

CITY OF SIOUX FALLS EMPLOYEE'S RETIREMENT SYSTEM SIXTY-THIRD ANNUAL ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

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1.0	



March 7, 2014

The Board of Trustees City of Sioux Falls Employee's Retirement System Sioux Falls, South Dakota

#### Ladies and Gentlemen:

The results of the December 31, 2013 actuarial valuation of the City of Sioux Falls Employee's Retirement System are presented in this report. Both this report and the Power Point presentation comprise the valuation results. The purpose of the valuation was to measure the System'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 System, concerning Retirement System 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.

Mark Buis, FSA, EA, MAAA

Respectfully submitted,

Louise M. Gates, ASA, MAAA

LMG/MB:bd

## **SECTION A**

VALUATION RESULTS

#### FINANCIAL OBJECTIVE

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

#### **CONTRIBUTION RATES**

The Retirement System is supported by member contributions, City contributions and investment income from Retirement System 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.

# PENSION CONTRIBUTIONS COMPUTED TO MEET THE FINANCIAL OBJECTIVE OF THE RETIREMENT SYSTEM FOR THE FISCAL YEAR BEGINNING JANUARY 1, 2015

	Contribution Requirements				
Contributions for	General/Management Police				
T IN IN	Φ5 455 205	Φ2 (25 420			
Total Normal Cost	\$5,477,297	\$3,635,439			
Employee Portion	1,942,304	1,521,104			
City Portion	3,534,993	2,114,335			
Unfunded Actuarial Accrued					
Liabilities Contribution	\$4,000,370	\$1,747,563			
Total Computed City-State Contribution	\$7,535,363	\$3,861,898			

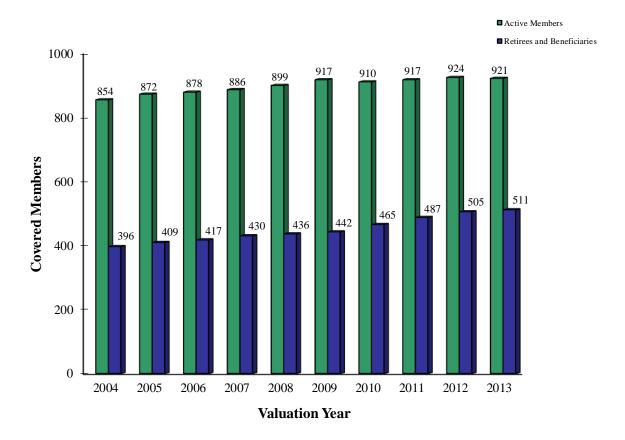
City General, Management and Police employees hired on or after July 1, 2013 will become members of the South Dakota Retirement System (SDRS) instead of joining the Retirement System. Contributions are expressed in terms of dollars in this report instead of as percents of payroll. This is due to the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

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

The Police employee contribution to the Pension Plan shown above was based on an employee contribution rate of 10.0% and plan member payroll projected to 2015. General and Management members will contribute 5.0% of pay during 2015.

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

# ACTIVE AND RETIRED PENSION PLAN MEMBERS GENERAL & POLICE COMBINED



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

# COMPUTED CITY PENSION CONTRIBUTIONS COMPARATIVE STATEMENT

Fiscal	Date	% of Payroll	Contributions	Weighted	Level 1	Dollar Contr	ibutions
Year	December 31	General	Police	Average	General	Police	Total
2001	1999	8.47 %	13.90 %	9.80 %			
2002	2000 **	7.60	15.60	9.67			
2003	2001 **	7.77	14.42	9.45			
2004	2002	8.68	15.68	10.48			
2005	2003	9.43	13.96	10.65			
2006	2004 @	9.80	14.84	11.21			
2007	2005	10.38	14.96	11.67			
2008	2006	9.50	13.36	10.43			
2009	2007 **@	9.33	14.58	10.80			
2010	2008	10.93	17.66	12.73			
2011	2009	13.17	20.78	15.15			
2012	2010	12.86	20.72	14.91			
2013	2011 @	12.56	18.94	14.25			
2014	2012 @#				\$7,702,379	\$3,860,628	\$11,563,007
2015	2013 @				7,535,363	3,861,898	11,397,261
2015	2013 W				1,333,303	3,801,898	11,397,201

<sup>@</sup> After changes in actuarial assumptions or methods.

<sup>#</sup> After changes in benefit provisions.

<sup>\*\*</sup> Reflects full funding credit.

