City of Plantation General Employees Retirement System

Chapter 112.664, FS 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





May 3, 2019

Board of Trustees City of Plantation General Employees' Retirement Plan Plantation, Florida

Dear Board Members:

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the City of Plantation General Employees' Retirement Plan (Plan) 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 System 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 concerning Retirement 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 Plan.

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 January 11, 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.

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.

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 completed 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

ву ___

Jeffrey/Amrose, MAAA

Enrolled Actuary No. 17-6599

Trisha Amrose, MAAA

Enrolled Actuary No. 17-8010



TABLE OF CONTENTS

<u>Title</u>		<u>Page</u>
Ch. 11	2.664, F.S. Results	
Schedi	ule 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
Actuar	ially Determined Contribution	9



CHAPTER 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,		2018	
1. Total pension liability			
a. Service Cost	\$	4,108,680	
b. Interest		14,628,265	
c. Benefit Changes		-	
d. Difference between actual & expected experience & Other		3,762,505	
e. Assumption Changes		-	
f. Benefit Payments		(11,424,478)	
g. Contribution Refunds		(56,152)	
h. Net Change in Total Pension Liability		11,018,820	
i. Total Pension Liability - Beginning		196,675,167	
j. Total Pension Liability - Ending	\$	207,693,987	
2 Dian Fiducian Not Position			
2. Plan Fiduciary Net Position	\$	6 60E 226	
a. Contributions - Employer b. Contributions - State	Ş	6,695,326	
c. Contributions - Member		1,906,695	
d. Net Investment Income		15,659,746	
e. Benefit Payments		(11,424,478)	
f. Contribution Refunds		(56,152)	
g. Administrative Expense		(153,444)	
h. Other		(133,444)	
i. Net Change in Plan Fiduciary Net Position		12,627,693	
j. Plan Fiduciary Net Position - Beginning		162,438,800	
k. Plan Fiduciary Net Position - Ending	\$	175,066,493	
arran radialy rectrosides. Ending	<u> </u>	173,000,133	
3. Net Pension Liability / (Asset)		32,627,494	
Certain Key Assumptions			
Valuation Date		10/01/2017	
Measurement Date		09/30/2018	
Investment Return Assumption		7.50%	
Mortality Table	FRS Mort	ality Rates from	
	7/1/1	.6 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,		2018	
1. Total pension liability			
a. Service Cost	\$	4,108,680	
b. Interest		14,628,265	
c. Benefit Changes		-	
d. Difference between actual & expected experience & Other		3,762,505	
e. Assumption Changes		-	
f. Benefit Payments		(11,424,478)	
g. Contribution Refunds		(56,152)	
h. Net Change in Total Pension Liability		11,018,820	
i. Total Pension Liability - Beginning		196,675,167	
j. Total Pension Liability - Ending	\$	207,693,987	
2. Plan Fiduciary Net Position			
a. Contributions - Employer	\$	6,695,326	
b. Contributions - State		-	
c. Contributions - Member		1,906,695	
d. Net Investment Income		15,659,746	
e. Benefit Payments		(11,424,478)	
f. Contribution Refunds		(56,152)	
g. Administrative Expense		(153,444)	
h. Other			
i. Net Change in Plan Fiduciary Net Position		12,627,693	
j. Plan Fiduciary Net Position - Beginning		162,438,800	
k. Plan Fiduciary Net Position - Ending	\$	175,066,493	
3. Net Pension Liability / (Asset)		32,627,494	
Certain Key Assumptions			
Valuation Date		10/01/2017	
Measurement Date		09/30/2018	
Investment Return Assumption		7.50%	
Mortality Table FRS	S Morta	ality Rates from	
	7/1/1	6 FRS Valuation	



Schedule of Changes in the Employers' Net Pension Liability Using Assumptions under 112.664(1)(b), F.S. except 2% lower investment return assumption

