

**TOWN OF GOLDEN BEACH
EMPLOYEES PENSION PLAN**

**ACTUARIAL VALUATION
AS OF OCTOBER 1, 2020**

**DETERMINES THE CONTRIBUTION
FOR THE 2021/22 FISCAL YEAR**



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February 7, 2021

Introduction

This report presents the results of the October 1, 2020 actuarial valuation for the Town of Golden Beach Employees Pension 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, 2020 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 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 is \$641,763, which equates to 24.91% of covered payroll. The minimum required contribution decreased by \$67,090 from the prior valuation.

Table I-C provides a breakdown of the sources of change in the contribution rate. Significantly, the rate increased by 0.84% of payroll due to investment losses, increased by 1.69% of payroll due to demographic experience, and decreased by 5.85% of payroll due to the assumption change that is described below. Although the market value of assets only earned 4.70% during the 2019/20 plan year, the actuarial value of assets is based on the market value adjusted to reflect a five-year phase-in of the net investment appreciation. On this basis, the actuarial value of assets



earned 5.94% during the 2019/20 plan year, whereas a 7.50% 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 Town must contribute an amount equal to the annual normal cost of the plan plus an amortization payment towards the unfunded accrued liability and an adjustment as necessary to reflect interest on any delayed payment of the contribution beyond the valuation date.

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 \$16,800,462. As illustrated in Table I-A, current assets are sufficient to cover \$10,845,226 of this amount, the employer's 2020/21 contribution will cover \$708,853 of this amount, the employer's 2021/22 contribution will cover \$641,763 of this amount, and future employee contributions are expected to cover \$946,360 of this amount, leaving \$3,658,260 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.

Actuarial Assumption Change

Since the completion of the previous valuation, the mortality basis was changed from the RP-2000 Combined and Blue Collar Mortality Tables with generational improvements in mortality using Scale BB to selected PUB-2010 Mortality Tables with generational improvements in mortality using Scale MP-2018. The impact of this assumption change was to decrease the minimum required contribution by 5.85% of payroll.

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 frozen initial liability funding method for this plan, which is expected to result in a contribution rate that decreases over time as a percentage of payroll. A brief description of the actuarial funding method is provided in Table IV-A.

Contents of the Report

Tables I-D through I-I 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. 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, 2020, 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

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

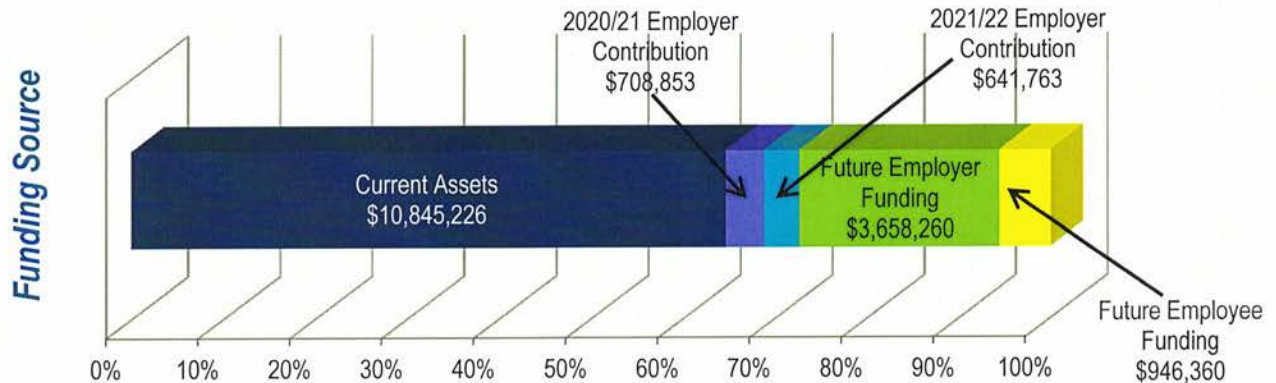
Enrolled Actuary No. 20-04927

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 for the 2020/21 Plan Year	\$410,969
Unfunded Liability Amortization Payment for the 2020/21 Plan Year	\$153,606
Expense Allowance for the 2020/21 Plan Year	\$57,170
	<hr/>
	\$621,745
Adjustment to Reflect Monthly Employer Contributions	\$24,699
Adjustment to Reflect One-Year Delay in Application of Valuation Results	(\$4,681)
	<hr/>

Required Employer Contribution for the 2021/22 Plan Year **\$641,763**

Expected Payroll for the 2021/22 Plan Year ÷ \$2,576,000

Minimum Required Contribution Rate 24.91%

Additional Disclosures

Present Value of Future Compensation	\$20,954,458
Present Value of Future Employer Contributions	\$5,008,876
Present Value of Future Employee Contributions	\$946,360



Minimum Required Contribution

Table I-A

(continued)

For the 2021/22 Plan Year

Estimated Contribution for General Employees Only

Normal Cost for the 2020/21 Plan Year	\$107,833
Unfunded Liability Amortization Payment for the 2020/21 Plan Year	\$56,676
Expense Allowance for the 2020/21 Plan Year	\$21,094
	<hr/>
	\$185,603
Adjustment to Reflect Monthly Employer Contributions	\$7,373
Adjustment to Reflect One-Year Delay in Application of Valuation Results	(\$462)
	<hr/>
Estimated Employer Contribution for the 2021/22 Plan Year	\$192,514
Expected Payroll for the 2021/22 Plan Year	<hr/>
	÷ \$1,199,413
Estimated Minimum Required Contribution Rate	16.05%

