

August 31, 2018

Ms. Kimberly Groome
Coral Gables Retirement System
147 Alhambra Circle, Suite 215
Coral Gables, FL 33134

**Re: City of Coral Gables Retirement System
Actuarial Impact Statement – Proposed Ordinance**

Dear Kimberly:

We have prepared this Actuarial Impact Statement for the City of Coral Gables Retirement System (“Plan”) to measure the first-year financial impact of the proposed Ordinance which would amend Section 46-253(c)(6) of the Code of the City of Coral Gables to allow the four former City employees who opted-out of the Class to be treated in the same manner as Class Members, and to provide them the same retroactive and permanent COLA and alternative dispute resolution mechanism as was provided to Class Members.

Summary of Findings

- The required City contribution for the fiscal year ending September 30, 2019 (payable October 1, 2018) increases by \$10,707, from \$25,083,655 to \$25,094,362.
- As a percentage of covered payroll, the required City contribution for the fiscal year ending September 30, 2019 increases by 0.03% of covered payroll, from 60.71% to 60.74%.
- The unfunded actuarial accrued liability as of October 1, 2017 increases by \$78,581, from \$226,839,817 to \$226,918,398, reflecting both the present value as of October 1, 2017 of the total retroactive cost-of-living adjustment (COLA) lump sum payments scheduled to be made mid-September 2018 (which total \$33,461) and of the increased monthly benefits payable thereafter (assuming no future COLAs are paid).

We note that if the proposed Ordinance for the four former City employees who opted-out of the Class is approved, then the COLA determination provisions of Section 46-253(c)(6), which provides for future COLAs to be granted to Class Members (and “Gap Members”) if the rate of return on the market value of assets during a fiscal year exceeds 10%, would be extended to these four former employees of the City. The City Commission can prevent a future COLA from being granted (or reduce it) by a 4/5 supermajority vote. We recommend incorporating an assumption into the actuarial valuation for future COLAs. However, the likelihood that the City Commission will prevent or reduce future COLAs is currently unknown, so if a future COLA assumption is not adopted, we recommend monitoring the actual experience of future COLA decisions made by the City Commission over a period of 3 to 5 years, and then taking action with regard to a future COLA assumption based on this experience.

Ms. Kimberly Groome

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This Statement must be filed with the Division of Retirement before the final public hearing on the Ordinance. Please have a member of the Board of Trustees sign the Statement. Then please send the Statement along with a copy of the proposed Ordinance to Tallahassee.

Required Disclosures

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

This report is intended to describe the financial effect of the proposed plan changes. No statement in this report is intended to be interpreted as a recommendation in favor of the changes or in opposition to them. This report should not be relied on for any purpose other than the purpose described above.

The calculations in this report are based upon the participant census data furnished by the Plan Administrator for the October 1, 2017 Actuarial Valuation and for the calculations of the retroactive COLA lump sums pursuant to the Settlement Agreement. 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 are based upon assumptions regarding future events, which may or may not materialize. They are also based on the assumptions, methods, and plan provisions outlined in this report. 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; 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. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal 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.

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.

Ms. Kimberly Groome

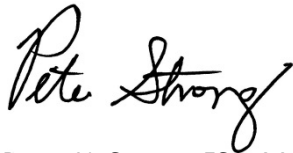
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Peter N. Strong and Melissa R. Moskovitz are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

The signing actuaries are independent of the plan sponsor.

Respectfully submitted,



Peter N. Strong, FSA, MAAA, FCA
Enrolled Actuary No. 17-06975
Senior Consultant & Actuary



Melissa R. Moskovitz, MAAA, FCA
Enrolled Actuary No. 17-06467
Consultant & Actuary

Enclosures

This communication shall not be construed to provide tax advice, legal advice or investment advice.

