City of Tamarac
Elected and Appointed Officers
And Non-Represented Employees
Retirement Plan

Actuarial Valuation
As of October 1, 2021

Determines the Contribution
For the 2021/22 Fiscal Year

SOUTHERN
ACTUARIAL
SERVICES

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March 9, 2022

Introduction

This report presents the results of the October 1, 2021 actuarial valuation of the City of Tamarac Elected and Appointed Officers and Non-Represented Employees Retirement Plan. 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, 2021 and to determine the minimum required contribution under Chapter 112, Florida Statutes, for the 2021/22 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 2021/22 plan year. The minimum required contribution rate is 20.30% of covered payroll, which represents a decrease of 1.03% of payroll from the prior valuation.

Table I-C provides a breakdown of the sources of change in the contribution rate. Significantly, the rate decreased by 1.83% of payroll due to investment gains, decreased by 1.23% of payroll due to demographic experience, increased by 4.88% of payroll due to the assumption changes that are described below, and decreased by 2.85% of payroll due to the method change that is described below. Although the market value of assets earned 19.81% during the 2020/21 plan year, the actuarial value of assets is based on the market value adjusted to reflect a five-year phase-in of the unexpected

investment earnings. On this basis, the actuarial value of assets earned 10.59% during the 2020/21 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 to reflect interest on any delayed payment of the contribution beyond the valuation date. On this basis, the City's 2021/22 minimum required contribution will be equal to 20.30% multiplied by the total pensionable earnings for the 2021/22 fiscal year for the active employees who are covered by the plan.

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 $82,005,224. As illustrated in Table I-A, current assets are sufficient to cover $65,725,087 of this amount, the employer's 2021/22 expected contribution will cover $1,736,123 of this amount, and future employee contributions are expected to cover $5,373,467 of this amount, leaving $9,170,547 to be covered by future employer funding beyond the 2021/22 fiscal year. Again, demographic and investment experience that differs from that assumed will either increase or decrease the future employer funding requirement.

Advance Employer Contribution

The City has made contributions to the plan in excess of the minimum amount that was required to be contributed pursuant to Chapter 112. In this report, the excess contributions are referred to as an "advance employer contribution." As of October 1, 2021, the advance employer contribution is $2,219,629, which reflects the advance employer contribution of $1,856,921 as of October 1, 2020 plus $362,708 of employer contributions in excess of the minimum required contribution for the 2020/21 plan year as shown in Table II-F.

The City may apply all or any portion of the advance employer contribution towards the minimum required contribution for the 2021/22 plan year or for any later plan year. The minimum required contribution for that plan year will be reduced dollar-for-dollar by the amount of the advance employer contribution that is applied in this manner.

Alternatively, at any time, the City may apply all or any portion of the advance employer contribution as an *extra* contribution in excess of the minimum required contribution.

Actuarial Assumption Changes

Since the completion of the previous valuation, the interest (or discount) rate was decreased from 7.00% per annum to 6.75% per annum and the administrative expense loading was decreased from 0.70% of future payroll to 0.50% of future payroll.

Asset Method Change

Since the completion of the previous valuation, actuarial funding method was changed from the individual entry age normal cost method to the aggregate cost method.

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 liablities 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-H 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 a five-year phase-in of the net investment earnings in order to provide a more stable and predictable contribution rate for the employer. 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, 2021, as well as a summary of the changes that have occurred since the previous valuation report was prepared.

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/wg

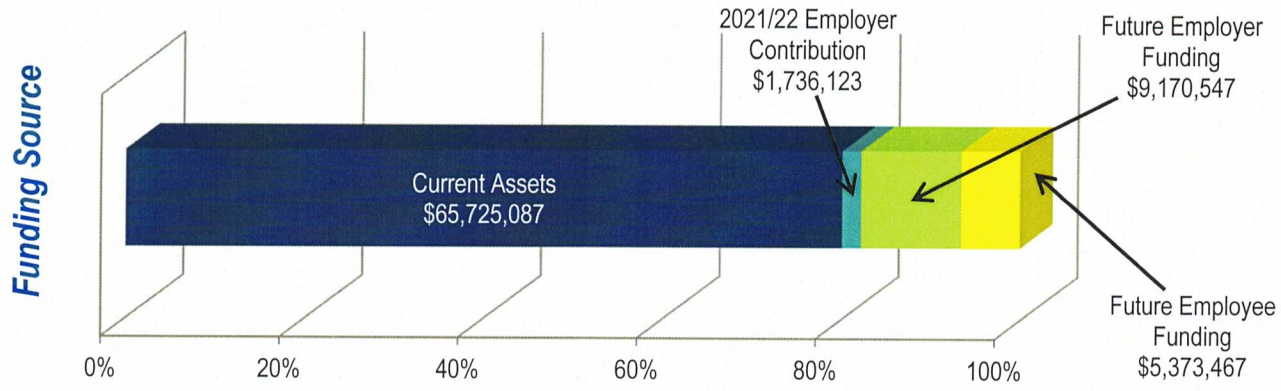
Charles T. Carr
Consulting Actuary
Southern Actuarial Services Company, Inc.

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 2021/22 Plan Year

Normal Cost	$1,736,123
Unfunded Liability Amortization Payment	$0
	$1,736,123
Adjustment to Reflect Beginning-of-Year Employer Contribution	$0
Preliminary Employer Contribution for the 2021/22 Plan Year	$1,736,123
Expected Payroll for the 2021/22 Plan Year	÷ *$8,553,482*
Minimum Required Contribution Rate	**20.30%**

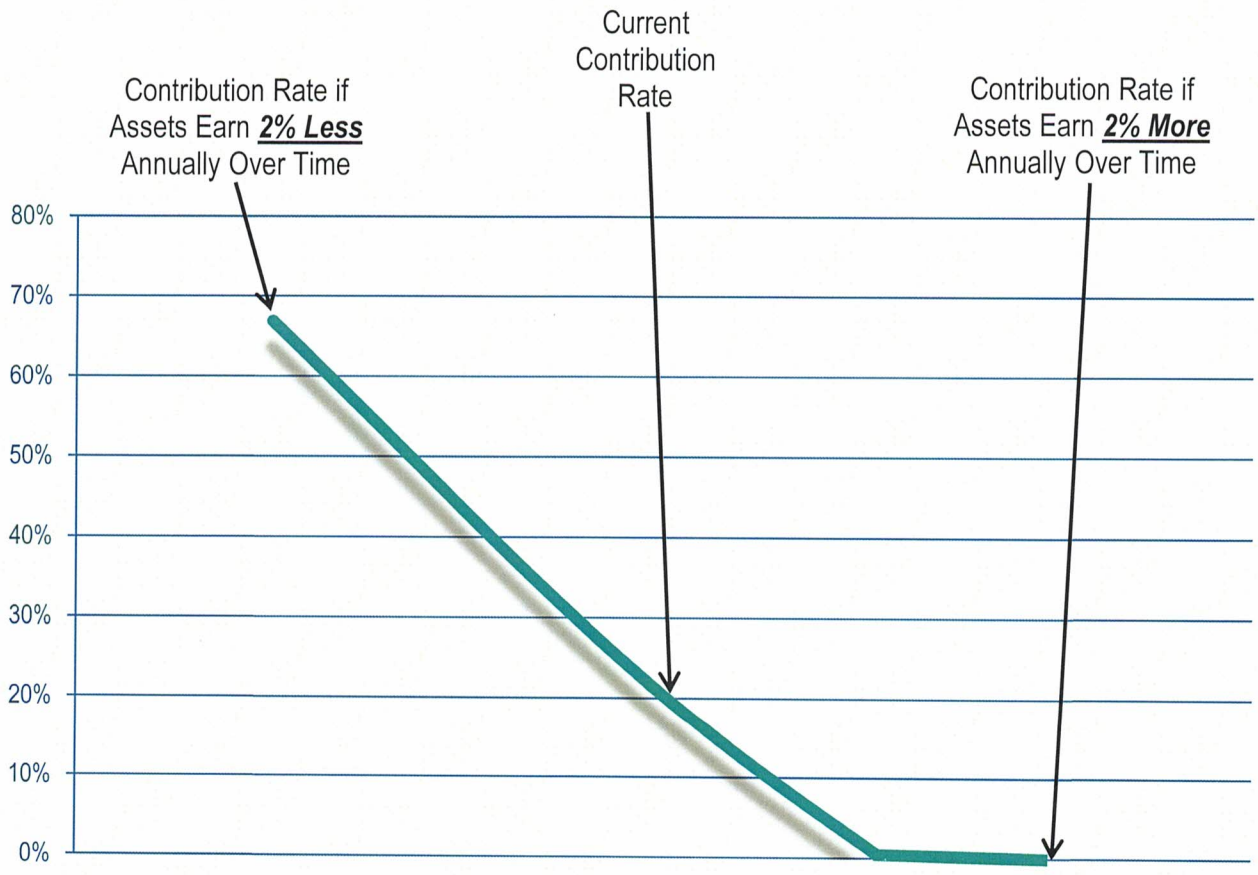
(The actual contribution should be based on the minimum required contribution rate multiplied by the actual payroll for the year.)