Estimated Contribution for Police Officers Only

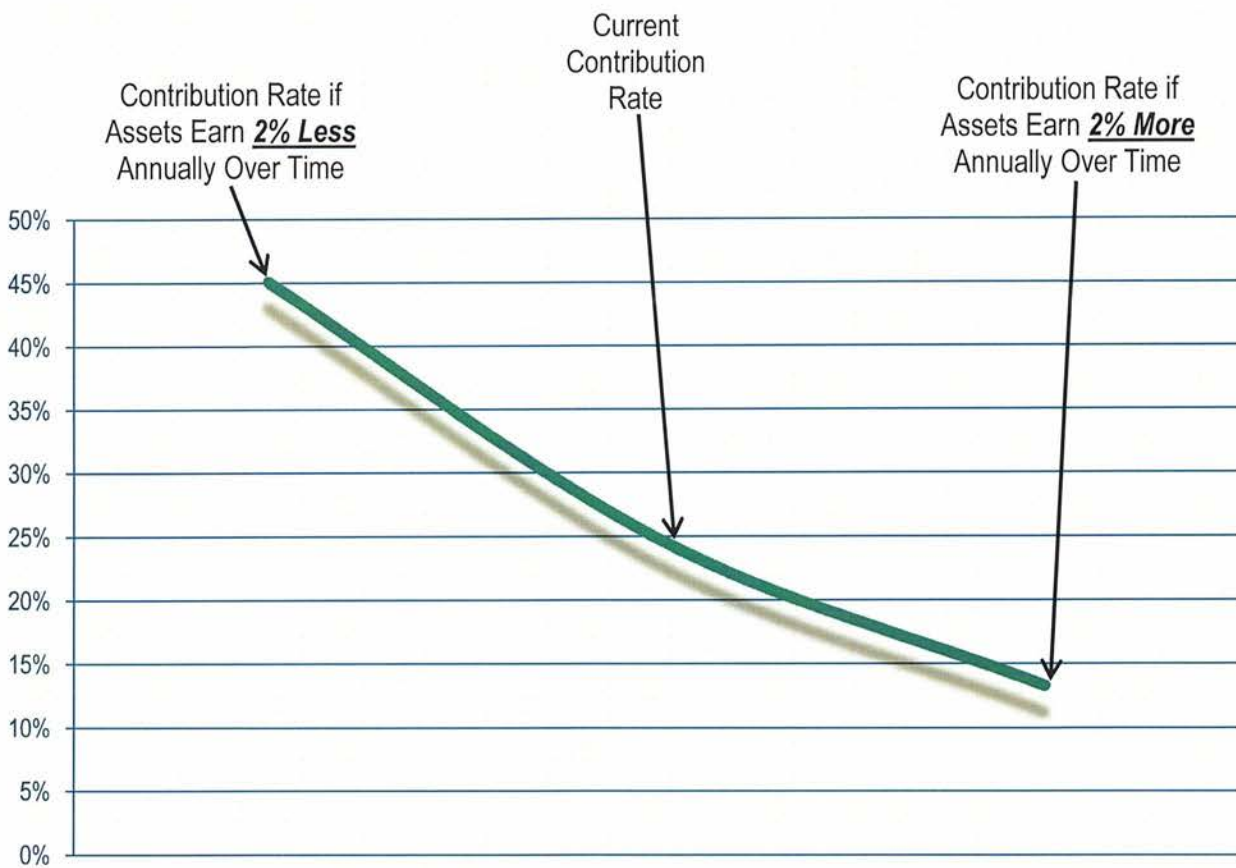
Normal Cost for the 2020/21 Plan Year	\$303,136
Unfunded Liability Amortization Payment for the 2020/21 Plan Year	\$96,930
Expense Allowance for the 2020/21 Plan Year	\$36,076
	<hr/>
	\$436,142
Adjustment to Reflect Monthly Employer Contributions	\$17,326
Adjustment to Reflect One-Year Delay in Application of Valuation Results	(\$4,219)
	<hr/>
Estimated Employer Contribution for the 2021/22 Plan Year	\$449,249
Expected Payroll for the 2021/22 Plan Year	<hr/>
	÷ \$1,376,587
Estimated Minimum Required Contribution Rate	32.63%

* Note: The amounts shown above are only for informational purposes.



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	28.23%
Increase (decrease) due to investment gains and losses	0.84%
Increase (decrease) due to other experience	1.69%
Increase (decrease) due to plan amendments	0.00%
Increase (decrease) due to actuarial assumption changes	-5.85%
Increase (decrease) due to actuarial method changes	0.00%
Current minimum required contribution rate	<u>24.91%</u>

Source of Change in the Unfunded Liability

Previous unfunded liability	\$1,847,795
Increase due to employer normal cost and expenses	\$505,465
Increase due to interest on normal cost and unfunded liability	\$176,495
Decrease due to employer contributions	(\$700,022)
Decrease due to interest on employer contributions	(\$37,909)
Expected unfunded liability	<u>\$1,791,824</u>
Increase (decrease) due to plan amendments	\$0
Increase (decrease) due to actuarial assumption changes	(\$293,121)
Increase (decrease) due to actuarial method changes	\$0
Current unfunded liability	<u>\$1,498,703</u>



Present Value of Future Benefits

Table I-D

	Old Assumptions <u>w/o Amendment</u>	Old Assumptions <u>w/ Amendment</u>	New Assumptions <u>w/ Amendment</u>
<i><u>Actively Employed Participants</u></i>			
Retirement benefits	\$10,930,544	\$10,930,544	\$10,874,154
Termination benefits	\$149,252	\$149,252	\$143,685
Disability benefits	\$1,353,914	\$1,353,914	\$1,218,403
Death benefits	\$119,326	\$119,326	\$92,475
Refund of employee contributions	\$62,755	\$62,755	\$61,648
Sub-total	\$12,615,791	\$12,615,791	\$12,390,365
<i><u>Deferred Vested Participants</u></i>			
Retirement benefits	\$91,771	\$91,771	\$88,649
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$91,771	\$91,771	\$88,649
<i><u>Due a Refund of Contributions</u></i>	\$0	\$0	\$0
<i><u>Deferred Beneficiaries</u></i>	\$0	\$0	\$0
<i><u>Retired Participants</u></i>			
Service retirements	\$3,080,500	\$3,080,500	\$3,040,576
Disability retirements	\$774,699	\$774,699	\$680,180
Beneficiaries receiving	\$604,651	\$604,651	\$600,692
DROP participants	\$0	\$0	\$0
Sub-total	\$4,459,850	\$4,459,850	\$4,321,448
<i><u>Grand Total</u></i>	<u>\$17,167,412</u>	<u>\$17,167,412</u>	<u>\$16,800,462</u>
Present Value of Future Payroll	\$20,936,456	\$20,936,456	\$20,954,458
Present Value of Future Employee Contribs.	\$945,464	\$945,464	\$946,360
Present Value of Future Employer Contribs.	\$5,376,722	\$5,376,722	\$5,008,876



