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Pensacola General Pension and Retirement Fund

Actuarial Valuation Report as of September 30, 2022

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Cavanaugh Macdonald
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The experience and dedication you deserve

April 4, 2023

The City of Pensacola and
The Board of Trustees
Pensacola General Pension and Retirement Fund
Pensacola, FL

Dear Board of Trustees:

This report presents the results of the September 30, 2022 biennial actuarial valuation of the Pensacola General Pension and Retirement Fund. This valuation is used to determine the contributions for the City's fiscal years beginning October 1, 2023 and October 1, 2024.

The City contribution requirements are summarized below. The contribution amounts assume lump sum payments on October 1.

Required City contribution for plan year beginning October 1, 2023 and October 1, 2024	
Total Payable as a Lump Sum on October 1	$5,599,270

The assumptions used in the valuation are outlined in Table XI. Provisions of the Fund are set forth in Table XII. Information required to be disclosed by the State of Florida under Chapter 112 is presented in Table Va. The projected unfunded actuarial accrued liability (UAAL) is shown in Table Vb. Tables VIa and VIb provide information about the Fund's assets. Tables VIIa though VIIh provide accounting information required under Governmental Accounting Standards Board (GASB) Statement No. 67, while Tables VIIIa through VIIIc provide information about the membership data. Finally, Table IX provides detailed historical data.

In order to prepare the results in this report we have utilized appropriate actuarial models that were developed for this purpose. These models use assumptions about future contingent events along with recognized actuarial approaches to develop the needed results.

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144
Phone (678) 388-1700 • Fax (678) 388-1730
www.CavMacConsulting.com
Offices in Kennesaw, GA • Bellevue, NE

The actuarial computations presented in this report are to be used for the following purposes:

1) Determining the contributions necessary to fund the Plan. These calculations have been made on a basis consistent with our understanding of the Plan's funding requirements and goals.
2) Providing the information required to be disclosed by the State of Florida under Chapter 112.
3) Providing accounting information required under Governmental Accounting Standards Board (GASB) Statement No. 67.

Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. The interest rate used for determining liabilities is based on the expected return on assets. Therefore, liability amounts in this report cannot be used to assess a settlement of the obligation.

Certification

This actuarial valuation and/or cost determination was prepared and completed by me or under my direct supervision and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate and, in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.

This is to certify that the independent consulting actuary is a Member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Plan and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Plan.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

Sincerely yours,

Todd B. G

Micki R. Taylor

Todd B. Green, ASA, EA, FCA, MAAA	Micki R. Taylor, ASA, EA, FCA, MAAA
President	Consulting Actuary
Enrollment Number 20-8883	Enrollment Number 20-5975

TBG/zs

Comments

1. Changes in Benefit Provisions, Actuarial Assumptions and Methods

Since the previous valuation the assumed investment rate of return was lowered from 7.20% to 7.00%. The rate will be lowered by 0.2% in biennial steps for each valuation until the assumed rate of return is 6.00%. The assumption change is reflected in the valuation and increased the Unfunded Actuarial Accrued Liability (UAAL) by $3,052,973.

2. Health Insurance Premium Assistance program

The valuation of the Health Insurance Premium Assistance Program and pension benefits provided by the Fund are combined in the results that follow, except where noted.

		As of September 30, 2022		As of September 30, 2020
1.	**Number of Members**			
a.	Active Members:	73		87
b.	Deferred Vested Members:	51		52
c.	DROP Members:	16		26
d.	Retired Members:			
	i. Non-disabled	406		420
	ii. Disabled	21		25
	iii. Beneficiaries	139		142
	iv. Subtotal	566		587
e.	Total Members:	706		752
2.	**Total Annual Compensation**	**$ 4,910,733**		**$ 5,136,477**
3.	**Total Projected Payroll**	**$ 4,910,733**		**$ 5,136,477**
4.	**Total Retired Member Benefits**	**$ 13,512,518**		**$ 13,638,254**
5.	**Annual Cost (Pension and Retiree Healthcare combined)**			
a.	Present Value of Future Benefits	$ 177,433,467		$ 179,809,472
b.	Present Value of Future Normal Cost	(2,850,554)		(3,314,147)
	City Portion	*1,611,165*		*1,839,740*
	Member Portion	*1,239,389*		*1,474,407*
c.	Actuarial Accrued Liability (AAL)	174,582,913		176,495,325
d.	Actuarial Value of Assets	(153,419,539)		(149,062,336)
e.	Unfunded Accrued Liability	$ 21,163,374		$ 27,432,989
6.	**Actuarially Determined Contribution (Payable as a Lump Sum on October 1st)**			
a.	Normal Cost	$ 595,038		$ 653,860
b.	Payment to Amortize Unfunded Liability	5,161,550		5,125,828
c.	Administrative Expenses	112,772		97,740
d.	Total	$ 5,869,360		$ 5,877,428
e.	Expected Member Contributions	$ 270,090		$ 282,506
f.	Estimated City Contributions	5,599,270		5,594,922
g.	Total	$ 5,869,360		$ 5,877,428

Unfunded Actuarial Accrued Liability (UAAL) — Table II

1.	**Actual Unfunded Accrued Liability as of 9/30/2020**	$	27,432,989
2.	**Expected Change in Unfunded Liability During the 2020/2021 & 2021/2022 Plan Years:**		
a.	Due to Normal Cost		1,263,804
b.	Due to Contributions		12,093,086
c.	Due to Interest		3,330,847
d.	Total Expected Change = (a. - b. + c.)		(7,498,435)
3.	**Expected Unfunded Accrued Liability as of 9/30/2022**	$	19,934,554
4.	**Change in Unfunded Liability During the 2020/2021 & 2021/2022 Plan Years Due to:**		
a.	Method changes	$	0
b.	Assumption changes		3,052,973
c.	Plan amendments		0
d.	Total change	$	3,052,973
5.	**Actual Unfunded Accrued Liability as of 9/30/2022**	$	21,163,374
6.	**Actuarial Gain/(Loss) as of 9/30/2022**	$	1,824,153

