

CITY OF SIOUX FALLS EMPLOYEE'S RETIREMENT SYSTEM SIXTY-FIRST ANNUAL ACTUARIAL VALUATION REPORT DECEMBER 31, 2011

OUTLINE OF CONTENTS

Page	Items
	Cover Letter
A	Valuation Results
1	Financial Objective
2	Computed City-State Contributions
3	Active and Retired Members, Benefits as a Percent of Payroll
4	Computed City Contributions – Comparative Statement
5	Actuarial Balance Sheet
6	Derivation of Actuarial Gain (Loss)
7-8	Comments
9-10	Contribution Summary
В	Summary of Benefit Provisions and Valuation Data
1-2	Summary of Benefit Provisions
3-5	Reported Asset Information
6-8	Retired Life Data
9	Inactive Member Data
10-13	Active Member Data
C	Actuarial Methods and Assumptions and Definitions of Technical Terms
1	Actuarial Cost Methods Used for the Valuation
2-6	Actuarial Assumptions Used for the Valuation
7	Miscellaneous and Technical Assumptions
8-9	Definitions of Technical Terms
D	Disclosures Required By GASB Statements No. 25 and No. 27
1	Schedule of Funding Progress and Employer Contributions
2	Required Supplementary Information
Appendix A	Retiree Health Valuation Based on Assumptions and Methods Prescribed by the Governmental Accounting Standards Board
1-9	
Appendix B	City Contributions Based on Alternate Amortization Periods
1-4	



April 24, 2011

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, 2011 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 to the Board at their May 2012 meeting 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 2013 fiscal year. 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 your Secretary, 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. The undersigned 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:mrb

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, 2013 are shown on page A-2.

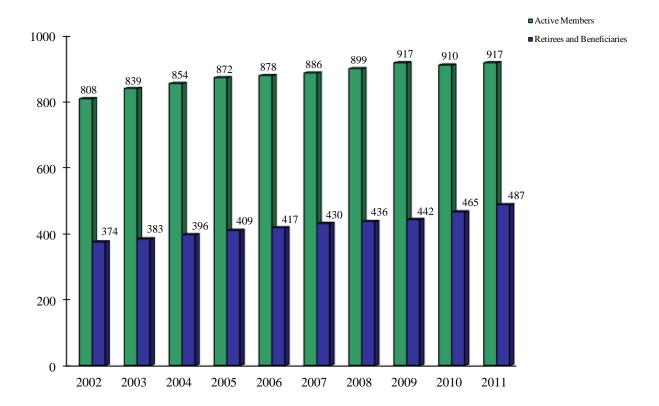
PENSION CONTRIBUTIONS COMPUTED TO MEET THE FINANCIAL OBJECTIVE OF THE RETIREMENT SYSTEM FOR THE FISCAL YEAR BEGINNING JANUARY 1, 2013

Contributions Expressed

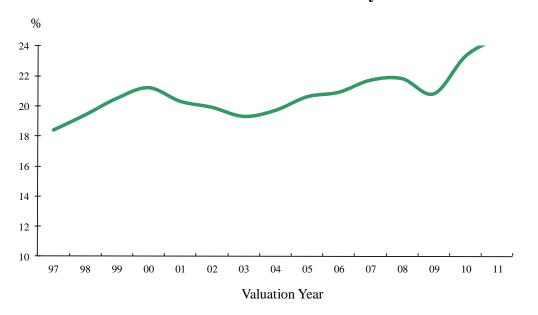
	As Percents of Payroll				
Contributions for	General/Management	Police			
Normal Cost					
Age & service benefits	9.72%	16.68%			
Death and disability benefits	0.98	1.26			
Termination benefits					
Deferred age & service benefits	0.49	0.23			
Refunds of member contributions	0.47	1.10			
Total normal cost	11.66%	19.27%			
Unfunded Actuarial Accrued Liabilities (1)	5.96%	11.73%			
Total Contribution Requirement	17.62%	31.00%			
Member portion	3.00%	8.00%			
City-State portion	14.62%	23.00%			

⁽¹⁾ Unfunded accrued liabilities were amortized as a level percent of active member payroll over a period of 12 years.

Active and Retired Members



Pension Benefits as a Percent of Payroll



COMPUTED CITY CONTRIBUTIONS COMPARATIVE STATEMENT

Fiscal	Valuation	0/ of Dormall 4	Cantributions	Weighted
Year	Date December 31	% of Payroll (General	Police	Weighted Average
1041	Beccinoci et	General	Tonce	Trotage
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	0.60	15.60	10.40
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	14.62	23.00	16.89

[@] After changes in actuarial assumptions or methods.

[#] After changes in benefit provisions.

^{**} Reflects full funding credit.

