

Retirement Plan for the Firefighters
Of the City of Greenacres

Actuarial Valuation
As of October 1, 2022

Determines the Contribution
For the 2023/24 Fiscal Year



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February 6, 2023

Introduction

This report presents the results of the October 1, 2022 actuarial valuation of the Retirement Plan for the Firefighters of the City of Greenacres. The report is based on the participant data and asset information provided by the pension plan administrator and, except for a cursory review for reasonableness including a comparison to the data provided for the previous valuation, we have not attempted to verify the accuracy of this information.

The primary purpose of this report is to provide a summary of the funded status of the plan as of October 1, 2022 and to determine the minimum required contribution under Chapter 112, Florida Statutes, for the 2023/24 plan year. In addition, this report provides a projection of the long-term funding requirements of the plan, statistical information concerning the assets held in the trust, statistical information concerning the participant population, and a summary of any recent plan changes.

The liabilities and cost presented in this report are based on numerous assumptions concerning the cost of benefits to be provided in the future, long-term investment returns, and the future demographic experience of the current participants. Anyone referring to this report should remember that the cost developed herein is only an *estimate* of the true cost of providing post-employment pension benefits. No one can predict with certainty whether the true cost will be higher or lower than the cost presented in this report. The calculated cost is entirely dependent upon the assumptions that are described in Table IV-A. If any of the assumptions is changed, then the cost shown in this report will change accordingly. Likewise, if any of the assumptions is not completely realized, then the cost shown in this report will change in the future.

Certain assumptions play a bigger role than others in determining the cost of the post-employment pension benefits. In some cases, relatively small changes in a particular assumption can have a dramatic impact on the anticipated cost of benefits. Although a thorough analysis of the impact of such changes is beyond the scope of this report, Table I-B illustrates the impact that alternative long-term investment returns would have on the minimum required contribution rate.

Minimum Required Contribution

Table I-A shows the development of the minimum required contribution for the 2023/24 plan year. The minimum required contribution rate is 35.83% of covered payroll, which represents an increase of 18.69% of payroll from the prior valuation.

The normal cost rate is 35.03% of payroll, which is 17.28% of payroll greater than the normal cost rate that was developed in the prior valuation. Table I-C provides a breakdown of the sources of change in the normal cost rate. Significantly, the rate increased by 14.36% due to investment losses and increased by another 2.92% of payroll due to demographic experience. The market value of assets lost 14.01% during the 2021/22 plan year, whereas a 7.00% annual investment return was required to maintain a stable contribution rate.



Chapter 112, Florida Statutes, sets forth the rules concerning the minimum required contribution for public pension plans within the state. Essentially, the City must contribute an amount equal to the annual normal cost of the plan plus an adjustment as necessary to reflect interest on any delayed payment of the contribution beyond the valuation date. On this basis, the City's 2023/24 minimum required contribution will be equal to 35.83% multiplied by the total pensionable earnings for the 2023/24 plan year for the active employees who are covered by the plan and reduced by the portion of the Chapter 175 contribution that is allowed to be recognized during the 2023/24 plan year.

Based on the current assets, participant data, and actuarial assumptions and methods that are used to value the plan, the present-day value of the total long-term funding requirement is \$39,630,594. As illustrated in Table I-A, current assets are sufficient to cover \$24,026,091 of this amount, the employer's 2022/23 expected contribution will cover \$829,152 of this amount, the employer's 2023/24 expected contribution will cover \$1,820,012 of this amount, and future employee contributions are expected to cover \$1,599,102 of this amount, leaving \$11,356,237 to be covered by future employer funding beyond the 2023/24 fiscal year. Again, demographic and investment experience that differs from that assumed will either increase or decrease the future employer funding requirement.

Identification and Assessment of Risk

The liabilities and cost presented in this report are based on numerous assumptions concerning the cost of benefits to be provided in the future, long-term investment returns, and the future demographic experience of the current participants. Anyone referring to this report should remember that the cost developed herein is only an *estimate* of the true cost of providing post-employment pension benefits. No one can predict with certainty whether the true cost will be higher or lower than the cost presented in this report. The calculated cost is entirely dependent upon the assumptions that are described in Table IV-A. If any of the assumptions is changed, then the cost shown in this report will change accordingly. Likewise, there is always a risk that, should these assumptions not be realized, the liabilities of the plan, the contributions required to fund the plan, and the funded status of the plan may be significantly different than the amounts shown in this report.

Although a thorough analysis of the risk of not meeting the assumptions is beyond the scope of this report, this discussion is intended to identify the significant risks faced by the plan. In some cases, a more detailed review of the risks, including numerical analysis, may be appropriate to help the plan sponsor and other interested parties assess the specific impact of not realizing certain assumptions. For example, Table I-B illustrates the impact that alternative long-term investment returns would have on the contribution rate. Note that this report is not intended to provide advice on the management or reduction of the identified risks nor is this report intended to provide investment advice.

The most significant risk faced by most defined benefit pension plans is investment risk, i.e. the risk that long-term investment returns will be less than assumed. Other related risks include a risk that, if the investments of the plan decline dramatically over a short period of time (such as occurred with many pension plans in 2008), the plan's assets may not have sufficient time to recover before benefits become due. Even if the assets of the plan grow in accordance with the assumed investment return over time, if benefit payments are expected to be large in the short-term (for example, if the plan provides an actuarial equivalent lump sum payment option and a large number of participants are expected to become entitled to such a lump sum in the near future), the plan's assets may not be sufficient to support such a high level of benefit payments. We have provided a 10-year projection of the expected benefit payments in Table III-G to help



the Trustees in formulating an investment policy that is expected to provide an investment return that meets both the short- and long-term cash flow needs of the pension plan.

Another source of risk is demographic experience. This is the risk that participants will receive salary increases that are different than the amount assumed, that participants will retire, become disabled, or terminate their employment at a rate that is different than assumed, and that participants will live longer than assumed, just to cite a few examples of the demographic risk faced by the plan. Although for most pension plans, the demographic risk is not as significant as the investment risk, particularly in light of the fact that the mortality assumption includes a component for future life expectancy increases, the demographic risk can nevertheless be a significant contributing factor to liabilities and contribution rates that become higher than anticipated.

A third source of risk is the risk that the plan sponsor (or other contributing entities) will not make, or will not have the ability to make, the contributions that are required to keep the plan funded at a sufficient level. Material changes in the number of covered employees, covered payroll, and, in some cases, hours worked by active participants can also significantly impact the plan's liabilities and the level of contributions received by the plan.

Finally, an actuarial funding method has been used to allocate the gap between projected liabilities and assets to each year in the future. The contribution rate under some funding methods is higher during the early years of the plan and then is lower during the later years of the plan. Other funding methods provide for lower contribution rates initially, with increasing contribution rates over time.

The Trustees have adopted the aggregate funding method for this plan, which is expected to result in a contribution rate that is level as a percentage of payroll over the working life of the plan's active participants. A brief description of the actuarial funding method is provided in Table IV-A.

Contents of the Report

Tables I-D through I-G provide a detailed breakdown of various liability amounts by type of benefit and by participant group. Tables II-A through II-F provide information concerning the assets of the trust fund. Specifically, Table II-A shows the development of the actuarial value of assets, which is based on the market value of assets. Tables III-A through III-G provide statistical information concerning the plan's participant population. In particular, Table III-G gives a 10-year projection of the cash that is expected to be required from the trust fund in order to pay benefits to the current group of participants. Finally, Tables IV-A through V-B provide a summary of the actuarial assumptions and methods that are used to value the plan's benefits and of the relevant plan provisions as of October 1, 2022, as well as a summary of the changes that have occurred since the previous valuation report was prepared.

Refund of Participant Contributions

It is our understanding that there are five participants who are due a refund of their contributions. We have estimated the accumulated amount of their refunds to be \$10,522 as of October 1, 2022. The average amount owed to these



individuals is \$2,104. If possible, we recommend that the accumulated contributions be distributed to these individuals in order to simplify the administration of the plan and to reduce future administrative costs.

Certification

This actuarial valuation was prepared by me or under my direct supervision and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate and, in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material change in plan costs or required contribution rates have been taken into account in the valuation.

For the firm,

Charles T. Carr

Charles T. Carr
Consulting Actuary
Southern Actuarial Services Company, Inc.

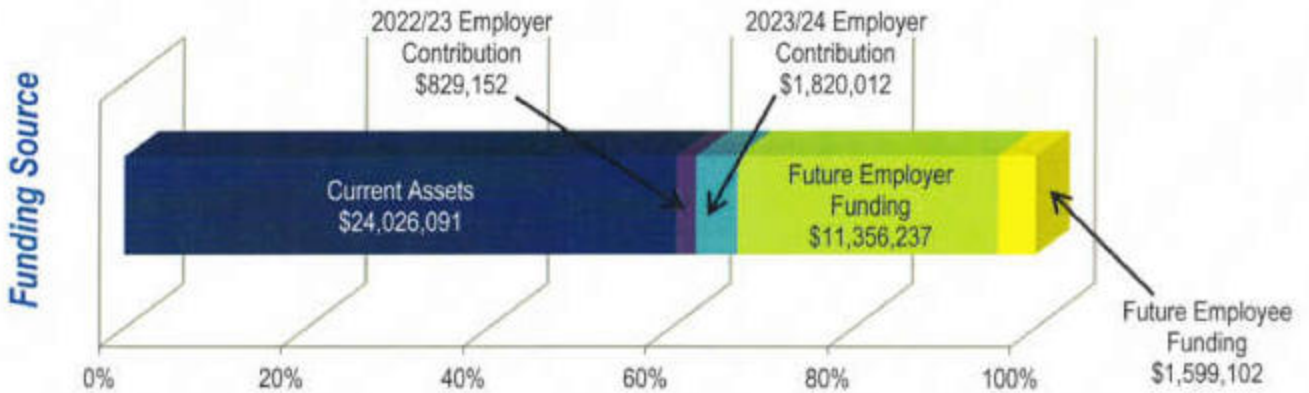
Enrolled Actuary No. 20-04927

The individual above is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.



Minimum Required Contribution

Table I-A



For the 2023/24 Plan Year

Present Value of Future Benefits	\$39,238,212
Present Value of Future Administrative Expenses	\$392,382
Actuarial Value of Assets	(\$24,026,091)
Present Value of Future Employee Contributions	(\$1,599,102)
Present Value of Future Normal Costs	\$14,005,401
<hr/>	
Present Value of Future Payroll	+ \$39,977,534
Normal Cost Rate	= 35.0332%
Expected Payroll	x \$4,837,524
<hr/>	
Normal Cost	\$1,694,738
Adjustment to Reflect Semi-Monthly Employer Contributions	\$60,451
Expected Employer Contribution for the 2022/23 Plan Year	(\$829,152)
Remaining Contribution Due/(Credit) for the 2022/23 Plan Year	\$926,037
	x 0.07
One Year's Interest Charge/(Credit) on the Remaining Contribution	\$64,823
<hr/>	
Preliminary Employer Contribution for the 2023/24 Plan Year	\$1,820,012
Expected Payroll for the 2023/24 Plan Year	÷ \$5,079,400

Minimum Required Contribution Rate 35.83%

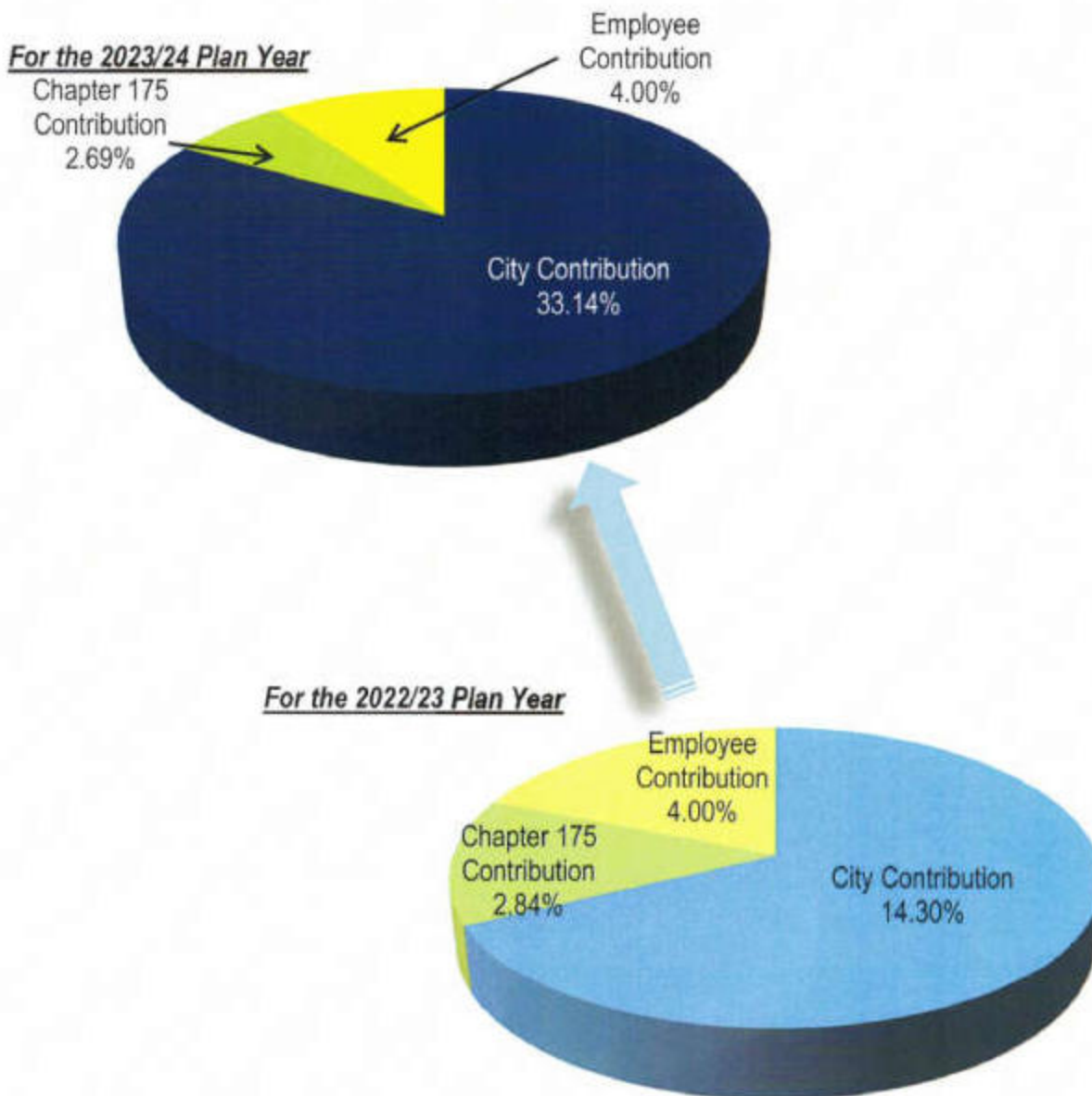
(The actual contribution should be based on the minimum required contribution rate multiplied by the actual payroll for the year.)



