



May 21, 2021

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, 2020 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 – 125.4% on a net market value of assets basis as of October 1, 2020

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,

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, 2020 Funding Actuarial Valuation Report and the System's Financial Reporting for the Year Ended September 30, 2020





May 21, 2021

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

Re: October 1, 2020 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, 2020. 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, 2020 is 125.4% 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



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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, 2020</u>
A. <u>Total Pension Liability (TPL)</u>	
Service Cost	\$ 153,299
Interest	573,480
Benefit Changes	0
Difference Between Actual and Expected Experience	18,209
Assumption Changes	(228,363)
Benefit Payments	(492,255)
Other	<u>0</u>
Net Change in Total Pension Liability	\$ 24,370
Total Pension Liability (TPL) - (beginning of year)	<u>9,860,977</u>
Total Pension Liability (TPL) - (end of year)	<u>\$ 9,885,347</u>
B. <u>System Fiduciary Net Position</u>	
Contributions - Employer	\$ 152,234
Contributions - Member	16,262
Net Investment Income	1,246,894
Benefit Payments	(492,255)
Administrative Expenses	(39,200)
Other	<u>0</u>
Net Change in System Fiduciary Net Position	\$ 883,935
System Fiduciary Net Position - (beginning of year)	<u>12,739,454</u>
System Fiduciary Net Position - (end of year)	<u>\$ 13,623,389</u>
C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	\$ (3,738,042)
Valuation Date	October 1, 2019

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, 2020</u>
A. <u>Total Pension Liability (TPL)</u>	
Service Cost	\$ 239,069
Interest	485,538
Benefit Changes	0
Difference Between Actual and Expected Experience	26,060
Assumption Changes	(343,454)
Benefit Payments	(492,255)
Other	<u>0</u>
Net Change in Total Pension Liability	\$ (85,042)
Total Pension Liability (TPL) - (beginning of year)	<u>12,462,909</u>
Total Pension Liability (TPL) - (end of year)	<u>\$ 12,377,867</u>
B. <u>System Fiduciary Net Position</u>	
Contributions - Employer	\$ 152,234
Contributions - Member	16,262
Net Investment Income	1,246,894
Benefit Payments	(492,255)
Administrative Expenses	(39,200)
Other	<u>0</u>
Net Change in System Fiduciary Net Position	\$ 883,935
System Fiduciary Net Position - (beginning of year)	<u>12,739,454</u>
System Fiduciary Net Position - (end of year)	<u>\$ 13,623,389</u>
C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	\$ (1,245,522)
Valuation Date	October 1, 2019

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)
2021	\$ 12,405,055	\$ 725,124	\$ 595,430	\$ 12,534,749
2022	12,534,749	728,768	723,897	12,539,620
2023	12,539,620	727,908	759,667	12,507,861
2024	12,507,861	726,406	747,138	12,487,129
2025	12,487,129	725,365	740,844	12,471,650
2026	12,471,650	724,350	743,519	12,452,481
2027	12,452,481	723,839	723,654	12,452,666
2028	12,452,666	724,397	706,699	12,470,364
2029	12,470,364	725,978	690,579	12,505,763
2030	12,505,763	728,663	673,141	12,561,285
2031	12,561,285	732,621	653,700	12,640,206
2032	12,640,206	737,799	639,955	12,738,050
2033	12,738,050	744,190	623,796	12,858,444
2034	12,858,444	752,099	602,521	13,008,022
2035	13,008,022	761,764	581,081	13,188,705
2036	13,188,705	773,303	559,416	13,402,592
2037	13,402,592	786,835	537,712	13,651,715
2038	13,651,715	802,478	516,115	13,938,078
2039	13,938,078	819,994	505,757	14,252,315
2040	14,252,315	839,172	495,696	14,595,791
2041	14,595,791	860,447	475,013	14,981,225
2042	14,981,225	884,088	459,029	15,406,284
2043	15,406,284	909,971	447,252	15,869,003
2044	15,869,003	938,243	431,438	16,375,808
2045	16,375,808	969,264	412,417	16,932,655
2046	16,932,655	1,003,263	394,179	17,541,739
2047	17,541,739	1,040,385	376,265	18,205,859
2048	18,205,859	1,080,803	358,521	18,928,141
2049	18,928,141	1,124,700	341,157	19,711,684
2050	19,711,684	1,172,258	324,195	20,559,747

