



August 21, 2023

Ms. Lisa Castronovo
Pension Administrator
City of Delray Beach
100 Northwest 1st Avenue
Delray Beach, Florida 33444

**Re: City of Delray Beach Firefighters' Retirement System
Actuarial Impact Statement**

Dear Lisa:

As requested, we have prepared the enclosed Actuarial Impact Statement to illustrate the first-year impact of the proposed ordinance which would amend the City of Delray Beach Firefighters' Retirement System as follows:

- Amend Section 33.76(E), Disability Retirement Provisions, to indicate that a firefighter who is diagnosed with certain specified cancers is presumed to have contracted those cancers while in the line of duty for purposes of determining the disability benefit payable from the Plan.
- Amend Section 33.76(F), Pre-Retirement Death, to indicate that a firefighter who is diagnosed with certain specified cancers is presumed to have contracted those cancers while in the line of duty for purposes of determining the death benefit payable from the Plan.
- Amend Section 33.88, Internal Revenue Code Compliance, including updates in accordance with the Internal Revenue Code and the provisions of the Secure Act 2.0.

The changes in the Disability Retirement and Pre-Retirement Death provisions were first reflected in the Actuarial Valuation Report as of October 1, 2019. For the purposes of this Actuarial Impact Statement, the impact of these plan changes is being shown on the actuarially determined contribution for the fiscal year ending September 30, 2021 using the valuation results as of October 1, 2019.

In our opinion, the changes under Section 33.88, Internal Revenue Code Compliance, will not have an actuarial impact on the cost of the Plan for prefunding purposes.

The Statement must be filed with the Division of Retirement before the final public hearing on the ordinance. Please have a member of the Board of Trustees sign the Statement. Then send the Statement along with a copy of the proposed ordinance to Tallahassee.

Summary of Findings

- The Required City Contribution in the first year increased by \$13,645 or 0.11% of covered payroll.
- The funded Ratio remained level at 63.5%.

Actuarial Assumptions

To reflect the above changes in the Disability Retirement and Pre-Retirement Death provisions, the proportion of firefighter disabilities and pre-retirement deaths that are assumed to be service-connected (versus non-service connected) was increased from 75% to 85%.

All remaining methods, assumptions, and benefits are the same as indicated in our October 1, 2019 Actuarial Valuation Report.

Risks Associated with Measuring the Accrued Liability and Actuarially Determined Contribution

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that results from the differences between actual experience and the actuarial assumptions.

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 due to changing conditions; 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 study does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the Plan's future financial condition include:

1. Investment risk – actual investment returns may differ from the either assumed or forecasted returns;
2. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the Plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;



3. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
4. Longevity risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
5. Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example, if the investment return is less (or more) than the assumed rate, the cost of the Plan can be expected to increase (or decrease). Likewise, if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

The computed contribution amounts may be considered as a minimum contribution that complies with the pension Board's funding policy and the State statutes. The timely receipt of the actuarially determined contributions is critical to support the financial health of the Plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

Risk Assessment

Risk assessment was outside the scope of this report. Risk assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability. We are prepared to perform such assessment to aid in the decision-making process.

Disclosures and Qualifications

This report was prepared at the request of the Board of Trustees for the City of Delray Beach Firefighters' Retirement System and is intended for use by the Board. This report may be provided to parties other than the Board only in its entirety and only with the permission of the Board.

This report is intended to describe the financial effect of the proposed plan changes on the retirement system. Potential effects on other benefit plans were not considered. No statement in this report is intended to be interpreted as a recommendation in favor of the changes, or in opposition to them. This report should not be relied on for any purpose other than the purpose described above. GRS is not responsible for unauthorized use of this report.

The calculations in this report are based upon information furnished by the Plan Administrator for the October 1, 2019 Actuarial Valuation Report concerning Plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We reviewed this information 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.



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The actuarial assumptions and methods, financial data, and participant census data utilized in these calculations are the same actuarial assumptions and methods, financial data, and participant census data used in the Actuarial Valuation as of October 1, 2019 as presented in our Report dated June 8, 2020, except for the changes noted above.

If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal are not described, or that conditions have changed since the calculations were made, you should contact the author of the report prior to relying on information in the report.

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 this report 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.

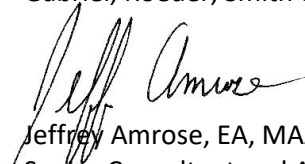
In the event that more than one plan change is being considered, it is very important to remember that the results of separate actuarial valuations cannot generally be added together to produce a correct estimate of the combined effect of all of the changes. The total can be considerably greater than the sum of the parts due to the interaction of various plan provisions with each other, and with the assumptions that must be used.


