

WICHITA FALLS FIREMEN'S  
RELIEF AND RETIREMENT FUND

ACTUARIAL VALUATION  
AS OF JANUARY 1, 2016



August 15, 2016

Board of Trustees  
Wichita Falls Firemen's  
Relief and Retirement Fund  
624 Indiana Ave, Suite 305  
Wichita Falls, TX 76301

Re: Wichita Falls Firemen's Relief and Retirement Fund

Dear Board:

We are pleased to present to the Board this report of the actuarial valuation of the Wichita Falls Firemen's Relief and Retirement Fund. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year(s). Please note that this valuation may not be applicable for any other purposes.

The valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflects laws and regulations issued to date pursuant to the provisions of the Texas Local Fire Fighters' Retirement Act (TLFFRA) and Vernon's Texas Civil Statutes, as well as applicable federal laws and regulations. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations.

In conducting the valuation, we have relied on personnel, plan design, financial reports, and asset information supplied by the Fund staff, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

The undersigned is familiar with the immediate and long-term aspects of pension valuations, and meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

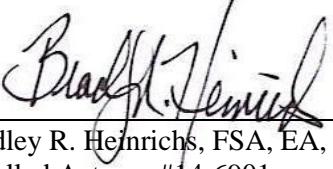
To our knowledge, no associate of Foster & Foster Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Wichita Falls, nor does anyone at Foster & Foster Inc. act as a member of the Board of Trustees of the Wichita Falls Firemen's Relief and Retirement Fund. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact me at 239-433-5500.

Respectfully submitted,

Foster & Foster Inc.

By:

  
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Bradley R. Heinrichs, FSA, EA, MAAA  
Enrolled Actuary #14-6901

BRH/lke

Enclosures

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## SUMMARY OF REPORT

The annual actuarial valuation of the Wichita Falls Firemen's Relief and Retirement Fund, performed as of January 1, 2016, has been completed and the results are presented in this Report.

The pension costs, compared with those developed in the January 1, 2015 actuarial valuation (as performed by the firm of John M. Crider, Jr.), are as follows:

Valuation Date	New Provisions <u>1/1/2016</u>	Old Provisions <u>1/1/2016</u>	Old Provisions <u>1/1/2015</u>
Normal Cost			
% of Total Annual Payroll	15.27%	15.25%	15.80%
Expected Member Contributions			
% of Total Annual Payroll	13.00%	12.00%	12.00%
City Normal Cost Rate			
% of Total Annual Payroll	2.27%	3.25%	3.80%
Funding Period To Amortize UAAL (expressed in number of years)	43.7 years	104.8 years	Infinite

During the past year, there was net unfavorable actuarial experience. The primary components of actuarial loss were attributable to a 6.36% investment return (Actuarial Asset Basis) which fell below the 8.00% assumption, average individual increases in pensionable earnings that exceeded the assumed rate, and unfavorable turnover experience. These losses were partially offset by our valuation replication of the January 1, 2015 actuarial valuation. As stated in our December 4, 2015 cost analysis, the valuation replication resulted in an Actuarial Accrued Liability that was 1.3% lower than the amount determined by the prior actuary.

In spite of the net unfavorable actuarial experience, it can be seen above that the funding period required to amortize the Unfunded Actuarial Accrued Liability has decreased since the previous valuation. The amortization period initially decreased from an infinite period to 104.8 years which is attributable to a 10.7% increase in covered annual payroll.

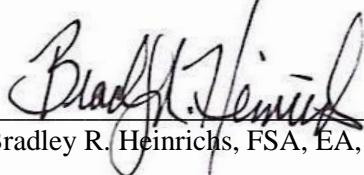
Additionally, the Board approved changes to the benefit structure at the April 2016 Board Meeting, as described on page 7. The impact of the benefit changed resulted in a decrease to the amortization period from 104.8 years to 43.7 years, determined as of January 1, 2016. The impact of these changes is displayed in the comparative summary section of the report.

