City of Indian Harbour Beach
Police Officers' Supplemental Pension Plan

Actuarial Valuation
As of October 1, 2019

Determines the Contribution
For the 2019/20 Fiscal Year

Southern Actuarial Services

Table of Contents

March 19, 2020

Introduction

This report presents the results of the October 1, 2019 actuarial valuation for the City of Indian Harbour Beach Police Officers' Supplemental 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, 2019 and to determine the minimum required contribution under Chapter 112, Florida Statutes, for the 2019/20 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 normal cost rate.

Minimum Required Contribution

Table I-A shows the development of the minimum required contribution for the 2019/20 plan year. The minimum required contribution rate is 3.74% of covered payroll, which represents a decrease of 0.09% of payroll from the prior valuation.

The normal cost rate is 3.58%, which is 0.09% of payroll less 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 decreased by 0.09% of payroll due to demographic experience. The market value of assets only earned 4.98% during the 2018/19 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 2019/20 minimum required contribution will be equal to 3.74% multiplied by the total pensionable earnings for the 2019/20 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 $550,378. As illustrated in Table I-A, current assets are sufficient to cover $233,013 of this amount and the employer's 2019/20 expected contribution will cover $39,938 of this amount, leaving $277,427 to be covered by future employer funding beyond the 2019/20 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, 2019, the advance employer contribution is $80,374, which is equal to the advance employer contribution as of October 1, 2018 plus $4,998 of actual employer contributions in excess of the minimum required contribution for the 2018/19 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 2019/20 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. In this case, the immediate application of the entire balance of the advance employer contribution as of October 1, 2019 would reduce the normal cost rate to 2.68% of payroll and would reduce the minimum required contribution for the 2019/20 plan year to 2.79% 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 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-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. 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, 2019, 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. 17-04927

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

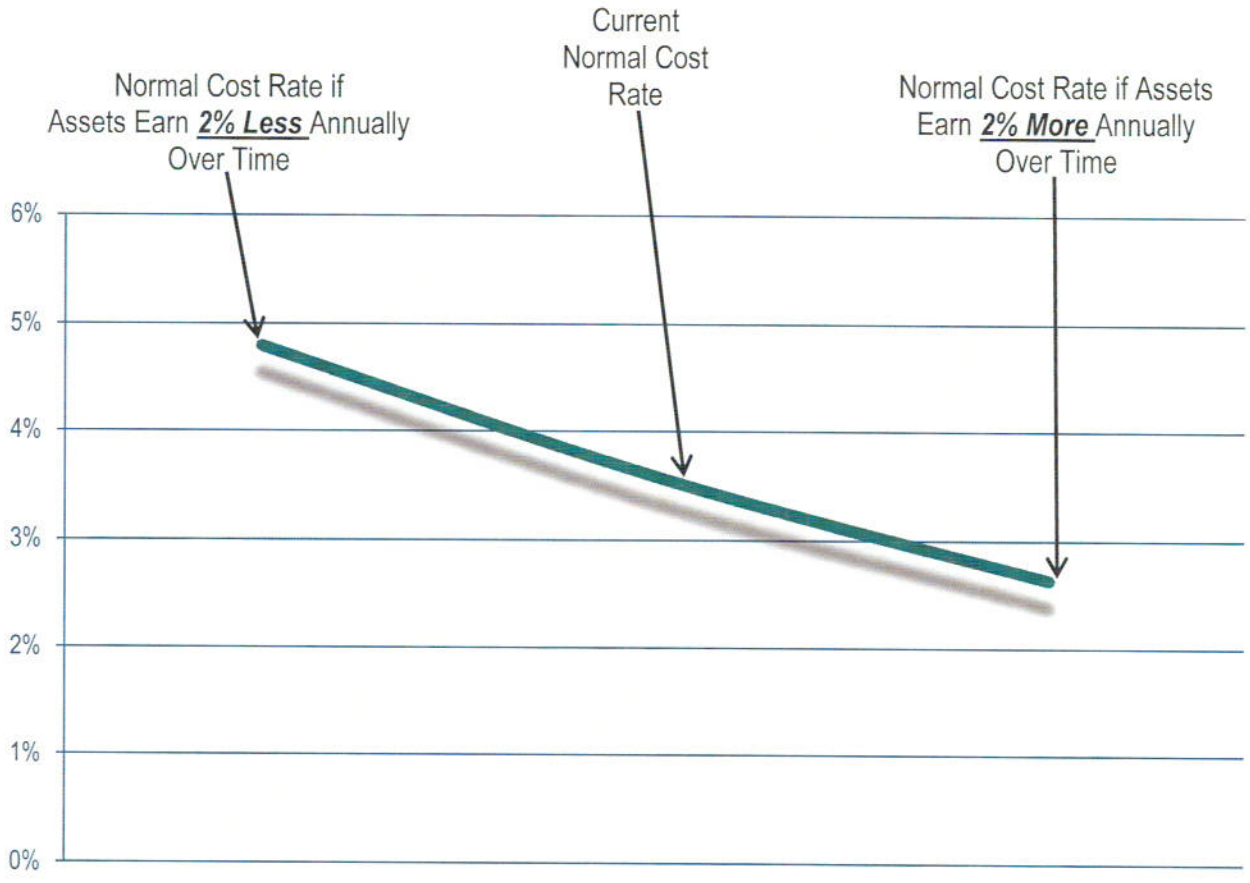
Table I-A

	For the 2019/20 Plan Year
Present Value of Future Benefits	$458,648
Present Value of Future Administrative Expenses	$91,730
Actuarial Value of Assets	($233,013)
Present Value of Future Employee Contributions	$0
Present Value of Future Normal Costs	$317,365
Present Value of Future Payroll	*÷ $8,853,881*
Normal Cost Rate	*= 3.5845%*
Expected Payroll	*x $1,068,248*
Normal Cost	$38,291
Adjustment to Reflect Quarterly Employer Contributions	$1,647
Preliminary Employer Contribution for the 2019/20 Plan Year	$39,938
Expected Payroll for the 2019/20 Plan Year	*÷ $1,068,248*
Minimum Required Contribution Rate	**3.74%**

