

CITY OF UMATILLA POLICE OFFICERS'
RETIREMENT TRUST FUND

ACTUARIAL VALUATION
AS OF OCTOBER 1, 2019

DETERMINES THE CONTRIBUTION
FOR THE 2020/21 FISCAL YEAR



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March 8, 2020

Introduction

This report presents the results of the October 1, 2019 actuarial valuation of the City of Umatilla Police Officers' Retirement Trust Fund. 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 2020/21 plan year. In addition, this report provides a projection of the long-term funding requirements of the plan, statistical information concerning the assets held in the trust, statistical information concerning the participant population, and a summary of any recent plan changes.

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

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

Minimum Required Contribution

Table I-A shows the development of the minimum required contribution for the 2020/21 plan year. The minimum required contribution is \$12,066, which is 2.81% of covered payroll and which is \$30,833 less than the minimum required contribution that was developed in the prior valuation.

The normal cost rate is 3.37%, which is 1.56% greater than the normal cost rate that was developed in the prior valuation. Table I-C provides a breakdown of the sources of change in the normal cost rate. Significantly, the rate increased by 1.00% of payroll due to investment losses, decreased by 1.56% of payroll due to demographic experience, and increased by another 2.12% of payroll due to the plan amendment that is described below. The



market value of assets only earned 5.26% 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 2020/21 minimum required contribution will be equal to \$12,066 and reduced by the portion of the Chapter 175/185 contribution that is allowed to be recognized during the 2020/21 plan year.

Based on the current assets, participant data, and actuarial assumptions and methods that are used to value the plan, the present-day value of the total long-term funding requirement is \$2,351,915. As illustrated in Table I-A, current assets are sufficient to cover \$2,126,521 of this amount, the employer's 2019/20 contribution will cover \$42,899 of this amount, the employer's 2020/21 contribution will cover \$12,066 of this amount, and future employee contributions are expected to cover \$106,200 of this amount, leaving \$64,229 to be covered by future employer funding beyond the 2020/21 fiscal year. Again, demographic and investment experience that differs from that assumed will either increase or decrease the future employer funding requirement.

Identification and Assessment of Risk

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

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

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



expected to become entitled to such a lump sum in the near future), the plan's assets may not be sufficient to support such a high level of benefit payments. We have provided a 10-year projection of the expected benefit payments in Table III-G to help the Trustees in formulating an investment policy that is expected to provide an investment return that meets both the short- and long-term cash flow needs of the pension plan.

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

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

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

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

Plan Amendment

The plan was amended since the previous valuation was prepared. This amendment was effective October 1, 2019. The employee contribution rate was increased from 0.50% of pensionable earnings to 3.00% of pensionable earnings and the benefit formula multiplier was increased from 2.50% to 3.00% for service earned after September 30, 2019.

Contents of the Report

Tables I-D through I-G provide a detailed breakdown of various liability amounts by type of benefit and by participant group. Tables II-A through II-F provide information concerning the assets of the trust fund. Specifically, Table II-A shows the development of the actuarial value of assets, which is based on the market value of assets, adjusted to reflect a five-year phase-in of the net investment gains and losses. 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 2020/21 Plan Year

Present Value of Future Benefits	\$2,208,371
Present Value of Future Administrative Expenses	\$143,544
Actuarial Value of Assets	(\$2,126,521)
Present Value of Future Employee Contributions	(\$106,200)
Present Value of Future Normal Costs	\$119,194
Present Value of Future Payroll	÷ \$3,539,980
Normal Cost Rate	= 3.3671%
Expected Payroll	x \$403,295

Normal Cost	\$13,579
Adjustment to Reflect Monthly Employer Contributions	\$504
Expected Employer Contribution for the 2019/20 Plan Year	(\$42,899)
Remaining Contribution Due/(Credit) for the 2019/20 Plan Year	(\$28,816)
	x 0.07
One Year's Interest Charge/(Credit) on the Remaining Contribution	(\$2,017)

Minimum Req. Contribution for the 2020/21 Plan Year **\$12,066**

Expected Payroll for the 2020/21 Plan Year	÷ \$428,824
Minimum Required Contribution as a % of Payroll	2.81%

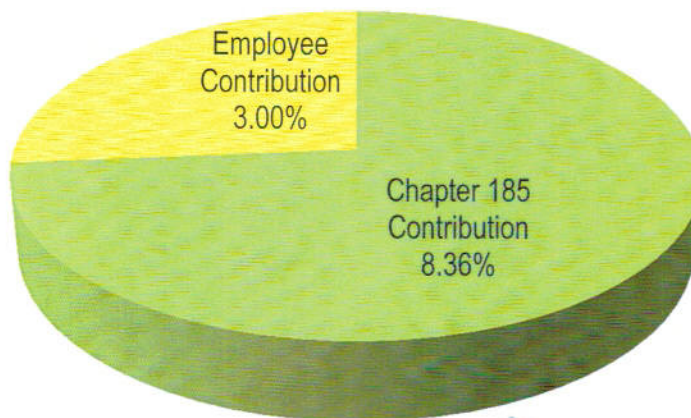


Minimum Required Contribution

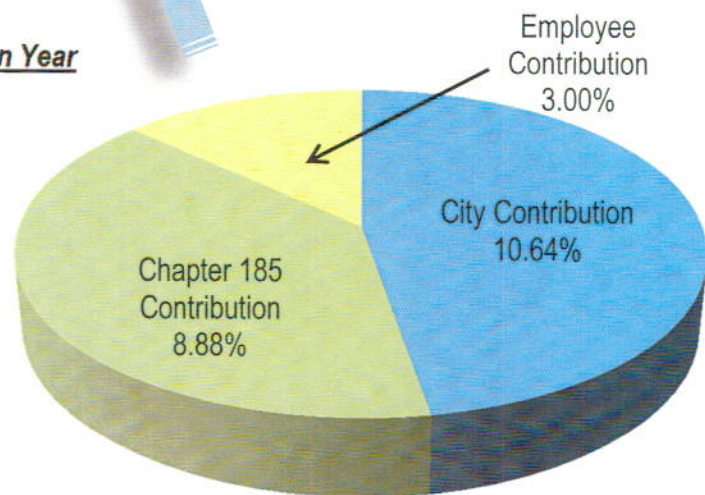
Table I-A
(continued)

The minimum required contribution rate of 2.81% includes both the City contribution and the allowable Chapter 185 contribution. In addition, employees are required to contribute 3.00% of pensionable earnings. The actual City contribution rate is expected to be approximately 0% based on the allowable Chapter 185 contribution for the previous year. The chart below shows the expected contribution rate by source for the 2020/21 plan year based on the expected payroll. A comparative chart shows the contribution rate by source for the previous plan year.

