

**CITY OF SIOUX FALLS FIREFIGHTERS' PENSION FUND  
FIFTY-EIGHTH ANNUAL ACTUARIAL VALUATION REPORT  
DECEMBER 31, 2013**

# OUTLINE OF CONTENTS

Page	Items
	<b>Cover Letter</b>
<b>A</b>	<b>Valuation Results</b>
1	Financial Objective
2	Computed City-State Contributions
3	Active and Retired Pension Fund Members
4	Computed City-State Pension Contributions – Comparative Statement
5	Actuarial Pension Balance Sheet
6	Derivation of Actuarial Gain (Loss)
7	Comments
8	Contribution Summary
<b>B</b>	<b>Summary of Benefit Provisions and Valuation Data</b>
1-3	Summary of Benefit Provisions
4-6	Reported Asset Information
7-9	Retired Life Data
10	Inactive Member Data
11-14	Active Member Data
<b>C</b>	<b>Actuarial Methods and Assumptions and Definitions of Technical Terms</b>
1	Actuarial Methods Used for the Valuation
2-5	Actuarial Assumptions Used for the Valuation
6-7	Definitions of Technical Terms
8	Miscellaneous and Technical Assumptions
<b>D</b>	<b>Disclosures Required by GASB Statements No. 25 and No. 27</b>
1	Schedule of Funding Progress and Employer Contributions
2	Required Supplementary Information
<b>Appendix A</b>	<b>Retiree Health Valuation Based on Assumptions and Methods Prescribed by the Governmental Accounting Standards Board</b>
1-8	

March 6, 2014

The Retirement Board  
City of Sioux Falls Firefighters' Pension Fund  
Sioux Falls, South Dakota

Ladies and Gentlemen:

The results of the December 31, 2013 actuarial valuation of the City of Sioux Falls Firefighters' Pension Fund are presented in this report. Both this report and the Power Point Presentation to the Board comprise the valuation results. The purpose of the valuation was to measure the Fund's funding progress, provide actuarial information in connection with applicable Governmental Accounting Standards Board Statements and to determine the employer contribution for the fiscal year beginning January 1, 2015. This report should not be relied upon for any other purpose. This report may be distributed to parties other than the Retirement Board only in its entirety and only with the permission of the Board.

The valuation was based upon information, furnished by the Fund, concerning Pension Fund benefits, financial transactions, individual members, terminated members, retirees and beneficiaries. Data was checked for internal and year to year consistency, but was not otherwise audited by us. As a result, we are unable to assume responsibility for the accuracy or completeness of the data provided.


Future actuarial measurements may differ significantly from those presented in this report due to such factors as experience differing from that anticipated by actuarial assumptions, changes in plan provisions, actuarial assumptions/methods or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements.

To the best of our knowledge, this report is complete and accurate and the valuation was conducted in accordance with standards of practice prescribed by the Actuarial Standards Board and in compliance with the applicable state statutes. Louise M. Gates and Mark Buis are independent of the plan sponsor and are members of the American Academy of Actuaries (MAAA) who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. It is our opinion that the actuarial assumptions used for the valuation produce results which are reasonable.

Respectfully submitted,



Louise M. Gates, ASA, MAAA



Mark Buis, FSA, EA, MAAA

LMG/MB:ah

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**SECTION A**  
**VALUATION RESULTS**

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## **FINANCIAL OBJECTIVE**

The financial objective of the Pension Fund is to establish and receive contributions that will accumulate reserves during members' working lifetimes which will be sufficient to pay promised benefits throughout retirement.

## **CONTRIBUTION RATES**

The Pension Fund is supported by member contributions, City contributions, State contributions (insurance premium taxes) and investment income from Pension Fund assets.

Contributions which satisfy the financial objective are determined by an annual actuarial valuation and are sufficient to:

- (1) cover the actuarial present value of benefits assigned to the current year by the actuarial cost methods described in Section C (the normal cost); and
- (2) amortize over a period of future years the actuarial present value of benefits not covered by valuation assets and anticipated future normal costs (unfunded actuarial accrued liability).

Pension contribution requirements for the year beginning January 1, 2015 are shown on page A-2.

**CONTRIBUTIONS COMPUTED TO MEET THE  
FINANCIAL OBJECTIVE OF THE PENSION FUND  
FOR THE FISCAL YEAR BEGINNING JANUARY 1, 2015  
(INCLUDING STATE CONTRIBUTIONS)**

<u>Contributions for</u>	<u>Contribution Requirements</u>
Total Normal Cost	\$3,109,510
Employee Portion	1,173,400
City-State Portion	1,936,110
 Unfunded Actuarial Accrued Liabilities Contribution	 \$2,488,546
 Total Computed City-State Contribution	 \$4,424,656

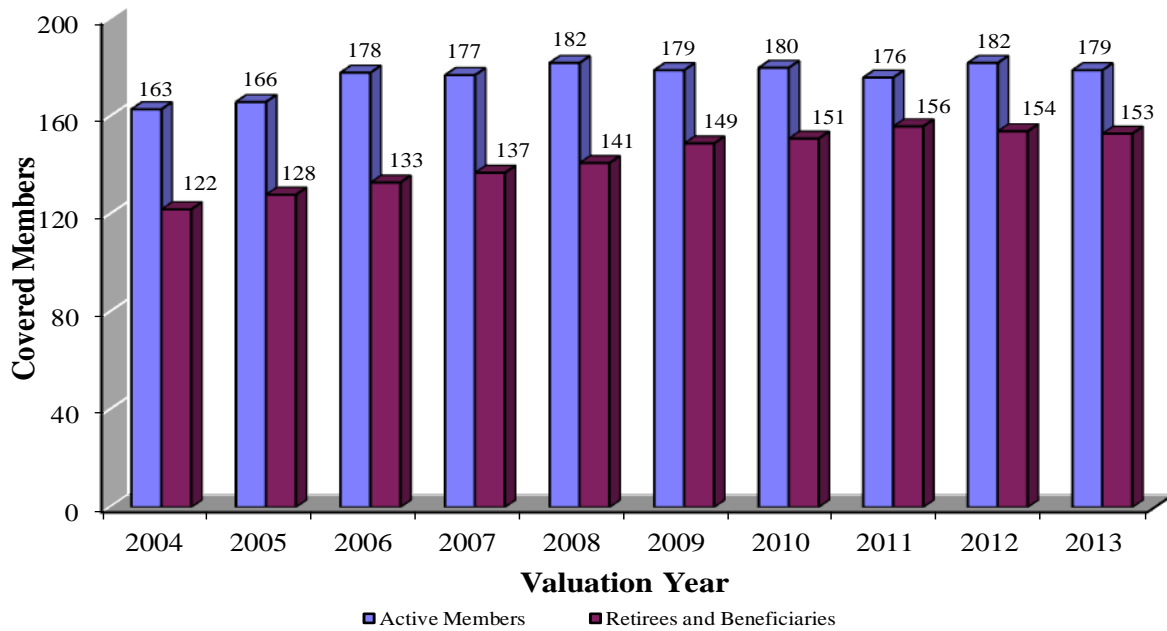
City Firefighter employees hired on or after July 1, 2013 will become members of the South Dakota Retirement System (SDRS) instead of joining the Pension Fund. Contributions are expressed in terms of dollars in this report instead of as percents of payroll. This is due to the use of the level dollar amortization method (appropriate for systems closed to new hires) to finance the Pension Fund's unfunded actuarial accrued liabilities (UAAL).