Additional Disclosures

Present Value of Future Compensation	$53,734,671
Present Value of Future Employer Contributions	$10,906,670
Present Value of Future Employee Contributions	$5,373,467

Sensitivity Analysis

Table I-B



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

Gain and Loss Analysis

Table I-C

Source of Change in the Contribution Rate

Previous minimum required contribution rate	21.33%
Increase (decrease) due to investment gains and losses	-1.83%
Increase (decrease) due to demographic experience	-1.23%
Increase (decrease) due to plan amendments	0.00%
Increase (decrease) due to actuarial assumption changes	4.88%
Increase (decrease) due to actuarial method changes	-2.85%
Current minimum required contribution rate	20.30%

Reconciliation of the Present Value of Accrued Benefits

Present Value of Accrued Benefits as of October 1, 2020	$52,398,256
Increase (Decrease) During the Plan Year Due to:	
Interest	$3,667,878
Benefits accumulated	-$1,541,221
Benefits paid	$2,100,548
Plan amendments	$0
Changes in actuarial assumptions or methods	$1,535,062
Net increase (decrease)	$5,762,267
Present Value of Accrued Benefits as of October 1, 2021	$58,160,523

Present Value of Future Benefits

Table I-D

	Old Assumptions w/o Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
Actively Employed Participants			
Retirement benefits	$43,933,659	$43,933,659	$45,973,314
Termination benefits	$0	$0	$0
Disability benefits	$1,230,443	$1,230,443	$1,286,916
Death benefits	$326,528	$326,528	$343,503
Refund of employee contributions	$986	$986	$992
Sub-total	**$45,491,616**	**$45,491,616**	**$47,604,725**
Deferred Vested Participants			
Retirement benefits	$5,421,821	$5,421,821	$5,560,508
Termination benefits	$0	$0	$0
Disability benefits	$0	$0	$0
Death benefits	$0	$0	$0
Refund of employee contributions	$0	$0	$0
Sub-total	**$5,421,821**	**$5,421,821**	**$5,560,508**
Due a Refund of Contributions	**$13,533**	**$13,533**	**$13,533**
Deferred Beneficiaries	**$0**	**$0**	**$0**
Retired Participants			
Service retirements	$26,470,120	$26,470,120	$27,002,796
Disability retirements	$0	$0	$0
Beneficiaries receiving	$1,523,724	$1,523,724	$1,554,989
DROP participants	$0	$0	$0
Sub-total	**$27,993,844**	**$27,993,844**	**$28,557,785**
Grand Total	**$78,920,814**	**$78,920,814**	**$81,736,551**
Present Value of Future Payroll	$52,981,044	$52,981,044	$53,734,671
Present Value of Future Employee Contribs.	$5,298,104	$5,298,104	$5,373,467
Present Value of Future Employer Contribs.	$8,162,528	$8,162,528	$10,906,670

Present Value of Accrued Benefits

Table I-E

	Old Assumptions w/o Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
Actively Employed Participants			
Retirement benefits	$22,561,669	$22,561,669	$23,369,849
Termination benefits	$0	$0	$0
Disability benefits	$471,217	$471,217	$488,575
Death benefits	$162,880	$162,880	$169,772
Refund of employee contributions	$497	$497	$501
Sub-total	**$23,196,263**	**$23,196,263**	**$24,028,697**
Deferred Vested Participants			
Retirement benefits	$5,421,821	$5,421,821	$5,560,508
Termination benefits	$0	$0	$0
Disability benefits	$0	$0	$0
Death benefits	$0	$0	$0
Refund of employee contributions	$0	$0	$0
Sub-total	**$5,421,821**	**$5,421,821**	**$5,560,508**
Due a Refund of Contributions	**$13,533**	**$13,533**	**$13,533**
Deferred Beneficiaries	**$0**	**$0**	**$0**
Retired Participants			
Service retirements	$26,470,120	$26,470,120	$27,002,796
Disability retirements	$0	$0	$0
Beneficiaries receiving	$1,523,724	$1,523,724	$1,554,989
DROP participants	$0	$0	$0
Sub-total	**$27,993,844**	**$27,993,844**	**$28,557,785**
Grand Total	**$56,625,461**	**$56,625,461**	**$58,160,523**
Funded Percentage	130.48%	130.48%	127.04%

(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
Actively Employed Participants			
Retirement benefits	$22,011,658	$22,011,658	$22,791,130
Termination benefits	$0	$0	$0
Disability benefits	$471,217	$471,217	$488,575
Death benefits	$107,877	$107,877	$112,267
Refund of employee contributions	$3,054	$3,054	$3,096
Sub-total	**$22,593,806**	**$22,593,806**	**$23,395,068**
Deferred Vested Participants			
Retirement benefits	$5,421,821	$5,421,821	$5,560,508
Termination benefits	$0	$0	$0
Disability benefits	$0	$0	$0
Death benefits	$0	$0	$0
Refund of employee contributions	$0	$0	$0
Sub-total	**$5,421,821**	**$5,421,821**	**$5,560,508**
Due a Refund of Contributions	**$13,533**	**$13,533**	**$13,533**
Deferred Beneficiaries	**$0**	**$0**	**$0**
Retired Participants			
Service retirements	$26,470,120	$26,470,120	$27,002,796
Disability retirements	$0	$0	$0
Beneficiaries receiving	$1,523,724	$1,523,724	$1,554,989
DROP participants	$0	$0	$0
Sub-total	**$27,993,844**	**$27,993,844**	**$28,557,785**
Grand Total	**$56,023,004**	**$56,023,004**	**$57,526,894**

