

# MIAMI SPRINGS GENERAL EMPLOYEES RETIREMENT SYSTEM

ANNUAL ACTUARIAL VALUATION AS OF OCTOBER 1, 2020

ANNUAL EMPLOYER CONTRIBUTION FOR THE FISCAL YEAR  
ENDING SEPTEMBER 30, 2022







April 29, 2021

Board of Trustees  
City of Miami Springs General  
Employees Retirement System  
Miami Springs, Florida

**Re: City of Miami Springs General Employees 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 Miami Springs General Employees 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, to determine the employer contribution rate for the fiscal year ending September 30, 2022, and to report the actuarial information for Governmental Accounting Standards Board (GASB) Statement No. 67 for the fiscal year ending September 30, 2020. This report also includes estimated GASB Statement No. 67 information for the fiscal year ending September 30, 2021. 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 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 Miami Springs General Employees 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.

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.

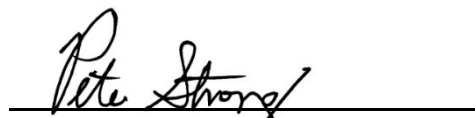
Peter N. Strong and Nicolas Lahaye are members of the American Academy of Actuaries. These actuaries meet the Academy's Qualification Standards to render the actuarial opinions contained herein. The signing actuaries are independent of the plan sponsor.

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



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Enrolled Actuary No. 20-6975



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## **SECTION A**

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### **DISCUSSION OF VALUATION RESULTS**

## DISCUSSION OF VALUATION RESULTS

### Comparison of Required Employer Contributions

The required employer contribution developed in this year's valuation is compared below to last year's results.

	For FYE 9/30/2022 Based on 10/1/2020 Valuation	For FYE 9/30/2021 Based on 10/1/2019 Valuation	Increase (Decrease)
Required Employer Contribution Before Threshold is Applied, assuming equal installments throughout the year As % of Covered Payroll	\$ 515,454 13.35 %	\$ 612,813 16.27 %	\$ (97,359) (2.92) %
Required Employer Contribution After Threshold is Applied, assuming equal installments throughout the year As % of Covered Payroll	\$ 450,974 11.68 %	\$ 494,921 13.14 %	\$ (43,947) (1.46) %
Required Employer Contribution After Threshold is Applied, assuming full payment on October 1st As % of Covered Payroll	\$ 435,789 11.29 %	\$ 478,209 12.70 %	\$ (42,420) (1.41) %
As % of Total Payroll including DROP participants	10.93 %	11.80 %	(0.87) %
Member Contribution Rate	6.67 %	8.13 %	(1.46) %

The required contribution of \$435,789 has been calculated under the assumption that full payment will be made on October 1, 2021. The actual employer contribution for the year ending September 30, 2020 was \$472,860. The required contribution reflecting actual payment timing was \$472,860.

### Revision in Benefits

There have been no revisions in benefits since the last valuation.

### 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, which were used in the July 1, 2019 and July 1, 2020 FRS Actuarial Valuations.





The assumption change described above decreased the total required contribution by \$42,858, or 1.11% of covered payroll, assuming beginning of year payment timing and prior to applying the threshold.

### Actuarial Experience

There was a net actuarial gain of \$588,213 for the year which means that actual experience was more favorable than expected. The gain is primarily due to a recognized investment return (on the actuarial value of assets) above the assumed rate of 7.00%. The actual investment return was 9.7% based on the actuarial value of assets and 10.7% based on the market value of assets. Demographic experience also resulted in an actuarial gain due to fewer retirements than expected (1 actual versus 3 expected) and more employment terminations than expected (12 actual versus 9 expected).

The actuarial experience gain caused a decrease in the total required contribution of \$53,669, or 1.39% of covered payroll, assuming beginning of year payment timing and prior to applying the threshold.

### 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 97.1% this year compared to 92.0% last year. The funded ratio would have been 95.2% prior to recognizing the assumption change.

### Analysis of Change in Employer Contribution

The components of change in the required contribution as a percent of payroll are as follows:

Contribution Rate Last Year*	15.72 %
Experience (Gains) or Losses	(1.39)
Revision in Assumptions/Methods	(1.11)
Amortization Payment on UAAL	(0.16)
Normal Cost Rate	0.00
Administrative Expense	<u>(0.16)</u>
Contribution Rate This Year*	12.90

\*Before threshold is applied, assuming full payment on October 1st.

### Variability of Future Contribution Rates

The Actuarial Cost Method used to determine the contribution rate is intended to produce contribution rates which are generally level as a percent of payroll. Even so, when experience differs from the assumptions, as it often does, the employer's contribution rate can vary significantly from year-to-year. Over time, if the year-to-year gains and losses offset each other, the contribution rate would be expected to return to the current level, but this does not always happen.

The Market Value of Assets exceeds the Actuarial Value of Assets by \$978,223 as of the valuation date (see Section C). This difference will be gradually recognized over the next five years. In turn, the computed employer contribution rate will decrease by approximately 1.63% of covered payroll (as of the beginning of the contribution year and before the threshold is applied) over the same period in the absence of offsetting losses.



## **Relationship to Market Value**

If we were not using an asset smoothing method, the City contribution rate would have been 11.27% (as of the beginning of the contribution year and before the threshold is applied) and the funded ratio would have been 101.8%. The market value-based funded ratio was 95.4% last year. In the absence of other gains and losses or assumption changes, the City contribution rate would be expected to decrease to approximately that level over the next five years.

## **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 rate shown on page 1 may be considered as a minimum contribution rate 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:

	<u>2020</u>	<u>2019</u>
Ratio of the market value of assets to total payroll	5.8	5.5
Ratio of actuarial accrued liability to payroll	5.7	5.8
Ratio of actives to retirees and beneficiaries	0.9	0.9
Ratio of net cash flow to market value of assets (Net of DROP)	-3.3%	-3.3%
Duration of the actuarial accrued liability	11.1	11.2

### 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**

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**VALUATION RESULTS**

<b>PARTICIPANT DATA</b>		
	October 1, 2020	October 1, 2019
<b>ACTIVE MEMBERS</b>		
Number	77	79
Covered Annual Payroll	\$ 3,730,509	\$ 3,639,150
Average Annual Payroll	\$ 48,448	\$ 46,065
Average Age	41.7	40.3
Average Past Service	7.2	6.7
Average Age at Hire	34.5	33.6
<b>RETIRES, BENEFICIARIES &amp; DROP</b>		
Number	84 *	85
Annual Benefits	\$ 1,298,325	\$ 1,368,034
Average Annual Benefit	\$ 15,456	\$ 16,095
Average Age	72.9	72.6
<b>DISABILITY RETIREES</b>		
Number	2	2
Annual Benefits	\$ 30,030	\$ 30,030
Average Annual Benefit	\$ 15,015	\$ 15,015
Average Age	68.7	67.7
<b>TERMINATED VESTED MEMBERS</b>		
Number	7	6
Annual Benefits	\$ 70,481	\$ 54,094
Average Annual Benefit	\$ 10,069	\$ 9,016
Average Age	52.5	52.6

\*The count includes 1 beneficiary who is only due a refund of employee contributions.

**ACTUARIALLY DETERMINED (REQUIRED) CONTRIBUTION (ADC)**

	October 1, 2020 <i>Assuming City Contribution made October 1st</i>	October 1, 2020 <i>After Changes</i>	October 1, 2020 <i>Before Changes</i>	October 1, 2019 <i>Assuming City Contribution made October 1st</i>
A. Valuation Date	October 1, 2020	October 1, 2020	October 1, 2020	October 1, 2019
B. ADC to Be Paid During Fiscal Year Ending	9/30/2022	9/30/2022	9/30/2022	9/30/2021
C. Assumed Dates of Employer Contributions	10/1/2021	Evenly	Evenly	10/1/2020
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 60,822	\$ 60,822	\$ 92,264	\$ 146,350
E. Employer Normal Cost	420,326	420,326	430,231	425,599
F. Employer ADC if Paid on the Valuation Date: D+E	481,148	481,148	522,495	571,949
G. Employer ADC Adjusted for Frequency of Payments	481,148	498,065	540,866	571,949
H. Employer ADC as % of Covered Payroll	12.90 %	13.35 %	14.50 %	15.72 %
I. Assumed Rate of Increase in Covered Payroll to Contribution Year	3.50 %	3.50 %	3.50 %	3.50 %
J. Covered Payroll for Contribution Year	3,861,077	3,861,077	3,861,077	3,766,520
K. Employer ADC for Contribution Year Before Threshold: H x J	498,079	515,454	559,856	592,097
L. Employer ADC as % of Covered Payroll in Contribution Year Before 10% Threshold: K ÷ J	12.90 %	13.35 %	14.50 %	15.72 %
M. Employer ADC after Threshold	435,789	450,974	472,982	478,209
N. Employer ADC as % of Covered Payroll after Threshold: M ÷ J	11.29 %	11.68 %	12.25 %	12.70 %
O. Member Contribution Rate	6.67 %*	6.67 %	7.25 %	8.13 %*

\* Member Contributions are still assumed to be made evenly throughout the year.





