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**CITY OF MIAMI GENERAL EMPLOYEES'
AND SANITATION EMPLOYEES'
EXCESS BENEFIT PLAN**

**Actuarial Valuation Report
as of
October 1, 2023**





Cavanaugh Macdonald

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January 26, 2024

Mr. Edgard Hernandez
Pension Administrator
City of Miami GESE Retirement Trust
2901 Bridgeport Avenue
Coconut Grove, FL 33133-3607

RE: Excess Benefit Plan Actuarial Valuation and 2024 City Contribution Requirement

Dear Mr. Hernandez:

As requested, we have prepared an actuarial valuation of the Excess Benefit Plan for general and sanitation employees. The purpose of the valuation is to estimate the City's liability with respect to benefits to be paid from the Excess Benefit Plan for current and future retirees for use in the City of Miami's and the Retirement Trust's financial statements. We have also identified the retired members from the City of Miami GESE Retirement Trust receiving benefits in excess of the maximum benefit limitations for the calendar year 2024 under Internal Revenue Code (IRC) Section 415(b)(1)(A).

Actuarial Valuation of the Excess Benefit Plan

The actuarial valuation of the City of Miami GESE Retirement Trust reflects benefit amounts up to the maximum benefit limits imposed by Internal Revenue Code (IRC) Section 415. The City of Miami Excess Benefit Plan provides for the payment of the excess of the total benefit earned under the GESE Plan without regard to the maximum benefit limit over the benefit payable from the GESE Plan as limited by IRC Section 415. The valuation of the Excess Benefit Plan quantifies the long-term financial obligation of the City with respect to these excess benefits.

The valuation results are summarized on the following page.



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<u>Present Value of Future Benefits</u>	<u>October 1, 2022</u>	<u>October 1, 2023</u>
Active members and inactive members due contribution refund	\$ 0	\$ 0
Retired and deferred vested members	<u>\$ 1,386,407</u>	<u>\$ 981,163</u>
Total	\$ 1,386,407	\$ 981,163
<u>Actuarial Accrued Liability</u>	\$ 1,386,407	\$ 981,163
<u>Present Value of Accumulated Benefits</u>	\$ 1,386,407	\$ 981,163
<u>Assets</u>	\$ 0	\$ 0

The Excess Benefit Plan is an unfunded plan. However, for illustration purposes we have determined the contribution requirement that would arise if the City were to fund the Excess Benefit Plan on the same actuarial basis as the GESE Plan. The illustrative annual contribution is \$183,011 determined as of October 1, 2023. This contribution represents 0.13% of the active members' payroll of \$137,402,855 as of October 1, 2023. The unfunded actuarial accrued liability of \$981,163 as of October 1, 2023 is amortized over 7 years from that date. Note that the illustrative annual contribution determined as of October 1, 2022 is \$234,885 or 0.17% of payroll.

Actuarial Standard of Practice Number 4 (ASOP 4) requires the disclosure of a reasonable Actuarial Determined Contribution (ADC). Based on the assumptions and methods used in this report, the illustrative annual contribution given above is reasonable with respect to ASOP 4.

The actuarial valuation is based on member census information provided to Cavanaugh Macdonald by the GESE Retirement Trust for use in the October 1, 2023 valuation of the City of Miami GESE Retirement Trust. In our calculations we used the same benefit provisions and actuarial assumptions used in the valuation of the GESE plan except that we have not reflected the maximum benefit limits under IRC Section 415.

The valuation assumptions include an interest rate of 7.15% per year and annual pay increases which vary based on years of service. As of October 1, 2023, the interest rate decreased from 7.30% to 7.15%. In the enclosed Tables I and II, respectively, we present a summary of the actuarial assumptions and methods and plan provisions used in the actuarial valuation of the City of Miami Excess Benefit Plan.

The enclosed Table III presents the schedule of funding progress and Table IV provides data on the Excess Benefit Plan for the Comprehensive Financial Report.