The Pension Fund's UAAL was amortized as a level dollar amount over a period of 24 years.

The employee contribution to the Pension Fund shown above was based on an employee contribution rate of 10.0% and plan member payroll projected to 2015.

The employer contribution shown above includes contributions for the stipend benefit (which will become effective January 1, 2014).

## ACTIVE AND RETIRED PENSION FUND MEMBERS



The chart above shows current and future pension benefit recipients on each valuation date during the last 10 years.

**COMPUTED CITY-STATE PENSION CONTRIBUTIONS  
COMPARATIVE STATEMENT**

<b>Fiscal Year</b>	<b>Valuation Date December 31</b>	<b>% of Payroll Contributions</b>	<b>Dollar Contributions</b>
2001	1999 **	10.48 %	
2002	2000 **	7.86	
2003	2001 **	7.23	
2004	2002 **	9.31	
2005	2003	11.12	
2006	2004 @	16.21	
2007	2005	17.14	
2008	2006	15.99	
2009	2007 @	16.36	
2010	2008	19.97	
2011	2009	24.55	
2012	2010	25.21	
2013	2011 @	24.31	
2014	2012 @#		\$4,484,256
2015	2013 @		4,424,656

@ After changes in actuarial assumptions or methods.

# After changes in benefit provisions.

\*\* Reflects amortization credit.



# ACTUARIAL BALANCE SHEET - DECEMBER 31, 2013

## Present Pension Resources and Expected Future Resources

A.	Valuation assets	\$110,630,521
B.	Actuarial present value of expected future employer contributions	
	1. For normal costs	18,582,489
	2. For unfunded actuarial accrued liabilities	28,438,339
	3. Total	<u>47,020,828</u>
C.	Actuarial present value of expected future member contributions	<u>11,299,764</u>
D.	Total actuarial present value of present and expected future resources	<u><u>\$168,951,113</u></u>

## Actuarial Present Value of Expected Future Pension Benefit Payments and Reserve

A.	To retirees and beneficiaries	\$ 84,573,093
B.	To vested terminated members	1,451,092
C.	To present active members	
	1. Allocated to service rendered prior to valuation date	53,044,675
	2. Allocated to service likely to be rendered after valuation date	29,882,253
	3. Total	<u>82,926,928</u>
D.	Reserves	
	1. Allocated to retirants and beneficiaries	0
	2. Unallocated investment income	0
	3. Total	0
E.	Total actuarial present value of expected future benefit payments and reserves	<u><u>\$168,951,113</u></u>

## DERIVATION OF ACTUARIAL GAIN (LOSS) YEAR ENDED DECEMBER 31, 2013

The actuarial gains or losses realized in the operation of the Pension Fund provide an experience test. Gains and losses are expected to cancel each other over a period of years (in the absence of double-digit inflation) and sizable year to year fluctuations are common. Detail on the derivation of the actuarial gain (loss) is shown below, along with a year by year comparative schedule.

(1) UAAL* at start of year	\$27,714,293
(2) Normal cost	1,898,020
(3) Actual contributions	2,816,770
(4) Interest accrual	2,112,256
(5) Expected UAAL before changes	28,907,799
(6) Change from benefit changes	0
(7) Change from revised actuarial methods/assumptions	3,695,099
(8) Expected UAAL after changes	32,602,898
(9) Actual UAAL at end of year	28,438,339
(10) Gain (loss) (8) - (9)	4,164,559
(11) Gain (loss) as percent of actuarial accrued liabilities at start of year	3.2%

\* *Unfunded Actuarial Accrued Liability.*

<b>Valuation Date December 31</b>	<b>Actuarial Gain (Loss) As % of Beginning Accrued Liabilities</b>
2004	(4.3) %
2005	(0.9)
2006	1.8
2007	3.1
2008	(4.6)
2009	(5.7)
2010	0.7
2011	(3.9)
2012	(0.4)
2013	3.2

## COMMENTS

**Comment A:** Pension Fund experience was overall favorable during the 2013 plan year. During calendar year 2013 the return on the market value of assets was higher than long term expectations. The market smoothing techniques used in this valuation of the Pension Fund recognize both past and present investment experience. As a result, the recognized rate of return on pension assets was 10.15%. Details of this asset smoothing method are shown on page B-5. Assets held in the Unallocated Income reserve were not used in the development of City pension contributions.

**Comment B:** This valuation of the Pension Fund reflects the following changes: A technical change to the mortality table (the male mortality table scaling factor was changed from 130% to 115%) and the investment return assumption was reduced to 7.65% per year. In addition, the valuation recognizes employee contributions to the Pension Fund of 10% per year during the calendar year 2015. These changes are noted in Sections B and C of this report.

**Comment C:** The Appendix of this report includes the results of the actuarial valuation of the retiree health program using assumptions and methods required by the Governmental Accounting Standards Board (GASB). The City's policy is to make 100% of the contributions recommended by the actuary. The Appendix of this report includes additional information about this valuation.

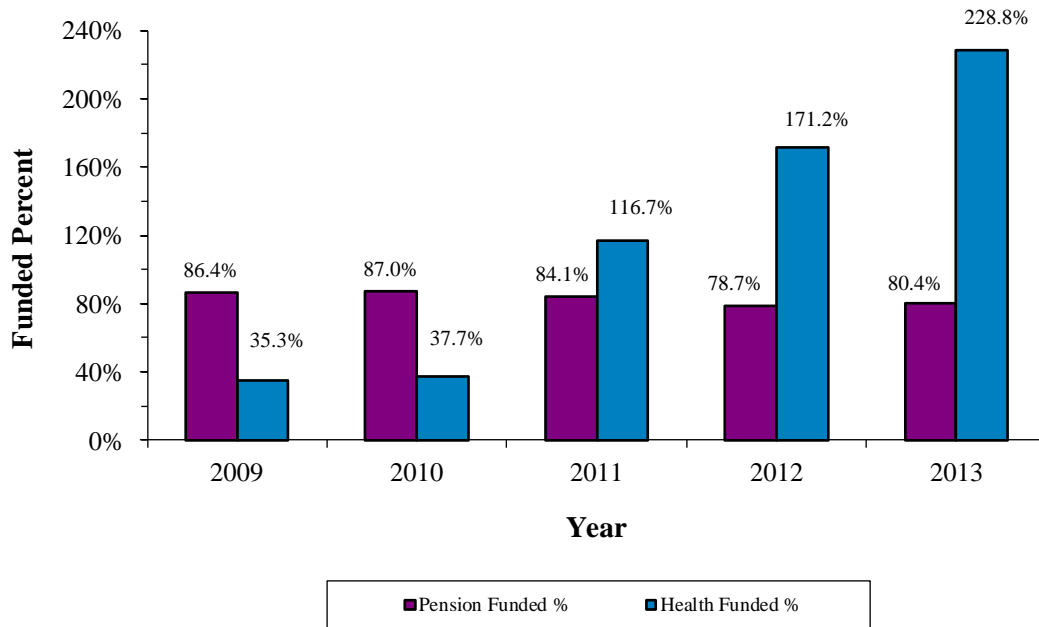
**Comment D:** During the 2013 plan year, retiree health cost increases were lower than expected. The favorable health care cost experience was offset in part by a change in the medical inflation assumption. The Health Plan continues to have a funding surplus as of the valuation date. As a result of the funding surplus, no City contribution is recommended to the retiree health plan for the 2015 fiscal year.

