

CITY OF DELRAY BEACH FIREFIGHTERS' RETIREMENT SYSTEM

Chapter 112.664, F.S. Compliance Report

In Connection with the October 1, 2021 Funding Actuarial
Valuation Report

And the Plan's Financial Reporting for the Year Ending
September 30, 2021





September 9, 2022

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, 2021. 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, 2021 actuarial valuation report. This report is also based on the Plan Provisions, census data, and financial information as summarized in our October 1, 2021 actuarial valuation report. Please refer to the October 1, 2021 actuarial valuation report, dated June 15, 2022, 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.

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.

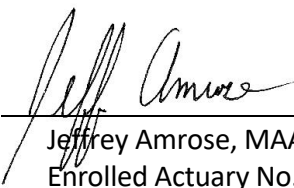
This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the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

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


By 
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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,	<u>2021</u>
1. Total pension liability	
a. Service Cost	\$ 3,992,364
b. Interest	12,761,659
c. Benefit Changes	(1,504,875)
d. Difference between actual & expected experience & Other	1,108,003
e. Assumption Changes	2,485,078
f. Benefit Payments	(8,072,538)
g. Contribution Refunds	(23,041)
h. Net Change in Total Pension Liability	<u>10,746,650</u>
i. Total Pension Liability - Beginning	<u>189,117,045</u>
j. Total Pension Liability - Ending	<u>\$ 199,863,695</u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer and Non-Employer	\$ 7,798,004
b. Contributions - State	1,201,496
c. Contributions - Member	1,242,141
d. Net Investment Income	30,223,771
e. Benefit Payments	(8,072,538)
f. Contribution Refunds	(23,041)
g. Administrative Expense	(141,002)
h. Other	-
i. Net Change in Plan Fiduciary Net Position	<u>32,228,831</u>
j. Plan Fiduciary Net Position - Beginning	<u>131,028,430</u>
k. Plan Fiduciary Net Position - Ending	<u>\$ 163,257,261</u>
3. Net Pension Liability / (Asset)	36,606,434