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2024 City Contribution Requirement

The report also includes a listing of retired members from the City of Miami GESE Retirement Trust receiving benefits in excess of the maximum benefit limitations for the calendar year 2024 under Internal Revenue Code (IRC) Section 415(b)(1)(A). This list is sorted in two ways: by Entity ID and by excess payment commencement month.

Our calculations are based on:

- The data reported by the Retirement Trust for use in our October 1, 2023 actuarial valuation.
- A COLA increase to the current annual benefit of \$400 as of October 1, 2024 for each retiree on the listing.
- The assumption that for the retirees on the listing, all of their contributions to the GESE Plan were “picked up.”
- The maximum annual dollar limitations for the year 2024 under IRC Section 415(b)(1)(A). The maximum amount increased from \$265,000 to \$275,000 from 2023 to 2024.
- Calculation of the excess benefits payable reflecting lump sum payments and rollovers from the DROP.

There are 9 current retirees receiving benefits in 2024 over the IRC Section 415 limits. The amount of Excess Benefit Plan expected to be paid in 2024 amounts to \$83,769. The amount payable from the Excess Benefit Plan in 2023 was \$120,698.

We have prepared a summary of benefits payable under the city of Miami Excess Benefit Plan which reflects our understanding of the payment schedule that the City follows. Under the City’s schedule:

- Retirement benefits in 2024 will be paid solely from the GESE Plan until the month when the retiree reaches the maximum benefit for the year.
- In the month that the maximum is reached, the retiree will receive a portion of his pension from the GESE Plan and a portion from the Excess Benefit Plan.
- After the month that the maximum is reached, the retiree will receive his entire pension from the Excess Benefit Plan.



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We also understand that the City intends to transfer funds to the Excess Benefit Plan in two phases to cover the benefits payable in 2024.

1. Sufficient funds to provide for excess benefit payments from January to September 2024. This amounts to a payment from the City to the Excess Benefit Plan of \$3,951.49.
2. The amount to cover excess benefits payable from October through December 2024. The City's funding requirement for this period amounts to \$79,817.82 payable in time for the Excess Benefit Plan administrator to issue the October excess pensions.

In addition, the City should transfer to the Excess Benefit Plan Trust the amount required to pay for the administrative expenses of the Plan.

It is our understanding that lump sum DROP payments and rollovers from the DROP must be combined with the regular GESE benefits for purposes of applying the IRC Section 415 maximum benefit limit. In these circumstances, the employees' DROP account balance is converted to an annuity for Section 415 testing purposes and added to the annuity otherwise payable to the employee from the Trust. The amount of this combined annuity benefit must not exceed the limit on benefits under Section 415 of the Code at that time. We recommend that you consult with legal counsel on this issue.

Note that DROP benefits are reflected in the listing of 2024 excess benefits based on the DROP information you have provided.

Under the revised Actuarial Standards of Practice (ASOP) No. 4 effective for valuations after February 15, 2023, we must now include a low-default-risk obligation measure of the Plan's liability in our funding valuation report. This is an informational disclosure as described below and would not be appropriate for assessing the funding progress or health of this plan. This measure uses the unit credit cost method and reflects all the assumptions and provisions of the funding valuation except that the discount rate is derived from considering low-default-risk fixed income securities. We considered the FTSE Pension Discount Curve based on market bond rates published by the Society of Actuaries as of September 30, 2023 and with the 30-year spot rate used for all durations beyond 30. Using these assumptions, we calculate a liability of approximately \$1.1 million. This amount approximates the termination liability if the plan (or all covered employment) ended on the valuation date and all of the accrued benefits had to be paid with cash-flow matched bonds. This assurance of funded status and benefit security is typically more relevant for corporate plans than for governmental plans since governments rarely have the need or option to completely terminate a plan.



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In order to prepare the results in this report, we have utilized actuarial models that were developed to measure liabilities and develop actuarial costs. These models include tools that we have produced and tested, along with commercially available valuation software that we have reviewed to confirm the appropriateness and accuracy of the output. In utilizing these models, we develop and use input parameters and assumptions about future contingent events along with recognized actuarial approaches to develop the needed results.

