

CITY OF DELRAY BEACH POLICE OFFICERS' RETIREMENT SYSTEM

Chapter 112.664, F.S. Compliance Report
In Connection with the October 1, 2017 Funding Actuarial
Valuation Report
And the Plan's Financial Reporting for the Year Ending
September 30, 2017



November 30, 2018

Board of Trustees
City of Delray Beach Police Officers Retirement System
Delray Beach, Florida

Dear Board Members:

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the City of Delray Beach Police Officers' Retirement System (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, 2017. 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, 2017 actuarial valuation report. This report is also based on the Plan Provisions, census data, and financial information as summarized in our October 1, 2017 actuarial valuation report. Please refer to the October 1, 2017 actuarial valuation report, dated September 25, 2018, 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.

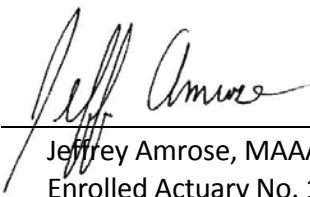
This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the Retirement Plan as of the valuation date. All calculations 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.

Jeffrey Amrose 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.

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 & COMPANY

By 
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Enrolled Actuary No. 17-6599
Senior Consultant & Actuary


By 
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Enrolled Actuary No. 17-8010
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TABLE OF CONTENTS

Title	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
Actuarially 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,	2017
1. Total pension liability	
a. Service Cost	\$ 2,257,858
b. Interest	10,166,078
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	3,864,146
e. Assumption Changes	-
f. Benefit Payments	(7,528,330)
g. Contribution Refunds	-
h. Net Change in Total Pension Liability	8,759,752
i. Total Pension Liability - Beginning	128,582,276
j. Total Pension Liability - Ending	\$ 137,342,028
 2. Plan Fiduciary Net Position	
a. Contributions - Employer and Non-Employer	\$ 5,162,290
b. Contributions - State	742,419
c. Contributions - Member	924,337
d. Net Investment Income	9,538,904
e. Benefit Payments	(7,528,330)
f. Contribution Refunds	-
g. Administrative Expense	(156,400)
h. Other	-
i. Net Change in Plan Fiduciary Net Position	8,683,220
j. Plan Fiduciary Net Position - Beginning	88,175,767
k. Plan Fiduciary Net Position - Ending	\$ 96,858,987
 3. Net Pension Liability / (Asset)	40,483,041
 Certain Key Assumptions	
Valuation Date	10/01/2016
Measurement Date	09/30/2017
Investment Return Assumption	8.00%
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,	<u>2017</u>
1. Total pension liability	
a. Service Cost	\$ 2,257,858
b. Interest	10,166,078
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	3,864,146
e. Assumption Changes	-
f. Benefit Payments	(7,528,330)
g. Contribution Refunds	-
h. Net Change in Total Pension Liability	<u>8,759,752</u>
i. Total Pension Liability - Beginning	<u>128,582,276</u>
j. Total Pension Liability - Ending	<u><u>\$ 137,342,028</u></u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer and Non-Employer	\$ 5,162,290
b. Contributions - State	742,419
c. Contributions - Member	924,337
d. Net Investment Income	9,538,904
e. Benefit Payments	(7,528,330)
f. Contribution Refunds	-
g. Administrative Expense	(156,400)
h. Other	-
i. Net Change in Plan Fiduciary Net Position	<u>8,683,220</u>
j. Plan Fiduciary Net Position - Beginning	<u>88,175,767</u>
k. Plan Fiduciary Net Position - Ending	<u><u>\$ 96,858,987</u></u>
3. Net Pension Liability / (Asset)	40,483,041
Certain Key Assumptions	
Valuation Date	10/01/2016
Measurement Date	09/30/2017
Investment Return Assumption	8.00%
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,	<u>2017</u>
1. Total pension liability	
a. Service Cost	\$ 3,505,838
b. Interest	9,911,516
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	-
e. Assumption Changes	-
f. Benefit Payments	(7,528,330)
g. Contribution Refunds	-
h. Net Change in Total Pension Liability	<u>5,889,024</u>
i. Total Pension Liability - Beginning	<u>165,450,267</u>
j. Total Pension Liability - Ending	<u>\$ 171,339,291</u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer and Non-Employer	\$ 5,162,290
b. Contributions - State	742,419
c. Contributions - Member	924,337
d. Net Investment Income	9,538,904
e. Benefit Payments	(7,528,330)
f. Contribution Refunds	-
g. Administrative Expense	(156,400)
h. Other	-
i. Net Change in Plan Fiduciary Net Position	<u>8,683,220</u>
j. Plan Fiduciary Net Position - Beginning	<u>88,175,767</u>
k. Plan Fiduciary Net Position - Ending	<u>\$ 96,858,987</u>
3. Net Pension Liability / (Asset)	74,480,304
Certain Key Assumptions	
Valuation Date	10/01/2016
Measurement Date	09/30/2017
Investment Return Assumption	6.00%
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,	<u>2017</u>
1. Total pension liability	
a. Service Cost	\$ 1,464,505
b. Interest	10,577,647
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	-
e. Assumption Changes	-
f. Benefit Payments	(7,528,330)
g. Contribution Refunds	-
h. Net Change in Total Pension Liability	<u>4,513,822</u>
i. Total Pension Liability - Beginning	<u>108,076,126</u>
j. Total Pension Liability - Ending	<u>\$ 112,589,948</u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer and Non-Employer	\$ 5,162,290
b. Contributions - State	742,419
c. Contributions - Member	924,337
d. Net Investment Income	9,538,904
e. Benefit Payments	(7,528,330)
f. Contribution Refunds	-
g. Administrative Expense	(156,400)
h. Other	-
i. Net Change in Plan Fiduciary Net Position	<u>8,683,220</u>
j. Plan Fiduciary Net Position - Beginning	<u>88,175,767</u>
k. Plan Fiduciary Net Position - Ending	<u>\$ 96,858,987</u>
3. Net Pension Liability / (Asset)	15,730,961
Certain Key Assumptions	
Valuation Date	10/01/2016
Measurement Date	09/30/2017
Investment Return Assumption	10.00%
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)
2018	87,750,269	6,090,229	7,494,212	86,346,286
2019	86,346,286	5,979,699	7,735,354	84,590,631
2020	84,590,631	5,840,137	8,074,038	82,356,730
2021	82,356,730	5,667,835	8,359,393	79,665,172
2022	79,665,172	5,461,382	8,671,533	76,455,021
2023	76,455,021	5,217,119	8,989,531	72,682,609
2024	72,682,609	4,935,529	9,212,702	68,405,436
2025	68,405,436	4,616,924	9,447,442	63,574,918
2026	63,574,918	4,256,645	9,725,144	58,106,419
2027	58,106,419	3,852,241	9,944,112	52,014,548
2028	52,014,548	3,403,121	10,149,906	45,267,763
2029	45,267,763	2,907,159	10,338,023	37,836,899
2030	37,836,899	2,365,155	10,428,139	29,773,915
2031	29,773,915	1,775,966	10,555,655	20,994,226
2032	20,994,226	1,138,797	10,573,357	11,559,666
2033	11,559,666	453,323	10,613,877	1,399,112
2034	1,399,112	-	10,599,579	-
2035	-	-	10,595,549	-
2036	-	-	10,570,003	-
2037	-	-	10,502,398	-
2038	-	-	10,428,740	-
2039	-	-	10,345,957	-
2040	-	-	10,257,216	-
2041	-	-	10,143,699	-
2042	-	-	10,010,116	-
2043	-	-	9,858,398	-

