CITY OF BOYNTON BEACH MUNICIPAL FIREFIGHTERS' PENSION TRUST FUND

Chapter 112.664, F.S. Compliance Report In Connection with the October 1, 2020 Funding Actuarial Valuation Report And the Plan's Financial Reporting for the Year Ending September 30, 2020









May 14, 2021

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, 2020. 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, 2020 actuarial valuation report. This report is also based on the Plan Provisions, census data, and financial information as summarized in our October 1, 2020 actuarial valuation report. Please refer to the October 1, 2020 actuarial valuation report, dated April 6, 2021, for summaries and descriptions of this information.

Board of Trustees City of Boynton Beach Municipal Firefighters' Pension Trust Fund May 14, 2021

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

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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,		2020
1. Total pension liability		
a. Service Cost	\$	3,593,983
b. Interest		12,281,407
c. Benefit Changes		616,047
d. Difference between actual & expected experience & Other		3,586,563
e. Assumption Changes		-
f. Benefit Payments		(7,663,405)
g. Contribution Refunds		(84,833)
h. Net Change in Total Pension Liability		12,329,762
i. Total Pension Liability - Beginning		163,996,071
j. Total Pension Liability - Ending	\$	176,325,833
2. Plan Fiduciary Net Position a. Contributions - Employer (From City)	\$	4,734,845
b. Contributions - Employer (From State)		881,763
c. Contributions - Member		1,448,783
d. Net Investment Income		15,834,660
e. Benefit Payments		(7,663,405)
f. Contribution Refunds		(84,833)
g. Administrative Expense		(229,164)
h. Other		327,937
i. Net Change in Plan Fiduciary Net Position		15,250,586
j. Plan Fiduciary Net Position - Beginning		122,792,356
k. Plan Fiduciary Net Position - Ending	\$	138,042,942
3. Net Pension Liability / (Asset)		38,282,891
Certain Key Assumptions		
Valuation Date		10/01/2019
Measurement Date		09/30/2020
Investment Return Assumption		7.50%
Mortality Table	201	8 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,		2020
1. Total pension liability		
a. Service Cost	\$	3,597,731
b. Interest		12,304,512
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		72,315
e. Assumption Changes		-
f. Benefit Payments		(7,663,405)
g. Contribution Refunds		(84,833)
h. Net Change in Total Pension Liability		8,226,320
i. Total Pension Liability - Beginning		164,300,394
j. Total Pension Liability - Ending	\$	172,526,714
2. Plan Fiduciary Net Position		
a. Contributions - Employer (From City)	\$	4,734,845
b. Contributions - Employer (From State)		881,763
c. Contributions - Member		1,448,783
d. Net Investment Income		15,834,660
e. Benefit Payments		(7,663,405)
f. Contribution Refunds		(84,833)
g. Administrative Expense		(229,164)
h. Other		327,937
i. Net Change in Plan Fiduciary Net Position		15,250,586
j. Plan Fiduciary Net Position - Beginning		122,792,356
k. Plan Fiduciary Net Position - Ending	\$	138,042,942
3. Net Pension Liability / (Asset)		34,483,772
Certain Key Assumptions		
Valuation Date		10/01/2019
Measurement Date		09/30/2020
Investment Return Assumption		7.50%
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,		2020
1. Total pension liability		
a. Service Cost	\$	5,658,740
b. Interest		11,353,344
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		72,315
e. Assumption Changes		-
f. Benefit Payments		(7,663,405)
g. Contribution Refunds		(84,833)
h. Net Change in Total Pension Liability		9,336,161
i. Total Pension Liability - Beginning		204,603,651
j. Total Pension Liability - Ending	\$	213,939,812
2. Plan Fiduciary Net Position		
a. Contributions - Employer (From City)	\$	4,734,845
b. Contributions - Employer (From State)		881,763
c. Contributions - Member		1,448,783
d. Net Investment Income		15,834,660
e. Benefit Payments		(7,663,405)
f. Contribution Refunds		(84,833)
g. Administrative Expense		(229,164)
h. Other		327,937
i. Net Change in Plan Fiduciary Net Position		15,250,586
j. Plan Fiduciary Net Position - Beginning		122,792,356
k. Plan Fiduciary Net Position - Ending	\$	138,042,942
3. Net Pension Liability / (Asset)		75,896,870
Certain Key Assumptions		
Valuation Date		10/01/2019
Measurement Date		09/30/2020
Investment Return Assumption		5.50%
Mortality Table	2019	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,		2020
1. Total pension liability		
a. Service Cost	\$	2,379,418
b. Interest		12,861,825
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		72,315
e. Assumption Changes		-
f. Benefit Payments		(7,663,405)
g. Contribution Refunds		(84,833)
h. Net Change in Total Pension Liability		7,565,320
i. Total Pension Liability - Beginning		136,846,171
j. Total Pension Liability - Ending	\$	144,411,491
2. Plan Fiduciary Net Position		
a. Contributions - Employer (From City)	\$	4,734,845
b. Contributions - Employer (From State)		881,763
c. Contributions - Member		1,448,783
d. Net Investment Income		15,834,660
e. Benefit Payments		(7,663,405)
f. Contribution Refunds		(84,833)
g. Administrative Expense		(229,164)
h. Other		327,937
i. Net Change in Plan Fiduciary Net Position		15,250,586
j. Plan Fiduciary Net Position - Beginning		122,792,356
k. Plan Fiduciary Net Position - Ending	\$	138,042,942
3. Net Pension Liability / (Asset)		6,368,549
Certain Key Assumptions		
Valuation Date		10/01/2019
Measurement Date		09/30/2020
Investment Return Assumption		9.50%
Mortality Table	201	9 FRS Mortality -
		Special Risk