Certain Key Assumptions

Valuation Date	10/01/2020
Measurement Date	09/30/2021
Investment Return Assumption	6.625%
Mortality Table	FRS Mortality - 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,	<u>2021</u>
1. Total pension liability	
a. Service Cost	\$ 3,992,364
b. Interest	12,761,659
c. Benefit Changes	(1,504,875)
d. Difference between actual & expected experience & Other	1,108,003
e. Assumption Changes	2,485,078
f. Benefit Payments	(8,072,538)
g. Contribution Refunds	(23,041)
h. Net Change in Total Pension Liability	<u>10,746,650</u>
i. Total Pension Liability - Beginning	<u>189,117,045</u>
j. Total Pension Liability - Ending	<u><u>\$ 199,863,695</u></u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer and Non-Employer	\$ 7,798,004
b. Contributions - State	1,201,496
c. Contributions - Member	1,242,141
d. Net Investment Income	30,223,771
e. Benefit Payments	(8,072,538)
f. Contribution Refunds	(23,041)
g. Administrative Expense	(141,002)
h. Other	-
i. Net Change in Plan Fiduciary Net Position	<u>32,228,831</u>
j. Plan Fiduciary Net Position - Beginning	<u>131,028,430</u>
k. Plan Fiduciary Net Position - Ending	<u><u>\$ 163,257,261</u></u>
3. Net Pension Liability / (Asset)	36,606,434
Certain Key Assumptions	
Valuation Date	10/01/2020
Measurement Date	09/30/2021
Investment Return Assumption	6.625%
Mortality Table	FRS Mortality - 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,	<u>2021</u>
1. Total pension liability	
a. Service Cost	\$ 6,499,737
b. Interest	11,212,092
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	-
e. Assumption Changes	-
f. Benefit Payments	(8,072,538)
g. Contribution Refunds	(23,041)
h. Net Change in Total Pension Liability	<u>9,616,250</u>
i. Total Pension Liability - Beginning	<u>239,971,672</u>
j. Total Pension Liability - Ending	<u><u>\$ 249,587,922</u></u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer and Non-Employer	\$ 7,798,004
b. Contributions - State	1,201,496
c. Contributions - Member	1,242,141
d. Net Investment Income	30,223,771
e. Benefit Payments	(8,072,538)
f. Contribution Refunds	(23,041)
g. Administrative Expense	(141,002)
h. Other	-
i. Net Change in Plan Fiduciary Net Position	<u>32,228,831</u>
j. Plan Fiduciary Net Position - Beginning	<u>131,028,430</u>
k. Plan Fiduciary Net Position - Ending	<u><u>\$ 163,257,261</u></u>
3. Net Pension Liability / (Asset)	86,330,661
Certain Key Assumptions	
Valuation Date	10/01/2020
Measurement Date	09/30/2021
Investment Return Assumption	4.625%
Mortality Table	FRS Mortality - 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,	<u>2021</u>
1. Total pension liability	
a. Service Cost	\$ 2,601,967
b. Interest	13,531,278
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	-
e. Assumption Changes	-
f. Benefit Payments	(8,072,538)
g. Contribution Refunds	(23,041)
h. Net Change in Total Pension Liability	<u>8,037,666</u>
i. Total Pension Liability - Beginning	<u>158,330,209</u>
j. Total Pension Liability - Ending	<u><u>\$ 166,367,875</u></u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer and Non-Employer	\$ 7,798,004
b. Contributions - State	1,201,496
c. Contributions - Member	1,242,141
d. Net Investment Income	30,223,771
e. Benefit Payments	(8,072,538)
f. Contribution Refunds	(23,041)
g. Administrative Expense	(141,002)
h. Other	-
i. Net Change in Plan Fiduciary Net Position	<u>32,228,831</u>
j. Plan Fiduciary Net Position - Beginning	<u>131,028,430</u>
k. Plan Fiduciary Net Position - Ending	<u><u>\$ 163,257,261</u></u>
3. Net Pension Liability / (Asset)	3,110,614
Certain Key Assumptions	
Valuation Date	10/01/2020
Measurement Date	09/30/2021
Investment Return Assumption	8.625%
Mortality Table	FRS Mortality - 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**

FYE	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2022	148,204,634	9,496,484	9,722,949	147,978,169
2023	147,978,169	9,470,699	10,048,443	147,400,425
2024	147,400,425	9,422,855	10,337,317	146,485,963
2025	146,485,963	9,350,533	10,691,695	145,144,801
2026	145,144,801	9,251,496	10,999,158	143,397,139
2027	143,397,139	9,120,600	11,455,415	141,062,324
2028	141,062,324	8,955,973	11,755,655	138,262,642
2029	138,262,642	8,761,828	12,017,267	135,007,203
2030	135,007,203	8,539,643	12,213,855	131,332,991
2031	131,332,991	8,289,236	12,424,886	127,197,341
2032	127,197,341	8,010,885	12,556,648	122,651,578
2033	122,651,578	7,706,874	12,642,809	117,715,643
2034	117,715,643	7,377,658	12,709,534	112,383,767
2035	112,383,767	7,022,244	12,775,268	106,630,743
2036	106,630,743	6,639,706	12,817,529	100,452,920
2037	100,452,920	6,230,756	12,807,556	93,876,120
2038	93,876,120	5,796,508	12,763,332	86,909,296
2039	86,909,296	5,337,079	12,699,239	79,547,136
2040	79,547,136	4,851,815	12,624,385	71,774,566
2041	71,774,566	4,340,633	12,511,162	63,604,037
2042	63,604,037	3,803,775	12,377,136	55,030,676
2043	55,030,676	3,239,286	12,271,575	45,998,387
2044	45,998,387	2,646,917	12,089,853	36,555,451
2045	36,555,451	2,027,960	11,889,473	26,693,938
2046	26,693,938	1,382,615	11,648,549	16,428,004
2047	16,428,004	711,194	11,386,014	5,753,184
2048	5,753,184	13,277	11,105,563	-

