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city of
CINCINNATI
RETIREMENT

Report of the Actuary on the Annual Valuation of the Retirement System for Employees of the City of Cincinnati

Pension Report

Prepared as of December 31, 2015
Approved by the Board of Trustees on August 4, 2016

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

August 4, 2016

Board of Trustees
Retirement System for Employees of the City of Cincinnati
801 Plum Street
Cincinnati, OH 45202

Members of the Board:

We are pleased to submit the results of the pension actuarial valuation of the Retirement System for Employees of the City of Cincinnati (CRS) prepared as of December 31, 2015. The purpose of this report is to provide a summary of the funded status of the System as of December 31, 2015 and to recommend actuarially determined contribution rates. The information needed for the City under Governmental Accounting Standards Board Statements No. 67 and 68 (GASB 67 and 68) will be provided in a separate report. However, for informational purposes, we have also provided accounting information under GASB 25 and 27 in Section VI.

On the basis of the valuation, it is recommended that employer contributions to the System be set at a rate of 27.92% of payroll (approximately $46,689,000) for the City's fiscal year ending June 30, 2017. This includes $1,280,607, or 0.77% of payroll, for the remaining 2007 Early Retirement Incentive Program (ERIP) for the Metropolitan Sewer District (MSD). The benefits of the System are included in the calculated contribution rate which is developed using the entry age cost method. Five-year smoothed market value of plan assets is used for the actuarial value of assets. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions within a 30-year period.

The valuation reflects the plan and funding changes included in the Collaborative Settlement Agreement (CSA) between the City of Cincinnati (City) and various plaintiff groups representing certain active and retired members of CRS as approved by the United States District Court for the Southern District of Ohio, Western Division (Court) on October 5, 2015 and generally effective January 1, 2016. As some of the changes outlined in the CSA have yet to be finalized or may be subject to interpretation, the valuation represents our understanding of the CSA as of the valuation date.

Per the CSA, the City contribution to CRS is expected to be 16.25% of payroll each year. Contributions at this level will never amortize the Unfunded Accrued Liability (UAL). However, members who began membership on or after January 1, 2010 are covered by a different benefit structure with a lower normal cost rate, so, as members who began membership prior to January 1, 2010 leave covered employment and are replaced by members in the lower cost benefit structure, the total normal cost rate is expected to decline. As a result, the portion of the 16.25% available to pay off the UAL is expected to increase each year in the future until all active members in the valuation are covered by the provision in the most recent benefit tier. While this is expected to improve the System's financial health in future years, it is impossible to anticipate the long-term funding progress without performing an open group projection of future valuation results. Such projections are performed to assist the Board in evaluating the long-term funding of the System, but the projections are completed after the valuation report is issued.

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This is to certify that the independent consulting actuary is a Member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the System and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial computations presented in this report are for purposes of determining the recommended funding amount for the System. Use of these computations for purposes other than meeting these requirements may not be appropriate.

We trust that the report will meet the approval of the Board and will furnish the desired information concerning the financial condition of the System.

Respectfully submitted,

Edward J. Koebel

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Eric Gary, FSA, FCA, MAAA
Principal and Chief Health Actuary

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RETIREMENT SYSTEM FOR EMPLOYEES OF THE CITY OF CINCINNATI
REPORT OF THE ACTUARY
ON THE VALUATION
PREPARED AS OF DECEMBER 31, 2015

PENSION REPORT

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the current and preceding valuations are summarized below.

Valuation Date	December 31, 2015	December 31, 2014
Active members:		
Number*	2,931	2,804
Annualized covered compensation	$ 167,248,240	$ 157,825,141
Retired members and beneficiaries receiving benefits:		
Number	4,264	4,319
Annual allowances	$ 160,734,970	157,072,728
Number of members and beneficiaries entitled to deferred benefits	191	197
Assets:		
Market Value	$ 1,670,524,000	$ 1,522,851,000
Actuarial Value	1,703,002,075	1,453,922,202
Unfunded accrued liability	$ 504,481,704	$ 805,900,209
Amortization Period	30 years	30 years
Funded Ratio		
Market Value	75.7%	67.4%
Actuarial Value	77.1%	64.3%
City's Fiscal Year Ending	**June 30, 2017**	**June 30, 2016**
City actuarially determined contribution rate (ADC):		
Normal Cost**	3.85%	2.15%
Unfunded Accrued Liability	23.30	38.25
Sub-total	27.15%	40.40%
ERIP***	0.77	3.91
Total	27.92%	44.31%
City estimated actuarially determined contribution in dollars (ADC):		
Normal Cost**	$ 6,439,000	$ 3,393,000
Unfunded Accrued Liability	38,969,000	60,368,000
Sub-total	$ 45,408,000	$ 63,761,000
ERIP**	1,281,000	6,178,000
Total	$ 46,689,000	$ 69,939,000

*In addition, there are 979 part-time employees at December 31, 2015.

**Beginning with the December 31, 2015 valuation, estimated budgeted administrative expenses are included in the normal cost rate.

***A $32.9 million dollar payment was made by the City at the end of 2015 reducing the remaining annual ERIP payments to $1,280,607, or 0.77% of payroll, beginning fiscal year 2017.

2. The major benefit and contribution provisions of the System as reflected in the valuation are summarized in Schedule G. The valuation reflects the plan and funding changes included in the CSA between the City and various plaintiff groups representing certain active and retired members of CRS as approved by the Court on October 5, 2015 and generally effective January 1, 2016. As some of the changes outlined in the CSA have yet to be finalized or may be subject to interpretation, the valuation represents our understanding of the CSA as of the valuation date.

3. Schedule E of this report outlines the full set of actuarial assumptions and methods used in the valuation.

4. Schedule C shows the development of the actuarial value of assets. The entry age actuarial cost method was used to prepare the valuation. Schedule F contains a brief description of the actuarial cost method.

5. Comments on the valuation results as of December 31, 2015 are given in Section IV, comments on the experience and actuarial gains and losses during the valuation year are given in Section VII and further discussion of the contributions is set out in Section V.

6. As shown in the Summary of Principal Results, the funding ratio is the ratio of assets to the accrued liability and is different based on market value of assets. The funded ratio is an indication of progress in funding the promised benefits. Since the ratio is less than 100%, there is a need for additional contributions toward payment of the unfunded accrued liability. In addition, this funded ratio does not have any relationship to measuring sufficiency if the plan had to settle its liabilities.

SECTION II – MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the System. The valuation included 2,931 active members with annualized compensation totaling $167,248,240. In addition, there are 979 part-time employees. The majority of these part-time employees are seasonal employees that have a minimal impact on the liabilities of the System.

2. The following table shows the number of retired members in receipt of a benefit and those members with a deferred benefit as of December 31, 2015 together with the amount of their annual retirement benefits payable under the System as of that date.

