



May 12, 2022

Pension Board
South Miami Pension Plan
c/o Ms. Siera Feketa, MBA
Pension Administrator
Foster & Foster
2503 Del Prado Blvd. S
Suite 502
Cape Coral, Florida 33904

**Re: South Miami Pension Plan
October 1, 2021 Actuarial Valuation**

Dear Pension Board Members:

As requested, we are pleased to enclose sixteen (16) copies of the October 1, 2021 Actuarial Valuation Report.

We appreciate the opportunity to perform this important service on behalf of the membership.

Upon Board approval of the Actuarial Valuation Report, we will upload an electronic copy of the Actuarial Valuation Report along with the required disclosure information to the State portal as required by the State.

If you should have any question concerning the above, please do not hesitate to contact us.

Sincerest regards,
Gabriel, Roeder, Smith & Company

A handwritten signature in black ink that reads "Michelle Jones". The signature is written in a cursive, flowing style.

Shelly L. Jones, A.S.A.
Consultant and Actuary

Enclosures

cc: Mr. Bradley Cassel (w/ Enclosure)
Mr. Alfredo Riverol (w/ Enclosure)
Ronald Cohen, Esq. (w/ Enclosure)

South Miami Pension Plan

ACTUARIAL VALUATION AS OF OCTOBER 1, 2021

This Valuation Determines the Annual Contribution for the Plan Year October 1, 2022 through September 30, 2023 to be paid in Fiscal Year October 1, 2022 to September 30, 2023

May 12, 2022



South Miami Pension Plan

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c/o Ms. Siera Feketa, MBA
Pension Administrator
Foster & Foster
2503 Del Prado Blvd. S
Suite 502
Cape Coral, Florida 33904

Re: October 1, 2021 Projection Actuarial Valuation

Dear Pension Board Members:

We are pleased to present our October 1, 2021 Actuarial Valuation Report for the South Miami Pension Plan (Plan). The purpose of this report is to indicate appropriate contribution levels, monitor minimum funding requirements, comment on the actuarial stability of the Plan and to satisfy State and accounting requirements. The Pension Board has retained Gabriel, Roeder, Smith & Company (GRS) to prepare an annual Actuarial Valuation.

This report consists of this commentary, detailed Tables I through XVI, the State Required Exhibit on Table XVII and a Glossary on Table XVIII. The Tables contain basic Plan cost figures plus significant details on the benefits, liabilities and experience of the Plan. We suggest you thoroughly review the report at your convenience and contact us with any questions that may arise.

Retirement Plan Costs

Our Projection Actuarial Valuation develops the required minimum Retirement Plan payment under the Florida Protection of Public Employee Retirement Benefits Act and Chapter 185. The minimum payment consists of payment of annual normal costs including expenses and amortization of the components of the unfunded actuarial accrued liability over various periods as prescribed by law (not less than normal cost). The **minimum required payment for fiscal year ending September 30, 2023** is as follows (figures in parentheses are the Plan cost expressed as a percentage of projected covered annual payroll for fiscal year beginning October 1, 2022).

General Employees Tier 1	\$ 140,855	(15.9%)
General Employees Tier 2	88,648	(7.8%)
AMSC Members	338,147	(23.2%)
Police Officers	545,245	(18.8%)
Total	<u>\$ 1,112,895</u>	(17.5%)

Total cost is to be met by Member, City and State contributions. We anticipate the following member contributions and State contributions which result in the following City contribution requirement.

	General Employees Tier 1	General Employees Tier 2	AMSC	Police Officers	Total
Members	\$ 61,905 (7.0%)	\$ 34,068 (3.0%)	\$ 102,126 (7.0%)	\$ 217,392 (7.5%)	\$ 415,491 (6.5%)
State	N/A N/A	N/A N/A	N/A N/A	\$ 79,228 (2.7%)	\$ 79,228 (1.2%)
City *	\$ 78,950 <u>(8.9%)</u>	\$ 54,580 <u>(4.8%)</u>	\$ 236,021 <u>(16.2%)</u>	\$ 248,625 <u>(8.6%)</u>	\$ 618,176 <u>(9.7%)</u>
Total	\$ 140,855 (15.9%)	\$ 88,648 (7.8%)	\$ 338,147 (23.2%)	\$ 545,245 (18.8%)	\$ 1,112,895 (17.5%)

* Plan expenses allocated to City.

If State payments under F.S., Chapter 185 total less than \$101,697, the City contribution must be increased by such deficiency – maximum \$79,228.

Changes in Actuarial Assumptions, Methods and Plan Benefits

The Plan provisions are unchanged from the October 1, 2020 Actuarial Impact Statement and are summarized on Table IX.

The actuarial assumptions and methods are unchanged from the October 1, 2020 Actuarial Impact Statement and are outlined on Table X.

Comparison of October 1, 2020 and October 1, 2021 Valuation Results

Table II of our report provides information of a comparative nature. The left columns of the Table indicate the costs as calculated for the October 1, 2020 Actuarial Impact Statement. The right columns indicate the costs as calculated for October 1, 2021.

Comparing the left and right columns of Table II shows the effect of Plan experience during the year.

General Employees Tier 1 - the total number of active participants decreased by approximately 7% while covered payroll decreased by approximately 3%. Total normal cost and the net City minimum funding requirement both decreased as a dollar amount but increased as a percentage of covered payroll. The unfunded actuarial accrued liability decreased both as a dollar amount and as a percentage of covered payroll.



General Employees Tier 2 - the total number of active participants decreased by approximately 11% while covered payroll decreased by approximately 10%. Total normal cost and the net City minimum funding requirement decreased both as a dollar amount and as a percentage of covered payroll. The unfunded actuarial accrued liability increased as a dollar amount but remained level as a percentage of covered payroll.

AMSC Members - the total number of active participants increased by approximately 9% while covered payroll increased by approximately 12%. Total normal cost, the unfunded actuarial accrued liability and the net City minimum funding requirement all increased both as a dollar amount and as a percentage of covered payroll.

Police Officers - the total number of active participants decreased by approximately 13% while covered payroll decreased by approximately 12%. Total normal cost, the unfunded actuarial accrued liability and the net City minimum funding requirement all decreased both as a dollar amount and as a percentage of covered payroll.

The ratio of Plan assets (market value) to the value of vested accrued benefits (Vested Benefit Security Ratio) is 139.3%. This is an increase from 125.8% as of the October 1, 2020 Actuarial Impact Statement.

Plan Experience

Table VI indicates General Employees (including AMSC members) experienced a total actuarial loss of \$27,062. Police Officers experienced an actuarial gain of \$173,401. This suggests actual Plan experience was slightly less favorable than expected for General Employees (including AMSC members) and more favorable than expected for Police Officers.

Table XV (salary, termination and investment yield) provides figures on recent Plan experience. Salary experience indicates actual salary increases during fiscal 2021 averaged 3.0% for General / AMSC Employees and 2.2% for Police Officers. Compared to the Plan's salary increase assumption of 4.7% for General / AMSC Employees and 4.5% for Police Officers, salary experience was an offsetting source of actuarial gain for General / AMSC Employees and a source of actuarial gain for Police Officers. Three, five and ten-year average annual salary average increases are 4.7%, 4.6% and 3.7%, respectively for General / AMSC Employees. Three, five and ten-year average annual salary average increases are 6.2%, 3.8% and 2.9%, respectively for Police Officers.

Employee turnover this year was 60% of the assumed turnover for General / AMSC Employees and was generally a source of actuarial loss. Employee turnover this year was 110% of the assumed turnover for Police Officers and was generally an additional source of actuarial gain. Three, five and ten-year average turnover is 90%, 80% and 90%, respectively for General Employees / AMSC Employees. Three, five and ten-year average turnover is 150%, 140% and 110%, respectively for Police Officers.



The consumer price index exceeded the 3.0% assumption and was a source of actuarial loss for General Employees / AMSC Employees and Police Officers.

Smoothed value investment return of 10.628% exceeded the Plan investment return assumption of 7.375%. Investment return was a source of actuarial gain during the previous year. The three, five and ten-year average annual smoothed value investment returns are 8.669%, 8.910% and 8.3%, respectively. The one, three, five and ten-year average annual market value investment returns are 23.221%, 10.391%, 10.852% and 10.8%, respectively.

Member Census and Financial Data

The Plan Administrator and City submitted the Member census data as of October 1, 2021 used for this valuation. This information contains name, gender, employee contributions, dates of birth, employment, participation and payroll information. Dates of termination and retirement are provided where applicable. The Plan Administrator updated information on inactive participants including retirees, beneficiaries and vested terminees.

We received information on Plan assets as of September 30, 2021 from the Plan Administrator. We do not audit the asset information provided to us. The Plan is responsible for the accuracy of the data.

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 expected returns;



2. Asset / Liability mismatch – changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and the actuarially determined contribution requirements;
3. 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;
4. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and the actuarially determined contributions differing from expected;
5. Longevity risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
6. 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 the actuarially determined 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 actuarially determined contribution can be expected to increase (or decrease). Likewise if longevity is improving (or worsening), increases (or decreases) in the actuarially determined contribution can be anticipated.

The actuarially determined contribution rate shown on page one 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>2021</u>
Ratio of the market value of assets to payroll	7.13	9.16
Ratio of actuarial accrued liability to payroll	6.80	7.82
Ratio of actives to retirees and beneficiaries	1.72	1.41
Ratio of net cash flow to market value of assets	-1.3%	-1.7%
Duration of the actuarial accrued liability	13.73	13.57

* Per Actuarial Impact Statement as of October 1, 2020.



Ratio of Market Value of Assets to Payroll

The relationship between assets and payroll is a useful indicator of the potential volatility of the actuarially determined 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 the actuarially determined 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 the actuarially determined 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 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 the actuarially determined 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, a duration of 10 indicates 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.

Summary

In our opinion the benefits provided for under the current Plan will be sufficiently funded through the payment of the amount as indicated in this and future Actuarial Valuation reports. We will continue to update you on the future payment requirements for the Plan through our actuarial reports. These reports will also continue to monitor the future experience of the Plan.

The actuarial assumptions used in this Actuarial Valuation are as adopted by the Pension Board of Trustees as updated based upon an Experience Study for the period October 1, 2005 – May 31, 2013. Each assumption represents an estimate of future Plan experience. The mortality assumptions are prescribed under State statute.

The Government Finance Officers Association (GFOA) recommends an experience study every five years. The last experience study performed was eight years ago. We recommend the Board authorize an Experience Study to assure actuarial assumptions are aligned with Plan experience and future expectations.

If all actuarial assumptions are met and if all future minimum required contributions are paid, Plan assets will be sufficient to pay all Plan benefits, future contributions are expected to remain relatively stable as a percent of payroll and the funded status is expected to improve. Plan minimum required contributions are determined in compliance with the requirements of the Florida Protection of Public Employee Retirement Benefits Act and Police Officers Retirement Chapter 185 with normal cost determined as a level percent of covered payroll and a level percent amortization payment using a maximum amortization period of 25-years.

The Unfunded Actuarial Accrued Liability (UAAL) may not be appropriate for assessing the sufficiency of Plan assets to meet the estimated cost of settling benefit obligations but may be appropriate for assessing the need for or the amount of future contributions. The UAAL would be different if it reflected the market value of assets rather than the smoothed value of assets.

The GASB Net Pension Liability and Plan Fiduciary Net Position as a Percentage of Total Pension Liability may not be appropriate for assessing the sufficiency of Plan assets to meet the estimated cost of settling benefit obligations but may be appropriate for assessing the need for or the amount of future contributions.

This report was prepared using ProVal's valuation model, a software product of Winklevoss Technologies. We are relying on the ProVal model. We performed tests of the ProVal model with this assignment and made a reasonable attempt to understand the developer's intended purpose of, general operation of, major



sensitivities and dependencies within, and key strengths and limitations of the ProVal model. In our professional judgment, the ProVal valuation model has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses.

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 Plan 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 may be provided to parties other than the Pension Board only in its entirety and only with the permission of an approved representative of the Pension Board.

The signing actuaries are independent of the Plan sponsor.

The undersigned are Members of the American Academy of Actuaries and meet the qualification standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. We are available to respond to any questions with regards to matters covered in this report.

Very truly yours,

GABRIEL, ROEDER, SMITH & COMPANY



Shelly L. Jones, A.S.A., E.A.
Consultant and Actuary



Jennifer M. Borregard, E.A.
Consultant and Actuary



Summary of Retirement Plan Costs as of October 1, 2021

General Employees Tier 1

	<u>Cost Data</u>	<u>% of Payroll</u>
A. Participant Data Summary		
1. Active employees	14	N/A
2. Terminated vested	3	N/A
3. Receiving benefits (excluding DROPs)	28	N/A
4. DROP participants	3	N/A
5. Annual payroll of active employees	\$ 884,361	100.0%
B. Total Normal Costs		
1. Age retirement benefits	\$ 62,597	7.1%
2. Termination benefits	18,526	2.1%
3. Death benefits	1,256	0.1%
4. Disability benefits	6,041	0.7%
5. Estimated administrative expenses	52,435	5.9%
6. Total annual normal costs	\$ 140,855	15.9%
C. Total Actuarial Accrued Liability		
1. Age retirement benefits active employees	\$ 4,051,748	458.2%
2. Termination benefits active employees	133,878	15.1%
3. Death benefits active employees	37,157	4.2%
4. Disability benefits active employees	200,313	22.7%
5. Retired or terminated vested participants receiving benefits excluding DROP participants	8,142,613	920.7%
6. DROP participants	1,116,207	126.2%
7. Terminated vested participants entitled to future benefits	631,731	71.4%
8. Deceased participants whose beneficiaries are receiving benefits	168,954	19.1%
9. Disabled participants receiving benefits	0	0.0%
10. Miscellaneous liability	66,279	7.5%
11. Total actuarial accrued liability	\$ 14,548,880	1645.1%
D. Market Value of Assets (Table V)	\$ 20,416,983	2308.7%
E. Smoothed Value of Assets (Table V)	\$ 18,510,768	2093.1%
F. Unfunded Actuarial Accrued Liability (C. - E.)	\$ (3,961,888)	(448.0%)

Summary of Retirement Plan Costs as of October 1, 2021

General Employees Tier 1

	<u>Cost Data</u>	<u>% of Payroll</u>
G. Preliminary Minimum Required Contribution		
1. Total normal cost	\$ 140,855	15.9%
2. Amortization of unfunded liability	(380,673)	(43.0%)
3. Interest adjustment	(8,529)	(1.0%)
4. Total preliminary required contribution	<u>\$ (248,347)</u>	(28.1%)
H. Minimum Required Contribution (F.S., 112.66 (13)) (Greater of G.1. and G.4.)	\$ 140,855	15.9%
I. Contribution Sources for Fiscal Year Ending September 30, 2023		
1. City	\$ 78,950	8.9%
2. Member	61,905	7.0%
3. State	N/A	N/A
4. Total minimum funding requirement	<u>\$ 140,855</u>	15.9%
J. Actuarial Present Value of Vested Accrued Benefits		
1. Retired, terminated vested, beneficiaries and disabled receiving benefits excluding DROPs	\$ 8,311,567	939.8%
2. DROP participants	1,116,207	126.2%
3. Terminated vested participants entitled to future benefits and miscellaneous	698,010	78.9%
4. Active participants entitled to future benefits	<u>3,252,919</u>	367.8%
5. Total actuarial present value of vested accrued benefits	\$ 13,378,703	1512.8%
K. Unfunded Actuarial Present Value of Vested Accrued Benefits (J. - D., not less than zero)	\$ 0	0.0%
L. Vested Benefit Security Ratio (D. ÷ J.)	152.6%	N/A

Summary of Retirement Plan Costs as of October 1, 2021

General Employees Tier 2

	<u>Cost Data</u>	<u>% of Payroll</u>
A. Participant Data Summary		
1. Active employees	24	N/A
2. Terminated vested	1	N/A
3. Receiving benefits (excluding DROPs)	0	N/A
4. DROP participants	0	N/A
5. Annual payroll of active employees	\$ 1,135,601	100.0%
B. Total Normal Costs		
1. Age retirement benefits	\$ 60,697	5.3%
2. Termination benefits	19,654	1.7%
3. Death benefits	1,078	0.1%
4. Disability benefits	5,051	0.4%
5. Estimated administrative expenses	2,168	0.2%
6. Total annual normal costs	\$ 88,648	7.8%
C. Total Actuarial Accrued Liability		
1. Age retirement benefits active employees	\$ 519,043	45.7%
2. Termination benefits active employees	126,443	11.1%
3. Death benefits active employees	8,185	0.7%
4. Disability benefits active employees	38,036	3.3%
5. Retired or terminated vested participants receiving benefits excluding DROP participants	0	0.0%
6. DROP participants	0	0.0%
7. Terminated vested participants entitled to future benefits	10,678	0.9%
8. Deceased participants whose beneficiaries are receiving benefits	0	0.0%
9. Disabled participants receiving benefits	0	0.0%
10. Miscellaneous liability	16,314	1.4%
11. Total actuarial accrued liability	\$ 718,699	63.3%
D. Market Value of Assets (Table V)	\$ 837,258	73.7%
E. Smoothed Value of Assets (Table V)	\$ 765,874	67.4%
F. Unfunded Actuarial Accrued Liability (C. - E.)	\$ (47,175)	(4.2%)