Minimum Required Contribution

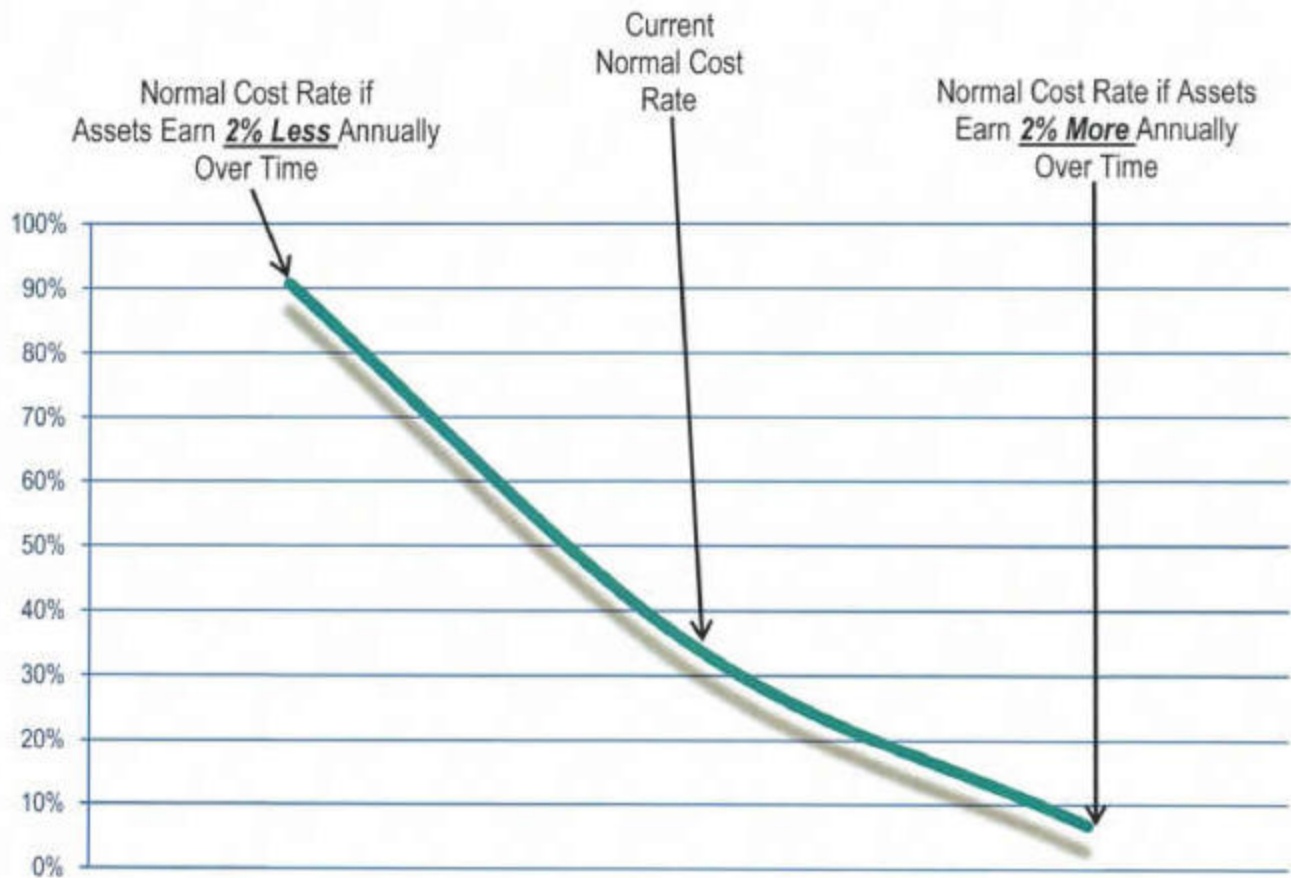
Table I-A
(continued)

The minimum required contribution rate of 35.83% includes both the City contribution and the allowable Chapter 175 contribution. In addition, employees are required to contribute 4.00% of pensionable earnings. The actual City contribution rate is expected to be approximately 33.14% based on the allowable Chapter 175 contribution for the previous year. The chart below shows the expected contribution rate by source for the 2023/24 plan year based on the expected payroll. A comparative chart shows the contribution rate by source for the previous plan year.



Sensitivity Analysis

Table I-B



The line above illustrates the sensitivity of the normal cost rate to changes in the long-term investment return.



Gain and Loss Analysis

Table I-C

Previous normal cost rate	17.75%
Increase (decrease) due to investment gains and losses	14.36%
Increase (decrease) due to demographic experience	2.92%
Increase (decrease) due to plan amendments	0.00%
Increase (decrease) due to actuarial assumption changes	0.00%
Increase (decrease) due to actuarial method changes	0.00%
Current normal cost rate	<u>35.03%</u>



Present Value of Future Benefits

Table I-D

	<u>Old Assumptions w/o Amendment</u>	<u>Old Assumptions w/ Amendment</u>	<u>New Assumptions w/ Amendment</u>
<i><u>Actively Employed Participants</u></i>			
Retirement benefits	\$29,228,049	\$29,228,049	\$29,228,049
Termination benefits	\$2,533,175	\$2,533,175	\$2,533,175
Disability benefits	\$1,689,019	\$1,689,019	\$1,689,019
Death benefits	\$159,803	\$159,803	\$159,803
Refund of employee contributions	\$206,302	\$206,302	\$206,302
Sub-total	\$33,816,348	\$33,816,348	\$33,816,348
<i><u>Deferred Vested Participants</u></i>			
Retirement benefits	\$2,167,257	\$2,167,257	\$2,167,257
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$2,167,257	\$2,167,257	\$2,167,257
<i><u>Due a Refund of Contributions</u></i>	\$10,522	\$10,522	\$10,522
<i><u>Deferred Beneficiaries</u></i>	\$0	\$0	\$0
<i><u>Retired Participants</u></i>			
Service retirements	\$2,504,474	\$2,504,474	\$2,504,474
Disability retirements	\$0	\$0	\$0
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$739,611	\$739,611	\$739,611
Sub-total	\$3,244,085	\$3,244,085	\$3,244,085
<i><u>Grand Total</u></i>	<u>\$39,238,212</u>	<u>\$39,238,212</u>	<u>\$39,238,212</u>
Present Value of Future Payroll	\$39,977,534	\$39,977,534	\$39,977,534
Present Value of Future Employee Contribs.	\$1,599,102	\$1,599,102	\$1,599,102
Present Value of Future Employer Contribs.	\$14,005,401	\$14,005,401	\$14,005,401



Present Value of Accrued Benefits

Table I-E

	Old Assumptions w/o Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
<u>Actively Employed Participants</u>			
Retirement benefits	\$12,662,107	\$12,662,107	\$12,662,107
Termination benefits	\$1,184,276	\$1,184,276	\$1,184,276
Disability benefits	\$951,146	\$951,146	\$951,146
Death benefits	\$76,776	\$76,776	\$76,776
Refund of employee contributions	\$101,401	\$101,401	\$101,401
Sub-total	\$14,975,706	\$14,975,706	\$14,975,706
<u>Deferred Vested Participants</u>			
Retirement benefits	\$2,167,257	\$2,167,257	\$2,167,257
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$2,167,257	\$2,167,257	\$2,167,257
<u>Due a Refund of Contributions</u>	\$10,522	\$10,522	\$10,522
<u>Deferred Beneficiaries</u>	\$0	\$0	\$0
<u>Retired Participants</u>			
Service retirements	\$2,504,474	\$2,504,474	\$2,504,474
Disability retirements	\$0	\$0	\$0
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$739,611	\$739,611	\$739,611
Sub-total	\$3,244,085	\$3,244,085	\$3,244,085
<u>Grand Total</u>	\$20,397,570	\$20,397,570	\$20,397,570
<u>Funded Percentage</u>	118.17%	118.17%	118.17%

(Note: Funded percentage is equal to the ratio of the usable portion of the market value of assets divided by the present value of accrued benefits.)



Present Value of Vested Benefits

Table I-F

	<u>Old Assumptions w/o Amendment</u>	<u>Old Assumptions w/ Amendment</u>	<u>New Assumptions w/ Amendment</u>
<u>Actively Employed Participants</u>			
Retirement benefits	\$12,374,354	\$12,374,354	\$12,374,354
Termination benefits	\$967,683	\$967,683	\$967,683
Disability benefits	\$951,146	\$951,146	\$951,146
Death benefits	\$74,401	\$74,401	\$74,401
Refund of employee contributions	\$124,266	\$124,266	\$124,266
Sub-total	\$14,491,850	\$14,491,850	\$14,491,850
<u>Deferred Vested Participants</u>			
Retirement benefits	\$2,167,257	\$2,167,257	\$2,167,257
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$2,167,257	\$2,167,257	\$2,167,257
<u>Due a Refund of Contributions</u>	\$10,522	\$10,522	\$10,522
<u>Deferred Beneficiaries</u>	\$0	\$0	\$0
<u>Retired Participants</u>			
Service retirements	\$2,504,474	\$2,504,474	\$2,504,474
Disability retirements	\$0	\$0	\$0
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$739,611	\$739,611	\$739,611
Sub-total	\$3,244,085	\$3,244,085	\$3,244,085
<u>Grand Total</u>	<u>\$19,913,714</u>	<u>\$19,913,714</u>	<u>\$19,913,714</u>



Entry Age Normal Accrued Liability

Table I-G

	<u>Old Assumptions w/o Amendment</u>	<u>Old Assumptions w/ Amendment</u>	<u>New Assumptions w/ Amendment</u>
<i><u>Actively Employed Participants</u></i>			
Retirement benefits	\$20,449,595	\$20,449,595	\$20,449,595
Termination benefits	\$1,626,044	\$1,626,044	\$1,626,044
Disability benefits	\$1,101,616	\$1,101,616	\$1,101,616
Death benefits	\$108,187	\$108,187	\$108,187
Refund of employee contributions	\$116,885	\$116,885	\$116,885
Sub-total	\$23,402,327	\$23,402,327	\$23,402,327
<i><u>Deferred Vested Participants</u></i>			
Retirement benefits	\$2,167,257	\$2,167,257	\$2,167,257
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$2,167,257	\$2,167,257	\$2,167,257
<i><u>Due a Refund of Contributions</u></i>	\$10,522	\$10,522	\$10,522
<i><u>Deferred Beneficiaries</u></i>	\$0	\$0	\$0
<i><u>Retired Participants</u></i>			
Service retirements	\$2,504,474	\$2,504,474	\$2,504,474
Disability retirements	\$0	\$0	\$0
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$739,611	\$739,611	\$739,611
Sub-total	\$3,244,085	\$3,244,085	\$3,244,085
<i><u>Grand Total</u></i>	<u>\$28,824,191</u>	<u>\$28,824,191</u>	<u>\$28,824,191</u>



Actuarial Value of Assets

Table II-A

Market Value of Assets as of October 1, 2022	\$24,104,468
Minus DROP account balances	(\$78,377)
Minus advance employer contributions	\$0
Minus excess Chapter 175/185 contributions	\$0
Actuarial Value of Assets as of October 1, 2022	<u>\$24,026,091</u>

Historical Actuarial Value of Assets	
October 1, 2013	\$17,308,555
October 1, 2014	\$20,145,669
October 1, 2015	\$9,292,323
October 1, 2016	\$10,816,320
October 1, 2017	\$13,518,355
October 1, 2018	\$16,027,007
October 1, 2019	\$18,140,965
October 1, 2020	\$20,712,016
October 1, 2021	\$26,703,610
October 1, 2022	\$24,026,091

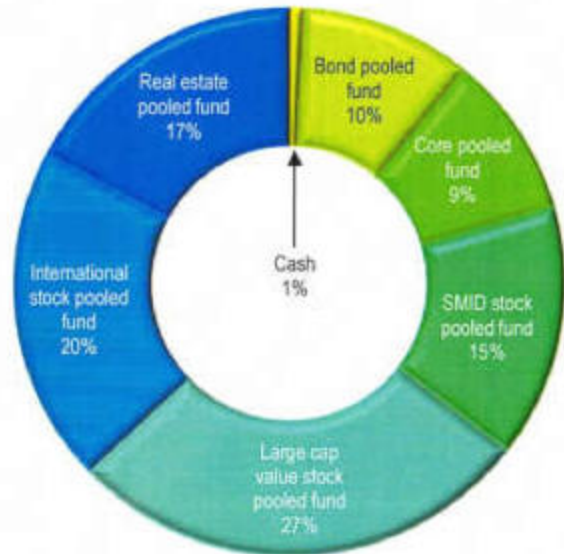


Market Value of Assets

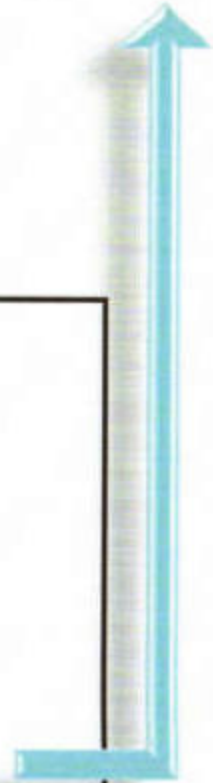
Table II-B

As of October 1, 2022

Market Value of Assets	<u>\$24,104,468</u>
Cash	\$192,791
Bond pooled fund	\$2,433,991
Core pooled fund	\$2,289,398
SMID stock pooled fund	\$3,638,937
Large cap value stock pooled fund	\$6,603,105
International stock pooled fund	\$4,795,685
Real estate pooled fund	\$4,145,015
Employer contribution receivable	\$5,546



Historical Market Value of Assets	
October 1, 2013	\$17,308,555
October 1, 2014	\$20,145,669
October 1, 2015	\$9,292,323
October 1, 2016	\$10,816,320
October 1, 2017	\$13,533,668
October 1, 2018	\$16,042,320
October 1, 2019	\$18,157,232
October 1, 2020	\$20,728,283
October 1, 2021	\$26,749,254
October 1, 2022	\$24,104,468



Investment Return

Table II-C



Plan Year	Market Value Return	Actuarial Value Return	Assumed Return
2012/13	11.84%	11.84%	7.25%
2013/14	8.42%	8.42%	7.25%
2014/15	0.13%	0.13%	7.25%
2015/16	8.58%	8.58%	7.25%
2016/17	14.87%	14.88%	7.25%
2017/18	8.83%	8.84%	7.25%
2018/19	5.65%	5.66%	7.25%
2019/20	7.25%	7.25%	7.25%
2020/21	21.82%	21.85%	7.25%
2021/22	-14.01%	-14.04%	7.00%
10yr. Avg.	6.94%	6.94%	7.22%



Asset Reconciliation

Table II-D

	<u>Market Value</u>	<u>Actuarial Value</u>
As of October 1, 2021	\$26,749,254	\$26,703,610
<i>Increases Due To:</i>		
Employer Contributions	\$1,041,869	\$1,041,869
Chapter 175/185 Contributions	\$137,591	\$137,591
Employee Contributions	\$199,360	\$199,360
Service Purchase Contributions	\$0	\$0
Total Contributions	<u>\$1,378,820</u>	<u>\$1,378,820</u>
Interest and Dividends	\$0	
Realized Gains (Losses)	\$0	
Unrealized Gains (Losses)	(\$3,830,228)	
Total Investment Income	<u>(\$3,830,228)</u>	(\$3,830,228)
Other Income	\$0	
Total Income	<u>(\$2,451,408)</u>	<u>(\$2,451,408)</u>
<i>Decreases Due To:</i>		
Monthly Benefit Payments	(\$137,178)	(\$137,178)
Refund of Employee Contributions	(\$6,060)	(\$6,060)
DROP Credits		(\$49,933)
Total Benefit Payments	<u>(\$143,238)</u>	<u>(\$193,171)</u>
Investment Expenses	\$0	
Administrative Expenses	(\$50,140)	(\$50,140)
Advance Employer Contribution		\$17,200
Excess Chapter 175/185 Contribution		\$0
Total Expenses	<u>(\$193,378)</u>	<u>(\$226,111)</u>
As of October 1, 2022	<u><u>\$24,104,468</u></u>	<u><u>\$24,026,091</u></u>



Historical Trust Fund Detail

Table II-E

Income

<u>Plan</u> <u>Year</u>	<u>Employer</u> <u>Contribs.</u>	<u>Chapter</u> <u>Contribs.</u>	<u>Employee</u> <u>Contribs.</u>	<u>Service</u>	<u>Realized</u>	<u>Unrealized</u>	<u>Other</u> <u>Income</u>	
				<u>Purchase</u> <u>Contribs.</u>	<u>Interest /</u> <u>Dividends</u>	<u>Gains /</u> <u>Losses</u>		<u>Gains /</u> <u>Losses</u>
2012/13	\$1,081,399	\$439,902	\$203,198	\$0	\$0	\$0	\$1,756,314	-\$103,486
2013/14	\$891,618	\$464,704	\$201,235	\$0	\$0	\$0	\$1,518,010	-\$128,288
2014/15	\$918,747	\$482,735	\$241,030	\$0	\$0	\$0	\$27,889	-\$12,372,826
2015/16	\$476,766	\$160,796	\$129,257	\$0	\$0	\$0	\$826,904	\$0
2016/17	\$811,403	\$160,796	\$130,901	\$0	\$0	\$0	\$1,684,899	\$0
2017/18	\$1,056,057	\$160,796	\$154,374	\$0	\$0	\$0	\$1,250,861	\$0
2018/19	\$973,405	\$160,796	\$160,516	\$0	\$0	\$0	\$939,539	\$0
2019/20	\$1,016,821	\$160,796	\$162,150	\$0	\$0	\$0	\$1,359,459	\$0
2020/21	\$1,156,111	\$161,730	\$181,267	\$0	\$0	\$0	\$4,670,230	\$0
2021/22	\$1,041,869	\$137,591	\$199,360	\$0	\$0	\$0	-\$3,830,228	\$0

Expenses

<u>Plan</u> <u>Year</u>	<u>Monthly</u>	<u>Contrib.</u> <u>Refunds</u>	<u>Admin.</u> <u>Expenses</u>	<u>Invest.</u> <u>Expenses</u>	<u>Other Actuarial Adjustments</u>		
	<u>Benefit</u> <u>Payments</u>				<u>DROP</u> <u>Credits</u>	<u>Advance</u> <u>Employer</u> <u>Contribs.</u>	<u>Excess</u> <u>Chapter</u> <u>Contribs.</u>
2012/13	\$19,311	\$4,019	\$49,740	\$0	\$0	\$0	\$0
2013/14	\$45,925	\$1,367	\$62,873	\$0	\$0	\$0	\$0
2014/15	\$77,918	\$7,974	\$65,029	\$0	\$0	\$0	\$0
2015/16	\$30,486	\$0	\$39,240	\$0	\$0	\$0	\$0
2016/17	\$31,401	\$1,643	\$37,607	\$0	\$0	\$15,313	\$0
2017/18	\$59,745	\$7,059	\$46,632	\$0	\$0	\$0	\$0
2018/19	\$70,671	\$8,028	\$40,645	\$0	\$0	\$954	\$0
2019/20	\$72,791	\$17,498	\$37,886	\$0	\$0	\$0	\$0
2020/21	\$87,324	\$12,940	\$48,103	\$0	\$28,444	\$933	\$0
2021/22	\$137,178	\$6,060	\$50,140	\$0	\$49,933	-\$17,200	\$0

Note: Information was not available to separate the investment expenses from the investment income nor was information available to separate the investment income by source.