Please let us know if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads 'Todd B. Green' with a long horizontal flourish extending to the right.

Todd B. Green, ASA, EA, FCA, MAAA
President
Enrolled Actuary No. 23-8883

A handwritten signature in blue ink that reads 'Micki R. Taylor' in a cursive style.

Micki R. Taylor, ASA, EA, FCA, MAAA
Consulting Actuary
Enrolled Actuary No. 23-5975



1. Actuarial Cost Method

The entry age normal cost method. Under this method, normal costs are determined on the individual entry age normal method.

For determination of the Annual Required Contribution the City contribution requirement the unfunded actuarial accrued liability is amortized over 30 years from October 1, 2000.

2. Decrements

• Pre-Retirement Mortality

Female: PUB-2010 Headcount Weighted General Below Median Employee Female Table

Male: PUB-2010 Headcount Weighted General Below Median Employee Male Table, set back 1 year

Projection Scale: MP-2018 (fully generational)

• Post-Retirement Healthy Mortality

Female: PUB-2010 Headcount Weighted General Below Median Healthy Retiree Female Table

Male: PUB-2010 Headcount Weighted General Below Median Healthy Retiree Male Table, set back 1 year

Projection Scale: MP-2018 (fully generational)

• Post-Retirement Disabled Mortality

Female: PUB-2010 Headcount Weighted General Disabled Retiree Female Table, set forward 3 years

Male: PUB-2010 Headcount Weighted General Disabled Retiree Male Table, set forward 3 years

Projection Scale: MP-2018 (fully generational)

• Disability

Representative values of the assumed annual rates of disability among members in active service are set forth in the following table. 90% of disabilities are assumed to be ordinary (non-occupational), and 10% are service incurred. Of the service incurred disabilities, 50% are assumed to be accidental. Disability and retirement decrements do not compete.

Age	Rate	Age	Rate	Age	Rate	Age	Rate
20	0.01%	30	0.03%	40	0.07%	50	0.15%
25	0.01%	35	0.05%	45	0.10%	55	0.22%



- Permanent Withdrawal from Active Status**

Representative values of the assumed annual rates of withdrawal among members in active service are set forth in the following table.

Age	Completed Years of Service					
	0	1	2	3	4	5 or more
20	13.5%	13.0%	10.8%	8.5%	7.0%	6.0%
25	13.5%	13.0%	10.8%	8.5%	7.0%	5.3%
30	13.5%	13.0%	10.8%	8.5%	7.0%	4.8%
35	13.0%	12.5%	10.3%	8.2%	7.0%	4.4%
40	12.4%	11.9%	9.7%	7.6%	6.5%	3.4%
45	11.8%	11.3%	9.0%	7.0%	5.7%	2.9%
50	11.2%	10.7%	8.5%	6.4%	4.7%	2.4%
55	10.9%	10.4%	8.2%	6.1%	4.4%	2.0%

- Retirement (non-Backdrop)**

Representative values of the assumed annual rates of retirement among members in active service are set forth in the following table. The rates for ages 45 through 54 are the assumed rates before the age of 55 under the rule of 70.

Age	Rate	Age	Rate	Age	Rate	Age	Rate	Age	Rate
45	5%	50	8%	55	15%	60	16%	65	16%
46	5%	51	8%	56	15%	61	16%	66	16%
47	5%	52	8%	57	15%	62	16%	67	16%
48	5%	53	8%	58	15%	63	16%	68	16%
49	5%	54	8%	59	15%	64	16%	69	16%
								70	100%

3. Interest Rate

7.15% per annum, compounded annually, including inflation.



4. Salary Increases

Salaries are assumed to increase at a rate that varies based on years of credited service. Rates include 3.5% wage inflation.

Years of Credited Service	Rate of Increase
Less Than 1	8.75%
1	8.00%
2	6.50%
3	5.50%
4	5.00%
5	5.00%
6	4.50%
7	4.50%
8	4.50%
9	4.50%
10 or more	4.00%

5. Inflation

2.5% per annum.

6. Spouses

80% of active members assumed to be married with the husband 3 years older than his wife.

