# CITY OF DELRAY BEACH GENERAL EMPLOYEES' RETIREMENT PLAN

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





August 30, 2018

Board of Trustees City of Delray Beach General Employees' Retirement Plan Delray Beach, Florida

#### Dear Board Members:

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the City of Delray Beach 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 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 Plan Administrator and the City 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 Plan Administrator and 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 August 30, 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.

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 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

Jeffrey Amrose, MAAA

Enrolled Actuary No. 17-6599

Senior Consultant & Actuary

Trisha Amrose, MAAA

Enrolled Actuary No. 17-8010

Consultant & Actuary



### **TABLE OF CONTENTS**

<u>Title</u>		Page
Ch. 11	2.664, F.S. Results	
Schedu	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

# 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	\$	2,119,345
b. Interest		8,375,249
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		(821,344)
e. Assumption Changes		2,634,532
f. Benefit Payments		(6,903,465)
g. Contribution Refunds		(68,352)
h. Net Change in Total Pension Liability		5,335,965
i. Total Pension Liability - Beginning		116,887,238
j. Total Pension Liability - Ending	\$	122,223,203
2. Plan Fiduciary Net Position		_
a. Contributions - Employer	\$	1,969,163
b. Contributions - State	Ψ	-
c. Contributions - Member		717,598
d. Net Investment Income		14,474,143
e. Benefit Payments		(6,903,465)
f. Contribution Refunds		(68,352)
g. Administrative Expense		(77,552)
h. Other		-
i. Net Change in Plan Fiduciary Net Position		10,111,535
j. Plan Fiduciary Net Position - Beginning		114,839,850
k. Plan Fiduciary Net Position - Ending	\$	124,951,385
3. Net Pension Liability / (Asset)		(2,728,182)
Certain Key Assumptions		
Valuation Date		10/01/2016
Measurement Date		09/30/2017
Investment Return Assumption		7.25%
Mortality Table	FRS M	ortality 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,	2017	
1. Total pension liability		
a. Service Cost	\$	2,119,345
b. Interest		8,375,249
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		(821,344)
e. Assumption Changes		2,634,532
f. Benefit Payments		(6,903,465)
g. Contribution Refunds		(68,352)
h. Net Change in Total Pension Liability		5,335,965
i. Total Pension Liability - Beginning		116,887,238
j. Total Pension Liability - Ending	\$	122,223,203
2. Plan Fiduciary Net Position		
a. Contributions - Employer	\$	1,969,163
b. Contributions - State	Ÿ	1,505,105
c. Contributions - Member		717,598
d. Net Investment Income		14,474,143
e. Benefit Payments		(6,903,465)
f. Contribution Refunds		(68,352)
g. Administrative Expense		(77,552)
h. Other		(77,532)
i. Net Change in Plan Fiduciary Net Position		10,111,535
j. Plan Fiduciary Net Position - Beginning		114,839,850
k. Plan Fiduciary Net Position - Ending	\$	124,951,385
K. Flan Huddary Net Position - Linding	<del></del>	124,331,363
3. Net Pension Liability / (Asset)		(2,728,182)
Certain Key Assumptions		
Valuation Date		10/01/2016
Measurement Date		09/30/2017
Investment Return Assumption		7.25%
Mortality Table	FRS IV	lortality 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,		2017
1. Total pension liability		
a. Service Cost	\$	3,359,428
b. Interest		7,684,782
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		-
e. Assumption Changes		2,634,532
f. Benefit Payments		(6,903,465)
g. Contribution Refunds		(68,352)
h. Net Change in Total Pension Liability		6,706,925
i. Total Pension Liability - Beginning		146,503,278
j. Total Pension Liability - Ending	\$	153,210,203
2. Plan Fiduciary Net Position		
a. Contributions - Employer	\$	1,969,163
b. Contributions - State	Ţ	1,505,105
c. Contributions - Member		717,598
d. Net Investment Income		14,474,143
e. Benefit Payments		(6,903,465)
f. Contribution Refunds		(68,352)
g. Administrative Expense		(77,552)
h. Other		(77,332)
		10,111,535
i. Net Change in Plan Fiduciary Net Position		• •
j. Plan Fiduciary Net Position - Beginning		114,839,850
k. Plan Fiduciary Net Position - Ending	\$	124,951,385
3. Net Pension Liability / (Asset)		28,258,818
Certain Key Assumptions		
Valuation Date		10/01/2016
Measurement Date		09/30/2017
Investment Return Assumption		5.25%
Mortality Table	FRS M	ortality 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,		2017
1. Total pension liability		_
a. Service Cost	\$	1,451,185
b. Interest		8,560,305
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		-
e. Assumption Changes		2,634,532
f. Benefit Payments		(6,903,465)
g. Contribution Refunds		(68,352)
h. Net Change in Total Pension Liability		5,674,205
i. Total Pension Liability - Beginning		94,578,563
j. Total Pension Liability - Ending	\$	100,252,768
2. Plan Fiduciary Net Position		
a. Contributions - Employer	\$	1,969,163
b. Contributions - State		-
c. Contributions - Member		717,598
d. Net Investment Income		14,474,143
e. Benefit Payments		(6,903,465)
f. Contribution Refunds		(68,352)
g. Administrative Expense		(77,552)
h. Other		
i. Net Change in Plan Fiduciary Net Position		10,111,535
j. Plan Fiduciary Net Position - Beginning		114,839,850
k. Plan Fiduciary Net Position - Ending	\$	124,951,385
3. Net Pension Liability / (Asset)		(24,698,617)
Certain Key Assumptions		
Valuation Date		10/01/2016
Measurement Date		09/30/2017
Investment Return Assumption		9.25%
Mortality Table	FRS M	ortality Rates from
	7/	1/16 FRS Valuation