The balance of this Report presents additional details of the actuarial valuation and the general operation of the Fund. The undersigned would be pleased to meet with the Board of Trustees in order to discuss the Report and answer any pending questions concerning its contents.

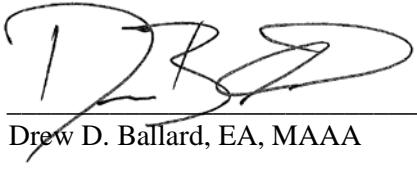
Respectfully submitted,

FOSTER & FOSTER INC.

By:

  
Bradley R. Heinrichs, FSA, EA, MAAA

By:

  
Drew D. Ballard, EA, MAAA

## CHANGES SINCE PRIOR VALUATION

### Benefit/Fund Changes

Effective April 20, 2016, there have been multiple changes in benefits, as follows:

- The member contribution rate was increased from 12.0% to 13.0% of Salary for all members
- All future new entrants will accrue benefits under a “Tier 2” benefit structure

### Actuarial Assumption/Method Changes

There has been no change in assumptions or methods since the prior valuation.

## COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Provisions <u>1/1/2016</u>	Old Provisions <u>1/1/2016</u>	Old Provisions <u>1/1/2015</u>
<b>A. Participant Data</b>			
Actives	157	157	156
Service Retirees + DROP	93	93	91
Beneficiaries + Alternate Payees	25	25	22
Disability Retirees	2	2	2
Terminated Vested	3	3	3
<b>Total</b>	<b>280</b>	<b>280</b>	<b>274</b>
<b>Covered Annual Payroll</b>	<b>10,660,025</b>	<b>10,660,025</b>	<b>9,629,250</b>
<b>Annual Rate of Payments to:</b>			
Service Retirees + DROP	3,465,517	3,465,517	3,347,666
Beneficiaries + Alternate Payees	310,933	310,933	255,408
Disability Retirees	37,495	37,495	37,490
Terminated Vested	0	0	0
<b>B. Assets</b>			
Actuarial Value	48,591,992	48,591,992	47,133,894
Market Value	46,577,636	46,577,636	47,517,957
<b>C. Liabilities</b>			
Present Value of Benefits			
Active Members			
Retirement Benefits	46,810,112	46,810,112	46,043,177
Vested Benefits	565,381	565,381	1,431,029
Death Benefits	954,843	954,843	630,574
Disability Benefits	4,367,320	4,367,320	2,930,967
Refund of Contributions	928,703	891,224	n/a
Service Retirees + DROP	35,081,780	35,081,780	34,134,897
Beneficiaries + Alternate Payees	2,216,855	2,216,855	1,694,391
Disability Retirees	421,333	421,333	425,480
Terminated Vested	25,923	25,923	16,837
<b>Total</b>	<b>91,372,250</b>	<b>91,334,771</b>	<b>87,307,352</b>

	New Provisions <u>1/1/2016</u>	Old Provisions <u>1/1/2016</u>	Old Provisions <u>1/1/2015</u>
<b>C. Liabilities - (Continued)</b>			
Present Value of Future Salaries	113,141,227	113,141,227	n/a
Normal Cost (Entry Age Normal)			
Retirement Benefits	1,217,168	1,217,168	1,182,062
Vested Benefits	23,363	23,363	161,354
Death Benefits	43,489	43,489	39,541
Disability Benefits	174,845	174,845	138,448
Refund of Contributions	106,795	104,360	n/a
Total Normal Cost	1,565,660	1,563,225	1,521,405
Present Value of Future Normal Costs	15,891,549	15,864,118	15,055,582
Actuarial Accrued Liability			
Retirement Benefits	34,218,907	34,218,907	n/a
Vested Benefits	324,538	324,538	n/a
Death Benefits	522,179	522,179	n/a
Disability Benefits	2,605,300	2,605,300	n/a
Refund of Contributions	63,886	53,838	n/a
Inactives	37,745,891	37,745,891	36,271,605
Total Actuarial Accrued Liability	75,480,701	75,470,653	72,251,770
Unfunded Actuarial Accrued Liability (UAAL)	26,888,709	26,878,661	25,117,876
Funded Ratio (AVA / AL)	64.4%	64.4%	65.2%
<b>D. Actuarial Present Value of Accrued Benefits</b>			
Vested Accrued Benefits			
Inactives	37,745,891	37,745,891	36,271,605
Actives	8,553,201	8,553,201	n/a
Member Contributions	11,912,920	11,912,920	n/a
Total	58,212,012	58,212,012	n/a
Non-vested Accrued Benefits	4,578,583	4,578,583	n/a
Total Present Value Accrued Benefits	62,790,595	62,790,595	n/a
Funded Ratio (MVA / PVAB)	74.2%	74.2%	n/a