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)
2021	\$ 12,405,055	\$ 483,379	\$ 595,430	\$ 12,293,004
2022	12,293,004	476,130	723,897	12,045,237
2023	12,045,237	465,449	759,667	11,751,019
2024	11,751,019	453,950	747,138	11,457,831
2025	11,457,831	442,358	740,844	11,159,345
2026	11,159,345	430,361	743,519	10,846,187
2027	10,846,187	418,262	723,654	10,540,795
2028	10,540,795	406,412	706,699	10,240,508
2029	10,240,508	394,747	690,579	9,944,676
2030	9,944,676	383,290	673,141	9,654,825
2031	9,654,825	372,114	653,700	9,373,239
2032	9,373,239	361,147	639,955	9,094,431
2033	9,094,431	350,343	623,796	8,820,978
2034	8,820,978	339,863	602,521	8,558,320
2035	8,558,320	329,818	581,081	8,307,057
2036	8,307,057	320,234	559,416	8,067,875
2037	8,067,875	311,134	537,712	7,841,297
2038	7,841,297	302,536	516,115	7,627,718
2039	7,627,718	294,216	505,757	7,416,177
2040	7,416,177	285,971	495,696	7,206,452
2041	7,206,452	278,028	475,013	7,009,467
2042	7,009,467	270,493	459,029	6,820,931
2043	6,820,931	263,205	447,252	6,636,884
2044	6,636,884	256,184	431,438	6,461,630
2045	6,461,630	249,583	412,417	6,298,796
2046	6,298,796	243,462	394,179	6,148,079
2047	6,148,079	237,820	376,265	6,009,634
2048	6,009,634	232,664	358,521	5,883,777
2049	5,883,777	228,004	341,157	5,770,624
2050	5,770,624	223,843	324,195	5,670,272

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, 2020	October 1, 2020
B. Actuarial Determined Contribution to Be Paid During Fiscal Year Ending	September 30, 2022	September 30, 2022
C. Annual Payroll of Active Employees	\$ 531,106	\$ 531,106
D. Total Minimum Funding Requirement		
1. Total Normal Cost	\$ 144,465	\$ 215,723
2. Annual Payment to Amortize Unfunded Actuarial Liability	(238,108)	(1,160)
3. Interest Adjustment	<u>(9,326)</u>	<u>12,275</u>
4. Total Minimum Funding Requirement (1. + 2. + 3., not less than 1.)	\$ 144,465	\$ 226,838
E. Expected Contribution Sources (\$ / % of pay)		
1. City	\$ 129,503 24.38%	\$ 211,876 39.89%
2. Member	<u>14,962 2.82%</u>	<u>14,962 2.82%</u>
3. Total	\$ 144,465 27.20%	\$ 226,838 42.71%

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 *	\$ 75,253	\$ 9,646	\$ 8,921	10 years
10/01/2011 Actuarial Loss / (Gain)	191,638	36,766	35,151	6 years
10/01/2012 Actuarial Loss / (Gain)	(228,754)	(38,658)	(36,647)	7 years
10/01/2013 Actuarial Loss / (Gain)	(540,370)	(82,093)	(77,173)	8 years
10/01/2014 Actuarial Loss / (Gain)	(975,466)	(135,297)	(126,147)	9 years
10/01/2015 Actuarial Loss / (Gain)	(710,620)	(91,085)	(84,243)	10 years
10/01/2015 Establish Credit Balance	1,818,583	233,101	215,591	10 years
10/01/2016 Actuarial Loss / (Gain)	(369,942)	(44,251)	(40,604)	11 years
10/01/2016 Assumptions Change	99,568	11,910	10,928	11 years
10/01/2017 Actuarial Loss / (Gain)	(272,967)	(30,716)	(27,967)	12 years
10/01/2018 Actuarial Loss / (Gain)	(278,068)	(29,633)	(26,776)	13 years
10/01/2019 Actuarial Loss / (Gain)	(177,898)	(18,056)	(16,194)	14 years
10/01/2019 Assumptions Change	(242,185)	(24,581)	(22,046)	14 years
10/01/2020 Actuarial Loss / (Gain)	(361,981)	(35,161)	(31,305)	15 years
10/01/2020 Assumption Change - 112.664(1)(b), F.S. Assumptions	2,513,262	N/A	217,351	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, 2020)**

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, 2020)**

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, 2020)**

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 (2020)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Men	Women	Men	Women
	55	32.58	35.02	28.63
60	27.74	30.00	24.55	27.84
62	25.85	28.02	22.93	26.02

Sample Ages (2040)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Men	Women	Men	Women
	55	34.22	36.50	30.64
60	29.30	31.44	26.40	29.51
62	27.37	29.43	24.72	27.63

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, 2020)**

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
55		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, 2000 valuation.

<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 is 3.75%.

G. Payroll Growth Assumption:

None.



**Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation
(as of October 1, 2020)**

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, 2020)**

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

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. Changes Since Previous Actuarial Valuation:

None.

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.