THE NUMBER AND ANNUAL BENEFITS OF RETIRED MEMBERS AND BENEFICIARIES AS OF DECEMBER 31, 2015

GROUP	NUMBER*	ANNUAL RETIREMENT BENEFITS
Participants Receiving Benefits	4,264	$ 160,734,970
Participants with a Deferred Benefit	191	3,090,977
Total	4,455	$ 163,825,947

*In addition, there are 7,518 inactive participants who are former employees who have an employee account balance in the plan but are not otherwise vested in an employer provided benefit.

3. Table 1 in Schedule H shows a reconciliation of participating members for the past plan year; Table 2 in Schedule H shows the distribution by age and years of membership service of the number of active members included in the valuation; and Table 3 shows the number and annual benefits of retired members and beneficiaries included in the valuation, distributed by age.

SECTION III – ASSETS

1. As of December 31, 2015, the total market value of assets amounted to $2,127,442,000, as reported by the System, of which $1,670,524,000 has been allocated for pension purposes. The estimated investment return for the plan year was (0.11)%. Schedule D shows the receipts and disbursements of the System for the year preceding the valuation date and a reconciliation of the System balances at market value.
2. The market-related actuarial value of assets using a 5-year smoothing technique of investment gains and losses is $1,703,002,075. The estimated investment return for the plan year ending December 31, 2015 on an actuarial value of assets basis was 7.51%, which can be compared to the investment return assumed for the period of 7.50%. Schedule C shows the development of the actuarial value of assets as of December 31, 2015.

SECTION IV – COMMENTS ON VALUATION

1. Schedule B of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of December 31, 2015. The valuation was prepared in accordance with the actuarial assumptions set forth in Schedule E and the actuarial cost method which is described in Schedule F.
2. The valuation balance sheet shows that the System has total prospective liabilities of $2,371,479,665, of which $1,647,154,186 is for the prospective benefits payable on account of present retired members, beneficiaries of deceased members, and terminated members entitled to deferred benefits, and $724,325,479 is for the prospective benefits payable on account of present active members. Against these liabilities, the System has a total present actuarial value of assets of $1,703,002,075 as of December 31, 2015. The difference of $668,477,590 between the total liabilities and the total present assets represents the present value of future contributions.
3. The contributions to the System consist of normal contributions and accrued liability contributions. The normal cost rate is equal to the actuarial present value of benefits accruing during the current

year divided by the annual active members' payroll. Estimated budgeted administrative expenses are included in the normal cost rate. The expenses for the fiscal year ending June 30, 2017 are estimated to be 0.75% of payroll. The valuation indicates that normal contributions at the rate of 12.85% of payroll are required under the entry age method. Of this amount, 9.00% will be paid by the members and the remaining 3.85% is payable by the City.

4. Prospective normal contributions at the rate of 12.85% have a present value of $163,995,886 net of administrative expenses. When this amount is subtracted from $668,477,590, which is the present value of the total future contributions to be made, there remains $504,481,704 as the amount of unfunded accrued liability contributions. The development of the unfunded accrued liability is shown in Schedule A.

5. Of the $504,481,704, $8,599,798 is due to the Early Retirement Incentive Plan (ERIP) that was being funded with separate contributions by the City through FY 2024. At the end of 2015, the City made a payment of $32,900,000 for the portion of the ERIP liability allocated to the City. The remaining balance is that portion of the ERIP liability allocated to the Metropolitan Sewer District (MSD). After the valuation date, the MSD made a payment on March 11, 2016 of $8,723,061, effectively paying off the remaining balance of the ERIP liability.

6. As can be seen from Schedule I of our report, the System had a total actuarial gain for the year. Most of this gain came as a result of the plan and funding changes included in the CSA between the City and various plaintiff groups representing certain active and retired members of CRS as approved by the Court on October 5, 2015 and generally effective January 1, 2016. The effect, in part, of these changes was a reduction in liabilities mainly due to a change from a compound COLA to a simple COLA for many members, as well as the introduction of a COLA suspension period for many active and retired members. The CSA also resulted in a transfer of assets from the Health Care Trust to the Pension Plan which reduced the unfunded accrued liability of the System. As for the actuarial experience of CRS for the valuation year, there was a relatively small experience loss. This was mainly due to losses from retirement and withdrawal experience during the year largely being offset by gains due to more retiree deaths than expected and lower salary increases than expected.

SECTION V – CONTRIBUTIONS PAYABLE

1. The contributions consist of a normal contribution and an accrued liability contribution as determined by actuarial valuation.
2. The normal contribution rate is calculated as the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. On the basis of the valuation, the normal contribution rate was determined to be 12.85%. Of this amount, 9.00% will be paid by the members and the remaining 3.85% is payable by the City.
3. A contribution of 23.30% of payroll will liquidate the portion of the unfunded accrued liability not attributed to the ERIP within a 30-year period.
4. An additional contribution of $1,280,607, or 0.77% of payroll, for the ERIP liability allocated to the MSD is required for the City's fiscal year ending June 30, 2017. After the valuation date, the MSD made a payment on March 11, 2016 of $8,723,061, effectively paying off the remaining balance of the ERIP liability.
5. The total contribution rate required for the City's fiscal year ending June 30, 2017 is, therefore, 27.92% of payroll.
6. The following table summarizes the employer contributions which were determined by the December 31, 2015 valuation and are recommended for use.

CITY ACTUARIALLY DETERMINED CONTRIBUTIONS (ADC)
FOR CITY FISCAL YEAR ENDING JUNE 30, 2017

	PERCENTAGE OF ACTIVE MEMBERS' COMPENSATION	EMPLOYER ACTUARIALLY DETERMINED CONTRIBUTION (ADC)
Normal Cost	3.85%	$ 6,439,000
Unfunded Accrued Liability	23.30	38,969,000
Sub-Total	27.15%	$ 45,408,000
ERIP	0.77	1,281,000
Total	27.92%	$ 46,689,000

SECTION VI – ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements (GASB) has issued Statements No. 67 and 68 which replaces Statement No. 25 and 27 for plan years beginning after June 15, 2013. The information required under the new GASB Statements will be issued in separate reports. The following information is provided for informational purposes only.

1. The following is a distribution of the number of employees by type of membership:

NUMBER OF ACTIVE AND RETIRED PARTICIPANTS
AS OF DECEMBER 31, 2015

GROUP	TOTAL
Retired participants and beneficiaries currently receiving benefits	4,264
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	191
Inactive participants*	7,518
Active Participants	
Full-Time	2,931
Part-Time	979
Total	15,883

* Participants who are former employees who have an employee account balance in the plan but are not otherwise vested in an employer provided benefit.

