OFFICE OF LEGISLATIVE AUDITOR
2024 REGULAR SESSION
ACTUARIAL NOTE

House Bill 33 HLS 24RS-150	**Date: March 8, 2024**
Original	**Organizations Affected: NOFF**
Author: Landry	
LLA Note HB 33.01	**OR INCREASE APV**

Bill Header: RETIREMENT/LOCAL: Provides relative to retirement for all hires in the Firefighters' Pension and Relief Fund in the city of New Orleans.

Purpose of Bill: This bill repeals the retirement eligibility, accrual rate, and withdrawal provisions for employees of the New Orleans Firefighters' Pension and Relief Fund (NOFF) hired after December 31, 2014 and makes the retirement eligibility, accrual rate, and withdrawal provisions for employees hired on or before December 31, 2014 applicable to all employees.

Cost Summary[1]: The estimated net actuarial and fiscal impact of the proposed legislation is summarized below.

This bill is expected to improve benefits for members hired after December 31, 2014, which will increase the total expected benefit payments, increase the unfunded accrued liability, increase the net pension liability (pension debt reported on the City's balance sheet), and increase the required employer contributions. This change will impact key measures of financial health for the retirement system and the City in the following ways:

- The contribution burden on the City: The most recent actuarial valuation available indicated the employer contribution requirement for the Old and New Plans combined is approximately $57 million per year. The prior actuary for NOFF also estimated the additional cost of implementing the benefit increases to be approximately $1 million per year. This estimate does not appear to account for all increases to the annual contribution associated with these plan changes. For this reason, and several others outlined below, the expected future contributions are likely to increase by significantly more than $1 million per year under proposed law.

- Funded status and benefit security: NOFF's funded ratio, as reported in the Fund's audited financial statement for the year ending December 31, 2022, was 11.54% (Old and New Plans combined). The current assets are only sufficient to cover approximately 16% of the promised obligations to current retirees, leaving no reserve for current active participant obligations. Any additional increase in benefits will decrease the funded ratio and potentially harm benefit security.

- The debt burden on the City's balance sheet financial position: The City's net position, as reported in the City's audited financial statement for the year ending December 31, 2022, was $816,875,000. The NOFF Total Pension Liability (TPL), as reported in the same financial statements, was $520,060,308. A 10% increase in NOFF's TPL would immediately decrease the City's net position by more than 6%. It is not unreasonable to assume that the combination of updating actuarial assumptions including possibly decreasing the assumed rate of return on investments (likely changes in assumptions discussed below) and implementing proposed law would increase NOFF's total pension liability by 10% or more, with a proportional negative impact to the City's net position.

The expected change in the ***net actuarial present value of expected future benefits and administrative expenses incurred by the retirement systems*** from the proposed law is estimated to be **an increase**. A more detailed explanation can be found in Section I: Actuarial Impact on Retirement Systems.

Net Fiscal Costs pertain to changes to all cash flows over the next five-year period including retirement system cash flows or cash flows related to local and state government entities.

In the following table, expenditures and revenues include cash flows to or from the affected retirement system (e.g. administrative expenses incurred by, benefit payments from, or contributions to the retirement system) and do not include administrative expenditures and revenues specifically incurred by the state or local government entities associated with implementing the legislation. A more detailed explanation can be found in Section II: Fiscal Impact on Retirement Systems.

Five Year Net Fiscal Costs Pertaining to:	**Expenditures**	**Revenues**
The Retirement Systems	Increase	Increase
Local Government Entities	Increase	0
State Government Entities	0	0
Total	**Increase**	**Increase**

In the following table, expenditures and revenues include administrative expenditures and revenues specifically incurred by the state or local government entities associated with implementing the legislation and do not include cash flows to or from the affected retirement system (i.e. contribution changes included in the above table). This information is provided by the LLA Local Government Services or the Legislative Fiscal Office. A more detailed explanation can be found in Sections III: Fiscal Impact on Local Government Entities and Section IV: Fiscal Impact on State Government Entities.