	For the Plan Years 2023/2024 & 2024/2025	For the Plan Years 2021/2022 & 2022/2023
A. Number of Plan Participants as of September 30		
a. Retirees and beneficiaries receiving benefits	566	587
b. DROP members	16	26
c. Terminated plan participants entitled to but not yet receiving benefits	51	52
d. Active plan participants	73	87
e. Total	706	752
B. Development of Actuarially Determined Employer Contribution (ADEC) Payable as Lump Sum		
a. Employer normal cost:		
i. Total normal cost (with expenses)	$ 707,810	$ 751,600
ii. Expected employee contribution	270,090	282,506
iii. Employer normal cost	**$ 437,720**	**$ 469,094**
b. Amortization of UAAL:		
i. PV of future benefits	$ 177,433,467	$ 179,809,472
ii. PV of future employer normal costs	1,611,165	1,839,740
iii. PV of future employee contributions	1,239,389	1,474,407
iv. Actuarial accrued liability (AAL)	174,582,913	176,495,325
v. Actuarial value of assets	153,419,539	149,062,336
vi. Unfunded AAL (UAAL)	21,163,374	27,432,989
vii. Amortization of UAAL	**$ 5,161,550**	**$ 5,125,828**
c. ADEC (Item B.a.iii. plus item B.b.vii.)	**$ 5,599,270**	**$ 5,594,922**

C. Schedule of Funding Progress ($ in thousands)

Actuarial Valuation Date		(1) Actuarial Value of Assets	(2) Actuarial Accrued Liability (AAL)	(3) Unfunded AAL (UAAL) (2) – (1)	(4) Funded Ratio (1) ÷ (2)	(5) Covered Payroll	(6) UAAL as % of Covered Payroll (3) ÷ (5)
9/30/2005		$104,435	$157,913	$53,478	66.1%	$16,904	316.4%
9/30/2006		106,662	157,417	50,755	67.8%	17,598	288.4%
9/30/2007	(a)	113,372	163,684	50,312	69.3%	14,807	339.8%
9/30/2008	(a)	115,679	166,311	50,632	69.6%	13,546	373.8%
9/30/2009		117,544	169,052	51,508	69.5%	12,091	426.0%
9/30/2010	(b)	119,198	174,015	54,817	68.5%	11,280	486.0%
9/30/2012	(a)	115,254	172,305	57,051	66.9%	7,835	728.2%
9/30/2014	(b)	126,848	176,126	49,278	72.0%	6,902	714.0%
9/30/2016	(b)	137,832	178,563	40,731	77.2%	6,348	641.6%
9/30/2018	(b)	145,389	179,933	34,544	80.8%	5,600	616.9%
9/30/2020	(b)	149,062	176,495	27,433	84.5%	5,136	534.1%
9/30/2022	(b)	153,420	174,583	21,163	87.9%	4,911	430.9%

(a) Change in benefit provisions
(b) Change in actuarial assumptions

D. Additional Information

Valuation date	September 30, 2022
Actuarial cost method	Entry Age Normal
Amortization method	Closed level dollar
Remaining amortization period	5 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of return*	7.00%
Projected salary increases*	4.50% - 9.50%
Cost-of-living adjustments	1.50% per year for retirements before October 1, 2012; 1.00% for retirements on or after October 1, 2012
*Includes inflation at:	2.40%

Present Value of Accrued Benefits — Table IV

Shown below is the development of the Total Present Value of Accrued Benefits for the Plan. The calculations were performed using the Plan's discount rate of 7.00%.

1. Actuarial Present Value of Accrued Benefits

	As of September 30, 2020	As of September 30, 2022
a. Vested Accrued Benefits:		
i. Inactive members and beneficiaries	$155,311,872	$152,379,846
ii. Active members	$21,183,453	$22,203,067
b. Total Benefits	**$176,495,325**	**$174,582,913**
c. Market Value of Assets	$146,482,331	$131,905,286
d. Percentage Funded	83.0%	75.6%

2. Statement of Changes in Total Actuarial Present Value of All Accrued Benefits

a. Actuarial Present Value as of September 30, 2020:	**$176,495,325**
b. Increase (Decrease) During 2020/2021 & 2021/2022 Plan Years Attributable to:	
i. Interest	$24,273,051
ii. Benefits accumulated/experience	($1,171,045)
iii. Benefits paid	($28,067,391)
iv. Plan amendments	$0
v. Changes in actuarial assumptions or methods	$3,052,973
vi. Net increase (decrease)	**($1,912,412)**
c. Actuarial Present Value as of September 30, 2022:	**$174,582,913**

3. Items Affecting Calculation of Actuarial Present Value of Accrued Benefits

a. Plan provisions reflected in the accrued benefits (see Table XII)
b. Actuarial assumptions and methods used to determine present values (see Table XI)

	After Assumption Change September 30, 2022	Prior to Assumption Change September 30, 2022	September 30, 2020
1. Participant Data:			
a. Active members:			
i. Number	73	73	87
ii. Total annual payroll	$4,910,733	$4,910,733	$5,136,477
iii. Projected annual payroll	$4,910,733	$4,910,733	$5,136,477
b. Retirees, members in DROP, and beneficiaries:			
i. Number	561	561	588
ii. Total annualized benefit	$13,271,589	$13,271,589	$13,358,466
c. Disabled members receiving benefits:			
i. Number	21	21	25
ii. Total annualized benefit	$240,929	$240,929	$279,788
d. Terminated vested members:			
i. Number	51	51	52
ii. Total annualized benefit	$601,114	$601,114	$641,901
2. Assets:			
a. Actuarial value of assets	$153,419,539	$153,419,539	$149,062,336
b. Market value of assets	$131,905,286	$131,905,286	$146,482,331

	After Assumption Change September 30, 2022	Prior to Assumption Change September 30, 2022	September 30, 2020
3. Liabilities:			
a. Present value of all future expected benefit payments:			
i. Active members:			
Retirement benefits	$23,568,677	$22,882,410	$22,742,700
Vesting benefits	$1,234,399	$1,187,004	$1,453,676
Death benefits	$186,556	$180,943	$218,198
Disability benefits	$63,989	$62,458	$83,026
Sub-total	$25,053,621	$24,312,815	$24,497,600
ii. Terminated vested members	$5,659,598	$5,498,751	$5,753,221
iii Retired members and beneficiaries:			
Retirees, members in DROP, and beneficiaries	$144,392,593	$142,113,209	$146,800,007
Disabled members	$2,327,655	$2,291,057	$2,758,644
Sub-total	$146,720,248	$144,404,266	$149,558,651
iv. Member contributions (annuities & refunds)	$0	$0	$0
v. Total present value of all future expected ben. pmts.	$177,433,467	$174,215,832	$179,809,472
b. Liabilities due and unpaid			
c. Active actuarial accrued liability	$22,203,067	$21,626,923	$21,183,453
d. Inactive actuarial accrued liability	$152,379,846	$149,903,017	$155,311,872
e. Total actuarial accrued liability	$174,582,913	$171,529,940	$176,495,325
f. Unfunded actuarial accrued liability	$21,163,374	$18,110,401	$27,432,989

