

CITY OF MIAMI BEACH EMPLOYEES' RETIREMENT PLAN

Chapter 112.664, F.S. Compliance Report

In Connection with the October 1, 2018 Funding Actuarial
Valuation Report and the Plan's Financial Reporting for the
Year Ending September 30, 2018





June 12, 2019

Board of Trustees
City of Miami Beach
Employees' Retirement Plan
Miami Beach, Florida

Dear Board Members:

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the City of Miami Beach Employees' Retirement Plan to prepare a disclosure report to satisfy the requirements set forth in Ch. 112.664, F.S. and as further required pursuant to Ch. 60T-1.0035, F.A.C.

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

The purpose of the report is to provide the required information specified in Ch. 112.664, F.S. as well as supplement this information with additional exhibits. This report should not be relied on for any purpose other than the purpose described above. GRS is not responsible for unauthorized use of this report.

The findings in this report are based on data or other information through September 30, 2018. 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 engagement does not include an analysis of the potential range of such measurements.

This report was based upon information furnished by the Plan Administrator concerning Plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked 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.

This report complements the October 1, 2018 actuarial valuation report dated April 8, 2019. Except as otherwise indicated as required for the disclosures contained herein, this report was prepared using the same assumptions, Plan provisions, census data, and financial information as summarized in those reports. Therefore, such information, and the reliances and limitations of those reports and their use, should be considered part of this report. Please refer to the October 1, 2018 actuarial valuation report dated April 8, 2019 for summaries and descriptions of this information.

The use of an investment return assumption that is 2% higher than the investment return assumption used to determine the funding requirements does not represent an estimate of future Plan experience nor does it reflect an observation of future return estimates inherent in financial market data. The use of this investment return assumption is provided as a counterpart to the Chapter 112.664, Florida Statutes requirement to utilize an investment return assumption that is 2% lower than the assumption used to determine the funding requirements. The inclusion of the additional exhibits showing the effect of using a 2% higher investment return assumption shows a more complete assessment of the range of possible results as opposed to showing a one-sided range as required by Florida Statutes.

Melissa R. Moskowitz and Trisha Amrose 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.

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 Retirement 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.

With respect to the reporting standards for defined benefit retirement plans or 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, the results are complete and accurate, and in our opinion, meet the requirements of Section 112.664(1), F.S. and Section 60T-1.0035, F.A.C.

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY

By Melissa R. Moskowitz
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RESULTS

**Schedule of Changes in the Employers' Net Pension Liability
Using Financial Reporting Assumptions per GASB Statement No. 67**

Fiscal year ending September 30,	<u>2018</u>
1. Total Pension Liability	
a. Service Cost	\$ 15,232,372
b. Interest	63,015,047
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	18,961
e. Assumption Changes	4,771,684
f. Benefit Payments	(49,726,168)
g. Contribution Refunds	(1,381,297)
h. Net Change in Total Pension Liability	<u>31,930,599</u>
i. Total Pension Liability - Beginning	<u>834,047,463</u>
j. Total Pension Liability - Ending	<u>\$ 865,978,062</u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer	\$ 31,892,485
b. Contributions - Non-Employer Contributing Entity	-
c. Contributions - Member	8,242,590
d. Net Investment Income	51,285,893
e. Benefit Payments	(49,726,168)
f. Contribution Refunds	(1,381,297)
g. Administrative Expense	(730,118)
h. Other	-
i. Net Change in Plan Fiduciary Net Position	<u>39,583,385</u>
j. Plan Fiduciary Net Position - Beginning	<u>616,624,226</u>
k. Plan Fiduciary Net Position - Ending	<u>\$ 656,207,611</u>
3. Net Pension Liability / (Asset)	209,770,451
Certain Key Assumptions	
Valuation Date	10/01/2017
Measurement Date	09/30/2018
Investment Return Assumption	7.60%
Mortality Table	Mortality Rates from 7/1/16 FRS Valuation (Regular Class)