2. The schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS
Dollar Amounts in Thousands

Actuarial Valuation Date	Actuarial Value of Assets (a)	Accrued Liability (AL) Entry Age (b)	Unfunded AL (UAL) (b – a)	Funded Ratio (a / b)	Covered Payroll (c)	UAL as a Percentage of Covered Payroll ((b – a) / c)
12/31/2010	$1,565,949	$2,085,987	$520,038	75.1%	$167,589	310.3%
12/31/2011	1,466,077	2,194,505	728,428	66.8	165,029	441.4
12/31/2012	1,367,695	2,229,818	862,123	61.3	167,148	515.8
12/31/2013	1,424,933	2,254,121	829,188	63.2	163,477	507.2
12/31/2014	1,453,922	2,259,822	805,900	64.3	164,575	489.7
12/31/2015	1,703,002	2,207,484	504,482	77.1	174,963*	288.3

*Includes $7,714,292 in part-time active employee compensation.

3. Additional information as of December 31, 2015 follows:

Valuation date	12/31/2015
Actuarial cost method	Entry age
Amortization period	Level dollar open
Remaining amortization period	30 years
Asset valuation method	Five-year smoothed market value
Actuarial assumptions:	
Investment rate of return (includes inflation)	7.50%
Projected salary increases (includes inflation)*	3.00% - 7.50%
Inflation	3.00%
Cost-of-living adjustments	2.00% - 3.00%

*Select salary increases for 5-year period beginning December 31, 2011.

SECTION VII – EXPERIENCE

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain/(loss) for the year ended December 31, 2015 is shown below.

			$ Thousands
(1)	UAL* as of December 31, 2014	$	805,900
(2)	Total normal cost from last valuation		18,264
(3)	Total actual contributions, without ERIP payment		39,854
(4)	Administrative Expenses		4,880
(4)	Interest accrual: [(1) + (2)] x .075 - [(3) x .0375]		60,501
(5)	Expected UAL before changes: (1) + (2) – (3) + (4)	$	849,691
(6)	Change due to plan amendments		(345,573)
(7)	Change due to actuarial assumptions or methods		0
(8)	Expected UAL after changes: (5) + (6) + (7)	$	504,118
(9)	Actual UAL as of December 31, 2015	$	504,482
(10)	Gain/(loss): (8) – (9)	$	(364)
(11)	Gain/(loss) as percent of accrued liabilities at start of year ($2,259,822)		(0.0)%

*Unfunded accrued liability, prior to the restatement of the actuarial value of assets.

Valuation Date December 31	Actuarial Gain/(Loss) as a % of Beginning Accrued Liabilities
2011	(7.2)%
2012	(5.0)%
2013	2.8%
2014	2.3%
2015	(0.0)%

SCHEDULE A

DEVELOPMENT OF THE UNFUNDED ACCRUED LIABILITY

	December 31, 2015	December 31, 2014
(1) Present value of prospective benefits:		
(a) Present active full time members	$ 720,332,136	$ 617,715,384
(b) Present active part time and seasonal members	3,993,343	3,669,692
(c) Present retired members, beneficiaries, former members entitled to deferred vested benefits and inactive members	1,647,154,186	1,784,574,681
(d) Total	$ 2,371,479,665	$ 2,405,959,757
(2) Present value of future normal contributions	163,995,886	146,137,346
(3) Actuarial accrued liabilities: 1(d) – (2)	$ 2,207,483,779	$ 2,259,822,411
(4) Actuarial value of assets	1,703,002,075	1,453,922,202
(5) Unfunded accrued liability (UAL): (3) – (4)	$ 504,481,704	$ 805,900,209
(6) Actuarially Determined Contribution Rate as a % of Payroll		
(a) Normal Cost	3.85%	2.15%
(b) UAL	23.30%	38.25%
(c) Sub-Total	27.15%	40.40%
(d) ERIP	0.77%	3.91%
(e) Total	27.92%	44.31%
(7) Estimated Contribution in dollars		
(a) Normal Cost	$ 6,439,000	$ 3,393,000
(b) UAL	38,969,000	60,368,000
(c) Sub-Total	$ 45,408,000	$ 63,761,000
(d) ERIP	1,281,000	6,178,000
(e) Total	$ 46,689,000	$ 69,939,000

SCHEDULE B

VALUATION BALANCE SHEET

Present and prospective assets and liabilities as of December 31, 2015:

ACTUARIAL LIABILITIES		
Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, terminated members entitled to deferred benefits and inactive members		$1,647,154,186
Present value of prospective benefits payable on account of present active members		724,325,479
Total liabilities		$2,371,479,665
PRESENT AND PROSPECTIVE ASSETS		
Actuarial value of assets		$1,703,002,075
Present value of future contributions		
City and Member Normal contributions	$ 163,995,886	
Unfunded accrued liability contributions	504,481,704	
Total prospective contributions		$ 668,477,590
Total assets		$2,371,479,665

SCHEDULE C

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

(1)	Actuarial Value of Assets as of December 31, 2014		$ 1,453,922,202
(2)	Market Value of Assets as of December 31, 2015		$ 1,670,524,000
(3)	Market Value of Assets as of December 31, 2014*		$ 1,528,815,000
(4)	Net Cash Flow During Plan Year		
	(a)	Contributions	$ 73,103,000
	(b)	Benefit Payments and Net Transfers	(162,712,000)
	(c)	Transfer per Collective Settlement Agreement	220,000,000
	(d)	Transfer Earnings and Expenses Adjustment	17,897,000
	(e)	Administrative Expenses	(4,880,000)
	(f)	Investment Expenses	(6,768,000)
	(g)	Net Cash Flow: (a) + (b) + (c) + (d) + (e) + (f)	$ 136,640,000
(5)	Investment Income		
	(a)	Market Total: (2) – (3) – (4)(g)	$ 5,069,000
	(b)	Assumed Rate	7.50%
	(c)	Amount for Immediate Recognition	
	[(3) x (5)(b)] + [[(4)(a) + (4)(b) + (4)(e)] x (5)(b) x 0.5] - (4)(f)		$ 117,885,788
	(d)	Amount for Phased-In Recognition: (5)(a) – (5)(c)	$ (112,816,788)
(6)	Recognized Amounts for Plan Year		
	(a)	Current Year: 0.20 x (5)(d)	$ (22,563,358)
	(b)	First Prior Year*	(695,655)
	(c)	Second Prior Year	25,772,630
	(d)	Third Prior Year	11,893,860
	(e)	Fourth Prior Year	(19,853,392)
	(f)	Total Recognized Investment Gain/(Loss)	$ (5,445,915)
(7)	Actuarial Value of Assets as of December 31, 2015		
	(1) + (4)(g) + (5)(c) + (6)(f)		$ 1,703,002,075
		80% of Market Value EOY	1,336,419,200
		120% of Market Value EOY	2,004,628,800
(8)	Final Actuarial Value of Assets as of December 31, 2015		$ 1,703,002,075
(9)	Rate of Return on Actuarial Value		7.51%

*Includes a correction to the December 31, 2014 information. This correction increased the market value of assets by $5,964,000 and increased the actuarial value of assets by $1,192,800.

