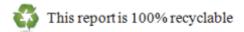


CITY OF SIOUX FALLS EMPLOYEE'S RETIREMENT SYSTEM FIFTY-EIGHTH ANNUAL ACTUARIAL VALUATION REPORT DECEMBER 31, 2008

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March 9, 2009

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

#### Ladies and Gentlemen:

Submitted in this report are the results of the fifty-eighth annual actuarial valuation of the assets, actuarial values and contribution requirements associated with benefits (pensions and postretirement health insurance) provided by the City of Sioux Falls Employee's Retirement System. The purpose of the valuation is to measure the System's funding progress and to determine contribution rates for the associated fiscal year.

The date of the valuation was December 31, 2008.

The valuation was based upon information, furnished by your Secretary, concerning Retirement System benefits, financial transactions, individual members, terminated members, retirees and beneficiaries. Data was checked for year-to-year consistency, but was not otherwise audited. The Appendix of this report includes retiree health valuation results based on assumptions and methods that comply with Governmental Accounting Standards Board (GASB) Statements No. 43 and No. 45 and with current actuarial standards of practice. This report may be provided to parties other than City of Sioux Falls only in its entirety and only with the permission of the Retirement System.

To the best of our knowledge this report is complete, accurate and was made in accordance with standards of practice prescribed by the Actuarial Standards Board and in compliance with the provisions governing the Retirement System. The actuarial assumptions used for the valuation produce results which we believe are reasonable. All actuaries submitting this report are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Louise M. Gates, ASA, MAAA Cathy Nagy, FSA, EJ, MAAA John Mallows, ASA, MAAA

LMG/CN/JM:bd

### **SECTION A**

VALUATION RESULTS

#### FINANCIAL OBJECTIVE

The financial objective of the Retirement System is to establish and receive contributions, expressed as percents of active member payroll, which will remain approximately level from year-to-year and 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, 2010 are shown on page A-2.

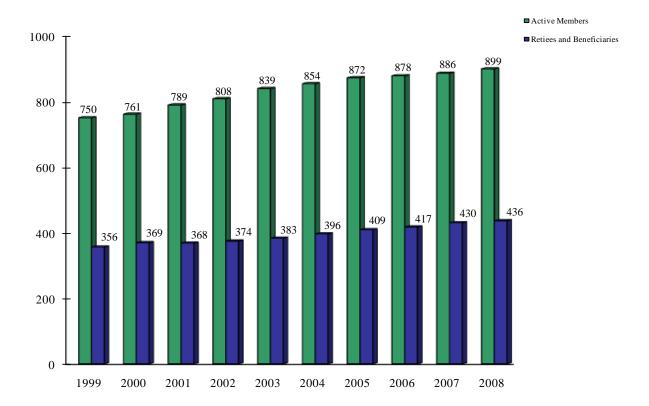
## PENSION CONTRIBUTIONS COMPUTED TO MEET THE FINANCIAL OBJECTIVE OF THE RETIREMENT SYSTEM FOR THE YEAR BEGINNING JANUARY 1, 2010

Contributions Expressed

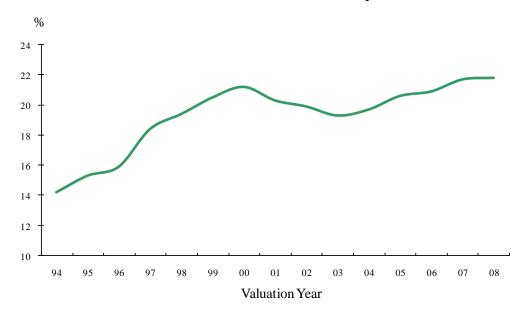
	As Percents of Payroll		
Contributions for	General/Management	Police	
Normal Cost			
Age & service benefits	9.67%	16.73%	
Death and disability benefits	0.97	1.27	
Termination benefits			
Deferred age & service benefits	0.49	0.23	
Refunds of member contributions	0.47	1.09	
Total normal cost	11.60%	19.32%	
Unfunded Actuarial Accrued Liabilities (1)	2.33%	6.34%	
Total Contribution Requirement	13.93%	25.66%	
Member portion	3.00%	8.00%	
City-State portion	10.93%	17.66%	

<sup>(1)</sup> Unfunded accrued liabilities were amortized as a level percent of active member payroll over a period of 15 years.

#### **Active and Retired Members**



#### Pension Benefits as a Percent of Payroll



### COMPUTED CITY CONTRIBUTIONS COMPARATIVE STATEMENT

<b>T</b> 7	
Val	uation

Fiscal	Date	% of Payroll Contributions		Weighted
Year	December 31	General	Police	Average
1996	1994	9.69	17.57	11.37
1997	1995	9.25	16.92	11.09
1998	1996	9.29	17.27	11.20
1999	1997 #	10.33	18.09	12.14
2000	1998 @	9.68	16.85	11.42
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