ACTUARIAL BALANCE SHEET - DECEMBER 31, 2011

Present Pension Resources and Expected Future Pension Resources

	General	Police	Total
A. Valuation assets	\$170,365,041	\$ 93,462,095	\$263,827,136
B. Actuarial present value of expected future employer contributions			
1. For normal costs	27,347,512	16,381,295	43,728,807
2. For unfunded actuarial accrued liabilities	21,291,149	16,605,587	37,896,736
3. Total	48,638,661	32,986,882	81,625,543
C. Actuarial present value of expected			
future member contributions	9,759,950	11,658,472	21,418,422
D. Total actuarial present value of present and expected future resources	\$228,763,652	\$138,107,449	\$366,871,101
Actuarial Present Value of Expected Future	e Pension Bene	efit Payments a	and Reserves
A. To retirees and beneficiaries	\$ 92,706,678	\$ 58,094,271	\$150,800,949
B. To vested terminated members	4,246,594	292,871	4,539,465
C. To present active members			
 Allocated to service rendered prior to valuation date Allocated to service likely to be 	94,702,918	51,680,540	146,383,458
rendered after valuation date	37,107,462	28,039,767	65,147,229
3. Total	131,810,380	79,720,307	211,530,687
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	\$228,763,652	\$138,107,449	\$366,871,101

DERIVATION OF ACTUARIAL GAIN (LOSS) YEAR ENDED DECEMBER 31, 2011

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	\$16,543,217	\$13,996,845
(2) Normal cost	4,222,039	2,754,214
(3) Actual contributions	5,961,226	4,022,758
(4) Interest accrual	1,214,706	1,035,599
(5) Expected UAAL before changes	16,018,736	13,763,900
(6) Change from benefit increases	0	0
(7) Change from revised actuarial assumptions	0	0
(8) Expected UAAL after changes	16,018,736	13,763,900
(9) Actual UAAL at end of year	21,291,149	16,605,587
(10) Gain (loss) (8) - (9)	(5,272,413)	(2,841,687)
(11) Gain (loss) as percent of AAL at start of year	(2.86)%	(2.71)%

^{*} Unfunded actuarial accrued liability.

COMMENTS

Comment A: Retirement System experience was overall unfavorable during the 2011 plan year. During calendar year 2011 the return on the market value of 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. The recognized rate of return for the year was 2.8% on trust assets. This experience was offset in part by lower than assumed pay increases. Details of this asset smoothing method are shown on page B-4.

Given the current state of capital markets, and unrecognized investment losses from 2008 and 2011, contribution increases are likely in the near term in the absence of significant offsetting favorable experience. If the market value of System assets was used to develop pension contributions, the contribution rate would be approximately 19.4% for the police and general member divisions combined.

Comment B: Appendix A 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 the recommended rates using methods and assumptions that comply with the GASB Statements No. 43 and No. 45. Appendix A of this report includes additional information about this valuation.

Comment C: 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 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 in 2012 to ensure continued compliance.

COMMENTS (CONCLUDED)

Comment D: During the 2011 plan year, total retiree health cost increases were consistent with expectations and retiree paid premiums were lower than expected. In addition, the recognized rate of return on plan assets was lower than long term expectations, and the assumed rates of medical inflation used in this valuation of the retiree health plan were modified to better reflect plan experience. This unfavorable experience was offset in part by "opt outs" in the General division. Page 5 of Appendix A includes a summary of medical and dental rates of inflation used in this valuation of the plan.

Comment E: The Actuarial Standards of Practice with regard to the mortality assumption have recently been revised. ASOP No. 35 Disclosure Section 4.1.1 now states "The disclosure of the mortality assumption should contain sufficient detail to permit another qualified actuary to understand the provision made for future mortality improvement. If the actuary assumes zero mortality improvement after the measurement date, the actuary should state that no provision was made for future mortality improvement." Currently, there is no margin for future mortality improvement in the mortality assumption used for the annual valuation of the System. We recommend that the mortality assumption be reviewed in connection with an experience study to determine the appropriate margin (if any) to be used in future valuations of the System.

Comment F: Appendix B of this report, includes alternate pension and retiree health contributions for fiscal 2013 based on alternate (longer) amortization periods. The resulting contributions meet the System's objective of contributions that are generally consistent with the prior year's amounts.

CONTRIBUTIONS COMPUTED TO MEET THE FINANCIAL OBJECTIVE OF THE RETIREMENT SYSTEM FOR THE FISCAL YEAR BEGINNING JANUARY 1, 2013

General/Management

	<u>Contributions</u>	Expressed as Perco	ents of Payroll
Contributions for	Pension	Health	Total
Total Normal Cost	11.66%	3.58%	15.24%
Unfunded Actuarial Accrued Liabilities*	5.96%	2.35%	8.31%
Total Contribution Requirement Member portion	17.62% 3.00%	5.93%	23.55%
City-State portion	14.62%	5.93%	20.55%

