



Actuarial Valuation Report

Firefighters' Pension and Relief Fund for the City of New Orleans

New Fund

Funding Valuation as of January 1, 2024

GASB 68 Valuation for the Fiscal Year Ending December 31,
2023, using December 31, 2023, Measurement Date

Introduction

This report documents the results of the actuarial valuation for the fiscal year ending December 31, 2023 of the New Fund for the Firefighters' Pension and Relief Fund for the City of New Orleans. The plan is a single-employer plan and does not issue a separate financial statement. As a result, all reporting requirements are included in the employer's financial statement. These results are based on a Measurement Date of December 31, 2023. The information provided in this report is intended strictly for documenting:

- Information relating to company and plan disclosure and reporting requirements; and
- The actuarial determined contribution for the fiscal year ending December 31, 2024

Determinations for purposes other than the financial accounting requirements may be significantly different from the results in this report. Thus, the use of this report for purposes other than those expressed here may not be appropriate.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board. In addition, the valuation results are based on our understanding of the financial accounting and reporting requirements under U.S. Generally Accepted Accounting Principles as set forth in Government Accounting Standards Board Statement 68 (GASB 68) including any guidance or interpretations provided by the Company and/or its audit partners prior to the issuance of this report. The information in this report is not intended to supersede or supplant the advice and interpretations of the Firefighters' Pension and Relief Fund for the City of New Orleans's auditors. Additional disclosures may be required under GASB 67. The funding valuation results are based on our understanding of the applicable laws and regulations under Louisiana Statutes Title 11, including any guidance or interpretations provided by the Firefighters' Pension and Relief Fund for the City of New Orleans prior to the issuance of this report.

A valuation model was used to develop the liabilities for the December 31, 2023 valuation. The valuation model relies on ProVal software, which was developed by Winklevoss Technologies, LLC. Experts within Aon selected this software and determined it is appropriate for performing valuations. We coded and reviewed the software for the provisions, assumptions, methods, and data of the New Fund.

A model was used to develop the appropriate GASB discount rate. The undersigned relied on experts at Aon for the development of the capital market assumptions and the model underlying the expected rate of return.

The valuation model outputs various cost scenarios. The "1% increase" and "1% decrease" interest rate scenarios vary only the discount rate assumption, in order to illustrate the impact of a change in that assumption in isolation. In practice, certain other assumptions, such as the expected or realized asset returns, would also be expected to vary when the discount rate changes. Therefore, the output from these scenarios should be used solely for assessing the impact of the discount rate in isolation and may not represent a realistic set of results for other purposes.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to (but not limited to) such factors as the following:

- Plan experience differing from that anticipated by the economic or demographic assumptions;
- Changes in actuarial methods or 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); and
- Changes in plan provisions or applicable law.

Due to the limited scope of our assignment, we did not perform an analysis of the potential range of such future measurements. However, an assessment and disclosure of risks pertaining to the funding valuation as required by the actuarial standards of practice is being provided in a separate report.

Funded status measurements shown in this report are determined based on various measures of plan assets and liabilities. For funding purposes, plan assets are measured based on the asset valuation method described in the Actuarial Assumptions and Methods section of this report. For entity and plan disclosure and reporting purposes, funded status is determined using plan assets measured at market value. Plan liabilities are measured based on the interest rates and other assumptions summarized in the Actuarial Assumptions and Methods section of this report.

These funded status measurements may not be appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations, and funded status measurements for Firefighters' Pension and Relief Fund for the City of New Orleans and plan disclosure and reporting purposes may not be appropriate for assessing the need for or the amount of future contributions.

In determining the actuarially determined contribution for the New Fund, Aon may be assisting the appropriate plan fiduciary as it performs tasks that are required for the administration for an employee benefit plan. Aon may be consulting with the employer/plan sponsor (Firefighters' Pension and Relief Fund for the City of New Orleans) as it considers alternative strategies for funding the plan. Thus, Aon potentially will be providing assistance to the Firefighters' Pension and Relief Fund for the City of New Orleans (and/or certain of its employees) acting in a fiduciary capacity (for the benefit of plan participants and beneficiaries) and to Firefighters' Pension and Relief Fund for the City of New Orleans (and/or its executives) acting in a settlor capacity (for the benefit of the employer sponsoring the New Fund).

In conducting the valuation, we have relied on personnel, plan design, and asset information supplied by Firefighters' Pension and Relief Fund for the City of New Orleans as of the valuation date. While we cannot verify the accuracy of all the information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy or completeness of the information and believe that it has produced appropriate results.

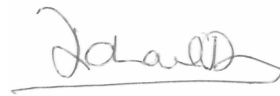
The actuarial assumptions and methods used in this valuation are described in the Actuarial Assumptions and Methods section of this report. Firefighters' Pension and Relief Fund for the City of New Orleans selected the economic and demographic assumptions and prescribed them for use for purposes of compliance with GASB 68. The Firefighters' Pension and Relief Fund for the City of New Orleans selected the funding economic and demographic assumptions and prescribed them for use for purposes of compliance with the state's funding regulations. Aon provided guidance with respect to these assumptions, and it is our belief that the assumptions represent reasonable expectations of anticipated plan experience and the combined effect of the assumptions, other than the prescribed assumptions or methods set by law or items we are unable to assess for reasonableness have no significant bias.

The undersigned are familiar with the near-term and long-term aspects of Pension valuations and collectively meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. The information provided in this report is dependent upon various factors as documented throughout this report, which may be subject to change. Each section of this report is considered to be an integral part of the actuarial opinions.

To our knowledge, no colleague of Aon providing services to Firefighters' Pension and Relief Fund for the City of New Orleans has any material direct or indirect financial interest in Firefighters' Pension and Relief Fund for the City of New Orleans. Thus, we believe there is no relationship existing that might affect our capacity to prepare and certify this actuarial report for Firefighters' Pension and Relief Fund for the City of New Orleans.



Deep Mandal, FSA, CFA, EA
Aon
1.281.882.6329
deep.mandal.2@aon.com



Michaela Perez, FSA, EA
Aon
1.770.690.7442
michaela.perez@aon.com

May 31, 2024

Table of Contents

Funding Requirements	1
Summary	2
Assets	4
Low-Default-Risk Obligation Measure (“LDROM”)	8
Accounting Requirements	9
Development of Net Pension Expense	10
Reconciliation of Net Pension Liability	12
Gain/Loss	13
Deferred Outflows/Inflows	14
Plan Fiduciary Net Position Projection	16
Sensitivity	18
Disclosure—Changes in the Net Pension Liability and Related Ratios	19
Appendix	23
Participant Data	24
Asset Allocation	25
Actuarial Assumptions and Methods	26
Actuarial Assumptions and Methods—Discussion	37
Plan Provisions	38

Funding Requirements

Summary

The following table illustrates the unfunded pension liability under the plan's funding policy.

	Valuation Date January 1, 2023	Valuation Date January 1, 2024
Pension Liability		
Retired Participants and Beneficiaries Receiving Payment	\$ 318,100,754	\$ 293,685,750
Terminated Vested Participants	0	4,035,770
Active Participants	<u>264,879,693</u>	<u>228,228,709</u>
Total	582,980,447	525,950,229
Actuarial Value of Assets	<u>\$ 53,468,142</u>	<u>\$ 76,112,921</u>
Unfunded Accrued Liability ¹	\$ 465,101,018	\$ 449,837,308
Funded Ratio	9.17%	14.5%
Discount Rate	7.50%	7.20%

¹ Includes \$4,979,098 of PLOP account balances, \$6,049,965 of DROP account balances (retired) and \$17,228,536 of DROP account balances (not retired) as of January 1, 2023. Includes \$4,153,102 of PLOP account balances, \$5,525,555 of DROP account balances (retired) and \$17,569,298 of DROP account balances (not retired) as of January 1, 2024.

Actuarial Determined Contribution¹

The following table illustrates the annual actuarial determined contribution under the plan's funding policy. The actuarial determined contribution is determined as the amount needed to fund the benefits accrued in the current year, plus administrative expenses incurred in the current year, plus an amortization of the unfunded liability as outlined in the January 1, 2016 Cooperative Endeavour Agreement ("CEA") between the City of New Orleans and the Firefighters' Pension and Relief Fund for the City of New Orleans. If the plan sponsor contributes the annual actuarial determined contribution amount and actual plan experience is equal to assumed, the plan would be expected to become fully funded within 22 years, and to have a lower contribution requirement in subsequent years.

Based on the plan sponsor's funding policy, the plan's unfunded liability would be expected to decrease over time, and the plan assets would be expected to be sufficient to pay plan benefits for all future years. The plan's unfunded liability is estimated to be fully amortized in 22 years.

Based on the plan sponsor's funding policy, the contribution amount is currently greater than the normal cost plus interest on the unfunded liability and is estimated to remain that way for all future years.

