

RETIREMENT PLAN FOR THE FIREFIGHTERS
OF THE SOUTHERN MANATEE FIRE & RESCUE DISTRICT

ACTUARIAL VALUATION
AS OF OCTOBER 1, 2015

DETERMINES THE CONTRIBUTION
FOR THE 2015/16 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>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	Allowable Chapter 175/185 Contribution II-7
Table II-H	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-5



December 27, 2015

Introduction

This report presents the results of the October 1, 2015 actuarial valuation for the Retirement Plan for the Firefighters of the Southern Manatee Fire & Rescue District. 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, 2015 and to determine the minimum required contribution under Chapter 112, Florida Statutes, for the 2015/16 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 2015/16 plan year. The minimum required contribution rate is 49.39% of covered payroll, which represents an increase of 7.17% of payroll from the prior valuation.

The normal cost rate is 47.69%, which is 6.93% 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 5.13% of payroll due to investment losses and increased by another 1.80% of payroll due to demographic experience. The market value of assets lost 0.11% during the 2014/15 plan year, whereas a 7.00% annual investment



return was required to maintain a stable contribution rate. The demographic loss occurred primarily because salary increases were greater than assumed.

Chapter 112, Florida Statutes, sets forth the rules concerning the minimum required contribution for public pension plans within the state. Essentially, the District 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 District's 2015/16 minimum required contribution will be equal to 49.39% multiplied by the total pensionable earnings for the 2015/16 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 2015/16 plan year. As of the date of this report, the allowable portion of the Chapter 175/185 contribution is \$438,971 per year. However, this amount is subject to change depending on the amount of the Chapter 175/185 contribution for the 2015/16 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 \$41,646,916. As illustrated in Table I-A, current assets are sufficient to cover \$25,839,564 of this amount, the employer's 2015/16 expected contribution will cover \$2,084,842 of this amount, and future employee contributions are expected to cover \$1,080,818 of this amount, leaving \$12,641,692 to be covered by future employer funding beyond the 2015/16 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 District 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, 2015, the advance employer contribution is \$472,337, which reflects the advance employer contribution of \$479,729 as of October 1, 2014 less \$7,392 that was used to cover the gap between the allowable Chapter 175/185 contribution, actual employer contributions, and the minimum funding requirement for the 2014/15 plan year as shown in Table II-F.

The District may apply all or any portion of the advance employer contribution towards the minimum required contribution for the 2015/16 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 District 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, 2015 would reduce the normal cost rate to 46.16% of payroll and would reduce the minimum required contribution for the 2015/16 plan year to 47.81% of payroll.



Excess Chapter 175/185 Contributions

As of October 1, 2015, the plan has accumulated excess Chapter 175/185 contributions of \$78,562 as shown in Table II-F. This amount is equal to the accumulated excess Chapter 175/185 contribution balance as of October 1, 2014 plus \$44,862 of Chapter 175/185 contributions in excess of the allowable amount. The total Chapter 175/185 distribution received during the 2014/15 plan year was \$483,833, \$438,971 of which was allowed to be used to offset the District's minimum required contribution. The Chapter 175/185 contribution consisted of a \$348,350 regular distribution plus a \$135,483 supplemental distribution. Tables II-G and II-H provide a history of the Chapter 175/185 contributions and the portion that is allowed to be recognized.

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, 2015, as well as a summary of the changes that have occurred since the previous valuation report was prepared.

Refund of Participant Contributions

It is our understanding that there are 13 participants who are due a refund of their contributions. We have estimated the accumulated amount of their refunds to be \$1,268 as of October 1, 2015. The average amount owed to these individuals is only \$98. If possible, we recommend that the accumulated contributions be distributed to these individuals in order to simplify the administration of the plan and to reduce future administrative costs.

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.

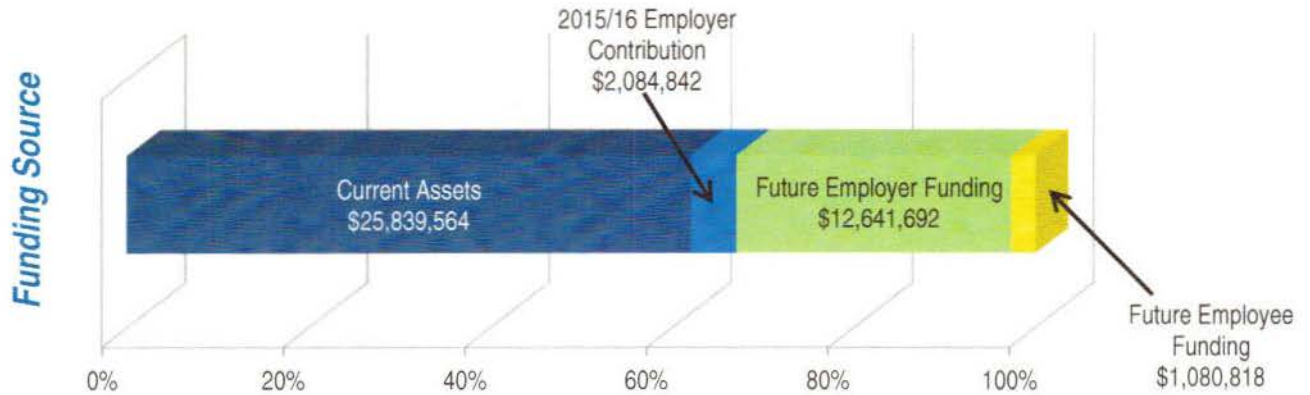
Enrolled Actuary No. 14-04927

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 2015/16 Plan Year

Present Value of Future Benefits	\$41,234,570
Present Value of Future Administrative Expenses	\$412,346
Actuarial Value of Assets	(\$25,839,564)
Present Value of Future Employee Contributions	(\$1,080,818)
Present Value of Future Normal Costs	\$14,726,534
Present Value of Future Payroll	÷ \$30,880,532
Normal Cost Rate	= 47.6887%
Expected Payroll	x \$4,221,200
Normal Cost	\$2,013,037
Adjustment to Reflect Semi-Monthly Employer Contributions	\$71,805
Preliminary Employer Contribution for the 2015/16 Plan Year	\$2,084,842
Expected Payroll for the 2015/16 Plan Year	÷ \$4,221,200