Valuation Date	New Provisions <u>1/1/2016</u>	Old Provisions <u>1/1/2016</u>	Old Provisions <u>1/1/2015</u>
<b>E. Pension Cost</b>			
Normal Cost			
% of Covered Annual Payroll <sup>1</sup>	15.27	15.25	15.80
Expected Member Contributions			
% of Covered Annual Payroll <sup>1</sup>	13.00	12.00	12.00
City Normal Cost Rate			
% of Covered Annual Payroll <sup>1</sup>	2.27	3.25	3.80
 <b>F. PRB Preferred Funding Policy</b>			
Normal Cost			
% of Covered Annual Payroll <sup>1</sup>	15.27	15.25	15.80
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 20 years			
% of Covered Annual Payroll <sup>1</sup>	17.62	17.61	17.52
Total Preferred Funding Cost			
% of Covered Annual Payroll <sup>1</sup>	32.89	32.86	33.32
Funding Period to Amortize UAAL <sup>2</sup>	43.7 years	104.8 years	Infinite

<sup>1</sup> Contributions developed as of 1/1/2016 are expressed as a percentage of covered annual payroll at 1/1/2016 of \$10,660,025 and are assumed to be made mid-year

<sup>2</sup> UAAL amortization period determined utilizing open group projection, which fully incorporates the impact of benefit changes.

Valuation Date	New Provisions <u>1/1/2016</u>	Old Provisions <u>1/1/2016</u>	Old Provisions <u>1/1/2015</u>
<b>G. PRB Minimum Funding Policy</b>			
Normal Cost			
% of Covered Annual Payroll <sup>1</sup>	15.27	15.25	15.80
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 40 years			
% of Covered Annual Payroll <sup>1</sup>	11.61	11.61	11.54
Total Minimum Funding Cost			
% of Covered Annual Payroll <sup>1</sup>	26.88	26.86	27.34
Funding Period to Amortize UAAL <sup>2</sup>	43.7 years	104.8 years	Infinite

<sup>1</sup> Contributions developed as of 1/1/2016 are expressed as a percentage of covered annual payroll at 1/1/2016 of \$10,660,025 and are assumed to be made mid-year

<sup>2</sup> UAAL amortization period determined utilizing open group projection, which fully incorporates the impact of benefit changes.

## GAIN/LOSS ANALYSIS

a. Total Gain/(Loss)

1. Unfunded Actuarial Accrued Liability as of January 1, 2015	25,117,876
2. Normal Cost applicable for 2015	1,521,405
3. Interest on (1) and (2)	2,131,142
4. Contributions made during 2015	2,457,474
5. Interest on (4)	98,299
6. Expected UAAL as of January 1, 2016: (1)+(2)+(3)-(4)-(5)	26,214,650
7. Actual UAAL as of January 1, 2016 (Before Plan Amendment)	26,878,661
 Total Actuarial Gain/(Loss)	 (664,011)