SCHEDULE D

CURRENT ASSET INFORMATION

Receipts		
(1) Contributions		
• Member and Employer	$ 72,754,000	
• Medicare Retiree Drug Subsidy Adjustment	349,000	
Total Contributions		$ 73,103,000
(2) Investment Income		
• Interest and Dividends	$ 19,729,000	
• Net Appreciation (Depreciation) in Fair Value of Investments	(15,053,000)	
• Other Investment Earnings	393,000	
• Investment Expenses	(6,768,000)	
Total Investment Income		$ (1,699,000)
(3) Transfers from Other Retirement Systems		$ 456,000
(4) Total Receipts		$ 71,860,000
Disbursements		
(5) Pension Benefits Paid	$ 162,020,000	
(6) Health Care Benefits Adjustment	1,040,000	
(7) Administrative Expenses	4,880,000	
(8) Transfers to Other Retirement Systems	108,000	
(9) Total Disbursements		$ 168,048,000
Transfer from Health to Pension		
(10)Transfer per Collective Settlement Agreement	$ 220,000,000	
(11)Earnings and Expenses Adjustment	17,897,000	
(12)Total Transfer		$ 237,897,000
(13)Net Increase/(Decrease): (4) - (9) + (12)		$ 141,709,000
Reconciliation of Asset Balances		
(14)Market Value at December 31, 2014		$ 1,522,851,000
(15)Reporting Adjustment		5,964,000
(16)Net Increase/(Decrease)		141,709,000
(17)Market Value at December 31, 2015		$ 1,670,524,000
(18)Estimated Rate of Return on Market Value of Assets		(0.11)%

SCHEDULE D
(Continued)

HISTORICAL ASSET INFORMATION
($ in thousands)

Valuation Date	Actuarial Value of Assets		Market Value of Assets	
	Amount	Rate of Return	Amount	Rate of Return
12/31/2010	$1,565,949	2.07%	$1,445,156	13.11%
12/31/2011	1,466,077	0.24	1,353,822	0.88
12/31/2012	1,367,695	0.25	1,409,032	12.06
12/31/2013	1,424,933	12.11	1,537,511	16.99
12/31/2014	1,453,922	10.18	1,522,851	6.46
12/31/2015	1,703,002	7.51	1,670,524	(0.11)

SCHEDULE E

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INVESTMENT RATE OF RETURN: 7.50% per year, net of investment expenses.

INFLATION ASSUMPTION: 3.00% per annum.

SALARY INCREASES: Salary increases are assumed to vary by service. In addition, salary increases are assumed to be lower for a five-year select period beginning with the December 31, 2011 valuation. Representative rates are as follows:

	Annual Increase	
Service	**Select Period**	**Ultimate Period**
0	7.0%	7.5%
5	4.5	5.0
10	3.0	4.5
20	3.0	4.5
30	3.0	4.0

SEPARATIONS FROM ACTIVE SERVICE: For death rates, RP-2000 Combined Mortality Table set forward two years for males and set forward one year for females and using a Scale AA projection to 2020 was used. Representative values of the assumed annual rates of separation from active service are as follows:

	Annual Rate of Withdrawal			
Age	**Less than One Year of Service**	**Between One and Three Years of Service**	**Between Three and Five Years of Service**	**Five or More Years of Service**
20	25.0%	10.0%	7.5%	5.0%
25	25.0	10.0	7.5	5.0
30	25.0	10.0	7.5	3.5
35	25.0	10.0	4.0	2.8
40	25.0	10.0	4.0	2.3
45	25.0	10.0	4.0	1.5
50	25.0	10.0	4.0	1.5
55	25.0	10.0	4.0	1.5
60	25.0	10.0	4.0	1.5
65	25.0	10.0	4.0	1.5
70	25.0	10.0	4.0	1.5

Age	Annual Rate of Disability: Groups C, D, E, and F	Annual Rate of Disability: Group G
20	0.01%	0.01%
25	0.02	0.02
30	0.03	0.03
35	0.05	0.05
40	0.09	0.09
45	0.15	0.15
50	0.27	0.27
55	0.42	0.42
60	0.00	0.50
67	0.00	0.00

Age	Annual Rate of Retirement			
	Early Retirement	Less than 30 Years of Service	30 Years of Service	31+ Years of Service
Current Employees Class - Groups C, D, E, and F*				
50			45.0	30.0
55	10.0%		45.0	30.0
59	10.0		45.0	30.0
60		25.0%	30.0	25.0
61		20.0	20.0	20.0
65		20.0	20.0	20.0
70		100.0	100.0	100.0
Non-CSA Participant - E, and F				
50			45.0	30.0
55			45.0	30.0
57	10.0%		45.0	30.0
59	10.0		45.0	30.0
60		25.0%	30.0	25.0
61		20.0	20.0	20.0
65		20.0	20.0	20.0
70		100.0	100.0	100.0
Group G				
57	10.0%			
60	20.0			
62	20.0		25.0%	20.0%
65	20.0		25.0	20.0
67		25.0%	25.0	20.0
69		20.0	20.0	20.0
70		100.0	100.0	100.0

* For purposes of valuing DROP benefits, the rates listed for 30 or more years of service are adjusted as follows:

- 30% of members who are expected to retire with 31, 32, 33, 34, or 35 years of service are assumed to enter the DROP upon attaining 30 year of service.
- 10% of members who are expected to retire with 30 years of service are assumed to enter the DROP upon attaining 30 years of service.

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table set forward two years for males and set forward one year for females and using a Scale AA projection to 2020 is used for the period after retirement and for dependent beneficiaries. The RP-2000 Disabled Mortality Table (set back 5 years for females) is used for the period after disability.

EXPENSES: Estimated budgeted administrative expenses of 0.75% of payroll are added to the normal cost rate.

COST-OF-LIVING ADJUSTMENT: Members not covered under the Collaborative Settlement Agreement are assumed to receive 2.0% simple annual benefit increases.

PERCENT MARRIED: 70% of male members and 30% of female members are assumed to be married with the male three years older than his spouse.

ASSETS: Actuarial value, as developed in Schedule C. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value. In addition, the actuarial value of assets cannot be less than 80% or more than 120% of the market value of assets.

WITHDRAWAL ASSUMPTION: It is assumed that 100% of vested members who terminate with less than 15 years of service elect to withdraw their contributions and that 50% of vested members who terminate with 15 or more years of service elect to withdraw their contributions while the remaining 50% elect to leave their contributions in the plan in order to be eligible for a benefit at their retirement date.

DROP CREDITING RATE: 3.0% annually.

VALUATION METHOD: Entry age actuarial cost method. See Schedule F for a brief description of this method.

SCHEDULE F

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently 7.50%), of each member's expected benefits at retirement or death is determined, based on age, service and sex. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the entry age actuarial cost method. Under this method, a calculation is made to determine the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

SCHEDULE G

SUMMARY OF MAIN SYSTEM PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

Eligibility

All active employees of the City except for the following:

- Members of the State Police and Fireman's Disability and Pension Fund.
- Employees for whom the City contributes to PERS.
- Elected officials.

