



May 17, 2022

Ms. Grisell Aedo, BBA, MPS
Retirement Director
City of Hialeah
501 Palm Avenue
Hialeah, Florida 33010-4719

Re: City of Hialeah Elected Officers Retirement System

Dear Grisell:

As requested, we are pleased to enclose ten (10) copies of the October 1, 2021 Chapter 112.664 Compliance Report for the City of Hialeah Elected Officers Retirement System (System).

As required, we will timely upload the required data to the State's online portal prior to the filing deadline.

We understand the following items must be posted on the System's website and must be posted on any website containing budget information relating to the City or actuarial or performance information relating to the System:

- this compliance report
- the most recent financial statement
- the most recent actuarial valuation report
- a link to the Division of Retirement Actuarial Summary Fact Sheet
http://www.dms.myflorida.com/workforce_operations/retirement/local_retirement_plans/local_retirement_section/actuarial_summary_fact_sheets
- for the previous five years - a side-by-side comparison of the System's assumed rate of return compared to the actual rate of return as well as the percentages of cash, equity, bond and alternative investments in the System portfolio
- the System's funded ratio as determined in the most recent actuarial valuation – 136.7% on a net market value of assets basis as of October 1, 2021

We appreciate the opportunity to work with the City Council on this important assignment.

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

Sincerest regards,
Gabriel, Roeder, Smith & Company

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

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

Enclosures

cc: Mr. Chris Chiocca (w/ enclosure)

CITY OF HIALEAH ELECTED OFFICERS RETIREMENT SYSTEM

CHAPTER 112.664, F.S. COMPLIANCE REPORT

In Connection with the October 1, 2021 Funding Actuarial Valuation Report and the System's Financial Reporting for the Year Ended September 30, 2021





May 17, 2022

City Council
c/o Ms. Grisell Aedo, BBA, MPS
Retirement Director
City of Hialeah
501 Palm Avenue
Hialeah, Florida 33010-4719

Re: October 1, 2021 Chapter 112.664 Compliance Report

Dear City Council Members:

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the City Council (Council) of the City of Hialeah Elected Officers Retirement System (System) to prepare a disclosure report to satisfy the requirements set forth in Chapter 112.664, F.S. and as further required pursuant to Chapter 60T-1.0035, F.A.C.

This report was prepared at the request of the Council and is intended for use by the Council and those designated or approved by the Council. This report may be provided to parties other than the Council only in its entirety and only with the permission of the Council.

The purpose of the report is to provide the required information specified in Chapter 112.664, F.S. and to supplement this information with additional exhibits. This report should not be relied on for any purpose other than the purpose described above.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based upon the System's funded status); and changes in System provisions or applicable law. The scope of this engagement does not include an analysis of the potential range of such measurements.

This report was based upon information furnished by the Council and City concerning System benefits, System provisions and System members as used in the corresponding Actuarial Valuation Reports for the Valuation Dates indicated. Financial information was provided by the Council and City as of September 30, 2021. We reviewed the information provided for internal and year-to-year consistency, but did not audit the information provided to us. The System is responsible for the accuracy of the information provided to us.

Except where specific assumptions are required by Chapter 112.664, F.S, this report was prepared using actuarial assumptions adopted by the Council as described in Section C. The Council's assumptions are based upon past and expected future System experience and represent an estimate of future System experience. The mortality assumptions are prescribed by statute.

If all actuarial assumptions are met and if all current and future minimum required contributions are paid System assets will be sufficient to pay all System benefits. Future contributions are expected to remain relatively stable. System minimum required contributions are determined in compliance with the requirements of the Florida Protection of Public Employee Retirement Benefits Act with normal cost determined as a level percent of covered payroll along with a level dollar amortization payment using an initial amortization period of 15 years.

The System's funded ratio as of October 1, 2021 is 136.7% defined as the ratio of the net market value of System assets to the actuarial accrued liability.

The System's funded ratio and the GASB Net Pension Liability may not be appropriate for assessing the sufficiency of System 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 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 herein. The signing actuaries are independent of the System sponsor.

