

CITY OF PLANTATION 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





June 3, 2019

Board of Trustees
City of Plantation Police Officers' Retirement System
Plantation, Florida

Dear Board Members:

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the City of Plantation 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 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 18, 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.

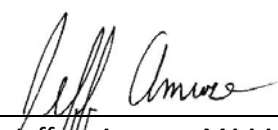
The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. The signing actuaries are independent of the plan sponsor.

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

By 
Trisha Amrose, MAAA
Enrolled Actuary No. 17-8010
Consultant & Actuary

TABLE OF CONTENTS

<u>Title</u>	<u>Page</u>
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,	<u>2018</u>
1. Total pension liability	
a. Service Cost	\$ 2,973,682
b. Interest	12,864,078
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	2,235,073
e. Assumption Changes	935,084
f. Benefit Payments	(7,697,900)
g. Contribution Refunds	(64,710)
h. Other (Increase in State Reserve)	-
i. Net Change in Total Pension Liability	<u>11,245,307</u>
j. Total Pension Liability - Beginning	<u>186,002,267</u>
k. Total Pension Liability - Ending	<u>\$ 197,247,574</u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer	\$ 5,589,768
b. Contributions - Non-Employer Contributing Entity	859,727
c. Contributions - Member	871,611
d. Net Investment Income	15,296,284
e. Benefit Payments	(7,697,900)
f. Contribution Refunds	(64,710)
g. Administrative Expense	(207,062)
h. Other	-
i. Net Change in Plan Fiduciary Net Position	<u>14,647,718</u>
j. Plan Fiduciary Net Position - Beginning	<u>151,644,038</u>
k. Plan Fiduciary Net Position - Ending	<u>\$ 166,291,756</u>
3. Net Pension Liability / (Asset)	30,955,818
Certain Key Assumptions	
Valuation Date	10/01/2017
Measurement Date	09/30/2018
Investment Return Assumption	6.90%
Mortality Table	FRS Mortality Rates from 7/1/16 FRS Valuation

**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>
1. Total pension liability	
a. Service Cost	\$ 2,973,682
b. Interest	12,864,078
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	2,235,073
e. Assumption Changes	935,084
f. Benefit Payments	(7,697,900)
g. Contribution Refunds	(64,710)
h. Other (Increase in State Reserve)	-
i. Net Change in Total Pension Liability	<u>11,245,307</u>
j. Total Pension Liability - Beginning	<u>186,002,267</u>
k. Total Pension Liability - Ending	<u>\$ 197,247,574</u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer	\$ 5,589,768
b. Contributions - Non-Employer Contributing Entity	859,727
c. Contributions - Member	871,611
d. Net Investment Income	15,296,284
e. Benefit Payments	(7,697,900)
f. Contribution Refunds	(64,710)
g. Administrative Expense	(207,062)
h. Other	-
i. Net Change in Plan Fiduciary Net Position	<u>14,647,718</u>
j. Plan Fiduciary Net Position - Beginning	<u>151,644,038</u>
k. Plan Fiduciary Net Position - Ending	<u>\$ 166,291,756</u>
3. Net Pension Liability / (Asset)	30,955,818
Certain Key Assumptions	
Valuation Date	10/01/2017
Measurement Date	09/30/2018
Investment Return Assumption	6.90%
Mortality Table	FRS Mortality Rates from 7/1/16 FRS Valuation

**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>
1. Total pension liability	
a. Service Cost	\$ 4,691,328
b. Interest	11,555,671
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	-
e. Assumption Changes	-
f. Benefit Payments	(7,697,900)
g. Contribution Refunds	(64,710)
h. Other (Increase in State Reserve)	-
i. Net Change in Total Pension Liability	<u>8,484,389</u>
j. Total Pension Liability - Beginning	<u>235,019,993</u>
k. Total Pension Liability - Ending	<u>\$ 243,504,382</u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer	\$ 5,589,768
b. Contributions - Non-Employer Contributing Entity	859,727
c. Contributions - Member	871,611
d. Net Investment Income	15,296,284
e. Benefit Payments	(7,697,900)
f. Contribution Refunds	(64,710)
g. Administrative Expense	(207,062)
h. Other	-
i. Net Change in Plan Fiduciary Net Position	<u>14,647,718</u>
j. Plan Fiduciary Net Position - Beginning	<u>151,644,038</u>
k. Plan Fiduciary Net Position - Ending	<u>\$ 166,291,756</u>
3. Net Pension Liability / (Asset)	77,212,626
Certain Key Assumptions	
Valuation Date	10/01/2017
Measurement Date	09/30/2018
Investment Return Assumption	4.90%
Mortality Table	FRS Mortality Rates from 7/1/16 FRS Valuation