## ACTUARIAL BALANCE SHEET - DECEMBER 31, 2013

### **Present Pension Resources and Expected Future Pension Resources**

	General	Police	Total
A. Valuation assets	\$188,683,871	\$118,899,410	\$307,583,281
B. Actuarial present value of expected future employer contributions			
1. For normal costs	32,125,627	20,054,680	52,180,307
2. For unfunded actuarial accrued liabilities	45,828,844	19,974,439	65,803,283
3. Total	77,954,471	40,029,119	117,983,590
C. Actuarial present value of expected future member contributions	18,216,968	14,462,807	32,679,775
D. Total actuarial present value of present and expected future resources	\$284,855,310	\$173,391,336	\$458,246,646
Actuarial Present Value of Expected Futur	re Pension Bene	efit Payments a	nd Reserves
A. To retirees and beneficiaries	\$108,450,105	\$ 66,199,063	\$174,649,168
B. To vested terminated members	5,559,157	587,147	6,146,304
<ul><li>C. To present active members</li><li>1. Allocated to service rendered prior to valuation date</li></ul>	120,503,453	72,087,639	192,591,092
2. Allocated to service likely to be	50.242.505	24.517.407	04.060.002
rendered after valuation date  3. Total	50,342,595	34,517,487 106,605,126	84,860,082 277,451,174
<ul><li>D. Reserves</li><li>1. Allocated to retirants and beneficiaries</li><li>2. Unallocated investment income</li></ul>	0	0	0
3. Total	0	0	0
E. Total actuarial present value of expected future benefit payments and reserves	\$284,855,310	\$173,391,336	\$458,246,646

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

The actuarial gains or losses realized in the operation of the Retirement System's Pension Plan 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. Details of the derivation of the actuarial gain (loss) are shown below.

<u>.</u>	General	Police
(1) UAAL* at start of year	\$45,138,343	\$19,712,164
(2) Normal cost	3,742,698	2,081,572
(3) Actual contributions	5,023,890	2,893,464
(4) Interest accrual	3,448,575	1,496,232
(5) Expected UAAL before changes	47,305,726	20,396,504
(6) Change from benefit changes	0	0
(7) Change from revised actuarial assumptions	5,571,297	3,983,765
(8) Expected UAAL after changes	52,877,023	24,380,269
(9) Actual UAAL at end of year	45,828,844	19,974,439
(10) Gain (loss) (8) - (9)	7,048,179	4,405,830
(11) Gain (loss) as percent of AAL at start of year	3.23%	3.42%

<sup>\*</sup> Unfunded actuarial accrued liability.

#### **COMMENTS**

Comment A: Retirement System 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 System recognize both past and present investment experience. As a result the recognized rate of return for the year was 10.25% on combined pension assets. 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 Retirement System 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, employee contributions to the Retirement System will increase to 5% per year for General and Management members and 10% per year for Police employees beginning in calendar year 2015. These changes are noted in Sections B and Section 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 contributions to the retiree health plan at 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 the 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

## General/Management Computed Employer Contributions

	Computed Employer Contributions				
Contributions for	Pension	Health	Total		
Total Computed City Contribution	\$7,535,363	\$0	\$7,535,363		

The pension contribution 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.

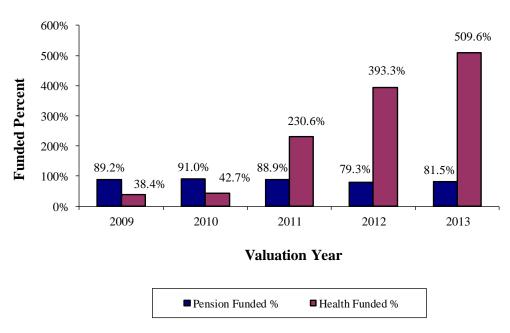
## Police Computed Employer Contributions

Contributions
n Total
\$3,861,898

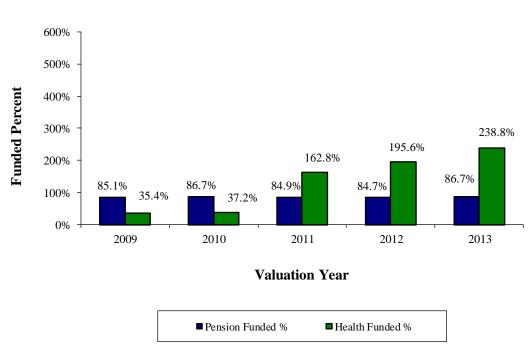
The pension contribution was based on a 24 year amortization of the UAAL. The retiree Health plan surplus resulted in a \$0 contribution for the 2015 fiscal year.

# PENSION AND RETIREE HEALTH FUNDED RATIO HISTORY

### General/Management



#### **Police**



# SECTION B SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA

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

#### **Retirement System Eligibility:**

New City employees (General, Management and Police) hired on or before June 30, 2013 will become members of this Retirement System. Individuals hired or rehired after June 30, 2013 will become members of the South Dakota Retirement System.

#### **Regular Unreduced Retirement:**

*Eligibility* - General members: age 55 with 30 or more years of service, or age 60 with 5 years of service.

Police: age 50 with 25 years of service, or age 60 with 15 years of service.

