CITY OF ATLANTIC BEACH POLICE OFFICERS' RETIREMENT SYSTEM

ANNUAL ACTUARIAL VALUATION AS OF OCTOBER 1, 2020

ANNUAL EMPLOYER CONTRIBUTION

IS DETERMINED BY THIS VALUATION

TO BE PAID IN THE EMPLOYER FISCAL YEAR ENDING

SEPTEMBER 30, 2022

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June 11, 2021

Board of Trustees
City of Atlantic Beach
Police Officers' Retirement System
Atlantic Beach, Florida

Re: City of Atlantic Beach Police Officers' Retirement System
Actuarial Valuation as of October 1, 2020 and Actuarial Disclosures

Dear Board Members:

The results of the October 1, 2020 Annual Actuarial Valuation of the City of Atlantic Beach Police Officers' Retirement System are presented in this report.

This report was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board. GRS is not responsible for unauthorized use of this report.

The purposes of the valuation are to measure the System's funding progress and to determine the employer contribution rate for the fiscal year ending September 30, 2022. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results associated with the benefits described in this report for purposes other than those identified above may be significantly different.

The contribution rate in this report is determined using the actuarial assumptions and methods disclosed in Section B of this report. This report includes risk metrics in Section A but does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

This valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

The findings in this report are based on data and other information through September 30, 2020. The valuation was based upon information furnished by the Plan Administrator concerning Retirement System benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal reasonability and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by the Plan Administrator.

This report was prepared using certain assumptions approved by the Board as authorized under Florida Statutes and prescribed by the Florida Statutes as described in the section of this report entitled Actuarial

Assumptions and Cost Method. The investment return assumption was prescribed by the Board and the assumed mortality rates detailed in the Actuarial Assumptions and Cost Method section were prescribed by the Florida Statutes in accordance with Florida Statutes Chapter 112.63. All actuarial assumptions used in this report are reasonable for purposes of this valuation.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the City of Atlantic Beach Police Officers' Retirement System as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board, and with applicable statutes.

Nicolas Lahaye and Dina Lerner are members of the American Academy of Actuaries. These actuaries meet the Academy's Qualification Standards to render the actuarial opinions contained herein.

The signing actuaries are independent of the plan sponsor.

This actuarial valuation and/or cost determination was prepared and completed by us or under our direct supervision, and we acknowledge responsibility for the results. To the best of our knowledge, the results are complete and accurate. In our opinion, the techniques and assumptions used are reasonable, meet the requirements and intent of Part VII, Chapter 112, Florida Statutes, and are based on generally accepted actuarial principles and practices. 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.

Gabriel, Roeder, Smith & Company will be pleased to review this valuation and Report with the Board of Trustees and to answer any questions pertaining to the valuation.

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY

By Nicolas Lahaye

Nicolas Lahaye, FSA, EA, MAAA, FCA
Consultant & Actuary

Dina Lerner

Dina Lerner, ASA, EA, MAAA, FCA
Consultant & Actuary

Statement by Enrolled Actuary

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. In my opinion, the techniques and assumptions used are reasonable, meet the requirements and intent of Part VII, Chapter 112, Florida Statutes, and are based on generally accepted actuarial principles and practices. 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.

Signature

June 11, 2021
Date

20-07775
Enrollment Number

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SECTION A

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Comparison of Required Employer Contributions

The following is a comparison of required contributions developed in this year's and the last actuarial valuations:

	For FYE 9/30/2022 Based on 10/1/2020 Valuation	For FYE 9/30/2021 Based on 10/1/2019 Valuation	Increase (Decrease)
Gross Contribution Requirement	$ 735,409	$ 816,776	$ (81,367)
As % of Expected Payroll	37.68 %	44.07 %	(6.39) %
Expected Employee Contribution	$ 156,160	$ 148,277	$ 7,883
As % of Covered Payroll	8.00 %	8.00 %	0.00 %
Required Employer/State Contribution	$ 579,249	$ 668,499	$ (89,250)
As % of Expected Payroll	29.68 %	36.07 %	(6.39) %
Estimated State Contribution	$ 136,427	$ 272,854 *	$ (136,427)
As % of Covered Payroll	6.99 %	14.72 %	(7.73) %
Required Employer Contribution (If Made in Equal Monthly Installments)	$ 442,822	$ 395,645 *	$ 47,177
As % of Covered Payroll	22.69 %	21.35 %	1.34 %
Required Employer Contribution (If Made in Whole at the Beginning of the Year)	$ 427,202	$ 381,690 *	45,512
As % of Covered Payroll	21.89 %	20.59 %	1.30 %

** Results have been updated to reflect a higher State contribution. A premium tax distribution of $136,427 was calculated by the State for FYE 2020 but will not be available to the Plan until FYE 2021. Therefore, two years' worth of State money is expected to be received in FYE 2021.*

Minimum Required Contribution

As illustrated in the preceding chart, the contribution necessary from the City and State to support the current benefits for the Police Officers is $579,249 for the fiscal year ending September 30, 2022. The City can use the State premium tax moneys to satisfy part of that requirement, leaving the City contribution at $442,822 (assuming receipts of $136,427 from the State). However, the City may need to contribute more, should receipts from the State fall short of the expected amount. Please note that the Required Employer Contribution for that fiscal year is assumed to be deposited in monthly intervals throughout the year. For completeness, we are also presenting an amount required to be contributed if deposited in a single sum at the beginning of the contribution year in lieu of periodic installments.

Revisions in Benefits

Ordinance No. 58-20-46, adopted on October 26, 2020, amended the Plan by increasing the required minimum distribution age from 70½ to 72 for participants reaching age 70½ on or after January 1, 2020. This change was made to comply with Internal Revenue Code requirements and did not have an actuarial impact on the cost of the Plan for prefunding purposes.

Revisions in Actuarial Assumptions or Methods

In compliance with Florida Statutes Chapter 112.63(1)(f) which mandates the use of the mortality tables used in either of the two most recently published actuarial valuation reports of the Florida Retirement System (FRS), the mortality tables and improvement scales were changed to reflect the updated mortality assumptions adopted by FRS after a 2019 experience study and used in the July 1, 2019 and July 1, 2020 FRS Actuarial Valuations.

The assumption change described above decreased the total required contribution by approximately $38,000, or 1.94% of covered payroll.

Actuarial Experience

There was a net actuarial gain of $44,747 this year which means that actual experience was more favorable than expected. The actuarial gain was primarily due to higher than expected benefits-weighted mortality experience among inactive members (approximately $44,000 in annual benefit payments ceased due to actual mortality experience since the prior valuation, versus an expected annual benefits reduction of approximately $11,500). The gain was partially offset by an investment loss on the actuarial value of assets (5.9% recognized return compared to 6.75% assumed) and salary increases that were larger than expected (12.8% versus 6.1% expected). The investment return on the market value of assets was 4.1% for the year. The net actuarial gain decreased the total required contribution by 0.24% of covered payroll.

Analysis of Change in Employer Contribution

The components of change in the actuarially required contribution are as follows:

Contribution rate last year	21.35 %
Payment on UAAL	(4.08)
Experience (gain)/loss	(0.24)
Change in administrative expense	(0.53)
Change in normal cost before expenses	0.40
Revision in benefits	0.00
Revision in assumptions/methods	(1.94)
Change in State Revenue	7.73
Contribution rate this year	22.69 %

Funded Ratio

The funded ratio, one measure of the Plan's financial health, is equal to the actuarial value of assets divided by the actuarial accrued (past service) liability. The funded ratio is 87.4% this year compared to 81.4% last year. The funded ratio would have been 85.0% prior to recognizing the assumption change.

Relationship to Market Value

The actuarial value of assets exceeds the market value of assets by $429,374 as of the valuation date (see Section C). This difference will be gradually recognized over the next three years causing the required contribution to increase, in the absence of offsetting gains.

If the market value of assets had been used in the valuation instead of the actuarial value of assets, the City contribution rate would have been 24.98% (assuming payment is made in equal monthly installments throughout the year) and the funded ratio would have been 84.7%. The funded ratio based on the market value of assets was 80.2% last year.

Conclusion

The remainder of this Report includes detailed actuarial valuation results, financial information, miscellaneous information and statistics, and a summary of plan provisions.

RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

Future actuarial measurements may differ significantly from the current measurements 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 due to changing conditions; 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. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

1. Investment risk – actual investment returns may differ from the expected returns;
2. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
3. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
4. Longevity risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
5. Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

The computed contribution shown on page A-1 may be considered as a minimum contribution that complies with the Board's funding policy. The timely receipt of the actuarially determined contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

Plan Maturity Measures

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

	2020	2019	2018
Ratio of the market value of assets to total payroll	7.1	7.0	7.8
Ratio of actuarial accrued liability to payroll	8.4	8.8	9.7
Ratio of actives to retirees and beneficiares	1.1	1.1	1.1
Ratio of net cash flow to market value of assets	2.2%	-1.7%	4.2%
Duration of the actuarial accrued liability	11.9	12.2	12.0

Ratio of Market Value of Assets to Payroll

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 2.0 times the payroll, a return on assets 5% different than assumed would equal 10% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

Ratio of Actuarial Accrued Liability to Payroll

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 2.5 times the payroll, a change in liability 2% other than assumed would equal 5% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

Ratio of Actives to Retirees and Beneficiaries

A young plan with many active members and few retirees will have a high ratio of active to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.

Ratio of Net Cash Flow to Market Value of Assets

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

Duration of Actuarial Accrued Liability

The duration of the actuarial accrued liability may be used to approximate the sensitivity to a 1% change in the assumed rate of return. For example, duration of 10 indicates that the liability would increase approximately 10% if the assumed rate of return were lowered 1%.

Additional Risk Assessment

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability.

SECTION B

VALUATION RESULTS

PARTICIPANT DATA		
	October 1, 2020	October 1, 2019
ACTIVE MEMBERS		
Number	24	26
Covered Annual Payroll	$ 1,853,832	$ 1,760,247
Average Annual Payroll	$ 77,243	$ 67,702
Average Age	43.3	41.0
Average Past Service	11.5	10.0
Average Age at Hire	31.8	31.0
RETIREES, BENEFICIARIES, & DROP MEMBERS		
Number	18	19
Annual Benefits	$ 595,460	$ 639,632
Average Annual Benefit	$ 33,081	$ 33,665
Average Age	66.7	65.5
DISABILITY RETIREES		
Number	4	4
Annual Benefits	$ 74,159	$ 74,159
Average Annual Benefit	$ 18,540	$ 18,540
Average Age	63.1	62.1
TERMINATED VESTED MEMBERS		
Number	3	3
Annual Benefits	$ 47,725	$ 47,725
Average Annual Benefit	$ 15,908	$ 15,908
Average Age	50.9	49.9

ACTUARIALLY DETERMINED CONTRIBUTION (ADC)			
A. Valuation Date	October 1, 2020 *After Assumption Change*	October 1, 2020 *Before Assumption Change*	October 1, 2019
B. ADC to Be Paid During Fiscal Year Ending	9/30/2022	9/30/2022	9/30/2021
C. Assumed Date(s) of Employer Contribution	Monthly	Monthly	Monthly
D. Annual Payment to Amortize Unfunded Actuarial Liability if Paid on the Valuation Date	$ 249,047	$ 277,742	$ 336,095
E. Employer Normal Cost (including Administrative Expenses) if Paid on the Valuation	274,435	280,000	268,045
F. Actuarially Determined Contribution (ADC) if Paid on the Valuation Date: D + E	523,482	557,742	604,140
G. ADC Adjusted for Frequency of Payments and Interest to Required Time of Contribution	579,249	617,158	668,499
H. Covered Payroll for Contribution Year	1,952,005	1,952,005	1,853,464
I. ADC as % of Expected Covered Payroll in the Contribution Year G ÷ H	29.68 %	31.62 %	36.07 %
J. Estimate of State Revenue in Contribution Year*	136,427	136,427	272,854
K. Actuarially Determined Contribution in Contribution Year	442,822	480,731	395,645
L. ADEC as % of Covered Payroll in Contribution Year: K ÷ H	22.69 %	24.63 %	21.35 %
M. Actuarially Determined Contribution if Paid on the First Day of the Contribution Year	427,202	463,775	381,690