Five Year Net Fiscal Costs Pertaining to:	**Expenditures**	**Revenues**
Local Government Entities	$ 0	$ 0
State Government Entities	0	0
Total	**$ 0**	**$ 0**

[1] This is a different assessment from the actuarial cost requiring a 2/3rd vote (refer to the section near the end of this Actuarial Note "**Information Pertaining to La. Const. Art. X, §29(F)**").

This Note has been prepared by the Actuary for the Louisiana Legislative Auditor (LLA) with assistance from either the Fiscal Notes staff of the Legislative Auditor or staff of the Legislative Fiscal Office (LFO). The attachment of this Note provides compliance with the requirements of R.S. 24:521 as amended by Act 353 of the 2016 Regular Session.	**Kenneth J. "Kenny" Herbold, ASA, EA, MAAA** **Director of Actuarial Services** **Louisiana Legislative Auditor**

I. ACTUARIAL IMPACT ON RETIREMENT SYSTEMS

This section of the actuarial note is intended to provide a brief outline of the changes in plan provisions and actuarial effect on key aspects of the affected retirement systems.

This bill is expected to improve benefits for members hired after December 31, 2014, which will increase the total expected benefit payments, increase the unfunded accrued liability, increase the net pension liability (pension debt reported on the City's balance sheet), and increase the required employer contributions.

Comparison of Plan Provisions

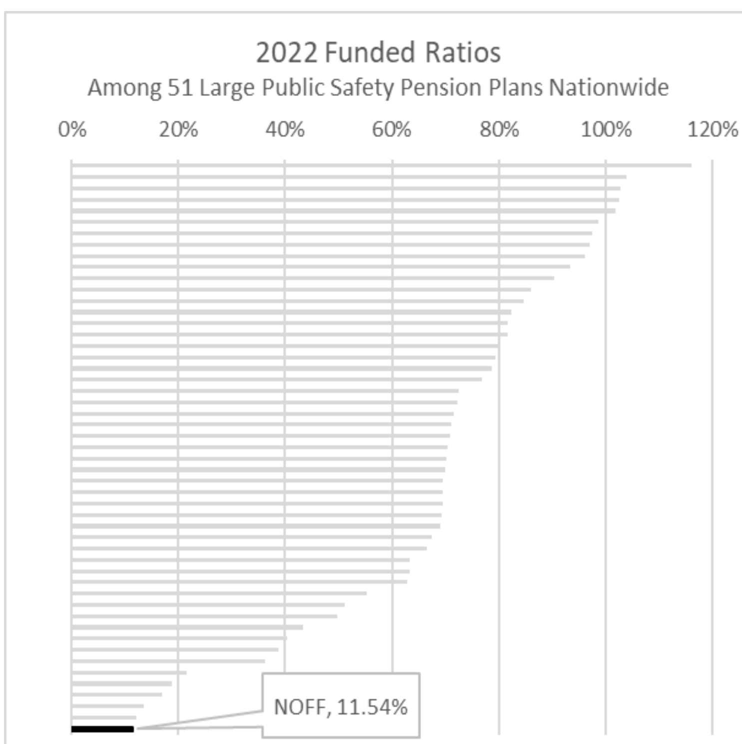
This bill generally provides, for employees hired after December 31, 2014, a greater benefit accrual ("multiplier") rate, earlier retirement ages, and earlier benefit commencement age for those who withdraw from service with at least 12 years of service credit and remain members of NOFF. Refer to the following table for a comparison of the changes under the proposed law.