(The actual contribution should be based on the minimum required contribution rate multiplied by the actual payroll for the 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	3.67%
Increase (decrease) due to investment gains and losses	0.00%
Increase (decrease) due to demographic experience	-0.09%
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	3.58%

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	$236,981	$236,981	$236,981
Termination benefits	$0	$0	$0
Disability benefits	$0	$0	$0
Death benefits	$0	$0	$0
Refund of employee contributions	$0	$0	$0
Sub-total	**$236,981**	**$236,981**	**$236,981**
Deferred Vested Participants			
Retirement benefits	$30,415	$30,415	$30,415
Termination benefits	$0	$0	$0
Disability benefits	$0	$0	$0
Death benefits	$0	$0	$0
Refund of employee contributions	$0	$0	$0
Sub-total	**$30,415**	**$30,415**	**$30,415**
Due a Refund of Contributions	**$0**	**$0**	**$0**
Deferred Beneficiaries	**$0**	**$0**	**$0**
Retired Participants			
Service retirements	$191,252	$191,252	$191,252
Disability retirements	$0	$0	$0
Beneficiaries receiving	$0	$0	$0
DROP participants	$0	$0	$0
Sub-total	**$191,252**	**$191,252**	**$191,252**
Grand Total	**$458,648**	**$458,648**	**$458,648**
Present Value of Future Payroll	$8,853,881	$8,853,881	$8,853,881
Present Value of Future Employee Contribs.	$0	$0	$0
Present Value of Future Employer Contribs.	$317,365	$317,365	$317,365

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	$150,171	$150,171	$150,171
Termination benefits	$0	$0	$0
Disability benefits	$0	$0	$0
Death benefits	$0	$0	$0
Refund of employee contributions	$0	$0	$0
Sub-total	**$150,171**	**$150,171**	**$150,171**
Deferred Vested Participants			
Retirement benefits	$30,415	$30,415	$30,415
Termination benefits	$0	$0	$0
Disability benefits	$0	$0	$0
Death benefits	$0	$0	$0
Refund of employee contributions	$0	$0	$0
Sub-total	**$30,415**	**$30,415**	**$30,415**
Due a Refund of Contributions	**$0**	**$0**	**$0**
Deferred Beneficiaries	**$0**	**$0**	**$0**
Retired Participants			
Service retirements	$191,252	$191,252	$191,252
Disability retirements	$0	$0	$0
Beneficiaries receiving	$0	$0	$0
DROP participants	$0	$0	$0
Sub-total	**$191,252**	**$191,252**	**$191,252**
Grand Total	**$371,838**	**$371,838**	**$371,838**
Funded Percentage	84.28%	84.28%	84.28%

(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	$150,171	$150,171	$150,171
Termination benefits	$0	$0	$0
Disability benefits	$0	$0	$0
Death benefits	$0	$0	$0
Refund of employee contributions	$0	$0	$0
Sub-total	**$150,171**	**$150,171**	**$150,171**
Deferred Vested Participants			
Retirement benefits	$30,415	$30,415	$30,415
Termination benefits	$0	$0	$0
Disability benefits	$0	$0	$0
Death benefits	$0	$0	$0
Refund of employee contributions	$0	$0	$0
Sub-total	**$30,415**	**$30,415**	**$30,415**
Due a Refund of Contributions	**$0**	**$0**	**$0**
Deferred Beneficiaries	**$0**	**$0**	**$0**
Retired Participants			
Service retirements	$191,252	$191,252	$191,252
Disability retirements	$0	$0	$0
Beneficiaries receiving	$0	$0	$0
DROP participants	$0	$0	$0
Sub-total	**$191,252**	**$191,252**	**$191,252**
Grand Total	**$371,838**	**$371,838**	**$371,838**

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	$160,224	$160,224	$160,224
Termination benefits	$0	$0	$0
Disability benefits	$0	$0	$0
Death benefits	$0	$0	$0
Refund of employee contributions	$0	$0	$0
Sub-total	**$160,224**	**$160,224**	**$160,224**
Deferred Vested Participants			
Retirement benefits	$30,415	$30,415	$30,415
Termination benefits	$0	$0	$0
Disability benefits	$0	$0	$0
Death benefits	$0	$0	$0
Refund of employee contributions	$0	$0	$0
Sub-total	**$30,415**	**$30,415**	**$30,415**
Due a Refund of Contributions	**$0**	**$0**	**$0**
Deferred Beneficiaries	**$0**	**$0**	**$0**
Retired Participants			
Service retirements	$191,252	$191,252	$191,252
Disability retirements	$0	$0	$0
Beneficiaries receiving	$0	$0	$0
DROP participants	$0	$0	$0
Sub-total	**$191,252**	**$191,252**	**$191,252**
Grand Total	**$381,891**	**$381,891**	**$381,891**

Actuarial Value of Assets

Table II-A

Market Value of Assets as of October 1, 2019	$313,387
Minus advance employer contributions	($80,374)
Actuarial Value of Assets as of October 1, 2019	**$233,013**