**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>
1. Total pension liability	
a. Service Cost	\$ 2,007,990
b. Interest	13,873,291
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	-
e. Assumption Changes	-
f. Benefit Payments	(7,697,900)
g. Contribution Refunds	(64,710)
h. Other (Increase in State Reserve)	-
i. Net Change in Total Pension Liability	<u>8,118,671</u>
j. Total Pension Liability - Beginning	<u>157,752,985</u>
k. Total Pension Liability - Ending	<u>\$ 165,871,656</u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer	\$ 5,589,768
b. Contributions - Non-Employer Contributing Entity	859,727
c. Contributions - Member	871,611
d. Net Investment Income	15,296,284
e. Benefit Payments	(7,697,900)
f. Contribution Refunds	(64,710)
g. Administrative Expense	(207,062)
h. Other	-
i. Net Change in Plan Fiduciary Net Position	<u>14,647,718</u>
j. Plan Fiduciary Net Position - Beginning	<u>151,644,038</u>
k. Plan Fiduciary Net Position - Ending	<u>\$ 166,291,756</u>
3. Net Pension Liability / (Asset)	(420,100)
Certain Key Assumptions	
Valuation Date	10/01/2017
Measurement Date	09/30/2018
Investment Return Assumption	8.90%
Mortality Table	FRS Mortality Rates from 7/1/16 FRS Valuation

Asset and Benefit Payment Projection
Not Reflecting Any Contributions from the Employer, State or Employee
Using Assumptions From the Latest Actuarial Valuation

FYE	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2019	138,288,626	9,129,345	10,027,037	137,390,934
2020	137,390,934	9,052,507	10,475,107	135,968,334
2021	135,968,334	8,943,293	10,818,624	134,093,003
2022	134,093,003	8,799,935	11,253,608	131,639,330
2023	131,639,330	8,620,311	11,590,740	128,668,901
2024	128,668,901	8,409,315	11,810,353	125,267,863
2025	125,267,863	8,167,841	12,058,616	121,377,088
2026	121,377,088	7,895,400	12,231,535	117,040,953
2027	117,040,953	7,594,706	12,338,656	112,297,003
2028	112,297,003	7,265,368	12,466,459	107,095,912
2029	107,095,912	6,908,149	12,494,029	101,510,032
2030	101,510,032	6,522,941	12,569,221	95,463,752
2031	95,463,752	6,104,897	12,682,350	88,886,299
2032	88,886,299	5,646,898	12,899,663	81,633,534
2033	81,633,534	5,148,153	12,956,033	73,825,654
2034	73,825,654	4,613,929	12,938,063	65,501,520
2035	65,501,520	4,044,470	12,916,339	56,629,651
2036	56,629,651	3,437,711	12,888,175	47,179,187
2037	47,179,187	2,793,335	12,801,162	37,171,360
2038	37,171,360	2,111,746	12,685,894	26,597,212
2039	26,597,212	1,390,802	12,587,056	15,400,958
2040	15,400,958	627,434	12,482,662	3,545,730
2041	3,545,730	-	12,306,916	-
2042	-	-	12,118,782	-
2043	-	-	11,897,330	-
2044	-	-	11,645,484	-

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:**

22.25

Certain Key Assumptions

Valuation Investment return assumption

6.85%

Valuation Mortality Table

FRS Mortality Rates

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	138,288,626	9,129,345	10,027,037	137,390,934
2020	137,390,934	9,052,507	10,475,107	135,968,334
2021	135,968,334	8,943,293	10,818,624	134,093,003
2022	134,093,003	8,799,935	11,253,608	131,639,330
2023	131,639,330	8,620,311	11,590,740	128,668,901
2024	128,668,901	8,409,315	11,810,353	125,267,863
2025	125,267,863	8,167,841	12,058,616	121,377,088
2026	121,377,088	7,895,400	12,231,535	117,040,953
2027	117,040,953	7,594,706	12,338,656	112,297,003
2028	112,297,003	7,265,368	12,466,459	107,095,912
2029	107,095,912	6,908,149	12,494,029	101,510,032
2030	101,510,032	6,522,941	12,569,221	95,463,752
2031	95,463,752	6,104,897	12,682,350	88,886,299
2032	88,886,299	5,646,898	12,899,663	81,633,534
2033	81,633,534	5,148,153	12,956,033	73,825,654
2034	73,825,654	4,613,929	12,938,063	65,501,520
2035	65,501,520	4,044,470	12,916,339	56,629,651
2036	56,629,651	3,437,711	12,888,175	47,179,187
2037	47,179,187	2,793,335	12,801,162	37,171,360
2038	37,171,360	2,111,746	12,685,894	26,597,212
2039	26,597,212	1,390,802	12,587,056	15,400,958
2040	15,400,958	627,434	12,482,662	3,545,730
2041	3,545,730	-	12,306,916	-
2042	-	-	12,118,782	-
2043	-	-	11,897,330	-
2044	-	-	11,645,484	-

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: 22.25

Certain Key Assumptions

Valuation Investment return assumption 6.85%
 Valuation Mortality Table FRS Mortality Rates

