CITY OF BOYNTON BEACH MUNICIPAL FIREFIGHTERS' PENSION TRUST FUND

Chapter 112.664, F.S. Compliance Report In Connection with the October 1, 2021 Funding Actuarial Valuation Report And the Plan's Financial Reporting for the Year Ending September 30, 2021









June 21, 2022

Board of Trustees City of Boynton Beach Municipal Firefighters Pension Fund Boynton Beach, Florida

Dear Board Members:

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the City of Boynton Beach Municipal Firefighters Pension Fund (System) 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 System 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.

The findings in this report are based on data or other information through September 30, 2021. 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 City and the Board 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 City.

Except as otherwise indicated as required for the disclosures contained herein, this report was prepared using certain assumptions selected by the Board as described in our October 1, 2021 actuarial valuation report. This report is also based on the Plan Provisions, census data, and financial information as summarized in our October 1, 2021 actuarial valuation report. Please refer to the October 1, 2021 actuarial valuation report, dated April 22, 2022, for summarise and descriptions of this information.

Board of Trustees City of Boynton Beach Municipal Firefighters' Pension Trust Fund June 21, 2022

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.

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.

Peter N. Strong and Jeffrey 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 complete 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 AND COMPANY

Peter N. Strong, FSA, MAAA, FCA Enrolled Actuary No. 20-6975 Senior Consultant & Actuary

By

Jeffrey Amrose, MAAA, FCA Enrolled Actuary No. 20-6599 Senior Consultant & Actuary



By

TABLE OF CONTENTS

<u>Title</u>

Page

Ch. 112.664, F.S. Results

Schedule of Changes in Net Pension Liability

1.	Using financial reporting assumptions per GASB Statement No. 67	1
2.	Using assumptions prescribed in Section 112.664(1)(a), F.S.	2
3.	Using assumptions prescribed in Section 112.664(1)(b), F.S.	3
4.	Using the mandated mortality and funding interest rate +2%	4
Assets '	Versus Benefit Payments Projections	
1.	Using assumptions from the Plan's latest actuarial valuation	5
2.	Using assumptions prescribed in Section 112.664(1)(a), F.S.	6
3.	Using assumptions prescribed in Section 112.664(1)(b), F.S.	7
4.	Using the mandated mortality and funding interest rate +2%	8
Actuari	ally Determined Contribution	9



CH. 112.664, FLORIDA STATUTES

RESULTS



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

Fiscal year ending September 30,		2021
1. Total pension liability		
a. Service Cost	\$	3,656,658
b. Interest		13,234,970
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		(864,411)
e. Assumption Changes		709,591
f. Benefit Payments		(7,050,691)
g. Contribution Refunds		(8,017)
h. Net Change in Total Pension Liability		9,678,100
i. Total Pension Liability - Beginning		176,325,833
j. Total Pension Liability - Ending	\$	186,003,933
2. Plan Fiduciary Net Position		
a. Contributions - Employer (From City)	\$	5,215,363
b. Contributions - Employer (From State)	Ŷ	995,143
c. Contributions - Member		1,489,935
d. Net Investment Income		26,216,184
e. Benefit Payments		(7,050,691)
f. Contribution Refunds		(8,017)
g. Administrative Expense		(186,227)
h. Other		168,513
i. Net Change in Plan Fiduciary Net Position		26,840,203
j. Plan Fiduciary Net Position - Beginning		138,042,942
k. Plan Fiduciary Net Position - Ending	\$	164,883,145
		
3. Net Pension Liability / (Asset)		21,120,788
Certain Key Assumptions		
Valuation Date		10/01/2020
Measurement Date		09/30/2021
Investment Return Assumption		7.35%
Mortality Table	201	9 FRS Mortality -
		Special Risk



