CITY OF DELRAY BEACH POLICE OFFICERS' RETIREMENT SYSTEM

Chapter 112.664, F.S. Compliance Report In Connection with the October 1, 2020 Funding Actuarial Valuation Report And the Plan's Financial Reporting for the Year Ending September 30, 2020







August 26, 2020

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, 2019. 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, 2020 actuarial valuation report. This report is also based on the Plan Provisions, census data, and financial information as summarized in our October 1, 2020 actuarial valuation report. Please refer to the October 1, 2020 actuarial valuation report, dated May 6, 2021, for summaries and descriptions of this information.

Board of Trustees City of Delray Beach Police Officers' Retirement System August 26, 2021 Page ii

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.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

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

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Jeffrey Amrose, MAAA Enrolled Actuary No. 20-6599 Senior Consultant & Actuary

By \

Trisha Amrose, MAAA Enrolled Actuary No. 20-8010 Consultant & Actuary



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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,		2020
1. Total pension liability		
a. Service Cost	\$	3,026,742
b. Interest		11,453,773
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		4,122,894
e. Assumption Changes		795,219
f. Benefit Payments		(8,056,133)
g. Contribution Refunds		(33,258)
h. Net Change in Total Pension Liability		11,309,237
i. Total Pension Liability - Beginning		164,643,286
j. Total Pension Liability - Ending	\$	175,952,523
2. Plan Fiduciary Net Position		
a. Contributions - Employer and Non-Employer	\$	6,917,364
b. Contributions - State	Ŧ	868,062
c. Contributions - Member		1,196,828
d. Net Investment Income		9,377,158
e. Benefit Payments		(8,056,133)
f. Contribution Refunds		(33,258)
g. Administrative Expense		(143,795)
h. Other		-
i. Net Change in Plan Fiduciary Net Position		10,126,226
j. Plan Fiduciary Net Position - Beginning		106,861,770
k. Plan Fiduciary Net Position - Ending	\$	116,987,996
3. Net Pension Liability / (Asset)		58,964,527
Certain Key Assumptions		
Valuation Date		10/01/2019
Measurement Date		09/30/2020
Investment Return Assumption		6.75%
Mortality Table	FRS Mortal	ity - Special Risk



1

Schedule of Changes in the Employers' Net Pension Liability Using Assumptions required under 112.664(1)(a), F.S.