Other Reconciliations

Table II-F

Advance Employer Contribution

Advance Employer Contribution as of October 1, 2021	\$17,200
Additional Employer Contribution	\$1,179,460
Minimum Required Contribution	(\$1,196,660)
Net Increase in Advance Employer Contribution	(\$17,200)
Advance Employer Contribution as of October 1, 2022	\$0

Excess Chapter 175/185 Contribution

Excess Chapter 175/185 Contribution as of October 1, 2021	\$0
Additional Chapter 175/185 Contribution	\$137,591
Allowable Chapter 175/185 Contribution	(\$137,591)
Net Increase in Excess Chapter 175/185 Contribution	\$0
Excess Chapter 175/185 Contribution as of October 1, 2022	\$0

DROP Account Reconciliation

DROP Balance as of October 1, 2021	\$28,444
DROP Benefits Paid	\$48,276
DROP Investment Return	\$1,657
DROP Expense Charge	\$0
Net DROP Credit	\$49,933
DROP Balance as of October 1, 2022	\$78,377



Historical Chapter 175/185 Contributions

Table II-G

Total Accumulated Excess Chapter 175/185 Contribution \$0

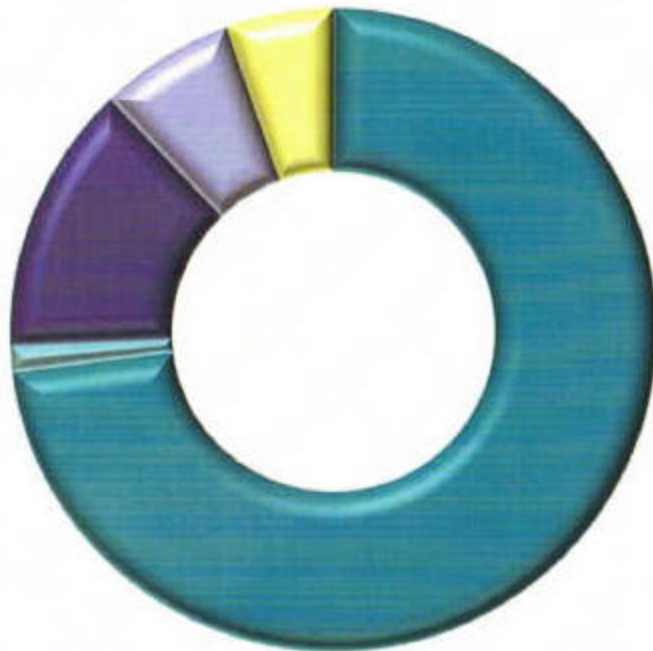
	Chapter 175 Regular <u>Distribution</u>	Chapter 175 Supplemental <u>Distribution</u>	Chapter 185 <u>Distribution</u>	Allowable <u>Amount</u>
1998 Distribution	\$0	\$0	\$61,736	(\$15,282)
1999 Distribution	\$0	\$0	\$116,890	(\$15,282)
2000 Distribution	\$25,888	\$0	\$123,453	(\$15,282)
2001 Distribution	\$32,116	\$7,377	\$140,464	(\$15,282)
2002 Distribution	\$50,540	\$11,252	\$176,353	(\$15,282)
2003 Distribution	\$74,296	\$22,556	\$108,910	(\$15,282)
2004 Distribution	\$90,294	\$22,676	\$127,930	(\$1,101,039)
2005 Distribution	\$96,599	\$20,955	\$141,462	(\$259,016)
2006 Distribution	\$147,230	\$39,411	\$173,192	(\$336,416)
2007 Distribution	\$164,946	\$125,392	\$179,037	(\$336,416)
2008 Distribution	\$162,702	\$129,469	\$231,968	(\$336,416)
2009 Distribution	\$146,876	\$86,661	\$198,893	(\$336,416)
2010 Distribution	\$146,985	\$63,181	\$181,288	(\$336,416)
2011 Distribution	\$147,633	\$70,340	\$195,067	(\$336,416)
2012 Distribution	\$154,864	\$80,164	\$204,874	(\$336,416)
2013 Distribution	\$165,614	\$78,675	\$220,415	(\$336,416)
2014 Distribution	\$159,512	\$91,591	\$231,632	(\$336,416)
2015 Distribution	\$160,796	\$0	\$0	(\$160,796)
2016 Distribution	\$160,796	\$0	\$0	(\$160,796)
2017 Distribution	\$160,796	\$0	\$0	(\$160,796)
2018 Distribution	\$160,796	\$0	\$0	(\$160,796)
2019 Distribution	\$160,796	\$0	\$0	(\$160,796)
2020 Distribution	\$161,730	\$0	\$0	(\$161,730)
2021 Distribution	\$219,035	\$0	\$0	(\$137,591)
Transfer to Share Plan				(\$1,031,312)



Summary of Participant Data

Table III-A

As of October 1, 2022



Participant Distribution by Status

<u>Actively Employed Participants</u>		
◆	Active Participants	54
◆	DROP Participants	1
<u>Inactive Participants</u>		
◆	Deferred Vested Participants	10
◆	Due a Refund of Contributions	5
◆	Deferred Beneficiaries	0
<u>Participants Receiving a Benefit</u>		
◆	Service Retirements	4
◆	Disability Retirements	0
◆	Beneficiaries Receiving	0
Total Participants		74

Number of Participants Included in Prior Valuations

	<i>Active</i>	<i>DROP</i>	<i>Inactive</i>	<i>Retired</i>	<i>Total</i>
October 1, 2013	75	0	21	1	97
October 1, 2014	73	0	32	3	108
October 1, 2015	37	0	11	1	49
October 1, 2016	41	0	11	1	53
October 1, 2017	47	0	12	1	60
October 1, 2018	47	0	13	2	62
October 1, 2019	49	0	14	2	65
October 1, 2020	50	0	14	2	66
October 1, 2021	50	1	15	3	69
October 1, 2022	54	1	15	4	74

* Note: Valuations prior to 10/1/2015 include police officers.



Data Reconciliation

Table III-B

	<u>Active</u>	<u>DROP</u>	<u>Deferred Vested</u>	<u>Due a Refund</u>	<u>Def. Benef.</u>	<u>Service Retiree</u>	<u>Disabled Retiree</u>	<u>Benef. Rec'v.</u>	<u>Total</u>
<u>October 1, 2021</u>	50	1	10	5	0	3	0	0	69
<u>Change in Status</u>									
Re-employed									
Terminated	(2)			2					
Retired	(1)					1			
<u>Participation Ended</u>									
Transferred Out									
Cashed Out				(2)					(2)
Died									
<u>Participation Began</u>									
Newly Hired	7								7
Transferred In									
New Beneficiary									
<u>Other Adjustment</u>									
<u>October 1, 2022</u>	54	1	10	5	0	4	0	0	74

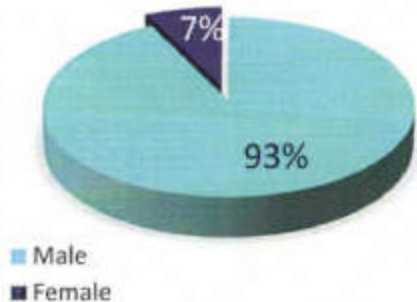


Active Participant Data

Table III-C

Gender Mix

As of October 1, 2022



Average Age	37.9 years
Average Service	8.7 years
Total Annualized Compensation for the Prior Year	\$5,031,165
Total Expected Compensation for the Current Year	\$4,837,524
Average Increase in Compensation for the Prior Year	8.28%
Expected Increase in Compensation for the Current Year	5.59%



Active Participant Statistics From Prior Valuations

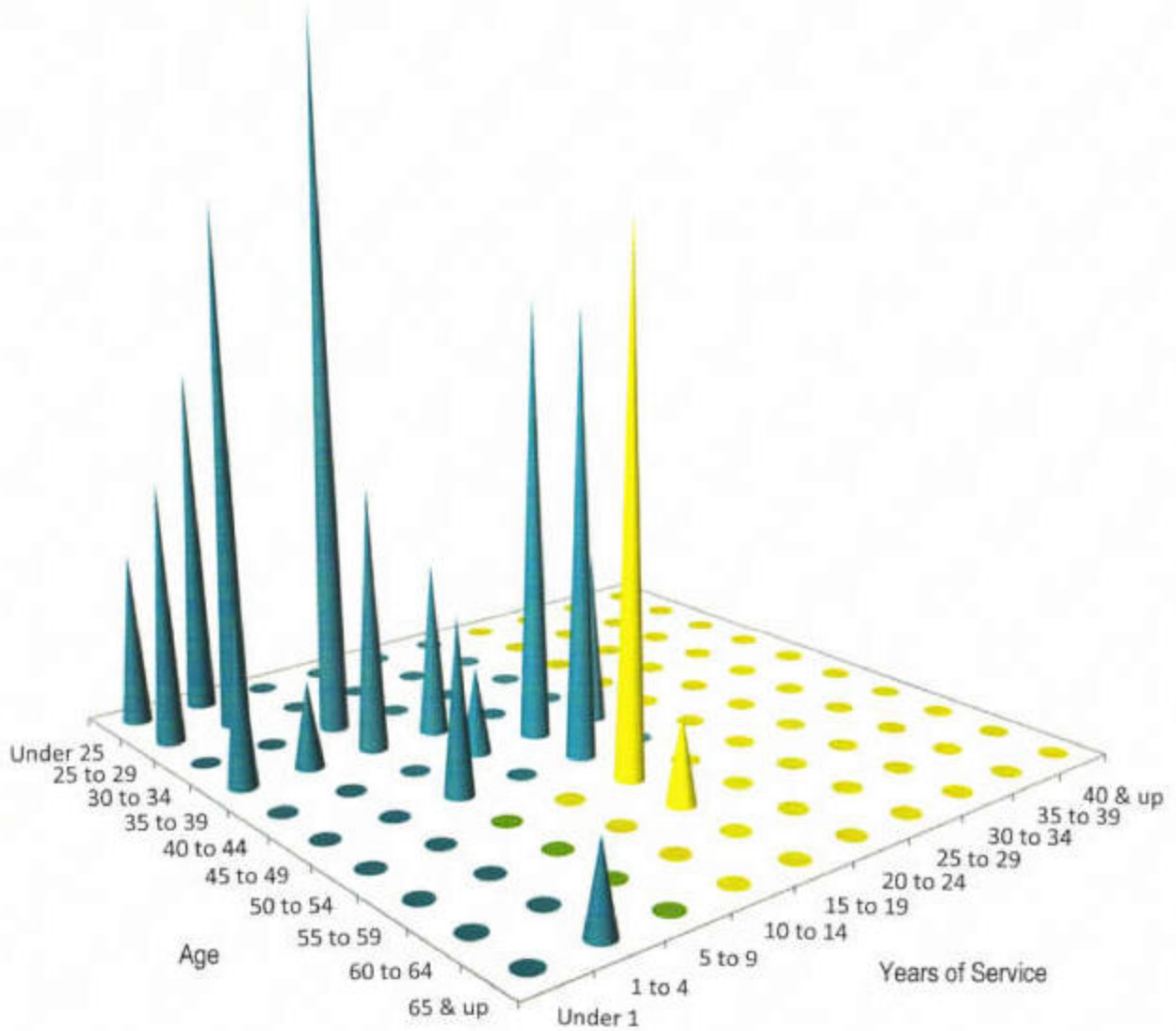
	Average Age	Average Service	Average Salary	Average Expected Salary Increase	Average Actual Salary Increase
October 1, 2013	38.0	7.1	\$68,324	5.36%	-1.30%
October 1, 2014	36.9	6.9	\$68,518	5.35%	3.57%
October 1, 2015	38.0	7.4	\$80,447	5.60%	16.99%
October 1, 2016	37.9	7.6	\$75,990	5.64%	-3.45%
October 1, 2017	37.8	7.5	\$74,993	5.66%	4.50%
October 1, 2018	38.1	8.0	\$81,892	5.69%	8.07%
October 1, 2019	37.8	8.3	\$79,922	5.54%	1.00%
October 1, 2020	38.4	9.0	\$80,817	5.49%	3.54%
October 1, 2021	38.2	8.8	\$89,548	5.43%	13.78%
October 1, 2022	37.9	8.7	\$93,170	5.49%	8.28%

* Note: Valuations prior to 10/1/2015 include police officers.