As part of the plan provisions from Ordinance 84-2011 that were passed by the City Council on March 16, 2011 and adopted by the Board, participants in the System were divided into the following groups:

Group	Criteria
A, B	Retirees as of 7/1/2011.
C	Active members who attain 30 years of service or age 60 with 5 years of service before 7/1/2011.
D	Active members who first attain 30 years of service or age 60 with 5 years of service on or after 7/1/2011 but before 1/1/2014 and retire on or before 1/1/2014.
E	Active members who first attain 30 years of service or age 60 with 5 years of service on or after 7/1/2011 but before 1/1/2014 and retire after 1/1/2014.
F	Active members hired before 1/1/2010 and not in groups C, D, or E.
G	Active members hired on or after 1/1/2010.

As part of the CSA approved by the Court on October 5, 2015 and generally effective January 1, 2016, participants in the System were further classified as follows:

Class	Criteria
Retirees Class	Retirees as of 7/1/2011 and their designated optionees.
Current Employees Class	Participants with at least 5-years of service and were actively employed on July 1, 2011 and were members of Groups C, D, E, and F.
Non-CSA participants	All other participants who are not included as part of the CSA.

Service Retirement Benefit

<u>Groups A, B, C and D:</u>

Normal Retirement Eligibility	Age 60 with 5 years of service or 30 years of service.
Early Retirement Eligibility	Age 55 with 25 years of service.
Benefit Formula Multiplier	Members hired prior to July 12, 1998 were given a one-time irrevocable option to choose either the benefit formula using a 2.22% multiplier or the benefit formula using a 2.50% multiplier. For members hired on or after July 12, 1998, benefits are calculated using a 2.50% multiplier.
Average Highest Compensation	Average of the highest three consecutive years of compensation.
Years of Service	Years or fractional years of full-time service rendered to the plan sponsor.
Benefit	a) An annuity which is actuarially equivalent to the accumulated contributions of the member at the time of retirement. b) A pension which together with the annuity produces a total annual retirement allowance equal to the product of the applicable benefit formula multiplier, the member's average highest compensation, and the number of years of service. Early Retirement Benefit is actuarially reduced from normal retirement age.

<u>Group E – Current Employees Class:</u>

Normal Retirement Eligibility	Age 60 with 5 years of service or 30 years of service.
Early Retirement Eligibility	Age 55 with 25 years of service.

Retirement benefit is composed of as many as three components:

<u>Part A Benefit:</u> for service earned through December 31, 2013

<u>Part B Benefit:</u> for service earned on and after January 1, 2014 up to a combined 20 years of service

<u>Part C Benefit</u>: for service earned on or after January 1, 2014 in excess of a combined 20 years of service.

Benefit Formula Multiplier	**<u>Part A Benefit:</u>** Members hired prior to July 12, 1998 were given a one-time irrevocable option to choose either the benefit formula using a 2.22% multiplier or the benefit formula using a 2.50% multiplier. For members hired on or after July 12, 1998, benefits are calculated using a 2.50% multiplier. **<u>Part B Benefit:</u>** Members hired prior to July 12, 1998 were given a one-time irrevocable option to choose either the benefit formula using a 2.22% multiplier or the benefit formula using a 2.50% multiplier. For members hired on or after July 12, 1998, benefits are calculated using a 2.50% multiplier. **<u>Part C Benefit:</u>** 2.20% multiplier
Average Highest Compensation	**<u>Part A Benefit:</u>** Average of the highest three consecutive years of compensation **<u>Part B Benefit:</u>** Average of the highest five consecutive years of compensation **<u>Part C Benefit:</u>** Average of the highest five consecutive years of compensation
Years of Service	Years or fractional years of full-time service rendered to the plan sponsor.
Benefit	a) An annuity which is actuarially equivalent to the accumulated contributions of the member at the time of retirement. b) A pension which together with the annuity produces a total annual retirement allowance equal to the sum of Part A, Part B, and Part C benefits each of which is the product of the applicable benefit formula multiplier, the applicable average highest compensation, and the applicable number of years of service. Early Retirement Benefit is actuarially reduced from normal retirement age.

<u>Group E – Non-CSA participants:</u>

Normal Retirement Eligibility	Age 65 with 5 years of service or age 60 with 30 years of service.
Reduced Normal Retirement Eligibility	Age 60 with 5 years of service or 30 years of service.

Retirement benefit is composed of as many as three components:

Part A Benefit: for service earned through December 31, 2013

Part B Benefit: for service earned on and after January 1, 2014 up to a combined 30 years of service

Part C Benefit: for service earned on or after January 1, 2014 in excess of a combined 30 years of service.

Benefit Formula Multiplier

Part A Benefit: Members hired prior to July 12, 1998 were given a one-time irrevocable option to choose either the benefit formula using a 2.22% multiplier or the benefit formula using a 2.50% multiplier. For members hired on or after July 12, 1998, benefits are calculated using a 2.50% multiplier.

Part B Benefit: 2.20% multiplier

Part C Benefit: 2.00% multiplier

Average Highest Compensation

Part A Benefit: Average of the highest three consecutive years of compensation

Part B Benefit: Average of the highest five consecutive years of compensation

Part C Benefit: Average of the highest five consecutive years of compensation

Years of Service

Years or fractional years of full-time service rendered to the plan sponsor.

Benefit

a) An annuity which is actuarially equivalent to the accumulated contributions of the member at the time of retirement.

b) A pension which together with the annuity produces a total annual retirement allowance equal to the sum of Part A, Part B, and Part C benefits each of which is the product of the applicable benefit formula multiplier, the applicable average highest compensation, and the applicable number of years of service.

Reduced Normal Retirement Part A benefits will not be actuarially reduced.

Reduced Normal Retirement Part B and C benefits are actuarially reduced from normal retirement age.

Group F– Current Employees Class:

Normal Retirement Eligibility	Age 60 with 5 years of service or 30 years of service.
Early Retirement Eligibility	Age 55 with 25 years of service.

Retirement benefit is composed of as many as three components:

Part A Benefit: for service earned through June 30, 2011

Part B Benefit: for service earned on and after July 1, 2011 up to a combined 20 years of service

Part C Benefit: for service earned on or after July 1, 2011 in excess of a combined 20 years of service.

Benefit Formula Multiplier

Part A Benefit: Members hired prior to July 12, 1998 were given a one-time irrevocable option to choose either the benefit formula using a 2.22% multiplier or the benefit formula using a 2.50% multiplier. For members hired on or after July 12, 1998, benefits are calculated using a 2.50% multiplier.

Part B Benefit: Members hired prior to July 12, 1998 were given a one-time irrevocable option to choose either the benefit formula using a 2.22% multiplier or the benefit formula using a 2.50% multiplier. For members hired on or after July 12, 1998, benefits are calculated using a 2.50% multiplier.