Asset and Benefit Payment Projection

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)
2021	116,309,935	8,247,754	8,191,184	116,366,505
2022	116,366,505	8,243,697	8,414,719	116,195,483
2023	116,195,483	8,207,322	9,062,467	115,340,338
2024	115,340,338	8,136,506	9,279,148	114,197,696
2025	114,197,696	8,027,454	9,961,270	112,263,880
2026	112,263,880	7,870,232	10,371,780	109,762,332
2027	109,762,332	7,666,881	10,902,046	106,527,167
2028	106,527,167	7,416,030	11,257,593	102,685,604
2029	102,685,604	7,128,755	11,391,467	98,422,892
2030	98,422,892	6,805,706	11,656,499	93,572,099
2031	93,572,099	6,446,855	11,719,572	88,299,382
2032	88,299,382	6,056,657	11,791,760	82,564,279
2033	82,564,279	5,634,773	11,801,406	76,397,646
2034	76,397,646	5,175,765	11,958,152	69,615,259
2035	69,615,259	4,675,651	12,001,909	62,289,001
2036	62,289,001	4,136,348	12,024,311	54,401,038
2037	54,401,038	3,556,919	12,015,163	45,942,794
2038	45,942,794	2,934,920	12,023,811	36,853,903
2039	36,853,903	2,267,457	12,008,308	27,113,052
2040	27,113,052	1,552,995	11,967,747	16,698,300
2041	16,698,300	790,143	11,896,115	5,592,328
2042	5,592,328	-	11,813,299	-
2043	-	-	11,704,434	-
2044	-	-	11,591,889	-
2045	-	-	11,505,029	-
2046	-	-	11,342,404	-

Number of years for which current market value of assets is adequate to sustain thepayment of expected retirement benefits, reflecting no contributions from theEmployer, Employee or State, contrary to Florida Statutes and Plan provisions:21.42

Certain Key Assumptions

Valuation Investment Return Assumption	7.35%
Valuation Mortality Table	2019 FRS Mortality - Special Risk

Note: As required in Section 112.664(1)(c) of the Florida Statutes, the projection of the Fund assets <u>do not</u> <u>include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan</u> <u>provisions</u>. 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.