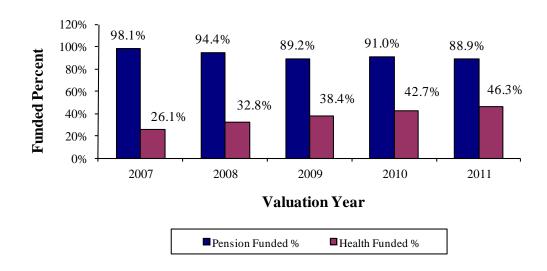
Police Contributions Expressed as Percents of Payroll

Contributions for	Pension	Health	Total
Total normal cost	19.27%	5.22%	24.49%
Unfunded Actuarial Accrued Liabilities*	11.73%	4.48%	16.21%
Total Contribution Requirement	31.00%	9.70%	40.70%
Member portion	8.00%	0.00%	8.00%
City-State portion	23.00%	9.70%	32.70%

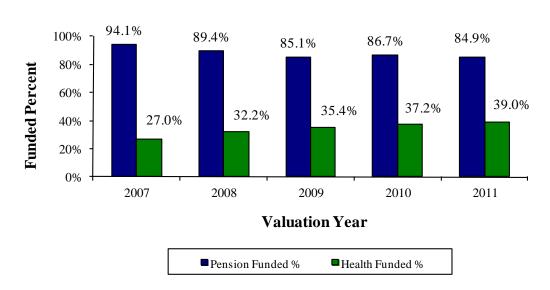
^{*} Unfunded accrued liabilities were amortized as a level percent of active member pay over a period of 12 years.

FUNDED RATIO HISTORY PENSION AND RETIREE HEALTH

General/Management



Police



SECTION B SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA

BENEFIT PROVISIONS EVALUATED AND/OR CONSIDERED (DECEMBER 31, 2011)

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, 2011)

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 Balances
Reserves	December 31, 2011
Annuity Savings Fund	
General division	\$ 22,630,022
Police division	15,255,658
Totals	37,885,680
Employer Reserve Fund	
General division	68,492,407
Police division	29,870,046_
Totals	98,362,453
Retirement Reserve Fund	
General division	62,255,789
Police division	52,596,023
Totals	114,851,812
IRC 401(h)	
General division	12,190,524
Police division	5,989,285
Totals	18,179,809
Income Fund	0
Expense Fund	254,345
Total Balances	\$269,534,099

DERIVATION OF VALUATION ASSETS

	Pensions	Health	Grand Total
	1 Chsions	ncam	Total
A. Funding Value, 12/31/10	\$258,975,306	\$16,515,972	\$275,491,278
B. Market Value, Beginning of Year	. , ,	. , ,	264,845,988
C. Non-Investment Net Cash Flow			(158,916)
D. Net Investment Income (Market total)			4,847,027
E. Market Value, End of Year			269,534,099
F. Phase-in Factor			20%
G. Expected Income			21,344,416
H. Market Value Gain (Loss): [(D) – (G)]			(16,497,389)
I. Method Change			
J. Recognition of Gain/(Loss)			
J1. Year One			(3,299,477)
J2. Year Two			2,447,609
J3. Year Three			5,265,429
J4. Year Four			(18,293,260)
J5. Year Five			<u>354,503</u>
J6. Total (J1J5)			(13,525,196)
K. Funding Value, 12/31/11			
[(A) + (C) + (G) + (J6)]			283,151,582
L. Net Funding Value Rate of Return	2.7%	4.6%	2.8%
M. Net Market Value Rate of Return	1.8%	1.8%	1.8%
N. Allocated Funding Value, 12/31/11	\$263,827,136	\$19,324,446	