<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, 2008

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

<u>.</u>	General	Police	Total
A. Valuation assets	\$157,778,041	\$ 84,006,949	\$241,784,990
B. Actuarial present value of expected			
future employer contributions			
1. For normal costs	24,954,575	15,029,660	39,984,235
2. For unfunded actuarial accrued liabilities	9,377,689	10,004,777	19,382,466
3. Total	34,332,264	25,034,437	59,366,701
C. Actuarial present value of expected			
future member contributions	9,059,617	10,828,926	19,888,543
D. Total actuarial present value of present			
and expected future resources	\$201,169,922	\$119,870,312	\$321,040,234
Actuarial Present Value of Expected Future	Pension Bene	efit Payments a	nd Reserves
A. To retirees and beneficiaries	\$ 76,824,146	\$ 47,441,541	\$124,265,687
B. To vested terminated members	3,129,838	185,695	3,315,533
C. To present active members			
1. Allocated to service rendered prior			
to valuation date	87,201,746	46,384,490	133,586,236
2. Allocated to service likely to be			
rendered after valuation date	34,014,192	25,858,586	59,872,778
3. Total	121,215,938	72,243,076	193,459,014
D. Reserves			
1. Allocated to retirants and beneficiaries	0	0	0
2. Unallocated investment income	0	0	0
3. Total	0	0	0
E. Total actuarial present value of expected			
future benefit payments and reserves	\$201,169,922	\$119,870,312	\$321,040,234

#### DERIVATION OF ACTUARIAL GAIN (LOSS) YEAR ENDED DECEMBER 31, 2008

The actuarial gains or losses realized in the operation of the Retirement System 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.

	General	Police
(1) UAAL* at start of year	\$2,958,849	\$5,159,160
(2) Normal cost	3,874,587	2,523,281
(3) Actual contributions	4,223,798	2,731,757
(4) Interest accrual	222,739	404,394
(5) Expected UAAL before changes	2,832,377	5,355,078
(6) Change from benefit increases		
(7) Change from revised actuarial assumptions		
(8) Expected UAAL after changes	2,832,377	5,355,078
(9) Actual UAAL at end of year	9,377,689	10,004,777
(10) Gain (loss) (8) - (9)	(6,545,312)	(4,649,699)
(11) Gain (loss) as percent of AAL at start of year	(4.13)%	(5.30)%

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

#### **COMMENTS**

Comment A: Retirement System experience was overall unfavorable during the year ended December 31, 2008. The primary source of unfavorable experience was investment return. During calendar year 2008 the return on fund assets was lower than long term expectations. The market smoothing techniques used in this valuation of the System recognize both past and present investment experience. Although investment gains from prior years helped to reduce the large investment loss in 2008, the recognized net investment yield for the year was 3.00%. Additional information about the asset smoothing method is shown on page B-4.

Given the current state of capital markets, it is likely that the Retirement System will continue to experience investment losses. In the absence of significant offsetting favorable experience, contribution increases are likely in the near term.

**Comment B:** The Appendix of this report includes the results of the retiree health valuation using assumptions and methods required by the Governmental Accounting Standards Board (GASB). The City has decided to make contributions to the retiree health plan at the recommended rates using the methods and assumptions that comply with the new GASB Statements. The Appendix of this report includes important additional information about this valuation.

Comment C: The Retirement Board adopted new economic assumptions for use in determining City contributions to the Pension Fund\IRC 401(h) account during calendar year 2009. This decision was made after the 2007 actuarial valuation report was completed. This report reflects revised 2007 valuation results. Effective with the 2007 actuarial valuation, the investment return and wage inflation assumptions are 7.75% and 4.25% per year respectively. These assumptions are described in detail on page C-4.

#### COMMENTS CONCLUDED

Comment D: The Internal Revenue Code (IRC) Section 401(h) allows a pension plan to establish a separate account within the pension trust to pay benefits for sickness, accident, hospitalization and medical expenses of retired employees, their spouses and their dependents. In order for a pension plan to maintain its qualified status, the IRC Section 401(h) account must meet certain requirements, established by the code. An important (and often, the most restrictive) requirement is that employer contributions for medical benefits must be "subordinate" to the contributions for pension benefits. As a result of this requirement the maximum permissible employer health contribution (to the pension trust) may be insufficient to actuarially fund the promised benefits.

The results of the most recent analysis conducted in 2008 indicate that the retiree health contributions are subordinate to pension contributions as of December 31, 2007. As a result, the plan has not violated the limit imposed by IRC Section 401(h). We recommend that this analysis be performed annually.

**Comment E:** The current years' retiree health contributions were generally consistent with expectations. During 2008, retiree health cost increases were consistent with expectations. Retiree payments for health coverage increased by less than expected over the prior year. This experience was offset by a change in the assumed rates of medical inflation used in this valuation of the retiree health plan. Page 4 of the Appendix includes a summary of medical and dental rates of inflation used in this valuation.