For the 2020/21 Plan Year

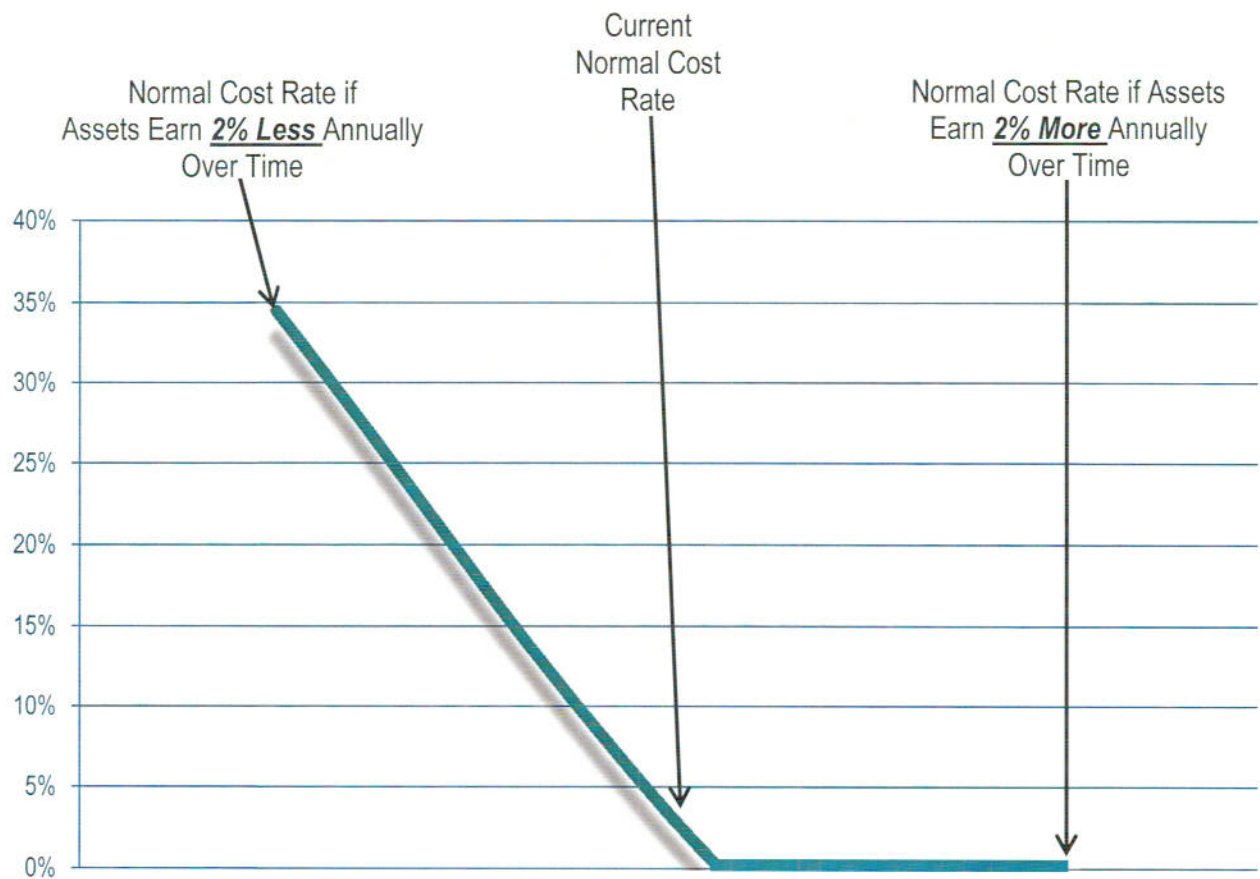


For the 2019/20 Plan Year



Sensitivity Analysis

Table I-B



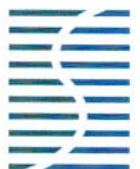
The line above illustrates the sensitivity of the normal cost rate to changes in the long-term investment return.



Gain and Loss Analysis

Table I-C

Previous normal cost rate	1.81%
Increase (decrease) due to investment gains and losses	1.00%
Increase (decrease) due to demographic experience	-1.56%
Increase (decrease) due to plan amendments	2.12%
Increase (decrease) due to actuarial assumption changes	0.00%
Increase (decrease) due to actuarial method changes	0.00%
Current normal cost rate	<u>3.37%</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>
<u>Actively Employed Participants</u>			
Retirement benefits	\$1,134,964	\$1,261,250	\$1,261,250
Termination benefits	\$291,144	\$312,898	\$312,898
Disability benefits	\$19,974	\$21,009	\$21,009
Death benefits	\$8,082	\$8,806	\$8,806
Refund of employee contributions	\$2,138	\$5,881	\$5,881
Sub-total	\$1,456,302	\$1,609,844	\$1,609,844
<u>Deferred Vested Participants</u>			
Retirement benefits	\$85,599	\$85,599	\$85,599
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$85,599	\$85,599	\$85,599
<u>Due a Refund of Contributions</u>	\$1,481	\$1,481	\$1,481
<u>Deferred Beneficiaries</u>	\$0	\$0	\$0
<u>Retired Participants</u>			
Service retirements	\$511,447	\$511,447	\$511,447
Disability retirements	\$0	\$0	\$0
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$0	\$0	\$0
Sub-total	\$511,447	\$511,447	\$511,447
<u>Grand Total</u>	<u>\$2,054,829</u>	<u>\$2,208,371</u>	<u>\$2,208,371</u>
Present Value of Future Payroll	\$3,539,980	\$3,539,980	\$3,539,980
Present Value of Future Employee Contribs.	\$17,700	\$106,200	\$106,200
Present Value of Future Employer Contribs.	\$44,172	\$119,194	\$119,194



