

CITY OF WAUCHULA  
PENSION PLAN

ACTUARIAL VALUATION  
AS OF OCTOBER 1, 2017

DETERMINES THE CONTRIBUTION  
FOR THE 2017/18 FISCAL YEAR



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GASB 67/68 Supplement as of September 30, 2017

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January 30, 2018

## Introduction

This report presents the results of the October 1, 2017 actuarial valuation of the City of Wauchula 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, 2017 and to determine the minimum required contribution under Chapter 112, Florida Statutes, for the 2017/18 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 2017/18 plan year. The minimum required contribution rate is 3.23% of covered payroll, which represents a decrease of 3.90% of payroll from the prior valuation.

Table I-C provides a breakdown of the sources of change in the contribution rate. Significantly, the rate decreased by 4.03% of payroll due to investment gains and increased by 0.13% of payroll due to demographic experience. The market value of assets earned 13.42% during the 2016/17 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 amortization payment towards the unfunded liability, where the amortization period is no longer than 30 years and where both amounts are adjusted as necessary for administrative expenses and to reflect interest on any delayed payment of the contribution beyond the valuation date. On this basis, the City's 2017/18 minimum required contribution will be equal to 3.23% multiplied by the total pensionable earnings for the 2017/18 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 \$21,392,918. As illustrated in Table I-A, current assets are sufficient to cover \$17,687,189 of this amount, the employer's 2017/18 expected contribution will cover \$86,849 of this amount, and future employee contributions are expected to cover \$2,747,140 of this amount, leaving \$871,740 to be covered by future employer funding beyond the 2017/18 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, 2017, the advance employer contribution is \$340,207, which reflects the advance employer contribution of \$538,405 as of October 1, 2016 less \$198,198 to cover the shortfall between the actual employer contribution and the minimum required contribution for the 2016/17 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 2017/18 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, 2017 would reduce the minimum required contribution for the 2017/18 plan year to 2.22% 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. Specifically, Table II-A shows the development of the actuarial value of assets, which is based on the market value of assets. Tables III-A through III-G provide statistical information concerning the plan's participant population. In particular, Table III-G gives a 10-year projection of the cash that is expected to be required from the trust fund in order to pay benefits to the



current group of participants. Finally, Tables IV-A through V-B provide a summary of the actuarial assumptions and methods that are used to value the plan's benefits and of the relevant plan provisions as of October 1, 2017, 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  
Consulting Actuary  
Southern Actuarial Services Company, Inc.

Enrolled Actuary No. 17-04927

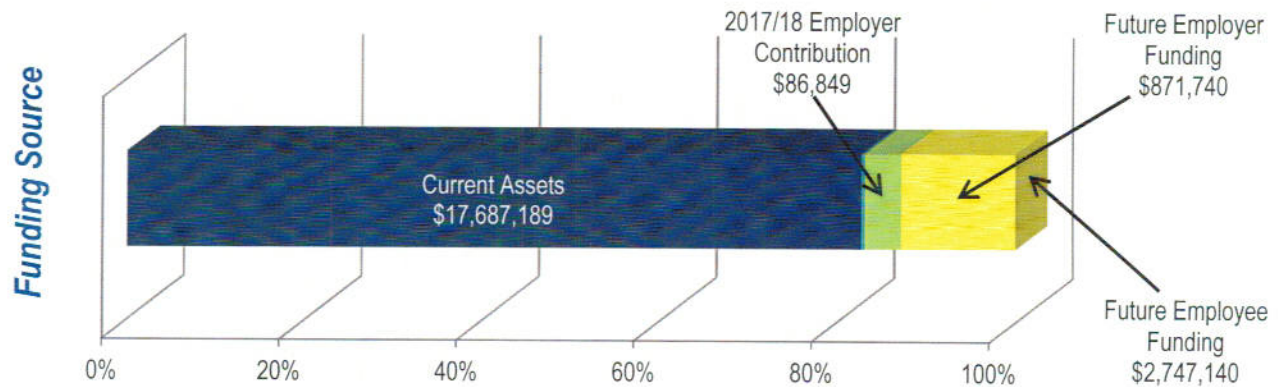
*The individual above is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.*





## Minimum Required Contribution

Table I-A



### For the 2017/18 Plan Year

Normal Cost for the 2017/18 Plan Year	\$0
Unfunded Liability Amortization Payment for the 2017/18 Plan Year	\$36,866
Expense Allowance for the 2017/18 Plan Year	\$46,992
	\$83,858
Adjustment to Reflect Semi-Monthly Employer Contributions	\$2,991
Preliminary Employer Contribution for the 2017/18 Plan Year	\$86,849
Expected Payroll for the 2017/18 Plan Year	÷ \$2,685,252