Summary of Retirement Plan Costs as of October 1, 2021

General Employees Tier 2

	<u>Cost Data</u>	<u>% of Payroll</u>
G. Preliminary Minimum Required Contribution		
1. Total normal cost	\$ 88,648	7.8%
2. Amortization of unfunded liability	(3,214)	(0.3%)
3. Interest adjustment	3,039	0.3%
4. Total preliminary required contribution	<u>\$ 88,473</u>	7.8%
H. Minimum Required Contribution (F.S., 112.66 (13)) (Greater of G.1. and G.4.)	\$ 88,648	7.8%
I. Contribution Sources for Fiscal Year Ending September 30, 2023		
1. City	\$ 54,580	4.8%
2. Member	34,068	3.0%
3. State	N/A	N/A
4. Total minimum funding requirement	<u>\$ 88,648</u>	7.8%
J. Actuarial Present Value of Vested Accrued Benefits		
1. Retired, terminated vested, beneficiaries and disabled receiving benefits excluding DROPs	\$ 0	0.0%
2. DROP participants	0	0.0%
3. Terminated vested participants entitled to future benefits and miscellaneous	26,992	2.4%
4. Active participants entitled to future benefits	<u>255,215</u>	22.5%
5. Total actuarial present value of vested accrued benefits	\$ 282,207	24.9%
K. Unfunded Actuarial Present Value of Vested Accrued Benefits (J. - D., not less than zero)	\$ 0	0.0%
L. Vested Benefit Security Ratio (D. ÷ J.)	296.7%	N/A

Summary of Retirement Plan Costs as of October 1, 2021

AMSC

	<u>Cost Data</u>	<u>% of Payroll</u>
A. Participant Data Summary		
1. Active employees	12	N/A
2. Terminated vested	0	N/A
3. Receiving benefits (excluding DROPs)	3	N/A
4. DROP participants	0	N/A
5. Annual payroll of active employees	\$ 1,458,939	100.0%
B. Total Normal Costs		
1. Age retirement benefits	\$ 162,062	11.1%
2. Termination benefits	8,561	0.6%
3. Death benefits	1,549	0.1%
4. Disability benefits	9,193	0.6%
5. Estimated administrative expenses	8,577	0.6%
6. Total annual normal costs	\$ 189,942	13.0%
C. Total Actuarial Accrued Liability		
1. Age retirement benefits active employees	\$ 3,224,716	221.0%
2. Termination benefits active employees	589,813	40.4%
3. Death benefits active employees	20,746	1.4%
4. Disability benefits active employees	117,909	8.1%
5. Retired or terminated vested participants receiving benefits excluding DROP participants	866,047	59.4%
6. DROP participants	0	0.0%
7. Terminated vested participants entitled to future benefits	0	0.0%
8. Deceased participants whose beneficiaries are receiving benefits	0	0.0%
9. Disabled participants receiving benefits	0	0.0%
10. Miscellaneous liability	0	0.0%
11. Total actuarial accrued liability	\$ 4,819,231	330.3%
D. Market Value of Assets (Table V)	\$ 3,530,733	242.0%
E. Smoothed Value of Assets (Table V)	\$ 3,241,288	222.2%
F. Unfunded Actuarial Accrued Liability (C. - E.)	\$ 1,577,943	108.2%

Summary of Retirement Plan Costs as of October 1, 2021

AMSC

	<u>Cost Data</u>	<u>% of Payroll</u>
G. Preliminary Minimum Required Contribution		
1. Total normal cost	\$ 189,942	13.0%
2. Amortization of unfunded liability	136,592	9.4%
3. Interest adjustment	11,613	0.8%
4. Total preliminary required contribution	<u>\$ 338,147</u>	23.2%
H. Minimum Required Contribution (F.S., 112.66 (13)) (Greater of G.1. and G.4.)	\$ 338,147	23.2%
I. Contribution Sources for Fiscal Year Ending September 30, 2023		
1. City	\$ 236,021	16.2%
2. Member	102,126	7.0%
3. State	N/A	N/A
4. Total minimum funding requirement	<u>\$ 338,147</u>	23.2%
J. Actuarial Present Value of Vested Accrued Benefits		
1. Retired, terminated vested, beneficiaries and disabled receiving benefits excluding DROPs	\$ 866,047	59.4%
2. DROP participants	0	0.0%
3. Terminated vested participants entitled to future benefits and miscellaneous	0	0.0%
4. Active participants entitled to future benefits	<u>2,248,146</u>	154.1%
5. Total actuarial present value of vested accrued benefits	\$ 3,114,193	213.5%
K. Unfunded Actuarial Present Value of Vested Accrued Benefits (J. - D., not less than zero)	\$ 0	0.0%
L. Vested Benefit Security Ratio (D. ÷ J.)	113.4%	N/A

Summary of Retirement Plan Costs as of October 1, 2021

Police Officers

	<u>Cost Data</u>	<u>% of Payroll</u>
A. Participant Data Summary		
1. Active employees	39	N/A
2. Terminated vested	6	N/A
3. Receiving benefits (excluding DROPs)	22	N/A
4. DROP participants	7	N/A
5. Annual payroll of active employees	\$ 2,898,555	100.0%
B. Total Normal Costs		
1. Age retirement benefits	\$ 374,411	12.9%
2. Termination benefits	69,366	2.4%
3. Death benefits	2,527	0.1%
4. Disability benefits	13,317	0.5%
5. Estimated administrative expenses	85,624	3.0%
6. Total annual normal costs	\$ 545,245	18.8%
C. Total Actuarial Accrued Liability		
1. Age retirement benefits active employees	\$ 10,473,077	361.3%
2. Termination benefits active employees	497,563	17.2%
3. Death benefits active employees	26,404	0.9%
4. Disability benefits active employees	128,370	4.4%
5. Retired or terminated vested participants receiving benefits excluding DROP participants	11,717,115	404.2%
6. DROP participants	6,044,054	208.5%
7. Terminated vested participants entitled to future benefits	830,170	28.6%
8. Deceased participants whose beneficiaries are receiving benefits	0	0.0%
9. Disabled participants receiving benefits	0	0.0%
10. Miscellaneous liability	62,761	2.2%
11. Total actuarial accrued liability	\$ 29,779,514	1027.4%
D. Market Value of Assets (Table V)	\$ 33,628,752	1160.2%
E. Smoothed Value of Assets (Table V)	\$ 30,651,726	1057.5%
F. Unfunded Actuarial Accrued Liability (C. - E.)	\$ (872,212)	(30.1%)

Summary of Retirement Plan Costs as of October 1, 2021

Police Officers

	<u>Cost Data</u>	<u>% of Payroll</u>
G. Preliminary Minimum Required Contribution		
1. Total normal cost	\$ 545,245	18.8%
2. Amortization of unfunded liability	(78,241)	(2.7%)
3. Interest adjustment	18,018	0.6%
4. Total preliminary required contribution	<u>\$ 485,022</u>	16.7%
H. Minimum Required Contribution (F.S., 112.66 (13)) (Greater of G.1. and G.4.)	\$ 545,245	18.8%
I. Expected Payroll of Active Employees for Fiscal Year Ending 2023 (A.5. x 1.000)	\$ 2,898,555	100.0%
J. Contribution Sources for Fiscal Year Ending September 30, 2023 (% of projected payroll of active employees for fiscal year ending 2023)		
1. City	\$ 248,625	8.6%
2. Member	217,392	7.5%
3. State	79,228	2.7%
4. Total required contribution	<u>\$ 545,245</u>	18.8%
K. Actuarial Present Value of Vested Accrued Benefits		
1. Retired, terminated vested, beneficiaries and disabled receiving benefits excluding DROPs	\$ 11,717,115	404.2%
2. DROP participants	6,044,054	208.5%
3. Terminated vested participants entitled to future benefits and miscellaneous	892,931	30.8%
4. Active participants entitled to future benefits	<u>6,497,491</u>	224.2%
5. Total actuarial present value of vested accrued benefits	\$ 25,151,591	867.7%
L. Unfunded Actuarial Present Value of Vested Accrued Benefits (K. - D., not less than zero)	\$ 0	0.0%
M. Vested Benefit Security Ratio (D. ÷ K.)	133.7%	N/A

Summary of Retirement Plan Costs as of October 1, 2021

All Participants

	<u>Cost Data</u>	<u>% of Payroll</u>
A. Participant Data Summary		
1. Active employees	89	N/A
2. Terminated vested	10	N/A
3. Receiving benefits (excluding DROPs)	53	N/A
4. DROP participants	10	N/A
5. Annual payroll of active employees	\$ 6,377,456	100.0%
B. Total Normal Costs		
1. Age retirement benefits	\$ 659,767	10.3%
2. Termination benefits	116,107	1.8%
3. Death benefits	6,410	0.1%
4. Disability benefits	33,602	0.5%
5. Estimated administrative expenses	148,804	2.3%
6. Total annual normal costs	<u>\$ 964,690</u>	15.1%
C. Total Actuarial Accrued Liability		
1. Age retirement benefits active employees	\$ 18,268,584	286.5%
2. Termination benefits active employees	1,347,697	21.1%
3. Death benefits active employees	92,492	1.5%
4. Disability benefits active employees	484,628	7.6%
5. Retired or terminated vested participants receiving benefits excluding DROP participants	20,725,775	325.0%
6. DROP participants	7,160,261	112.3%
7. Terminated vested participants entitled to future benefits	1,472,579	23.1%
8. Deceased participants whose beneficiaries are receiving benefits	168,954	2.6%
9. Disabled participants receiving benefits	0	0.0%
10. Miscellaneous liability	145,354	2.3%
11. Total actuarial accrued liability	<u>\$ 49,866,324</u>	781.9%
D. Market Value of Assets (Table V)	\$ 58,413,726	915.9%
E. Smoothed Value of Assets (Table V)	\$ 53,169,656	833.7%
F. Unfunded Actuarial Accrued Liability (C. - E.)	\$ (3,303,332)	(51.8%)

Summary of Retirement Plan Costs as of October 1, 2021

All Participants

	<u>Cost Data</u>	<u>% of Payroll</u>
G. Preliminary Minimum Required Contribution		
1. Total normal cost	\$ 964,690	15.1%
2. Amortization of unfunded liability	(325,536)	(5.1%)
3. Interest adjustment	24,141	0.4%
4. Total preliminary required contribution	<u>\$ 663,295</u>	10.4%
H. Minimum Required Contribution (F.S., 112.66 (13))	\$ 1,112,895	17.5%
I. Expected Payroll of Active Employees for Fiscal Year Ending 2023 (\$884,361 x 1.000 + \$1,135,601 x 1.000 + \$1,458,939 x 1.000 + \$2,898,555 x 1.000)	\$ 6,377,456	100.0%
J. Contribution Sources for Fiscal Year Ending September 30, 2023 (% of projected payroll of active employees for fiscal year ending 2023)		
1. City	\$ 618,176	9.7%
2. Member	415,491	6.5%
3. State	79,228	1.2%
4. Total required contribution	<u>\$ 1,112,895</u>	17.5%
K. Actuarial Present Value of Vested Accrued Benefits		
1. Retired, terminated vested, beneficiaries and disabled receiving benefits excluding DROPs	\$ 20,894,729	327.6%
2. DROP participants	7,160,261	112.3%
3. Terminated vested participants entitled to future benefits and miscellaneous	1,617,933	25.4%
4. Active participants entitled to future benefits	<u>12,253,771</u>	192.1%
5. Total actuarial present value of vested accrued benefits	\$ 41,926,694	657.4%
L. Unfunded Actuarial Present Value of Vested Accrued Benefits (K. - D., not less than zero)	\$ 0	0.0%
M. Vested Benefit Security Ratio (D. ÷ K.)	139.3%	N/A

Comparison of Cost Data of October 1, 2020 and October 1, 2021 Valuations

General Employees Tier 1

	October 1, 2020		October 1, 2021	
	Cost Data	% of Annual Compensation	Cost Data	% of Annual Compensation
A. Participants				
1. Active employees	15	N/A	14	N/A
2. Terminated vested	5	N/A	3	N/A
3. Receiving benefits excluding DROPs	25	N/A	28	N/A
4. DROP participants	4	N/A	3	N/A
5. Annual payroll of active employees	\$ 907,685	100.0%	\$ 884,361	100.0%
B. Total Normal Costs	\$ 143,674	15.8%	\$ 140,855	15.9%
C. Total Actuarial Accrued Liability	\$ 13,793,229	1519.6%	\$ 14,548,880	1645.1%
D. Smoothed Value of Assets	\$ 17,318,262	1908.0%	\$ 18,510,768	2093.1%
E. Unfunded Actuarial Accrued Liability	\$ (3,525,033)	(388.4%)	\$ (3,961,888)	(448.0%)
F. Member Cost	\$ 63,538	7.0%	\$ 61,905	7.0%
G. City Cost (includes expenses)	\$ 80,136	8.8%	\$ 78,950	8.9%
H. Actuarial Present Value of Vested Accrued Benefits	\$ 12,455,187	1372.2%	\$ 13,378,703	1512.8%
I. Vested Benefit Security Ratio	137.5%	N/A	152.6%	N/A

Comparison of Cost Data of October 1, 2020 and October 1, 2021 Valuations

General Employees Tier 2

	October 1, 2020		October 1, 2021	
	Cost Data	% of Annual Compensation	Cost Data	% of Annual Compensation
A. Participants				
1. Active employees	27	N/A	24	N/A
2. Terminated vested	1	N/A	1	N/A
3. Receiving benefits excluding DROPs	0	N/A	0	N/A
4. DROP participants	0	N/A	0	N/A
5. Annual payroll of active employees	\$ 1,264,549	100.0%	\$ 1,135,601	100.0%
B. Total Normal Costs	\$ 99,322	7.9%	\$ 88,648	7.8%
C. Total Actuarial Accrued Liability	\$ 611,159	48.3%	\$ 718,699	63.3%
D. Smoothed Value of Assets	\$ 664,846	52.6%	\$ 765,874	67.4%
E. Unfunded Actuarial Accrued Liability	\$ (53,687)	(4.2%)	\$ (47,175)	(4.2%)
F. Member Cost	\$ 37,936	3.0%	\$ 34,068	3.0%
G. City Cost (includes expenses)	\$ 61,386	4.9%	\$ 54,580	4.8%
H. Actuarial Present Value of Vested Accrued Benefits	\$ 249,205	19.7%	\$ 282,207	24.9%
I. Vested Benefit Security Ratio	260.9%	N/A	296.7%	N/A

Comparison of Cost Data of October 1, 2020 and October 1, 2021 Valuations

	<u>AMSC</u>			
	Actuarial Impact Statement		October 1, 2021	
	October 1, 2020		October 1, 2021	
	Cost Data	% of Annual Compensation	Cost Data	% of Annual Compensation
A. Participants				
1. Active employees	11	N/A	12	N/A
2. Terminated vested	0	N/A	0	N/A
3. Receiving benefits excluding DROPs	3	N/A	3	N/A
4. DROP participants	0	N/A	0	N/A
5. Annual payroll of active employees	\$ 1,298,985	100.0%	\$ 1,458,939	100.0%
B. Total Normal Costs	\$ 162,893	12.5%	\$ 189,942	13.0%
C. Total Actuarial Accrued Liability	\$ 4,080,695	314.1%	\$ 4,819,231	330.3%
D. Smoothed Value of Assets	\$ 2,726,874	209.9%	\$ 3,241,288	222.2%
E. Unfunded Actuarial Accrued Liability	\$ 1,353,821	104.2%	\$ 1,577,943	108.2%
F. Member Cost	\$ 90,929	7.0%	\$ 102,126	7.0%
G. City Cost (includes expenses)	\$ 197,675	15.2%	\$ 236,021	16.2%
H. Actuarial Present Value of Vested Accrued Benefits	\$ 2,684,384	206.7%	\$ 3,114,193	213.5%
I. Vested Benefit Security Ratio	99.7%	N/A	113.4%	N/A

Comparison of Cost Data of October 1, 2020 and October 1, 2021 Valuations

Police Officers

	October 1, 2020		October 1, 2021	
	Cost Data	% of Annual Compensation	Cost Data	% of Annual Compensation
A. Participants				
1. Active employees	45	N/A	39	N/A
2. Terminated vested	5	N/A	6	N/A
3. Receiving benefits excluding DROPs	22	N/A	22	N/A
4. DROP participants	3	N/A	7	N/A
5. Annual payroll of active employees	\$ 3,281,847	100.0%	\$ 2,898,555	100.0%
B. Total Normal Costs	\$ 634,638	19.3%	\$ 545,245	18.8%
C. Total Actuarial Accrued Liability	\$ 27,406,673	835.1%	\$ 29,779,514	1027.4%
D. Smoothed Value of Assets	\$ 28,113,521	856.6%	\$ 30,651,726	1057.5%
E. Unfunded Actuarial Accrued Liability	\$ (706,848)	(21.5%)	\$ (872,212)	(30.1%)
F. Member Cost	\$ 247,862	7.5% ¹	\$ 217,392	7.5% ²
G. City Cost (includes expenses)	\$ 311,990	9.4% ¹	\$ 248,625	8.6% ²
H. Actuarial Present Value of Vested Accrued Benefits	\$ 22,855,819	696.4%	\$ 25,151,591	867.7%
I. Vested Benefit Security Ratio	121.1%	N/A	133.7%	N/A

¹ Percent of expected 2021-2022 covered payroll (\$3,304,820)

² Percent of expected 2022-2023 covered payroll (\$2,898,555)

Comparison of Cost Data of October 1, 2020 and October 1, 2021 Valuations

All Participants

	Actuarial Impact Statement October 1, 2020		October 1, 2021	
	Cost Data	% of Annual Compensation	Cost Data	% of Annual Compensation
A. Participants				
1. Active employees	98	N/A	89	N/A
2. Terminated vested	11	N/A	10	N/A
3. Receiving benefits excluding DROPs	50	N/A	53	N/A
4. DROP participants	7	N/A	10	N/A
5. Annual payroll of active employees	\$ 6,753,066	100.0%	\$ 6,377,456	100.0%
B. Total Normal Costs	\$ 1,040,527	15.4%	\$ 964,690	15.1%
C. Total Actuarial Accrued Liability	\$ 45,891,756	679.6%	\$ 49,866,324	781.9%
D. Smoothed Value of Assets	\$ 48,823,503	723.0%	\$ 53,169,656	833.7%
E. Unfunded Actuarial Accrued Liability	\$ (2,931,747)	(43.4%)	\$ (3,303,332)	(51.8%)
F. Member Cost	\$ 440,265	6.5% ¹	\$ 415,491	6.5% ²
G. City Cost (includes expenses)	\$ 651,187	9.6% ¹	\$ 618,176	9.7% ²
H. Actuarial Present Value of Vested Accrued Benefits	\$ 38,244,595	566.3%	\$ 41,926,694	657.4%
I. Vested Benefit Security Ratio	125.8%	N/A	139.3%	N/A