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	\$293,885	\$293,885	\$293,885
Termination benefits	\$151,168	\$151,168	\$151,168
Disability benefits	\$13,748	\$13,748	\$13,748
Death benefits	\$3,399	\$3,399	\$3,399
Refund of employee contributions	\$1,390	\$1,390	\$1,390
Sub-total	\$463,590	\$463,590	\$463,590
<u>Deferred Vested Participants</u>			
Retirement benefits	\$85,599	\$85,599	\$85,599
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$85,599	\$85,599	\$85,599
<u>Due a Refund of Contributions</u>	\$1,481	\$1,481	\$1,481
<u>Deferred Beneficiaries</u>	\$0	\$0	\$0
<u>Retired Participants</u>			
Service retirements	\$511,447	\$511,447	\$511,447
Disability retirements	\$0	\$0	\$0
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$0	\$0	\$0
Sub-total	\$511,447	\$511,447	\$511,447
<u>Grand Total</u>	<u>\$1,062,117</u>	<u>\$1,062,117</u>	<u>\$1,062,117</u>
<u>Funded Percentage</u>	200.22%	200.22%	200.22%

(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	\$275,187	\$275,187	\$275,187
Termination benefits	\$125,390	\$125,390	\$125,390
Disability benefits	\$13,748	\$13,748	\$13,748
Death benefits	\$2,498	\$2,498	\$2,498
Refund of employee contributions	\$2,141	\$2,141	\$2,141
Sub-total	\$418,964	\$418,964	\$418,964
<u>Deferred Vested Participants</u>			
Retirement benefits	\$85,599	\$85,599	\$85,599
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$85,599	\$85,599	\$85,599
<u>Due a Refund of Contributions</u>	\$1,481	\$1,481	\$1,481
<u>Deferred Beneficiaries</u>	\$0	\$0	\$0
<u>Retired Participants</u>			
Service retirements	\$511,447	\$511,447	\$511,447
Disability retirements	\$0	\$0	\$0
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$0	\$0	\$0
Sub-total	\$511,447	\$511,447	\$511,447
<u>Grand Total</u>	<u>\$1,017,491</u>	<u>\$1,017,491</u>	<u>\$1,017,491</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	\$599,910	\$661,821	\$661,821
Termination benefits	\$193,756	\$205,563	\$205,563
Disability benefits	\$13,218	\$13,782	\$13,782
Death benefits	\$4,929	\$5,300	\$5,300
Refund of employee contributions	\$1,550	\$3,600	\$3,600
Sub-total	\$813,363	\$890,066	\$890,066
<u>Deferred Vested Participants</u>			
Retirement benefits	\$85,599	\$85,599	\$85,599
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$85,599	\$85,599	\$85,599
<u>Due a Refund of Contributions</u>	\$1,481	\$1,481	\$1,481
<u>Deferred Beneficiaries</u>	\$0	\$0	\$0
<u>Retired Participants</u>			
Service retirements	\$511,447	\$511,447	\$511,447
Disability retirements	\$0	\$0	\$0
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$0	\$0	\$0
Sub-total	\$511,447	\$511,447	\$511,447
<u>Grand Total</u>	<u>\$1,411,890</u>	<u>\$1,488,593</u>	<u>\$1,488,593</u>



Actuarial Value of Assets

Table II-A

Market Value of Assets as of October 1, 2019	\$2,126,521
Minus DROP account balances	\$0
Minus advance employer contributions	\$0
Minus excess Chapter 175/185 contributions	\$0
Actuarial Value of Assets as of October 1, 2019	<u>\$2,126,521</u>

Historical Actuarial Value of Assets

October 1, 2010	N/A
October 1, 2011	N/A
October 1, 2012	N/A
October 1, 2013	\$1,422,072
October 1, 2014	\$1,562,864
October 1, 2015	\$1,578,430
October 1, 2016	\$1,705,205
October 1, 2017	\$1,921,212
October 1, 2018	\$2,036,542
October 1, 2019	\$2,126,521

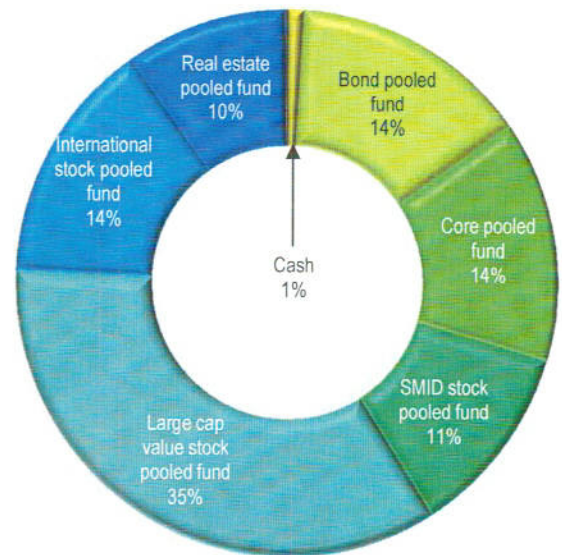


Market Value of Assets

Table II-B

As of October 1, 2019

Market Value of Assets	<u>\$2,126,521</u>
Cash	\$19,109
Bond pooled fund	\$305,750
Core pooled fund	\$303,627
SMID stock pooled fund	\$244,176
Large cap value stock pooled fund	\$736,773
International stock pooled fund	\$307,874
Real estate pooled fund	\$205,957
Employer contribution receivable	\$3,072
Employee contribution receivable	\$183