	Market Value of	Expected	Projected Benefit	Market Value of
FYE	Assets (BOY)	Investment Return	Payments	Assets (EOY)
2021	116,309,935	8,247,754	8,191,184	116,366,505
2022	116,366,505	8,243,697	8,414,719	116,195,483
2023	116,195,483	8,207,322	9,062,467	115,340,338
2024	115,340,338	8,136,506	9,279,148	114,197,696
2025	114,197,696	8,027,454	9,961,270	112,263,880
2026	112,263,880	7,870,232	10,371,780	109,762,332
2027	109,762,332	7,666,881	10,902,046	106,527,167
2028	106,527,167	7,416,030	11,257,593	102,685,604
2029	102,685,604	7,128,755	11,391,467	98,422,892
2030	98,422,892	6,805,706	11,656,499	93,572,099
2031	93,572,099	6,446,855	11,719,572	88,299,382
2032	88,299,382	6,056,657	11,791,760	82,564,279
2033	82,564,279	5,634,773	11,801,406	76,397,646
2034	76,397,646	5,175,765	11,958,152	69,615,259
2035	69,615,259	4,675,651	12,001,909	62,289,001
2036	62,289,001	4,136,348	12,024,311	54,401,038
2037	54,401,038	3,556,919	12,015,163	45,942,794
2038	45,942,794	2,934,920	12,023,811	36,853,903
2039	36,853,903	2,267,457	12,008,308	27,113,052
2040	27,113,052	1,552,995	11,967,747	16,698,300
2041	16,698,300	790,143	11,896,115	5,592,328
2042	5,592,328	-	11,813,299	-
2043	-	-	11,704,434	-
2044	-	-	11,591,889	-
2045	-	-	11,505,029	-
2046	-	-	11,342,404	-

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>:

Certain Key Assumptions

Valuation Investment Return Assumption	7.35%
Valuation Mortality Table	2019 FRS Mortality - Special Risk

Note: As required in Section 112.664(1)(c) of the Florida Statutes, the projection of the Fund assets <u>do not</u> <u>include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan</u> <u>provisions</u>. 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.



21.42

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.

	Market Value of	Expected	Projected Benefit	Market Value of
FYE	Assets (BOY)	Investment Return	Payments	Assets (EOY)
2021	116,309,935	6,003,467	8,191,184	114,122,218
2022	114,122,218	5,880,445	8,414,719	111,587,944
2023	111,587,944	5,727,534	9,062,467	108,253,011
2024	108,253,011	5,543,319	9,279,148	104,517,182
2025	104,517,182	5,325,205	9,961,270	99,881,117
2026	99,881,117	5,066,195	10,371,780	94,575,532
2027	94,575,532	4,768,161	10,902,046	88,441,647
2028	88,441,647	4,430,488	11,257,593	81,614,542
2029	81,614,542	4,061,656	11,391,467	74,284,731
2030	74,284,731	3,662,422	11,656,499	66,290,654
2031	66,290,654	3,233,051	11,719,572	57,804,133
2032	57,804,133	2,777,092	11,791,760	48,789,465
2033	48,789,465	2,294,549	11,801,406	39,282,608
2034	39,282,608	1,781,739	11,958,152	29,106,195
2035	29,106,195	1,236,130	12,001,909	18,340,416
2036	18,340,416	659,562	12,024,311	6,975,667
2037	6,975,667	51,793	12,015,163	-
2038	-	-	12,023,811	-
2039	-	-	12,008,308	-
2040	-	-	11,967,747	-
2041	-	-	11,896,115	-
2042	-	-	11,813,299	-
2043	-	-	11,704,434	-
2044	-	-	11,591,889	-
2045	-	-	11,505,029	-
2046	-	-	11,342,404	-

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>:

16.58

Certain Key Assumptions

Valuation Investment Return Assumption	5.35%
Valuation Mortality Table	2019 FRS Mortality - Special Risk

Note: As required in Section 112.664(1)(c) of the Florida Statutes, the projection of the Fund assets <u>do not</u> <u>include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan</u> <u>provisions</u>. 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