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

Fiscal year ending September 30,		2021
1. Total pension liability		
a. Service Cost	\$	3,656,658
b. Interest		13,234,970
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		(864,411)
e. Assumption Changes		709,591
f. Benefit Payments		(7,050,691)
g. Contribution Refunds		(8,017)
h. Net Change in Total Pension Liability		9,678,100
i. Total Pension Liability - Beginning		176,325,833
j. Total Pension Liability - Ending	\$	186,003,933
2. Plan Fiduciary Net Position		
a. Contributions - Employer (From City)	\$	5,215,363
b. Contributions - Employer (From State)		995,143
c. Contributions - Member		1,489,935
d. Net Investment Income		26,216,184
e. Benefit Payments		(7,050,691)
f. Contribution Refunds		(8,017)
g. Administrative Expense		(186,227)
h. Other		168,513
i. Net Change in Plan Fiduciary Net Position		26,840,203
j. Plan Fiduciary Net Position - Beginning		138,042,942
k. Plan Fiduciary Net Position - Ending	\$	164,883,145
3. Net Pension Liability / (Asset)		21,120,788
Certain Key Assumptions		
Valuation Date		10/01/2020
Measurement Date		09/30/2021
Investment Return Assumption		7.35%
Mortality Table	201	9 FRS Mortality -
		Special Risk



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

Fiscal year ending September 30,		2021
1. Total pension liability		
a. Service Cost	\$	6,233,106
b. Interest		11,885,666
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		26,271
e. Assumption Changes		-
f. Benefit Payments		(7,050,691)
g. Contribution Refunds		(8,017)
h. Net Change in Total Pension Liability		11,086,335
i. Total Pension Liability - Beginning		219,445,085
j. Total Pension Liability - Ending	\$	230,531,420
2. Plan Fiduciary Net Position		
a. Contributions - Employer (From City)	\$	5,215,363
b. Contributions - Employer (From State)		995,143
c. Contributions - Member		1,489,935
d. Net Investment Income		26,216,184
e. Benefit Payments		(7,050,691)
f. Contribution Refunds		(8,017)
g. Administrative Expense		(186,227)
h. Other		168,513
i. Net Change in Plan Fiduciary Net Position		26,840,203
j. Plan Fiduciary Net Position - Beginning		138,042,942
k. Plan Fiduciary Net Position - Ending	\$	164,883,145
3. Net Pension Liability / (Asset)		65,648,275
Certain Key Assumptions		
Valuation Date		10/01/2020
Measurement Date		09/30/2021
Investment Return Assumption		5.35%
Mortality Table	201	9 FRS Mortality -
		Special Risk



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,		2021
1. Total pension liability		
a. Service Cost	\$	2,618,338
b. Interest		13,620,192
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		26,271
e. Assumption Changes		-
f. Benefit Payments		(7,050,691)
g. Contribution Refunds		(8,017)
h. Net Change in Total Pension Liability		9,206,093
i. Total Pension Liability - Beginning		146,568,384
j. Total Pension Liability - Ending	\$	155,774,477
2. Plan Fiduciary Net Position		
a. Contributions - Employer (From City)	\$	5,215,363
b. Contributions - Employer (From State)		995,143
c. Contributions - Member		1,489,935
d. Net Investment Income		26,216,184
e. Benefit Payments		(7,050,691)
f. Contribution Refunds		(8,017)
g. Administrative Expense		(186,227)
h. Other		168,513
i. Net Change in Plan Fiduciary Net Position		26,840,203
j. Plan Fiduciary Net Position - Beginning		138,042,942
k. Plan Fiduciary Net Position - Ending	\$	164,883,145
3. Net Pension Liability / (Asset)		(9,108,668)
Certain Key Assumptions		
Valuation Date		10/01/2020
Measurement Date		09/30/2021
Investment Return Assumption		9.35%
Mortality Table	201	9 FRS Mortality -
		Special Risk



Not Reflecting Any Contributions from the Employer, State or Employee Using Assumptions from the Plan's Latest Actuarial Valuation