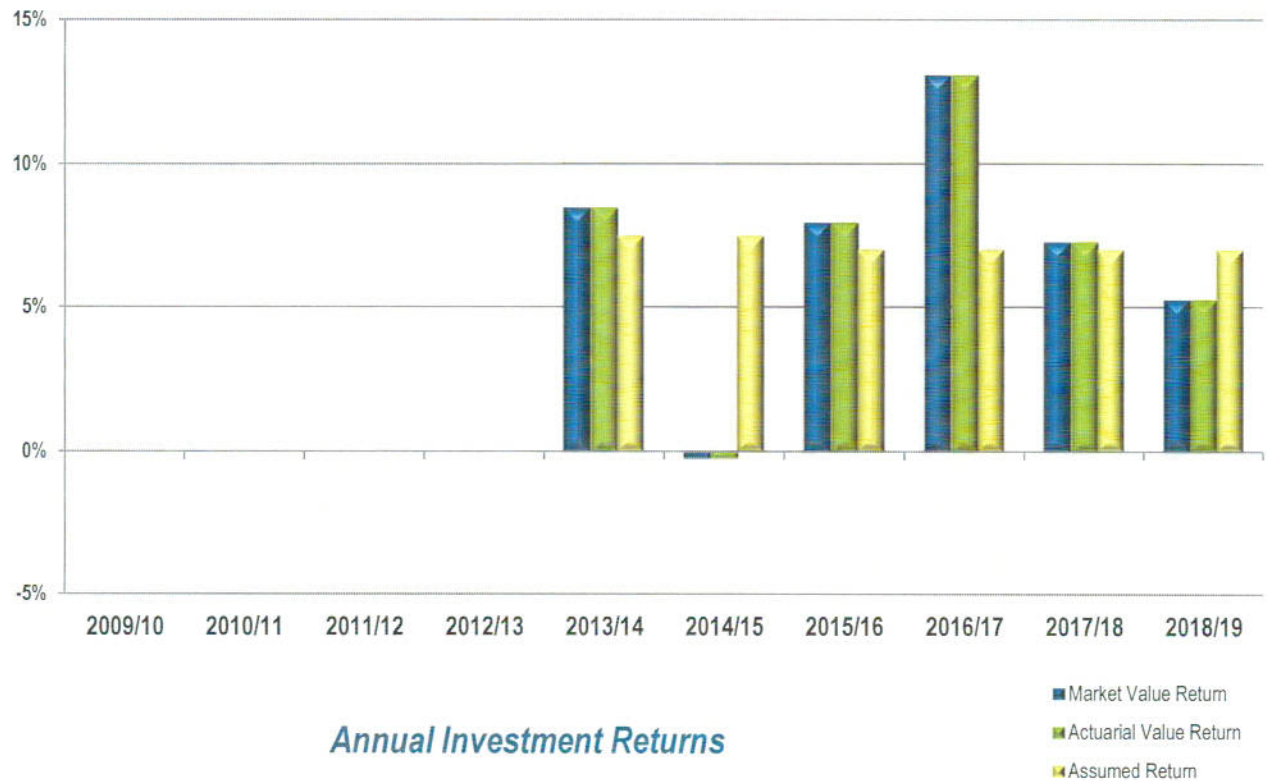
**Historical Market Value of Assets**

October 1, 2010	N/A
October 1, 2011	N/A
October 1, 2012	N/A
October 1, 2013	\$1,422,072
October 1, 2014	\$1,562,864
October 1, 2015	\$1,578,430
October 1, 2016	\$1,705,205
October 1, 2017	\$1,921,212
October 1, 2018	\$2,036,542
October 1, 2019	\$2,126,521



Investment Return

Table II-C

*Annual Investment Returns*

Plan Year	Market Value Return	Actuarial Value Return	Assumed Return
2009/10	N/A	N/A	N/A
2010/11	N/A	N/A	N/A
2011/12	N/A	N/A	N/A
2012/13	N/A	N/A	N/A
2013/14	8.48%	8.48%	7.50%
2014/15	-0.22%	-0.22%	7.50%
2015/16	7.95%	7.95%	7.00%
2016/17	13.08%	13.08%	7.00%
2017/18	7.28%	7.28%	7.00%
2018/19	5.26%	5.26%	7.00%
6yr. Avg.	6.90%	6.90%	7.17%



Asset Reconciliation

Table II-D

	<u>Market Value</u>	<u>Actuarial Value</u>
As of October 1, 2018	\$2,036,542	\$2,036,542
<i>Increases Due To:</i>		
Employer Contributions	\$8,465	\$8,465
Chapter 175/185 Contributions	\$35,832	\$35,832
Employee Contributions	\$2,148	\$2,148
Share Plan Transfer	\$0	\$0
Total Contributions	<u>\$46,445</u>	<u>\$46,445</u>
Interest and Dividends	\$0	
Realized Gains (Losses)	\$0	
Unrealized Gains (Losses)	\$106,627	
Total Investment Income	<u>\$106,627</u>	\$106,627
Other Income	\$0	
Total Income	<u>\$153,072</u>	<u>\$153,072</u>
<i>Decreases Due To:</i>		
Monthly Benefit Payments	(\$46,876)	(\$46,876)
Refund of Employee Contributions	\$0	\$0
DROP Credits		\$0
Total Benefit Payments	<u>(\$46,876)</u>	<u>(\$46,876)</u>
Investment Expenses	\$0	
Administrative Expenses	(\$16,217)	(\$16,217)
Advance Employer Contribution		\$0
Excess Chapter 175/185 Contribution		\$0
Total Expenses	<u>(\$63,093)</u>	<u>(\$63,093)</u>
As of October 1, 2019	<u>\$2,126,521</u>	<u>\$2,126,521</u>



Historical Trust Fund Detail

Table II-E

Income

Plan Year	Employer Contribs.	Chapter Contribs.	Employee Contribs.	Interest / Dividends	Realized Gains / Losses	Unrealized Gains / Losses	Other Income
2009/10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
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	\$42,479	\$23,027	\$1,588	\$0	\$0	\$121,384	\$0
2014/15	\$47,980	\$23,731	\$1,889	\$0	\$0	-\$3,466	\$0
2015/16	\$20,798	\$35,314	\$2,120	\$0	\$0	\$125,610	\$0
2016/17	\$14,618	\$28,623	\$2,155	\$0	\$0	\$222,596	\$0
2017/18	\$14,688	\$32,337	\$2,227	\$0	\$0	\$138,930	\$0
2018/19	\$8,465	\$35,832	\$2,148	\$0	\$0	\$106,627	\$0

Expenses

Plan Year	Monthly Benefit Payments	Contrib. Refunds	Admin. Expenses	Invest. Expenses	<u>Other Actuarial Adjustments</u>		
					DROP Credits	Advance Employer Contribs.	Excess Chapter Contribs.
2009/10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
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	\$40,168	\$0	\$7,518	\$0	\$0	\$0	\$0
2014/15	\$46,876	\$0	\$7,692	\$0	\$0	\$0	\$0
2015/16	\$46,876	\$0	\$10,191	\$0	\$0	\$0	\$0
2016/17	\$46,876	\$0	\$5,109	\$0	\$0	\$0	\$0
2017/18	\$46,876	\$0	\$25,976	\$0	\$0	\$0	\$0
2018/19	\$46,876	\$0	\$16,217	\$0	\$0	\$0	\$0