	Present Law	Proposed Law
Retirement Eligibility: For members entering employment --		
Before 1/1/15	At least age 50 with at least 12 years of service	No change
From 1/1/15 through 8/14/16	At least age 52 with at least 12 years of service	At least age 50 with at least 12 years of service
On or after 8/15/16	Social Security Age, less 10 years (i.e., between ages 55 and 57)	At least age 50 with at least 12 years of service
Accrual rate multiplier in benefit formula: For members hired --		
Before 1/1/15	• 2.5% for each of the first 12 years of service, plus • 3.33% for each year of service above 12 years; • Upon reaching 30 years, <u>all</u> years of service get 3.33% per year (first 12 years get retroactively increase to the 3.33% rate)	No change
From 1/1/15 through 8/14/16	2.75% for each year of service throughout career	Same as the "Before 1/1/15" group, above[1]
On or after 8/15/16	2.50% for each year of service throughout career	Same as the "Before 1/1/15" group, above
Deferred Eligibility for Vested Terminations (with 12 years of service): For members entering employment --		
Before 1/1/15	Beginning at age 50	No change
From 1/1/15 through 8/14/16	Beginning at age 52	Beginning at age 50
On or after 8/15/16	Social Security Age (i.e., between ages 65 and 67)	Beginning at age 50

[1] This change may result in a short "wear away" period for these participants where their current accrued benefit is greater than the benefit granted under the new formula.

Primary Concerns

As reported in the Fund's audited financial statement for the year ending December 31, 2022, the funded ratio was 11.54% (Old and New Plans combined). According to the previous actuary's January 1, 2023 actuarial valuation reports, the current assets are only sufficient to cover approximately 16% of the promised obligations to current retirees, leaving no reserve for current active participant obligations.



Based on information compiled by the *Public Plans Data*[2], NOFF, this makes it the worst funded retirement plan out of 216 large retirement systems in the country. The graph to the right, shows NOFF along with 50 other large public safety plans identified by *Public Plans Data* (for the complete list of 51 public safety plans, please refer to the Appendix).

In addition to the Fund being in a precarious financial position, the Fund recently received the results of an actuarial audit and an experience study performed by an independent actuary. The actuarial audit reviewed whether the costs and liabilities in the January 1, 2021 actuarial valuations were calculated accurately and appropriately. This audit noted significant deficiencies in the work being performed, including noting the determination of the required employer contribution was not being calculated in accordance with the January 1, 2016 Cooperative Endeavor Agreement (CEA) between the City of New Orleans, NOFF, and the New Orleans Firefighters Local 632. Further, the actuarial audit noted the funding valuation was not being performed using the actuarial assumptions stated in the report, potential issues associated with the stated assumptions, and the existing liabilities did not fully reflect all significant plan provisions. The experience study reviewed actual plan experience for the period January 1, 2017 through December 31, 2021 to assess the reasonableness of current assumptions and make recommendations for updated assumptions.

[2]*Public Plans Data*, which is developed and maintained through a collaboration of the Government Finance Officers Association (GFOA), MissionSquare Research Institute, the National Association of State Retirement Administrators (NASRA), and the Center for Retirement Research at Boston College. https://publicplansdata.org/

Finally, the actuarial audit commented on the investment return assumption, but did not provide an evaluation of the appropriateness of the assumption. The investment return assumption is generally considered the most important assumption used in actuarial valuations because it is the most influential on the determination of the value of the liabilities. Even a small reduction in the investment return assumption can result in large increases in the total liability. For the NOFF New Plan, a 1% reduction in this assumption would increase the liability by approximately 12%.

The actuary who performed the previous work has resigned, and NOFF has engaged a new actuary beginning with the January 1, 2024 actuarial valuation. This new actuary will review the independent actuary's two reports and advise the board concerning their recommendations. This actuary will implement new actuarial assumptions and methods (as adopted by the board) in the upcoming January 1, 2024 valuation report. Presumably, this will also include an assessment of the current investment return assumption and recommend any changes to the board.

Potential Impact

Given the uncertainty surrounding the valuation of NOFF's current obligations it is difficult to provide a reasonable evaluation of the impact of the proposed law. However, we attempt to provide some commentary on the likely impact based on the information available to us at this time.

- <u>The contribution burden on the City</u>: The prior actuary for NOFF estimated the cost of implementing the benefit increases to be approximately $1 million per year. We do not have sufficient information to assess the reasonableness of the $1 million estimate other than to note it appears to be the increase in annually accruing benefits (normal cost) and does not consider the amortization of the increase in unfunded accrued liability. For every 1% increase in accrued liability (approximately $5,000,000) the annual required contribution would increase by approximately $525,000 based on a 7.5% assumed investment return and the 15-year amortization period specified in the CEA.