**Minimum Required Contribution Rate** **3.23%**

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

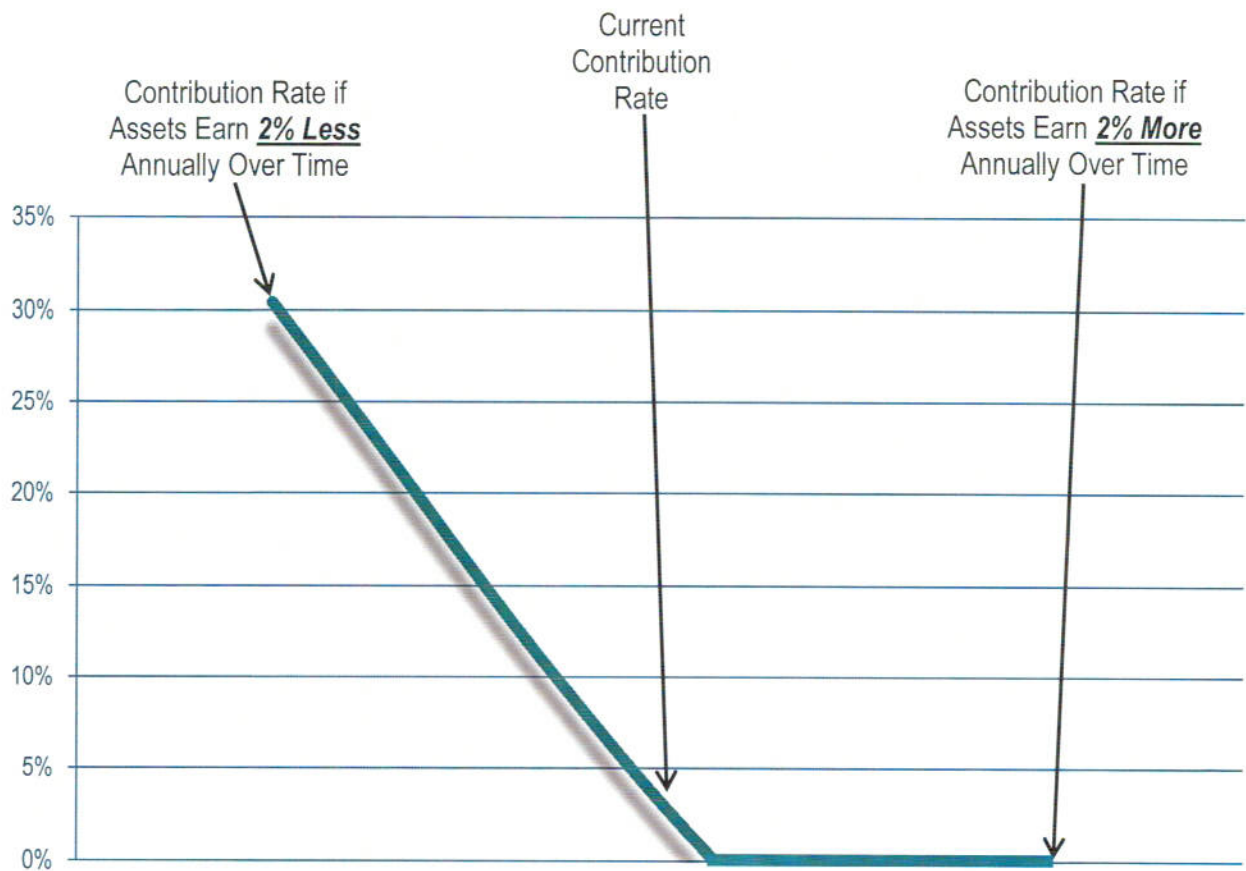
### Additional Disclosures

Present Value of Future Compensation	\$27,471,410
Present Value of Future Employer Contributions	\$958,589
Present Value of Future Employee Contributions	\$2,747,140



## Sensitivity Analysis

Table I-B



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



## Gain and Loss Analysis

Table I-C

### Source of Change in the Contribution Rate

Previous minimum required contribution rate	7.13%
Increase (decrease) due to investment gains and losses	-4.03%
Increase (decrease) due to demographic experience	0.13%
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 minimum required contribution rate	<u>3.23%</u>

### Source of Change in the Unfunded Liability

Previous unfunded liability	\$1,425,373
Increase due to employer normal cost and expenses	\$66,015
Increase due to interest on normal cost and unfunded liability	\$104,397
Decrease due to employer contributions	(\$198,198)
Decrease due to interest on employer contributions	\$0
Expected unfunded liability	<u>\$1,397,587</u>
Increase (decrease) due to plan amendments	\$0
Increase (decrease) due to actuarial assumption changes	\$0
Increase (decrease) due to actuarial method changes	\$0
Immediate reduction in unfunded liability	(\$919,748) *
Current unfunded liability	<u>\$477,839</u>

\* The unfunded liability is reduced to keep the normal cost from becoming negative.





## Present Value of Future Benefits

Table I-D

	Old Assumptions <u>w/o Amendment</u>	Old Assumptions <u>w/ Amendment</u>	New Assumptions <u>w/ Amendment</u>
<i><u>Actively Employed Participants</u></i>			
Retirement benefits	\$10,883,283	\$10,883,283	\$10,883,283
Termination benefits	\$362,490	\$362,490	\$362,490
Disability benefits	\$500,035	\$500,035	\$500,035
Death benefits	\$249,844	\$249,844	\$249,844
Refund of employee contributions	\$285,006	\$285,006	\$285,006
Sub-total	<b>\$12,280,658</b>	<b>\$12,280,658</b>	<b>\$12,280,658</b>
<i><u>Deferred Vested Participants</u></i>			
Retirement benefits	\$648,142	\$648,142	\$648,142
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$9,642	\$9,642	\$9,642
Refund of employee contributions	\$0	\$0	\$0
Sub-total	<b>\$657,784</b>	<b>\$657,784</b>	<b>\$657,784</b>
<i><u>Due a Refund of Contributions</u></i>	<b>\$58,344</b>	<b>\$58,344</b>	<b>\$58,344</b>
<i><u>Deferred Beneficiaries</u></i>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<i><u>Retired Participants</u></i>			
Service retirements	\$6,842,661	\$6,842,661	\$6,842,661
Disability retirements	\$227,372	\$227,372	\$227,372
Beneficiaries receiving	\$845,349	\$845,349	\$845,349
DROP participants	\$0	\$0	\$0
Sub-total	<b>\$7,915,382</b>	<b>\$7,915,382</b>	<b>\$7,915,382</b>
<i><u>Grand Total</u></i>	<b><u>\$20,912,168</u></b>	<b><u>\$20,912,168</u></b>	<b><u>\$20,912,168</u></b>
Present Value of Future Payroll	\$27,471,410	\$27,471,410	\$27,471,410
Present Value of Future Employee Contribs.	\$2,747,140	\$2,747,140	\$2,747,140
Present Value of Future Employer Contribs.	\$958,589	\$958,589	\$958,589



## Present Value of Accrued Benefits

Table I-E

	Old Assumptions w/o Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
<u>Actively Employed Participants</u>			
Retirement benefits	\$3,226,569	\$3,226,569	\$3,226,569
Termination benefits	\$135,727	\$135,727	\$135,727
Disability benefits	\$312,342	\$312,342	\$312,342
Death benefits	\$118,912	\$118,912	\$118,912
Refund of employee contributions	\$101,409	\$101,409	\$101,409
Sub-total	<b>\$3,894,959</b>	<b>\$3,894,959</b>	<b>\$3,894,959</b>
<u>Deferred Vested Participants</u>			
Retirement benefits	\$648,142	\$648,142	\$648,142
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$9,642	\$9,642	\$9,642
Refund of employee contributions	\$0	\$0	\$0
Sub-total	<b>\$657,784</b>	<b>\$657,784</b>	<b>\$657,784</b>
<u>Due a Refund of Contributions</u>	<b>\$58,344</b>	<b>\$58,344</b>	<b>\$58,344</b>
<u>Deferred Beneficiaries</u>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<u>Retired Participants</u>			
Service retirements	\$6,842,661	\$6,842,661	\$6,842,661
Disability retirements	\$227,372	\$227,372	\$227,372
Beneficiaries receiving	\$845,349	\$845,349	\$845,349
DROP participants	\$0	\$0	\$0
Sub-total	<b>\$7,915,382</b>	<b>\$7,915,382</b>	<b>\$7,915,382</b>
<u>Grand Total</u>	<b><u>\$12,526,469</u></b>	<b><u>\$12,526,469</u></b>	<b><u>\$12,526,469</u></b>
<u>Funded Percentage</u>	143.91%	143.91%	143.91%

(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
<i><u>Actively Employed Participants</u></i>			
Retirement benefits	\$3,200,019	\$3,200,019	\$3,200,019
Termination benefits	\$96,501	\$96,501	\$96,501
Disability benefits	\$312,342	\$312,342	\$312,342
Death benefits	\$113,930	\$113,930	\$113,930
Refund of employee contributions	\$119,559	\$119,559	\$119,559
Sub-total	<b>\$3,842,351</b>	<b>\$3,842,351</b>	<b>\$3,842,351</b>
<i><u>Deferred Vested Participants</u></i>			
Retirement benefits	\$648,142	\$648,142	\$648,142
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$9,642	\$9,642	\$9,642
Refund of employee contributions	\$0	\$0	\$0
Sub-total	<b>\$657,784</b>	<b>\$657,784</b>	<b>\$657,784</b>
<i><u>Due a Refund of Contributions</u></i>	<b>\$58,344</b>	<b>\$58,344</b>	<b>\$58,344</b>
<i><u>Deferred Beneficiaries</u></i>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<i><u>Retired Participants</u></i>			
Service retirements	\$6,842,661	\$6,842,661	\$6,842,661
Disability retirements	\$227,372	\$227,372	\$227,372
Beneficiaries receiving	\$845,349	\$845,349	\$845,349
DROP participants	\$0	\$0	\$0
Sub-total	<b>\$7,915,382</b>	<b>\$7,915,382</b>	<b>\$7,915,382</b>
<i><u>Grand Total</u></i>	<b><u>\$12,473,861</u></b>	<b><u>\$12,473,861</u></b>	<b><u>\$12,473,861</u></b>