¹ Percent of expected 2021-2022 covered payroll (\$6,776,039)

² Percent of expected 2022-2023 covered payroll (\$6,377,456)

**Characteristics of Participants in
Actuarial Valuation as of October 1, 2021**

	General				Total
	Tier 1	Tier 2	AMSC	Police	
A. <u>Active Plan Participants Summary</u>					
1. Active participants fully vested	14	8	12	17	51
2. Active participants partially vested	0	0	0	0	0
3. Active participants non-vested	0	16	0	22	38
4. Total active participants	14	24	12	39	89
5. Annual rate of pay of active participants	\$ 884,361	\$ 1,135,601	\$ 1,458,939	\$ 2,898,555	\$ 6,377,456
B. <u>Retired and Terminated Vested Participant Summary</u>					
1. Retired or terminated vested participants receiving benefits excluding DROPs	27	0	3	22	52
2. DROP participants	3	0	0	7	10
3. Terminated vested participants entitled to future benefits	3	1	0	6	10
4. Deceased participants whose beneficiaries are receiving benefits	1	0	0	0	1
5. Disabled participants receiving benefits	0	0	0	0	0
C. <u>Projected Annual Retirement Benefits</u>					
1. Retired or terminated vested receiving benefits excluding DROP participants	\$ 693,738	\$ 0	\$ 78,798	\$ 938,669	\$ 1,711,205
2. DROP participants	\$ 69,011	\$ 0	\$ 0	\$ 364,781	\$ 433,792
3. Terminated vested entitled to future benefits	\$ 80,022	\$ 10,394	\$ 0	\$ 137,586	\$ 228,002
4. Beneficiaries of deceased participants	\$ 15,872	\$ 0	\$ 0	\$ 0	\$ 15,872
5. Disabled participants	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

Statement of Assets as of October 1, 2021

	General		AMSC	Police	Total
	Tier 1	Tier 2			
<u>Market Value of Assets</u>					
A. <u>General Investments</u>					
1. Cash and Cash Equivalents	\$ 368,722	\$ 15,122	\$ 63,765	\$ 605,888	\$ 1,053,497
2. U.S. Government Securities	1,981,819	81,270	342,718	3,256,559	5,662,366
3. Common Stocks	0	0	0	0	0
4. Corporate Obligations	2,275,931	93,331	393,579	3,739,848	6,502,689
5. International Equity	0	0	0	0	0
6. Real Estate	2,814,902	115,433	486,784	4,625,493	8,042,612
7. Mutual Funds					
Equity	9,881,055	405,201	1,708,743	16,236,712	28,231,711
International Equity	3,079,330	126,277	532,512	5,060,006	8,798,125
8. Prepaid Insurance	1,425	58	246	2,342	4,071
9. Total General Investments	\$ 20,403,184	\$ 836,692	\$ 3,528,347	\$ 33,526,848	\$ 58,295,071
B. <u>Receivables</u>					
1. City Contributions	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2. Employee Contributions	0	0	0	0	0
3. Share Plan Contributions	0	0	0	79,228 *	79,228 *
4. Interest and Dividends	27,209	1,116	4,705	44,711	77,741
5. Other	0	0	0	0	0
6. Pending Trades	0	0	0	0	0
7. Total Receivables	\$ 27,209	\$ 1,116	\$ 4,705	\$ 123,939	\$ 156,969
C. <u>Payables</u>					
1. Accounts Payable	\$ 13,410	\$ 550	\$ 2,319	\$ 22,035	\$ 38,314
2. Pending Trades	0	0	0	0	0
3. Total Payables	\$ 13,410	\$ 550	\$ 2,319	\$ 22,035	\$ 38,314
E. <u>Total Assets (A. + B. - C. + D.)</u>	\$ 20,416,983	\$ 837,258	\$ 3,530,733	\$ 33,628,752	\$ 58,413,726

* State Monies received fiscal year ended September 30, 2021.

Reconciliation of Plan Assets

	General				Total
	Tier 1	Tier 2	AMSC	Police	
A. <u>Market Value of Assets</u> as of October 1, 2020	\$ 17,126,850	\$ 650,209	\$ 2,675,349	\$ 27,678,257	\$ 48,130,665
B. <u>Receipts During Year</u>					
1. Contributions					
a. Members	\$ 62,095	\$ 36,602	\$ 95,383	\$ 243,908	\$ 437,988
b. City	86,136	60,703	140,976	264,685	552,500
c. State	0	0	0	79,228	79,228
d. Total	\$ 148,231	\$ 97,305	\$ 236,359	\$ 587,821	\$ 1,069,716
2. Investment income					
a. Interest, dividends and other	\$ 379,291	\$ 15,683	\$ 62,042	\$ 619,360	\$ 1,076,376
b. Investment expenses	(215,095)	(8,894)	(35,184)	(351,237)	(610,410)
c. Net interest and dividends	\$ 164,196	\$ 6,789	\$ 26,858	\$ 268,123	\$ 465,966
3. Realized and unrealized gain / (loss)					
a. Realized gain / (loss)	\$ 1,610,810	\$ 66,605	\$ 263,485	\$ 2,630,365	\$ 4,571,265
b. Unrealized gain / (loss)	2,130,536	88,095	348,499	3,479,047	6,046,177
c. Net realized and unrealized gain/(loss)	\$ 3,741,346	\$ 154,700	\$ 611,984	\$ 6,109,412	\$ 10,617,442
4. Other	0	0	0	0	0
5. Total receipts during period	\$ 4,053,773	\$ 258,794	\$ 875,201	\$ 6,965,356	\$ 12,153,124
C. <u>Disbursements During Year</u>					
1. Benefit payments	\$ 643,345	\$ 0	\$ 76,157	\$ 907,507	\$ 1,627,009
2. DROP distributions	19,118	0	0	0	19,118
3. Contribution refunds	48,742	4,660	0	21,730	75,132
4. Administrative expenses	52,435	2,168	8,577	85,624	148,804
5. Total disbursements during period	\$ 763,640	\$ 6,828	\$ 84,734	\$ 1,014,861	\$ 1,870,063
D. <u>Internal Transfer</u>	\$ 0	\$ (64,917)	\$ 64,917	\$ 0	\$ 0
E. <u>Market Value of Assets</u> as of October 1, 2021	\$ 20,416,983	\$ 837,258	\$ 3,530,733	\$ 33,628,752	\$ 58,413,726
F. <u>Estimated expenses to be paid by the City</u> as of October 1, 2021					
1. Administrative	\$ 52,435	\$ 2,168	\$ 8,577	\$ 85,624	\$ 148,804
2. Investment	\$ 215,095	\$ 8,894	\$ 35,184	\$ 351,237	\$ 610,410
G. <u>Reconciliation of DROP Account Balances</u>					
1. DROP account balances as of October 1, 2020	\$ 68,714	\$ 0	\$ 0	\$ 83,586	\$ 152,300
2. Benefit payments into DROP accounts	72,858	0	0	221,999	294,857
3. Investment credits	3,514	0	0	6,601	10,115
4. Distributions from DROP accounts	(19,118)	0	0	0	(19,118)
5. DROP account balances as of September 30, 2021	\$ 125,968	\$ 0	\$ 0	\$ 312,186	\$ 438,154

All Participants

Development of Smoothed Value of Assets as of September 30

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
A. Preliminary smoothed value from prior year	\$ 45,791,297	\$ 48,823,503	\$ 53,169,656			
B. Market value beginning of year	\$ 45,564,011	\$ 48,130,665	\$ 58,413,726			
C. Market value end of year	\$ 48,130,665	\$ 58,413,726				
D. Non-investment net cash flow	\$ (610,388)	\$ (800,347)				
E. Investment return						
1. Total market value return: C. - B. - D.	\$ 3,177,042	\$ 11,083,408				
2. Amount for immediate recognition (7.375%)	3,337,838	3,520,124				
3. Amount for phased-in recognition: E.1. - E.2.	(160,796)	7,563,284				
F. Phased-in recognition of investment return						
1. Current year: 20% of E.3.	\$ (32,159)	\$ 1,512,657				
2. First prior year	(463,347)	(32,159)	1,512,657			
3. Second prior year	216,612	(463,347)	(32,159)	1,512,657		
4. Third prior year	392,615	216,612	(463,347)	(32,159)	1,512,657	
5. Fourth prior year	191,035	392,613	216,614	(463,346)	(32,160)	1,512,656
6. Total phased-in recognition of investment return	\$ 304,756	\$ 1,626,376	\$ 1,233,765	\$ 1,017,152	\$ 1,480,497	\$ 1,512,656
G. Smoothed value end of year						
1. Preliminary smoothed value end of year:						
A. + D. + E.2. + F.6.	\$ 48,823,503	\$ 53,169,656				
2. Upper corridor limit: 120% of C.	57,756,798	70,096,471				
3. Lower corridor limit: 80% of C.	38,504,532	46,730,981				
4. Smoothed value end of year:						
G.1., not more than G.2., nor less than G.3.	\$ 48,823,503	\$ 53,169,656				
H. Difference between market value and smoothed value	\$ (692,838)	\$ 5,244,070				
I. Smoothed value rate of return	8.008%	10.628%				
J. Market value rate of return	7.020%	23.221%				

Allocation of Smoothed Value of Assets for Budgeting Purposes

	General		AMSC	Police	Total
	Tier 1	Tier 2			
A. <u>Smoothed Value as of October 1, 2020</u>	\$17,318,262	\$ 664,846	\$ 2,726,874	\$28,113,521	\$48,823,503
B. <u>Receipts During Period</u>					
1. Member Contributions	\$ 62,095	\$ 36,602	\$ 95,383	\$ 243,908	\$ 437,988
2. City Contributions	86,136	60,703	140,976	264,685	552,500
3. State Contributions	0	0	0	79,228	79,228
4. Other	0	0	0	0	0
5. Net Investment Return	<u>1,807,915</u>	<u>75,468</u>	<u>297,872</u>	<u>2,965,245</u>	<u>5,146,500</u>
6. Total Receipts During Period	\$ 1,956,146	\$ 172,773	\$ 534,231	\$ 3,553,066	\$ 6,216,216
C. <u>Disbursements During Period</u>					
1. Benefit Payments	\$ 643,345	\$ 0	\$ 76,157	\$ 907,507	\$ 1,627,009
2. DROP Distributions	19,118	0	0	0	19,118
3. Contribution Refunds	48,742	4,660	0	21,730	75,132
4. Administrative Expenses	<u>52,435</u>	<u>2,168</u>	<u>8,577</u>	<u>85,624</u>	<u>148,804</u>
5. Total Disbursements During Period	\$ 763,640	\$ 6,828	\$ 84,734	\$ 1,014,861	\$ 1,870,063
D. <u>Internal Transfer</u>	\$ 0	\$ (64,917)	\$ 64,917	\$ 0	\$ 0
E. <u>Smoothed Value as of September 30, 2021</u>	\$18,510,768	\$ 765,874	\$ 3,241,288	\$30,651,726	\$53,169,656

**Actuarial Gain / (Loss) for
Plan Year Ended September 30, 2021**

(General Employees Tier 1)

A. Derivation of Actuarial Gain / (Loss)

1. City normal cost previous actuarial valuation		\$	80,136
2. Unfunded actuarial accrued liability previous actuarial valuation			(3,525,033)
3. City contributions previous year			86,136
4. Interest on:			
(a) Normal cost	\$	5,910	
(b) Unfunded actuarial accrued liability		(259,971)	
(c) Contributions		3,176	
(d) Net total: (a) + (b) - (c)			\$ (257,237)
5. Expected unfunded actuarial accrued liability current year (1. + 2. - 3. + 4.)		\$	(3,788,270)
6. Actual unfunded actuarial accrued liability current year			(3,961,888)
7. Actuarial gain / (loss): (5. - 6.)		\$	173,618

B. Approximate Portion of Gain / (Loss)

Due to Investments

1. Smoothed value of assets previous year		\$	17,318,262
2. Contributions during year			148,231
3. Benefits and admin expenses during year			763,640
4. Expected appreciation for period			1,254,529
5. Internal transfer			0
6. Expected smoothed value of assets current year (1. + 2. - 3. + 4. + 5.)		\$	17,957,382
7. Actual smoothed value of assets current year			18,510,768
8. Approximate gain / (loss) due to investments: (7. - 6.)		\$	553,386

C. Approximate Portion of Gain / (Loss)

Due to Liabilities: A. - B.

\$ (379,768)

Actuarial Gain / (Loss) for
Plan Year Ended September 30, 2021

(General Employees Tier 2)

A. Derivation of Actuarial Gain / (Loss)

1. City normal cost previous actuarial valuation		\$	61,386
2. Unfunded actuarial accrued liability previous actuarial valuation			(53,687)
3. City contributions previous year			60,703
4. Interest on:			
(a) Normal cost	\$	4,527	
(b) Unfunded actuarial accrued liability		(3,959)	
(c) Contributions		2,238	
(d) Net total: (a) + (b) - (c)			\$ (1,670)
5. Expected unfunded actuarial accrued liability current year (1. + 2. - 3. + 4.)			\$ (54,674)
6. Actual unfunded actuarial accrued liability current year			(47,175)
7. Actuarial gain / (loss): (5. - 6.)		\$	(7,499)

B. Approximate Portion of Gain / (Loss)

Due to Investments

1. Smoothed value of assets previous year		\$	664,846
2. Contributions during year			97,305
3. Benefits and admin expenses during year			6,828
4. Expected appreciation for period			52,369
5. Internal transfer			(64,917)
6. Expected smoothed value of assets current year (1. + 2. - 3. + 4. + 5.)		\$	742,775
7. Actual smoothed value of assets current year			765,874
8. Approximate gain / (loss) due to investments: (7. - 6.)		\$	23,099

C. Approximate Portion of Gain / (Loss)

Due to Liabilities: A. - B.

\$ (30,598)

Actuarial Gain / (Loss) for
Plan Year Ended September 30, 2021

(AMSC)

A. Derivation of Actuarial Gain / (Loss)

1. City normal cost previous actuarial impact statement		\$	71,964
2. Unfunded actuarial accrued liability previous actuarial impact statement			1,353,821
3. City contributions previous year			140,976
4. Interest on:			
(a) Normal cost	\$	5,307	
(b) Unfunded actuarial accrued liability		99,844	
(c) Contributions		5,198	
(d) Net total: (a) + (b) - (c)			\$ 99,953
5. Expected unfunded actuarial accrued liability current year (1. + 2. - 3. + 4.)			\$ 1,384,762
6. Actual unfunded actuarial accrued liability current year			1,577,943
7. Actuarial gain / (loss): (5. - 6.)			\$ (193,181)

B. Approximate Portion of Gain / (Loss)

Due to Investments

1. Smoothed value of assets previous year		\$	2,726,874
2. Contributions during year			236,359
3. Benefits and admin expenses during year			84,734
4. Expected appreciation for period			206,698
5. Internal transfer			64,917
6. Expected smoothed value of assets current year (1. + 2. - 3. + 4. + 5.)			\$ 3,150,114
7. Actual smoothed value of assets current year			3,241,288
8. Approximate gain / (loss) due to investments: (7. - 6.)			\$ 91,174

C. Approximate Portion of Gain / (Loss)

Due to Liabilities: A. - B.

\$ (284,355)

Actuarial Gain / (Loss) for
Plan Year Ended September 30, 2021

(Police Officers)

A. Derivation of Actuarial Gain / (Loss)

1. City normal cost previous actuarial valuation		\$	386,776
2. Unfunded actuarial accrued liability previous actuarial valuation			(706,848)
3. Contributions previous year			
(a) City	\$	264,685	
(b) State		79,228	
(c) Total		<u> </u>	\$ 343,913
4. Interest on:			
(a) Normal cost	\$	28,525	
(b) Unfunded actuarial accrued liability		(52,130)	
(c) Contributions		11,221	
(d) Net total: (a) + (b) - (c)		<u> </u>	\$ (34,826)
5. Expected unfunded actuarial accrued liability current year (1. + 2. - 3. + 4.)			\$ (698,811)
6. Actual unfunded actuarial accrued liability current year			<u>(872,212)</u>
7. Actuarial gain / (loss): (5. - 6.)			\$ 173,401

B. Approximate Portion of Gain / (Loss)

Due to Investments

1. Smoothed value of assets previous year		\$	28,113,521
2. Contributions during year			587,821
3. Benefits and admin expenses during year			1,014,861
4. Expected appreciation for period			<u>2,056,164</u>
5. Expected smoothed value of assets current year (1. + 2. + 3. - 4. + 5.)		\$	29,742,645
6. Actual smoothed value of assets current year			<u>30,651,726</u>
7. Approximate gain / (loss) due to investments: (7. - 6.)		\$	909,081

C. Approximate Portion of Gain / (Loss)

Due to Liabilities: A. - B.