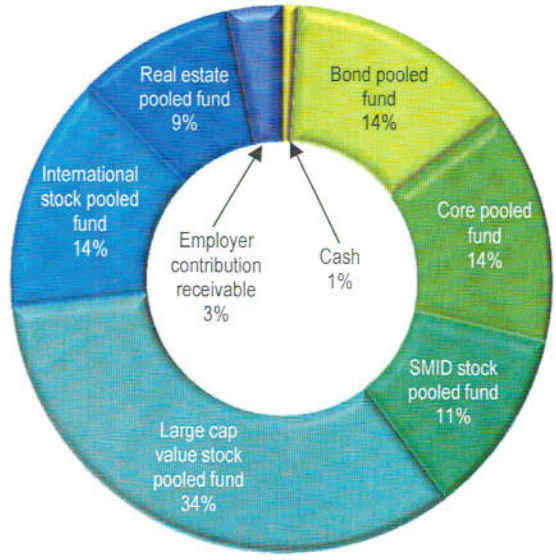
Historical Actuarial Value of Assets

October 1, 2010	$29,138
October 1, 2011	$42,127
October 1, 2012	$67,500
October 1, 2013	$96,065
October 1, 2014	$115,439
October 1, 2015	$125,496
October 1, 2016	$147,043
October 1, 2017	$182,508
October 1, 2018	$197,427
October 1, 2019	$233,013

Market Value of Assets

Table II-B

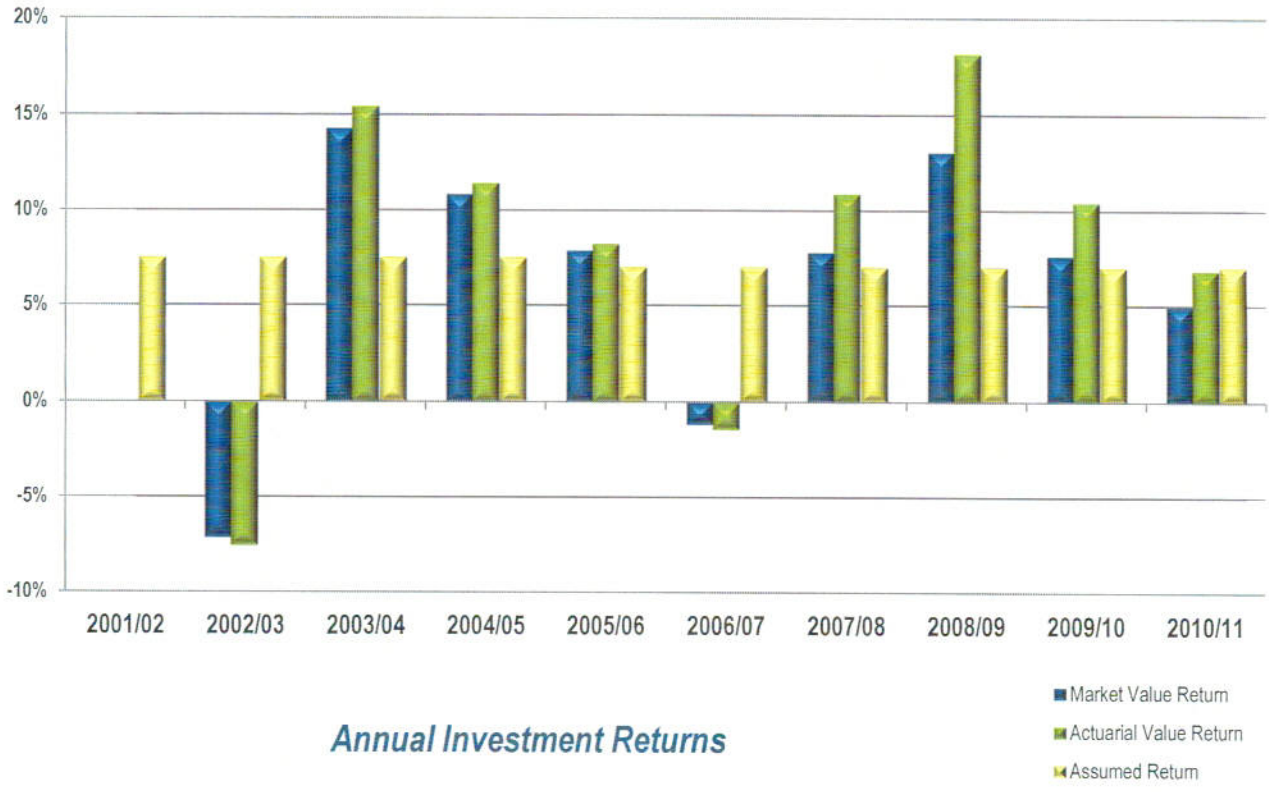
	As of October 1, 2019
Market Value of Assets	**$313,387**
Cash	$2,727
Bond pooled fund	$43,633
Core pooled fund	$43,330
SMID stock pooled fund	$34,845
Large cap value stock pooled fund	$105,142
International stock pooled fund	$43,935
Real estate pooled fund	$29,391
Employer contribution receivable	$10,384



Historical Market Value of Assets	
October 1, 2010	$29,138
October 1, 2011	$46,386
October 1, 2012	$71,633
October 1, 2013	$100,198
October 1, 2014	$120,128
October 1, 2015	$173,381
October 1, 2016	$202,859
October 1, 2017	$243,683
October 1, 2018	$272,803
October 1, 2019	$313,387

Investment Return

Table II-C



Annual Investment Returns

Plan Year	Market Value Return	Actuarial Value Return	Assumed Return
2009/10	0.00%	0.00%	7.50%
2010/11	-7.12%	-7.53%	7.50%
2011/12	14.27%	15.45%	7.50%
2012/13	10.85%	11.43%	7.50%
2013/14	7.88%	8.23%	7.00%
2014/15	-1.17%	-1.43%	7.00%
2015/16	7.78%	10.90%	7.00%
2016/17	13.08%	18.15%	7.00%
2017/18	7.58%	10.45%	7.00%
2018/19	4.98%	6.85%	7.00%
10yr. Avg.	5.61%	6.97%	7.20%

