

RETIREMENT PLAN FOR THE POLICE OFFICERS
OF THE CITY OF CLERMONT

ACTUARIAL VALUATION
AS OF OCTOBER 1, 2018

DETERMINES THE CONTRIBUTION
FOR THE 2018/19 FISCAL YEAR



	<u>Page</u>
Discussion	1
<u>Funding Results</u>	
Table I-A	Minimum Required Contribution I-1
Table I-B	Sensitivity Analysis I-3
Table I-C	Gain and Loss Analysis I-4
Table I-D	Present Value of Future Benefits I-5
Table I-E	Present Value of Accrued Benefits I-6
Table I-F	Present Value of Vested Benefits I-7
Table I-G	Entry Age Normal Accrued Liability I-8
<u>Accounting Results</u>	
GASB 67/68 Supplement as of September 30, 2018	
<u>Assets</u>	
Table II-A	Actuarial Value of Assets II-1
Table II-B	Market Value of Assets II-2
Table II-C	Investment Return II-3
Table II-D	Asset Reconciliation II-4
Table II-E	Historical Trust Fund Detail II-5
Table II-F	Other Reconciliations II-6
Table II-G	Historical Chapter 175/185 Contributions II-8
<u>Data</u>	
Table III-A	Summary of Participant Data III-1
Table III-B	Data Reconciliation III-2
Table III-C	Active Participant Data III-3
Table III-D	Active Age-Service Distribution III-4
Table III-E	Active Age-Service-Salary Table III-5
Table III-F	Inactive Participant Data III-6
Table III-G	Projected Benefit Payments III-7
<u>Methods & Assumptions</u>	
Table IV-A	Summary of Actuarial Methods and Assumptions IV-1
Table IV-B	Changes in Actuarial Methods and Assumptions IV-3
<u>Plan Provisions</u>	
Table V-A	Summary of Plan Provisions V-1
Table V-B	Summary of Plan Amendments V-6



January 12, 2019

Introduction

This report presents the results of the October 1, 2018 actuarial valuation for the Retirement Plan for the Police Officers of the City of Clermont. 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, 2018 and to determine the minimum required contribution under Chapter 112, Florida Statutes, for the 2018/19 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 2018/19 plan year. The minimum required contribution rate is 20.67% of covered payroll, which represents a decrease of 1.91% of payroll from the prior valuation.

The normal cost rate is 19.96%, which is 1.79% lower 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 2.69% of payroll due to investment gains, decreased by 3.45% of payroll due to demographic experience, decreased by another 1.87% of payroll due to the plan amendment that is described below, and increased by 6.22% of payroll due to the assumption change that is described below. The market value of assets earned 13.33% during the 2016/17 plan year and earned 7.43% during the 2017/18 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 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 2018/19 minimum required contribution will be equal to 20.67% multiplied by the total pensionable earnings for the 2018/19 plan year for the active employees who are covered by the plan and reduced by the portion of the Chapter 175/185 contribution that is allowed to be recognized during the 2018/19 plan year. Furthermore, if an actuarial valuation is not prepared as of October 1, 2019, then the 20.67% contribution rate should also be applied to the covered payroll for the 2019/20 plan year and offset by the allowable Chapter 175/185 contribution in order to determine the minimum required contribution for that year. The allowable Chapter 175/185 contribution is \$211,000 plus one-half of the excess above \$211,000.

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 \$26,328,838. As illustrated in Table I-A, current assets are sufficient to cover \$18,238,809 of this amount, the employer's 2018/19 expected contribution will cover \$788,491 of this amount, and future employee contributions are expected to cover \$1,588,746 of this amount, leaving \$5,712,792 to be covered by future employer funding beyond the 2018/19 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, 2018, the advance employer contribution is \$45,454, which reflects the advance employer contribution of \$125,434 as of October 1, 2016 minus the net shortfall between the actual employer contributions and the minimum required contribution during the period October 1, 2016 through September 30, 2018 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 2018/19 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, 2018 would reduce the minimum required contribution for the 2018/19 plan year to 20.53% of payroll.

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, 2018, as well as a summary of the changes that have occurred since the previous valuation report was prepared.

Plan Amendment

Effective with the October 29, 2018 payroll, the employee contribution rate has been increased from 3.00% to 4.00% and, effective with the September 30, 2019 payroll, the employee contribution rate will be further increased to 5.00%. This change decreased the minimum required contribution for the 2018/19 plan year by 1.94% of payroll.

Assumption Change

Since the previous valuation was prepared, the assumed interest (or discount) rate has been reduced from 7.50% per annum to 7.00% per annum to reflect lower expected future investment earnings. This change increased the minimum required contribution for the 2018/19 plan year by 6.44% of payroll.

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
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 2018/19 Plan Year

Present Value of Future Benefits	\$25,939,742
Present Value of Future Administrative Expenses	\$389,096
Actuarial Value of Assets	(\$18,238,809)
Present Value of Future Employee Contributions	(\$1,588,746)
Present Value of Future Normal Costs	\$6,501,283
<hr/>	
Present Value of Future Payroll	÷ \$32,567,956
Normal Cost Rate	= 19.9622%
Expected Payroll	x \$3,813,876
<hr/>	
Normal Cost	\$761,334
Adjustment to Reflect Semi-Monthly Employer Contributions	\$27,157
Preliminary Employer Contribution for the 2018/19 Plan Year	\$788,491
<hr/>	
Expected Payroll for the 2018/19 Plan Year	÷ \$3,813,876

Minimum Required Contribution Rate 20.67%

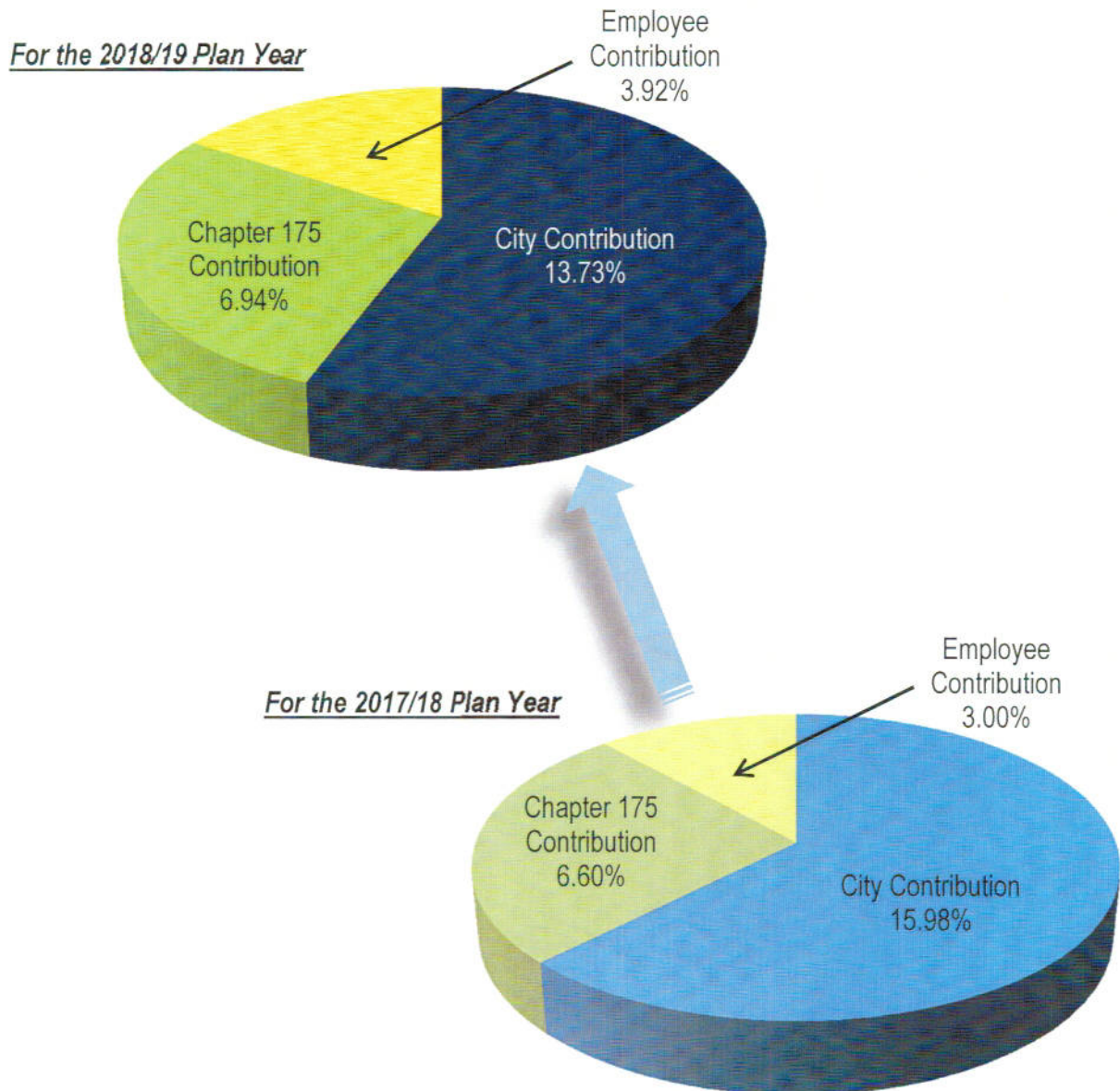
(The actual contribution should be based on the minimum required contribution rate multiplied by the actual payroll for the year.)