## Entry Age Normal Accrued Liability

Table I-G

	Old Assumptions w/o Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
<u>Actively Employed Participants</u>			
Retirement benefits	\$5,447,357	\$5,447,357	\$5,447,357
Termination benefits	\$170,004	\$170,004	\$170,004
Disability benefits	\$271,725	\$271,725	\$271,725
Death benefits	\$135,342	\$135,342	\$135,342
Refund of employee contributions	\$130,111	\$130,111	\$130,111
Sub-total	<b>\$6,154,539</b>	<b>\$6,154,539</b>	<b>\$6,154,539</b>
<u>Deferred Vested Participants</u>			
Retirement benefits	\$648,142	\$648,142	\$648,142
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$9,642	\$9,642	\$9,642
Refund of employee contributions	\$0	\$0	\$0
Sub-total	<b>\$657,784</b>	<b>\$657,784</b>	<b>\$657,784</b>
<u>Due a Refund of Contributions</u>	<b>\$58,344</b>	<b>\$58,344</b>	<b>\$58,344</b>
<u>Deferred Beneficiaries</u>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<u>Retired Participants</u>			
Service retirements	\$6,842,661	\$6,842,661	\$6,842,661
Disability retirements	\$227,372	\$227,372	\$227,372
Beneficiaries receiving	\$845,349	\$845,349	\$845,349
DROP participants	\$0	\$0	\$0
Sub-total	<b>\$7,915,382</b>	<b>\$7,915,382</b>	<b>\$7,915,382</b>
<u>Grand Total</u>	<b><u>\$14,786,049</u></b>	<b><u>\$14,786,049</u></b>	<b><u>\$14,786,049</u></b>





## Unfunded Liability Bases

Table I-H

<u>Description</u>	<u>Original Amount</u>	<u>Outstanding Balance</u>	<u>Amortization Payment</u>	<u>Years Rem.</u>
	<b>Total</b>	<b>\$477,839</b>	<b>\$36,866</b>	
		↓	↓	
10/1/2014 Assumption Change	\$818,450	\$266,944	\$20,813	27
10/1/2016 Assumption Change	\$628,448	\$210,895	\$16,053	29



## Development of the Normal Cost

Table I-I

### Normal Cost as of October 1, 2017

Present Value of Future Benefits	\$20,912,168
Unfunded Frozen Liability	(\$477,839)
Actuarial Value of Assets	(\$17,687,189)
Present Value of Future Employee Contributions	(\$2,747,140)
Present Value of Future Normal Cost	\$0
Present Value of Future Compensation	÷ \$27,471,410
Normal Cost Accrual Rate	0.000000%
Expected Payroll for the Current Year	x \$2,685,252
Normal Cost	\$0





## Actuarial Value of Assets

Table II-A

Market Value of Assets as of October 1, 2017 \$18,027,396

Minus advance employer contributions (\$340,207)

**Actuarial Value of Assets as of October 1, 2017 \$17,687,189**

**Historical Actuarial Value of Assets**

October 1, 2008	\$9,470,146
October 1, 2009	\$9,897,681
October 1, 2010	\$11,602,139
October 1, 2011	\$11,767,746
October 1, 2012	\$13,794,913
October 1, 2013	\$15,043,906
October 1, 2014	\$15,916,800
October 1, 2015	\$15,159,423
October 1, 2016	\$15,931,492
October 1, 2017	\$17,687,189

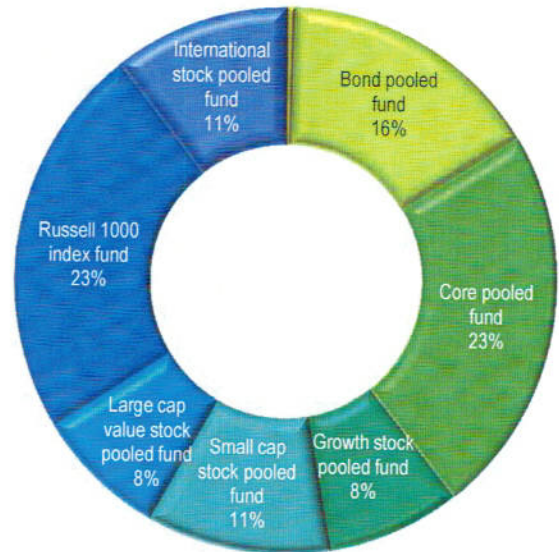


## Market Value of Assets

Table II-B

As of October 1, 2017

<b>Market Value of Assets</b>	<b><u>\$18,027,396</u></b>
Cash	\$72,110
Bond pooled fund	\$2,830,301
Core pooled fund	\$4,164,328
Growth stock pooled fund	\$1,442,192
Small cap stock pooled fund	\$1,983,014
Large cap value stock pooled fund	\$1,424,164
Russell 1000 index fund	\$4,200,383
International stock pooled fund	\$1,910,904