Fiscal year ending September 30,		2020
1. Total pension liability		
a. Service Cost	\$	3,026,742
b. Interest		11,453,773
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		4,122,894
e. Assumption Changes		795,219
f. Benefit Payments		(8,056,133)
g. Contribution Refunds		(33,258)
h. Net Change in Total Pension Liability		11,309,237
i. Total Pension Liability - Beginning		164,643,286
j. Total Pension Liability - Ending	\$	175,952,523
2. Plan Fiduciary Net Position		
a. Contributions - Employer and Non-Employer	\$	6,917,364
b. Contributions - State		868,062
c. Contributions - Member		1,196,828
d. Net Investment Income		9,377,158
e. Benefit Payments		(8,056,133)
f. Contribution Refunds		(33,258)
g. Administrative Expense		(143,795)
h. Other		-
i. Net Change in Plan Fiduciary Net Position		10,126,226
j. Plan Fiduciary Net Position - Beginning		106,861,770
k. Plan Fiduciary Net Position - Ending	\$	116,987,996
3. Net Pension Liability / (Asset)		58,964,527
Certain Key Assumptions		
Valuation Date		10/01/2019
Measurement Date		09/30/2020
Investment Return Assumption		6.75%
Mortality Table	FRS Mortal	ity - 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,		2020
1. Total pension liability		
a. Service Cost	\$	5,733,459
b. Interest		10,355,920
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		-
e. Assumption Changes		-
f. Benefit Payments		(8,056,133)
g. Contribution Refunds		(33,258)
h. Net Change in Total Pension Liability		7,999,988
i. Total Pension Liability - Beginning		216,330,608
j. Total Pension Liability - Ending	\$	224,330,596
2. Plan Fiduciary Net Position		
a. Contributions - Employer and Non-Employer	\$	6,917,364
b. Contributions - State		868,062
c. Contributions - Member		1,196,828
d. Net Investment Income		9,377,158
e. Benefit Payments		(8,056,133)
f. Contribution Refunds		(33,258)
g. Administrative Expense		(143,795)
h. Other		-
i. Net Change in Plan Fiduciary Net Position		10,126,226
j. Plan Fiduciary Net Position - Beginning		106,861,770
k. Plan Fiduciary Net Position - Ending	\$	116,987,996
3. Net Pension Liability / (Asset)		107,342,600
Certain Key Assumptions		
Valuation Date		10/01/2019
Measurement Date		09/30/2020
Investment Return Assumption		4.75%
Mortality Table	FRS Morta	ity - 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,		2020
1. Total pension liability		
a. Service Cost	\$	2,243,739
b. Interest		11,870,997
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		-
e. Assumption Changes		-
f. Benefit Payments		(8,056,133)
g. Contribution Refunds		(33,258)
h. Net Change in Total Pension Liability		6,025,345
i. Total Pension Liability - Beginning		137,469,499
j. Total Pension Liability - Ending	\$	143,494,844
2. Plan Fiduciary Net Position		
-	\$	6 017 264
a. Contributions - Employer and Non-Employer b. Contributions - State	Ş	6,917,364
c. Contributions - State		868,062
		1,196,828
d. Net Investment Income		9,377,158
e. Benefit Payments		(8,056,133)
f. Contribution Refunds		(33,258)
g. Administrative Expense		(143,795)
h. Other		-
i. Net Change in Plan Fiduciary Net Position		10,126,226
j. Plan Fiduciary Net Position - Beginning		106,861,770
k. Plan Fiduciary Net Position - Ending	\$	116,987,996
3. Net Pension Liability / (Asset)		26,506,848
Certain Key Assumptions		
Valuation Date		10/01/2019
Measurement Date		09/30/2020
Investment Return Assumption		8.75%
Mortality Table	FRS Mortal	ity - 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

	Market Value of	Expected	Projected Benefit	Market Value of
FYE	Assets (BOY)	Investment Return	Payments	Assets (EOY)
2021	107,487,424	6,938,658	9,384,973	105,041,109
2022	105,041,109	6,765,551	9,621,439	102,185,221
2023	102,185,221	6,564,718	9,860,291	98,889,648
2024	98,889,648	6,333,986	10,105,644	95,117,990
2025	95,117,990	6,067,400	10,461,156	90,724,234
2026	90,724,234	5,758,365	10,830,258	85,652,341
2027	85,652,341	5,406,151	11,122,444	79,936,048
2028	79,936,048	5,012,380	11,357,126	73,591,302
2029	73,591,302	4,578,680	11,518,018	66,651,964
2030	66,651,964	4,106,477	11,630,525	59,127,916
2031	59,127,916	3,591,019	11,855,259	50,863,676
2032	50,863,676	3,029,804	11,955,370	41,938,110
2033	41,938,110	2,423,533	12,067,840	32,293,803
2034	32,293,803	1,772,667	12,064,150	22,002,320
2035	22,002,320	1,077,250	12,086,124	10,993,446
2036	10,993,446	334,444	12,077,446	-
2037	-	-	11,999,268	-
2038	-	-	11,929,436	-
2039	-	-	11,859,978	-
2040	-	-	11,765,126	-
2041	-	-	11,643,582	-
2042	-	-	11,501,466	-
2043	-	-	11,330,767	-
2044	-	-	11,124,265	-
2045	-	-	10,889,665	-
2046	-	-	10,634,495	-

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</u> Employer, Employee or State, contrary to Florida Statutes and Plan provisions:

15.92

Certain Key Assumptions

Valuation Investment Return Assumption Valuation Mortality Table

6.75% FRS Mortality - Special Risk

Note: As required in Section 112.664(1)(c) of the Florida Statutes, the projection of the Fund assets <u>do</u> <u>not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes</u> <u>and Plan provisions</u>. 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.

