

CITY OF BOYNTON BEACH MUNICIPAL FIREFIGHTERS' PENSION TRUST FUND

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 19, 2019

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, 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 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, 2018 actuarial valuation report. This report is also based on the Plan Provisions, census data, and financial information as summarized in our October 1, 2018 actuarial valuation report. Please refer to the October 1, 2018 actuarial valuation report, dated March 27, 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.

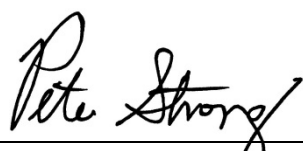
Peter N. Strong and Jeffrey Amrose are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. The signing actuaries are independent of the plan sponsor.

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

By 
Peter N. Strong, FSA, MAAA, FCA
Enrolled Actuary No. 17-6975
Senior Consultant & Actuary

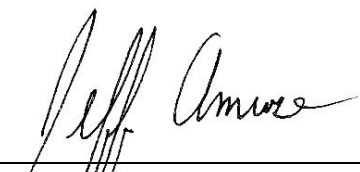
By 
Jeffrey Amrose, MAAA, FCA
Enrolled Actuary No. 17-6599
Senior Consultant & Actuary

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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,	<u>2018</u>
1. Total pension liability	
a. Service Cost	\$ 3,717,529
b. Interest	11,208,637
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	1,221,359
e. Assumption Changes	-
f. Benefit Payments	(5,970,713)
g. Contribution Refunds	(105,981)
h. Net Change in Total Pension Liability	<u>10,070,831</u>
i. Total Pension Liability - Beginning	<u>148,770,660</u>
j. Total Pension Liability - Ending	<u>\$ 158,841,491</u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer (From City)	\$ 5,444,061
b. Contributions - Employer (From State)	789,121
c. Contributions - Member	1,473,516
d. Net Investment Income	9,221,736
e. Benefit Payments	(5,970,713)
f. Contribution Refunds	(105,981)
g. Administrative Expense	(141,569)
h. Other	323,472
i. Net Change in Plan Fiduciary Net Position	<u>11,033,643</u>
j. Plan Fiduciary Net Position - Beginning	<u>104,369,743</u>
k. Plan Fiduciary Net Position - Ending	<u>\$ 115,403,386</u>
3. Net Pension Liability / (Asset)	43,438,105
Certain Key Assumptions	
Valuation Date	10/01/2017
Measurement Date	09/30/2018
Investment Return Assumption	7.50%
Mortality Table	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,

1. Total pension liability

	2018
a. Service Cost	\$ 3,717,529
b. Interest	11,208,637
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	1,221,359
e. Assumption Changes	-
f. Benefit Payments	(5,970,713)
g. Contribution Refunds	(105,981)
h. Net Change in Total Pension Liability	10,070,831
i. Total Pension Liability - Beginning	148,770,660
j. Total Pension Liability - Ending	\$ 158,841,491

2. Plan Fiduciary Net Position

a. Contributions - Employer (From City)	\$ 5,444,061
b. Contributions - Employer (From State)	789,121
c. Contributions - Member	1,473,516
d. Net Investment Income	9,221,736
e. Benefit Payments	(5,970,713)
f. Contribution Refunds	(105,981)
g. Administrative Expense	(141,569)
h. Other	323,472
i. Net Change in Plan Fiduciary Net Position	11,033,643
j. Plan Fiduciary Net Position - Beginning	104,369,743
k. Plan Fiduciary Net Position - Ending	\$ 115,403,386

3. Net Pension Liability / (Asset) 43,438,105

Certain Key Assumptions

Valuation Date	10/01/2017
Measurement Date	09/30/2018
Investment Return Assumption	7.50%
Mortality Table	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,

1. Total pension liability

	<u>2018</u>
a. Service Cost	\$ 5,911,969
b. Interest	10,516,039
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	(2,695)
e. Assumption Changes	-
f. Benefit Payments	(5,970,713)
g. Contribution Refunds	(105,981)
h. Net Change in Total Pension Liability	<u>10,348,619</u>
i. Total Pension Liability - Beginning	<u>188,328,432</u>
j. Total Pension Liability - Ending	<u>\$ 198,677,051</u>