## CONTRIBUTION SUMMARY FOR THE FISCAL YEAR BEGINNING JANUARY 1, 2015

Contributions for	Computed Employer Contributions		
	Pension	Health	Total
Total Computed City-State Contribution	\$4,424,656	\$0	\$4,424,656

The pension contribution shown above was based on a 24-year amortization of the UAAL. The Retiree Health Plan surplus resulted in a \$0 contribution for the 2015 fiscal year.

### Pension and Retiree Health Funded Ratio History



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**SECTION B**  
**SUMMARY OF BENEFIT PROVISIONS**  
**AND VALUATION DATA**

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**BENEFIT PROVISIONS EVALUATED  
AND/OR CONSIDERED  
(DECEMBER 31, 2013)**

**Pension Fund Eligibility:**

New City Firefighter employees hired on or before June 30, 2013 will become members of the Firefighters Pension Fund. Individuals hired after June 30, 2013 will become members of the South Dakota Retirement System.

**Regular Retirement:**

*Eligibility* - Age 55 with 20 or more years of service; or the sum of a member's age and years of service equals eighty (80) with a minimum retirement age of 50.

*Annual Amount* - Final average compensation times the sum of a) 2.5% times the first 25 years of service, plus b) 1.5% times service in excess of 25 years.

*Type of Final Average Compensation* - Average of last 3 years before retirement. Some lump sums are included.

**Early Reduced Retirement:**

*Eligibility* - 20 or more years of service.

*Annual Amount* - Same as regular retirement except that the benefit is actuarially reduced.

**Deferred Retirement (vested benefit):**

*Eligibility* - 15 years of service; benefit payable at deferred retirement age.

*Annual Amount* - Computed as a regular retirement benefit but based on service and final average compensation at termination.

**Duty Disability Retirement:**

*Eligibility* - No age or service requirements. Must be in receipt of Workers' Compensation.

*Annual Amount* - Computed as a regular retirement benefit, based on a minimum of 10 years of service. Minimum benefit is 50% of a first-class firefighter's salary. Workers' compensation payments are offset.

**BENEFIT PROVISIONS EVALUATED  
AND/OR CONSIDERED  
(DECEMBER 31, 2013)**

**Non-Duty Disability Retirement:**

*Eligibility* - 10 years of service.

*Annual Amount* - Computed as a regular retirement benefit. Minimum benefit is 20% of a first-class firefighter's salary.

**Duty Death Before Retirement:**

*Eligibility* - No age or service requirement. Also payable in case of death of duty-disability retiree within 5 years of retirement. Workers' Compensation must be payable.

*Annual Amount* - Refund of accumulated contributions. Spouse receives a pension of 1/3 of first-class firefighter's salary until death. Unmarried children under age 18 or an eligible handicapped child will receive equal share of 1/4 of a first-class firefighter's salary (if no spouse, each child receives 1/4 to a maximum of 1/2). The minimum monthly benefit for each eligible child is \$200. If there are no spouse or eligible children, dependent parents each receive 1/6 of a first-class firefighter's salary. Workers' Compensation payments are offset.

**Non-Duty Death Before Retirement:**

*Eligibility* - 10 years of service.

*Annual Amount* - Surviving spouse receives a monthly benefit for life computed as a regular retirement benefit but actuarially reduced in accordance with a 100% joint and survivor election. In addition each eligible or handicapped child is paid a minimum monthly benefit of \$200.

**Post-Retirement Cost-of-Living Adjustments:**

An annual increase equal to 100% of the June CPI change each year with a cap of 3%. The first increase is granted after 36 months of retirement.

**Member Contributions:**

8% of compensation until January 1, 2014.

9% of compensation effective January 6, 2014.

10% of compensation on and after January 5, 2015.

**BENEFIT PROVISIONS EVALUATED  
AND/OR CONSIDERED  
(DECEMBER 31, 2013)**

**Stipend Benefit:**

*Eligibility* - Members who retire from City employment (regular, early reduced or disability retirement) after December 31, 2013 are eligible to receive a monthly stipend benefit payable from the Pension Fund until age 65 (or Medicare eligibility) in lieu of retiree health plan benefits.

*Annual Amount* - \$40 per month times years of service at retirement. Benefit is payable to the member only until he/she becomes eligible for Medicare or dies (if earlier). No benefit is payable to a surviving spouse or child of a deceased Pension Fund Member. Benefit increases by 3% each year beginning in January 2015.

**Retiree Health Plan Benefit:**

*Eligibility* – Eligible Pension Fund members (and their eligible spouses) who retire from the City employment on or before December 31, 2013 are eligible to join the City Sponsored Retiree Health Plan at retirement.

*Annual Amount* – Medical, prescription drug and dental benefits are provided to eligible retirees and spouses until attainment of age 65 (or Medicare eligibility). The benefit recipient pays for 50% of the monthly premium amount.



## REPORTED FUND BALANCES

Reserves	Reported Fund Balances Market Value 2013
Pension Savings Fund	\$ 12,532,822
Pension Reserve Fund	49,425,648
Retirement Reserve Fund	59,670,800
Unallocated Income	1,199,241
IRC 401(h) Account	7,649,507
Income/Expense Fund	162,622
Total Fund Balances	\$130,640,640

*In financing pension actuarial accrued liabilities, valuation assets were distributed as follows:*

Reserves	Valuation Assets Applied to Actuarial Accrued Liabilities for			Totals
	Active & Inactive Members	Retirees & Beneficiaries	Contingency Reserve	
Pension Savings Fund	\$12,532,822			\$12,532,822
Pension Reserve and Income/Expense Fund	13,524,606	\$24,902,293		38,426,899
Retirement Reserve Fund		59,670,800		59,670,800
Total*	\$26,057,428	\$84,573,093	\$ 0	\$110,630,521

*\*Based on Actuarial Value of Assets. Excludes IRC 401(h) Account and Unallocated Income reserves.*