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

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and presents the actuarial position of the System as of the valuation date as required by statute. 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.

With respect to the reporting standards for defined benefit retirement systems contained in Section 112.664(1), F.S., the actuarial disclosures required under this section were prepared and completed by us or under our direct supervision and we acknowledge responsibility for the results.



To the best of our knowledge and belief, the results are complete and accurate, and in our opinion, meet the requirement of Section 112.664(1), F.S., and Section 60T-1.0035, F.A.C.

Respectfully submitted,

GABRIEL, ROEDER, SMITH AND COMPANY

By *Michelle Jones*
Shelly L. Jones, M.A.A.A.
Enrolled Actuary No. 20-08646
Consultant & Actuary

By *Jennifer Borregard*
Jennifer M. Borregard, M.A.A.A.
Enrolled Actuary No. 20-07624
Consultant & Actuary

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
A	Chapter 112.664, F.S. Results	
	Net Pension Liability	
	1. Using financial reporting assumptions per GASB Statement No. 67 and No. 68 and using assumptions required under Section 112.664(1)(a), F.S.	1
	2. Using assumptions required under Section 112.664(1)(b), F.S.	2
	Asset and Benefit Payments Projection	
	1. Using financial reporting assumptions per GASB Statement No. 67 and No. 68 and using assumptions required under Section 112.664(1)(a), F.S.	3
	2. Using assumptions required under Section 112.664(1)(b), F.S.	4
	Actuarially Determined Contribution	5
	Unfunded Actuarial Accrued Liabilities Bases and Amortization Payments	6
B	Summary of System Provisions	7
C	Actuarial Assumptions and Cost Methods Used for Funding	9
D	Glossary	13

SECTION A

CHAPTER 112.664, F.S. RESULTS

Net Pension Liability
Using Financial Reporting Assumptions per GASB Statements No. 67 and No. 68
and Using Assumptions Required Under 112.664(1)(a), F.S.

Measurement Date	<u>September 30, 2021</u>
A. <u>Total Pension Liability (TPL)</u>	
Service Cost	\$ 105,265
Interest	580,910
Benefit Changes	0
Difference Between Actual and Expected Experience	6,687
Assumption Changes	0
Benefit Payments	(630,943)
Other	<u>0</u>
Net Change in Total Pension Liability	\$ 61,919
Total Pension Liability (TPL) - (beginning of year)	<u>9,885,347</u>
Total Pension Liability (TPL) - (end of year)	<u>\$ 9,947,266</u>
B. <u>System Fiduciary Net Position</u>	
Contributions - Employer	\$ 147,015
Contributions - Member	15,607
Net Investment Income	2,332,612
Benefit Payments	(630,943)
Administrative Expenses	(17,606)
Other	<u>0</u>
Net Change in System Fiduciary Net Position	\$ 1,846,685
System Fiduciary Net Position - (beginning of year)	<u>13,623,389</u>
System Fiduciary Net Position - (end of year)	<u>\$ 15,470,074</u>
C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	\$ (5,522,808)
Valuation Date	October 1, 2020

Certain Key Assumptions

Investment Return Assumption 6.0%

Mortality Table:

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.



Net Pension Liability
Using Assumptions Required Under 112.664(1)(b), F.S.

Measurement Date	<u>September 30, 2021</u>
A. <u>Total Pension Liability (TPL)</u>	
Service Cost	\$ 176,523
Interest	490,654
Benefit Changes	0
Difference Between Actual and Expected Experience	27,429
Assumption Changes	0
Benefit Payments	(630,943)
Other	<u>0</u>
Net Change in Total Pension Liability	\$ 63,663
Total Pension Liability (TPL) - (beginning of year)	<u>12,377,867</u>
Total Pension Liability (TPL) - (end of year)	<u>\$ 12,441,530</u>
B. <u>System Fiduciary Net Position</u>	
Contributions - Employer	\$ 147,015
Contributions - Member	15,607
Net Investment Income	2,332,612
Benefit Payments	(630,943)
Administrative Expenses	(17,606)
Other	<u>0</u>
Net Change in System Fiduciary Net Position	\$ 1,846,685
System Fiduciary Net Position - (beginning of year)	<u>13,623,389</u>
System Fiduciary Net Position - (end of year)	<u>\$ 15,470,074</u>
C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	\$ (3,028,544)

Valuation Date October 1, 2020

Certain Key Assumptions

Investment Return Assumption 4.0%

Mortality Table:

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.