Asset Reconciliation

Table II-D

	Market Value	Actuarial Value
As of October 1, 2018	**$272,803**	**$197,427**
Increases Due To:		
Employer Contributions	$48,839	$48,839
Employee Contributions	$0	$0
Service Purchase Contributions	$0	$0
Total Contributions	$48,839	$48,839
Interest and Dividends	$0	
Realized Gains (Losses)	$0	
Unrealized Gains (Losses)	$14,245	
Total Investment Income	$14,245	$14,245
Other Income	$0	
Total Income	**$63,084**	**$63,084**
Decreases Due To:		
Annual Benefit Payments	($16,760)	($16,760)
Refund of Employee Contributions	$0	$0
Total Benefit Payments	($16,760)	($16,760)
Investment Expenses	$0	
Administrative Expenses	($5,740)	($5,740)
Advance Employer Contribution		($4,998)
Total Expenses	**($22,500)**	**($27,498)**
As of October 1, 2019	**$313,387**	**$233,013**

Historical Trust Fund Detail

Table II-E

Income

Plan Year	Employer Contribs.	Chapter Contribs.	Employee Contribs.	Service Purchase Contribs.	Interest / Dividends	Realized Gains / Losses	Unrealized Gains / Losses	Other Income
2009/10	$36,398	$0	$0	$0	$0	$0	$0	$0
2010/11	$40,367	$0	$0	$0	$0	$0	-$2,787	$0
2011/12	$27,298	$0	$0	$0	$0	$0	$7,860	$0
2012/13	$28,747	$0	$0	$0	$0	$0	$8,839	$0
2013/14	$26,298	$0	$0	$0	$0	$0	$8,356	$0
2014/15	$68,454	$0	$0	$0	$0	$0	-$1,731	$0
2015/16	$35,117	$0	$0	$0	$0	$0	$14,089	$0
2016/17	$30,984	$0	$0	$0	$0	$0	$27,414	$0
2017/18	$35,955	$0	$0	$0	$0	$0	$18,869	$0
2018/19	$48,839	$0	$0	$0	$0	$0	$14,245	$0

Expenses

Plan Year	Annual Benefit Payments	Contrib. Refunds	Admin. Expenses	Invest. Expenses
2009/10	$7,260	$0	$0	$0
2010/11	$20,299	$0	$33	$0
2011/12	$6,360	$0	$3,551	$0
2012/13	$7,875	$0	$1,146	$0
2013/14	$8,460	$0	$6,264	$0
2014/15	$12,230	$0	$1,240	$0
2015/16	$12,180	$0	$7,548	$0
2016/17	$13,005	$0	$4,569	$0
2017/18	$15,800	$0	$9,904	$0
2018/19	$16,760	$0	$5,740	$0

Other Actuarial Adjustments

Plan Year	DROP Credits	Advance Employer Contribs.
2009/10	$0	$0
2010/11	$0	$4,259
2011/12	$0	-$126
2012/13	$0	$0
2013/14	$0	$556
2014/15	$0	$43,196
2015/16	$0	$7,931
2016/17	$0	$5,359
2017/18	$0	$14,201
2018/19	$0	$4,998

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

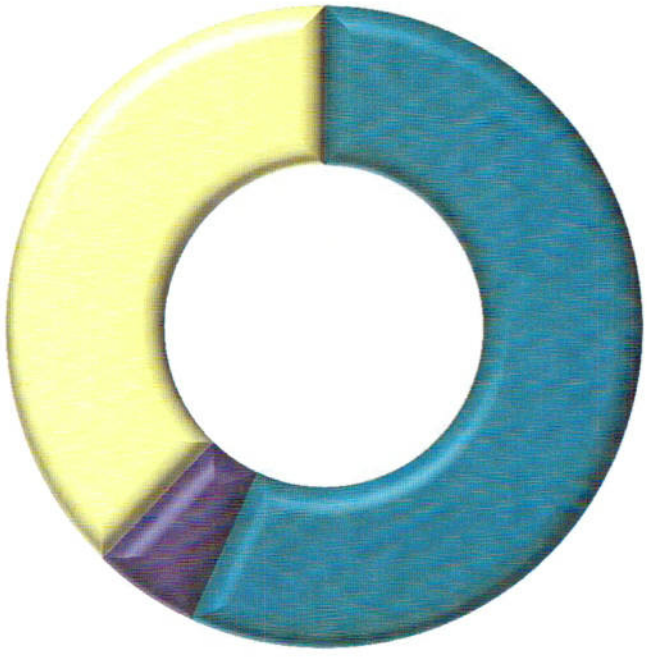
Table II-F

Advance Employer Contribution

Advance Employer Contribution as of October 1, 2018	$75,376
Additional Employer Contribution	$48,839
Minimum Required Contribution	($43,841)
Net Increase in Advance Employer Contribution	$4,998
Advance Employer Contribution as of October 1, 2019	$80,374

Summary of Participant Data

Table III-A



Participant Distribution by Status

As of October 1, 2019

Actively Employed Participants	
Active Participants	21
DROP Participants	0
Inactive Participants	
Deferred Vested Participants	2
Due a Refund of Contributions	0
Deferred Beneficiaries	0
Participants Receiving a Benefit	
Service Retirements	14
Disability Retirements	0
Beneficiaries Receiving	0
Total Participants	**37**