## DERIVATION OF VALUATION ASSETS

	<u>Pension</u>	<u>Health</u>	<u>Sub-Total</u>	<u>Unallocated Income</u>	<u>Total</u>
A. Funding Value, 12/31/12	\$102,540,544	\$6,977,862	\$109,518,406	\$0	\$109,518,406
B. Market Value, Beginning of Year			110,196,822	0	110,196,822
C. Non-Investment Net Cash Flow	(2,210,232)	(330,944)		1,199,241	
D. Net Investment Income	20,783,164				
E. Market Value, End of Year			129,441,399	1,199,241	130,640,640
F. Phase-in Factor	20%				
G. Expected Income**	7,861,246	1,002,589			
H. Market Value Gain (Loss): [(D) – (G)]	12,921,918				
I. Method Change					
J. Recognition of Gain (Loss)					
J1. Year One	2,584,384				
J2. Year Two	1,114,678				
J3. Year Three	(1,260,099)				
J4. Year Four					
J5. Year Five					
J6. Total (J1...J5)	<u>2,438,963</u>				
K. Funding Value, 12/31/13 [(A) + (C) + (G) + (J6)]	110,630,521	7,649,507	118,280,028	1,199,241	119,479,269
L. Funding Value Rate of Return	10.15%	14.72%			
M. Market Value Rate of Return	20.35%	14.72%			

\*\* Actual investment income shown for health assets.

**ASSET INFORMATION REPORTED FOR VALUATION  
COMPARATIVE STATEMENT - MARKET VALUE**

Year Ended Dec. 31	Assets Beginning of Year	Revenues			Expenses			Assets Year-End
		Member Contrib.	Employer Contrib.	Investment Income	Retirement Benefits	Contrib. Refunds	Other Net Expenses*	
1999	\$ 56,813,410	\$388,242	\$1,216,206	\$ 9,134,505	\$1,970,490	\$46,532	\$213,541	\$ 65,321,800
2000	65,321,800	377,237	1,034,177	491,515	2,082,927	9,920	231,827	64,900,056
2001	64,900,056	549,024	878,260	(913,594)	2,275,493	0	263,426	62,874,827
2002	62,874,827	612,637	837,636	(6,425,470)	2,454,162	11,921	336,984	55,096,563
2003	55,096,563	694,919	964,605	14,505,737	2,646,885	12,667	401,224	68,201,048
2004	68,201,048	729,784	1,269,502	9,856,321	3,130,455	27,170	366,281	76,532,749
2005	76,532,749	733,442	1,448,282	6,666,149	3,460,068	1,038	467,077	81,452,439
2006	81,452,439	804,140	2,096,083	12,813,932	3,755,563	133,085	539,948	92,737,998
2007	92,737,998	832,892	2,716,461	7,602,334	4,173,282	42,932	611,256	99,062,215
2008	99,062,215	856,843	2,685,905	(26,092,662)	4,440,801	22,529	633,148	71,415,823
2009	71,415,823	926,257	2,852,790	16,900,840	4,930,354	43,069	583,877	86,538,410
2010	86,538,410	887,101	3,171,070	12,255,865	5,211,418	34,640	464,318	97,142,070
2011	97,142,070	916,965	3,718,003	1,987,241	5,558,803	3,589	541,016	97,660,871
2012	97,660,871	911,291	3,970,160	13,981,467	5,848,569	0	478,398	110,196,822
2013	110,196,822	926,949	4,016,011	21,915,937	5,937,848	16,103	461,128	130,640,640

\* Includes retiree medical benefits.

Employer contributions in 2013 include contributions to the unallocated income reserve.

**ADDITIONS TO AND REMOVALS FROM RETIRED/SURVIVOR MEMBERSHIP  
COMPARATIVE STATEMENT**

<b>Year Ended Dec. 31</b>	<b>Additions</b>		<b>Removals</b>		<b>End of Year Totals</b>		<b>Average Annual Benefits</b>	<b>Present Value of Benefits</b>	<b>Expected Removals</b>
	<b>No.</b>	<b>Annual Benefits</b>	<b>No.</b>	<b>Annual Benefits</b>	<b>No.</b>	<b>Annual Benefits</b>			
1999	3	\$ 159,701	2	\$ 19,218	97	\$ 2,064,677	\$21,285	\$27,618,722	2.8
2000	4	91,635	2	6,150	99	2,150,162	21,719	28,364,586	3.0
2001	5	204,618	4	38,747	100	2,316,033	23,160	30,488,652	3.2
2002	7	256,583	5	60,380	102	2,512,236	24,630	33,161,976	3.0
2003	17	266,239	7	21,520	112	2,756,955	24,616	36,127,984	2.9
2004	13	538,951	3	39,371	122	3,256,535	26,693	42,695,611	3.1
2005	8	339,439	2	35,965	128	3,560,009	27,813	46,338,790	3.3
2006	9	484,345	4	76,783	133	3,967,571	29,831	52,332,720	3.6
2007	7	371,127	3	31,735	137	4,306,963	31,438	57,295,812	3.7
2008	9	527,492	5	160,035	141	4,674,420	33,152	64,060,877	3.8
2009	14	567,145	6	83,800	149	5,157,765	34,616	70,864,899	3.9
2010	7	299,458	5	108,324	151	5,348,899	35,423	73,447,548	3.9
2011	11	567,883	6	159,270	156	5,757,512	36,907	79,914,932	4.0
2012	2	190,469	4	124,027	154	5,823,954	37,818	82,278,462	4.2
2013	3	219,347	4	125,800	153	5,917,501	38,676	84,573,093	3.7

**RETIREES AND BENEFICIARIES DECEMBER 31, 2013  
TABULATED BY TYPE OF BENEFITS BEING PAID**

<b>Type of Benefits Being Paid</b>	<b>No.</b>	<b>Annual Pension Benefit</b>
Age and Service Benefits*	113	\$5,005,839
Disability Retirement Benefits*	8	137,389
Survivor Benefits	32	774,273
<b>Total</b>	<b>153</b>	<b>\$5,917,501</b>

\* *Includes survivors.*

**RETIREES AND BENEFICIARIES BY AGE  
AS OF DECEMBER 31, 2013**

<u>Age</u>	<u>No.</u>	<u>Annual Pensions</u>
Under 40	1	\$ 2,514
40 - 44	1	26,608
45 - 49	0	0
50 - 54	6	254,291
55 - 59	35	1,651,421
60 - 64	37	1,578,865
65 - 69	23	857,337
70 - 74	14	670,971
75 - 79	14	451,244
80 - 84	10	214,934
85 +	12	209,316
<b>Total</b>	<b>153</b>	<b>\$ 5,917,501</b>

**VESTED DEFERRED RETIREMENTS BY AGE  
AS OF DECEMBER 31, 2013**

<u>Age</u>	<u>No.</u>	<u>Annual Pensions</u>
40-44	2	\$ 73,425
45-49	1	55,623
50-54	0	0
55-59	1	19,275
60-64	1	25,174
<b>Totals</b>	<b>5</b>	<b>\$173,497</b>