	Market Value of	Expected	Projected Benefit	Market Value of
FYE	Assets (BOY)	Investment Return	Payments	Assets (EOY)
2022	140,845,497	9,766,215	8,510,155	142,101,557
2023	142,101,557	9,831,272	9,202,504	142,730,325
2024	142,730,325	9,867,628	9,443,096	143,154,857
2025	143,154,857	9,870,493	10,212,013	142,813,337
2026	142,813,337	9,829,755	10,668,485	141,974,607
2027	141,974,607	9,748,090	11,275,373	140,447,324
2028	140,447,324	9,624,463	11,678,911	138,392,876
2029	138,392,876	9,472,114	11,831,518	136,033,472
2030	136,033,472	9,292,388	12,139,996	133,185,864
2031	133,185,864	9,084,872	12,249,435	130,021,301
2032	130,021,301	8,855,328	12,341,128	126,535,501
2033	126,535,501	8,605,313	12,362,958	122,777,856
2034	122,777,856	8,329,898	12,551,581	118,556,173
2035	118,556,173	8,025,891	12,611,890	113,970,174
2036	113,970,174	7,696,622	12,650,219	109,016,577
2037	109,016,577	7,342,359	12,652,488	103,706,448
2038	103,706,448	6,961,850	12,675,823	97,992,475
2039	97,992,475	6,553,356	12,674,296	91,871,535
2040	91,871,535	6,116,768	12,644,675	85,343,628
2041	85,343,628	5,652,137	12,585,530	78,410,235
2042	78,410,235	5,158,823	12,517,727	71,051,331
2043	71,051,331	4,636,144	12,420,317	63,267,158
2044	63,267,158	4,083,137	12,320,704	55,029,591
2045	55,029,591	3,496,418	12,257,273	46,268,736
2046	46,268,736	2,875,352	12,108,059	37,036,029
2047	37,036,029	2,221,221	11,940,009	27,317,241
2048	27,317,241	1,533,109	11,750,327	17,100,023
2049	17,100,023	809,821	11,547,718	6,362,126
2050	6,362,126	49,859	11,329,591	-

Number of years for which current market value of assets is adequate to sustain the payment of expected retirement benefits, <u>reflecting no contributions from the</u> <u>Employer, Employee or State, contrary to Florida Statutes and Plan provisions</u>:

28.50

Certain Key Assumptions Valuation Investment Return Assumption Valuation Mortality Table

7.15% 2019 FRS Mortality - Special Risk



Not Reflecting Any Contributions from the Employer, State or Employee Using Assumptions required under 112.664(1)(a), F.S.

	Market Value of	Expected	Projected Benefit	Market Value of
FYE	Assets (BOY)	Investment Return	Payments	Assets (EOY)
2022	140,845,497	9,766,215	8,510,155	142,101,557
2023	142,101,557	9,831,272	9,202,504	142,730,325
2024	142,730,325	9,867,628	9,443,096	143,154,857
2025	143,154,857	9,870,493	10,212,013	142,813,337
2026	142,813,337	9,829,755	10,668,485	141,974,607
2027	141,974,607	9,748,090	11,275,373	140,447,324
2028	140,447,324	9,624,463	11,678,911	138,392,876
2029	138,392,876	9,472,114	11,831,518	136,033,472
2030	136,033,472	9,292,388	12,139,996	133,185,864
2031	133,185,864	9,084,872	12,249,435	130,021,301
2032	130,021,301	8,855,328	12,341,128	126,535,501
2033	126,535,501	8,605,313	12,362,958	122,777,856
2034	122,777,856	8,329,898	12,551,581	118,556,173
2035	118,556,173	8,025,891	12,611,890	113,970,174
2036	113,970,174	7,696,622	12,650,219	109,016,577
2037	109,016,577	7,342,359	12,652,488	103,706,448
2038	103,706,448	6,961,850	12,675,823	97,992,475
2039	97,992,475	6,553,356	12,674,296	91,871,535
2040	91,871,535	6,116,768	12,644,675	85,343,628
2041	85,343,628	5,652,137	12,585,530	78,410,235
2042	78,410,235	5,158,823	12,517,727	71,051,331
2043	71,051,331	4,636,144	12,420,317	63,267,158
2044	63,267,158	4,083,137	12,320,704	55,029,591
2045	55,029,591	3,496,418	12,257,273	46,268,736
2046	46,268,736	2,875,352	12,108,059	37,036,029
2047	37,036,029	2,221,221	11,940,009	27,317,241
2048	27,317,241	1,533,109	11,750,327	17,100,023
2049	17,100,023	809,821	11,547,718	6,362,126
2050	6,362,126	49,859	11,329,591	-