\$ (735,680)

Amortization of Unfunded Actuarial Accrued Liability

A. Unfunded Actuarial Accrued Liability

<u>Date</u>	<u>General Employees</u>		<u>General Employees</u>	
	<u>Tier 1</u>		<u>Tier 2</u>	
	<u>Unfunded Liability</u>	<u>Amortization Payment</u>	<u>Unfunded Liability</u>	<u>Amortization Payment</u>
October 1, 2021	\$ (3,961,888)	\$ (380,673)	\$ (47,175)	\$ (3,214)
October 1, 2022	\$ (3,845,330)	\$ (380,673)	\$ (47,203)	\$ (3,214)
October 1, 2023	\$ (3,720,175)	\$ (380,673)	\$ (47,233)	\$ (3,214)
October 1, 2024	\$ (3,585,790)	\$ (380,673)	\$ (47,265)	\$ (3,214)
October 1, 2025	\$ (3,441,494)	\$ (380,673)	\$ (47,300)	\$ (3,214)
...				
October 1, 2046	\$ 0	\$ 0	\$ 0	\$ 0
<u>Date</u>	<u>AMSC</u>		<u>Police Officers</u>	
	<u>Unfunded Liability</u>	<u>Amortization Payment</u>	<u>Unfunded Liability</u>	<u>Amortization Payment</u>
October 1, 2021	\$ 1,577,943	\$ 136,592	\$ (872,212)	\$ (78,241)
October 1, 2022	\$ 1,547,651	\$ 136,592	\$ (852,526)	\$ (78,241)
October 1, 2023	\$ 1,515,125	\$ 136,592	\$ (831,389)	\$ (78,241)
October 1, 2024	\$ 1,480,200	\$ 136,592	\$ (808,693)	\$ (78,241)
October 1, 2025	\$ 1,442,699	\$ 136,592	\$ (784,323)	\$ (78,241)
...				
October 1, 2046	\$ 0	\$ 0	\$ 0	\$ 0

B. Covered Payroll History

<u>Date</u>	<u>Police Officers</u>	
	<u>Covered Payroll</u>	<u>Annual Increase</u>
October 1, 2021	\$ 2,898,555	(11.7%)
October 1, 2020	\$ 3,281,847	6.2%
October 1, 2019	\$ 3,090,000	(5.7%)
October 1, 2018	\$ 3,275,192	10.2%
October 1, 2017	\$ 2,970,815	(7.6%)
October 1, 2016	\$ 3,214,004	(0.5%)
October 1, 2015	\$ 3,229,332	3.3%
October 1, 2014	\$ 3,127,368	12.1%
October 1, 2013	\$ 2,789,742	(2.4%)
October 1, 2012	\$ 2,857,846	(6.3%)
October 1, 2011	\$ 3,050,052	N/A
10-Year Average Annual Increase		(0.5%)

Accounting Disclosure Exhibit

	Actuarial Valuation 10/01/2020	Actuarial Impact Statement 10/01/2020	10/01/2021
I. <u>Number of Plan Members</u>			
a. Retirees and beneficiaries receiving benefits excluding DROPs	50	50	53
b. DROP participants	7	7	10
c. Terminated Plan members entitled to deferred benefits	11	11	10
d. Active Plan members	98	98	89
e. Total	166	166	162
II. <u>Financial Accounting Standards Board Allocation</u>			
<u>As of October 1, 2021</u>			
A. <u>Statement of Accumulated Plan Benefits</u>			
1. Actuarial present value of accumulated vested Plan benefits			
a. Participants currently receiving benefits including DROP participants	\$ 23,571,126	\$ 23,571,126	\$ 28,054,990
b. Other participants	14,542,864	14,673,469	13,871,704
c. Total	\$ 38,113,990	\$ 38,244,595	\$ 41,926,694
2. Actuarial present value of accumulated non-vested Plan benefits			
	\$ 1,914,206	\$ 1,903,690	\$ 2,069,087
3. Total actuarial present value of accumulated Plan benefits			
	\$ 40,028,196	\$ 40,148,285	\$ 43,995,781
B. <u>Statement of Change in Accumulated Plan Benefits</u>			
1. Actuarial present value of accumulated Plan benefits as of October 1, 2020			\$ 40,028,196
2. Increase / (decrease) during year attributable to:			
a. Plan amendments			\$ 120,089
b. Change in actuarial assumptions			0
c. Benefits paid including refunds and DROP distributions			(1,721,259)
d. Other, including benefits accumulated, increase for interest due to decrease in the discount period			5,568,755
e. Net increase			\$ 3,967,585
3. Actuarial present value of accumulated plan benefits as of October 1, 2021			\$ 43,995,781
C. <u>Significant Matters Affecting Calculations</u>			
1. Assumed rate of return used in determining actuarial present value			7.375%
2. Change in Plan provisions			See Table IX., Item O.
3. Change in actuarial assumptions			None.

Accounting Disclosure Exhibit

III. Net Pension Liability and Related Ratios (GASB No. 67 & No. 68)

Measurement Date	9/30/2014 ¹	9/30/2015 ¹	9/30/2016	9/30/2017	9/30/2018	9/30/2019	9/30/2020	9/30/2021	Projected 9/30/2022 ²
A. Total Pension Liability (TPL)									
Service Cost	\$ 669,181	\$ 686,435	\$ 697,537	\$ 846,884	\$ 796,141	\$ 842,564	\$ 852,115	\$ 897,075	\$ 815,886
Interest	2,299,340	2,381,731	2,460,415	2,630,646	2,834,288	2,889,649	3,164,443	3,387,205	3,659,874
Benefit Changes	0	0	0	(20,122)	0	0	2,209,880	266,306	0
Difference Between Actual and Expected Experience Assumption Changes	(598,374)	(502,259)	(656,677)	(112,807)	901,489	(1,314,061)	502,197	339,164	1,422,832
Benefit Payments, including Refunds of Member Contributions	(1,315,113)	(1,417,586)	(1,293,782)	(1,570,751)	(1,563,305)	(1,660,970)	(1,584,681)	(1,721,259)	(2,113,610)
Net Change in Total Pension Liability	\$ 1,055,034	\$ 1,148,321	\$ 1,207,493	\$ 2,339,968	\$ 2,968,613	\$ 757,182	\$ 4,034,154	\$ 3,168,491	\$ 3,784,982
Total Pension Liability (TPL) - (beginning of year)	31,764,236	32,819,270	33,967,591	35,175,084	37,515,052	40,483,665	41,240,847	45,275,001	48,443,492
Total Pension Liability (TPL) - (end of year)	\$ 32,819,270	\$ 33,967,591	\$ 35,175,084	\$ 37,515,052	\$ 40,483,665	\$ 41,240,847	\$ 45,275,001	\$ 48,443,492	\$ 52,228,474
B. Plan Fiduciary Net Position									
Contributions - City and State	\$ 878,217	\$ 834,251	\$ 570,154	\$ 681,713	\$ 690,632	\$ 704,929	\$ 2,215,515	\$ 631,728	\$ 730,415
Contributions - Member	593,396	562,835	490,452	910,127	536,473	594,753	459,625	437,988	415,491
Net Investment Income	3,054,164	16,750	3,306,002	4,542,693	3,984,542	868,406	3,177,042	11,083,408	4,266,841
Benefit Payments, including Refunds of Member Contributions	(1,315,113)	(1,417,586)	(1,293,782)	(1,570,751)	(1,563,305)	(1,660,970)	(1,584,681)	(1,721,259)	(2,113,610)
Administrative Expenses	(100,780)	(135,093)	(129,291)	(163,555)	(139,324)	(129,072)	(143,452)	(148,804)	(148,804)
Other	6,784	4,454	2,835	0	260,999	49,243	359,949	0	0
Net Change in Plan Fiduciary Net Position	\$ 3,116,668	\$ (134,389)	\$ 2,946,370	\$ 4,400,227	\$ 3,770,017	\$ 427,289	\$ 4,483,998	\$ 10,283,061	\$ 3,150,333
Plan Fiduciary Net Position - (beginning of year)	29,120,485	32,237,153	32,102,764	35,049,134	39,449,361	43,219,378	43,646,667	48,130,665	58,413,726
Plan Fiduciary Net Position - (end of year)	\$ 32,237,153	\$ 32,102,764	\$ 35,049,134	\$ 39,449,361	\$ 43,219,378	\$ 43,646,667	\$ 48,130,665	\$ 58,413,726	\$ 61,564,059
C. Net Pension Liability (NPL) - (end of year): (A) - (B)	\$ 582,117	\$ 1,864,827	\$ 125,950	\$ (1,934,309)	\$ (2,735,713)	\$ (2,405,820)	\$ (2,855,664)	\$ (9,970,234)	\$ (9,335,585)
D. Plan Fiduciary Net Position as a Percentage of TPL:									
(B) / (A)	98.23 %	94.51 %	99.64 %	105.16 %	106.76 %	105.83 %	106.31 %	120.58 %	117.87 %
E. Covered Employee Payroll ³	\$ 4,902,128	\$ 4,086,300	\$ 4,861,991	\$ 6,368,739	\$ 6,447,564	\$ 6,840,856	\$ 7,013,961	\$ 6,668,442	\$ 6,377,456
F. NPL as a Percentage of Covered Employee Payroll:									
(C) / (E)	11.87 %	45.64 %	2.59 %	(30.37)%	(42.43)%	(35.17)%	(40.71)%	(149.51)%	(146.38)%
G. Notes to Schedule:									
Valuation Date	10/1/2013	10/1/2014	10/1/2015	10/1/2016	10/1/2017	10/1/2018	10/1/2019	10/1/2020	10/1/2021
Reporting Date (GASB No. 68)	9/30/2015	9/30/2016	9/30/2017	9/30/2018	9/30/2019	9/30/2020	9/30/2021	9/30/2022	9/30/2023

Update procedures used to roll forward TPL, excluding DROP account balances, to the measurement dates - actual DROP account balances as of measurement dates included in TPL.

See Notes to Schedule of Contributions for a history of benefit and assumption changes.

¹ As Reported in Plan's financial statements

² Projected - actual amounts will be available after fiscal year end

³ Reported payroll on which contributions to the Plan are based as provided under GASB No. 82



Accounting Disclosure Exhibit

IV. Schedule of Employer Contributions (GASB No. 67 & No. 68)

Fiscal Year End 9/30	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll ^{1,2}	Actual Contribution as a % of Covered Payroll
2012	\$ 1,021,975	\$ 1,021,975	\$ 0	\$ 5,423,152	18.84%
2013	860,190	860,190	0	4,861,701	17.69%
2014	878,217	878,217	0	4,902,128	17.92%
2015	834,251	834,251	0	4,086,300	20.42%
2016	570,154	570,154	0	4,861,991	11.73%
2017	680,568	681,713	(1,145)	6,368,739	10.70%
2018	690,632	690,632	0	6,447,564	10.71%
2019	704,929	704,929	0	6,840,856	10.30%
2020	677,223	2,215,515	(1,538,292)	7,013,961	31.59%
2021	631,727	631,728	(1)	6,668,442	9.47%
2022 ³	730,415	730,415	0	6,377,456	11.45%

¹ Projected prior to fiscal year ended September 30, 2014

² Reported payroll on which contributions to the Plan are based as provided under GASB No. 82

³ Projected - actual amounts will be available after fiscal year end

Accounting Disclosure Exhibit

V. Notes to Schedule of Contributions (GASB No. 67 & No. 68)

Valuation Date: Actuarially determined contributions are calculated as of October 1st - two year(s) prior the fiscal year end in which contributions are reported.

Methods and Assumptions Used to Determine Contribution Rates for Fiscal Year Ending September 30, 2022:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Closed
Amortization Period	25 years
Asset Valuation Method	5-year smoothed
Inflation	2.75%
Salary Increases	3.75% - 5.25%
Investment Rate of Return	7.375%
Payroll Growth Assumption	4.0% per year, but limited to average annual increase over most recent ten years (0.7%) for Police Officers. None for General Employees including AMSC.
Retirement Age	Experience-based table of rates specific to the type of eligibility condition
Mortality	<p>General including AMSC members - healthy participants during employment, PUB-2010 Headcount Weighted General Below Median Employee Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018.</p> <p>Police Members - healthy participants during employment, PUB-2010 Headcount Weighted Safety Employee Female Mortality Table and Safety Below Median Employee Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018.</p> <p>General including AMSC members - healthy participants post employment, PUB-2010 Headcount Weighted General Below Median Healthy Retiree Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018.</p> <p>Police Members - healthy participants post employment, PUB-2010 Headcount Weighted Safety Healthy Retiree Female Mortality Table and Safety Below Median Healthy Retiree Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018.</p> <p>General including AMSC members - disabled participants, PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table, separate rates for males and females, both set forward 3 years, without projected mortality improvements.</p> <p>Police members - disabled participants, 80% PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table / 20% PUB-2010 Headcount Weighted Safety Disabled Retiree Mortality Table, separate rates for males and females, without projected mortality improvements.</p>
Cost-of-Living Increases	3.0% / 0.0%

Other Information:

Benefit Changes

2020: Final Average Compensation, normal retirement eligibility, early retirement eligibility and vesting schedule for AMSC members were updated. 2019: Eligibility requirements for Tier 2 General and AMSC members were updated; Normal retirement eligibility for Police Officers and AMSC were updated; Early retirement eligibility for Police Officers were updated; AMSC's vesting schedule updated from 3 year cliff vesting to 5 years cliff vesting; added a 12% cap on employee contributions for all Police Officers; added cost-of-living increases provided for Tier 2 General, AMSC and the portion of benefit accrued after September 30, 2011 for Tier 1 General members who retired or entered the DROP on or after October 1, 2019. 2015: Re-opened Plan to General Employees effective October 1, 2016 with a new class of benefits (Tier 2);

Accounting Disclosure Exhibit

V. Notes to Schedule of Contributions (GASB No. 67 & No. 68) (cont'd)

Benefit Changes (cont'd)

2015(cont'd): Created new class of benefits for employees who hold management positions effective October 1, 2016 (AMSC); added a 10% cap on employee contributions for Tier 1 General Employees; added a 12% cap on employee contributions for Police Lieutenants and Captains; Final Average Compensation updated to the average of the best five years for Police Lieutenants and Captains; caps overtime hours at 300 hours per fiscal year for Police Lieutenants and Captains. 2011: Eligibility requirements updated to include only General Employees hired before October 1, 2011; Final Average Compensation updated to the average of the final 60 consecutive months of basic compensation for General Employees; Normal Retirement eligibility updated to age 60 and completion of 10 years of Credited Service for benefits accrued after September 30, 2011 for General Employees; benefit multiplier decreased to 2.25% for benefits accrued after September 30, 2011 for General Employees; cost-of-living increases eliminated for benefits accrued after September 30, 2011 for General Employees; Final Average Compensation for members covered under the Police Officers and Sergeants collective bargaining agreement updated to the average of the best five (5) years of basic compensation.

Assumption Changes

2019: Mortality assumptions updated to the mortality assumptions used in the Florida Retirement System July 1, 2019 Actuarial Valuation; Retirement rates and cost-of-living increases were updated. 2016: Mortality assumptions updated to the mortality assumptions used in the Florida Retirement System July 1, 2016 Actuarial Valuation. 2012: Investment return updated from 7.000% to 7.375%; withdrawal, salary increase and retirement rates updated. 2011: Payroll growth assumption eliminated for General Employees; General Employees who retire prior to age 60 but after attainment of 10 years of service (55 & 10) assumed to receive an actuarially reduced benefit payable immediately upon retirement.

VI. Discount Rate (GASB No. 67 & No. 68)

A discount rate of 7.375% was used to measure the TPL. This discount rate was based on the expected rate of return on Plan investments of 7.375%. The projection of cash flows used to determine this discount rate assumed member contributions will be made at the current member contribution rate and employer contributions will be made at rates equal to the difference between actuarially determined current contribution rates and the member contribution rate. Based on these assumptions, the Plan's fiduciary net position was projected to be available to make all projected future expected benefit payments of current Plan members. Therefore, the long-term expected rate of return on Plan investments was applied to all periods of projected benefit payments to determine the TPL.

VII. Sensitivity of the NPL to the Discount Rate Assumption (GASB No. 67 & No. 68)

Measurement date: September 30, 2021

	1% Decrease	Current Discount Rate	1% Increase
Discount Rate	6.375%	7.375%	8.375%
NPL	\$ (3,508,799)	\$ (9,970,234)	\$ (15,259,028)

Measurement date: September 30, 2022 *

	1% Decrease	Current Discount Rate	1% Increase
Discount Rate	6.375%	7.375%	8.375%
NPL	\$ (2,472,792)	\$ (9,335,585)	\$ (14,957,898)

* Projected - actual amounts will be available after fiscal year end



Accounting Disclosure Exhibit

VIII. Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions - Reporting Date (GASB No. 68)

Pension Expense for Fiscal Year Ending September 30, 2022 \$ (980,078)

Summary of Outstanding Deferred Inflows and Outflows of Resources as of September 30, 2022

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between actual and expected experience on liabilities	\$ 793,379	\$ 578,610
Changes of assumptions or other inputs	41,933	674,584
Net difference between projected and actual earnings on pension Plan investments	<u>0</u>	<u>5,292,081</u>
Total	<u>\$ 835,312</u>	<u>\$ 6,545,275</u>

Projected Deferred Outflows for City Contributions after the Measurement Date \$ 651,187

Summary of Deferred Outflows and Inflows of Resources that will be Recognized in Pension Expense in Future Years.

<u>Year Ending 30-Sep</u>	<u>Amount</u>
2023	\$ (1,341,944)
2024	(1,277,967)
2025	(1,615,995)
2026	(1,474,057)
2027	0
Thereafter	0

Accounting Disclosure Exhibit

The following information is not required to be disclosed but is provided for informational purposes.