Minimum Required Contribution

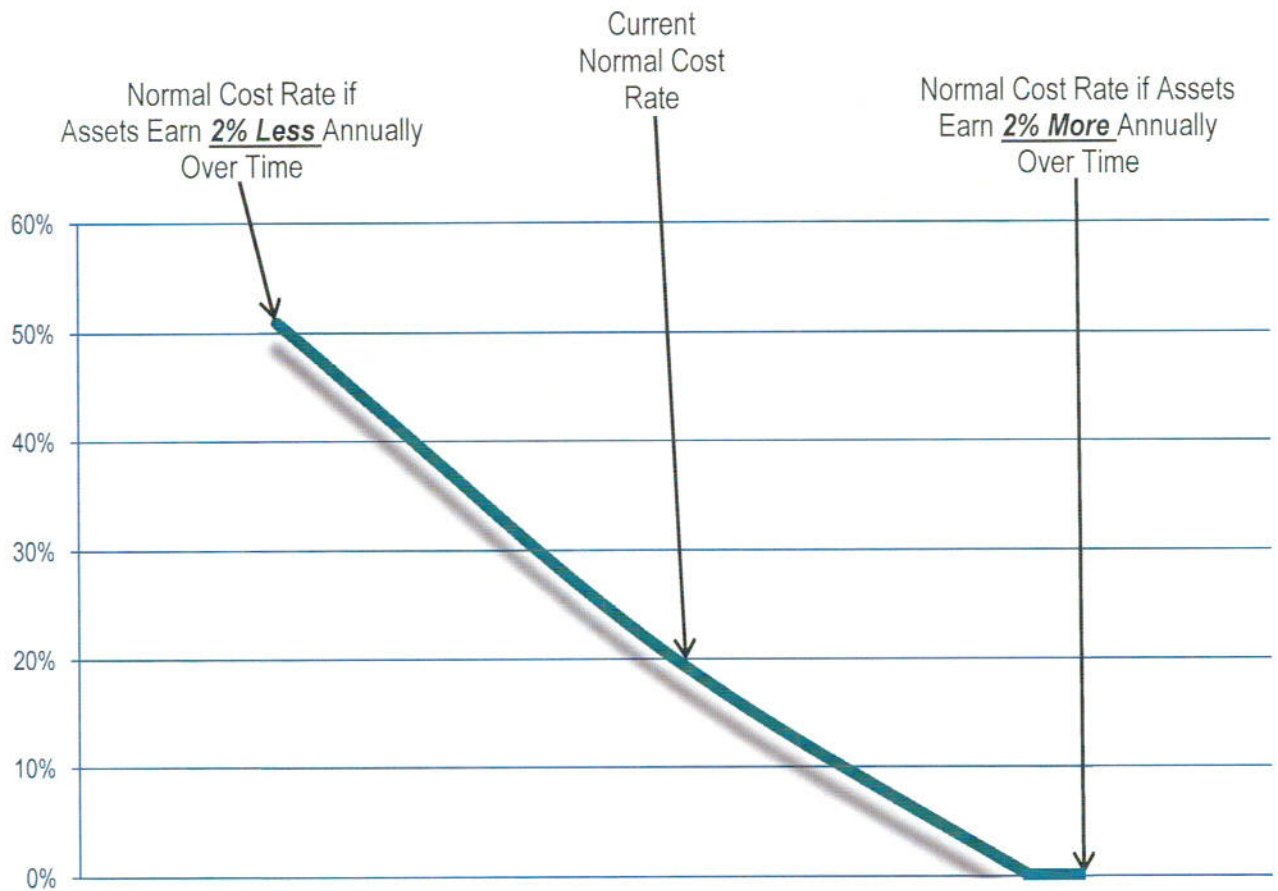
Table I-A
(continued)

The minimum required contribution rate of 20.67% includes both the City contribution and the allowable Chapter 185 contribution. In addition, employees are required to contribute 3.92% of pensionable earnings. The actual City contribution rate is expected to be approximately 13.73% based on the allowable Chapter 185 contribution for the previous year. The chart below shows the expected contribution rate by source for the 2018/19 plan year based on the expected payroll. A comparative chart shows the contribution rate by source for the previous plan year.



Sensitivity Analysis

Table I-B



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



Gain and Loss Analysis

Table I-C

Previous normal cost rate	21.75%
Increase (decrease) due to investment gains and losses	-2.69%
Increase (decrease) due to demographic experience	-3.45%
Increase (decrease) due to plan amendments	-1.87%
Increase (decrease) due to actuarial assumption changes	6.22%
Increase (decrease) due to actuarial method changes	0.00%
Current normal cost rate	<u>19.96%</u>



Present Value of Future Benefits

Table I-D

	<u>Old Assumptions w/o Amendment</u>	<u>Old Assumptions w/ Amendment</u>	<u>New Assumptions w/ Amendment</u>
<i><u>Actively Employed Participants</u></i>			
Retirement benefits	\$17,673,928	\$17,673,928	\$19,445,916
Termination benefits	\$442,809	\$442,809	\$514,693
Disability benefits	\$128,257	\$128,257	\$139,657
Death benefits	\$98,119	\$98,119	\$103,359
Refund of employee contributions	\$9,558	\$11,423	\$11,506
Sub-total	\$18,352,671	\$18,354,536	\$20,215,131
<i><u>Deferred Vested Participants</u></i>			
Retirement benefits	\$524,816	\$524,816	\$566,714
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$524,816	\$524,816	\$566,714
<i><u>Due a Refund of Contributions</u></i>	\$3,402	\$3,402	\$3,402
<i><u>Deferred Beneficiaries</u></i>	\$0	\$0	\$0
<i><u>Retired Participants</u></i>			
Service retirements	\$3,180,035	\$3,180,035	\$3,348,880
Disability retirements	\$944,047	\$944,047	\$997,137
Beneficiaries receiving	\$286,377	\$286,377	\$293,935
DROPP participants	\$487,285	\$487,285	\$514,543
Sub-total	\$4,897,744	\$4,897,744	\$5,154,495
<i><u>Grand Total</u></i>	<u>\$23,778,633</u>	<u>\$23,780,498</u>	<u>\$25,939,742</u>
Present Value of Future Payroll	\$31,679,754	\$31,679,754	\$32,567,956
Present Value of Future Employee Contribs.	\$950,391	\$1,544,432	\$1,588,746
Present Value of Future Employer Contribs.	\$4,946,112	\$4,353,964	\$6,501,283