# CONTRIBUTIONS COMPUTED TO MEET THE FINANCIAL OBJECTIVE OF THE RETIREMENT SYSTEM FOR THE FISCAL YEAR BEGINNING JANUARY 1, 2010 GENERAL/MANAGEMENT

**Contributions Expressed as Percents of Payroll** 

Total
12.02%
1.34
0.49
0.47
14.32%
4.64%
18.96%
3.00%
15.96%

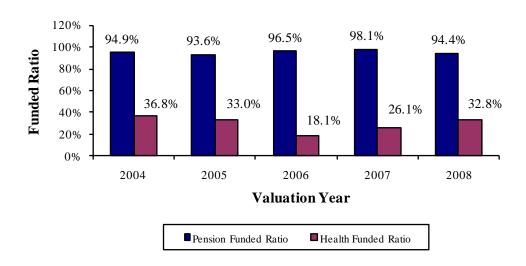
# CONTRIBUTIONS COMPUTED TO MEET THE FINANCIAL OBJECTIVE OF THE RETIREMENT SYSTEM FOR THE FISCAL YEAR BEGINNING JANUARY 1, 2010 POLICE

**Contributions Expressed as Percents of Payroll** 

Contributions for	Pension	Health	Total
Normal Cost			
Age & service benefits	16.73%	3.77%	20.50%
Death and disability benefits	1.27	0.26	1.53
Termination benefits			
Deferred age & service benefits	0.23	0.00	0.23
Refunds of member contributions	1.09	0.00	1.09
Total normal cost	19.32%	4.03%	23.35%
Unfunded Actuarial Accrued Liabilities	6.34%	3.42%	9.76%
Total Contribution Requirement	25.66%	7.45%	33.11%
Member portion	8.00%	0.00%	8.00%
City-State portion	17.66%	7.45%	25.11%

### FUNDED RATIO HISTORY PENSION AND RETIREE HEALTH

#### General/Management



#### **Police** 94.6% 94.1% 90.7% 100% 90.5% 89.4% 80% **Funded Ratio** 60% 32.2% 28.9% 29.1% 40% 27.0% 19.2% 20% 0% 2004 2005 2006 2007 2008 Valuation Year Pension Funded Ratio ■ Health Funded Ratio

Effective with the 2006 actuarial valuation the health funded ratio was based on the results of an actuarial valuation that complies with GASB Statements No. 43 and No. 45. Please refer to the Appendix for additional information.

# SECTION B SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA

## BENEFIT PROVISIONS EVALUATED AND/OR CONSIDERED (DECEMBER 31, 2008)

#### **Regular Unreduced Retirement**

Eligibility - General members: age 55 with 30 or more years 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 age 60.

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, 2008)

#### **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.

**Member Contributions:** Police: 8% of compensation.

Elected officials, appointed officers and management

employees: 3.0% of compensation. Other members: 3.0% of compensation.

#### REPORTED FUND BALANCES (MARKET VALUE)

	Reported Fund Dalances		
Reserves	December 31, 2007	December 31, 2008	
Annuity Savings Fund			
General division	\$ 19,302,694	\$ 19,704,665	
Police division	11,422,232	12,382,608	
Totals	30,724,926	32,087,273	
Employer Reserve Fund			
General division	97,856,158	40,835,152	
Police division	42,431,064	18,424,363	
Totals	140,287,222	59,259,515	
Retirement Reserve Fund			
General division	49,104,048	53,517,644	
Police division	40,078,487	42,261,517	
Totals	89,182,535	95,779,161	
Income Fund	0	0	
Expense Fund	193,446_	190,590	
Total Balances	\$260,388,129	\$187,316,539	

#### **DERIVATION OF VALUATION ASSETS**

	Pensions	Health	Grand Total
A. Funding Value, 12/31/07	\$238,029,788	\$8,379,519	\$246,409,307
B. Market Value, Beginning of Year			260,388,129
C. Non-Investment Net Cash Flow			(1,267,340)
D. Net Investment Income (Market total)			(71,804,250)
E. Market Value, End of Year			187,316,539
F. Phase-in Factor			20%
G. Expected Income			19,662,051
H. Market Value Gain (Loss): [(D) – (G)]			(91,466,301)
I. Method Change:			
J. Recognition of Gain/(Loss)			
J1. Year One			(18,293,260)
J2. Year Two			354,503
J3. Year Three			3,302,352
J4. Year Four			317,453
J5. Year Five			<u>2,018,844</u>
J6. Total (J1J5)			(12,300,108)
K. Funding Value, 12/31/08			
[(A) + (C) + (G) + (J6)]			252,503,910
L. Net Funding Value Rate of Return			3.0%
M. Percent Allocation (to pension and health)*	95.8%	4.2%	100.0%
N. Allocated Funding Value, 12/31/2008	\$241,784,990	\$10,718,920	\$252,503,910

<sup>\*</sup> Rounded

#### SUMMARY OF CURRENT ASSET INFORMATION REPORTED FOR VALUATION

#### **Trust Assets**

	December 31, 2008  Market Value
Cash	\$ 187,329
Receivables & accruals	898,351
Investments	186,233,411
Less accounts payable	2,552
Total assets	\$187,316,539

#### **Revenues and Expenditures of Trust**

	2008	2007
Balance - January 1	\$260,388,129	\$241,431,606
Revenues		
Employee's contributions	2,065,615	2,001,290
Employer contributions	7,710,786	7,896,489
Investment income	(71,138,091)	19,937,351
Other income	0	0
Expenditures		
Benefit payments	10,005,006	9,262,791
Hospitalization insurance	763,261	740,024
Refunds of member contributions	275,474	199,779
Expenses	666,159	676,013
Miscellaneous	0	0
Balance - December 31	\$187,316,539	\$260,388,129