Entry Age Normal Accrued Liability

Table I-G

	Old Assumptions w/o Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
Actively Employed Participants			
Retirement benefits	$28,470,081	$28,470,081	$29,447,083
Termination benefits	$0	$0	$0
Disability benefits	$633,349	$633,349	$654,645
Death benefits	$166,077	$166,077	$172,478
Refund of employee contributions	$409	$409	$411
Sub-total	**$29,269,916**	**$29,269,916**	**$30,274,617**
Deferred Vested Participants			
Retirement benefits	$5,421,821	$5,421,821	$5,560,508
Termination benefits	$0	$0	$0
Disability benefits	$0	$0	$0
Death benefits	$0	$0	$0
Refund of employee contributions	$0	$0	$0
Sub-total	**$5,421,821**	**$5,421,821**	**$5,560,508**
Due a Refund of Contributions	**$13,533**	**$13,533**	**$13,533**
Deferred Beneficiaries	**$0**	**$0**	**$0**
Retired Participants			
Service retirements	$26,470,120	$26,470,120	$27,002,796
Disability retirements	$0	$0	$0
Beneficiaries receiving	$1,523,724	$1,523,724	$1,554,989
DROP participants	$0	$0	$0
Sub-total	**$27,993,844**	**$27,993,844**	**$28,557,785**
Grand Total	**$62,699,114**	**$62,699,114**	**$64,406,443**

Development of the Normal Cost

Table I-H

	As of October 1, 2021
Present Value of Future Benefits	$81,736,551
Expense Allowance	$268,673
Actuarial Value of Assets	($65,725,087)
Present Value of Future Employee Contributions	($5,373,467)
Present Value of Future Normal Cost	$10,906,670
Present Value of Future Compensation	÷ $53,734,671
Normal Cost Accrual Rate	20.297268%
Expected Payroll for the Current Year	x $8,553,482
Normal Cost	$1,736,123

Actuarial Value of Assets

Table II-A

	Net Investment Gain (Loss)		*Unrecognized Gain (Loss)*
For the 2017/18 plan year	*$255,949*	*x 20%*	*$51,190*
For the 2018/19 plan year	*($678,074)*	*x 40%*	*($271,230)*
For the 2019/20 plan year	*($203,837)*	*x 60%*	*($122,302)*
For the 2020/21 plan year	*$7,854,684*	*x 80%*	*$6,283,747*
			$5,941,405

Market Value of Assets as of October 1, 2021	$73,886,121
Minus advance employer contributions	($2,219,629)
Adjustment for unrecognized gain or loss as shown above, but restricted to an amount that keeps the actuarial value of assets within an 80%-120% corridor of the market value	($5,941,405)
Actuarial Value of Assets as of October 1, 2021	**$65,725,087**

Historical Actuarial Value of Assets

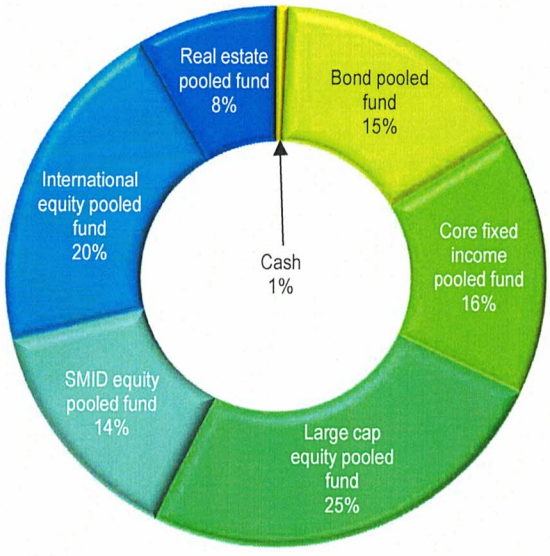
October 1, 2012	$18,675,782
October 1, 2013	$27,153,986
October 1, 2014	$29,484,473
October 1, 2015	$31,971,088
October 1, 2016	$33,820,614
October 1, 2017	$37,653,200
October 1, 2018	$41,968,104
October 1, 2019	$46,163,097
October 1, 2020	$58,936,405
October 1, 2021	$65,725,087

Market Value of Assets

Table II-B

As of October 1, 2021

Market Value of Assets	**$73,886,121**
Cash	$517,566
Bond pooled fund	$11,454,811
Core fixed income pooled fund	$11,676,517
Large cap equity pooled fund	$18,697,208
SMID equity pooled fund	$10,272,379
International equity pooled fund	$15,076,009
Real estate pooled fund	$6,207,769
Accounts payable	($16,138)

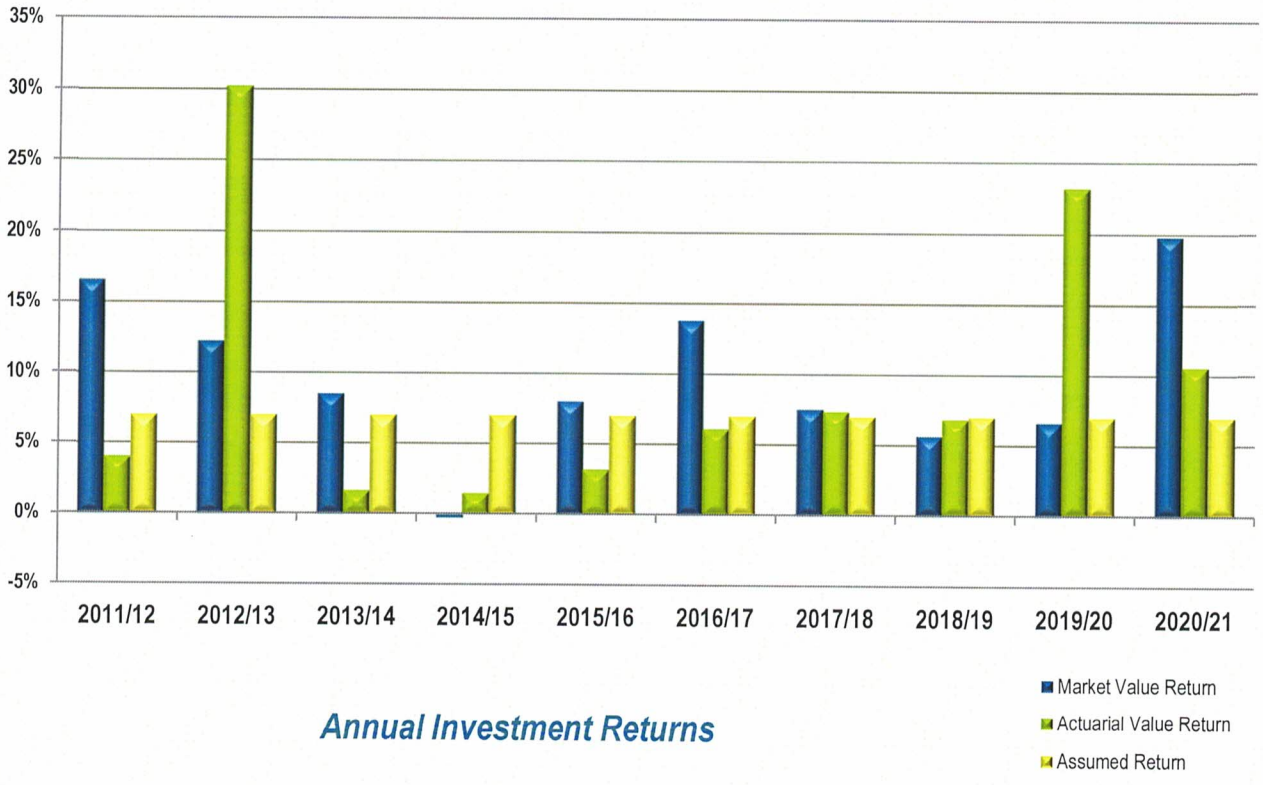


Historical Market Value of Assets

October 1, 2012	$22,741,134
October 1, 2013	$28,135,867
October 1, 2014	$32,481,032
October 1, 2015	$34,322,448
October 1, 2016	$38,401,166
October 1, 2017	$45,457,198
October 1, 2018	$50,749,143
October 1, 2019	$55,229,412
October 1, 2020	$60,858,351
October 1, 2021	$73,886,121

