



March 25, 2021

Mr. Rick Rivera  
Pension Administrator  
City of Miami Beach Employees' Retirement Plan  
1700 Convention Center Drive  
Miami Beach, Florida 33139

**Re: City of Miami Beach Employees' Retirement Plan  
Actuarial Study for Vested Rehired Members**

Dear Rick:

As requested, we have prepared the enclosed analysis estimating the first-year financial effect of applying Tier B benefit provisions for six (6) members of the City of Miami Beach Employees' Retirement Plan (Plan) who terminated employment after reaching full vesting and were subsequently rehired. Under the current provisions, such members accrue benefits under the Tier C structure for service accrued after re-employment.

The exhibit on page 5 summarizes the first-year effect on the required City contribution and the Unfunded Actuarial Accrued liability (UAAL) (as compared to the October 1, 2019 Actuarial Valuation) for each of the six members described above.

If a decision is made to provide Tier B benefit provisions for all service, an Actuarial Impact Statement will need to be prepared and sent to the Division of Retirement along with a copy of the amending ordinance prior to the second reading of the proposed ordinance.

**Summary of Findings**

The estimated effect of the changes described above is summarized as follows:

- The required City contribution for the first year would increase by \$67,398 (from \$30,699,942 to \$30,767,340).
- The Unfunded Actuarial Accrued Liability (UAAL) would increase by \$618,315 (from \$225,521,621 to \$226,139,936).
- The funded ratio as of October 1, 2019 would decrease by 0.1% (from 74.4% to 74.3%).
- The ultimate cost of the proposed changes is measured by the increase in the Present Value of Future Benefits less the Present Value of Projected Member Contributions. The proposed ordinance would increase the Actuarial Present Value of Projected Benefits by \$715,234 (from \$1,009,027,676 to \$1,009,742,910) and decrease the Actuarial Present Value of Future Projected Contributions by \$11,650 (from \$71,909,573 to \$71,897,923), for an ultimate cost of \$726,884. This assumes all of our actuarial assumptions are met each year. This represents the value of the expected employer provided benefit payments in today's dollars that is funded over time by the City.

### **Other Cost Considerations**

- This study shows the increase in the required City contribution for the first year only and is based on the assumptions detailed in the October 1, 2019 Actuarial Valuation Report dated June 4, 2020. Future increases in the required City contribution may be higher if there are changes in assumptions, methods, demographics, or plan provisions.
- As of October 1, 2019, the actuarial value of assets exceeded the market value by \$3,298,096. Once all the gains and losses are fully recognized in the actuarial value of assets, the required contribution will increase by roughly \$279,000 regardless of whether the proposed changes are adopted.

### **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 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 this report does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the Plan's future financial condition include:

1. Investment risk – actual investment returns may differ from the either assumed or forecasted returns;
2. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the Plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
3. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
4. Longevity risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
5. Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.





The effects of certain trends in experience can generally be anticipated. For example, if the investment return is less (or more) than the assumed rate, the cost of the Plan can be expected to increase (or decrease). Likewise if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

The computed contribution amounts may be considered as minimum contributions that comply with the pension Board's funding policy and the State statutes. 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.

#### **Additional Risk Assessment**

Additional risk assessment is outside the scope of this report. 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.

#### **Required Disclosures**

This report was prepared at the request of the Board with permission of the City and is intended for use by the Plan and City and those approved by them. This report may be provided to parties other than the Board and City only in its entirety and only their permission. GRS is not responsible for unauthorized use of this report.

The purpose of this report is to describe the financial effect of the proposed changes. No statement in this report is intended to be interpreted as a recommendation in favor of, or in opposition to the proposed changes. This report should not be relied on for any purpose other than the purpose described above. Determinations of financial results associated with the benefits described in this report, for purposes other than those identified herein may be significantly different.

The calculations in this report are based upon data furnished by the Plan Administrator for this study and census data and financial information provided by the Plan Administrator for the October 1, 2019 Actuarial Valuation concerning Plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We reviewed this information for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by the Plan Administrator.

The calculations in this report are based on data or other information through September 30, 2019. They are also based upon census data, financial information, assumptions and methods, and the provisions described in this report and the October 1, 2019 Actuarial Valuation Report dated June 4, 2020. If you have reason to believe that the assumptions that were used are unreasonable, that the current and proposed plan provisions are incorrectly described, that important plan provisions relevant to this report are not described, or that conditions have changed since the calculations were made, you should contact the authors of this report prior to relying on information in this report.