2. Plan Fiduciary Net Position

a. Contributions - Employer (From City)	\$ 5,444,061
b. Contributions - Employer (From State)	789,121
c. Contributions - Member	1,473,516
d. Net Investment Income	9,221,736
e. Benefit Payments	(5,970,713)
f. Contribution Refunds	(105,981)
g. Administrative Expense	(141,569)
h. Other	323,472
i. Net Change in Plan Fiduciary Net Position	<u>11,033,643</u>
j. Plan Fiduciary Net Position - Beginning	<u>104,369,743</u>
k. Plan Fiduciary Net Position - Ending	<u>\$ 115,403,386</u>

3. Net Pension Liability / (Asset) 83,273,665

Certain Key Assumptions

Valuation Date	10/01/2017
Measurement Date	09/30/2018
Investment Return Assumption	5.50%
Mortality Table	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,	2018
1. Total pension liability	
a. Service Cost	\$ 2,439,372
b. Interest	11,678,352
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	(2,695)
e. Assumption Changes	-
f. Benefit Payments	(5,970,713)
g. Contribution Refunds	(105,981)
h. Net Change in Total Pension Liability	8,038,335
i. Total Pension Liability - Beginning	123,530,342
j. Total Pension Liability - Ending	\$ 131,568,677
2. Plan Fiduciary Net Position	
a. Contributions - Employer (From City)	\$ 5,444,061
b. Contributions - Employer (From State)	789,121
c. Contributions - Member	1,473,516
d. Net Investment Income	9,221,736
e. Benefit Payments	(5,970,713)
f. Contribution Refunds	(105,981)
g. Administrative Expense	(141,569)
h. Other	323,472
i. Net Change in Plan Fiduciary Net Position	11,033,643
j. Plan Fiduciary Net Position - Beginning	104,369,743
k. Plan Fiduciary Net Position - Ending	\$ 115,403,386
3. Net Pension Liability / (Asset)	16,165,291
Certain Key Assumptions	
Valuation Date	10/01/2017
Measurement Date	09/30/2018
Investment Return Assumption	9.50%
Mortality Table	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

FYE	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2019	95,986,708	6,930,466	7,160,999	95,756,175
2020	95,756,175	6,906,421	7,341,113	95,321,483
2021	95,321,483	6,856,374	7,806,315	94,371,542
2022	94,371,542	6,775,683	8,058,191	93,089,034
2023	93,089,034	6,661,894	8,527,569	91,223,359
2024	91,223,359	6,511,775	8,799,382	88,935,752
2025	88,935,752	6,322,591	9,269,068	85,989,275
2026	85,989,275	6,088,967	9,606,097	82,472,145
2027	82,472,145	5,809,640	10,020,561	78,261,224
2028	78,261,224	5,483,521	10,295,230	73,449,515
2029	73,449,515	5,117,312	10,437,387	68,129,440
2030	68,129,440	4,709,945	10,660,353	62,179,032
2031	62,179,032	4,260,808	10,736,507	55,703,333
2032	55,703,333	3,772,599	10,804,023	48,671,909
2033	48,671,909	3,244,263	10,830,134	41,086,038
2034	41,086,038	2,671,918	10,920,925	32,837,031
2035	32,837,031	2,051,696	10,962,158	23,926,569
2036	23,926,569	1,382,501	10,986,440	14,322,630
2037	14,322,630	662,322	10,983,340	4,001,612
2038	4,001,612	-	10,990,946	-
2039	-	-	10,978,579	-
2040	-	-	10,937,711	-
2041	-	-	10,886,504	-
2042	-	-	10,818,077	-
2043	-	-	10,735,868	-
2044	-	-	10,634,093	-

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:** 19.33

Certain Key Assumptions

Valuation Investment Return Assumption	7.50%
Valuation Mortality Table	FRS Mortality - Special Risk