**Chapter 185 Florida Statutes. The City contribution amount may need to be increased if the amount received under the provisions of Chapter 185, Florida Statutes, is not sufficient to meet the total employer contribution requirement.*

ACTUARIAL VALUE OF BENEFITS AND ASSETS			
A. Valuation Date	October 1, 2020 *After Assumption Change*	October 1, 2020 *Before Assumption Change*	October 1, 2019
B. Actuarial Present Value of All Projected Benefits for			
1. Active Members			
a. Service Retirement Benefits	$9,641,742	$9,786,178	$8,637,570
b. Vesting Benefits	599,212	607,038	637,121
c. Disability Benefits	212,455	210,368	205,184
d. Preretirement Death Benefits	63,890	92,047	87,024
e. Return of Member Contributions	68,267	69,533	83,031
f. Total	10,585,566	10,765,164	9,649,930
2. Inactive Members			
a. Service Retirees & Beneficiaries	6,153,797	6,430,078	7,020,577
b. Disability Retirees	788,142	799,000	810,419
c. Terminated Vested Members	298,221	305,008	284,237
d. Total	7,240,160	7,534,086	8,115,233
3. DROP Balances	175,616	175,616	173,030
4. Total for All Members	18,001,342	18,474,866	17,938,193
C. Actuarial Accrued (EAN Past Service) Liability (including reserves)*	15,535,202	15,977,744	15,406,386
D. Actuarial Value of Accumulated Plan Benefits*	13,540,918	13,942,097	13,696,167
E. Plan Assets (including reserves)*			
1. Market Value	13,153,186	13,153,186	12,349,591
2. Actuarial Value	13,582,560	13,582,560	12,538,670
F. Unfunded Actuarial Accrued Liability (C - E2)	1,952,642	2,395,184	2,867,716
G. Actuarial Present Value of Projected Covered Payroll	12,379,155	12,355,407	12,678,192
H. Actuarial Present Value of Projected Member Contributions	990,332	988,433	1,014,255

** Includes DROP balances.*

State Premium Tax Revenues

Actuarial Confirmation of the Use of State Chapter Money	
1. Accumulated Excess at Beginning of Previous Year	0
2. Amount Received for Previous Plan Year	132,844
3. Amount Used in Previous Plan Year*	132,844
4. Accumulated Excess as of Valuation Date (Held in Reserve for Benefit Improvements): (1) + (2) - (3)	0
5. Expected Amount to be Received This Plan Year**:	272,854

*Pursuant to the agreement between the City and the Police Benevolent Association, the City has access to all Chapter 185 revenue to fund the Unfunded Actuarial Accrued Liability, subject to an actuarial certification, and consequently there was no increase in the Accumulated Excess Premium Tax Revenues.

** A State premium tax distribution of $136,427 was calculated for FYE 2020 but will not be available to the Plan until FYE 2021. Therefore, two years' worth of State money is expected to be received in FYE 2021.

FINANCIAL SOUNDNESS

The purpose of this portion of the Report is to provide certain measures which indicate the financial soundness of the program. These measures relate to short term solvency and long term solvency.

The various percentages listed in this Section as of a single valuation date are not that significant. What is significant, however, is the trend of the rates over a period of years. It is also important to keep in mind that each time benefits or assumptions are revised; actuarial liabilities are created or diminished. Any newly created liabilities are financed systematically over a period of future years. All actuarially computed values in this analysis are based on the actuarial assumptions utilized in the respective years' actuarial valuations.

Short Term Solvency

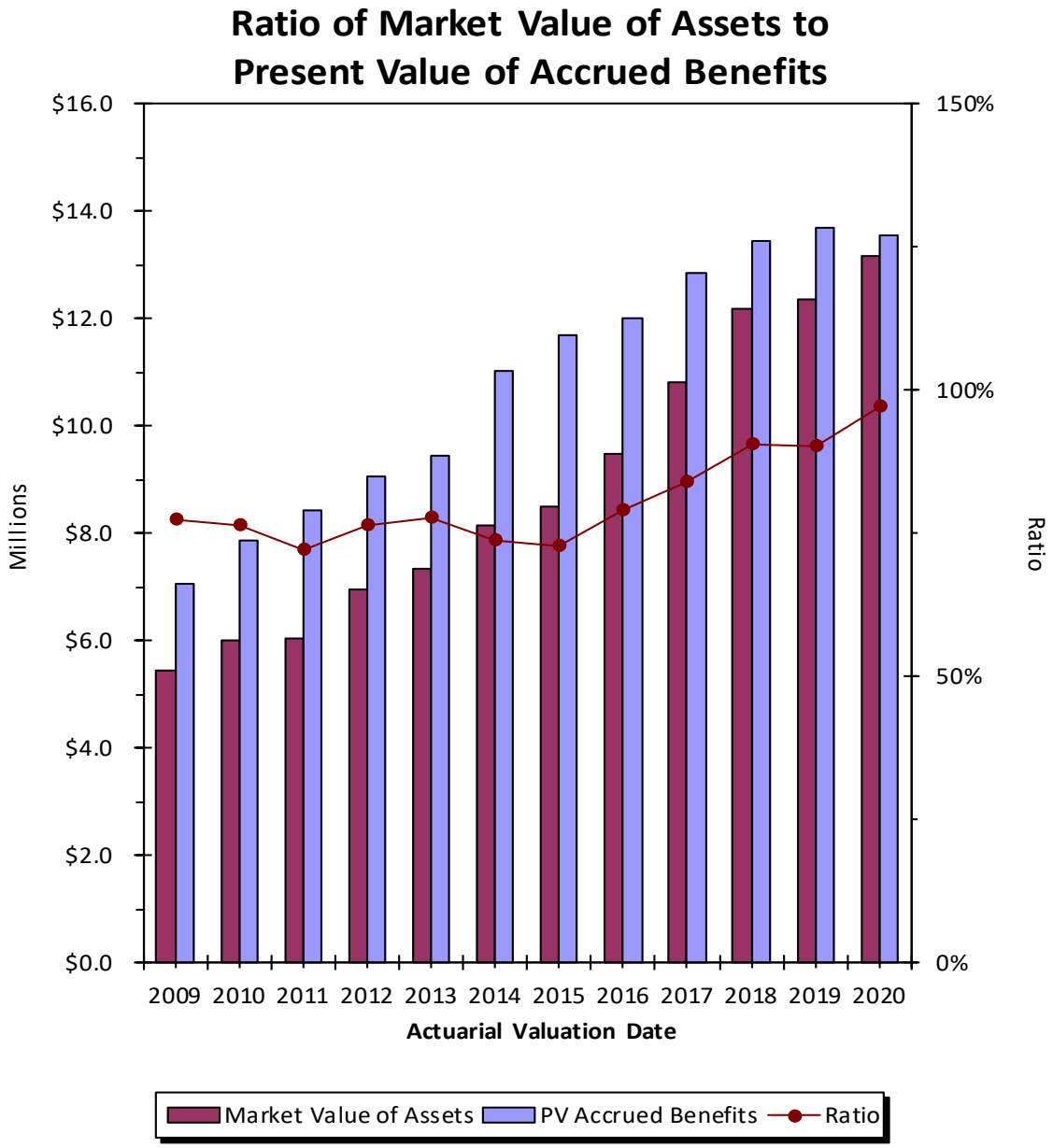
The ultimate test of financial soundness is the program's ability to pay all promised benefits when due. The program's progress in accumulating assets to pay all promised benefits can be measured by comparing the market value of assets with:

1. The actuarial present value of projected benefits payable to those already receiving benefits and to vested terminations, and
2. The actuarial present value of accrued benefits payable to active participants. This amount is based on benefits earned to date without future credited service or salary increases.

The total of the two items should generally be fully covered by assets. That portion of the total of the two items covered by assets should increase over time. Often assets continue to grow beyond the actuarial present value of these two items.

	Police Officers		
	10/1/2020	10/1/2019	10/1/2018
1. Accumulated Contributions of Active Members	$ 1,030,020	$ 901,960	$ 756,326
2. APV of Projected Benefits in Pay Status and for Vested Terminations*	7,415,776	8,288,263	8,730,518
3. APV of Accrued Benefits for Active Participants (Employer Portion)	5,095,122	4,505,944	3,943,402
4. Total	13,540,918	13,696,167	13,430,246
5. Market Value of Assets*	13,153,186	12,349,591	12,164,644
6. Assets as % of Total	97 %	90 %	91 %

* *DROP balances are included.*



Increases in benefits will, of course, adversely affect the trend in the years when such increases are first reflected in the actuarial values. Although different actuarial assumptions would be used in the event of a termination of the program, this test shows how much of the benefits accrued to date might be covered by assets in the event of a plan freeze using the valuation assumptions.

Long Term Solvency

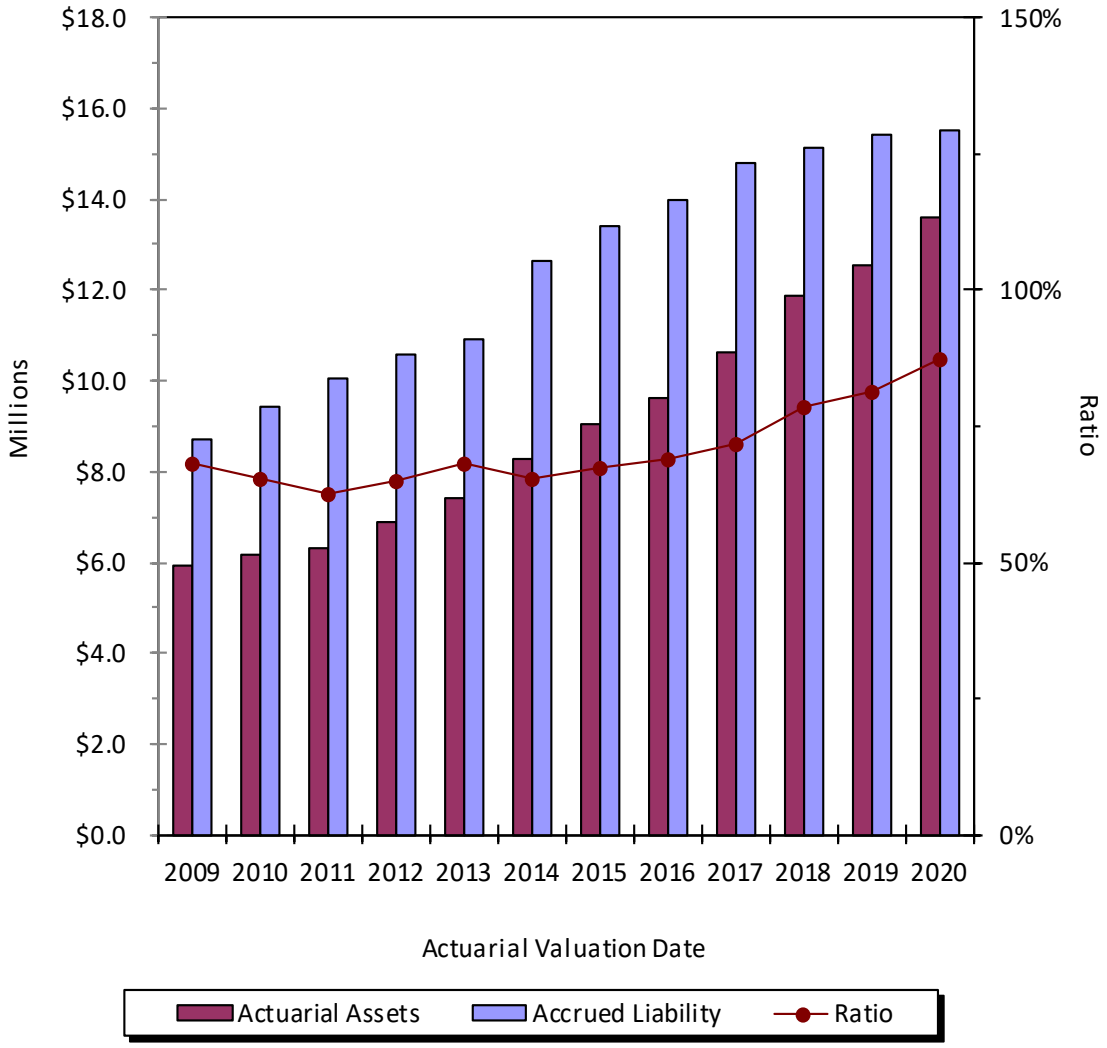
Over the longer term, the solvency of an ongoing plan can be measured by comparing the Actuarial Value of Assets to an amount known as the Actuarial Accrued Liability (AAL) under the Entry Age Actuarial Cost Method. This item has often been called the "past service liability". Its derivation differs from the short term solvency value derivation in several ways. The short term solvency liability number is based on the benefits accrued to date by the participants while the long term solvency liability number is based on what the normal costs accrued to date by the employer. In addition, the short term solvency asset number is the market value, while the long term asset number is the actuarial value of assets. As in the case of the short term solvency values, the AAL is affected immediately by any revisions in benefits or assumptions. The accumulation of assets to equal the AAL can be considered a long range funding goal.