Asset and Benefit Payment Projection
Not Reflecting Any Future Contributions
Using Financial Reporting Assumptions per GASB Statements No. 67 and No. 68
and Using Assumptions Required Under 112.664(1)(a), F.S.

FYE	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2022	\$ 14,251,740	\$ 829,963	\$ 780,541	\$ 14,301,162
2023	14,301,162	831,434	826,936	14,305,660
2024	14,305,660	832,144	813,261	14,324,543
2025	14,324,543	833,468	807,338	14,350,673
2026	14,350,673	834,906	811,349	14,374,230
2027	14,374,230	837,144	785,751	14,425,623
2028	14,425,623	840,998	761,826	14,504,795
2029	14,504,795	846,313	744,299	14,606,809
2030	14,606,809	853,044	725,375	14,734,478
2031	14,734,478	861,387	704,176	14,891,689
2032	14,891,689	871,262	690,443	15,072,508
2033	15,072,508	882,648	673,767	15,281,389
2034	15,281,389	895,943	650,109	15,527,223
2035	15,527,223	911,462	626,224	15,812,461
2036	15,812,461	929,355	602,053	16,139,763
2037	16,139,763	949,775	577,776	16,511,762
2038	16,511,762	972,874	553,590	16,931,046
2039	16,931,046	998,403	542,047	17,387,402
2040	17,387,402	1,026,145	530,846	17,882,701
2041	17,882,701	1,056,608	507,730	18,431,579
2042	18,431,579	1,090,131	489,389	19,032,321
2043	19,032,321	1,126,622	475,548	19,683,395
2044	19,683,395	1,166,257	457,810	20,391,842
2045	20,391,842	1,209,439	436,863	21,164,418
2046	21,164,418	1,256,437	416,895	22,003,960
2047	22,003,960	1,307,437	397,414	22,913,983
2048	22,913,983	1,362,655	378,252	23,898,386
2049	23,898,386	1,422,320	359,621	24,961,085
2050	24,961,085	1,486,664	341,541	26,106,208
2051	26,106,208	1,555,943	323,778	27,338,373

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no contributions from the City or Members: All future years

Certain Key Assumptions

Investment return assumption 6.0%

Mortality Table:

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.

Note: As required in Section 112.664(c) of the Florida Statutes, the projection of System assets does not include future contributions from the City or Member. For this reason, this projection should not be viewed as representative of the amount of time the System can sustain benefit payments. Under the Government Accounting Standards Board standards which include City and Member contributions, the System is expected to be able to pay all future benefit payments.



Asset and Benefit Payment Projection
Not Reflecting Any Future Contributions
Using Assumptions Required Under 112.664(1)(b), F.S.