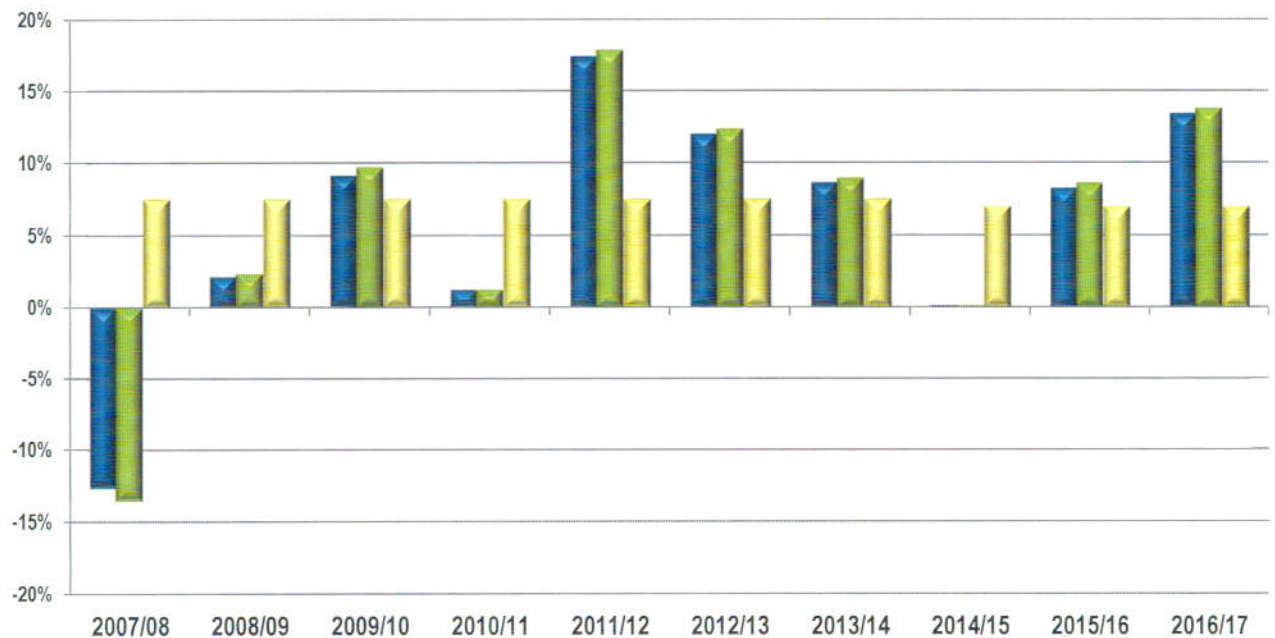
**Historical Market Value of Assets**

October 1, 2008	\$10,337,131
October 1, 2009	\$10,740,499
October 1, 2010	\$11,973,677
October 1, 2011	\$12,109,219
October 1, 2012	\$14,064,331
October 1, 2013	\$15,497,413
October 1, 2014	\$16,490,294
October 1, 2015	\$15,880,274
October 1, 2016	\$16,469,897
October 1, 2017	\$18,027,396



## Investment Return

Table II-C

*Annual Investment Returns*

■ Market Value Return  
■ Actuarial Value Return  
■ Assumed Return

Plan Year	Market Value Return	Actuarial Value Return	Assumed Return
2007/08	-12.62%	-13.52%	7.50%
2008/09	2.19%	2.38%	7.50%
2009/10	9.16%	9.70%	7.50%
2010/11	1.24%	1.28%	7.50%
2011/12	17.43%	17.88%	7.50%
2012/13	12.02%	12.34%	7.50%
2013/14	8.65%	8.95%	7.50%
2014/15	0.13%	0.14%	7.00%
2015/16	8.26%	8.61%	7.00%
2016/17	13.42%	13.80%	7.00%
10yr. Avg.	5.66%	5.80%	7.35%





## Asset Reconciliation

Table II-D

	<u>Market Value</u>	<u>Actuarial Value</u>
As of October 1, 2016	\$16,469,897	\$15,931,492
<i>Increases Due To:</i>		
Employer Contributions	\$0	\$0
Employee Contributions	\$277,978	\$277,978
Service Purchase Contributions	\$0	\$0
Total Contributions	<u>\$277,978</u>	<u>\$277,978</u>
Interest and Dividends	\$0	
Realized Gains (Losses)	\$0	
Unrealized Gains (Losses)	\$2,169,961	
Total Investment Income	<u>\$2,169,961</u>	\$2,169,961
Other Income	\$0	
Total Income	<u>\$2,447,939</u>	<u>\$2,447,939</u>
<i>Decreases Due To:</i>		
Monthly Benefit Payments	(\$744,588)	(\$744,588)
Refund of Employee Contributions	(\$104,812)	(\$104,812)
Total Benefit Payments	<u>(\$849,400)</u>	<u>(\$849,400)</u>
Investment Expenses	\$0	
Administrative Expenses	(\$41,040)	(\$41,040)
Advance Employer Contribution		\$198,198
Total Expenses	<u>(\$890,440)</u>	<u>(\$692,242)</u>
As of October 1, 2017	<u><u>\$18,027,396</u></u>	<u><u>\$17,687,189</u></u>



## Historical Trust Fund Detail

Table II-E

Income

Plan Year	Employer Contribs.	Employee Contribs.	Service Purchase Contribs.	Interest / Dividends	Realized Gains / Losses	Unrealized Gains / Losses	Other Income
2007/08	\$271,886	\$288,983	\$0	\$0	\$0	-\$1,482,400	\$0
2008/09	\$285,942	\$285,942	\$0	\$0	\$0	\$228,051	\$0
2009/10	\$386,579	\$301,513	\$0	\$0	\$0	\$994,664	\$0
2010/11	\$339,900	\$280,489	\$0	\$0	\$0	\$148,240	\$0
2011/12	\$351,847	\$266,773	\$0	\$0	\$0	\$2,098,149	\$0
2012/13	\$308,530	\$233,913	\$0	\$0	\$0	\$1,675,534	\$0
2013/14	\$256,383	\$256,383	\$0	\$0	\$0	\$1,326,542	\$0
2014/15	\$262,201	\$262,201	\$0	\$0	\$0	\$21,494	\$0
2015/16	\$13,515	\$271,126	\$0	\$0	\$0	\$1,283,244	\$0
2016/17	\$0	\$277,978	\$0	\$0	\$0	\$2,169,961	\$0

Expenses

Plan Year	Monthly Benefit Payments	Contrib. Refunds	Admin. Expenses	Invest. Expenses
2007/08	\$331,381	\$39,896	\$42,359	\$0
2008/09	\$297,568	\$49,944	\$49,055	\$0
2009/10	\$310,335	\$59,906	\$79,337	\$0
2010/11	\$472,182	\$119,773	\$41,132	\$0
2011/12	\$475,629	\$245,782	\$40,246	\$0
2012/13	\$536,433	\$201,342	\$47,120	\$0
2013/14	\$775,288	\$40,979	\$30,160	\$0
2014/15	\$895,803	\$212,360	\$47,753	\$0
2015/16	\$835,033	\$94,106	\$49,123	\$0
2016/17	\$744,588	\$104,812	\$41,040	\$0

Other Actuarial Adjustments

Advance  
Employer  
Contribs.

\$174,186  
-\$24,167  
-\$471,280  
-\$30,065  
-\$72,055  
\$184,089  
\$119,987  
\$147,357  
-\$182,446  
-\$198,198

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	\$538,405
Additional Employer Contribution	\$0
Minimum Required Contribution	(\$198,198)
Net Increase in Advance Employer Contribution	(\$198,198)
Advance Employer Contribution as of October 1, 2017	<u>\$340,207</u>

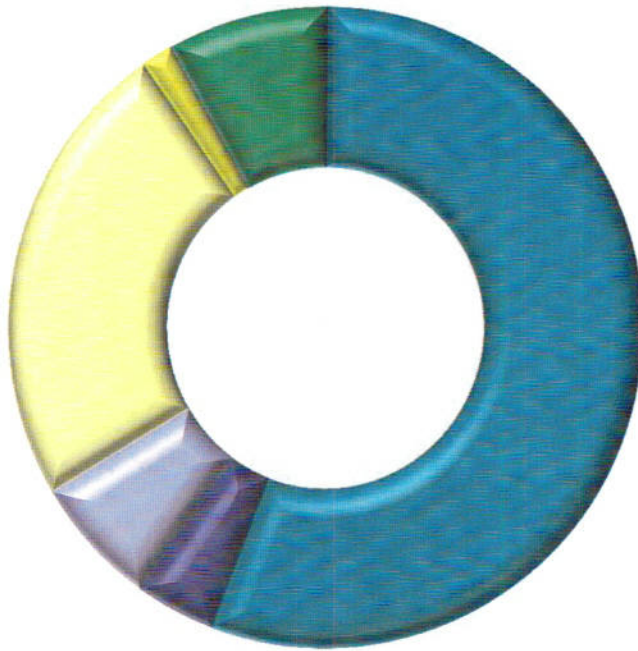




## Summary of Participant Data

Table III-A

As of October 1, 2017

Actively Employed Participants

Active Participants	68
DROP Participants	0

Inactive Participants

Deferred Vested Participants	5
Due a Refund of Contributions	8
Deferred Beneficiaries	0