	After Assumption Change September 30, 2022	Prior to Assumption Change September 30, 2022	September 30, 2020
4. Actuarial Present Value of Accrued Benefits:	$174,582,913	$171,529,940	$176,495,325
(please reference Table IV for details concerning the present value of accrued benefits)			
5. Pension Cost (as a % of projected payroll):			
a. Normal cost plus projected administrative expenses	14.41%	13.83%	14.63%
Dollar amount	$707,810	$679,200	$751,600
b. Payment to amortize unfunded liability	105.11%	90.43%	99.79%
Dollar amount	$5,161,550	$4,440,637	$5,125,828
c. Amount to be contributed by members	5.50%	5.50%	5.50%
Dollar amount	$270,090	$270,090	$282,506
d. Expected City Contributions	114.02%	98.76%	108.92%
Dollar amount	$5,599,270	$4,849,747	$5,594,922

6. Past Contributions:			
a. Total Required City Contribution	$5,594,922	$5,594,922	$5,941,147
b. Actual contribution made by:			
i. City	$5,599,854	$5,599,854	$5,946,490
ii. Members	$266,873	$266,873	$285,355

	After Assumption Change September 30, 2022	Prior to Assumption Change September 30, 2022	September 30, 2020
7. Net actuarial (gain) / loss:	($1,824,153)	($1,824,153)	($252,719)
8. Other disclosures:			
a. Present value of active members':			
i. Future salaries:			
at attained age	$22,534,347	$22,356,237	$26,807,403
at entry age	N/A	N/A	N/A
ii. Future contributions:			
at attained age	$1,239,389	$1,229,593	$1,474,407
at entry age	N/A	N/A	N/A
b. Present value of future normal contributions from City	$1,611,165	$1,456,299	$1,839,740
c. Present value of future expected benefit payments for active members at entry age	N/A	N/A	N/A
d. Amount of active members' accumulated contributions	$3,379,516	$3,379,516	$3,521,381

Projected Unfunded Actuarial Accrued Liability (UAAL) — Table Vb

Balance as of October 1	UAAL Beginning of Year	Amortization Payment	UAAL End of Year
2022	21,163,374	5,161,550	17,483,260
2023	17,483,260	5,161,550	13,545,538
2024	13,545,538	5,161,550	9,332,176
2025	9,332,176	5,161,550	4,823,878
2026	4,823,878	5,161,550	0

Revenues and Expenditures

		As of September 30, 2022	As of September 30, 2020
Revenues:			
a.	Member contributions	$ 266,873	$ 285,355
b.	City contributions	5,599,854	5,946,490
c.	City contributions – Other	0	0
d.	Investment Income and Realized Gains	8,312,955	8,402,112
e.	Increase in unrealized appreciation	(36,509,592)	4,280,167
f.	Other revenue	(154)	11,002
g.	Total revenues	$ (22,330,064)	$ 18,925,126
Expenditures:			
a.	Refunds of member contributions	$ 0	$ 23,117
b.	Benefits payments	12,940,698	12,931,003
c.	Payment from DROP accounts	937,721	377,999
d.	Health care subsidy payments	100,212	103,712
e.	Administrative expenses	12,910	7,678
f.	Investment expenses	663,814	700,763
g.	Realized losses	0	0
h.	Decrease in unrealized appreciation	0	0
i.	Other expenditures	99,862	90,062
j.	Total expenditures	$ 14,755,217	$ 14,234,334
Net Income:			
	Total revenues minus total expenditures	$ (37,085,281)	$ 4,690,792

Summary of Assets for Pension and Retiree Healthcare Benefits Combined

	September 30, 2022 Market	September 30, 2020 Market
Cash	$ 242,841	$ 81,725
Debt Securities		
Short-term	3,211,879	2,525,061
Bonds	32,978,011	21,802,200
Equity Securities		
Common Stock	95,648,305	121,968,840
Other		
Accounts receivable	10,929	10,029
Accounts payable	(463,717)	(190,550)
Accrued Interest	277,038	285,026
Total Assets	$ 131,905,286	$ 146,482,331

Derivation of Actuarial Value of Assets

Table VI[illegible]

	Valuation Date September 30:	**2022**	**2021**	**2020**	**2019**	**2018**
A.	Actuarial Value Beginning of Year	$155,131,569	$149,062,336	$146,109,981	$145,388,687	$141,763,084
B.	Market Value End of Year	$131,905,286	$168,990,567	$146,482,331	$141,791,539	$147,043,426
C.	Market Value Beginning of Year	$168,990,567	$146,482,331	$141,791,539	$147,043,426	$142,489,470
D.	Cash Flow					
D1.	Contributions	$5,866,727	$6,226,359	$6,231,845	$6,495,037	$6,506,490
D2.	Other Revenue	0	0	0	0	0
D3.	Benefit Payments	(13,978,631)	(14,088,760)	(13,435,831)	(13,395,307)	(13,213,824)
D4.	Administrative Expenses	(112,772)	(114,316)	(97,740)	(113,078)	(112,430)
D5.	Investment Expenses	(663,814)	(787,822)	(700,763)	(664,829)	(699,714)
D6.	Net	(8,888,490)	$(8,764,539)	$(8,002,489)	$(7,678,177)	$(7,519,478)
E.	Investment Income					
E1.	Market Total: B – C – D6	$(28,196,791)	$31,272,775	$12,693,281	$2,426,290	$12,073,434
E2.	Assumed Rate	7.20%	7.20%	7.40%	7.40%	7.60%
E3.	Amount for Immediate Recognition	12,535,046	11,047,388	10,923,173	11,286,549	11,269,763
E4.	Amount for Phased-In Recognition	(40,731,837)	20,225,387	1,770,108	(8,860,259)	803,671
F.	Phased-In Recognition of Investment Income					
F1.	Current Year: 0.20*E4	$(8,146,367)	$4,045,077	$354,022	$(1,772,052)	$160,734
F2.	First Prior Year	4,045,077	354,022	(1,772,052)	160,734	998,603
F3.	Second Prior Year	354,022	(1,772,052)	160,734	998,603	290,364
F4.	Third Prior Year	(1,772,052)	160,734	998,603	290,364	(2,564,727)
F5.	Fourth Prior Year	160,734	998,603	290,364	(2,564,727)	990,344
F6.	Total Recognized Investment Gain	$(5,358,586)	$3,786,384	$31,671	$(2,887,078)	$(124,682)
G.	Preliminary Actuarial Value End of Year:	$153,419,539	$155,131,569	$149,062,336	$146,109,981	$145,388,687
H.	Difference Between Market & Actuarial Values:	$(21,514,253)	$13,858,998	$(2,580,005)	$(4,318,442)	$1,654,739

The actuarial value of assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5-year period. During periods when investment performance exceeds the assumed rate, the actuarial value will tend to be less than market value. During periods when investment performance is less than assumed, the actuarial value will tend to be greater than the market value.