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	95,986,708	6,930,466	7,160,999	95,756,175
2020	95,756,175	6,906,421	7,341,113	95,321,483
2021	95,321,483	6,856,374	7,806,315	94,371,542
2022	94,371,542	6,775,683	8,058,191	93,089,034
2023	93,089,034	6,661,894	8,527,569	91,223,359
2024	91,223,359	6,511,775	8,799,382	88,935,752
2025	88,935,752	6,322,591	9,269,068	85,989,275
2026	85,989,275	6,088,967	9,606,097	82,472,145
2027	82,472,145	5,809,640	10,020,561	78,261,224
2028	78,261,224	5,483,521	10,295,230	73,449,515
2029	73,449,515	5,117,312	10,437,387	68,129,440
2030	68,129,440	4,709,945	10,660,353	62,179,032
2031	62,179,032	4,260,808	10,736,507	55,703,333
2032	55,703,333	3,772,599	10,804,023	48,671,909
2033	48,671,909	3,244,263	10,830,134	41,086,038
2034	41,086,038	2,671,918	10,920,925	32,837,031
2035	32,837,031	2,051,696	10,962,158	23,926,569
2036	23,926,569	1,382,501	10,986,440	14,322,630
2037	14,322,630	662,322	10,983,340	4,001,612
2038	4,001,612	-	10,990,946	-
2039	-	-	10,978,579	-
2040	-	-	10,937,711	-
2041	-	-	10,886,504	-
2042	-	-	10,818,077	-
2043	-	-	10,735,868	-
2044	-	-	10,634,093	-

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:** 19.33

Certain Key Assumptions

Valuation Investment Return Assumption	7.50%
Valuation Mortality Table	FRS Mortality - Special Risk

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	95,986,708	5,082,341	7,160,999	93,908,050
2020	93,908,050	4,963,062	7,341,113	91,529,999
2021	91,529,999	4,819,476	7,806,315	88,543,160
2022	88,543,160	4,648,274	8,058,191	85,133,243
2023	85,133,243	4,447,820	8,527,569	81,053,494
2024	81,053,494	4,215,959	8,799,382	76,470,071
2025	76,470,071	3,950,955	9,269,068	71,151,958
2026	71,151,958	3,649,190	9,606,097	65,195,051
2027	65,195,051	3,310,162	10,020,561	58,484,652
2028	58,484,652	2,933,537	10,295,230	51,122,959
2029	51,122,959	2,524,735	10,437,387	43,210,307
2030	43,210,307	2,083,407	10,660,353	34,633,361
2031	34,633,361	1,609,581	10,736,507	25,506,435
2032	25,506,435	1,105,743	10,804,023	15,808,155
2033	15,808,155	571,620	10,830,134	5,549,641
2034	5,549,641	4,905	10,920,925	-
2035	-	-	10,962,158	-
2036	-	-	10,986,440	-
2037	-	-	10,983,340	-
2038	-	-	10,990,946	-
2039	-	-	10,978,579	-
2040	-	-	10,937,711	-
2041	-	-	10,886,504	-
2042	-	-	10,818,077	-
2043	-	-	10,735,868	-
2044	-	-	10,634,093	-

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:** 15.50

Certain Key Assumptions

Valuation Investment Return Assumption	5.50%
Valuation Mortality Table	FRS Mortality - Special Risk