Mandatory Retirement Age - Police: age 60 (age 65 with employer consent).

Annual Amount - General members: 1.8% of final average pay times years of service.

Police: final average pay 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 Pay - Highest 3 consecutive years out of last 10. 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 - General Members: 5 years of service. Benefit commences at deferred retirement age.

Police: 15 years of service. Benefit commences at deferred retirement age.

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

#### **Duty Disability Retirement:**

Eligibility - No age or service requirement.

Annual Amount - Computed as a regular retirement benefit. If disabled before eligible for regular retirement, additional service is credited for the period between disability and the time member would have been eligible for regular retirement if he had not been disabled. Minimum benefit is 12.5% of final average pay for general members and 20% of final average pay for police. Worker's 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 based on service and final average pay at time of disability. Worker's Compensation payments are offset.

#### **Duty Death Before Retirement:**

Eligibility - No age or service requirement. Worker's Compensation must be payable.

Annual Amount - Refund of accumulated contributions. Spouse receives pension of 1/3 of final average pay until death. Unmarried children under age 18 or an eligible handicapped child each receive an equal share of 1/6 of final average pay (if no spouse each child receives 1/4 to a maximum of 1/2). If no spouse or eligible children, dependent parents each receive 1/6 of final average pay (each parent's pension limited to \$600 annually). Worker's Compensation payments are offset.

#### **Non-Duty Death Before Retirement:**

Eligibility - 10 years of service.

Annual Amount - Spouse (or some other dependent if an Option B election was in force) receives a benefit computed as regular retirement benefit but actuarially reduced in accordance with a 100% joint and survivor election. Minimum benefit is \$360 annually. If no Option B election is in force, each unmarried child under age 18 or an eligible handicapped child receives \$2,400 annually. If no Option B election is in force and there is no eligible spouse, member contributions are refunded.

**Post-Retirement Cost-of-Living Adjustments:** Annual increase equal to 100% of the June CPI of each year (with a cap of 3%) applied to the member's current benefit. The first increase will be granted after 36 months of retirement.

#### **Employee Contributions:**

Division	On or Before December 31, 2013	As of January 6, 2014	As of January 5, 2015
General/Management	3% of Compensation	4% of Compensation	5% of Compensation
Police	8% of Compensation	9% of Compensation	10% of Compensation

# 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 Retirement System 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 Retirement System Member. Benefit increases by 3% each year beginning in January 2015.

#### **Retiree Health Plan Benefit:**

*Eligibility* – Eligible Retirement System 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 (MARKET VALUE)

	<b>Reported Fund Balances</b>
Reserves	<b>December 31, 2013</b>
Annuity Savings Fund	
General division	\$ 24,447,320
Police division	18,164,581
Totals	42,611,901
Employer Reserve Fund	
General division	117,841,174
Police division	55,017,556
Totals	172,858,730
Retirement Reserve Fund	
General division	68,507,816
Police division	54,877,725
Totals	123,385,541
Unallocated Income	
General division	2,371,948
Police division	1,489,651_
Totals	3,861,599
IRC 401(h)	
General division	18,125,345
Police division	7,844,356
Totals	25,969,701
Income Fund	0
Expense Fund	248,012
Total Balances	\$368,935,484

## **DERIVATION OF VALUATION ASSETS**

	Pensions	Health	Sub-Total	Grand Total	
	1 Chsions	Heatin	Sub-Total	Income	Grand Total
A. Funding Value, 12/31/12	\$282,267,554	\$22,807,459	\$305,075,013	\$ 0	\$305,075,013
B. Market Value, Beginning of Year			308,023,121	0	308,023,121
C. Non-Investment Net Cash Flow	(3,427,801)	(813,403)		3,861,599	
D. Net Investment Income (Market total)	57,316,323				
E. Market Value, End of Year			365,073,885	3,861,599	368,935,484
F. Phase-in Factor	20%				
G. Expected Income**	21,742,908	3,975,645			
H. Market Value Gain (Loss): $[(D) - (G)]$	35,573,415				
I. Method Change					
J. Recognition of Gain/(Loss)					
J1. Year One	7,114,683				
J2. Year Two	3,290,305				
J3. Year Three	(3,404,368)				
J4. Year Four					
J5. Year Five					
J6. Total (J1J5)	7,000,620				
K. Funding Value, 12/31/13					
[(A) + (C) + (G) + (J6)]	307,583,281	25,969,701	333,552,982	3,861,599	337,414,581
L. Net Funding Value Rate of Return	10.25%	17.75%			
M. Net Market Value Rate of Return	20.22%	17.75%			
Actual investment income shown for health assets.					