	Fiscal Year Ending December 31, 2023	Fiscal Year Ending December 31, 2024
Normal Cost	\$ 8,135,376	\$ 9,776,856
Assumed Administrative Expenses	200,000	800,000
Amortization of the Unfunded Liability	41,393,837	58,057,666
Expected Employee Contributions	(3,764,799)	(4,964,137)
Interest Adjustment	<u>0</u>	<u>4,584,268</u>
 Actuarial Determined Contribution	 \$ 45,964,414	 \$ 68,254,652

Reasonable Actuarially Determined Contribution

The actuarially determined contribution in this report is considered reasonable because it meets the criteria of Section 3.21 of Actuarial Standard of Practice No. 4, *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions* (ASOP 4):

- All significant assumptions are reasonable
- Combined impact of assumptions are projected to have no significant bias
- The actuarial cost method allocates cost in a reasonable way over employees' careers
- Amortizations are projected to either fully amortize the unfunded liability or reduce the unfunded accrued liability by a reasonable amount within a reasonable period.
- The asset method and output smoothing method (if any) are consistent with actuarial standards.
- Contributions are projected to accumulate assets adequate to make benefit payments when due.

¹ The Actuarial Determined Contribution shown for the Fiscal Year Ending December 31, 2023 was developed by the prior actuary and did not reflect the methodology outlined in the January 1, 2016 CEA.

Market Value of Assets (Reflects 12/31 Measurement Date)

	Fiscal Year Ending 12/31/2022	Fiscal Year Ending 12/31/2023
Fair Value of Assets at Beginning of Measurement Period	\$ 52,869,728	\$ 53,468,142
Contributions—Employer	37,946,745	40,819,651
Contributions—Employee	3,708,895	4,537,595
Benefit Payments	(34,277,214)	(33,584,182)
Investment Return, Net of Expenses	<u>(6,780,012)</u>	<u>6,770,767</u>
Fair Value of Assets at End of Measurement Period	\$ 53,468,142	\$ 72,011,973
Receivable Contributions	<u>0</u>	<u>0</u>
Market Value of Assets at End of Measurement Period	\$ 53,468,142	\$ 72,011,973

Development of Expected Investment Return (12/31 Measurement)

	Fiscal Year Ending 12/31/2022	Fiscal Year Ending 12/31/2023
Pension Asset at Beginning of Measurement Period	\$ 52,869,728	\$ 53,468,142
Actual Contributions—Employer	37,946,745	40,819,651
Actual Contributions—Employee	3,708,895	4,537,595
Actual Benefit Payments	(34,277,214)	(33,584,182)
Administrative Expenses	(326,450)	(754,832)
Other	0	0
Expected Return on Assets	<u>7.50%</u>	<u>7.50%</u>
Expected Investment Return	\$ 4,229,679	\$ 4,428,406

Actuarial Value of Assets

	January 1, 2024
1. Market Value of Assets	\$ 72,011,973
2. Asset Gains/(Losses) for Four Prior Years	
a. January 1, 2023	\$ 3,097,193
b. January 1, 2022	\$ (10,678,460)
c. January 1, 2021	\$ (994,860)
d. January 1, 2020	\$ 1,131,588
3. Unrecognized Asset Gains/(Losses)	
a. January 1, 2023: 80% of (2)(a)	\$ 2,477,754
b. January 1, 2022: 60% of (2)(b)	(6,407,076)
c. January 1, 2021: 40% of (2)(c)	(397,944)
d. January 1, 2020: 20% of (2)(d)	<u>226,318</u>
e. Total: (a) + (b) + (c) + (d)	\$ (4,100,948)
4. Preliminary Actuarial Value of Assets = (1) – (3)(e)	\$ 76,112,921
5. Adjustment to Be Within 20% of Market Value	\$ 0
6. Actuarial Value of Assets = (4) + (5)	\$ 76,112,921

Amortization of Unfunded Liability (Gains)/Losses

The table below lists the amortization bases as of December 31, 2023.

Date Established	Type of Base	Period		Balance		Annual Payment
		Original	Remaining	Original	Remaining	
01/01/2016	CEA	30.00	22.00	\$343,439,402	\$308,741,949	\$ 26,470,695
01/01/2017	Plan Amendment	15.00	8.00	\$(18,912,503)	\$(12,549,539)	\$(1,975,710)
01/01/2020	Plan Amendment	15.00	11.00	\$ 4,291,492	\$ 3,556,550	\$ 446,853
01/01/2020	Assumption Change	10.00	6.00	\$ 9,117,253	\$ 6,234,629	\$ 1,227,692
01/01/2020	(Gain)/Loss	5.00	1.00	\$ 16,025,521	\$ 3,684,600	\$ 3,684,600
01/01/2021	Assumption Change	10.00	7.00	\$ 25,414,108	\$ 19,610,549	\$ 3,418,108
01/01/2021	(Gain)/Loss	5.00	2.00	\$ 5,778,309	\$ 2,564,416	\$ 1,326,763
01/01/2022	(Gain)/Loss	5.00	3.00	\$ (9,695,824)	\$ (6,232,069)	\$(2,223,342)
01/01/2023	(Gain)/Loss	5.00	4.00	\$ 64,255,799	\$ 53,193,217	\$ 14,715,576
01/01/2024	Assumption	10.00	10.00	\$ 55,774,011	\$ 55,774,011	\$ 7,476,247
01/01/2024	(Gain)/Loss	5.00	5.00	\$ 15,258,995	\$ 15,258,995	\$ 3,490,184
Total Charges					\$449,837,308	\$ 58,057,666

Low-Default-Risk Obligation Measure (“LDROM”)

A key purpose of this report is to communicate an Actuarially Determined Contribution and Funded Percentage for the New Fund. For both of these calculations, we use an Actuarial Accrued Liability that represents the present value of the portion of expected future benefit payments accrued under the plan’s actuarial cost method, discounted back to the valuation date using an asset return expectation of [7.20%]. The asset return expectation is based on the plan’s diversified asset portfolio and long-term capital market return assumptions for the various asset classes represented in the portfolio. The objective of the portfolio is to maximize investment returns with a reasonable amount of risk.

For all funding valuations with measurement dates on or after February 15, 2023, and for which an actuarial report is issued on or after February 15, 2023, ASOP 4 now requires the calculation and disclosure of an additional measure of the plan’s liability using a discount rate or discount rates derived from low-default-risk fixed income securities whose cash flows are reasonably consistent with the pattern of benefits expected to be paid in the future.

This additional liability measure is referred to as the Low-Default-Risk Obligation Measure (LDROM). The LDROM shown in this report is based upon the Bond Buyer GO-20 index as of the measurement date, 3.26%, although other discount rates may also be appropriate for this purpose.

The LDROM can be thought of as a measure of what the plan’s funding liability would be if the plan were to use an ultra-low-risk investment policy. Since plan assets are not invested in an all-bond portfolio, the LDROM may not be appropriate for assessing funding status progress on an Actuarial Accrued Liability basis, necessary plan contributions, or the security of participant benefits.

All assumptions and methods other than the asset return assumption are the same for the calculation of Actuarial Accrued Liability and LDROM.

	Fiscal Year Ending December 31, 2023
LDROM	\$ 839,187,371
Interest Rate	3.26%
Actuarial Cost Method	Entry Age Normal

Accounting Requirements

Development of GASB 68 Net Pension Expense

Calculation Details

The following table illustrates the Net Pension Liability under GASB 68.

	Fiscal Year Ending 12/31/2022	Fiscal Year Ending 12/31/2023
(1) Pension Liability		
(a) Retired Participants and Beneficiaries Receiving Payment	\$ 318,100,754	\$ 398,218,106
(b) Terminated Vested	0	7,923,303
(c) Active Participants	<u>147,000,264</u>	<u>392,080,864</u>
(d) Total	\$ 465,101,018	\$ 798,222,273
(2) Plan Fiduciary Net Position	<u>(53,468,142)</u>	<u>(72,011,973)</u>
(3) Net Pension Liability	\$ 411,632,876	\$ 726,210,300
(4) Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	11.50%	9.02%
(5) Deferred Outflow of Resources for Contributions Made After Measurement Date	\$ 0	TBD

Expense

The following table illustrates the Pension expense under GASB 68.

	Fiscal Year Ending 12/31/2022	Fiscal Year Ending 12/31/2023
(1) Service Cost	\$ 7,868,430	\$ 8,135,376
(2) Interest Cost	29,645,336	34,256,090
(3) Expected Investment Return	(4,229,679)	(4,428,406)
(4) Employee Contributions ¹	(3,708,895)	(4,537,595)
(5) Administrative Expense	326,450	754,832
(6) Other	0	0
(7) Plan Changes	0	0
(8) Amortization of Unrecognized		
(a) Liability (Gain)/Loss	6,698,612	(577,529)
(b) Asset (Gain)/Loss	3,922,570	122,394
(c) Assumption Change (Gain)/Loss	<u>6,926,273</u>	<u>81,144,835</u>
(9) Total Expense	\$ 47,449,097	\$ 114,869,997

¹ Employee contributions for the Fiscal Year Ending 12/31/2022 are from the Audited Financial Statements for the Year Ending December 31, 2022.

Shown below are details regarding the calculation of Service Cost, Interest Cost and Expected Investment Return components of the Expense.