b. Gain/(Loss) on Assets

1. Actuarial Value of Assets as of January 1, 2015	47,133,894
2. Contributions Less Benefit Payments	(1,493,432)
3. Expected Investment Earnings	3,710,974
4. Expected AVA as of January 1, 2016: (1)+(2)+(3)	49,351,436
5. Actual Actuarial Value of Assets as of January 1, 2016	48,591,992
 Gain/(Loss) on Assets	 (759,444)

c. Gain/(Loss) on Liabilities

1. Expected Actuarial Accrued Liability: a(6)+b(4)	75,566,086
2. Actual Actuarial Accrued Liability (Before Plan Amendment)	75,470,653
 Gain/(Loss) on Liabilities	 95,433

## ACTUARIAL ASSUMPTIONS AND METHODS

### Assumption Rationale

**The assumptions and methods stated below were utilized by the prior actuary. Since this is our first actuarial valuation, we not do have adequate historical Fund experience to incorporate a sufficient rationale for all of the actuarial assumptions stated below at this time.**

#### Mortality Rates

RP-2000 projected to 2024 using Scale AA -- Sex Distinct. We feel this sufficiently accommodates expected mortality improvements.

#### Retirement Age

Age	Service																	
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37+
50	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
51	0.21	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
52	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
53	0.32	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
54	0.42	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.55	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
56	0.68	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
57	0.79	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
58	0.86	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
59	0.91	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
60	0.95	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
61	0.98	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
62	1	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
63+	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

The assumed rates of retirement were amended by the prior actuary in conjunction with the January 1, 2015 actuarial valuation

#### Termination Rates

Table T-1 from the Actuary's Pension Handbook. Sample rates are displayed below.

Age	Termination Rate
25	4.97%
35	2.49%
45	0.62%
55	0.00%

## Disability Rates

Sample rates are displayed below.

<u>Age</u>	<u>Termination Rate</u>
25	0.111%
35	0.152%
45	0.335%
55	0.858%

The assumed rates of disablement were amended by the prior actuary in conjunction with the January 1, 2015 actuarial valuation.

## Interest Rate

8.00% per year, compounded annually, net of expenses. This is supported by the asset allocation of the trust and the long-term expected return by asset class.

## Salary Increases

<u>Service</u>	<u>Increase</u>
0-4	8.0%
5-14	5.6%
15-19	5.5%
20-24	4.1%
25+	3.7%

The assumed rates of salary increase were amended by the prior actuary in conjunction with the January 1, 2015 actuarial valuation.

## Payroll Growth

4.50% per year for amortization of the Unfunded Actuarial Accrued Liability. The assumed payroll growth rate was amended by the prior actuary in conjunction with the January 1, 2015 actuarial valuation.

## Funding Method

Entry Age Normal Actuarial Cost Method

## Marital Status

100% of actives are assumed to be married at time of benefit commencement. Males are assumed to be two years older than their spouses.

## Dependent Children

Each member is assumed to have two children. The first child is assumed to have been born when the member was age 25. The second child is assumed to be two years younger. It is also assumed that benefits will be paid until each child reaches the age of 20.

## Contribution Rates

Members – 13.00%  
City – 12.00%

Retirement Election

Members eligible for the DROP are assumed to elect either straight service retirement benefits or the DROP, whichever is more valuable. Other members are assumed to receive straight service retirement benefits.

Actuarial Asset Method

All assets are valued at market value with an adjustment made to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period.

## VALUATION NOTES

Covered Annual Payroll is the projected annual rate of pay for the year beginning on the valuation date of all active participants who are not subject to a 100% probability of retirement on the valuation date.

Present Value of Benefits is the single sum value on the valuation date of all future benefits to be paid to current Members, Retirees, Beneficiaries, Disability Retirees and Vested Terminations.

Entry Age Normal Cost Method - Under this method, the normal cost is the sum of the individual normal costs for all active participants. For an active participant, the normal cost is the participant's normal cost accrual rate, multiplied by the participant's current compensation. The funding span utilized in determination of the normal cost rate for each benefit is to the last age at which that benefit is payable.