Present Value of Accrued Benefits

Table I-E

	Old Assumptions <u>w/o Amendment</u>	Old Assumptions <u>w/ Amendment</u>	New Assumptions <u>w/ Amendment</u>
<u>Actively Employed Participants</u>			
Retirement benefits	\$6,630,585	\$6,630,585	\$6,577,587
Termination benefits	\$69,762	\$69,762	\$67,410
Disability benefits	\$787,482	\$787,482	\$709,501
Death benefits	\$60,675	\$60,675	\$45,981
Refund of employee contributions	\$31,742	\$31,742	\$30,521
Sub-total	\$7,580,246	\$7,580,246	\$7,431,000
<u>Deferred Vested Participants</u>			
Retirement benefits	\$91,771	\$91,771	\$88,649
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$91,771	\$91,771	\$88,649
<u>Due a Refund of Contributions</u>	\$0	\$0	\$0
<u>Deferred Beneficiaries</u>	\$0	\$0	\$0
<u>Retired Participants</u>			
Service retirements	\$3,080,500	\$3,080,500	\$3,040,576
Disability retirements	\$774,699	\$774,699	\$680,180
Beneficiaries receiving	\$604,651	\$604,651	\$600,692
DROP participants	\$0	\$0	\$0
Sub-total	\$4,459,850	\$4,459,850	\$4,321,448
<u>Grand Total</u>	<u>\$12,131,867</u>	<u>\$12,131,867</u>	<u>\$11,841,097</u>
<u>Funded Percentage</u>	96.16%	96.16%	98.52%

(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 <u>w/o Amendment</u>	Old Assumptions <u>w/ Amendment</u>	New Assumptions <u>w/ Amendment</u>
<u>Actively Employed Participants</u>			
Retirement benefits	\$6,561,102	\$6,561,102	\$6,509,065
Termination benefits	\$59,549	\$59,549	\$57,745
Disability benefits	\$750,395	\$750,395	\$675,784
Death benefits	\$54,932	\$54,932	\$41,107
Refund of employee contributions	\$40,471	\$40,471	\$38,414
Sub-total	\$7,466,449	\$7,466,449	\$7,322,115
<u>Deferred Vested Participants</u>			
Retirement benefits	\$91,771	\$91,771	\$88,649
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$91,771	\$91,771	\$88,649
<u>Due a Refund of Contributions</u>	\$0	\$0	\$0
<u>Deferred Beneficiaries</u>	\$0	\$0	\$0
<u>Retired Participants</u>			
Service retirements	\$3,080,500	\$3,080,500	\$3,040,576
Disability retirements	\$774,699	\$774,699	\$680,180
Beneficiaries receiving	\$604,651	\$604,651	\$600,692
DROP participants	\$0	\$0	\$0
Sub-total	\$4,459,850	\$4,459,850	\$4,321,448
<u>Grand Total</u>	<u>\$12,018,070</u>	<u>\$12,018,070</u>	<u>\$11,732,212</u>



Entry Age Normal Accrued Liability

Table I-G

	Old Assumptions <u>w/o Amendment</u>	Old Assumptions <u>w/ Amendment</u>	New Assumptions <u>w/ Amendment</u>
<u>Actively Employed Participants</u>			
Retirement benefits	\$7,848,532	\$7,848,532	\$7,799,146
Termination benefits	\$78,846	\$78,846	\$75,991
Disability benefits	\$803,685	\$803,685	\$723,387
Death benefits	\$72,241	\$72,241	\$54,467
Refund of employee contributions	\$34,431	\$34,431	\$33,147
Sub-total	\$8,837,735	\$8,837,735	\$8,686,138
<u>Deferred Vested Participants</u>			
Retirement benefits	\$91,771	\$91,771	\$88,649
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$91,771	\$91,771	\$88,649
<u>Due a Refund of Contributions</u>	\$0	\$0	\$0
<u>Deferred Beneficiaries</u>	\$0	\$0	\$0
<u>Retired Participants</u>			
Service retirements	\$3,080,500	\$3,080,500	\$3,040,576
Disability retirements	\$774,699	\$774,699	\$680,180
Beneficiaries receiving	\$604,651	\$604,651	\$600,692
DROP participants	\$0	\$0	\$0
Sub-total	\$4,459,850	\$4,459,850	\$4,321,448
<u>Grand Total</u>	<u>\$13,389,356</u>	<u>\$13,389,356</u>	<u>\$13,096,235</u>



Unfunded Liability Bases

Table I-H

<u>Description</u>	<u>Original Amount</u>	<u>Outstanding Balance</u>	<u>Amortization Payment</u>	<u>Years Rem.</u>
	Total	\$1,498,703	\$153,606	
		↓	↓	
Prior base #1		\$272,041	\$36,867	10
Prior base #2		\$81,881	\$9,374	13
Prior base #3		\$83,703	\$8,254	17
Prior base #4		\$272,059	\$25,412	19
10/1/2017 Assump.Change		\$979,917	\$91,530	19
10/1/2017 Amendment		\$102,223	\$9,548	19
10/1/2020 Assump. Change		(\$293,121)	(\$27,379)	19



Development of the Normal Cost

Table I-I

Normal Cost as of October 1, 2020

Present Value of Future Benefits	\$16,800,462
Unfunded Frozen Liability	(\$1,498,703)
Actuarial Value of Assets	(\$10,845,226)
Present Value of Future Employee Contributions	(\$946,360)
Present Value of Future Normal Cost	\$3,510,173
Present Value of Future Compensation	÷ \$20,954,458
Normal Cost Accrual Rate	16.751438%
Expected Payroll for the Current Year	x \$2,453,333
Normal Cost	<u>\$410,969</u>
Estimated Normal Cost for General Employees	\$107,833 *
Estimated Normal Cost for Police Officers	\$303,136 *

** only for informational purposes*



Actuarial Value of Assets

Table II-A

	<u>Investment Gain (Loss)</u>		<u>Unrecognized Gain (Loss)</u>
For the 2016/17 plan year	\$837,790	x 20%	\$167,558
For the 2017/18 plan year	\$631,969	x 40%	\$252,788
For the 2018/19 plan year	\$142,448	x 60%	\$85,469
For the 2019/20 plan year	\$393,498	x 80%	\$314,798
			<u>\$820,613</u>

Market Value of Assets as of October 1, 2020 \$11,665,839

Minus advance employer contributions \$0

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 (\$820,613)

Actuarial Value of Assets as of October 1, 2020 \$10,845,226

<u>Historical Actuarial Value of Assets</u>	
October 1, 2011	\$4,443,079
October 1, 2012	\$4,947,281
October 1, 2013	\$5,569,208
October 1, 2014	\$6,140,492
October 1, 2015	\$6,636,386
October 1, 2016	\$7,290,716
October 1, 2017	\$8,049,582
October 1, 2018	\$8,993,996
October 1, 2019	\$9,850,843
October 1, 2020	\$10,845,226