Active Age-Service Distribution

Table III-D



	Eligible to retire
	May be eligible to retire
	Not eligible to retire



Active Age-Service-Salary Table

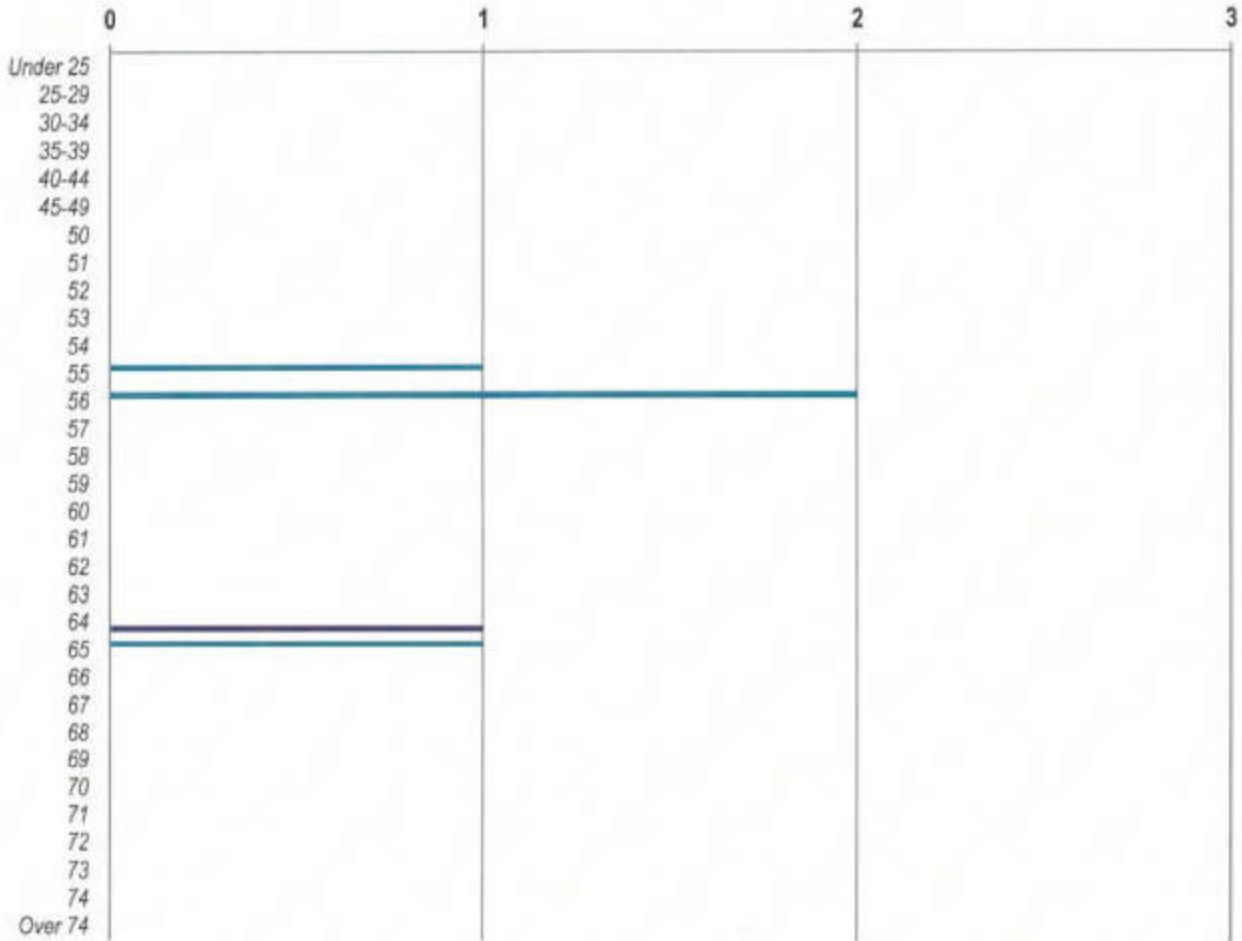
Table III-E

Attained Age	Completed Years of Service										Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	
Under 25	2	4	0	0	0	0	0	0	0	0	6
Avg. Pay	48,885	62,015	0	0	0	0	0	0	0	0	57,639
25 to 29	3	6	0	0	0	0	0	0	0	0	9
Avg. Pay	58,612	69,538	0	0	0	0	0	0	0	0	65,896
30 to 34	0	0	8	0	0	0	0	0	0	0	8
Avg. Pay	0	0	88,306	0	0	0	0	0	0	0	88,306
35 to 39	2	1	3	2	0	0	0	0	0	0	8
Avg. Pay	48,466	75,169	89,405	103,324	0	0	0	0	0	0	80,870
40 to 44	0	0	0	1	5	2	0	0	0	0	8
Avg. Pay	0	0	0	95,628	119,181	95,596	0	0	0	0	110,340
45 to 49	0	0	2	0	5	0	0	0	0	0	7
Avg. Pay	0	0	123,804	0	118,992	0	0	0	0	0	120,367
50 to 54	0	0	0	0	6	0	0	0	0	0	6
Avg. Pay	0	0	0	0	135,664	0	0	0	0	0	135,664
55 to 59	0	0	0	0	1	0	0	0	0	0	1
Avg. Pay	0	0	0	0	115,971	0	0	0	0	0	115,971
60 to 64	0	0	0	0	0	0	0	0	0	0	0
Avg. Pay	0	0	0	0	0	0	0	0	0	0	0
65 & up	0	1	0	0	0	0	0	0	0	0	1
Avg. Pay	0	83,615	0	0	0	0	0	0	0	0	83,615
Total	7	12	13	3	17	2	0	0	0	0	54
Avg. Pay	52,934	68,673	94,021	100,759	124,754	95,596	0	0	0	0	93,170



Inactive Participant Data

Table III-F



Age at Retirement

- Service Retirements
- Disability Retirements
- DROP Participants

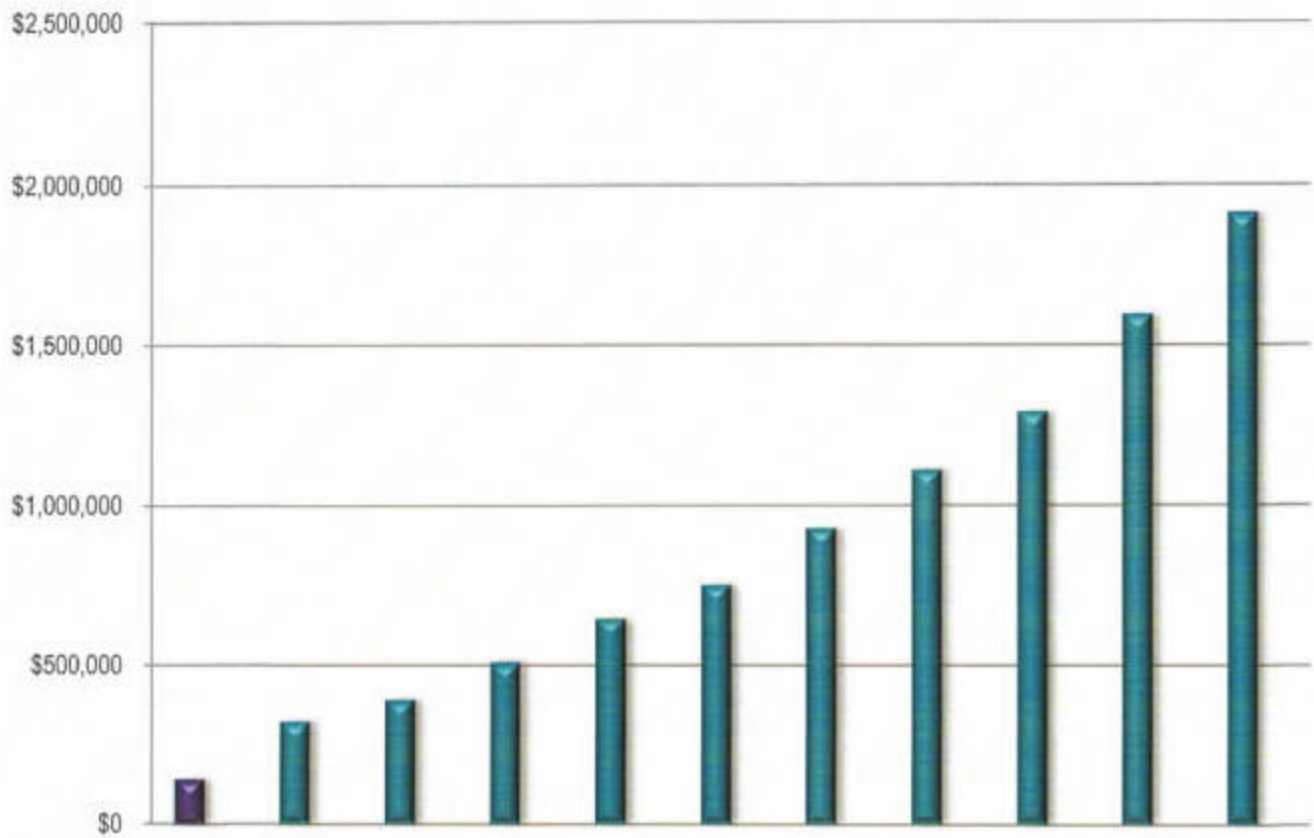
Average Monthly Benefit

Service Retirements	\$3,360.30
Disability Retirements	Not applicable
Beneficiaries Receiving	Not applicable
DROP Participants	\$4,023.00
Deferred Vested Participants	\$1,785.31
Deferred Beneficiaries	Not applicable



Projected Benefit Payments

Table III-G



Actual

For the period October 1, 2021 through September 30, 2022

\$143,238 *

Projected

For the period October 1, 2022 through September 30, 2023

\$325,978

For the period October 1, 2023 through September 30, 2024

\$393,904

For the period October 1, 2024 through September 30, 2025

\$508,898

For the period October 1, 2025 through September 30, 2026

\$646,273

For the period October 1, 2026 through September 30, 2027

\$751,281

For the period October 1, 2027 through September 30, 2028

\$928,068

For the period October 1, 2028 through September 30, 2029

\$1,110,924

For the period October 1, 2029 through September 30, 2030

\$1,293,706

For the period October 1, 2030 through September 30, 2031

\$1,596,708

For the period October 1, 2031 through September 30, 2032

\$1,913,930

* includes police officers



Summary of Actuarial Methods and Assumptions

Table IV-A

NOTE: The following assumptions and methods have been selected and approved by the Board of Trustees based in part on the advice of the plan's enrolled actuary in accordance with the authority granted to the Board under the pension ordinances and State law.

1. **Actuarial Cost Method**

Aggregate cost method. Under this actuarial cost method, a funding cost is developed for the plan as a level percentage of payroll. The level funding percentage is calculated as the excess of the total future benefit liability over accumulated assets and future employee contributions, with this excess spread over the expected future payroll for current active participants. The normal cost is equal to the level funding percentage multiplied by the expected payroll for the year immediately following the valuation date. The actuarial accrued liability is equal to the accumulated assets. Therefore, under the aggregate cost method, no unfunded accrued liability is developed.

2. **Asset Method**

The actuarial value of assets is equal to the market value of assets.

3. **Interest (or Discount) Rate**

7.00% per annum

4. **Salary Increases**

Plan compensation is generally assumed to increase at the rate of 5.00% per annum, unless actual plan compensation is known for a prior plan year. However, with respect to participants who have earned less than four years of service, compensation is assumed to increase at a higher rate. Specifically, compensation for participants with less than one year of service is assumed to increase 8.00% per annum, compensation for participants with at least one year of service, but less than two years of service, is assumed to increase 7.00% per annum, compensation for participants with at least two years of service, but less than three years of service, is assumed to increase 6.00% per annum, and compensation for participants with at least three years of service, but less than four years of service, is assumed to increase 5.50% per annum.

5. **Decrement**

- Pre-retirement mortality: Sex-distinct rates set forth in the PUB-2010 Headcount-Weighted Employee Mortality Table for public safety employees (Below Median table for males), with full generational improvements in mortality using Scale MP-2018 and with ages set forward one year



Summary of Actuarial Methods and Assumptions

Table IV-A

(continued)

- **Post-retirement mortality:** For non-disabled retirees, sex-distinct rates set forth in the PUB-2010 Headcount-Weighted Healthy Retiree Mortality Table for public safety employees (Below Median table for males), with full generational improvements in mortality using Scale MP-2018 and with ages set forward one year; for disabled retirees, sex-distinct rates set forth in the PUB-2010 Headcount-Weighted Disabled Retiree Mortality Table (80% general employee rates plus 20% public safety employee rates), with full generational improvements in mortality using Scale MP-2018
- **Disability:** Age- and gender-based rates of disability were assumed, ranging from 0.067% for males and 0.040% for females at age 25, 0.119% for males and 0.118% for females at age 35, 0.462% for males and 0.435% for females at age 45, and 1.000% for males and 0.840% for females at age 55; 75% of disabilities are assumed to be service-related.
- **Termination:** With respect to participants with less than 10 years of service, the termination rates are both gender- and service-based, ranging from 15.00% for males and 10.01% for females with less than two years of service to 4.30% for males and 4.75% for females with between eight and 10 years of service; with respect to participants with at least 10 years of service, the termination rates are both gender- and age-based, ranging from 4.28% for males and 5.41% for females at age 25 to 0.00% for both genders at age 55.
- **Retirement:** For those participants who have met the age and service requirements to retire, retirement is assumed to occur at the rate of 15% per year during each of the three years prior to normal retirement age; alternatively, 40% of participants who reach their normal retirement age are assumed to retire immediately, with 20% assumed to retire during each of the next two years after the attainment of normal retirement age and 100% assumed to retire three years after the attainment of normal retirement age. No retirements are assumed to occur prior to age 45.

6. Form of Payment

Future retirees have been assumed to select the 10-year certain and life annuity, except that participants who terminate their service with less than 15 years of service or prior to age 40 are assumed to receive a refund of their accumulated employee contributions.



Summary of Actuarial Methods and Assumptions

Table IV-A

(continued)

7. Expenses

The total projected benefit liability has been loaded by 1.00% to account for anticipated administrative expenses. In addition, the interest rate set forth in item 3. above is assumed to be net of investment expenses and commissions.



Changes in Actuarial Methods and Assumptions

Table IV-B

There were no assumption or method changes since the completion of the previous valuation.

The following additional assumption and method changes were made during the past three years:

- (1) *Effective October 1, 2021, the assumed interest (or discount) rate was decreased from 7.25% per annum to 7.00% per annum.*
- (2) *October 1, 2020, the mortality basis was changed from the RP-2000 Blue Collar Mortality Table with generational improvements in mortality using Scale BB to selected PUB-2010 Mortality Tables with generational improvements in mortality using Scale MP-2018.*
- (3) *Effective October 1, 2016, the mortality basis was changed from a 2007 projection of the RP-2000 Mortality Table for annuitants to a full generational projection using Scale BB of the RP-2000 Blue Collar Mortality Table as required by State law.*



Summary of Plan Provisions

Table V-A

1. Benefit Formula

3.00% of Average Monthly Earnings multiplied by Credited Service

2. Service Retirement

Normal retirement: Age 55 with at least six years of credited service; or

Any age with at least 25 years of credited service

Early retirement: Age 50 with at least six years of credited service

(Note: In the case of early retirement, the participant's benefit is reduced by 3% for each year by which the participant's early retirement age precedes his normal retirement age.)

3. Disability Retirement

The disability benefit is a monthly 10-year certain and life annuity equal to the larger of the monthly accrued benefit or either 42% of average monthly earnings (for service-based disability) or 25% of average monthly earnings (for non-service disability), but offset as necessary to preclude the total of the participant's worker's compensation, disability benefit, and other City-financed disability or salary continuation benefit (excluding social security benefits) from exceeding his average monthly earnings. The participant must have earned at least 10 years of credited service in order to be eligible for a non-service disability. The participant may convert his disability benefit into any of the optional forms of payment that are otherwise available under the plan.

(A participant is disabled if he is found to have a mental or physical condition resulting from bodily injury, disease, or a mental disorder that renders him incapable of employment as a firefighter. However, a participant will not be eligible for a disability benefit if his disability is caused by excessive and habitual use of drugs, intoxicants, or narcotics; by injury or disease sustained while serving in the armed forces; by injury or disease sustained while willfully and illegally participating in fights, riots, or civil insurrections, or while committing a crime; by injury or disease sustained after termination of employment; or by an injury or disease sustained while working for another employer and arising from such employment.)

4. Deferred Vested Retirement

A vested participant who terminates employment before becoming eligible for retirement receives a deferred vested retirement benefit payable at the participant's early or normal retirement age. If the benefit is payable prior to normal retirement age, then the benefit is reduced by 3% for each year by which the participant's early retirement age precedes his normal retirement age.

A non-vested participant who terminates employment receives his accumulated contributions.



Summary of Plan Provisions

Table V-A

(continued)

5. Vesting

An employee becomes 100% vested upon the attainment of six years of credited service.

6. Pre-Retirement Death Benefit

If a vested participant dies prior to retirement, the participant's beneficiary receives a 10-year certain annuity equal to the participant's monthly accrued benefit payable beginning at the participant's early or normal retirement age. The pre-retirement death benefit guarantees at least the return of the participant's accumulated contributions.

If a non-vested participant dies prior to retirement, the participant's beneficiary receives the participant's accumulated contributions.

7. Form of Payment

Actuarially increased single life annuity *(optional)*;

10-year certain and life annuity *(normal form of payment)*;

Actuarially reduced 50% joint and contingent annuity *(optional)*;

Actuarially reduced 66⅔% joint and contingent annuity *(optional)*;

Actuarially reduced 75% joint and contingent annuity *(optional)*;

Actuarially reduced 100% joint and contingent annuity *(optional)*; or

Actuarially equivalent single lump sum distribution *(automatic if the single sum value of the participant's benefit is less than or equal to \$5,000 or if the monthly benefit is less than \$100)*

(Note: All forms of payment guarantee at least the return of the participant's accumulated contributions. Furthermore, a participant may change his joint annuitant up to two times after retirement subject to an actuarially equivalent adjustment.)

8. Automatic Cost-of-Living Adjustment

Employees receive an automatic annual 3% cost-of-living adjustment.