**Schedule of Changes in the Employers' Net Pension Liability
Using Assumptions required under 112.664(1)(a), F.S.**

Fiscal year ending September 30,

	<u>2018</u>
1. Total Pension Liability	
a. Service Cost	\$ 15,232,372
b. Interest	63,015,047
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	18,961
e. Assumption Changes	4,771,684
f. Benefit Payments	(49,726,168)
g. Contribution Refunds	(1,381,297)
h. Net Change in Total Pension Liability	<u>31,930,599</u>
i. Total Pension Liability - Beginning	<u>834,047,463</u>
j. Total Pension Liability - Ending	<u>\$ 865,978,062</u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer	\$ 31,892,485
b. Contributions - Non-Employer Contributing Entity	-
c. Contributions - Member	8,242,590
d. Net Investment Income	51,285,893
e. Benefit Payments	(49,726,168)
f. Contribution Refunds	(1,381,297)
g. Administrative Expense	(730,118)
h. Other	-
i. Net Change in Plan Fiduciary Net Position	<u>39,583,385</u>
j. Plan Fiduciary Net Position - Beginning	<u>616,624,226</u>
k. Plan Fiduciary Net Position - Ending	<u>\$ 656,207,611</u>
3. Net Pension Liability / (Asset)	209,770,451
Certain Key Assumptions	
Valuation Date	10/01/2017
Measurement Date	09/30/2018
Investment Return Assumption	7.60%
Mortality Table	Mortality Rates from 7/1/16 FRS Valuation (Regular Class)

**Schedule of Changes in the Employers' Net Pension Liability
Using Assumptions required under 112.664(1)(b), F.S.**

Fiscal year ending September 30,

	<u>2018</u>
1. Total Pension Liability	
a. Service Cost	\$ 24,927,006
b. Interest	59,722,914
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	-
e. Assumption Changes	-
f. Benefit Payments	(49,726,168)
g. Contribution Refunds	(1,381,297)
h. Net Change in Total Pension Liability	<u>33,542,455</u>
i. Total Pension Liability - Beginning	<u>1,067,107,342</u>
j. Total Pension Liability - Ending	<u>\$ 1,100,649,797</u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer	\$ 31,892,485
b. Contributions - Non-Employer Contributing Entity	-
c. Contributions - Member	8,242,590
d. Net Investment Income	51,285,893
e. Benefit Payments	(49,726,168)
f. Contribution Refunds	(1,381,297)
g. Administrative Expense	(730,118)
h. Other	-
i. Net Change in Plan Fiduciary Net Position	<u>39,583,385</u>
j. Plan Fiduciary Net Position - Beginning	<u>616,624,226</u>
k. Plan Fiduciary Net Position - Ending	<u>\$ 656,207,611</u>
3. Net Pension Liability / (Asset)	444,442,186
Certain Key Assumptions	
Valuation Date	10/01/2017
Measurement Date	09/30/2018
Investment Return Assumption	5.60%
Mortality Table	Mortality Rates from 7/1/16 FRS Valuation (Regular Class)

Schedule of Changes in the Employers' Net Pension Liability
Using Assumptions under 112.664(1)(b), F.S. except 2% higher investment return assumption

Fiscal year ending September 30,	<u>2018</u>
1. Total Pension Liability	
a. Service Cost	\$ 9,954,146
b. Interest	64,017,596
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	-
e. Assumption Changes	-
f. Benefit Payments	(49,726,168)
g. Contribution Refunds	(1,381,297)
h. Net Change in Total Pension Liability	<u>22,864,277</u>
i. Total Pension Liability - Beginning	<u>682,449,543</u>
j. Total Pension Liability - Ending	<u>\$ 705,313,820</u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer	\$ 31,892,485
b. Contributions - Non-Employer Contributing Entity	-
c. Contributions - Member	8,242,590
d. Net Investment Income	51,285,893
e. Benefit Payments	(49,726,168)
f. Contribution Refunds	(1,381,297)
g. Administrative Expense	(730,118)
h. Other	-
i. Net Change in Plan Fiduciary Net Position	<u>39,583,385</u>
j. Plan Fiduciary Net Position - Beginning	<u>616,624,226</u>
k. Plan Fiduciary Net Position - Ending	<u>\$ 656,207,611</u>
3. Net Pension Liability / (Asset)	49,106,209
Certain Key Assumptions	
Valuation Date	10/01/2017
Measurement Date	09/30/2018
Investment Return Assumption	9.60%
Mortality Table	Mortality Rates from 7/1/16 FRS Valuation (Regular Class)