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	138,288,626	6,463,843	10,027,037	134,725,432
2020	134,725,432	6,280,162	10,475,107	130,530,487
2021	130,530,487	6,068,377	10,818,624	125,780,240
2022	125,780,240	5,827,442	11,253,608	120,354,074
2023	120,354,074	5,556,097	11,590,740	114,319,431
2024	114,319,431	5,258,091	11,810,353	107,767,169
2025	107,767,169	4,934,286	12,058,616	100,642,839
2026	100,642,839	4,584,563	12,231,535	92,995,867
2027	92,995,867	4,211,087	12,338,656	84,868,298
2028	84,868,298	3,813,801	12,466,459	76,215,640
2029	76,215,640	3,393,478	12,494,029	67,115,089
2030	67,115,089	2,950,278	12,569,221	57,496,146
2031	57,496,146	2,481,016	12,682,350	47,294,812
2032	47,294,812	1,980,982	12,899,663	36,376,131
2033	36,376,131	1,450,059	12,956,033	24,870,157
2034	24,870,157	892,455	12,938,063	12,824,549
2035	12,824,549	308,769	12,916,339	216,979
2036	216,979	-	12,888,175	-
2037	-	-	12,801,162	-
2038	-	-	12,685,894	-
2039	-	-	12,587,056	-
2040	-	-	12,482,662	-
2041	-	-	12,306,916	-
2042	-	-	12,118,782	-
2043	-	-	11,897,330	-
2044	-	-	11,645,484	-

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: 17.00

Certain Key Assumptions

Valuation Investment return assumption 4.85%
 Valuation Mortality Table FRS Mortality Rates

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	138,288,626	11,794,847	10,027,037	140,056,436
2020	140,056,436	11,931,471	10,475,107	141,512,800
2021	141,512,800	12,045,159	10,818,624	142,739,335
2022	142,739,335	12,134,459	11,253,608	143,620,186
2023	143,620,186	12,197,496	11,590,740	144,226,942
2024	144,226,942	12,241,476	11,810,353	144,658,065
2025	144,658,065	12,268,645	12,058,616	144,868,094
2026	144,868,094	12,279,581	12,231,535	144,916,140
2027	144,916,140	12,279,093	12,338,656	144,856,577
2028	144,856,577	12,268,166	12,466,459	144,658,284
2029	144,658,284	12,249,397	12,494,029	144,413,652
2030	144,413,652	12,224,420	12,569,221	144,068,851
2031	144,068,851	12,188,899	12,682,350	143,575,400
2032	143,575,400	12,135,613	12,899,663	142,811,350
2033	142,811,350	12,065,500	12,956,033	141,920,817
2034	141,920,817	11,987,483	12,938,063	140,970,237
2035	140,970,237	11,904,318	12,916,339	139,958,216
2036	139,958,216	11,816,000	12,888,175	138,886,041
2037	138,886,041	11,724,963	12,801,162	137,809,842
2038	137,809,842	11,634,820	12,685,894	136,758,768
2039	136,758,768	11,546,174	12,587,056	135,717,886
2040	135,717,886	11,458,675	12,482,662	134,693,899
2041	134,693,899	11,375,829	12,306,916	133,762,812
2042	133,762,812	11,301,753	12,118,782	132,945,783
2043	132,945,783	11,239,245	11,897,330	132,287,698
2044	132,287,698	11,192,149	11,645,484	131,834,363

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:**

25+

Certain Key Assumptions

Valuation Investment return assumption

8.85%

Valuation Mortality Table

FRS Mortality Rates

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

	Plans 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	Quarterly	Quarterly	Quarterly	Quarterly
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 3,978,097	\$ 3,978,097	\$ 6,390,456	\$ 1,630,340
E. Employer Normal Cost	2,403,987	2,403,987	4,148,707	1,372,581
F. ADC if Paid on Valuation Date: D + E	6,382,084	6,382,084	10,539,163	3,002,921
G. ADC Adjusted for Frequency of Payments	6,648,472	6,648,472	10,852,914	3,163,697
H. ADC Adjusted for Frequency of Payments as % of Covered Payroll	65.57 %	65.57 %	107.04 %	31.20 %
I. Assumed Rate of Increase in Covered Payroll to Contribution Year	4.00 %	4.00 %	4.00 %	4.00 %
J. Covered Payroll for Contribution Year	10,544,997	10,544,997	10,544,997	10,544,997
K. ADC for Contribution Year: H x J	6,914,355	6,914,355	11,287,365	3,290,039
L. Allowable Credit for State Revenue in Contribution Year	859,727	859,727	859,727	859,727
M. Employer ADC in Contribution Year	6,054,628	6,054,628	10,427,638	2,430,312
N. Employer ADC as % of Covered Payroll in Contribution Year: M ÷ J	57.42 %	57.42 %	98.89 %	23.05 %
O. Expected Member Contributions	932,736	932,736	932,736	932,736
P. Total Contribution (including Members) in Contributing Year	7,847,091	7,847,091	12,220,101	4,222,775
Q. Total Contribution as a % of covered payroll in Contribution Year: P ÷ J	74.42 %	74.42 %	115.89 %	40.05 %
R. Certain Key Assumptions				
Investment Return Assumption	6.85%	6.85%	4.85%	8.85%
Mortality Table	FRS Mortality	FRS Mortality	FRS Mortality	FRS Mortality