**ACTUARIAL VALUE OF BENEFITS AND ASSETS**

A. Valuation Date	October 1, 2020 <i>After Changes</i>	October 1, 2020 <i>Before Changes</i>	October 1, 2019
B. Actuarial Present Value of All Projected Benefits for			
1. Active Members			
a. Service Retirement Benefits	\$ 9,552,291	\$ 9,733,709	\$ 9,021,817
b. Vesting Benefits	1,542,080	1,574,495	1,553,185
c. Disability Benefits	89,034	86,639	83,183
d. Preretirement Death Benefits	147,074	189,493	178,387
e. Return of Member Contributions	90,746	93,159	115,674
f. Total	11,421,225	11,677,495	10,952,246
2. Inactive Members			
a. Service Retirees & Beneficiaries	12,938,604	13,163,848	13,507,605
b. Disability Retirees	259,658	257,651	261,931
c. Terminated Vested Members	583,403	596,885	444,025
d. Total	13,781,665	14,018,384	14,213,561
3. Total for All Members	25,202,890	25,695,879	25,165,807
C. Actuarial Accrued (Past Service) Liability	21,077,859	21,495,331	20,999,722
D. Actuarial Value of Accumulated Plan Benefits per FASB No. 35	19,008,081	19,374,250	18,993,752
E. Plan Assets			
1. Market Value	21,451,799	21,451,799	20,028,267
2. Actuarial Value	20,473,576	20,473,576	19,327,362
F. Unfunded Actuarial Accrued Liability: (C - E2)	604,283	1,021,755	1,672,360
G. Actuarial Present Value of Projected Covered Payroll	29,471,278	29,427,029	29,230,953
H. Actuarial Present Value of Projected Member Contributions	1,473,564	1,471,351	1,461,548
I. Accumulated Value of Active Member Contributions	1,902,816	1,902,816	1,729,118



**CALCULATION OF EMPLOYER NORMAL COST**

A. Valuation Date	October 1, 2020 <i>After Changes</i>	October 1, 2020 <i>Before Changes</i>	October 1, 2019
B. Normal Cost for			
1. Service Retirement Benefits	\$ 381,177	\$ 386,897	\$ 376,588
2. Vesting Benefits	107,338	109,399	107,981
3. Disability Benefits	4,546	4,418	4,291
4. Preretirement Death Benefits	7,105	9,165	8,869
5. Return of Member Contributions	<u>20,550</u>	<u>20,742</u>	<u>20,094</u>
6. Total for Future Benefits	520,716	530,621	517,823
7. Assumed Amount for Administrative Expenses	<u>86,135</u>	<u>86,135</u>	<u>89,733</u>
8. Total Normal Cost	606,851	616,756	607,556
C. Expected Member Contribution	186,525	186,525	181,957
D. Employer Normal Cost: B8-C	420,326	430,231	425,599
E. Employer Normal Cost as % of Covered Payroll	11.27 %	11.53 %	11.70 %



## LIQUIDATION OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

UAAL Amortization Period and Payments						
Original UAAL				Current UAAL		
FYE	Source	Amortization Period (Years)	Amount	Years Remaining	Amount	Payment
10/1/2009	Initial Unfunded	30	\$ (27,259)	19	\$ 126,532	\$ 11,441
10/1/2010	(Gain)/Loss	20	117,494	10	97,077	12,917
10/1/2010	Assumption Change	30	140,520	20	144,840	12,777
10/1/2011	(Gain)/Loss	20	327,186	11	241,560	30,106
10/1/2011	Assumption Change	30	147,089	21	132,981	11,470
10/1/2012	(Gain)/Loss	20	377,521	12	293,339	34,516
10/1/2012	Assumption Change	30	152,846	22	140,375	11,860
10/1/2013	(Gain)/Loss	20	203,827	13	159,600	17,847
10/1/2013	Assumption Change	30	156,294	23	140,967	11,688
10/1/2014	(Gain)/Loss	20	(279,983)	14	(230,616)	(24,645)
10/1/2015	(Gain)/Loss	20	(12,884)	15	(11,377)	(1,167)
10/1/2016	(Gain)/Loss	20	(16,073)	16	(14,692)	(1,454)
10/1/2016	Assumption Change	30	326,373	26	317,703	25,108
10/1/2017	(Gain)/Loss	20	(257,623)	17	(236,655)	(22,654)
10/1/2017	Assumption Change	30	480,156	27	462,664	36,073
10/1/2018	(Gain)/Loss	20	(568,425)	18	(536,271)	(49,824)
10/1/2018	Assumption Change	30	493,160	28	479,854	36,950
10/1/2019	(Gain)/Loss	20	(101,798)	19	(97,913)	(8,854)
10/1/2020	(Gain)/Loss	20	(588,213)	20	(588,213)	(51,891)
10/1/2020	Assumption Change	30	(417,472)	30	(417,472)	(31,442)
			\$ 652,736		\$ 604,283	\$ 60,822

### Amortization Schedule

The UAAL is being liquidated as a level dollar amount over the number of years remaining in the amortization period. The following schedule illustrates the expected amortization of the UAAL:

Amortization Schedule	
Year	Expected UAAL
2020	\$ 604,283
2021	581,503
2022	557,129
2023	531,049
2024	503,143
2025	473,285
2030	289,549
2035	386,247
2040	403,091
2045	60,696
2050	0



## 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:

<b>Derivation of the Current UAAL</b>	
1. Last Year's UAAL	\$ 1,672,360
2. Last Year's Employer Normal Cost*	305,143
3. Last Year's Contributions	472,860
4. Interest at the Assumed Rate on:	
a. 1 and 2 for one year	138,425
b. 3 from dates paid	33,100
c. a - b	105,325
5. This Year's Expected UAAL: 1 + 2 - 3 + 4c	1,609,968
6. This Year's Actual UAAL (Before any changes in benefits and/or assumptions)	1,021,755
7. Net Actuarial Gain (Loss): (5) - (6)	588,213
8. Gain (Loss) due to investments	520,649
9. Gain (Loss) due to other sources	67,564
10. Change in UAAL due to assumption change	(417,472)
11. This Year's Actual UAAL (After assumption change)	604,283

\*Reflecting 8.31% employee contribution rate for fiscal year beginning October 1, 2019.



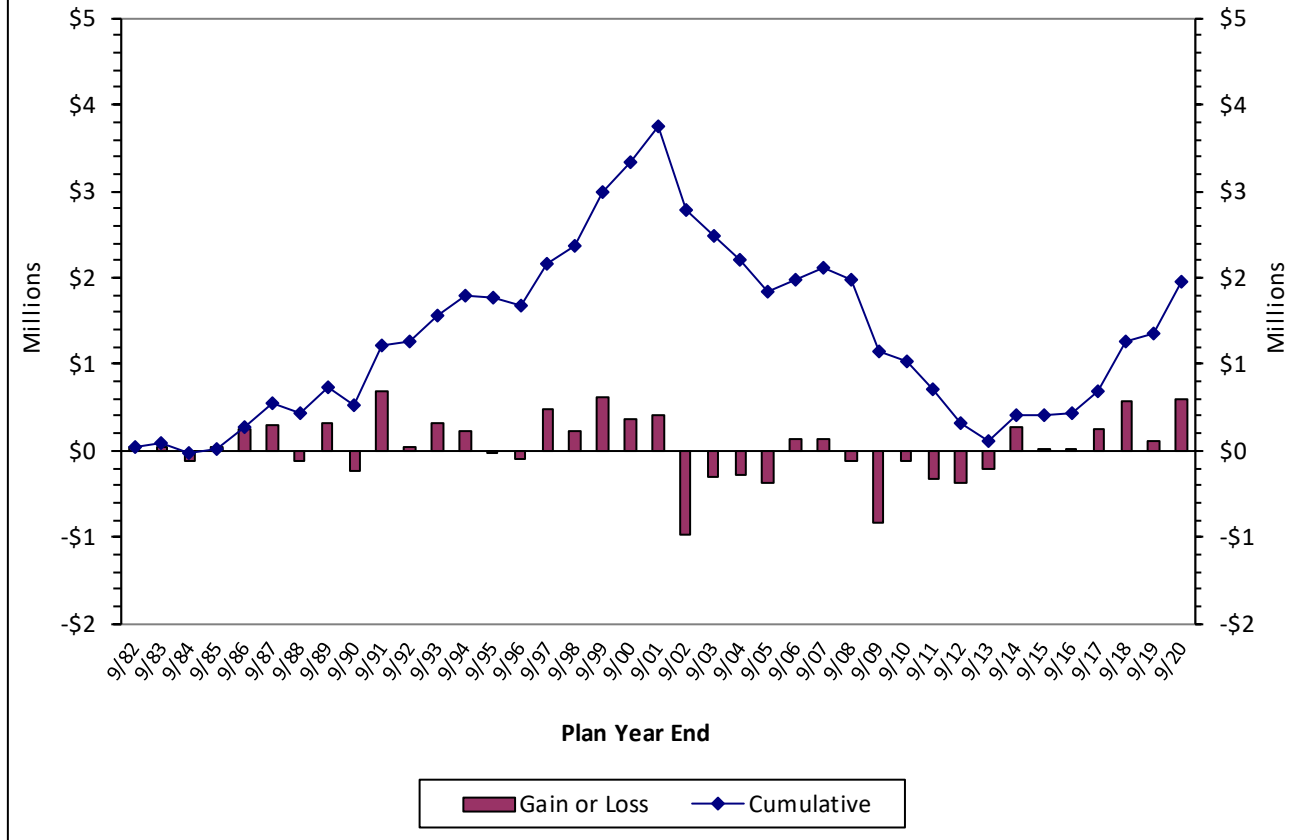
Net actuarial gains in previous years have been as follows:

Year Ended 9/30	Net Gain (Loss)		
	Program A	Program B	Total
1982	\$ (2,335)	\$ 44,869	\$ 42,534
1983	46,535	581	47,116
1984	(58,275)	(57,793)	(116,068)
1985	(10,290)	56,699	46,409
1986	82,066	164,139	246,205
1987	119,175	170,784	289,959
1988	(17,814)	(110,004)	(127,818)
1989	---	---	315,845
1990	---	---	(226,101)
1991	---	---	697,646
1992	---	---	41,913
1993	---	---	314,306
1994	---	---	229,013
1995	---	---	(23,052)
1996	---	---	(94,520)
1997	---	---	470,551
1998	---	---	216,517
1999	---	---	612,683
2000	---	---	360,328
2001	---	---	412,403
2002	---	---	(973,805)
2003	---	---	(306,284)
2004	---	---	(276,317)
2005	---	---	(368,464)
2006	---	---	141,707
2007	---	---	136,442
2008	---	---	(127,451)
2009	---	---	(834,865)
2010	---	---	(117,494)
2011	---	---	(327,186)
2012	---	---	(377,521)
2013	---	---	(203,827)
2014	---	---	279,983
2015	---	---	12,884
2016	---	---	16,073
2017	---	---	257,623
2018	---	---	568,425
2019	---	---	101,798
2020	---	---	588,213

Note: After 1988, Programs A and B combined.



