

CITY OF BOYNTON BEACH MUNICIPAL FIREFIGHTERS' PENSION TRUST FUND
Chapter 112.664, F.S. Compliance Report
In Connection with the October 1, 2016 Funding Actuarial Valuation Report
And the Plan's Financial Reporting for the Year Ending September 30, 2016

April 28, 2017

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, 2016. 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 otherwise 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, 2016 actuarial valuation report. This report is also based on the Plan Provisions, census data, and financial information as summarized in our October 1, 2016 actuarial valuation report. Please refer to the October 1, 2016 actuarial valuation report, dated March 8, 2017, 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 me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my 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
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Senior Consultant & Actuary

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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,	2016
1. Total pension liability	
a. Service Cost	\$ 3,204,682
b. Interest	9,542,671
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	(418,827)
e. Assumption Changes	-
f. Benefit Payments	(5,176,836)
g. Contribution Refunds	-
h. Net Change in Total Pension Liability	<u>7,151,690</u>
i. Total Pension Liability - Beginning	<u>126,579,666</u>
j. Total Pension Liability - Ending	<u>\$ 133,731,356</u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer (From City)	\$ 4,195,420
b. Contributions - Employer (From State)	923,246
c. Contributions - Member	1,485,128
d. Net Investment Income	9,197,486
e. Benefit Payments	(5,176,836)
f. Contribution Refunds	-
g. Administrative Expense	(161,122)
h. Other	271,411
i. Net Change in Plan Fiduciary Net Position	<u>10,734,733</u>
j. Plan Fiduciary Net Position - Beginning	<u>80,406,693</u>
k. Plan Fiduciary Net Position - Ending	<u>\$ 91,141,426</u>
3. Net Pension Liability / (Asset)	42,589,930
Certain Key Assumptions	
Valuation Date	10/01/2015
Measurement Date	09/30/2016
Investment Return Assumption	7.50%
Mortality Table	1983 Group Annuity Mortality Table

**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>2016</u>
1. Total pension liability	
a. Service Cost	\$ 3,476,445
b. Interest	10,029,090
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	79,370
e. Assumption Changes	-
f. Benefit Payments	(5,176,836)
g. Contribution Refunds	-
h. Net Change in Total Pension Liability	<u>8,408,069</u>
i. Total Pension Liability - Beginning	<u>132,793,487</u>
j. Total Pension Liability - Ending	<u>\$ 141,201,556</u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer (From City)	\$ 4,195,420
b. Contributions - Employer (From State)	923,246
c. Contributions - Member	1,485,128
d. Net Investment Income	9,197,486
e. Benefit Payments	(5,176,836)
f. Contribution Refunds	-
g. Administrative Expense	(161,122)
h. Other	271,411
i. Net Change in Plan Fiduciary Net Position	<u>10,734,733</u>
j. Plan Fiduciary Net Position - Beginning	<u>80,406,693</u>
k. Plan Fiduciary Net Position - Ending	<u>\$ 91,141,426</u>
3. Net Pension Liability / (Asset)	50,060,130
Certain Key Assumptions	
Valuation Date	10/01/2015
Measurement Date	09/30/2016
Investment Return Assumption	7.50%
Mortality Table	RP-2000 fully generational using Scale AA

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

Fiscal year ending September 30,

	2016
1. Total pension liability	
a. Service Cost	\$ 5,498,963
b. Interest	9,358,252
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	79,370
e. Assumption Changes	-
f. Benefit Payments	(5,176,836)
g. Contribution Refunds	-
h. Net Change in Total Pension Liability	<u>9,759,749</u>
i. Total Pension Liability - Beginning	<u>167,199,807</u>
j. Total Pension Liability - Ending	<u>\$ 176,959,556</u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer (From City)	\$ 4,195,420
b. Contributions - Employer (From State)	923,246
c. Contributions - Member	1,485,128
d. Net Investment Income	9,197,486
e. Benefit Payments	(5,176,836)
f. Contribution Refunds	-
g. Administrative Expense	(161,122)
h. Other	271,411
i. Net Change in Plan Fiduciary Net Position	<u>10,734,733</u>
j. Plan Fiduciary Net Position - Beginning	<u>80,406,693</u>
k. Plan Fiduciary Net Position - Ending	<u>\$ 91,141,426</u>
3. Net Pension Liability / (Asset)	85,818,130
Certain Key Assumptions	
Valuation Date	10/01/2015
Measurement Date	09/30/2016
Investment Return Assumption	5.50%
Mortality Table	RP-2000 fully generational using Scale AA