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:** 26.50

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 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)
2022	148,204,634	9,496,484	9,722,949	147,978,169
2023	147,978,169	9,470,699	10,048,443	147,400,425
2024	147,400,425	9,422,855	10,337,317	146,485,963
2025	146,485,963	9,350,533	10,691,695	145,144,801
2026	145,144,801	9,251,496	10,999,158	143,397,139
2027	143,397,139	9,120,600	11,455,415	141,062,324
2028	141,062,324	8,955,973	11,755,655	138,262,642
2029	138,262,642	8,761,828	12,017,267	135,007,203
2030	135,007,203	8,539,643	12,213,855	131,332,991
2031	131,332,991	8,289,236	12,424,886	127,197,341
2032	127,197,341	8,010,885	12,556,648	122,651,578
2033	122,651,578	7,706,874	12,642,809	117,715,643
2034	117,715,643	7,377,658	12,709,534	112,383,767
2035	112,383,767	7,022,244	12,775,268	106,630,743
2036	106,630,743	6,639,706	12,817,529	100,452,920
2037	100,452,920	6,230,756	12,807,556	93,876,120
2038	93,876,120	5,796,508	12,763,332	86,909,296
2039	86,909,296	5,337,079	12,699,239	79,547,136
2040	79,547,136	4,851,815	12,624,385	71,774,566
2041	71,774,566	4,340,633	12,511,162	63,604,037
2042	63,604,037	3,803,775	12,377,136	55,030,676
2043	55,030,676	3,239,286	12,271,575	45,998,387
2044	45,998,387	2,646,917	12,089,853	36,555,451
2045	36,555,451	2,027,960	11,889,473	26,693,938
2046	26,693,938	1,382,615	11,648,549	16,428,004
2047	16,428,004	711,194	11,386,014	5,753,184
2048	5,753,184	13,277	11,105,563	-

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: 26.50

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 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)
2022	148,204,634	6,629,621	9,722,949	145,111,306
2023	145,111,306	6,479,028	10,048,443	141,541,891
2024	141,541,891	6,307,262	10,337,317	137,511,836
2025	137,511,836	6,112,677	10,691,695	132,932,818
2026	132,932,818	5,893,787	10,999,158	127,827,447
2027	127,827,447	5,647,113	11,455,415	122,019,145
2028	122,019,145	5,371,536	11,755,655	115,635,026
2029	115,635,026	5,070,221	12,017,267	108,687,980
2030	108,687,980	4,744,374	12,213,855	101,218,499
2031	101,218,499	4,394,030	12,424,886	93,187,643
2032	93,187,643	4,019,556	12,556,648	84,650,551
2033	84,650,551	3,622,723	12,642,809	75,630,465
2034	75,630,465	3,204,001	12,709,534	66,124,932
2035	66,124,932	2,762,850	12,775,268	56,112,514
2036	56,112,514	2,298,798	12,817,529	45,593,783
2037	45,593,783	1,812,538	12,807,556	34,598,765
2038	34,598,765	1,305,041	12,763,332	23,140,474
2039	23,140,474	776,577	12,699,239	11,217,812
2040	11,217,812	226,885	12,624,385	-
2041	-	-	12,511,162	-
2042	-	-	12,377,136	-
2043	-	-	12,271,575	-
2044	-	-	12,089,853	-
2045	-	-	11,889,473	-
2046	-	-	11,648,549	-
2047	-	-	11,386,014	-