## MARKET VALUE OF ASSETS REPORTED FOR VALUATION COMPARATIVE STATEMENT

Year	Assets		Revenues					
Ended	Beginning	<b>Employee</b>	<b>Employer</b>	Investment	Retirement	Contrib.	Misc.	Assets
<b>Dec. 31</b>	of Year	Contrib.	Contrib.	Income	Benefits	Refunds	Expenses*	Year-End
1994	\$ 76,111,595	\$1,270,016	\$3,164,398	\$ 209,322	\$2,727,077	\$ 77,774	\$ 379,964	\$ 77,570,516
1995	77,570,516	1,322,338	3,191,204	18,315,824	3,299,025	168,376	521,138	96,411,343
1996	96,411,343	1,485,256	3,369,320	12,535,654	3,782,793	83,772	510,740	109,424,268
1997	109,424,268	1,540,007	3,341,706	17,474,254	4,202,853	189,073	533,763	126,854,546
1998	126,854,546	1,462,159	3,723,334	14,571,870	4,998,076	114,099	504,691	140,995,043
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

<sup>\*</sup> includes retiree health benefits

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

Year		Additions	Re	Removals End		d 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
1994 +	30	\$ 735,959	8	\$ 57,983	279	\$3,292,237	\$ 11,800	\$ 39,021,252	10.0
1995	30	541,105	13	115,481	296	3,717,861	12,560	44,353,632	10.6
1996	25	516,018	13	163,629	308	4,070,250	13,215	48,501,396	11.6
1997	29	761,054	10	89,454	327	4,741,850	14,501	59,459,496	11.6
1998	25	594,946	5	38,762	347	5,298,034	15,268	66,486,000	9.8
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

<sup>+ 2</sup> years of COLA

## RETIREES AND BENEFICIARIES AS OF DECEMBER 31, 2008 TABULATED BY TYPE OF BENEFITS BEING PAID

Type of Benefits Being Paid	No.	Annual Benefits
Age and Service Retirement Benefits	342	\$8,610,197
Disability Retirement Benefits	20	372,785
Survivor Retirement Benefits	74	1,152,623
Total Retirement Benefits Being Paid	436	\$10,135,605

## RETIREES AND BENEFICIARIES BY ATTAINED AGES AS OF DECEMBER 31, 2008

Attained		Annual
Ages	No.	Benefits
Under 40	2	\$ 14,204
40 - 44	1	6,028
45 - 49	3	45,761
50 - 54	22	529,818
55 - 59	47	1,520,665
60 - 64	94	2,762,697
65 - 69	88	2,309,671
70 - 74	58	1,069,707
75 - 79	52	985,022
80 - 84	36	541,044
85 - 89	26	308,629
90 & Over	7	42,359
Totals	436	\$10,135,605

## VESTED FORMER MEMBERS AS OF DECEMBER 31, 2008 TABULATED BY ATTAINED AGES

Attained Ages	No.	Monthly Benefits
Under 40	12	\$ 71,875
40 - 44	11	105,998
45 - 49	10	98,302
50 - 54	13	154,949
55 - 59	3	63,376
Totals	49	\$494,500

## ACTIVE MEMBERS AS OF DECEMBER 31, 2008 TABULATED BY VALUATION DIVISIONS

		Annual	Average			
Valuation Groups	No.	Payroll	Age	Service	Pay	
General/Management Members	676	\$33,372,841	45.3 yrs.	12.4 yrs.	\$49,368	
Police Members	223	13,060,463	39.4	11.6	58,567	
<b>Total Active Members</b>	899	\$46,433,304	43.8	12.2	\$51,650	

### ACTIVE MEMBERS INCLUDED IN VALUATION COMPARATIVE SCHEDULE

Valuation								
Date	I	Active Member	S	Valuation _		1	Average	
December 31	General	Police	Totals	Payroll	Age	Service	Pay	% Incr.
1994	563	136	699	\$23,186,822	42.0	12.0	\$33,171	2.8 %
1995	568	155	723	24,295,495	43.0	11.9	33,604	1.3
1996	575	160	735	25,525,258	42.0	11.8	34,728	3.3
1997	571	158	729	25,830,779	42.2	11.8	35,433	2.0
1998	573	161	734	27,295,184	42.2	11.7	37,187	5.0
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

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

Year Ended	Dur	r Added ring ear		rmal ement		ability ement		d-In- vice		her nations	Active Members End of
Dec. 31	A	E	A	Е	A	E	A	Е	A	E	Year
1994	47	38	27	8.2	0	1.8	0	2.2	11	27.2	699
1995	66	42	20	8.2	3	1.8	0	2.2	19	27.2	723
1996	45	33	17	8.3	0	2.1	1	2.2	15	30.3	735
1997	38	44	21	8.3	1	2.1	0	2.2	22	30.3	729
1998	45	50	21	7.8	1	1.6	0	0.9	23	26.8	734
1999	56	46	14	7.5	1	1.6	2	0.9	23	27.5	750
2000	68	57	17	11.0	2	1.1	0	1.0	38	27.9	761
2001	64	36	11	10.0	1	1.2	1	1.0	23	29.2	789
2002	66	47	11	13.7	0	1.3	0	1.1	36	30.2	808
2003	74	43	19	15.3	2	1.3	0	1.1	22	31.5	839
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
5 Year Totals	297	237	83	78.2	5	5.8	3	6.2	146	155.6	

A represents actual number.