Number of Participants Included in Prior Valuations

	Active	*DROP*	*Inactive*	*Retired*	*Total*
October 1, 2010	N/A	N/A	N/A	N/A	N/A
October 1, 2011	19	0	1	5	25
October 1, 2012	N/A	N/A	N/A	N/A	N/A
October 1, 2013	19	0	2	7	28
October 1, 2014	N/A	N/A	N/A	N/A	N/A
October 1, 2015	19	0	2	10	31
October 1, 2016	19	0	2	10	31
October 1, 2017	20	0	1	11	32
October 1, 2018	20	0	2	13	35
October 1, 2019	21	0	2	14	37

Data Reconciliation

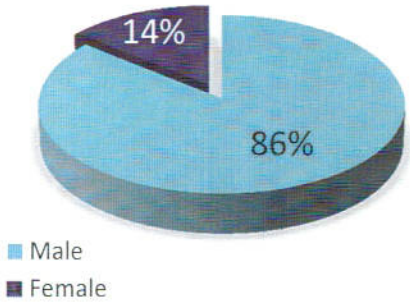
Table III-B

	Active	DROP	Deferred Vested	Due a Refund	Def. Benef.	Service Retiree	Disabled Retiree	Benef. Rec'v.	Total
October 1, 2018	20	0	2	0	0	13	0	0	**35**
Change in Status									
Re-employed									
Terminated	(3)								**(3)**
Retired	(1)					1			
Participation Ended									
Transferred Out									
Cashed Out									
Died									
Participation Began									
Newly Hired	5								**5**
Transferred In									
New Beneficiary									
Other Adjustment									
October 1, 2019	21	0	2	0	0	14	0	0	**37**

Active Participant Data

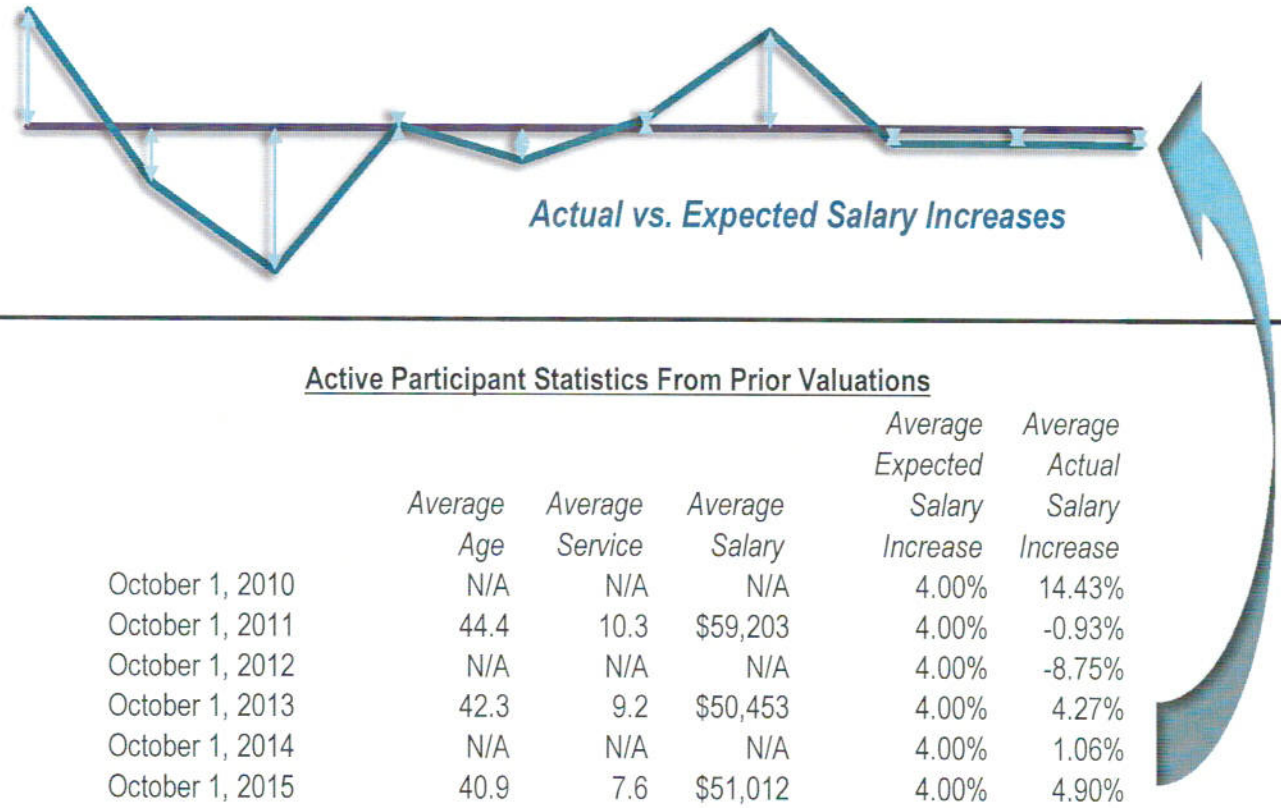
Table III-C

Gender Mix



As of October 1, 2019

Average Age	40.3 years
Average Service	7.5 years
Total Annualized Compensation for the Prior Year	$1,172,748
Total Expected Compensation for the Current Year	$1,068,248
Average Increase in Compensation for the Prior Year	2.58%
Expected Increase in Compensation for the Current Year	4.00%