Valuation Date	Actuarial Value of Assets (in Thousands)	Actuarial Accrued Liability (in Thousands)	% of AAL Covered by Assets
9/30/03 *	$ 4,373	$ 5,986	73 %
9/30/04	4,534	6,405	71
9/30/05	4,775	6,997	68
9/30/06	5,175	7,034	74
9/30/07 *	5,663	7,620	74
9/30/08	5,764	8,112	71
9/30/09 *	5,922	8,689	68
9/30/10 *	6,164	9,449	65
9/30/11	6,305	10,065	63
9/30/12 *	6,880	10,559	65
9/30/13	7,429	10,895	68
9/30/14 *,**	8,270	12,656	65
9/30/15 **	9,030	13,400	67
9/30/16 *,**	9,632	13,999	69
10/1/17 *,**	10,631	14,800	72
10/1/18 **	11,896	15,117	79
10/1/19 **	12,539	15,406	81
10/1/20 *,**	13,583	15,535	87

** Reflects change in benefits, actuarial assumptions and/or method.*

*** DROP balances are being included in Actuarial Accrued Liability and in Plan Assets beginning with the September 30, 2014 Valuation. The Excess Premium Tax Liability (if any) is being included in Actuarial Accrued Liability and in Plan Assets beginning with the September 30, 2015 Valuation.*

Ratio of Actuarial Value of Assets to Actuarial Accrued Liability



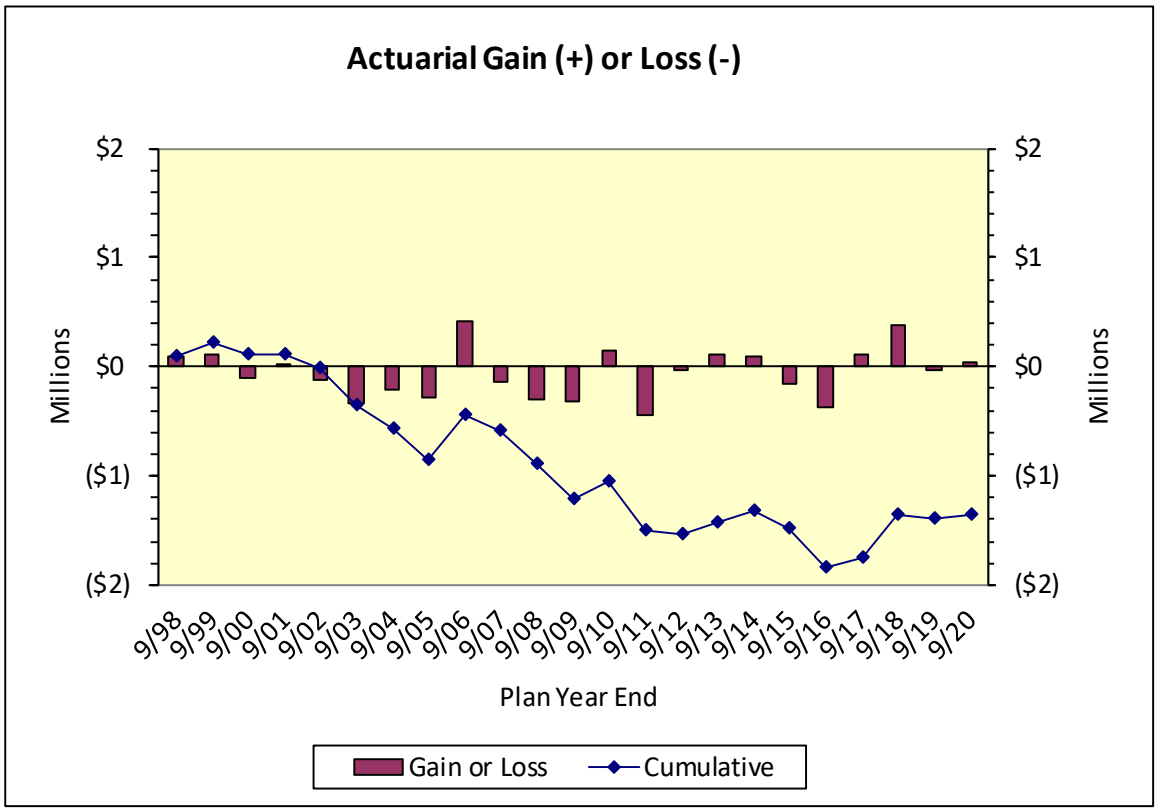
ACTUARIAL GAINS AND LOSSES

The assumptions used to anticipate mortality, employment turnover, investment income, expenses, salary increases, and other factors have been based on long range trends and expectations. Actual experience can vary from these expectations. The variance is measured by the gain and loss for the period involved. If significant long term experience reveals consistent deviation from what has been expected and that deviation is expected to continue, the assumptions should be modified. The net actuarial gain (loss) for the past year is computed as follows:

Derivation of Experience Gain (Loss)		
1.	Last Year's UAAL	$2,867,716
2.	Last Year's Employer Normal Cost	268,045
3.	Last Year's Actual City and State Contributions	877,866
4.	Interest at the assumed rate on:	
	a. 1 for one year	193,571
	b. 2 for one year	18,093
	c. 3 from dates paid	29,628
	d. a + b - c	182,036
5.	This Year's Expected UAAL 1 + 2 - 3 + 4d	2,439,931
6.	This Year's Actual UAAL (before any changes in benefits or assumptions)	2,395,184
7.	Net Actuarial Gain (Loss): (5) - (6)	44,747
8.	Gain (Loss) due to investments	(91,292)
9.	Gain (Loss) due to other sources	136,039

Net actuarial gain (loss) in previous years have been as follows:

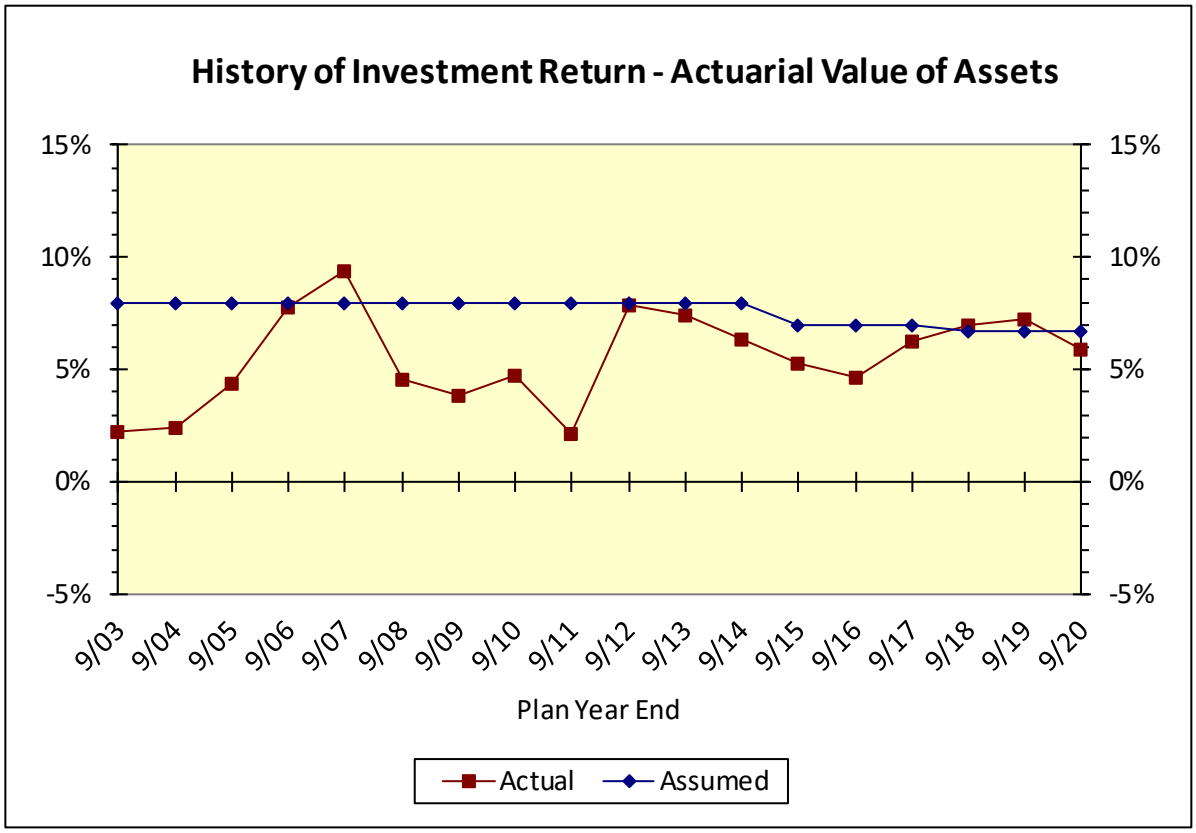
Year Ended	Actuarial Gain (Loss)	Cumulative Gain (Loss)
9/30/1998	95,019	95,019
9/30/1999	117,618	212,637
9/30/2000	(103,871)	108,766
9/30/2001	1,389	110,155
9/30/2002	(128,212)	(18,057)
9/30/2003	(339,563)	(357,620)
9/30/2004	(207,808)	(565,428)
9/30/2005	(287,225)	(852,653)
9/30/2006	411,559	(441,094)
9/30/2007	(137,906)	(578,999)
9/30/2008	(308,022)	(887,021)
9/30/2009	(323,582)	(1,210,603)
9/30/2010	154,731	(1,055,872)
9/30/2011	(451,201)	(1,507,073)
9/30/2012	(32,697)	(1,539,770)
9/30/2013	115,061	(1,424,709)
9/30/2014	95,416	(1,329,292)
9/30/2015	(154,573)	(1,483,865)
9/30/2016	(366,146)	(1,850,011)
9/30/2017	106,084	(1,743,927)
9/30/2018	380,936	(1,362,991)
9/30/2019	(35,319)	(1,398,310)
9/30/2020	44,747	(1,353,563)