MARKET VALUE OF ASSETS REPORTED FOR VALUATION COMPARATIVE STATEMENT

Assets		Revenues			Expenses		
Beginning	Employee	Employer	Investment	Retirement	Contrib.	Misc.	Assets
of Year	Contrib.	Contrib.	Income	Benefits	Refunds	Expenses*	Year-End
\$ 109,424,268	\$1,540,007	\$3,341,706	\$ 17,474,254	\$4,202,853	\$ 189,073	\$ 533,763	\$ 126,854,546
126,854,546	1,462,159	3,723,334	14,571,870	4,998,076	114,099	504,691	140,995,043
140,995,043	1,193,764	3,746,140	20,287,090	5,421,649	160,909	394,037	160,245,442
160,245,442	1,249,943	3,667,166	(539,610)	5,847,524	177,771	438,219	158,159,427
158,159,427	1,359,825	3,537,191	(1,535,524)	6,190,412	237,070	541,518	154,551,919
154,551,919	1,442,154	3,896,795	(14,929,083)	6,600,911	182,350	664,456	137,514,068
137,514,068	1,593,939	4,373,347	36,238,185	6,915,649	132,505	703,505	171,967,880
171,967,880	1,718,969	5,261,202	24,644,820	7,403,924	188,094	758,667	195,242,186
195,242,186	1,829,649	5,769,159	17,035,074	8,014,168	182,999	1,055,818	210,623,083
210,623,083	1,907,951	5,975,325	33,030,851	8,662,750	189,338	1,253,516	241,431,606
241,431,606	2,001,290	7,896,489	19,937,351	9,262,791	199,779	1,416,037	260,388,129
260,388,129	2,065,615	7,710,786	(71,138,091)	10,005,006	275,474	1,429,420	187,316,539
187,316,539	2,272,170	8,433,917	46,453,891	10,471,659	90,776	1,292,212	232,621,870
232,621,871	2,241,213	9,554,056	32,715,573	11,150,501	197,614	938,610	264,845,988
264,845,988	2,252,998	10,599,328	5,091,133	12,037,530	115,034	1,102,784	269,534,099
	\$ 109,424,268 126,854,546 140,995,043 160,245,442 158,159,427 154,551,919 137,514,068 171,967,880 195,242,186 210,623,083 241,431,606 260,388,129 187,316,539 232,621,871	Beginning of YearEmployee Contrib.\$ 109,424,268\$1,540,007126,854,5461,462,159140,995,0431,193,764160,245,4421,249,943158,159,4271,359,825154,551,9191,442,154137,514,0681,593,939171,967,8801,718,969195,242,1861,829,649210,623,0831,907,951241,431,6062,001,290260,388,1292,065,615187,316,5392,272,170232,621,8712,241,213	Beginning of YearEmployee Contrib.Employer Contrib.\$ 109,424,268 126,854,546 140,995,043 158,159,427\$1,540,007 1,462,159 1,37514,068 1,718,969 1,37514,068 1,718,969 1,718,967,880 1,718,969 1,829,649 1,907,9513,723,334 3,746,140 3,667,166 3,537,191154,551,919 137,514,068 171,967,880 171,967,880 171,967,880 171,967,9511,442,154 1,718,969 5,261,202 1,829,649 1,907,9513,896,795 5,261,202 5,769,159 5,975,325241,431,606 260,388,129 187,316,539 232,621,8712,001,290 2,065,615 2,7710,786 7,710,786 7,710,786 187,316,539 2,272,170 232,621,8717,896,489 2,9554,056	Beginning of YearEmployee Contrib.Employer Contrib.Investment Income\$ 109,424,268 126,854,546 140,995,043 158,159,427\$1,540,007 1,359,825\$3,723,334 3,746,140 3,746,140 3,746,140 3,667,166 3,537,191\$14,571,870 20,287,090 (1535,524)154,551,919 154,551,919 179,67,880 171,967,880 171,967,880 171,967,880 171,9623,083\$1,718,969 5,769,159 5,769,159\$(14,929,083) 36,238,185 37,769,159 37,769,159241,431,606 241,431,606 2560,388,129 187,316,539 232,621,871\$2,241,213 2,241,213\$7,594,056 3433,917 354,056\$19,937,351 46,453,891 32,715,573	Beginning of YearEmployee Contrib.Employer Contrib.Investment IncomeRetirement Benefits\$ 109,424,268\$1,540,007\$3,341,706\$17,474,254\$4,202,853\$ 126,854,546\$1,462,159\$3,723,334\$14,571,870\$4,998,076\$ 140,995,043\$1,193,764\$3,746,140\$20,287,090\$5,421,649\$ 160,245,442\$1,249,943\$3,667,166\$(539,610)\$5,847,524\$ 158,159,427\$1,359,825\$3,537,191\$(1,535,524)\$6,190,412\$ 154,551,919\$1,442,154\$3,896,795\$(14,929,083)\$6,600,911\$ 137,514,068\$1,593,939\$4,373,347\$36,238,185\$6,915,649\$ 171,967,880\$1,718,969\$5,261,202\$24,644,820\$7,403,924\$ 195,242,186\$1,829,649\$5,769,159\$17,035,074\$8,014,168\$ 210,623,083\$1,907,951\$5,975,325\$33,030,851\$8,662,750\$ 241,431,606\$2,001,290\$7,896,489\$19,937,351\$9,262,791\$ 260,388,129\$2,065,615\$7,710,786\$(71,138,091)\$10,005,006\$ 187,316,539\$2,272,170\$8,433,917\$46,453,891\$10,471,659\$ 232,621,871\$2,241,213\$9,554,056\$32,715,573\$11,150,501	Beginning of YearEmployee Contrib.Employer Contrib.Investment IncomeRetirement BenefitsContrib.\$ 109,424,268\$1,540,007\$3,341,706\$17,474,254\$4,202,853\$189,073\$ 126,854,546\$1,462,159\$3,723,334\$14,571,870\$4,998,076\$114,099\$ 140,995,043\$1,193,764\$3,746,140\$20,287,090\$5,421,649\$160,909\$ 160,245,442\$1,249,943\$3,667,166\$(539,610)\$5,847,524\$177,771\$ 158,159,427\$1,359,825\$3,537,191\$(1,535,524)\$6,190,412\$237,070\$ 154,551,919\$1,442,154\$3,896,795\$(14,929,083)\$6,600,911\$182,350\$ 137,514,068\$1,593,939\$4,373,347\$36,238,185\$6,915,649\$132,505\$ 171,967,880\$1,718,969\$5,261,202\$24,644,820\$7,403,924\$188,094\$ 195,242,186\$1,829,649\$5,769,159\$17,035,074\$8,014,168\$182,999\$ 210,623,083\$1,907,951\$5,975,325\$33,030,851\$8,662,750\$189,338\$ 241,431,606\$2,001,290\$7,896,489\$19,937,351\$9,262,791\$199,779\$ 260,388,129\$2,065,615\$7,710,786\$(71,138,091)\$10,005,006\$275,474\$ 187,316,539\$2,272,170\$8,433,917\$46,453,891\$10,471,659\$90,776\$ 232,621,871\$2,241,213\$9,554,056\$32,715,573\$11,150,501\$197,614	Beginning of YearEmployee Contrib.Employer Contrib.IncomeRetirement BenefitsContrib.Misc. Refunds\$ 109,424,268\$1,540,007\$3,341,706\$17,474,254\$4,202,853\$189,073\$533,763\$ 126,854,546\$1,462,159\$3,723,334\$14,571,870\$4,998,076\$114,099\$504,691\$ 140,995,043\$1,193,764\$3,746,140\$20,287,090\$5,421,649\$160,909\$394,037\$ 160,245,442\$1,249,943\$3,667,166\$(539,610)\$5,847,524\$177,771\$438,219\$ 158,159,427\$1,359,825\$3,537,191\$(1,535,524)\$6,190,412\$237,070\$541,518\$ 154,551,919\$1,442,154\$3,896,795\$(14,929,083)\$6,600,911\$182,350\$664,456\$ 137,514,068\$1,593,939\$4,373,347\$36,238,185\$6,915,649\$132,505\$703,505\$ 171,967,880\$1,718,969\$5,261,202\$24,644,820\$7,403,924\$188,094\$758,667\$ 195,242,186\$1,829,649\$5,769,159\$17,035,074\$8,014,168\$182,999\$1,055,818\$ 210,623,083\$1,907,951\$5,975,325\$33,030,851\$8,662,750\$189,338\$1,253,516\$ 241,431,606\$2,001,290\$7,896,489\$19,937,351\$9,262,791\$199,779\$1,416,037\$ 260,388,129\$2,065,615\$7,710,786\$(71,138,091)\$10,005,006\$275,474\$1,429,420\$ 187,316,539\$2,272,170\$8,433,917\$46,453,891\$10,471,659\$90,776\$1,292,2