Summary of Plan Provisions

Table V-A

(continued)

9. Average Monthly Earnings

Average monthly earnings during the highest five years of compensation out of the 10 years immediately preceding the determination date or career average earnings, if greater. Earnings include fixed monthly compensation plus up to 300 hours of overtime and cannot exceed the maximum amount allowed under IRC section 401(a)(17).

10. Credited Service

The elapsed time from the participant's date of hire until his date of termination, retirement, or death.

11. Employee Contribution

Employees must contribute 4.00% of earnings. Employee contributions are accumulated without interest.

12. City Contribution

The City is required to make periodic contributions at least on a quarterly basis as determined under Chapter 112, Florida Statutes.

13. Participant Requirement

All firefighters of the City of Greenacres automatically become participants in the plan on their date of hire.

14. Actuarial Equivalence

Based on 7.00% interest per annum and the unisex mortality table promulgated by the Internal Revenue Service (IRS) for purposes of Internal Revenue Code (IRC) section 417(e)(3)

15. Plan Effective Date

The plan was originally effective on January 1, 1996.

16. Deferred Retirement Option Plan (DROP)

A participant who reaches his Normal Retirement Age is eligible to participate in the DROP for a period of up to 60 months. Notwithstanding the foregoing, a participant who is over age 59 or who has earned more than 33 years of service is not eligible to participate in the DROP. Interest is credited on the DROP accounts at the rate of 3.00% per annum.



Summary of Plan Amendments

Table V-B

No plan changes were adopted since the completion of the previous valuation.

The following additional plan amendments were adopted during the past three years and were reflected in prior valuation reports:

- (1) During the 2020/21 plan year, a DROP was added to the plan as described in item 16. of Table V-A.*
- (2) Effective February 1, 2016, the firefighters and public safety officers were divided into two separate plans. (Ordinance 2016-08)*



Retirement Plan for the Public Safety Officers
Of the City of Greenacres

Actuarial Valuation
As of October 1, 2022

Determines the Contribution
For the 2023/24 Fiscal Year



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February 21, 2023

Introduction

This report presents the results of the October 1, 2022 actuarial valuation of the Retirement Plan for the Public Safety Officers of the City of Greenacres. The report is based on the participant data and asset information provided by the pension plan administrator and, except for a cursory review for reasonableness including a comparison to the data provided for the previous valuation, we have not attempted to verify the accuracy of this information.

The primary purpose of this report is to provide a summary of the funded status of the plan as of October 1, 2022 and to determine the minimum required contribution under Chapter 112, Florida Statutes, for the 2023/24 plan year. In addition, this report provides a projection of the long-term funding requirements of the plan, statistical information concerning the assets held in the trust, statistical information concerning the participant population, and a summary of any recent plan changes.

The liabilities and cost presented in this report are based on numerous assumptions concerning the cost of benefits to be provided in the future, long-term investment returns, and the future demographic experience of the current participants. Anyone referring to this report should remember that the cost developed herein is only an *estimate* of the true cost of providing post-employment pension benefits. No one can predict with certainty whether the true cost will be higher or lower than the cost presented in this report. The calculated cost is entirely dependent upon the assumptions that are described in Table IV-A. If any of the assumptions is changed, then the cost shown in this report will change accordingly. Likewise, if any of the assumptions is not completely realized, then the cost shown in this report will change in the future.

Certain assumptions play a bigger role than others in determining the cost of the post-employment pension benefits. In some cases, relatively small changes in a particular assumption can have a dramatic impact on the anticipated cost of benefits. Although a thorough analysis of the impact of such changes is beyond the scope of this report, Table I-B illustrates the impact that alternative long-term investment returns would have on the minimum required contribution rate.

Minimum Required Contribution

Table I-A shows the development of the minimum required contribution for the 2023/24 plan year. The minimum required contribution rate is 74.10% of covered payroll, which represents an increase of 48.17% of payroll from the prior valuation.

The normal cost rate is 71.85% of payroll, which is 44.91% of payroll greater than the normal cost rate that was developed in the prior valuation. Table I-C provides a breakdown of the sources of change in the normal cost rate. Significantly, the rate increased by 39.80% of payroll due to investment losses and increased by another 5.11% of payroll due to demographic experience. The market value of assets lost 13.91% during the 2021/22 plan year, whereas a 7.00% annual investment return was required to maintain a stable contribution rate.



Chapter 112, Florida Statutes, sets forth the rules concerning the minimum required contribution for public pension plans within the state. Essentially, the City must contribute an amount equal to the annual normal cost of the plan plus an adjustment as necessary to reflect interest on any delayed payment of the contribution beyond the valuation date. On this basis, the City's 2023/24 minimum required contribution will be equal to 74.10% multiplied by the total pensionable earnings for the 2023/24 plan year for the active employees who are covered by the plan and reduced by the portion of the Chapter 185 contribution that is allowed to be recognized during the 2023/24 plan year.

Based on the current assets, participant data, and actuarial assumptions and methods that are used to value the plan, the present-day value of the total long-term funding requirement is \$35,509,887. As illustrated in Table I-A, current assets are sufficient to cover \$24,076,522 of this amount, the employer's 2022/23 expected contribution will cover \$677,061 of this amount, the employer's 2023/24 expected contribution will cover \$2,031,510 of this amount, and future employee contributions are expected to cover \$602,978 of this amount, leaving \$8,121,816 to be covered by future employer funding beyond the 2023/24 fiscal year. Again, demographic and investment experience that differs from that assumed will either increase or decrease the future employer funding requirement.

Identification and Assessment of Risk

The liabilities and cost presented in this report are based on numerous assumptions concerning the cost of benefits to be provided in the future, long-term investment returns, and the future demographic experience of the current participants. Anyone referring to this report should remember that the cost developed herein is only an *estimate* of the true cost of providing post-employment pension benefits. No one can predict with certainty whether the true cost will be higher or lower than the cost presented in this report. The calculated cost is entirely dependent upon the assumptions that are described in Table IV-A. If any of the assumptions is changed, then the cost shown in this report will change accordingly. Likewise, there is always a risk that, should these assumptions not be realized, the liabilities of the plan, the contributions required to fund the plan, and the funded status of the plan may be significantly different than the amounts shown in this report.

Although a thorough analysis of the risk of not meeting the assumptions is beyond the scope of this report, this discussion is intended to identify the significant risks faced by the plan. In some cases, a more detailed review of the risks, including numerical analysis, may be appropriate to help the plan sponsor and other interested parties assess the specific impact of not realizing certain assumptions. For example, Table I-B illustrates the impact that alternative long-term investment returns would have on the contribution rate. Note that this report is not intended to provide advice on the management or reduction of the identified risks nor is this report intended to provide investment advice.

The most significant risk faced by most defined benefit pension plans is investment risk, i.e. the risk that long-term investment returns will be less than assumed. Other related risks include a risk that, if the investments of the plan decline dramatically over a short period of time (such as occurred with many pension plans in 2008), the plan's assets may not have sufficient time to recover before benefits become due. Even if the assets of the plan grow in accordance with the assumed investment return over time, if benefit payments are expected to be large in the short-term (for example, if the plan provides an actuarial equivalent lump sum payment option and a large number of participants are expected to become entitled to such a lump sum in the near future), the plan's assets may not be sufficient to support such a high level of benefit payments. We have provided a 10-year projection of the expected benefit payments in Table III-G to help



the Trustees in formulating an investment policy that is expected to provide an investment return that meets both the short- and long-term cash flow needs of the pension plan.

Another source of risk is demographic experience. This is the risk that participants will receive salary increases that are different than the amount assumed, that participants will retire, become disabled, or terminate their employment at a rate that is different than assumed, and that participants will live longer than assumed, just to cite a few examples of the demographic risk faced by the plan. Although for most pension plans, the demographic risk is not as significant as the investment risk, particularly in light of the fact that the mortality assumption includes a component for future life expectancy increases, the demographic risk can nevertheless be a significant contributing factor to liabilities and contribution rates that become higher than anticipated.

A third source of risk is the risk that the plan sponsor (or other contributing entities) will not make, or will not have the ability to make, the contributions that are required to keep the plan funded at a sufficient level. Material changes in the number of covered employees, covered payroll, and, in some cases, hours worked by active participants can also significantly impact the plan's liabilities and the level of contributions received by the plan.

Finally, an actuarial funding method has been used to allocate the gap between projected liabilities and assets to each year in the future. The contribution rate under some funding methods is higher during the early years of the plan and then is lower during the later years of the plan. Other funding methods provide for lower contribution rates initially, with increasing contribution rates over time.

The Trustees have adopted the aggregate funding method for this plan, which is expected to result in a contribution rate that is level as a percentage of payroll over the working life of the plan's active participants. A brief description of the actuarial funding method is provided in Table IV-A.

Contents of the Report

Tables I-D through I-G provide a detailed breakdown of various liability amounts by type of benefit and by participant group. Tables II-A through II-F provide information concerning the assets of the trust fund. Specifically, Table II-A shows the development of the actuarial value of assets, which is based on the market value of assets. Tables III-A through III-G provide statistical information concerning the plan's participant population. In particular, Table III-G gives a 10-year projection of the cash that is expected to be required from the trust fund in order to pay benefits to the current group of participants. Finally, Tables IV-A through V-B provide a summary of the actuarial assumptions and methods that are used to value the plan's benefits and of the relevant plan provisions as of October 1, 2022, as well as a summary of the changes that have occurred since the previous valuation report was prepared.

Refund of Participant Contributions

It is our understanding that there are seven participants who are due a refund of their contributions. We have estimated the accumulated amount of their refunds to be \$6,221 as of October 1, 2022. The average amount owed to these



individuals is \$1,244. If possible, we recommend that the accumulated contributions be distributed to these individuals in order to simplify the administration of the plan and to reduce future administrative costs.

Certification

This actuarial valuation was prepared by me or under my direct supervision and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate and, in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material change in plan costs or required contribution rates have been taken into account in the valuation.

For the firm,

Charles T. Carr

Charles T. Carr
Consulting Actuary
Southern Actuarial Services Company, Inc.

Enrolled Actuary No. 20-04927

The individual above is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.



Minimum Required Contribution

Table I-A



For the 2023/24 Plan Year

Present Value of Future Benefits	\$35,158,304
Present Value of Future Administrative Expenses	\$351,583
Actuarial Value of Assets	(\$24,076,522)
Present Value of Future Employee Contributions	(\$602,978)
Present Value of Future Normal Costs	\$10,830,387
Present Value of Future Payroll	+ \$15,074,391
Normal Cost Rate	= 71.8463%
Expected Payroll	x \$2,611,110
Normal Cost	\$1,875,985
Adjustment to Reflect Semi-Monthly Employer Contributions	\$66,916
Expected Employer Contribution for the 2022/23 Plan Year	(\$677,061)
Remaining Contribution Due/(Credit) for the 2022/23 Plan Year	\$1,265,840
	x 0.07
One Year's Interest Charge/(Credit) on the Remaining Contribution	\$88,609
Preliminary Employer Contribution for the 2023/24 Plan Year	\$2,031,510
Expected Payroll for the 2023/24 Plan Year	+ \$2,741,666

Minimum Required Contribution Rate 74.10%

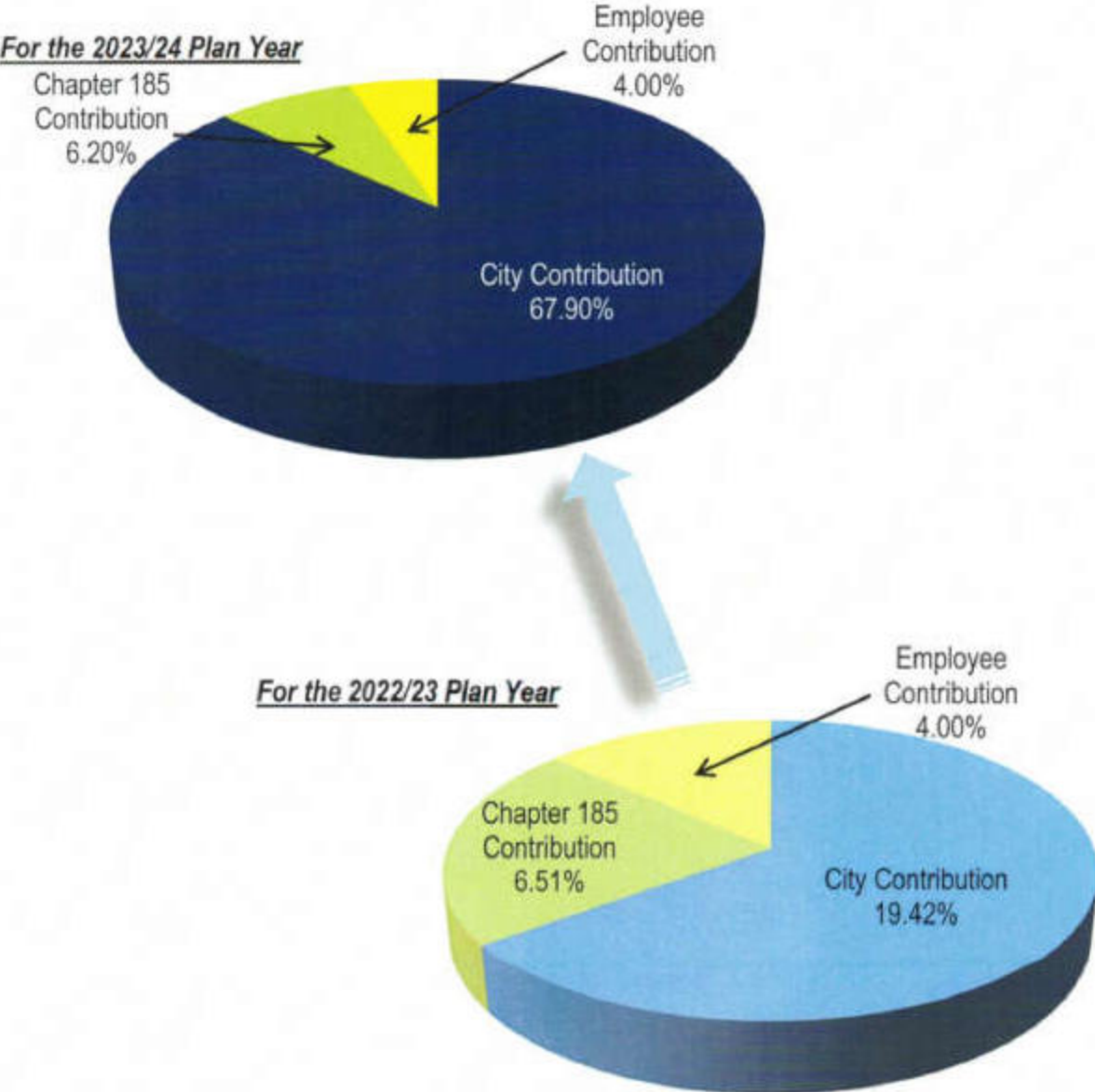
(The actual contribution should be based on the minimum required contribution rate multiplied by the actual payroll for the year.)