Part C Benefit: 2.20% multiplier

Average Highest Compensation

Part A Benefit: Average of the highest three consecutive years of compensation

Part B Benefit: Average of the highest five consecutive years of compensation

Part C Benefit: Average of the highest five consecutive years of compensation

Years of Service

Years or fractional years of full-time service rendered to the plan sponsor.

Benefit

a) An annuity which is actuarially equivalent to the accumulated contributions of the member at the time of retirement.

b) A pension which together with the annuity produces a total annual retirement allowance equal to the sum of Part A, Part B, and Part C benefits each of which is the product of the applicable benefit formula multiplier, the applicable average highest compensation, and the applicable number of years of service.

Early Retirement Benefit is actuarially reduced from normal retirement age.

Group F Non-CSA participants:

Normal Retirement Eligibility	Age 65 with 5 years of service or age 60 with 30 years of service.
Reduced Normal Retirement Eligibility	Age 60 with 5 years of service or 30 years of service.
Early Retirement Eligibility	Prior to January 1, 2014, age 55 with 25 years of service or age 57 with 15 years of service. On or after January 1, 2014, age 57 with 15 years of service.

Retirement benefit is composed of as many as three components:

Part A Benefit: for service earned through June 30, 2011

Part B Benefit: for service earned on and after July 1, 2011 up to a combined 30 years of service

Part C Benefit: for service earned on or after July 1, 2011 in excess of a combined 30 years of service.

Benefit Formula Multiplier	**Part A Benefit:** Members hired prior to July 12, 1998 were given a one-time irrevocable option to choose either the benefit formula using a 2.22% multiplier or the benefit formula using a 2.50% multiplier. For members hired on or after July 12, 1998, benefits are calculated using a 2.50% multiplier. **Part B Benefit:** 2.20% multiplier **Part C Benefit:** 2.00% multiplier
Average Highest Compensation	**Part A Benefit:** Average of the highest three consecutive years of compensation **Part B Benefit:** Average of the highest five consecutive years of compensation **Part C Benefit:** Average of the highest five consecutive years of compensation
Years of Service	Years or fractional years of full-time service rendered to the plan sponsor.

Benefit

a) An annuity which is actuarially equivalent to the accumulated contributions of the member at the time of retirement.

b) A pension which together with the annuity produces a total annual retirement allowance equal to the sum of Part A, Part B, and Part C benefits each of which is the product of the applicable benefit formula multiplier, the applicable average highest compensation, and the applicable number of years of service.

Reduced Normal Retirement Part A benefits will not be actuarially reduced.

Reduced Normal Retirement Part B and C benefits are actuarially reduced from normal retirement age.

Early Retirement Part A, B, and C benefits are actuarially reduced from normal retirement age.

Group G

Normal Retirement Eligibility	Age 67 with 5 years of service or age 62 with 30 years of service.
Early Retirement Eligibility	Age 57 with 15 years of service.
Benefit Formula Multiplier	Benefit is calculated using a 2.20% multiplier for all years of service up to 30 years and a 2.00% multiplier for all service in excess of 30 years.
Average Highest Compensation	Average of the highest five consecutive years of compensation.
Years of Service	Years or fractional years of full-time service rendered to the plan sponsor.

Benefit

a) An annuity which is actuarially equivalent to the accumulated contributions of the member at the time of retirement.

b) A pension which together with the annuity produces a total annual retirement allowance equal to the product of the applicable benefit formula multiplier, the member’s average highest compensation, and the number of years of service.

Early Retirement Benefit is actuarially reduced from normal retirement age.

Miscellany for All Groups

In no event shall the retirement allowance be greater than 90% of a member's average highest compensation.

In no event shall the retirement allowance be greater than that permitted by Section 415 of the Internal Revenue Code.

The average highest compensation used in the calculation of benefits depends on which benefit formula applies to the member. The formula that uses the 2.22% multiplier includes overtime compensation and the lump sum payment for unused vacation, unused sick-pay, etc. The formulas that use all other multipliers do not include overtime or the lump sum payment.

Disability Retirement Benefit

Eligibility	5 years of service.
Benefit	90% of normal retirement benefit at disability date but not less than the smaller of: (1) 25% of average highest compensation (2) 90% of the retirement benefit member would have become entitled to had he continued in service to normal retirement age without further change in average highest compensation.

Deferred Vested Retirement Benefit

Eligibility	5 years of service.
Benefit	Normal retirement benefit beginning at normal retirement age.

Preretirement Death Benefit

(1) Refund of contributions with interest.

(2) Survivor Benefits according to type of survivors if member has at least 18 months of service.

Postretirement Death Benefit

(1) Lump sum $5,000 for group AB only.

(2) If no Joint and Survivor Option is selected, balance of member contributions not received back in retirement benefit payments prior to death.

Optional Forms of Benefit

(1) Joint and 100% Survivor Payment

(2) Joint and 50% Survivor Payment

(3) 66 2/3% Joint and Survivor Payment

(4) 80% Joint and Survivor Payment

COLA Increases

Retirees Class:

3% simple COLA based on the participant's benefit on January 1, 2016 including all previously granted COLA's. Effective January 1, 2016 the COLA will be suspended for a 3-year period.

In the third year of the COLA suspension (calendar year 2018), members will receive a one-time payment that is the lesser of 3% of their base pension benefit and $1,000. This payment will be made on January 1, or the anniversary date of the member's retirement according to when the member normally receives a COLA.

Current Employees Class:

3% simple COLA with a 3-year delay following each participant's date of retirement.

Non-CSA Participants:

Increases will be indexed to the CPI-U with a maximum of 2% per year and will be based on simple interest. There is no suspension or delay for COLA increases.

Poverty Exception:

Any member of the Retirees Class or Current Employees Class who retired or retires with at least 5-years of service and whose household income is below 150% of federal poverty guidelines will receive a 3% compounding COLA until such time income exceeds 150% of federal poverty guidelines at which point the participant will receive a 3% simple COLA.

Contributions

By Members:

Each member, commencing January 1, 1978, contributes at a rate of 7.0% of the salary used to compute retirement benefits until his retirement. Beginning January 1, 2010, the employee contribution rate was increased 0.5% per year over 4 years to reach 9.0% of pay. The CSA establishes the contribution rate for members shall not exceed 9.0% of pay for the term of the agreement.