### Actuarial Gain (+) or Loss (-)



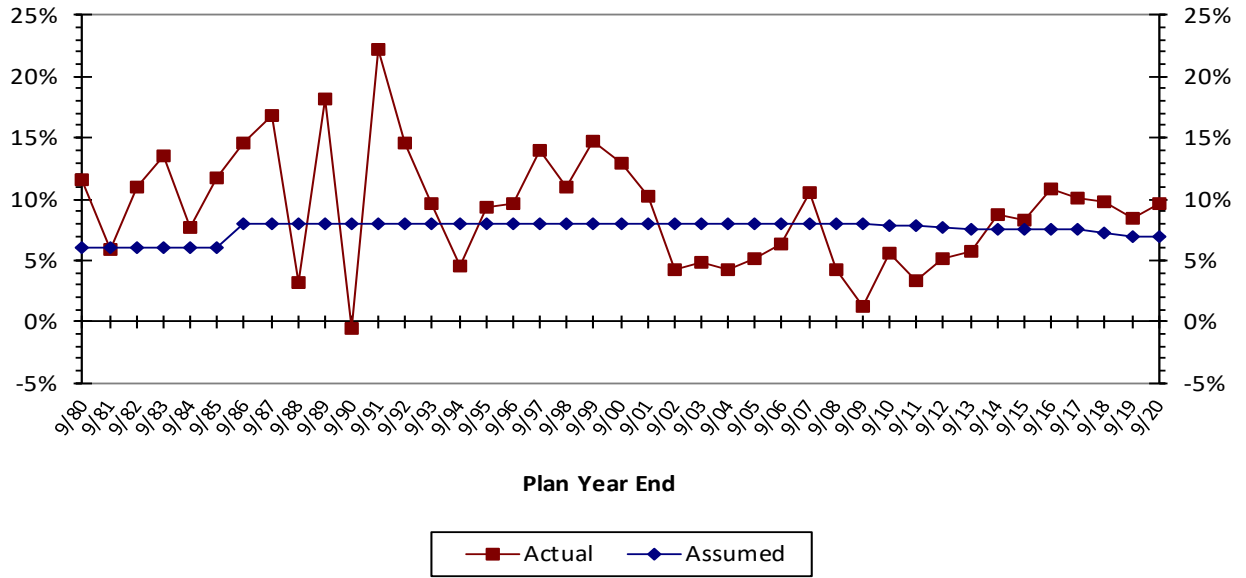
The fund earnings and salary increase assumptions have considerable impact on the cost of the Plan so it is important that they are in line with the actual experience. The following table shows the actual fund earnings and salary increase rates compared to the assumed rates for the last few years:

Year Ending	Investment Return		Salary Increases	
	Actual	Assumed	Actual	Assumed
9/30/1980	11.6 %	6.0 %	9.9 %	6.0 %
9/30/1981	5.9	6.0	7.1	6.0
9/30/1982	11.0	6.0	7.7	6.0
9/30/1983	13.6	6.0	6.3	6.0
9/30/1984	7.7	6.0	12.4	6.0
9/30/1985	11.8	6.0	13.9	6.0
9/30/1986	14.5	8.0	5.0	8.0
9/30/1987	16.8	8.0	6.7	8.0
9/30/1988	3.2	8.0	6.2	8.0
9/30/1989	18.2	8.0	10.6	8.0
9/30/1990	(0.5)	8.0	5.1	8.0
9/30/1991	22.2	8.0	(2.4)	8.0
9/30/1992	14.6	8.0	11.5	8.0
9/30/1993	9.6	8.0	0.5	8.0
9/30/1994	4.6	8.0	4.0	8.0
9/30/1995	9.4	8.0	5.0	8.0
9/30/1996	9.6	8.0	6.7	7.0
9/30/1997	13.9	8.0	4.7	7.0
9/30/1998	11.0	8.0	6.8	7.0
9/30/1999	14.7	8.0	4.9	7.0
9/30/2000	12.9	8.0	4.9	6.0
9/30/2001	10.2	8.0	5.2	6.0
9/30/2002	4.3	8.0	5.9	6.0
9/30/2003	4.8	8.0	3.7	6.0
9/30/2004	4.2	8.0	6.6	6.0
9/30/2005	5.2	8.0	9.2	6.0
9/30/2006	6.3	8.0	3.2	6.0
9/30/2007	10.6	8.0	7.5	6.0
9/30/2008	4.2	8.0	5.9	6.0
9/30/2009	1.3	8.0	4.6	6.0
9/30/2010	5.6	7.9	1.7	6.6
9/30/2011	3.3	7.8	3.3	6.7
9/30/2012	5.1	7.7	(1.2)	6.9
9/30/2013	5.8	7.6	0.5	6.7
9/30/2014	8.8	7.5	3.4	6.8
9/30/2015	8.4	7.5	2.9	6.8
9/30/2016	10.8	7.5	9.6	6.8
9/30/2017	10.1	7.5	3.9	6.8
9/30/2018	9.9	7.25	5.7	5.4
9/30/2019	8.5	7.0	4.1	5.5
9/30/2020	9.7	7.0	7.0	5.5
Averages	9.0 %	---	5.6 %	---

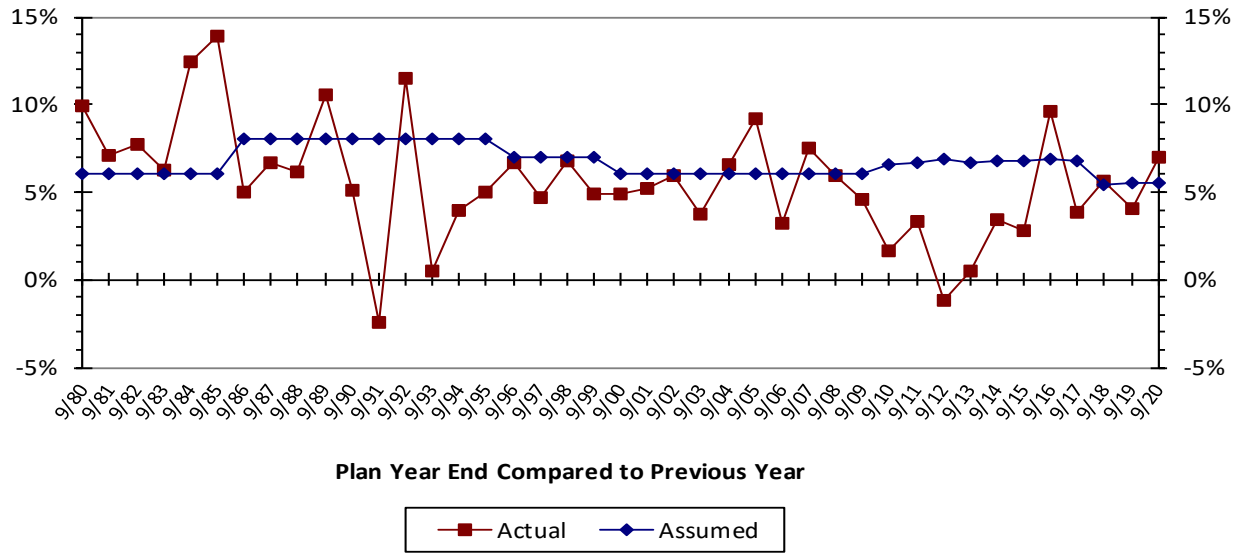
The actual investment return rates shown above are based on the actuarial value of assets. The actual salary increase rates shown above are the increases received by those active members who were included in the actuarial valuations both at the beginning and the end of each year.



### History of Investment Returns Based on Actuarial Value of Assets



### History of Salary Increases





**Actual (A) Compared to Expected (E) Decrements  
Among Active Employees**

Year Ended	Number Added During Year		Service & DROP Retirement		Disability Retirement		Death		Terminations				Active Members End of Year
	A	E	A	E	A	E	A	E	Vested	Other	Totals		
									A	A	A	E	
9/30/2002	17	16	8	12	0	0	0	0	3	5	8	4	<b>88</b>
9/30/2003	9	7	0	9	0	0	1	0	4	2	6	4	<b>90</b>
9/30/2004	10	17	3	10	0	0	0	0	2	12	14	4	<b>83</b>
9/30/2005	12	17	6	7	0	1	0	1	3	8	11	3	<b>78</b>
9/30/2006	19	15	3	7	0	0	0	0	0	12	12	3	<b>82</b>
9/30/2007	6	8	0	7	0	0	0	0	2	6	8	3	<b>80</b>
9/30/2008	7	12	0	10	0	0	1	0	1	10	11	3	<b>75</b>
9/30/2009	4	6	1	10	0	0	0	0	1	4	5	3	<b>73</b>
9/30/2010	12	6	2	8	0	0	0	0	1	3	4	5	<b>79</b>
9/30/2011	6	15	11	8	0	0	1	0	0	3	3	6	<b>70</b>
9/30/2012	4	12	5	5	0	0	0	0	2	5	7	6	<b>62</b>
9/30/2013	4	11	5	3	0	0	0	0	3	3	6	4	<b>55</b>
9/30/2014	4	9	5	4	0	0	1	0	1	2	3	4	<b>50</b>
9/30/2015	9	7	4	3	0	0	0	0	2	1	3	4	<b>52</b>
9/30/2016	28	10	3	2	1	0	0	0	1	5	6	5	<b>70</b>
9/30/2017	15	12	0	1	0	0	0	0	3	9	12	9	<b>73</b>
9/30/2018	14	11	1	1	0	0	0	0	1	9	10	10	<b>76</b>
9/30/2019	10	7	3	3	0	0	0	0	0	4	4	9	<b>79</b>
9/30/2020	11	13	1	3	0	0	0	0	1	11	12	9	<b>77</b>
9/30/2021				3		0		0				8	
19 Yr Totals *	201	211	61	113	1	1	4	1	31	114	145	98	