Minimum Required Contribution

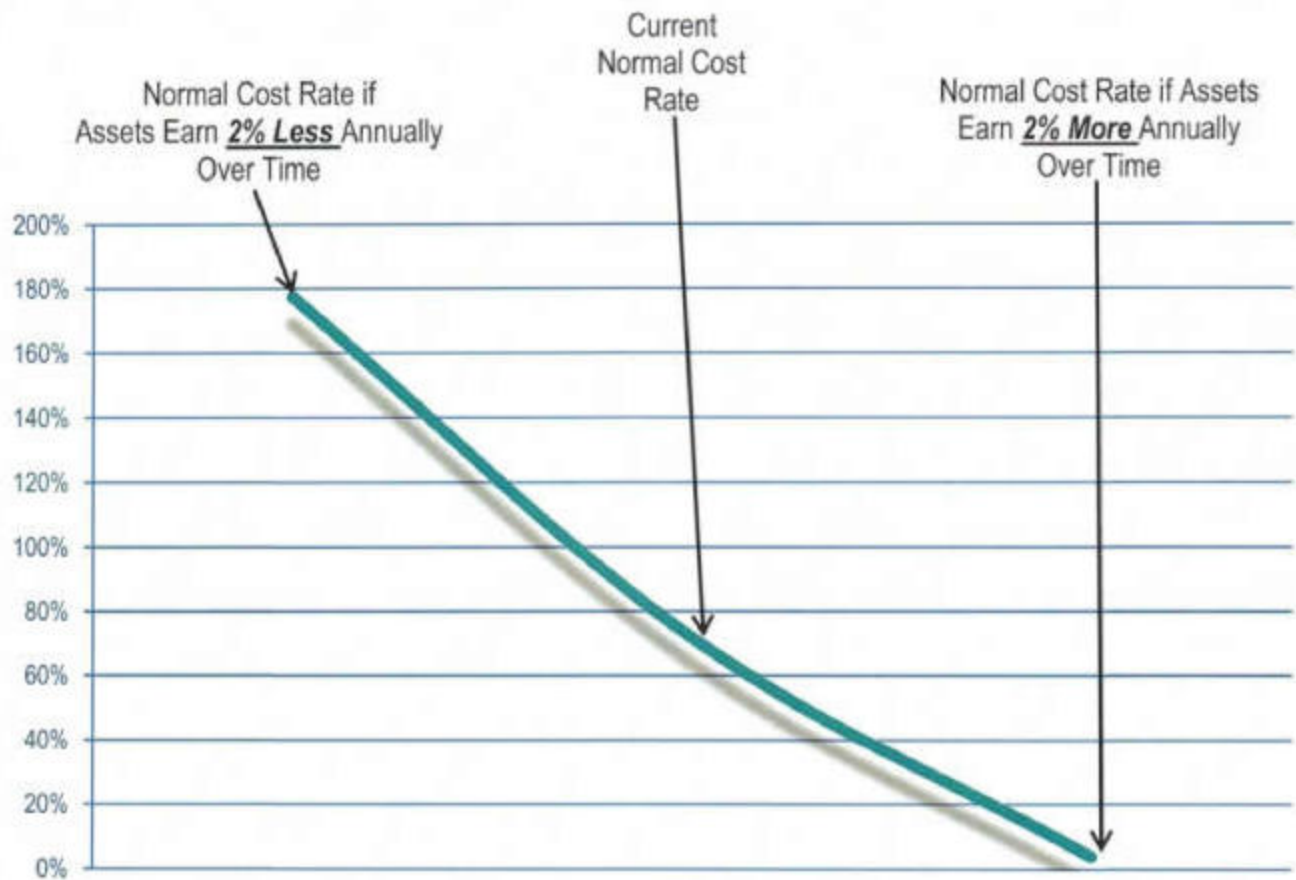
Table I-A
(continued)

The minimum required contribution rate of 74.10% includes both the City contribution and the allowable Chapter 185 contribution. In addition, employees are required to contribute 4.00% of pensionable earnings. The actual City contribution rate is expected to be approximately 67.9% based on the allowable Chapter 185 contribution for the previous year. The chart below shows the expected contribution rate by source for the 2023/24 plan year based on the expected payroll. A comparative chart shows the contribution rate by source for the previous plan year.



Sensitivity Analysis

Table I-B



The line above illustrates the sensitivity of the normal cost rate to changes in the long-term investment return.



Gain and Loss Analysis

Table I-C

Previous normal cost rate	26.94%
Increase (decrease) due to investment gains and losses	39.80%
Increase (decrease) due to demographic experience	5.11%
Increase (decrease) due to plan amendments	0.00%
Increase (decrease) due to actuarial assumption changes	0.00%
Increase (decrease) due to actuarial method changes	0.00%
Current normal cost rate	<u>71.85%</u>



Present Value of Future Benefits

Table I-D

	Old Assumptions w/o Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
<i>Actively Employed Participants</i>			
Retirement benefits	\$24,221,725	\$24,221,725	\$24,221,725
Termination benefits	\$1,870,886	\$1,870,886	\$1,870,886
Disability benefits	\$804,213	\$804,213	\$804,213
Death benefits	\$66,426	\$66,426	\$66,426
Refund of employee contributions	\$14,091	\$14,091	\$14,091
Sub-total	\$26,977,341	\$26,977,341	\$26,977,341
<i>Deferred Vested Participants</i>			
Retirement benefits	\$4,366,348	\$4,366,348	\$4,366,348
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$4,366,348	\$4,366,348	\$4,366,348
<i>Due a Refund of Contributions</i>	\$6,221	\$6,221	\$6,221
<i>Deferred Beneficiaries</i>	\$0	\$0	\$0
<i>Retired Participants</i>			
Service retirements	\$3,808,394	\$3,808,394	\$3,808,394
Disability retirements	\$0	\$0	\$0
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$0	\$0	\$0
Sub-total	\$3,808,394	\$3,808,394	\$3,808,394
<i>Grand Total</i>	\$35,158,304	\$35,158,304	\$35,158,304
Present Value of Future Payroll	\$15,074,391	\$15,074,391	\$15,074,391
Present Value of Future Employee Contribs.	\$602,978	\$602,978	\$602,978
Present Value of Future Employer Contribs.	\$10,830,387	\$10,830,387	\$10,830,387



Present Value of Accrued Benefits

Table I-E

	<u>Old Assumptions w/o Amendment</u>	<u>Old Assumptions w/ Amendment</u>	<u>New Assumptions w/ Amendment</u>
<u>Actively Employed Participants</u>			
Retirement benefits	\$13,559,281	\$13,559,281	\$13,559,281
Termination benefits	\$1,214,662	\$1,214,662	\$1,214,662
Disability benefits	\$529,933	\$529,933	\$529,933
Death benefits	\$43,592	\$43,592	\$43,592
Refund of employee contributions	\$12,860	\$12,860	\$12,860
Sub-total	\$15,360,328	\$15,360,328	\$15,360,328
<u>Deferred Vested Participants</u>			
Retirement benefits	\$4,366,348	\$4,366,348	\$4,366,348
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$4,366,348	\$4,366,348	\$4,366,348
<u>Due a Refund of Contributions</u>	\$6,221	\$6,221	\$6,221
<u>Deferred Beneficiaries</u>	\$0	\$0	\$0
<u>Retired Participants</u>			
Service retirements	\$3,808,394	\$3,808,394	\$3,808,394
Disability retirements	\$0	\$0	\$0
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$0	\$0	\$0
Sub-total	\$3,808,394	\$3,808,394	\$3,808,394
<u>Grand Total</u>	\$23,541,291	\$23,541,291	\$23,541,291
<u>Funded Percentage</u>	108.84%	108.84%	108.84%

(Note: Funded percentage is equal to the ratio of the usable portion of the market value of assets divided by the present value of accrued benefits.)



Present Value of Vested Benefits

Table I-F

	Old Assumptions w/o Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
<i><u>Actively Employed Participants</u></i>			
Retirement benefits	\$13,559,281	\$13,559,281	\$13,559,281
Termination benefits	\$984,832	\$984,832	\$984,832
Disability benefits	\$529,933	\$529,933	\$529,933
Death benefits	\$43,592	\$43,592	\$43,592
Refund of employee contributions	\$30,488	\$30,488	\$30,488
Sub-total	\$15,148,126	\$15,148,126	\$15,148,126
<i><u>Deferred Vested Participants</u></i>			
Retirement benefits	\$4,366,348	\$4,366,348	\$4,366,348
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$4,366,348	\$4,366,348	\$4,366,348
<i><u>Due a Refund of Contributions</u></i>	\$6,221	\$6,221	\$6,221
<i><u>Deferred Beneficiaries</u></i>	\$0	\$0	\$0
<i><u>Retired Participants</u></i>			
Service retirements	\$3,808,394	\$3,808,394	\$3,808,394
Disability retirements	\$0	\$0	\$0
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$0	\$0	\$0
Sub-total	\$3,808,394	\$3,808,394	\$3,808,394
<i><u>Grand Total</u></i>	\$23,329,089	\$23,329,089	\$23,329,089



Entry Age Normal Accrued Liability

Table I-G

	<u>Old Assumptions w/o Amendment</u>	<u>Old Assumptions w/ Amendment</u>	<u>New Assumptions w/ Amendment</u>
<i><u>Actively Employed Participants</u></i>			
Retirement benefits	\$18,675,973	\$18,675,973	\$18,675,973
Termination benefits	\$1,532,315	\$1,532,315	\$1,532,315
Disability benefits	\$660,370	\$660,370	\$660,370
Death benefits	\$54,563	\$54,563	\$54,563
Refund of employee contributions	\$13,271	\$13,271	\$13,271
Sub-total	\$20,936,492	\$20,936,492	\$20,936,492
<i><u>Deferred Vested Participants</u></i>			
Retirement benefits	\$4,366,348	\$4,366,348	\$4,366,348
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$4,366,348	\$4,366,348	\$4,366,348
<i><u>Due a Refund of Contributions</u></i>	\$6,221	\$6,221	\$6,221
<i><u>Deferred Beneficiaries</u></i>	\$0	\$0	\$0
<i><u>Retired Participants</u></i>			
Service retirements	\$3,808,394	\$3,808,394	\$3,808,394
Disability retirements	\$0	\$0	\$0
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$0	\$0	\$0
Sub-total	\$3,808,394	\$3,808,394	\$3,808,394
<i><u>Grand Total</u></i>	\$29,117,455	\$29,117,455	\$29,117,455



Actuarial Value of Assets

Table II-A

Market Value of Assets as of October 1, 2022	\$25,622,910
Minus advance employer contributions	(\$547,480)
Minus Contribution Reserve Account	(\$998,908)
Actuarial Value of Assets as of October 1, 2022	<u>\$24,076,522</u>

Historical Actuarial Value of Assets

October 1, 2013	\$17,308,555
October 1, 2014	\$20,145,669
October 1, 2015	\$12,226,506
October 1, 2016	\$13,695,174
October 1, 2017	\$16,222,190
October 1, 2018	\$18,174,281
October 1, 2019	\$19,576,183
October 1, 2020	\$21,526,404
October 1, 2021	\$27,106,962
October 1, 2022	\$24,076,522

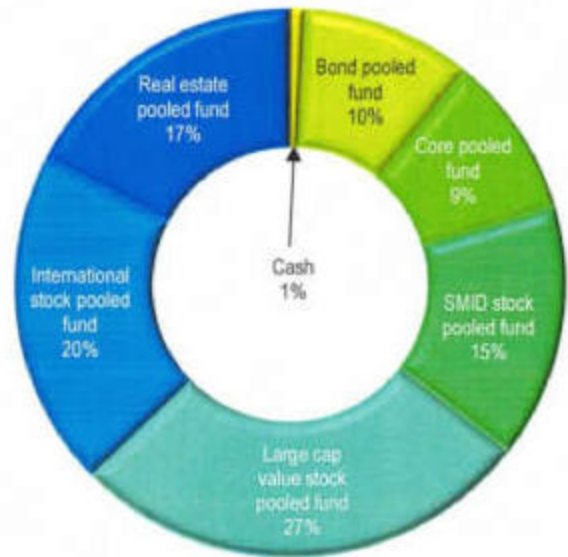


Market Value of Assets

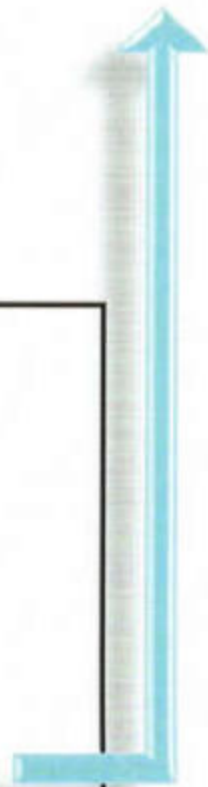
Table II-B

As of October 1, 2022

Market Value of Assets	<u>\$25,622,910</u>
Cash	\$204,647
Bond pooled fund	\$2,583,666
Core pooled fund	\$2,430,181
SMID stock pooled fund	\$3,862,709
Large cap value stock pooled fund	\$7,009,154
International stock pooled fund	\$5,090,590
Real estate pooled fund	\$4,399,906
Employer contribution receivable	\$36,772
Employee contribution receivable	\$5,285



<u>Historical Market Value of Assets</u>	
October 1, 2013	\$17,308,555
October 1, 2014	\$20,145,669
October 1, 2015	\$12,226,506
October 1, 2016	\$13,773,612
October 1, 2017	\$16,595,337
October 1, 2018	\$18,789,925
October 1, 2019	\$20,527,351
October 1, 2020	\$22,852,331
October 1, 2021	\$28,766,290
October 1, 2022	\$25,622,910



Investment Return

Table II-C



Plan Year	Market Value Return	Actuarial Value Return	Assumed Return
2012/13	11.84%	11.84%	7.25%
2013/14	8.42%	8.42%	7.25%
2014/15	0.13%	0.13%	7.25%
2015/16	8.59%	8.61%	7.25%
2016/17	14.84%	15.08%	7.25%
2017/18	8.86%	8.97%	7.25%
2018/19	5.47%	5.70%	7.25%
2019/20	7.07%	7.48%	7.25%
2020/21	21.87%	23.37%	7.25%
2021/22	-13.91%	-14.71%	7.00%
10yr. Avg.	6.92%	7.05%	7.22%



Asset Reconciliation

Table II-D

	<u>Market Value</u>	<u>Actuarial Value</u>
As of October 1, 2021	\$28,766,290	\$27,106,962
<i>Increases Due To:</i>		
Employer Contributions	\$733,631	\$733,631
Chapter 175/185 Contributions	\$340,297	\$340,297
Employee Contributions	\$111,251	\$111,251
Service Purchase Contributions	\$0	\$0
Total Contributions	\$1,185,179	\$1,185,179
Interest and Dividends	\$0	
Realized Gains (Losses)	\$0	
Unrealized Gains (Losses)	(\$4,064,339)	
Total Investment Income	(\$4,064,339)	(\$4,064,339)
Other Income	\$0	
Total Income	(\$2,879,160)	(\$2,879,160)
<i>Decreases Due To:</i>		
Monthly Benefit Payments	(\$204,246)	(\$204,246)
Refund of Employee Contributions	(\$13,339)	(\$13,339)
Total Benefit Payments	(\$217,585)	(\$217,585)
Investment Expenses	\$0	
Administrative Expenses	(\$46,635)	(\$46,635)
Advance Employer Contribution		\$144,477
Contribution Reserve Account		(\$31,537)
Total Expenses	(\$264,220)	(\$151,280)
As of October 1, 2022	\$25,622,910	\$24,076,522



Historical Trust Fund Detail

Table II-E

Income

Plan Year	Employer Contribs.	Chapter Contribs.	Employee Contribs.	Service	Realized	Unrealized	Other Income
				Purchase Contribs.	Interest / Dividends	Gains / Losses	
2012/13	\$1,081,399	\$439,902	\$203,198	\$0	\$0	\$1,756,314	-\$103,486
2013/14	\$891,618	\$464,704	\$201,235	\$0	\$0	\$1,518,010	-\$128,288
2014/15	\$918,747	\$482,735	\$241,030	\$0	\$0	\$27,889	-\$9,438,643
2015/16	\$295,082	\$243,529	\$93,294	\$0	\$0	\$1,070,248	\$0
2016/17	\$466,733	\$300,955	\$80,200	\$0	\$0	\$2,097,217	\$0
2017/18	\$499,721	\$276,476	\$87,701	\$0	\$0	\$1,501,574	\$0
2018/19	\$422,374	\$319,072	\$95,841	\$0	\$0	\$1,046,573	\$0
2019/20	\$581,562	\$341,488	\$103,255	\$0	\$0	\$1,481,634	\$0
2020/21	\$628,111	\$342,387	\$101,291	\$0	\$0	\$5,088,516	\$0
2021/22	\$733,631	\$340,297	\$111,251	\$0	\$0	-\$4,064,339	\$0

Expenses

Plan Year	Monthly	Contrib. Refunds	Admin.	Invest.	<u>Other Actuarial Adjustments</u>	
	Benefit Payments		Expenses	Expenses	Advance Employer Contribs.	Contrib. Reserve Account
2012/13	\$19,311	\$4,019	\$49,740	\$0	\$0	\$0
2013/14	\$45,925	\$1,367	\$62,873	\$0	\$0	\$0
2014/15	\$77,918	\$7,974	\$65,029	\$0	\$0	\$0
2015/16	\$49,769	\$65,138	\$40,140	\$0	\$78,438	\$0
2016/17	\$81,873	\$0	\$41,507	\$0	\$163,754	\$130,955
2017/18	\$90,451	\$29,939	\$50,494	\$0	\$96,197	\$121,769
2018/19	\$96,909	\$6,650	\$42,875	\$0	\$169,957	\$165,567
2019/20	\$144,635	\$0	\$38,324	\$0	\$170,000	\$204,759
2020/21	\$200,084	\$0	\$46,262	\$0	\$13,611	\$319,790
2021/22	\$204,246	\$13,339	\$46,635	\$0	-\$144,477	\$31,537

Note: Information was not available to separate the investment expenses from the investment income nor was information available to separate the investment income by source.