	Fiscal Year Ending 12/31/2022	Fiscal Year Ending 12/31/2023
(1) Development of Service Cost:		
(a) Normal Cost at Beginning of Measurement Period	\$ 7,868,430	\$ 8,135,376
(2) Development of Interest Cost:		
(a) Total Pension Liability at Beginning of Measurement Period	\$ 408,850,476	\$ 465,101,018
(b) Normal Cost at Beginning of Measurement Period	7,868,430	8,135,376
(c) Actual Benefit Payments	(34,277,214)	(33,584,182)
(d) Discount Rate	<u>7.50%</u>	<u>7.50%</u>
(e) Interest Cost	\$ 29,645,336	\$ 34,256,090
(3) Development of Expected Investment Return:		
(a) Plan Fiduciary Net Position at Beginning of Measurement Period	\$ 52,869,728	\$ 53,468,142
(b) Actual Contributions—Employer	37,946,745	40,819,651
(c) Actual Contributions—Employee	3,708,895	4,537,595
(d) Actual Benefit Payments	(34,277,214)	(33,584,182)
(e) Administrative Expenses	(326,450)	(754,832)
(f) Other	0	0
(g) Expected Return on Assets	<u>7.50%</u>	<u>7.50%</u>
(h) Expected Return	\$ 4,229,679	\$ 4,428,406

Reconciliation of Net Pension Liability

Shown below are details regarding the Total Pension Liability, Plan Fiduciary Net Position, and Net Pension Liability for the Measurement Period from December 31, 2022 to December 31, 2023:

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (c) = (a) – (b)
Balance Recognized at 12/31/2022 (Based on 12/31/2022 Measurement Date)	\$ 465,101,018	\$ 53,468,142	\$ 411,632,876
Changes Recognized for the Fiscal Year:			
Service Cost	\$ 8,135,376	N/A	\$ 8,135,376
Interest on the Total Pension Liability	34,256,090	N/A	34,256,090
Changes of Benefit Terms	0	N/A	0
Differences Between Expected and Actual Experience	(3,732,084)	N/A	(3,732,084)
Changes of Assumptions	328,046,055	N/A	328,046,055
Benefit Payments	(33,584,182)	(33,584,182)	0
Contributions From the Employer	N/A	40,819,651	(40,819,651)
Contributions From the Employee	N/A	4,537,595	(4,537,595)
Net Investment Income	N/A	7,525,599	(7,525,599)
Administrative Expense	N/A	(754,832)	754,832
Other	N/A	0	0
Net Changes	\$ 333,121,255	\$ 18,543,831	\$ 314,577,424
Balance Recognized at 12/31/2023 (Based on 12/31/2023 Measurement Date)	\$ 798,222,273	\$ 72,011,973	\$ 726,210,300

Liability (Gain)/Loss

The following table illustrates the liability gain/loss under GASB 68.

	Fiscal Year Ending 12/31/2022	Fiscal Year Ending 12/31/2023
(1) Pension Liability at Beginning of Measurement Period	\$ 408,850,476	\$ 465,101,018
(2) Service Cost	7,868,430	8,135,376
(3) Interest on the Total Pension Liability	29,645,336	34,256,090
(4) Changes of Benefit Terms	0	0
(5) Changes of Assumptions	0	328,046,055
(6) Benefit Payments	<u>(34,277,214)</u>	<u>(33,584,182)</u>
(7) Expected Pension Liability at End of Measurement Period	\$ 412,087,028	\$ 801,954,357
(8) Actual Pension Liability at End of Measurement Period	<u>465,101,018</u>	<u>798,222,273</u>
(9) Pension Liability (Gain)/Loss	\$ 53,013,990	\$ (3,732,084)
(10) Average Future Working Life Expectancy	<u>5.00</u>	<u>4.42</u>
(11) Pension Liability (Gain)/Loss Amortization	\$ 10,602,798	\$ (844,363)

Asset (Gain)/Loss

The following table illustrates the asset gain/loss under GASB 68.

	Fiscal Year Ending 12/31/2022	Fiscal Year Ending 12/31/2023
(1) Pension Asset at Beginning of Measurement Period	\$ 52,869,728	\$ 53,468,142
(2) Contributions—Employer	37,946,745	40,819,651
(3) Contributions—Employee	3,708,895	4,537,595
(4) Expected Investment Income	4,229,679	4,428,406
(5) Benefit Payments	(34,277,214)	(33,584,182)
(6) Administrative Expense	(326,450)	(754,832)
(7) Other	<u>0</u>	<u>0</u>
(8) Expected Pension Asset at End of Measurement Period	\$ 64,151,383	\$ 68,914,780
(9) Actual Pension Asset at End of Measurement Period	<u>53,468,142</u>	<u>72,011,973</u>
(10) Pension Asset (Gain)/Loss	\$ 10,683,241	\$ (3,097,193)
(11) Amortization Factor	<u>5.00</u>	<u>5.00</u>
(12) Pension Asset (Gain)/Loss Amortization	\$ 2,136,648	\$ (619,439)

Deferred Outflows/Inflows

The following table illustrates the Deferred Inflows and Outflows as of December 31, 2023 under GASB 68.

	Deferred Outflows	Deferred Inflows
(1) Difference Between Actual and Expected Experience	\$ 31,808,394	\$ 21,375,057
(2) Net Difference Between Expected and Actual Earnings on Pension Plan Investments	4,284,992	0
(3) Assumption Changes	<u>258,910,311</u>	<u>0</u>
(4) Sub Total	\$ 295,003,697	\$ 21,375,057
(5) Contributions Made in Fiscal Year Ending 12/31/2023 After Measurement Date	<u>0</u>	<u>N/A</u>
(6) Total	\$ 295,003,697	\$ 21,375,057

Amortization of Deferred Inflows/Outflows

The table below lists the amortization bases included in the deferred inflows/outflows as of December 31, 2023.

Date Established	Type of Base	Period		Balance		Annual Payment
		Original	Remaining	Original	Remaining	
12/31/2017	Liability (Gain)/Loss	5.00	0.00	\$ (222,473)	\$ 0	\$ (31,781)
12/31/2018	Liability (Gain)/Loss	5.00	0.00	\$ (8,072,878)	\$ 0	\$ (1,345,478)
12/31/2019	Liability (Gain)/Loss	5.00	0.00	\$ 11,154,725	\$ 0	\$ 2,230,945
12/31/2020	Liability (Gain)/Loss	5.00	1.00	\$ (19,459,842)	\$ (3,891,970)	\$ (3,891,968)
12/31/2021	Liability (Gain)/Loss	5.00	2.00	\$ (36,488,412)	\$ (14,595,366)	\$ (7,297,682)
12/31/2022	Liability (Gain)/Loss	5.00	3.00	\$ 53,013,990	\$ 31,808,394	\$ 10,602,798
12/31/2022	Liability (Gain)/Loss	4.42	3.42	\$ (3,732,084)	\$ (2,887,721)	\$ (844,363)
12/31/2019	Asset (Gain)/Loss	5.00	0.00	\$ (7,743,178)	\$ 0	\$ (1,548,634)
12/31/2020	Asset (Gain)/Loss	5.00	1.00	\$ (225,821)	\$ (45,165)	\$ (45,164)
12/31/2021	Asset (Gain)/Loss	5.00	2.00	\$ 994,915	\$ 397,966	\$ 198,983
12/31/2022	Asset (Gain)/Loss	5.00	3.00	\$ 10,683,241	\$ 6,409,945	\$ 2,136,648
12/31/2023	Asset (Gain)/Loss	5.00	4.00	\$ (3,097,193)	\$ (2,477,754)	\$ (619,439)
12/31/2019	Assumption Change	5.00	0.00	\$ 9,217,253	\$ 0	\$ 1,843,449
12/31/2020	Assumption Change	5.00	1.00	\$ 25,414,108	\$ 5,082,820	\$ 5,082,822
12/31/2022	Assumption Change	4.42	3.42	\$ 328,046,055	\$253,827,491	\$ 74,218,564
Total Charges					\$273,628,640	\$ 80,689,700

Amounts Recognized in the deferred outflows of resources and deferred inflows of resources related to Pension will be recognized in the Pension expense as follows:

Year End December 31:

2024	\$ 79,541,194
2025	\$ 78,395,507
2026	\$ 85,494,209
2027	\$ 30,197,730
2028	\$ 0
Total Thereafter	\$ 0

Plan Fiduciary Net Position Projection

The following table illustrates the projection of the fiduciary net position for use in the calculation of the discount rate as of December 31, 2023.