Asset and Benefit Payment Projection
Not Reflecting Any Contributions from the Employer, State or Employee
Using assumptions from the Plan's latest actuarial valuation

FYE	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2019	640,885,726	46,148,054	51,156,687	635,877,093
2020	635,877,093	45,695,174	53,216,201	628,356,066
2021	628,356,066	45,064,711	54,986,508	618,434,269
2022	618,434,269	44,257,713	56,662,846	606,029,136
2023	606,029,136	43,271,541	58,150,514	591,150,163
2024	591,150,163	42,107,552	59,432,269	573,825,446
2025	573,825,446	40,752,944	60,905,725	553,672,665
2026	553,672,665	39,190,254	62,271,883	530,591,036
2027	530,591,036	37,399,624	63,858,778	504,131,882
2028	504,131,882	35,364,878	65,200,346	474,296,414
2029	474,296,414	33,087,448	66,260,887	441,122,975
2030	441,122,975	30,567,386	67,115,656	404,574,705
2031	404,574,705	27,790,517	68,068,945	364,296,277
2032	364,296,277	24,739,432	68,874,370	320,161,339
2033	320,161,339	21,406,011	69,495,705	272,071,645
2034	272,071,645	17,777,610	70,073,681	219,775,574
2035	219,775,574	13,837,446	70,552,590	163,060,430
2036	163,060,430	9,571,224	70,888,224	101,743,430
2037	101,743,430	4,967,311	71,025,246	35,685,495
2038	35,685,495	12,711	71,032,041	-
2039	-	-	70,902,575	-
2040	-	-	70,683,536	-
2041	-	-	70,241,422	-
2042	-	-	69,847,953	-
2043	-	-	69,149,041	-
2044	-	-	68,499,604	-

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 Employer, Employee or State, contrary to Florida Statutes and Plan provisions:** 19.50

Certain Key Assumptions

Valuation Investment return assumption 7.50%
 Valuation Mortality Table Mortality Rates from 7/1/16 FRS Valuation (Regular Class)

Note: As required in Section 112.664(1)(c) of the Florida Statutes, the projection of the Fund assets do not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan provisions. For this reason, these projections should not be viewed as a representation of the amount of time the Fund can sustain benefit payments. Under the GASB standards which DO include contributions from the employer, employee and State, the Fund is expected to be able to sustain the benefit payment demands in the near-term and long-term future.

Asset and Benefit Payment Projection
Not Reflecting Any Contributions from the Employer, State or Employee
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)
2019	640,885,726	46,148,054	51,156,687	635,877,093
2020	635,877,093	45,695,174	53,216,201	628,356,066
2021	628,356,066	45,064,711	54,986,508	618,434,269
2022	618,434,269	44,257,713	56,662,846	606,029,136
2023	606,029,136	43,271,541	58,150,514	591,150,163
2024	591,150,163	42,107,552	59,432,269	573,825,446
2025	573,825,446	40,752,944	60,905,725	553,672,665
2026	553,672,665	39,190,254	62,271,883	530,591,036
2027	530,591,036	37,399,624	63,858,778	504,131,882
2028	504,131,882	35,364,878	65,200,346	474,296,414
2029	474,296,414	33,087,448	66,260,887	441,122,975
2030	441,122,975	30,567,386	67,115,656	404,574,705
2031	404,574,705	27,790,517	68,068,945	364,296,277
2032	364,296,277	24,739,432	68,874,370	320,161,339
2033	320,161,339	21,406,011	69,495,705	272,071,645
2034	272,071,645	17,777,610	70,073,681	219,775,574
2035	219,775,574	13,837,446	70,552,590	163,060,430
2036	163,060,430	9,571,224	70,888,224	101,743,430
2037	101,743,430	4,967,311	71,025,246	35,685,495
2038	35,685,495	12,711	71,032,041	-
2039	-	-	70,902,575	-
2040	-	-	70,683,536	-
2041	-	-	70,241,422	-
2042	-	-	69,847,953	-
2043	-	-	69,149,041	-
2044	-	-	68,499,604	-

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 Employer, Employee or State, contrary to Florida Statutes and Plan provisions:** 19.50

Certain Key Assumptions

Valuation Investment return assumption	7.50%
Valuation Mortality Table	Mortality Rates from 7/1/16 FRS Valuation (Regular Class)

Note: As required in Section 112.664(1)(c) of the Florida Statutes, the projection of the Fund assets do not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan provisions. For this reason, these projections should not be viewed as a representation of the amount of time the Fund can sustain benefit payments. Under the GASB standards which DO include contributions from the employer, employee and State, the Fund is expected to be able to sustain the benefit payment demands in the near-term and long-term future.