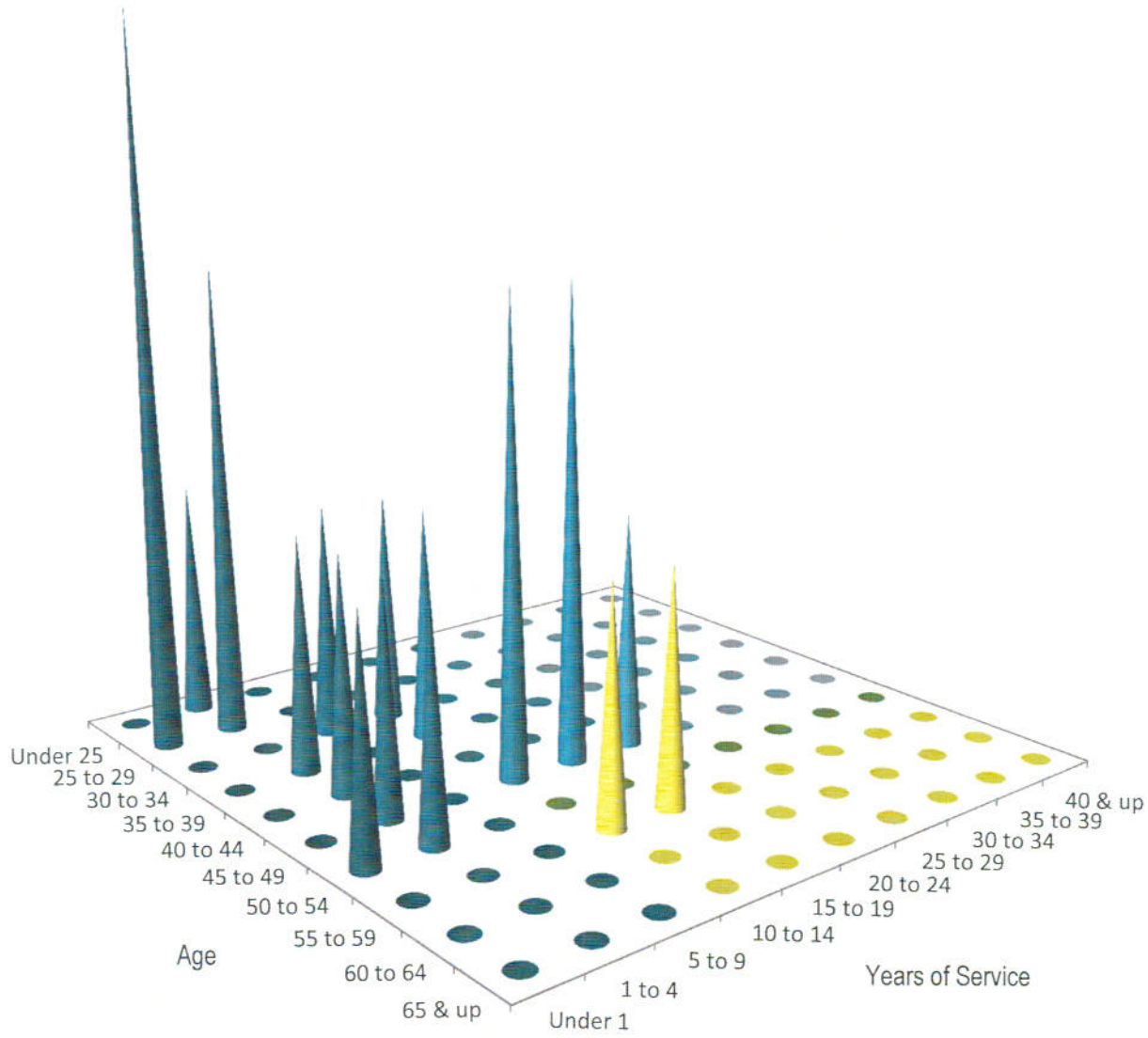
Actual vs. Expected Salary Increases

Active Participant Statistics From Prior Valuations

	Average Age	*Average Service*	*Average Salary*	*Average Expected Salary Increase*	*Average Actual Salary Increase*
October 1, 2010	N/A	N/A	N/A	4.00%	14.43%
October 1, 2011	44.4	10.3	$59,203	4.00%	-0.93%
October 1, 2012	N/A	N/A	N/A	4.00%	-8.75%
October 1, 2013	42.3	9.2	$50,453	4.00%	4.27%
October 1, 2014	N/A	N/A	N/A	4.00%	1.06%
October 1, 2015	40.9	7.6	$51,012	4.00%	4.90%
October 1, 2016	41.9	8.6	$57,595	4.00%	12.77%
October 1, 2017	43.1	9.2	$58,505	4.00%	2.64%
October 1, 2018	40.2	8.0	$56,853	4.00%	2.65%
October 1, 2019	40.3	7.5	$55,845	4.00%	2.58%