Net Pension Liability — Table VIIa

The material presented herein will follow the order presented in GASB 67. Paragraph numbers are provided for ease of reference.

Paragraphs 31(a) (1)-(4): The information is provided in the following table. The Net Pension Liability (NPL) is equal to the Total Pension Liability (TPL) minus the Financial Net Position (FNP). That result as of September 30, 2022 is presented in the table below.

	Fiscal Year Ending September 30, 2022
Total Pension Liability	$ 174,582,913
Fiduciary Net Position	131,905,286
Net Pension Liability	$ 42,677,627
Ratio of Fiduciary Net Position to Total Pension Liability	75.55%

Paragraph 31(b): This paragraph requires information regarding the actuarial assumptions used to measure the TPL. The actuarial assumptions utilized in developing the TPL are outlined in Table XI. The total pension liability was determined by an actuarial valuation as of September 30, 2022, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.40 percent
Salary increases	4.50 – 9.50 percent, average, including inflation
Investment rate of return	7.00 percent, net of pension plan investment expense, including inflation
Mortality	**Pre-Retirement Healthy Mortality:** *Female:* PUB-2010 Headcount Weighted General Below Median Employee Female Table *Male:* PUB-2010 Headcount Weighted General Below Median Employee Male Table, set back 1 year *Projection Scale:* MP-2018 **Post-Retirement Healthy Mortality:** *Female:* PUB-2010 Headcount Weighted General Below Median Healthy Retiree Female Table *Male:* PUB-2010 Headcount Weighted General Below Median Healthy Retiree Male Table, set back 1 year *Projection Scale:* MP-2018 **Post-Retirement Disabled Mortality:** *Female:* PUB-2010 Headcount Weighted General Disabled Retiree Female Table, set forward 3 years *Male:* PUB-2010 Headcount Weighted General Disabled Retiree Male Table, set forward 3 years

The actuarial assumptions used in the September 30, 2022 valuation were based on the results of the last actuarial experience study, dated January 7, 2011.

Paragraph 31.b.(1)

(a) **Discount rate:** The discount rate used to measure the total pension liability was 7.00%.

(b) **Projected cash flows:** The projection of cash flows used to determine the discount rate assumed the City would contribute the actuarial determined contribution.

(c) **Long term rate of return:** The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

(d) **Municipal bond rate:** The discount rate determination does not use a municipal bond rate.

(e) **Periods of projected benefit payments:** Projected future benefit payments for all current plan members were projected through 2124.

(f) **Assumed Asset Allocation:** The target asset allocation and best estimates of arithmetic rates of return for each major asset class are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Domestic Equity	37%	7.07%
Infrastructure	5%	5.60%
Private Real Estate	8%	6.38%
Convertibles	10%	6.35%
International Equity	15%	3.11%
Bonds	25%	2.00%
Total	**100%**	

(g) Sensitivity analysis: This paragraph requires disclosure of the sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the System, calculated using the discount rate of 7.00 percent, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate:

	1% Decrease 6.00%	Current Discount Rate 7.00%	1% Increase 8.00%
System's net pension liability	$59,527,194	$42,677,627	$28,305,836

Paragraph 31(c): September 30, 2022 is the actuarial valuation date upon which the TPL is based. No roll-forward procedures were used to determine the TPL.

Paragraph 34: In addition, the following should be noted regarding the RSI:

Changes of benefit terms: None.

Changes of assumptions: Since the previous valuation, the assumed rate of return was lowered from 7.20% to 7.00%.

Method and assumptions used in calculations of actuarially determined contributions. The actuarially determined contribution rates are determined on a biennial basis. The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule:

Actuarial cost method	Entry age
Amortization method	Level dollar, closed
Remaining amortization period	7 years
Asset valuation method	5-year smoothed market
Inflation	2.40 percent
Salary increase	4.50-9.50 percent, including inflation
Investment rate of return	7.20 percent, net of pension plan investment expense, including inflation

SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY
GASB 67 Paragraph 32(a)