Present Value of Accrued Benefits

Table I-E

	<u>Old Assumptions w/o Amendment</u>	<u>Old Assumptions w/ Amendment</u>	<u>New Assumptions w/ Amendment</u>
<i><u>Actively Employed Participants</u></i>			
Retirement benefits	\$7,024,352	\$7,024,352	\$7,577,128
Termination benefits	\$202,647	\$202,647	\$232,933
Disability benefits	\$88,885	\$88,885	\$96,131
Death benefits	\$45,891	\$45,891	\$47,691
Refund of employee contributions	\$5,604	\$5,604	\$5,623
Sub-total	\$7,367,379	\$7,367,379	\$7,959,506
<i><u>Deferred Vested Participants</u></i>			
Retirement benefits	\$524,816	\$524,816	\$566,714
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$524,816	\$524,816	\$566,714
<i><u>Due a Refund of Contributions</u></i>	\$3,402	\$3,402	\$3,402
<i><u>Deferred Beneficiaries</u></i>	\$0	\$0	\$0
<i><u>Retired Participants</u></i>			
Service retirements	\$3,180,035	\$3,180,035	\$3,348,880
Disability retirements	\$944,047	\$944,047	\$997,137
Beneficiaries receiving	\$286,377	\$286,377	\$293,935
DROPP participants	\$487,285	\$487,285	\$514,543
Sub-total	\$4,897,744	\$4,897,744	\$5,154,495
<i><u>Grand Total</u></i>	<u>\$12,793,341</u>	<u>\$12,793,341</u>	<u>\$13,684,117</u>
<i><u>Funded Percentage</u></i>	142.92%	142.92%	133.62%



Present Value of Vested Benefits

Table I-F

	Old Assumptions w/o Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
<i>Actively Employed Participants</i>			
Retirement benefits	\$6,666,431	\$6,666,431	\$7,188,758
Termination benefits	\$165,983	\$165,983	\$189,952
Disability benefits	\$83,063	\$83,063	\$89,727
Death benefits	\$39,349	\$39,349	\$40,783
Refund of employee contributions	\$18,655	\$18,655	\$19,090
Sub-total	\$6,973,481	\$6,973,481	\$7,528,310
<i>Deferred Vested Participants</i>			
Retirement benefits	\$524,816	\$524,816	\$566,714
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$524,816	\$524,816	\$566,714
<i>Due a Refund of Contributions</i>	\$3,402	\$3,402	\$3,402
<i>Deferred Beneficiaries</i>	\$0	\$0	\$0
<i>Retired Participants</i>			
Service retirements	\$3,180,035	\$3,180,035	\$3,348,880
Disability retirements	\$944,047	\$944,047	\$997,137
Beneficiaries receiving	\$286,377	\$286,377	\$293,935
DROP participants	\$487,285	\$487,285	\$514,543
Sub-total	\$4,897,744	\$4,897,744	\$5,154,495
<i>Grand Total</i>	<u>\$12,399,443</u>	<u>\$12,399,443</u>	<u>\$13,252,921</u>



Entry Age Normal Accrued Liability

Table I-G

	Old Assumptions w/o Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
<i>Actively Employed Participants</i>			
Retirement benefits	\$10,216,816	\$10,216,816	\$10,953,494
Termination benefits	\$256,652	\$256,652	\$293,119
Disability benefits	\$74,759	\$74,759	\$79,903
Death benefits	\$58,865	\$58,865	\$60,833
Refund of employee contributions	\$5,543	\$6,063	\$6,075
Sub-total	\$10,612,635	\$10,613,155	\$11,393,424
<i>Deferred Vested Participants</i>			
Retirement benefits	\$524,816	\$524,816	\$566,714
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$524,816	\$524,816	\$566,714
<i>Due a Refund of Contributions</i>	\$3,402	\$3,402	\$3,402
<i>Deferred Beneficiaries</i>	\$0	\$0	\$0
<i>Retired Participants</i>			
Service retirements	\$3,180,035	\$3,180,035	\$3,348,880
Disability retirements	\$944,047	\$944,047	\$997,137
Beneficiaries receiving	\$286,377	\$286,377	\$293,935
DROP participants	\$487,285	\$487,285	\$514,543
Sub-total	\$4,897,744	\$4,897,744	\$5,154,495
<i>Grand Total</i>	<u>\$16,038,597</u>	<u>\$16,039,117</u>	<u>\$17,118,035</u>



Actuarial Value of Assets

Table II-A

Market Value of Assets as of October 1, 2018	\$18,326,157
Minus DROP account balances	(\$41,894)
Minus advance employer contributions	(\$45,454)
Minus excess Chapter 175/185 contributions	\$0
Actuarial Value of Assets as of October 1, 2018	<u>\$18,238,809</u>

<u>Historical Actuarial Value of Assets</u>	
October 1, 2009	\$5,289,564
October 1, 2010	\$6,557,368
October 1, 2011	\$7,341,114
October 1, 2012	\$9,291,324
October 1, 2013	\$10,879,150
October 1, 2014	\$12,281,709
October 1, 2015	\$12,541,760
October 1, 2016	\$13,974,251
October 1, 2017	\$16,439,405
October 1, 2018	\$18,238,809

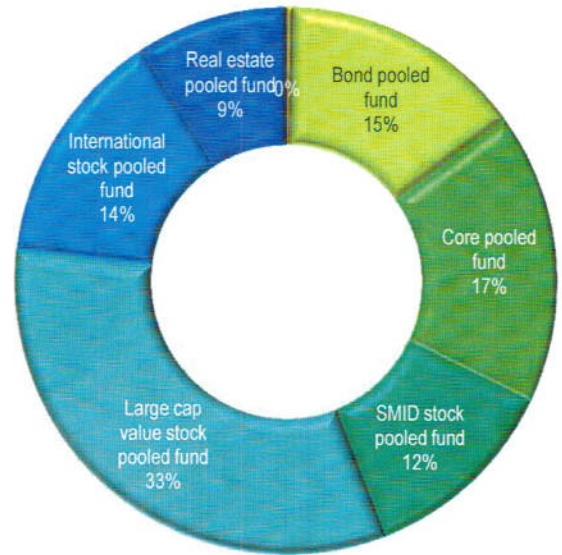


Market Value of Assets

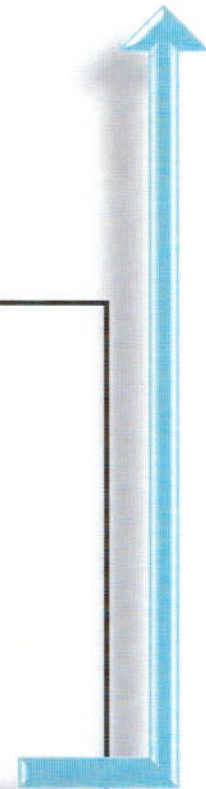
Table II-B

As of October 1, 2018

Market Value of Assets	<u>\$18,326,157</u>
Cash	\$73,305
Bond pooled fund	\$2,657,293
Core pooled fund	\$3,152,099
SMID stock pooled fund	\$2,199,139
Large cap value stock pooled fund	\$5,992,653
International stock pooled fund	\$2,602,314
Real estate pooled fund	\$1,649,354