IX. Components of Pension Expense (GASB No. 68)

Measurement Date	9/30/2014	9/30/2015	9/30/2016	9/30/2017	9/30/2018	9/30/2019	9/30/2020	9/30/2021	Projected 9/30/2022 *
Service Cost	\$ 669,181	\$ 686,435	\$ 697,537	\$ 846,884	\$ 796,141	\$ 842,564	\$ 852,115	\$ 897,075	\$ 815,886
Interest on Total Pension Liability	2,299,340	2,381,731	2,460,415	2,630,646	2,834,288	2,889,649	3,164,443	3,387,205	3,659,874
Current-Period Benefit Changes	0	0	0	(20,122)	0	0	2,209,880	266,306	0
Contributions - Member	(593,396)	(562,835)	(490,452)	(910,127)	(536,473)	(594,753)	(459,625)	(437,988)	(415,491)
Projected Earnings on Plan Investments	(2,149,941)	(2,371,917)	(2,354,317)	(2,579,620)	(2,901,480)	(3,171,163)	(3,267,136)	(3,520,124)	(4,266,841)
Administrative Expenses	100,780	135,093	129,291	163,555	139,324	129,072	143,452	148,804	148,804
Other Changes in Plan Fiduciary Net Position	(6,784)	(4,454)	(2,835)	0	(260,999)	(49,243)	(1,898,241)	0	0
Recognition of Beginning Deferred Outflows / (Inflows) due to Liabilities	(106,853)	(198,173)	(322,074)	(238,127)	(68,035)	(273,227)	(282,595)	(78,044)	232,128
Recognition of Beginning Deferred Outflows / (Inflows) due to Assets	(193,020)	278,602	88,265	(304,350)	(520,961)	132,608	(320,994)	(1,643,312)	(1,250,701)
Total Pension Expense	<u>\$ 19,307</u>	<u>\$ 344,482</u>	<u>\$ 205,830</u>	<u>\$ (411,261)</u>	<u>\$ (518,195)</u>	<u>\$ (94,493)</u>	<u>\$ 141,299</u>	<u>\$ (980,078)</u>	<u>\$ (1,076,341)</u>

* Projected - actual amounts will be available after measurement date

Accounting Disclosure Exhibit

The following information is not required to be disclosed but is provided for informational purposes.

X. Recognition of Deferred Outflows and (Inflows) due to Liabilities - Measurement Date (GASB No. 68)

Recognition of Deferred Outflows due to Differences Between Actual and Expected Experience on Liabilities

Established	Initial Balance	Initial Recognition Period	Remaining Recognition Period as of 9/30/2021	Recognition Amount for 2020 / 2021	Balance as of 9/30/2021
2015 / 2016	\$ 0	5.3	0.0	\$ 0	\$ 0
2016 / 2017	0	5.4	0.4	0	0
2017 / 2018	901,489	5.3	1.3	170,092	221,121
2018 / 2019	0	5.3	2.3	0	0
2019 / 2020	502,197	5.1	3.1	98,470	305,257
2020 / 2021	339,164	4.7	3.7	72,163	267,001
TOTAL				\$ 340,725	\$ 793,379

Recognition of Deferred (Inflows) due to Differences Between Actual and Expected Experience on Liabilities

Established	Initial Balance	Initial Recognition Period	Remaining Recognition Period as of 9/30/2021	Recognition Amount for 2020 / 2021	Balance as of 9/30/2021
2015 / 2016	\$ (656,677)	5.3	0.0	\$ (37,172)	\$ 0
2016 / 2017	(112,807)	5.4	0.4	(20,890)	(8,357)
2017 / 2018	0	5.3	1.3	0	0
2018 / 2019	(1,314,061)	5.3	2.3	(247,936)	(570,253)
2019 / 2020	0	5.1	3.1	0	0
2020 / 2021	0	4.7	3.7	0	0
TOTAL				\$ (305,998)	\$ (578,610)

Recognition of Deferred Outflows due to Changes of Assumptions or Other Inputs

Established	Initial Balance	Initial Recognition Period	Remaining Recognition Period as of 9/30/2021	Recognition Amount for 2020 / 2021	Balance as of 9/30/2021
2015 / 2016	\$ 0	5.3	0.0	\$ 0	\$ 0
2016 / 2017	566,118	5.4	0.4	104,837	41,933
2017 / 2018	0	5.3	1.3	0	0
2018 / 2019	0	5.3	2.3	0	0
2019 / 2020	0	5.1	3.1	0	0
2020 / 2021	0	4.7	3.7	0	0
TOTAL				\$ 104,837	\$ 41,933

Accounting Disclosure Exhibit

The following information is not required to be disclosed but is provided for informational purposes.

X. Recognition of Deferred Outflows and (Inflows) due to Liabilities - Measurement Date (GASB No. 68) (cont'd)

Recognition of Deferred (Inflows) due to Changes of Assumptions or Other Inputs

Established	Initial Balance	Initial Recognition Period	Remaining Recognition Period as of 9/30/2021	Recognition Amount for 2020 / 2021	Balance as of 9/30/2021
2015 / 2016	\$ 0	5.3	0.0	\$ 0	\$ 0
2016 / 2017	0	5.4	0.4	0	0
2017 / 2018	0	5.3	1.3	0	0
2018 / 2019	0	5.3	2.3	0	0
2019 / 2020	(1,109,800)	5.1	3.1	(217,608)	(674,584)
2020 / 2021	0	4.7	3.7	0	0
TOTAL				\$ (217,608)	\$ (674,584)

XI. Recognition of Deferred Outflows and (Inflows) due to Assets - Measurement Date (GASB No. 68)

Recognition of Deferred Outflows / (Inflows) due to Difference Between Projected and Actual Earnings on Pension Plan Investments

Established	Initial Balance	Initial Recognition Period	Remaining Recognition Period as of 9/30/2021	Recognition Amount for 2020 / 2021	Balance as of 9/30/2021
2016 / 2017	\$ (1,963,073)	5	0	\$ (392,613)	\$ 0
2017 / 2018	(1,083,062)	5	1	(216,612)	(216,614)
2018 / 2019	2,302,757	5	2	460,551	921,104
2019 / 2020	90,094	5	3	18,019	54,056
2020 / 2021	(7,563,284)	5	4	(1,512,657)	(6,050,627)
TOTAL				\$ (1,643,312)	\$ (5,292,081)

Outline of Principal Provisions of the Retirement Plan

A. Effective Date:

October 1, 1965. Most recently amended by Ordinance 18-21-2408 adopted September 7, 2021.

B. Eligibility Requirements:

1. General Employees

Tier 1:

Regular full-time employee hired before October 1, 2011 is eligible to enter the Plan following the completion of six months of Credited Service and attainment of age 20.

Tier 2:

Regular full-time employee hired on or after October 1, 2011 and not participating in the Plan as of October 1, 2016 who elects to join or fails to make any election within ninety (90) days from September 20, 2016 is eligible to enter the Plan as a Tier 2 employee as of October 1, 2016.

Regular full-time employee hired on or after October 1, 2016 who elects to join or fails to make any election within ninety (90) days from date of hire is eligible to enter the Plan as a Tier 2 employee as of their date of hire.

Any regular full-time employee who previously entered into the Defined Contribution (DC) Plan may opt-out of the DC Plan and elect to join the Plan as a Tier 2 member or as their respective classification at the time they elect to join the Plan during an annual open enrollment period.

2. Police Officers

Regular full-time Police Officer is eligible to enter the Plan as of date of employment.

3. Administration Management Service Class (AMSC)

Employees of the City with the following positions who do not elect to participate in a defined contribution Plan of the City:

City Manager	Chief Administrative Officer (currently Finance Office Manager)
City Attorney	Chief Procurement Officer (currently Purchasing Manager)
City Clerk	Parks and Recreation Director
Assistant / Deputy City Manager	Assistant Director of Parks and Recreation
Finance Director / Chief Financial Officer	Community Redevelopment Agency Director
Chief of Police	Personnel Manager
Planning and Zoning Director	Project Manager
Building Director	Special Assistant to the Manager
Director of Public Works	Superintendent of Maintenance

Outline of Principal Provisions of the Retirement Plan

C. Credited Service:

1. General Employees and AMSC

Continuous employment. Credited service shall exclude continuous employment prior to Plan participation as follows: (1) If employed prior to October 1, 1973, credited service shall exclude the first two years of continuous employment and any additional year of continuous employment prior to attainment of age 25. (2) If employed on or after October 1, 1973, credited service shall exclude the first six (6) months of continuous employment and continuous employment prior to age 20.

Credited service for Tier 2 employees and AMSC will be continuous employment from the date of hire for all purposes except for benefit accruals which will be from the later of date of Plan entry election date or date of hire.

2. Police Officers

Continuous employment. For Police Officers who did not participate when first eligible for the Plan, Credited Service shall exclude continuous employment prior to Plan participation as follows: (1) If employed prior to October 1, 1973, Credited Service shall exclude the first two years of continuous employment and any additional year of continuous employment prior to attainment of age 25. (2) If employed on or after October 1, 1973, Credited Service shall exclude the first six (6) months of continuous employment and continuous employment prior to age 20.

D. Final Monthly Compensation (FMC):

Final Average Compensation is 1/36th of the final 36 consecutive months of compensation. For Police Officers, not less than 1/5th of the highest five (5) years out of the last (10) ten years of compensation. Compensation shall mean regular wages and salaries, excluding bonuses, vacation, sick leave and other additional compensation.

Effective October 1, 2011, Final Average Compensation for General Employees is 1/60th of the final 60 consecutive months of basic compensation, provided it is not less than the Final Average Compensation as of September 30, 2011 based on the definition above. Basic compensation shall mean base wages and salaries, excluding commissions, overtime pay, bonuses and any other forms of additional compensation earned outside of base wages.

Effective October 1, 2011, Final Average Compensation for members covered under the Police Officers and Sergeants collective bargaining agreement is the best five (5) years of basic compensation, provided it is not less than the Final Average Compensation as of September 30, 2011 based on the definition above. Basic compensation shall mean base wages and salaries, including up to 300 hours of overtime in a fiscal year and excluding payments for accrued unused sick or annual leave, extra duty or special detail work, shift differential, assignment pay, bonuses and any other forms of additional compensation earned outside of base wages.

Outline of Principal Provisions of the Retirement Plan

D. Final Monthly Compensation (FMC) (cont'd):

Effective October 1, 2016, Final Average Compensation for members covered under the Miami-Dade County Police Benevolent Association Upper-Collective Bargaining Union (Lieutenants & Captains) collective bargaining agreement is the best five (5) years of basic compensation, provided it is not less than the Final Average Compensation as of September 30, 2016 based on the definition above. Basic compensation shall mean base wages and salaries, including up to 300 hours of overtime in a fiscal year and excluding payments for accrued unused sick or annual leave, extra duty or special detail work, shift differential, assignment pay, bonuses and any other forms of additional compensation earned outside of base wages.

Final Average Compensation for Tier 2 General Employees shall be the average of the highest eight (8) years of credit service.

Final Average Compensation for AMSC shall be the average of the highest five (5) years of credited service.

E. Normal Retirement:

1. Eligibility:

a. General Employees: Attainment of age 55 and completion of ten (10) years of Credited Service for benefits accrued as of September 30, 2011.

Attainment of age 60 and completion of ten (10) years of Credited Service for benefits accrued after September 30, 2011, including increases in the accrued benefit as of September 30, 2011 due to increases in the Final Average Compensation.

Attainment of age 65 and completion of ten (10) years of Credited Service or completion of thirty-three (33) years of Credited Service regardless of age for Tier 2 General Employees.

b. Police Officers: Attainment of age 55 and completion of ten (10) years of Credited Service or completion of twenty-five (25) years of Credited Service regardless of age.

c. AMSC: Attainment of age 60 and completion of ten (10) years of Credited Service (attainment of age 60 and completion of five (5) years of Credited Service if an AMSC member prior to September 7, 2021), attainment of age 55 and completion of twenty (20) years of Credited Service or completion of thirty-three (33) years of Credited Service regardless of age.

2. Benefit:

The monthly Plan benefit is the product of:

- a. FMC,
- b. Credited Service during the appropriate period and
- c. The appropriate benefit percentage

Outline of Principal Provisions of the Retirement Plan

E. Normal Retirement (cont'd):

2. Benefit (cont'd):

The appropriate benefit percentages are:

a. <u>General Employees</u>	<u>For Credited Service</u>	<u>Percentage</u>
	Through September 30, 1999	2.50%
	October 1, 1999 through September 30, 2011	2.75%
	October 1, 2011 and thereafter	2.25%
b. <u>Police Officers</u>	<u>For Credited Service</u>	<u>Percentage</u>
	Through September 30, 1995	2.00%
	October 1, 1995 through September 30, 1996	2.25%
	October 1, 1996 through September 30, 1997	2.50%
	October 1, 1997 through September 30, 2001	2.75%
	October 1, 2001 through September 30, 2002	2.80%
	October 1, 2002 through September 30, 2003	2.90%
	October 1, 2003 and thereafter	3.00%
c. <u>General Employees (Tier 2)</u>	<u>For Credited Service</u>	<u>Percentage</u>
	October 1, 2016 and thereafter	1.60%
d. <u>AMSC</u>	<u>For Credited Service</u>	<u>Percentage</u>
	October 1, 2016 and thereafter	3.00%

F. Supplemental Benefit:

A cost-of-living supplemental benefit based upon the consumer price index is provided upon retirement. The cumulative increase is limited to 3% per year.

No cost-of-living supplemental benefit is provided for Tier 2 General Employees and AMSC members who retired or entered the DROP prior to October 1, 2019. No cost-of-living supplemental benefit is provided on the portion of the benefit accrued after September 30, 2011 for Tier 1 General Employees who retired or entered the DROP prior to October 1, 2019.

G. Early Retirement for Police Officers:

1. Eligibility: Attainment of age 50 and completion of 10 years of Credited Service.
2. Benefit: Accrued benefit based upon FMC and Credited Service as of Early Retirement Date, reduced 3% for each year that the benefit commencement date precedes Normal Retirement.

Outline of Principal Provisions of the Retirement Plan

H. Delayed Retirement:

1. Eligibility: Retirement subsequent to Normal Retirement Date.
2. Benefit: Accrued benefit based upon FMC and Credited Service as of Delayed Retirement Date.

I. Disability Retirement:

1. Eligibility: Totally and permanently disabled for a six month period while actively employed.
2. Benefit: Accrued benefit based upon FMC and Credited Service as of date of disability, actuarially reduced as for Early Retirement for early commencement.

J. Pre-Retirement Death Benefit:

Prior to vesting: Refund of member's accumulated Employee Contribution.

Upon vesting: The beneficiary will receive benefit payable as if the deceased member had terminated employment on the day before death and survived to the earliest retirement date and elected the 50% Joint and Contingent form of payment reduced for early retirement and died the next day. The beneficiary may elect to defer payment until the deceased member's normal retirement date.

K. Benefit Upon Termination of Service:

1. Benefit payable at Normal Retirement equal to the greater of:
 - a. Accrued benefit based upon FMC and Credited Service as of date of termination times the vesting percentage shown below, or
 - b. Benefit which can be supported by the accumulated Member Contributions with interest to Normal Retirement Date.

No supplemental benefit shall be payable to vested terminees.

2. Vesting Schedule:

<u>Years of Credited Service</u>	<u>Vesting Percentage</u>
Less than 10	0%
10 or more years	100%

AMSC members who have completed three (3) years of continuous Credited Service as of as of June 18, 2019 are 100% vested. AMSC members employed on September 7, 2021 are 100% vested immediately.

3. Refund Option:

A terminated member may elect to receive a refund of Accumulated Contributions without interest in lieu of receiving any other Plan benefits.

Outline of Principal Provisions of the Retirement Plan

L. Member Contributions:

Members contribute 7.0% (3.0% for Tier 2 General Employees and 7.5% for Police Officers) of member's basic annual compensation.

Should the City contribution for General Employees be actuarially determined to exceed 7.0%, not including expenses, both the City and the General Employees (other than Tier 2 General Employees and AMSC) will share equally in the amount in excess of 7.0%. General Employees (other than Tier 2 General Employees and AMSC) Contributions are capped at 10% of basic annual compensation as of October 1, 2016.

Should the City contribution for Police Officers be actuarially determined to exceed 7.5%, not including expenses, both the City and the Police Officers will share equally in the amount in excess of 7.5% but not more than 12.0%.

M. Normal Form of Retirement Income:

The normal form of payment shall be a life annuity with a guarantee of a refund of accumulated Employee Contributions.

N. Deferred Retirement Option Plan (DROP):

1. Eligibility: Attainment of normal retirement date.
2. The maximum period of participation in the DROP is sixty (60) months.
3. A member's account in the DROP shall be credited monthly with interest in an amount equal to 50% of the net (gross return minus investment expense) yearly interest earned by the Plan for the preceding fiscal year, up to a maximum of 5% and a minimum of 0%.
4. No payment may be made from the DROP until the member actually separates from service with the City. The DROP account balance may be distributed in a lump sum, periodic payments, an annuity or a combination thereof.

O. Changes Since Previous Valuation (included in Actuarial Impact Statement):

1. Final Average Compensation for AMSC was:

Final Average Compensation for AMSC shall be the average of the highest eight (8) years of credited service.

2. Normal Retirement eligibility for AMSC was:

Attainment of age 60 and completion of five (5) years of Credited Service or completion of thirty-three (33) years of Credited Service regardless of age.

3. Early retirement for AMSC was:

Eligibility: Attainment of age 55 and completion of 10 years of Credited Service.

Benefit: Accrued benefit based upon FMC and Credited Service as of Early Retirement Date, reduced 1/15 for each of the first five years and 1/30 for the next five years that the benefit commencement date precedes Normal Retirement.

4. Vesting schedule for AMSC was:

100% vesting upon completion of 5 years of credited service.

**Actuarial Assumptions and Methods
Used in the Valuation**

A. Mortality

General Employees including AMSC Mortality Assumptions:

For healthy participants during employment, PUB-2010 Headcount Weighted General Below Median Employee Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018.

For healthy participants post employment, PUB-2010 Headcount Weighted General Below Median Healthy Retiree Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018.

For disabled participants, PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table, separate rates for males and females, both set forward 3 years, without projected mortality improvements.