Minimum Required Contribution Rate **49.39%**

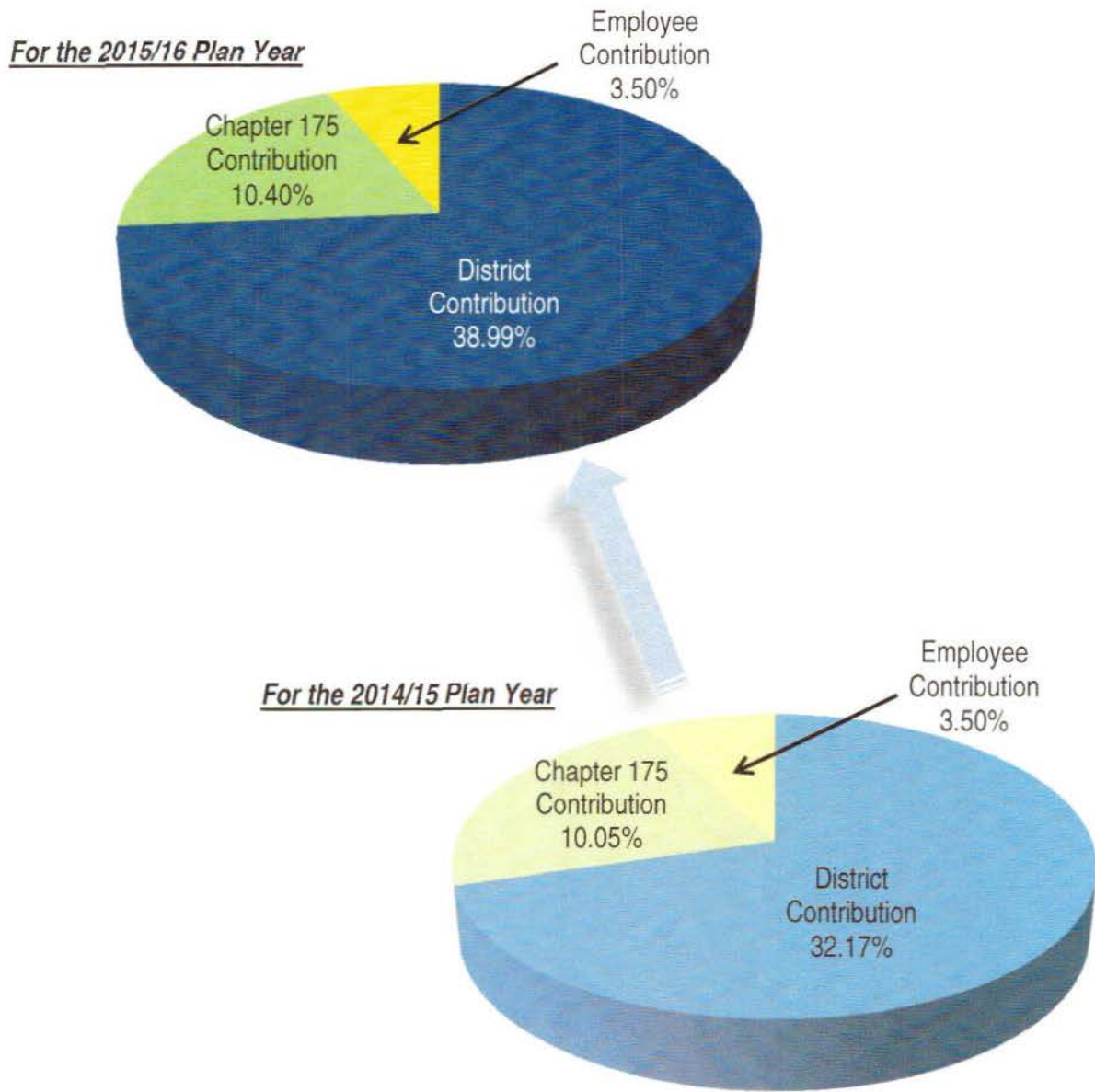
(The actual contribution should be based on the minimum required contribution rate multiplied by the actual payroll for the year.)



Minimum Required Contribution

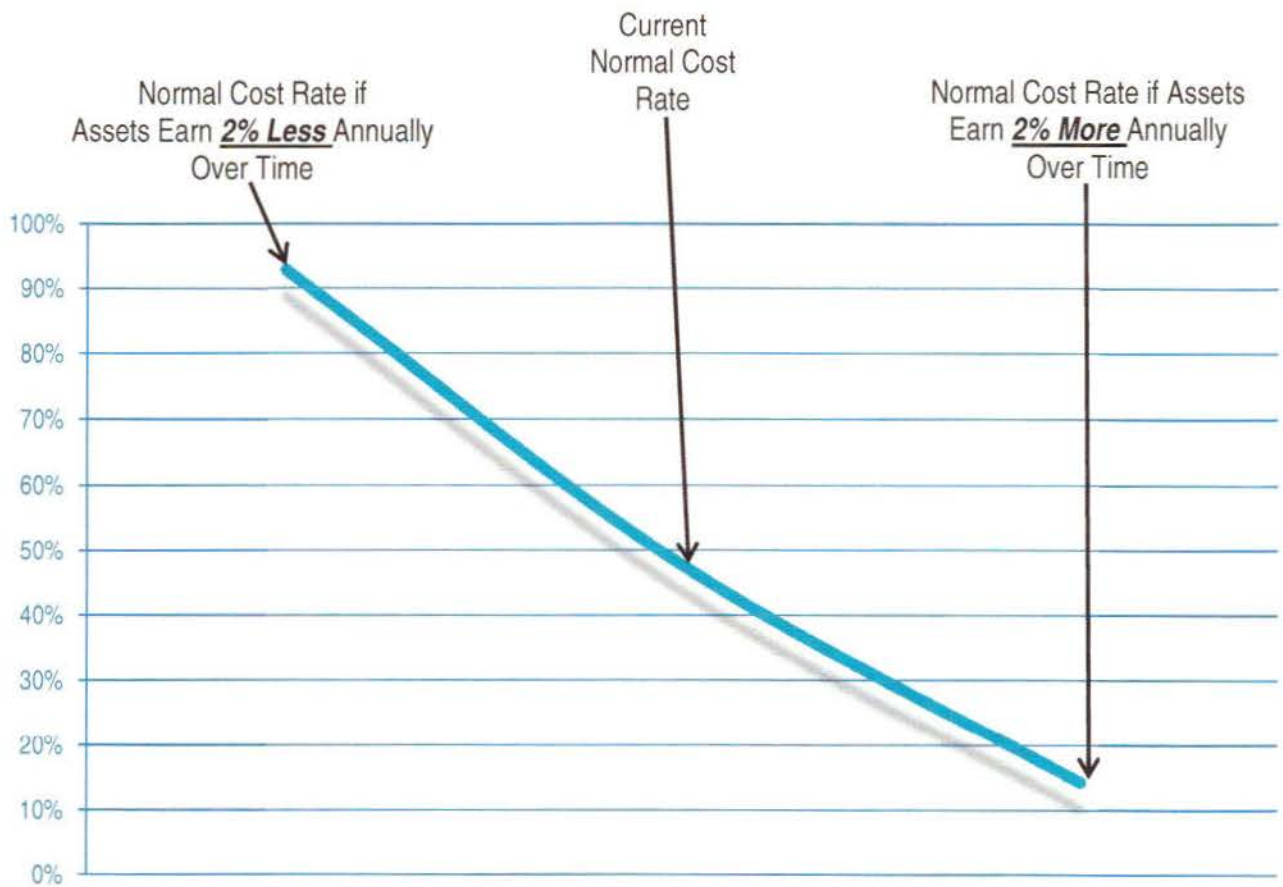
Table I-A
(continued)