CITY OF CORAL GABLES RETIREMENT SYSTEM

Actuarial Impact Statement – August 31, 2018

Description of Amendment

The proposed ordinance would amend Section 46-253(c) (“Normal retirement income – Cost of living increase”) of the Code of the City of Coral Gables by the addition of the underlined:

- (6) For the class members in Murrhee v. City of Coral Gables, Case No. 13-20731 CA (13) (Fla. 11th Cir. Ct.), and for those members who opted out of the class in Murrhee v. City of Coral Gables but advised the city in writing on or before August 30, 2018 that they wish to be treated in the same manner as class members, or the designated beneficiaries of such members, paragraph 8.1 of the Class Action Settlement Agreement dated September 18, 2017 will govern cost of living increases as of January 1, 2013 and January 1, 2014.
- (7) For the class members in Murrhee v. City of Coral Gables, Case No. 13-20731 CA (13) (Fla. 11th Cir. Ct.), for those members who opted out of the class in Murrhee v. City of Coral Gables but advised the city in writing on or before August 30, 2018 that they wish to be treated in the same manner as class members, and for those members who retired, entered the DROP or became eligible for normal retirement after January 1, 2013 and before February 10, 2015 and signed a settlement agreement with the city, or the designated beneficiaries of such members, paragraph 8.3 of the Class Action Settlement Agreement dated September 18, 2017 will govern cost of living increases for the fiscal year ending September 30, 2017 and each year thereafter and reads as follows:

Funding Implications of Amendment

- The required City contribution for the fiscal year ending September 30, 2019 (payable October 1, 2018) increases by \$10,707, from \$25,083,655 to \$25,094,362.
- As a percentage of covered payroll, the required City contribution for the fiscal year ending September 30, 2019 increases by 0.03% of covered payroll, from 60.71% to 60.74%.
- The unfunded actuarial accrued liability as of October 1, 2017 increases by \$78,581, from \$226,839,817 to \$226,918,398, reflecting both the present value as of October 1, 2017 of the total retroactive cost-of-living adjustment (COLA) lump sum payments scheduled to be made mid-September 2018 (which total \$33,461) and of the increased monthly benefits payable thereafter (assuming no future COLAs are paid).

Certification of Administrator

I believe the amendment to be in compliance with Part VII, Chapter 112, Florida Statutes and Section 14, Article X of the Constitution of the State of Florida.

For the Board of Trustees
as Plan Administrator

ACTUARIAL IMPACT STATEMENT

Plan

City of Coral Gables Retirement System

Actuarial Valuation Date

October 1, 2017

Date of Report

August 31, 2018

Report Requested by

The Board of Trustees for the Plan

Prepared by

Peter N. Strong, FSA, EA, MAAA, FCA

Group Valued

All active and inactive members of the Plan

Plan Changes Being Proposed

See page 4 attached.

Participants Affected

Four former City employees in the Plan who opted-out of the Class

Actuarial Assumptions and Methods

Same used in the October 1, 2017 Actuarial Valuation. Some of the key assumptions/methods are:

Investment Return	7.65%
Mortality Table	Same used in the July 1, 2017 actuarial valuation of the Florida Retirement System
Cost Method	Entry Age Normal

Amortization Period for Any Change in Actuarial Accrued Liability

10 years

Summary of Data Used in Report

Participant census data provided by the Plan Administrator for the October 1, 2017 Actuarial Valuation and for the calculations of the retroactive COLA lump sums pursuant to the Settlement Agreement.

Actuarial Impact of Proposal

- The required City contribution for the fiscal year ending September 30, 2019 (payable October 1, 2018) increases by \$10,707, from \$25,083,655 to \$25,094,362.
- As a percentage of covered payroll, the required City contribution for the fiscal year ending September 30, 2019 increases by 0.03% of covered payroll, from 60.71% to 60.74%.
- The unfunded actuarial accrued liability as of October 1, 2017 increases by \$78,581, from \$226,839,817 to \$226,918,398, reflecting both the present value as of October 1, 2017 of the total retroactive cost-of-living adjustment (COLA) lump sum payments scheduled to be made mid-September 2018 (which total \$33,461) and of the increased monthly benefits payable thereafter (assuming no future COLAs are paid).