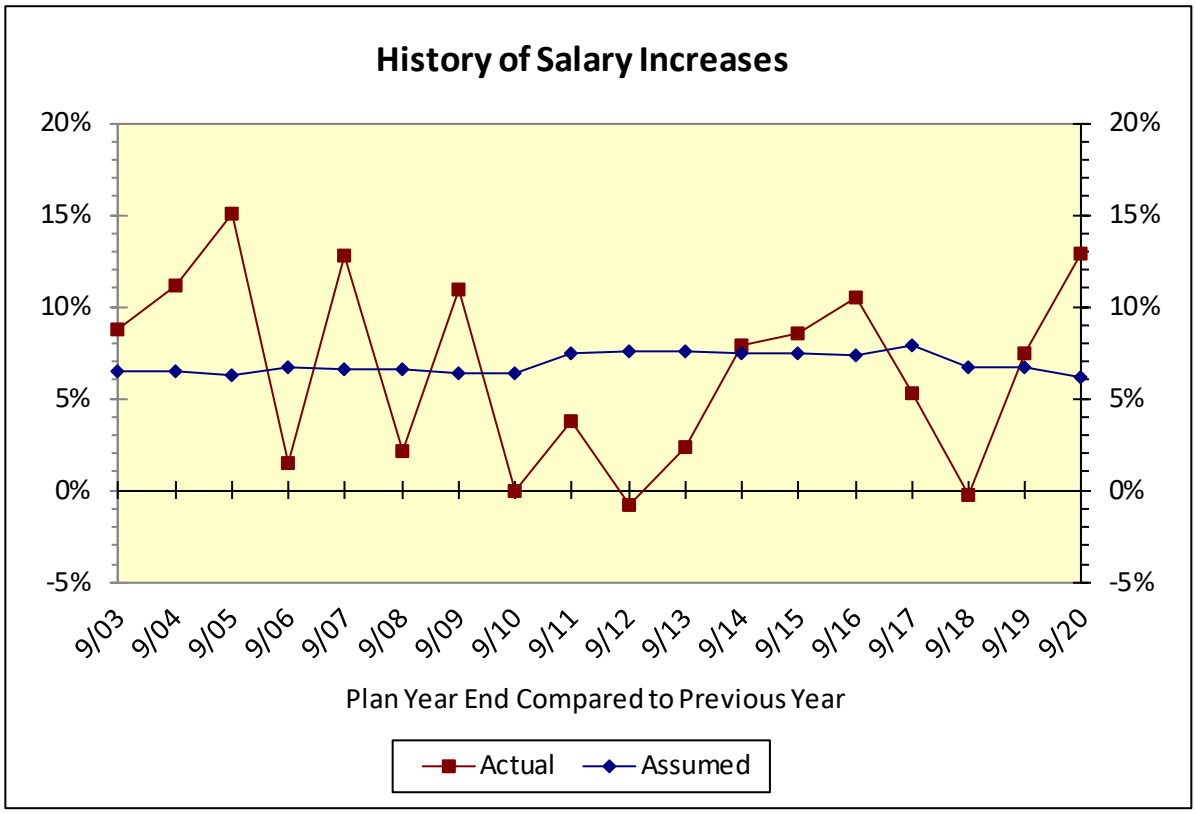


The fund earnings and salary increase assumptions have considerable impact on the cost of the Plan so it is important that they are in line with the actual experience. The following table shows the history of actuarial fund earnings and salary increase rates compared to the assumed rates.

Year Ending	Investment Return (AVA)		Salary Increases	
	Actual	Assumed	Actual	Assumed
9/30/2003	2.2	8.0	8.8	6.5 %
9/30/2004	2.4	8.0	11.2	6.5
9/30/2005	4.4	8.0	15.1	6.3
9/30/2006	7.8	8.0	1.5	6.7
9/30/2007	9.4	8.0	12.8	6.6
9/30/2008	4.6	8.0	2.1	6.6
9/30/2009	3.8	8.0	11.0	6.4
9/30/2010	4.7	8.0	(0.0)	6.4
9/30/2011	2.2	8.0	3.8	7.4
9/30/2012	7.9	8.0	(0.8)	7.6
9/30/2013	7.5	8.0	2.3	7.5
9/30/2014	6.3	8.0	7.8	7.5
9/30/2015	5.3	7.0	8.6	7.5
9/30/2016	4.7	7.0	10.5	7.3
9/30/2017	6.3	7.0	5.3	7.8
9/30/2018	7.0	6.75	(0.2)	6.7
9/30/2019	7.3	6.75	7.4	6.7
9/30/2020	5.9	6.75	12.8	6.1
Average	5.5 %	---	6.6 %	---

The actual investment return rates shown above are based on the actuarial value of assets. The actual salary increase rates shown above are the increases received by those active members who were included in the actuarial valuations both at the beginning and the end of each year.

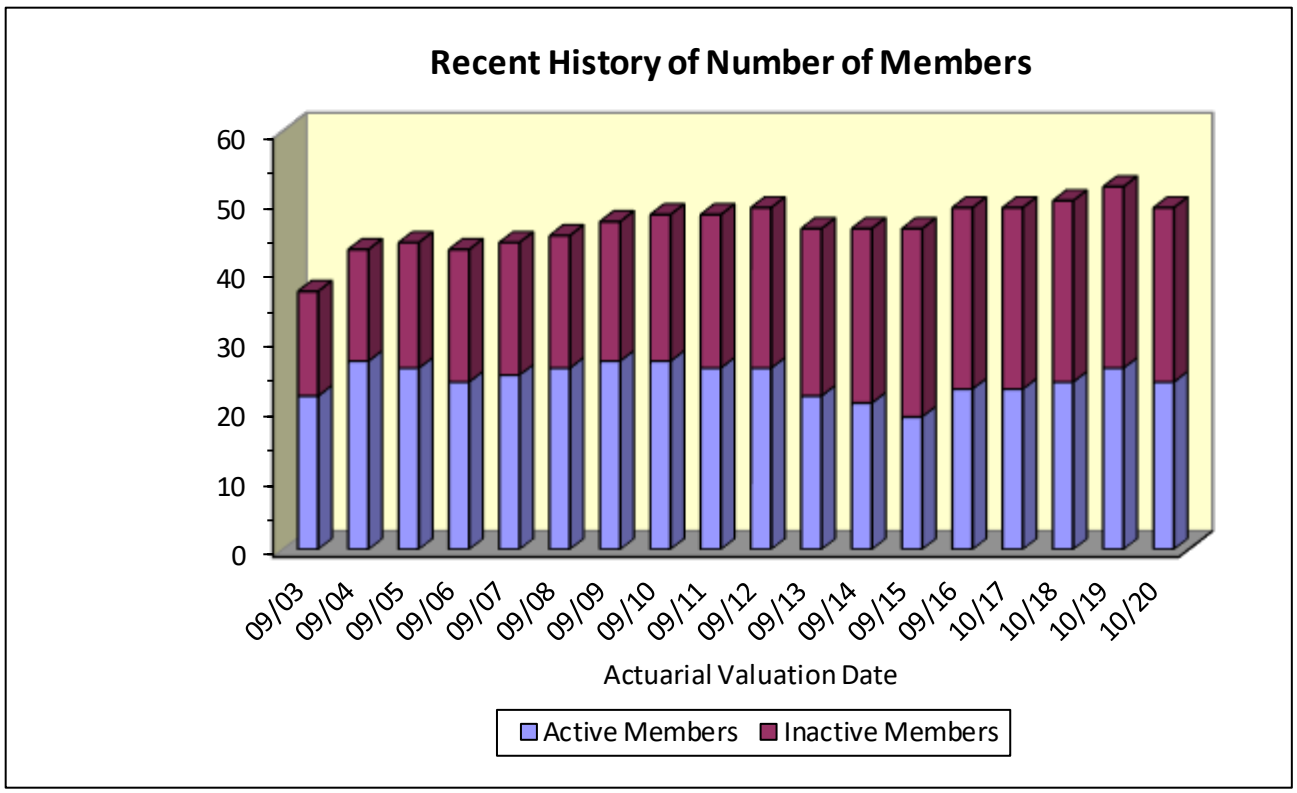

History of Investment Return - Actuarial Value of Assets
15%
10%
5%
0%
-5%
9/03
9/04
9/05
9/06
9/07
9/08
9/09
9/10
9/11
9/12
9/13
9/14
9/15
9/16
9/17
9/18
9/19
9/20
Plan Year End
Actual
Assumed

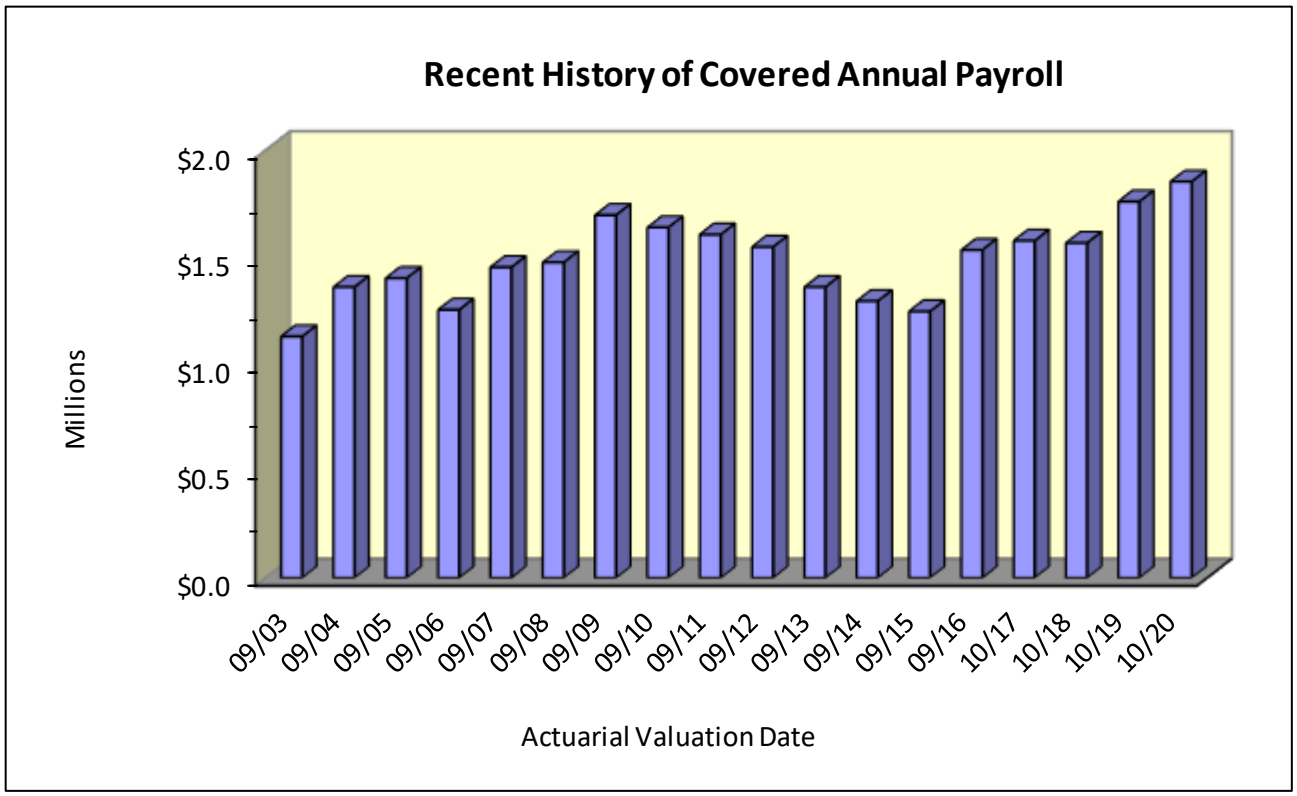

History of Salary Increases
20%
15%
10%
5%
0%
-5%
9/03
9/04
9/05
9/06
9/07
9/08
9/09
9/10
9/11
9/12
9/13
9/14
9/15
9/16
9/17
9/18
9/19
9/20
Plan Year End Compared to Previous Year
Actual
Assumed