# MARKET VALUE OF ASSETS REPORTED FOR VALUATION COMPARATIVE STATEMENT

Year	Assets	sets Revenues		Expenses				
Ended	Beginning	Employee	Employer	Investment	Retirement	Contrib.	Misc.	Assets
Dec. 31	of Year	Contrib.	Contrib.	Income	Benefits	Refunds	Expenses*	Year-End
1999	\$ 140,995,043	\$1,193,764	\$3,746,140	\$ 20,287,090	\$5,421,649	\$ 160,909	\$ 394,037	\$ 160,245,442
2000	160,245,442	1,249,943	3,667,166	(539,610)	5,847,524	177,771	438,219	158,159,427
2001	158,159,427	1,359,825	3,537,191	(1,535,524)	6,190,412	237,070	541,518	154,551,919
2002	154,551,919	1,442,154	3,896,795	(14,929,083)	6,600,911	182,350	664,456	137,514,068
2003	137,514,068	1,593,939	4,373,347	36,238,185	6,915,649	132,505	703,505	171,967,880
2004	171,967,880	1,718,969	5,261,202	24,644,820	7,403,924	188,094	758,667	195,242,186
2005	195,242,186	1,829,649	5,769,159	17,035,074	8,014,168	182,999	1,055,818	210,623,083
2006	210,623,083	1,907,951	5,975,325	33,030,851	8,662,750	189,338	1,253,516	241,431,606
2007	241,431,606	2,001,290	7,896,489	19,937,351	9,262,791	199,779	1,416,037	260,388,129
2008	260,388,129	2,065,615	7,710,786	(71,138,091)	10,005,006	275,474	1,429,420	187,316,539
2009	187,316,539	2,272,170	8,433,917	46,453,891	10,471,659	90,776	1,292,212	232,621,870
2010	232,621,871	2,241,213	9,554,056	32,715,573	11,150,501	197,614	938,610	264,845,988
2011	264,845,988	2,252,998	10,599,328	5,091,133	12,037,530	115,034	1,102,784	269,534,099
2012	269,534,099	2,335,451	11,346,909	39,210,054	12,972,156	300,274	1,130,962	308,023,121
2013	308,023,121	2,428,547	11,778,953	61,515,708	13,508,748	264,954	1,037,143	368,935,484

<sup>\*</sup> Includes retiree health benefits.

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

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

Year		Additions	Re	emovals	Er	nd of Year	Average	Present	
Ended		Annual		Annual		Annual	Annual	Value of	Expected
<b>Dec. 31</b>	No.	Benefits	No.	Benefits	No.	Benefits	Benefits	Benefits	Removals
1999	25	\$ 507,219	16	\$ 133,245	356	\$ 5,672,008	\$ 15,933	\$ 71,686,116	7.8
2000	27	544,081	14	59,225	369	6,156,864	16,685	76,925,868	10.9
2001	22	561,207	23	274,403	368	6,443,668	17,510	80,195,604	11.3
2002	21	397,601	15	140,349	374	6,700,920	17,917	82,787,796	11.2
2003	37	566,899	28	280,190	383	6,987,629	18,244	85,924,411	11.2
2004	24	749,117	11	159,821	396	7,576,925	19,134	90,336,864	11.3
2005	33	1,007,507	20	246,108	409	8,338,324	20,387	100,153,352	12.4
2006	25	802,970	17	281,824	417	8,859,470	21,246	105,705,500	12.5
2007	25	920,591	12	100,174	430	9,679,887	22,511	116,479,480	12.7
2008	21	707,365	15	251,647	436	10,135,605	23,247	124,265,687	13.0
2009	16	715,776	10	155,652	442	10,695,729	24,198	130,284,387	13.5
2010	39	1,183,836	16	258,781	465	11,620,784	24,991	140,993,607	14.3
2011	37	1,069,943	15	295,874	487	12,394,854	25,451	150,800,949	15.1
2012	26	978,426	8	141,390	505	13,231,890	26,202	168,103,297	15.6
2013	21	670,763	15	335,453	511	13,567,200	26,550	174,649,168	13.8
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# RETIREES AND BENEFICIARIES AS OF DECEMBER 31, 2013 TABULATED BY TYPE OF BENEFITS BEING PAID

Type of Benefits Being Paid	No.	Annual Benefits
Age and Service Retirement Benefits	406	\$ 11,566,995
Disability Retirement Benefits	21	479,684
Survivor Retirement Benefits	84	1,520,521
Total Retirement Benefits Being Paid	511	\$13,567,200

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

		Annual
Age	No.	Benefits
45 - 49	3	\$ 65,334
50 - 54	10	333,835
55 - 59	47	1,521,310
60 - 64	97	2,993,247
65 - 69	129	3,698,637
		, ,
70 - 74	84	2,342,217
75 - 79	56	1,154,357
		, ,
80 - 84	43	839,180
85 - 89	28	424,358
		,
90 & Over	14	194,725
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Totals	511	\$13,567,200