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: 16.17

Certain Key Assumptions

Valuation Investment Return Assumption 7.25%
 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)
2018	87,750,269	6,090,229	7,494,212	86,346,286
2019	86,346,286	5,979,699	7,735,354	84,590,631
2020	84,590,631	5,840,137	8,074,038	82,356,730
2021	82,356,730	5,667,835	8,359,393	79,665,172
2022	79,665,172	5,461,382	8,671,533	76,455,021
2023	76,455,021	5,217,119	8,989,531	72,682,609
2024	72,682,609	4,935,529	9,212,702	68,405,436
2025	68,405,436	4,616,924	9,447,442	63,574,918
2026	63,574,918	4,256,645	9,725,144	58,106,419
2027	58,106,419	3,852,241	9,944,112	52,014,548
2028	52,014,548	3,403,121	10,149,906	45,267,763
2029	45,267,763	2,907,159	10,338,023	37,836,899
2030	37,836,899	2,365,155	10,428,139	29,773,915
2031	29,773,915	1,775,966	10,555,655	20,994,226
2032	20,994,226	1,138,797	10,573,357	11,559,666
2033	11,559,666	453,323	10,613,877	1,399,112
2034	1,399,112	-	10,599,579	-
2035	-	-	10,595,549	-
2036	-	-	10,570,003	-
2037	-	-	10,502,398	-
2038	-	-	10,428,740	-
2039	-	-	10,345,957	-
2040	-	-	10,257,216	-
2041	-	-	10,143,699	-
2042	-	-	10,010,116	-
2043	-	-	9,858,398	-