Number of years for which current market value of assets is 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:

28.50

Certain Key Assumptions Valuation Investment Return Assumption Valuation Mortality Table

7.15% 2019 FRS Mortality - Special Risk



Not Reflecting Any Contributions from the Employer, State or Employee Using Assumptions required under 112.664(1)(b), F.S.

	Market Value of	Expected	Projected Benefit	Market Value of
FYE	Assets (BOY)	Investment Return	Payments	Assets (EOY)
2022	140,845,497	7,034,407	8,510,155	139,369,749
2023	139,369,749	6,940,578	9,202,504	137,107,823
2024	137,107,823	6,817,893	9,443,096	134,482,620
2025	134,482,620	6,662,896	10,212,013	130,933,503
2026	130,933,503	6,468,362	10,668,485	126,733,380
2027	126,733,380	6,236,428	11,275,373	121,694,435
2028	121,694,435	5,966,531	11,678,911	115,982,055
2029	115,982,055	5,668,414	11,831,518	109,818,951
2030	109,818,951	5,343,071	12,139,996	103,022,026
2031	103,022,026	4,990,211	12,249,435	95,762,802
2032	95,762,802	4,614,000	12,341,128	88,035,674
2033	88,035,674	4,215,491	12,362,958	79,888,207
2034	79,888,207	3,791,039	12,551,581	71,127,665
2035	71,127,665	3,338,319	12,611,890	61,854,094
2036	61,854,094	2,859,743	12,650,219	52,063,618
2037	52,063,618	2,355,475	12,652,488	41,766,605
2038	41,766,605	1,824,578	12,675,823	30,915,360
2039	30,915,360	1,265,778	12,674,296	19,506,842
2040	19,506,842	679,002	12,644,675	7,541,169
2041	7,541,169	64,293	12,585,530	-
2042	-	-	12,517,727	-
2043	-	-	12,420,317	-
2044	-	-	12,320,704	-
2045	-	-	12,257,273	-
2046	-	-	12,108,059	-
2047	-	-	11,940,009	-
2048	-	-	11,750,327	-
2049	-	-	11,547,718	-
2050	-	-	11,329,591	-

Number of years for which current market value of assets is adequate to sustain the payment of expected retirement benefits, <u>reflecting no contributions from the</u> <u>Employer, Employee or State, contrary to Florida Statutes and Plan provisions</u>:

19.58

Certain Key Assumptions5.15%Valuation Investment Return Assumption5.15%Valuation Mortality Table2019 FRS Mortality - Special Risk