## VESTED FORMER MEMBERS AS OF DECEMBER 31, 2013 TABULATED BY AGE

Age	No.	Monthly Benefits
Under 40	11	\$ 61,921
40 - 44	10	74,631
45 - 49	8	65,211
50 - 54	15	190,667
55 - 59	25	333,502
60 & Over		
Totals	69	\$ 725,932

# ACTIVE MEMBERS AS OF DECEMBER 31, 2013 TABULATED BY VALUATION DIVISION

		Annual		Average	
Valuation Groups	No.	Payroll	Age	Service	Pay
General/Management Members	694	\$39,231,637	45.9 yrs.	13.2 yrs.	\$56,530
Police Members	227	15,029,398	40.5	13.2	66,209
<b>Total Active Members</b>	921	\$54,261,035	44.6	13.2	\$58,915

# ACTIVE MEMBERS INCLUDED IN VALUATION COMPARATIVE SCHEDULE

Valuation								
Date	Acti	ive Memb	ers	Valuation			Average	
December 31	General	Police	Totals	Payroll	Age	Service	Pay	% Incr.
1999	588	162	750	\$27,623,182	42.4	11.7	\$36,830	(1.0) %
2000	587	174	761	29,068,666	42.4	11.7	38,198	3.7
2001	611	178	789	31,751,356	42.6	11.7	40,243	5.4
2002	626	182	808	33,718,220	43.0	11.8	41,730	3.7
2003	636	203	839	36,244,556	42.8	11.7	43,200	3.5
2004	642	212	854	38,539,387	43.1	11.7	45,128	4.5
2005	654	218	872	40,492,380	43.0	11.6	46,436	2.9
2006	664	214	878	42,456,531	43.4	11.9	48,356	4.1
2007	669	217	886	44,646,848	43.5	11.9	50,391	4.2
2008	676	223	899	46,433,304	43.8	12.2	51,650	2.5
2009	698	219	917	51,510,466	44.1	12.5	56,173	8.8
2010	687	223	910	49,893,917	44.1	12.6	54,828	(2.4)
2011	690	227	917	50,604,786	44.1	12.5	55,185	0.7
2012	696	228	924	52,015,637	44.2	12.7	56,294	2.0
2013	694	227	921	54,261,035	44.6	13.2	58,915	4.7

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

Year Ended	Du	er Added ring ear	Retii	rement		ability rement_		d-In- rvice		ther inations	Active Members End of
Dec. 31	A	E	A	E	A	E	A	E	A	E	Year
2004	65	50	17	15.1	1	1.3	1	1.2	31	33.2	854
2005	65	47	19	13.9	3	1.1	1	1.2	24	31.2	872
2006	56	50	14	14.0	0	1.1	0	1.2	36	31.4	878
2007	57	49	22	16.7	0	1.1	1	1.3	26	29.9	886
2008	54	41	11	18.5	1	1.2	0	1.3	29	29.9	899
2009	48	30	12	24.8	0	1.2	0	1.4	18	29.4	917
2010	51	58	30	27.6	0	1.2	0	1.5	28	29.3	910
2011	64	57	27	25.1	0	1.2	0	1.6	30	29.0	917
2012	60	53	19	26.7	1	1.1	0	1.6	33	30.2	924
2013	39	0	12	27.1	2	1.3	0	1.2	28	29.8	921
5 Year Tota	ıls 262	198	100	131.3	3	6.0	0	7.3	137	147.7	

A represents actual number.

E represents expected number based on assumptions outlined in Section C.

### GENERAL/MANAGEMENT ACTIVE MEMBERS - DECEMBER 31, 2013 BY AGE AND YEARS OF SERVICE

		Years	of Serv	vice on	Valuati	on Date	9	Totals	
									Valuation
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll
20-24	9							9	\$ 343,988
	_	7						_	
25-29	43	7	_					50	2,074,645
30-34	36	35	6					77	3,947,660
35-39	32	29	26	5				92	5,087,038
40-44	15	19	17	11	1			63	3,793,661
45-49	13	23	27	17	15	1		96	5,936,877
50-54	14	16	24	16	21	19	10	120	7,091,695
55-59	11	12	15	17	17	21	26	119	6,964,213
60	1		1	3	2	5	4	16	1,036,826
61			1	1	4	3	3	12	642,420
62	2		1	4	2	3	1	13	789,262
63		1	4	1		1	1	8	421,877
64			2		1	1	1	5	287,981
65	1				2	2		5	341,513
66		1	1		1	2		5	238,886
68				1				1	67,308
69						1		1	67,288
71				1				1	50,298
75			1					1	48,201
Totals	177	143	126	77	66	59	46	694	\$39,231,637

