

# CITY OF DELRAY BEACH POLICE OFFICERS' RETIREMENT SYSTEM

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



July 31, 2019

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, 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 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, 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 May 10, 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.

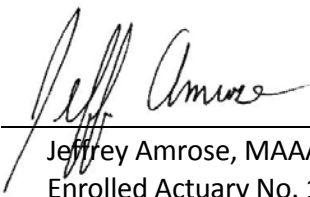
This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the Retirement Plan as of the valuation date. All calculations 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   
Jeffrey Amrose, MAAA  
Enrolled Actuary No. 17-6599  
Senior Consultant & Actuary

By   
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## **CH. 112.664, FLORIDA STATUTES**

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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,	<b>2018</b>
<b>1. Total pension liability</b>	
a. Service Cost	\$ 2,250,201
b. Interest	10,828,233
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	(1,601,389)
e. Assumption Changes	12,048,119
f. Benefit Payments	(8,361,173)
g. Contribution Refunds	(117,462)
<b>h. Net Change in Total Pension Liability</b>	15,046,529
<b>i. Total Pension Liability - Beginning</b>	137,342,028
<b>j. Total Pension Liability - Ending</b>	\$ 152,388,557
 <b>2. Plan Fiduciary Net Position</b>	
a. Contributions - Employer and Non-Employer	\$ 5,113,912
b. Contributions - State	786,320
c. Contributions - Member	1,126,780
d. Net Investment Income	7,424,945
e. Benefit Payments	(8,361,173)
f. Contribution Refunds	(117,462)
g. Administrative Expense	(108,929)
h. Other	(160,328) *
<b>i. Net Change in Plan Fiduciary Net Position</b>	5,704,065
<b>j. Plan Fiduciary Net Position - Beginning</b>	96,858,987
<b>k. Plan Fiduciary Net Position - Ending</b>	\$ 102,563,052
 <b>3. Net Pension Liability / (Asset)</b>	 49,825,505

**Certain Key Assumptions**

Valuation Date	10/01/2017
Measurement Date	09/30/2018
Investment Return Assumption	7.25%
Mortality Table	FRS Mortality - Special Risk

\* Due to Fire Pension fund for final settlement of the Legacy Fund split.

**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>2018</u>
<b>1. Total pension liability</b>	
a. Service Cost	\$ 2,250,201
b. Interest	10,828,233
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	(1,601,389)
e. Assumption Changes	12,048,119
f. Benefit Payments	(8,361,173)
g. Contribution Refunds	(117,462)
<b>h. Net Change in Total Pension Liability</b>	<u>15,046,529</u>
<b>i. Total Pension Liability - Beginning</b>	<u>137,342,028</u>
<b>j. Total Pension Liability - Ending</b>	<u>\$ 152,388,557</u>
<b>2. Plan Fiduciary Net Position</b>	
a. Contributions - Employer and Non-Employer	\$ 5,113,912
b. Contributions - State	786,320
c. Contributions - Member	1,126,780
d. Net Investment Income	7,424,945
e. Benefit Payments	(8,361,173)
f. Contribution Refunds	(117,462)
g. Administrative Expense	(108,929)
h. Other	(160,328) *
<b>i. Net Change in Plan Fiduciary Net Position</b>	<u>5,704,065</u>
<b>j. Plan Fiduciary Net Position - Beginning</b>	<u>96,858,987</u>
<b>k. Plan Fiduciary Net Position - Ending</b>	<u>\$ 102,563,052</u>
<b>3. Net Pension Liability / (Asset)</b>	49,825,505

**Certain Key Assumptions**

Valuation Date	10/01/2017
Measurement Date	09/30/2018
Investment Return Assumption	7.25%
Mortality Table	FRS Mortality - Special Risk

\* Due to Fire Pension fund for final settlement of the Legacy Fund split.

**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>2018</u>
<b>1. Total pension liability</b>	
a. Service Cost	\$ 4,323,354
b. Interest	9,900,178
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	-
e. Assumption Changes	-
f. Benefit Payments	(8,361,173)
g. Contribution Refunds	(117,462)
<b>h. Net Change in Total Pension Liability</b>	<u>5,744,897</u>
<b>i. Total Pension Liability - Beginning</b>	<u>188,490,784</u>
<b>j. Total Pension Liability - Ending</b>	<u>\$ 194,235,681</u>
<b>2. Plan Fiduciary Net Position</b>	
a. Contributions - Employer and Non-Employer	\$ 5,113,912
b. Contributions - State	786,320
c. Contributions - Member	1,126,780
d. Net Investment Income	7,424,945
e. Benefit Payments	(8,361,173)
f. Contribution Refunds	(117,462)
g. Administrative Expense	(108,929)
h. Other	(160,328) *
<b>i. Net Change in Plan Fiduciary Net Position</b>	<u>5,704,065</u>
<b>j. Plan Fiduciary Net Position - Beginning</b>	<u>96,858,987</u>
<b>k. Plan Fiduciary Net Position - Ending</b>	<u>\$ 102,563,052</u>
<b>3. Net Pension Liability / (Asset)</b>	91,672,629
<b>Certain Key Assumptions</b>	
Valuation Date	10/01/2017
Measurement Date	09/30/2018
Investment Return Assumption	5.25%
Mortality Table	FRS Mortality - Special Risk

\* Due to Fire Pension fund for final settlement of the Legacy Fund split.