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability									
Service Cost	$ 598,194	$ 653,860	$ 706,288	$ 692,814	$ 806,853	$ 806,853	$ 960,937	$ 875,872	$ 875,872
Interest	12,115,554	12,200,468	12,830,343	12,870,665	13,096,503	13,087,373	13,265,393	13,080,194	13,039,418
Benefit changes								1,929,586	
Difference between expected and actual experience	(2,466,070)	-	(3,644,260)	-	(2,139,264)	-	(6,829,727)	-	-
Changes of assumptions	3,052,973	-	(62,137)	-	3,260,021	-	8,088,948	-	-
Benefit payments	(13,978,631)	(14,078,231)	(13,412,714)	(13,364,040)	(13,199,103)	(14,334,373)	(13,902,080)	(13,007,151)	(13,664,554)
Refunds of contributions	-	(10,529)	(23,117)	(31,267)	(14,721)	-	(82,082)	(31,304)	(82,048)
Net change in total pension liability	$ (677,980)	$ (1,234,432)	$ (3,605,597)	$ 168,172	$ 1,810,289	$ (440,147)	$ 1,501,389	$ 2,847,197	$ 168,688
Total pension liability - beginning	$ 175,260,893	$ 176,495,325	$ 180,100,922	$ 179,932,750	$ 178,122,461	$ 178,562,608	$ 177,061,219	$ 174,214,022	$ 174,045,334
Total pension liability - ending (a)	$ 174,582,913	$ 175,260,893	$ 176,495,325	$ 180,100,922	$ 179,932,750	$ 178,122,461	$ 178,562,608	$ 177,061,219	$ 174,214,022
Plan net position									
Contributions - employer	$ 5,599,854	$ 5,946,411	$ 5,946,490	$ 6,200,753	$ 6,200,956	$ 6,788,208	$ 6,788,559	$ 6,586,144	$ 6,586,424
Contributions - member	266,873	279,948	285,355	294,284	305,534	341,314	360,693	375,026	388,789
Net investment income	(28,860,605)	30,484,953	11,992,518	1,761,461	11,373,720	14,963,864	11,356,088	(2,230,201)	14,895,032
Benefit payments	(13,978,631)	(14,078,231)	(13,412,714)	(13,364,040)	(13,199,103)	(14,334,373)	(13,902,080)	(13,007,151)	(13,664,554)
Administrative expense	(112,772)	(114,316)	(97,740)	(113,078)	(112,430)	(134,684)	(102,605)	(126,054)	(103,765)
Refunds of contributions	-	(10,529)	(23,117)	(31,267)	(14,721)	-	(82,082)	(31,304)	(82,048)
Other	-	-	-	-	-	-	-	2,149,812	-
Net change in plan net position	$ (37,085,281)	$ 22,508,236	$ 4,690,792	$ (5,251,887)	$ 4,553,956	$ 7,624,329	$ 4,418,573	$ (6,283,728)	$ 8,019,878
Plan net position - beginning	$ 168,990,567	$ 146,482,331	$ 141,791,539	$ 147,043,426	$ 142,489,470	$ 134,865,141	$ 130,446,568	$ 136,730,296	$ 128,710,418
Plan net position - ending (b)	$ 131,905,286	$ 168,990,567	$ 146,482,331	$ 141,791,539	$ 147,043,426	$ 142,489,470	$ 134,865,141	$ 130,446,568	$ 136,730,296
Net pension liability - ending (a) - (b)	$ 42,677,627	$ 6,270,326	$ 30,012,994	$ 38,309,383	$ 32,889,324	$ 35,632,991	$ 43,697,467	$ 46,614,651	$ 37,483,726

SCHEDULE OF THE NET PENSION LIABILITY
GASB 67 Paragraph 32(b)

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability	$ 174,582,913	$ 175,260,893	$ 176,495,325	$ 180,100,922	$ 179,932,750	$ 178,122,461	$ 178,562,608	$ 177,061,219	$ 174,214,022
Plan net position	131,905,286	168,990,567	146,482,331	141,791,539	147,043,426	142,489,470	134,865,141	130,446,568	136,730,296
Net pension liability	$ 42,677,627	$ 6,270,326	$ 30,012,994	$ 38,309,383	$ 32,889,324	$ 35,632,991	$ 43,697,467	$ 46,614,651	$ 37,483,726
Ratio of plan net position to total pension liability	75.55%	96.42%	83.00%	78.73%	81.72%	80.00%	75.53%	73.67%	78.48%
Covered-employee payroll	$ 4,852,230	$ 5,076,072	$ 5,067,293	$ 5,258,416	$ 5,555,159	$ 6,174,853	$ 6,347,558	$ 6,901,570	$ 6,757,461
Net pension liability as a percentage of covered-employee payroll	879.55%	123.53%	592.29%	728.53%	592.05%	577.07%	688.41%	675.42%	554.70%

SCHEDULE OF EMPLOYER CONTRIBUTIONS
GASB 67 Paragraph 32(c)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Actuarially determined employer contribution	$ 5,599,854	$ 5,946,411	$ 5,946,490	$ 6,200,753	$ 6,200,956	$ 6,788,559	$ 6,788,559	$ 7,515,167	$ 7,448,089	$ 7,157,167
Actual employer contributions	5,599,854	5,946,411	5,946,490	6,200,753	6,200,956	6,788,559	6,788,559	7,515,167	7,448,089	7,157,167
Annual contribution deficiency (excess)	-	-	-	-	-	-	-	-	-	-
Covered-employee payroll	$ 4,852,230	$ 5,076,072	$ 5,067,293	$ 5,258,416	$ 5,555,159	$ 6,174,853	$ 6,347,558	$ 6,901,570	$ 6,757,461	$ 6,961,827
Actual contributions as a percentage of covered-employee payroll	115.41%	117.15%	117.35%	117.92%	111.63%	109.94%	106.95%	108.89%	110.22%	102.81%

Tabulated by Attained Age and Years of Service
as of September 30, 2022

Attained Age	Years of Service to Valuation Date							Totals	
	0-5	6-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
Under 20									
20-24									
25-29									
30-34									
35-39				1				1	81,734
40-44				10	2			12	840,373
45-49				4	10	1		15	940,682
50-54				7	5	3	2	17	1,054,152
55-59				1	6	3	5	15	1,186,672
60				1	2		1	4	272,405
61					1	1		2	93,869
62									
63				1		1	1	3	161,609
64						1	1	2	131,933
65					1			1	67,271
66									
67				1				1	80,033
68									
69									
70 & Over									
Totals	0	0	0	26	27	10	10	73	$4,910,733

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

Age: 52.21 years
Service: 22.63 years
Annual Pay: $67,270

Retiree and Beneficiary Information September 30, 2022
Tabulated by Attained Ages

Attained Age	Service Retirement No.	Service Retirement Annual Benefits*	Disability Retirement No.	Disability Retirement Annual Benefits*	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits*	Totals No.	Totals Annual Benefits*
Under 20					1	7,555	1	$7,555
20-24								
25-29								
30-34								
35-39								
40-44								
45-49			2	14,014			2	14,014
50-54			1	12,835	2	35,374	3	48,209
55-59	6	212,415	2	33,128	4	45,573	12	291,116
60-64	40	923,839	1	11,261	4	78,789	45	1,013,889
65-69	87	2,409,549	4	62,846	15	233,762	106	2,706,157
70-74	107	2,764,407	1	8,579	18	266,606	126	3,039,591
75-79	81	2,276,888	3	27,980	25	552,027	109	2,856,896
80-84	39	1,002,487	2	25,294	21	297,375	62	1,325,155
85-89	32	703,311	4	32,136	31	379,279	67	1,114,727
90-94	12	208,789	1	8,152	16	320,058	29	536,999
95								
96	1	19,185			1	10,488	2	29,673
97	1	8,903					1	8,903
98					1	8,286	1	8,286
99								
100 & Over								
Totals	406	$10,529,773	21	$236,225	139	$2,235,172	566	$13,001,170

* Excluding amounts for the health subsidy

There were 51 vested members with annual deferred benefits of $592,378 included in the valuation excluding amounts for the health subsidy.