^{*} Includes retiree health benefits.

ADDITIONS TO AND REMOVALS FROM RETIRED/SURVIVOR MEMBERSHIP COMPARATIVE STATEMENT

Year		Additions	Re	movals	E	End of Year		Present	
Ended		Annual		Annual		Annual	Annual	Value of	Expected
Dec. 31	No.	Benefits	No.	Benefits	No.	Benefits	Benefits	Benefits	Removals
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
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

RETIREES AND BENEFICIARIES AS OF DECEMBER 31, 2011 TABULATED BY TYPE OF BENEFITS BEING PAID

Type of Benefits Being Paid	No.	Annual Benefits
Age and Service Retirement Benefits	382	\$ 10,493,067
Disability Retirement Benefits	18	370,385
Survivor Retirement Benefits	87	1,531,402
Total Retirement Benefits Being Paid	487	\$12,394,854

RETIREES AND BENEFICIARIES BY ATTAINED AGES AS OF DECEMBER 31, 2011

Attained		Annual
Ages	No.	Benefits
40 - 44	1	\$ 12,000
45 - 49	2	40,608
50 - 54	16	467,562
55 - 59	52	1,836,794
60 - 64	109	3,175,720
65 - 69	96	2,685,615
70 - 74	78	1,956,952
75 - 79	48	879,947
80 - 84	47	814,112
85 - 89	29	420,528
90 & Over	9	105,016
Totals	487	\$12,394,854

VESTED FORMER MEMBERS AS OF DECEMBER 31, 2011 TABULATED BY ATTAINED AGES

Attained		Monthly
Ages	No.	Benefits
Under 40	10	\$ 85,787
40 - 44	7	44,245
45 - 49	10	131,056
50 - 54	18	234,942
55 - 59	16	167,602
Totals	61	\$ 663,632

ACTIVE MEMBERS AS OF DECEMBER 31, 2011 TABULATED BY VALUATION DIVISION

		Annual _		Average		
Valuation Groups	No.	Payroll	Age	Service	Pay	_
General/Management Members	690	\$36,334,246	45.6 yrs.	12.6 yrs.	\$52,658	
Police Members	227	14,270,540	39.7	12.1	62,866	
Total Active Members	917	\$50,604,786	44.1	12.5	\$55,185	