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	95,986,708	8,778,590	7,160,999	97,604,299
2020	97,604,299	8,923,706	7,341,113	99,186,892
2021	99,186,892	9,051,955	7,806,315	100,432,532
2022	100,432,532	9,158,326	8,058,191	101,532,667
2023	101,532,667	9,240,544	8,527,569	102,245,642
2024	102,245,642	9,295,365	8,799,382	102,741,625
2025	102,741,625	9,320,174	9,269,068	102,792,731
2026	102,792,731	9,309,020	9,606,097	102,495,654
2027	102,495,654	9,261,110	10,020,561	101,736,203
2028	101,736,203	9,175,916	10,295,230	100,616,889
2029	100,616,889	9,062,829	10,437,387	99,242,331
2030	99,242,331	8,921,655	10,660,353	97,503,633
2031	97,503,633	8,752,861	10,736,507	95,519,987
2032	95,519,987	8,561,208	10,804,023	93,277,172
2033	93,277,172	8,346,900	10,830,134	90,793,938
2034	90,793,938	8,106,680	10,920,925	87,979,693
2035	87,979,693	7,837,368	10,962,158	84,854,903
2036	84,854,903	7,539,360	10,986,440	81,407,823
2037	81,407,823	7,212,035	10,983,340	77,636,518
2038	77,636,518	6,853,399	10,990,946	73,498,971
2039	73,498,971	6,460,920	10,978,579	68,981,312
2040	68,981,312	6,033,683	10,937,711	64,077,284
2041	64,077,284	5,570,233	10,886,504	58,761,013
2042	58,761,013	5,068,438	10,818,077	53,011,374
2043	53,011,374	4,526,127	10,735,868	46,801,633
2044	46,801,633	3,941,036	10,634,093	40,108,576
2045	40,108,576	3,310,698	10,518,250	32,901,024
2046	32,901,024	2,632,173	10,387,879	25,145,318
2047	25,145,318	1,902,295	10,242,315	16,805,298
2048	16,805,298	1,117,686	10,080,359	7,842,625
2049	7,842,625	274,610	9,903,980	-

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:** 30.75

Certain Key Assumptions

Valuation Investment Return Assumption 9.50%
 Valuation Mortality Table FRS Mortality - Special Risk

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. Actuarially Determined Contribution (ADC) to Be Paid During Fiscal Year Ending	9/30/2020	9/30/2020	9/30/2020	9/30/2020
C. Assumed Date(s) of Employer Contributions	10/1/2019	10/1/2019	10/1/2019	10/1/2019
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 3,593,023	\$ 3,593,023	\$ 5,310,381	\$ 1,991,114
E. Employer Normal Cost	2,230,990	2,230,990	4,183,826	1,091,374
F. Employer ADC if Paid on Valuation Date: D + E	5,824,013	5,824,013	9,494,207	3,082,488
G. Employer ADC Adjusted for Frequency of Payments	5,824,013	5,824,013	9,494,207	3,082,488
H. Employer ADC Adjusted for Frequency of Payments as % of Covered Payroll	56.03 %	56.03 %	91.34 %	29.66 %
I. Covered Payroll per Valuation	10,393,865	10,393,865	10,393,865	10,393,865
J. Assumed Rate of Increase in Covered Payroll to Contribution Year	2.50 %	2.50 %	2.50 %	2.50 %
K. Covered Payroll for Contribution Year	10,653,712	10,653,712	10,653,712	10,653,712
L. Employer ADC for Contribution Year: H x K	5,969,275	5,969,275	9,731,101	3,159,891
M. Estimated State Revenue in Contribution Year	1,087,954	1,087,954	1,087,954	1,087,954
N. Net Employer ADC in Contribution Year	4,881,321	4,881,321	8,643,147	2,071,937
O. Net Employer ADC as % of Covered Payroll in Contribution Year: N ÷ K	45.82 %	45.82 %	81.13 %	19.45 %
P. Expected Member Contribution	1,278,445	1,278,445	1,278,445	1,278,445
Q. Total Contribution (Including Members) in Contribution Year	7,247,720	7,247,720	11,009,546	4,438,336
R. Total Contribution as % of Covered Payroll in Contribution Year: Q ÷ K	68.03 %	68.03 %	103.34 %	41.66 %
S. Certain Key Assumptions				
Investment Return Assumption	7.50%	7.50%	5.50%	9.50%
Mortality Table	FRS Mortality - Special Risk	FRS Mortality - Special Risk	FRS Mortality - Special Risk	FRS Mortality - Special Risk