Other Reconciliations

Table II-F

Advance Employer Contribution

Advance Employer Contribution as of October 1, 2021	\$691,957
Additional Employer Contribution	\$733,631
Allowable Chapter 175/185 Contribution	\$170,000
Minimum Required Contribution	(\$1,048,108)
Net Increase in Advance Employer Contribution	(\$144,477)
Advance Employer Contribution as of October 1, 2022	<u>\$547,480</u>

Contribution Reserve Account

Contribution Reserve Account as of October 1, 2021	\$967,371
Additional Chapter 175/185 Contribution	\$368,023
Allowable Chapter 175/185 Contribution	(\$170,000)
Transfer to the Share Plan	(\$27,726)
Investment Earnings Credit	(\$138,760) *
Net Increase in Contribution Reserve Account	\$31,537
Contribution Reserve Account as of October 1, 2022	<u>\$998,908</u>

* Based on the market value return for the prior year, with a full year's investment return applied to the beginning balance and one-sixth of a year's investment return applied to the additional deposit.



Historical Chapter 175/185 Contributions

Table II-G

Total Accumulated Excess Chapter 175/185 Contribution **\$778,235**

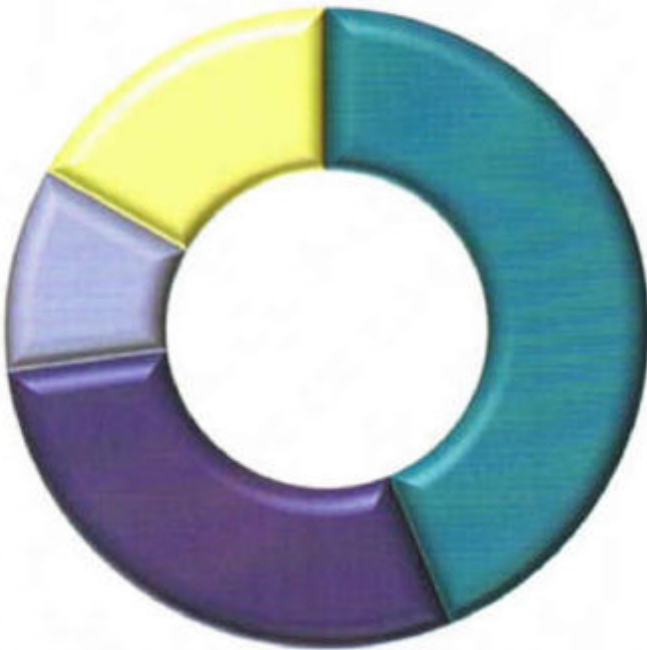
	Chapter 175 Regular <u>Distribution</u>	Chapter 175 Supplemental <u>Distribution</u>	Chapter 185 <u>Distribution</u>	Allowable <u>Amount</u>
1998 Distribution	\$0	\$0	\$61,736	(\$15,282)
1999 Distribution	\$0	\$0	\$116,890	(\$15,282)
2000 Distribution	\$25,888	\$0	\$123,453	(\$15,282)
2001 Distribution	\$32,116	\$7,377	\$140,464	(\$15,282)
2002 Distribution	\$50,540	\$11,252	\$176,353	(\$15,282)
2003 Distribution	\$74,296	\$22,556	\$108,910	(\$15,282)
2004 Distribution	\$90,294	\$22,676	\$127,930	(\$1,101,039)
2005 Distribution	\$96,599	\$20,955	\$141,462	(\$259,016)
2006 Distribution	\$147,230	\$39,411	\$173,192	(\$336,416)
2007 Distribution	\$164,946	\$125,392	\$179,037	(\$336,416)
2008 Distribution	\$162,702	\$129,469	\$231,968	(\$336,416)
2009 Distribution	\$146,876	\$86,661	\$198,893	(\$336,416)
2010 Distribution	\$146,985	\$63,181	\$181,288	(\$336,416)
2011 Distribution	\$147,633	\$70,340	\$195,067	(\$336,416)
2012 Distribution	\$154,864	\$80,164	\$204,874	(\$336,416)
2013 Distribution	\$165,614	\$78,675	\$220,415	(\$336,416)
2014 Distribution	\$159,512	\$91,591	\$231,632	(\$336,416)
2015 Distribution	\$0	\$0	\$247,729	(\$170,000)
2016 Distribution	\$0	\$0	\$256,157	(\$170,000)
2017 Distribution	\$0	\$0	\$280,676	(\$170,000)
2018 Distribution	\$0	\$0	\$323,272	(\$170,000)
2019 Distribution	\$0	\$0	\$345,688	(\$170,000)
2020 Distribution	\$0	\$0	\$346,587	(\$170,000)
2021 Distribution	\$0	\$0	\$368,023	(\$170,000)
Transfer to Share Plan				(\$298,088)
Transfer to Reserve				(\$851,677)



Summary of Participant Data

Table III-A

As of October 1, 2022



Participant Distribution by Status

<u>Actively Employed Participants</u>		
◆	Active Participants	21
◆	DROP Participants	0
<u>Inactive Participants</u>		
◆	Deferred Vested Participants	14
◆	Due a Refund of Contributions	5
◆	Deferred Beneficiaries	0
<u>Participants Receiving a Benefit</u>		
◆	Service Retirements	8
◆	Disability Retirements	0
◆	Beneficiaries Receiving	0
Total Participants		48

Number of Participants Included in Prior Valuations

	<i>Active</i>	<i>DROP</i>	<i>Inactive</i>	<i>Retired</i>	<i>Total</i>
October 1, 2013	75	0	21	1	97
October 1, 2014	73	0	32	3	108
October 1, 2015	42	0	25	2	69
October 1, 2016	25	0	27	2	54
October 1, 2017	24	0	27	3	54
October 1, 2018	23	0	25	3	51
October 1, 2019	23	0	20	6	49
October 1, 2020	21	0	20	8	49
October 1, 2021	21	0	20	8	49
October 1, 2022	21	0	19	8	48

* Note: Valuations prior to 10/1/2015 include firefighters.



Data Reconciliation

Table III-B

	<u>Active</u>	<u>DROP</u>	<u>Deferred Vested</u>	<u>Due a Refund</u>	<u>Def. Benef.</u>	<u>Service Retiree</u>	<u>Disabled Retiree</u>	<u>Benef. Rec'v.</u>	<u>Total</u>
<u>October 1, 2021</u>	21	0	15	5	0	8	0	0	49
<u>Change in Status</u>									
Re-employed									
Terminated									
Retired									
<u>Participation Ended</u>									
Transferred Out									
Cashed Out			(1)						(1)
Died									
<u>Participation Began</u>									
Newly Hired									
Transferred In									
New Beneficiary									
<u>Other Adjustment</u>									
<u>October 1, 2022</u>	21	0	14	5	0	8	0	0	48

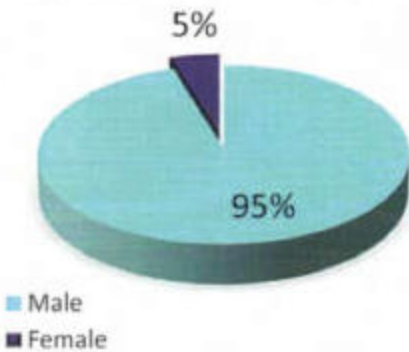


Active Participant Data

Table III-C

Gender Mix

As of October 1, 2022



Average Age	45.6 years
Average Service	16.6 years
Total Annualized Compensation for the Prior Year	\$2,793,466
Total Expected Compensation for the Current Year	\$2,611,110
Average Increase in Compensation for the Prior Year	10.07%
Expected Increase in Compensation for the Current Year	5.00%



Active Participant Statistics From Prior Valuations

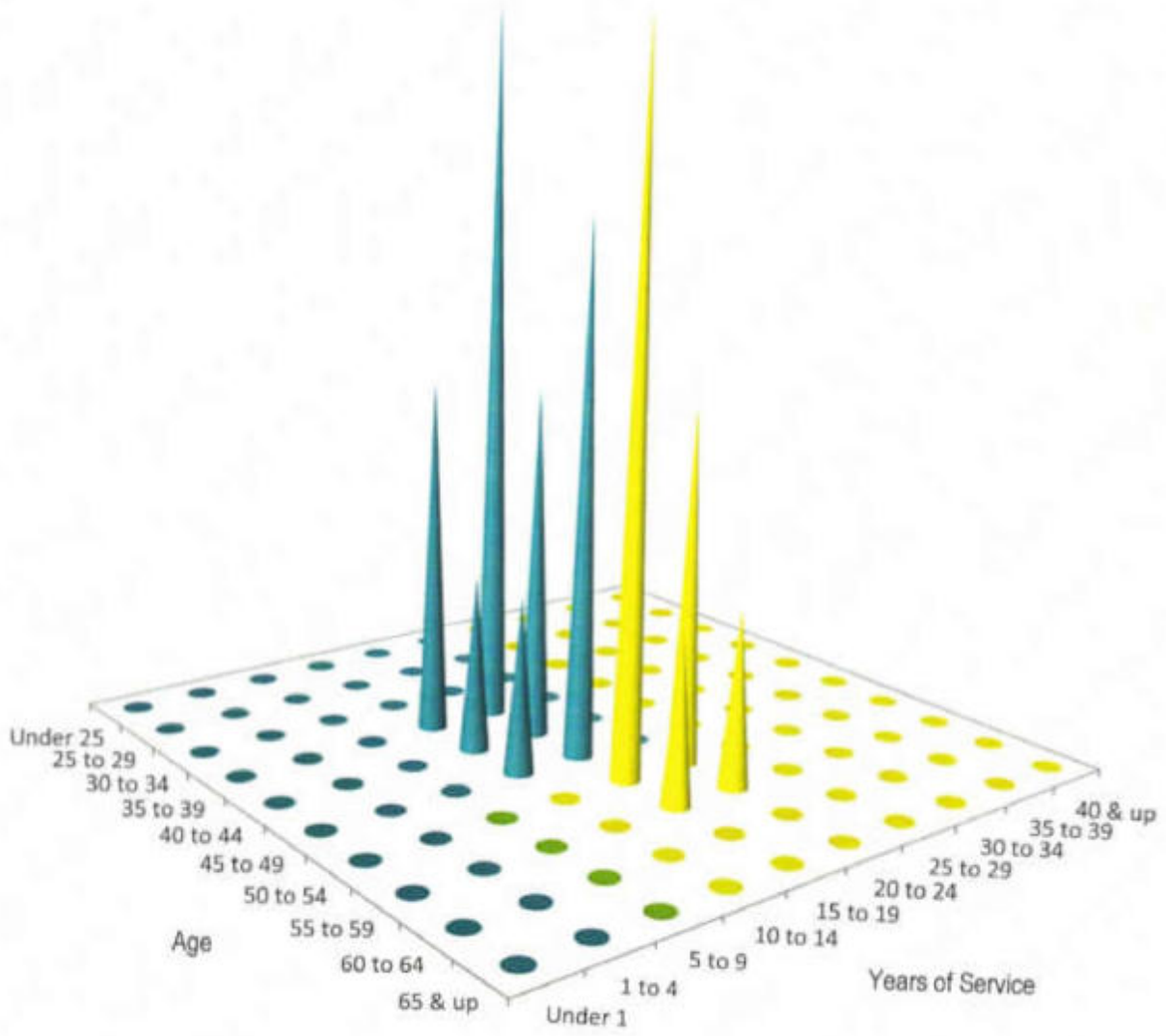
	Average Age	Average Service	Average Salary	Average Expected Salary Increase	Average Actual Salary Increase
October 1, 2013	38.0	7.1	\$68,324	5.36%	-1.30%
October 1, 2014	36.9	6.9	\$68,518	5.35%	3.57%
October 1, 2015	36.9	7.2	\$71,942	5.64%	10.75%
October 1, 2016	41.6	11.1	\$78,092	5.58%	-3.32%
October 1, 2017	42.0	11.9	\$82,869	5.00%	5.95%
October 1, 2018	42.4	13.2	\$94,575	5.00%	15.60%
October 1, 2019	43.4	14.2	\$104,174	5.00%	10.52%
October 1, 2020	43.6	14.6	\$115,644	5.00%	10.45%
October 1, 2021	44.6	15.6	\$120,585	5.00%	4.60%
October 1, 2022	45.6	16.6	\$133,022	5.00%	10.07%

* Note: Valuations prior to 10/1/2015 include firefighters.



Active Age-Service Distribution

Table III-D



▲ Eligible to retire
▲ May be eligible to retire
▲ Not eligible to retire



Active Age-Service-Salary Table

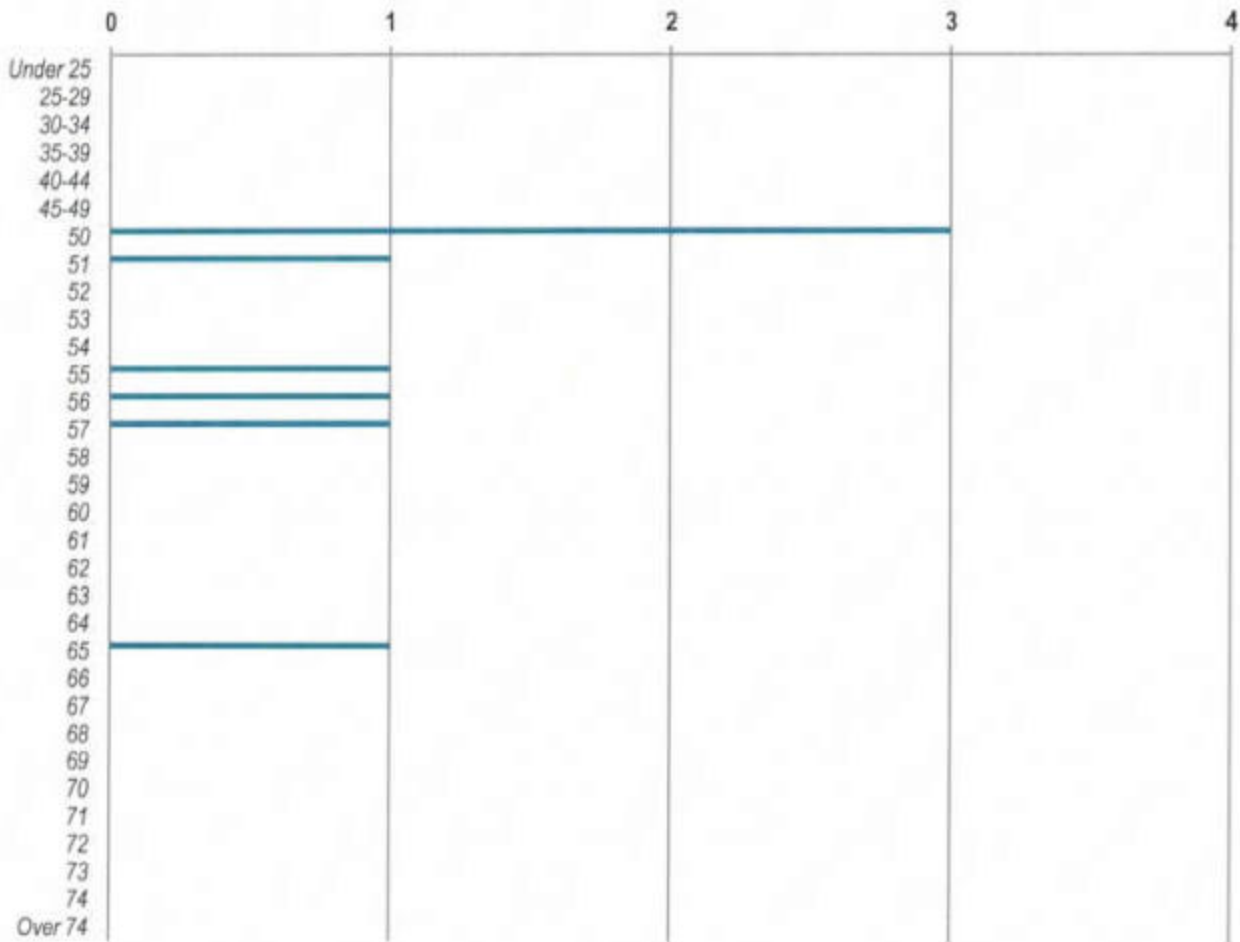
Table III-E

Attained Age	Completed Years of Service										Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up		
Under 25	0	0	0	0	0	0	0	0	0	0	0	0
Avg.Pay	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0
Avg.Pay	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0
Avg.Pay	0	0	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	2	4	0	0	0	0	0	0	6
Avg.Pay	0	0	0	108,941	145,128	0	0	0	0	0	0	133,066
40 to 44	0	0	0	1	2	0	0	0	0	0	0	3
Avg.Pay	0	0	0	128,447	118,471	0	0	0	0	0	0	121,796
45 to 49	0	0	0	1	3	0	0	0	0	0	0	4
Avg.Pay	0	0	0	100,707	158,259	0	0	0	0	0	0	143,871
50 to 54	0	0	0	0	4	2	0	0	0	0	0	6
Avg.Pay	0	0	0	0	126,410	158,201	0	0	0	0	0	137,007
55 to 59	0	0	0	0	1	1	0	0	0	0	0	2
Avg.Pay	0	0	0	0	119,426	112,733	0	0	0	0	0	116,080
60 to 64	0	0	0	0	0	0	0	0	0	0	0	0
Avg.Pay	0	0	0	0	0	0	0	0	0	0	0	0
65 & up	0	0	0	0	0	0	0	0	0	0	0	0
Avg.Pay	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	4	14	3	0	0	0	0	0	21
Avg.Pay	0	0	0	111,759	136,950	143,045	0	0	0	0	0	133,022