	Market Value of	Expected	Projected Benefit	Market Value of
FYE	Assets (BOY)	Investment Return	Payments	Assets (EOY)
2021	107,487,424	6,938,658	9,384,973	105,041,109
2022	105,041,109	6,765,551	9,621,439	102,185,221
2023	102,185,221	6,564,718	9,860,291	98,889,648
2024	98,889,648	6,333,986	10,105,644	95,117,990
2025	95,117,990	6,067,400	10,461,156	90,724,234
2026	90,724,234	5,758,365	10,830,258	85,652,341
2027	85,652,341	5,406,151	11,122,444	79,936,048
2028	79,936,048	5,012,380	11,357,126	73,591,302
2029	73,591,302	4,578,680	11,518,018	66,651,964
2030	66,651,964	4,106,477	11,630,525	59,127,916
2031	59,127,916	3,591,019	11,855,259	50,863,676
2032	50,863,676	3,029,804	11,955,370	41,938,110
2033	41,938,110	2,423,533	12,067,840	32,293,803
2034	32,293,803	1,772,667	12,064,150	22,002,320
2035	22,002,320	1,077,250	12,086,124	10,993,446
2036	10,993,446	334,444	12,077,446	-
2037	-	-	11,999,268	-
2038	-	-	11,929,436	-
2039	-	-	11,859,978	-
2040	-	-	11,765,126	-
2041	-	-	11,643,582	-
2042	-	-	11,501,466	-
2043	-	-	11,330,767	-
2044	-	-	11,124,265	-
2045	-	-	10,889,665	-
2046	-	-	10,634,495	-

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</u> Employer, Employee or State, contrary to Florida Statutes and Plan provisions:

15.92

Certain Key Assumptions

Valuation Investment Return Assumption Valuation Mortality Table

6.75% FRS Mortality - Special Risk

Note: As required in Section 112.664(1)(c) of the Florida Statutes, the projection of the Fund assets <u>do</u> <u>not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes</u> <u>and Plan provisions</u>. 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.

	Market Value of	Expected	Projected Benefit	Market Value of
FYE	Assets (BOY)	Investment Return	Payments	Assets (EOY)
2021	107,487,424	4,882,760	9,384,973	102,985,211
2022	102,985,211	4,663,288	9,621,439	98,027,060
2023	98,027,060	4,422,103	9,860,291	92,588,872
2024	92,588,872	4,157,962	10,105,644	86,641,190
2025	86,641,190	3,867,004	10,461,156	80,047,038
2026	80,047,038	3,545,016	10,830,258	72,761,796
2027	72,761,796	3,192,027	11,122,444	64,831,379
2028	64,831,379	2,809,759	11,357,126	56,284,012
2029	56,284,012	2,399,938	11,518,018	47,165,932
2030	47,165,932	1,964,157	11,630,525	37,499,564
2031	37,499,564	1,499,667	11,855,259	27,143,972
2032	27,143,972	1,005,399	11,955,370	16,194,001
2033	16,194,001	482,604	12,067,840	4,608,765
2034	4,608,765	-	12,064,150	-
2035	-	-	12,086,124	-
2036	-	-	12,077,446	-
2037	-	-	11,999,268	-
2038	-	-	11,929,436	-
2039	-	-	11,859,978	-
2040	-	-	11,765,126	-
2041	-	-	11,643,582	-
2042	-	-	11,501,466	-
2043	-	-	11,330,767	-
2044	-	-	11,124,265	-
2045	-	-	10,889,665	-
2046	-	-	10,634,495	-

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</u> <u>Employer, Employee or State, contrary to Florida Statutes and Plan provisions</u>:

Certain Key Assumptions

Valuation Investment Return Assumption	4.75%
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 <u>do</u> <u>not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes</u> <u>and Plan provisions</u>. 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.