Participants Receiving a Benefit

Service Retirements	29
Disability Retirements	2
Beneficiaries Receiving	10

**Total Participants 122**Number of Participants Included in Prior Valuations

	<i>Active</i>	<i>DROP</i>	<i>Inactive</i>	<i>Retired</i>	<i>Total</i>
October 1, 2008	75	0	12	33	120
October 1, 2009	78	0	12	32	122
October 1, 2010	71	0	11	35	117
October 1, 2011	69	0	11	34	114
October 1, 2012	62	0	14	36	112
October 1, 2013	N/A	N/A	N/A	N/A	N/A
October 1, 2014	69	0	14	43	126
October 1, 2015	70	0	12	43	125
October 1, 2016	69	0	15	42	126
October 1, 2017	68	0	13	41	122



## 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>	69	0	5	10	0	31	2	9	126
<u>Change in Status</u>									
Re-employed									
Terminated	(16)		1	15					
Retired			(1)			1			
<u>Participation Ended</u>									
Transferred Out									
Cashed Out				(17)					(17)
Died						(3)		(1)	(4)
<u>Participation Began</u>									
Newly Hired	15								15
Transferred In									
New Beneficiary								2	2
<u>Other Adjustment</u>									
<u>October 1, 2017</u>	68	0	5	8	0	29	2	10	122

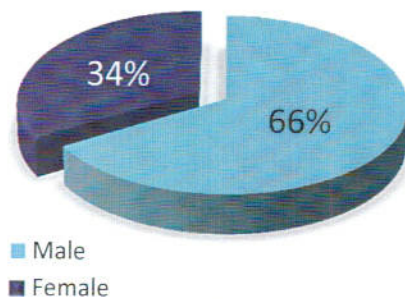


## Active Participant Data

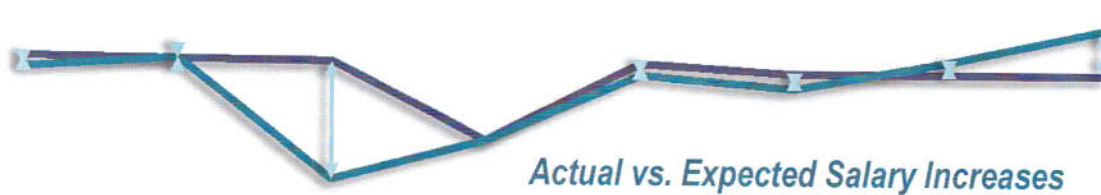
Table III-C

As of October 1, 2017

## Gender Mix



Average Age	39.4 years
Average Service	6.4 years
Total Annualized Compensation for the Prior Year	\$2,715,001
Total Expected Compensation for the Current Year	\$2,685,252
Average Increase in Compensation for the Prior Year	8.45%
Expected Increase in Compensation for the Current Year	5.00%
Accumulated Contributions for Active Employees	\$1,679,969



## Active Participant Statistics From Prior Valuations

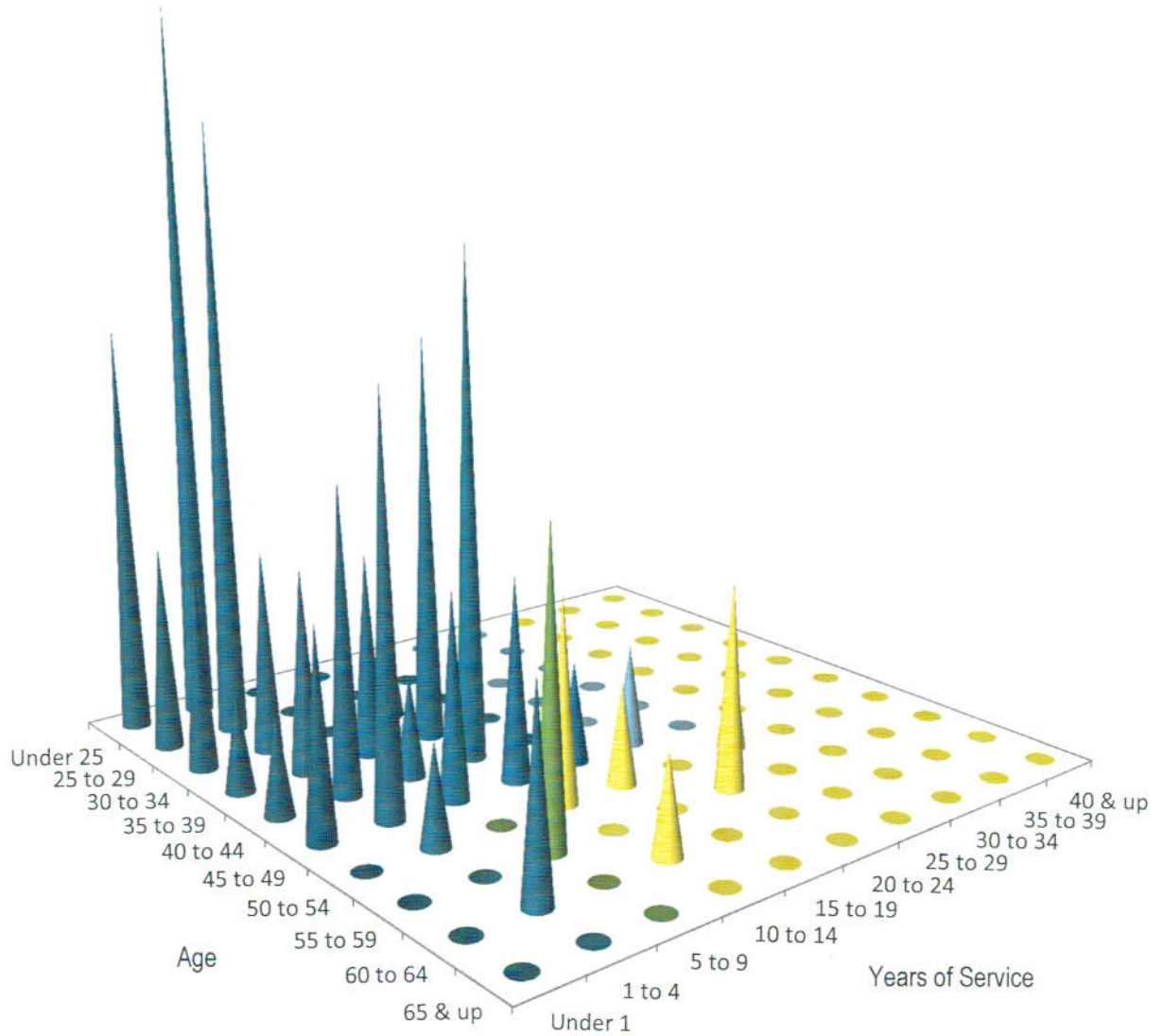
	Average Age	Average Service	Average Salary	Average Expected Salary Increase	Average Actual Salary Increase
October 1, 2008	41.3	7.3	\$35,850	5.83%	8.56%
October 1, 2009	41.6	7.4	\$36,730	6.01%	5.54%
October 1, 2010	42.0	7.5	\$37,530	6.14%	5.31%
October 1, 2011	43.0	8.2	\$39,440	5.95%	6.03%
October 1, 2012	43.3	8.6	\$37,346	5.83%	-2.92%
October 1, 2013	N/A	N/A	N/A	N/A	N/A
October 1, 2014	38.6	5.9	\$36,600	5.74%	4.86%
October 1, 2015	38.5	5.6	\$36,593	5.00%	3.91%
October 1, 2016	37.9	5.9	\$37,060	5.00%	5.98%
October 1, 2017	39.4	6.4	\$39,926	5.00%	8.45%