Special Risks Involved with the Proposal that the Plan Has Not Been Exposed to Previously

We note that if the proposed Ordinance for the four former City employees who opted-out of the Class is approved, then the COLA determination provisions of Section 46-253(c)(6), which provides for future COLAs to be granted to Class Members (and “Gap Members”) if the rate of return on the market value of assets during a fiscal year exceeds 10%, would be extended to these four former employees of the City. The City Commission can prevent a future COLA from being granted (or reduce it) by a 4/5 supermajority vote. We recommend incorporating an assumption into the actuarial valuation for future COLAs. However, the likelihood that the City Commission will prevent or reduce future COLAs is currently unknown, so if a future COLA assumption is not adopted, we recommend monitoring the actual experience of future COLA decisions made by the City Commission over a period of 3 to 5 years, and then taking action with regard to a future COLA assumption based on this experience.

Actuarially Determined Contribution (ADC) - Reflecting Proposed Ordinance

A. Valuation Date	October 1, 2017					
	<i>Total</i>	<i>Elected</i>	<i>General Excludable</i>	<i>General Non-Excludable</i>	<i>Police Officers</i>	<i>Firefighters</i>
B. ADC to Be Paid During Fiscal Year Ending	9/30/2019	9/30/2019	9/30/2019	9/30/2019	9/30/2019	9/30/2019
C. Assumed City Contribution Date	10/1/2018	10/1/2018	10/1/2018	10/1/2018	10/1/2018	10/1/2018
D. Annual Payment to Amortize Unfunded Actuarial Accrued Liability	\$ 22,712,811	\$ 30,257	\$ 3,398,639	\$ 7,201,071	\$ 6,571,954	\$ 5,510,890
E. Total Normal Cost	6,726,494	256	1,261,422	1,588,470	2,228,594	1,647,752
F. Increase in Normal Cost due to Expected Payroll Growth	252,244	10	47,303	59,568	83,572	61,791
G. Total Contribution Requirement	29,691,549	30,523	4,707,364	8,849,109	8,884,120	7,220,433
H. State Contributions	145,830	0	0	0	93,559	52,271
I. State Contributions Discounted to BOY	136,721	0	0	0	87,715	49,006
J. City and Members Combined = G. - I.	29,554,828	30,523	4,707,364	8,849,109	8,796,405	7,171,427
K. Expected Member Contributions	4,131,480	0	908,576	1,241,134	1,201,364	780,406
L. Expected Member Contributions Discounted to BOY	3,981,977	0	875,698	1,196,222	1,157,891	752,166
M. Member Cost Sharing	496,454	0	0	496,454	0	0
N. Member Cost Sharing Discounted to BOY	478,489	0	0	478,489	0	0
O. Net City Contribution* = J. - L. - N.	25,094,362	30,523	3,831,666	7,174,398	7,638,514	6,419,261
P. Net City Contribution as % of Covered Payroll	60.74 %	N/A	42.17 %	57.81 %	63.58 %	82.26 %

* Interest at the 7.65% annual rate must be added from October 1 to the date(s) of deposit.

Actuarially Determined Contribution (ADC) - Actuarial Valuation as of October 1, 2017

A. Valuation Date	October 1, 2017					
	<i>Total</i>	<i>Elected</i>	<i>General Excludable</i>	<i>General Non-Excludable</i>	<i>Police Officers</i>	<i>Firefighters</i>
B. ADC to Be Paid During Fiscal Year Ending	9/30/2019	9/30/2019	9/30/2019	9/30/2019	9/30/2019	9/30/2019
C. Assumed City Contribution Date	10/1/2018	10/1/2018	10/1/2018	10/1/2018	10/1/2018	10/1/2018
D. Annual Payment to Amortize Unfunded Actuarial Accrued Liability	\$ 22,702,104	\$ 30,257	\$ 3,393,151	\$ 7,199,393	\$ 6,568,413	\$ 5,510,890
E. Total Normal Cost	6,726,494	256	1,261,422	1,588,470	2,228,594	1,647,752
F. Increase in Normal Cost due to Expected Payroll Growth	252,244	10	47,303	59,568	83,572	61,791
G. Total Contribution Requirement	29,680,842	30,523	4,701,876	8,847,431	8,880,579	7,220,433
H. State Contributions	145,830	0	0	0	93,559	52,271
I. State Contributions Discounted to BOY	136,721	0	0	0	87,715	49,006
J. City and Members Combined = G. - I.	29,544,121	30,523	4,701,876	8,847,431	8,792,864	7,171,427
K. Expected Member Contributions	4,131,480	0	908,576	1,241,134	1,201,364	780,406
L. Expected Member Contributions Discounted to BOY	3,981,977	0	875,698	1,196,222	1,157,891	752,166
M. Member Cost Sharing	496,454	0	0	496,454	0	0
N. Member Cost Sharing Discounted to BOY	478,489	0	0	478,489	0	0
O. Net City Contribution* = J. - L. - N.	25,083,655	30,523	3,826,178	7,172,720	7,634,973	6,419,261
P. Net City Contribution as % of Covered Payroll	60.71 %	N/A	42.11 %	57.79 %	63.55 %	82.26 %