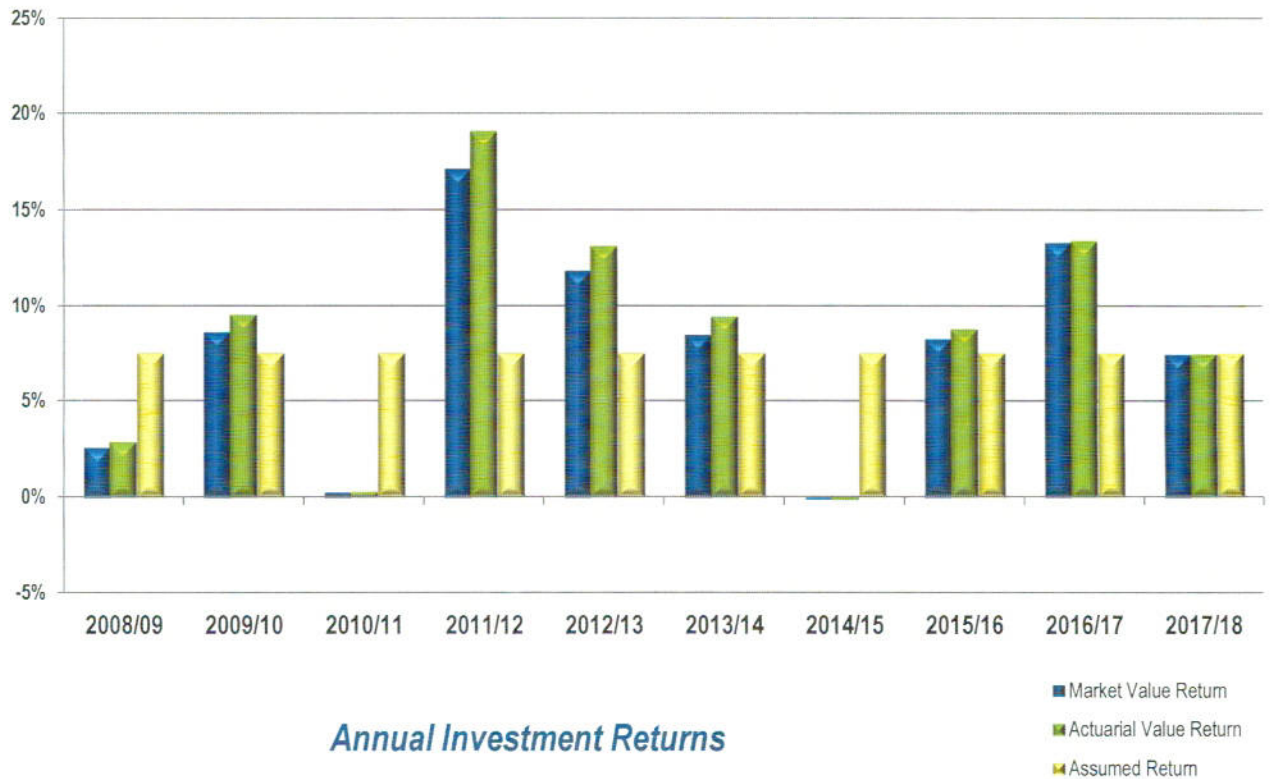


Historical Market Value of Assets	
October 1, 2009	\$5,839,876
October 1, 2010	\$7,200,333
October 1, 2011	\$8,186,716
October 1, 2012	\$10,158,337
October 1, 2013	\$12,031,622
October 1, 2014	\$13,622,129
October 1, 2015	\$13,994,534
October 1, 2016	\$14,099,685
October 1, 2017	\$16,448,667
October 1, 2018	\$18,326,157



Investment Return

Table II-C



Plan Year	Market Value Return	Actuarial Value Return	Assumed Return
2008/09	2.58%	2.85%	7.50%
2009/10	8.63%	9.54%	7.50%
2010/11	0.24%	0.27%	7.50%
2011/12	17.12%	19.05%	7.50%
2012/13	11.86%	13.13%	7.50%
2013/14	8.48%	9.44%	7.50%
2014/15	-0.11%	-0.12%	7.50%
2015/16	8.27%	8.78%	7.50%
2016/17	13.33%	13.39%	7.50%
2017/18	7.43%	7.45%	7.50%
10yr. Avg.	7.65%	8.22%	7.50%



Asset Reconciliation

Table II-D

	<u>Market Value</u>	<u>Actuarial Value</u>
As of October 1, 2016	\$14,099,685	\$13,974,251
<i>Increases Due To:</i>		
Employer Contributions	\$1,191,139	\$1,191,139
Chapter 175/185 Contributions	\$597,406	\$597,406
Employee Contributions	\$236,601	\$236,601
Service Purchase Contributions	\$0	\$0
Total Contributions	<u>\$2,025,146</u>	<u>\$2,025,146</u>
Interest and Dividends	\$0	
Realized Gains (Losses)	\$0	
Unrealized Gains (Losses)	\$3,153,476	
Total Investment Income	<u>\$3,153,476</u>	\$3,153,476
Other Income	\$0	
Total Income	<u>\$5,178,622</u>	<u>\$5,178,622</u>
<i>Decreases Due To:</i>		
Benefit Payments	(\$715,970)	(\$715,970)
Refund of Employee Contributions	(\$47,432)	(\$47,432)
DROP Credits		(\$41,894)
Total Benefit Payments	<u>(\$763,402)</u>	<u>(\$805,296)</u>
Transfer to Share Plan	(\$87,703)	
Administrative Expenses	(\$101,045)	(\$101,045)
Advance Employer Contribution		\$79,980
Excess Chapter 175/185 Contribution		(\$87,703)
Total Expenses	<u>(\$952,150)</u>	<u>(\$914,064)</u>
As of October 1, 2018	<u><u>\$18,326,157</u></u>	<u><u>\$18,238,809</u></u>



Historical Trust Fund Detail

Table II-E

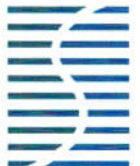
Income

Plan Year	Employer Contribs.	Chapter Contribs.	Employee Contribs.	Service Purchase Contribs.	Interest / Dividends	Realized Gains / Losses	Unrealized Gains / Losses	Other Income
2008/09	\$449,224	\$215,007	\$77,036	\$0	\$0	\$0	\$139,764	\$0
2009/10	\$697,663	\$214,298	\$85,593	\$0	\$0	\$0	\$539,567	\$0
2010/11	\$855,643	\$212,565	\$90,477	\$0	\$0	\$0	\$18,538	\$0
2011/12	\$508,321	\$203,523	\$84,197	\$0	\$0	\$0	\$1,446,261	\$0
2012/13	\$623,754	\$211,000	\$90,850	\$0	\$0	\$0	\$1,242,473	\$0
2013/14	\$548,481	\$217,653	\$95,733	\$0	\$0	\$0	\$1,043,670	\$0
2014/15	\$400,563	\$240,486	\$99,188	\$0	\$0	\$0	-\$14,780	\$0
2015/16	\$393,619	\$266,584	\$108,806	\$0	\$0	\$0	\$1,115,432	\$0
2016/17	\$511,379	\$278,846	\$116,332	\$0	\$0	\$0	\$1,908,188	\$0
2017/18	\$679,760	\$318,560	\$120,269	\$0	\$0	\$0	\$1,245,288	\$0

Expenses

Plan Year	Benefit Payments	Contrib. Refunds	Admin. Expenses	Transfer to Share Plan	<u>Other Actuarial Adjustments</u>		
					DROP Credits	Advance Employer Contribs.	Excess Chapter Contribs.
2008/09	\$135,910	\$25,159	\$12,413	\$0	\$0	\$0	\$93,362
2009/10	\$136,119	\$14,638	\$25,907	\$0	\$0	\$0	\$92,653
2010/11	\$149,658	\$10,307	\$30,875	\$0	\$0	\$111,717	\$90,920
2011/12	\$232,402	\$0	\$38,279	\$0	\$45,168	-\$105,635	\$81,878
2012/13	\$259,574	\$3,174	\$32,044	\$0	\$48,193	\$147,911	\$89,355
2013/14	\$267,809	\$15,370	\$31,851	\$0	\$51,420	\$40,520	\$96,008
2014/15	\$291,187	\$7,371	\$54,494	\$0	\$54,864	-\$61,351	\$118,841
2015/16	\$570,037	\$30,843	\$30,651	\$1,147,759	-\$199,645	-\$7,728	\$27,792
2016/17	\$357,355	\$24,840	\$49,645	\$33,923	\$3,119	-\$119,291	\$33,923
2017/18	\$358,615	\$22,592	\$51,400	\$53,780	\$38,775	\$39,311	\$53,780

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, 2016	\$125,434
Additional Employer Contribution	\$756,302
Minimum Required Contribution	(\$875,593)
Net Increase in Advance Employer Contribution	(\$119,291)
Advance Employer Contribution as of October 1, 2017	<u>\$6,143</u>
Additional Employer Contribution	\$944,540
Minimum Required Contribution	(\$905,229)
Net Increase in Advance Employer Contribution	\$39,311
Advance Employer Contribution as of October 1, 2018	<u>\$45,454</u>

Excess Chapter 175/185 Contribution

Excess Chapter 175/185 Contribution as of October 1, 2016	\$0
Additional Chapter 175/185 Contribution	\$278,846
Allowable Chapter 175/185 Contribution	(\$244,923)
Net Increase in Excess Chapter 175/185 Contribution	\$33,923
Transfer to Share Plan	(\$33,923)
Excess Chapter 175/185 Contribution as of October 1, 2017	<u>\$0</u>
Additional Chapter 175/185 Contribution	\$318,560
Allowable Chapter 175/185 Contribution	(\$264,780)
Net Increase in Excess Chapter 175/185 Contribution	\$53,780
Transfer to Share Plan	(\$53,780)
Excess Chapter 175/185 Contribution as of October 1, 2018	<u>\$0</u>



Other Reconciliations

Table II-F
(continued)

DROP Account Reconciliation

DROP Balance as of October 1, 2016	\$0
DROP Benefit Credits	\$3,119
DROP Investment Credits	\$0
DROP Benefits Paid Out	\$0
Net DROP Credit	\$3,119
DROP Balance as of October 1, 2017	\$3,119
DROP Benefit Credits	\$37,430
DROP Investment Credits	\$1,345
DROP Benefits Paid Out	\$0
Net DROP Credit	\$38,775
DROP Balance as of October 1, 2018	\$41,894