# Active Age-Service Distribution

Table III-D



- ▲ Eligible to retire
- ▲ May be eligible to retire
- ▲ Not eligible to retire



Active Age-Service-Salary Table

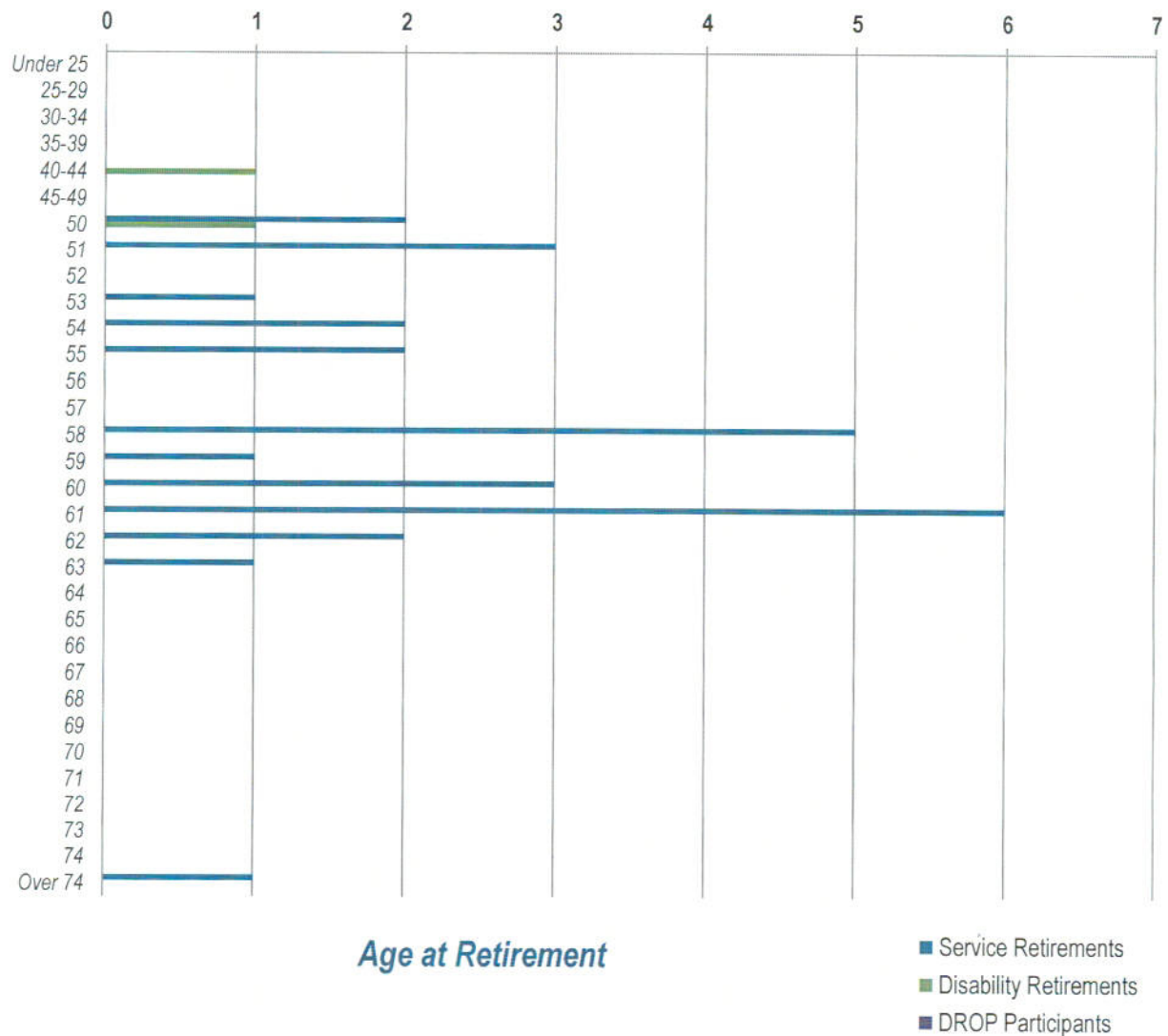
Table III-E

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	
<b>Under 25</b>	<b>4</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>
Avg.Pay	24,689	32,089	0	0	0	0	0	0	0	0	29,398
<b>25 to 29</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>
Avg.Pay	25,904	45,849	0	0	0	0	0	0	0	0	40,862
<b>30 to 34</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>
Avg.Pay	23,285	40,804	0	22,850	0	0	0	0	0	0	30,205
<b>35 to 39</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>
Avg.Pay	15,766	36,023	31,231	58,741	0	0	0	0	0	0	42,804
<b>40 to 44</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>
Avg.Pay	41,892	33,687	54,328	49,950	0	0	0	0	0	0	44,703
<b>45 to 49</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>
Avg.Pay	43,089	48,813	33,720	30,010	44,129	69,748	0	0	0	0	43,564
<b>50 to 54</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>
Avg.Pay	0	40,517	0	33,309	39,381	0	35,225	0	0	0	36,348
<b>55 to 59</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>
Avg.Pay	0	0	57,733	0	0	43,511	0	0	0	0	52,044
<b>60 to 64</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>
Avg.Pay	0	33,926	0	48,857	0	0	0	0	0	0	38,903
<b>65 &amp; up</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Avg.Pay	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>12</b>	<b>27</b>	<b>8</b>	<b>15</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>68</b>
Avg.Pay	28,414	39,187	44,679	45,537	41,755	52,256	35,225	0	0	0	39,926