  The most recent actuarial valuation available indicated the employer contribution requirement for the Old and New Plans combined is approximately $57 million per year. However, as noted before, the actuarial audit and experience study noted deficiencies in the benefits being valued and recommended an update to actuarial assumptions equating to an approximate 4.5% increase in total liability. Once the new actuary has reviewed all assumptions, including the investment return assumption, it is very likely the required contribution without accounting for the proposed law could increase significantly.

  For these reasons, the expected future contributions are likely to be significantly higher than $58 million per year under proposed law.

- <u>Funded status and benefit security</u>: The members' security of retirement benefits requires two aspects, 1) a sufficient level of assets (preferably full funding but at least equal to multiples of the annual benefit payments) available to support the payment of benefits and 2) the ability and willingness of the sponsoring entity to make actuarially determined contributions. With assets only sufficient to cover approximately 16% of the existing retiree obligations, the Old and the New plans are essentially operating on a pay-as-you-go basis. This means current contributions are used primarily to pay current benefits, with limited ability to accumulate additional assets in the near term. Any increase in this burden is shifted directly to the City and relies on the City's ability to maintain this support, potentially crowding out funding for other government functions.

- <u>The debt burden on the City's balance sheet financial position</u>: The City's net position, as reported in the City's audited financial statement for the year ending December 31, 2022, was $816,875,000. The NOFF Total Pension Liability (TPL), as reported in the same financial statements, was $520,060,308. A 10% increase in NOFF's TPL would immediately decrease the City's net position by more than 6%. It is not unreasonable to assume that the combination of updating actuarial assumptions including possibly decreasing the assumed rate of return on investments (likely changes in assumptions discussed below) and implementing proposed law would increase NOFF's total pension liability by 10% or more, with a proportional negative impact to the City's net position.

II. <u>FISCAL IMPACT ON RETIREMENT SYSTEMS</u>

This section of the actuarial note pertains to annual fiscal costs (savings) associated with the retirement systems.

Fiscal costs or savings include only cash flows to or from the affected retirement system (e.g. administrative expenses incurred by, benefit payments from, or contributions to the retirement system) and do not include administrative expenditures and revenues specifically incurred by the state or local government entities associated with implementing the legislation. A fiscal cost is denoted by "Increase" or a positive number. Fiscal savings are denoted by "Decrease" or a negative number. A revenue increase is denoted by "Increase" or a positive number. A revenue decrease is denoted by "Decrease" or a negative number.

Table A: Retirement System Fiscal Cost

Expenditures	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**5-Year Total**
State General Fund	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Agy Self-Generated	Increase	Increase	Increase	Increase	Increase	Increase
Stat Deds/Other	0	0	0	0	0	0
Federal Funds	0	0	0	0	0	0
Local Funds	0	Increase	Increase	Increase	Increase	Increase
Annual Total	**Increase**	**Increase**	**Increase**	**Increase**	**Increase**	**Increase**

Revenues	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**5-Year Total**
State General Fund	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Agy Self-Generated	0	Increase	Increase	Increase	Increase	Increase
Stat Deds/Other	0	0	0	0	0	0
Federal Funds	0	0	0	0	0	0
Local Funds	0	0	0	0	0	0
Annual Total	**$ 0**	**Increase**	**Increase**	**Increase**	**Increase**	**Increase**

Changes in employer contributions are reflected in the State General Fund and/or Local Fund expenditure lines above. The actual sources of funding (e.g., Federal Funds, State General Fund, etc.) may vary by employer and are not differentiated in the table.

The proposed legislation will have the following effects on retirement related fiscal costs and revenues during the five-year measurement period.

1. Expenditures:

   a. Agy Self-Generated expenditures are expected to increase because greater benefits for employees hired after December 31, 2014 will increase and accelerate expected benefit payments.
   b. An increase in expected benefit payments will necessarily result in higher expected employer contributions. Increases in employer contributions are reflected in the Local Funds line above.