(\$ in thousands)

Year Ending December 31 ²	Beginning Fiduciary Net Position (a)	Total Contributions (b)	Benefit Payments (c)	Administrative Expenses (d)	Investment Earnings (e)	Ending Fiduciary Net Position ¹ (f)
2024	\$72,012	\$35,388	\$30,783	\$800	\$4,068	\$79,885
2025	79,885	35,101	33,004	800	4,556	85,738
2026	85,738	34,825	45,940	800	4,520	78,342
2027	78,342	34,453	39,380	800	4,219	76,834
2028	76,834	34,169	41,243	800	4,045	73,006
2029	73,006	33,836	42,932	800	3,709	66,819
2030	66,819	33,534	43,654	800	3,238	59,137
2031	59,137	33,245	43,983	800	2,674	50,272
2032	50,272	32,951	44,540	800	2,016	39,899
2033	39,899	32,657	44,301	800	1,277	28,733
2034	28,733	32,356	45,173	800	443	15,558
2035	15,558	31,979	46,818	800	0	0
2036	0	31,573	47,715	800	0	0
2037	0	31,197	47,765	800	0	0
2038	0	30,800	48,694	800	0	0
2039	0	30,318	49,544	800	0	0
2040	0	29,848	49,853	800	0	0
2041	0	29,327	50,653	800	0	0
2042	0	28,765	50,779	800	0	0
2043	0	28,221	49,961	800	0	0
2044	0	27,651	49,194	800	0	0
2045	0	27,039	48,400	800	0	0
2046	0	26,402	47,531	800	0	0
2047	0	25,730	46,669	800	0	0
2048	0	24,853	45,707	800	0	0
2049	0	23,861	44,914	800	0	0
2050	0	22,832	44,098	800	0	0
2051	0	21,761	43,192	800	0	0
2052	0	20,644	42,352	800	0	0
2053	0	19,475	41,612	800	0	0

¹ (f)=(a) + (b) – (c) – (d) + (e)

² Years later than 2053 were omitted from this table.

Plan Fiduciary Net Position

The last year in which projected benefit payments are due from the Plan is 2120.

The Plan's projected fiduciary net position at the end of 2035 is \$0, based on the valuation completed for the fiscal year ending December 31, 2023.

As such, the Plan's fiduciary net position was not projected to be available to make all projected future benefit payments for current Plan members. The projected "depletion date" when projected benefits are not covered by projected assets is 2035. Therefore, the long-term expected rate of return on Plan investments of 7.20% per annum was not applied to all periods of projected benefit payments to determine the total Pension liability as of December 31, 2023 shown earlier in this report, pursuant to paragraph 30 of GASB Statement No. 68.

In projecting the Plan's fiduciary net position the following assumptions were made:

1. Interest rate for discounting was 7.20% per annum.
2. Projected total contributions are employer contributions to the unfunded actuarial accrued liability and normal cost (including administrative expenses). Based on the historical contributions made by the plan the unfunded liability is not anticipated to be paid off. Contributions are assumed to be paid at year end.
3. Assumed contributions are based on the historical 5 year average of contributions made to the plan.
4. Projected benefit payments have been determined in accordance with Paragraphs 24 - 25 of GASB Statement No. 68, and are based on the closed group of active, retired members and beneficiaries as of December 31, 2023. Benefit payments are assumed to be paid mid-year.
5. Administrative expenses are \$800 thousand for 2024. Expenses are assumed to be paid mid-year.
6. Projected investment earnings are based on the assumed investment rate of return of 7.20% per annum.

Interest Rate Sensitivity

The following table illustrates the impact of interest rate sensitivity on the Net Pension Liability for fiscal year ending December 31, 2022:

	1% Decrease (6.50%)	Current Rate (7.50%)	1% Increase (8.50%)
(1) Total Pension Liability	\$ 515,051,259	\$ 465,101,018	\$ 422,582,342
(2) Plan Fiduciary Net Position	<u>(53,468,142)</u>	<u>(53,468,142)</u>	<u>(53,468,142)</u>
(3) Net Pension Liability (Asset)	\$ 461,583,117	\$ 411,632,876	\$ 369,114,200

The following table illustrates the impact of interest rate sensitivity on the Net Pension Liability for fiscal year ending December 31, 2023:

	1% Decrease (2.63%)	Current Rate (3.63%)	1% Increase (4.63%)
(1) Total Pension Liability	\$ 916,926,650	\$ 798,222,273	\$ 702,072,619
(2) Plan Fiduciary Net Position	<u>(72,011,973)</u>	<u>(72,011,973)</u>	<u>(72,011,973)</u>
(3) Net Pension Liability (Asset)	\$ 844,914,677	\$ 726,210,300	\$ 630,060,646

Disclosure—Changes in the Net Pension Liability and Related Ratios

Changes in the Net Pension Liability and Related Ratios¹

	Fiscal Year Ending				
	2014	2015	2016	2017	2018
Total Pension Liability					
Service Cost	\$ 5,864,836	\$ 6,183,235	\$ 6,327,772	\$ 6,020,016	\$ 5,851,426
Interest Cost	31,786,464	25,108,885	28,032,524	29,807,146	29,890,231
Changes of Benefit Terms	0	0	(18,912,503)	0	0
Differences Between Expected and Actual Experiences	(16,071,547)	(18,529,944)	45,022,465	(222,473)	(8,072,878)
Changes of Assumptions	95,806,073	(80,611,355)	0	0	0
Benefit Payments	(38,888,748)	(40,760,039)	(39,880,379)	(33,736,884)	(35,256,899)
Net Change in Total Pension Liability	\$ 78,497,078	\$ (108,609,218)	\$ 20,589,879	\$ 1,867,805	\$ (7,588,120)
Total Pension Liability (Beginning)	423,819,315	502,316,393	393,707,175	414,297,054	416,164,859
Total Pension Liability (Ending)	\$ 502,316,393	\$ 393,707,175	\$ 414,297,054	\$ 416,164,859	\$ 408,576,739
Plan Fiduciary Net Position					
Contributions—Employer	\$ 20,648,538	\$ 30,501,132	\$ 32,278,593	\$ 36,328,853	\$ 34,102,867
Contributions—Member	2,038,542	2,654,721	2,729,769	3,011,193	3,052,370
Net Investment Income	(5,328,054)	(6,683,482)	(1,518,395)	(5,309,489)	(12,648,537)
Benefit Payments	(38,888,748)	(40,760,039)	(39,880,379)	(33,736,884)	(35,256,899)
Administrative Expense	(600,909)	(822,056)	(879,623)	(555,675)	(565,575)
Other	0	0	0	0	0
Net Change in Plan Fiduciary Net Position	\$ (22,130,631)	\$ (15,109,724)	\$ (7,270,035)	\$ (262,002)	\$ (11,315,774)
Plan Fiduciary Net Position (Beginning)	87,508,128	65,377,497	50,267,773	42,997,738	42,735,736
Plan Fiduciary Net Position (Ending)	\$ 65,377,497	\$ 50,267,773	\$ 42,997,738	\$ 42,735,736	\$ 31,419,962
Net Pension Liability (Ending)	\$ 436,938,896	\$ 343,439,402	\$ 371,299,316	\$ 373,429,123	\$ 377,156,777
Net Position as a Percentage of Pension Liability	13.02%	12.77%	10.38%	10.27%	7.69%
Covered-Employee Payroll	\$ 26,984,531	\$ 27,088,650	\$ 27,148,936	\$ 27,762,479	\$ 28,171,135
Net Pension Liability as a Percentage of Payroll	1619.22%	1267.84%	1367.64%	1345.09%	1338.81%
Annual Money-Weighted Rate of Return²	-7.43%	-10.92%	-3.10%	-11.24%	-28.80%

¹ GASB 68 was effective first for employer fiscal years beginning after June 15, 2014.

² The money-weighted rate of return shown was determined as the 1-year internal rate of return reflecting the timing of contributions, benefit payments and expenses during the Measurement Period grouped as the beginning or middle of month nearest transaction.

Disclosure—Changes in the Net Pension Liability and Related Ratios

Changes in the Net Pension Liability and Related Ratios¹

	Fiscal Year Ending				
	2019	2020	2021	2022	2023
Total Pension Liability					
Service Cost	\$ 6,289,441	\$ 7,532,704	\$ 7,028,535	\$ 7,868,430	\$ 8,135,376
Interest Cost	29,295,484	31,226,471	31,913,679	29,645,336	34,256,090
Changes of Benefit Terms	4,291,492	0	0	0	0
Differences Between Expected and Actual Experiences	11,154,725	(19,459,842)	(36,488,412)	53,013,990	(3,732,084)
Changes of Assumptions	9,117,253	25,414,108	0	0	328,046,055
Benefit Payments	(35,940,582)	(32,863,222)	(38,238,097)	(34,277,214)	(33,584,182)
Net Change in Total Pension Liability	\$ 24,207,813	\$ 11,850,219	\$ (35,784,295)	\$ 56,250,542	\$ 333,121,255
Total Pension Liability (Beginning)	408,576,739	432,784,552	444,634,771	408,850,476	465,101,018
Total Pension Liability (Ending)	\$ 432,784,552	\$ 444,634,771	\$ 408,850,476	\$ 465,101,018	\$ 798,222,273
Plan Fiduciary Net Position					
Contributions—Employer	\$ 34,177,543	\$ 34,225,585	\$ 35,290,228	\$ 37,946,745	\$ 40,819,651
Contributions—Member	3,123,545	3,089,859	3,253,474	3,708,895	4,537,595
Net Investment Income	8,561,116	4,385,827	2,760,254	(6,453,562)	7,525,599
Benefit Payments	(35,940,582)	(32,863,222)	(38,238,097)	(34,277,214)	(33,584,182)
Administrative Expense	(953,901)	(786,610)	(224,497)	(326,450)	(754,832)
Other	1,562,262	26,982	0	0	0
Net Change in Plan Fiduciary Net Position	\$ 10,529,983	\$ 8,078,421	\$ 2,841,362	\$ 598,414	\$ 18,543,831
Plan Fiduciary Net Position (Beginning)	31,419,962	41,949,945	50,028,366	52,869,728	53,468,142
Plan Fiduciary Net Position (Ending)	\$ 41,949,945	\$ 50,028,366	\$ 52,869,728	\$ 53,468,142	\$ 72,011,973
Net Pension Liability (Ending)	\$ 390,834,607	\$ 394,606,405	\$ 355,980,748	\$ 411,632,876	\$ 726,210,300
Net Position as a Percentage of Pension Liability	9.69%	11.25%	12.93%	11.50%	9.02%
Covered-Employee Payroll	\$ 28,816,039	\$ 32,367,204	\$ 29,440,916	\$ 37,647,989	\$ 51,545,717
Net Pension Liability as a Percentage of Payroll	1356.31%	1219.16%	1209.14%	1093.37%	1408.87%
Annual Money-Weighted Rate of Return²	31.90%	10.16%	6.28%	6.28%	13.17%

¹ GASB 68 was effective first for employer fiscal years beginning after June 15, 2014.