In addition, there were 16 members who enrolled in the DROP. The accumulated benefits credited to the DROP are $2,035,779.

	Active	Deferred Vested	Retired	DROP	Total
1. Number of participants as of September 30, 2020	**87**	**52**	**587**	**26**	**752**
2. Change in status during the plan year:					
a. Actives who became inactive	(4)	4			
b. Members who retired	(2)		2		
c. Actives who enrolled in DROP	(8)			8	
d. Vesteds who became active					
e. Vesteds who retired		(5)	5		
f. Retirees who became active					
g. Transfer in					
3. No longer participating due to:					
a. Death			(62)		(62)
b. Refund of contributions					
c. Receipt of lump sum payment					
d. Expiration of certain period					
e. No longer in DROP			18	(18)	
f. Data change from last year					
g. Transfer out					
4. New participant due to:					
a. Initial participation					
b. Death of another participant			16		16
c. Data change from last year					
5. Number of participants as of September 30, 2022	**73**	**51**	**566**	**16**	**706**

Actuarial estimates regarding the inflation rate and real investment return rate were utilized in the valuation. These estimates are used, in combination with the other estimates, to (i) determine the present value of amounts expected to be paid in the future and (ii) establish rates of contribution which are expected to remain relatively level as a percent of total employee payroll.

Inflation

- Effective September, 30 2020, 2.40% per annum, compounded annually. This is the rate at which growth in the supply of money and credit is estimated to exceed growth in the supply of goods and services. It may be thought of as the rate of decline in the purchasing power of the dollar. There are a number of indices for measuring the inflation rate. The recent inflation rate as measured by the Consumer Price Index has been:

Year Ended:	9/30/2022	9/30/2021	9/30/2020	9/30/2019	9/30/2018	Average for Period
Actual	8.2%	5.4%	1.4%	1.7%	2.3%	3.8%
Assumed	2.4	2.4	3.0	3.0	3.0	2.8

Real Investment Return

- Effective October 1, 2022, 4.60% per annum. This is the rate of return estimated to be produced by investing a pool of assets in an inflation-free environment. Recent real rates of investment return on the actuarial value of assets have been:

Year Ended:	9/30/2022	9/30/2021	9/30/2020	9/30/2019	9/30/2018	Average for Period
Total Rate	4.3%	9.7%	7.2%	5.5%	7.6%	6.9%
Less Inflation Rate	8.2	5.4	1.4	1.7	2.3	3.8
Actual Real Rate	(3.9)	4.3	5.8	3.8	5.3	3.1
Projected Real Rate	4.8	4.8	4.4	4.4	4.6	4.6

- The total investment return rate was computed by dividing the investment earnings recognized in the actuarial value of assets, before the release of any reserve, by a weighted average of the value of assets during the year. The investment earnings are assumed to be net of any investment expenses.

➢ A schedule of recent salary change experience, as measured by average reported pay, follows:

Year Ended:	9/30/2022	9/30/2021	9/30/2020	9/30/2019	9/30/2018	Average for Period
% of Change: Actual Average*	7.6%	6.1%	9.0%	4.2%	4.2%	6.2%
Estimated	6.2	6.2	6.2	6.2	6.2	6.2
% Change in Total Payroll	(5.3)	1.1	(4.0)	(4.4)	(8.4)	(4.2)

*Excluding terminations and new members.

Prior Contribution Rates

Valuation Date	Applicable Fiscal Year	Normal Cost	Expenses	Unfunded Actuarial Accrued Liability	Total City Contributions
9-30-96	1996-97	1.42%	1.04%	4.76%	7.22%
9-30-97	1997-98	(3.64)	1.04	15.17	12.57
9-30-98	1998-99	(3.96)	0.93	13.44	10.41
9-30-99	1999-00	(2.43)	1.05	13.89	12.51
9-30-00	2000-02	(2.88)	1.05	16.97	15.14
9-30-01	2002-03	4.38	1.05	15.75	21.18
9-30-02	2003-04	12.33	1.05	15.20	28.58
9-30-03	2004-05	11.31	1.05	22.50	34.86
9-30-04	2005-06	11.13	1.05	25.10	37.28
9-30-05	2006-07	12.91	1.05	21.86	35.82
9-30-06	2007-08	12.84	1.05	20.50	34.39
9-30-07	2008-09	13.92	1.05	34.61	49.58
9-30-08	2009-10	13.26	1.05	38.92	53.23
9-30-09	2010-11	13.65	0.80	45.45	59.90
9-30-10	2011-12	10.36	0.61	53.27	64.24
9-30-12	2013-14	9.61	1.26	85.07	95.99
9-30-14	2015-16	11.53	1.50	89.35	102.37
9-30-16	2017-18	12.17	1.62	83.04	95.70
9-30-18	2019-20	11.97	2.01	96.30	110.28
9-30-20	2021-22	7.24	1.90	99.79	108.93
9-30-22	2023-24	6.61	2.30	105.11	114.02

Actuarial Standards of Practice are issued by the Actuarial Standards Board and are binding on credentialed actuaries practicing in the United States. These standards generally identify what the actuary should consider, document and disclose when performing an actuarial assignment. In September 2017, Actuarial Standard of Practice Number 51, Assessment and Disclosure of Risk in Measuring Pension Obligations, (ASOP 51) was issued as final with application to measurement dates on or after November 1, 2018. This ASOP, which applies to funding valuations, actuarial projections, and actuarial cost studies of proposed plan changes, was first applicable for the September 30, 2020 actuarial valuation for the Plan.

A typical retirement plan faces many different risks, but the greatest risk is the inability to make benefit payments when due. If plan assets are depleted, benefits may not be paid which could create legal and litigation risk or the plan could become "pay as you go." The term "risk" is most commonly associated with an outcome with undesirable results. However, in the actuarial world, risk can be translated as uncertainty. The actuarial valuation process uses many actuarial assumptions to project how future contributions and investment returns will meet the cash flow needs for future benefit payments. Of course, we know that actual experience will not unfold exactly as anticipated by the assumptions and that uncertainty, whether favorable or unfavorable, creates risk. ASOP 51 defines risk as the potential of actual future measurements to deviate from expected results due to actual experience that is different than the actuarial assumptions.