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>2016</u>
1. Total pension liability	
a. Service Cost	\$ 2,285,851
b. Interest	10,376,899
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	79,370
e. Assumption Changes	-
f. Benefit Payments	(5,176,836)
g. Contribution Refunds	-
h. Net Change in Total Pension Liability	<u>7,565,284</u>
i. Total Pension Liability - Beginning	<u>109,493,395</u>
j. Total Pension Liability - Ending	<u>\$ 117,058,679</u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer (From City)	\$ 4,195,420
b. Contributions - Employer (From State)	923,246
c. Contributions - Member	1,485,128
d. Net Investment Income	9,197,486
e. Benefit Payments	(5,176,836)
f. Contribution Refunds	-
g. Administrative Expense	(161,122)
h. Other	271,411
i. Net Change in Plan Fiduciary Net Position	<u>10,734,733</u>
j. Plan Fiduciary Net Position - Beginning	<u>80,406,693</u>
k. Plan Fiduciary Net Position - Ending	<u>\$ 91,141,426</u>
3. Net Pension Liability / (Asset)	25,917,253
Certain Key Assumptions	
Valuation Date	10/01/2015
Measurement Date	09/30/2016
Investment Return Assumption	9.50%
Mortality Table	RP-2000 fully generational using Scale AA

**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)
2017	74,883,095	5,390,469	6,020,360	74,253,204
2018	74,253,204	5,328,028	6,425,662	73,155,570
2019	73,155,570	5,231,061	6,816,193	71,570,438
2020	71,570,438	5,102,967	7,061,762	69,611,643
2021	69,611,643	4,938,992	7,516,838	67,033,797
2022	67,033,797	4,737,130	7,744,128	64,026,799
2023	64,026,799	4,496,201	8,154,918	60,368,082
2024	60,368,082	4,213,438	8,377,805	56,203,715
2025	56,203,715	3,886,631	8,763,938	51,326,408
2026	51,326,408	3,511,038	9,025,146	45,812,300
2027	45,812,300	3,086,090	9,328,864	39,569,526
2028	39,569,526	2,611,118	9,509,239	32,671,405
2029	32,671,405	2,090,523	9,595,535	25,166,393
2030	25,166,393	1,522,365	9,736,399	16,952,359
2031	16,952,359	904,795	9,776,839	8,080,315
2032	8,080,315	237,793	9,819,484	-
2033	-	-	9,825,996	-
2034	-	-	9,878,921	-
2035	-	-	9,891,189	-
2036	-	-	9,892,611	-
2037	-	-	9,873,512	-
2038	-	-	9,837,590	-
2039	-	-	9,791,981	-
2040	-	-	9,728,473	-
2041	-	-	9,656,583	-
2042	-	-	9,570,960	-

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:** 15.83

Certain Key Assumptions

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

Note: As required in Section 112.664(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)
2017	74,883,095	5,390,469	6,020,360	74,253,204
2018	74,253,204	5,328,028	6,425,662	73,155,570
2019	73,155,570	5,231,061	6,816,193	71,570,438
2020	71,570,438	5,102,967	7,061,762	69,611,643
2021	69,611,643	4,938,992	7,516,838	67,033,797
2022	67,033,797	4,737,130	7,744,128	64,026,799
2023	64,026,799	4,496,201	8,154,918	60,368,082
2024	60,368,082	4,213,438	8,377,805	56,203,715
2025	56,203,715	3,886,631	8,763,938	51,326,408
2026	51,326,408	3,511,038	9,025,146	45,812,300
2027	45,812,300	3,086,090	9,328,864	39,569,526
2028	39,569,526	2,611,118	9,509,239	32,671,405
2029	32,671,405	2,090,523	9,595,535	25,166,393
2030	25,166,393	1,522,365	9,736,399	16,952,359
2031	16,952,359	904,795	9,776,839	8,080,315
2032	8,080,315	237,793	9,819,484	-
2033	-	-	9,825,996	-
2034	-	-	9,878,921	-
2035	-	-	9,891,189	-
2036	-	-	9,892,611	-
2037	-	-	9,873,512	-
2038	-	-	9,837,590	-
2039	-	-	9,791,981	-
2040	-	-	9,728,473	-
2041	-	-	9,656,583	-
2042	-	-	9,570,960	-