Jeffrey Amrose and Trisha Amrose are members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. The undersigned 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 Plan as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

If there are any questions or if we can be of further assistance, please contact us. We welcome your questions and comments.

Sincerely yours,
Gabriel, Roeder, Smith & Company


Jeffrey Amrose, EA, MAAA
Senior Consultant and Actuary


Trisha Amrose, EA, MAAA
Consultant and Actuary

This communication shall not be construed to provide tax advice, legal advice or investment advice.



CITY OF DELRAY BEACH FIREFIGHTERS' RETIREMENT SYSTEM

Impact Statement – August 21, 2023

Description of Amendments

The proposed ordinance would amend the Plan as follows:

- Amend Section 33.76(E), Disability Retirement Provisions, to indicate that a firefighter who is diagnosed with certain specified cancers is presumed to have contracted those cancers while in the line of duty for purposes of determining the disability benefit payable from the Plan.
- Amend Section 33.76(F), Pre-Retirement Death, to indicate that a firefighter who is diagnosed with certain specified cancers is presumed to have contracted those cancers while in the line of duty for purposes of determining the death benefit payable from the Plan.
- Amend Section 33.88, Internal Revenue Code Compliance, including updates in accordance with the Internal Revenue Code and the provisions of the Secure Act 2.0.

Funding Implications of Amendment

An actuarial cost estimate is attached.

Certification of Administrator

I believe the amendment to be in compliance with Part VII, Chapter 112, Florida Statutes and Section 14, Article X of the Constitution of the State of Florida.

For the Board of Trustees
as Plan Administrator

SUPPLEMENTAL ACTUARIAL VALUATION REPORT

Plan

City of Delray Beach Firefighters' Retirement System

Valuation Date

October 1, 2019

Date of Report

August 21, 2023

Report Requested by

Board of Trustees

Prepared by

Gabriel, Roeder, Smith & Company

Group Valued

All active and inactive Firefighters.

Benefits Being Considered for Change

The proposed ordinance would amend the Plan as follows:

- Amend Section 33.76(E), Disability Retirement Provisions, to indicate that a firefighter who is diagnosed with certain specified cancers is presumed to have contracted those cancers while in the line of duty for purposes of determining the disability benefit payable from the Plan.
- Amend Section 33.76(F), Pre-Retirement Death, to indicate that a firefighter who is diagnosed with certain specified cancers is presumed to have contracted those cancers while in the line of duty for purposes of determining the death benefit payable from the Plan.
- Amend Section 33.88, Internal Revenue Code Compliance, including updates in accordance with the Internal Revenue Code and the provisions of the Secure Act 2.0.

Participants Affected

All current and future active participants.

Actuarial Assumptions and Methods

Same Actuarial Assumptions and Methods used in the October 1, 2019 Actuarial Valuation, with the exception of the proportion of firefighter disabilities and pre-retirement deaths that are assumed to be service-connected. To reflect the above changes in the Disability Retirement and Pre-Retirement Death provisions, the proportion of firefighter disabilities and pre-retirement deaths that are assumed to be service-connected (versus non-service connected) was increased from 75% to 85%. Some of the key assumptions/methods are:

Investment Return:	7.00%
Salary Increases:	5.00% to 6.25% per year depending on service
Cost Method:	Entry Age Normal

Amortization Period for Any Change in Actuarial Accrued Liability

20 years

Summary of Data Used in Report

See attached page

Actuarial Impact of Proposal(s)

See attached page(s)

Special Risks Involved with the Proposal That the Plan Has Not Been Exposed to Previously

None

Other Cost Considerations

None

ACTUARIALLY DETERMINED (REQUIRED) CONTRIBUTION (ADC)

A. Valuation Date	October 1, 2019 <i>Valuation</i>	October 1, 2019 <i>Proposed Ordinance</i>	<i>Change</i>
B. ADC to Be Paid During Fiscal Year Ending	9/30/2021	9/30/2021	
C. Assumed Date of Employer Contrib.	Biweekly	Biweekly	
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 5,889,209	\$ 5,889,711	\$ 502
E. Employer Normal Cost	2,382,857	2,394,687	11,830
F. ADC as of the Valuation Date: D+E	8,272,066	8,284,398	12,332
G. ADC Adjusted for Frequency of Payments	8,562,912	8,575,677	12,765
H. ADC as % of Covered Payroll	72.86 %	72.97 %	0.11 %
I. Assumed Rate of Increase in Covered Payroll to Contribution Year	5.55 %	5.55 %	0.00 %
J. Covered Payroll for Contribution Year	12,404,842	12,404,842	0
K. ADC for Contribution Year: H x J	9,038,168	9,051,813	13,645
L. Estimated Credit for State Revenue in Contribution Year	1,129,759	1,129,759	0
M. Required Employer Contribution (REC) in Contribution Year: K - L	7,908,409	7,922,054	13,645
N. REC as % of Covered Payroll in Contribution Year: M ÷ J	63.75 %	63.86 %	0.11 %