FYE	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2022	\$ 14,251,740	\$ 553,259	\$ 780,541	\$ 14,024,458
2023	14,024,458	543,169	826,936	13,740,691
2024	13,740,691	532,113	813,261	13,459,543
2025	13,459,543	520,994	807,338	13,173,199
2026	13,173,199	509,454	811,349	12,871,304
2027	12,871,304	497,930	785,751	12,583,483
2028	12,583,483	486,932	761,826	12,308,589
2029	12,308,589	476,314	744,299	12,040,604
2030	12,040,604	466,002	725,375	11,781,231
2031	11,781,231	456,084	704,176	11,533,139
2032	11,533,139	446,456	690,443	11,289,152
2033	11,289,152	437,055	673,767	11,052,440
2034	11,052,440	428,096	650,109	10,830,427
2035	10,830,427	419,730	626,224	10,623,933
2036	10,623,933	411,991	602,053	10,433,871
2037	10,433,871	404,911	577,776	10,261,006
2038	10,261,006	398,518	553,590	10,105,934
2039	10,105,934	392,563	542,047	9,956,450
2040	9,956,450	386,825	530,846	9,812,429
2041	9,812,429	381,562	507,730	9,686,261
2042	9,686,261	376,911	489,389	9,573,783
2043	9,573,783	372,710	475,548	9,470,945
2044	9,470,945	368,978	457,810	9,382,113
2045	9,382,113	365,876	436,863	9,311,126
2046	9,311,126	363,466	416,895	9,257,697
2047	9,257,697	361,749	397,414	9,222,032
2048	9,222,032	360,735	378,252	9,204,515
2049	9,204,515	360,435	359,621	9,205,329
2050	9,205,329	360,857	341,541	9,224,645
2051	9,224,645	362,013	323,778	9,262,880

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no contributions from the City or Members: All future years

Certain Key Assumptions

Investment return assumption 4.0%

Mortality Table:

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.

Note: As required in Section 112.664(c) of the Florida Statutes, the projection of System assets does not include future contributions from the City or Member. For this reason, this projection should not be viewed as representative of the amount of time the System can sustain benefit payments. Under the Government Accounting Standards Board standards which include City and Member contributions, the System is expected to be able to pay all future benefit payments.



ACTUARIALLY DETERMINED CONTRIBUTION

	Valuation Assumptions and 112.664(1)(a), F.S. Assumptions	112.664(1)(b), F.S. Assumptions
A. Valuation Date	October 1, 2021	October 1, 2021
B. Actuarial Determined Contribution to Be Paid During Fiscal Year Ending	September 30, 2023	September 30, 2023
C. Annual Payroll of Active Employees	\$ 411,699	\$ 411,699
D. Total Minimum Funding Requirement		
1. Total Normal Cost	\$ 90,806	\$ 139,236
2. Annual Payment to Amortize Unfunded Actuarial Liability	(290,888)	(48,253)
3. Interest Adjustment	<u>(18,938)</u>	<u>4,838</u>
4. Total Minimum Funding Requirement (1. + 2. + 3., not less than 1.)	\$ 90,806	\$ 139,236
E. Expected Contribution Sources (\$ / % of pay)		
1. City	\$ 75,287 18.29%	\$ 123,717 30.05%
2. Member	<u>15,519 3.77%</u>	<u>15,519 3.77%</u>
3. Total	\$ 90,806 22.06%	\$ 139,236 33.82%

Unfunded Actuarial Accrued Liabilities Bases and Amortization Payments

<u>Amortization Base</u>	Current Unfunded Liabilities	<u>Amortization Payment</u>		Remaining Funding Period
		Valuation and 112.664(1)(a), F.S. Assumptions	112.664(1)(b), F.S. Assumptions	
10/01/2010 Combined Bases *	\$ 80,342	\$ 11,143	\$ 10,390	9 years
10/01/2011 Actuarial Loss / (Gain)	205,321	45,983	44,347	5 years
10/01/2012 Actuarial Loss / (Gain)	(244,777)	(46,961)	(44,898)	6 years
10/01/2013 Actuarial Loss / (Gain)	(577,671)	(97,624)	(92,544)	7 years
10/01/2014 Actuarial Loss / (Gain)	(1,042,035)	(158,307)	(148,818)	8 years
10/01/2015 Actuarial Loss / (Gain)	(758,671)	(105,228)	(98,111)	9 years
10/01/2015 Establish Credit Balance	1,941,552	269,294	251,082	9 years
10/01/2016 Actuarial Loss / (Gain)	(394,769)	(50,600)	(46,799)	10 years
10/01/2016 Assumptions Change	106,250	13,619	12,596	10 years
10/01/2017 Actuarial Loss / (Gain)	(291,171)	(34,829)	(31,959)	11 years
10/01/2018 Actuarial Loss / (Gain)	(296,513)	(33,365)	(30,379)	12 years
10/01/2019 Actuarial Loss / (Gain)	(189,645)	(20,210)	(18,261)	13 years
10/01/2019 Assumptions Change	(258,177)	(27,513)	(24,860)	13 years
10/01/2020 Actuarial Loss / (Gain)	(385,790)	(39,156)	(35,118)	14 years
10/01/2021 Actuarial Loss / (Gain)	(136,764)	(13,285)	(11,828)	15 years
10/01/2021 Assumptions Change	(39,630)	(3,849)	(3,427)	15 years
10/01/2021 Assumption Change - 112.664(1)(b), F.S. Assumptions	2,547,752	N/A	220,334	15 years