2. Revenues:

   Changes in retirement contributions identified as changes in Local Fund expenditures have corresponding changes in Agy Self-Generated revenues.

III. FISCAL IMPACT ON LOCAL GOVERNMENT ENTITIES
(Prepared by LLA Local Government Services)

This section of the actuarial note pertains to annual fiscal costs (savings) related to administrative expenditures and revenue impacts incurred by local government entities other than those included in Table A.

The proposed legislation is not expected to have any additional effects on fiscal administrative costs and revenues related to local government entities during the five-year measurement period, other than those outlined above.

IV. FISCAL IMPACT ON STATE GOVERNMENT ENTITIES
(Prepared by Legislative Fiscal Office)

This section of the actuarial note pertains to annual fiscal costs (savings) related to administrative expenditures and revenue impacts incurred by state government entities other than those included in Table A.

N/A - This bill only impacts local government, and therefore, has no state impact. The LFO does not review local government bills.

V. ACTUARIAL DISCLOSURES

Intended Use

This actuarial note is based on our understanding of the bill as of the date shown above. It is intended to be used by the legislature during the current legislative session only and assumes no other legislative changes affecting the funding or benefits of the affected systems, other than those identified, will be adopted. Other readers of this actuarial note are advised to seek professional guidance as to its content and interpretation, and not to rely upon this communication without such guidance. The actuarial note, and any referenced documents, should be read as a whole. Distribution of, or reliance on, only parts of this actuarial note could result in its misuse and may mislead others. The summary of the impact of the bill included in this actuarial note is for the purposes of an actuarial analysis only, as required by La. R.S. 24:521, and is not a legal interpretation of the provisions of the bill.

Actuarial Data, Methods and Assumptions

Unless indicated otherwise, this actuarial note was prepared using actuarial data, methods, and assumptions as disclosed in the most recent actuarial valuation report adopted by the Retirement system. We are not providing an opinion on whether the assumptions and methods are reasonable for the purpose of this analysis, and have expressed potential concerns with regard to some information provided.

In the event that new, more appropriate actuarial assumption and methods are adopted, they would likely increase the contribution requirements and the pension liabilities for funding and accounting, and decrease the funded ratio – even before considering the impact of this proposed bill.

Conflict of Interest

There is nothing in the proposed legislation that will compromise the signing actuary's ability to present an unbiased statement of actuarial opinion.

Risks Associated with Measuring Costs

This actuarial note is an actuarial communication, and is required to include certain disclosures in compliance with Actuarial Standards of Practice (ASOP) No. 51.

A full actuarial determination of the retirement system's costs, actuarially determined contributions and accrued liability require the use of assumptions regarding future economic and demographic events. The assumptions used to determine the retirement system's contribution requirement and accrued liability are summarized in the system's most recent Actuarial Valuation Report.

The actual emerging future experience, such as a retirement fund's future investment returns, may differ from the assumptions. To the extent that emerging future experience differs from the assumptions, the resulting shortfalls (or gains) must be recognized in future years by future taxpayers. Future actuarial measurements may also differ significantly from the current measurements due to other factors: changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period; or additional cost or contribution requirements based on the system's funded status); and changes in plan provisions or applicable law.

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 expected returns (assumptions);
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 and life expectancy 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 at rates that differ from what was assumed, resulting in actual future accrued liability and contributions differing from expected.

The scope of an actuarial note prepared for the Louisiana Legislature does not include an analysis of the potential range of such future measurements or a quantitative measurement of the future risks of not achieving the assumptions. In certain circumstances, detailed or quantitative assessments of one or more of these risks as well as various plan maturity measures and historical actuarial measurements may be requested from the actuary. Additional risk assessments are generally outside the scope of an actuarial note. Additional assessments may include stress tests, scenario tests, sensitivity tests, stochastic modeling, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability.