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

#### GENERAL/MANAGEMENT ACTIVE MEMBERS - DECEMBER 31, 2008 BY ATTAINED AGE AND YEARS OF SERVICE

		Year	s of Ser		Totals				
Attained									Valuation
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll
20.24	10							10	Ф 217.527
20-24	10							10	\$ 317,537
25-29	49	8						57	2,167,068
30-34	38	28	4					70	3,093,314
35-39	25	24	15	1				65	3,105,037
40-44	25	27	17	15	1			85	4,462,989
45-49	18	26	18	20	21	11		114	5,675,035
50-54	17	18	18	21	24	12	25	135	7,029,331
55-59	2	12	16	15	15	7	18	85	4,551,235
60	1		1	3	3	2	3	13	650,715
61	1	3	3	2	3	3	2	17	890,116
62	1	4	3		1		1	10	498,207
63	1		1		1			3	211,700
64		1		1	1			3	180,130
65		1	2					3	164,135
66		1	1					2	77,743
67		1						1	105,602
68				1				1	44,313
70	1	1						2	148,634
Totals	189	155	99	79	70	35	49	676	\$33,372,841

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

Age: 45.3 years Service: 12.4 years Annual Pay: \$49,368

#### POLICE ACTIVE MEMBERS - DECEMBER 31, 2008 BY ATTAINED AGE AND YEARS OF SERVICE

		Y	ears of So	ervice to	Valuation	n Date		Totals	
Attained Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	1							1	\$ 19,094
25-29	27	4						31	1,360,660
30-34	14	23	2					39	1,950,385
35-39	5	21	20					46	2,710,321
40-44	1	9	14	13	8			45	2,808,972
45-49		1	3	5	15			24	1,669,637
50-54	1	2	4	8	7	2	1	25	1,722,749
55-59			1	3	3	1	3	11	759,091
60					1			1	59,554
Totals	49	60	44	29	34	3	4	223	\$13,060,463

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

Age: 39.4 years Service: 11.6 years Annual Pay: \$58,567

#### **SECTION C**

ACTUARIAL METHODS AND ASSUMPTIONS AND DEFINITIONS OF TECHNICAL TERMS

#### ACTUARIAL COST METHODS USED FOR THE VALUATION

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 for Pension Benefits**

The unfunded actuarial accrued liability (UAAL) was determined using the funding value of assets and actuarial accrued liability calculated as of the valuation date. Except where indicated, the UAAL amortization payment (one component of the contribution requirement), is the level percent of pay required to fully amortize the UAAL over a 15 year period beginning on the date contributions determined by this report are scheduled to begin. This UAAL payment does not reflect any payments expected to be made between the valuation date and the date contributions determined by this report are scheduled to begin.

Active payroll was assumed to increase 4.25% a year for the purpose of determining the level percent contributions.

#### **ACTUARIAL ASSUMPTIONS IN THE VALUATION PROCESS**

The actuary calculates contribution requirements and actuarial present values of a retirement system by applying actuarial assumptions to the benefit provisions and census information of the system, using the actuarial cost methods described in this report.

The principal areas of risk which require assumptions about future experience are:

- (i) long-term rates of investment return to be generated by the assets of the system
- (ii) patterns of pay increases to members
- (iii) rates of mortality among members, retirees and beneficiaries
- (iv) rates of withdrawal of active members
- (v) rates of disability among active members
- (vi) the age patterns of actual retirements

In making a valuation, the actuary calculates the monetary effect of each assumption for as long as a present covered person survives - - - a period of time which can be as long as a century.

The employer contribution rate has been computed to remain level from year-to-year so long as benefits and the basic experience and make-up of members do not change. Examples of favorable experience which would tend to reduce the employer contribution rate are:

- (1) Investment returns in excess of 7.75% per year
- (2) Member non-vested terminations at a higher rate than outlined in this report
- (3) Mortality among retirees and beneficiaries at a higher rate than indicated by the 1983 Group Annuity Mortality Table
- (4) Increases in the number of active members

#### **ACTUARIAL ASSUMPTIONS IN THE VALUATION PROCESS**

Examples of unfavorable experience which would tend to increase the employer contribution rate are:

- (1) Pay increases in excess of the rates outlined in this report.
- (2) An acceleration in the rate of retirement from the rates outlined in this report.
- (3) A pattern of hiring employees at older ages than in the past.

Actual experience of the system will not coincide exactly with assumed experience, regardless of the choice of the assumptions, or the skill of the actuary and the precision of the calculations. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments (usually small) to the computed contribution rate.

From time-to-time one or more of the assumptions are modified to reflect experience trends (but not random or temporary year-to-year fluctuations).

Valuation assets are equal to reported market value of assets, with investment gains and losses spread over a period of 5 years, (with 20% recognition in each year). Such spreading reduces the fluctuation in the City's computed contribution rate which might otherwise be caused by market value fluctuations. The details of the spreading technique are shown in Section B of this report.