² The money-weighted rate of return shown was determined as the 1-year internal rate of return reflecting the timing of contributions, benefit payments and expenses during the Measurement Period grouped as the beginning or middle of month nearest transaction.

Disclosure—Contribution Schedule

Contributions

	Fiscal Year Ending				
	2014	2015	2016	2017	2018
Actuarially Determined Contribution	\$ 36,182,434	\$ 31,992,690	\$ 35,880,883	\$ 33,639,710	\$ 34,102,683
Contributions Made in Relation to the Actuarially Determined Contribution	20,648,538	30,501,132	32,278,593	36,328,853	34,102,867
Contribution Deficiency (Excess)	\$ 15,533,896	\$ 1,491,558	\$ 3,602,290	\$ (2,689,143)	\$ (184)
Covered-Employee Payroll	\$ 26,984,531	\$ 27,088,650	\$ 27,148,936	\$ 27,762,479	\$ 28,171,135
Contributions as a Percentage of Payroll	76.52%	112.60%	118.89%	130.86%	121.06%
	Fiscal Year Ending				
	2019	2020	2021	2022	2023
Actuarially Determined Contribution	\$ 34,147,005	\$ 35,435,883	\$ 40,146,006	\$ 45,964,414	\$ 68,254,652
Contributions Made in Relation to the Actuarially Determined Contribution	34,177,543	34,225,585	34,301,094	36,000,000	40,819,651
Contribution Deficiency (Excess)	\$ (30,538)	\$ 1,210,298	\$ 5,844,912	\$ 9,964,414	\$ 27,435,001
Covered-Employee Payroll	\$ 28,816,039	\$ 32,367,204	\$ 29,440,916	\$ 37,647,989	\$ 51,545,717
Contributions as a Percentage of Payroll	118.61%	105.74%	116.51%	95.62%	79.19%

Disclosure—Contribution Schedule

Notes to Schedule:

Valuation Date: Actuarially determined contribution rates are calculated as of December 31, one year prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Actuarial Cost Method for FYE 2023 and Later Entry Age Normal with closed amortization period for initial unfunded and subsequent actuarial gains/losses based on the January 1, 2016 CEA.

Asset Valuation Method for FYE 2023 and Later Market Value of Assets adjusted to reflect investment gains and losses during each of the last 5 years at 20% per year.

Salary Increases N/A

Investment Rate of Return 7.50%, net of Pension plan investment expense, including inflation.

Retirement Age varies by age and hire date

Mortality

Healthy Postretirement: Pub-2010 for Public Safety healthy retirees (amounts weighted) mortality projected with scale MP-2021

Disabled Postretirement: Pub-2010 for Public Safety disabled retirees (amounts weighted) mortality projected with scale MP-2021

Contingent Survivors: Pub-2010 for Public Safety contingent survivors (amounts weighted) mortality projected with scale MP-2021

Appendix

Participant Data

The actuarial valuation was based on personnel information from Firefighters' Pension and Relief Fund for the City of New Orleans records as of January 1, 2024. Following are some of the pertinent characteristics from the personnel data as of that date. Prior year characteristics are also provided for comparison purposes. Both age and service have been determined using years and months as of the valuation date.

January 1, 2024

Active Participants

Number	619
Average Age	42.6
Average Service	14.4

Inactives With Deferred Benefits

Number	14
Average Current Age	42.4

Healthy Retirees Receiving Payment

Number	74
Average Current Age	66.8
Average Monthly Benefit	\$3,522

Disabled Retirees Receiving Payment

Number	575
Average Current Age	69.1
Average Monthly Benefit	\$3,167

Survivors Receiving Payment

Number	121
Average Current Age	69.9
Average Monthly Benefit	\$ 1,647

Children Receiving Payment

Number	14
Average Current Age	21.1
Average Monthly Benefit	\$ 383

Total Participants

Number	1,417
--------	-------

Asset Allocation

The long-term expected rate of return on Pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric real rates of return for each major asset class included in the Pension plan's target asset allocation as of December 31 are summarized in the following table¹:

Asset Class	Expected Nominal Rate of Return	Expected Real Rate of Return	Allocation
Large Cap U.S. Equity	7.00%	4.59%	20.00%
Small Cap U.S. Equity	7.50%	5.08%	20.00%
International (Non-U.S.) Equity (Developed)	6.90%	4.50%	15.00%
Cash (Govt)	3.60%	1.27%	5.00%
Core U.S. Fixed Income (Market Duration)	4.30%	1.96%	10.00%
High Yield Bonds	5.90%	3.52%	5.00%
Private Real Estate (Core)	5.70%	3.32%	10.00%
Private Equity	10.30%	7.82%	5.00%
Multi-Asset Credit	6.90%	4.50%	10.00%
Total Portfolio	7.20%	4.79%	100.00%

The discount rate used to measure the total Pension liability is 3.63%. The projection of cash flows used to determine the discount rate assumed that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs of future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on these assumptions, the Pension Fund's fiduciary net position was not projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on Pension Plan investments was not applied to all periods of projected benefit payments to determine the total Pension liability.

¹ These rates of return reflect the Firefighters' Pension and Relief Fund for the City of New Orleans's best estimate.

Actuarial Assumptions and Methods—Funding

Funding Discount Rate	7.50%
Expected Return on Assets	7.20%
Salary Increases	See Table 1
General Inflation	2.30%
Optional Payment Form Election Percentage	100% Life Annuity
Vesting Electing Percentage	25% of vested terminations elect deferred contributions in lieu of contribution refunds
Retirement Age	
Active Participants	See Table 2
Terminated Vested Participants	Age 50
Mortality Rates	
	Healthy Preretirement: Pub-2010 for Public Safety healthy employees (amounts weighted) mortality projected with scale MP-2021
	Healthy Postretirement: Pub-2010 for Public Safety healthy retirees (amounts weighted) mortality projected with scale MP-2021
	Disabled Postretirement Pub-2010 for Public Safety disabled retirees (amounts weighted) mortality projected with scale MP-2021
	Contingent Survivors: Pub-2010 for Public Safety contingent survivors (amounts weighted) mortality projected with scale MP-2021
Service Related Active Deaths	5% of active deaths are assumed to be service-related
Withdrawal Rates	See Table 3
Disability Rates	See Table 4
Decrement Timing	Middle of year decrements
Surviving Spouse Benefit	It is assumed that 80% of males and 80% of females have an eligible spouse, and that males are 3 years older than their spouse.

Administrative Expenses	\$800,000, per annum as of beginning of year
Actuarial Value of Assets	The actuarial value of assets is determined by adjusting the fair value of plan assets as of December 31, 2023 to reflect investment gains and losses during each of the last 5 years at 20% per year.
Amortization Basis for Funding	Transition to the Cooperative Endeavor Agreement (CEA) - Closed level dollar 30-year amortization of the Unfunded Actuarial Accrued Liability commencing January 1, 2016. Assumption and Method Changes – 10 years Actuarial Experience Gain/Loss – 5 years Plan Amendments – 15 years
Actuarial Cost Method	Entry Age Normal cost method
Discount Rate Method	Equal to the Expected Return on Assets
Measurement Date	December 31, 2023
Measurement Period	December 31, 2022 to December 31, 2023
Valuation Date	January 1, 2024
Census Data	As of January 1, 2024

Changes in Funding Methods/Assumptions Since the Prior Year

Method Changes

The funding valuation reflects the following method changes in order to comply with the January 1, 2016 CEA:

- A change in the asset valuation method from market value of assets to five-year smoothing of asset gains and losses during each of the last 5 years at 20% per year as outlined in the January 1, 2016 CEA.
- A change in the amortization method from a 30-year decreasing open amortization schedule commencing on January 1, 2016, to the amortization schedule as outlined in the January 1, 2016 CEA: initial unfunded amortized over a closed 30-year period, assumption changes amortized over 10 years, plan amendments amortized over 15 years and actuarial experience amortized over 5 years.

The combined impact of the above changes on the actuarial determined contribution for the FYE 12/31/2024 is an increase of approximately \$20.8 M.