## ACTIVE MEMBERS INCLUDED IN VALUATION

Valn. Date Dec. 31	Active Members			Vested Term. Members	Valuation Payroll	Age	Average		% Incr.
	Chiefs	Other	Total				Service	Pay	
1999	12	137	149	2	\$6,265,176	42	14.2	\$42,048	0.8%
2000	12	138	150	2	6,236,863	42	14.9	41,579	(1.1)
2001	11	140	151	3	6,860,428	42	14.9	45,433	9.3
2002	13	149	162	3	7,634,337	41	13.7	47,126	3.7
2003	13	151	164	4	8,354,041	41	13.2	50,939	8.1
2004	12	151	163	4	8,624,759	41	12.5	52,913	3.9
2005	12	154	166	4	8,917,110	41	12.3	53,718	1.5
2006	12	166	178	5	9,493,382	40	10.7	53,334	(0.7)
2007	11	166	177	4	9,991,111	40	10.9	56,447	5.8
2008	12	170	182	4	10,461,858	40	10.5	57,483	1.8
2009	13	166	179	3	11,189,155	40	10.4	62,509	8.7
2010	12	168	180	3	10,913,504	40	10.6	60,631	(3.0)
2011	11	165	176	4	10,827,592	40	10.5	61,520	1.5
2012	13	169	182	5	11,525,947	41	11.2	63,329	2.9
2013	11	168	179	5	11,573,294	42	12.2	64,655	2.1



**ADDITIONS TO AND REMOVALS FROM ACTIVE MEMBERSHIP  
ACTUAL AND EXPECTED NUMBERS**

Year Ended Dec. 31	Number Added During Year		Retirement		Disability Retirement		Died-In- Service		Other Terminations		Members End of Year
	A	E	A	E	A	E	A	E	A	E	
2004	11	12	10	4.1	0	0.2	1	0.2	1	4.7	163
2005	9	6	4	3.9	1	0.1	0	0.2	1	3.1	166
2006	24	12	9	4	0	0.2	0	0.2	3	3.0	178
2007	7	8	5	2.9	0	0.1	0	0.2	3	3.9	177
2008	13	8	6	1.5	1	0.2	0	0.2	1	3.4	182
2009	8	11	8	2.0	0	0.2	1	0.2	2	3.6	179
2010	8	7	5	2.4	0	0.2	0	0.2	2	3.3	180
2011	8	12	7	2.1	0	0.2	0	0.2	5	3.1	176
2012	7	1	0	1.6	0	0.2	0	0.2	1	2.9	182
2013	0	0	0	4.5	1	0.3	0	0.2	2	1.9	179
<b>5-Year Totals</b>	<b>31</b>	<b>31</b>	<b>20</b>	<b>12.6</b>	<b>1</b>	<b>1.1</b>	<b>1</b>	<b>1.0</b>	<b>12</b>	<b>14.8</b>	

A - Represents actual number.

E - Represents the expected number based on assumptions outlined in Section C of the 2012 valuation report.

**ACTIVE FIREFIGHTER MEMBERS  
DECEMBER 31, 2013  
BY AGE AND YEARS OF SERVICE**

Age	Years of Service on Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll
20-24	1							1	\$ 46,731
25-29	5	2						7	358,205
30-34	14	12	2					28	1,569,087
35-39	5	22	13					40	2,408,068
40-44	1	10	9	2				22	1,347,083
45-49	2	6	9	14	1	1		33	2,186,047
50-54		3	4	8	2	10		27	1,942,969
55-59		1	1	3	1	3		9	606,646
60						1		1	79,729
<b>Totals</b>	<b>28</b>	<b>56</b>	<b>38</b>	<b>27</b>	<b>4</b>	<b>15</b>		<b>168</b>	<b>\$10,544,565</b>

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 41.8 years

Service: 11.7 years

Annual Pay: \$62,765

**ACTIVE MEMBER BATTALION CHIEFS  
DECEMBER 31, 2013  
BY AGE AND YEARS OF SERVICE**

Age	Years of Service on Valuation Date							No.	Totals
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus		Payroll
35-39			2					2	\$ 169,888
40-44			1	2				3	265,121
45-49				2	1			3	281,486
50-54						1	2	3	312,234
<b>Totals</b>			<b>3</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>11</b>	<b>\$1,028,729</b>

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 45.6 years

Service: 20.4 years

Annual Pay: \$93,521

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**SECTION C**

**ACTUARIAL METHODS AND ASSUMPTIONS  
AND DEFINITIONS OF TECHNICAL TERMS**

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# ACTUARIAL METHODS USED FOR THE VALUATION

## **Actuarial Cost Method**

Normal cost and the allocation of actuarial present values between service rendered before and after the valuation date were determined using an individual entry-age actuarial cost method having the following characteristics:

- (i) the annual normal costs for each individual active member, payable from the member's actual date of employment to projected date of retirement, are sufficient to accumulate the actuarial present value of the member's benefit at the time of retirement;
- (ii) each annual normal cost is a constant percentage of the member's year-by-year projected covered pay.

## **Amortization of Unfunded Actuarial Accrued Liabilities**

The Pension Plan unfunded actuarial accrued liability (UAAL) was determined using the funding value of assets and actuarial accrued pension liability calculated as of the valuation date. The UAAL amortization payment (one component of the contribution requirement), was developed using a level dollar amortization method that fully amortizes the UAAL over a 24-year period.

The Retiree Health Plan UAAL (or surplus) was amortized over a 14-year period using a level dollar amortization method.

## **Asset Valuation Method**

The funding value of assets used in the Pension Plan valuation recognizes assumed investment income fully each year. Differences between actual and assumed investment income are phased-in over a 5-year period. During periods when investment performance exceeds the assumed rate, the funding value of assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, the funding value of assets will tend to be greater than market value. This is the result of phasing-in differences between actual investment income (market value basis) and expected investment income (funding value basis).

The Retiree Health Plan valuation uses a market value of assets to develop the UAAL.

## ACTUARIAL ASSUMPTIONS USED FOR THE VALUATION

### **Investment Return** (net of expenses)

7.65% per year, compounded annually. This rate consists of a net real rate of return of 3.40% per year plus a long-term rate of wage inflation of 4.25% per year.

This assumption is used to equate the value of payments due at different points in time and was first used for the December 31, 2013 valuation. Approximate rates of investment return on pension assets, for the purpose of comparison with assumed rates, are shown below.

	<b>Year Ended December 31,</b>				
	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>
Rate of Investment Return	10.2%	7.6%	2.7%	5.1%	4.2%

The nominal rate of return was computed using the approximate formula  $i = I$  divided by  $1/2(A + B - I)$ , where  $I$  is actual investment income net of expenses,  $A$  is the beginning of year asset value, and  $B$  is the end of year asset value.

These rates of return should not be used for measurement of an investment advisor's performance or for comparisons with other systems -- *to do so will mislead.*

**Pay Projections:** These assumptions are used to project current pays to those upon which benefits will be based. The base economic assumptions were first used for the December 31, 2007 valuation. The merit and longevity assumptions shown below were first used for the December 31, 2012 valuation.