\* Totals are through current Plan Year only



**RECENT HISTORY OF VALUATION RESULTS**

Valuation Date	Number of		Covered Annual Payroll	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL (UAAL)	Funded Ratio	Employer Normal Cost	
	Active Members	Inactive Members						Amount	% of Payroll
10/1/91	86	33	\$ 2,162,473	\$ 4,555,581	\$ 3,460,829	\$ (1,094,752)	131.6 %	\$ 67,697	3.13 %
10/1/92	85	36	2,442,571	4,976,504	4,237,651	(738,853)	117.4	75,670	3.10
10/1/93	95	36	2,491,348	5,460,492	4,369,493	(1,090,999)	125.0	42,189	1.69
10/1/94	95	35	2,550,907	5,752,917	4,456,390	(1,296,527)	129.1	44,036	1.73
10/1/95	97	40	2,602,431	6,270,385	5,318,611	(951,774)	117.9	54,597	2.10
10/1/96	98	41	2,863,384	6,830,478	5,955,713	(874,765)	114.7	113,027	3.95
10/1/97	96	42	2,916,129	7,703,046	6,380,390	(1,322,656)	120.7	85,972	2.95
10/1/98	94	44	2,977,751	8,495,731	6,883,280	(1,612,451)	123.4	74,966	2.52
10/1/99	90	49	2,863,379	9,646,613	7,308,588	(2,338,025)	132.0	(48,901)	(1.71)
10/1/00	93	51	3,069,479	10,780,335	8,273,005	(2,507,330)	130.3	(50,445)	(1.64)
10/1/01	87	53	2,987,599	11,671,813	9,132,700	(2,539,113)	127.8	(86,060)	(2.88)
10/1/02	88	60	3,222,834	11,845,208	9,776,521	(2,068,687)	121.2	38,617	1.20
10/1/03	90	62	3,262,260	12,040,035	10,265,029	(1,775,006)	117.3	73,162	2.24
10/1/04	83	66	3,160,625	12,194,853	10,766,920	(1,427,933)	113.3	114,745	3.63
10/1/05	78	72	3,155,692	12,407,308	11,326,985	(1,080,323)	109.5	178,678	5.66
10/1/06	82	66	3,157,952	12,767,033	11,434,793	(1,332,240)	111.7	173,533	5.50
10/1/07	80	68	3,364,865	13,786,880	12,271,087	(1,515,793)	112.4	166,555	4.95
10/1/08	75	67	3,429,028	13,945,299	12,736,662	(1,208,637)	109.5	194,819	5.68
10/1/09	73	67	3,495,598	13,736,039	13,708,780	(27,259)	100.2	347,141	9.93
10/1/10	79	66	3,731,068	14,132,944	14,515,197	382,253	97.4	379,050	10.16
10/1/11	70	74	3,221,566	14,316,041	15,232,512	916,471	94.0	337,176	10.47
10/1/12	62	78	2,821,874	14,537,003	15,971,613	1,434,610	91.0	305,853	10.84
10/1/13	55	84	2,430,353	14,657,002	16,482,270	1,825,268	88.9	265,890	10.94
10/1/14	50	88	2,238,008	15,260,442	16,757,713	1,497,271	91.1	260,482	11.64
10/1/15	52	93	2,379,287	15,830,330	17,237,855	1,407,525	91.8	287,565	12.09
10/1/16	70	97	3,112,373	16,570,614	18,254,929	1,684,315	90.8	349,525	11.23
10/1/17	73	96	3,305,740	17,403,690	19,316,048	1,912,358	90.1	363,119	10.98
10/1/18	76	92	3,554,733	18,383,837	20,182,852	1,799,015	91.1	416,619	11.72
10/1/19	79	93	3,639,150	19,327,362	20,999,722	1,672,360	92.0	425,599	11.70
10/1/20	77	93	3,730,509	20,473,576	21,077,859	604,283	97.1	420,326	11.27

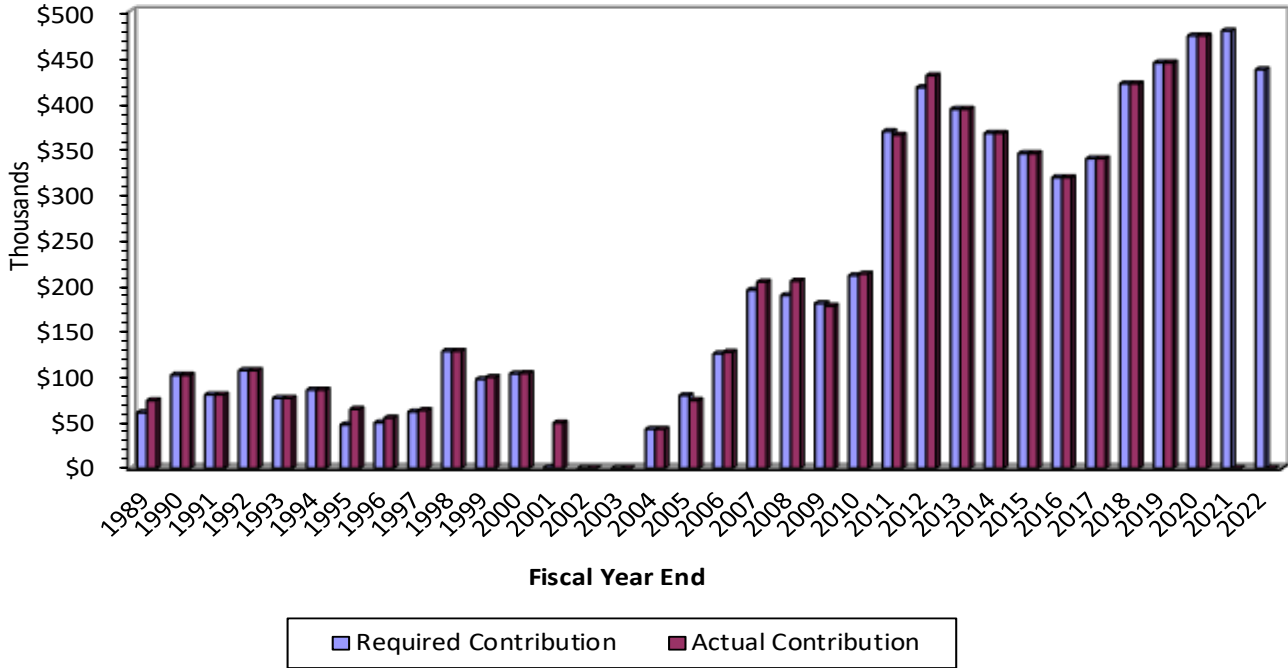


RECENT HISTORY OF REQUIRED AND ACTUAL CONTRIBUTIONS				
Valuation Date	For Fiscal Year Ended September 30	Required City Contribution*		Actual City Contribution
		Amount	% of Payroll	
10/1/87	1989	60,925	3.35	74,102
10/1/88	1990	101,962	5.32	101,962
10/1/89	1991	80,477	3.69	80,477
10/1/90	1992	107,013	4.80	107,013
10/1/91	1993	76,662	3.55	76,662
10/1/92	1994	85,691	3.51	85,691
10/1/93	1995	47,776	1.92	64,713
10/1/94	1996	49,868	1.95	55,128
10/1/95	1997	61,827	2.38	63,427
10/1/96	1998	127,995	4.47	127,995
10/1/97	1999	97,357	3.34	99,564
10/1/98	2000	103,440	3.47	103,846
10/1/99	2001	789	0.03	49,687
10/1/00	2002	0	0.00	0
10/1/01	2003	0	0.00	0
10/1/02	2004	42,827	1.36	42,827
10/1/03	2005	79,730	2.35	74,265
10/1/04	2006	125,237	3.81	126,928
10/1/05	2007	194,946	5.94	203,625
10/1/06	2008	189,174	5.76	204,774
10/1/07	2009	180,222	5.15	177,356
10/1/08	2010	210,762	5.91	212,519
10/1/09	2011	368,268	10.13	364,282
10/1/10	2012	416,357	10.73	429,403
10/1/11	2013	392,670	11.72	392,670
10/1/12	2014	366,204	12.48	366,204
10/1/13	2015	344,236	13.62	344,236
10/1/14	2016	317,957	13.66	317,957
10/1/15	2017	338,551	13.68	338,551
10/1/16	2018	420,570	12.99	420,570
10/1/17	2019	443,293	12.96	443,293
10/1/18	2020	472,860	12.85	472,860
10/1/19	2021	478,209	12.70	---
10/1/20	2022	435,789	11.29	---

\* Reflecting threshold after fiscal year ending September 30, 2010 and reflecting beginning of year expected contribution timing (October 1<sup>st</sup>) after fiscal year ending September 30, 2013.



### Recent History of Required and Actual Contributions



# ACTUARIAL ASSUMPTIONS AND COST METHOD

## Valuation Methods

**Actuarial Cost Method** - Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an **Individual Entry-Age Actuarial Cost Method** having the following characteristics:

- (i) the annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement;
- (ii) each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Actuarial gains/(losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

**Financing of Unfunded Actuarial Accrued Liabilities** - Unfunded Actuarial Accrued Liabilities (full funding credit if assets exceed liabilities) were amortized by level (principal & interest combined) dollar contributions over a reasonable period of future years.

**Actuarial Value of Assets** - The Actuarial Value of Assets phases in the difference between the actual and expected investment earnings over a period of 5 years. 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 Nine-Year Period Ending September 30, 2016, dated December 22, 2017.

## Economic Assumptions

**The investment return rate** assumed in the valuations is 7.00% per year, compounded annually (net after investment expenses).

The **Inflation Rate** assumed in this valuation was 2.5% per year. The Inflation Rate is defined to be the expected long-term rate of annual increases in the prices of goods and services.

The assumed **real rate of return** over inflation is defined to be the portion of total investment return that is more than the assumed inflation rate. Considering other economic assumptions, the 7.00% investment return rate translates to an assumed real rate of return over inflation of 4.50%.

The assumed rates of salary increase for individual active members are shown below. This assumption is used to project a member's current salary to the salaries upon which benefits will be based. Part of the assumption is for productivity, merit and/or seniority increase, and 2.5% recognizes inflation.

Years of Service	% Increase in Salary		
	Merit and Seniority	Base (Economic)	Total Increase
0 - 1	4.00%	2.50%	6.50%
2 - 3	3.75	2.50	6.25
4 - 11	3.50	2.50	6.00
12 - 15	1.75	2.50	4.25
16+	1.00	2.50	3.50

### Demographic Assumptions

The mortality tables used in the valuation 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 General Below Median Employee Female Table	Headcount Weighted General Below Median Healthy Retiree Female Table
Male	Headcount Weighted General Below Median Employee Male Table, set back 1 year	Headcount Weighted General Below Median Healthy Retiree Male Table, set back 1 year

These are the same rates as used by the Florida Retirement System (FRS) in their July 1, 2019 and July 1, 2020 Actuarial Valuation Reports for Regular (other than K-12 School Instructional Personnel) class members. Florida Statutes Chapter 112.63(1)(f) mandates the use of the mortality tables from either of the two most recently published actuarial valuation reports of FRS.

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 Regular Class Members

Sample Attained Ages (in 2020)	Probability of		Future Life	
	Dying Next Year		Expectancy (years)	
	Men	Women	Men	Women
50	0.19 %	0.58 %	33.04	36.86
55	0.97	0.58	28.67	32.42
60	1.15	0.60	24.59	27.89
65	1.29	0.69	20.55	23.32
70	1.80	1.10	16.55	18.85
75	2.88	1.90	12.85	14.66
80	4.87	3.44	9.58	10.92

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

### FRS Healthy Pre-Retirement Mortality for Regular Class Members

Sample Attained Ages (in 2020)	Probability of		Future Life	
	Dying Next Year		Expectancy (years)	
	Men	Women	Men	Women
50	0.19 %	0.11 %	37.64	40.19
55	0.30	0.17	32.63	35.06
60	0.46	0.26	27.78	30.04
65	0.65	0.37	23.10	25.13
70	0.90	0.57	18.56	20.31
75	1.36	0.94	14.13	15.62
80	2.15	1.59	9.83	11.12

This assumption is used to measure the probabilities of active members dying prior to retirement.