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



Other Reconciliations

Table II-F

DROP Account Reconciliation

DROP Balance as of October 1, 2018	\$0
DROP Benefit Credits	\$0
DROP Investment Credits	\$0
DROP Benefits Paid Out	\$0
Net DROP Credit	\$0
DROP Balance as of October 1, 2019	\$0

Advance Employer Contribution

Advance Employer Contribution as of October 1, 2018	\$0
Additional Employer Contribution	\$44,297
Minimum Required Contribution	(\$44,297)
Net Increase in Advance Employer Contribution	\$0
Advance Employer Contribution as of October 1, 2019	\$0

Excess Chapter 175/185 Contribution

Excess Chapter 175/185 Contribution as of October 1, 2018	\$0
Additional Chapter 175/185 Contribution	\$35,832
Allowable Chapter 175/185 Contribution	(\$35,832)
Net Increase in Excess Chapter 175/185 Contribution	\$0
Excess Chapter 175/185 Contribution as of October 1, 2019	\$0



Historical Chapter 175/185 Contributions

Table II-G

Total Accumulated Excess Chapter 175/185 Contribution \$0

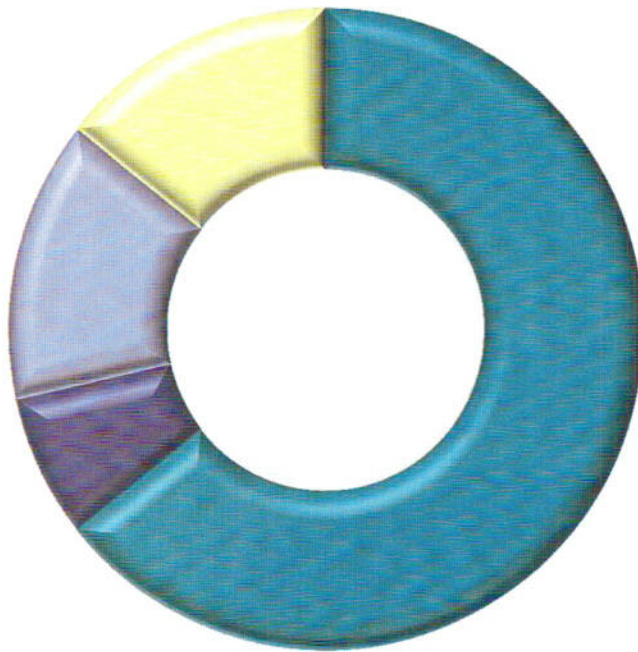
	Chapter 175 Regular <u>Distribution</u>	Chapter 175 Supplemental <u>Distribution</u>	Chapter 185 <u>Distribution</u>	Allowable <u>Amount</u>
1998 Distribution	\$0	\$0	\$20,106	(\$20,106)
1999 Distribution	\$0	\$0	\$19,981	(\$19,981)
2000 Distribution	\$0	\$0	\$24,208	(\$24,208)
2001 Distribution	\$0	\$0	\$25,989	(\$25,989)
2002 Distribution	\$0	\$0	\$29,479	(\$29,479)
2003 Distribution	\$0	\$0	\$30,305	(\$30,305)
2004 Distribution	\$0	\$0	\$30,581	(\$30,581)
2005 Distribution	\$0	\$0	\$30,305	(\$30,305)
2006 Distribution	\$0	\$0	\$30,305	(\$30,305)
2007 Distribution	\$0	\$0	\$27,283	(\$27,283)
2008 Distribution	\$0	\$0	\$25,577	(\$25,577)
2009 Distribution	\$0	\$0	\$23,799	(\$23,799)
2010 Distribution	\$0	\$0	\$49,127	(\$49,127)
2011 Distribution	\$0	\$0	\$24,402	(\$24,402)
2013 Distribution	\$0	\$0	\$23,027	(\$23,027)
2014 Distribution	\$0	\$0	\$23,731	(\$23,731)
2015 Distribution	\$0	\$0	\$35,315	(\$35,315)
2016 Distribution	\$0	\$0	\$28,623	(\$28,623)
2017 Distribution	\$0	\$0	\$32,337	(\$32,337)
2018 Distribution	\$0	\$0	\$35,832	(\$35,832)



Summary of Participant Data

Table III-A

As of October 1, 2019

Actively Employed Participants

Active Participants	9
DROP Participants	0

Inactive Participants

Deferred Vested Participants	1
Due a Refund of Contributions	2
Deferred Beneficiaries	0

Participants Receiving a Benefit

Service Retirements	2
Disability Retirements	0
Beneficiaries Receiving	0

Total Participants 14Number 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	8	0	0	0	8
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	8	0	0	0	8
October 1, 2015	N/A	N/A	N/A	N/A	N/A
October 1, 2016	9	0	2	2	13
October 1, 2017	N/A	N/A	N/A	N/A	N/A
October 1, 2018	9	0	2	2	13
October 1, 2019	9	0	3	2	14



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, 2018</u>	9	0	0	2	0	2	0	0	13
<u>Change in Status</u>									
Re-employed									
Terminated	(1)		1						
Retired									
<u>Participation Ended</u>									
Transferred Out									
Cashed Out									
Died									
<u>Participation Began</u>									
Newly Hired	1								1
Transferred In									
New Beneficiary									
<u>Other Adjustment</u>									
<u>October 1, 2019</u>	9	0	1	2	0	2	0	0	14

