# CITY OF DELRAY BEACH FIREFIGHTERS' RETIREMENT SYSTEM

Chapter 112.664, F.S. Compliance Report In Connection with the October 1, 2022 Funding Actuarial Valuation Report And the Plan's Financial Reporting for the Year Ending September 30, 2022





July 12, 2023

Board of Trustees City of Delray Beach Firefighters' Retirement System Delray Beach, Florida

#### Dear Board Members:

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the City of Delray Beach Firefighters' 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, 2022. 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, 2022 actuarial valuation report. This report is also based on the Plan Provisions, census data, and financial information as summarized in our October 1, 2022 actuarial valuation report. Please refer to the October 1, 2022 actuarial valuation report, dated May 11, 2023, for summaries and descriptions of this information.

Board of Trustees City of Delray Beach Firefighters' Retirement System July 12, 2023 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.

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.

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

/ Jeffrey Amrose, MAAA

Enrolled Actuary No. 23-6599

Senior Consultant & Actuary

Trisha Amrose, MAAA

Enrolled Actuary No. 23-8010

**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,	2022	
1. Total pension liability		
a. Service Cost	\$	3,920,642
b. Interest		13,182,831
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		4,938,237
e. Assumption Changes		-
f. Benefit Payments		(9,569,342)
g. Contribution Refunds		(27,087)
h. Net Change in Total Pension Liability		12,445,281
i. Total Pension Liability - Beginning		199,863,695
j. Total Pension Liability - Ending	\$	212,308,976
2. Plan Fiduciary Net Position		
a. Contributions - Employer and Non-Employer	\$	8,169,314
b. Contributions - State		1,322,142
c. Contributions - Member		1,489,819
d. Net Investment Income		(23,391,743)
e. Benefit Payments		(9,569,342)
f. Contribution Refunds		(27,087)
g. Administrative Expense		(134,090)
h. Other		
i. Net Change in Plan Fiduciary Net Position		(22,140,987)
j. Plan Fiduciary Net Position - Beginning		163,257,261
k. Plan Fiduciary Net Position - Ending	\$	141,116,274
3. Net Pension Liability / (Asset)		71,192,702
Certain Key Assumptions		
Valuation Date		10/01/2021
Measurement Date		09/30/2022
Investment Return Assumption		6.625%
Mortality Table	FRS Morta	lity - Special Risk



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

Fiscal year ending September 30,		2022
1. Total pension liability		
a. Service Cost	\$	3,920,642
b. Interest		13,182,831
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		4,938,237
e. Assumption Changes		-
f. Benefit Payments		(9,569,342)
g. Contribution Refunds		(27,087)
h. Net Change in Total Pension Liability		12,445,281
i. Total Pension Liability - Beginning		199,863,695
j. Total Pension Liability - Ending	\$	212,308,976
2. Plan Fiduciary Net Position		
a. Contributions - Employer and Non-Employer	\$	8,169,314
b. Contributions - State	Ψ	1,322,142
c. Contributions - Member		1,489,819
d. Net Investment Income		(23,391,743)
e. Benefit Payments		(9,569,342)
f. Contribution Refunds		(27,087)
g. Administrative Expense		(134,090)
h. Other		-
i. Net Change in Plan Fiduciary Net Position		(22,140,987)
j. Plan Fiduciary Net Position - Beginning		163,257,261
k. Plan Fiduciary Net Position - Ending	\$	141,116,274
3. Net Pension Liability / (Asset)		71,192,702
Certain Key Assumptions		
Valuation Date		10/01/2021
Measurement Date		09/30/2022
Investment Return Assumption		6.625%
Mortality Table	FRS Morta	lity - 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,		2022
1. Total pension liability		
a. Service Cost	\$	6,325,042
b. Interest		11,889,991
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		-
e. Assumption Changes		-
f. Benefit Payments		(9,569,342)
g. Contribution Refunds		(27,087)
h. Net Change in Total Pension Liability		8,618,604
i. Total Pension Liability - Beginning		255,554,069
j. Total Pension Liability - Ending	\$	264,172,673
2. Plan Fiduciary Net Position		
a. Contributions - Employer and Non-Employer	\$	8,169,314
b. Contributions - State	Ψ	1,322,142
c. Contributions - Member		1,489,819
d. Net Investment Income		(23,391,743)
e. Benefit Payments		(9,569,342)
f. Contribution Refunds		(27,087)
g. Administrative Expense		(134,090)
h. Other		-
i. Net Change in Plan Fiduciary Net Position	-	(22,140,987)
j. Plan Fiduciary Net Position - Beginning		163,257,261
k. Plan Fiduciary Net Position - Ending	\$	141,116,274
3. Net Pension Liability / (Asset)		123,056,399
Certain Key Assumptions		
Valuation Date		10/01/2021
Measurement Date		09/30/2022
Investment Return Assumption		4.625%
Mortality Table	FRS Morta	lity - 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,	2022	
1. Total pension liability		
a. Service Cost	\$	2,534,850
b. Interest		14,464,463
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		-
e. Assumption Changes		-
f. Benefit Payments		(9,569,342)
g. Contribution Refunds		(27,087)
h. Net Change in Total Pension Liability		7,402,884
i. Total Pension Liability - Beginning		169,967,281
j. Total Pension Liability - Ending	\$	177,370,165
2. Plan Fiduciary Net Position		
a. Contributions - Employer and Non-Employer	\$	8,169,314
b. Contributions - State	Ţ	1,322,142
c. Contributions - Member		1,489,819
d. Net Investment Income		(23,391,743)
e. Benefit Payments		(9,569,342)
f. Contribution Refunds		(27,087)
g. Administrative Expense		(134,090)
h. Other		(134,030)
i. Net Change in Plan Fiduciary Net Position		(22,140,987)
j. Plan Fiduciary Net Position - Beginning		163,257,261
k. Plan Fiduciary Net Position - Ending	\$	141,116,274
3. Net Pension Liability / (Asset)		36,253,891
Certain Key Assumptions		
Valuation Date		10/01/2021
Measurement Date		09/30/2022
Investment Return Assumption		8.625%
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	<b>Projected Benefit</b>	Market Value of
FYE	Assets (BOY)	<b>Investment Return</b>	Payments	Assets (EOY)
2023	127,367,362	8,093,084	10,415,205	125,045,241
2024	125,045,241	7,930,330	10,684,288	122,291,283
2025	122,291,283	7,736,729	11,020,921	119,007,091
2026	119,007,091	7,509,265	11,319,375	115,196,981
2027	115,196,981	7,240,947	11,799,347	110,638,581
2028	110,638,581	6,928,221	12,123,322	105,443,480
2029	105,443,480	6,574,555	12,409,819	99,608,216
2030	99,608,216	6,180,799	12,626,279	93,162,736
2031	93,162,736	5,745,932	12,863,387	86,045,281
2032	86,045,281	5,269,266	13,018,370	78,296,177
2033	78,296,177	4,752,482	13,121,204	69,927,455
2034	69,927,455	4,194,954	13,214,784	60,907,625
2035	60,907,625	3,594,244	13,309,765	51,192,104
2036	51,192,104	2,948,167	13,382,933	40,757,338
2037	40,757,338	2,256,644	13,389,562	29,624,420
2038	29,624,420	1,520,062	13,360,187	17,784,295
2039	17,784,295	737,252	13,311,913	5,209,634
2040	5,209,634	-	13,253,165	-
2041	-	-	13,146,714	-
2042	-	-	13,023,613	-
2043	-	-	12,930,986	-
2044	-	-	12,751,930	-
2045	-	-	12,561,810	-
2046	-	-	12,319,987	-
2047	-	-	12,055,183	-
2048	-	-	11,771,599	-