The minimum required contribution rate of 49.39% includes both the District contribution and the allowable Chapter 175 contribution. In addition, employees are required to contribute 3.50% of pensionable earnings. The actual District contribution rate is expected to be approximately 38.99% based on the allowable Chapter 175 contribution for the previous year. The chart below shows the expected contribution rate by source for the 2015/16 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	40.76%
Increase (decrease) due to investment gains and losses	5.13%
Increase (decrease) due to demographic experience	1.80%
Increase (decrease) due to plan amendments	0.00%
Increase (decrease) due to actuarial assumption changes	0.00%
Increase (decrease) due to actuarial method changes	0.00%
Current normal cost rate	<u>47.69%</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	\$26,339,061	\$26,339,061	\$26,339,061
Termination benefits	\$1,533,474	\$1,533,474	\$1,533,474
Disability benefits	\$1,318,001	\$1,318,001	\$1,318,001
Death benefits	\$275,669	\$275,669	\$275,669
Refund of employee contributions	\$15,505	\$15,505	\$15,505
Sub-total	\$29,481,710	\$29,481,710	\$29,481,710
<i><u>Deferred Vested Participants</u></i>			
Retirement benefits	\$0	\$0	\$0
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$0	\$0	\$0
<i><u>Due a Refund of Contributions</u></i>	\$1,268	\$1,268	\$1,268
<i><u>Deferred Beneficiaries</u></i>	\$0	\$0	\$0
<i><u>Retired Participants</u></i>			
Service retirements	\$6,725,011	\$6,725,011	\$6,725,011
Disability retirements	\$1,896,878	\$1,896,878	\$1,896,878
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$3,129,703	\$3,129,703	\$3,129,703
Sub-total	\$11,751,592	\$11,751,592	\$11,751,592
<i><u>Grand Total</u></i>	<u>\$41,234,570</u>	<u>\$41,234,570</u>	<u>\$41,234,570</u>
Present Value of Future Payroll	\$30,880,532	\$30,880,532	\$30,880,532
Present Value of Future Employee Contribs.	\$1,080,818	\$1,080,818	\$1,080,818
Present Value of Future Employer Contribs.	\$14,726,534	\$14,726,534	\$14,726,534



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	\$12,352,822	\$12,352,822	\$12,352,822
Termination benefits	\$985,925	\$985,925	\$985,925
Disability benefits	\$786,415	\$786,415	\$786,415
Death benefits	\$186,611	\$186,611	\$186,611
Refund of employee contributions	\$10,548	\$10,548	\$10,548
Sub-total	\$14,322,321	\$14,322,321	\$14,322,321
<i><u>Deferred Vested Participants</u></i>			
Retirement benefits	\$0	\$0	\$0
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$0	\$0	\$0
<i><u>Due a Refund of Contributions</u></i>	\$1,268	\$1,268	\$1,268
<i><u>Deferred Beneficiaries</u></i>	\$0	\$0	\$0
<i><u>Retired Participants</u></i>			
Service retirements	\$6,725,011	\$6,725,011	\$6,725,011
Disability retirements	\$1,896,878	\$1,896,878	\$1,896,878
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$3,129,703	\$3,129,703	\$3,129,703
Sub-total	\$11,751,592	\$11,751,592	\$11,751,592
<i><u>Grand Total</u></i>	<u>\$26,075,181</u>	<u>\$26,075,181</u>	<u>\$26,075,181</u>



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	\$11,371,369	\$11,371,369	\$11,371,369
Termination benefits	\$895,204	\$895,204	\$895,204
Disability benefits	\$786,415	\$786,415	\$786,415
Death benefits	\$186,611	\$186,611	\$186,611
Refund of employee contributions	\$28,804	\$28,804	\$28,804
Sub-total	\$13,268,403	\$13,268,403	\$13,268,403
<i>Deferred Vested Participants</i>			
Retirement benefits	\$0	\$0	\$0
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$0	\$0	\$0
<i>Due a Refund of Contributions</i>	\$1,268	\$1,268	\$1,268
<i>Deferred Beneficiaries</i>	\$0	\$0	\$0
<i>Retired Participants</i>			
Service retirements	\$6,725,011	\$6,725,011	\$6,725,011
Disability retirements	\$1,896,878	\$1,896,878	\$1,896,878
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$3,129,703	\$3,129,703	\$3,129,703
Sub-total	\$11,751,592	\$11,751,592	\$11,751,592
<i>Grand Total</i>	<u>\$25,021,263</u>	<u>\$25,021,263</u>	<u>\$25,021,263</u>