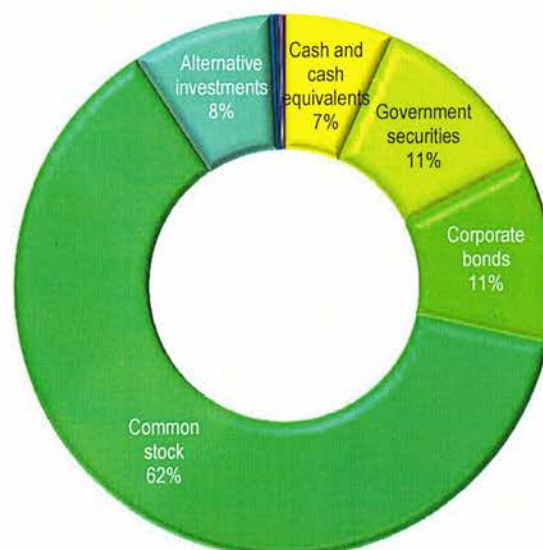


Market Value of Assets

Table II-B

As of October 1, 2020

Market Value of Assets	<u>\$11,665,839</u>
Cash and cash equivalents	\$762,408
Government securities	\$1,288,233
Corporate bonds	\$1,283,211
Common stock	\$7,300,507
Alternative investments	\$983,633
Prepaid expenses	\$41,822
Income receivable	\$21,456
Employee contribution receivable	\$6,389
Other receivables	\$4,975
Accounts payable	(\$26,795)

**Historical Market Value of Assets**

October 1, 2011	N/A
October 1, 2012	N/A
October 1, 2013	N/A
October 1, 2014	\$7,095,417
October 1, 2015	\$7,188,350
October 1, 2016	\$7,825,704
October 1, 2017	\$8,993,254
October 1, 2018	\$10,129,529
October 1, 2019	\$10,753,331
October 1, 2020	\$11,665,839



Investment Return

Table II-C



Plan	Market Value Return	Actuarial Value Return	Assumed Return
<u>Year</u>	<u>Return</u>	<u>Return</u>	<u>Return</u>
2010/11	N/A	6.07%	7.50%
2011/12	N/A	11.35%	7.50%
2012/13	N/A	12.57%	7.50%
2013/14	N/A	10.26%	7.50%
2014/15	-0.69%	5.69%	7.50%
2015/16	6.01%	6.75%	7.50%
2016/17	11.64%	6.96%	7.50%
2017/18	8.47%	7.12%	7.50%
2018/19	2.56%	5.42%	7.50%
2019/20	4.70%	5.94%	7.50%
6yr. Avg.	5.37%	7.79%	7.50%



Asset Reconciliation

Table II-D

	<u>Market Value</u>	<u>Actuarial Value</u>
As of October 1, 2019	\$10,753,331	\$9,850,843
<i>Increases Due To:</i>		
Employer Contributions	\$700,022	\$700,022
Employee Contributions	\$153,944	\$153,944
Total Contributions	<u>\$853,966</u>	<u>\$853,966</u>
Interest and Dividends	\$222,196	
Realized Gains (Losses)	\$0	
Unrealized Gains (Losses)	\$393,498	
Total Investment Income	<u>\$615,694</u>	\$597,078
Other Income	\$0	
Total Income	<u>\$1,469,660</u>	<u>\$1,451,044</u>
<i>Decreases Due To:</i>		
Monthly Benefit Payments	(\$398,771)	(\$398,771)
Refund of Employee Contributions	(\$720)	(\$720)
Total Benefit Payments	<u>(\$399,491)</u>	<u>(\$399,491)</u>
Investment Expenses	(\$100,491)	
Administrative Expenses	(\$57,170)	(\$57,170)
Advance Employer Contribution		\$0
Total Expenses	<u>(\$557,152)</u>	<u>(\$456,661)</u>
As of October 1, 2020	<u><u>\$11,665,839</u></u>	<u><u>\$10,845,226</u></u>



Historical Trust Fund Detail

Table II-E

Income

Plan	Employer	Employee	Service		Realized	Unrealized	Other
<u>Year</u>	<u>Contribs.</u>	<u>Contribs.</u>	<u>Purchase</u>	<u>Interest /</u>	<u>Gains /</u>	<u>Gains /</u>	<u>Income</u>
			<u>Contribs.</u>	<u>Dividends</u>	<u>Losses</u>	<u>Losses</u>	
2010/11	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2011/12	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2012/13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2013/14	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2014/15	\$427,817	\$101,778	\$0	\$121,052	\$0	-\$105,912	\$0
2015/16	\$457,855	\$110,543	\$0	\$134,038	\$0	\$371,166	\$0
2016/17	\$513,696	\$120,499	\$0	\$154,252	\$0	\$837,790	\$0
2017/18	\$588,601	\$152,113	\$0	\$224,331	\$0	\$631,969	\$0
2018/19	\$637,382	\$156,672	\$0	\$215,347	\$0	\$142,448	\$0
2019/20	\$700,022	\$153,944	\$0	\$222,196	\$0	\$393,498	\$0

Expenses

Plan	Monthly	Contrib.	Admin.	Invest.	Other Actuarial Adjustments
<u>Year</u>	<u>Benefit</u>	<u>Refunds</u>	<u>Expenses</u>	<u>Expenses</u>	<u>Advance</u>
	<u>Payments</u>				<u>Employer</u>
					<u>Contribs.</u>
2010/11	N/A	N/A	N/A	N/A	N/A
2011/12	N/A	N/A	N/A	N/A	N/A
2012/13	N/A	N/A	N/A	N/A	N/A
2013/14	N/A	N/A	N/A	N/A	N/A
2014/15	\$302,974	\$44,361	\$40,111	\$64,356	\$0
2015/16	\$306,358	\$1,613	\$61,092	\$67,185	\$0
2016/17	\$320,173	\$9,354	\$61,904	\$67,256	\$0
2017/18	\$320,175	\$4,143	\$57,496	\$78,925	\$0
2018/19	\$350,908	\$22,713	\$60,517	\$93,909	\$0
2019/20	\$398,771	\$720	\$57,170	\$100,491	\$0

Note: Information was not available to separate the investment expenses from the investment income nor was information available to separate the realized and unrealized gains and losses.