Investment Return

Table II-C



Annual Investment Returns

Plan Year	Market Value Return	Actuarial Value Return	Assumed Return
2011/12	16.56%	4.01%	7.00%
2012/13	12.24%	30.23%	7.00%
2013/14	8.53%	1.65%	7.00%
2014/15	-0.25%	1.49%	7.00%
2015/16	8.04%	3.16%	7.00%
2016/17	13.79%	6.09%	7.00%
2017/18	7.55%	7.34%	7.00%
2018/19	5.68%	6.83%	7.00%
2019/20	6.64%	23.20%	7.00%
2020/21	19.81%	10.59%	7.00%
10yr. Avg.	9.72%	9.10%	7.00%

Asset Reconciliation

Table II-D

	Market Value	Actuarial Value
As of October 1, 2020	**$60,858,351**	**$58,936,405**
Increases Due To:		
Employer Contributions	$2,166,962	$2,166,962
Employee Contributions	$845,876	$845,876
Service Purchase Contributions	$0	$0
Total Contributions	$3,012,838	$3,012,838
Interest and Dividends	$0	
Realized Gains (Losses)	$0	
Unrealized Gains (Losses)	$12,193,138	
Total Investment Income	$12,193,138	$6,268,758
Other Income	$0	
Total Income	**$15,205,976**	**$9,281,596**
Decreases Due To:		
Monthly Benefit Payments	($2,100,548)	($2,100,548)
Refund of Employee Contributions	$0	$0
Total Benefit Payments	($2,100,548)	($2,100,548)
Investment Expenses	($48,000)	
Administrative Expenses	($29,658)	($29,658)
Advance Employer Contribution		($362,708)
Total Expenses	**($2,178,206)**	**($2,492,914)**
As of October 1, 2021	**$73,886,121**	**$65,725,087**

Historical Trust Fund Detail

Table II-E

Income

Plan Year	Employer Contribs.	Employee Contribs.	Service Purchase Contribs.	Interest / Dividends	Realized Gains / Losses	Unrealized Gains / Losses	Other Income
2011/12	$2,211,719	$713,434	$130,210	$57	$0	$3,103,964	$0
2012/13	$2,278,870	$883,964	$0	$13	$0	$2,970,636	$0
2013/14	$2,129,940	$630,346	$0	$8	$0	$2,518,348	$0
2014/15	$2,129,940	$735,600	$0	$8	$0	-$42,219	$0
2015/16	$2,298,244	$627,367	$0	$6	$0	$2,852,407	$0
2016/17	$2,342,796	$687,356	$0	$12	$0	$5,453,018	$0
2017/18	$2,778,312	$710,403	$0	$25	$0	$3,547,371	$0
2018/19	$2,683,986	$754,160	$0	$53	$0	$2,975,611	$0
2019/20	$2,828,102	$886,055	$0	$25	$0	$3,775,617	$0
2020/21	$2,166,962	$845,876	$0	$0	$0	$12,193,138	$0

Expenses

Plan Year	Monthly Benefit Payments	Contrib. Refunds	Admin. Expenses	Invest. Expenses
2011/12	$555,067	$139,141	$25,348	$38,346
2012/13	$640,550	$33,641	$28,287	$36,272
2013/14	$758,768	$104,695	$31,033	$38,981
2014/15	$884,571	$23,481	$33,063	$40,796
2015/16	$1,136,848	$495,191	$25,452	$41,815
2016/17	$1,216,406	$119,763	$45,547	$45,434
2017/18	$1,669,052	$0	$27,341	$47,773
2018/19	$1,828,624	$30,067	$26,970	$47,880
2019/20	$1,777,876	$0	$34,984	$48,000
2020/21	$2,100,548	$0	$29,658	$48,000

Other Actuarial Adjustments

Plan Year	Advance Employer Contribs.
2011/12	$0
2012/13	$0
2013/14	$0
2014/15	-$107,755
2015/16	$442,492
2016/17	-$73,260
2017/18	$295,454
2018/19	$266,903
2019/20	$51,206
2020/21	$362,708

Note: Prior to October 1, 2009, information was not available to separate the investment expenses from the investment income nor was information available to separate the investment income by source. Monthly benefit payments include contribution refunds for the 2009/10 plan year.

Other Reconciliations

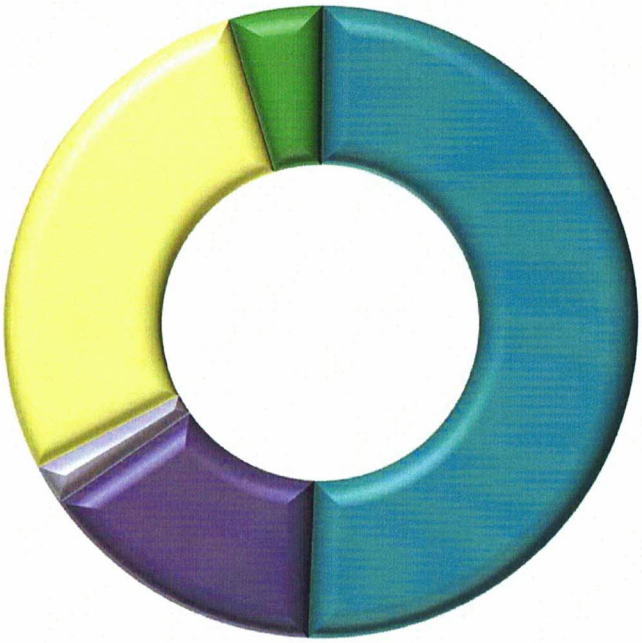
Table II-F

Advance Employer Contribution

Advance Employer Contribution as of October 1, 2020	$1,856,921
Additional Employer Contribution	$2,166,962
Minimum Required Contribution	($1,804,254)
Net Increase in Advance Employer Contribution	$362,708
Advance Employer Contribution as of October 1, 2021	$2,219,629

Summary of Participant Data

Table III-A



Participant Distribution by Status

As of October 1, 2021

Actively Employed Participants	
Active Participants	96
DROP Participants	0
Inactive Participants	
Deferred Vested Participants	28
Due a Refund of Contributions	4
Deferred Beneficiaries	0
Participants Receiving a Benefit	
Service Retirements	53
Disability Retirements	0
Beneficiaries Receiving	9
Total Participants	**190**