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

Age: 45.9 years Service: 13.2 years Annual Pay: \$56,530

### POLICE ACTIVE MEMBERS - DECEMBER 31, 2013 BY AGE AND YEARS OF SERVICE

		Ye	ars of Se		Totals				
	0.4	5.0	10.14	15 10	20.24	25.20	20 DI	NT	Valuation
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll
20-24	2							2	\$ 92,900
25-29	26	1						27	1,387,915
30-34	10	23	4					37	2,210,077
35-39	2	12	21	2				37	2,340,415
40-44	1	5	19	19				44	3,039,922
45-49		1	9	13	11	8		42	3,051,999
50-54			1	3	5	12		21	1,617,295
55-59		1	2	2	7	3	1	16	1,222,499
60						1		1	66,376
Totals	41	43	56	39	23	24	1	227	\$15,029,398

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

Age: 40.5 years Service: 13.2 years Annual Pay: \$66,209

## **SECTION C**

ACTUARIAL METHODS, ASSUMPTIONS AND DEFINITIONS OF TECHNICAL TERMS

#### 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 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 19-year period for General and Management and a 14-year period for Police 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.

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

7.65% per year, compounded annually. This rate consists of a net real rate of return of 3.4% a year plus a long-term rate of wage inflation of 4.25% a 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, for the purpose of comparisons with assumed rates, are shown below.

_		Year En	ded Decem	ber 31,	
	2013	2012	2011	2010	2009
Rate of Investment Return	10.3 %	77 %	27 %	5 1 %	4.2 %
Rate of Hivestillent Return	10.5 /0	7.7 /0	2.7 /0	J.1 /0	<b>⊣.</b> ∠ /0

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.

	<b>Annual Rate</b>	e of Pay Increase for San	nple Ages				
Sample	Base	Management					
Ages	(Economic)	Merit and Longevity	Totals				
20	4.25 %	2.00 %	6.25 %				
25	4.25	2.00	6.25				
30	4.25	1.00	5.25				
35	4.25	1.00	5.25				
40	4.25	0.50	4.75				
45	4.25	0.50	4.75				
50	4.25	0.20	4.45				
55	4.25	0.20	4.45				
60	4.25	0.10	4.35				
65	4.25	0.00	4.25				

**Annual Rate of Pay Increase for Indicated Years of Service** 

Years of	Base	General		Police		
Service	(Economic) Merit and Longevity Tota		Total	Merit and Longevity	<b>Total</b>	
4	1.25.07	2.50.0/	<b>555</b> 00	<b>5</b> 00 0/	0.25.0/	
1	4.25 %	3.50 %	7.75 %	5.00 %	9.25 %	
2	4.25	3.50	7.75	5.00	9.25	
3	4.25	3.50	7.75	4.70	8.95	
4	4.25	3.00	7.25	4.50	8.75	
5	4.25	2.50	6.75	2.20	6.45	
6	4.25	2.00	6.25	2.20	6.45	
7	4.25	2.00	6.25	2.10	6.35	
8	4.25	2.00	6.25	2.10	6.35	
9	4.25	2.00	6.25	2.00	6.25	
10	4.25	2.00	6.25	2.00	6.25	
11	4.25	2.00	6.25	2.00	6.25	
12	4.25	2.00	6.25	2.00	6.25	
13	4.25	2.00	6.25	1.00	5.25	
14	4.25	1.00	5.25	0.00	4.25	
15	4.25	0.00	4.25	0.00	4.25	

The base economic assumptions were first used in the December 31, 2007 valuation. The merit and longevity assumptions were first used for the December 31, 2012 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:

_	Year Ended December 31,				
Increase in	2013	2012	2011	2010	2009
Average pay	4.7 %	2.0 %	0.7 %	(2.4) %	8.8 %
Total payroll	4.3	2.8	1.4	(3.1)	10.9

**Mortality Table:** The RP2000 Mortality Combined Health 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 male Police members (100% for General/Management) men and 100% of the rates for women. This table was first used for the December 31, 2012 valuation. Sample values follow:

Future Life
Expectancy (Years)

Sample	Ger	General		Police		
Ages	Men	Men Women		Women		
55	28.37	30.90	27.18	30.90		
60	23.94	26.34	22.80	26.34		
65	19.74	21.98	18.68	21.98		
70	15.83	17.93	14.85	17.93		
75	12.26	14.25	11.39	14.25		
80	9.13	10.95	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.