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

	Market Value of	Expected	Projected Benefit	Market Value of
FYE	Assets (BOY)	Investment Return	Payments	Assets (EOY)
2022	140,845,497	12,498,023	8,510,155	144,833,365
2023	144,833,365	12,831,238	9,202,504	148,462,099
2024	148,462,099	13,152,260	9,443,096	152,171,263
2025	152,171,263	13,456,471	10,212,013	155,415,721
2026	155,415,721	13,732,455	10,668,485	158,479,691
2027	158,479,691	13,985,043	11,275,373	161,189,361
2028	161,189,361	14,214,516	11,678,911	163,724,966
2029	163,724,966	14,439,542	11,831,518	166,332,990
2030	166,332,990	14,664,064	12,139,996	168,857,058
2031	168,857,058	14,890,009	12,249,435	171,497,632
2032	171,497,632	15,127,427	12,341,128	174,283,931
2033	174,283,931	15,381,374	12,362,958	177,302,347
2034	177,302,347	15,648,930	12,551,581	180,399,696
2035	180,399,696	15,929,578	12,611,890	183,717,384
2036	183,717,384	16,231,393	12,650,219	187,298,558
2037	187,298,558	16,558,967	12,652,488	191,205,037
2038	191,205,037	16,915,342	12,675,823	195,444,556
2039	195,444,556	17,303,328	12,674,296	200,073,588
2040	200,073,588	17,728,239	12,644,675	205,157,152
2041	205,157,152	18,196,091	12,585,530	210,767,713
2042	210,767,713	18,712,560	12,517,727	216,962,546
2043	216,962,546	19,283,843	12,420,317	223,826,072
2044	223,826,072	19,916,413	12,320,704	231,421,781
2045	231,421,781	20,614,323	12,257,273	239,778,831
2046	239,778,831	21,385,819	12,108,059	249,056,591
2047	249,056,591	22,242,423	11,940,009	259,359,005
2048	259,359,005	23,193,771	11,750,327	270,802,449
2049	270,802,449	24,250,116	11,547,718	283,504,847
2050	283,504,847	25,422,365	11,329,591	297,597,621

Number of years for which current market value of assets is adequate to sustain the payment of expected retirement benefits, <u>reflecting no contributions from the</u> <u>Employer, Employee or State, contrary to Florida Statutes and Plan provisions</u>:

All Years

Certain Key Assumptions Valuation Investment Return Assumption Valuation Mortality Table

9.15% 2019 FRS Mortality - Special Risk



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, 2021	October 1, 2021	October 1, 2021	October 1, 2021	
 B. Actuarially Determined Contribution (ADC) to Be Paid During Fiscal Year Ending 	9/30/2023	9/30/2023	9/30/2023	9/30/2023	
C. Assumed Date(s) of Employer Contributions	10/1/2022	10/1/2022	10/1/2022	10/1/2022	
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 3,686,801	\$ 3,686,801	\$ 5,804,945	\$ 1,667,543	
E. Employer Normal Cost	2,920,288	2,920,288	5,319,694	1,514,248	
F. Employer ADC if Paid on Valuation Date: D + E	6,607,089	6,607,089	11,124,639	3,181,791	
G. Employer ADC Adjusted for Frequency of Payments	6,607,089	6,607,089	11,124,639	3,181,791	
H. Employer ADC Adjusted for Frequency of Payments as % of Covered Payroll	56.42 %	56.42 %	95.00 %	27.17 %	
I. Covered Payroll per Valuation	11,710,333	11,710,333	11,710,333	11,710,333	
J. Assumed Rate of Increase in Covered Payroll to Contibution Year	2.50 %	2.50 %	2.50 %	2.50 %	
K. Covered Payroll for Contribution Year	12,003,091	12,003,091	12,003,091	12,003,091	
L. Employer ADC for Contribution Year: H x K	6,772,144	6,772,144	11,402,936	3,261,240	
M. Estimated State Revenue in Contribution Year Including amounts from Excess Reserve	1,068,298	1,068,298	1,068,298	1,068,298	
N. Net Employer ADC in Contribution Year	5,703,846	5,703,846	10,334,638	2,192,942	
O. Net Employer ADC as % of Covered Payroll in Contribution Year: N ÷ K	47.52 %	47.52 %	86.10 %	18.27 %	
P. Expected Member Contribution	1,440,371	1,440,371	1,440,371	1,440,371	
Q. Total Contribution (Including Members) in Contribution Year	8,212,515	8,212,515	12,843,307	4,701,611	
R. Total Contribution as % of Covered Payroll in Contribution Year: Q ÷ K	68.42 %	68.42 %	107.00 %	39.17 %	
S. Certain Key Assumptions Investment Return Assumption Mortality Table	7.15% 2019 FRS Mortality - Special Risk	7.15% 2019 FRS Mortality - Special Risk	5.15% 2019 FRS Mortality - Special Risk	9.15% 2019 FRS Mortality - Special Risk	