Entry Age Normal Accrued Liability

Table I-G

	<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	\$19,049,393	\$19,049,393	\$19,049,393
Termination benefits	\$1,222,732	\$1,222,732	\$1,222,732
Disability benefits	\$1,001,406	\$1,001,406	\$1,001,406
Death benefits	\$211,592	\$211,592	\$211,592
Refund of employee contributions	\$10,494	\$10,494	\$10,494
Sub-total	\$21,495,617	\$21,495,617	\$21,495,617
<i><u>Deferred Vested Participants</u></i>			
Retirement benefits	\$0	\$0	\$0
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$0	\$0	\$0
<i><u>Due a Refund of Contributions</u></i>	\$1,268	\$1,268	\$1,268
<i><u>Deferred Beneficiaries</u></i>	\$0	\$0	\$0
<i><u>Retired Participants</u></i>			
Service retirements	\$6,725,011	\$6,725,011	\$6,725,011
Disability retirements	\$1,896,878	\$1,896,878	\$1,896,878
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$3,129,703	\$3,129,703	\$3,129,703
Sub-total	\$11,751,592	\$11,751,592	\$11,751,592
<i><u>Grand Total</u></i>	<u>\$33,248,477</u>	<u>\$33,248,477</u>	<u>\$33,248,477</u>



Actuarial Value of Assets

Table II-A

Market Value of Assets as of October 1, 2015	\$26,747,732
Minus DROP account balances	(\$357,269)
Minus advance employer contributions	(\$472,337)
Minus excess Chapter 175/185 contributions	(\$78,562)
Actuarial Value of Assets as of October 1, 2015	<u>\$25,839,564</u>

Historical Actuarial Value of Assets

October 1, 2006	\$7,749,173
October 1, 2007	\$10,178,736
October 1, 2008	\$9,901,143
October 1, 2009	\$9,778,891
October 1, 2010	\$12,806,292
October 1, 2011	\$14,407,208
October 1, 2012	\$18,425,606
October 1, 2013	\$21,754,439
October 1, 2014	\$24,788,582
October 1, 2015	\$25,839,564

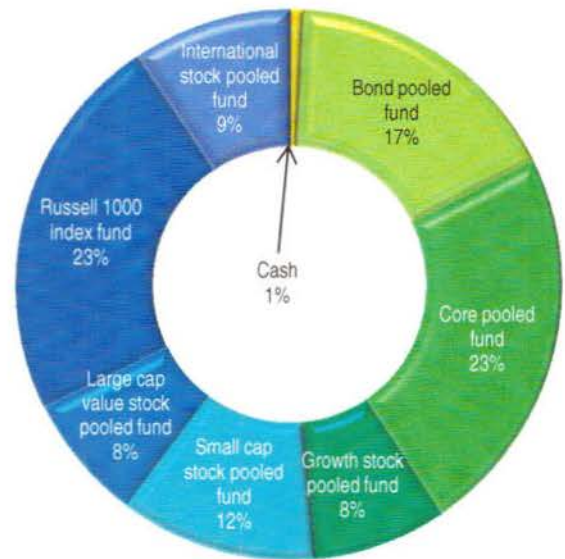


Market Value of Assets

Table II-B

As of October 1, 2015

Market Value of Assets	<u>\$26,747,732</u>
Cash	\$213,982
Bond pooled fund	\$4,493,619
Core pooled fund	\$6,151,978
Growth stock pooled fund	\$2,113,071
Small cap stock pooled fund	\$3,129,484
Large cap value stock pooled fund	\$2,006,080
Russell 1000 index fund	\$6,125,231
International stock pooled fund	\$2,514,287

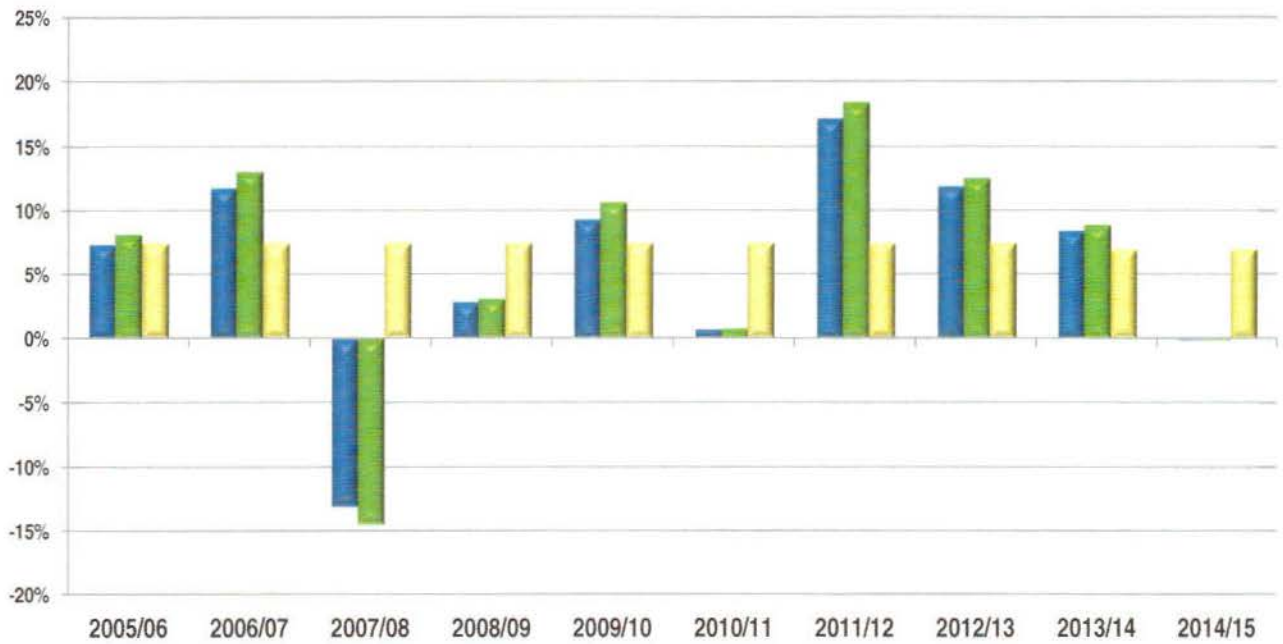


Historical Market Value of Assets	
October 1, 2006	\$8,603,850
October 1, 2007	\$11,170,167
October 1, 2008	\$11,461,484
October 1, 2009	\$11,531,839
October 1, 2010	\$14,165,249
October 1, 2011	\$15,576,823
October 1, 2012	\$19,409,374
October 1, 2013	\$22,836,219
October 1, 2014	\$26,085,813
October 1, 2015	\$26,747,732