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

17.42

6.625%

#### **Certain Key Assumptions**

Valuation Investment Return Assumption 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 not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes 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	<b>Projected Benefit</b>	Market Value of
FYE	Assets (BOY)	<b>Investment Return</b>	Payments	Assets (EOY)
2023	127,367,362	8,093,084	10,415,205	125,045,241
2024	125,045,241	7,930,330	10,684,288	122,291,283
2025	122,291,283	7,736,729	11,020,921	119,007,091
2026	119,007,091	7,509,265	11,319,375	115,196,981
2027	115,196,981	7,240,947	11,799,347	110,638,581
2028	110,638,581	6,928,221	12,123,322	105,443,480
2029	105,443,480	6,574,555	12,409,819	99,608,216
2030	99,608,216	6,180,799	12,626,279	93,162,736
2031	93,162,736	5,745,932	12,863,387	86,045,281
2032	86,045,281	5,269,266	13,018,370	78,296,177
2033	78,296,177	4,752,482	13,121,204	69,927,455
2034	69,927,455	4,194,954	13,214,784	60,907,625
2035	60,907,625	3,594,244	13,309,765	51,192,104
2036	51,192,104	2,948,167	13,382,933	40,757,338
2037	40,757,338	2,256,644	13,389,562	29,624,420
2038	29,624,420	1,520,062	13,360,187	17,784,295
2039	17,784,295	737,252	13,311,913	5,209,634
2040	5,209,634	-	13,253,165	-
2041	-	-	13,146,714	-
2042	-	-	13,023,613	-
2043	-	-	12,930,986	-
2044	-	-	12,751,930	-
2045	-	-	12,561,810	-
2046	-	-	12,319,987	-
2047	-	-	12,055,183	-
2048	-	-	11,771,599	-