For disabled retirees, the mortality table is the PUB-2010 Headcount Weighted General Disabled Retiree Table with ages set forward 3 years for males and females, with no provision being made for future mortality improvements. These are the same rates in use for Regular class members of FRS in the July 1, 2020 FRS Actuarial Valuation.

**FRS Disabled Mortality for Regular Class Members**

Sample Attained Ages (in 2020)	Probability of		Future Life	
	Dying Next Year		Expectancy (years)	
	Men	Women	Men	Women
50	2.02 %	1.64 %	20.99	23.92
55	2.53	1.91	18.18	20.88
60	3.08	2.27	15.50	17.88
65	3.93	2.83	12.94	14.91
70	5.08	3.79	10.53	12.07
75	6.98	5.46	8.29	9.45
80	10.12	8.31	6.33	7.19

The rates of retirement used to measure the probability of eligible members retiring are as shown below.

Number of Years After First Eligibility for Normal Retirement	Probability of Normal Retirement
0	50 %
1 - 10	25
11+	100

The rate of retirement is 5% for each year of eligibility for early retirement.

**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). This assumption measures the probabilities of members separating from employment for reasons other than death, disability or retirement.

Years of Service	% of Active Members Separating Within Next Year
0 - 2	20.0 %
3 - 4	12.5
5 - 8	5.5
9 - 17	4.0
18+	3.0



**Rates of disability** among active members were as shown below. These are the same rates used for Regular Class members in the July 1, 2018 Actuarial Valuation of the Florida Retirement System.

Sample Ages	% Becoming Disabled within Next Year			
	Non Service-		Service-Connected	
	Males	Females	Males	Females
20	0.000%	0.000%	0.000%	0.000%
25	0.010%	0.010%	0.001%	0.001%
30	0.010%	0.010%	0.001%	0.001%
35	0.020%	0.010%	0.001%	0.001%
40	0.020%	0.020%	0.001%	0.001%
45	0.080%	0.060%	0.004%	0.001%
50	0.160%	0.100%	0.006%	0.006%
55	0.250%	0.160%	0.006%	0.006%
60	0.300%	0.260%	0.010%	0.013%

**Changes from previous valuation:** The mortality tables and improvement scales were updated to reflect the updated mortality assumptions used in the July 1, 2019 Florida Retirement System (FRS) Actuarial Valuation.

## Miscellaneous and Technical Assumptions

<b>Administrative &amp; Investment Expenses</b>	The investment return assumption is intended to be the return net of investment expenses. Annual administrative expenses are assumed to be equal to the average of the expenses over the previous 2 years. Assumed administrative expenses are added to the Normal Cost.
<b>Benefit Service</b>	Exact fractional service is used to determine the amount of benefit payable.
<b>Decrement Operation</b>	Disability and mortality decrements operate during retirement eligibility.
<b>Decrement Timing</b>	Decrements of all types are assumed to occur at the beginning of the year.
<b>Eligibility Testing</b>	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.
<b>Forfeitures</b>	For vested separations from service, it is assumed that 0% of members separating will withdraw their contributions and forfeit an employer financed benefit. It was further assumed that the liability at termination is the greater of the vested deferred benefit (if any) or the member's accumulated contributions.
<b>Incidence of Contributions</b>	Employer contributions are assumed to be made in equal installments at the end of each pay period. 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.
<b>Marriage Assumption</b>	100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses for active member valuation purposes.
<b>Normal Form of Benefit</b>	A life annuity is the normal form of benefit.
<b>Pay Increase Timing</b>	Middle of fiscal year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.
<b>Service Credit Accruals</b>	It is assumed that members accrue one year of service credit per year.

## GLOSSARY OF TERMS

<b>Actuarial Accrued Liability (AAL)</b>	The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.
<b>Actuarial Assumptions</b>	Assumptions about future plan experience that affect costs or liabilities, such as: mortality, withdrawal, disablement, and retirement; future increases in salary; future rates of investment earnings; future investment and administrative expenses; characteristics of members not specified in the data, such as marital status; characteristics of future members; future elections made by members; and other items.
<b>Actuarial Cost Method</b>	A procedure for allocating the Actuarial Present Value of Future Benefits between the Actuarial Present Value of Future Normal Costs and the Actuarial Accrued Liability.
<b>Actuarially Determined Contribution (ADC)</b>	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The ADC consists of the Employer Normal Cost and Amortization Payment.
<b>Actuarial Equivalent</b>	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
<b>Actuarial Present Value (APV)</b>	The amount of funds required to provide a payment or series of payments in the future. It is determined by discounting the future payments with an assumed interest rate and with the assumed probability each payment will be made.
<b>Actuarial Present Value of Future Benefits (APVFB)</b>	The Actuarial Present Value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
<b>Actuarial Valuation</b>	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB No. 67.

<b>Actuarial Value of Assets</b>	The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially determined contribution (ADC).
<b>Amortization Method</b>	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the rate at which total covered payroll of all active members is assumed to increase.
<b>Amortization Payment</b>	That portion of the plan contribution or ADC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
<b>Amortization Period</b>	The period used in calculating the Amortization Payment.
<b>Closed Amortization Period</b>	A specific number of years that is reduced by one each year, and declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc.
<b>Employer Normal Cost</b>	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
<b>Equivalent Single Amortization Period</b>	For plans that do not establish separate amortization bases (separate components of the UAAL), this is the same as the Amortization Period. For plans that do establish separate amortization bases, this is the period over which the UAAL would be amortized if all amortization bases were combined upon the current UAAL payment.
<b>Experience Gain/Loss</b>	A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two actuarial valuations. To the extent that actual experience differs from that assumed, Unfunded Actuarial Accrued Liabilities emerge which may be larger or smaller than projected. Gains are due to favorable experience, e.g., the assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, losses are the result of unfavorable experience, i.e., actual results that produce Unfunded Actuarial Accrued Liabilities which are larger than projected.

<b>Funded Ratio</b>	The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.
<b>GASB</b>	Governmental Accounting Standards Board.
<b>GASB No. 67 and GASB No. 68</b>	These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 sets the rules for the systems themselves.
<b>Normal Cost</b>	The annual cost assigned, under the Actuarial Cost Method, to the current plan year.
<b>Open Amortization Period</b>	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.
<b>Unfunded Actuarial Accrued Liability</b>	The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.
<b>Valuation Date</b>	The date as of which the Actuarial Present Value of Future Benefits are determined. The benefits expected to be paid in the future are discounted to this date.



## SECTION C

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### PENSION FUND INFORMATION

## Statement of Plan Assets at Market Value

Item	September 30	
	2020	2019
A. Cash and Cash Equivalents (Operating Cash)	\$ -	\$ -
B. Receivables:		
1. Member Contributions	\$ -	\$ -
2. Employer Contributions	-	-
3. Investment Income and Other Receivables	53,951	68,034
4. Total Receivables	\$ 53,951	\$ 68,034
C. Investments		
1. Short Term Investments	\$ 744,529	\$ 542,547
2. Domestic Equities	13,080,707	12,080,046
3. International Equities	-	-
4. Domestic Fixed Income	5,797,757	5,900,253
5. International Fixed Income	165,247	-
6. Real Estate	1,820,166	1,811,008
7. Private Equity	-	-
8. Total Investments	\$ 21,608,406	\$ 20,333,854
D. Liabilities		
1. Benefits Payable	\$ -	\$ -
2. Accrued Expenses and Other Payables	(53,826)	(41,204)
3. Total Liabilities	\$ (53,826)	\$ (41,204)
E. Total Market Value of Assets Available for Benefits	\$ 21,608,531	\$ 20,360,684
F. DROP Accounts	\$ (156,732)	\$ (332,417)
G. Market Value Net of Reserves	\$ 21,451,799	\$ 20,028,267
H. Allocation of Investments		
1. Short Term Investments	3.5%	2.7%
2. Domestic Equities	60.5%	59.4%
3. International Equities	0.0%	0.0%
4. Domestic Fixed Income	26.8%	29.0%
5. International Fixed Income	0.8%	0.0%
6. Real Estate	8.4%	8.9%
7. Private Equity	0.0%	0.0%
8. Total Investments	100.0%	100.0%



## Reconciliation of Plan Assets

Item	September 30	
	2020	2019
A. Market Value of Assets at Beginning of Year	\$ 20,360,684	\$ 20,543,939
B. Revenues and Expenditures		
1. Contributions		
a. Employee Contributions	\$ 314,272	\$ 307,085
b. Employer Contributions	472,860	443,293
c. Purchased Service Credit	-	-
d. Total	<u>\$ 787,132</u>	<u>\$ 750,378</u>
2. Investment Income		
a. Interest, Dividends, and Other Income	\$ 483,364	\$ 469,026
b. Net Realized/Unrealized Gains/(Losses)	1,801,129	773,637
c. Investment Expenses	<u>(125,675)</u>	<u>(135,262)</u>
d. Net Investment Income	\$ 2,158,818	\$ 1,107,401
3. Benefits and Refunds		
a. Regular Monthly Benefits	\$ (1,239,298)	\$ (1,169,394)
b. Refunds	(76,741)	(10,453)
c. Lump Sum Benefits Paid	-	-
d. DROP Distributions	<u>(295,891)</u>	<u>(775,090)</u>
e. Total	\$ (1,611,930)	\$ (1,954,937)
4. Administrative and Miscellaneous Expenses	\$ (86,173)	\$ (86,097)
5. Transfers	\$ -	\$ -
C. Market Value of Assets at End of Year	\$ 21,608,531	\$ 20,360,684
D. DROP Accounts	\$ (156,732)	\$ (332,417)
E. Market Value Net of Reserves	\$ 21,451,799	\$ 20,028,267