Historical Chapter 175/185 Contributions

Table II-G

Total Accumulated Excess Chapter 175/185 Contribution \$0

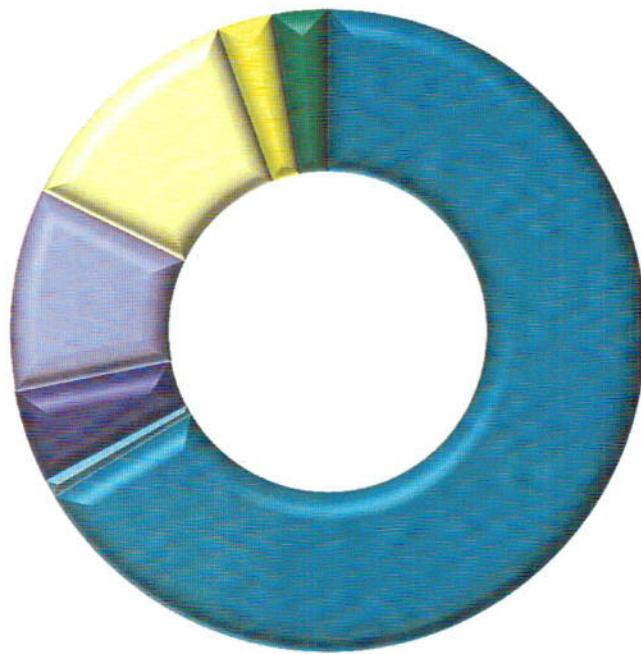
	Chapter 175 Regular <u>Distribution</u>	Chapter 175 Supplemental <u>Distribution</u>	Chapter 185 <u>Distribution</u>	Allowable <u>Amount</u>
1998 Distribution	\$0	\$0	\$80,472	(\$71,123)
1999 Distribution	\$0	\$0	\$87,387	(\$71,123)
2000 Distribution	\$0	\$0	\$98,660	(\$71,123)
2001 Distribution	\$0	\$0	\$113,749	(\$100,150)
2002 Distribution	\$0	\$0	\$152,815	(\$121,645)
2003 Distribution	\$0	\$0	\$167,661	(\$121,645)
2004 Distribution	\$0	\$0	\$183,852	(\$121,645)
2005 Distribution	\$0	\$0	\$199,035	(\$121,645)
2006 Distribution	\$0	\$0	\$211,850	(\$121,645)
2007 Distribution	\$0	\$0	\$218,263	(\$121,645)
2008 Distribution	\$0	\$0	\$215,007	(\$121,645)
2009 Distribution	\$0	\$0	\$214,298	(\$121,645)
2010 Distribution	\$0	\$0	\$212,565	(\$121,645)
2011 Distribution	\$0	\$0	\$203,523	(\$121,645)
2012 Distribution	\$0	\$0	\$211,000	(\$121,645)
2013 Distribution	\$0	\$0	\$217,653	(\$121,645)
2014 Distribution	\$0	\$0	\$240,486	(\$121,645)
2015 Distribution	\$0	\$0	\$266,584	(\$238,792)
2016 Distribution	\$0	\$0	\$278,846	(\$244,923)
2017 Distribution	\$0	\$0	\$318,560	(\$264,780)
Interest Adjustment				\$15,655
Ordinance 342-C				(\$29,060)
Transfer to Share Plan				(\$1,235,462)



Summary of Participant Data

Table III-A

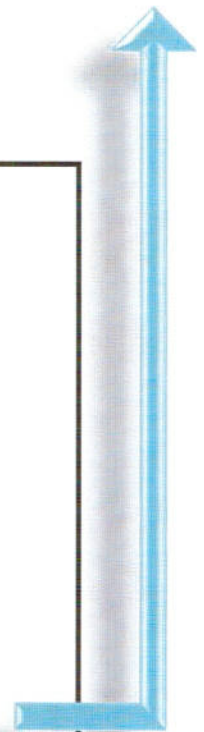
As of October 1, 2018



Participant Distribution by Status

<u>Actively Employed Participants</u>		
◆	Active Participants	71
◆	DROP Participants	1
<u>Inactive Participants</u>		
◆	Deferred Vested Participants	5
◆	Due a Refund of Contributions	11
◆	Deferred Beneficiaries	0
<u>Participants Receiving a Benefit</u>		
◆	Service Retirements	13
◆	Disability Retirements	3
◆	Beneficiaries Receiving	3
Total Participants		107

<u>Number of Participants Included in Prior Valuations</u>					
	<i>Active</i>	<i>DROP</i>	<i>Inactive</i>	<i>Retired</i>	<i>Total</i>
October 1, 2009	50	0	20	7	77
October 1, 2010	N/A	N/A	N/A	N/A	N/A
October 1, 2011	52	1	22	11	86
October 1, 2012	52	1	25	12	90
October 1, 2013	N/A	N/A	N/A	N/A	N/A
October 1, 2014	59	1	14	15	89
October 1, 2015	N/A	N/A	N/A	N/A	N/A
October 1, 2016	65	0	14	18	97
October 1, 2017	N/A	N/A	N/A	N/A	N/A
October 1, 2018	71	1	16	19	107



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, 2016</u>	65	0	5	9	0	12	4	2	97
<u>Change in Status</u>									
Re-employed									
Terminated	(7)		1	6					
Retired	(2)					2			
<u>Participation Ended</u>									
Transferred Out	(1)	1							
Cashed Out			(1)	(4)					(5)
Died						(1)	(1)		(2)
<u>Participation Began</u>									
Newly Hired	16								16
Transferred In									
New Beneficiary								1	1
<u>Other Adjustment</u>									
<u>October 1, 2018</u>	71	1	5	11	0	13	3	3	107

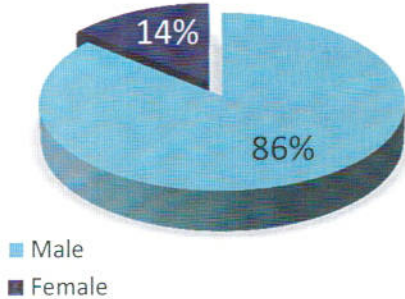


Active Participant Data

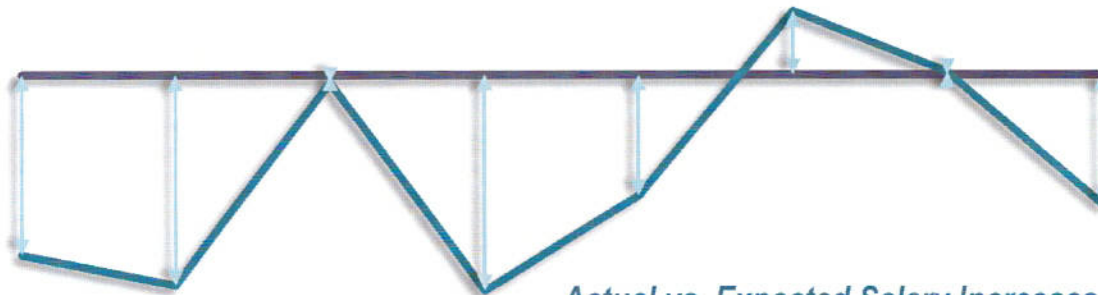
Table III-C

Gender Mix

As of October 1, 2018



Average Age	38.3 years
Average Service	7.0 years
Total Annualized Compensation for the Prior Year	\$4,026,712
Total Expected Compensation for the Current Year	\$3,813,876
Average Increase in Compensation for the Prior Year	2.38%
Expected Increase in Compensation for the Current Year	5.50%