Sample Ages (2021)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Male	Female	Male	Female
	55	32.67	35.09	28.73
60	27.81	30.07	24.64	27.92
62	25.92	28.09	23.02	26.09

Sample Ages (2041)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Male	Female	Male	Female
	55	34.30	36.58	30.75
60	29.38	31.51	26.50	29.59
62	27.45	29.50	24.81	27.71

Police Officer Mortality Assumptions:

For healthy participants during employment, PUB-2010 Headcount Weighted Safety Employee Female Mortality Table and Safety Below Median Employee Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018.

For healthy participants post employment, PUB-2010 Headcount Weighted Safety Healthy Retiree Female Mortality Table and Safety Below Median Healthy Retiree Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018.

For disabled participants, 80% PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table / 20% PUB-2010 Headcount Weighted Safety Disabled Retiree Mortality Table, separate rates for males and females, without projected mortality improvements.

Actuarial Assumptions and Methods
Used in the Valuation

A. Mortality (cont'd)

Police Officer Mortality Assumptions (cont'd):

Sample Ages (2021)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Male	Female	Male	Female
	55	30.53	34.39	27.68
60	25.58	29.33	23.10	26.47
62	23.66	27.32	21.36	24.63

Sample Ages (2041)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Male	Female	Male	Female
	55	32.17	35.88	29.58
60	27.15	30.77	24.88	28.22
62	25.19	28.74	23.09	26.33

B. Investment Return to be Earned by Fund

7.375% (net of investment expenses), compounded annually - includes inflation at 2.75%.

C. Allowances for Expenses or Contingencies

Actual expenses paid in previous year.

D. Employee Withdrawal Rates

Withdrawal rates for males and for females were used in accordance with the following illustrative example based upon number of years of service:

Service	Withdrawal Rates Per 100 Employees	
	Police	General / AMSC
1 - 2	12.00	20.00
3 - 6	8.00	9.25
7 - 10	8.00	5.00
11 & Over	3.50	5.00

E. Disability Rates

1985 Disability Study, Class 1 with separate rates for females.

**Actuarial Assumptions and Methods
Used in the Valuation**

F. Marital Assumptions

100% of active members are assumed to be married. Where applicable, females are assumed to be three years younger than their male spouses.

G. Salary Increase Factors

Current salary is assumed to increase in accordance with the following table based upon number of years of service - includes wage inflation of 3.25%.

<u>Service</u>	<u>Police</u>	<u>General / AMSC</u>
0 - 9	5.25%	5.25%
10 - 14	3.75%	4.75%
15 - 19	3.75%	4.25%
20 & over	3.75%	3.75%

H. Increase in Covered Payroll

4.0% per year, limited to average annual increase over most recent ten years (-0.5%) but not less than 0.0% for Police Officers. No increase in covered payroll is assumed for General Employees including AMSC.

I. Retirement Rates

Rates of Early Retirement for Police Officers were used in accordance with the following table.

<u>Years Preceding Normal Retirement</u>	<u>Police</u>
1 - 6	5%
7 - 10	10%

Rates of Normal Retirement were used in accordance with the following tables.

<u>Age</u>	<u>Police</u>	<u>General *</u>	<u>AMSC **</u>
55 - 59	25%	10%	25%
60 - 61	25%	10%	25%
62 - 64	40%	25%	35%
65 - 66	100%	25%	35%
67 & above	100%	100%	100%

<u>Service</u>	<u>Police</u>
25 years	100%

* Rates are 25% for Tier 2 members for each year upon meeting 33 years of service until 100% at age 67.

** Rates are 25% below the age of 62 and 35% between the ages of 62 and 66 upon meeting 33 years of service until 100% at age 67.

General Employees who retire prior to age sixty (60) but after attainment of ten (10) years of Credited Service (55 & 10) are assumed to receive an actuarially reduced benefit payable immediately upon retirement.

**Actuarial Assumptions and Methods
Used in the Valuation**

J. Cost of Living Increases

Future cost of living increases for General Employees (including Tier 1 and Tier 2 General Employees), AMSC and Police Officers are assumed to be 3.0% per annum.

K. Valuation of Assets

The method used for determining the smoothed value of assets phases in the deviation between the expected and actual return on assets at the rate of 20% per year. The smoothed value of assets will be further adjusted to the extent necessary to fall within the corridor whose lower limit is 80% of the fair market value of Plan assets and whose upper limit is 120% of the fair market value of Plan assets.

L. Cost Methods

Normal Retirement, Termination, Disability and Pre-Retirement Death Benefit:

Entry-Age-Actuarial Cost Method

Under this method the normal cost for each active employee is the amount which is calculated to be a level percentage of pay that would be required annually from his date of hire to his retirement age to fund his estimated benefits, assuming the Plan had always been in effect. The normal cost for the Plan is the sum of the individual normal costs for all active employees. The actuarial accrued liability as of any valuation date for each active employee or inactive employee who is eligible to receive benefits under the Plan is the excess of the actuarial present value of estimated future benefits over the actuarial present value of current and future normal costs. The unfunded actuarial accrued liability as of any valuation date is the excess of the actuarial accrued liability over the smoothed value of assets of the Plan.

Vested Normal Retirement, Termination, Disability, and Death Benefits: Unit Credit Cost Method

Under this method, the actuarial present value of vested accrued benefits is an amount calculated to be the sum of the present values of each individual's vested accrued or earned benefit under the Plan as of the valuation date. Each individual's calculation is based on pay and service as of the valuation date.

M. Disclosure of Assumptions

The investment return, salary increases, withdrawal and retirement rates were updated based on the experience study performed for the period October 1, 2005 - May 31, 2013. The mortality rates are based upon the July 1, 2021 FRS Actuarial Valuation, as required under F.S., Chapter 2015 -157.

N. Changes Since Previous Valuation (included in Actuarial Impact Statement)

AMSC Retirement Rates were:

<u>Age</u>	<u>AMSC *</u>
55 - 59	10%
60 - 61	25%
62 - 64	35%
65 - 66	35%
67 & above	100%

* Includes Early Retirement.

**Distribution by Attained Age Groups
and Service Groups as of October 1, 2021**

General Employees (including AMSC)

Attained Age Group	-----COMPLETED YEARS OF SERVICE-----							Total
	<u>0 - 4</u>	<u>5 - 9</u>	<u>10 - 14</u>	<u>15 - 19</u>	<u>20 - 24</u>	<u>25 - 29</u>	<u>30 & Over</u>	
Under 25	-	-	-	-	-	-	-	0
25 - 29	1	-	-	-	-	-	-	1
30 - 34	2	1	1	-	-	-	-	4
35 - 39	3	2	1	-	-	-	-	6
40 - 44	1	1	1	-	1	-	-	4
45 - 49	2	1	2	1	1	-	-	7
50 - 54	3	7	1	-	2	-	-	13
55 - 59	2	2	1	-	2	1	-	8
60 - 64	-	1	1	-	1	1	-	4
65 - 69	-	1	-	1	-	-	-	2
70 & Over	-	-	-	-	1	-	-	1
TOTAL	14	16	8	2	8	2	0	50

	<u>October 1, 2020</u>	<u>October 1, 2021</u>
Average Attained Age	48.20 years	49.54 years
Average Hire Age	35.88 years	35.96 years
Average Pay	\$ 65,495	\$ 69,578
Percent Female	37.7%	36.0%

**Distribution by Attained Age Groups
and Service Groups as of October 1, 2021**

Police Officers

Attained Age Group	-----COMPLETED YEARS OF SERVICE-----							Total
	<u>0 - 4</u>	<u>5 - 9</u>	<u>10 - 14</u>	<u>15 - 19</u>	<u>20 - 24</u>	<u>25 - 29</u>	<u>30 & Over</u>	
Under 25	3	-	-	-	-	-	-	3
25 - 29	4	3	-	-	-	-	-	7
30 - 34	2	1	1	-	-	-	-	4
35 - 39	-	1	3	3	-	-	-	7
40 - 44	2	-	1	2	-	-	-	5
45 - 49	1	-	-	-	1	-	-	2
50 - 54	1	-	-	2	2	1	-	6
55 - 59	2	-	-	-	-	-	-	2
60 - 64	2	-	-	1	-	-	-	3
65 & Over	-	-	-	-	-	-	-	0
TOTAL	17	5	5	8	3	1	0	39

	<u>October 1, 2020</u>	<u>October 1, 2021</u>
Average Attained Age	41.06 years	40.73 years
Average Hire Age	31.52 years	31.22 years
Average Pay	\$ 72,930	\$ 74,322
Percent Female	17.8%	17.9%

**Statistics for Participants Entitled to Deferred Benefits
and Participants Receiving Benefits**

A. Entitled to Deferred Benefits

<u>Current Age Group</u>	<u>Count</u>	<u>Total Annual Benefit</u>	<u>Average Annual Benefit</u>
Less than 40	2	\$ 34,920	\$ 17,460
40 - 44	1	18,463	18,463
45 - 49	1	19,512	19,512
50 - 54	5	136,897	27,379
55 - 59	1	18,210	18,210
60 - 64	-	-	-
65 & Over	-	-	-
TOTAL	10	\$ 228,002	\$ 22,800

B. Receiving Benefits (Excluding DROP Participants)

<u>Current Age Group</u>	<u>Count</u>	<u>Total Annual Benefit</u>	<u>Average Annual Benefit</u>
Less than 50	-	\$ -	\$ -
50 - 54	2	85,924	42,962
55 - 59	7	265,019	37,860
60 - 64	7	179,973	25,710
65 - 69	11	391,901	35,627
70 - 74	12	381,177	31,765
75 - 79	10	350,283	35,028
80 - 84	2	46,899	23,450
85 - 89	1	15,293	15,293
90 & Over	1	10,608	10,608
TOTAL	53	\$ 1,727,077	\$ 32,586

**Statistics for Participants Entitled to Deferred Benefits
and Participants Receiving Benefits**

C. DROP Participants

<u>Current Age Group</u>	<u>Count</u>	<u>Total Annual Benefit</u>	<u>Average Annual Benefit</u>
Less than 50	-	\$ -	\$ -
50 - 54	1	64,156	64,156
55 - 59	6	263,519	43,920
60 - 64	1	56,955	56,955
65 - 69	2	49,162	24,581
70 - 74	-	-	-
75 - 79	-	-	-
80 & Over	-	-	-
TOTAL	<u>10</u>	<u>\$ 433,792</u>	<u>\$ 43,379</u>

Reconciliation of Employee Data

General Employees (including AMSC)

A. <u>Active Participants</u>	
1. Active participants previous year	53
2. Retired during period	(1)
3. Entered DROP during period	0
4. Died during period	0
5. Disabled during period	0
6. Terminated during period	(2)
7. New active participants	0
8. Re-instated during period	0
9. Transfer to Police	0
10. Transfer from 401(k) Plan	0
11. Adjustments	0
12. Active participants current year	50
B. <u>Participants Receiving Benefits</u>	
1. Participants receiving benefits previous year	28
2. New retired participants	1
3. Former DROPs now receiving benefits	1
4. New terminated vested receiving benefits	1
5. New disabled receiving benefits	0
6. New beneficiaries receiving benefits	0
7. Died or ceased payment during period	0
8. Adjustments	0
9. Retired or terminated vested receiving benefits current year	31
C. <u>DROP Participants</u>	
1. DROP participants previous year	4
2. Died during year	0
3. Became disabled during year	0
4. Employment terminated and retired during year	(1)
5. Entered DROP during year	0
6. DROP participants current year	3
D. <u>Terminated Vested Participants Entitled to Future Benefits</u>	
1. Terminated vested entitled previous year	6
2. Died during period	0
3. Commenced receiving benefits during period	(1)
4. New terminated vested	0
5. Terminated vested paid lump sum	(1)
6. Terminated vested entitled current year	4

Reconciliation of Employee Data

Police Officers

A. Active Participants

1. Active participants previous year	45
2. Retired during period	0
3. Entered DROP during period	(4)
4. Died during period	0
5. Disabled during period	0
6. Terminated or went to part-time during period	(3)
7. New active participants	1
8. Re-instated during period	0
9. Transfer from General	0
10. Active participants current year	<u>39</u>

B. Participants Receiving Benefits

1. Participants receiving benefits previous year	22
2. New retired participants	0
3. Former DROPs now receiving benefits	0
4. New terminated vested receiving benefits	0
5. New disabled receiving benefits	0
6. New beneficiaries receiving benefits	0
7. Died or ceased payment during period	0
8. Adjustments	0
9. Retired or terminated vested receiving benefits current year	<u>22</u>

C. DROP Participants

1. DROP participants previous year	3
2. Died during year	0
3. Became disabled during year	0
4. Employment terminated and retired during year	0
5. Entered DROP during year	4
6. DROP participants current year	<u>7</u>

D. Terminated Vested Participants Entitled to Future Benefits

1. Terminated vested entitled previous year	5
2. Died during period	0
3. Commenced receiving benefits during period	0
4. New terminated vested	1
5. Terminated vested paid lump sum	0
6. Terminated vested entitled current year	<u>6</u>

Projected Retirement Benefits

<u>Fiscal Year</u>	<u>Projected Total Annual Payout</u>
2022	\$ 2,528,284
2023	\$ 2,663,217
2024	\$ 2,784,347
2025	\$ 2,901,751
2026	\$ 3,132,605
2027	\$ 3,249,619
2028	\$ 3,347,605
2029	\$ 3,505,395
2030	\$ 3,728,532
2031	\$ 3,970,311

The above projected payout of Plan benefits during the next ten years is based on assumptions involving all decrements. The actual payouts may differ from the above estimates depending upon the death, salary and retirement experience of the Plan. However, since the projected payment is recomputed each valuation date, there is an automatic correction to the extent that actual experience varies from expected experience.

Recent Compensation, Termination and Investment Return Experience

Valuation Date	Compensation				Termination		Investment Return ¹		
	% Increase / (Decrease)				Ratio of Actual		Smoothed Value	Market Value	Assumed Rate of Return
	General (incl. AMSC)		Police		General (incl. AMSC)	Police			
Actual	Assumed	Actual	Assumed	to Expected					
10/01/2021	3.0%	4.7%	2.2%	4.5%	0.6	1.1	10.628%	23.221%	7.375%
10/01/2020	7.1%	4.7%	5.5%	4.4%	1.4	1.2	8.008%	7.020%	7.375%
10/01/2019	4.1%	4.7%	11.1%	4.3%	0.8	2.4	7.398%	2.011%	7.375%
10/01/2018	4.3%	4.6%	(1.0%)	4.4%	0.3	1.1	9.004%	10.128%	7.375%
10/01/2017	4.5%	4.6%	1.6%	4.5%	1.5	1.5	9.544%	12.987%	7.375%
10/01/2016	8.0%	4.7%	2.4%	4.4%	1.5	1.0	9.826%	10.368%	7.375%
10/01/2015	2.3%	4.8%	2.0%	4.5%	1.2	1.0	8.195%	0.042%	7.375%
10/01/2014	0.9%	4.8%	9.9%	4.6%	0.5	0.7	10.249%	10.590%	7.375%
10/01/2013	3.0%	4.8%	(0.6%)	4.7%	0.4	1.6	8.682%	16.219%	7.375%
10/01/2012	(0.2%)	6.3%	(3.3%)	5.3%	3.0	0.3	2.1%	17.6%	7.0%
Last 3 Years	4.7%	4.7%	6.2%	4.4%	0.9	1.5	8.669%	10.391%	7.375%
Last 5 Years	4.6%	4.7%	3.8%	4.4%	0.8	1.4	8.910%	10.852%	7.375%
Last 10 Years	3.7%	4.9%	2.9%	4.6%	0.9	1.1	8.3%	10.8%	7.3%

¹ Computed as $2I/(A+B-I)$, where A is beginning value, B is ending value and I is investment return.