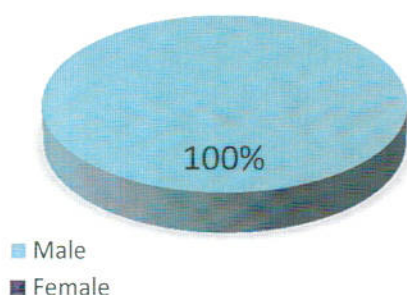


Active Participant Data

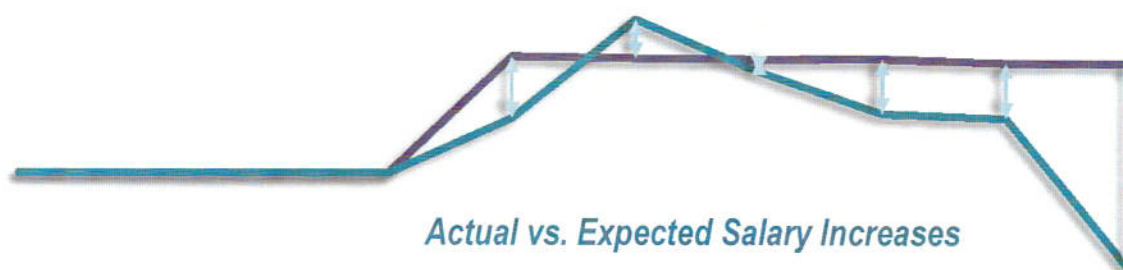
Table III-C

As of October 1, 2019

Gender Mix



Average Age	38.3 years
Average Service	7.9 years
Total Annualized Compensation for the Prior Year	\$415,479
Total Expected Compensation for the Current Year	\$403,295
Average Increase in Compensation for the Prior Year	-5.57%
Expected Increase in Compensation for the Current Year	6.33%
Accumulated Contributions for Active Employees	\$18,470



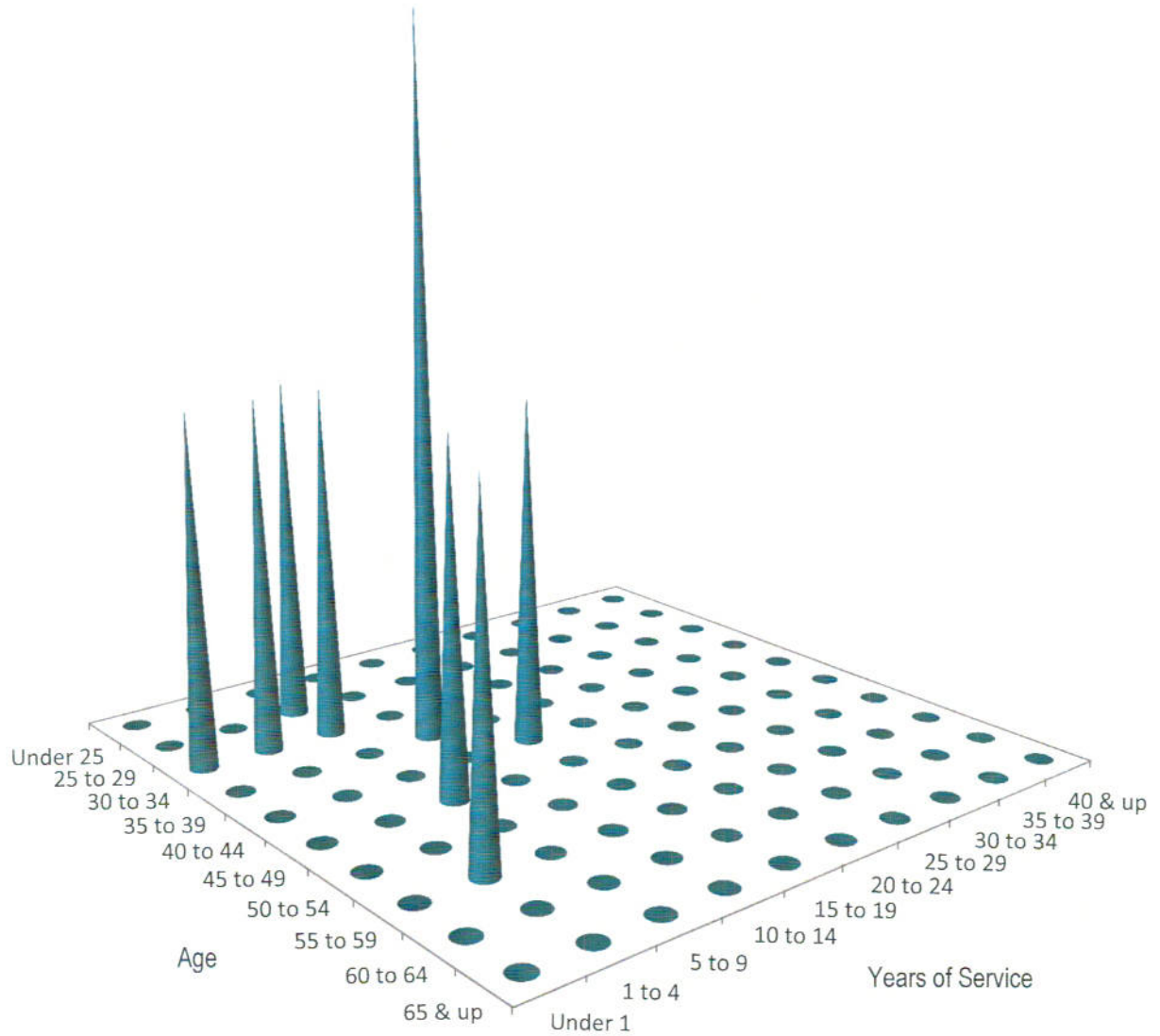
Active Participant Statistics From Prior Valuations

	Average Age	Average Service	Average Salary	Average Expected Salary Increase	Average Actual Salary Increase
October 1, 2010	N/A	N/A	N/A	N/A	N/A
October 1, 2011	38.5	9.1	\$43,310	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	32.5	5.5	\$46,229	7.00%	3.29%
October 1, 2015	N/A	N/A	N/A	6.89%	9.18%
October 1, 2016	36.9	6.2	\$51,895	6.83%	6.07%
October 1, 2017	N/A	N/A	N/A	6.85%	3.56%
October 1, 2018	38.9	8.2	\$52,584	6.62%	3.30%
October 1, 2019	38.3	7.9	\$46,164	6.62%	-5.57%