Number of Participants Included in Prior Valuations

	Active	*DROP*	*Inactive*	*Retired*	*Total*
October 1, 2012	81	0	14	21	116
October 1, 2013	77	0	17	24	118
October 1, 2014	81	0	18	26	125
October 1, 2015	81	0	17	33	131
October 1, 2016	80	0	23	35	138
October 1, 2017	85	0	23	40	148
October 1, 2018	90	0	27	42	159
October 1, 2019	94	0	27	48	169
October 1, 2020	92	0	28	58	178
October 1, 2021	96	0	32	62	190

Data Reconciliation

Table III-B

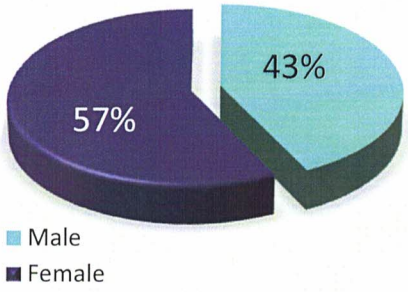
	Active	DROP	Deferred Vested	Due a Refund	Def. Benef.	Service Retiree	Disabled Retiree	Benef. Rec'v.	Total
October 1, 2020	92	0	24	4	0	50	0	8	**178**
Change in Status									
Re-employed									
Terminated	(5)		5						
Retired	(3)					3			
Participation Ended									
Transferred Out									
Cashed Out									
Died			(1)						**(1)**
Participation Began									
Newly Hired	9								**9**
Transferred In	3								**3**
New Beneficiary								1	**1**
Other Adjustment									
October 1, 2021	96	0	28	4	0	53	0	9	**190**

Active Participant Data

Table III-C

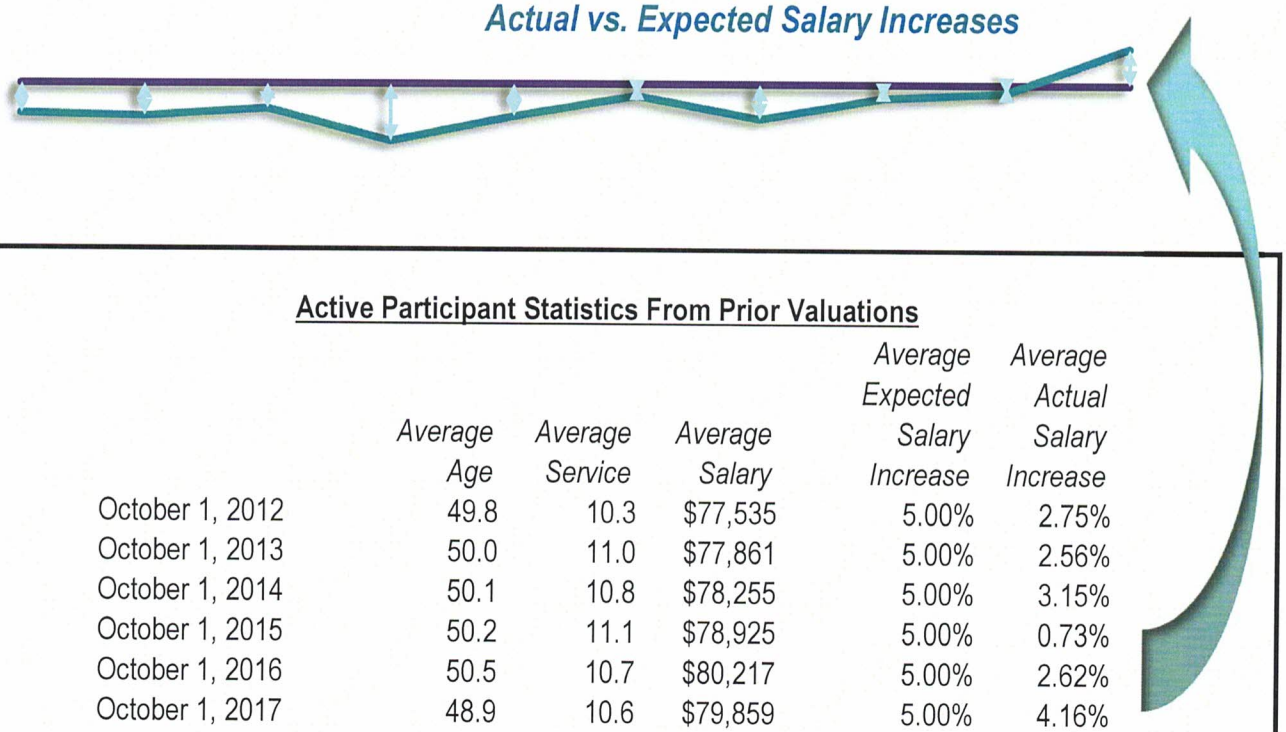
As of October 1, 2021

Gender Mix



Average Age	49.7 years
Average Service	10.9 years
Total Annualized Compensation for the Prior Year	$8,146,166
Total Expected Compensation for the Current Year	$8,553,482
Average Increase in Compensation for the Prior Year	7.76%
Expected Increase in Compensation for the Current Year	5.00%
Accumulated Contributions for Active Employees	$7,202,426