However, the general cost-effects of emerging experience deviating from assumptions can be known. For example, the investment return since the most recent actuarial valuation may be less (or more) than the assumed rate, or a cost-of-living adjustment may be more (or less) than the assumed rate, or life expectancy may be improving (or worsening) compared to what is assumed. In each of these situations, the cost of the plan can be expected to increase (or decrease).

The use of reasonable assumptions and the timely receipt of the actuarially determined contributions are critical to support the financial health of the plan. However, employer contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

Certification

Kenneth J. Herbold is an Associate of the Society of Actuaries (ASA), a Member of the American Academy of Actuaries (MAAA), and an Enrolled Actuary (EA) under the Employees Retirement Income Security Act of 1974. Mr. Herbold meets the US Qualification Standards necessary to render the actuarial opinion contained herein.

VI. LEGISLATIVE PROCEDURAL ITEMS

Information Pertaining to La. Const. Art. X, §29(F)

☒ This bill contains a retirement system benefit provision having an actuarial cost. Some members of the New Orleans Firefighters' Pension and Relief Fund would receive a larger benefit with the enactment of this bill than what they would have received without this bill.

Dual Referral Relative to Total Fiscal Costs or Total Cash Flows:

The information presented below is based on information contained in Sections II, III, and IV for the first three years following the 2024 Regular Session.

Senate

☒ 13.5.1 Applies to Senate or House Instruments
If an annual fiscal cost ≥ $100,000, then bill is dual referred to:
Dual Referral: Senate Finance

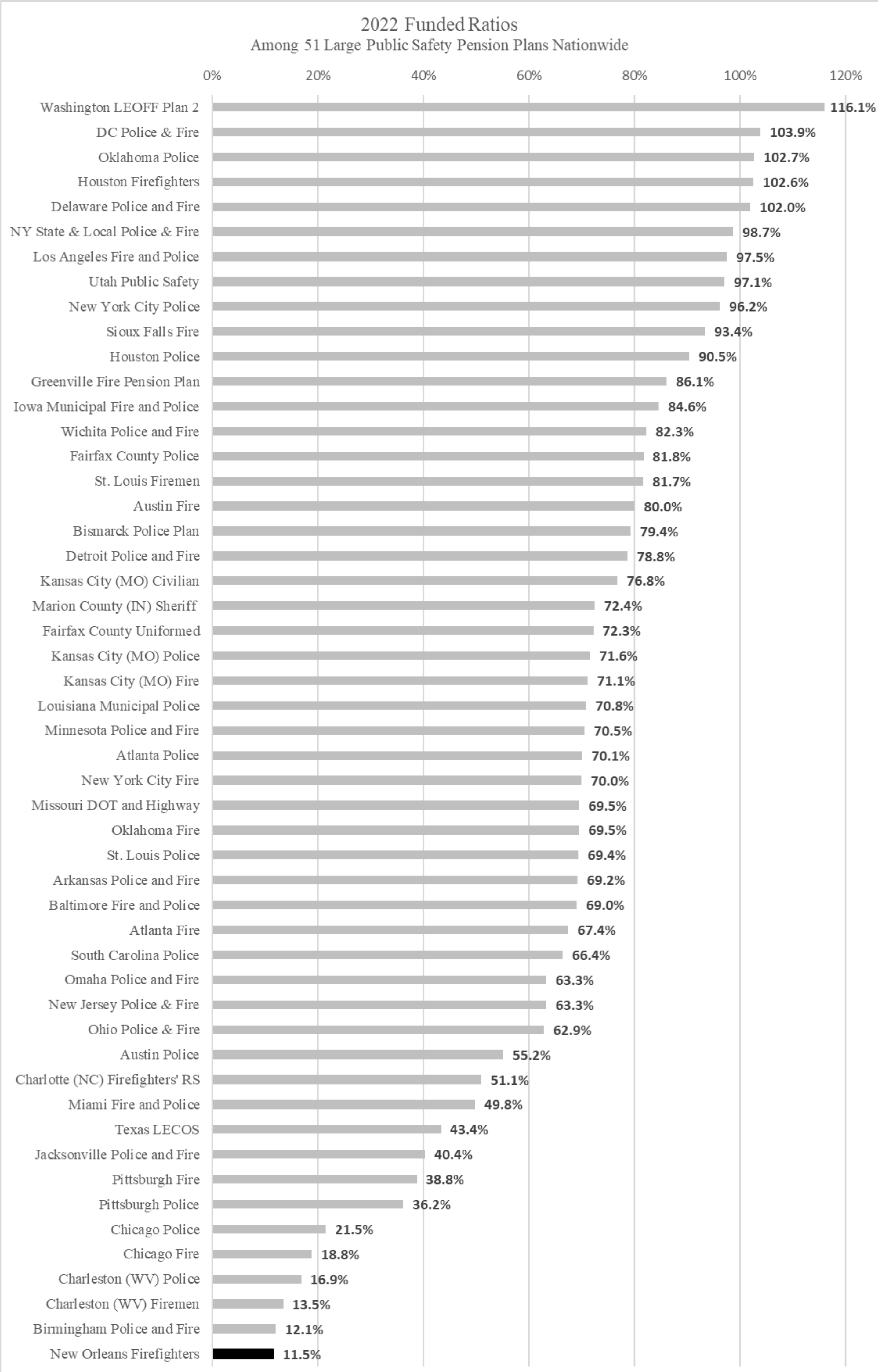
☐ 13.5.2 Applies to Senate or House Instruments
If an annual tax or fee change ≥ $500,000, then bill is dual referred to:
Dual Referral: Revenue and Fiscal Affairs