(a) The normal cost accrual rate equals:

- (i) the present value of future benefits for the participant, determined as of the participant's entry age, divided by
- (ii) the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age .

(b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.

(c) The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant's accrued liability equals the present value, at the participant's attained age, of future benefits less the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.

(d) Under this method, the entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

**STATEMENT OF FIDUCIARY NET POSITION**  
**DECEMBER 31, 2015**

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Money Market	2,147,349.72	2,147,349.72
Total Cash and Equivalents	2,147,349.72	2,147,349.72
Receivables:		
Investment Income	49,386.11	49,386.11
Total Receivable	49,386.11	49,386.11
Investments:		
U. S. Bonds and Bills	3,512,070.86	3,516,592.01
Federal Agency Guaranteed Securities	937,354.56	947,497.69
Corporate Bonds	1,114,018.75	1,106,568.34
Stocks	4,483,386.27	4,306,969.59
Mutual Funds:		
Fixed Income	8,119,068.86	7,585,295.90
Equity	10,926,594.38	10,029,269.84
Pooled/Common/Commingled Funds:		
Fixed Income	1,295,277.28	1,151,062.26
Equity	9,069,290.93	13,303,312.82
Real Estate	2,323,337.10	2,434,331.58
Total Investments	41,780,398.99	44,380,900.03
Computer Equipment and Office Furniture	0.00	0.00
Total Assets	43,977,134.82	46,577,635.86
<u>LIABILITIES</u>		
Total Liabilities	0.00	0.00
NET POSITION RESTRICTED FOR PENSIONS	43,977,134.82	46,577,635.86

**STATEMENT OF CHANGES IN FIDUCIARY NET POSITION  
FOR THE YEAR ENDED DECEMBER 31, 2015**  
Market Value Basis

**ADDITIONS**

Contributions:

Member	1,202,678.83
City	1,254,795.13
 Total Contributions	 2,457,473.96
 Investment Income:	
Net Realized Gain (Loss)	3,348,063.07
Unrealized Gain (Loss)	(4,049,755.89)
Net Increase in Fair Value of Investments	(701,692.82)
Interest & Dividends	1,545,534.66
Less Investment Expense <sup>1</sup>	(203,312.39)
 Net Investment Income	 640,529.45
 Total Additions	 3,098,003.41

**DEDUCTIONS**

Distributions to Members:

Benefit Payments	3,739,523.43
Lump Sum DROP Distributions	194,868.40
Refunds of Member Contributions	16,513.76
 Total Distributions	 3,950,905.59
 Administrative Expense	 87,419.00
 Total Deductions	 4,038,324.59
 Net Increase in Net Position	 (940,321.18)
 <b>NET POSITION RESTRICTED FOR PENSIONS</b>	
Beginning of the Year	47,517,957.04
 End of the Year	 46,577,635.86

<sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees.

**ACTUARIAL ASSET VALUATION**  
December 31, 2015

Actuarial Assets for funding purposes are developed by recognizing the total actuarial investment gain or loss for each Plan Year over a five year period. In the first year, 20% of the gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Plan Year Ending	Gain/(Loss)	<u>Gains/(Losses) Not Yet Recognized</u>				
		2016	2017	2018	2019	2020
12/31/2011	(2,542,044)	0	0	0	0	0
12/31/2012	480,493	96,099	0	0	0	0
12/31/2013	1,695,791	678,316	339,158	0	0	0
12/31/2014	(396,499)	(237,899)	(158,600)	(79,300)	0	0
12/31/2015	(3,188,589)	(2,550,872)	(1,913,153)	(1,275,436)	(637,718)	0
<b>Total</b>		<b>(2,014,356)</b>	<b>(1,732,595)</b>	<b>(1,354,736)</b>	<b>(637,718)</b>	<b>0</b>
<u>Development of Investment Gain/(Loss)</u>						
Market Value of Assets, 12/31/2014				47,517,957		
Contributions Less Benefit Payments				(1,493,432)		
Expected Investment Earnings*				3,741,699		
Actual Net Investment Earnings				553,110		
<b>2015 Actuarial Investment Gain/(Loss)</b>				<b>(3,188,589)</b>		