Fiscal year ending September 30,		2018		
1. Total pension liability				
a. Service Cost	\$	6,280,783		
b. Interest		13,733,338		
c. Benefit Changes		-		
d. Difference between actual & expected experience & Other		-		
e. Assumption Changes		-		
f. Benefit Payments		(11,424,478)		
g. Contribution Refunds		(56,152)		
h. Net Change in Total Pension Liability		8,533,491		
i. Total Pension Liability - Beginning		249,156,582		
j. Total Pension Liability - Ending	\$	257,690,073		
2. Plan Fiduciary Net Position				
a. Contributions - Employer	\$	6,695,326		
b. Contributions - State	Y	0,033,320		
c. Contributions - Member		1,906,695		
d. Net Investment Income		15,659,746		
e. Benefit Payments		(11,424,478)		
f. Contribution Refunds		(56,152)		
g. Administrative Expense		(153,444)		
h. Other		-		
i. Net Change in Plan Fiduciary Net Position		12,627,693		
j. Plan Fiduciary Net Position - Beginning		162,438,800		
k. Plan Fiduciary Net Position - Ending	\$	175,066,493		
	-			
3. Net Pension Liability / (Asset)		82,623,580		
Certain Key Assumptions				
Valuation Date		10/01/2017		
Measurement Date		09/30/2018		
Investment Return Assumption		5.50%		
Mortality Table	FRS Mort	ality 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,		2018	
1. Total pension liability		_	
a. Service Cost	\$	2,823,092	
b. Interest		15,452,538	
c. Benefit Changes		-	
d. Difference between actual & expected experience & Other		-	
e. Assumption Changes		-	
f. Benefit Payments		(11,424,478)	
g. Contribution Refunds		(56,152)	
h. Net Change in Total Pension Liability		6,795,000	
i. Total Pension Liability - Beginning		165,575,516	
j. Total Pension Liability - Ending	\$	172,370,516	
2. Blan Fiducians Not Basitian			
2. Plan Fiduciary Net Position a. Contributions - Employer	\$	6 60E 226	
b. Contributions - Employer	Ş	6,695,326	
c. Contributions - State		1,906,695	
d. Net Investment Income		15,659,746	
e. Benefit Payments		(11,424,478)	
f. Contribution Refunds		• • • • • • • • • • • • • • • • • • • •	
		(56,152)	
g. Administrative Expense h. Other		(153,444)	
	-	12 627 602	
i. Net Change in Plan Fiduciary Net Position		12,627,693	
j. Plan Fiduciary Net Position - Beginning	\$	162,438,800	
k. Plan Fiduciary Net Position - Ending	\$	175,066,493	
3. Net Pension Liability / (Asset)		(2,695,977)	
Certain Key Assumptions			
Valuation Date		10/01/2017	
Measurement Date		09/30/2018	
Investment Return Assumption		9.50%	
Mortality Table	FRS Mort	ality Rates from	
	7/1/2	L6 FRS Valuation	



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

	Market Value of	Expected	Projected Benefit	Market Value of
FYE	Assets (BOY)	Investment Return	Payments	Assets (EOY)
2019	166,960,563	12,079,668	11,796,656	167,243,575
2020	167,243,575	12,073,774	12,519,845	166,797,504
2021	166,797,504	12,018,539	13,100,642	165,715,401
2022	165,715,401	11,916,210	13,665,194	163,966,417
2023	163,966,417	11,766,504	14,159,382	161,573,539
2024	161,573,539	11,569,088	14,638,066	158,504,561
2025	158,504,561	11,325,203	15,003,696	154,826,068
2026	154,826,068	11,041,420	15,214,263	150,653,225
2027	150,653,225	10,721,223	15,407,173	145,967,275
2028	145,967,275	10,364,634	15,544,312	140,787,597
2029	140,787,597	9,972,110	15,652,252	135,107,455
2030	135,107,455	9,546,014	15,654,533	128,998,936
2031	128,998,936	9,088,301	15,643,191	122,444,046
2032	122,444,046	8,600,855	15,531,955	115,512,946
2033	115,512,946	8,085,325	15,417,234	108,181,037
2034	108,181,037	7,539,359	15,312,501	100,407,895
2035	100,407,895	6,962,356	15,152,970	92,217,281
2036	92,217,281	6,353,567	15,006,114	83,564,734
2037	83,564,734	5,713,215	14,777,080	74,500,869
2038	74,500,869	5,042,857	14,525,543	65,018,183
2039	65,018,183	4,342,419	14,238,533	55,122,069
2040	55,122,069	3,613,041	13,896,378	44,838,732
2041	44,838,732	2,855,008	13,543,921	34,149,819
2042	34,149,819	2,067,407	13,168,793	23,048,433
2043	23,048,433	1,249,995	12,763,671	11,534,757
2044	11,534,757	402,708	12,330,621	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits, <u>reflecting no contributions from the Employer, Employee or State, contrary to Florida</u>

Statutes and Plan provisions:

____<u>·</u>___

Certain Key Assumptions

Valuation Investment return assumption 7.50%
Valuation Mortality Table FRS Mortality Rates from 7/1/16 FRS Valuation

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.