Investment Return

Table II-C



Annual Investment Returns

- Market Value Return
- Actuanal Value Return
- Assumed Return

Plan Year	Market Value Return	Actuarial Value Return	Assumed Return
2005/06	7.38%	8.17%	7.50%
2006/07	11.80%	13.09%	7.50%
2007/08	-13.08%	-14.47%	7.50%
2008/09	2.81%	3.11%	7.50%
2009/10	9.34%	10.70%	7.50%
2010/11	0.68%	0.75%	7.50%
2011/12	17.18%	18.41%	7.50%
2012/13	11.92%	12.58%	7.50%
2013/14	8.45%	8.90%	7.00%
2014/15	-0.11%	-0.11%	7.00%
10yr. Avg.	5.31%	5.72%	7.40%



Asset Reconciliation

Table II-D

	<u>Market Value</u>	<u>Actuarial Value</u>
As of October 1, 2014	\$26,085,813	\$24,788,582
<i>Increases Due To:</i>		
Employer Contributions	\$1,397,570	\$1,397,570
Chapter 175/185 Contributions	\$483,833	\$483,833
Employee Contributions	\$152,860	\$152,860
Service Purchase Contributions	\$0	\$0
Total Contributions	<u>\$2,034,263</u>	<u>\$2,034,263</u>
Interest and Dividends	\$0	
Realized Gains (Losses)	\$0	
Unrealized Gains (Losses)	(\$28,475)	
Total Investment Income	<u>(\$28,475)</u>	(\$28,475)
Other Income	\$0	
Total Income	<u>\$2,005,788</u>	<u>\$2,005,788</u>
<i>Decreases Due To:</i>		
Monthly Benefit Payments	(\$1,279,900)	(\$1,279,900)
Refund of Employee Contributions	(\$201)	(\$201)
DROP Credits		\$426,533
Total Benefit Payments	<u>(\$1,280,101)</u>	<u>(\$853,568)</u>
Investment Expenses	\$0	
Administrative Expenses	(\$63,768)	(\$63,768)
Advance Employer Contribution		\$7,392
Excess Chapter 175/185 Contribution		(\$44,862)
Total Expenses	<u>(\$1,343,869)</u>	<u>(\$954,806)</u>
As of October 1, 2015	<u><u>\$26,747,732</u></u>	<u><u>\$25,839,564</u></u>



Historical Trust Fund Detail

Table II-E

Income

<u>Plan Year</u>	<u>Employer Contribs.</u>	<u>Chapter Contribs.</u>	<u>Employee Contribs.</u>	<u>Service Purchase Contribs.</u>	<u>Interest / Dividends</u>	<u>Realized Gains / Losses</u>	<u>Unrealized Gains / Losses</u>	<u>Other Income</u>
2005/06	\$1,124,133	\$239,425	\$127,826	\$0	\$0	\$0	\$542,188	\$0
2006/07	\$1,054,605	\$277,689	\$141,642	\$76,834	\$0	\$0	\$1,101,297	\$0
2007/08	\$1,342,701	\$432,471	\$153,012	\$40,772	\$0	\$0	-\$1,584,177	\$0
2008/09	\$862,274	\$463,450	\$151,515	\$0	\$0	\$0	\$319,010	\$0
2009/10	\$1,036,007	\$425,465	\$154,877	\$0	\$0	\$0	\$1,146,562	\$0
2010/11	\$1,144,422	\$398,462	\$146,195	\$0	\$0	\$0	\$101,054	\$0
2011/12	\$907,375	\$429,639	\$139,372	\$0	\$0	\$0	\$2,767,695	\$0
2012/13	\$1,598,463	\$408,775	\$136,039	\$0	\$0	\$0	\$2,376,983	\$0
2013/14	\$1,267,372	\$448,192	\$143,926	\$0	\$0	\$0	\$1,982,480	\$0
2014/15	\$1,397,570	\$483,833	\$152,860	\$0	\$0	\$0	-\$28,475	\$0

Expenses

<u>Plan Year</u>	<u>Monthly Benefit Payments</u>	<u>Contrib. Refunds</u>	<u>Admin. Expenses</u>	<u>Invest. Expenses</u>	<u>Other Actuarial Adjustments</u>		
					<u>DROP Credits</u>	<u>Advance Employer Contribs.</u>	<u>Excess Chapter Contribs.</u>
2005/06	\$34,927	\$4,150	\$19,036	\$0	\$0	\$285,772	\$0
2006/07	\$57,191	\$1,123	\$27,436	\$0	\$0	\$136,754	\$0
2007/08	\$57,191	\$3,441	\$32,830	\$0	\$17,949	\$568,910	\$0
2008/09	\$1,685,869	\$10,590	\$29,435	\$0	\$147,617	\$2,562	\$24,479
2009/10	\$86,037	\$425	\$43,039	\$0	\$183,600	-\$577,591	\$0
2010/11	\$326,691	\$0	\$51,868	\$0	\$131,135	-\$320,477	\$0
2011/12	\$362,065	\$1,262	\$48,203	\$0	\$341,936	-\$527,783	\$0
2012/13	\$1,041,946	\$1,101	\$50,368	\$0	-\$287,641	\$385,653	\$0
2013/14	\$526,686	\$6,682	\$59,008	\$0	\$249,206	-\$42,976	\$9,221
2014/15	\$1,279,900	\$201	\$63,768	\$0	-\$426,533	-\$7,392	\$44,862

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, 2014	\$479,729
Additional Employer Contribution	\$1,836,541
Minimum Required Contribution	(\$1,843,933)
Net Increase in Advance Employer Contribution	(\$7,392)
Advance Employer Contribution as of October 1, 2015	<u>\$472,337</u>

Excess Chapter 175/185 Contribution

Excess Chapter 175/185 Contribution as of October 1, 2014	\$33,700
Additional Chapter 175/185 Contribution	\$483,833
Allowable Chapter 175/185 Contribution	(\$438,971)
Net Increase in Excess Chapter 175/185 Contribution	\$44,862
Excess Chapter 175/185 Contribution as of October 1, 2015	<u>\$78,562</u>