ACTIVE MEMBERS INCLUDED IN VALUATION COMPARATIVE SCHEDULE

Valuation								
Date _	A	Active Member	S	Valuation _		1	Average	
December 31	General	Police	Totals	Payroll	Age	Service	Pay	% Incr.
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
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

ADDITIONS TO AND REMOVALS FROM ACTIVE MEMBERSHIP ACTUAL AND EXPECTED NUMBERS

Year Ended	Number Dur Ye	_		rmal rement		ability ement		d-In- vice		her nations	Active Members End of
Dec. 31	A	E	A	E	A	E	A	E	A	E	Year
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
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
5 Year Totals	274	235	102	112.7	1	5.9	1	7.1	131	147.5	

A represents actual number.

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

GENERAL/MANAGEMENT ACTIVE MEMBERS - DECEMBER 31, 2011 BY ATTAINED AGE AND YEARS OF SERVICE

	Years of Service on Valuation Date								Totals
Attained									Valuation
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll
20-24	8							8	\$ 265,792
25-29	42	8						50	
			0						1,885,216
30-34	40	39	8					87	4,114,991
35-39	36	16	21	4				77	3,953,003
40-44	15	21	27	10	3			76	4,287,351
45-49	16	22	15	12	19	11	1	96	5,523,731
50-54	14	27	26	9	23	15	17	131	7,188,073
55-59	11	10	9	17	18	21	19	105	5,864,681
60	2		2	6	3	1	1	15	872,496
61	1	1	3	1	1	1	2	10	511,322
62			2	1	2		1	6	348,735
63	2			1	2	1	2	8	488,141
64		2	2	3	2	1		10	469,669
65		1	3	1				5	221,341
66				1				1	62,202
67						1		1	64,728
68				2				2	120,263
69				1				1	47,852
73			1					1	44,659
Totals	187	147	119	69	73	52	43	690	\$36,334,246

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

Age: 45.6 years Service: 12.6 years Annual Pay: \$52,658

POLICE ACTIVE MEMBERS - DECEMBER 31, 2011 BY ATTAINED AGE AND YEARS OF SERVICE

	Years of Service on Valuation Date								Totals
Attained Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	7							7	\$ 323,066
25-29	22	3						25	1,251,993
30-34	10	26	3					39	2,238,205
35-39	6	21	14	2				43	2,668,712
40-44		8	14	19	3			44	2,894,594
45-49		4	4	6	18	4		36	2,583,154
50-54		3		7	8	5		23	1,571,291
55-59				1	6	1	1	9	674,584
60					1			1	64,941
Totals	45	65	35	35	36	10	1	227	\$14,270,540

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

Age: 39.7 years Service: 12.1 years Annual Pay: \$62,866

SECTION C

ACTUARIAL METHODS AND 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 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), expressed as a level percent of pay is the payment required to fully amortize the UAAL over a 12 year period. Active payroll was assumed to increase 4.25% a year for the purpose of determining the level percent contributions.

Asset Valuation Method

The funding value of assets 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).

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,						
	2011	2010	2009	2008	2007		
Rate of Investment Return	2.8 %	5.1 %	4.2 %	3.0 %	12.8 %		

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 Rat	e of Pay Increase for Sam	ple Ages					
Sample	Base	General/Management						
Ages	(Economic)	Merit and Longevity	Totals					
20	4.25 %	1.70 %	5.95 %					
25	4.25	1.60	5.85					
30	4.25	1.20	5.45					
35	4.25	0.90	5.15					
40	4.25	0.40	4.65					
45	4.25	0.30	4.55					
50	4.25	0.20	4.45					
55	4.25	0.20	4.45					
60	4.25	0.00	4.25					
65	4.25	0.00	4.25					
03	7.23	0.00	7.23					

Annual Rate of Pay Increase for Indicated Years of Service

-	rimidal Rate of I	ay mercuse for maneuted re	cars or 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. The assumed rate of price inflation is 3.5% per year.

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

_	Year Ended December 31,						
Increase in	2011	2010	2009	2008	2007		
Average pay Total payroll	0.7 % 1.4	(2.4) % (3.1)	8.8 % 10.9	2.5 % 4.0	4.2 % 5.2		

Mortality Table: The 1983 Group Annuity Mortality Table. This table includes no margin for future improvements in mortality. This table was first used for the December 31, 1997 valuation. Sample values follow:

	Actuarial Pre	sent Value of	Futu	re Life
Sample	\$1 Month	ly for Life	Expectar	ncy (Years)
Ages	Men	Women	Men	Women
55	\$127.14	\$137.81	24.82	30.24
60	117.18	129.90	20.64	25.67
65	104.97	119.83	16.69	21.29
70	91.48	107.29	13.18	17.13
75	77.33	92.89	10.15	13.37
80	63.28	78.10	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 Separating				
Sample	Years of	Within Next Year				
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.