# Asset and Benefit Payment Projection Not Reflecting Any Contributions from the Employer, State or Employee Using assumptions per the Plan's latest actuarial valuation

	Market Value of Assets	<b>Expected Investment</b>	<b>Projected Benefit</b>	Market Value of Assets
FYE	(BOY)	Return	Payments	(EOY)
2017	127,065,505	8,944,353	7,390,224	128,619,634
2018	128,619,634	9,044,999	7,722,057	129,942,576
2019	129,942,576	9,130,944	7,997,029	131,076,491
2020	131,076,491	9,205,829	8,199,091	132,083,229
2021	132,083,229	9,274,677	8,313,287	133,044,619
2022	133,044,619	9,338,702	8,469,876	133,913,445
2023	133,913,445	9,392,984	8,710,083	134,596,346
2024	134,596,346	9,437,528	8,847,088	135,186,786
2025	135,186,786	9,475,337	8,984,976	135,677,147
2026	135,677,147	9,505,515	9,133,179	136,049,483
2027	136,049,483	9,528,469	9,244,654	136,333,298
2028	136,333,298	9,546,744	9,308,154	136,571,888
2029	136,571,888	9,563,919	9,311,539	136,824,268
2030	136,824,268	9,583,378	9,279,501	137,128,145
2031	137,128,145	9,604,624	9,301,138	137,431,631
2032	137,431,631	9,627,345	9,281,337	137,777,639
2033	137,777,639	9,656,069	9,180,953	138,252,755
2034	138,252,755	9,694,517	9,070,554	138,876,718
2035	138,876,718	9,744,831	8,930,507	139,691,042
2036	139,691,042	9,810,054	8,759,908	140,741,188
2037	140,741,188	9,892,247	8,592,817	142,040,618
2038	142,040,618	9,993,139	8,408,433	143,625,324
2039	143,625,324	10,116,279	8,180,896	145,560,707
2040	145,560,707	10,266,196	7,916,001	147,910,902
2041	147,910,902	10,446,304	7,647,909	150,709,297
2042	150,709,297	10,658,842	7,381,561	153,986,578

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 Statutes and Plan provisions</u>:

All future years

7.25%

#### **Certain Key Assumptions**

Valuation Investment return assumption Valuation 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 required under 112.664(1)(a), F.S.