Actual vs. Expected Salary Increases

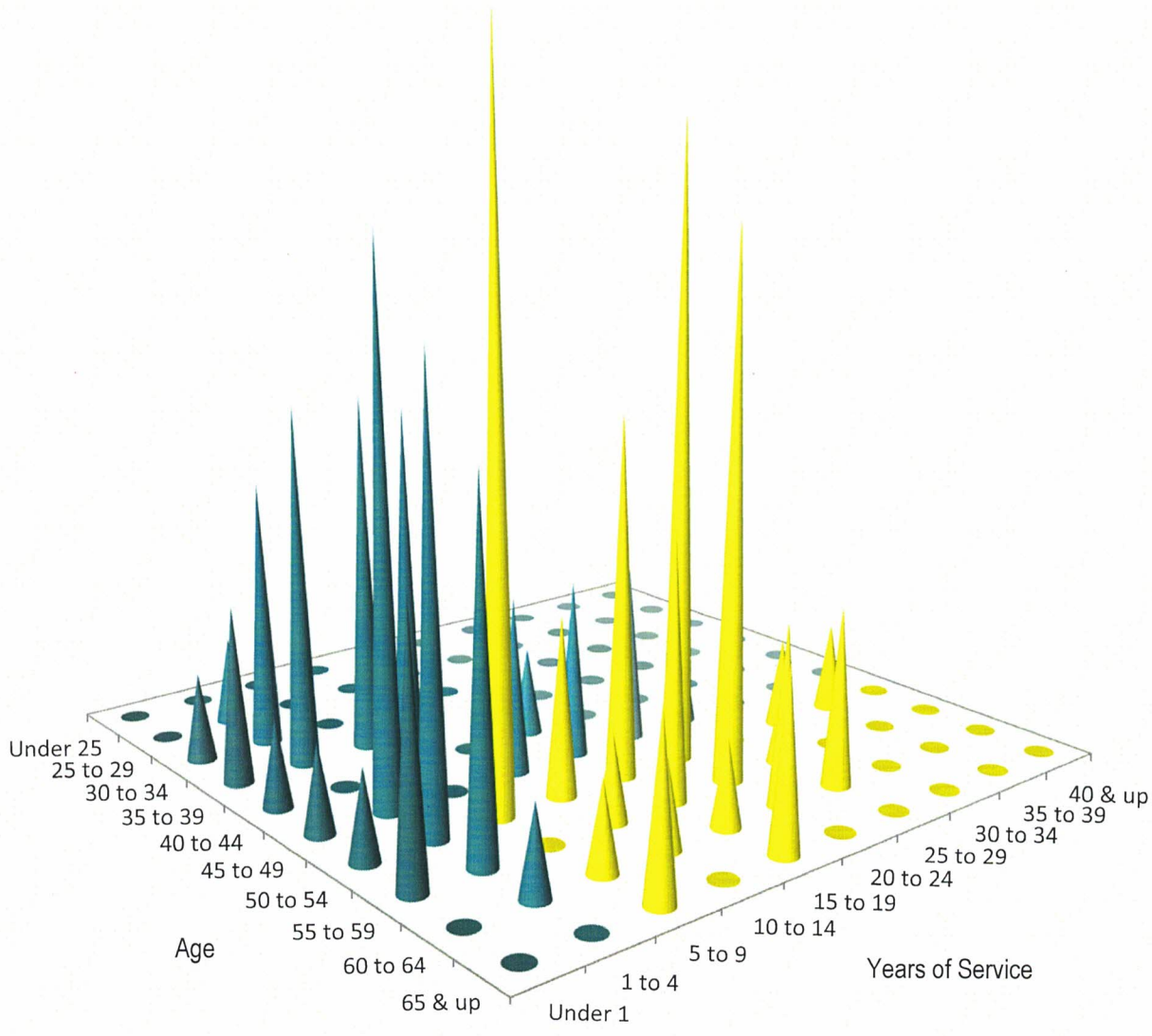


Active Participant Statistics From Prior Valuations

	Average Age	*Average Service*	*Average Salary*	*Average Expected Salary Increase*	*Average Actual Salary Increase*
October 1, 2012	49.8	10.3	$77,535	5.00%	2.75%
October 1, 2013	50.0	11.0	$77,861	5.00%	2.56%
October 1, 2014	50.1	10.8	$78,255	5.00%	3.15%
October 1, 2015	50.2	11.1	$78,925	5.00%	0.73%
October 1, 2016	50.5	10.7	$80,217	5.00%	2.62%
October 1, 2017	48.9	10.6	$79,859	5.00%	4.16%
October 1, 2018	48.7	10.7	$80,081	5.00%	2.45%
October 1, 2019	49.1	10.6	$70,058	5.00%	4.00%
October 1, 2020	49.3	10.8	$82,623	5.00%	4.42%
October 1, 2021	49.7	10.9	$84,856	5.00%	7.76%

Active Age-Service Distribution

Table III-D



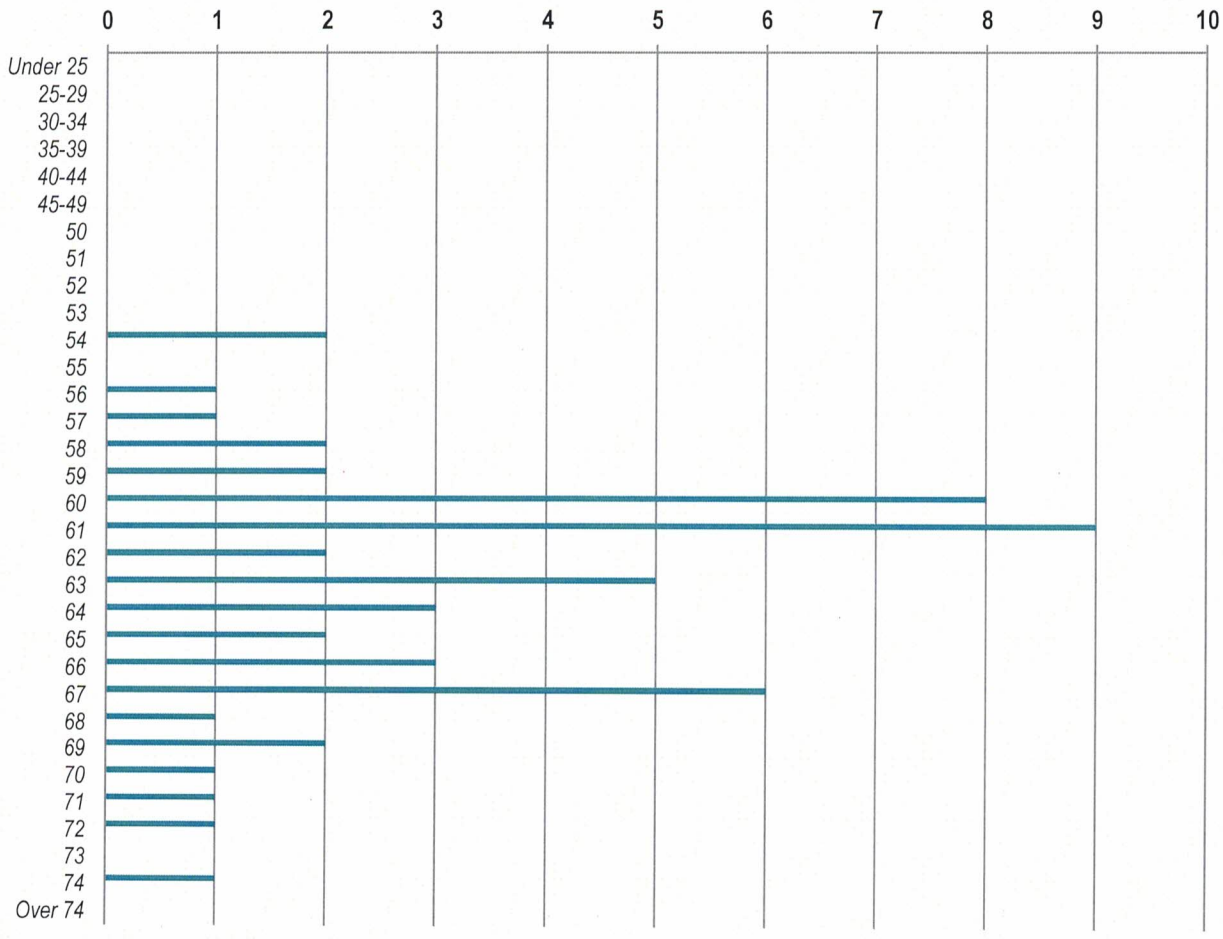
Active Age-Service-Salary Table

Table III-E

Attained Age	Completed Years of Service										
	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	Total
Under 25	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Avg.Pay	0	0	0	0	0	0	0	0	0	0	0
25 to 29	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
Avg.Pay	0	59,265	0	0	0	0	0	0	0	0	59,265
30 to 34	**1**	**3**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**5**
Avg.Pay	59,197	57,663	0	52,886	0	0	0	0	0	0	57,014
35 to 39	**2**	**4**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**11**
Avg.Pay	79,325	80,289	69,885	79,487	0	0	0	0	0	0	76,257
40 to 44	**1**	**0**	**4**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**6**
Avg.Pay	61,846	0	44,745	0	129,322	0	0	0	0	0	61,692
45 to 49	**1**	**6**	**0**	**2**	**2**	**2**	**1**	**0**	**0**	**0**	**14**
Avg.Pay	66,725	100,066	0	79,657	72,652	82,096	113,711	0	0	0	89,260
50 to 54	**1**	**5**	**8**	**2**	**4**	**7**	**0**	**1**	**1**	**0**	**29**
Avg.Pay	69,801	85,331	96,530	116,394	74,152	91,725	0	81,896	80,008	0	89,726
55 to 59	**3**	**4**	**0**	**1**	**3**	**6**	**1**	**0**	**0**	**0**	**18**
Avg.Pay	91,321	73,884	0	129,228	81,738	84,330	176,573	0	0	0	90,361
60 to 64	**0**	**1**	**1**	**1**	**1**	**2**	**2**	**0**	**0**	**0**	**8**
Avg.Pay	0	113,766	78,801	92,967	78,628	43,469	75,009	0	0	0	75,140
65 & up	**0**	**0**	**2**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**4**
Avg.Pay	0	0	99,052	0	157,717	0	0	0	0	0	128,385
Total	**9**	**24**	**19**	**8**	**13**	**17**	**4**	**1**	**1**	**0**	**96**
Avg.Pay	76,687	82,907	79,351	93,334	93,116	82,305	110,076	81,896	80,008	0	84,856