25.92

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.

	Market Value of	Expected	Projected Benefit	Market Value of
FYE	Assets (BOY)	Investment Return	Payments	Assets (EOY)
2019	166,960,563	12,079,668	11,796,656	167,243,575
2020	167,243,575	12,073,774	12,519,845	166,797,504
2021	166,797,504	12,018,539	13,100,642	165,715,401
2022	165,715,401	11,916,210	13,665,194	163,966,417
2023	163,966,417	11,766,504	14,159,382	161,573,539
2024	161,573,539	11,569,088	14,638,066	158,504,561
2025	158,504,561	11,325,203	15,003,696	154,826,068
2026	154,826,068	11,041,420	15,214,263	150,653,225
2027	150,653,225	10,721,223	15,407,173	145,967,275
2028	145,967,275	10,364,634	15,544,312	140,787,597
2029	140,787,597	9,972,110	15,652,252	135,107,455
2030	135,107,455	9,546,014	15,654,533	128,998,936
2031	128,998,936	9,088,301	15,643,191	122,444,046
2032	122,444,046	8,600,855	15,531,955	115,512,946
2033	115,512,946	8,085,325	15,417,234	108,181,037
2034	108,181,037	7,539,359	15,312,501	100,407,895
2035	100,407,895	6,962,356	15,152,970	92,217,281
2036	92,217,281	6,353,567	15,006,114	83,564,734
2037	83,564,734	5,713,215	14,777,080	74,500,869
2038	74,500,869	5,042,857	14,525,543	65,018,183
2039	65,018,183	4,342,419	14,238,533	55,122,069
2040	55,122,069	3,613,041	13,896,378	44,838,732
2041	44,838,732	2,855,008	13,543,921	34,149,819
2042	34,149,819	2,067,407	13,168,793	23,048,433
2043	23,048,433	1,249,995	12,763,671	11,534,757
2044	11,534,757	402,708	12,330,621	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits, <u>reflecting no</u> contributions from the Employer, Employee or State, contrary to Florida

Statutes and Plan provisions:

25.92

Certain Key Assumptions

Valuation Investment return assumption 7.50%
Valuation Mortality Table FRS Mortality Rates from 7/1/16 FRS Valuation

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% lower investment return assumption

	Market Value of	Expected	Projected Benefit	Market Value of
FYE	Assets (BOY)	Investment Return	Payments	Assets (EOY)
2019	166,960,563	8,858,423	11,796,656	164,022,330
2020	164,022,330	8,676,932	12,519,845	160,179,417
2021	160,179,417	8,449,600	13,100,642	155,528,375
2022	155,528,375	8,178,268	13,665,194	150,041,449
2023	150,041,449	7,862,897	14,159,382	143,744,964
2024	143,744,964	7,503,426	14,638,066	136,610,324
2025	136,610,324	7,100,966	15,003,696	128,707,594
2026	128,707,594	6,660,525	15,214,263	120,153,856
2027	120,153,856	6,184,765	15,407,173	110,931,448
2028	110,931,448	5,673,761	15,544,312	101,060,897
2029	101,060,897	5,127,912	15,652,252	90,536,557
2030	90,536,557	4,549,011	15,654,533	79,431,035
2031	79,431,035	3,938,519	15,643,191	67,726,363
2032	67,726,363	3,297,821	15,531,955	55,492,229
2033	55,492,229	2,628,099	15,417,234	42,703,094
2034	42,703,094	1,927,576	15,312,501	29,318,169
2035	29,318,169	1,195,793	15,152,970	15,360,992
2036	15,360,992	432,186	15,006,114	787,064
2037	787,064	-	14,777,080	-
2038	-	-	14,525,543	-
2039	-	-	14,238,533	-
2040	-	-	13,896,378	-
2041	-	-	13,543,921	-
2042	-	-	13,168,793	-
2043	-	-	12,763,671	-
2044	-	-	12,330,621	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits, <u>reflecting no</u> contributions from the Employer, Employee or State, contrary to Florida Statutes and Plan provisions:

Certain Key Assumptions

Valuation Investment return assumption 5.50% Valuation Mortality Table FRS Mortality Rates from 7/1/16 FRS Valuation

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.