### Development of Actuarial Value of Assets

Valuation Date – September 30	2019	2020	2021	2022	2023	2024
A. Actuarial Value of Assets Beginning of Year	\$ 19,355,690	\$ 19,659,779				
B. Market Value End of Year	20,360,684	21,608,531				
C. Market Value Beginning of Year	20,543,939	20,360,684				
D. Non-Investment/Administrative Net Cash Flow	(1,290,656)	(910,971)				
E. Investment Income						
E1. Actual Market Total: B-C-D	1,107,401	2,158,818				
E2. Assumed Rate of Return	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
E3. Assumed Amount of Return	1,320,069	1,360,851				
E4. Amount Subject to Phase-In: E1–E3	(212,668)	797,967				
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.2 x E4	(42,534)	159,593				
F2. First Prior Year	159,923	(42,534)	159,593			
F3. Second Prior Year	147,604	159,923	(42,534)	159,593		
F4. Third Prior Year	96,061	147,604	159,923	(42,534)	159,593	
F5. Fourth Prior Year	(86,378)	96,063	147,605	159,921	(42,532)	159,595
F6. Total Phase-Ins	274,676	520,649	424,587	276,980	117,061	159,595
<b>G. Actuarial Value of Assets End of Year</b>						
G1. Preliminary Actuarial Value of Assets End of Year: A+D+E3+F6	\$ 19,659,779	\$ 20,630,308				
G2. Upper Corridor Limit: 120%*B	24,432,821	25,930,237				
G3. Lower Corridor Limit: 80%*B	16,288,547	17,286,825				
G4. Actuarial Value of Assets End of Year	19,659,779	20,630,308				
G5. DROP Accounts	(332,417)	(156,732)				
G6. Final Actuarial Value of Assets End of Year	19,327,362	20,473,576				
H. Difference between Market & Actuarial Value of Assets	700,905	978,223				
I. Actuarial Rate of Return	8.46%	9.68%				
J. Market Value Rate of Return	5.52%	10.72%				
K. Ratio of Actuarial Value of Assets to Market Value	96.56%	95.47%				

The Actuarial Value of Assets recognizes assumed investment return (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, Actuarial Value of Assets will tend to be less than Market Value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than Market Value. If assumed rates are exactly realized for 5 consecutive years, Actuarial Value of Assets will become equal to Market Value.



**Reconciliation of DROP Accounts**

<b>Year Ended 9/30</b>	<b>Balance at Beginning of Year</b>	<b>Adjustment</b>	<b>Credits</b>	<b>Interest</b>	<b>Distributions</b>	<b>Balance at End of Year</b>
2010	\$ 343,289	\$ -	\$ 76,894	\$ 8,837	\$ (285,437)	\$ 143,583
2011	\$ 143,583	\$ -	\$ 101,170	\$ (4,076)	\$ (110,841)	\$ 129,836
2012	\$ 129,836	\$ -	\$ 274,088	\$ 44,504	\$ -	\$ 448,428
2013	\$ 448,428	\$ -	\$ 356,657	\$ 74,150	\$ (108,760)	\$ 770,476
2014	\$ 770,476	\$ 108,760	\$ 332,430	\$ 97,472	\$ (304,766)	\$1,004,372
2015	\$1,004,372	\$ 36,550	\$ 326,274	\$ 50,098	\$ (224,555)	\$1,192,739
2016	\$1,192,739	\$ -	\$ 462,292	\$ 112,193	\$ (807,118)	\$ 960,106
2017	\$ 960,106	\$ -	\$ 203,086	\$ 83,992	\$ (463,036)	\$ 784,148
2018	\$ 784,148	\$ -	\$ 177,648	\$ 95,223	\$ (85,166)	\$ 971,853
2019	\$ 971,853	\$ -	\$ 136,583	\$ (929)	\$ (775,090)	\$ 332,417
2020	\$ 332,417	\$ 3	\$ 99,509	\$ 20,694	\$ (295,891)	\$ 156,732



Year Ending September 30	Investment Rate of Return	
	Market Value	Actuarial Value
1978	6.1 %	---
1979	5.1	---
1980	5.2	11.6 %
1981	2.1	5.9
1982	21.3	11.0
1983	13.6	13.6
1984	5.9	7.7
1985	17.5	11.8
1986	18.9	14.5
1987	11.1	16.8
1988	4.0	3.2
1989	18.2	18.2
1990	(0.5)	(0.5)
1991	22.2	22.2
1992	14.6	14.6
1993	11.5	9.6
1994	1.2	4.6
1995	19.3	9.4
1996	12.4	9.6
1997	28.3	13.9
1998	5.8	11.0
1999	12.9	14.7
2000	8.9	12.9
2001	1.5	10.2
2002	(4.6)	4.3
2003	14.5	4.8
2004	8.7	4.2
2005	9.0	5.2
2006	6.6	6.3
2007	13.4	10.6
2008	(12.8)	4.2
2009	(3.2)	1.3
2010	7.3	5.6
2011	(3.7)	3.3
2012	19.4	5.1
2013	12.2	5.8
2014	12.0	8.8
2015	4.5	8.4
2016	10.0	10.8
2017	11.4	10.1
2018	11.2	9.9
2019	5.5	8.5
2020	10.7	9.7

**Average Returns:**

Last 5 Years	9.7 %	9.8 %
Last 10 Years	9.2 %	8.0 %
All Years	9.0 %	9.0 %

The above rates are based on the retirement system's financial information reported to the actuary. They may differ from figures that the investment consultant reports, in part because of differences in the handling of administrative and investment expenses, and in part because of differences in the handling of cash flows.



## **SECTION D**

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### **FINANCIAL ACCOUNTING INFORMATION**

**FASB NO. 35 INFORMATION**

A. Valuation Date	October 1, 2020	October 1, 2019
<b>B. Actuarial Present Value of Accumulated Plan Benefits</b>		
1. Vested Benefits		
a. Members Currently Receiving Payments	\$ 13,198,262	\$ 13,769,536
b. Terminated Vested Members	583,403	444,025
c. Other Members	5,143,861	4,688,536
d. Total	<u>18,925,526</u>	<u>18,902,097</u>
2. Non-Vested Benefits	82,555	91,655
3. Total Actuarial Present Value of Accumulated Plan Benefits: 1d + 2	19,008,081	18,993,752
4. Accumulated Contributions of Active Members	1,902,816	1,729,118
<b>C. Changes in the Actuarial Present Value of Accumulated Plan Benefits</b>		
1. Total Value at Beginning of Year	18,993,752	18,401,621
2. Increase (Decrease) During the Period Attributable to:		
a. Plan Amendment	0	0
b. Change in Actuarial Assumptions	(366,169)	0
c. Latest Member Data, Benefits Accumulated and Decrease in the Discount Period	1,796,046	1,908,561
d. Benefits Paid (net basis)	<u>(1,415,548)</u>	<u>(1,316,430)</u>
e. Net Increase	14,329	592,131
3. Total Value at End of Period	19,008,081	18,993,752
<b>D. Market Value of Assets</b>	21,451,799	20,028,267
<b>E. Actuarial Assumptions - See page entitled Actuarial Assumptions and Methods</b>		



## SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS GASB Statement No. 67

Fiscal year ending September 30,	2021*	2020	2019	2018	2017	2016	2015	2014
<b>Total pension liability</b>								
Service Cost	\$ 530,621	\$ 517,823	\$ 478,369	\$ 449,371	\$ 425,585	\$ 327,212	\$ 298,401	\$ 318,230
Interest	1,502,993	1,460,559	1,469,522	1,446,426	1,346,316	1,332,765	1,326,920	1,281,464
Benefit Changes	-	-	-	-	-	-	-	-
Difference between actual & expected experience	(63,182)	191,392	(114,573)	185,603	603,966	109,558	(166,972)	34,570
Assumption Changes	(457,293)	-	506,514	461,742	347,759	-	-	-
Benefit Payments	(1,499,320)	(1,535,189)	(1,944,484)	(1,161,974)	(1,585,026)	(1,731,453)	(993,482)	(908,927)
Refunds	(41,492)	(76,741)	(10,453)	(60,181)	(18,047)	(39,929)	(53,595)	(60,675)
<b>Net Change in Total Pension Liability</b>	<b>(27,673)</b>	<b>557,844</b>	<b>384,895</b>	<b>1,320,987</b>	<b>1,120,553</b>	<b>(1,847)</b>	<b>411,272</b>	<b>664,662</b>
<b>Total Pension Liability - Beginning</b>	<b>21,711,112</b>	<b>21,153,268</b>	<b>20,768,373</b>	<b>19,447,386</b>	<b>18,326,833</b>	<b>18,328,680</b>	<b>17,917,408</b>	<b>17,252,746</b>
<b>Total Pension Liability - Ending (a)</b>	<b>\$ 21,683,439</b>	<b>\$ 21,711,112</b>	<b>\$ 21,153,268</b>	<b>\$ 20,768,373</b>	<b>\$ 19,447,386</b>	<b>\$ 18,326,833</b>	<b>\$ 18,328,680</b>	<b>\$ 17,917,408</b>
<b>Plan Fiduciary Net Position</b>								
Contributions - Employer	\$ 478,209	\$ 472,860	\$ 443,293	\$ 420,570	\$ 338,551	\$ 317,957	\$ 344,236	\$ 366,204
Contributions - Employer (from state)	-	-	-	-	-	-	-	-
Contributions - Non-Employer contributing entity	-	-	-	-	-	-	-	-
Contributions - Member	303,290	314,272	307,085	285,901	283,972	252,554	208,312	188,555
Net Investment Income	1,499,744	2,158,818	1,107,401	2,106,317	2,021,370	1,720,828	766,343	1,903,591
Benefit Payments	(1,499,320)	(1,535,189)	(1,944,484)	(1,161,974)	(1,585,026)	(1,731,453)	(993,482)	(908,927)
Refunds	(41,492)	(76,741)	(10,453)	(60,181)	(18,047)	(39,929)	(53,595)	(60,675)
Administrative Expense	(86,135)	(86,173)	(86,097)	(93,369)	(83,952)	(82,657)	(82,212)	(76,422)
Other	-	-	-	-	-	-	-	-
<b>Net Change in Plan Fiduciary Net Position</b>	<b>654,296</b>	<b>1,247,847</b>	<b>(183,255)</b>	<b>1,497,264</b>	<b>956,868</b>	<b>437,300</b>	<b>189,602</b>	<b>1,412,326</b>
<b>Plan Fiduciary Net Position - Beginning</b>	<b>21,608,531</b>	<b>20,360,684</b>	<b>20,543,939</b>	<b>19,046,675</b>	<b>18,089,807</b>	<b>17,652,507</b>	<b>17,462,905</b>	<b>16,050,579</b>
<b>Plan Fiduciary Net Position - Ending (b)</b>	<b>\$ 22,262,827</b>	<b>\$ 21,608,531</b>	<b>\$ 20,360,684</b>	<b>\$ 20,543,939</b>	<b>\$ 19,046,675</b>	<b>\$ 18,089,807</b>	<b>\$ 17,652,507</b>	<b>\$ 17,462,905</b>
<b>Net Pension Liability - Ending (a) - (b)</b>	<b>(579,388)</b>	<b>102,581</b>	<b>792,584</b>	<b>224,434</b>	<b>400,711</b>	<b>237,026</b>	<b>676,173</b>	<b>454,503</b>
<b>Plan Fiduciary Net Position as a Percentage</b>								
<b>of Total Pension Liability</b>	102.67 %	99.53 %	96.25 %	98.92 %	97.94 %	98.71 %	96.31 %	97.46 %
<b>Covered Payroll</b>	\$ 3,730,509	\$ 3,781,853	\$ 3,677,665	\$ 3,407,640	\$ 3,124,004	\$ 2,757,140	\$ 2,284,123	\$ 2,388,786
<b>Net Pension Liability as a Percentage</b>								
<b>of Covered Payroll</b>	(15.53)%	2.71 %	21.55 %	6.59 %	12.83 %	8.60 %	29.60 %	19.03 %

\* These figures are estimates only. Actual figures will be provided after the end of the fiscal year.