\*Expected Investment Earnings = 0.08 \* [47,517,957 + 0.5 \* (1,493,432)]

<u>Development of Actuarial Value of Assets</u>	
(1) Market Value of Assets, 12/31/2015	46,577,636
(2) Gains/(Losses) Not Yet Recognized	(2,014,356)
<b>(3) Actuarial Value of Assets, 12/31/2015, (1) - (2)</b>	<b>48,591,992</b>

(A) 12/31/2014 Actuarial Assets:	47,133,894
 (I) Net Investment Income:	
1. Interest, Dividends and Misc Income	1,545,535
2. Realized Gains (Losses)	3,348,063
3. Change in Actuarial Value	(1,651,337)
4. Investment & Administrative Expenses	(290,731)
<b>Total</b>	<b>2,951,529</b>

(B) 12/31/2015 Actuarial Assets:	48,591,992
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Actuarial Asset Rate of Return = $2I/(A+B-I)$ :	6.36%
Market Value of Assets Rate of Return:	1.18%

12/31/2015 Limited Actuarial Assets:	48,591,992
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	(759,444)

**CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS**  
**DECEMBER 31, 2015**  
**Actuarial Asset Basis**

**REVENUES**

Contributions:	
Member	1,202,678.83
City	1,254,795.13
Total Contributions	2,457,473.96
Earnings from Investments:	
Interest & Dividends	1,545,534.66
Net Realized Gain (Loss)	3,348,063.07
Change in Actuarial Value	(1,651,336.85)
Total Earnings and Investment Gains	3,242,260.88
EXPENDITURES	
Distributions to Members:	
Benefit Payments	3,739,523.43
Lump Sum DROP Distributions	194,868.40
Refunds of Member Contributions	16,513.76
Total Distributions	3,950,905.59
Expenses:	
Investment related <sup>1</sup>	203,312.39
Administrative	87,419.00
Total Expenses	290,731.39
Change in Net Assets for the Year	1,458,097.86
Net Assets Beginning of the Year	47,133,894.00
Net Assets End of the Year <sup>2</sup>	48,591,991.86

<sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees.

<sup>2</sup>Net Assets may be limited for actuarial consideration.

## STATISTICAL DATA

	<u>1/1/2015</u>	<u>1/1/2016</u>
Actives	156	157
Average Current Age	39.4	39.8
Average Age at Employment	25.3	25.4
Average Past Service	14.1	14.4
Average Annual Salary	\$61,726	\$67,898

## AGE AND SERVICE DISTRIBUTION

### PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19	0	0	0	0	0	0	0	0	0	0	0	0
20 - 24	2	5	1	2	0	0	0	0	0	0	0	10
25 - 29	1	3	4	2	4	8	0	0	0	0	0	22
30 - 34	2	6	1	0	2	11	1	0	0	0	0	23
35 - 39	0	1	1	0	0	10	10	4	0	0	0	26
40 - 44	0	0	0	0	0	2	4	10	2	0	0	18
45 - 49	0	0	0	0	0	0	3	9	6	3	0	21
50 - 54	0	0	0	0	0	0	0	4	5	4	13	26
55 - 59	0	0	0	0	0	0	0	0	2	2	4	8
60 - 64	0	0	0	0	0	0	0	0	0	2	1	3
65+	0	0	0	0	0	0	0	0	0	0	0	0
Total	5	15	7	4	6	31	18	27	15	11	18	157

## VALUATION PARTICIPANT RECONCILIATION

### 1. Active lives

a. Number in prior valuation 1/1/2015	156
b. Terminations	
i. Vested with deferred benefits	0
ii. Non-vested or full lump sum distribution received	1 *
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired or Entered DROP	3
f. Continuing participants	152
g. New entrants	5
h. Total active life participants in valuation	157