Inactive Participant Data

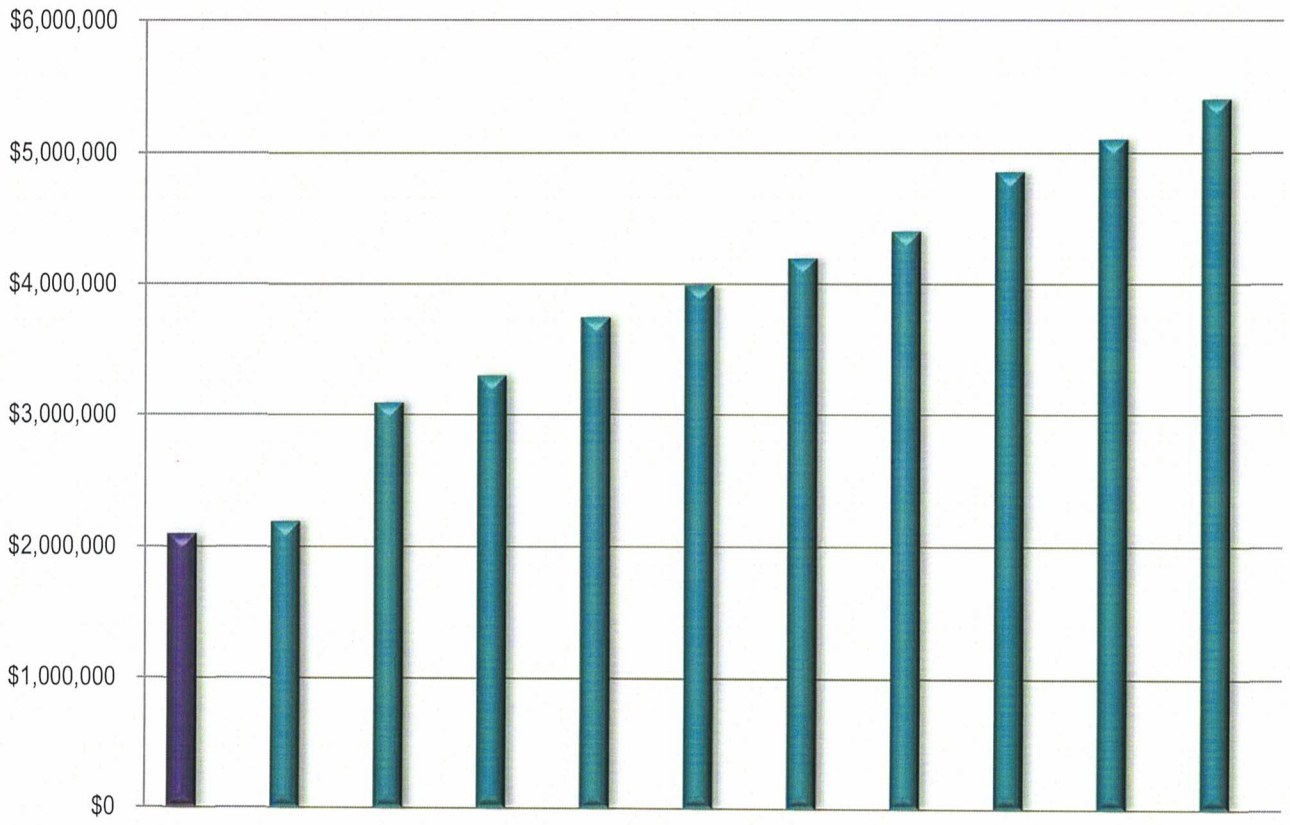
Table III-F



	Average Monthly Benefit
Service Retirements	*$3,239.13*
Disability Retirements	*Not applicable*
Beneficiaries Receiving	*$1,240.94*
DROP Participants	*Not applicable*
Deferred Vested Participants	*$1,464.87*
Deferred Beneficiaries	*Not applicable*

Projected Benefit Payments

Table III-G



Actual	
For the period October 1, 2020 through September 30, 2021	$2,100,548
Projected	
For the period October 1, 2021 through September 30, 2022	$2,191,630
For the period October 1, 2022 through September 30, 2023	$3,094,267
For the period October 1, 2023 through September 30, 2024	$3,301,643
For the period October 1, 2024 through September 30, 2025	$3,745,740
For the period October 1, 2025 through September 30, 2026	$3,993,165
For the period October 1, 2026 through September 30, 2027	$4,197,475
For the period October 1, 2027 through September 30, 2028	$4,403,384
For the period October 1, 2028 through September 30, 2029	$4,855,877
For the period October 1, 2029 through September 30, 2030	$5,102,793
For the period October 1, 2030 through September 30, 2031	$5,406,779

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. Amortization Method

The unfunded liability is amortized as a level dollar amount over a period of up to 30 years.

3. Asset Method

The actuarial value of assets is equal to the market value of assets, adjusted to reflect a five-year phase-in of the unexpected investment appreciation.

4. Interest (or Discount) Rate

6.75% per annum

5. Salary Increases

Plan compensation is assumed to increase at the rate of 5.00% per annum, unless actual plan compensation is known for a prior plan year.

6. Decrements

- Pre-retirement mortality: Sex-distinct rates set forth in the PUB-2010 Headcount-Weighted Below Median Employee Mortality Table for general employees, with full generational improvements in mortality using Scale MP-2018 and with male ages set back one year

Summary of Actuarial Methods and Assumptions — Table IV-A

(continued)

- Post-retirement mortality: Sex-distinct rates set forth in the PUB-2010 Headcount-Weighted Below Median Healthy Retiree Mortality Table for general employees, with full generational improvements in mortality using Scale MP-2018 and with male ages set back one year
- Disability: Sex-distinct disability rates set forth in the Wyatt 1985 Disability Study (Class 1)
- Termination: None assumed
- Retirement: 5% of eligible participants are assumed to retire at each early retirement age and 100% of eligible participants are assumed to retire on their normal retirement age.

No decrements have been assumed to occur during the first year following the valuation date.

7. **Form of Payment**

Future retirees have been assumed to select the 10-year certain and life annuity.

8. **Marriage Assumption**

100% of participants are assumed to be married, with male spouses assumed to be three years older than female spouses.

9. **Expenses**

Administrative expenses are assumed to be 0.50% of future payroll. In addition, the interest rate set forth in item 4. above is assumed to be net of investment expenses and commissions.