7. Expenses and Payment of Benefits

The City shall provide for all the expenses of the Plan and for all the benefit payments.

8. Assets

There are no plan assets.



9. Funding Period (Illustrative City Contribution Requirement)

The initial unfunded actuarial accrued liability as of October 1, 2000 is amortized over 30 years from that date.

10. Maximum Benefit

The valuation of the excess benefits does not reflect the maximum benefit limits under Internal Revenue Code Section 415.

We have assumed future cost-of-living increases of 2.5% in the IRC Section 415 limits for the benefits payable from the City of Miami GESE Retirement Trust.



1. Plan Effective Date

The original plan effective date is October 1, 2000.

2. Membership

All members of the City of Miami General Employees' and Sanitation Employees' (GESE) Retirement Trust.

3. Member Contributions

There are no member contributions.

4. Excess Plan Benefit

The excess, if any, of the benefit earned under the GESE Retirement Plan without taking into account the Internal Revenue Code (IRC) Section 415 limits over the maximum benefit as limited under IRC Section 415.



1. Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b) – (a)	Funded Ratio (a)/(b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b)-(a)]/(c)
10/1/2014	0	8,551,455	8,551,455	0.00%	69,829,851	12.25%
10/1/2015	0	8,025,662	8,025,662	0.00%	78,707,859	10.20%
10/1/2016	0	7,177,011	7,177,011	0.00%	94,536,971	7.59%
10/1/2017	0	5,613,173	5,613,173	0.00%	107,890,759	5.20%
10/1/2018	0	4,859,623	4,859,623	0.00%	107,770,892	4.51%
10/1/2019	0	4,165,340	4,165,340	0.00%	119,071,503	3.50%
10/1/2020	0	4,244,057	4,244,057	0.00%	126,118,458	3.37%
10/1/2021	0	2,739,915	2,739,915	0.00%	127,879,474	2.14%
10/1/2022	0	1,386,407	1,386,407	0.00%	138,127,441	1.00%
10/1/2023	0	981,163	981,163	0.00%	137,402,855	0.71%

2. Method and assumptions used in calculations of actuarially determined contributions

Valuation date:	October 1, 2023
Actuarial cost method:	Entry Age Normal
Amortization method:	Level Dollar, closed
Remaining amortization period:	7 years
Asset valuation method:	Not applicable.
Actuarial assumptions:	
Investment rate of return*	7.15%
Projected salary increases**	Variable By Years of Service
*Includes inflation at	2.50%
**Includes wage inflation at	3.50%



Schedule of Retirants and Beneficiaries Added to and Removed from Rolls

Year Ended	Added to Rolls		Removed from Rolls		Rolls – End of Year		% Increase In Annual Allowances	Average Annual Allowances
	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances		
September 30, 2016	0	\$0	5	\$2,975	42	\$605,959 ⁽¹⁾	(12.04)%	\$14,428
September 30, 2017	0	\$0	6	\$11,759	36	\$477,589 ⁽²⁾	(21.18)%	\$13,266
September 30, 2018	0	\$0	3	\$4,007	33	\$417,288 ⁽³⁾	(12.63)%	\$12,645
September 30, 2019	0	\$0	5	\$6,918	28	\$361,096 ⁽⁴⁾	(13.47)%	\$12,896
September 30, 2020	3	\$442	1	\$1,388	30	\$371,062 ⁽⁵⁾	2.76%	\$12,369
September 30, 2021	1	\$33	11	\$15,923	20	\$240,994 ⁽⁶⁾	(35.05)%	\$12,050
September 30, 2022	0	\$0	8	\$22,353	12	\$119,498 ⁽⁷⁾	(50.41)%	\$9,958
September 30, 2023	0	\$0	3	\$10,102	9	\$82,869 ⁽⁸⁾	(30.65)%	\$9,208

⁽¹⁾ Includes an additional decrease in benefits of \$79,993 due to changes in Section 415 limits.

⁽²⁾ Includes an additional decrease in benefits of \$116,611 due to changes in Section 415 limits.