Active Age-Service Distribution

Table III-D



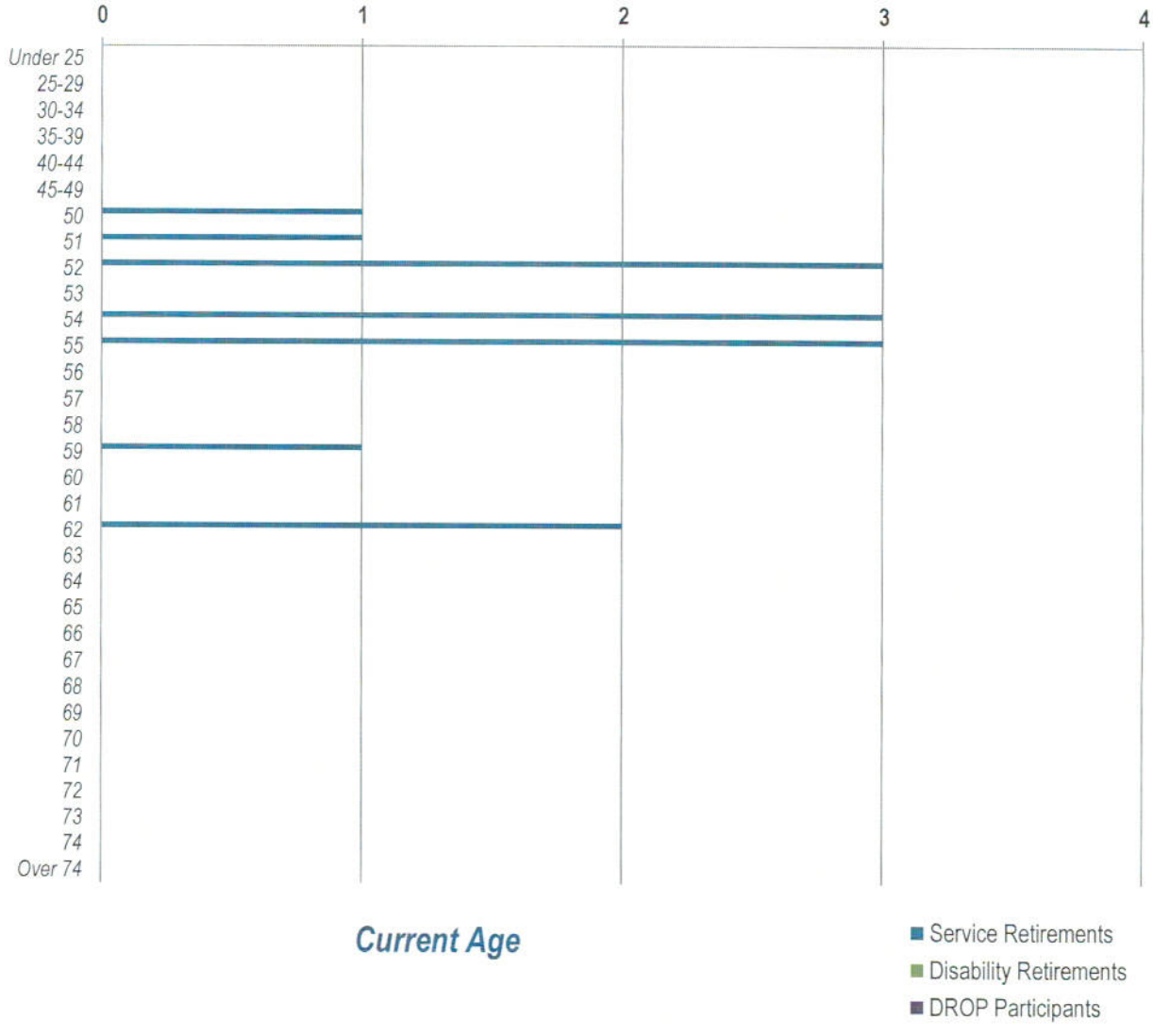
Active Age-Service-Salary Table

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	1	0	0	0	0	0	0	0	0	1
Avg.Pay	0	41,401	0	0	0	0	0	0	0	0	41,401
25 to 29	3	2	0	0	0	0	0	0	0	0	5
Avg.Pay	37,197	48,418	0	0	0	0	0	0	0	0	41,685
30 to 34	0	0	1	1	0	0	0	0	0	0	2
Avg.Pay	0	0	47,756	58,951	0	0	0	0	0	0	53,354
35 to 39	0	1	0	1	0	0	0	0	0	0	2
Avg.Pay	0	45,213	0	60,322	0	0	0	0	0	0	52,768
40 to 44	0	1	0	0	0	0	0	0	0	0	1
Avg.Pay	0	47,820	0	0	0	0	0	0	0	0	47,820
45 to 49	0	1	0	2	2	1	0	0	0	0	6
Avg.Pay	0	46,920	0	62,817	68,342	70,146	0	0	0	0	63,231
50 to 54	1	1	0	0	0	0	0	0	0	0	2
Avg.Pay	37,614	100,275	0	0	0	0	0	0	0	0	68,945
55 to 59	0	0	0	1	1	0	0	0	0	0	2
Avg.Pay	0	0	0	75,187	70,400	0	0	0	0	0	72,794
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	0	0	0	0	0	0	0	0	0	0
Avg.Pay	0	0	0	0	0	0	0	0	0	0	0
Total	4	7	1	5	3	1	0	0	0	0	21
Avg.Pay	37,301	54,066	47,756	64,019	69,028	70,146	0	0	0	0	55,845