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

17.42

#### **Certain Key Assumptions**

Valuation Investment Return Assumption 6.625%
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 not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes 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	<b>Projected Benefit</b>	Market Value of
FYE	Assets (BOY)	Investment Return	Payments	Assets (EOY)
2023	127,367,362	5,649,889	10,415,205	122,602,046
2024	122,602,046	5,423,270	10,684,288	117,341,028
2025	117,341,028	5,172,164	11,020,921	111,492,271
2026	111,492,271	4,894,757	11,319,375	105,067,653
2027	105,067,653	4,586,519	11,799,347	97,854,825
2028	97,854,825	4,245,434	12,123,322	89,976,937
2029	89,976,937	3,874,456	12,409,819	81,441,574
2030	81,441,574	3,474,690	12,626,279	72,289,985
2031	72,289,985	3,045,946	12,863,387	62,472,544
2032	62,472,544	2,588,305	13,018,370	52,042,479
2033	52,042,479	2,103,537	13,121,204	41,024,812
2034	41,024,812	1,591,806	13,214,784	29,401,834
2035	29,401,834	1,052,047	13,309,765	17,144,116
2036	17,144,116	483,435	13,382,933	4,244,618
2037	4,244,618	-	13,389,562	-
2038	-	-	13,360,187	-
2039	-	-	13,311,913	-
2040	-	-	13,253,165	-
2041	-	-	13,146,714	-
2042	-	-	13,023,613	-
2043	-	-	12,930,986	-
2044	-	-	12,751,930	-
2045	-	-	12,561,810	-
2046	-	-	12,319,987	-
2047	-	-	12,055,183	-
2048	-	-	11,771,599	-

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>:

#### **Certain Key Assumptions**

Valuation Investment Return Assumption 4.625%
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 not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes 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.



14.33

# 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)	<b>Investment Return</b>	Payments	Assets (EOY)
2023	127,367,362	10,536,279	10,415,205	127,488,436
2024	127,488,436	10,535,118	10,684,288	127,339,266
2025	127,339,266	10,507,734	11,020,921	126,826,079
2026	126,826,079	10,450,601	11,319,375	125,957,305
2027	125,957,305	10,354,971	11,799,347	124,512,929
2028	124,512,929	10,216,422	12,123,322	122,606,029
2029	122,606,029	10,039,597	12,409,819	120,235,807
2030	120,235,807	9,825,830	12,626,279	117,435,358
2031	117,435,358	9,574,066	12,863,387	114,146,037
2032	114,146,037	9,283,678	13,018,370	110,411,345
2033	110,411,345	8,957,127	13,121,204	106,247,268
2034	106,247,268	8,593,939	13,214,784	101,626,423
2035	101,626,423	8,191,295	13,309,765	96,507,953
2036	96,507,953	7,746,672	13,382,933	90,871,692
2037	90,871,692	7,260,259	13,389,562	84,742,389
2038	84,742,389	6,732,873	13,360,187	78,115,075
2039	78,115,075	6,163,349	13,311,913	70,966,511
2040	70,966,511	5,549,319	13,253,165	63,262,665
2041	63,262,665	4,889,453	13,146,714	55,005,404
2042	55,005,404	4,182,573	13,023,613	46,164,364
2043	46,164,364	3,424,028	12,930,986	36,657,406
2044	36,657,406	2,611,774	12,751,930	26,517,250
2045	26,517,250	1,745,385	12,561,810	15,700,825
2046	15,700,825	822,897	12,319,987	4,203,735
2047	4,203,735	-	12,055,183	-
2048	-	-	11,771,599	-

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 8.625%
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.



24.33

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, 2022	October 1, 2022	October 1, 2022	October 1, 2022
B. Actuarially Determined Contribution (ADC) to Be Paid During Fiscal Year Ending	9/30/2024	9/30/2024	9/30/2024	9/30/2024
C. Assumed Dates of Employer Contributions	Biweekly	Biweekly	Biweekly	Biweekly
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 6,524,502	\$ 6,524,502	\$ 10,342,978	\$ 3,323,849
E. Employer Normal Cost	2,801,192	2,801,192	5,230,274	1,401,113
F. ADC if Paid on Valuation Date: D + E	9,325,694	9,325,694	15,573,252	4,724,962
G. ADC Adjusted for Frequency of Payments	9,636,613	9,636,613	15,939,068	4,928,135
H. ADC as % of Covered Payroll	73.09 %	73.09 %	120.89 %	37.38 %
Assumed Rate of Increase in Covered     Payroll to Contribution Year	5.55 %	5.55 %	5.55 %	5.55 %
J. Covered Payroll for Contribution Year	13,917,003	13,917,003	13,917,003	13,917,003
K. ADC for Contribution Year: H x J	10,171,937	10,171,937	16,824,265	5,202,176
L. Estimated Credit for State Revenue in Contribution Year	1,206,994	1,206,994	1,206,994	1,206,994
M. Required Employer Contribution (REC) in Contribution Year	8,964,943	8,964,943	15,617,271	3,995,182
N. REC as % of Covered Payroll in Contribution Year: M ÷ J	64.42 %	64.42 %	112.22 %	28.71 %
O. Expected Member Contributions	1,366,290	1,366,290	1,366,290	1,366,290
P. Total Contribution (Including Members) in Contribution Year	11,538,227	11,538,227	18,190,555	6,568,466
Q. Total Contribution as % of Covered Payroll in Contribution Year: P ÷ J	82.91 %	82.91 %	130.71 %	47.20 %
R. Certain Key Assumptions Investment Return Assumption Mortality Table	6.625 % FRS Mortality - Special Risk	6.625 % FRS Mortality - Special Risk	4.625 % FRS Mortality - Special Risk	8.625 % FRS Mortality - Special Risk