ACTUARIAL VALUE OF BENEFITS AND ASSETS

A. Valuation Date	October 1, 2019 <i>Valuation</i>	October 1, 2019 <i>Proposed Ordinance</i>	<i>Change</i>
B. Actuarial Present Value of All Projected Benefits for			
1. Active Members			
a. Service Retirement Benefits	\$ 73,729,512	\$ 73,729,516	\$ 4
b. Vesting Benefits	1,100,362	1,100,362	0
c. Disability Benefits	1,742,728	1,838,722	95,994
d. Preretirement Death Benefits	1,015,360	1,054,294	38,934
e. Return of Member Contributions	446,107	444,376	(1,731)
f. Total	<u>78,034,069</u>	<u>78,167,270</u>	<u>133,201</u>
2. Inactive Members			
a. Service Retirees & Beneficiaries	114,776,313	114,776,313	0
b. Disability Retirees	1,477,098	1,477,098	0
c. Terminated Vested Members*	114,284	114,284	0
d. COLA Account	<u>10,098,699</u>	<u>10,098,699</u>	<u>0</u>
e. Total	126,466,394	126,466,394	0
3. Total for All Members	204,500,463	204,633,664	133,201
C. Actuarial Accrued (Past Service) Liability (Entry Age Normal)	170,913,717	170,919,931	6,214
D. Actuarial Value of Accumulated Plan Benefits per FASB No. 35	N/A	N/A	N/A
E. Plan Assets			
1. Market Value	108,468,348	108,468,348	0
2. Actuarial Value	108,512,188	108,512,188	0
F. Unfunded Actuarial Accrued Liability	62,401,529	62,407,743	6,214
G. Actuarial Present Value of Projected Covered Payroll	123,438,426	123,438,438	12
H. Actuarial Present Value of Projected Member Contributions	10,913,711	10,913,712	1
I. Funded Ratio: E2 ÷ C	63.5%	63.5%	0.0%

* Terminated Vested liability includes refunds payable for terminated non-vested members.

CALCULATION OF EMPLOYER NORMAL COST

A. Valuation Date	October 1, 2019 <i>Valuation</i>	October 1, 2019 <i>Proposed Ordinance</i>	<i>Change</i>
B. Normal Cost for			
1. Service Retirement Benefits	\$ 2,923,008	\$ 2,923,009	\$ 1
2. Vesting Benefits	95,247	95,247	0
3. Disability Benefits	113,087	121,352	8,265
4. Preretirement Death Benefits	66,679	70,482	3,803
5. Return of Member Contributions	<u>82,437</u>	<u>82,198</u>	<u>(239)</u>
6. Total for Future Benefits	3,280,458	3,292,288	11,830
7. Assumed Amount for Administrative Expenses	<u>160,131</u>	<u>160,131</u>	<u>0</u>
8. Total Normal Cost	3,440,589	3,452,419	11,830
9. Total as a % of Covered Payroll	29.28 %	29.38 %	0.10 %
C. Expected Member Contribution	1,057,732	1,057,732	0
D. Employer Normal Cost: B8-C	2,382,857	2,394,687	11,830
E. Employer Normal Cost as a % of Covered Payroll	20.28 %	20.38 %	0.10 %

PARTICIPANT DATA			
	October 1, 2019 <i>Valuation</i>	October 1, 2019 <i>Proposed Ordinance</i>	<i>Change</i>
ACTIVE MEMBERS			
Number	141	141	0
Covered Annual Payroll	\$ 11,752,574	\$ 11,752,574	\$ 0
Average Annual Payroll	\$ 83,352	\$ 83,352	\$ 0
Average Age	34.9	34.9	0.0
Average Past Service	8.1	8.1	0.0
Average Age at Hire	26.8	26.8	0.0
RETIREES, BENEFICIARIES & DROP			
Number	135	135	0
Annual Benefits	\$ 8,632,500	\$ 8,632,500	\$ 0
Average Annual Benefit	\$ 63,944	\$ 63,944	\$ 0
Average Age	60.7	60.7	0.0
DISABILITY RETIREES			
Number	4	4	0
Annual Benefits	\$ 137,705	\$ 137,705	\$ 0
Average Annual Benefit	\$ 34,426	\$ 34,426	\$ 0
Average Age	62.4	62.4	0.0
TERMINATED VESTED MEMBERS (EXCLUDING NON-VESTED REFUNDS PAYABLE)			
Number	1	1	0
Annual Benefits	\$ 28,716	\$ 28,716	\$ 0
Average Annual Benefit	\$ 28,716	\$ 28,716	\$ 0
Average Age	34.6	34.6	0.0