Inactive Participant Data

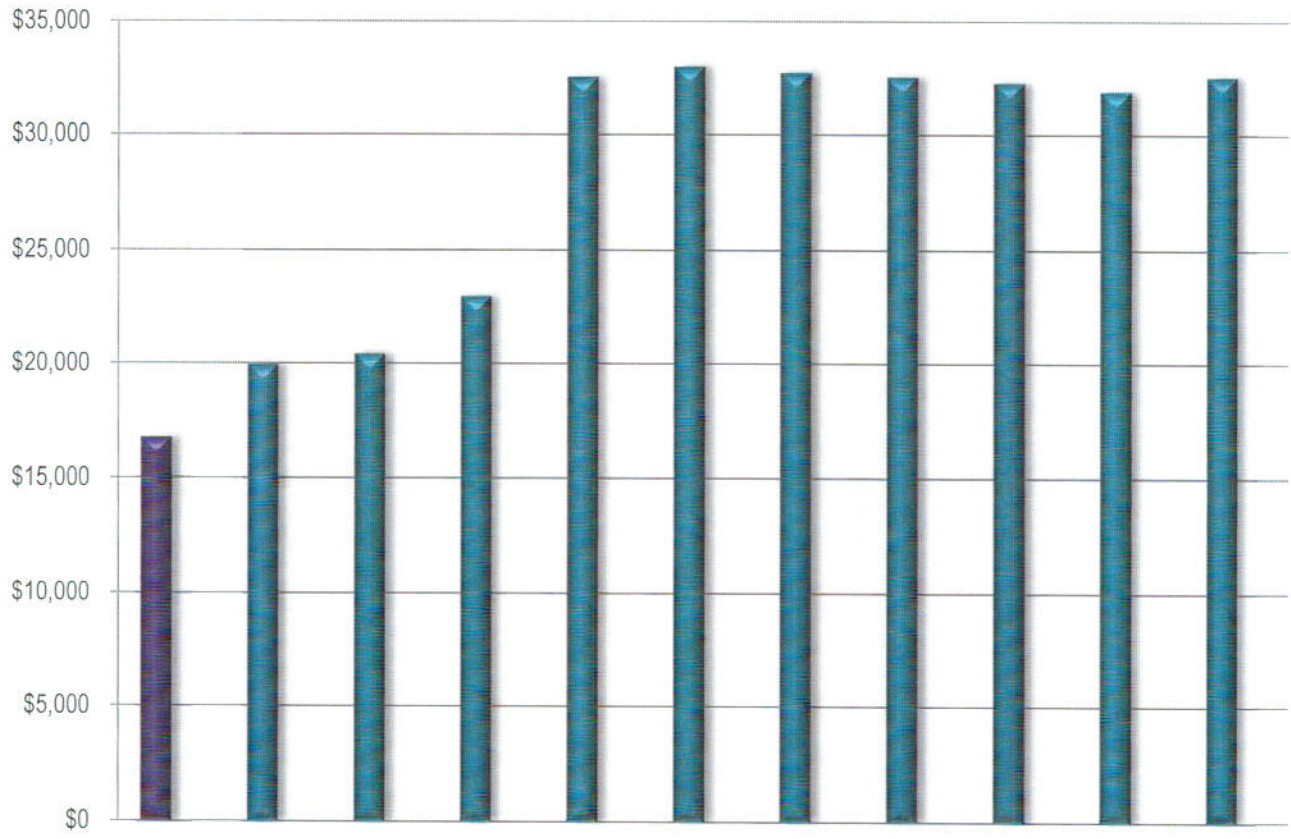
Table III-F



	Average Annual Benefit
Service Retirements	*$1,197.14*
Disability Retirements	*Not applicable*
Beneficiaries Receiving	*Not applicable*
DROP Participants	*Not applicable*
Deferred Vested Participants	*$1,320.00*
Deferred Beneficiaries	*Not applicable*

Projected Benefit Payments

Table III-G



For the period October 1, 2018 through September 30, 2019	$16,760
Projected	
For the period October 1, 2019 through September 30, 2020	$19,961
For the period October 1, 2020 through September 30, 2021	$20,457
For the period October 1, 2021 through September 30, 2022	$23,009
For the period October 1, 2022 through September 30, 2023	$32,530
For the period October 1, 2023 through September 30, 2024	$32,999
For the period October 1, 2024 through September 30, 2025	$32,738
For the period October 1, 2025 through September 30, 2026	$32,529
For the period October 1, 2026 through September 30, 2027	$32,301
For the period October 1, 2027 through September 30, 2028	$31,896
For the period October 1, 2028 through September 30, 2029	$32,541

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

Compensation is assumed to increase at the rate of 4.00% per annum, unless actual plan compensation is known for a prior plan year.

5. Decrements

- Pre-retirement mortality: None is assumed.
- Post-retirement mortality: Sex-distinct rates set forth in the RP-2000 Blue Collar Mortality Table, with full generational improvements in mortality using Scale BB
- Disability: None is assumed.
- Termination: None is assumed.
- Retirement: Retirement is assumed to occur at age 52.

6. Expenses

The present value of future benefits has been loaded by 20.00% to account for administrative expenses. 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 10 years:

(1) *Effective October 1, 2018, an administrative expense assumption was added equal to a 20% loading of the present value of future benefits.*

(2) *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 Blue Collar Mortality Table as required by State law.*

(3) *Effective October 1, 2013, the assumed interest (or discount) rate was decreased from 7.50% per annum to 7.00% per annum.*

(4) *Effective October 1, 2013, the mortality basis was changed from the RP-2000 Mortality Table for annuitants, projected to 2007 by Scale AA, to the RP-2000 Mortality Table for annuitants, projected to 2015 by Scale AA, both as published by the Internal Revenue Service (IRS) for purposes of Internal Revenue Code (IRC) section 430.*

Summary of Plan Provisions

Table V-A

1. **Accrued Benefit**

   $84.00 multiplied by the first 10 years of Credited Service plus $120.00 multiplied by Credited Service in excess of 10 years, to a maximum benefit of $2,400.00 per year

   (Note: The deferred vested participant is entitled to receive an additional $500.00 annual benefit.)

2. **Normal Retirement Age and Benefit**

   - **Age**
     Age 52
   - **Amount**
     Accrued Benefit payable annually as of each January 1
   - **Form of Payment**
     10-year certain and life annuity

3. **Early Retirement Age and Benefit**

   * **Age**
     Age 50 with at least 10 years of service
   * **Amount**
     Accrued Benefit payable annually as of each January 1
   * **Form of Payment**
     10-year certain and life annuity

4. **Participation Requirement**

   All police officers of the City of Indian Harbour Beach, Florida automatically become a participant in the plan on their date of hire.

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 10 years and were reflected in prior valuation reports:

(1) The plan was amended with respect to those individuals who retire after October 1, 2016 to increase the benefit formula from $60.00 for each year of service to $84.00 for each of the first 10 years of service plus $120.00 for each year of service in excess of 10 years, to a maximum benefit of $2,400.00 per year.

(2) The normal form of payment was changed from a single life annuity to a 10-year certain and life annuity for those individuals who retire after September 30, 2009.

(3) The plan was amended to add an early retirement benefit at age 50 if the participant has earned at least 10 years of service.