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

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		
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.

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).

Duty disability benefits were approximated by using the retirement benefit formula without an offset for worker's

compensation benefits.

Forfeiture Assumption: General, Management, and Police 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).



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)
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
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

Schedule of Employer Pension Contributions

Valuation Year Ended	Fiscal Year Ended		Contribution Rates as % aluation Pay		Computed Dollar	Actual	Percent
Dec. 31	Dec. 31	General	Police	Wt. Avg.	Contributions	Contributions	Contributed
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
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		
2011	2013	14.62	23.00	16.89	9,340,329		

[#] 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, 2011

Actuarial Cost Method Entry-Age

Amortization Method Level percent, closed

Remaining Amortization Period 12 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 change in CPI with a cap of 3% beginning 36 months after retirement.

Membership of the Retirement System is shown below at December 31, 2011, the date of the latest actuarial valuation:

Retirees and beneficiaries receiving benefits 487

Terminated plan members entitled

to but not yet receiving benefits 61

Active plan members 917

Total 1,465



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. 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, 2011 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 claims

experience from January 2009 to October 2011 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, 2012 to

December 31, 2012.

The undersigned 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.

John Mallows ESA MAAA

PREMIUM RATE DEVELOPMENT METHOD MONTHLY PER PERSON HEALTH CARE RATES

Facsimile Health Care Premiums Used in the 2011 Valuation

Monthly Pre-65 Rates at Sample Ages							
Age	Male	Female					
50	\$ 788.01	\$ 892.86					
55	1,029.92	1,058.66					
60	1,293.87	1,243.69					

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

Monthly Dental Premiums Used in the 2011 Valuation

Coverage for	Monthly Rate			
1-person	\$30.62			
2-person	61.24			

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 2011 Valuation

Coverage for	Monthly Rate
Health Care Premiums (Retiree Only - General)	\$392.30
Health Care Premiums (Retiree Only - Police)	392.30
Health Care Premiums (Retiree & Spouse - General)	831.97
Health Care Premiums (Retiree & Spouse - Police)	831.97
Dental (Retiree only)	19.12
Dental (Retiree & Spouse)	36.51

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 December 31, Medical & Rx Dental						
Determine 31,	Wiculcal & KX	Dentai				
2012	9.00%	4.25%				
2013	8.50	4.25				
2014	8.00	4.25				
2015	7.50	4.25				
2016	7.00	4.25				
2017	6.50	4.25				
2018	6.00	4.25				
2019	5.50	4.25				
2020	5.00	4.25				
2021 & 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, 2013

	Contribution Requirements
Contributions for	Expressed as Percents of Payroll
Total NC%	3.58 %
-Employee %	0.00
-Employer %	3.58 %
UAL% (24 Year Amortizaton of UAL*)	<u>2.35</u> %
Total Employer Contribution	5.93 %
First Year \$ Contribution	\$2,341,655

^{*} 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, 2013

	Contribution Requirements
Contributions for	Expressed as Percents of Payroll
Total NC%	5.22 %
-Employee %	0.00
-Employer %	5.22 %
UAL% (24 Year Amortization of UAL*) Total Employer Contribution	4.48 % 9.70 %
First Year \$ Contribution	\$1,504,403

^{*} 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
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	44,491,492	25,167,046	43.4	50,604,786	49.7

[^] New methods or assumptions adopted.

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

Valuation	Fiscal			Annual		
Year	Year	Contribution R	ate as a % of	Required		
Ended	Ended	Valuation	n 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	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		
2011	2013	5.93%	9.70%	3,846,058		

[^] New methods or assumptions adopted.

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, 2011 actuarial valuation for the Retiree Health Plan:

Valuation Date December 31, 2011

Actuarial Cost Method Entry-Age

Amortization Method Level percent, closed

Remaining Amortization Period 24 years

Asset Valuation Method 5 year smoothed market

Premium Rate Development Method Please refer to Appendix A

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

page 5

Membership of the Retiree Health Plan is shown below at December 31, 2011, the date of the latest actuarial valuation.

Retirees receiving medical benefits 134

Active plan members 917

Total number of current and former City employees

who are members of the Retiree Health Plan 1,051

APPENDIX B

CITY CONTRIBUTIONS BASED ON ALTERNATE AMORTIZATION PERIODS

PENSION CONTRIBUTIONS BASED ON ALTERNATE AMORTIZATION PERIODS GENERAL/MANAGEMENT DIVISION

2013 Fiscal Year Contributions Expressed as %'s of Payroll Using the Current and Alternate Amortization Periods

	Current 12 Years	Alternate 19 Years
Actuarial Accrued Liability	\$ 191,656,190	\$ 191,656,190
Valuation Assets	\$ 170,365,041	\$ 170,365,041
Unfunded Actuarial Accrued Liability	\$ 21,291,149	\$ 21,291,149
UAAL %*	5.96%	3.90%
City Normal Cost %	8.66%	8.66%
City Contribution %	14.62%	12.56%
Increase (Decrease) in City %		(2.06)%
First Year Dollar Contributions	\$ 5,773,187	\$ 4,959,729

^{*} Unfunded actuarial accrued liability payment percent

The chart above shows pension contributions based on the December 31, 2011 actuarial valuation of the Retirement System using a 12 year amortization of the UAAL (the current amortization period) and a 19 year amortization of the UAAL (a longer period requested by the System).