The various risk factors for a given plan can have a significant impact – positive or negative – on the actuarial projection of liability and contribution rates.

There are a number of risks inherent in the funding of a defined benefit plan. These include:

- economic risks, such as investment return and price inflation;
- demographic risks such as mortality, payroll growth, aging population including impact of baby boomers, and retirement ages;
- contribution risk, i.e., the potential for contribution rates to be too high for the plan sponsor/employer to pay and
- external risks such as the regulatory and political environment.

There is a direct correlation between healthy, well-funded retirement plans and consistent contributions equal to the full actuarial contribution rate each year. The Plan is primarily funded by member and employer contributions to the trust fund, together with the earnings on these accumulated contributions. These contributions fund benefit accruals for current active members and administrative expenses. The remainder of the contributions amortizes the unfunded actuarial accrued liability. The required contribution rate is the sum of the rates for the normal cost for the plan and the amortization of the unfunded actuarial accrued liability. The required contribution rate is sensitive to increases in the UAAL and periods of lower-than-expected returns would lead to much higher contribution rates as a percentage of payroll.

The other significant risk factor for the Plan is investment return because of the volatility of returns and the size of plan assets compared to payroll. A perusal of historical returns over 10-20 years reveals that the actual return each year is rarely close to the average return for the same period. This is to be expected, given the underlying capital market assumptions and the Plan's asset allocation. To the extent market rates of interest affect the expected return on assets, there is a risk of change to the discount rate which determines the present value of liabilities and actuarial valuation results.

A key demographic risk for the Plan is improvements in mortality (longevity) greater than anticipated. While the actuarial assumptions reflect a margin for improvement in mortality experience these assumptions are refined every experience study, the risk arises because there is a possibility of some sudden shift, perhaps from a significant medical breakthrough that could quickly increase liabilities. Likewise, as we have recently seen with COVID-19, a public health crisis can result in a significant number of additional deaths in a short period of time, which can influence plan liabilities and future funding needs. While either of these events could happen, it represents a small probability and thus represents much less risk than the volatility associated with investment returns.

1. **Actuarial Cost Method**

- **To Determine the Funded Status and the Actuarially Determined Employer Contribution**
  Entry Age Normal Cost Method on an individual basis.

- **To Determine the Present Value of Accrued Benefits**
  Unit Credit

2. **Decrements**

- **Pre-Retirement Healthy Mortality**
  Female: PUB-2010 Headcount Weighted General Below Median Employee Female Table
  Male: PUB-2010 Headcount Weighted General Below Median Employee Male Table, set back 1 year
  Projection Scale: MP-2018

  Representative percentages of deaths assumed to be non-service (ordinary) or service (accidental) related are listed below.

Age	Ordinary		Accidental	
	Male	Female	Male	Female
20	90.91%	88.24%	9.09%	11.76%
25	90.24	90.91	9.76	9.09
30	90.57	90.00	9.43	10.00
35	89.47	90.48	10.53	9.52
40	89.81	89.66	10.19	10.34
45	90.05	89.89	9.95	10.11
50	90.06	90.28	9.94	9.72
55	89.94	90.09	10.06	9.91
60	90.01	90.03	9.99	9.97
64	90.02	89.98	9.98	10.02

- **Post-Retirement Healthy Mortality**
  Female: PUB-2010 Headcount Weighted General Below Median Healthy Retiree Female Table
  Male: PUB-2010 Headcount Weighted General Below Median Healthy Retiree Male Table, set back 1 year
  Projection Scale: MP-2018

- **Post-Retirement Disabled Mortality**
  Female: PUB-2010 Headcount Weighted General Disabled Retiree Female Table, set forward 3 years
  Male: PUB-2010 Headcount Weighted General Disabled Retiree Male Table, set forward 3 years

- **Disability**

  Representative values of the assumed annual rates of disability among members in active service are as follows:

Age	Ordinary Disability Rate	Accidental Disability Rate
20	0.0135%	0.0065%
25	0.0133	0.0067
30	0.0202	0.0098
35	0.0267	0.0133
40	0.0333	0.0167
45	0.0666	0.0334
50	0.1135	0.0565
55	0.1935	0.0965
60	0.3000	0.1500
64	0.3934	0.1966

- **Withdrawal from Active Status**

  Representative values of the assumed annual rates of withdrawal among members in active service are as follows:

Age	Rate
20	5.00%
25	13.00
30	11.00
35	9.00
40	7.00
45	5.00
50	4.00
54	4.00

- **Retirement**

Values of the assumed annual rates of retirement among members in active service are as follows:

Age	Rate
Under 45	5.00%
45	5.00
46	5.00
47	5.00
48	7.00
49	10.00
50	12.00
51	15.00
52	15.00
53	15.00
54	15.00
55	20.00
56	20.00
57	20.00
58	20.00
59	20.00
60	25.00
61	30.00
62	40.00
63	40.00
64	50.00
65 & Over	100.00

An additional 20% are assumed to retire when first eligible for an unreduced retirement benefit. In addition, 100% are assumed to retire upon the attainment of age 60 and the completion of 30 years of service.

3. Interest Rates

- **Used for Calculating All Liabilities**
  Effective October 1, 2022 the interest rate is assumed to be 7.00% net of investment expenses per annum, comprised of an inflation rate of 2.40% and a real rate of return of 4.60%.

4. Salary Increases

The following representative salary increases are assumed, which includes an inflation rate of 3.00%.

Age	Rate	Age	Rate	Age	Rate	Age	Rate
20	9.50%	30	7.50%	40	6.50%	50	6.50%
25	9.50%	35	6.50%	45	6.50%	55	5.50%

5. Marriage Assumptions

- 80% of members are assumed married or entitled to dependent benefits.

- Male spouses are assumed to be three years older than female spouses.

6. Expenses

Administrative expenses for the year following the valuation date are assumed to be equal to the actual amount for the previous fiscal year.

7. Cost-of-Living Adjustments

For retirements before October 1, 2012, benefits are assumed to increase 1.50% annually after retirement. For retirements on or after October 1, 2012, cost-of-living adjustments are assumed to be 1.00%. No COLA is assumed for participants who enter the DROP on or after October 1, 2012 while currently participating in the DROP.