RECENT HISTORY OF VALUATION RESULTS							
Valuation Date	Number of Active Members	Number of Inactive Members	Reported Covered Annual Payroll (in Thousands)	Actuarial Value of Assets (in Thousands)	UAAL (in Thousands)	Employer Normal Cost** Amount (in Thousands)	Employer Normal Cost** % of Covered Payroll
9/30/03 *	22	15	$ 1,129	$ 4,373	$ 1,613	$ 182	16.12 %
9/30/04	27	16	1,360	4,534	1,871	220	16.21
9/30/05	26	18	1,402	4,775	2,222	228	16.25
9/30/06	24	19	1,254	5,175	1,859	211	16.84
9/30/07 *	25	19	1,453	5,663	1,957	200	13.74
9/30/08	26	19	1,476	5,764	2,348	207	13.99
9/30/09 *	27	20	1,697	5,922	2,767	244	14.36
9/30/10 *	27	21	1,639	6,164	3,285	247	15.08
9/30/11	26	22	1,606	6,305	3,760	260	16.17
9/30/12 *	26	23	1,548	6,880	3,679	208	13.44
9/30/13	22	24	1,360	7,429	3,466	176	12.92
9/30/14 *	21	25	1,295	8,270	4,387	208	16.08
9/30/15	19	27	1,247	9,030	4,370	214	17.18
9/30/16 *	23	26	1,534	9,632	4,367	234	15.26
10/1/17 *	23	26	1,577	10,631	4,169	262	16.62
10/1/18	24	26	1,566	11,896	3,221	233	14.88
10/1/19	26	26	1,760	12,539	2,868	268	15.23
10/1/20 *	24	25	1,854	13,583	1,953	274	14.80

** Reflects change in benefits, actuarial assumptions and/or method.*

***For Valuations prior to 2009, Normal Cost is a mid-year amount, excluding any administrative expenses. Beginning with 9/30/2009 valuation, Normal Cost is a beginning of the year figure, including administrative expenses. For all years, % of Covered Payroll is Normal Cost shown expressed as a % of Covered Valuation Payroll.*


Recent History of Number of Members
60
50
40
30
20
10
0
09/03
09/04
09/05
09/06
09/07
09/08
09/09
09/10
09/11
09/12
09/13
09/14
09/15
09/16
10/17
10/18
10/19
10/20
Actuarial Valuation Date
Active Members
Inactive Members


Recent History of Covered Annual Payroll
Millions
$2.0
$1.5
$1.0
$0.5
$0.0
09/03
09/04
09/05
09/06
09/07
09/08
09/09
09/10
09/11
09/12
09/13
09/14
09/15
09/16
10/17
10/18
10/19
10/20
Actuarial Valuation Date

RECENT HISTORY OF REQUIRED AND ACTUAL CONTRIBUTIONS				
Valuation	End of Year To Which Valuation Applies	Required Employer/State Contributions		Actual Employer/State Contributions
		Amount	% of Expected Payroll	
9/30/06	9/30/08	$ 309,841	22.80 %	$ 309,842
9/30/07 *	9/30/09	345,280	21.93	345,280
9/30/08	9/30/10	425,823	26.62	425,823
9/30/09 *	9/30/11	487,032	26.49	487,032
9/30/10 *	9/30/12	628,909	36.18	628,898
9/30/11	9/30/13	606,741	35.63	609,012
9/30/12 *	9/30/14	654,280	39.99	659,420
9/30/13	9/30/15	665,091	46.10	677,542
9/30/14 *	9/30/16	825,700	60.14	842,455
9/30/15	9/30/17	849,061	64.68	945,540
9/30/16 *	9/30/18	841,726	52.12	1,091,552
10/1/17 *	9/30/19	826,705	49.79	826,705
10/1/18	9/30/20	668,090	40.50	877,866
10/1/19	9/30/21	668,499	36.07	----
10/1/20 *	9/30/22	579,249	29.68	----

** Reflects change in benefits, actuarial assumptions and/or method.*

ACTUARIAL ASSUMPTIONS AND COST METHOD

Valuation Methods

Actuarial Cost Method - The actuarial cost method is a procedure for allocating the actuarial present value of benefits and expenses to time periods. Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using the **Entry-Age Actuarial Cost Method**. The entry-age actuarial cost method allocates the actuarial present value of each member's projected benefits on a level basis over the member's pensionable compensation between the entry age of the member and the estimated active status exit ages. The portion of the actuarial present value allocated to the valuation year is called the normal cost. The portion of the actuarial present value not provided for by the actuarial present value of future normal costs is called the actuarial accrued liability. Deducting accrued assets from the actuarial accrued liability determines the unfunded actuarial accrued liability.

Financing of Unfunded Actuarial Accrued Liabilities - The unfunded actuarial accrued liability was financed as a level percent of member payroll.

Actuarial Value of Assets - The Actuarial Value of Assets phases in the difference between the expected and actual return on market value of assets at the rate of 25% per year. The Actuarial Value of Assets will be further adjusted to the extent necessary to fall within the corridor whose lower limit is 80% of the Market Value of plan assets and whose upper limit is 120% of the Market Value of plan assets. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than Market Value. During periods when investment performance is less than assumed rate, Actuarial Value of Assets will tend to be greater than Market Value.

Valuation Assumptions

The actuarial assumptions used in the valuation are shown in this Section. With the exception of the mortality assumption, which is prescribed by Florida Statutes, all assumptions listed herein were established following the Assumption Study and Experience Review for the Seven Years Ended September 30, 2016, dated August 9, 2017.

Economic Assumptions

The investment return rate assumed in the valuations is 6.75% per year, compounded annually (net of investment expenses).

The **price inflation rate** assumed in this valuation was 2.5% per year.

The plan does not provide for automatic post-retirement **cost of living adjustments** (COLA) of retiree benefits. Ad-hoc COLA increases have been adopted in the past upon approval by the City. Most recently, such increases have been granted in 1987, 1996 and 2001. No assumptions are made regarding future adjustments. Any such increases will be recognized as they occur.

The **payroll growth rate** would be 3.5%, except that it is limited this year due to the lower actual payroll growth rate over the last 10 years in accordance with the requirements of Ch. 112.64 (5) (a), F.S. The rate used to amortize the unfunded actuarial accrued liabilities is 1.24% per year.

The **total rate of return** is defined as earnings resulting from interest, dividends, realized gains (losses) and unrealized appreciation (depreciation) divided by the beginning market value of the fund, adjusted for cash flow during the year. The total rate of return is assumed to be 6.75% per year, net of investment-related expenses.

The rates of salary increases used in the valuation are illustrated in the following table. These rates include price inflation of 2.5%.

Annual Rates for Salary Increase for Sample Ages

Age:	20	30	40	50	60
Expected Increase	18.5%	9.3%	5.9%	5.1%	4.5%

Demographic Assumptions

The mortality tables used in the valuation are the same rates in use for Special Risk class members of FRS in the July 1, 2020 FRS Actuarial Valuation as prescribed by the Florida Statutes Chapter 112.63(1)(f) which mandates the use of the mortality tables from either of the two most recently published actuarial valuation reports of FRS. They are based on the PUB-2010 Headcount Weighted Mortality Tables described below, with mortality improvements projected to all future years after 2010 using Scale MP-2018.

	Pre-Retirement PUB-2010 Table	Post-Retirement PUB-2010 Table
Female	Headcount Weighted Safety Employee Female Table, set forward 1 year	Headcount Weighted Safety Healthy Retiree Female Table, set forward 1 year
Male	Headcount Weighted Safety Below Median Employee Male Table, set forward 1 year	Headcount Weighted Safety Below Median Healthy Retiree Male Table, set forward 1 year

The following tables present post-retirement mortality rates and life expectancies at illustrative ages. These assumptions are used to measure the probabilities of each benefit payment being made after retirement.

FRS Healthy Post-Retirement Mortality for Special Risk Class Members

Sample Attained Ages (in 2020)	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	0.42 %	0.20 %	32.40	36.24
55	0.56	0.36	27.63	31.21
60	0.93	0.61	23.05	26.43
65	1.32	0.92	18.80	21.93
70	2.09	1.45	14.80	17.68
75	3.56	2.44	11.21	13.75
80	6.35	4.19	8.14	10.30

The following tables present pre-retirement mortality rates and life expectancies at illustrative ages. This assumption is used to measure the probabilities of active members dying prior to retirement.

FRS Healthy Pre-Retirement Mortality for Special Risk Class Members

Sample Attained Ages (in 2020)	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	0.17 %	0.11 %	35.58	39.50
55	0.26	0.16	30.50	34.36
60	0.43	0.22	25.55	29.30
65	0.69	0.30	20.80	24.29
70	1.18	0.55	16.28	19.39
75	2.09	1.08	12.05	14.69
80	6.35	4.19	8.14	10.30

For disabled retirees, the mortality table is a blend of 80% of the PUB-2010 Headcount Weighted General Disabled Retiree Table and 20% of the PUB-2010 Headcount Weighted Safety Disabled Retiree Table, both with separate rates for males and females and no provision being made for future mortality improvements.

FRS Disabled Mortality for Special Risk Class Members

Sample Attained Ages (in 2020)	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	1.45 %	1.25 %	24.04	26.84
55	1.91	1.50	20.88	23.54
60	2.37	1.81	17.92	20.32
65	3.00	2.22	15.07	17.17
70	3.91	2.90	12.39	14.10
75	5.30	4.13	9.87	11.22
80	7.66	6.21	7.60	8.67

The rates of retirement used to measure the probability of eligible members retiring under normal and early retirement eligibility were as shown below.

Normal Retirement/DROP	
Year of Eligibility	Percent of Eligible Employees Retiring
1	50%
2	30%
3	10%
4	10%
5	40%
6 - 9	50%
10 and over	100%

Additionally, the rate of retirement is assumed to be 100% upon attainment of age 60 and completion of 5 years of service (applies only to members hired before January 1, 2013).

Early Retirement/DROP	
Retirement Ages	Percent of Eligible Employees Retiring
50	10%
51	10%
52	10%
53	10%
54	10%

Rates of Disability among active members (67% of disability incidences are assumed to be service-connected)

	Percent Becoming Disabled Within Next Year	
Sample Ages	Men	Women
20	0.14%	0.14%
25	0.15%	0.15%
30	0.18%	0.18%
35	0.23%	0.23%
40	0.30%	0.30%
45	0.51%	0.51%
50	1.00%	1.00%
55	1.55%	1.55%
60	0.00%	0.00%

Rates of separation from active membership are as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability).

Rates of Separation from Active Employment

Sample Ages	Years of Service	Assumptions
ALL	0	37.0%
	1	24.0%
	2	15.0%
	3	12.0%
	4	10.0%
25	5 & Over	5.5%
30		5.0%
35		4.5%
40		3.9%
45		3.3%
50		2.4%
55		1.4%
60		1.0%

Changes from previous valuation: The mortality tables and improvement scales were updated to reflect the updated mortality assumptions used in the July 1, 2020 Florida Retirement System (FRS) Actuarial Valuation.