⁽³⁾ Includes an additional decrease in benefits of \$56,294 due to changes in Section 415 limits.

⁽⁴⁾ Includes an additional decrease in benefits of \$49,274 due to changes in Section 415 limits.

⁽⁵⁾ Includes an additional decrease in benefits of \$10,912 due to changes in Section 415 limits.

⁽⁶⁾ Includes an additional decrease in benefits of \$114,178 due to changes in Section 415 limits.

⁽⁷⁾ Includes an additional decrease in benefits of \$99,143 due to changes in Section 415 limits.

⁽⁸⁾ Includes an additional decrease in benefits of \$26,527 due to changes in Section 415 limits.



Analysis of Financial Experience
Gains & Losses in Accrued Liabilities During Year ending September 30
Resulting from Differences Between Assumed Experience & Actual Experience

\$ Gain (or Loss) For Year Ending September 30	2023
Age & Service Retirements	
If members retire at older ages or with lower final average pay than assumed, there is a gain. If younger ages or higher average pay, a loss.	0
Disability Retirements	
If disability claims are less than assumed, there is a gain. If more claims, a loss.	0
Death-In-Service Retirements	
If survivor claims are less than assumed, there is a gain. If more claims, a loss.	0
Withdrawal From Employment	
If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	0
Pay Increases and Data Adjustments	
If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	0
Contribution Income	
If more contributions are received than expected, there is a gain. If less, a loss.	2,399
Investment Income	
If there is greater investment income than assumed, there is a gain. If less income, a loss.	88
Death After Retirement	
If retirants live longer than assumed, there is a loss. If not as long, a gain.	(8,151)
New Members	0
Other	
Miscellaneous gains and losses resulting from timing of financial transactions, valuation methods, increase in maximum benefit limits, etc.	290,691
Gain (or Loss) During Year From Financial Experience	285,027
Non-Recurring Items	(13,460)
Adjustments for plan amendments, assumption changes, etc.	
Composite Gain (or Loss) During Year	271,567



MEMBERS RECEIVING BENEFITS IN EXCESS OF THE MAXIMUM BENEFIT LIMITATIONS

TABLE V

**City of Miami GESE Retirement Trust Estimated Excess Benefits for 2024 for Those Retired as of October 1, 2023
Based on the October 1, 2023 Actuarial Valuation Data and
Internal Revenue Code Section 415(b)(1)(A) Dollar Maximum Benefit Limits for the Year 2024**

Sorted by Entity ID

Name	Status as of January 1st				First Payment Change				Second Payment Change				Third Payment Change				Total 2024 Excess Benefit Plan Payment	Month Excess Payment Begins In
	Initial Payment	Qualified Payment	Excess Payment	Total Monthly Payment	Payment Change Date	Qualified Payment	Excess Payment	Total Monthly Payment	Payment Change Date	Qualified Payment	Excess Payment	Total Monthly Payment	Payment Change Date	Qualified Payment	Excess Payment	Total Monthly Payment		
AB	1/1/2024	10,396.63	-	10,396.63	10/1/2024	10,429.96	-	10,429.96	12/1/2024	4,182.41	6,247.55	10,429.96	N/A	-	-	-	6,247.55	Dec
NG	1/1/2024	8,671.28	-	8,671.28	10/1/2024	8,704.61	-	8,704.61	12/1/2024	1,265.82	7,438.79	8,704.61	N/A	-	-	-	7,438.79	Dec
LC	1/1/2024	9,728.61	-	9,728.61	9/1/2024	5,777.12	3,951.49	9,728.61	10/1/2024	-	9,761.94	9,761.94	N/A	-	-	-	33,237.31	Sep
MV	1/1/2024	9,586.14	-	9,586.14	10/1/2024	9,619.47	-	9,619.47	11/1/2024	2,294.62	7,324.85	9,619.47	12/1/2024	-	9,619.47	9,619.47	16,944.32	Nov
DP	1/1/2024	7,379.38	-	7,379.38	10/1/2024	7,412.71	-	7,412.71	12/1/2024	2,366.16	5,046.55	7,412.71	N/A	-	-	-	5,046.55	Dec
MS	1/1/2024	7,868.55	-	7,868.55	10/1/2024	7,901.88	-	7,901.88	12/1/2024	1,892.29	6,009.59	7,901.88	N/A	-	-	-	6,009.59	Dec
NV	1/1/2024	7,737.70	-	7,737.70	10/1/2024	7,771.03	-	7,771.03	12/1/2024	3,999.56	3,771.47	7,771.03	N/A	-	-	-	3,771.47	Dec
LF	1/1/2024	7,569.81	-	7,569.81	10/1/2024	7,603.14	-	7,603.14	12/1/2024	4,841.90	2,761.24	7,603.14	N/A	-	-	-	2,761.24	Dec
WB	1/1/2024	11,405.44	-	11,405.44	10/1/2024	11,438.77	-	11,438.77	12/1/2024	9,126.28	2,312.49	11,438.77	N/A	-	-	-	2,312.49	Dec