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:** 15.83

Certain Key Assumptions

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

Note: As required in Section 112.664(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)
2017	74,883,095	3,953,010	6,020,360	72,815,745
2018	72,815,745	3,828,160	6,425,662	70,218,243
2019	70,218,243	3,674,558	6,816,193	67,076,608
2020	67,076,608	3,495,015	7,061,762	63,509,861
2021	63,509,861	3,286,329	7,516,838	59,279,352
2022	59,279,352	3,047,401	7,744,128	54,582,625
2023	54,582,625	2,777,784	8,154,918	49,205,491
2024	49,205,491	2,475,912	8,377,805	43,303,598
2025	43,303,598	2,140,690	8,763,938	36,680,350
2026	36,680,350	1,769,228	9,025,146	29,424,432
2027	29,424,432	1,361,800	9,328,864	21,457,368
2028	21,457,368	918,651	9,509,239	12,866,780
2029	12,866,780	443,796	9,595,535	3,715,041
2030	3,715,041	-	9,736,399	-
2031	-	-	9,776,839	-
2032	-	-	9,819,484	-
2033	-	-	9,825,996	-
2034	-	-	9,878,921	-
2035	-	-	9,891,189	-
2036	-	-	9,892,611	-
2037	-	-	9,873,512	-
2038	-	-	9,837,590	-
2039	-	-	9,791,981	-
2040	-	-	9,728,473	-
2041	-	-	9,656,583	-
2042	-	-	9,570,960	-

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:** 13.33

Certain Key Assumptions

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

Note: As required in Section 112.664(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)
2017	74,883,095	6,827,927	6,020,360	75,690,662
2018	75,690,662	6,885,394	6,425,662	76,150,394
2019	76,150,394	6,910,518	6,816,193	76,244,719
2020	76,244,719	6,907,815	7,061,762	76,090,772
2021	76,090,772	6,871,574	7,516,838	75,445,508
2022	75,445,508	6,799,477	7,744,128	74,500,857
2023	74,500,857	6,690,223	8,154,918	73,036,162
2024	73,036,162	6,540,490	8,377,805	71,198,847
2025	71,198,847	6,347,603	8,763,938	68,782,512
2026	68,782,512	6,105,644	9,025,146	65,863,010
2027	65,863,010	5,813,865	9,328,864	62,348,011
2028	62,348,011	5,471,372	9,509,239	58,310,144
2029	58,310,144	5,083,676	9,595,535	53,798,285
2030	53,798,285	4,648,358	9,736,399	48,710,244
2031	48,710,244	4,163,073	9,776,839	43,096,478
2032	43,096,478	3,627,740	9,819,484	36,904,734
2033	36,904,734	3,039,215	9,825,996	30,117,953
2034	30,117,953	2,391,957	9,878,921	22,630,989
2035	22,630,989	1,680,112	9,891,189	14,419,912
2036	14,419,912	899,993	9,892,611	5,427,294
2037	5,427,294	46,601	9,873,512	-
2038	-	-	9,837,590	-
2039	-	-	9,791,981	-
2040	-	-	9,728,473	-
2041	-	-	9,656,583	-
2042	-	-	9,570,960	-

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:** 20.50

Certain Key Assumptions

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

Note: As required in Section 112.664(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, 2016	October 1, 2016	October 1, 2016	October 1, 2016
B. Actuarially Determined Contribution (ADC) to Be Paid During Fiscal Year Ending	9/30/2018	9/30/2018	9/30/2018	9/30/2018
C. Assumed Date(s) of Employer Contributions	10/1/2017	10/1/2017	10/1/2017	10/1/2017
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 3,598,572	\$ 3,598,572	\$ 4,789,395	\$ 2,405,535
E. Employer Normal Cost	2,394,174	2,394,174	4,459,461	1,188,136
F. Employer ADC if Paid on Valuation Date: D + E	5,992,746	5,992,746	9,248,856	3,593,671
G. Employer ADC Adjusted for Frequency of Payments	5,992,746	5,992,746	9,248,856	3,593,671
H. Employer ADC Adjusted for Frequency of Payments as % of Covered Payroll	56.09 %	56.09 %	86.56 %	33.63 %
I. Covered Payroll per Valuation	10,684,549	10,684,549	10,684,549	10,684,549
J. Assumed Rate of Increase in Covered Payroll to Contribution Year	2.74 %	2.74 %	2.74 %	2.74 %
K. Covered Payroll for Contribution Year	10,977,306	10,977,306	10,977,306	10,977,306
L. Employer ADC for Contribution Year: H x K	6,157,171	6,157,171	9,501,956	3,691,668
M. Estimated State Revenue in Contribution Year	781,954	781,954	781,954	781,954
N. Net Employer ADC in Contribution Year	5,375,217	5,375,217	8,720,002	2,909,714
O. Net Employer ADC as % of Covered Payroll in Contribution Year: N ÷ K	48.97 %	48.97 %	79.44 %	26.51 %
P. Expected Member Contribution	1,317,277	1,317,277	1,317,277	1,317,277
Q. Total Contribution (Including Members) in Contribution Year	7,474,448	7,474,448	10,819,233	5,008,945
R. Total Contribution as % of Covered Payroll in Contribution Year: Q ÷ K	68.09 %	68.09 %	98.56 %	45.63 %
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