Other Reconciliations

Table II-F

Advance Employer Contribution

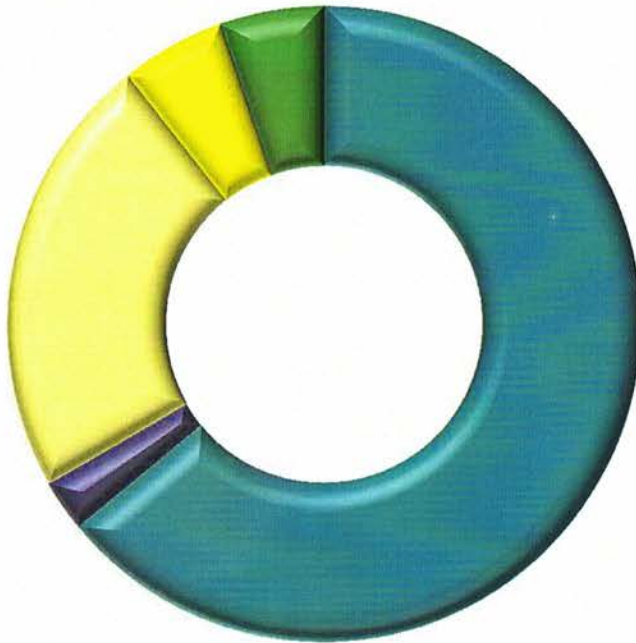
Advance Employer Contribution as of October 1, 2019	\$0
Additional Employer Contribution	\$700,022
Minimum Required Contribution	<u>(\$700,022)</u>
Net Increase in Advance Employer Contribution	\$0
Advance Employer Contribution as of October 1, 2020	<u><u>\$0</u></u>



Summary of Participant Data

Table III-A

As of October 1, 2020



Actively Employed Participants

Active Participants	48
DROP Participants	0

Inactive Participants

Deferred Vested Participants	2
Due a Refund of Contributions	0
Deferred Beneficiaries	0

Participants Receiving a Benefit

Service Retirements	17
Disability Retirements	4
Beneficiaries Receiving	4

Total Participants 75

Number of Participants Included in Prior Valuations

	<i>Active</i>	<i>DROP</i>	<i>Inactive</i>	<i>Retired</i>	<i>Total</i>
October 1, 2011	N/A	N/A	N/A	N/A	N/A
October 1, 2012	N/A	N/A	N/A	N/A	N/A
October 1, 2013	N/A	N/A	N/A	N/A	N/A
October 1, 2014	N/A	N/A	N/A	N/A	N/A
October 1, 2015	40	0	3	19	62
October 1, 2016	41	0	3	21	65
October 1, 2017	46	0	3	21	70
October 1, 2018	49	0	3	21	73
October 1, 2019	47	0	2	24	73
October 1, 2020	48	0	2	25	75



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, 2019</u>	47	0	1	0	1	18	3	3	73
<u>Change in Status</u>									
Re-employed									
Terminated	(2)		1	1					
Retired	(1)				(1)	1	1		
<u>Participation Ended</u>									
Transferred Out									
Cashed Out				(1)					(1)
Died						(2)			(2)
<u>Participation Began</u>									
Newly Hired	4								4
Transferred In									
New Beneficiary								1	1
<u>Other Adjustment</u>									
<u>October 1, 2020</u>	48	0	2	0	0	17	4	4	75

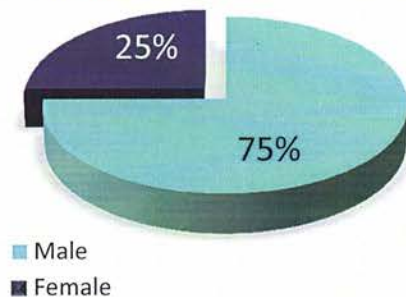


Active Participant Data

Table III-C

As of October 1, 2020

Gender Mix



Average Age	47.8 years
Average Service	9.1 years
Total Annualized Compensation for the Prior Year	\$3,092,832
Total Expected Compensation for the Current Year	\$2,453,333
Average Increase in Compensation for the Prior Year	2.23%
Expected Increase in Compensation for the Current Year	5.00%



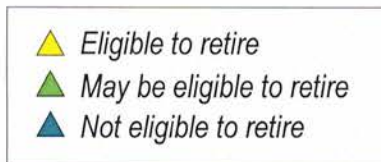
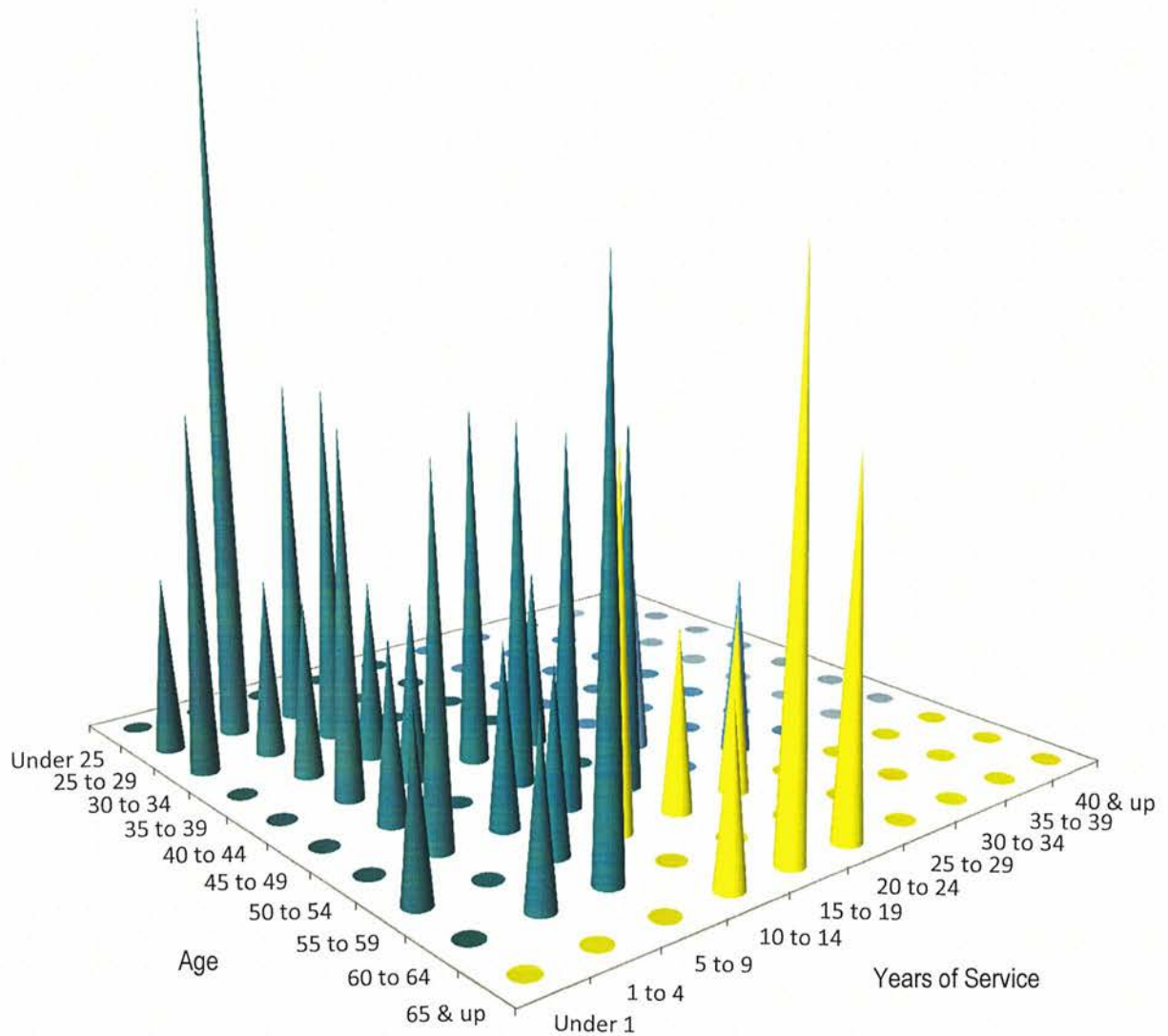
Active Participant Statistics From Prior Valuations