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



SECTION B



SUMMARY OF SYSTEM PROVISIONS

**Outline of Principal Provisions of the Retirement System
(as of October 1, 2021)**

A. Eligibility:

All elected officials, city attorneys and assistant city attorneys are eligible to participate. Effective January 1, 2014, the System is closed to new entrants.

B. Normal Retirement:

1. Eligibility:

Earlier of:

- (a) Attainment of age 55 with completion of 8 years of credited service.
- (b) Completion of 20 years of credited service.

2. Mandatory Retirement Age:

None.

3. Amount of Pension:

Total service not to exceed 25 years, times 3.0% of final average monthly compensation at time of retirement.

4. Normal Form:

Normal form of benefit is payable for life with 60 months guaranteed.

5. Type of Final Average Salary:

Highest annual W-2 pay prior to termination or retirement divided by 12.

C. Deferred Retirement:

1. Eligibility:

100% vesting upon the completion of 8 years of credited service - pension begins at age 55. Employees who have not completed 8 years of credited service at date of termination of employment shall be entitled to the return of their member contributions with 3% compound interest.

2. Benefit:

Computed as a regular retirement but based upon service and compensation at time of termination.



**Outline of Principal Provisions of the Retirement System
(as of October 1, 2021)**

D. Duty Disability Retirement:

None.

E. Non-Duty Disability Retirement:

None.

F. Pre-Retirement Death:

1. Eligibility:

Immediate.

2. Benefit:

Computed as for normal retirement and payable immediately, but terminates after 60 payments of monthly amount or 120 payments of one-half monthly amount.

G. City Contributions:

Actuarially determined amounts sufficient to cover the funding requirements.

H. Member Contributions:

7% of compensation for members who are not vested as of January 1, 2014. None for members who are vested as of January 1, 2014.

I. Changes Since Previous Actuarial Valuation:

None.



SECTION C

ACTUARIAL ASSUMPTIONS AND COST METHODS USED FOR FUNDING

**Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation
(as of October 1, 2021)**

A. Mortality:

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.

Sample Ages (2021)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Men	Women	Men	Women
	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)	
	Men	Women	Men	Women
	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

B. Interest to be Earned by Fund:

6.0%, compounded annually, net of investment expenses - includes inflation of 2.75%.

C. Allowances for Expenses or Contingencies:

Estimated expenses are based on actual expenses paid in previous year.



**Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation
(as of October 1, 2021)**

D. Employee Withdrawal Rates:

The rates do not apply to members eligible to retire and do not include separation on account of death or disability. This estimate measures the probabilities of members remaining in employment. These rates were first used for the September 30, 1995 valuation for Elected Officers and September 30, 2004 for Attorneys.

<u>Sample Ages</u>	<u>Years of Service</u>	<u>Withdrawal Rates Per 100 Employees</u>	
		<u>Elected Officers</u>	<u>Attorneys</u>
ALL	Less than 5	10	20
25	5 & Over	10	10
30		10	10
35		10	10
40		10	10
45		10	10
50		10	10
55		10	10
60		10	10

E. Disability Rates:

None.

F. Salary Increase Factors:

Employee salaries are estimated to increase between the date of hire and date of retirement. The following assumed rates of increase in individual salaries were first used for the September 30, 2021 valuation.