## Inactive Participant Data

Table III-F



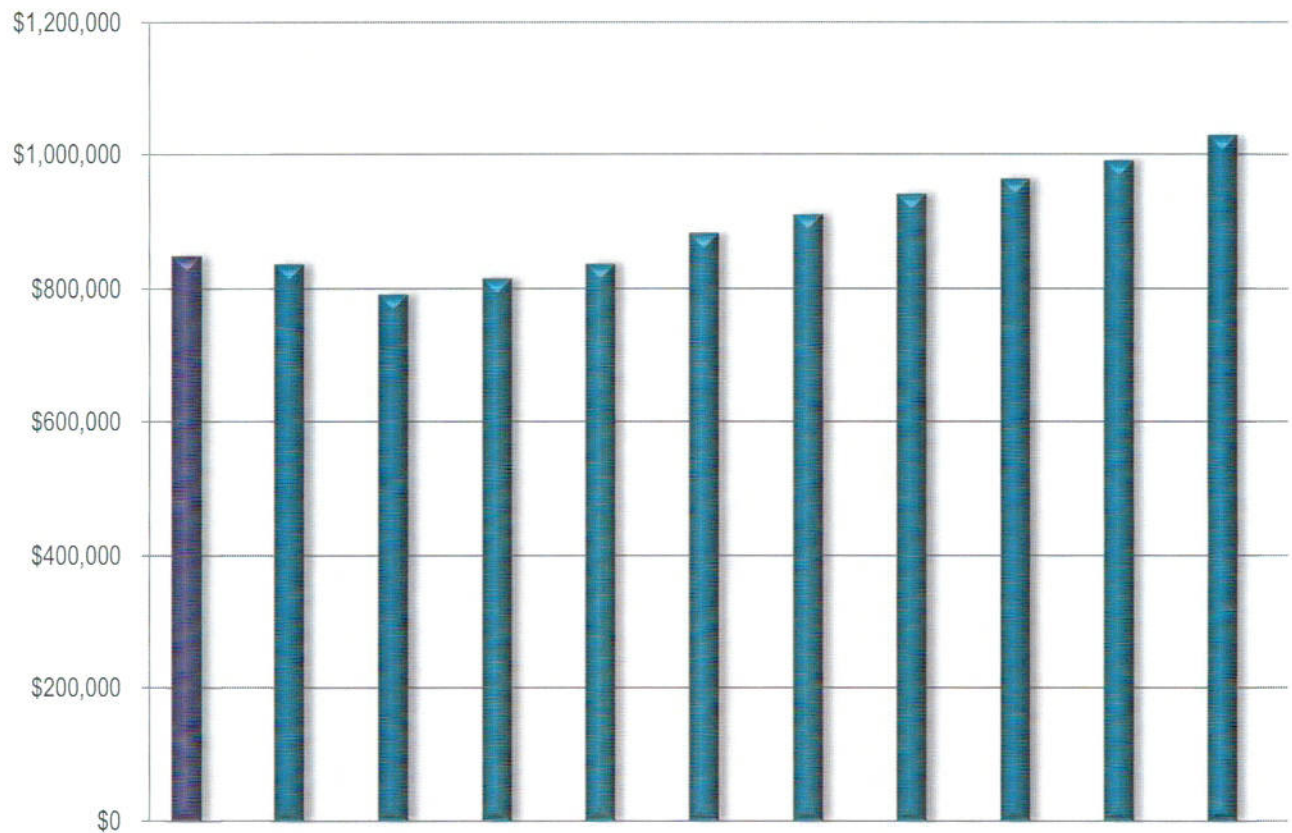
<u>Average Monthly Benefit</u>	
Service Retirements	\$1,702.80
Disability Retirements	\$817.28
Beneficiaries Receiving	\$701.56
DROP Participants	Not applicable
Deferred Vested Participants	\$1,266.25
Deferred Beneficiaries	Not applicable





## Projected Benefit Payments

Table III-G

Actual

For the period October 1, 2016 through September 30, 2017

\$849,400

Projected

For the period October 1, 2017 through September 30, 2018

\$837,160

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

\$792,655

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

\$816,272

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

\$837,952

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

\$882,562

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

\$910,989

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

\$941,250

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

\$964,474

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

\$991,374

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

\$1,028,962



## Summary of Actuarial Methods and Assumptions

Table IV-A

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

1. **Actuarial Cost Method**

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

2. **Amortization Method**

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

3. **Asset Method**

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

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

7.00% per annum

5. **Salary Increases**

Plan compensation is assumed to increase at the rate of 5.00% per annum, unless actual plan compensation is known for a prior plan year. In addition, all pay-related benefits other than disability benefits have been loaded by 5.00% to reflect anticipated accumulated sick leave and vacation pay.

6. **Decrements**

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





## Summary of Actuarial Methods and Assumptions

## Table IV-A

(continued)

- **Disability:** For police officers, age- and gender-based rates of disability were assumed, ranging from 0.179% for males and 0.075% for females at age 25, 0.290% for males and 0.096% for females at age 35, 0.795% for males and 0.162% for females at age 45, and 1.030% for males and 0.040% for females at age 55; 80% of such disabilities are assumed to be service-related.  
  
For all other participants, age- and gender-based rates of disability were assumed, ranging from 0.075% for males and 0.035% for females at age 25, 0.096% for males and 0.054% for females at age 35, 0.162% for males and 0.085% for females at age 45, and 0.400% for males and 0.180% for females at age 55; 20% of such disabilities are assumed to be service-related.
- **Termination:** For police officers, the termination rates are age-based, ranging from 5.00% at age 25, 3.00% at age 35, and 0.00% at age 45. For all other participants, the termination rates are age-based, ranging from 7.10% at age 25, 4.20% at age 35, 1.80% at age 45, 0.80% at age 55, and 0.00% at age 60.
- **Retirement:** For police officers, 20% are assumed to retire at each of ages 55 through 57, 30% are assumed to retire at each of ages 58 and 59, and 100% are assumed to retire at age 60. For all other participants, 10% are assumed to retire at each of ages 55 through 59 and 100% are assumed to retire at age 60. Regardless of the foregoing, participants who have earned at least 30 years of service are assumed to retire immediately and deferred vested participants are assumed to wait until their normal retirement age to commence receipt of their benefit.

**7. Form of Payment**

Future married retirees have been assumed to select the 50% joint and contingent annuity; future unmarried police retirees have been assumed to select the 10-year certain and life annuity; all other future unmarried retirees have been assumed to select the single life annuity.

**8. Marriage Assumption**

80% of non-retired participants are assumed to be married, with husbands three years older than wives.

**9. Expenses**

Administrative expenses are assumed to be 1.75% of covered payroll. In addition, the interest rate set forth in item 4. above is assumed to be net of investment expenses and commissions.





## Changes in Actuarial Methods and Assumptions

Table IV-B

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, 2016, the mortality basis was changed from a 2015 projection of the RP-2000 Mortality Table for annuitants to a full generational projection using Scale BB of the RP-2000 Combined Mortality Table as required by State law.*
- (2) Effective October 1, 2014, the assumed interest (or discount) rate was decreased from 7.50% per annum to 7.00% per annum.*
- (3) Effective October 1, 2014, the assumed increase in future salaries for those employees with less than five years of service was decreased from 7.40% per year to 5.00% per year.*
- (4) Effective October 1, 2014, the mortality basis was changed from the RP-2000 Mortality Table, projected to 2007 by Scale AA, to the RP-2000 Mortality Table, projected to 2015 by Scale AA.*
- (5) Effective October 1, 2009, the administrative expense assumption was changed from a flat \$45,000 per year to 1.75% of covered payroll.*
- (6) Effective October 1, 2008, the pre-retirement mortality assumption was changed from the sex-distinct rates set forth in the 1983 Group Annuity Mortality Table, set back five years for females, to the sex-distinct rates set forth in the RP-2000 Mortality Table for non-annuitants.*
- (7) Effective October 1, 2008, the post-retirement healthy mortality assumption was changed from the sex-distinct rates set forth in the 1983 Group Annuity Mortality Table, set back five years for females, to the sex-distinct rates set forth in the RP-2000 Mortality Table for annuitants.*
- (8) Effective October 1, 2008, the post-retirement disabled mortality assumption was changed from the sex-distinct rates set forth in the 1983 Group Annuity Mortality Table, set forward five years for males, to the sex-distinct rates set forth in the RP-2000 Mortality Table for annuitants.*