Active Age-Service Distribution

Table III-D



Active Age-Service-Salary Table

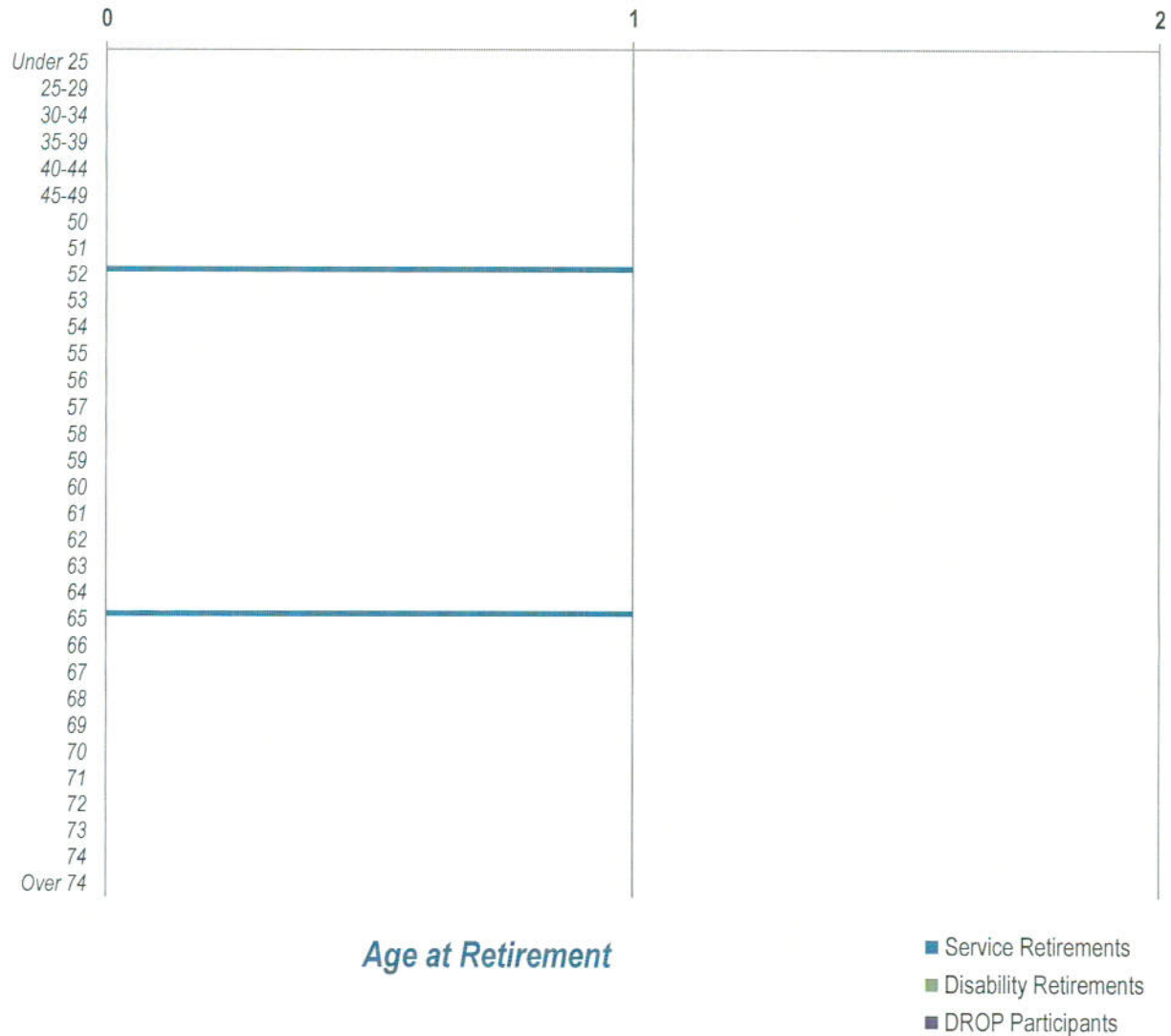
Table III-E

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	0	0	1	0	0	0	0	0	0	0	1
Avg. Pay	0	0	42,522	0	0	0	0	0	0	0	42,522
30 to 34	1	1	1	0	0	0	0	0	0	0	3
Avg. Pay	37,945	37,854	44,041	0	0	0	0	0	0	0	39,947
35 to 39	0	0	0	2	0	0	0	0	0	0	2
Avg. Pay	0	0	0	57,180	0	0	0	0	0	0	57,180
40 to 44	0	0	0	0	1	0	0	0	0	0	1
Avg. Pay	0	0	0	0	53,818	0	0	0	0	0	53,818
45 to 49	0	0	1	0	0	0	0	0	0	0	1
Avg. Pay	0	0	40,853	0	0	0	0	0	0	0	40,853
50 to 54	0	0	0	0	0	0	0	0	0	0	0
Avg. Pay	0	0	0	0	0	0	0	0	0	0	0
55 to 59	0	1	0	0	0	0	0	0	0	0	1
Avg. Pay	0	44,087	0	0	0	0	0	0	0	0	44,087
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	1	2	3	2	1	0	0	0	0	0	9
Avg. Pay	37,945	40,971	42,472	57,180	53,818	0	0	0	0	0	46,164