The use of a 19 year amortization period in the 2011 valuation of the pension plan achieves the Retirement System's goal of contribution amounts that are consistent with or lower than the prior year's amount. The pension contributions shown in the 2010 valuation report were \$5.0 million for the General / Management division.

PENSION CONTRIBUTIONS BASED ON ALTERNATE AMORTIZATION PERIODS POLICE DIVISION

2013 Fiscal Year Contributions Expressed as %'s of Payroll Using the Current and Alternate Amortization Periods

	Current 12 Years	Alternate 19 Years
Actuarial Accrued Liability	\$ 110,067,682	\$ 110,067,682
Valuation Assets	\$ 93,462,095	\$ 93,462,095
Unfunded Actuarial Accrued Liability	\$ 16,605,587	\$ 16,605,587
UAAL %*	11.73%	7.67%
City Normal Cost %	11.27%	11.27%
City Contribution %	23.00%	18.94%
Increase (Decrease) in City %		(4.06)%
First Year Dollar Contributions	\$ 3,567,142	\$ 2,937,464

^{*} Unfunded actuarial accrued liability payment percent

The chart above shows pension contributions based on the December 31, 2011 actuarial valuation of the Retirement System using a 12 year amortization of the UAAL (the remaining amortization period) and a 19 year amortization of the UAAL (a longer period requested by the System).

The use of a 19 year amortization period in the 2011 valuation of the pension plan achieves the Retirement System's goal of contribution amounts that are consistent with or lower than the prior year's amount. The pension contributions shown in the 2010 valuation report were \$3.1 million for the Police division.

HEALTH CONTRIBUTIONS BASED ON ALTERNATE AMORTIZATION PERIODS GENERAL/MANAGEMENT DIVISION

2013 Fiscal Year Contributions Expressed as %'s of Payroll Using the Current and Alternate Amortization Periods

	Current 24 Years	Alternate 30 Years
Actuarial Accrued Liability	\$ 26,842,224	\$ 26,842,224
Valuation Assets	\$ 12,437,448	\$ 12,437,448
Unfunded Actuarial Accrued Liability	\$ 14,404,776	\$ 14,404,776
UAAL %*	2.35%	1.99%
City Normal Cost %	3.58%	3.58%
City Contribution %	5.93%	5.57%
Increase (Decrease) in City %		(0.36)%
First Year Dollar Contributions	\$ 2,341,655	\$ 2,199,498

^{*} Unfunded actuarial accrued liability payment percent

The chart above shows retiree health contributions based on the December 31, 2011 actuarial valuation of the Retiree Health Plan using a 24 year amortization of the UAAL (the current amortization period) and a 30 year amortization of the UAAL (a longer period requested by the Plan).

The use of a 30 year amortization period in the 2011 valuation of the Retiree Health Plan achieves the Plan's goal of contribution amounts that are consistent with or lower than the prior year's amount. The retiree health contributions shown in the 2010 valuation report were \$2.2 million for the General / Management division.

HEALTH CONTRIBUTIONS BASED ON ALTERNATE AMORTIZATION PERIODS POLICE DIVISION

2013 Fiscal Year Contributions Expressed as %'s of Payroll Using the Current and Alternate Amortization Periods

	Current 24 Years	Alternate 30 Years
Actuarial Accrued Liability	\$ 17,649,268	\$ 17,649,268
Valuation Assets	\$ 6,886,998	\$ 6,886,998
Unfunded Actuarial Accrued Liability	\$ 10,762,270	\$ 10,762,270
UAAL %*	4.48%	3.79%
City Normal Cost %	5.22%	5.22%
City Contribution %	9.70%	9.01%
Increase (Decrease) in City %		(0.69)%
First Year Dollar Contributions	\$ 1,504,403	\$ 1,397,389

^{*} Unfunded actuarial accrued liability payment percent

The chart above shows retiree health contributions based on the December 31, 2011 actuarial valuation of the Retiree Health Plan using a 24 year amortization of the UAAL (the current amortization period) and a 30 year amortization of the UAAL (a longer period requested by the Plan).

The use of a 30 year amortization period in the 2011 valuation of the Retiree Health Plan achieves the Plan's goal of contribution amounts that are consistent with or lower than the prior year's amount. The retiree health contributions shown in the 2010 valuation report were \$1.3 million for the Police division.