House

☐ 6.8F Applies to Senate or House Instruments
If an annual General Fund fiscal cost ≥ $100,000, then bill is dual referred to:
Dual Referral: Appropriations

☐ 6.8G Applies to Senate Instruments only
If a net fee decrease occurs or is an increase in annual fees and taxes ≥ $500,000, then bill is dual referred to:
Dual Referral: Ways and Means

APPENDIX


2022 Funded Ratios
Among 51 Large Public Safety Pension Plans Nationwide
0%
20%
40%
60%
80%
100%
120%
Washington LEOFF Plan 2 116.1%
DC Police & Fire 103.9%
Oklahoma Police 102.7%
Houston Firefighters 102.6%
Delaware Police and Fire 102.0%
NY State & Local Police & Fire 98.7%
Los Angeles Fire and Police 97.5%
Utah Public Safety 97.1%
New York City Police 96.2%
Sioux Falls Fire 93.4%
Houston Police 90.5%
Greenville Fire Pension Plan 86.1%
Iowa Municipal Fire and Police 84.6%
Wichita Police and Fire 82.3%
Fairfax County Police 81.8%
St. Louis Firemen 81.7%
Austin Fire 80.0%
Bismarck Police Plan 79.4%
Detroit Police and Fire 78.8%
Kansas City (MO) Civilian 76.8%
Marion County (IN) Sheriff 72.4%
Fairfax County Uniformed 72.3%
Kansas City (MO) Police 71.6%
Kansas City (MO) Fire 71.1%
Louisiana Municipal Police 70.8%
Minnesota Police and Fire 70.5%
Atlanta Police 70.1%
New York City Fire 70.0%
Missouri DOT and Highway 69.5%
Oklahoma Fire 69.5%
St. Louis Police 69.4%
Arkansas Police and Fire 69.2%
Baltimore Fire and Police 69.0%
Atlanta Fire 67.4%
South Carolina Police 66.4%
Omaha Police and Fire 63.3%
New Jersey Police & Fire 63.3%
Ohio Police & Fire 62.9%
Austin Police 55.2%
Charlotte (NC) Firefighters' RS 51.1%
Miami Fire and Police 49.8%
Texas LECOS 43.4%
Jacksonville Police and Fire 40.4%
Pittsburgh Fire 38.8%
Pittsburgh Police 36.2%
Chicago Police 21.5%
Chicago Fire 18.8%
Charleston (WV) Police 16.9%
Charleston (WV) Firemen 13.5%
Birmingham Police and Fire 12.1%
New Orleans Firefighters 11.5%