DROP Account Reconciliation

DROP Balance as of October 1, 2014	\$783,802
DROP Benefit Credits	\$206,671
DROP Investment Credits	\$33,117
DROP Benefits Paid Out	(\$666,321)
Net DROP Credit	(\$426,533)
DROP Balance as of October 1, 2015	<u>\$357,269</u>



Allowable Chapter 175/185 Contribution

Table II-G

1997 Base Amounts

Chapter 175 Regular Distribution	\$21,065
Chapter 175 Supplemental Distribution	\$0
Chapter 185 Distribution	\$0

Qualifying Benefit Improvements

Resolution 04-09	\$409,418
Resolution 2007-04	\$8,488



Historical Chapter 175/185 Contributions

Table II-H

Total Accumulated Excess Chapter 175/185 Contribution	\$78,562
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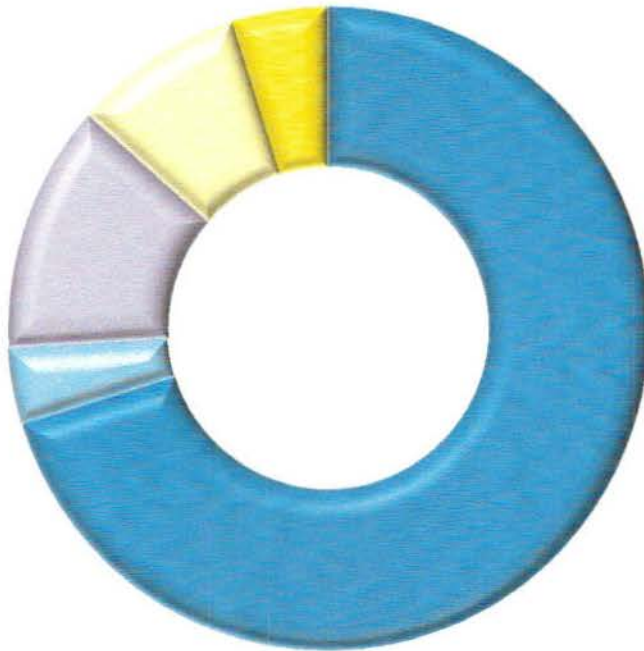
	<u>Chapter 175 Regular Distribution</u>	<u>Chapter 175 Supplemental Distribution</u>	<u>Chapter 185 Distribution</u>	<u>Allowable Amount</u>
1998 Distribution	\$38,443	\$0	\$0	(\$38,443)
1999 Distribution	\$49,368	\$0	\$0	(\$49,368)
2000 Distribution	\$76,102	\$0	\$0	(\$76,102)
2001 Distribution	\$99,756	\$0	\$0	(\$99,756)
2002 Distribution	\$132,354	\$0	\$0	(\$132,354)
2003 Distribution	\$158,638	\$0	\$0	(\$158,638)
2004 Distribution	\$196,521	\$0	\$0	(\$196,521)
2005 Distribution	\$239,425	\$0	\$0	(\$239,425)
2006 Distribution	\$273,425	\$4,264	\$0	(\$277,689)
2007 Distribution	\$297,089	\$135,382	\$0	(\$432,471)
2008 Distribution	\$329,717	\$133,733	\$0	(\$438,971)
2009 Distribution	\$324,870	\$100,595	\$0	(\$425,465)
2010 Distribution	\$324,070	\$74,392	\$0	(\$398,462)
2011 Distribution	\$333,648	\$95,991	\$0	(\$429,639)
2012 Distribution	\$304,728	\$104,047	\$0	(\$408,775)
2013 Distribution	\$315,742	\$132,450	\$0	(\$438,971)
2014 Distribution	\$348,350	\$135,483	\$0	(\$438,971)



Summary of Participant Data

Table III-A

As of October 1, 2015



Participant Distribution by Status

<u>Actively Employed Participants</u>		
◆	Active Participants	73
◆	DROP Participants	4
<u>Inactive Participants</u>		
◆	Deferred Vested Participants	0
◆	Due a Refund of Contributions	13
◆	Deferred Beneficiaries	0
<u>Participants Receiving a Benefit</u>		
◆	Service Retirements	9
◆	Disability Retirements	5
◆	Beneficiaries Receiving	0
Total Participants		104

Number of Participants Included in Prior Valuations

	<i>Active</i>	<i>DROP</i>	<i>Inactive</i>	<i>Retired</i>	<i>Total</i>
October 1, 2006	83	0	20	3	106
October 1, 2007	87	0	21	3	111
October 1, 2008	N/A	N/A	N/A	N/A	N/A
October 1, 2009	89	2	22	4	117
October 1, 2010	82	2	25	5	114
October 1, 2011	81	4	26	9	120
October 1, 2012	77	4	24	11	116
October 1, 2013	74	3	25	12	114
October 1, 2014	72	4	15	12	103
October 1, 2015	73	4	13	14	104



Data Reconciliation

Table III-B

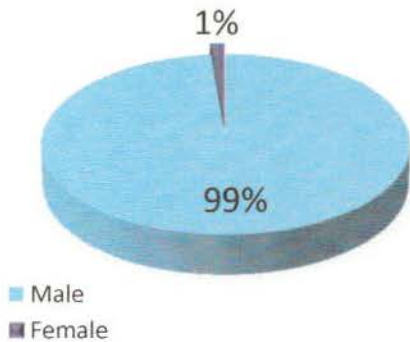
	<u>Active</u>	<u>DROP</u>	<u>Deferred Vested</u>	<u>Due a Refund</u>	<u>Def. Benef.</u>	<u>Service Retiree</u>	<u>Disabled Retiree</u>	<u>Benef. Rec'v.</u>	<u>Total</u>
<u>October 1, 2014</u>	72	4	1	14	0	7	5	0	103
<u>Change in Status</u>									
Re-employed	1		(1)						
Terminated									
Retired		(2)				2			
<u>Participation Ended</u>									
Transferred Out	(2)	2							
Cashed Out				(1)					(1)
Died									
<u>Participation Began</u>									
Newly Hired	2								2
Transferred In									
New Beneficiary									
<u>Other Adjustment</u>									
<u>October 1, 2015</u>	73	4	0	13	0	9	5	0	104