## SCHEDULE OF THE EMPLOYER'S NET PENSION LIABILITY

### GASB Statement No. 67

FY Ending September 30,	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability	Plan Fiduciary Net Position as a % of Total Pension Liability	Covered Payroll	Net Pension Liability Liability as a % of Covered Payroll
2014	\$ 17,917,408	\$ 17,462,905	\$ 454,503	97.46%	\$ 2,388,786	19.03%
2015	18,328,680	17,652,507	676,173	96.31%	2,284,123	29.60%
2016	18,326,833	18,089,807	237,026	98.71%	2,757,140	8.60%
2017	19,447,386	19,046,675	400,711	97.94%	3,124,004	12.83%
2018	20,768,373	20,543,939	224,434	98.92%	3,407,640	6.59%
2019	21,153,268	20,360,684	792,584	96.25%	3,677,665	21.55%
2020	21,711,112	21,608,531	102,581	99.53%	3,781,853	2.71%
2021*	21,683,439	22,262,827	\$ (579,388)	102.67%	3,730,509	(15.53)%

\* These figures are estimates only. Actual figures will be provided after the end of the fiscal year.



## NOTES TO EMPLOYERS NET PENSION LIABILITY

### GASB Statement No. 67

Valuation Date: October 1, 2020  
Measurement Date: September 30, 2021

#### **Methods and Assumptions Used to Determine Net Pension Liability:**

Actuarial Cost Method	Entry Age Normal
Inflation	2.5%
Salary Increases	3.5% to 6.5% depending on service, including inflation
Investment Rate of Return	7.00%
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition
Mortality	The same versions of Pub-2010 Headcount-Weighted Mortality Tables for Regular (other than K-12 School Instructional Personnel) class members as used by the Florida Retirement System (FRS) in their July 1, 2020 actuarial valuation (with mortality improvements projected to all future years after 2010 using Scale MP-2018). Florida Statutes Chapter 112.63(1)(f) mandates the use of mortality tables from one of the two most recently published FRS actuarial valuation reports.

#### **Other Information:**

Notes See Discussion of Valuation Results in Section A of this report.





## SCHEDULE OF CONTRIBUTIONS GASB Statement No. 67

FY Ending September 30,	Actuarially Determined Contribution	Actual Contribution*	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2014	\$ 366,204	\$ 366,204	* \$ -	\$ 2,388,786	15.33%
2015	344,236	344,236	-	2,284,123	15.07%
2016	317,957	317,957	-	2,757,140	11.53%
2017	338,551	338,551	-	3,124,004	10.84%
2018	420,570	420,570	-	3,407,640	12.34%
2019	443,293	443,293	-	3,677,665	12.05%
2020	472,860	472,860	-	3,781,853	12.50%
2021**	478,209	478,209	-	3,730,509	12.82%

\* A receivable City contribution for the fiscal year ending September 30, 2014 of \$12,537, deposited after September 30, 2014, is reflected in the 2014 fiscal year actual contribution figure and excluded from the 2015 fiscal year.

\*\* These figures are estimates only. Actual figures will be provided after the end of the fiscal year.

## NOTES TO SCHEDULE OF CONTRIBUTIONS

### GASB Statement No. 67

**Valuation Date:** October 1, 2019  
**Notes** Actuarially determined contributions are calculated as of October 1, which is one year prior to the expected contribution date and the beginning of the fiscal year in which the contribution is due.

**Methods and Assumptions Used to Determine Contribution Rates:**

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Dollar, Closed
Remaining Amortization Period	21 years (single equivalent period)
Asset Valuation Method	5-year smoothed market
Inflation	2.5%
Salary Increases	3.5% to 6.5% depending on service, including inflation
Investment Rate of Return	7.00%
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition
Mortality	RP-2000 Combined Healthy Participant Mortality Table (for pre-retirement mortality) and the RP-2000 Mortality Table for Annuitants (for post-retirement mortality), with mortality improvements projected to all future years after 2000 using Scale BB. For males, the base mortality rates include a 50% blue collar adjustment and a 50% white collar adjustment. For females, the base mortality rates include a 100% white collar adjustment. These are the same rates as used for Regular Class members of the Florida Retirement System (FRS) in the July 1, 2018 Actuarial Valuation. Florida Statutes Chapter 112.63(1)(f) mandates the use of the mortality tables used in either of the two most recently published actuarial valuation reports of FRS.

**Other Information:**  
**Notes** See Discussion of Valuation Results in the October 1, 2019 Actuarial Valuation Report (dated May 6, 2020).



## SINGLE DISCOUNT RATE GASB Statement No. 67

A single discount rate of 7.00% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 7.00%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between the total actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments (7.00%) was applied to all periods of projected benefit payments to determine the total pension liability.

Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the plan's net pension liability, calculated using a single discount rate of 7.00%, as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher:

### Sensitivity of the Net Pension Liability to the Single Discount Rate Assumption\*

1% Decrease 6.00%	Current Single Discount Rate Assumption 7.00%	1% Increase 8.00%
\$1,827,694	(\$579,388)	(\$2,593,828)

\* These figures are estimates only. Actual figures will be provided after the end of the fiscal year.

## SECTION E

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### MISCELLANEOUS INFORMATION

<b>RECONCILIATION OF MEMBERSHIP DATA</b>		
	<b>From 10/1/19 To 10/1/20</b>	<b>From 10/1/18 To 10/1/19</b>
<b>A. Active Members</b>		
1. Number Included in Last Valuation	79	76
2. New Members Included in Current Valuation	11	10
3. Non-Vested Employment Terminations	(11)	(4)
4. Vested Employment Terminations	(1)	0
5. DROP Participation	0	(3)
6. Service Retirements	(1)	0
7. Disability Retirements	0	0
8. Deaths	0	0
9. Transfer from General Employees	0	0
10. Number Included in This Valuation	<u>77</u>	<u>79</u>
<b>B. Terminated Vested Members</b>		
1. Number Included in Last Valuation	6	7
2. Additions from Active Members	1	0
3. Lump Sum Payments/Refund of Contributions	0	0
4. Payments Commenced	0	(1)
5. Deaths	0	0
6. Other	0	0
7. Number Included in This Valuation	<u>7</u>	<u>6</u>
<b>C. DROP Plan Members</b>		
1. Number Included in Last Valuation	4	6
2. Additions from Active Members	0	3
3. Retirements	(1)	(5)
4. Deaths Resulting in No Further Payments	0	0
5. Other - Data Adjustment	0	0
6. Number Included in This Valuation	<u>3</u>	<u>4</u>
<b>D. Service Retirees, Disability Retirees and Beneficiaries</b>		
1. Number Included in Last Valuation	83	79
2. Additions from Active Members	1	0
3. Additions from Terminated Vested Members	0	1
4. Additions from DROP Plan	1	5
5. Deaths Resulting in No Further Payments	(2)	(4)
6. Deaths Resulting in New Survivor Benefits	0	2
7. End of Certain Period - No Further Payments	0	0
8. Other - Data Adjustment	0	0
9. Number Included in This Valuation	<u>83</u>	<u>83</u>

Active Members as of October 1, 2020													
Age Group	Years of Service to Valuation Date												Totals
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35+	
15-19 NO.	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT PAY	0	0	0	0	0	0	0	0	0	0	0	0	0
AVG PAY	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24 NO.	2	2	0	0	0	0	0	0	0	0	0	0	4
TOT PAY	80,787	64,817	0	0	0	0	0	0	0	0	0	0	145,604
AVG PAY	40,393	32,408	0	0	0	0	0	0	0	0	0	0	36,401
25-29 NO.	2	1	4	1	2	2	0	0	0	0	0	0	12
TOT PAY	75,195	30,087	144,303	32,545	98,001	89,815	0	0	0	0	0	0	469,946
AVG PAY	37,598	30,087	36,076	32,545	49,000	44,908	0	0	0	0	0	0	39,162
30-34 NO.	3	1	2	3	4	1	0	0	0	0	0	0	14
TOT PAY	84,781	46,679	65,369	113,541	151,638	92,653	0	0	0	0	0	0	554,661
AVG PAY	28,260	46,679	32,684	37,847	37,910	92,653	0	0	0	0	0	0	39,619
35-39 NO.	3	0	2	0	3	2	1	1	0	0	0	0	12
TOT PAY	85,038	0	68,901	0	125,970	78,077	62,075	58,007	0	0	0	0	478,068
AVG PAY	28,346	0	34,450	0	41,990	39,038	62,075	58,007	0	0	0	0	39,839
40-44 NO.	0	1	0	0	0	1	2	1	0	0	0	0	5
TOT PAY	0	37,056	0	0	0	91,244	150,334	46,154	0	0	0	0	324,788
AVG PAY	0	37,056	0	0	0	91,244	75,167	46,154	0	0	0	0	64,958
45-49 NO.	0	0	0	1	0	3	0	0	0	0	0	0	4
TOT PAY	0	0	0	61,760	0	216,594	0	0	0	0	0	0	278,354
AVG PAY	0	0	0	61,760	0	72,198	0	0	0	0	0	0	69,589
50-54 NO.	0	0	1	0	1	1	1	5	1	1	0	0	11
TOT PAY	0	0	36,653	0	43,472	48,882	111,067	296,168	64,564	56,281	0	0	657,087
AVG PAY	0	0	36,653	0	43,472	48,882	111,067	59,234	64,564	56,281	0	0	59,735
55-59 NO.	0	1	0	0	0	0	2	1	0	0	1	0	5
TOT PAY	0	31,259	0	0	0	0	84,053	47,208	0	0	62,554	0	225,074
AVG PAY	0	31,259	0	0	0	0	42,026	47,208	0	0	62,554	0	45,015
60-64 NO.	0	1	0	0	3	1	0	1	0	0	0	1	7
TOT PAY	0	25,750	0	0	147,638	41,692	0	60,339	0	0	0	56,281	331,700
AVG PAY	0	25,750	0	0	49,213	41,692	0	60,339	0	0	0	56,281	47,386
65-99 NO.	1	0	0	1	0	1	0	0	0	0	0	0	3
TOT PAY	29,329	0	0	27,500	0	97,092	0	0	0	0	0	0	153,921
AVG PAY	29,329	0	0	27,500	0	97,092	0	0	0	0	0	0	51,307
TOT NO.	11	7	9	6	13	12	6	9	1	1	1	1	77
TOT AMT	355,130	235,648	315,226	235,346	566,719	756,049	407,529	507,876	64,564	56,281	62,554	56,281	3,619,204
AVG AMT	32,285	33,664	35,025	39,224	43,594	63,004	67,922	56,431	64,564	56,281	62,554	56,281	47,003