Actual vs. Expected Salary Increases

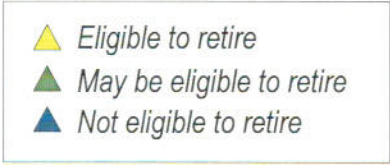
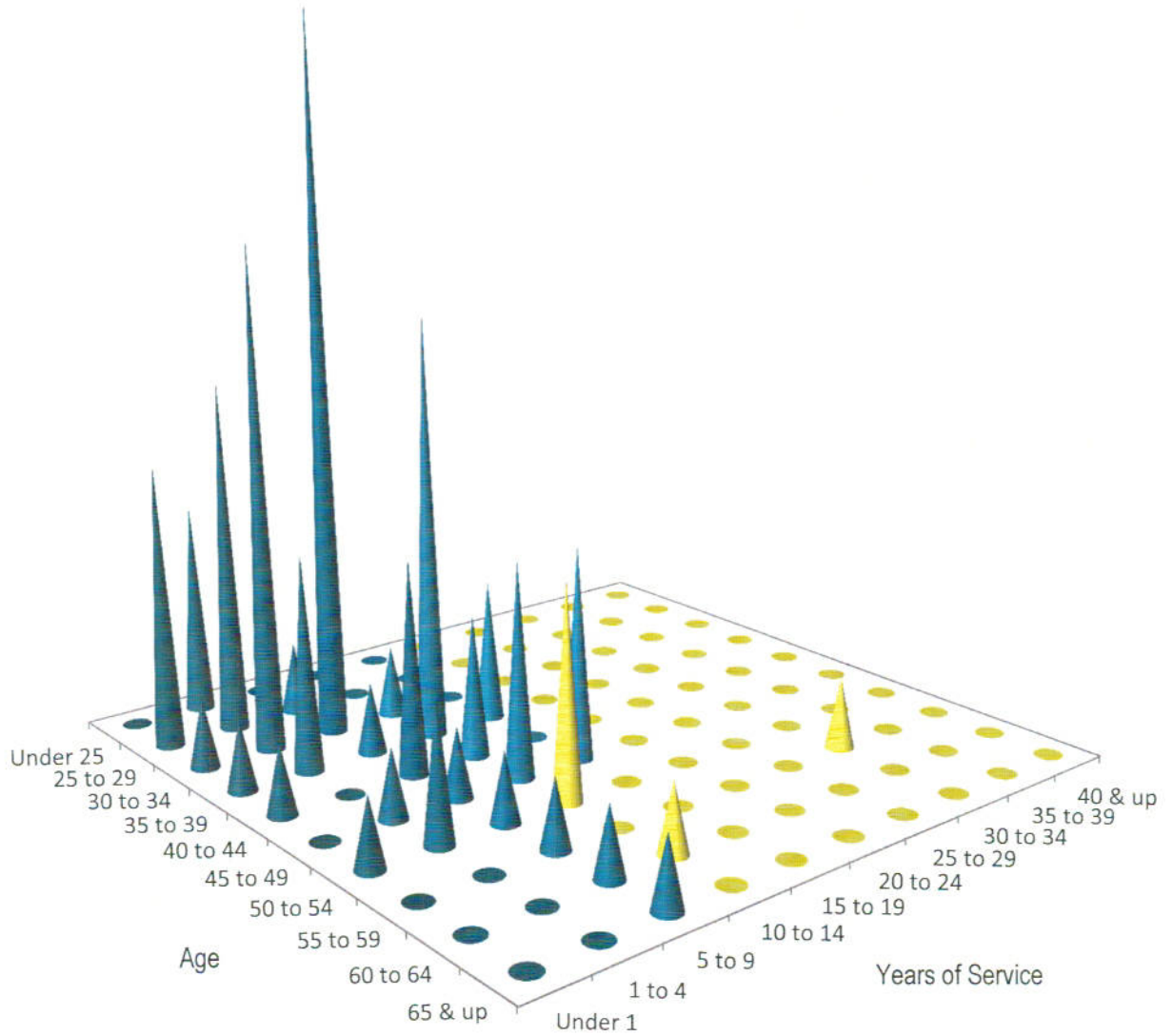
Active Participant Statistics From Prior Valuations

	<i>Average Age</i>	<i>Average Service</i>	<i>Average Salary</i>	<i>Average Expected Salary Increase</i>	<i>Average Actual Salary Increase</i>
October 1, 2009	38.6	5.1	\$51,884	5.50%	7.77%
October 1, 2010	N/A	N/A	N/A	5.50%	7.36%
October 1, 2011	37.2	4.7	\$53,483	5.50%	1.20%
October 1, 2012	37.3	5.2	\$53,121	5.50%	0.49%
October 1, 2013	N/A	N/A	N/A	5.50%	5.31%
October 1, 2014	38.5	6.3	\$55,774	5.50%	0.36%
October 1, 2015	N/A	N/A	N/A	5.50%	2.60%
October 1, 2016	38.8	6.9	\$57,077	5.50%	7.01%
October 1, 2017	N/A	N/A	N/A	5.50%	5.57%
October 1, 2018	38.3	7.0	\$56,714	5.50%	2.38%