**Table XV
(Cont'd)**

Summary of Transaction Information

Valuation Date	Benefits Paid	Expenses	Contributions	Investment Return	Other / Transfers	Market Value
10/01/2021	\$ 1,721,259	\$ 759,214	\$ 1,069,716	\$ 11,693,818	\$ 0	\$ 58,413,726
10/01/2020	1,584,681	380,061	1,136,848	3,413,651	0	48,130,665
10/01/2019	1,660,970	304,351	1,299,682	1,043,685	1,917,344	45,564,011
10/01/2018	1,563,305	295,923	1,227,105	4,141,141	0	43,219,378
10/01/2017	1,570,751	289,032	1,591,840	4,668,170	0	39,449,361
10/01/2016	1,293,782	226,969	1,060,606	3,406,515	0	35,049,134
10/01/2015	1,417,586	226,363	1,381,911	112,474	0	32,087,589
10/01/2014	1,315,113	181,451	1,455,588	3,165,221	0	32,244,727
10/01/2013	1,351,678	264,362	1,505,547	4,066,152	0	29,092,870
10/01/2012	1,579,698	273,772	1,798,773	3,725,813	0	25,113,160
10/01/2011	1,125,796	189,999	2,141,352	(1,186,307)	0	21,407,509
10/01/2010	888,202	235,003	2,104,969	1,875,107	0	21,768,259
10/01/2009	764,708	206,941	1,652,824	804,982	0	18,911,388
10/01/2008	762,030	184,756	1,595,179	(2,633,551)	0	17,425,231
10/01/2007	681,660	84,321	1,511,306	2,291,062	0	19,410,389
10/01/2006	505,945	146,005	1,161,211	940,523	0	16,374,002
10/01/2005	574,338	136,535	1,409,957	1,302,776	0	14,924,218
10/01/2004	527,266	137,028	1,262,722	751,494	65,275	12,922,358
10/01/2003	356,561	115,729	1,216,406	1,344,365	0	11,436,952
10/01/2002	309,307	114,307	1,103,263	(1,059,445)	0	9,348,471
10/01/2001	333,639	88,128	675,983	(534,923)	0	9,728,267
10/01/2000	232,192	80,274	499,210	963,114	0	10,008,974
10/01/1999	254,771	75,413	369,032	997,855	0	9,304,813
10/01/1998	271,956	83,115	279,699	815,050	61,811	8,268,110
10/01/1997	233,331	56,437	219,754	1,552,534	0	7,590,243
10/01/1996	224,942	56,774	215,634	829,680	0	6,107,723
10/01/1995	160,057	48,995	164,183	975,873	0	5,344,125

Employer Contribution Information

Valuation Date	Contribution Fiscal Year End	Minimum Required Employer Contributions	Actual City Contributions	Actual State Contributions	Actual Employer Contributions
10/01/2021	09/30/2023	\$ 697,404	N/A	N/A	N/A
10/01/2020	09/30/2022	\$ 730,415	N/A	N/A	N/A
10/01/2019	09/30/2021	\$ 631,727	\$ 552,500	\$ 79,228	\$ 631,728
10/01/2018	09/30/2020	\$ 677,223	\$ 597,995	\$ 79,228	\$ 677,223
10/01/2017	09/30/2019	\$ 704,929	\$ 667,149	\$ 37,780	\$ 704,929
10/01/2016	09/30/2018	\$ 690,632	\$ 652,852	\$ 37,780	\$ 690,632
10/01/2015	09/30/2017	\$ 680,568	\$ 643,933	\$ 37,780	\$ 681,713
10/01/2014	09/30/2016	\$ 570,154	\$ 532,374	\$ 37,780	\$ 570,154
10/01/2013	09/30/2015	\$ 834,251	\$ 796,471	\$ 37,780	\$ 834,251
10/01/2012	09/30/2014	\$ 878,218	\$ 840,438	\$ 37,780	\$ 878,218
10/01/2011	09/30/2013	\$ 860,190	\$ 822,410	\$ 37,780	\$ 860,190
10/01/2010	09/30/2012	\$ 1,021,975	\$ 984,195	\$ 37,780	\$ 1,021,975
10/01/2010	09/30/2011	\$ 1,266,587	\$ 1,235,540	\$ 37,780	\$ 1,273,320
10/01/2009	09/30/2010	\$ 1,257,246	\$ 1,257,246	\$ 0 *	\$ 1,257,246
10/01/2008	09/30/2009	\$ 843,731	\$ 843,731	\$ 0 *	\$ 843,731
10/01/2007	09/30/2008	\$ 769,186	\$ 769,186	\$ 0 *	\$ 769,186
10/01/2006	09/30/2007	\$ 794,068	\$ 756,288	\$ 37,780	\$ 794,068
10/01/2005	09/30/2006	\$ 632,035	\$ 632,397	\$ 0 *	\$ 632,397
10/01/2004	09/30/2005	\$ 917,230	\$ 879,812	\$ 37,418	\$ 917,230
10/01/2003	09/30/2004	\$ 757,439	\$ 744,941	\$ 12,498	\$ 757,439
10/01/2002	09/30/2003	\$ 752,389	\$ 739,891	\$ 13,378	\$ 753,269
10/01/2001	09/30/2002	\$ 621,909	\$ 620,377	\$ 12,498	\$ 632,875

* State contribution in the amount of \$37,780 included in the City contribution as receivable

Actuarial Valuation as of October 1, 2021

State Required Exhibit

(General Employees Tier 1)

	<u>10/01/2020</u>	<u>10/01/2021</u>
A. <u>Participant Data</u>		
1. Active participants	15	14
2. Retired participants and beneficiaries receiving benefits excluding DROPs	25	28
3. DROP participants	4	3
4. Disabled participants receiving benefits	0	0
5. Terminated vested participants	5	3
6. Annual payroll of active participants	\$ 907,685	\$ 884,361
7. Expected payroll of active employees for the following year	\$ 907,685	\$ 884,361
8. Annual benefits payable to those currently receiving benefits excluding DROPs	\$ 620,524	\$ 709,610
9. Annual benefits payable to DROPs	\$ 86,661	\$ 69,011
B. <u>Assets</u>		
1. Market Value of Assets	\$ 17,126,850	\$ 20,416,983
2. Smoothed Value of Assets	\$ 17,318,262	\$ 18,510,768
C. <u>Liabilities</u>		
1. Actuarial present value of future expected benefit payments for active members		
a. Retirement benefits	\$ 4,393,223	\$ 4,369,952
b. Vesting benefits	260,015	242,598
c. Death benefits	18,275	43,618
d. Disability benefits	245,105	229,125
e. Refunds	1,815	0
f. Total	<u>\$ 4,918,433</u>	<u>\$ 4,885,293</u>
2. Actuarial present value of future expected benefit payments for terminated vested members	\$ 824,475	\$ 631,731
3. Actuarial present value of future expected benefit payments for members currently receiving benefits		
a. Service retired	\$ 6,957,382	\$ 8,142,613
b. DROP participants	1,360,944	1,116,207
c. Disability retired	0	0
d. Beneficiaries	167,205	168,954
e. Miscellaneous	83,178	66,279
f. Total	<u>\$ 8,568,709</u>	<u>\$ 9,494,053</u>

Actuarial Valuation as of October 1, 2021

State Required Exhibit

(General Employees Tier 1)

	<u>10/01/2020</u>	<u>10/01/2021</u>
4. Total actuarial present value of future expected benefit payments	\$ 14,311,617	\$ 15,011,077
5. Actuarial accrued liabilities	\$ 13,793,229	\$ 14,548,880
6. Unfunded actuarial accrued liabilities	\$ (3,525,033)	\$ (3,961,888)
D. <u>Statement of Accumulated Plan Benefits</u>		
1. Actuarial present value of accumulated vested benefits		
a. Participants currently receiving benefits including DROP participants	\$ 8,485,531	\$ 9,427,774
b. Other participants	3,969,656	3,950,929
c. Total	<u>\$ 12,455,187</u>	<u>\$ 13,378,703</u>
2. Actuarial present value of accumulated non-vested Plan benefits	<u>263,635</u>	<u>162,592</u>
3. Total actuarial present value of accumulated Plan benefits	\$ 12,718,822	\$ 13,541,295
E. <u>Statement of Change in Accumulated Plan Benefits</u>		
1. Actuarial present value of accumulated Plan benefits as of October 1, 2020		\$ 12,718,822
2. Increase (decrease) during period attributable to:		
a. Plan amendment		\$ 0
b. Change in actuarial assumptions		0
c. Benefits paid		(711,205)
d. Other, including benefits accumulated and increase for interest due to decrease in the discount period		<u>1,533,678</u>
e. Net increase		\$ 822,473
3. Actuarial present value of accumulated Plan benefits as of October 1, 2021		\$ 13,541,295

Actuarial Valuation as of October 1, 2021

State Required Exhibit

(General Employees Tier 1)

	<u>10/01/2020</u>	<u>10/01/2021</u>
F. <u>Pension Cost</u>		
1. Total normal cost (including administrative expenses)	\$ 143,674	\$ 140,855
2. Payment required to amortize unfunded liability	(331,035)	(380,673)
3. Interest adjustment	(6,663)	(8,529)
4. Total preliminary required contribution	\$ (194,024)	\$ (248,347)
5. Total required contribution	\$ 143,674	\$ 140,855
6. Item 5 as a percentage of payroll	15.8%	15.9%
7. Estimated member contributions	\$ 63,538	\$ 61,905
8. Item 7 as a percentage of payroll	7.0%	7.0%
9. Estimated State contributions	\$ 0	\$ 0
10. Item 9 as a percentage of payroll	0.0%	0.0%
11. Net amount payable by City	\$ 80,136	\$ 78,950
12. Item 11 as a percentage of payroll	8.8%	8.9%
G. <u>Past Contributions</u>		
1. Total contribution required (prior year's valuation)	\$ 148,231	\$ 143,674
2. Actual contributions made:		
a. Members	\$ 62,095	N/A
b. State	N/A	N/A
c. City	86,136	N/A
d. Total	\$ 148,231	N/A
H. <u>Net Actuarial Gain / (Loss)</u>	\$ 56,118	\$ 173,618
I. <u>Disclosure of Following Items:</u>		
1. Actuarial present value of future salaries - attained age	\$ 5,697,017	\$ 5,336,010
2. Actuarial present value of future employee contributions - attained age	\$ 398,791	\$ 373,521
3. Actuarial present value of future contributions from other sources	N/A	N/A
4. Amount of active members' accumulated contributions	\$ 1,039,020	\$ 1,014,490
5. Actuarial present value of future salaries and future benefits at entry age	N/A	N/A
6. Actuarial present value of future employee contributions at entry age	N/A	N/A

Actuarial Valuation as of October 1, 2021

State Required Exhibit

(General Employees Tier 2)

	<u>10/01/2020</u>	<u>10/01/2021</u>
A. <u>Participant Data</u>		
1. Active participants	27	24
2. Retired participants and beneficiaries receiving benefits excluding DROPs	0	0
3. DROP participants	0	0
4. Disabled participants receiving benefits	0	0
5. Terminated vested participants	1	1
6. Annual payroll of active participants	\$ 1,264,549	\$ 1,135,601
7. Expected payroll of active employees for the following year	\$ 1,264,549	\$ 1,135,601
8. Annual benefits payable to those currently receiving benefits excluding DROPs	\$ 0	\$ 0
9. Annual benefits payable to DROPs	\$ 0	\$ 0
B. <u>Assets</u>		
1. Market Value of Assets	\$ 650,209	\$ 837,258
2. Smoothed Value of Assets	\$ 664,846	\$ 765,874
C. <u>Liabilities</u>		
1. Actuarial present value of future expected benefit payments for active members		
a. Retirement benefits	\$ 974,231	\$ 988,635
b. Vesting benefits	287,745	284,023
c. Death benefits	7,508	17,192
d. Disability benefits	80,678	80,322
e. Refunds	26,207	21,985
f. Total	<u>\$ 1,376,369</u>	<u>\$ 1,392,157</u>
2. Actuarial present value of future expected benefit payments for terminated vested members	\$ 9,941	\$ 10,678
3. Actuarial present value of future expected benefit payments for members currently receiving benefits		
a. Service retired	\$ 0	\$ 0
b. DROP participants	0	0
c. Disability retired	0	0
d. Beneficiaries	0	0
e. Miscellaneous	18,199	16,314
f. Total	<u>\$ 18,199</u>	<u>\$ 16,314</u>

Actuarial Valuation as of October 1, 2021

State Required Exhibit

(General Employees Tier 2)

	<u>10/01/2020</u>	<u>10/01/2021</u>
4. Total actuarial present value of future expected benefit payments	\$ 1,404,509	\$ 1,419,149
5. Actuarial accrued liabilities	\$ 611,159	\$ 718,699
6. Unfunded actuarial accrued liabilities	\$ (53,687)	\$ (47,175)
D. <u>Statement of Accumulated Plan Benefits</u>		
1. Actuarial present value of accumulated vested benefits		
a. Participants currently receiving benefits including DROP participants	\$ 0	\$ 0
b. Other participants	249,205	282,207
c. Total	<u>\$ 249,205</u>	<u>\$ 282,207</u>
2. Actuarial present value of accumulated non-vested Plan benefits	<u>68,250</u>	<u>96,458</u>
3. Total actuarial present value of accumulated Plan benefits	\$ 317,455	\$ 378,665
E. <u>Statement of Change in Accumulated Plan Benefits</u>		
1. Actuarial present value of accumulated Plan benefits as of October 1, 2020		\$ 317,455
2. Increase (decrease) during period attributable to:		
a. Plan amendment		\$ 0
b. Change in actuarial assumptions		0
c. Benefits paid		(4,660)
d. Other, including benefits accumulated and increase for interest due to decrease in the discount period		<u>65,870</u>
e. Net increase		\$ 61,210
3. Actuarial present value of accumulated Plan benefits as of October 1, 2021		\$ 378,665

Actuarial Valuation as of October 1, 2021

State Required Exhibit

(General Employees Tier 2)

	<u>10/01/2020</u>	<u>10/01/2021</u>
F. <u>Pension Cost</u>		
1. Total normal cost (including administrative expenses)	\$ 99,322	\$ 88,648
2. Payment required to amortize unfunded liability	(3,763)	(3,214)
3. Interest adjustment	3,398	3,039
4. Total preliminary required contribution	\$ 98,957	\$ 88,473
5. Total required contribution	\$ 99,322	\$ 88,648
6. Item 5 as a percentage of payroll	7.9%	7.8%
7. Estimated member contributions	\$ 37,936	\$ 34,068
8. Item 7 as a percentage of payroll	3.0%	3.0%
9. Estimated State contributions	\$ 0	\$ 0
10. Item 9 as a percentage of payroll	0.0%	0.0%
11. Net amount payable by City	\$ 61,386	\$ 54,580
12. Item 11 as a percentage of payroll	4.9%	4.8%
G. <u>Past Contributions</u>		
1. Total contribution required (prior year's valuation)	\$ 97,305	\$ 99,322
2. Actual contributions made:		
a. Members	\$ 36,602	N/A
b. State	N/A	N/A
c. City	60,703	N/A
d. Total	\$ 97,305	N/A
H. <u>Net Actuarial Gain / (Loss)</u>	\$ 104,817	\$ (7,499)
I. <u>Disclosure of Following Items:</u>		
1. Actuarial present value of future salaries - attained age	\$ 11,047,223	\$ 9,959,071
2. Actuarial present value of future employee contributions - attained age	\$ 331,417	\$ 298,772
3. Actuarial present value of future contributions from other sources	N/A	N/A
4. Amount of active members' accumulated contributions	\$ 172,488	\$ 196,016
5. Actuarial present value of future salaries and future benefits at entry age	N/A	N/A
6. Actuarial present value of future employee contributions at entry age	N/A	N/A

Actuarial Valuation as of October 1, 2021

State Required Exhibit

(AMSC)

	Actuarial	
	Impact Statement	
	<u>10/01/2020</u>	<u>10/01/2021</u>
A. <u>Participant Data</u>		
1. Active participants	11	12
2. Retired participants and beneficiaries receiving benefits excluding DROPs	3	3
3. DROP participants	0	0
4. Disabled participants receiving benefits	0	0
5. Terminated vested participants	0	0
6. Annual payroll of active participants	\$ 1,298,985	\$ 1,458,939
7. Expected payroll of active employees for the following year	\$ 1,298,985	\$ 1,458,939
8. Annual benefits payable to those currently receiving benefits excluding DROPs	\$ 76,157	\$ 78,798
9. Annual benefits payable to DROPs	\$ 0	\$ 0
B. <u>Assets</u>		
1. Market Value of Assets	\$ 2,675,349	\$ 3,530,733
2. Smoothed Value of Assets	\$ 2,726,874	\$ 3,241,288
C. <u>Liabilities</u>		
1. Actuarial present value of future expected benefit payments for active members		
a. Retirement benefits	\$ 3,474,399	\$ 4,192,844
b. Vesting benefits	611,890	673,553
c. Death benefits	10,949	30,858
d. Disability benefits	146,438	177,004
e. Refunds	566	2,227
f. Total	<u>\$ 4,244,242</u>	<u>\$ 5,076,486</u>
2. Actuarial present value of future expected benefit payments for terminated vested members	\$ 0	\$ 0
3. Actuarial present value of future expected benefit payments for members currently receiving benefits		
a. Service retired	\$ 857,450	\$ 866,047
b. DROP participants	0	0
c. Disability retired	0	0
d. Beneficiaries	0	0
e. Miscellaneous	0	0
f. Total	<u>\$ 857,450</u>	<u>\$ 866,047</u>

Actuarial Valuation as of October 1, 2021

State Required Exhibit

(AMSC)

	Actuarial Impact Statement	
	<u>10/01/2020</u>	<u>10/01/2021</u>
4. Total actuarial present value of future expected benefit payments	\$ 5,101,692	\$ 5,942,533
5. Actuarial accrued liabilities	\$ 4,080,695	\$ 4,819,231
6. Unfunded actuarial accrued liabilities	\$ 1,353,821	\$ 1,577,943
D. <u>Statement of Accumulated Plan Benefits</u>		
1. Actuarial present value of accumulated vested benefits		
a. Participants currently receiving benefits including DROP participants	\$ 857,450	\$ 866,047
b. Other participants	1,826,934	2,248,146
c. Total	<u>\$ 2,684,384</u>	<u>\$ 3,114,193</u>
2. Actuarial present value of accumulated non-vested Plan benefits	<u>61,024</u>	<u>140,191</u>
3. Total actuarial present value of accumulated Plan benefits	\$ 2,745,408	\$ 3,254,384
E. <u>Statement of Change in Accumulated Plan Benefits</u>		
1. Actuarial present value of accumulated Plan benefits as of October 1, 2020		\$ 2,745,408
2. Increase (decrease) during period attributable to:		
a. Plan amendment		\$ 0
b. Change in actuarial assumptions		0
c. Benefits paid		(76,157)
d. Other, including benefits accumulated and increase for interest due to decrease in the discount period		585,133
e. Net increase		<u>\$ 508,976</u>
3. Actuarial present value of accumulated Plan benefits as of October 1, 2021		\$ 3,254,384

Actuarial Valuation as of October 1, 2021

State Required Exhibit

(AMSC)