Miscellaneous and Technical Assumptions

Administrative & Investment Expenses	Annual administrative expenses are assumed to be equal to the actual expenses paid during the preceding fiscal year. Investment expenses are offset against gross investment income. Assumed administrative expenses are added to the Normal Cost.
Benefit Service	Exact fractional service is used to determine the amount of benefit payable.
Decrement Operation	Disability and mortality decrements do not operate during the first 5 years of service. Disability and separation do not operate during retirement eligibility.
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.
Forfeitures	Vested members who terminate with a benefit worth less than 100% of their own accumulated contributions were assumed to forfeit their vested benefit.
Incidence of Contributions	Employer contributions are assumed to be received in 12 equal monthly installments. Member contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.
Marriage Assumption	80% of members are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female participants and female spouses are assumed to be three years younger than male participants for active member valuation purposes.
Normal Form of Benefit	The normal form of benefit is a life annuity with 10 year certain.
Pay Increase Timing	Beginning of fiscal year. This is equivalent to assuming that reported pays represent the actual amount paid during the previous fiscal year.
Service Credit Accruals	It is assumed that members accrue one year of service credit per year.

GLOSSARY OF TERMS

Actuarial Accrued Liability	The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as "accrued liability" or "past service liability."
Accrued Service	The service credited under the plan which was rendered before the date of the actuarial valuation.
Actuarial Assumptions	Estimates of future plan 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 plan benefits" between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the "actuarial funding method."
Actuarial Equivalent	A single amount or series of amounts of equal value to another single amount or series of amounts, computed on the basis of the rate(s) of interest and mortality tables used by the plan.
Actuarial Present Value	The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.
Amortization	Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.
Experience Gain (Loss)	A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used.
Normal Cost	The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost." Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

Reserve Account	An account used to indicate that funds have been set aside for a specific purpose and is not generally available for other uses.
Unfunded Actuarial Accrued Liability	The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded accrued liability."
Valuation Assets	The value of current plan assets recognized for valuation purposes. Generally based on market value plus a portion of unrealized appreciation or depreciation.

SECTION C

PENSION FUND INFORMATION

SUMMARY OF ASSETS		
	Year Ending 9/30/2020	Year Ending 9/30/2019
Cash and Securities - Market Value		
Cash and Cash Equivalents	$ 423,428	$ 413,866
Short Term Investments	280,488	186,449
Treasury and Agency Bonds & Notes	1,125,968	1,140,552
Corporate Bonds	1,256,494	1,126,795
Common & Preferred Stocks	5,277,956	4,230,292
Other Fixed Income	0	0
Mutual or Pooled Bond Funds	2,707,537	3,316,567
Mutual Funds	1,897,151	1,749,202
Other Securities - Participant Directed	175,616	173,030
Total	13,144,638	12,336,753
Receivables and Accruals		
State Contribution	0	0
Member Contribution	0	0
Employer Contribution	0	0
Interest and Dividends	12,048	12,838
Total	12,048	12,838
Payables		
Benefits-DROP Reserve *	0	0
Lump Sum Distributions	0	0
Other	3,500	0
Total	3,500	0
Net Assets - Market Value	$ 13,153,186	$ 12,349,591

** DROP balances are included for consistency with GASB Statements 67 and 68.*

PENSION FUND INCOME AND DISBURSEMENTS*		
	Year Ending 9/30/2020	**Year Ending 9/30/2019**
Market Value at Beginning of Period	$ 12,349,591	$ 12,164,644
Beginning of Year Adjustment	(95,420)	0
Income		
Member Contributions	161,166	142,024
State Contributions	132,844	0
Employer Contribution	745,022	826,705
Interest, Dividends, and Other Income	546,949	362,917
Realized and Unrealized Gain (Loss)	103,159	75,087
Total Income	1,689,140	1,406,733
Disbursements		
Monthly Benefit Payments	706,428	697,940
Lump Sum Distributions	0	400,904
Refund of Contributions	9,448	44,933
Investment Related Expenses	42,831	39,246
Other Administrative Expenses	31,418	38,763
Insurance Premiums	0	0
Total Disbursements	790,125	1,221,786
Net Increase During Period	$ 803,595	$ 184,947
Market Value at End of Period	$ 13,153,186	$ 12,349,591

DEFERRED RETIREMENT OPTION PLAN (DROP)
BENEFITS HELD IN RESERVE

A reconciliation of the accumulated DROP account balances is provided in the table below.

RECONCILIATION OF DROP ACCOUNTS		
Value at beginning of year	$	173,030
Payments credited to accounts	+	0
Investment Earnings credited	+	2,586
Withdrawals from accounts	-	0
Value at end of year		175,616

ACTUARIAL VALUE OF ASSETS

As of September 30, 2020

Valuation assets are calculated using a smoothed market value over a period of four (4) years, as prescribed under Internal Revenue Procedure 2000-40. The asset value determined under this method will be adjusted to be no greater than 120% and no less than 80% of the fair market value.

Under this method, the actuarial value of assets is equal to the market value of assets less a decreasing fraction (1/nth per year, where n equals the number of years in the smoothing period) of the gain or loss for each of the preceding 3 years.

Under this method, a gain or loss for a year is determined by calculating the difference between the expected market value of the assets at the valuation date and the actual market value of the assets at the valuation date. The expected value of the assets for the year is the market value of the assets at the valuation date for the prior year brought forward with interest at the valuation interest rate to the valuation date for the current year plus contributions minus disbursements (i.e., benefits paid and expenses), all adjusted with interest at the valuation rate to the valuation date for the current year. If the expected value is less than the market value, the difference is a gain. Conversely, if the expected value is greater than the market value, the difference is a loss.

Calculation of Valuation Assets is shown on the following page.

DEVELOPMENT OF FUNDING VALUE OF ASSETS AS OF SEPTEMBER 30

	2019	2020	2021	2022	2023
A. Preliminary actuarial value from prior year	$ 11,895,920	$ 12,538,670	$ 13,582,560		
B. Market value beginning of year	12,164,644	12,349,591	13,153,186		
C. Market value end of year	12,349,591	13,153,186			
D. Non-investment net cash flow [contributions-(benefits & expenses)]	(213,811)	291,738			
E. Investment return					
1. Actual market value return net of investment expenses: C - B - D	398,758	511,857			
2. Assumed Rate of Return	6.75%	6.75%	6.75%	6.75%	6.75%
3. Assumed Amount of Return	813,897	843,444			
4. Excess/(shortfall) to be phased-in: E1 - E3	(415,139)	(331,587)			
F. Phased-in recognition of investment return (4 Year Recognition)					
1. Current year: 25% of E4	(103,785)	(82,897)			
2. 25% of excess/(shortfall) from first prior year	26,884	(103,785)	(82,897)		
3. 25% of excess/(shortfall) from second prior year	68,505	26,884	(103,785)	(82,897)	
4. 25% of excess/(shortfall) from third prior year	51,060	68,506	26,885	(103,784)	(82,896)
5. Total phased-in recognition of investment return	42,664	(91,292)	(159,797)	(186,681)	(82,896)
G. Actuarial value end of year					
1. Preliminary actuarial value end of year: A + D + E3 + F5	12,538,670	13,582,560			
2. Upper corridor limit: 120% of C	14,819,509	15,783,823			
3. Lower corridor limit: 80% of C	9,879,673	10,522,549			
4. Actuarial value end of year	**12,538,670**	**13,582,560**			
H. Difference between market value and actuarial value	(189,079)	(429,374)			
I. Ratio of Funding Value to Market Value	102%	103%			

INVESTMENT RATE OF RETURN

The investment rate of return has been calculated on the following bases:

Basis 1 - Market Value: Interest, dividends, realized gains (losses) and unrealized appreciation (depreciation) divided by the beginning market value of the fund, adjusted for cash flow during the year. This figure is normally called the Total Rate of Return.

Basis 2 - Actuarial Value: Investment earnings recognized in the Actuarial Value of Assets divided by the weighted average of the Actuarial Value of Assets during the year.

Year Ended	Investment Rate of Return	
	Market Value	Actuarial Value
9/30/03	9.5 %	2.2 %
9/30/04	6.7	2.4
9/30/05	8.5	4.4
9/30/06	8.8	7.8
9/30/07	14.2	9.4
9/30/08	(11.7)	4.6
9/30/09	8.5	3.8
9/30/10	10.8	4.7
9/30/11	1.2	2.2
9/30/12	13.9	7.9
9/30/13	5.7	7.5
9/30/14	5.8	6.3
9/30/15	0.5	5.3
9/30/16	9.4	4.7
9/30/17	9.8	6.3
9/30/18	7.7	7.0
9/30/19	3.3	7.3
9/30/20	4.1	5.9
Average Compounded Rate of Return for		
5 Years	6.8 %	6.2 %
10 Years	6.1 %	6.0 %

SECTION D

MISCELLANEOUS INFORMATION

RECONCILIATION OF MEMBERSHIP DATA		
	From 10/01/19 To 10/01/20	From 10/01/18 To 10/01/19
A. Active Members		
1. Number Included in Last Valuation	26	24
2. New Members Included in Current Valuation	1	3
3. Non-Vested Employment Terminations	(3)	(1)
4. Vested Employment Terminations	0	0
5. Service Retirements	0	0
6. Disability Retirements	0	0
7. Deaths	0	0
8. DROP Retirement	0	0
9. Vested Employment Terminations-Refunded	0	0
10. Number Included in This Valuation	24	26
B. Terminated Vested Members		
1. Number Included in Last Valuation	3	4
2. Additions from Active Members	0	0
3. Lump Sum Payments/Withdrawals	0	0
4. Payments Commenced	0	0
5. Deaths	0	(1)
6. Other-Returned to Work	0	0
7. Number Included in This Valuation	3	3
C. Service Retirees, Disability Retirees, Beneficiaries & DROP		
1. Number Included in Last Valuation	23	22
2. Additions from Active Members	0	0
3. Additions entering the DROP	0	0
4. Additions from Terminated Vested Members	0	0
5. Deaths Resulting in No Further Payments	(1)	0
6. Deaths Resulting in New Survivor Benefits	0	1
7. End of Certain Period - No Further Payments	0	0
8. Other -- Lump Sum Distributions	0	0
9. Number Included in This Valuation	22	23

STATISTICAL DATA

Active Members as of October 1, 2020

Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	Totals	Avg. Pay
20-24 NO.	0	0	0	0	0	0	0	0	0
25-29 NO.	1	0	0	0	0	0	0	1	58,256
30-34 NO.	2	1	0	0	0	0	0	3	66,412
35-39 NO.	3	0	1	0	0	0	0	4	68,130
40-44 NO.	0	0	2	0	0	0	0	2	77,737
45-49 NO.	3	0	0	3	3	0	0	9	77,487
50-54 NO.	1	0	0	1	1	1	0	4	90,294
55-59 NO.	0	0	0	0	1	0	0	1	109,788
60-64 NO.	0	0	0	0	0	0	0	0	0
65&UP NO.	0	0	0	0	0	0	0	0	0
TOT NO.	10	1	3	4	5	1	0	24	77,243

NUMBER ADDED TO AND REMOVED FROM ACTIVE MEMBERSHIP

Year Ended	Number Added During Year		Terminations During Year										Active Members End of Year
			Service Retirement		Disability Retirement		Died-in Service		Withdrawal				
									Vested	Other	Total		
September 30	A	E	A	E	A	E	A	E	A	A	A	E	
2003	3	6	0	0.1	1	0.1	0	0.0	2	3	5	1.3	22
2004	9	4	0	0.3	0	0.0	0	0.0	2	2	4	1.1	27
2005	3	4	2	0.6	0	0.0	0	0.0	1	1	2	1.9	26
2006	2	4	1	1.0	0	0.0	0	0.0	1	2	3	1.8	24
2007	4	3	1	0.2	0	0.0	0	0.0	0	2	2	1.5	25
2008	5	4	1	0.1	0	0.0	0	0.0	0	3	3	1.6	26
2009	5	4	1	0.1	0	0.0	0	0.0	0	3	3	1.6	27
2010	3	3	0	0.4	1*	0.0	0	0.0	1*	1	3	1.4	27
2011	3	4	2	1.0	0	0.0	0	0.0	0	2	2	2.5	26
2012	2	2	1	1.0	0	0.1	0	0.0	0	1	1	2.5	26
2013	0	4	1	1.0	0	0.1	0	0.0	0	3	3	2.5	22
2014	2	3	0	0.4	0	0.1	0	0.0	3	0	3	2.2	21
2015	2	4	1	0.5	0	0.1	0	0.0	2	1	3	1.5	19
2016	5	1	0	0.5	0	0.0	0	0.0	0	1	1	1.5	23
2017	1	1	0	0.2	0	0.1	0	0.0	1	0	1	2.7	23
2018	5	4	0	0.8	0	0.0	0	0.0	0	4	4	2.1	24
2019	3	1	0	1.0	0	0.0	0	0.0	0	1	1	2.7	26
2020	**1**	**3**	**0**	**0.9**	**0**	**0.0**	**0**	**0.0**	**0**	**3**	**3**	**2.9**	**24**
5-yr. Totals 2016-2020	15	10	0	3.4	0	0.1	0	0.0			10	11.9	
Expected for 2021				0.8		0.1		0.0				2.0	

A Represents actual number.