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:** 18.92

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 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)
2022	148,204,634	12,363,348	9,722,949	150,845,033
2023	150,845,033	12,577,045	10,048,443	153,373,635
2024	153,373,635	12,782,679	10,337,317	155,818,997
2025	155,818,997	12,978,309	10,691,695	158,105,611
2026	158,105,611	13,162,270	10,999,158	160,268,723
2027	160,268,723	13,329,163	11,455,415	162,142,471
2028	162,142,471	13,477,826	11,755,655	163,864,642
2029	163,864,642	13,615,081	12,017,267	165,462,456
2030	165,462,456	13,744,414	12,213,855	166,993,015
2031	166,993,015	13,867,324	12,424,886	168,435,453
2032	168,435,453	13,986,052	12,556,648	169,864,857
2033	169,864,857	14,105,623	12,642,809	171,327,671
2034	171,327,671	14,228,913	12,709,534	172,847,050
2035	172,847,050	14,357,125	12,775,268	174,428,907
2036	174,428,907	14,491,737	12,817,529	176,103,115
2037	176,103,115	14,636,568	12,807,556	177,932,127
2038	177,932,127	14,796,227	12,763,332	179,965,022
2039	179,965,022	14,974,328	12,699,239	182,240,111
2040	182,240,111	15,173,783	12,624,385	184,789,509
2041	184,789,509	15,398,551	12,511,162	187,676,898
2042	187,676,898	15,653,368	12,377,136	190,953,130
2043	190,953,130	15,940,496	12,271,575	194,622,051
2044	194,622,051	16,264,777	12,089,853	198,796,975
2045	198,796,975	16,633,506	11,889,473	203,541,008
2046	203,541,008	17,053,068	11,648,549	208,945,527
2047	208,945,527	17,530,530	11,386,014	215,090,043

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:

All future years

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.



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, 2021	October 1, 2021	October 1, 2021	October 1, 2021
B. Actuarially Determined Contribution (ADC) to Be Paid During Fiscal Year Ending	9/30/2023	9/30/2023	9/30/2023	9/30/2023
C. Assumed Dates of Employer Contributions	Biweekly	Biweekly	Biweekly	Biweekly
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 6,300,222	\$ 6,300,222	\$ 9,740,297	\$ 3,391,685
E. Employer Normal Cost	2,803,000	2,803,000	5,207,400	1,417,208
F. ADC if Paid on Valuation Date: D + E	9,103,222	9,103,222	14,947,697	4,808,893
G. ADC Adjusted for Frequency of Payments	9,406,723	9,406,723	15,298,818	5,015,675
H. ADC as % of Covered Payroll	72.20 %	72.20 %	117.43 %	38.50 %
I. Assumed Rate of Increase in Covered Payroll to Contribution Year	5.55 %	5.55 %	5.55 %	5.55 %
J. Covered Payroll for Contribution Year	13,751,263	13,751,263	13,751,263	13,751,263
K. ADC for Contribution Year: H x J	9,928,412	9,928,412	16,148,108	5,294,236
L. Estimated Credit for State Revenue in Contribution Year	1,201,496	1,201,496	1,201,496	1,201,496
M. Required Employer Contribution (REC) in Contribution Year	8,726,916	8,726,916	14,946,612	4,092,740
N. REC as % of Covered Payroll in Contribution Year: M ÷ J	63.46 %	63.46 %	108.69 %	29.76 %
O. Expected Member Contributions	1,328,499	1,328,499	1,328,499	1,328,499
P. Total Contribution (Including Members) in Contribution Year	11,256,911	11,256,911	17,476,607	6,622,735
Q. Total Contribution as % of Covered Payroll in Contribution Year: P ÷ J	81.86 %	81.86 %	127.09 %	48.16 %
R. Certain Key Assumptions				
Investment Return Assumption	6.625 %	6.625 %	4.625 %	8.625 %
Mortality Table	FRS Mortality - Special Risk	FRS Mortality - Special Risk	FRS Mortality - Special Risk	FRS Mortality - Special Risk