Inactive Participant Data

Table III-F

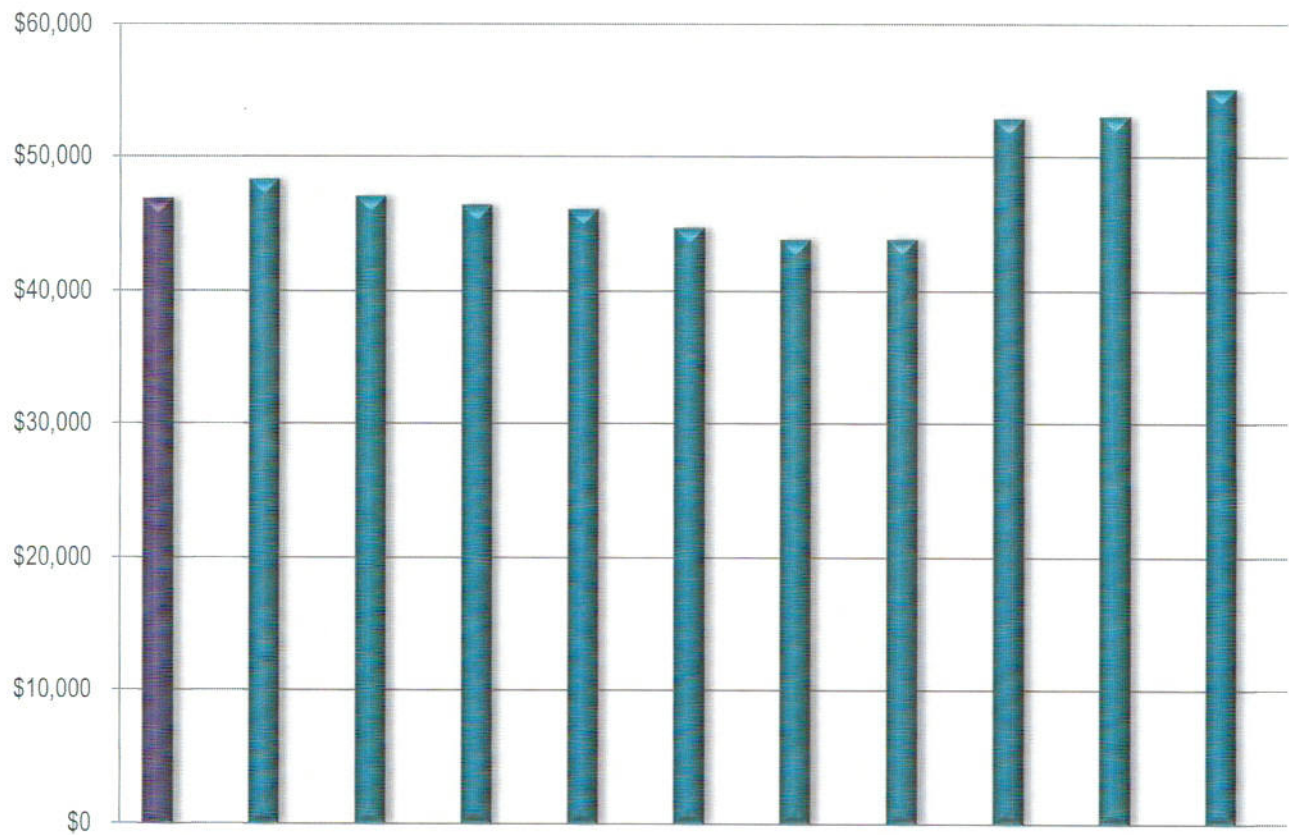
Average Monthly Benefit

Service Retirements	\$1,953.16
Disability Retirements	Not applicable
Beneficiaries Receiving	Not applicable
DROP Participants	Not applicable
Deferred Vested Participants	\$1,133.31
Deferred Beneficiaries	Not applicable



Projected Benefit Payments

Table III-G

Actual

For the period October 1, 2018 through September 30, 2019

\$46,876

Projected

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

\$48,350

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

\$47,064

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

\$46,404

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

\$46,112

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

\$44,764

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

\$43,877

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

\$43,909

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

\$52,871

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

\$53,039

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

\$55,100



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 assumed to increase at the rate of 10.00% per annum for employees with less than one year of service, 8.00% per annum for employees with at least one but less than two years of service, 7.00% per annum for employees with at least two but less than five years of service, and 5.50% per annum for employees with at least five years of service, unless actual plan compensation is known for a prior plan year.

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 (sample rates include 0.03% at age 20, 0.04% at age 30, 0.07% at age 40, and 0.18% at age 50); all disabilities are assumed to be service-related.
- Termination: Service-based rates of employment termination were assumed (rates are 20% per year prior to three years of service, 15% per year with at least three but less than five years of service, and 5% per year with at least five years of service).
- Retirement: 5% of participants are assumed to retire at each eligible retirement age prior to normal retirement, 10% are assumed to retire at each age after normal retirement, and 100% are assumed to retire at age 58 with 13 years of service or at age 55 with 28 years of service; no retirements are assumed to occur on the valuation date for those who are eligible for normal retirement.

6. Form of Payment

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

7. Expenses

The total projected benefit liability has been loaded by 6.50% 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 mortality basis was changed from a blend of various RP-2000 Mortality Tables to the RP-2000 Blue Collar Mortality Table and the administrative expense assumption was changed from the amount of the prior year's expenses to a 6.50% loading of the projected benefit liability.



Summary of Plan Provisions

Table V-A

1. Monthly Accrued Benefit

2.50% of Average Final Compensation multiplied by Credited Service earned prior to October 1, 2019 plus
3.00% of Average Final Compensation multiplied by Credited Service earned after September 30, 2019

2. Normal Retirement Age and Benefit

- **Age**

Age 55 with at least 10 years of Credited Service; or
Age 52 with at least 25 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 66 $\frac{2}{3}$ % joint and contingent annuity (optional);
Actuarially reduced 75% joint and contingent annuity (optional);
Actuarially reduced 100% joint and contingent annuity (optional);
Social security level income annuity (optional);
Single lump sum payment equal to 10%, 15%, 20%, or 25% of the actuarially equivalent value of the normal form of benefit with the remaining value paid in one of the optional annuity forms; or
Actuarially equivalent lump sum distribution (automatic if the single sum value of the participant's benefit is less than or equal to \$1,000)

(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 Monthly Accrued Benefit, 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

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 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

8. Pre-Retirement Death Benefit

In the case of the death of a vested participant prior to retirement, his beneficiary will receive 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

10. Compensation

W-2 compensation, excluding, after July 1, 2011, overtime in excess of 300 hours per year and payments for accrued unused sick and annual leave; 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 elapsed time from the participant's date of hire until his date of termination, retirement, or death, provided that the participant made all required contributions.

12. Participation Requirement

All full-time police officers of the City of Umatilla



Summary of Plan Provisions

Table V-A

(continued)

13. Accumulated Contributions

The Employee Contributions accumulated with no interest; if the participant terminates his employment with less than 10 years of Credited Service, he receives his Accumulated Contributions in lieu of any other benefits payable from the plan.

14. Participant Contribution

3.00% of earnings (0.50% of earnings prior to October 1, 2019)

15. Definition of Actuarially Equivalent

- **Interest Rate**
7.00% per annum
- **Mortality Table**
RP-2000 Combined Healthy Unisex Mortality Table

16. Deferred Retirement Option Plan (DROP)

A participant who reaches his Normal Retirement Age is eligible to participate in the DROP for a period of up to 60 months. The DROP accounts are credited with interest based on the actual investment return on plan assets.



Summary of Plan Amendments

Table V-B

Since the completion of the previous valuation, Ordinance 2019-I was adopted to be effective October 1, 2019. This ordinance increased the employee contribution rate from 0.50% of pensionable earnings to 3.00% of pensionable earnings and increased the benefit formula multiplier from 2.50% to 3.00% for service earned after September 30, 2019.