By Employers:	The sponsoring employer makes annual contributions based on members' salaries so that, when members become eligible for benefits, reserves will have been accumulated adequate to provide the pension and other benefits payable by the plan on account of creditable service.
2007 Early Retirement Window	City employees who have 28 years or more of service credit prior to January 1, 2008 were eligible. Those electing to retire prior to January 1, 2008 were credited with two more years of service.
Deferred Retirement Option Plan (DROP)	At the time of this report, the design of the DROP has not been finalized and is still being negotiated. The valuation was performed using the most up-to-date design proposal available and is described below.
Eligibility	Current Employees Class members with at least 30 years of service.
Maximum Participation Period	5 years.
Minimum Participation Period	None.
Benefit	Monthly pension benefit calculated as if eligible member actually retired on their DROP effective date, including any adjustments for an assigned optionee. The monthly pension benefit will be contributed to the member's DROP account in the CRS Pension Trust and paid out as a lump sum upon termination from the DROP.
Employee Contributions	Members continue to contribute 9% of pay while participating in DROP. The following portions will be credited to the member's DROP account and the remaining portion will be contributed to the CRS Pension Trust:

Amounts Credited to Member's DROP Account	
Years 1 & 2	50% of employee contributions
Years 3 & 4	75% of employee contributions
Year 5	100% of employee contributions

Employer Contributions	Employer contributions to the CRS Pension Trust continue to apply in the same manner as for other actively employed members who are not participating in the DROP. Employer contributions are not credited to the member's DROP account.
Interest	DROP account balances are credited each month at a rate equal to the 10-year U.S. Treasury Note Business Day Series adjusted quarterly with a cap of 4% but not less than 0%.

SCHEDULE H

TABLE 1

STATUS RECONCILIATION OF PARTICIPATING MEMBERS

	Active Full Time	Active Part Time	Receiving Benefits	Deferred Benefits	Total
Participants as of December 31, 2014	2,804	795	4,319	197	8,115
A. Receiving Benefits	(69)	(3)	86	(14)	
B. Terminated Vested	(20)	(4)		24	
C. Terminated Non-Vested	(20)	(157)			(177)
D. Deaths	(6)		(186)	(2)	(194)
E. Rehires	6	9		(5)	10
F. New Participants	224	419			643
G. New Member Due to Death of Participant			46		46
H. Part Time to Full Time	57	(57)			
I. Full Time to Part Time	(22)	22			
J. Refunds	(23)	(45)		(9)	(77)
K. Benefits Expired			(2)		(2)
L. Data Corrections			1		1
Participants as of December 31, 2015	2,931	979	4,264	191	8,365

In addition, there are 7,518 inactive participants who are former employees who have an employee account balance in the plan but are not otherwise vested in an employer provided benefit.

SCHEDULE H
(Continued)

TABLE 2

SCHEDULE OF ACTIVE MEMBERS BY AGE AND SERVICE
AS OF DECEMBER 31, 2015

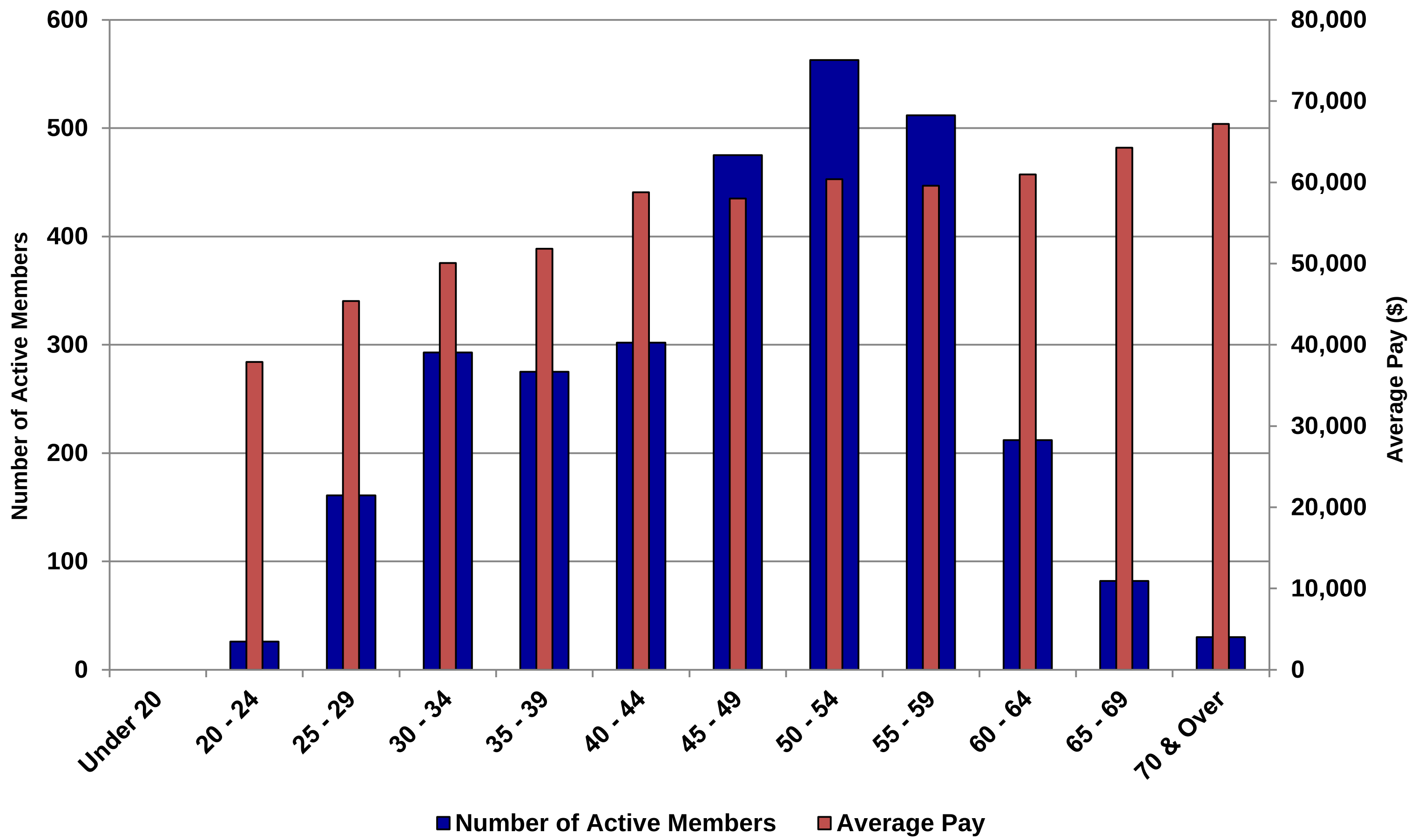
	Completed Years of Service							
Age	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30+	Total
Under 20								
Avg Pay								
20 - 24	26							26
Avg Pay	37,888							37,888
25 - 29	134	27						161
Avg Pay	45,093	46,821						45,382
30 - 34	155	99	38	1				293
Avg Pay	48,808	52,746	48,318	50,054				50,079
35 - 39	108	85	47	34	1			275
Avg Pay	50,739	50,607	50,385	60,160	57,369			51,827
40 - 44	76	73	79	55	16	3		302
Avg Pay	56,918	59,667	57,791	60,322	64,467	50,355		58,766
45 - 49	78	72	82	92	69	79	3	475
Avg Pay	55,417	54,966	55,246	57,630	63,424	62,159	54,482	58,026
50 - 54	55	38	60	69	98	208	35	563
Avg Pay	58,676	54,259	54,910	56,809	62,503	62,434	68,172	60,393
55 - 59	36	47	47	69	72	181	60	512
Avg Pay	56,799	60,550	56,921	54,604	58,834	61,251	64,226	59,589
60 - 64	16	22	31	31	34	56	22	212
Avg Pay	59,383	71,775	55,582	58,745	57,169	60,682	68,641	60,969
65 - 69	5	10	17	15	15	12	8	82
Avg Pay	116,543	66,620	59,855	61,174	53,127	57,875	74,178	64,255
70 & Over	2	2	3	5	6	5	7	30
Avg Pay	160,987	50,647	44,410	63,159	58,460	53,581	75,052	67,210
Total	691	475	404	371	311	544	135	2,931
Avg Pay	51,878	55,484	54,811	57,836	60,829	61,572	66,903	57,062