Active Age-Service Distribution

Table III-D



Active Age-Service-Salary Table

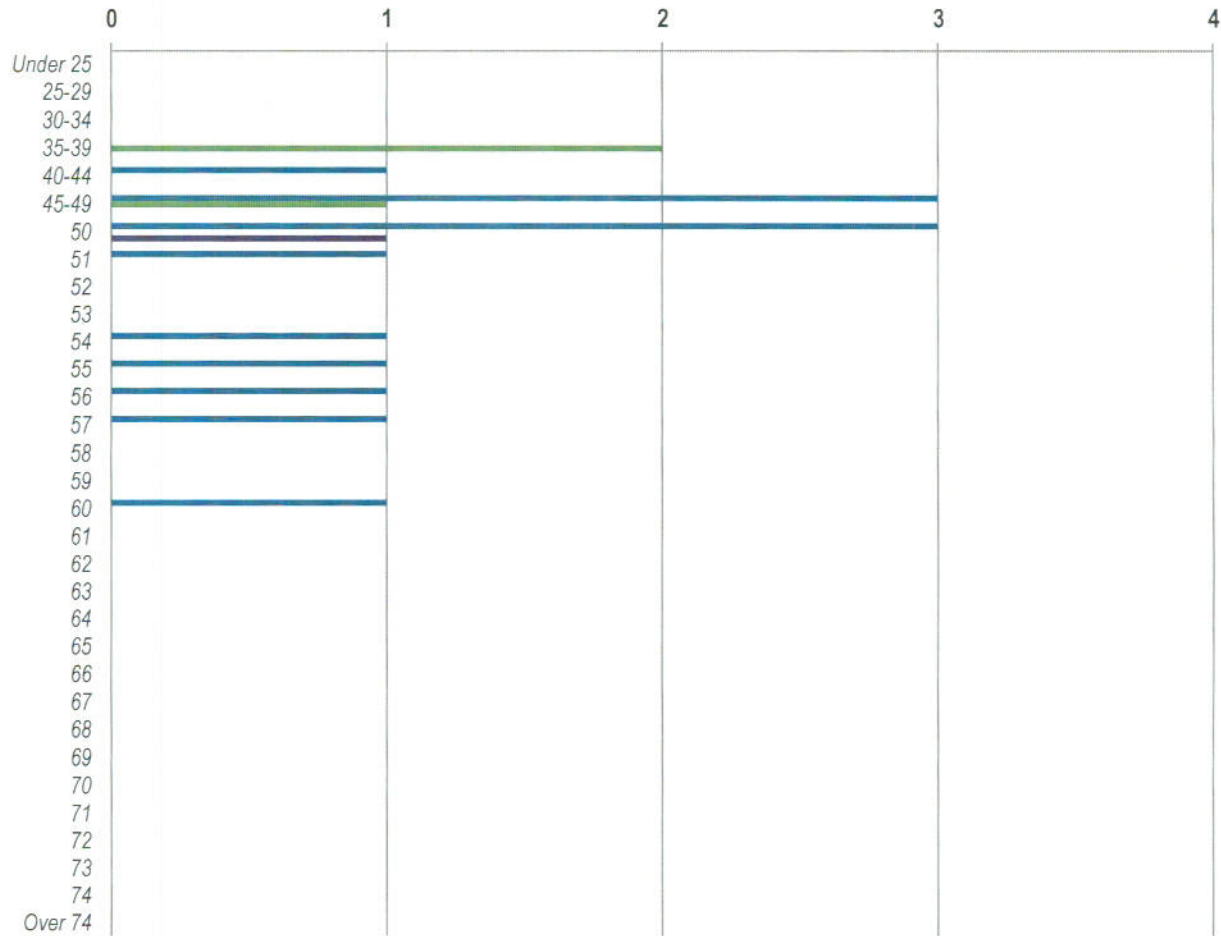
Table III-E

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	3	0	0	0	0	0	0	0	0	0	3
Avg.Pay	0	48,306	0	0	0	0	0	0	0	0	0	48,306
25 to 29	4	5	1	0	0	0	0	0	0	0	0	10
Avg.Pay	30,440	50,313	61,095	0	0	0	0	0	0	0	0	43,442
30 to 34	1	7	10	1	0	0	0	0	0	0	0	19
Avg.Pay	17,339	52,458	56,537	64,665	0	0	0	0	0	0	0	53,399
35 to 39	1	3	1	6	2	0	0	0	0	0	0	13
Avg.Pay	17,339	50,711	58,228	65,497	70,247	0	0	0	0	0	0	58,552
40 to 44	1	0	3	2	0	0	0	0	0	0	0	6
Avg.Pay	38,621	0	59,399	59,596	0	0	0	0	0	0	0	56,002
45 to 49	0	1	1	3	3	0	0	0	0	0	0	8
Avg.Pay	0	51,191	116,795	67,639	75,739	0	0	0	0	0	0	74,765
50 to 54	1	2	1	3	0	0	0	0	0	0	0	7
Avg.Pay	42,518	60,996	57,084	63,665	0	0	0	0	0	0	0	58,941
55 to 59	0	0	1	0	0	0	0	0	1	0	0	2
Avg.Pay	0	0	71,623	0	0	0	0	0	88,379	0	0	80,001
60 to 64	0	0	1	1	0	0	0	0	0	0	0	2
Avg.Pay	0	0	42,028	61,699	0	0	0	0	0	0	0	51,864
65 & up	0	0	1	0	0	0	0	0	0	0	0	1
Avg.Pay	0	0	61,167	0	0	0	0	0	0	0	0	61,167
Total	8	21	20	16	5	0	0	1	0	0	0	71
Avg.Pay	29,697	51,857	60,579	64,528	73,542	0	0	88,379	0	0	0	56,714



Inactive Participant Data

Table III-F



Age at Retirement

- Service Retirements
- Disability Retirements
- DROP Participants

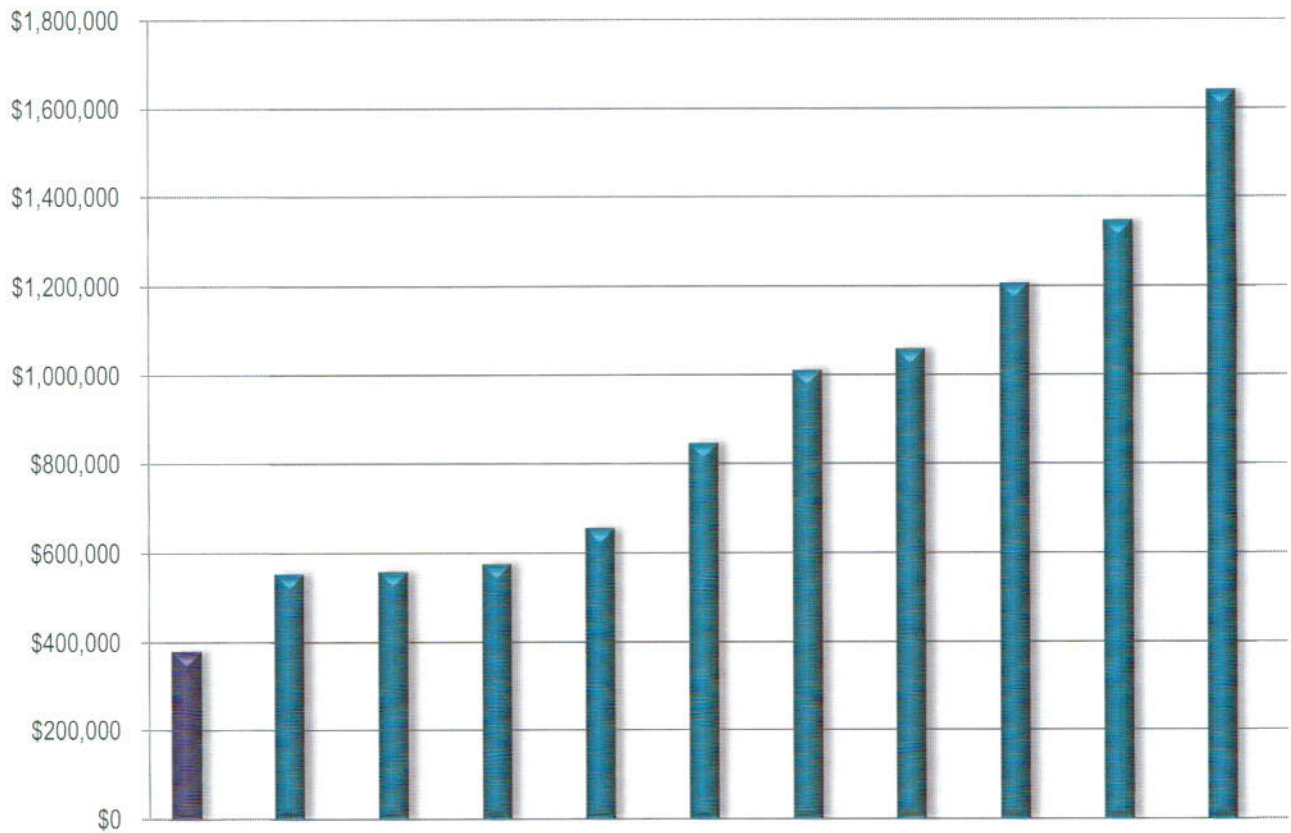
Average Monthly Benefit

Service Retirements	\$1,645.53
Disability Retirements	\$2,040.94
Beneficiaries Receiving	\$1,201.89
DROP Participants	\$3,119.20
Deferred Vested Participants	\$1,169.68
Deferred Beneficiaries	Not applicable



Projected Benefit Payments

Table III-G



Actual

For the period October 1, 2017 through September 30, 2018 \$381,207

Projected

For the period October 1, 2018 through September 30, 2019 \$555,305
 For the period October 1, 2019 through September 30, 2020 \$560,582
 For the period October 1, 2020 through September 30, 2021 \$577,621
 For the period October 1, 2021 through September 30, 2022 \$658,015
 For the period October 1, 2022 through September 30, 2023 \$848,675
 For the period October 1, 2023 through September 30, 2024 \$1,013,107
 For the period October 1, 2024 through September 30, 2025 \$1,060,910
 For the period October 1, 2025 through September 30, 2026 \$1,208,970
 For the period October 1, 2026 through September 30, 2027 \$1,348,325
 For the period October 1, 2027 through September 30, 2028 \$1,642,639



Summary of Actuarial Methods and Assumptions

Table IV-A

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

1. **Actuarial Cost Method**

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

2. **Asset Method**

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

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

7.00% per annum

4. **Salary Increases**

Plan compensation is generally assumed to increase at the rate of 5.50% per annum, unless actual plan compensation is known for a prior plan year. In addition, average final compensation has been increased to account for accumulated sick leave and vacation for terminations prior to October 1, 2031. The percentage increase is equal to 4.00% for terminations prior to October 1, 2019, 3.00% for terminations during the period October 1, 2019 through September 30, 2023, 2.00% for terminations during the period October 1, 2023 through September 30, 2027, and 1.00% for terminations during the period October 1, 2027 through September 30, 2031.

5. **Decrements**

- Pre-retirement mortality: Sex-distinct rates set forth in the RP-2000 Blue Collar Mortality Table, with full generational improvements in mortality using Scale BB
- 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



Summary of Actuarial Methods and Assumptions

Table IV-A

(continued)

- Disability: Age-based rates of disability were assumed, ranging from 0.03% at age 20, 0.04% at age 30, 0.07% at age 40, and 0.18% at age 50; 75% of all disabilities are assumed to be service-related.
- Termination: Age-based rates of termination were assumed, ranging from 5.00% at age 20, 3.80% at age 30, 1.50% at age 40, and 0.00% at age 50.
- Retirement: Retirement is assumed to occur at normal retirement age, except that those individuals who are eligible for early retirement at ages 52 through 54 are assumed to retire at the rate of 20% per year.

6. Form of Payment

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

7. Expenses

The total projected benefit liability has been loaded by 1.50% to account for anticipated administrative expenses. In addition, the interest rate set forth in item 3. above is assumed to be net of investment expenses and commissions.