#### **ACTUARIAL ASSUMPTIONS USED FOR THE VALUATION**

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

7.75% per year, compounded annually. This rate consists of a net real rate of return of 3.5% 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, 2007 valuation. Approximate rates of investment return, for the purpose of comparisons with assumed rates, are shown below.

	Year Ended December 31,									
	2008	2007	2006	2005	2004					
Rate of Investment Return	3.0 %	12.8 %	10.2 %	7.1 %	5.6 %					

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.

Annual Rate of Pay Increase for Sample Ages		
Base	General/Management	
(Economic)	Merit and Longevity	Totals
4.25 %	1.70 %	5.95 %
4.25	1.60	5.85
4.25	1.20	5.45
4.25	0.90	5.15
4.25	0.40	4.65
4.25	0.30	4.55
4.25	0.20	4.45
4.25	0.20	4.45
4.25	0.00	4.25
4.25	0.00	4.25
	Base (Economic) 4.25 % 4.25 4.25 4.25 4.25 4.25 4.25 4.25 4.25 4.25	Base (Economic)         General/Manage Merit and Longevity           4.25 %         1.70 %           4.25 1.60         1.20           4.25 0.90         1.20           4.25 0.90         1.20           4.25 0.40         1.20           4.25 0.20         1.20           4.25 0.30         1.20           4.25 0.20

Annual Rate of Pay Increase for Indicated Years of Service

-	Timedi Itate of Lay Increase for Indicated Tears of Service			
Years of	Base	Police		
Service	(Economic)	Merit and Longevity	Total	
1	4.25 %	4.00 %	8.25 %	
2	4.25	4.00	8.25	
3	4.25	4.00	8.25	
4	4.25	4.00	8.25	
5	4.25	4.00	8.25	
6	4.25	3.00	7.25	
7	4.25	3.00	7.25	
8	4.25	2.00	6.25	
9	4.25	2.00	6.25	
10	4.25	1.00	5.25	
11	4.25	1.00	5.25	
12	4.25	1.00	5.25	
13	4.25	1.00	5.25	
14	4.25	1.00	5.25	
15	4.25	0.00	4.25	

The base economic assumptions were first used in the December 31, 2007 valuation.

**Lump sum payments** included in the calculation of the average pay upon which benefits are computed were assumed to increase benefits by 12% for members of the Police, General and Management divisions.

**Active Member Group Size:** The number of active members was assumed to remain constant. This assumption is unchanged from previous valuations.

If the number of active members remains constant, the total active member payroll is expected to increase 4.25% annually, the base portion of the individual pay increase assumptions. This increasing payroll was recognized in amortizing unfunded actuarial accrued liabilities.

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

_	Year Ended December 31,				
Increase in	2008	2007	2006	2005	2004
Average pay	2.5%	4.2%	4.1%	2.9%	4.5%
Total payroll	4.0	5.2	4.9	5.1	6.3

**Mortality Table:** The 1983 Group Annuity Mortality Table. This table was first used for the December 31, 1997 valuation. Sample values follow:

	<b>Actuarial Present Value of</b>		Futu	re Life
Sample	\$1 Month	ly for Life	Expectar	ncy (Years)
Ages	Men	Women	Men	Women
55	\$124.57	\$134.74	24.82	30.24
60	115.04	127.24	20.64	25.67
65	103.26	117.61	16.69	21.29
70	90.18	105.53	13.18	17.13
75	76.40	91.57	10.15	13.37
80	62.65	77.16	7.64	10.20

This assumption is used to measure the probabilities of members dying before retirement and the probabilities of each benefit payment being made after retirement.

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 Separat	ting
Sample	Years of	Within Next Yo	ear
Ages	Service	General/Management	Police
ALL	0	12.00 %	13.00 %
	1	11.00	8.00
	2	9.00	5.00
	3	7.00	4.00
	4	5.00	3.50
25	5 & Over	5.00	3.50
30		5.00	3.00
35		4.50	2.50
40		3.50	2.00
45		2.50	1.00
50		1.50	1.00
55		1.00	0.50
60		0.50	0.50

These rates were first used for the December 31, 2004 valuation.

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

Percent Becoming Disabled within Next Year
0.08 %
0.08
0.08
0.08
0.20
0.26
0.49
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		Early Retirement Rates		Rates
Retirement	General/		Years of	General/	
Ages	Management	Police	Service	Management	Police
50		40%	20	2%	2%
51		20	21	2	2
52		20	22	2	2
53		20	23	2	2
54		20	24	2	2
55	25%	20	25	2	2
56	25	20	26	2	2
57	20	20	27	2	2
58	20	20	28	2	2
59	20	20	29	2	2
60	25	100	30	2	2
61	25	100	31		2
62	30	100	32		2
63	20	100	33		2
64	20	100	34		2
65	40	100	35		2
66	30	100			
67	30	100			
68	30	100			
69	30	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 current rates were first used for the December 31, 2004 valuation of the System.

#### 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 12% 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.

**Disability Assumption:** Fifty percent of disabilities 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.)

**Death Assumption:** Fifty percent of deaths were assumed to be duty related and

fifty percent were assumed to be unrelated to duty.