If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information to make an informed decision on the subject matter of this report, please contact the authors of this report prior to making such decision.

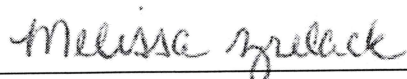
This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge, the information contained in this report is accurate and fairly presents the actuarial position of the Plan as of the valuation date. All calculations have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

Melissa Zrelack and Travis Robinson 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 undersigned actuaries are independent of the plan sponsor.

This actuarial valuation and/or cost determination was prepared and completed by us or under our direct supervision, and we acknowledge responsibility for the results. To the best of our knowledge, the results are complete and accurate. In our opinion, the techniques and assumptions used are reasonable, meet the requirements and intent of Part VII, Chapter 112, Florida Statutes, and are based on generally accepted actuarial principles and practices. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.

Respectfully submitted,



Melissa Zrelack, MAAA, FCA  
Enrolled Actuary No. 20-06467



Travis Robinson, MAAA, ASA, FCA  
Enrolled Actuary No. 20-08351





**Miami Beach Employees' Retirement Plan**  
**Estimated Effect of Providing Tier B Provisions to Total Service for Vested Rehired Members**  
**(Breakdown by Member)**

	<b>10/1/2019 Valuation</b>	<b>Marcela Rubio</b>	<b>Karen Rosel</b>	<b>Rafael Moreno</b>	<b>Tameka Otto Stewart</b>	<b>Michael Gongora</b>	<b>Maria Moya Denham</b>
Annual Required Contribution	\$ 30,699,942	\$ 30,710,632	\$ 30,709,958	\$ 30,712,120	\$ 30,716,736	\$ 30,705,203	\$ 30,712,401
Change from 10/1/2019 Valuation		10,690	10,016	12,178	16,794	5,261	12,459
Unfunded Actuarial Accrued Liability	225,521,621	225,626,174	225,611,529	225,582,014	225,791,732	225,540,069	225,596,523
Change from 10/1/2019 Valuation		104,553	89,908	60,393	270,111	18,448	74,902
Present Value of Future Benefits minus Present Value of Member Contributions	937,118,103	937,247,701	937,228,939	937,248,988	937,313,297	937,163,451	937,233,126
Change from 10/1/2019 Valuation		129,598	110,836	130,885	195,194	45,348	115,023







**Smith, Michael - HR Dir.**

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**From:** Rivera, Rick  
**Sent:** Thursday, April 1, 2021 6:32 PM  
**To:** Woodruff, John  
**Subject:** Tier B/C study

Hi John,

- Tameka has a tier 'B' vested portion of 6.84 years of creditable service (YCS) with an accrued benefit of \$1,478.42 payable at age 55.
- She is currently age 43 with a separate Tier 'C' YCS of 4.54 since her 2<sup>nd</sup> rehire date. She will need to reach 5.0 YCS to have a separate vested portion payable at age 62.

If nothing changes and Tameka stays employed until age 62 at the City of Miami Beach she will collect two (2) separate pensions.

If the pension study is adopted Tameka would be able to add the 6.84 YCS to her current ycs. At the end of her career her pension calculation would be  
Based on tier 'B' provisions.

Please see exhibits below:

<u>Tier B Service</u>				Vested benefit		
<u>Name</u>	<u>First Hire date</u>	<u>Termination date</u>	<u>TIER 'B' YCS</u>	<u>Payable at age 55</u>	<u>Pension Multiplier</u>	<u>Retiree COLA</u>
Otto Stewart, Tameka	3/23/2009	1/6/2016	6.84	\$ 1,478.42	3.00%	2.50%

<u>Current Tier C Service</u>	<u>2nd Hire date</u>	<u>Current Ycs</u>	<u>Payable at age 62</u>	<u>Pension Multiplier</u>	<u>Retiree COLA</u>
	8/22/2016	4.54	\$6,272.00	2.50%	1.50%

<u>Current Situation</u>	
Tier 'C' accrued benefit at age 55:	<b>\$6,272.00</b> (She works until age 55)
Tier 'B' accrued benefit at age 55:	<b>\$1,478.00</b>
Total estimated benefit:	<b>\$7,750.00</b>

Approval of Study scenario:	
Tier 'B' accrued benefit at age 55:	<b>\$ 10,720.00</b>

John, currently we must erase all YCS and pension contributions for these 6 employees in the pension software system to provide the members accurate tier 'c' projections. The administration of these

6 employees is a bit labor intensive. Once retired the separate benefits and different COLA percentages will require much programming or manual labor.

Please contact me if you have any questions

Thank you,

Rick