13.42

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)
2021	107,487,424	8,994,557	9,384,973	107,097,008
2022	107,097,008	8,950,050	9,621,439	106,425,619
2023	106,425,619	8,880,854	9,860,291	105,446,182
2024	105,446,182	8,784,419	10,105,644	104,124,957
2025	104,124,957	8,653,258	10,461,156	102,317,059
2026	102,317,059	8,478,919	10,830,258	99,965,720
2027	99,965,720	8,260,394	11,122,444	97,103,670
2028	97,103,670	7,999,697	11,357,126	93,746,241
2029	93,746,241	7,698,883	11,518,018	89,927,106
2030	89,927,106	7,359,786	11,630,525	85,656,367
2031	85,656,367	6,976,265	11,855,259	80,777,373
2032	80,777,373	6,544,973	11,955,370	75,366,976
2033	75,366,976	6,066,642	12,067,840	69,365,778
2034	69,365,778	5,541,699	12,064,150	62,843,327
2035	62,843,327	4,970,023	12,086,124	55,727,226
2036	55,727,226	4,347,744	12,077,446	47,997,524
2037	47,997,524	3,674,815	11,999,268	39,673,071
2038	39,673,071	2,949,481	11,929,436	30,693,116
2039	30,693,116	2,166,774	11,859,978	20,999,912
2040	20,999,912	1,322,768	11,765,126	10,557,554
2041	10,557,554	414,379	11,643,582	-
2042	-	-	11,501,466	-
2043	-	-	11,330,767	-
2044	-	-	11,124,265	-
2045	-	-	10,889,665	-
2046	-	-	10,634,495	-

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: 20.92

Certain Key Assumptions

Valuation Investment Return Assumption Valuation Mortality Table

8.75% 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, 2020	October 1, 2020	October 1, 2020	October 1, 2020
 B. Actuarially Determined Contribution (ADC) to Be Paid During Fiscal Year Ending 	9/30/2022	9/30/2022	9/30/2022	9/30/2022
C. Assumed Dates of Employer Contributions	Biweekly	Biweekly	Biweekly	Biweekly
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 5,915,852	\$ 5,915,852	\$ 8,621,934	\$ 3,569,814
E. Employer Normal Cost	2,341,999	2,341,999	4,453,285	1,155,443
F. ADC if Paid on Valuation Date: D + E	8,257,851	8,257,851	13,075,219	4,725,257
G. ADC Adjusted for Frequency of Payments	8,538,205	8,538,205	13,390,463	4,931,278
H. ADC as % of Covered Payroll	69.56 %	69.56 %	109.09 %	40.17 %
 Assumed Rate of Increase in Covered Payroll to Contribution Year 	5.67 %	5.67 %	5.67 %	5.67 %
J. Covered Payroll for Contribution Year	12,971,259	12,971,259	12,971,259	12,971,259
K. ADC for Contribution Year: H x J	9,022,808	9,022,808	14,150,346	5,210,555
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	8,416,213	8,416,213	13,543,751	4,603,960
N. REC as % of Covered Payroll in Contribution Year: M ÷ J	64.88 %	64.88 %	104.41 %	35.49 %
O. Expected Member Contributions	1,167,413	1,167,413	1,167,413	1,167,413
P. Total Contribution (Including Members) in Contribution Year	10,190,221	10,190,221	15,317,759	6,377,968
Q. Total Contribution as % of Covered Payroll in Contribution Year: P ÷ J	78.56 %	78.56 %	118.09 %	49.17 %
R. Certain Key Assumptions Investment Return Assumption Mortality Table	6.75 % FRS Mortality - Special Risk	6.75 % FRS Mortality - Special Risk	4.75 % FRS Mortality - Special Risk	8.75 % FRS Mortality - Special Risk