Assumption Changes

The funding valuation reflects the following assumption changes:

- The expected return on assets and funding interest rate decreased from 7.50% to 7.20% based on the expected nominal rate of return for the target allocation of the plan's assets.
- The percentage of terminated vested participants assumed to withdraw their employee contribution balance was increased from 25% to 75% as the result of a recent experience study.
- The salary increase rate was updated from 5.0% to an age graded table to better reflect anticipated future experience based on the results of a recent experience study.
- The retirement rates were updated to better reflect anticipated future experience based on the results of a recent experience study.
- The withdrawal rates were updated to better reflect anticipated future experience based on the results of a recent experience study.
- The inflation assumption was updated from 2.50% to 2.30% to better reflect anticipated future experience.
- The healthy preretirement mortality assumption was updated from RP-2014 active table for males and females for actives without projection to Pub-2010 for Public Safety healthy employees (amounts weighted) mortality projected with scale MP-2021.
- The healthy postretirement mortality assumption was updated from RP-2014 healthy annuitant table for males and females for retirees without projection to Pub-2010 for Public Safety healthy retirees (amounts weighted) mortality projected with scale MP-2021.
- The disabled mortality assumption was updated from RP-2014 active/healthy annuitant table for males and females for actives and retirees with ages set forward five years without projection to Pub-2010 for Public Safety disabled retirees (amounts weighted) mortality projected with scale MP-2021.
- The mortality assumption for contingent survivors was updated from RP-2014 active/healthy annuitant table for males and females for actives and retirees without projection to Pub-2010 for Public Safety contingent survivors (amounts weighted) mortality projected with scale MP-2021.
- The surviving spouse age difference was updated from zero years (i.e. spouses the same age as participants) to female spouses being 2 years younger than participants.

The demographic assumptions used in the funding valuation (with the exception of mortality) were approved by the Board based on an actuarial experience study completed by Rudd and Wisdom, Inc. in December 2023.

Actuarial Assumptions and Methods—Accounting

Discount Rate	January 1, 2023: 7.50% ¹ January 1, 2024: 3.63%
20 Year Municipal Bond Rate	January 1, 2023: 3.72% January 1, 2024: 3.26%
Municipal Bond Rate Basis	Bond Buyer GO 20-Bond Municipal Bond Index
Expected Return on Assets	7.20%
Administrative Expenses	Actual non-investment administrative expenses during the measurement period are recognized in expense.
Asset Method	Fair Market Value
Actuarial Cost Method	Entry Age Normal Cost Method
All Other Assumptions	Same as Funding Assumptions

Changes in Financial Accounting Methods/Assumptions Since the Prior Year

Method Changes

There have been no method changes in the financial accounting valuation since the prior year.

Assumption Changes

The financial accounting valuation reflects the following assumption changes:

- The discount rate decreased from 7.50% at December 31, 2022, to 3.63% at December 31, 2023.
- The expected return on assets decreased from 7.50% to 7.20% based on the expected nominal rate of return for the target allocation of the plan's assets.
- The percentage of terminated vested participants assumed to withdraw their employee contribution balance was increased from 25% to 75% as the result of a recent experience study.
- The salary increase rate was updated from 5.0% to an age graded table to better reflect anticipated future experience based on the results of a recent experience study.
- The retirement rates were updated to better reflect anticipated future experience based on the results of a recent experience study.
- The withdrawal rates were updated to better reflect anticipated future experience based on the results of a recent experience study.

¹ Based on the employer's funding policy, projected assets are not projected to always be sufficient to cover projected benefit payments, so the EROA is not used as the discount rate.

- The inflation assumption was updated from 2.50% to 2.30% to better reflect anticipated future experience.
- The healthy preretirement mortality assumption was updated from RP-2014 active table for males and females for actives without projection to Pub-2010 for Public Safety healthy employees (amounts weighted) mortality projected with scale MP-2021.
- The healthy postretirement mortality assumption was updated from RP-2014 healthy annuitant table for males and females for retirees without projection to Pub-2010 for Public Safety healthy retirees (amounts weighted) mortality projected with scale MP-2021.
- The disabled mortality assumption was updated from RP-2014 active/healthy annuitant table for males and females for actives and retirees with ages set forward five years without projection to Pub-2010 for Public Safety disabled retirees (amounts weighted) mortality projected with scale MP-2021
- The mortality assumption for contingent survivors was updated from RP-2014 active/healthy annuitant table for males and females for actives and retirees without projection to Pub-2010 for Public Safety contingent survivors (amounts weighted) mortality projected with scale MP-2021.
- The surviving spouse age difference was updated from zero years (i.e. spouses the same age as participants) to female spouses being 2 years younger than participants.

The demographic assumptions used in the funding valuation (with the exception of mortality) were approved by the Board based on an actuarial experience study completed by Rudd and Wisdom, Inc. in December 2023.

Actuarial Assumptions and Methods

Table 1

Salary Scale

Age	<u>Years of Creditable Service¹</u>	
	<1	>=1
20-24	22.50%	10.00%
25-29	22.50%	4.50%
30-34	22.50%	4.00%
35-39	22.50%	3.50%
40-44	22.50%	2.75%
45-49	22.50%	2.50%
50+	22.50%	1.75%

¹ All rates are prior to the addition of an inflation component

Table 2a

Retirement Rates – Members hired before January 1, 2015

Age	Years of Creditable Service							
	<12	12-24	25	26	27	28	29	30
50	0%	8%	7%	6%	5%	4%	1%	80%
51	0%	8%	7%	6%	5%	4%	1%	80%
52	0%	8%	7%	6%	5%	4%	1%	80%
53	0%	8%	7%	6%	5%	4%	1%	80%
54	0%	8%	7%	6%	5%	4%	1%	80%
55	0%	8%	6%	4%	2%	1%	1%	80%
56	0%	8%	6%	4%	2%	1%	1%	80%
57	0%	8%	6%	4%	2%	1%	1%	80%
58	0%	8%	6%	4%	2%	1%	1%	80%
59	0%	8%	6%	4%	2%	1%	1%	80%
60	0%	35%	33%	31%	29%	27%	1%	80%
61	0%	35%	33%	31%	29%	27%	1%	80%
62	0%	60%	55%	50%	45%	40%	1%	90%
63	0%	60%	55%	50%	45%	40%	1%	90%
64	0%	60%	55%	50%	45%	40%	1%	90%
65	0%	75%	70%	65%	60%	55%	1%	100%
66+	100%	100%	100%	100%	100%	100%	100%	100%

Table 2b

Retirement Rates – Members hired between January 1, 2015 and August 14, 2016

<u>Age</u>	<u>Rate</u>
52	10%
53	10%
54	10%
55	20%
56	20%
57	20%
58	20%
59	20%
60	30%
61	30%
62	40%
63	30%
64	30%
65	50%
66	50%
67+	100%

Table 2c

Retirement Rates – Members hired on or after August 14, 2016

<u>Age</u>	<u>Rate</u>
57	25%
58	25%
59	25%
60	35%
61	35%
62	50%
63	30%
64	30%
65	50%
66	50%
67+	100%

Table 3

Withdrawal Rates

Age	<u>Years of Creditable Service</u>	
	<12	<12
<25	10%	2%
25-29	10%	2%
30-34	10%	2%
35-39	7%	2%
40-44	6%	2%
45-49	5%	2%
50-54	4%	2%
55-59	4%	2%
60+	4%	2%

Table 4

Disability Rates¹

Age	Rate	Age	Rate
<25	0.315%	55	2.800%
26	0.315%	56	3.000%
27	0.315%	57	3.200%
28	0.327%	58	3.400%
29	0.345%	59	3.750%
30	0.369%	60+	3.750%
31	0.399%		
32	0.435%		
33	0.474%		
34	0.519%		
35	0.567%		
36	0.618%		
37	0.675%		
38	0.750%		
39	0.850%		
40	0.950%		
41	1.050%		
42	1.150%		
43	1.250%		
44	1.350%		
45	1.450%		
46	1.550%		
47	1.650%		
48	1.700%		
49	1.750%		
50	1.800%		
51	2.000%		
52	2.200%		
53	2.400%		
54	2.600%		

¹ 80% of disabilities are assumed to be service-related.

Actuarial Assumptions and Methods—Discussion

Discussion of Actuarial Assumptions and Methods

For the funding valuation, the Firefighters' Pension and Relief Fund for the City of New Orleans selected the economic and demographic assumptions and prescribed them for use for purposes of compliance with the state's funding regulations. Aon provided guidance with respect to these assumptions, and it is our belief that the assumptions represent reasonable expectations of anticipated plan experience. The actuarial cost and amortization methods are prescribed by Louisiana Statutes Title 11 and the January 1, 2016 CEA with the City of New Orleans.

While the method used to value assets is prescribed by the January 1, 2016 CEA, Aon provided guidance with respect to the use of this method, and it is our belief that the method is appropriate for funding purposes.

For the accounting valuation, Firefighters' Pension and Relief Fund for the City of New Orleans selected the economic and demographic assumptions and prescribed them for use for purposes of compliance with GASB 68. Aon provided guidance with respect to these assumptions, and it is our belief that the assumptions represent reasonable expectations of anticipated plan experience.

Calculation of Normal Costs and Liabilities

The method used to calculate the service cost and projected benefit obligation for determining pension expense and the actuarial determined contribution is the entry age normal cost method. Under this cost method, the actuarial accrued liability is based on a prorated portion of the present value of all benefits earned to date over expected future working life time as defined by GASB. The proration is determined so that the cost with respect to service accrued from date of hire is recognized as a level percentage of pay each year. The Normal Cost is equal to the prorated cost for the year of the valuation.