* Interest at the 7.65% annual rate must be added from October 1 to the date(s) of deposit.

Actuarial Value of Benefits and Assets - Reflecting Proposed Ordinance

A. Valuation Date	October 1, 2017					
	<i>Total</i>	<i>Elected</i>	<i>General Excludable</i>	<i>General Non-Excludable</i>	<i>Police Officers</i>	<i>Firefighters</i>
B. Actuarial Present Value (APV) of All Projected Benefits						
1. Active Members						
a. Service Retirement Benefits	\$ 143,249,503	\$ -	\$ 20,737,914	\$ 32,364,711	\$ 56,933,580	\$ 33,213,298
b. Vesting Benefits	5,586,695	-	1,261,679	2,266,276	736,898	1,321,842
c. Disability Benefits	2,028,272	-	353,747	363,626	747,104	563,795
d. Preretirement Death Benefits	3,655,484	-	656,774	538,802	1,364,361	1,095,547
e. Return of Member Contributions	3,154,168	-	807,948	1,847,005	407,909	91,306
f. Total	157,674,122	-	23,818,062	37,380,420	60,189,852	36,285,788
2. Inactive Members						
a. Service Retirees & Beneficiaries	429,941,090	522,888	64,609,325	126,716,024	120,216,530	117,876,323
b. Disability Retirees	17,165,140	-	582,096	3,930,649	8,783,282	3,869,113
c. Terminated Vested Members	6,785,489	-	1,045,554	3,277,826	1,934,497	527,612
d. DROP Account Balances	33,835,492	-	1,934,317	5,477,621	5,311,298	21,112,256
e. Total	487,727,211	522,888	68,171,292	139,402,120	136,245,607	143,385,304
3. Total for All Members	645,401,333	522,888	91,989,354	176,782,540	196,435,459	179,671,092
C. Actuarial Accrued (Past Service) Liability	592,797,302	522,888	81,672,700	167,162,544	178,881,122	164,558,048
D. APV of Accumulated Plan Benefits per FASB ASC 960	N/A	N/A	N/A	N/A	N/A	N/A
E. Plan Assets						
1. Market Value	378,889,704	224,756	49,527,900	98,589,677	116,566,847	113,980,524
2. Actuarial Value	365,878,904	217,038	47,827,148	95,204,178	112,564,025	110,066,515
F. Unfunded Actuarial Accrued Liability	226,918,398	305,850	33,845,552	71,958,366	66,317,097	54,491,533
G. APV of Projected Covered Payroll	298,926,442	-	70,853,773	71,856,047	84,203,869	72,012,753
H. APV of Projected Member Contributions	29,892,644	-	7,085,377	7,185,605	8,420,387	7,201,275
I. Accumulated Value of Member Contributions	24,972,687	-	5,716,733	11,057,878	4,977,754	3,220,322

Actuarial Value of Benefits and Assets - Actuarial Valuation as of October 1, 2017