Changes in Actuarial Methods and Assumptions

Table IV-B

Since the completion of the previous valuation, the interest (or discount) rate was decreased from 7.50% per annum to 7.00% per annum.

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

- (1) *Effective October 1, 2016, the mortality basis was changed from a 2007 projection of the RP-2000 Mortality Table to a full generational projection using Scale BB of the RP-2000 Blue Collar Mortality Table as required by State law.*
- (2) *Effective October 1, 2012, the assumed increase in average final compensation is being gradually eliminated as described in item 4. of Table IV-A to account for the elimination of overtime in excess of 300 hours per year after February 14, 2012 and unused sick and annual leave accrued after February 14, 2012.*
- (3) *Effective October 1, 2009, the pre-retirement mortality basis was changed from the 1983 Group Annuity Mortality Table to a 2007 projection of the RP-2000 Mortality Table for non-annuitants.*
- (4) *Effective October 1, 2009, the post-retirement mortality basis was changed from the 1983 Group Annuity Mortality Table to a 2007 projection of the RP-2000 Mortality Table for annuitants.*
- (5) *Effective October 1, 2009, the administrative expense assumption was changed from a flat \$10,500 per year to a 1.50% loading of the total projected benefit liability.*



Summary of Plan Provisions

Table V-A

1. **Monthly Accrued Benefit**

2.25% of Average Final Compensation multiplied by Credited Service earned prior to October 1, 2002, plus
3.00% of Average Final Compensation multiplied by Credited Service earned after September 30, 2002

2. **Normal Retirement Age and Benefit**

- **Age**

Age 55 with at least 10 years of Credited Service; or
Any age with at least 20 years of Credited Service

- **Amount**

Monthly Accrued Benefit

- **Form of Payment**

Actuarially increased single life annuity (optional);
10-year certain and life annuity (normal form of payment);
Actuarially reduced 50% joint and contingent annuity (optional);
Actuarially reduced 66²/₃% joint and contingent annuity (optional);
Actuarially reduced 75% joint and contingent annuity (optional);
Actuarially reduced 100% joint and contingent annuity (optional);
Any other actuarially equivalent form of payment approved by the Board; or
Actuarially equivalent lump sum distribution (automatic if the single sum value of the participant's benefit is less than or equal to \$5,000 or the monthly annuity is less than \$100)

(Note: A participant may change his joint annuitant up to two times after retirement.)

3. **Early Retirement Age and Benefit**

- **Age**

Age 50 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 Date precedes his Normal Retirement Date (payable at Early Retirement Age)

- **Form of Payment**

Same as for Normal Retirement



Summary of Plan Provisions

Table V-A

(continued)

4. **Service Incurred Disability Eligibility and Benefit**

- **Eligibility**
The participant is eligible if his disability was incurred during the course of his employment with the City.
- **Condition**
The Board must find that the participant has a physical or mental condition resulting from bodily injury, disease, or a mental disorder which renders him incapable of employment as a police officer.
- **Amount Payable**
A monthly 10-year certain and life annuity equal to the larger of (a) or (b), as follows, but offset as necessary to preclude the total of the participant's worker's compensation, disability benefit, and other City-provided disability compensation from exceeding his Average Final Compensation:
 - (a) Monthly Accrued Benefit; or
 - (b) 42% of Average Final Compensation

5. **Non-Service Incurred Disability Eligibility and Benefit**

- **Eligibility**
The participant must have earned at least 10 years of Credited Service if his disability was incurred other than during the course of his employment with the City.
- **Condition**
Same as for a Service Incurred Disability Benefit
- **Amount Payable**
A monthly 10-year certain and life annuity equal to the larger of (a) or (b), as follows, but offset as necessary to preclude the total of the participant's worker's compensation, disability benefit, and other City-provided disability compensation from exceeding his Average Final Compensation:
 - (a) Monthly Accrued Benefit; or
 - (b) 25% of Average Final Compensation

6. **Delayed Retirement Age and Benefit**

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



Summary of Plan Provisions

Table V-A

(continued)

7. **Deferred Vested Benefit**

- **Age**
Any age with at least five years of Credited Service
- **Amount**
Vested portion of the Monthly Accrued Benefit (payable at Normal Retirement Age); or
Vested portion of the Monthly Accrued Benefit reduced by 3% for each year by which the participant's Early Retirement Date precedes his Normal Retirement Date (payable at Early Retirement Age)

Exception: Those individuals who terminated their service prior to October 1, 1990 may not commence receipt of their Monthly Accrued Benefit prior to age 60.

- **Form of Payment**
Same as for Normal Retirement

8. **Pre-Retirement Death Benefit**

In the case of the death of a fully or partially vested participant, his beneficiary will receive the vested portion of the participant's Monthly Accrued Benefit payable for 10 years beginning on the participant's early or normal retirement date. In the case of the death of a non-vested participant prior to retirement, his beneficiary will receive the participant's Accumulated Contributions in lieu of any other benefits payable from the plan.

9. **Average Final Compensation**

Average of the highest five years of Compensation out of the last 10 years of employment (or career average, if higher).

10. **Compensation**

Actual compensation for services rendered, including overtime, but excluding bonuses; compensation excludes overtime in excess of 300 hours per year after February 14, 2012 and excludes unused sick and annual leave accrued after February 14, 2012; annual compensation in excess of \$200,000 (as indexed) is excluded in accordance with IRC §401(a)(17).



Summary of Plan Provisions

Table V-A

(continued)

11. Credited Service

The elapsed time from the participant's date of hire until his date of termination, retirement, or death, calculated to the nearest number of whole months, provided that the participant made all required contributions. A participant may purchase up to five years of additional credited service for service with the military or employment as a police officer under the conditions outlined in the plan.

12. Vesting Requirement

Participants with at least five years of Credited Service are 50% vested, with an additional 10% vesting granted for each additional year of Credited Service, to a maximum of 100% vested after 10 years of Credited Service.

13. Participation Requirement

All police officers of the City of Clermont automatically become a participant in the plan on their date of hire.

14. Accumulated Contributions

The Employee Contributions accumulated with interest at the rate of 5.00% per annum; if the participant terminates his employment with less than five years of Credited Service, he receives his Accumulated Contributions in lieu of any other benefits payable from the plan.

15. Participant Contribution

5.00% of earnings (3.00% of earnings prior to October 29, 2018 and 4.00% of earnings during the period October 29, 2018 through September 29, 2019)

16. Definition of Actuarially Equivalent

- **Interest Rate**
7.50% per annum
- **Mortality Table**
The unisex mortality table promulgated by the Internal Revenue Service (IRS) for purposes of Internal Revenue Code (IRC) section 417(e)(3)

17. Plan Effective Date

October 1, 1979



Summary of Plan Provisions

Table V-A

(continued)

18. **Deferred Retirement Option Plan (DROP)**

A participant who reaches his Normal Retirement Age is eligible to participate in the DROP for a period of up to 60 months.



Summary of Plan Amendments

Table V-B

Since the completion of the previous valuation, Ordinance No. 2018-38 was adopted to be effective October 29, 2018. This ordinance increased the employee contribution rate from 3.00% of pensionable earnings to 4.00% for the period October 29, 2018 through September 29, 2019 and to 5.00% thereafter.

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

- (1) *Effective during the 2015/16 plan year, Ordinances 2015-05, 2016-07, and 2016-37 were adopted. These ordinances allow a participant to purchase up to five years of additional credited service for service with the military or employment as a police officer under the conditions specified in the plan; clarify that purchased service is applicable for vesting purposes, as well as benefit accrual credit and eligibility; establish a share plan to receive the accumulated excess Chapter 185 contributions and 50% of the Chapter 185 contributions greater than \$211,000 per year; and clarify that a participant may enter the DROP at any time after he has attained his normal retirement age.*
- (2) *Effective October 1, 2014, retirees as of that date were provided with a \$2.00 per month benefit increase for each year of service. (Ordinance No. 2014-36)*
- (3) *Effective during the 2011/12 plan year, overtime in excess of 300 hours per year after February 14, 2012 and unused sick and annual leave accrued after February 14, 2012 were excluded from plan compensation. (Ordinance No. 2012-01-C)*
- (4) *Effective during the 2010/11 plan year, the mortality table used for purposes of actuarial equivalence was changed as described in item 16. of Table V-A.*