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: 16.17

Certain Key Assumptions

Valuation Investment Return Assumption 7.25%
 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)
2018	87,750,269	4,410,166	7,494,212	84,666,223
2019	84,666,223	4,241,924	7,735,354	81,172,793
2020	81,172,793	4,049,628	8,074,038	77,148,383
2021	77,148,383	3,830,856	8,359,393	72,619,846
2022	72,619,846	3,584,914	8,671,533	67,533,227
2023	67,533,227	3,309,519	8,989,531	61,853,215
2024	61,853,215	3,005,460	9,212,702	55,645,973
2025	55,645,973	2,673,418	9,447,442	48,871,949
2026	48,871,949	2,310,492	9,725,144	41,457,297
2027	41,457,297	1,915,475	9,944,112	33,428,660
2028	33,428,660	1,488,570	10,149,906	24,767,324
2029	24,767,324	1,028,911	10,338,023	15,458,212
2030	15,458,212	537,817	10,428,139	5,567,890
2031	5,567,890	15,228	10,555,655	-
2032	-	-	10,573,357	-
2033	-	-	10,613,877	-
2034	-	-	10,599,579	-
2035	-	-	10,595,549	-
2036	-	-	10,570,003	-
2037	-	-	10,502,398	-
2038	-	-	10,428,740	-
2039	-	-	10,345,957	-
2040	-	-	10,257,216	-
2041	-	-	10,143,699	-
2042	-	-	10,010,116	-
2043	-	-	9,858,398	-

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: 13.50

Certain Key Assumptions

Valuation Investment Return Assumption 5.25%
 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)
2018	87,750,269	7,770,293	7,494,212	88,026,350
2019	88,026,350	7,784,677	7,735,354	88,075,673
2020	88,075,673	7,773,575	8,074,038	87,775,210
2021	87,775,210	7,732,585	8,359,393	87,148,402
2022	87,148,402	7,660,169	8,671,533	86,137,038
2023	86,137,038	7,551,910	8,989,531	84,699,417
2024	84,699,417	7,408,609	9,212,702	82,895,324
2025	82,895,324	7,230,873	9,447,442	80,678,755
2026	80,678,755	7,012,997	9,725,144	77,966,608
2027	77,966,608	6,751,996	9,944,112	74,774,492
2028	74,774,492	6,447,207	10,149,906	71,071,793
2029	71,071,793	6,096,007	10,338,023	66,829,777
2030	66,829,777	5,699,453	10,428,139	62,101,091
2031	62,101,091	5,256,152	10,555,655	56,801,588
2032	56,801,588	4,765,129	10,573,357	50,993,360
2033	50,993,360	4,225,994	10,613,877	44,605,477
2034	44,605,477	3,635,776	10,599,579	37,641,674
2035	37,641,674	2,991,811	10,595,549	30,037,936
2036	30,037,936	2,289,646	10,570,003	21,757,579
2037	21,757,579	1,526,840	10,502,398	12,782,021
2038	12,782,021	700,008	10,428,740	3,053,289
2039	3,053,289	-	10,345,957	-
2040	-	-	10,257,216	-
2041	-	-	10,143,699	-
2042	-	-	10,010,116	-
2043	-	-	9,858,398	-

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: 21.33

Certain Key Assumptions

Valuation Investment Return Assumption	9.25%
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, 2017	October 1, 2017	October 1, 2017	October 1, 2017
B. Actuarially Determined Contribution (ADC) to Be Paid During Fiscal Year Ending	9/30/2019	9/30/2019	9/30/2019	9/30/2019
C. Assumed Dates of Employer Contributions	Biweekly	Biweekly	Biweekly	Biweekly
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 4,646,622	\$ 4,646,622	\$ 6,991,677	\$ 2,609,652
E. Employer Normal Cost	1,803,364	1,803,364	3,472,533	867,761
F. ADC if Paid on Valuation Date: D + E	6,449,986	6,449,986	10,464,210	3,477,413
G. ADC Adjusted for Frequency of Payments	6,684,636	6,684,636	10,742,453	3,637,304
H. ADC as % of Covered Payroll	59.73 %	59.73 %	95.99 %	32.50 %
I. Assumed Rate of Increase in Covered Payroll to Contribution Year	5.67 %	5.67 %	5.67 %	5.67 %
J. Covered Payroll for Contribution Year	11,825,889	11,825,889	11,825,889	11,825,889
K. ADC for Contribution Year: H x J	7,063,603	7,063,603	11,351,671	3,843,414
L. Estimated Credit for State Revenue in Contribution Year	606,595	606,595	606,595	606,595
M. Required Employer Contribution (REC) in Contribution Year	6,457,008	6,457,008	10,745,076	3,236,819
N. REC as % of Covered Payroll in Contribution Year: M ÷ J	54.60 %	54.60 %	90.86 %	27.37 %
O. Expected Member Contributions	1,064,330	1,064,330	1,064,330	1,064,330
P. Total Contribution (Including Members) in Contribution Year	8,127,933	8,127,933	12,416,001	4,907,744
Q. Total Contribution as % of Covered Payroll in Contribution Year: P ÷ J	68.73 %	68.73 %	104.99 %	41.50 %
R. Certain Key Assumptions				
Investment Return Assumption	7.25 %	7.25 %	5.25 %	9.25 %
Mortality Table	FRS Mortality - Special Risk	FRS Mortality - Special Risk	FRS Mortality - Special Risk	FRS Mortality - Special Risk