	<b>Market Value of Assets</b>	<b>Expected Investment</b>	<b>Projected Benefit</b>	<b>Market Value of Assets</b>
FYE	(BOY)	Return	Payments	(EOY)
2017	127,065,505	8,944,353	7,390,224	128,619,634
2018	128,619,634	9,044,999	7,722,057	129,942,576
2019	129,942,576	9,130,944	7,997,029	131,076,491
2020	131,076,491	9,205,829	8,199,091	132,083,229
2021	132,083,229	9,274,677	8,313,287	133,044,619
2022	133,044,619	9,338,702	8,469,876	133,913,445
2023	133,913,445	9,392,984	8,710,083	134,596,346
2024	134,596,346	9,437,528	8,847,088	135,186,786
2025	135,186,786	9,475,337	8,984,976	135,677,147
2026	135,677,147	9,505,515	9,133,179	136,049,483
2027	136,049,483	9,528,469	9,244,654	136,333,298
2028	136,333,298	9,546,744	9,308,154	136,571,888
2029	136,571,888	9,563,919	9,311,539	136,824,268
2030	136,824,268	9,583,378	9,279,501	137,128,145
2031	137,128,145	9,604,624	9,301,138	137,431,631
2032	137,431,631	9,627,345	9,281,337	137,777,639
2033	137,777,639	9,656,069	9,180,953	138,252,755
2034	138,252,755	9,694,517	9,070,554	138,876,718
2035	138,876,718	9,744,831	8,930,507	139,691,042
2036	139,691,042	9,810,054	8,759,908	140,741,188
2037	140,741,188	9,892,247	8,592,817	142,040,618
2038	142,040,618	9,993,139	8,408,433	143,625,324
2039	143,625,324	10,116,279	8,180,896	145,560,707
2040	145,560,707	10,266,196	7,916,001	147,910,902
2041	147,910,902	10,446,304	7,647,909	150,709,297
2042	150,709,297	10,658,842	7,381,561	153,986,578

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 Statutes and Plan provisions</u>:

All future years

7.25%

#### **Certain Key Assumptions**

Valuation Investment return assumption Valuation 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 required under 112.664(1)(b), F.S.

	Market Value of Assets	<b>Expected Investment</b>	<b>Projected Benefit</b>	Market Value of Assets
FYE	(BOY)	Return	Payments	(EOY)
2017	127,065,505	6,476,946	7,390,224	126,152,227
2018	126,152,227	6,420,288	7,722,057	124,850,458
2019	124,850,458	6,344,727	7,997,029	123,198,156
2020	123,198,156	6,252,677	8,199,091	121,251,742
2021	121,251,742	6,147,493	8,313,287	119,085,948
2022	119,085,948	6,029,678	8,469,876	116,645,750
2023	116,645,750	5,895,262	8,710,083	113,830,929
2024	113,830,929	5,743,888	8,847,088	110,727,729
2025	110,727,729	5,577,350	8,984,976	107,320,103
2026	107,320,103	5,394,559	9,133,179	103,581,483
2027	103,581,483	5,195,356	9,244,654	99,532,185
2028	99,532,185	4,981,101	9,308,154	95,205,132
2029	95,205,132	4,753,842	9,311,539	90,647,435
2030	90,647,435	4,515,403	9,279,501	85,883,337
2031	85,883,337	4,264,720	9,301,138	80,846,919
2032	80,846,919	4,000,828	9,281,337	75,566,410
2033	75,566,410	3,726,237	9,180,953	70,111,694
2034	70,111,694	3,442,762	9,070,554	64,483,902
2035	64,483,902	3,150,979	8,930,507	58,704,374
2036	58,704,374	2,852,032	8,759,908	52,796,498
2037	52,796,498	2,546,255	8,592,817	46,749,936
2038	46,749,936	2,233,650	8,408,433	40,575,153
2039	40,575,153	1,915,447	8,180,896	34,309,704
2040	34,309,704	1,593,464	7,916,001	27,987,167
2041	27,987,167	1,268,569	7,647,909	21,607,827
2042	21,607,827	940,645	7,381,561	15,166,911