**Inactive Members as of October 1, 2020**

Age	Terminated Vested		Disabled		Retired		Beneficiaries		Total	
	Number	Total Annual Benefits	Number	Total Annual Benefits	Number	Total Annual Benefits	Number	Total Annual Benefits	Number	Total Annual Benefits
Under 20	-	-	-	-	-	-	-	-	-	-
20 - 24	-	-	-	-	-	-	-	-	-	-
25 - 29	-	-	-	-	-	-	-	-	-	-
30 - 34	-	-	-	-	-	-	-	-	-	-
35 - 39	1	9,360	-	-	-	-	-	-	1	9,360
40 - 44	-	-	-	-	-	-	1	7,236	1	7,236
45 - 49	2	32,370	-	-	-	-	-	-	2	32,370
50 - 54	-	-	1	22,125	2	86,528	-	-	3	108,653
55 - 59	3	23,487	-	-	6	150,853	-	-	9	174,340
60 - 64	1	5,264	-	-	9	129,919	-	-	10	135,183
65 - 69	-	-	-	-	15	294,873	1	23,074	16	317,947
70 - 74	-	-	-	-	10	115,943	2	16,024	12	131,967
75 - 79	-	-	-	-	14	224,020	2	6,484	16	230,504
80 - 84	-	-	1	7,905	8	113,203	1	6,370	10	127,478
85 - 89	-	-	-	-	7	78,217	4	41,076	11	119,293
90 - 94	-	-	-	-	1	4,505	1*	0	2	4,505
95 - 99	-	-	-	-	-	-	-	-	-	-
100 & Over	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>7</b>	<b>70,481</b>	<b>2</b>	<b>30,030</b>	<b>72</b>	<b>1,198,061</b>	<b>12</b>	<b>100,264</b>	<b>93</b>	<b>1,398,836</b>

\*The count includes 1 beneficiary who is only due a refund of employee contributions.



## **SECTION F**

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### **SUMMARY OF PLAN PROVISIONS**



# SUMMARY OF PLAN PROVISIONS

## A. Ordinances

The Plan was established under the Code of Ordinances for the City of Miami Springs, Florida, Chapter 35, Article I, and was most recently amended under Ordinance No. 1080-2015 passed and adopted on May 27, 2015. The Plan is also governed by certain provisions of Part VII, Chapter 112, Florida Statutes and the Internal Revenue Code.

## B. Effective Date

January 1, 1960

## C. Plan Year

October 1 through September 30

## D. Type of Plan

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

## E. Eligibility Requirements

All employees, except police officers and firefighters, who work at least 1000 hours per year. Employees appointed to director positions (City Manager, Assistant City Manager, or Department Director) after May 27, 2015 have the option to join the Plan.

## F. Credited Service

Service is measured as the total number years and fractional parts of years of service rendered to the City. No service is credited for any periods of employment for which the member received a refund of their contributions.

## G. Compensation

Salary or wages paid for personal services rendered to the City, but not including allowances for food, clothing, shelter, or travel expense.

## H. Final Average Salary (FAS)

The average of the highest Compensation over any 5 years of Credited Service out of the last 10 years prior to termination or retirement. Compensation for FAS excludes overtime and lump sum payments at retirement for unused sick leave and vacation pay.



## **I. Normal Retirement**

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

- (1) age 62 and 5 years of Credited Service, or
- (2) when age plus Credited Service equals 75 years.

**Benefit:** 1.75% of FAS multiplied by each year of Credited Service prior to 10/1/89, plus 2.50% of FAS multiplied by each year of Credited Service after 10/1/89; former program A members receive credit at the rate of 1.00% for service prior to 10/1/89.

**Normal Form of Benefit:** Single life Annuity; other options are also available.

**COLA:** None

## **J. Early Retirement**

**Eligibility:** A member may elect to retire earlier than the Normal Retirement Eligibility upon attainment of age 55 and 10 years of Credited Service.

**Benefit:** The Normal Retirement Benefit is reduced by .25% for each month by which the Early Retirement date precedes the Normal Retirement date.

**Normal Form of Benefit:** Single life Annuity; other options are also available.

**COLA:** None

## **K. Delayed Retirement**

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

## **L. Service Connected Disability**

**Eligibility:** Any member who has 10 or more years of Credited Service and becomes totally and permanently disabled and rendered incapacitated for duty in the employ of the City is immediately eligible for a disability benefit. The 10 year requirement is waived if the member is receiving Worker's Compensation.

**Benefit:** The accrued Normal Retirement Benefit taking into account compensation earned and service credited as of the date of disability payable immediately. If a member is receiving Worker's Compensation, the minimum benefit is 25% of salary; upon termination of Worker's Compensation, benefit is recomputed by allowing additional service credit from date of retirement to age 60.



Normal Form  
of Benefit: Payable for life or until recovery from disability; other options are also available.

COLA: None

#### **M. Non-Service Connected Disability**

Eligibility: Any member who has 10 or more years of Credited Service and becomes totally and permanently disabled and rendered incapacitated for duty in the employ of the City is immediately eligible for a disability benefit. The 10 year requirement is waived if the member is receiving Worker's Compensation.

Benefit: The accrued Normal Retirement Benefit taking into account compensation earned and service credited as of the date of disability payable immediately. If a member is receiving Worker's Compensation, the minimum benefit is 25% of salary; upon termination of Worker's Compensation, benefit is recomputed by allowing additional service credit from date of retirement to age 60.

Normal Form  
of Benefit: Payable for life or until recovery from disability; other options are also available.

COLA: None

#### **N. Death in the Line of Duty**

Eligibility: Members with 10 or more years of Credited Service are eligible for survivor benefits.

Benefit: The beneficiary will receive the member's accrued Normal Retirement Benefit taking into account compensation earned and service credited as of the date of death.

Normal Form  
of Benefit: Payable immediately as though the member had retired on the date of death and elected the 100% Joint & Survivor option.

COLA: None

The beneficiary of a plan member who dies with less than 10 years of Credited Service will receive a refund of the member's accumulated contributions with interest.

#### **O. Other Pre-Retirement Death**

Eligibility: Members with 10 or more years of Credited Service are eligible for survivor benefits.

Benefit: The beneficiary will receive the member's accrued Normal Retirement Benefit taking into account compensation earned and service credited as of the date of death.

Normal Form  
of Benefit: Payable immediately as though the member had retired on the date of death and elected the 100% Joint & Survivor option.

COLA: None

The beneficiary of a plan member who dies with less than 10 years of Credited Service will receive a refund of the member's accumulated contributions with interest.

#### **P. Post-Retirement Death**

Benefit determined by the form of benefit elected upon retirement.

#### **Q. Optional Forms**

In lieu of electing the Normal Form of benefit, the optional forms of benefits available to all retirees are a 10 Year Certain and Life Annuity and the 50% and 100% Joint and Survivor options.

#### **R. Vested Termination**

Eligibility: A member has earned a non-forfeitable right to Plan benefits after the completion of 5 years of Credited Service.

Benefit: The benefit is the member's accrued Normal Retirement Benefit as of the date of termination. Benefit begins on the member's Normal Retirement date determined as though the member had remained in full-time employment. Alternatively, a member may elect a refund of their own accumulated contributions with interest or, if the member had 10 years of Credited Service, a reduced Early Retirement Benefit any time after age 55.

Normal Form  
of Benefit: Single life Annuity; other options are also available.

COLA: None

Members terminating employment with less than 5 years of Credited Service will receive a refund of their own accumulated contributions with interest.

#### **S. Refunds**

Eligibility: All members terminating employment with less than 5 years of Credited Service are eligible. Optionally, vested members (those with 5 or more years of Credited Service) may elect a refund in lieu of the vested benefits otherwise due.

Benefit: Refund of the member's contributions with interest. Interest is credited at a rate that is determined by the Board each year.



**T. Member Contributions**

5.0% of Compensation; when the total annual required contribution is greater than 15% of payroll, the amount over 15% is shared equally by the City and the members.

**U. Employer Contributions**

Any additional amount determined by the actuary needed to fund the plan properly according to State laws. When the total annual required contribution is greater than 15% of payroll (the threshold of 15% of payroll is comprised on the City contribution of 10% of payroll and the member contribution rate of 5% of pay), the amount over 15% is shared equally by the City and the members.

**V. Cost of Living Increases**

Not Applicable

**W. 13<sup>th</sup> Check**

Not Applicable

**X. Deferred Retirement Option Plan**

Eligibility: Plan members are eligible for the DROP upon the attainment of the earlier of:

- (1) age 62 and 5 years of Credited Service, or
- (2) when age plus Credited Service equals 75 years.

Members must make a written election to participate in the DROP.

Benefit: The member’s Credited Service and FAS 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 FAS.

Maximum  
DROP Period: 60 months

Interest  
Credited: The member's DROP account is credited or debited at an interest rate to be set by the Board.

Normal Form  
of Benefit: The plan member may elect from 1 of the 2 following options:  
  
(1) Lump Sum, or  
(2) Any other form of payment selected by the participant, approved by the Board and conforming to all applicable laws.

COLA: None



**Y. Other Ancillary Benefits**

There are no ancillary retirement type benefits not required by statutes but which might be deemed a Miami Springs General Employees' Retirement System liability if continued beyond the availability of funding by the current funding source.

**Z. Changes from Previous Valuation**

There were no changes in plan provisions since the previous valuation.