**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>2018</u>
<b>1. Total pension liability</b>	
a. Service Cost	\$ 1,718,582
b. Interest	10,856,673
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	-
e. Assumption Changes	-
f. Benefit Payments	(8,361,173)
g. Contribution Refunds	(117,462)
<b>h. Net Change in Total Pension Liability</b>	<u>4,096,620</u>
<b>i. Total Pension Liability - Beginning</b>	<u>119,890,171</u>
<b>j. Total Pension Liability - Ending</b>	<u><u>\$ 123,986,791</u></u>
<b>2. Plan Fiduciary Net Position</b>	
a. Contributions - Employer and Non-Employer	\$ 5,113,912
b. Contributions - State	786,320
c. Contributions - Member	1,126,780
d. Net Investment Income	7,424,945
e. Benefit Payments	(8,361,173)
f. Contribution Refunds	(117,462)
g. Administrative Expense	(108,929)
h. Other	(160,328) *
<b>i. Net Change in Plan Fiduciary Net Position</b>	<u>5,704,065</u>
<b>j. Plan Fiduciary Net Position - Beginning</b>	<u>96,858,987</u>
<b>k. Plan Fiduciary Net Position - Ending</b>	<u><u>\$ 102,563,052</u></u>
<b>3. Net Pension Liability / (Asset)</b>	21,423,739

**Certain Key Assumptions**

Valuation Date	10/01/2017
Measurement Date	09/30/2018
Investment Return Assumption	9.25%
Mortality Table	FRS Mortality - Special Risk

\* Due to Fire Pension fund for final settlement of the Legacy Fund split.

**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	94,110,114	6,308,172	7,986,754	92,431,532
2020	92,431,532	6,178,544	8,333,232	90,276,844
2021	90,276,844	6,019,155	8,577,822	87,718,177
2022	87,718,177	5,828,666	8,903,051	84,643,792
2023	84,643,792	5,602,998	9,201,915	81,044,875
2024	81,044,875	5,341,991	9,461,448	76,925,418
2025	76,925,418	5,043,376	9,754,377	72,214,417
2026	72,214,417	4,703,116	10,054,086	66,863,447
2027	66,863,447	4,320,328	10,288,946	60,894,829
2028	60,894,829	3,894,739	10,511,389	54,278,179
2029	54,278,179	3,423,957	10,729,015	46,973,121
2030	46,973,121	2,908,524	10,845,569	39,036,076
2031	39,036,076	2,347,048	11,013,634	30,369,490
2032	30,369,490	1,738,897	11,056,216	21,052,171
2033	21,052,171	1,084,460	11,119,757	11,016,874
2034	11,016,874	382,038	11,118,370	280,542
2035	280,542	-	11,129,910	-
2036	-	-	11,121,241	-
2037	-	-	11,062,547	-
2038	-	-	10,998,996	-
2039	-	-	10,923,177	-
2040	-	-	10,841,940	-
2041	-	-	10,734,259	-
2042	-	-	10,611,510	-
2043	-	-	10,468,620	-
2044	-	-	10,305,124	-

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: 16.00

**Certain Key Assumptions**

Valuation Investment Return Assumption 7.00%  
 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	94,110,114	6,308,172	7,986,754	92,431,532
2020	92,431,532	6,178,544	8,333,232	90,276,844
2021	90,276,844	6,019,155	8,577,822	87,718,177
2022	87,718,177	5,828,666	8,903,051	84,643,792
2023	84,643,792	5,602,998	9,201,915	81,044,875
2024	81,044,875	5,341,991	9,461,448	76,925,418
2025	76,925,418	5,043,376	9,754,377	72,214,417
2026	72,214,417	4,703,116	10,054,086	66,863,447
2027	66,863,447	4,320,328	10,288,946	60,894,829
2028	60,894,829	3,894,739	10,511,389	54,278,179
2029	54,278,179	3,423,957	10,729,015	46,973,121
2030	46,973,121	2,908,524	10,845,569	39,036,076
2031	39,036,076	2,347,048	11,013,634	30,369,490
2032	30,369,490	1,738,897	11,056,216	21,052,171
2033	21,052,171	1,084,460	11,119,757	11,016,874
2034	11,016,874	382,038	11,118,370	280,542
2035	280,542	-	11,129,910	-
2036	-	-	11,121,241	-
2037	-	-	11,062,547	-
2038	-	-	10,998,996	-
2039	-	-	10,923,177	-
2040	-	-	10,841,940	-
2041	-	-	10,734,259	-
2042	-	-	10,611,510	-
2043	-	-	10,468,620	-
2044	-	-	10,305,124	-