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 Statutes and Plan provisions</u>:

28.33

#### **Certain Key Assumptions**

Valuation Investment return assumption Valuation Mortality Table

5.25% 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 under 112.664(1)(b), F.S. except 2% higher investment return assumption

	Market Value of Assets	<b>Expected Investment</b>	<b>Projected Benefit</b>	Market Value of Assets
FYE	(BOY)	Return	Payments	(EOY)
2017	127,065,505	11,411,761	7,390,224	131,087,042
2018	131,087,042	11,768,406	7,722,057	135,133,391
2019	135,133,391	12,129,976	7,997,029	139,266,338
2020	139,266,338	12,502,928	8,199,091	143,570,175
2021	143,570,175	12,895,752	8,313,287	148,152,640
2022	148,152,640	13,312,387	8,469,876	152,995,151
2023	152,995,151	13,749,210	8,710,083	158,034,278
2024	158,034,278	14,208,993	8,847,088	163,396,183
2025	163,396,183	14,698,592	8,984,976	169,109,799
2026	169,109,799	15,220,247	9,133,179	175,196,867
2027	175,196,867	15,778,145	9,244,654	181,730,358
2028	181,730,358	16,379,556	9,308,154	188,801,760
2029	188,801,760	17,033,504	9,311,539	196,523,725
2030	196,523,725	17,749,268	9,279,501	204,993,492
2031	204,993,492	18,531,720	9,301,138	214,224,074
2032	214,224,074	19,386,465	9,281,337	224,329,202
2033	224,329,202	20,325,832	9,180,953	235,474,081
2034	235,474,081	21,361,839	9,070,554	247,765,366
2035	247,765,366	22,505,260	8,930,507	261,340,119
2036	261,340,119	23,768,815	8,759,908	276,349,026
2037	276,349,026	25,164,867	8,592,817	292,921,076
2038	292,921,076	26,706,310	8,408,433	311,218,953
2039	311,218,953	28,409,387	8,180,896	331,447,444
2040	331,447,444	30,292,774	7,916,001	353,824,217
2041	353,824,217	32,375,024	7,647,909	378,551,332
2042	378,551,332	34,674,601	7,381,561	405,844,372

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 Statutes and Plan provisions</u>:

All future years

9.25%

#### **Certain Key Assumptions**

Valuation Investment return assumption Valuation Mortality Table

FRS Mortality Rates from 7/1/16 FRS Valuation



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	12/31/2018	12/31/2018	12/31/2018	12/31/2018
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 260,094	\$ 260,094	\$ 2,411,873	\$ 0
E. Employer Normal Cost	1,940,915	1,940,915	3,295,725	1,132,909
F. ADC if Paid on Valuation Date: D + E	2,201,009	2,201,009	5,707,598	1,132,909
G. ADC Adjusted for Frequency of Payments	2,402,252	2,402,252	6,084,585	1,265,382
H. ADC Adjusted for Frequency of Payments as % of Covered Payroll	13.30 %	13.30 %	33.69 %	7.01 %
Assumed Rate of Increase in Covered     Payroll to Contribution Year	0.00 %	0.00 %	0.00 %	0.00 %
J. Covered Payroll for Contribution Year	18,060,007	18,060,007	18,060,007	18,060,007
K. ADC for Contribution Year: H x J	2,402,252	2,402,252	6,084,585	1,265,382
L. Expected Employee Contribution in Contribution Year	632,254	632,254	632,254	632,254
M. Total Contribution Requirement in Contribution Year	3,034,506	3,034,506	6,716,839	1,897,636
N. Total Contribution Requirement as % of Covered Payroll in Contribution Year	16.80 %	16.80 %	37.19 %	10.51 %
O. Certain Key Assumptions Investment Return Assumption Mortality Table	7.25% FRS Mortality Rates from 7/1/16 FRS Valuation	7.25% FRS Mortality Rates from 7/1/16 FRS Valuation	5.25% FRS Mortality Rates from 7/1/16 FRS Valuation	9.25% FRS Mortality Rates from 7/1/16 FRS Valuation