<b>Service (Years)</b>	<b>Annual Rate of Pay Increase for Sample Ages</b>		
	<b>Base (Economic)</b>	<b>Merit and Longevity</b>	<b>Total</b>
1-4	4.25 %	4.50 %	8.75 %
5-12	4.25	2.00	6.25
13	4.25	1.00	5.25
14	4.25	0.00	4.25

## ACTUARIAL ASSUMPTIONS USED FOR THE VALUATION

The assumed rate of price inflation is 3.50% per year.

Changes actually experienced in average pay and total payroll have been as follows:

<b>Increase in</b>	<b>Year Ended December 31</b>				
	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>
Average pay	2.1 %	2.9 %	1.5 %	(3.0) %	8.7 %
Total payroll	0.4	6.4	(0.8)	(2.5)	7.0

**Mortality Table:** The RP-2000 Mortality Combined Healthy Table projected to 2020 using Projection Scale BB. For pre-retirement mortality, 100% of the table rates were used for both men and women. For post-retirement mortality, 115% of the table rates were used for men and 100% of the rates for women. This table was first used for the December 31, 2012 valuation. Sample values follow:

<b>Sample Ages</b>	<b>Future Life Expectancy (Years)</b>	
	<b>Men</b>	<b>Women</b>
	55	27.18
60	22.80	26.34
65	18.68	21.98
70	14.85	17.93
75	11.39	14.25
80	8.39	10.95

The assumption is used to measure the probabilities of members dying before retirement and the probabilities of each benefit payment being made after retirement. The membership size in this plan is not sufficiently large to determine if there is a margin for mortality improvement. However, based on our experience with a broad cross section of public sector plans similar in nature to this plan, it is our opinion that there is no provision for future mortality improvement in the current male, post-retirement, mortality assumption.

## ACTUARIAL ASSUMPTIONS USED FOR THE VALUATION

**Rates of separation from active membership:** The rates do not apply to members eligible to retire and do not include separation on account of death or disability. This assumption measures the probabilities of members remaining in employment.

Sample Ages	Years of Service	Percent Separating within Next Year
ALL	0	6.00 %
	1	2.00
	2	1.50
	3	1.25
	4	1.25
25	5 & Over	2.50
30		2.00
35		1.50
40		1.00
45		0.50
50		0.00
55		0.00
60		0.00

The service based rates were first used in the December 31, 2012 valuation. The age based rates were first used in the December 31, 2004 valuation.

**Rates of Disability:** These assumptions represent the probabilities of active members becoming disabled.

Sample Ages	Percent Becoming Disabled within Next Year
20	0.08 %
25	0.08
30	0.08
35	0.08
40	0.20
45	0.26
50	0.49
55	0.89



## ACTUARIAL ASSUMPTIONS USED FOR THE VALUATION

**Rates of Retirement:** These rates are used to measure the probabilities of an eligible member retiring under the Regular and Early reduced retirement provisions during the next year.

### Percents of Active Members Retiring within the Next Year

<u>Retirement Ages</u>	<u>Regular Retirement Rates</u>	<u>Service (Yrs)</u>	<u>Early Retirement Rates</u>
50	50 %	20	2 %
51	50	21	2
52	50	22	2
53	50	23	2
54	60	24	2
55	60	25	2
56	60	26	2
57	70	27	2
58	70	28	2
59	70	29	2
60 & Over	100	30 & Over	2

A member was assumed to be eligible for regular retirement after attaining age 55 and completing 20 or more years of service, or if the sum of age and service equals eighty (80). A member was assumed to be eligible for early reduced retirement after completing 20 years of service.

The early retirement rates were first used for the December 31, 2004 valuation. The regular retirement rates were first used for the December 31, 2012 valuation.

## DEFINITIONS OF TECHNICAL TERMS

***Accrued Service*** - Service credited under the system which was rendered before the date of the actuarial valuation.

***Actuarial Accrued Liability*** - The difference between the actuarial present value of system benefits and the actuarial present value of future normal costs. Also referred to as “past service liability”.

***Actuarial Assumptions*** - Estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

***Actuarial Cost Method*** - A mathematical budgeting procedure for allocating the dollar amount of the “actuarial present value of future benefits” between future normal costs and actuarial accrued liability. Sometimes referred to as the “actuarial funding method”.

***Actuarial Equivalent*** - One series of payments is said to be actuarially equivalent to another series of payments if the two series have the same actuarial present value.

***Actuarial Gain (Loss)*** - The difference between actual unfunded actuarial accrued liabilities and anticipated unfunded actuarial accrued liabilities -- during the period between two valuation dates. It is a measurement of the difference between actual and expected experience.

***Actuarial Present Value*** - The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payment.

## DEFINITIONS OF TECHNICAL TERMS

***Amortization*** - Paying off an interest-discounted amount with periodic payments of interest and (generally) principal -- as opposed to paying it off with a lump sum payment.

***Normal Cost*** - The portion of the actuarial present value of future benefits that is assigned to the current year by the actuarial cost method. Sometimes referred to as “current service cost”.

***Unfunded Actuarial Accrued Liabilities*** - The difference between actuarial accrued liabilities and valuation assets. Sometimes referred to as “unfunded past service liability” or “unfunded supplemental present value”.

Most retirement systems have unfunded actuarial accrued liabilities. They arise each time new benefits are added and each time an actuarial loss occurs. The existence of unfunded actuarial accrued liabilities is not in itself bad, any more than a mortgage on a house is bad. Unfunded actuarial accrued liabilities do not represent a debt that is payable today. What is important is the ability to amortize the unfunded actuarial accrued liabilities and the trend in their amount (after due allowance for devaluation of the dollar).

## MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

<b>Marriage Assumption:</b>	80% of participants are assumed to be married for purposes of death and retiree health benefits. In each case males were assumed to be 3 years older than females.
<b>Pay Increase Timing:</b>	Beginning of year.
<b>Decrement Timing:</b>	Decrements of all types are assumed to occur mid-year.
<b>Eligibility Testing:</b>	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
<b>Benefit Service:</b>	Exact fractional service is used to determine the amount of benefit payable.
<b>Other:</b>	Disability and turnover decrements do not operate during retirement eligibility.
<b>Miscellaneous Loading Factors:</b>	The calculated retirement benefits were increased by 13% to account for the inclusion of unused sick leave and vacation time in the calculation of Final Average Compensation (FAC) and by 1% to account for the impact of subsidized optional forms of payment.
<b>Death/Disability Assumption:</b>	Fifty percent of disabilities and deaths were assumed to be duty related. Fifty percent were assumed to be unrelated to duty. The recovery rate from disability was assumed to be 0 (i.e., no disabled individual was assumed to recover and return to work).
<b>Forfeiture Assumption:</b>	All vested terminated members were assumed to elect a deferred retirement benefit.