	Average Age	Average Service	Average Salary	Average Expected Salary Increase	Average Actual Salary Increase
October 1, 2011	N/A	N/A	N/A	N/A	N/A
October 1, 2012	N/A	N/A	N/A	N/A	N/A
October 1, 2013	N/A	N/A	N/A	N/A	N/A
October 1, 2014	N/A	N/A	N/A	N/A	N/A
October 1, 2015	47.0	8.0	\$53,766	N/A	N/A
October 1, 2016	49.0	9.0	\$52,055	5.00%	0.77%
October 1, 2017	47.2	8.3	\$56,028	5.00%	7.69%
October 1, 2018	48.1	8.8	\$62,399	5.00%	6.38%
October 1, 2019	47.6	9.0	\$64,717	5.00%	4.30%
October 1, 2020	47.8	9.1	\$64,434	5.00%	2.23%



Active Age-Service Distribution

Table III-D



Active Age-Service-Salary Table

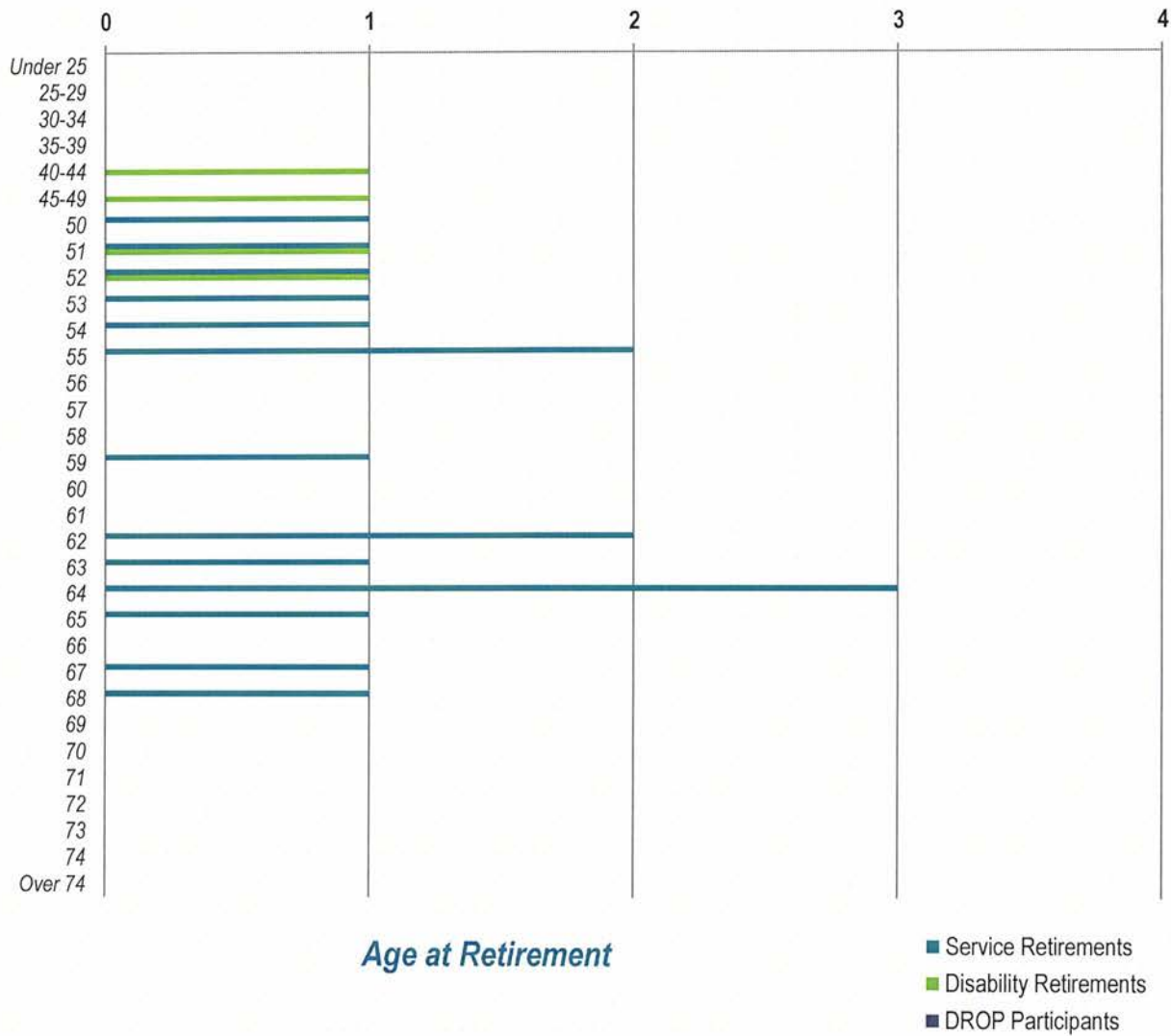
Table III-E

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
Avg.Pay	0	0	0	0	0	0	0	0	0	0	0
25 to 29	1	4	2	0	0	0	0	0	0	0	7
Avg.Pay	45,863	44,492	40,363	0	0	0	0	0	0	0	43,508
30 to 34	2	1	2	0	0	0	0	0	0	0	5
Avg.Pay	35,344	42,900	67,028	0	0	0	0	0	0	0	49,528
35 to 39	0	1	1	0	0	0	0	0	0	0	2
Avg.Pay	0	40,229	47,333	0	0	0	0	0	0	0	43,781
40 to 44	0	2	1	2	1	0	0	0	0	0	6
Avg.Pay	0	126,253	60,646	90,600	40,237	0	0	0	0	0	89,098
45 to 49	0	1	0	2	0	1	0	0	0	0	4
Avg.Pay	0	53,729	0	88,923	0	66,744	0	0	0	0	74,580
50 to 54	0	2	1	2	2	0	1	0	0	0	8
Avg.Pay	0	47,988	44,067	90,769	87,782	0	111,980	0	0	0	76,140
55 to 59	1	0	1	2	1	1	0	0	0	0	6
Avg.Pay	30,606	0	79,779	63,022	83,517	84,572	0	0	0	0	67,420
60 to 64	0	1	3	0	0	0	0	0	0	0	4
Avg.Pay	0	64,699	66,476	0	0	0	0	0	0	0	66,032
65 & up	0	0	0	1	3	2	0	0	0	0	6
Avg.Pay	0	0	0	41,754	53,586	69,943	0	0	0	0	57,066
Total	4	12	11	9	7	4	1	0	0	0	48
Avg.Pay	36,789	60,667	58,730	78,709	65,725	72,801	111,980	0	0	0	64,434