Active Participant Data

Table III-C

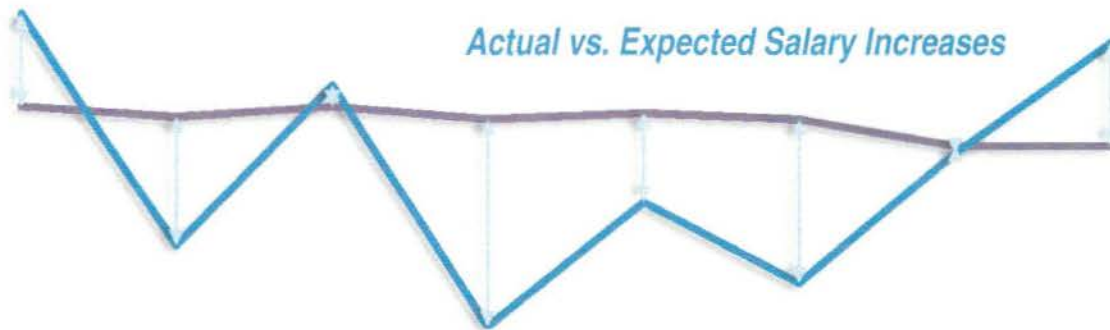
Gender Mix



As of October 1, 2015

Average Age	40.6 years
Average Service	13.0 years
Total Annualized Compensation for the Prior Year	\$4,305,214
Total Expected Compensation for the Current Year	\$4,221,200
Average Increase in Compensation for the Prior Year	6.91%
Expected Increase in Compensation for the Current Year	4.50%
Accumulated Contributions for Active Employees	\$1,512,066

Actual vs. Expected Salary Increases



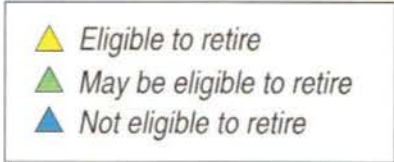
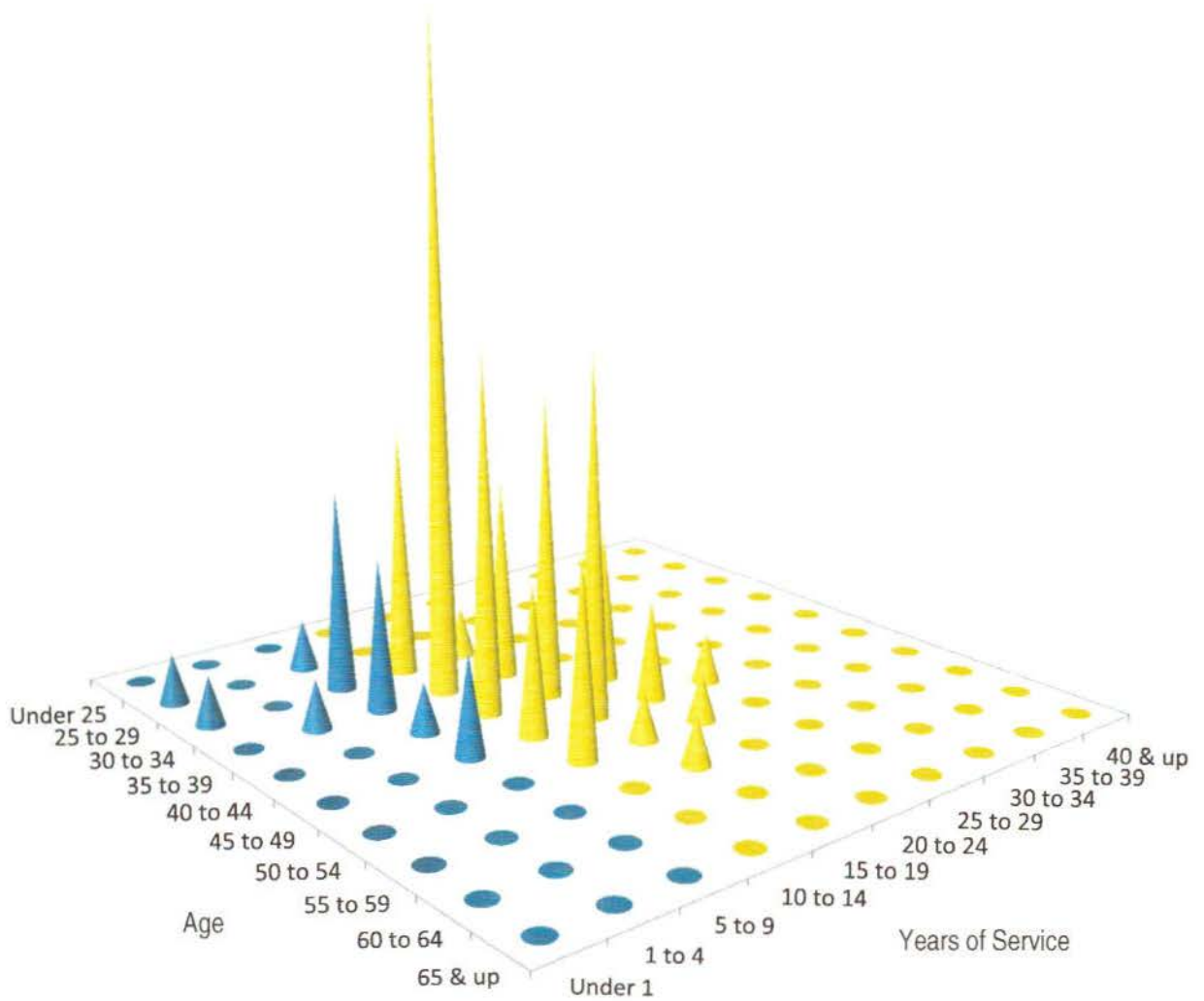
Active Participant Statistics From Prior Valuations