MEMBERS RECEIVING BENEFITS IN EXCESS OF THE MAXIMUM BENEFIT LIMITATIONS

TABLE V

**City of Miami GESE Retirement Trust Estimated Excess Benefits for 2024 for Those Retired as of October 1, 2023
Based on the October 1, 2023 Actuarial Valuation Data and
Internal Revenue Code Section 415(b)(1)(A) Dollar Maximum Benefit Limits for the Year 2024**

Sorted by Excess Payment Commencement Month

Name	Status as of January 1st				First Payment Change				Second Payment Change				Third Payment Change				Total 2024 Excess Benefit Plan Payment	Month Excess Payment Begins In
	Initial Payment	Qualified Payment	Excess Payment	Total Monthly Payment	Payment Change Date	Qualified Payment	Excess Payment	Total Monthly Payment	Payment Change Date	Qualified Payment	Excess Payment	Total Monthly Payment	Payment Change Date	Qualified Payment	Excess Payment	Total Monthly Payment		
LC	1/1/2024	9,728.61	-	9,728.61	9/1/2024	5,777.12	3,951.49	9,728.61	10/1/2024	-	9,761.94	9,761.94	N/A	-	-	-	33,237.31	Sep
MV	1/1/2024	9,586.14	-	9,586.14	10/1/2024	9,619.47	-	9,619.47	11/1/2024	2,294.62	7,324.85	9,619.47	12/1/2024	-	9,619.47	9,619.47	16,944.32	Nov
NG	1/1/2024	8,671.28	-	8,671.28	10/1/2024	8,704.61	-	8,704.61	12/1/2024	1,265.82	7,438.79	8,704.61	N/A	-	-	-	7,438.79	Dec
AB	1/1/2024	10,396.63	-	10,396.63	10/1/2024	10,429.96	-	10,429.96	12/1/2024	4,182.41	6,247.55	10,429.96	N/A	-	-	-	6,247.55	Dec
MS	1/1/2024	7,868.55	-	7,868.55	10/1/2024	7,901.88	-	7,901.88	12/1/2024	1,892.29	6,009.59	7,901.88	N/A	-	-	-	6,009.59	Dec
DP	1/1/2024	7,379.38	-	7,379.38	10/1/2024	7,412.71	-	7,412.71	12/1/2024	2,366.16	5,046.55	7,412.71	N/A	-	-	-	5,046.55	Dec
NV	1/1/2024	7,737.70	-	7,737.70	10/1/2024	7,771.03	-	7,771.03	12/1/2024	3,999.56	3,771.47	7,771.03	N/A	-	-	-	3,771.47	Dec
LF	1/1/2024	7,569.81	-	7,569.81	10/1/2024	7,603.14	-	7,603.14	12/1/2024	4,841.90	2,761.24	7,603.14	N/A	-	-	-	2,761.24	Dec
WB	1/1/2024	11,405.44	-	11,405.44	10/1/2024	11,438.77	-	11,438.77	12/1/2024	9,126.28	2,312.49	11,438.77	N/A	-	-	-	2,312.49	Dec