Inactive Participant Data

Table III-F



Age at Retirement

- Service Retirements
- Disability Retirements
- DROP Participants

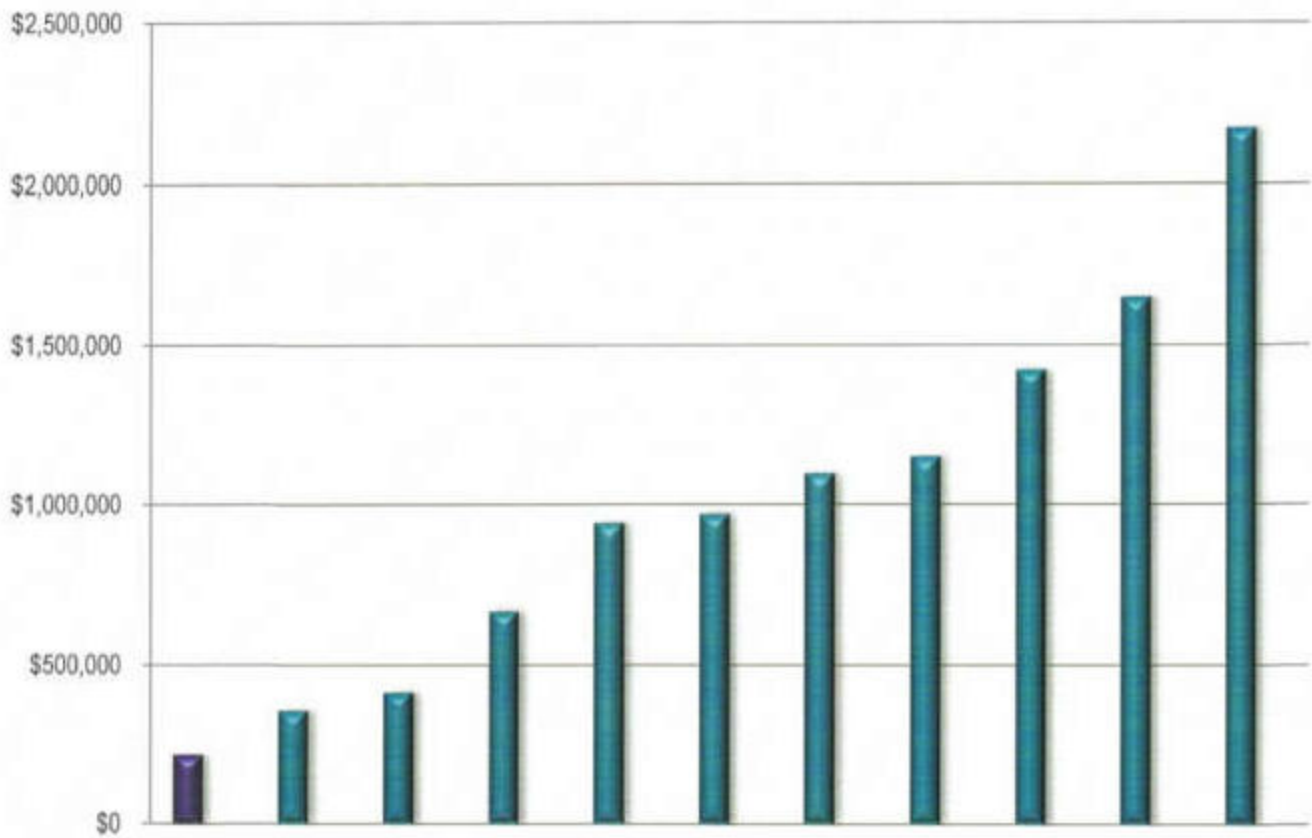
Average Monthly Benefit

Service Retirements	\$2,160.56
Disability Retirements	Not applicable
Beneficiaries Receiving	Not applicable
DROP Participants	Not applicable
Deferred Vested Participants	\$1,871.70
Deferred Beneficiaries	Not applicable



Projected Benefit Payments

Table III-G



Actual

For the period October 1, 2021 through September 30, 2022 \$217,585 *

Projected

For the period October 1, 2022 through September 30, 2023	\$359,606
For the period October 1, 2023 through September 30, 2024	\$416,588
For the period October 1, 2024 through September 30, 2025	\$669,113
For the period October 1, 2025 through September 30, 2026	\$944,355
For the period October 1, 2026 through September 30, 2027	\$972,042
For the period October 1, 2027 through September 30, 2028	\$1,100,686
For the period October 1, 2028 through September 30, 2029	\$1,153,340
For the period October 1, 2029 through September 30, 2030	\$1,424,157
For the period October 1, 2030 through September 30, 2031	\$1,649,824
For the period October 1, 2031 through September 30, 2032	\$2,171,798

* includes firefighters



Summary of Actuarial Methods and Assumptions

Table IV-A

NOTE: The following assumptions and methods have been selected and approved by the Board of Trustees based in part on the advice of the plan's enrolled actuary in accordance with the authority granted to the Board under the pension ordinances and State law.

1. Actuarial Cost Method

Aggregate cost method. Under this actuarial cost method, a funding cost is developed for the plan as a level percentage of payroll. The level funding percentage is calculated as the excess of the total future benefit liability over accumulated assets and future employee contributions, with this excess spread over the expected future payroll for current active participants. The normal cost is equal to the level funding percentage multiplied by the expected payroll for the year immediately following the valuation date. The actuarial accrued liability is equal to the accumulated assets. Therefore, under the aggregate cost method, no unfunded accrued liability is developed.

2. Asset Method

The actuarial value of assets is equal to the market value of assets.

3. Interest (or Discount) Rate

7.00% per annum

4. Salary Increases

Plan compensation is generally assumed to increase at the rate of 5.00% per annum, unless actual plan compensation is known for a prior plan year. However, with respect to participants who have earned less than four years of service, compensation is assumed to increase at a higher rate. Specifically, compensation for participants with less than one year of service is assumed to increase 8.00% per annum, compensation for participants with at least one year of service, but less than two years of service, is assumed to increase 7.00% per annum, compensation for participants with at least two years of service, but less than three years of service, is assumed to increase 6.00% per annum, and compensation for participants with at least three years of service, but less than four years of service, is assumed to increase 5.50% per annum.

In addition, average final compensation for police officers has been increased to account for accumulated sick and annual leave for terminations prior to October 1, 2031. The percentage increase is equal to 2.00% for terminations during the period through September 30, 2026 and 1.00% for terminations during the period October 1, 2026 through September 30, 2031.



Summary of Actuarial Methods and Assumptions

Table IV-A

(continued)

5. Decrements

- **Pre-retirement mortality:** Sex-distinct rates set forth in the PUB-2010 Headcount-Weighted Employee Mortality Table for public safety employees (Below Median table for males), with full generational improvements in mortality using Scale MP-2018 and with ages set forward one year
- **Post-retirement mortality:** For non-disabled retirees, sex-distinct rates set forth in the PUB-2010 Headcount-Weighted Healthy Retiree Mortality Table for public safety employees (Below Median table for males), with full generational improvements in mortality using Scale MP-2018 and with ages set forward one year; for disabled retirees, sex-distinct rates set forth in the PUB-2010 Headcount-Weighted Disabled Retiree Mortality Table (80% general employee rates plus 20% public safety employee rates), with full generational improvements in mortality using Scale MP-2018
- **Disability:** Age- and gender-based rates of disability were assumed, ranging from 0.067% for males and 0.040% for females at age 25, 0.119% for males and 0.118% for females at age 35, 0.462% for males and 0.435% for females at age 45, and 1.000% for males and 0.840% for females at age 55; 75% of disabilities are assumed to be service-related.
- **Termination:** With respect to participants with less than 10 years of service, the termination rates are both gender- and service-based, ranging from 15.00% for males and 10.01% for females with less than two years of service to 4.30% for males and 4.75% for females with between eight and 10 years of service; with respect to participants with at least 10 years of service, the termination rates are both gender- and age-based, ranging from 4.28% for males and 5.41% for females at age 25 to 0.00% for both genders at age 55.
- **Retirement:** 100% retirement at normal retirement age

6. Form of Payment

Future retirees have been assumed to select the 10-year certain and life annuity, except that participants who terminate their service with less than 15 years of service or prior to age 40 are assumed to receive a refund of their accumulated employee contributions.



Summary of Actuarial Methods and Assumptions

Table IV-A

(continued)

7. **Expenses**

The total projected benefit liability has been loaded by 1.00% to account for anticipated administrative expenses. In addition, the interest rate set forth in item 3. above is assumed to be net of investment expenses and commissions.



Changes in Actuarial Methods and Assumptions

Table IV-B

No assumptions or methods were changed since the completion of the previous valuation.

The following additional assumption and method changes were made during the past several years:

- (1) Effective October 1, 2021, the assumed interest (or discount) rate was decreased from 7.25% per annum to 7.00% per annum.*
- (2) Effective October 1, 2020, the mortality basis was changed from the RP-2000 Blue Collar Mortality Table with generational improvements in mortality using Scale BB to selected PUB-2010 Mortality Tables with generational improvements in mortality using Scale MP-2018.*
- (3) Effective October 1, 2020, the retirement assumption was changed from a range of rates three years before and after normal retirement age to 100% at normal retirement age.*
- (4) Effective October 1, 2016, the mortality basis was changed from a 2007 projection of the RP-2000 Mortality Table for annuitants to a full generational projection using Scale BB of the RP-2000 Blue Collar Mortality Table as required by State law.*



Summary of Plan Provisions

Table V-A

1. Benefit Formula

3.00% of Average Monthly Earnings multiplied by Credited Service

2. Service Retirement

Normal retirement: Age 55 with at least six years of credited service; or

Any age with at least 25 years of credited service

Early retirement: Age 50 with at least six years of credited service

(Note: In the case of early retirement, the participant's benefit is reduced by 3% for each year by which the participant's early retirement age precedes his normal retirement age.)

3. Disability Retirement

The disability benefit is a monthly 10-year certain and life annuity equal to the larger of the monthly accrued benefit or either 42% of average monthly earnings (for service-based disability) or 25% of average monthly earnings (for non-service disability), but offset as necessary to preclude the total of the participant's worker's compensation, disability benefit, and other City-financed disability or salary continuation benefit (excluding social security benefits) from exceeding his average monthly earnings. The participant must have earned at least 10 years of credited service in order to be eligible for a non-service disability. The participant may convert his disability benefit into any of the optional forms of payment that are otherwise available under the plan.

(A participant is disabled if he is found to have a mental or physical condition resulting from bodily injury, disease, or a mental disorder that renders him incapable of employment as a firefighter. However, a participant will not be eligible for a disability benefit if his disability is caused by excessive and habitual use of drugs, intoxicants, or narcotics; by injury or disease sustained while serving in the armed forces; by injury or disease sustained while willfully and illegally participating in fights, riots, or civil insurrections, or while committing a crime; by injury or disease sustained after termination of employment; or by an injury or disease sustained while working for another employer and arising from such employment.)

4. Deferred Vested Retirement

A vested participant who terminates employment before becoming eligible for retirement receives a deferred vested retirement benefit payable at the participant's early or normal retirement age. If the benefit is payable prior to normal retirement age, then the benefit is reduced by 3% for each year by which the participant's early retirement age precedes his normal retirement age.

A non-vested participant who terminates employment receives his accumulated contributions.



Summary of Plan Provisions

Table V-A

(continued)

5. Vesting

An employee becomes 100% vested upon the attainment of six years of credited service.

6. Pre-Retirement Death Benefit

If a vested participant dies prior to retirement, the participant's beneficiary receives a 10-year certain annuity equal to the participant's monthly accrued benefit payable beginning at the participant's early or normal retirement age. The pre-retirement death benefit guarantees at least the return of the participant's accumulated contributions.

If a non-vested participant dies prior to retirement, the participant's beneficiary receives the participant's accumulated contributions.

7. Form of Payment

Actuarially increased single life annuity (*optional*);

10-year certain and life annuity (*normal form of payment*);

Actuarially reduced 50% joint and contingent annuity (*optional*);

Actuarially reduced 66⅔% joint and contingent annuity (*optional*);

Actuarially reduced 75% joint and contingent annuity (*optional*);

Actuarially reduced 100% joint and contingent annuity (*optional*); or

Actuarially equivalent single lump sum distribution (*automatic if the single sum value of the participant's benefit is less than or equal to \$5,000 or if the monthly benefit is less than \$100*)

(*Note: All forms of payment guarantee at least the return of the participant's accumulated contributions. Furthermore, a participant may change his joint annuitant up to two times after retirement subject to an actuarially equivalent adjustment.*)

8. Automatic Cost-of-Living Adjustment

Employees receive an automatic annual 3% cost-of-living adjustment.



Summary of Plan Provisions

Table V-A

(continued)

9. Average Monthly Earnings

Average monthly earnings during the highest five years of compensation out of the 10 years immediately preceding the determination date or career average earnings, if greater. Earnings include total cash remuneration, but exclude overtime in excess of 300 hours per year after October 2, 2011, lump sum payments for unused sick and annual leave accrued after October 2, 2011, and compensation for extra duty and special detail work performed on behalf of a second-party employer. Earnings cannot exceed the maximum amount allowed under IRC section 401(a)(17).

10. Credited Service

The elapsed time from the participant's date of hire until his date of termination, retirement, or death.

11. Employee Contribution

Employees must contribute 4.00% of earnings. Employee contributions are accumulated without interest.

12. City Contribution

The City is required to make periodic contributions at least on a quarterly basis as determined under Chapter 112, Florida Statutes.

13. Participant Requirement

All police officers of the City of Greenacres who were hired prior to February 1, 2016 automatically become participants in the plan on their date of hire.

14. Actuarial Equivalence

Based on 7.25% interest per annum and the unisex mortality table promulgated by the Internal Revenue Service (IRS) for purposes of Internal Revenue Code (IRC) section 417(e)(3)

15. Plan Effective Date

The plan was originally effective on January 1, 1996.



Summary of Plan Amendments

Table V-B

No plan changes were adopted since the completion of the previous valuation.

The following additional plan changes were made during the past several years:

- (1) *During the 2019/20 plan year, the plan was amended to allow police officers who work for the Palm Beach County Sheriff's Office (PBSO) to continue actively participating in the pension plan as an employee and to commence receipt of their accrued pension upon the attainment of normal retirement age regardless of whether the officer continues in employment with the PBSO.*