## Summary of Plan Provisions

## Table V-A

### 1. Monthly Accrued Benefit

2.50% of Average Final Compensation multiplied by Credited Service (up to 40 years)

### 2. Normal Retirement Age and Benefit

- **Age**

Age 60 with at least six years of Credited Service; or  
Any age with at least 30 years of Credited Service

- **Amount**

Monthly Accrued Benefit

- **Form of Payment**

Single life annuity (normal form of payment for unmarried participants; optional for married participants);

10-year certain and life annuity (alternative normal form of payment for police officers; optional with actuarial adjustment for all other participants);

50% joint and contingent annuity (normal form of payment for married participants; optional with actuarial adjustment for all other participants); 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)

### 3. Early Retirement Age and Benefit

- **Age**

Age 50 with at least six years of Credited Service

- **Amount**

Monthly Accrued Benefit (payable at Normal Retirement Age); or

Monthly Accrued Benefit reduced by 1% for each of the first five years by which the participant's Early Retirement Age precedes age 60 and further reduced by 2% for each of the next five years by which the participant's Early Retirement Date precedes age 60 (payable at Early Retirement Age)

- **Form of Payment**

Same as for Normal Retirement



## Summary of Plan Provisions

## Table V-A

(continued)

### 4. Delayed Retirement Age and Benefit

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

### 5. Deferred Vested Benefit

- **Age**  
Any age with at least six years of Credited Service
- **Amount**  
Monthly Accrued Benefit (payable at Normal Retirement Age); or  
Monthly Accrued Benefit reduced by 1% for each of the first five years by which the participant's Early Retirement Age precedes his Normal Retirement Date and further reduced by 2% for each of the next five years 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

### 6. Service Incurred Disability Retirement Eligibility and Benefit

- **Eligibility**  
All participants are eligible.
- **Condition**  
The participant must have become disabled in the line of duty due to a sickness or injury which continuously and permanently renders him unable to perform any useful, meaningful work for the City in an available position for which he is reasonably qualified or may be reasonably trained to perform. Alternatively, a police officer must only be unable to render useful and efficient service as a police officer due to his disability. However, Disability Benefits will not be payable in cases where the disability arose as a result of excessive and habitual use of drugs, intoxicants, or narcotics or injury or disease sustained while willfully and illegally participating in fights, riots, or civil insurrections, while committing a crime, while serving in any branch of the U.S. armed forces, or while not employed by the City.





## Summary of Plan Provisions

## Table V-A

(continued)

- **Amount**

A monthly benefit equal to the larger of (a) or (b), as follows:

- (a) Monthly Accrued Benefit; or
- (b) 50% of Average Final Compensation (*provided that the monthly disability benefit plus monthly worker's compensation cannot exceed the average wage used to determine the worker's compensation payment*).

- **Form of Payment**

Same as for Normal Retirement

### 7. Non-Service Incurred Disability Retirement Eligibility and Benefit

- **Eligibility**

All participants are eligible.

- **Condition**

Same as for a Service Incurred Disability, except that the disability was not incurred in the line of duty.

- **Amount**

A monthly benefit equal to the larger of (a) or (b), as follows:

- (a) Monthly Accrued Benefit; or
- (b) 25% of Average Final Compensation (*provided that the monthly disability benefit plus monthly worker's compensation cannot exceed the average wage used to determine the worker's compensation payment*).

- **Form of Payment**

Same as for Normal Retirement

### 8. Pre-Retirement Death Benefits

#### Monthly Annuity

In the case of the death of a vested participant prior to retirement, his spouse will receive 50% of the participant's Monthly Accrued Benefit payable for life beginning at the participant's earliest retirement age or, with respect to unmarried, vested police officers, his beneficiary will receive the officer's Monthly Accrued Benefit payable for 10 years beginning at the officer's earliest retirement age. In the case of the death of a non-vested or unmarried participant prior to retirement, his beneficiary will receive the participant's Accumulated Contributions in lieu of any other benefits payable from the plan.



# Summary of Plan Provisions

## Table V-A

(continued)

### Single Lump Sum Payment

In the case of the death of a participant prior to retirement, his beneficiary will receive \$25,000, reduced by 10% for each year of Credited Service less than 10 years.

#### 9. **Post-Retirement Death Benefit**

### Single Lump Sum Payment

In the case of the death of a participant after retirement, his beneficiary will receive \$25,000, reduced by 10% for each year of Credited Service less than 10 years.

#### 10. **Average Final Compensation**

Average of the highest three consecutive years of Compensation out of the last 10 years of employment

#### 11. **Compensation**

Regular salary or wage plus overtime pay, leave pay, bonuses, sick pay, incentive pay, and lump sum payments of accrued sick leave upon retirement; annual compensation in excess of \$200,000 (as indexed) is excluded in accordance with Internal Revenue Code (IRC) §401(a)(17).

#### 12. **Credited Service**

The elapsed time from the participant's date of hire until his date of termination, retirement, or death; police officers may purchase up to five years of additional Credited Service for certain military service.

#### 13. **Participation Requirement**

All full-time employees of the City of Wauchula, Florida, including the City Clerk, but excluding members of the City Council, the Mayor, and state-certified firefighters

#### 14. **Accumulated Contributions**

The Employee Contributions accumulated without interest; if the participant terminates his employment with less than six years of Credited Service, he receives his Accumulated Contributions in lieu of any other benefits payable from the plan.



## Summary of Plan Provisions

## Table V-A

(continued)

### 15. Employee and Employer Contributions

All participating employees are required to contribute 10% of compensation to the plan. In addition, the City of Wauchula is required to contribute the greater of 10% of covered payroll or the contribution required pursuant to Chapter 112, Florida Statutes.

### 16. Supplemental Retirement Benefit

All participants who retire at age 50 or later with at least six years of Credited Service receive a \$100.00 monthly supplemental retirement benefit payable for their lifetime only.

### 17. Definition of Actuarially Equivalent

- **Interest Rate**  
7.50% per annum
- **Mortality Table**  
1983 Group Annuity Mortality Table, blended 50%/50% for males and females, and set back two years

### 18. Plan Effective Date

October 1, 2000

### 19. Cost-of-Living Adjustment

The Trustees of the plan are authorized to adopt a periodic cost-of-living adjustment (COLA) no more frequently than every other year of up to one-half of the increase in the Consumer Price Index, to a maximum COLA of 3.00%, provided that the actuary certifies that the COLA can be funded on a sound actuarial basis without increasing the level of contributions to the plan.





## Summary of Plan Amendments

Table V-B

No significant plan amendments 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) *Effective May 17, 2010, the plan was amended to reduce the service requirement for retirement and vesting from 10 years to six years and to add an unreduced normal retirement benefit upon the attainment of 30 years of service regardless of age (a "30 and out" benefit). (Ordinance 2010-01)*
- (2) *Effective September 1, 2007, retirees were given a one-time 10% cost-of-living adjustment.*