### 2. Non-Active lives (including beneficiaries receiving benefits)

	Service Retirees, DROP Receiving <u>Benefits</u>	Receiving Death / QDRO <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested Deferred * <u></u>	<u>Total</u>
a. Number prior valuation	91	22	2	3	118
b. In	3	4	0	2	9
c. Out	1	1	0	2	4
d. Number current valuation	93	25	2	3	123

\* Includes Non-Vested Terminated Participants awaiting a refund of accumulated contributions.

## SUMMARY OF BENEFIT PROVISIONS

### Credited Service

Period of continuous employment covered by the Fund during which a member pays into, and keeps on deposit in the Fund, the contributions required by the Fund. Credited Service will be calculated in completed months.

### Compensation

Total bi-weekly pay, including regular, longevity and overtime pay, and pay received during a period of sick leave or vacation, but excluding lump sum distributions for unused sick leave and/or unused vacation time and pay classified by the City or Department as "merit" pay.

### Average Salary

*Hired prior to April 21, 2016:* Average Compensation over the 78 consecutive pay periods of service which produces the highest average, multiplied by 2.167.

*Hired after April 20, 2016:* Average Compensation over the 130 consecutive pay periods of service which produces the highest average, multiplied by 2.167.

### Member Contributions

12.00% of Compensation. Effective April 20, 2016, 13.00% of Compensation.

### Service Retirement

#### Date

*Hired prior to April 21, 2016:* Attainment of age 50 and 20 years of Credited Service.

*Hired after April 20, 2016:* Attainment of age 55 and 20 years of Credited Service.

#### Benefit

*Hired prior to April 21, 2016:* 2.55% of Average Salary for each year of Credited Service.

*Hired after April 20, 2016:* 2.50% of Average Salary for each year of Credited Service.

#### Form of Benefit

Life Annuity with two-thirds (2/3) continued to Surviving Spouse.

## Disability

### Prior to Attainment of Age 50

*Hired prior to January 1, 2004:* 50.0% of Average Salary, payable until attainment of age 50.

*Hired After December 31, 2003:*

Service related – 50.0% of Average Salary, payable until attainment of age 50.  
Non-service related – Average Salary multiplied by a factor based on below table, payable until attainment of age 50.

<u>Service</u>	<u>Factor</u>
0-1	5%
2	10
3	15
4	20
5	25
6	30
7	35
8	40
9	45
10+	50

### Attainment of Age 50 Following Disability

2.55% multiplied by Average Salary at time of disability for each year of service assuming the member continued employment to age 50 (maximum = 20 years of service).

### Attainment of Age 50 Prior to Disability

2.55% multiplied by Average Salary at time of disability for each year of service.

## Death Benefits

Surviving Spouse of Member:

### Prior to Normal Retirement Eligibility

Two-thirds (2/3) multiplied by Average Salary at time of death multiplied by 2.55% for each year of service assuming the member continued employment to age 50.

Following Normal Retirement Eligibility

Two-thirds (2/3) of the member's accrued benefit, as described under the Service Retirement benefit provision.

Dependent Children of Member:

Each child is entitled to \$230 per month, payable until age 18 or until age 23 as long as the child remains a full-time student.

Retroactive Deferred Retirement Option Program

Eligibility

*Hired prior to April 21, 2016:* Attainment of age 55 and 25 years of Credited Service.

Participation Period

*Hired after April 20, 2016:* Attainment of age 57 and 25 years of Credited Service.

*Hired prior to April 21, 2016:* Not to exceed 24 months retroactively (53/23).

*Hired after April 20, 2016:* Not to exceed 24 months retroactively (55/23).

Accumulation

Sum of the monthly Service Retirement benefit the member would have received if had retired on the Retroactive DROP election date.