E Represents expected number.

** Member retroactively approved for duty disability benefits (previously reported as vested terminated)*

Retired Members and Beneficiary Data
Historical Schedule**

	Added			Removed		Net Increase		End of Year		Expected Removals	
Year Ended	No.	Annual		No.	Annual	No.	Annual	No.	Annual	No.	Annual
2003	2	30,148				2	30,148	11	235,310	0.1	2,072
2004								11	235,310	0.2	2,683
2005	2	106,731				2	106,731	13	342,041	0.2	2,933
2006	1	34,521		1	9,796	0	24,724	13	366,765	0.2	3,809
2007	1	43,455				1	43,455	14	410,220	0.2	3,922
2008	2	63,781				2	63,781	16	474,001	0.2	4,510
2009								16	474,001	0.2	5,200
2010		6,319	*	1	14,935	(1)	(8,616)	15	465,385	0.2	5,200
2011	2	84,469		0		2	84,469	17	549,854	0.2	5,200
2012	2	68,629		0		2	68,629	19	618,483	0.3	5,761
2013	1	48,017		0		1	48,017	20	666,500	0.2	4,950
2014	0	0		0		0	-	20	666,500	0.2	5,547
2015	1	20,397		0		1	20,397	21	686,897	0.2	6,119
2016	0	0		0		0	-	21	686,897	0.3	6,815
2017	1	9,468		0		1	9,468	22	696,365	0.3	9,139
2018	0	0		0		0	-	22	696,365	0.4	9,846
2019	1	17,426		0		1	17,426	23	713,791	0.4	10,886
2020	**0**	**0**		**1**	44,172	**(1)**	**(44,172)**	**22**	**669,619**	**0.4**	**11,541**
Expected for 2021										0.5	12,824

* *One-time adjustment correcting past underpayments*

** *Includes member retroactively approved for duty disabililty*

SECTION E

SUMMARY OF PLAN PROVISIONS

A. Ordinances:

Plan established under the Code of Ordinances for the City of Atlantic Beach, Florida, Part II, Chapter 2, Article VI, Division 4 and was most recently amended under Ordinance No. 58-20-46, passed and adopted on October 26, 2020. The Plan is also governed by certain provisions of Part VII, Chapter 112, Florida Statutes (F.S.), F. S. 185 and the Internal Revenue Code.

B. Effective Date

December 22, 1975, Restated under Division 4 on July 10, 2000

C. Plan Year

October 1 through September 30

D. Type of Plan

Qualified, governmental defined benefit retirement plan; for GASB purposes it is a sole employer plan.

E. Eligibility Requirements

All full time sworn City police officers, who normally work more than 1,000 hours annually and are not an elected officials, temporary or contractual employees, or executives or departments heads who have elected not to participate, will become members on the date of employment.

F. Credited Service

Service is measured as the total number of years and fractional parts of years, but credited to the nearest one-twelfth (1/12) of a year. No service will be credited for any periods of employment for which the member received a refund of their employee contributions.

G. Compensation

Base salary or wages paid for services rendered to the City including longevity pay, overtime pay not to exceed 300 hours, cost of living payments, holiday and personal leave taken and incentive pay. Compensation excludes payments of unused personal leave, uniform or equipment allowances, extra duty or special detail pay on behalf of a second party employer, or any reimbursement of expenses.

H. Final Average Compensation (FAC)

Average monthly rate of Compensation during the highest 60 consecutive months of Credited Service out of the last 120 months preceding the date of termination or retirement.

I. Normal Retirement

Eligibility: **For members hired prior to January 1, 2013**

A participant may retire on the first day of the month coincident with or next following the earlier of:

(1) 25 years of Credited Service regardless of age, or
(2) age 50 with 20 years of Credited Service, or
(3) age 55 with 10 years of Credited Service, or
(4) age 60 with 5 years of Credited Service.

For members hired on or after January 1, 2013

A participant may retire on the first day of the month coincident with or next following the earlier of:

(1) Age 55 with 10 years of Credited Service, or
(2) age 52 with 25 years of Credited Service.

Benefit: **For members hired prior to January 1, 2013**

3.00% of FAC times Credited Service. Benefit is limited to 100% of FAC.

For members hired on or after January 1, 2013

2.00% of FAC times Credited Service. Benefit is limited to 100% of FAC.

Normal Form of Benefit: 10 Years Certain and Life thereafter; other options are also available.

J. Early Retirement

Eligibility: A member may elect to retire earlier than the Normal Retirement Eligibility upon attainment of age 50 with 10 years of Credited Service.

Benefit: The Normal Retirement Benefit is actuarially reduced by 3% for each year by which the member's Early Retirement date precedes the member's normal retirement age.

Normal Form of Benefit: 10 year certain and life thereafter; other options are also available.

K. Delayed Retirement

Same as Normal Retirement taking into account compensation earned and service credited until the date of actual employment termination.

L. Service Connected Disability

Eligibility: Any member who becomes totally and permanently disabled due to a service related injury or illness and is deemed unable to render useful and efficient service to the City as a police officer is eligible for a disability benefit.

Benefit: The benefit is calculated as if the member was eligible for Normal Retirement and is payable retroactively to the later of; the last day on payroll, or the date of application for disability benefits. The minimum for a service connected disability benefit is 42% of FAC.

Normal Form of Benefit: 10 year certain and life thereafter.

M. Non-Service Connected Disability

Eligibility: Any member with 8 1/3 or more years of Credited Service who becomes totally and permanently disabled and is deemed unable to render useful and efficient service to the City as a police officer is eligible for a disability benefit.

Benefit: The benefit is calculated as if the member was eligible for Normal Retirement and is payable retroactively to the later of; the last day on payroll, or the date of application for disability benefits. The minimum for a non-service connected disability benefit is 25% of FAC if the member had at least 8 1/3 years of Credited Service.

Normal Form of Benefit: 10 year certain and life thereafter.

N. Pre-Retirement Death

Eligibility: Any member with 5 or more years of Credited Service is eligible for a death benefit.

Benefit: Upon the death of a member, the designated beneficiary shall be paid an actuarially reduced standard ten (10) year certain and life survivor pension notwithstanding that the member may not have satisfied the conditions for retirement. If there are no beneficiaries designated by the member, then a benefit shall be paid to the surviving spouse or, if no surviving spouse, a reduced benefit will be paid to the member's unmarried children.

If spouse is receiving benefits described above, no children's benefits are payable. If spouse is not receiving benefits, children under age 19, or age 23 if an unmarried fulltime student, will receive equal shares of 50% of the member's Normal Retirement Benefit under the Life Annuity option based upon service and FAC as of the date of death.

Normal Form of Benefit: Payable for the life of the member's beneficiary or spouse. Children's benefits are payable until age 19 or age 23 if an unmarried fulltime student.

O. Post Retirement Death

Benefit determined by the form of benefit elected upon retirement.

P. Optional Forms

In lieu of electing the Normal Form of benefit, the optional forms of benefits available to all retirees are a Life Annuity, or the 50%, 66 2/3%, 75% or 100% Joint and Survivor options. A Social Security option is also available for members retiring prior to the time they are eligible for Social Security retirement benefits.

Q. Vested Termination

Eligibility: **For members hired prior to January 1, 2013**

A participant has earned a non-forfeitable right to Plan benefits after the completion of 5 or more years of Credited Service.

For members hired on or after January 1, 2013

A participant has earned a non-forfeitable right to Plan benefits after the completion of 10 or more years of Credited Service

Benefit: The benefit is the member's vested portion of the accrued Normal Retirement Benefit as of the date of termination. Benefit begins on the Normal Retirement date.

Normal Form of Benefit: 10 year certain and life thereafter; other options are also available.

Member's terminating employment with less than 5 years of Credited Service will receive a refund of their own accumulated contributions.

R. Refunds

Eligibility: All non-vested members are eligible. Optionally, vested participants may also withdraw their contributions in lieu of the deferred benefits otherwise due. Vested members may delay withdrawal of funds for up to five years.

Benefit: The member who terminates employment receives a lump-sum payment of their employee contributions with interest.

S. Member Contributions

8.0%

T. Premium Tax Monies

A distribution of casualty insurance premium tax monies collected by the State pursuant to Chapter 185 Florida Statutes.

U. Employer Contributions

The amount determined by the actuary to pay the normal cost and an amortization of the unfunded actuarial accrued liabilities, along with employee contributions and Chapter 185 monies. Following are assumed contribution rates per recent valuations:

Contribution Year Beginning	City	State Sec 185	Member	Total
10/1/2009	21.07%	5.55%	4.815%	31.44%
10/1/2010	21.66%	4.83%	4.815%	31.31%
10/1/2011	31.07%	5.11%	4.815%	41.00%
10/1/2012	30.13%	5.21%	5.111%	40.45%
10/1/2013	34.42%	5.57%	7.000%	46.99%
10/1/2014	39.43%	6.67%	8.000%	54.10%
10/1/2015	52.60%	7.54%	8.000%	68.14%
10/1/2016	56.08%	8.61%	8.000%	72.69%
10/1/2017	38.04%	14.08%	8.000%	60.12%
10/1/2018	42.38%	7.41%	8.000%	57.79%
10/1/2019	24.39%	16.11%	8.000%	48.50%
10/1/2020	21.35%	14.72%	8.000%	44.07%
10/1/2021	22.69%	6.99%	8.000%	37.68%

V. Cost of Living Increases

The plan does not provide for automatic post-retirement cost of living adjustments (COLA) of retiree benefits.

W. Changes from Previous Valuation

See the Discussion of Valuation Results Section of this report under the Revisions in Benefits heading.

X. Gain-sharing benefits

Not applicable.

Y. Deferred Retirement Option Plan

Eligibility:	Upon obtaining Normal or Early Retirement eligibility. All members must make a written election to participate in the DROP.
Benefit:	The member's Credited Service and FAC are frozen upon entry into the DROP. The monthly retirement benefit as described under Normal Retirement is calculated based upon the frozen Credited Service and FAC. Benefits for members entering the DROP upon Early Retirement eligibility will be actuarially reduced as described for Early Retirement.
Maximum DROP Period:	60 months
Interest Credited:	Participants' DROP account balances will be credited in accordance with the self-directed options selected by the participant who entered the program prior to July 1, 2013. For all other participants, DROP account balances will be credited or debited quarterly with interest based on Plan's net investment earnings or losses for that quarter.
Normal Form of Benefit:	Lump Sum or roll-over to a qualified retirement account.