8. Assets

Actuarial value, as developed in Tables VIb and VIc. The actuarial value of assets is a market-related method that each year recognizes 20% of the unexpected investment return.

9. Participation in the Health Insurance Premium Assistance program

50%

1. **Participation**

   Participation, which was closed to new members on October 1, 1979, was reopened to new members effective October 6, 1997. Effective June 17, 2007, participation is closed to new members.

2. **Credited Service**

   All service from date of hire. For benefit calculations only, fractional service greater than one-half is rounded up to a whole year. Members entering the Fund for the first time on or after October 6, 1997 who had service with the City had the option of purchasing credit for any or all prior service.

3. **Average Final Compensation**

   For retirements before October 1, 2012, the average annual compensation, excluding unused leave and overtime in excess of 300 hours per fiscal year, during the highest 2 years of his or her last 5 years of contributing service prior to retirement, termination or death.

   For retirements on or after October 1, 2012, the average annual compensation, excluding unused leave and overtime in excess of 200 hours per fiscal year, during the last 5 years of contributing service prior to retirement, termination or death. Overtime pay will be based on non-overtime rates for over 40 hours per week.

4. **Normal Retirement Benefit**

   - **Eligibility**

     Age 55 and 20 years of credited service

   - **Benefit Amount**

     An annual benefit equal to the greatest of:

     (a) 2.1% of Average Final Compensation times years of service (maximum 63%) for service accrued before October 1, 2012. For service accrued on or after October 1, 2012, 1.75% of Average Final Compensation times years of service (maximum 52.5%).

(b) 75% of the first $2,400 of Average Final Compensation, plus 50% of the next $1,200 of Average Final Compensation, plus 40% of any additional amount.

(c) $300 per year of service (maximum $6,000).

5. Early Retirement Benefit

- **Eligibility**

25 years of credited service, regardless of age.

- **Benefit Amount**

Computed as a normal retirement benefit, with a benefit reduction of the lesser of 3% for each year of age below age 55, or 3% for each year of credited service below 30 years. Such benefit shall not be less than $300 per year of service (service not to exceed 20 years).

6. Postponed Retirement

- **Eligibility**

Retirement after first eligible for normal retirement benefit.

- **Benefit Amount**

Computed as a normal retirement benefit plus, under formula (b) only, 1% of the normal retirement benefit for each year of service credited after normal retirement date, but before age 70.

7. Disability Benefit – Service-Connected

- **Eligibility**

Total and permanent disability or partial disability incurred in the line of duty.

- **Benefit Amount**

  Accrued retirement benefit at date of disability, with a benefit reduction for formulas (a) and (b) of 2% for each year by which service at date of disability is less than 20 years. For partial disability, the benefit is further reduced by a certain percentage determined by the Board. Such benefit shall not be less than $300 per year of service (service not to exceed 20 years).

8. Disability Benefit – Not Service-Connected

- **Eligibility**

  Total and permanent disability or partial disability, and 6 years of credited service.

- **Benefit Amount**

  Accrued retirement benefit at date of disability, with a benefit reduction for formulas (a) and (b) of 5% for each of the first 5 years, and 3% for each of the next 5 years by which service at date of disability is less than 20 years. For partial disability, the benefit is further reduced by a certain percentage determined by the Board. Such benefit shall not be less than $300 per year of service (service not to exceed 20 years).

9. Death Benefit – Service-Connected

- **Eligibility**

  None.

- **Benefit Amount**

  Computed as 80% of service-connected disability benefit, payable to the widow until death. If there is no surviving spouse, any dependent child(ren) under the age of 18 shall receive a benefit in the amount that a surviving spouse would have been entitled to. The total of all children's benefits shall not exceed the amount payable to the widow.

10. Death Benefit – Not Service-Connected

- **Eligibility**

  6 years of credited service.

- **Benefit Amount**

  Same as service-connected death benefit, except widow's benefit is computed as a non-service-connected disability benefit.

11. Vested Termination

- **Eligibility**

  6 years of credited service.

- **Benefit Amount**

  The accrued retirement benefit, payable at age 60. If the member terminated with at least 20 years of credited service, the benefit is payable at age 55.

12. Non-Vested Termination

A member terminating for any cause, other than line of duty disability, with less than 6 years of credited service is entitled to a refund of all accumulated contributions.

13. Cost-of-Living Adjustments

For retirements before October 1, 2012, the cost-of-living adjustment (COLA) is based on the Consumer Price Index (CPI-U) from April 1 of the preceding year to March 31 of the year in which the increase is to be given, subject to a maximum increase of 1.50% per year.

For retirements on or after October 1, 2012, the COLA is also based on the Consumer Price Index (CPI-U), subject to a maximum increase of 1.00% per year.

For participants who enter the DROP on or after October 1, 2012, no COLA is granted while participating in the DROP.

14. Deferred Retirement Option Plan (DROP)

An active member eligible for normal retirement may continue employment with the City but elect to freeze the accrual of additional benefits as of the effective date of such election (as if the member had retired on such date). The member's normal retirement benefit payments will be credited to a DROP account. Member and City contributions to the Fund cease for the participant. A DROP participant's continued employment cannot normally exceed 60 months.

The DROP account will earn interest at 4% per annum for participants who entered the DROP prior to October 1, 2012 and 1.3% per year for participants who entered the DROP on or after October 1, 2012. Cost-of-living adjustments are also credited to the benefits in the DROP account for participants who entered the DROP prior to October 1, 2012. Participants who entered the DROP on or after October 1, 2012 are not eligible for COLA payments while participating in the DROP.

Upon resignation, the participant then receives a distribution from the DROP account as well as regular monthly retirement benefits.

15. Retiree Health Insurance Premium Assistance

The Fund shall provide premium assistance for each covered retiree participating in the City group health insurance plan in the amount of $56 per month (not indexed for inflation).

16. Normal Form of Benefit

For participants who retired prior to October 1, 2012, the normal form of benefit is a benefit payable for life. Upon death 80% of the benefit is continued for the lifetime of the beneficiary. For participants who retire on or after October 1, 2012, the normal form of benefit is a single life annuity. Upon death all benefit payments stop.

17. Annual Contributions

- **Member**

  All members contribute 5.5% of compensation to the Fund.

- **City**

  The City contributes an actuarially determined amount which, together with member contributions, equals the sum of the normal cost and payments for the amortization of the unfunded actuarial accrued liability over a period not exceeding 40 years (currently 5 years).