A. Valuation Date	October 1, 2017					
	<i>Total</i>	<i>Elected</i>	<i>General Excludable</i>	<i>General Non-Excludable</i>	<i>Police Officers</i>	<i>Firefighters</i>
B. Actuarial Present Value (APV) of All Projected Benefits						
1. Active Members						
a. Service Retirement Benefits	\$ 143,249,503	\$ -	\$ 20,737,914	\$ 32,364,711	\$ 56,933,580	\$ 33,213,298
b. Vesting Benefits	5,586,695	-	1,261,679	2,266,276	736,898	1,321,842
c. Disability Benefits	2,028,272	-	353,747	363,626	747,104	563,795
d. Preretirement Death Benefits	3,655,484	-	656,774	538,802	1,364,361	1,095,547
e. Return of Member Contributions	3,154,168	-	807,948	1,847,005	407,909	91,306
f. Total	157,674,122	-	23,818,062	37,380,420	60,189,852	36,285,788
2. Inactive Members						
a. Service Retirees & Beneficiaries	429,862,509	522,888	64,569,047	126,703,709	120,190,542	117,876,323
b. Disability Retirees	17,165,140	-	582,096	3,930,649	8,783,282	3,869,113
c. Terminated Vested Members	6,785,489	-	1,045,554	3,277,826	1,934,497	527,612
d. DROP Account Balances	33,835,492	-	1,934,317	5,477,621	5,311,298	21,112,256
e. Total	487,648,630	522,888	68,131,014	139,389,805	136,219,619	143,385,304
3. Total for All Members	645,322,752	522,888	91,949,076	176,770,225	196,409,471	179,671,092
C. Actuarial Accrued (Past Service) Liability	592,718,721	522,888	81,632,422	167,150,229	178,855,134	164,558,048
D. APV of Accumulated Plan Benefits per FASB ASC 960	N/A	N/A	N/A	N/A	N/A	N/A
E. Plan Assets						
1. Market Value	378,889,704	224,756	49,527,900	98,589,677	116,566,847	113,980,524
2. Actuarial Value	365,878,904	217,038	47,827,148	95,204,178	112,564,025	110,066,515
F. Unfunded Actuarial Accrued Liability	226,839,817	305,850	33,805,274	71,946,051	66,291,109	54,491,533
G. APV of Projected Covered Payroll	298,926,442	-	70,853,773	71,856,047	84,203,869	72,012,753
H. APV of Projected Member Contributions	29,892,644	-	7,085,377	7,185,605	8,420,387	7,201,275
I. Accumulated Value of Member Contributions	24,972,687	-	5,716,733	11,057,878	4,977,754	3,220,322

Participant Data

October 1, 2017

	Total	Elected	General Excludable	General Non-Excludable	Police Officers	Firefighters
Active Members						
Number	599	0	111	251	156	81
Covered Annual Payroll (expected)	\$ 41,314,804	\$ 0	\$ 9,085,760	\$ 12,411,342	\$ 12,013,641	\$ 7,804,061
Average Annual Salary	\$ 68,973	\$ 0	\$ 81,854	\$ 49,448	\$ 77,011	\$ 96,346
Average Age	41.4	0.0	45.5	43.0	38.3	36.6
Average Past Service	9.7	0.0	8.1	10.0	10.8	8.7
Average Age at Hire	31.7	0.0	37.4	33.0	27.5	27.9
Service Retirees, Beneficiaries & DROP						
Number	881	4	139	399	172	167
Annual Benefits	\$ 40,013,853	\$ 51,432	\$ 6,178,225	\$ 12,147,338	\$ 10,779,922	\$ 10,856,936
Average Annual Benefit	\$ 45,419	\$ 12,858	\$ 44,448	\$ 30,444	\$ 62,674	\$ 65,012
Average Age	64.9	70.7	67.4	66.7	63.2	60.2
Disability Retirees						
Number	56	0	2	21	23	10
Annual Benefits	\$ 1,952,717	\$ 0	\$ 90,644	\$ 473,565	\$ 938,405	\$ 450,103
Average Annual Benefit	\$ 34,870	\$ 0	\$ 45,322	\$ 22,551	\$ 40,800	\$ 45,010
Average Age	62.8	0.0	74.7	61.9	61.4	65.9
Terminated Vested Members						
Number	37	0	5	21	9	2
Annual Benefits	\$ 830,406	\$ 0	\$ 132,179	\$ 392,146	\$ 253,677	\$ 52,404
Average Annual Benefit	\$ 22,443	\$ 0	\$ 26,436	\$ 18,674	\$ 28,186	\$ 26,202
Average Age	47.2	0.0	46.6	47.8	45.9	47.9