18.08

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

	Market Value of	Expected	Projected Benefit	Market Value of
FYE	Assets (BOY)	Investment Return	Payments	Assets (EOY)
2019	166,960,563	15,300,912	11,796,656	170,464,819
2020	170,464,819	15,599,465	12,519,845	173,544,439
2021	173,544,439	15,864,441	13,100,642	176,308,238
2022	176,308,238	16,100,186	13,665,194	178,743,230
2023	178,743,230	16,308,036	14,159,382	180,891,884
2024	180,891,884	16,489,421	14,638,066	182,743,239
2025	182,743,239	16,647,932	15,003,696	184,387,475
2026	184,387,475	16,794,133	15,214,263	185,967,345
2027	185,967,345	16,935,057	15,407,173	187,495,229
2028	187,495,229	17,073,692	15,544,312	189,024,609
2029	189,024,609	17,213,856	15,652,252	190,586,213
2030	190,586,213	17,362,100	15,654,533	192,293,780
2031	192,293,780	17,524,858	15,643,191	194,175,447
2032	194,175,447	17,708,900	15,531,955	196,352,392
2033	196,352,392	17,921,159	15,417,234	198,856,317
2034	198,856,317	18,164,006	15,312,501	201,707,822
2035	201,707,822	18,442,477	15,152,970	204,997,329
2036	204,997,329	18,761,956	15,006,114	208,753,171
2037	208,753,171	19,129,640	14,777,080	213,105,731
2038	213,105,731	19,555,081	14,525,543	218,135,269
2039	218,135,269	20,046,520	14,238,533	223,943,256
2040	223,943,256	20,614,531	13,896,378	230,661,409
2041	230,661,409	21,269,498	13,543,921	238,386,986
2042	238,386,986	22,021,246	13,168,793	247,239,439
2043	247,239,439	22,881,472	12,763,671	257,357,240
2044	257,357,240	23,863,233	12,330,621	268,889,852

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits, <u>reflecting no</u> <u>contributions from the Employer, Employee or State, contrary to Florida</u> Statutes and Plan provisions:

25+

Certain Key Assumptions

Valuation Investment return assumption 9.50%
Valuation Mortality Table FRS Mortality Rates from 7/1/16 FRS Valuation

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. Except 2% Lower Investment Return Assumption	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	\$ 4,533,025	\$ 4,533,025	\$ 7,792,979	\$ 1,512,684		
E. Employer Normal Cost	2,490,807	2,490,807	4,759,119	1,152,703		
F. ADC if Paid on Valuation Date: D + E	7,023,832	7,023,832	12,552,098	2,665,387		
G. ADC Adjusted for Frequency of Payments	7,344,049	7,344,049	12,974,853	2,818,194		
H. ADC Adjusted for Frequency of Payments as % of Covered Payroll	25.43 %	25.43 %	44.93 %	9.76 %		
Assumed Rate of Increase in Covered Payroll to Contribution Year	4.00 %	4.00 %	4.00 %	4.00 %		
J. Covered Payroll for Contribution Year	30,030,565	30,030,565	30,030,565	30,030,565		
K. Employer ADC for Contribution Year: H x J	7,636,773	7,636,773	13,492,733	2,930,983		
L. Allowable Credit for State Revenue in Contribution Year	0	0	0	0		
M. Net Employer ADC in Contribution Year	7,636,773	7,636,773	13,492,733	2,930,983		
N. Employer ADC as % of Covered Payroll in Contribution Year: M÷J	25.43 %	25.43 %	44.93 %	9.76 %		
O. Expected Member Contributions	1,976,751	1,976,751	1,976,751	1,976,751		
P. Total Contribution (including Members) in Contribution Year	9,613,524	9,613,524	15,469,484	4,907,734		
Q. Total Contribution as a % of covered payroll in Contribution Year: P ÷ J	32.01 %	32.01 %	51.51 %	16.34 %		
R. Certain Key Assumptions Investment Return Assumption Mortality Table	7.50% FRS Mortality Rates from 7/1/16 FRS Valuation	7.50% FRS Mortality Rates from 7/1/16 FRS Valuation	5.50% FRS Mortality Rates from 7/1/16 FRS Valuation	9.50% FRS Mortality Rates from 7/1/16 FRS Valuation		