Asset and Benefit Payment Projection
Not Reflecting Any Contributions from the Employer, State or Employee
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)
2019	640,885,726	33,841,906	51,156,687	623,570,945
2020	623,570,945	32,832,956	53,216,201	603,187,700
2021	603,187,700	31,663,195	54,986,508	579,864,387
2022	579,864,387	30,334,313	56,662,846	553,535,854
2023	553,535,854	28,845,333	58,150,514	524,230,673
2024	524,230,673	27,198,300	59,432,269	491,996,704
2025	491,996,704	25,384,911	60,905,725	456,475,890
2026	456,475,890	23,393,697	62,271,883	417,597,704
2027	417,597,704	21,211,757	63,858,778	374,950,683
2028	374,950,683	18,829,278	65,200,346	328,579,615
2029	328,579,615	16,249,704	66,260,887	278,568,432
2030	278,568,432	13,475,583	67,115,656	224,928,359
2031	224,928,359	10,499,164	68,068,945	167,358,578
2032	167,358,578	7,310,677	68,874,370	105,794,885
2033	105,794,885	3,907,587	69,495,705	40,206,767
2034	40,206,767	284,346	70,073,681	-
2035	-	-	70,552,590	-
2036	-	-	70,888,224	-
2037	-	-	71,025,246	-
2038	-	-	71,032,041	-
2039	-	-	70,902,575	-
2040	-	-	70,683,536	-
2041	-	-	70,241,422	-
2042	-	-	69,847,953	-
2043	-	-	69,149,041	-
2044	-	-	68,499,604	-

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 Employer, Employee or State, contrary to Florida Statutes and Plan provisions:** 15.50

Certain Key Assumptions

Valuation Investment return assumption	5.50%
Valuation Mortality Table	Mortality Rates from 7/1/16 FRS Valuation (Regular Class)

Note: As required in Section 112.664(1)(c) of the Florida Statutes, the projection of the Fund assets do not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan provisions. For this reason, these projections should not be viewed as a representation of the amount of time the Fund can sustain benefit payments. Under the GASB standards which DO include contributions from the employer, employee and State, the Fund is expected to be able to sustain the benefit payment demands in the near-term and long-term future.

Asset and Benefit Payment Projection

Not Reflecting Any Contributions from the Employer, State or Employee

Using Assumptions under 112.664(1)(b), F.S. except 2% higher investment return assumption

FYE	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2019	640,885,726	58,454,201	51,156,687	648,183,240
2020	648,183,240	59,049,638	53,216,201	654,016,677
2021	654,016,677	59,519,725	54,986,508	658,549,894
2022	658,549,894	59,870,755	56,662,846	661,757,803
2023	661,757,803	60,104,842	58,150,514	663,712,131
2024	663,712,131	60,229,620	59,432,269	664,509,482
2025	664,509,482	60,235,379	60,905,725	663,839,136
2026	663,839,136	60,106,803	62,271,883	661,674,056
2027	661,674,056	59,825,743	63,858,778	657,641,021
2028	657,641,021	59,378,881	65,200,346	651,819,556
2029	651,819,556	58,775,466	66,260,887	644,334,135
2030	644,334,135	58,023,749	67,115,656	635,242,228
2031	635,242,228	57,114,737	68,068,945	624,288,020
2032	624,288,020	56,035,829	68,874,370	611,449,479
2033	611,449,479	54,786,655	69,495,705	596,740,429
2034	596,740,429	53,361,841	70,073,681	580,028,589
2035	580,028,589	51,751,468	70,552,590	561,227,467
2036	561,227,467	49,949,419	70,888,224	540,288,662
2037	540,288,662	47,953,724	71,025,246	517,217,140
2038	517,217,140	45,761,606	71,032,041	491,946,705
2039	491,946,705	43,367,065	70,902,575	464,411,195
2040	464,411,195	40,761,596	70,683,536	434,489,255
2041	434,489,255	37,940,012	70,241,422	402,187,845
2042	402,187,845	34,890,068	69,847,953	367,229,960
2043	367,229,960	31,602,267	69,149,041	329,683,186
2044	329,683,186	28,066,171	68,499,604	289,249,753
2045	289,249,753	24,250,785	67,956,658	245,543,880
2046	245,543,880	20,134,700	67,199,346	198,479,234
2047	198,479,234	15,695,887	66,518,736	147,656,385
2048	147,656,385	10,918,603	65,447,451	93,127,537
2049	93,127,537	5,802,018	64,107,326	34,822,229
2050	34,822,229	342,100	62,442,359	-