Inactive Participant Data

Table III-F

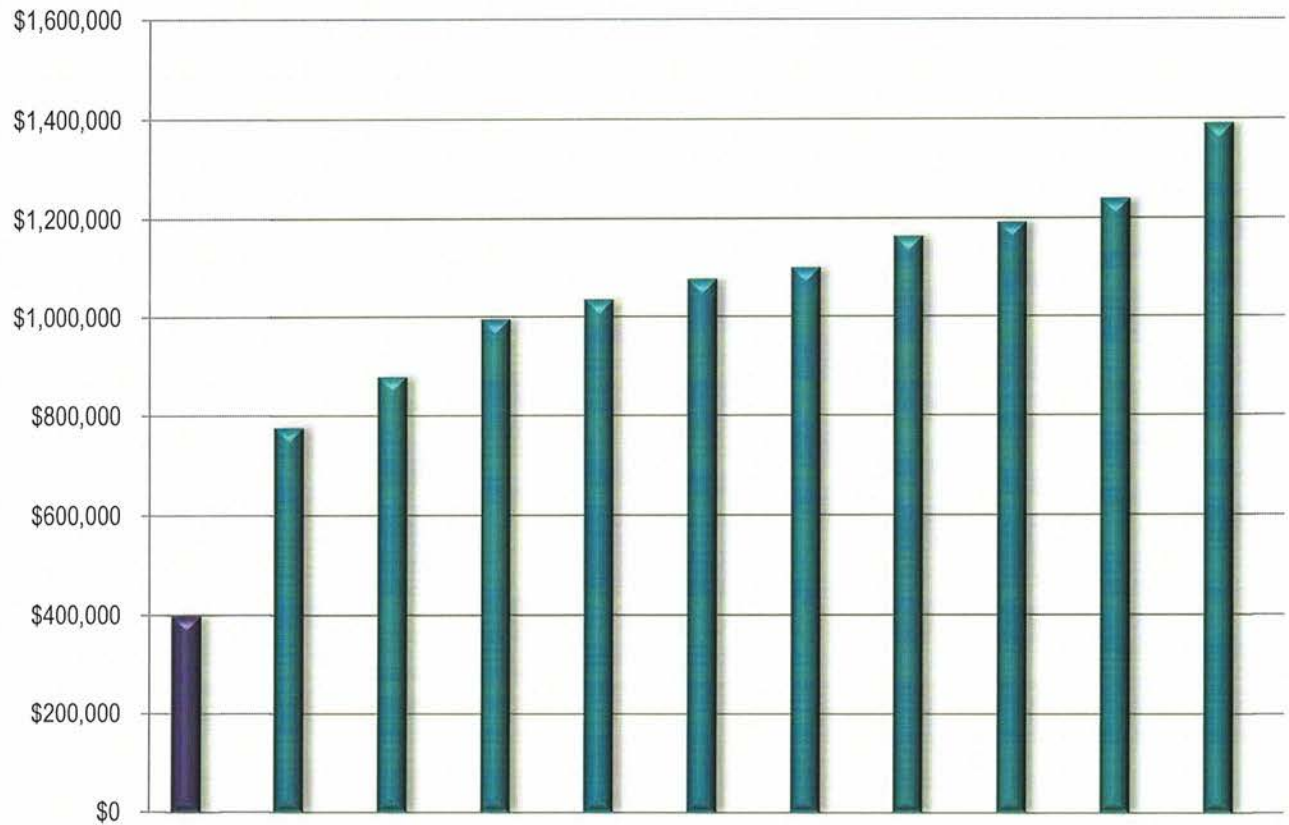
Average Monthly Benefit

Service Retirements	\$1,492.94
Disability Retirements	\$1,379.95
Beneficiaries Receiving	\$1,431.53
DROP Participants	Not applicable
Deferred Vested Participants	\$1,093.21
Deferred Beneficiaries	Not applicable



Projected Benefit Payments

Table III-G

Actual

For the period October 1, 2019 through September 30, 2020

\$399,491

Projected

For the period October 1, 2020 through September 30, 2021

\$777,061

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

\$880,081

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

\$996,271

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

\$1,036,001

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

\$1,078,084

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

\$1,101,180

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

\$1,165,248

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

\$1,193,556

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

\$1,239,585

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

\$1,391,147



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**

Frozen initial liability cost method. Under this actuarial cost method, an unfunded liability is developed at the inception of the plan using the individual entry age normal cost method. Over time, this unfunded liability is adjusted to reflect changes in the entry age normal accrued liability due to plan amendments and changes in actuarial assumptions and methods. The employer makes a periodic contribution towards the unfunded liability which is intended to eliminate the unfunded liability over a pre-determined period. In addition, each year the total projected liability in excess of the unfunded liability, accumulated assets, and future employee contributions is divided by the present value of future compensation to develop a level funding percentage for the plan as a whole. The level funding percentage is then multiplied by the covered payroll for the year immediately following the valuation date to determine the normal cost for that year.

2. **Amortization Method**

The unfunded actuarial accrued liability is amortized as a level dollar amount over a period of up to 19 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 net investment appreciation (or depreciation).

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

7.50% 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.