Non-forfeiture Assumption: All vested terminated Police members were assumed to elect

a deferred retirement benefit. 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.

#### **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).

#### **SECTION D**

DISCLOSURES REQUIRED BY GASB STATEMENTS NO. 25, NO. 26 AND NO. 27

## GASB STATEMENT NO. 25 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)
1999	\$ 138,462,917	\$ 142,638,847	\$4,175,930	97.1 %	\$27,623,182	15.2 %
2000	152,796,352	156,540,695	3,744,343	97.6	29,068,666	12.9
2001	164,995,804	167,764,361	2,768,557	98.3	31,751,356	8.7
2002	168,572,303	176,313,178	7,740,875	95.6	33,718,220	23.0
2003	175,891,684	184,882,463	8,990,779	95.1	36,244,556	24.8
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

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

Valuation	<b>Fiscal</b>	(	Contribution	n			
Year	Year		Rates as %	)			
Ended	<b>Ended</b>	of V	aluation Pa	yroll	Computed Dollar	Actual	%
Dec. 31	Dec. 31	General	Police	Wt. Avg.	Contributions	Contributions	<u>Contribute</u> d
1999	2001	8.47	13.90	9.80	\$2,827,978	\$3,111,633	100 %
2000#	2002	7.60	15.60	9.67	2,936,546	3,273,019	100
2001#	2003	7.77	14.42	9.45	3,134,728	3,557,438	100
2002#	2004	8.68	15.68	10.48	3,693,299	4,270,076	100
2003	2005	9.43	13.96	10.65	4,125,255	4,499,260	100
20044	2006	0.00	1404	11.01	4 515 020	4.020.407	100
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		
2008	2010	10.93	17.66	12.73	6,470,984		

<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.

<sup>^</sup> New methods or assumptions adopted

## GASB STATEMENT NO. 25 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, 2008

Actuarial Cost Method Entry-Age

Amortization Method Level percent, closed

Remaining Amortization Period 15 years

Asset Valuation Method 5 year smoothed market

Actuarial Assumption:

Investment rate of return 7.75%
Projected salary increases\* 4.25% - 8.25%
\* Includes inflation at 4.25%

Cost-of-living adjustments

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

Membership of the Retirement System is shown below at December 31, 2008, the date of the latest actuarial valuation:

Retirees and beneficiaries receiving benefits 436

Terminated plan members entitled

to but not yet receiving benefits 49

Active plan members 899

Total 1,384

# GASB STATEMENT No. 26 REQUIRED SUPPLEMENTARY INFORMATION STATEMENT OF PLAN ASSETS (INCLUDES RETIREE HEALTH) AS OF DECEMBER 31, 2008

#### Assets:

Cash and equivalents Interest and dividend receivables* Total	\$ 187,329 898,351 1,085,680
Investments, at market value:	
Other investments STW Northern trust	95,564,661 35,553,584 55,115,166
Total investments	186,233,411
Total assets (market value)	187,319,091
Less accounts payable	2,552
Net assets held in trust for pension and health benefits	\$ 187,316,539

<sup>\*</sup> Includes accounts receivable

# GASB STATEMENT NO. 26 REQUIRED SUPPLEMENTARY INFORMATION STATEMENT OF CHANGES IN PLAN ASSETS (INCLUDES RETIREE HEALTH) AS OF DECEMBER 31, 2008

	Retiree			
	Pension	Health	Total	
Additions:				
Contributions:				
Employer	\$4,889,940	\$2,820,846	\$ 7,710,786	
Plan Members	2,065,615		2,065,615	
Total	6,955,555	2,820,846	9,776,401	
Investment Income			(71,138,091)	
Miscellaneous			0	
Total Additions			(61,361,690)	
Deductions:				
Pension Benefits Paid	10,005,006		10,005,006	
Refunds of Contributions	275,474		275,474	
Health Benefits		763,261	763,261	
Expenses^	640,658	25,501	666,159	
Total Deductions	10,921,138	788,762	11,709,900	
Net Increase (Decrease)			\$ (73,071,590)	
Net Assets Held in Trust Fund:				
Beginning of Year Market Value			\$260,388,129	
End of Year Market Value			\$187,316,539	

<sup>^</sup> The administrative and other expenses shown above were allocated based on the average funding value of assets and are shown for illustration purposes.

Employer contributions for pension and retiree health were reported in total and allocated by the actuary based on contribution recommendations.



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 McKennan. 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 based on a weighted average of reported premiums and utilization of health care plans by retirees. 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. The City pays the remaining portion of the retiree health care cost. Health insurance coverage terminates upon attainment of age 65. At this time, each retiree must make their 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, 2008 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 premium rates were developed for pre-65 retirees only. There is no retiree health coverage for post-65 retirees. The rates were calculated by using actual claims and exposure data for the period of January 2006 through September 2008, plus the load for administration and network access fees. The self-insured medical and prescription drug data was provided by the City. Since prescription drug claims and medical claims exhibit different trends and claim payment patterns, we analyzed these claims separately.

Age graded and sex distinct premiums are utilized in this valuation. The premiums developed by the preceding process are 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 for each specific age/sex combination. The age/sex specific premiums more accurately reflect the health care utilization and cost at that age.