Changes in Actuarial Methods and Assumptions — Table IV-B

Since the completion of the previous valuation, two assumptions and one method have been changed, as follows:

(1) The actuarial funding method was changed from the individual entry age normal cost method to the aggregate cost method.

(2) The interest (or discount) rate was decreased from 7.00% per annum to 6.75% per annum.

(3) The administrative expense loading was decreased from 0.70% of future payroll to 0.50% of future payroll.

The following additional assumption and method changes were made during the past 10 years:

(1) Effective October 1, 2020, the mortality basis was changed from the RP-2000 Combined 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.

(2) Effective October 1, 2020, the actuarial value of assets was changed from the market value adjusted to reflect a five-year phase-in of the net investment gains and losses to the market value adjusted to reflect a five-year phase-in of the unexpected investment gains and losses.

(3) Effective October 1, 2016, the mortality basis was changed from a 2015 projection of the RP-2000 Mortality Table for annuitants to a full generational projection using Scale BB of the RP-2000 Combined Mortality Table as required by State law.

(4) Effective October 1, 2014, the mortality basis was updated from the 1994 Group Annuity Reserving Table, projected to 2002 by Scale AA, to the RP-2000 Mortality Table, projected to 2015 by Scale AA.

(5) Effective October 1, 2014, no decrements are assumed to occur during the first year following the valuation date.

(6) Effective October 1, 2013, the method used to determine the actuarial value of assets was changed from the market value, adjusted to reflect a five-year phase-in of the net investment gains or losses, to the market value, adjusted to reflect a five-year phase-in of the net investment gains and losses that occur after September 30, 2013.

(7) Effective October 1, 2013, the assumed increase in future payroll for purposes of amortizing the unfunded liability was eliminated.

(8) Effective October 1, 2011, the assumed increase in future payroll used to amortize the unfunded liability was decreased from 5.00% per year to 4.00% per year.

Summary of Plan Provisions

Table V-A

1. Monthly Accrued Benefit

For elected officials:
6⅔% of Average Final Compensation for each completed year of Credited Service, with a pro-rata benefit accrual for a partial year and with the benefit limited to 80% of Average Final Compensation

For City manager and City attorney:
4.00% of Average Final Compensation multiplied by Credited Service, with the benefit limited to 80% of Average Final Compensation

For all other participants:
3.00% of Average Final Compensation multiplied by Credited Service, with the benefit limited to 80% of Average Final Compensation

2. Normal Retirement Age and Benefit

- **Age**
  Age 60 with at least five years of Credited Service;
  Age 57 with at least 20 years of Credited Service; or
  Age 55 with at least 25 years of Credited Service
- **Amount**
  Monthly Accrued Benefit
- **Form of Payment**
  Actuarially equivalent single life annuity (optional);
  10-year certain and life annuity (normal form of payment);
  Actuarially equivalent joint and contingent annuity (optional);
  Actuarially equivalent joint and contingent annuity with "pop-up" feature (optional); or
  Actuarially equivalent annuity plus a partial lump sum payment, with the partial lump sum payment equal to up to three years of monthly benefit payments with simple interest calculated at the rate of 4% per year and a refund of the participant's contributions during the same period

  (Note: All forms of payment guarantee at least the return of the participant's Accumulated Contributions.)

Summary of Plan Provisions

Table V-A

(continued)

3. Early Retirement Age and Benefit

- **Age**
  Age 50 with at least five years of Credited Service
- **Amount**
  Monthly Accrued Benefit (payable at Normal Retirement Age); or
  Monthly Accrued Benefit reduced by 5% for each year by which the participant's Early Retirement Age precedes Normal Retirement Age (payable at Early Retirement Age)
- **Form of Payment**
  Same as for Normal Retirement

4. Disability Eligibility and Benefit

- **Eligibility**
  All participants are eligible.
- **Condition**
  The participant must be totally and permanently disabled such that he is unable to perform his duties as a City employee.
- **Amount**
  Monthly Accrued Benefit
- **Form of Payment**
  Same as for Normal Retirement

5. Deferred Vested Benefit

- **Age**
  Any age with at least one year of Credited Service
- **Amount**
  Monthly Accrued Benefit multiplied by the Vested Percentage (payable at Normal Retirement Age); or
  Monthly Accrued Benefit multiplied by the Vested Percentage and reduced by 5% for each year by which the participant's Early Retirement Age precedes age 60 (payable at Early Retirement Age)
- **Form of Payment**
  Same as for Normal Retirement

Summary of Plan Provisions

Table V-A

(continued)

6. Pre-Retirement Death Benefits

- **Fully or Partially Vested Participant**
  Upon the death prior to retirement of a fully or partially vested participant, the participant's beneficiary receives an immediate Pre-Retirement Survivor Annuity equal to one-half of a 50% joint and contingent annuity based on the participant's Monthly Accrued Benefit calculated without regard to any reduction for early retirement. The Pre-Retirement Survivor Annuity guarantees at least the return of the participant's Accumulated Contributions.
- **Non-Vested Participant**
  In the case of the death of a non-vested participant prior to retirement, his beneficiary will receive the participant's Accumulated Contributions.

7. Vested Percentage

Each participant earns a 20% vested interest in his Monthly Accrued Benefit for each whole year of Credited Service up to five years of Credited Service

8. Average Final Compensation

Average compensation for the highest five consecutive years of service prior to the determination; compensation includes total cash remuneration paid for services rendered to the City, but excludes: (i) bonuses, (ii) employer contributions to any health, dental, disability, or related insurance program, (iii) medical, child care, and other non-taxable reimbursements, (iv) employer contributions to a deferred compensation program under Internal Revenue Code (IRC) section 457, (v) cash payments of unused accumulated leave payable upon employment termination, and (vi) any overtime pay in excess of 300 hours per year after June 30, 2011.

9. Credited Service

The uninterrupted service, expressed in years and completed months, from the participant's date of hire until his date of termination, retirement, or death. For purposes of determining the Monthly Accrued Benefit, Credited Service earned prior to the effective date of the plan is not included for participants other than elected officials unless the participant purchases such credit by paying into the plan 50% of the full actuarial cost thereof. In addition, participants may purchase up to four years of credit for other prior governmental or military service by paying into the plan the full actuarial cost thereof, provided that no other pension benefit is granted for such service by any other governmental employer.

Summary of Plan Provisions

Table V-A

(continued)

10. Participation Requirement

All managerial and non-bargaining employees, as well as charter officers and elected commissioners, of the City of Tamarac, Florida, may voluntarily participate in the plan. Subject to certain exceptions, those individuals who are hired on or after October 1, 2005 are required to participate in the plan.

11. Accumulated Contributions

The participant's Contributions accumulated with 2.50% simple interest per annum *(Prior to January 1, 2012, the participant's Contributions were accumulated with 4.00% simple interest per annum.)*

12. Participant Contributions

10% of compensation per year; participant Contributions are deemed to be "picked-up" by the City pursuant to Internal Revenue Code (IRC) §414(h)(2).

13. Actuarial Equivalence

Based on 7.00% interest per annum and the unisex mortality rates set forth in the 1994 Group Annuity Reserving Table, projected to 2002 by Scale AA

14. Automatic Cost-of-Living Adjustment

Effective each January 1, retirement, disability, and deferred vested benefits are automatically increased by 2% compounded annually after the participant has been receiving payments for at least five years.

15. Plan Effective Date

October 1, 2005

Summary of Plan Amendments

Table V-B

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