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**SECTION D**

**DISCLOSURES REQUIRED BY GASB STATEMENTS  
NO. 25 AND NO. 27**

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## REQUIRED SUPPLEMENTARY INFORMATION

### Schedule of Pension Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b)-(a)	Funded Ratio (a)/(b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
2004	\$ 72,736,709	\$ 78,146,993	\$ 5,410,284	93.1	\$ 8,624,759	62.7%
2005	75,974,775	82,553,914	6,579,139	92.0	8,917,110	73.8
2006	82,154,884	87,164,271	5,009,387	94.3	9,493,382	52.8
2007	91,114,339	95,560,890	4,446,551	95.3	9,991,111	44.5
2008	92,122,034	100,976,694	8,854,660	91.2	10,461,858	84.6
2009	93,760,099	108,557,299	14,797,200	86.4	11,189,155	132.2
2010	96,339,891	110,709,933	14,370,042	87.0	10,913,504	131.7
2011	96,992,162	115,353,137	18,360,975	84.1	10,827,592	169.6
2012	102,540,544	130,254,837	27,714,293	78.7	11,525,947	240.5
2013 *	111,829,762	139,068,860	28,438,339	80.4	11,573,294	245.7

\* UAAL based on an asset value of \$110,630,521.

### Schedule of Employer Pension Contributions

Valuation Year Ended December 31	Fiscal Year Ended December 31	Contribution Rates as % of Valuation Payroll	Computed Dollar Contributions	Actual Contributions	% Contributed
2004 ^	2006	16.21 %	\$1,526,731	\$1,683,121	100%
2005	2007	17.14	1,669,043	1,826,253	100
2006	2008	15.99	1,657,685	1,695,167	100
2007 ^	2009	16.36	1,776,435	1,877,096	100
2008	2010	19.97	2,270,592	2,233,372	98
2009	2011	24.55	2,985,389	2,773,506	93
2010	2012	25.21	2,990,124	2,871,209	96
2011	2013	24.31	2,860,678	2,816,770	98
2012 ^	2014		4,484,256		
2013 ^	2015		4,424,656		

^ New methods or assumptions adopted.

Computed dollar contributions are based on contribution rates and projected valuation payroll. Actual contributions were based on the financial statements provided by the City. Deviations may be attributable to differences between projected and actual payroll. This information is presented in draft form for review by the City's auditor. Please let us know if there are any items that the auditor changes so that we can maintain consistency with the City's financial statements.

## REQUIRED SUPPLEMENTARY INFORMATION

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

Valuation date	December 31, 2013
Actuarial cost method	Entry-Age
Amortization method	Level dollar, closed
Remaining amortization period	24 years
Asset valuation method	5 year smoothed market
Actuarial assumptions:	
Investment rate of return	7.65%
Projected salary increases*	4.25%-8.75%
*Includes inflation at	4.25%
Cost-of-living adjustments	Annual increase equal to the Change in CPI with a cap of 3% Beginning 3 years after retirement.

Membership of the plan consisted of the following at December 31, 2013, the date of the latest actuarial valuation:

Retirees and beneficiaries receiving benefits	153
Terminated plan members entitled to but not yet receiving benefits	5
Active plan members	<u>179</u>
Total	337

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## **APPENDIX**

### **RETIREE HEALTH VALUATION BASED ON ASSUMPTIONS AND METHODS PRESCRIBED BY THE GOVERNMENTAL ACCOUNTING STANDARDS BOARD**

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# RETIREE HEALTH PREMIUM RATES

## Background

Health care premiums are an important part of a retiree health valuation. Eligible City retirees (and their spouses) may elect to receive benefits from health plans offered by Sanford and Avera. All benefits provided by the City sponsored retiree health Program (plan) are self-funded. This means that the City pays claims and takes the risk associated with the health care program. The City buys stop loss insurance to help manage this risk. Dental insurance benefits are also self-funded.

Retiree health benefit recipients pay for a portion of their benefits based on premium rates established by the City (illustrative premiums). These premiums were used in the actuarial valuation of the retiree health program. A summary of these premiums is shown in this section of the report.

Retirees who participate in the retiree health program pay 50% of the reported illustrative premiums. These rates are developed based upon blended active and retiree experience and we assumed that this practice will continue even when there are no actives on the plan. The City pays the remaining portion of the retiree health care cost. Since the retirees are responsible for a significant portion of the costs, there may be anti-selection in this plan (healthy retirees may decline coverage which increases the average cost for the remaining retirees). The probability of opt out may increase once the public exchanges come online in 2014. Health insurance coverage terminates upon attainment of age 65. At this time, each retiree must make his or her own arrangements for health care coverage.

The current actuarial standard covering the valuation of retiree medical liability became effective for measurements on or after January 1, 2003. The standard includes the development of facsimile premiums based on the actual claims experience and the use of age grading. The combination of these two techniques produces “premiums” at each age during the retiree’s lifetime based on the group’s actual, historical claims experience.

We believe that using illustrative premium rates alone to determine retiree medical liability will likely understate the value of retiree health benefits and will fail to comply with both current actuarial standards of practice and governmental accounting standards. A summary of the facsimile health care “premium” rates used in the December 31, 2013 valuation of the retiree health program are shown on the following pages. The actuarial assumptions and methods used in the retiree health program valuation are shown in this section of the report.

## **PREMIUM RATE DEVELOPMENT METHOD MONTHLY PER PERSON HEALTH CARE RATES**

Initial premiums were developed for pre-65 retirees only. These premiums were developed using retiree claims experience from January 2011 to November 2013 in conjunction with exposure data for the retired members of the health care program. These claims were projected on a paid claim basis, adjusted for plan design changes, large claims and loaded for administrative expenses.

Age graded and sex distinct premiums are utilized by this valuation. The premium developed by the preceding process is appropriate for the unique age and sex distribution currently existing. Over the future years covered by this valuation, the age and sex distribution will most likely change. Therefore, our process “distributes” the average premium over all age/sex combinations and assigns a unique premium to each combination. This process more accurately reflects health care costs in the retired population over the projection period. The tables in this section of the report show the combined medical and prescription drug one-person monthly premiums at selected ages effective January 1, 2014 to December 31, 2014.

James E. Pranschke is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to certify the per capita retiree health care rates shown in this report.



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James E. Pranschke, FSA, MAAA

**PREMIUM RATE DEVELOPMENT METHOD  
MONTHLY PER PERSON HEALTH CARE RATES**

**Facsimile Health Care Premiums Used in the 2013 Valuation**

<b>Age</b>	<b>Monthly Pre-65 Rates at Sample Ages</b>	
	<b>Male</b>	<b>Female</b>
50	\$ 820.22	\$ 929.36
55	1,072.02	1,101.94
60	1,346.76	1,294.54

The above rates reflect the total medical and prescription drug retiree cost without considering any applicable retiree contributions.

**Monthly Dental Premiums Used in the 2013 Valuation**

<b>Coverage for</b>	<b>Monthly Rate</b>
Retiree Only	\$42.96
Retiree & Spouse	82.04

The dental premium rates used in the valuation were not “age graded” since dental claims do not vary significantly by age.

The chart below shows the retiree paid premiums (50% of the weighted average illustrative premiums) reported to the actuary in connection with this valuation of the program.