<u>Sample Ages</u>	<u>Salary Increase</u>
20	7.25%
30	7.25%
40	7.25%
50	7.25%
60	7.25%

General increase in wage level due to wage inflation is 3%.

G. Payroll Growth Assumption:

None.

Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation (as of October 1, 2021)

H. Retirement Rates:

A member is assumed to retire upon becoming eligible for retirement after 20 or more years of service regardless of age or after attaining age 55 with 8 or more years of service. This rate was first used for the September 30, 1998 valuation.

I. Technical Assumptions:

1. Pay Increase Timing:

Beginning of year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the date preceding the valuation date.

2. Decrement Timing:

Decrements of all types are assumed to occur mid-year.

3. Eligibility Testing:

Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.

4. Benefit Service:

Exact fractional service is used to determine the amount of benefit payable.

5. Decrement Relativity:

Decrement rates are used directly from tabular rates, without adjustment for multiple decrement table effects.

6. Decrement Operation:

Mortality decrement does not operate during the first 5 years of service. Withdrawal does not operate during retirement eligibility.

7. Incidence of Contributions:

Contributions are assumed to be received midway through the fiscal year.

8. Marriage Assumption:

100% of members are assumed to be married for purposes of death-in-service benefits.

J. Asset Valuation Method:

The method used for determining the smoothed actuarial value of assets phases in the deviation between the expected and actual return on assets at the rate of 20% per year. The smoothed actuarial 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 System assets and whose upper limit is 120% of the fair market value of System assets.

**Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation
(as of October 1, 2021)**

K. Cost Method:

Entry-Age-Normal 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 entry age to his assumed retirement age to fund his estimated benefits, assuming the System had always been in effect. The normal cost for the System is the sum of such amounts for all 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 System 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 assets of the System.

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 Fund as of the valuation date. Each individual's calculation is based on pay and service as of the valuation date.

L. Disclosure of Assumptions

The salary increase (wage inflation) assumption was updated based on the most recent assumption study performed as of September 30, 2020. The mortality rates are based upon the July 1, 2021 FRS Actuarial Valuation, as required under F.S., Chapter 2015-157.

M. Changes Since Previous Actuarial Valuation:

Salary Increase Factors were:

<u>Sample Ages</u>	<u>Salary Increase</u>
20	8.00%
30	8.00%
40	8.00%
50	8.00%
60	8.00%

General increase in wage level due to wage inflation was 3.75%.

SECTION D

GLOSSARY

GLOSSARY

<i>Actuarial Accrued Liability</i>	The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.
<i>Actuarial Assumptions</i>	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.
<i>Actuarial Cost Method</i>	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.
<i>Actuarial Equivalent</i>	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
<i>Actuarial Present Value</i>	The amount of funds required to provide a payment or series of payments in the future. It is determined by discounting the future payments with an assumed interest rate and with the assumed probability each payment will be made.
<i>Actuarial Present Value of Future Benefits</i>	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.
<i>Actuarial Valuation</i>	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.
<i>Actuarial Value of Assets</i>	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.

<i>Amortization Method</i>	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.
<i>Amortization Payment</i>	That portion of the plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
<i>Amortization Period</i>	The period used in calculating the Amortization Payment.
<i>Annual Required Contribution</i>	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.
<i>Closed Amortization Period</i>	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.
<i>Employer Normal Cost</i>	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
<i>Equivalent Single Amortization Period</i>	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.
<i>Experience Gain/Loss</i>	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.
<i>Funded Ratio</i>	The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.



<i>GASB</i>	Governmental Accounting Standards Board.
<i>GASB No. 67 and GASB No. 68</i>	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.
<i>Normal Cost</i>	The annual cost assigned, under the Actuarial Cost Method, to the current plan year.
<i>Open Amortization Period</i>	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.
<i>Unfunded Actuarial Accrued Liability</i>	The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.
<i>Valuation Date</i>	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.