SECTION F

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

COMPARATIVE SUMMARY OF PRINCIPLE VALUATION RESULTS	October 1, 2020 *After Changes*	October 1, 2020 *Before Changes*	October 1, 2019
A. Participant Data			
Number Included:			
Actives	24	24	26
Service Retirees & Beneficiaries	18	18	19
Disability Retirees	4	4	4
Terminated Vested Members	3	3	3
Total Members and Beneficiaries	49	49	52
Total Annual Payroll	$1,853,832	$1,853,832	$1,760,247
Expected Annual Payroll in Contribution Year	1,952,005	1,952,005	1,853,464
Total Annualized Benefits			
Service Retirees & Beneficiaries	595,460	595,460	639,632
Disability Retirees	74,159	74,159	74,159
Terminated Vested Members	47,725	47,725	47,725
B. Assets (Market Value)*			
Cash and Short Term Investments	703,916	703,916	600,315
Treasury and Agency Bonds & Notes	1,125,968	1,125,968	1,140,552
Corporate Bonds	1,256,494	1,256,494	1,126,795
Common & Preferred Stocks	5,277,956	5,277,956	4,230,292
Mutual Fund Bonds	2,707,537	2,707,537	3,316,567
Mutual Fund Stocks	1,897,151	1,897,151	1,749,202
Other Securities	175,616	175,616	173,030
Net Receivables & Payables	8,548	8,548	12,838
Total	13,153,186	13,153,186	12,349,591
Actuarial Value	13,582,560	13,582,560	12,538,670
Assets include:			
Accumulated active member contributions (with interest if applicable)	1,030,020	1,030,020	901,960
C. Actuarial present value of accrued benefits			
(i) Vested accrued benefits			
Retired members and beneficiaries	6,941,939	7,229,078	7,830,996
Terminated members	298,221	305,008	284,237
DROP Balances*	175,616	175,616	173,030
Excess Premium Tax Liability*	0	0	0
Active members (includes non-forfeitable members contributions of 1,030,020 and 901,960)	6,089,072	6,195,052	5,387,810
Total	13,504,848	13,904,754	13,676,073
(ii) Non-vested accrued benefits	36,070	37,343	20,094
(iii) Total actuarial p.v. of accrued benefits	13,540,918	13,942,097	13,696,167
(iv) Actuarial p.v. of accrued benefits at begin. of year	13,696,167	13,696,167	13,430,246
(v) Changes attributable to:			
Amendments	none	none	none
Assumption change	(401,179)	none	0
Operation of decrements	961,806	961,806	1,409,698
Benefit payments	(715,876)	(715,876)	(1,143,777)
Other (Method Change)	0	0	0
(vi) Net change	(155,249)	245,930	265,921
(vii) Actuarial p.v. of accr. benefits at end of year	13,540,918	13,942,097	13,696,167

** DROP balances and Excess Premium Tax Liability are included.*

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS	October 1, 2020 *After Changes*	October 1, 2020 *Before Changes*	October 1, 2019
D. Liabilities- Actuarial Present Value of Future Benefits			
1. Active Members			
Service Retirement Benefits	$9,641,742	$9,786,178	$8,637,570
Vesting Benefits	599,212	607,038	637,121
Disability Benefits	212,455	210,368	205,184
Preretirement Death Benefits	63,890	92,047	87,024
Return of Member Contributions	68,267	69,533	83,031
Total Actives	10,585,566	10,765,164	9,649,930
2. Inactive Members			
Service Retirees & Beneficiaries	6,153,797	6,430,078	7,020,577
Disability Retirees	788,142	799,000	810,419
Terminated Vested Members	298,221	305,008	284,237
Total Inactive Members	7,240,160	7,534,086	8,115,233
3. DROP Balances	175,616	175,616	173,030
4. Excess Premium Tax Liability	0	0	0
5. Total Present Value for All Members	18,001,342	18,474,866	17,938,193
Total Present Value of:			
Future Salaries	12,379,155	12,355,407	12,678,192
Future Employee Contributions	990,332	988,433	1,014,255
Future Contributions from Other Sources	3,428,450	3,903,873	4,385,268
Derivation of Current Employer Unfunded Actuarial Accrued Liability (UAAL)			
a. Total UAAL for Prior Valuation Date	$2,867,716	$2,867,716	$3,220,752
b. Employer Normal Cost for this period	268,045	268,045	233,115
c. Interest acccrued on (a) and (b)	211,664	211,664	233,136
d. Contributions for this period	877,866	877,866	826,705
e. Interest accrued on (d)	29,628	29,628	27,901
f. Accumulated Excess Premium Tax Reserve Use	0	0	0
g. Changes due to:			
Assumptions	(442,542)	0	0
Plan Amendment	0	0	0
Cost Method (Asset Method)	0	0	0
Actuarial (Gain) Loss	(44,747)	(44,747)	35,319
h. Total Current UAAL: a+b+c-d-e-f+g	1,952,642	2,395,184	2,867,716

Original and Current Unfunded Actuarial Accrued Liabilities					
Date	Item Description	Years Remaining	Amortization Payment	Original Amount	Current Unfunded
9/30/2006	Experience Gain	1	(5,164)	(411,559)	(5,164)
9/30/2007	Experience Loss	2	6,109	137,906	11,902
9/30/2008	Experience Loss	3	17,907	308,022	50,997
9/30/2009	Experience Loss	4	20,193	323,582	74,729
9/30/2010	Experience Gain	5	(10,157)	(154,731)	(45,806)
9/30/2011	Experience Loss	6	29,919	451,201	157,884
9/30/2012	Experience Loss	7	2,252	32,697	13,524
9/30/2013	Experience Gain	8	(8,002)	(115,061)	(53,570)
9/30/2014	Experience Gain	9	(6,764)	(95,416)	(49,710)
9/30/2015	Experience Loss	10	10,952	154,573	87,289
9/30/2016	Experience Loss	11	26,593	366,146	227,597
10/1/2017	Experience Gain	12	(8,105)	(106,084)	(73,888)
10/1/2018	Experience Gain	13	(31,301)	(380,936)	(301,932)
10/1/2019	Experience Loss	14	3,070	35,319	31,158
10/1/2020	Experience Gain	15	(4,212)	(44,747)	(44,747)
9/30/1993	Benefit Changes	3	33,693	442,232	95,952
9/30/1994	Benefit Changes	4	(1,076)	(12,597)	(3,982)
9/30/1996	Benefit Changes	6	3,312	35,914	17,478
9/30/1997	Benefit Changes	7	824	8,892	4,947
9/30/2001	Benefit Changes	11	7,071	81,627	60,516
9/30/2003	Benefit Changes	13	11,091	144,006	106,988
9/30/2007	Benefit Changes	17	(3,493)	(49,157)	(40,187)
9/30/2012	Benefit Changes	22	(2,368)	(40,750)	(31,586)
9/30/1995	Assumption/Method Change	5	29,176	323,633	131,579
9/30/1997	Assumption/Method Change	7	21,476	231,795	128,954
9/30/2009	Assumption/Method Change	19	2,611	40,694	32,106
9/30/2010	Assumption/Method Change	20	38,808	630,507	491,357
9/30/2014	Assumption/Method Change	24	69,454	1,234,336	968,417
9/30/2016	Assumption/Method Change	26	(1,820)	(32,567)	(26,371)
10/1/2017	Assumption/Method Change	27	25,693	451,119	378,753
10/1/2020	Assumption/Method Change	30	(28,695)	(442,542)	(442,542)
TOTAL			**$249,047**	**$3,548,053**	**$1,952,642**

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS	October 1, 2020 *After Changes*	October 1, 2020 *Before Changes*	October 1, 2019
E. Pension Cost			
Entry Age Normal Cost for:			
Service Retirement Benefits	$295,543	$299,206	$277,697
Vesting Benefits	52,866	53,497	50,269
Disability Benefits	18,599	18,329	16,812
Preretirement Death Benefits	3,587	4,991	4,677
Return of Member Contributions	20,687	20,794	19,634
Total Actives	391,282	396,817	369,089
Administrative Expenses	31,418	31,418	38,763
Expected Member Contributions (Assuming employee contrib rate applicable to the contrib year)	148,265	148,235	139,807
Total Employer Normal Cost	274,435	280,000	268,045
Payment Required to Amortize Unfunded Actuarial Accrued Liability	249,047	277,742	336,095
Total Contribution at Valuation Date	523,482	557,742	604,140
Total Contribution Adjusted for Frequency of Payments and Interest to Next Following Fiscal Year	579,249	617,158	668,499
% of Expected Payroll	29.68%	31.62%	36.07%
Amount Expected to be Contributed by Members	156,160	156,160	148,277
% of Expected Payroll	8.000%	8.000%	8.000%

F. Past Contributions- For the Fiscal Years Ended September 30 of 2019 and 2020:		
Required Contribution Determined in the Valuation as of	October 1, 2018	October 1, 2017
For the Year Ending:	September 30, 2020	September 30, 2019
by the Plan Sponsor (Including Expected Premium Tax Revenues)	$668,090	$826,705
by the Plan Sponsor (Excluding Expected Premium Tax Revenues)	$402,402	$713,002
Expected Premium Tax Revenues	$265,688	$113,703
by Members	$131,954	$132,834
Actual Contribution for the Fiscal Year ended	September 30, 2020	September 30, 2019
by the Plan Sponsor	$745,022	$826,705
Premium Tax Revenues	$132,844	$0
by Members	$161,166	$142,024
G. Net experience (gain) loss during year:	($44,747)	$35,319

H. 1. Plan to Amortize Unfunded Actuarial Accrued Liability

20 year funding of the Original Unfunded Actuarial Accrued Liability, 15 year funding of any Gains or Losses and 30 year of adjustments due to benefit or assumption changes.

2. Schedule Illustrating the Amortization of the Unfunded Actuarial Accrued Liability (UAAL)

Year	Projected UAAL
2020	$1,952,642
2021	$1,818,572
2022	1,666,590
2023	1,507,627
2024	1,391,726
2025	1,286,740
2030	967,760
2035	707,239
2040	215,472
2045	0
2050	0

3. Action taken since last actuarial valuation.

Contribution sufficient to satisfy the total required contribution.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

I. 1. Three-Year Comparison of Actual and Assumed Salary Increases (Annualized)

Year Ended	Actual	Assumed
9/30/2018	(0.2)%	6.7%
9/30/2019	7.4 %	6.7%
9/30/2020	12.8 %	6.1%

2. Three-Year Comparison of Investment Return (Actuarial Value)

Year Ended	Actual	Assumed
9/30/2018	7.0%	6.75%
9/30/2019	7.3%	6.75%
9/30/2020	5.9%	6.75%

3. Average Annual Growth in Covered Payroll, Last Ten Years (if applicable)

Valuation Date	Total Covered Payroll
9/30/2010	1,639,155
9/30/2011	1,605,814
9/30/2012	1,548,109
9/30/2013	1,360,245
9/30/2014	1,294,600
9/30/2015	1,246,622
9/30/2016	1,533,818
10/1/2017	1,576,914
10/1/2018	1,566,471
10/1/2019	1,760,247
10/1/2020	1,853,832
Total % Increase Last Ten Years	13.10 %
Annual % Increase	1.24 %
Thirty-year Forecast	3.50 %

J. Benefits and Expenses of Plan not Explicitly or Implicitly Provided in Valuation

NONE

K. Trends not taken into Account but which are likely to Result in Future Cost Increases

NONE