**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.

	Percent Separating			
Years of	within Next Year			
Service	General/Management	Police		
0	11.00 %	7.00 %		
1	10.00	5.00		
2	8.00	3.50		
3	8.00	3.50		
4	7.00	3.00		
5 & Over	5.00	3.50		
	5.00	3.00		
	4.50	2.50		
	3.50	2.00		
	2.50	1.00		
	1.50	1.00		
	1.00	0.50		
	0.50	0.50		
	0 1 2 3 4	Years of Service         within Next Years           0         11.00 %           1         10.00           2         8.00           3         8.00           4         7.00           5 & Over         5.00           4.50         3.50           2.50         1.50           1.00         1.00		

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

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

Sample	<b>Percent Becoming Disabled</b>			
Ages	within Next Year			
20	0.08 %			
25	0.08			
30	0.08			
35	0.08			
40	0.20			
45	0.27			
50	0.49			
55	0.89			

**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.

	Regular Retirement Rates		<b>Early Retirement Rates</b>		
Retirement	General/		Years of	General/	
Ages	Management	Police	Service	Management	Police
50		250/	20	20/	20/
50		35%	20	2%	2%
51		35	21	2	2
52		35	22	2	2
53		30	23	2	2
54		25	24	2	2
55	20%	20	25	2	2
56	20	20	26	2	2
57	20	20	27	2	2
58	20	20	28	2	2
59	20	20	29	2	2
60	30	100	30	2	2
61	20	100	31		2
62	30	100	32		2
63	20	100	33		2
64	20	100	34		2
65	20	100	35		2
66	20	100			
67	20	100			
68	20	100			
69	20	100			
70	100	100			

General and Management members were assumed to be eligible for regular retirement after attaining age 55 with 30 years of service, or age 60 with 5 years of service. These members were assumed to be eligible for early reduced retirement after completing 20 years of service.

A Police member was assumed eligible for retirement after attaining age 50 with 25 years of service, or, after attaining age 60 with 15 or more years of service. Police members were 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.

#### MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

Marriage Assumption: 80% of participants are assumed to be married for purposes

of death and retiree health benefits. In each case the male

was assumed to be 3 years older than the female.

**Pay Increase Timing:** Beginning of year.

**Decrement Timing:** Decrements of all types are assumed to occur mid-year.

Eligibility Testing: 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.

**Benefit Service:** Exact fractional service is used to determine the amount of

benefit payable.

Other: Disability and turnover decrements do not operate during

retirement eligibility.

Miscellaneous Loading Factors: The calculated retirement benefits were increased by 9% for

General/Management and 11% for Police to account for the inclusion of unused sick leave and vacation time in the calculation of Final Average Compensation and by 1% to account for the impact of subsidized optional forms of

payment.

**Death/Disability:** Fifty percent of disabilities and deaths for Police were

assumed to be duty related. Fifty percent were assumed to be unrelated to duty. Twenty-five percent of disabilities for General/Management were assumed to be duty related. Seventy-five 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).

Forfeiture Assumption: General and Management members who terminate close to

retirement were assumed to elect a deferred retirement while those terminating with less service were assumed to elect a refund of their contributions in lieu of deferred retirement benefits. All vested terminated Police members were

assumed to elect a deferred retirement benefit.

#### **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 benefit" 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.

#### **DEFINITIONS OF TECHNICAL TERMS**

**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.

**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).



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

#### REQUIRED SUPPLEMENTARY INFORMATION

#### **Schedule of Pension Funding Progress (Police & General Combined)**

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (\$ millions) (c)	UAAL as a % of Covered Payroll ((b-a)/c)
2004	\$ 184,053,333	\$ 197,268,600	\$ 13,215,267	93.3	\$38,539,387	34.3 %
2005	195,203,944	210,940,503	15,736,559	92.5	40,492,380	38.9
2006	213,015,364	222,363,698	9,348,334	95.8	42,456,531	22.0
2007	238,029,788	246,147,797	8,118,009	96.7	44,646,848	18.2
2008	241,784,990	261,167,456	19,382,466	92.6	46,433,304	41.7
2009	248,954,926	283,777,829	34,822,903	87.7	51,510,466	67.6
2010	258,975,306	289,515,368	30,540,062	89.5	49,893,917	61.2
2011	263,827,136	301,723,872	37,896,736	87.4	50,604,786	74.9
2012	282,267,554	347,118,061	64,850,507	81.3	52,015,637	124.7
2013 *	311,444,880	373,386,564	65,803,283	83.4	54,261,035	121.3

<sup>\*</sup> UAL based on an asset value of \$307,583,281.

#### **Schedule of Employer Pension Contributions**

Valuation	<b>Fiscal</b>	C	Contribution	ı			
Year	Year	]	Rates as %				
Ended	Ended	of Va	luation Pay	roll	<b>Computed Dollar</b>	Actual	Percent
Dec. 31	Dec. 31	General	Police	Wt. Avg.	Contributions	Contributions	Contributed
2004^	2006	9.80 %	14.84 %	11.21 %	\$4,717,920	\$4,928,487	100 %
2005	2007	10.38	14.96	11.67	5,160,605	5,373,132	100
2006	2008	9.50	13.36	10.43	4,907,566	4,889,940	100
2007#^	2009	9.33	14.58	10.80	5,238,815	5,459,718	100
2008	2010	10.93	17.66	12.73	6,470,984	6,591,255	100
2009	2011	13.17	20.78	15.15	8,533,571	7,730,986	91
2010	2012	12.86	20.72	14.91	8,149,433	7,928,104	97
2011	2013	12.56	18.94	14.25	7,897,193	7,917,354	100
2012^	2014				11,563,007		
2013^	2015				11,397,261		

<sup>#</sup> Reflects amortization credit.