	Market Value of	Expected	Projected Benefit	Market Value of
FYE	Assets (BOY)	Investment Return	Payments	Assets (EOY)
2021	116,309,935	10,492,041	8,191,184	118,610,792
2022	118,610,792	10,696,721	8,414,719	120,892,794
2023	120,892,794	10,879,806	9,062,467	122,710,133
2024	122,710,133	11,039,597	9,279,148	124,470,582
2025	124,470,582	11,172,310	9,961,270	125,681,622
2026	125,681,622	11,266,351	10,371,780	126,576,193
2027	126,576,193	11,325,203	10,902,046	126,999,350
2028	126,999,350	11,348,147	11,257,593	127,089,904
2029	127,089,904	11,350,355	11,391,467	127,048,792
2030	127,048,792	11,334,121	11,656,499	126,726,414
2031	126,726,414	11,301,030	11,719,572	126,307,872
2032	126,307,872	11,258,521	11,791,760	125,774,633
2033	125,774,633	11,208,212	11,801,406	125,181,439
2034	125,181,439	11,145,421	11,958,152	124,368,708
2035	124,368,708	11,067,385	12,001,909	123,434,184
2036	123,434,184	10,978,960	12,024,311	122,388,833
2037	122,388,833	10,881,647	12,015,163	121,255,317
2038	121,255,317	10,775,259	12,023,811	120,006,765
2039	120,006,765	10,659,244	12,008,308	118,657,701
2040	118,657,701	10,535,003	11,967,747	117,224,957
2041	117,224,957	10,404,390	11,896,115	115,733,232
2042	115,733,232	10,268,785	11,813,299	114,188,718
2043	114,188,718	10,129,463	11,704,434	112,613,747
2044	112,613,747	9,987,465	11,591,889	111,009,323
2045	111,009,323	9,841,512	11,505,029	109,345,806
2046	109,345,806	9,693,575	11,342,404	107,696,977

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:All Years

Certain Key Assumptions

Valuation Investment Return Assumption Valuation Mortality Table

9.35% 2019 FRS Mortality - Special Risk

Note: As required in Section 112.664(1)(c) of the Florida Statutes, the projection of the Fund assets <u>do not</u> <u>include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan</u> <u>provisions</u>. 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, 2020	October 1, 2020	October 1, 2020	October 1, 2020
 B. Actuarially Determined Contribution (ADC) to Be Paid During Fiscal Year Ending 	9/30/2022	9/30/2022	9/30/2022	9/30/2022
C. Assumed Date(s) of Employer Contributions	10/1/2021	10/1/2021	10/1/2021	10/1/2021
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 3,672,306	\$ 3,672,306	\$ 5,577,492	\$ 1,855,422
E. Employer Normal Cost	2,774,279	2,774,279	5,048,213	1,433,445
F. Employer ADC if Paid on Valuation Date: D + E	6,446,585	6,446,585	10,625,705	3,288,867
G. Employer ADC Adjusted for Frequency of Payments	6,446,585	6,446,585	10,625,705	3,288,867
 H. Employer ADC Adjusted for Frequency of Payments as % of Covered Payroll 	55.58 %	55.58 %	91.61 %	28.36 %
I. Covered Payroll per Valuation	11,598,751	11,598,751	11,598,751	11,598,751
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	11,888,720	11,888,720	11,888,720	11,888,720
L. Employer ADC for Contribution Year: H x K	6,607,751	6,607,751	10,891,256	3,371,641
M. Estimated State Revenue in Contribution Year Including amounts from Excess Reserve	1,062,385	1,062,385	1,062,385	1,062,385
N. Net Employer ADC in Contribution Year	5,545,366	5,545,366	9,828,871	2,309,256
O. Net Employer ADC as % of Covered Payroll in Contribution Year: N ÷ K	46.64 %	46.64 %	82.67 %	19.42 %
P. Expected Member Contribution	1,426,646	1,426,646	1,426,646	1,426,646
Q. Total Contribution (Including Members) in Contribution Year	8,034,397	8,034,397	12,317,902	4,798,287
R. Total Contribution as % of Covered Payroll in Contribution Year: Q ÷ K	67.58 %	67.58 %	103.61 %	40.36 %
S. Certain Key Assumptions Investment Return Assumption Mortality Table	7.35% 2019 FRS Mortality - Special Risk	7.35% 2019 FRS Mortality - Special Risk	5.35% 2019 FRS Mortality - Special Risk	9.35% 2019 FRS Mortality - Special Risk