Accounting Information under GASB 68

Benefit obligations and expense/(income) are calculated under U.S. Generally Accepted Accounting Principles as set forth in Government Accounting Standards Board Statement 68.

The total Pension liability represents the actuarial present value of benefits based on the entry age normal cost method as of the measurement date reflecting all normal costs over the period when benefits were earned.

The Pension expense is the annual amount to be recognized in the income statement as the cost of Pension benefits for this plan for the period ending December 31, 2023.

Plan Provisions

Eligibility

An employee enters the plan and becomes a New System Member on the first day of employment as an Active Firefighter

Active Firefighter of the New System

Any individual employed on or after January 1, 1968 by the Fire Department of the City of New Orleans who is actively engaged in the extinguish

Any individual who has occupied a position as an Active Firefighter (as described in (1) above) for at least 10 years and who, because of physical disability, elects to transfer from the fire suppression division to the fire administration division may continue to participate in the Fund unless the Board determines that such continued employment is detrimental to the health and safety of other members, but

Excludes any other individual who is receiving disability benefits, has terminated service or has retired.

Inactive Firefighter of the New System

A member who terminates employment with the Fire Department

Employee Contributions

Effective January 1, 2014

Period	Members with less than 20 Yrs Svc as of January 1, 2014	Members with 20 or more Yrs of Svc as of January 1, 2014
January 1, 2014 to December 31, 2014	8.00%	3.33%
January 1, 2015 to December 31, 2015	10.00%	6.66%
January 1, 2016 and thereafter	10.00% ¹	10.00%*

¹ Per Paragraph I(A)(23) of the Cooperative Endeavor Agreement (CEA) effective January 1, 2016 between the City of New Orleans, the NOFFPF and New Orleans Firefighters Local 632, the Employee Contribution rate shall be adjusted (upward or downward in accordance with and in concert with the Employee Contribution required codified in the Firefighters' Retirement System (FRS) law and FRS regulations. Under La. R.S. 11:62(3) FRS Employee Contributions are determined as follows:

- (a) Any member whose earnable compensation is less than or equal to the most recently issued poverty guidelines issued by the United States Department of Health and Human Services according to the size of the member's family unit - 8%.
- (b) For employee contributions due and payable July 1, 2011, or thereafter, any member whose earnable compensation is more than the most recently issued poverty guidelines issued by the United States Department of Health and Human Services according to the size of the member's family unit:

Employee Contributions (continued)

If the total contribution for the fiscal year expressed as a percentage of payroll after applying all required tax contributions is:

The employee contributions are:

25.00% or below	8.00%
25.01% to 25.75%	8.25%
25.76% to 26.50%	8.50%
26.51% to 27.25%	8.75%
27.26% to 28.00%	9.00%
28.01% to 28.75%	9.25%
28.76% to 29.50%	9.50%
29.51% to 30.25%	9.75%

However, any Member who participates in the DROP shall not make employee contributions during the DROP participation period;

Member contributions are not credited with interest. The sum of all of a member's contributions are referred to as "Accumulated Contributions".

Compensation

Wages paid by New Orleans Fire Department during the Plan Year which shall not include voluntary overtime, part-time, uniform allowance or holiday pay.

Notwithstanding the above, for any Plan Year Salary/Compensation shall not exceed \$200,000 (adjusted for cost-of-living increases in accordance with Code Section 401(a)(17), as applicable to governmental plans

Average Compensation

The average compensation received during the five highest consecutive plan years.

Creditable Service

A Year of Creditable Service is granted for all periods in which a Member performs services as an Active Firefighter, where 12 months of service equals one Year of Creditable Service.

Unused Leave

Unused Sick Leave

Upon written request, a Member shall receive Creditable Service for Unused Sick Leave where one month of Creditable Service is granted for every 18 days of Sick Leave for Members other than Chiefs and one month of Creditable Service is granted for every 14.3 days of Sick Leave for Members who are Chiefs. However, such service cannot be applied for Vesting purposes.

Unused Annual Leave

Upon written request, a Member shall receive Creditable Service for Unused Annual Leave in excess of 45 days where one month of Creditable Service is granted for every 18 days of Annual Leave (above 45 days) for Members other than Chiefs and one month of Creditable Service is granted for every 14.3 days of Annual Leave (above 45 days) for Members who are Chiefs. However, such service cannot be applied for Vesting purposes.

Other Creditable Service

Transfers Between Retirement Systems: Pursuant to Louisiana Revised Statutes (La. R.S.) 11:143, transfers of credits and funds between the Retirement System and any other retirement system authorized under these Transfer Statutes is permitted subject to the terms of the Retirement System.

Purchase of Creditable Service: A who has earned at least 5 Years of Creditable Service may purchase up to five additional Years of Creditable Service in accordance with La. R.S. 11:158.

Military Service Credit: Subject to the rules of the Retirement System along with La. R.S. 11:3366 and La. R.S. 29:38, up to 5 Years of Creditable Service may be awarded to Members who performed military service prior to or during employment with the Fire Department.

Service Retirement Benefit

Monthly benefit equal to one-twelfth of Average Compensation multiplied by a service-related accrual factor, where such accrual factor is determined as follows, but in no event is the accrual factor greater than 100%:

Accrual Factor per Year of Creditable Service (YOCS)	Hired before 01/01/2015	Hired between 01/01/2015 and 08/14/2016	Hired on or after 08/15/2016
Per YOCS under 12 YOCS	2.50%	2.75%	2.50%
Per YOCS over 12 YOCS but before Age 50	2.50%	2.75%	2.50%
Per YOCS over 12 YOCS and after Age 50 up to 30 YOCS	3 1/3%	2.75%	2.50%
Per YOCS at 30 YOCS	3 1/3% ¹	2.75%	2.50%

Minimum Benefit: In no event shall the Service Retirement Allowance be less than \$1,200 per month

¹Once a member reaches 30 YOCS, the 3 1/3% accrual factor is applied retrospectively to all YOCS from 0 YOCS through their 30th YOCS, resulting in a total accrual factor of 100%.

Service Retirement Eligibility

Eligibility	Hired before 01/01/2015	Hired between 01/01/2015 and 08/14/2016	Hired on or after 08/15/2016
Age	50	52	10 Years before Social Security Full Retirement Age* ¹
Years of Creditable Service	12	12	12

Normal Form of Payment

Life annuity

Optional Forms of Benefit

Benefits actuarially equivalent to the benefit provided under the normal form of payment:

Life annuity with Guaranteed Benefit: a reduced annuity payable for life where payments equal to the sum of Accumulated Contributions are guaranteed

Joint and 100% Survivor Annuity with Pop-up: a reduced annuity payable for the Member's life with 100% of such amount payable following the Member's death for the remaining lifetime, if any, of the Designated Beneficiary. If the Designated Beneficiary predeceases the Member, the Member's benefit shall pop-up to the Normal Form (i.e., the Life Annuity amount prior to reduction).

Joint and 50% Contingent Annuity with Pop-up: a reduced annuity payable for the Member's life with 50% of such amount payable following the Member's death for the remaining lifetime, if any, of the Designated Beneficiary. If the Designated Beneficiary predeceases the Member, the Member's benefit shall pop-up to the Normal Form (i.e., the Life Annuity amount prior to reduction).

¹Per La. R.S. 11:3384(A)(3) which references 42 U.S.C. 416(l)(1) which defines Full Retirement Age to be:

Year of Birth	Full Retirement Age	Year of Birth	Full Retirement Age
Before 1938	65	1955	66 and 2 months
1938	65 and 2 months	1956	66 and 4 months
1939	65 and 4 months	1957	66 and 6 months
1940	65 and 6 months	1958	66 and 8 months
1941	65 and 8 months	1959	66 and 10 months
1942	65 and 10 months	1960 and later	67
1943-1954	66		

Other Survivor Annuity

A Joint and X% Contingent Annuity with Pop-up: a reduced annuity payable for the Member's life with X% of such amount payable following the Member's death for the remaining lifetime, if any, of the Designated Beneficiary. If the Designated Beneficiary predeceases the Member, the Member's benefit shall pop-up to the Normal Form (i.e., the Life Annuity amount prior to reduction); where "X" is any multiple of 1%

Partial Lumpsum

Option Plan (PLOP): A Member may elect to receive a Partial Lumpsum of up to 60 times the Member's normal retirement benefit. Their monthly benefit shall be equal to their normal retirement benefit reduced by the actuarially equivalent of the Partial Lumpsum. COLAs shall be based on the reduced retirement benefit rather than the full normal retirement benefit.