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 may maintain consistency with the City's financial statements.

New methods or assumptions adopted.

#### 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 Assumption:

Investment rate of return 7.65%
Projected salary increases\* 4.25% - 9.25%
\* Includes inflation at 4.25%

Cost-of-living adjustments

Annual increase equal to change in CPI with a cap of 3% beginning 36 months after retirement.

Membership of the Retirement System is shown below at December 31, 2013, the date of the latest actuarial valuation:

Retirees and beneficiaries receiving benefits 511

Terminated plan members entitled

to but not yet receiving benefits 69

Active plan members 921

Total 1,501



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

#### 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 page. 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.

James E. Pranschke, FSA. MAAA

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

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

	Monthly Pre-65 Rates at Sample Ages					
Age	Male	Female				
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>
1-person	\$42.96
2-person	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**

Coverage for	Monthly Rate
Health Care Premiums (Retiree Only - General)	\$435.52
Health Care Premiums (Retiree Only - Police)	432.52
Health Care Premiums (Retiree & Spouse - General)	917.25
Health Care Premiums (Retiree & Spouse - Police)	917.25
Dental (Retiree only)	21.48
Dental (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

Future Health Cost Increases						
Year Beginning						
	Medical &					
December 31,	Rx	Dental				
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				

#### **Cumulative Aging Factors at Select Ages**

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

# COMPUTED RETIREE HEALTH CONTRIBUTION BASED ON ASSUMPTIONS/METHODS PRESCRIBED BY GASB FOR GENERAL AND MANAGEMENT MEMBERS FOR THE FISCAL YEAR BEGINNING JANUARY 1, 2015

Total Actuarial Accrued Liability	\$ 3,5	57,014	
Asset Value	18,1	25,345	
Unfunded Actuarial Accrued Liability	(14,568,33		
First Year \$ Contribution	\$	0	

Eligible General/Management members of the Retirement System who retire on or before December 31, 2013 may join the Retiree Health Plan. Retirement System 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 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 contribution are recommended for fiscal year 2015.

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

Total Actuarial Accrued Liability	\$	3,285,023	
Asset Value		7,844,356	
Unfunded Actuarial Accrued Liability	y (4,559,		
First Year \$ Contribution	\$	0	

Eligible General/Management members of the Retirement System who retire on or before December 31, 2013 may join the Retiree Health Plan. Retirement System 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 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 contribution are recommended for fiscal year 2015.

## REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF HEALTH FUNDING PROGRESS FOR THE RETIREE HEALTH PLAN (POLICE & GENERAL COMBINED)

Actuarial Valuation Date Dec. 31	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (\$ millions) (c)	UAAL as a % of Covered Payroll ((b-a)/c)
2007	\$ 8,379,519	\$ 31,758,969	\$ 23,379,450	26.4	\$ 44,646,848	52.4 %
2008	10,718,920	32,930,510	22,211,590	32.6	46,433,304	47.8
2009	13,473,646	36,173,536	22,699,890	37.2	51,510,466	44.1
2010	16,515,972	40,712,275	24,196,303	40.6	49,893,917	48.5
2011	19,324,446	9,624,374	(9,700,072)	200.8	50,604,786	-
2012	22,807,459	7,582,125	(15,225,334)	300.8	52,015,637	-
2013	25,969,701	6,842,037	(19,127,664)	379.6	54,261,035	-

### REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF EMPLOYER HEALTH CONTRIBUTIONS (POLICE & GENERAL)

Year Ended	Year Ended	Contribution Rate as a % of Valuation Payroll		Required Contribution	Actual	Percentage
Dec. 31	Dec. 31	General	Police	(ARC)	Contributions	Contributed
2006	2008	5.49%	7.57%	\$ 2,816,421	\$ 2,820,846	100.0 %
2007^	2009	5.18%	7.36%	2,808,976	2,974,199	100.0
2008	2010	5.03%	7.45%	2,881,839	2,962,801	100.0
2009	2011	4.89%	7.66%	3,160,024	2,868,342	90.8
2010	2012	5.53%	8.95%	3,510,380	3,418,805	97.4
2011^	2013	0.00%	0.00%	0	0	100.0
2012^	2014	0.00%	0.00%	0		
2013^	2015	0.00%	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

Amortization Method Level dollar, closed

Remaining Amortization Period 19 years for General 14 years for Police

Asset Valuation Method Market value of assets

Premium Rate Development Method Please refer to Appendix

**Actuarial Assumptions** 

Actuarial Cost Method

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

Entry-Age

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 111

Active plan members \_\_\_\_0

Total number of current and former City employees who are members of the Retiree Health Plan 111