**Illustrative Monthly Premiums Used in the 2013 Valuation**

<b>Coverage for</b>	<b>Monthly Rate</b>
Health Care Premiums (Retiree Only)	\$432.52
Health Care Premiums (Retiree & Spouse)	917.25
Dental Premiums (Retiree Only)	21.48
Dental Premiums (Retiree & Spouse)	41.02

# HEALTH COST TREND ASSUMPTION

## Background

Retiree health care valuations require an assumption about how the health costs that the plan is absorbing will change over the years. This assumption includes more than just “health inflation”. It includes the impact of:

- The introduction of new procedures and medications and how they are priced.
- The utilization of services and products by covered retirees and their dependents and how that utilization changes over the years.

Retiree health valuations use a health cost trend assumption that changes over the years. The near term rates reflect the fact that currently employers are seeing sharp increases in the cost of health goods and services. However, they do not anticipate that health costs will increase at these rates indefinitely. To do so would be to ignore the real world implications of this sort of projection. For example, if health costs represent 20% of disposable income initially and grow at 12% per year for the next 10 years while disposable income increases at 4% would imply that after 10 years health would absorb 40% of our disposable income. Over a 20-year period, these rates of increase would imply that at the end of the 20-year period, health costs would absorb almost 80% of our disposable income.

The valuations attempt to deal with the future by recognizing that it is more reasonable to assume that current trends will have to change in the future before we reach the absurd situation of having little or no money to spend on things that are not related to health (including food, shelter, clothes, etc.). Health costs are assumed to increase at rates greater than general inflation for a temporary “cooling off” period. At the end of the cooling off period, health costs are assumed to increase in line with general inflation. As years elapse, there are fewer remaining years in the cooling off period. A summary of the rates of medical inflation used in this valuation of the program are shown on the next page. Retirees pay the premium rates shown at the bottom of the prior page. These premiums were assumed to increase with medical inflation. The assumed rate of increase is shown on the following page.

# HEALTH COST TREND AND RELATED ASSUMPTIONS

## Rates of Inflation for Medical, Rx and Dental Benefits

<b>Future Health Cost Increases</b>		
<b>Year Beginning December 31,</b>	<b>Medical &amp; Rx</b>	<b>Dental</b>
2014	9.00%	4.25%
2015	8.50	4.25
2016	8.00	4.25
2017	7.50	4.25
2018	7.00	4.25
2019	6.50	4.25
2020	6.00	4.25
2021	5.50	4.25
2022	5.00	4.25
2023 & After	4.25	4.25

Retiree paid premiums were assumed to increase at the rates shown above.

## Cumulative Aging Factors at Select Ages

<b>Age</b>	<b>Male</b>	<b>Female</b>
45	0.514	0.673
50	0.696	0.788
55	0.909	0.935
57	1.000	1.000
60	1.142	1.098

**COMPUTED RETIREE HEALTH CONTRIBUTION  
BASED ON ASSUMPTIONS / METHODS PRESCRIBED BY GASB  
FOR THE FISCAL YEAR BEGINNING JANUARY 1, 2015**

Total Actuarial Accrued Liability	\$ 3,343,854
Asset Value	<u>7,649,507</u>
Unfunded Actuarial Accrued Liability	(4,305,653)
 First Year \$ Contribution	 \$ 0

Eligible Firefighter members of the Pension Fund who retire on or before December 31, 2013 may join the Retiree Health Plan. Pension Fund members who retire after December 31, 2013 are not eligible to participate in the Retiree Health Plan. As a result, the Plan was closed on January 1, 2014.

As of the valuation date, the Retiree Health Plan has a surplus. The surplus shown above is likely to persist in the near term (absent adverse health plan experience).

Since Plan assets exceed liabilities as of the valuation date, no City contributions are recommended for fiscal year 2015.

**REQUIRED SUPPLEMENTARY INFORMATION  
SCHEDULE OF FUNDING PROGRESS FOR  
THE RETIREE HEALTH PLAN**

<b>Actuarial Valuation Date Dec. 31</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) (b)</b>	<b>Unfunded AAL (UAAL) (b)-(a)</b>	<b>Funded Ratio (a)/(b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a % of Covered Payroll ((b-a)/c)</b>
2007	\$2,542,036	\$10,835,013	\$ 8,292,977	23.5	\$ 9,991,111	83.0 %
2008	3,296,432	10,706,694	7,410,262	30.8	10,461,858	70.8
2009	4,095,878	11,596,630	7,500,752	35.3	11,189,155	67.0
2010	4,911,528	13,027,364	8,115,836	37.7	10,913,504	74.4
2011	5,709,105	4,890,730	(818,375)	116.7	10,827,592	-
2012	6,977,862	4,075,513	(2,902,349)	171.2	11,525,947	-
2013	7,649,507	3,343,854	(4,305,653)	228.8	11,573,294	-

**REQUIRED SUPPLEMENTARY INFORMATION  
SCHEDULE OF EMPLOYER HEALTH CONTRIBUTIONS**

<b>Valuation Year Ended Dec. 31</b>	<b>Fiscal Year Ended Dec. 31</b>	<b>Contribution Rate as a % of Valuation Payroll</b>	<b>Annual Required Contribution (ARC)</b>	<b>Actual Contributions</b>	<b>Percentage Contributed</b>
2006	2008	9.47%	\$ 981,756	\$ 990,738	100.0 %
2007 <sup>^</sup>	2009	8.72%	946,853	975,694	100.0
2008	2010	8.33%	947,122	937,698	99.0
2009	2011	8.35%	1,015,397	944,497	93.0
2010	2012	9.65%	1,144,573	1,098,951	96.0
2011 <sup>^</sup>	2013	0.00%	0	0	100.0
2012 <sup>^</sup>	2014	0.00%	0		
2013 <sup>^</sup>	2015	0.00%	0		

<sup>^</sup> *New methods/assumptions or plan provisions adopted.*

Annual required contributions expressed as percents of pay are based on contribution rates and projected valuation payroll. Actual contributions were based on the financial statements provided by the City. Deviations may be attributable to differences between projected and actual payroll. This information is presented in draft form for review by the City's auditor. Please let us know if there are any items that the auditor changes so that we can maintain consistency with the City's financial statements.

## REQUIRED SUPPLEMENTARY INFORMATION FOR THE RETIREE HEALTH PLAN

The following assumptions and methods were used in the December 31, 2013 actuarial valuation for the Retiree Health Plan:

Valuation Date	December 31, 2013
Actuarial Cost Method	Entry-Age
Amortization Method	Level dollar, closed
Remaining Amortization Period	14 years
Asset Valuation Method	Market value of assets
Premium Rate Development Method	Please refer to Appendix A

### **Actuarial Assumptions**

Annual Rate of Return (discount rate)	7.65% per year
Rates of Inflation for Medical Benefits	9.0% grading down to 4.25% in the year 2023
Rate of Inflation for Dental Benefits	4.25% for all years

Membership of the Retiree Health Plan is shown below at December 31, 2013, the date of the latest actuarial valuation.

Retirees receiving medical benefits	43
Active Plan members	<u>0</u>
Total number of current and former City employees who are members of the Retiree Health Plan	43