Preretirement Death Benefit

On Duty Death of Active Firefighter whether or not Vested:

Surviving Spouse Benefit

If on duty while in act of performing duties as Firefighter (i.e., Type 1 Service Connected Death): monthly annuity for life, even upon remarriage, equal to 66 2/3% of monthly Salary at date of death, but not less than \$1,200 per month; however, in lieu of this annuity benefit the Surviving Spouse may elect a refund of Accumulated Contributions, or

If on duty while not in act of performing duties as Firefighter (i.e., Type 2 Service Connected Death): monthly annuity equal to 50% of monthly Salary at date of death, but not less than \$1,200 per month; however, in lieu of this annuity benefit the Surviving Spouse may elect a refund of Accumulated Contributions,

Children under Age 18 whether or not there is a Surviving Spouse: Each child receives \$300 monthly annuity until the earlier of age 18 or marriage; however, dependent children with physical or mental disability may receive annuity for life or until they complete specialized training that renders them self-supporting, and

Lump Sum Death Benefit

\$3,000 one-time payment payable to named Beneficiary

Widowed Parent and No Surviving Spouse or Dependent Children

If there is no surviving spouse or dependent children, but the Firefighter had a Widowed Parent dependent upon the Firefighter for support, such Widowed Parent shall receive the same benefit as a Surviving Spouse even if such Widowed Parent remarries.

Not On Duty Death of Active Firefighter whether or not vested or Death of Inactive Vested Firefighter:

Surviving Spouse Benefit

Annuity of \$1,200 per month for life (even upon remarriage)

Children Under Age 18

Each child receives \$300 monthly annuity until the earlier of age 18 or marriage; however, dependent children with physical or mental disability may receive annuity for life or until they complete specialized training that renders them self-supporting, and

Lump Sum Death Benefit

\$3,000 one-time payment payable to named Beneficiary

Widowed Parent and No Surviving
Spouse or Dependent Children

If there is no surviving spouse or dependent children, but the Firefighter had a Widowed Parent dependent upon the Firefighter for support, such Widowed Parent shall receive the same benefit as a Surviving Spouse (i.e., \$1,200 per month). Benefit ceases upon remarriage of a Widowed Father but continues upon remarriage of a Widowed Mother.

Postretirement Death Benefit

Surviving Spouse:

Greater of

- (i) Survivor benefits payable under the optional annuity form elected at the time of retirement and
- (ii) \$1,200 per month payable for Spouse's life.

Lump Sum Death Benefit: \$3,000 one-time payment payable to named Beneficiary.

Deferred Vested Benefit

Vesting Schedule

(Accumulated Employee Contributions are always 100% vested):

Years of Credited Service	Vested Percentage
Less than 12	0%
12 or more	100%

Non-Vested Terminations

A Member who terminates non-vested will receive his Accumulated Contributions as a lump sum.

Refund of Contributions for Vested Members: A Vested Member who terminates employment may elect to be paid the amount of Accumulated Contributions. A Member who makes this election shall not be entitled to receive a Retirement Allowance, unless such Member is reemployed for at least four (4) years and repays the Accumulated Contributions plus additional interest accruals.

Separation Retirement Allowance for Vested Terminations:

Pre-January 1, 2015 Hires

Any pre-January 1, 2015 hire who terminates employment as a Vested Member, other than by Retirement, who did not withdraw his Accumulated Contributions is entitled to receive a Retirement Allowance beginning at age 50.

Post-December 31, 2014
and Pre-August 15, 2016 Hires

Any member hired after December 31, 2014 and before August 15, 2016 who terminates employment as a Vested Member, other than by Retirement, who did not withdraw his Accumulated Contributions is entitled to receive a Retirement Allowance beginning at age 52.

Post-August 14, 2016 Hires

Any post-August 14, 2016 hire who terminates employment as a Vested Member, other than by Retirement, who did not withdraw his Accumulated Contributions is entitled to receive a Retirement Allowance beginning 10 years

Disability Retirement

Service-Related Disability

Total and permanent physical or mental disability and unable to hold any meaningful and gainful employment

Total and permanent physical or mental disability and incapacitated from duties, but able to hold any meaningful and gainful employment other than as a firefighter

Non-service-related disability: Total and permanent physical or mental disability and incapacitated to perform duties

Post-Termination Disability

In the event a Firefighter has terminated employment but has not yet commenced Service Retirement and is determined to have Disabling Cancer, Hepatitis B, Hepatitis C or Hearing Loss within a specified presumption period following termination of employment, where such period can be no greater than 5 years but may be less as determined by the BOT, such Firefighter may be presumed to have become Disabled during their employment and may be eligible for Service-related Disability benefits. For firefighters terminating employment after December 31, 2022 who have been diagnosed with disabling cancer prior to reaching age 65, the presumption period following termination is extended to a period not to exceed 10 years.

Disability Benefit

Service-Related Disability

If unable to hold any meaningful and gainful employment, the greater of:

1. 66 2/3% of monthly Salary at date of retirement, or
2. Amount determined under regular Service Retirement Allowance provided the Member has accrued at least 20 Years of Creditable Service

If able to hold any meaningful and gainful employment other than as a firefighter

1. 50% of monthly Salary at date of retirement, or
2. Amount determined under regular Service Retirement Allowance provided the Member has accrued at least 20 Years of Creditable Service

Non-Service-Related Disability

Years of Service with Fire Department	Monthly Pension as Percentage of Average Compensation during last year of Service prior to Disability
Less than 10	30%
At least 10 but less than 15	40%
15 or more	50%

Post-Retirement Disability

Once a Member has commenced a Service Retirement benefit, such Member may not apply for any type of Disability Retirement benefit. However, if a Member is determined by the BOT to be Disabled after commencing Service Retirement, such Member may be entitled to have a portion of their retirement income excluded from taxable income in accordance with IRS Revenue Ruling 72-44. Such determination does not affect the amount of benefits payable to the retired Member from the Retirement System and only affects such Member's income taxes.

Deferred Retirement Option Plan (DROP)

Participation: In lieu of terminating employment and receiving a Retirement Allowance, any Member who is Eligible for a Service Retirement Allowance and has at least 12 Years of Creditable Service may elect to participate in the DROP program. The participant must elect the duration of participation for a period not to exceed 5 years. The Member shall be required to select a distribution option at the time of commencing participation in the DROP, but such distribution option cannot be a PLOP. Subject to the rules of the system, after commencement of the participation period, the Member may change his distribution option originally selected or their beneficiary designation.

Benefits

During the period of the DROP, the Member shall remain employed but his Average Compensation and Credited Service shall remain as they existed on the date of commencement in the DROP program, and no further Employee contributions shall be made. The participant's DROP account shall receive a Retirement Allowance based on any optional elections made, and without regard to any cost-of-living adjustments during the period of the DROP. (However, payments after one full year following the termination of the Member's employment, the member may be eligible for cost-of-living adjustments.) During the participation period, the DROP account shall not accrue or earn any interest or earnings of any kind. Upon the expiration of the participation period or termination of employment, each DROP participant's DROP account shall be credited with interest annually based on a five-year rolling average of the composite return of the Pension Fund as determined by the Fund's actuary, less administrative fees (not to exceed 2%). At the discretion of the Board of Trustees, the DROP account may be placed in a liquid money market fund and be credited with interest at the actual rate of return earned on the money market fund. Absent a waiver by the Member, the DROP account shall not be diminished (e.g., if the rate of return is negative the account shall be credited with 0% return rather than a negative return). If the Member waives their right to the protections from the account being diminished, the DROP account shall be credited with interest annually based on a five-year rolling average of the composite return of the Pension Fund as determined by the Fund's actuary, less a 2.0% administrative fee.

Termination of Employment

On termination of employment at the end of the specified DROP period (or for any reason before the end of the DROP period including Disability), a Member may elect to receive withdrawals from their DROP account plus any interest earned reduced by any administrative fees. Such withdrawal(s) may be a one-time lump sum payment equal to the balance of the DROP account, or a series of periodic or non-periodic payments. Furthermore, the Member's Retirement Allowance shall commence in lieu of being deposited into the DROP account.

Death

If a DROP participant dies before distribution of his DROP account is made in its entirety, his named beneficiary, may elect to receive the balance of the Member's DROP account in any form of payment approved by the board of trustees. In addition, normal survivor benefits payable to Beneficiaries of retirees shall be payable.

Reverse Drop

In lieu of terminating employment and accepting a Service Retirement Benefit, any Member participating in the Fund who is eligible for Service Retirement may elect to participate in the DROP on a retroactive basis, and receive a lump sum benefit of up to five years, based upon the value of the pension at the retroactive date selected.

Actuarial Equivalence

1971 Group Annuity Mortality Table for males (female mortality rates are assumed to be six years younger than the male rates at each age) with 7% interest.

Cost-of-Living Adjustments

Subject to a two-thirds approval of the entire Board of Trustees (BOT), the BOT may use interest on investments in excess of normal requirements, as determined by the plan actuary, to provide an annual Cost-of-Living Adjustment (COLA) for retired Members and widows of retired Members in an amount not to exceed 3% of the original benefit. In addition, subject to a two-thirds approval of the entire BOT, the BOT may provide an annual COLA for retired Members and widows of retired Members over age 65 in an amount not to exceed to 2% of the original benefit.

However, a Member who participates in the DROP shall not be eligible to receive a COLA during the period of participation in the DROP and shall not be eligible for a COLA until one year after their termination of employment. Such DROP Members are also subject to other eligibility requirements for receiving a COLA (e.g., the Member must also be over age 65 in the case of post-65 COLA of up to 2% of the original benefit amount).

Plan Changes Since the Prior Year

The financial accounting valuation and funding valuations do not reflect any plan changes.