	Actuarial Impact Statement	
	10/01/2020	10/01/2021
F. Pension Cost		
1. Total normal cost (including administrative expenses)	\$ 162,893	\$ 189,942
2. Payment required to amortize unfunded liability	115,799	136,592
3. Interest adjustment	9,912	11,613
4. Total preliminary required contribution	\$ 288,604	\$ 338,147
5. Total required contribution	\$ 288,604	\$ 338,147
6. Item 5 as a percentage of payroll	22.2%	23.2%
7. Estimated member contributions	\$ 90,929	\$ 102,126
8. Item 7 as a percentage of payroll	7.0%	7.0%
9. Estimated State contributions	\$ 0	\$ 0
10. Item 9 as a percentage of payroll	0.0%	0.0%
11. Net amount payable by City	\$ 197,675	\$ 236,021
12. Item 11 as a percentage of payroll	15.2%	16.2%
G. Past Contributions		
1. Total contribution required (prior year's valuation)	\$ 236,359	\$ 288,604
2. Actual contributions made:		
a. Members	\$ 95,383	N/A
b. State	N/A	N/A
c. City	140,976	N/A
d. Total	\$ 236,359	N/A
H. Net Actuarial Gain / (Loss)		
	\$ (159,636)	\$ (193,181)
I. Disclosure of Following Items:		
1. Actuarial present value of future salaries - attained age	\$ 8,262,809	\$ 8,881,946
2. Actuarial present value of future employee contributions - attained age	\$ 578,397	\$ 621,736
3. Actuarial present value of future contributions from other sources	N/A	N/A
4. Amount of active members' accumulated contributions	\$ 695,425	\$ 801,107
5. Actuarial present value of future salaries and future benefits at entry age	N/A	N/A
6. Actuarial present value of future employee contributions at entry age	N/A	N/A

Actuarial Valuation as of October 1, 2021

State Required Exhibit

(Police Officers)

	<u>10/01/2020</u>	<u>10/01/2021</u>
A. <u>Participant Data</u>		
1. Active participants	45	39
2. Retired participants and beneficiaries receiving benefits excluding DROPs	22	22
3. DROP participants	3	7
4. Disabled participants receiving benefits	0	0
5. Terminated vested participants	5	6
6. Annual payroll of active participants	\$ 3,281,847	\$ 2,898,555
7. Expected payroll of active employees for the following year	\$ 3,304,820	\$ 2,898,555
8. Annual benefits payable to those currently receiving benefits excluding DROPs	\$ 907,213	\$ 938,669
9. Annual benefits payable to DROPs	\$ 158,126	\$ 364,781
B. <u>Assets</u>		
1. Market Value of Assets	\$ 27,678,257	\$ 33,628,752
2. Smoothed Value of Assets	\$ 28,113,521	\$ 30,651,726
C. <u>Liabilities</u>		
1. Actuarial present value of future expected benefit payments for active members		
a. Retirement benefits	\$ 14,851,441	\$ 13,238,357
b. Vesting benefits	796,711	803,050
c. Death benefits	29,793	43,318
d. Disability benefits	281,846	217,950
e. Refunds	220,223	217,276
f. Total	<u>\$ 16,180,014</u>	<u>\$ 14,519,951</u>
2. Actuarial present value of future expected benefit payments for terminated vested members	\$ 673,430	\$ 830,170
3. Actuarial present value of future expected benefit payments for members currently receiving benefits		
a. Service retired	\$ 11,551,649	\$ 11,717,115
b. DROP participants	2,676,496	6,044,054
c. Disability retired	0	0
d. Beneficiaries	0	0
e. Miscellaneous	64,748	62,761
f. Total	<u>\$ 14,292,893</u>	<u>\$ 17,823,930</u>

Actuarial Valuation as of October 1, 2021

State Required Exhibit

(Police Officers)

	<u>10/01/2020</u>	<u>10/01/2021</u>
4. Total actuarial present value of future expected benefit payments	\$ 31,146,337	\$ 33,174,051
5. Actuarial accrued liabilities	\$ 27,406,673	\$ 29,779,514
6. Unfunded actuarial accrued liabilities	\$ (706,848)	\$ (872,212)
D. <u>Statement of Accumulated Plan Benefits</u>		
1. Actuarial present value of accumulated vested benefits		
a. Participants currently receiving benefits including DROP participants	\$ 14,228,145	\$ 17,761,169
b. Other participants	8,627,674	7,390,422
c. Total	<u>\$ 22,855,819</u>	<u>\$ 25,151,591</u>
2. Actuarial present value of accumulated non-vested Plan benefits	<u>1,510,781</u>	<u>1,669,846</u>
3. Total actuarial present value of accumulated Plan benefits	\$ 24,366,600	\$ 26,821,437
E. <u>Statement of Change in Accumulated Plan Benefits</u>		
1. Actuarial present value of accumulated Plan benefits as of October 1, 2020		\$ 24,366,600
2. Increase (decrease) during period attributable to:		
a. Plan amendment		\$ 0
b. Change in actuarial assumptions		0
c. Benefits paid		(929,237)
d. Other, including benefits accumulated and increase for interest due to decrease in the discount period		<u>3,384,074</u>
e. Net increase		\$ 2,454,837
3. Actuarial present value of accumulated Plan benefits as of October 1, 2021		\$ 26,821,437

Actuarial Valuation as of October 1, 2021

State Required Exhibit

(Police Officers)

	<u>10/01/2020</u>	<u>10/01/2021</u>
F. Pension Cost		
1. Total normal cost (including administrative expenses)	\$ 634,638	\$ 545,245
2. Payment required to amortize unfunded liability	(59,985)	(78,241)
3. Interest adjustment	21,846	18,018
4. Total preliminary required contribution	<u>\$ 596,499</u>	<u>\$ 485,022</u>
5. Total required contribution (Greater of F.1. and F.4.)	\$ 634,638	\$ 545,245
6. Item 5 as a percentage of payroll	19.3%	18.8%
7. Estimated member contributions	\$ 247,862	\$ 217,392
8. Item 7 as a percentage of payroll	7.5% ¹	7.5% ²
9. Estimated State contributions	\$ 79,228	\$ 79,228
10. Item 9 as a percentage of payroll	2.4% ¹	2.7% ²
11. Net amount payable by City	\$ 311,990	\$ 248,625
12. Item 11 as a percentage of payroll	9.4% ¹	8.6% ²
G. Past Contributions		
1. Total contribution required (prior year's valuation)	\$ 587,820	\$ 639,080
2. Actual contributions made:		
a. Members	\$ 243,908	N/A
b. State	79,228	N/A
c. City	264,685	N/A
d. Total	<u>\$ 587,821</u>	<u>N/A</u>
H. Net Actuarial Gain / (Loss)	\$ (87,764)	\$ 173,401
I. Disclosure of Following Items:		
1. Actuarial present value of future salaries - attained age	\$ 21,243,985	\$ 19,143,033
2. Actuarial present value of future employee contributions - attained age	\$ 1,593,299	\$ 1,435,727
3. Actuarial present value of future contributions from other sources	N/A	N/A
4. Amount of active members' accumulated contributions	\$ 3,086,933	\$ 2,611,455
5. Actuarial present value of future salaries and future benefits at entry age	N/A	N/A
6. Actuarial present value of future employee contributions at entry age	N/A	N/A

¹ Percent of expected 2021-2022 covered payroll (\$3,304,820)

² Percent of expected 2022-2023 covered payroll (\$2,898,555)

Actuarial Valuation as of October 1, 2021

State Required Exhibit

(All Participants)

	Actuarial Impact Statement 10/01/2020	10/01/2021
A. <u>Participant Data</u>		
1. Active participants	98	89
2. Retired participants and beneficiaries receiving benefits excluding DROPs	50	53
3. DROP participants	7	10
4. Disabled participants receiving benefits	0	0
5. Terminated vested participants	11	10
6. Annual payroll of active participants	\$ 6,753,066	\$ 6,377,456
7. Expected payroll of active employees for the following year	\$ 6,776,039	\$ 6,377,456
8. Annual benefits payable to those currently receiving benefits excluding DROPs	\$ 1,603,894	\$ 1,727,077
9. Annual benefits payable to DROPs	\$ 244,787	\$ 433,792
B. <u>Assets</u>		
1. Market Value of Assets	\$ 48,130,665	\$ 58,413,726
2. Smoothed Value of Assets	\$ 48,823,503	\$ 53,169,656
C. <u>Liabilities</u>		
1. Actuarial present value of future expected benefit payments for active members		
a. Retirement benefits	\$ 23,693,294	\$ 22,789,788
b. Vesting benefits	1,956,361	2,003,224
c. Death benefits	66,525	134,986
d. Disability benefits	754,067	704,401
e. Refunds	248,811	241,488
f. Total	\$ 26,719,058	\$ 25,873,887
2. Actuarial present value of future expected benefit payments for terminated vested members	\$ 1,507,846	\$ 1,472,579
3. Actuarial present value of future expected benefit payments for members currently receiving benefits		
a. Service retired	\$ 19,366,481	\$ 20,725,775
b. DROP participants	4,037,440	7,160,261
c. Disability retired	0	0
d. Beneficiaries	167,205	168,954
e. Miscellaneous	166,125	145,354
f. Total	\$ 23,737,251	\$ 28,200,344

Actuarial Valuation as of October 1, 2021

State Required Exhibit

(All Participants)

	Actuarial Impact Statement 10/01/2020	10/01/2021
4. Total actuarial present value of future expected benefit payments	\$ 51,964,155	\$ 55,546,810
5. Actuarial accrued liabilities	\$ 45,891,756	\$ 49,866,324
6. Unfunded actuarial accrued liabilities	\$ (2,931,747)	\$ (3,303,332)
D. <u>Statement of Accumulated Plan Benefits</u>		
1. Actuarial present value of accumulated vested benefits		
a. Participants currently receiving benefits including DROP participants	\$ 23,571,126	\$ 28,054,990
b. Other participants	14,673,469	13,871,704
c. Total	<u>\$ 38,244,595</u>	<u>\$ 41,926,694</u>
2. Actuarial present value of accumulated non-vested Plan benefits	<u>1,903,690</u>	<u>2,069,087</u>
3. Total actuarial present value of accumulated Plan benefits	\$ 40,148,285	\$ 43,995,781
E. <u>Statement of Change in Accumulated Plan Benefits</u>		
1. Actuarial present value of accumulated Plan benefits as of October 1, 2020		\$ 40,148,285
2. Increase (decrease) during period attributable to:		
a. Plan amendment		\$ 0
b. Change in actuarial assumptions		0
c. Benefits paid		(1,721,259)
d. Other, including benefits accumulated and increase for interest due to decrease in the discount period		<u>5,568,755</u>
e. Net increase		\$ 3,847,496
3. Actuarial present value of accumulated Plan benefits as of October 1, 2021		\$ 43,995,781

Actuarial Valuation as of October 1, 2021

State Required Exhibit

(All Participants)

	Actuarial Impact Statement	
	10/01/2020	10/01/2021
F. Pension Cost		
1. Total normal cost (including expenses)	\$ 1,040,527	\$ 964,690
2. Payment required to amortize unfunded liability	(278,984)	(325,536)
3. Interest adjustment	28,493	24,141
4. Total preliminary required contribution	\$ 790,036	\$ 663,295
5. Total required contribution	\$ 1,166,238	\$ 1,112,895
6. Item 5 as a percentage of payroll	17.3%	17.5%
7. Estimated member contributions	\$ 440,265	\$ 415,491
8. Item 7 as a percentage of payroll	6.5% ¹	6.5% ²
9. Estimated State contributions	\$ 79,228	\$ 79,228
10. Item 9 as a percentage of payroll	1.2% ¹	1.2% ²
11. Net amount payable by City	\$ 651,187	\$ 618,176
12. Item 11 as a percentage of payroll	9.6% ¹	9.7% ²
G. Past Contributions		
1. Total contribution required (prior year's valuation)	\$ 1,069,715	\$ 1,170,680
2. Actual contributions made:		
a. Members	\$ 437,988	N/A
b. State	79,228	N/A
c. City	552,500	N/A
d. Total	\$ 1,069,716	N/A
H. Net Actuarial Gain / (Loss)	\$ (86,465)	\$ 146,339
I. Disclosure of Following Items:		
1. Actuarial present value of future salaries - attained age	\$ 46,251,034	\$ 43,320,060
2. Actuarial present value of future employee contributions - attained age	\$ 2,901,904	\$ 2,729,756
3. Actuarial present value of future contributions from other sources	N/A	N/A
4. Amount of active members' accumulated contributions	\$ 4,993,866	\$ 4,623,068
5. Actuarial present value of future salaries and future benefits at entry age	N/A	N/A
6. Actuarial present value of future employee contributions at entry age	N/A	N/A

¹ Percent of expected 2021-2022 covered payroll (\$6,776,039)

² Percent of expected 2022-2023 covered payroll (\$6,377,456)

**Table XVII
(Cont'd)**

State Required Exhibit

	<u>Unfunded Actuarial Accrued Liabilities</u>	<u>Current Unfunded Liabilities</u>	<u>Amortization Payment</u>	<u>Remaining Funding Period</u>
<u>General Employees Tier 1</u>				
10/01/2015	Combined Bases *	\$ (1,439,939)	\$ (163,884)	13 years
10/01/2016	Actuarial Loss / (Gain)	(510,661)	(46,209)	20 years
10/01/2016	Assumption Change	526,939	47,682	20 years
10/01/2017	Actuarial Loss / (Gain)	(346,974)	(30,727)	21 years
10/01/2018	Actuarial Loss / (Gain)	(1,593,258)	(138,345)	22 years
10/01/2018	Plan Amendment - Ord. #35-19-2348	817,934	71,023	22 years
10/01/2019	Actuarial Loss / (Gain)	(910,366)	(77,640)	23 years
10/01/2019	Assumption Change	(271,642)	(23,167)	23 years
10/01/2020	Actuarial Loss / (Gain)	(60,303)	(5,059)	24 years
10/01/2021	Actuarial Loss / (Gain)	<u>(173,618)</u>	<u>(14,347)</u>	25 years
	TOTAL	\$ (3,961,888)	\$ (380,673)	
<u>General Employees Tier 2</u>				
10/01/2017	Initial Base	\$ 90,221	\$ 8,164	20 years
10/01/2018	Actuarial Loss / (Gain)	28,987	2,517	22 years
10/01/2018	Plan Amendment - Ord. #35-19-2348	108,349	9,408	22 years
10/01/2019	Actuarial Loss / (Gain)	(162,795)	(13,884)	23 years
10/01/2019	Assumption Change	(13,730)	(1,171)	23 years
10/01/2020	Actuarial Loss / (Gain)	(105,706)	(8,868)	24 years
10/01/2021	Actuarial Loss / (Gain)	<u>7,499</u>	<u>620</u>	25 years
	TOTAL	\$ (47,175)	\$ (3,214)	
<u>AMSC</u>				
10/01/2017	Combined Bases *	\$ 208,582	\$ 18,874	20 years
10/01/2018	Actuarial Loss / (Gain)	543,308	47,176	22 years
10/01/2018	Plan Amendment - Ord. #23-19-2336	246,512	21,405	22 years
10/01/2018	Plan Amendment - Ord. #35-19-2348	537,636	46,684	22 years
10/01/2019	Actuarial Loss / (Gain)	(520,175)	(44,363)	23 years
10/01/2019	Assumption Change	(67,513)	(5,758)	23 years
10/01/2020	Actuarial Loss / (Gain)	163,560	13,721	24 years
10/01/2020	Plan Amendment - Ord. #18-21-2408	272,852	22,890	24 years
10/01/2021	Actuarial Loss / (Gain)	<u>193,181</u>	<u>15,963</u>	25 years
	TOTAL	\$ 1,577,943	\$ 136,592	

* Combined per Internal Revenue Code Regulation 1.412(b)-1

State Required Exhibit

	<u>Unfunded Actuarial Accrued Liabilities</u>	<u>Current Unfunded Liabilities</u>	<u>Amortization Payment</u>	<u>Remaining Funding Period</u>
<u>Police Officers</u>				
10/01/2018	Combined Bases *	\$ (480,687)	\$ (45,716)	18 years
10/01/2018	Plan Amendment - Ord. #38-19-2351	341,509	29,654	22 years
10/01/2019	Actuarial Loss / (Gain)	273,395	23,316	23 years
10/01/2019	Assumption Change	(920,416)	(78,497)	23 years
10/01/2020	Actuarial Loss / (Gain)	87,388	7,331	24 years
10/01/2021	Actuarial Loss / (Gain)	<u>(173,401)</u>	<u>(14,329)</u>	25 years
	TOTAL	\$ (872,212)	\$ (78,241)	

* Combined per Internal Revenue Code Regulation 1.412(b)-1

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, and in our opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. Based upon our understanding of the Plan, 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 other wise provided for in the valuation. All known events or trends which may require material increase in Plan costs or required contribution rates have been taken into account in the valuation.

Michelle Jones

Shelly L. Jones, A.S.A.
Enrollment Number:
20-08646

Jennifer Borregard

Jennifer M. Borregard, E.A.
Enrollment Number: 20-07624

Dated: May 12, 2022

Glossary

Actuarial Accrued Liability. The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.

Actuarial Assumptions. 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.

Actuarial Cost Method. 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.

Actuarial Equivalent. Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.

Actuarial Present Value of Future Benefits. 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, non-retired 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.

Actuarial Valuation. 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.

Actuarial Value of Assets. 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 required contribution.

Amortization Method. 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.

Glossary

Amortization Payment. That portion of the plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Amortization Period. The period used in calculating the Amortization Payment.

Annual Required Contribution. The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The annual required contribution consists of the Employer Normal Cost and Amortization Payment plus interest adjustment.

Closed Amortization Period. 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.

Employer Normal Cost. The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.

Equivalent Single Amortization Period. 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.

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 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. Losses are the result of unfavorable experience, i.e., actual results that produce Unfunded Actuarial Accrued Liabilities which are larger than projected.

GASB. Governmental Accounting Standards Board.

Glossary

GASB No. 67 and GASB No. 68. These are the governmental accounting standards that set the accounting rules for public retirement plans and the employers that sponsor or contribute to them. Statement No. 67 sets the accounting rules for the plans themselves, while Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement plans.

Normal Cost. The annual cost assigned, under the Actuarial Cost Method, to the current plan year.

Open Amortization Period. 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.

Unfunded Actuarial Accrued Liability. The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.

Valuation Date. 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.

Vested Benefit Security Ratio. The ratio of the Market Value of Assets to the Actuarial Present Value of Vested Accrued Benefits.