The tables below show the resulting medical, dental, and prescription drug one-person monthly premiums at select ages without any adjustment for retiree contributions. The facsimile health care premium (or per capita costs) rates shown below reflect the use of age grading.

Facsimile Health Care Premiums Used in the 2008 Valuation

	Monthly Pre-65 Rates at Sample Ages				
Age	Male	Female			
50	\$585.72	\$663.66			
55	\$765.53	\$786.90			
60	\$961.73	\$924.43			

Monthly Dental Premiums Used in the 2008 Valuation

Coverage for	<b>Monthly Rate</b>
1-person	\$37.29
2-person	74.58

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.

Coverage for	Monthly Rate
Health Care Premiums (Retiree Only - General)	\$323.48
Health Care Premiums (Retiree Only - Police)	323.48
Health Care Premiums (Retiree & Spouse - General)	686.02
Health Care Premiums (Retiree & Spouse - Police)	686.02
Dental (Retiree only)	17.34
Dental (Retiree & Spouse)	33.11

#### 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 City has indicated that these premiums will be subject to additional increases in an effort to bridge the gap between the City paid "premiums" and the retiree paid premiums. 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 December 31,	Medical & Rx	Dental		
2009	10.00%	4.25%		
2010	9.25	4.25		
2011	8.50	4.25		
2012	7.75	4.25		
2013	7.00	4.25		
2014	6.25	4.25		
2015	5.75	4.25		
2016	5.25	4.25		
2017	4.75	4.25		
2018 & 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
57	1.000	1.000
60	1.142	1.098

## COMPUTED RETIREE HEALTH CONTRIBUTION RATES BASED ON ASSUMPTIONS / METHODS PRESCRIBED BY GASB FOR GENERAL AND MANAGEMENT MEMBERS FOR THE FISCAL YEAR BEGINNING JANUARY 1, 2010

	Contribution Requirements			
Contributions for	<b>Expressed as Percents of Payrol</b>			
Total NC%	2.72 %			
-Employee %	0.00			
-Employer %	2.72 %			
UAL% (27 Year Amortizaton of UAL*) Total Employer Contribution	2.31 % 5.03 %			
First Year \$ Contribution	\$1,824,372			

<sup>\*</sup> Unfunded accrued liability (UAL) was amortized as a level percent of active member payroll.

## COMPUTED RETIREE HEALTH CONTRIBUTION RATES BASED ON ASSUMPTIONS/METHODS PRESCRIBED BY GASB FOR POLICE MEMBERS FOR THE FISCAL YEAR BEGINNING JANUARY 1, 2010

	Contribution Requirements		
Contributions for	<b>Expressed as Percents of Payroll</b>		
Total NC%	4.03 %		
-Employee %	<u>0.00</u>		
-Employer %	4.03 %		
UAL% (27 Year Amortization of UAL*) Total Employer Contribution	3.42 % 7.45 %		
First Year \$ Contribution	\$1,057,467		

<sup>\*</sup> Unfunded accrued liability (UAL) was amortized as a level percent of active member payroll.

## 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)
2006	\$ 5,747,326	\$ 31,127,424	\$ 25,380,098	18.5 %	\$ 42,456,531	59.8 %
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

<sup>^</sup> New methods or assumptions adopted.

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

Valuation Year	Fiscal Year	Contribution R	tate as a % of	Annual Required		
Ended	<b>Ended</b>	Valuation Payroll		Contribution	Actual	Percentage
Dec. 31	Dec. 31	General	Police	(ARC)	Contributions	Contributed
2005	2007	5.04%	7.23%	\$ 2,501,513	\$ 2,523,357	100.0 %
2006	2008	5.49%	7.57%	2,816,421	2,820,846	100.0
2007^	2009	5.18%	7.36%	2,808,976		
2008	2010	5.03%	7.45%	2,881,839		

Annual required 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 FOR THE RETIREE HEALTH PLAN

The following assumptions and methods were used in the December 31, 2008 actuarial valuation for the Retiree Health Plan:

Valuation Date December 31, 2008

Actuarial Cost Method Entry-Age

Amortization Method Level percent, closed

Remaining Amortization Period 27 years

Asset Valuation Method 5 year smoothed market

Premium Rate Development Method Please refer to page 1

**Actuarial Assumptions** 

Annual Rate of return (discount rate) 7.75% per year

Dependent Coverage elections 80% of employees are assumed

to cover a spouse at retirement

Coverage election All eligible future retirees are

assumed to elect benefits

Rates of inflation for medical and dental benefits

Please refer to page 4

Membership of the Retiree Health Plan is shown below at December 31, 2008, the date of the latest actuarial valuation.

Retirees receiving medical benefits 135

Active plan members 899

Total number of current and former City employees

who are members of the Retiree Health Plan 1,034

March 9, 2009

Ms. Angie Uthe City of Sioux Falls Employee's Retirement System City Hall - 224 West 9th Street Sioux Falls, South Dakota 57104-6407

Dear Angie:

Enclosed are 20 copies of the report of the fifty-eighth annual actuarial valuation of the City of Sioux Falls Employee's Retirement System.

Sincerely,

Louise M. Gates

LMG:bd Enclosures