Average Age 47.33 Average Service 14.15

SCHEDULE H
(Continued)

CHART 1

DISTRIBUTION OF ACTIVE MEMBERS BY AGE
AS OF DECEMBER 31, 2015



SCHEDULE H
(Continued)

TABLE 3

SCHEDULE OF RETIRED MEMBERS AND BENEFICIARIES
AS OF DECEMBER 31, 2015

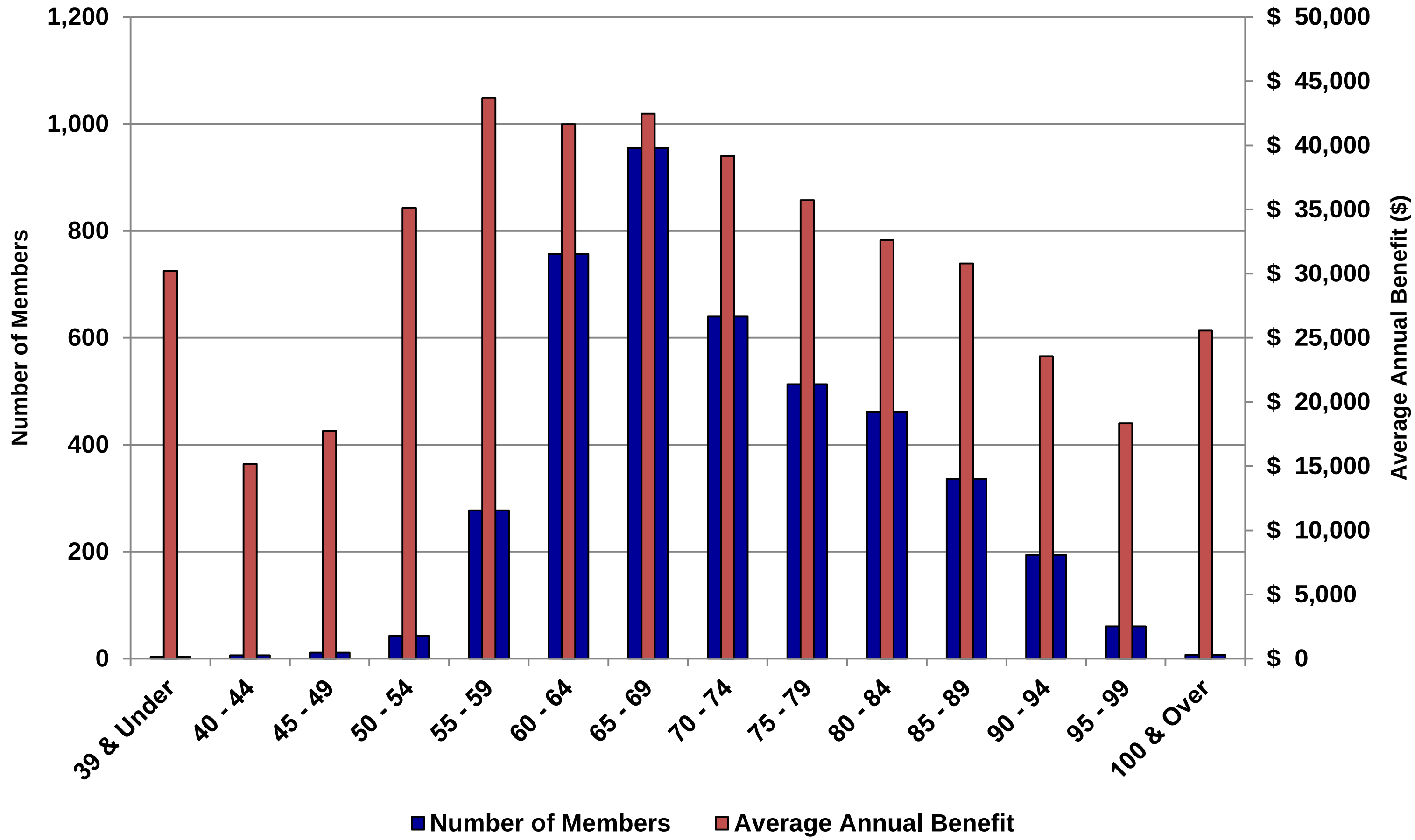
Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefit
39 & Under	3	$ 90,625	$ 30,208
40 - 44	6	90,997	15,166
45 - 49	11	195,315	17,756
50 - 54	43	1,509,837	35,112
55 - 59	277	12,105,357	43,702
60 - 64	757	31,523,147	41,642
65 - 69	955	40,560,628	42,472
70 - 74	640	25,067,233	39,168
75 - 79	513	18,324,832	35,721
80 - 84	462	15,066,018	32,610
85 - 89	336	10,349,094	30,801
90 - 94	194	4,573,279	23,574
95 - 99	60	1,099,590	18,327
100 & Over	7	179,018	25,574
Total	**4,264**	**$ 160,734,970**	**$ 37,696**

In addition, there are 191 deferred vested employees and beneficiaries entitled to deferred annual benefits totaling $3,090,977.

SCHEDULE H
(Continued)

CHART 2

DISTRIBUTION OF RETIRED MEMBERS AND BENEFICIARIES AS OF DECEMBER 31, 2015



SCHEDULE I

ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Unfunded Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
($ Thousands)

Type of Activity	$ Gain (or Loss) For Year Ending 12/31/2015	$ Gain (or Loss) For Year Ending 12/31/2014
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	$ (8,033)	$ (1,001)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	137	(77)
Death-in-Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(109)	(684)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(2,125)	(4,714)
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	3,347	(1,641)
New Members. Additional unfunded accrued liability will produce a loss.	(732)	(603)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	413	36,688
Death After Retirement. If retirants live longer than assumed, there is a loss. If not as long, a gain.	9,006	26,087
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(2,268)	(2,168)
Gain (or Loss) During Year From Experience	$ (364)	$ 51,887
Non-Recurring Items. Adjustments for plan amendments, asset transfers, assumption changes, or method changes.	345,573	0
Composite Gain (or Loss) During Year	$ 345,209	$ 51,887