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: 16.00

**Certain Key Assumptions**

Valuation Investment Return Assumption 7.00%  
 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	94,110,114	4,505,837	7,986,754	90,629,197
2020	90,629,197	4,323,129	8,333,232	86,619,094
2021	86,619,094	4,116,509	8,577,822	82,157,781
2022	82,157,781	3,885,313	8,903,051	77,140,043
2023	77,140,043	3,626,954	9,201,915	71,565,082
2024	71,565,082	3,341,718	9,461,448	65,445,352
2025	65,445,352	3,028,408	9,754,377	58,719,383
2026	58,719,383	2,684,617	10,054,086	51,349,914
2027	51,349,914	2,310,272	10,288,946	43,371,240
2028	43,371,240	1,905,777	10,511,389	34,765,628
2029	34,765,628	1,470,056	10,729,015	25,506,669
2030	25,506,669	1,004,194	10,845,569	15,665,294
2031	15,665,294	507,924	11,013,634	5,159,584
2032	5,159,584	-	11,056,216	-
2033	-	-	11,119,757	-
2034	-	-	11,118,370	-
2035	-	-	11,129,910	-
2036	-	-	11,121,241	-
2037	-	-	11,062,547	-
2038	-	-	10,998,996	-
2039	-	-	10,923,177	-
2040	-	-	10,841,940	-
2041	-	-	10,734,259	-
2042	-	-	10,611,510	-
2043	-	-	10,468,620	-
2044	-	-	10,305,124	-

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 5.00%  
 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	94,110,114	8,110,506	7,986,754	94,233,866
2020	94,233,866	8,106,053	8,333,232	94,006,687
2021	94,006,687	8,074,600	8,577,822	93,503,465
2022	93,503,465	8,014,675	8,903,051	92,615,089
2023	92,615,089	7,921,272	9,201,915	91,334,446
2024	91,334,446	7,794,335	9,461,448	89,667,333
2025	89,667,333	7,631,113	9,754,377	87,544,069
2026	87,544,069	7,426,532	10,054,086	84,916,515
2027	84,916,515	7,179,484	10,288,946	81,807,053
2028	81,807,053	6,889,622	10,511,389	78,185,286
2029	78,185,286	6,553,870	10,729,015	74,010,141
2030	74,010,141	6,172,862	10,845,569	69,337,434
2031	69,337,434	5,744,756	11,013,634	64,068,556
2032	64,068,556	5,268,640	11,056,216	58,280,980
2033	58,280,980	4,744,899	11,119,757	51,906,122
2034	51,906,122	4,171,224	11,118,370	44,958,976
2035	44,958,976	3,545,462	11,129,910	37,374,528
2036	37,374,528	2,863,252	11,121,241	29,116,539
2037	29,116,539	2,122,674	11,062,547	20,176,666
2038	20,176,666	1,320,945	10,998,996	10,498,615
2039	10,498,615	453,332	10,923,177	28,770
2040	28,770	-	10,841,940	-
2041	-	-	10,734,259	-
2042	-	-	10,611,510	-
2043	-	-	10,468,620	-
2044	-	-	10,305,124	-

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:** 21.00

**Certain Key Assumptions**

Valuation Investment Return Assumption	9.00%
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 Dates of Employer Contributions	Biweekly	Biweekly	Biweekly	Biweekly
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 5,222,519	\$ 5,222,519	\$ 7,786,506	\$ 3,047,136
E. Employer Normal Cost	1,897,283	1,897,283	3,712,770	889,753
F. ADC if Paid on Valuation Date: D + E	7,119,802	7,119,802	11,499,276	3,936,889
G. ADC Adjusted for Frequency of Payments	7,370,134	7,370,134	11,790,783	4,113,222
H. ADC as % of Covered Payroll	64.37 %	64.37 %	102.98 %	35.93 %
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	12,098,342	12,098,342	12,098,342	12,098,342
K. ADC for Contribution Year: H x J	7,787,703	7,787,703	12,458,873	4,346,934
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	7,181,108	7,181,108	11,852,278	3,740,339
N. REC as % of Covered Payroll in Contribution Year: M ÷ J	59.36 %	59.36 %	97.97 %	30.92 %
O. Expected Member Contributions	1,088,851	1,088,851	1,088,851	1,088,851
P. Total Contribution (Including Members) in Contribution Year	8,876,554	8,876,554	13,547,724	5,435,785
Q. Total Contribution as % of Covered Payroll in Contribution Year: P ÷ J	73.37 %	73.37 %	111.98 %	44.93 %
R. Certain Key Assumptions				
Investment Return Assumption	7.00 %	7.00 %	5.00 %	9.00 %
Mortality Table	FRS Mortality - Special Risk	FRS Mortality - Special Risk	FRS Mortality - Special Risk	FRS Mortality - Special Risk