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 Employer, Employee or State, contrary to Florida Statutes and Plan provisions: 31.50

Certain Key Assumptions

Valuation Investment return assumption	9.50%
Valuation Mortality Table	Mortality Rates from 7/1/16 FRS Valuation (Regular Class)

Note: As required in Section 112.664(1)(c) of the Florida Statutes, the projection of the Fund assets do not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan provisions. For this reason, these projections should not be viewed as a representation of the amount of time the Fund can sustain benefit payments. Under the GASB standards which DO include contributions from the employer, employee and State, the Fund is expected to be able to sustain the benefit payment demands in the near-term and long-term future.

ACTUARIALLY DETERMINED CONTRIBUTION

	Plan's Latest Actuarial Valuation	112.664(1)(a) F.S. Assumptions	112.664(1)(b) F.S. Assumptions	112.664(1)(b) F.S. Except 2% Higher Investment Return Assumption
A. Valuation Date	October 1, 2018	October 1, 2018	October 1, 2018	October 1, 2018
B. Actuarial Determined Contribution (ADC) to Be Paid During Fiscal Year Ending	9/30/2020	9/30/2020	9/30/2020	9/30/2020
C. Assumed Dates of Employer Contributions	10/1/2019	10/1/2019	10/1/2019	10/1/2019
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 21,651,668	\$ 21,651,668	\$ 34,474,076	\$ 9,388,895
E. Employer Normal Cost	7,627,430	7,627,430	16,872,690	2,493,400
F. Employer ADC if Paid on Valuation Date: D + E	29,279,098	29,279,098	51,346,766	11,882,295
G. Employer ADC Adjusted for Frequency of Payments	31,475,030	31,475,030	54,170,838	13,011,113
H. Employer ADC Adjusted for Frequency of Payments as % of Covered Payroll	37.04 %	37.04 %	63.75 %	15.31 %
I. Assumed Rate of Increase in Covered Payroll to Contribution Year	0.00 %	0.00 %	0.00 %	0.00 %
J. Covered Payroll for Contribution Year	84,980,438	84,980,438	84,980,438	84,980,438
K. Employer ADC for Contribution Year: H x J	31,475,030	31,475,030	54,170,838	13,011,113
L. Estimated Credit for State Revenue in Contribution Year	0	0	0	0
M. Net Employer ADC in Contribution Year	31,475,030	31,475,030	54,170,838	13,011,113
N. Net Employer ADC as % of Covered Payroll in Contribution Year: M ÷ J	37.04 %	37.04 %	63.75 %	15.31 %
O. Expected Member Contribution	8,367,942	8,367,942	8,367,942	8,367,942
P. Total Contribution (Including Members) in Contribution Year	39,842,972	39,842,972	62,538,780	21,379,055
Q. Total Contribution as % of Covered Payroll in Contribution Year: P ÷ J	46.88 %	46.88 %	73.59 %	25.16 %
R. Certain Key Assumptions				
Investment Return Assumption	7.50%	7.50%	5.50%	9.50%
Mortality Table	Mortality Rates from 7/1/16 FRS Valuation (Regular Class)	Mortality Rates from 7/1/16 FRS Valuation (Regular Class)	Mortality Rates from 7/1/16 FRS Valuation (Regular Class)	Mortality Rates from 7/1/16 FRS Valuation (Regular Class)