Summary of Actuarial Methods and Assumptions

Table IV-A

(continued)

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 (general employees), or

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 (police officers)
- 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 (general employees), or

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 (police officers)
- Disability: Sex-distinct rates set forth in the Wyatt 1985 Disability Study (Class 2); 25% of disabilities for general employees and 75% of disabilities for police officers are assumed to occur in the line of duty.
- Termination: Sex-distinct rates set forth in the Scale 155 Table



Summary of Actuarial Methods and Assumptions

Table IV-A

(continued)

- Retirement: With respect to general employees, retirement is assumed to occur at the rate of 5% at each of ages 55 through 64, 60% at age 65, 40% at each of ages 66 through 69, and 100% at age 70; with respect to police officers who have earned less than 20 years of service, retirement is assumed to occur at the rate of 5% at each of ages 50 through 54, 70% at age 55, 40% at each of ages 56 through 59, and 100% at age 60; with respect to police officers who have earned at least 20 years of service, retirement is assumed to occur at the rate of 5% at each of ages 50 and 51, 70% at age 52, 40% at each of ages 53 through 56, and 100% at age 57.

7. Marriage Assumption

All non-retired participants are assumed to be married, with husbands assumed to be three years older than wives.

8. Form of Payment

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

9. Expenses

Administrative expenses are assumed to be equal to the actual prior year's expenses. 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, the mortality basis was changed from the RP-2000 Combined and Blue Collar Mortality Tables with generational improvements in mortality using Scale BB to selected PUB-2010 Mortality Tables with generational improvements in mortality using Scale MP-2018.

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

- (1) Effective October 1, 2017, the mortality basis was changed from a 2009 projection of the RP-2000 White Collar Mortality Table to the RP-2000 Combined Mortality Table with full generational improvements in mortality using Scale BB.*
- (2) Effective October 1, 2017, the assumed withdrawal and disability rates were changed to the tables described in Table IV-A.*
- (3) Effective October 1, 2017, the amortization payment towards the unfunded accrued liability was changed from an increasing payment based on 4.00% annual compounded increases in total covered payroll to a level-dollar payment.*



Summary of Plan Provisions

Table V-A

1. Monthly Accrued Benefit

- 2.25% of Average Final Compensation multiplied by Credited Service (with respect to contributing general employees); or
- 2.75% of Average Final Compensation multiplied by Credited Service earned prior to October 1, 2006 plus 3.00% of Average Final Compensation multiplied by Credited Service earned after September 30, 2006 (with respect to contributing police officers); or
- 15.00% of Average Final Compensation multiplied by the first two years of Credited Service plus 3.00% of Average Final Compensation multiplied by Credited Service in excess of two years (with respect to the Town Manager); or
- 2.00% of Average Final Compensation multiplied by Credited Service (with respect to non-contributing employees)

2. Normal Retirement Age and Benefit

- **Age**
 - Age 65 (general employees only), or
 - Age 55 with at least 10 years of Credited Service (police officers and Town Manager only), or
 - Age 52 with at least 20 years of Credited Service (police officers and Town Manager only)
- **Amount**
 - Monthly Accrued Benefit
- **Form of Payment**
 - Actuarially increased single life annuity (optional);
 - 10-year certain and life annuity (normal form of payment);
 - Actuarially equivalent 50% joint and contingent annuity (optional);
 - Actuarially equivalent 75% joint and contingent annuity (optional);
 - Actuarially equivalent 100% joint and contingent annuity (optional); or
 - Any other actuarially equivalent form of payment approved by the Board of Trustees

(All forms of payment guarantee the return of the employee's contributions to the plan.)



Summary of Plan Provisions

Table V-A

(continued)

3. Early Retirement Age and Benefit

- **Age**
Age 55 with at least 10 years of Credited Service (general employees only), or
Age 50 with at least 10 years of Credited Service (police officers and Town Manager only)
- **Amount**
Monthly Accrued Benefit (payable at Normal Retirement Age); or
Monthly Accrued Benefit reduced by 3% 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. Delayed Retirement Age and Benefit

- **Age**
After Normal Retirement Age
- **Amount**
Monthly Accrued Benefit
- **Form of Payment**
Same as for Normal Retirement

5. Deferred Vested Benefit

- **Age**
Any age with at least 10 years of Credited Service
- **Amount**
Monthly Accrued Benefit (payable at Normal Retirement Age); or
Monthly Accrued Benefit reduced by 3% 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



Summary of Plan Provisions

Table V-A

(continued)

6. Service Incurred Disability Retirement Eligibility and Benefit

- **Eligibility**
All participants who become disabled in the line-of-duty are eligible.
- **Amount**
A monthly benefit equal to the largest of (a), (b), or (c), as follows:
 - (a) Monthly Accrued Benefit; or
 - (b) 42% of salary in effect at the time of disability (for general employees only); or
 - (c) 70% of salary in effect at the time of disability (for police officers and Town Manager only)
- **Form of Payment**
Same as for Normal Retirement

7. Non-Service Incurred Disability Retirement Eligibility and Benefit

- **Eligibility**
10 years of Credited Service
- **Amount**
A monthly benefit equal to the larger of (a) or (b), as follows:
 - (a) Monthly Accrued Benefit; or
 - (b) 25% of salary in effect at the time of disability
- **Form of Payment**
Same as for Normal Retirement

8. Pre-Retirement Death Benefit

In the case of the death of a participant in the line-of-duty prior to his Normal Retirement Date, the participant's spouse will receive a monthly single life annuity equal to the larger of the participant's Monthly Accrued Benefit or 12% of salary in effect at the time of death. If there is no surviving spouse, the benefit is payable to the participant's dependent children until age 18.

9. Average Final Compensation

Average of the highest consecutive 60 months of Compensation out of the last 10 years



Summary of Plan Provisions

Table V-A

(continued)

10. Compensation

Total cash remuneration, excluding payments for unused vacation and sick time and excluding any other extraordinary compensation; annual compensation in excess of \$200,000 (as indexed) is excluded in accordance with Internal Revenue Code (IRC) §401(a)(17).

11. Credited Service

The completed years and months of service from the participant's date of hire until his date of termination, retirement, or death; service earned prior to participation is not considered for purposes of determining the amount of the Town Manager's benefit.

12. Participation Requirement

All full-time employees of the Town of Golden Beach, Florida

13. Participant Contributions

Participating employees must contribute 3.50% (general employees) or 6.00% (police officers and Town Manager) of their pensionable earnings in order to receive the higher benefit formula multiplier; employee contributions are accumulated with interest at the rate of 5.00% per annum.

14. Definition of Actuarially Equivalent

- **Interest Rate**
7.00% per annum
- **Mortality Table**
1983 Group Annuity Mortality Table for males, with the participant's age set forward five years in the case of a disabled participant

15. Plan Effective Date

October 1, 1978



Summary of Plan Amendments

Table V-B

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

The following additional plan amendments were adopted during the past 10 years and were reflected in prior valuation reports:

- (1) *The Town Manager (and future Town Managers) was allowed to participate in the plan as a police officer after earning 10 years of service. (Ordinance 576.17)*