	Average Age	Average Service	Average Salary	Average Expected Salary Increase	Average Actual Salary Increase
October 1, 2006	34.9	7.7	\$43,574	N/A	N/A
October 1, 2007	37.9	9.8	\$46,671	N/A	N/A
October 1, 2008	N/A	N/A	N/A	5.45%	7.61%
October 1, 2009	36.2	8.7	\$47,154	5.20%	2.14%
October 1, 2010	37.7	10.1	\$53,650	5.43%	5.94%
October 1, 2011	37.0	9.6	\$48,778	5.13%	0.21%
October 1, 2012	37.9	10.5	\$50,965	5.27%	3.14%
October 1, 2013	39.3	11.7	\$52,471	5.12%	1.23%
October 1, 2014	40.2	12.7	\$56,296	4.50%	4.32%
October 1, 2015	40.6	13.0	\$58,976	4.50%	6.91%



Active Age-Service Distribution

Table III-D



Active Age-Service-Salary Table

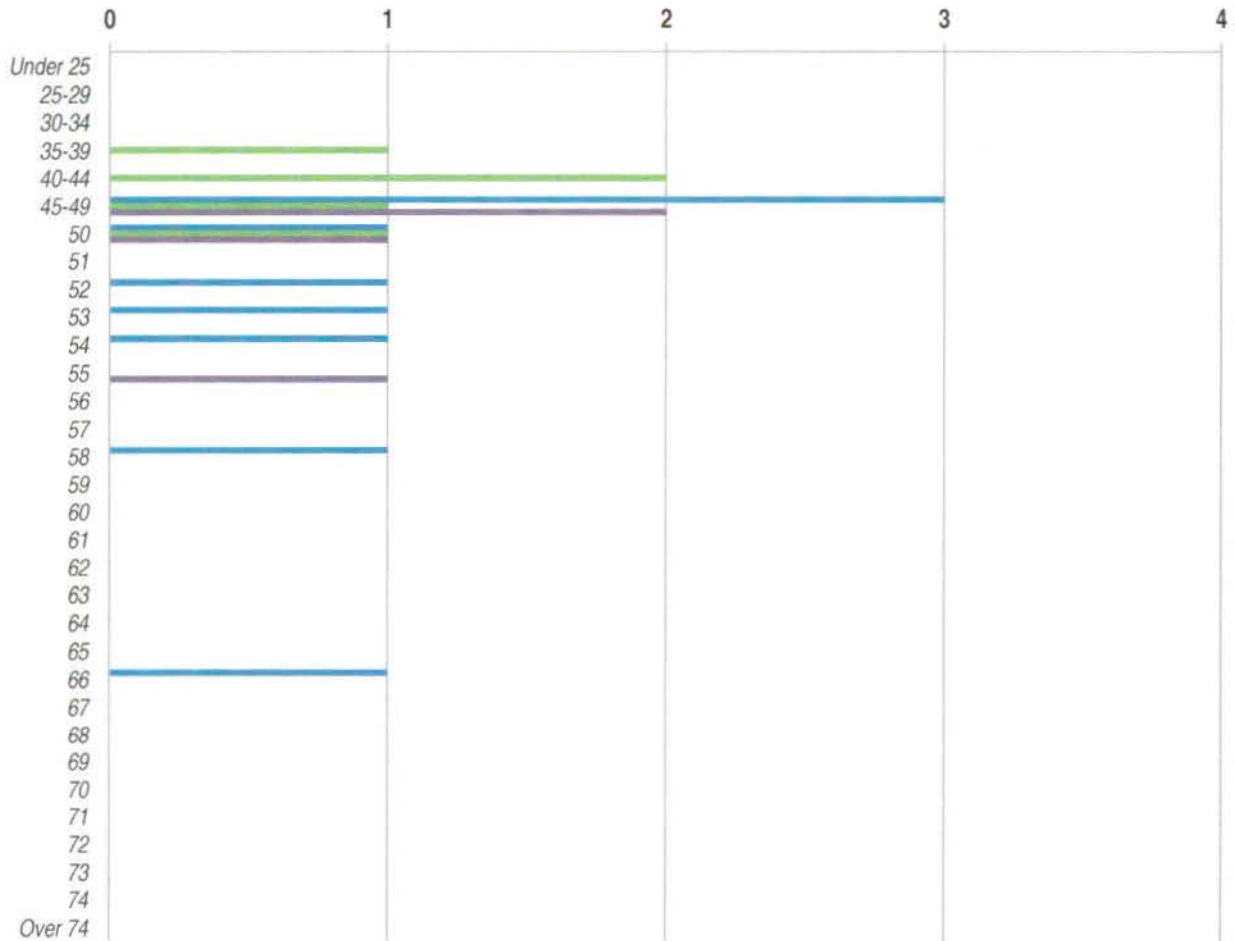
Table III-E

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	0
Avg.Pay	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	1	0	1	0	0	0	0	0	0	0	0	2
Avg.Pay	39,678	0	52,894	0	0	0	0	0	0	0	0	46,286
30 to 34	1	0	4	5	1	0	0	0	0	0	0	11
Avg.Pay	39,678	0	47,689	53,304	57,013	0	0	0	0	0	0	50,360
35 to 39	0	1	3	13	4	0	0	0	0	0	0	21
Avg.Pay	0	18,489	55,311	58,681	63,251	0	0	0	0	0	0	57,156
40 to 44	0	0	1	7	6	3	0	0	0	0	0	17
Avg.Pay	0	0	57,299	57,371	59,892	67,130	0	0	0	0	0	59,979
45 to 49	0	0	2	3	7	2	1	0	0	0	0	15
Avg.Pay	0	0	56,385	57,264	68,174	69,531	87,808	0	0	0	0	65,910
50 to 54	0	0	0	4	1	1	0	0	0	0	0	6
Avg.Pay	0	0	0	61,597	59,348	86,961	0	0	0	0	0	65,450
55 to 59	0	0	0	0	1	0	0	0	0	0	0	1
Avg.Pay	0	0	0	0	57,419	0	0	0	0	0	0	57,419
60 to 64	0	0	0	0	0	0	0	0	0	0	0	0
Avg.Pay	0	0	0	0	0	0	0	0	0	0	0	0
65 & up	0	0	0	0	0	0	0	0	0	0	0	0
Avg.Pay	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	1	11	32	20	6	1	0	0	0	0	73
Avg.Pay	39,678	18,489	52,695	57,786	63,168	71,236	87,808	0	0	0	0	58,976



Inactive Participant Data

Table III-F



Age at Retirement

- Service Retirements
- Disability Retirements
- DROP Participants

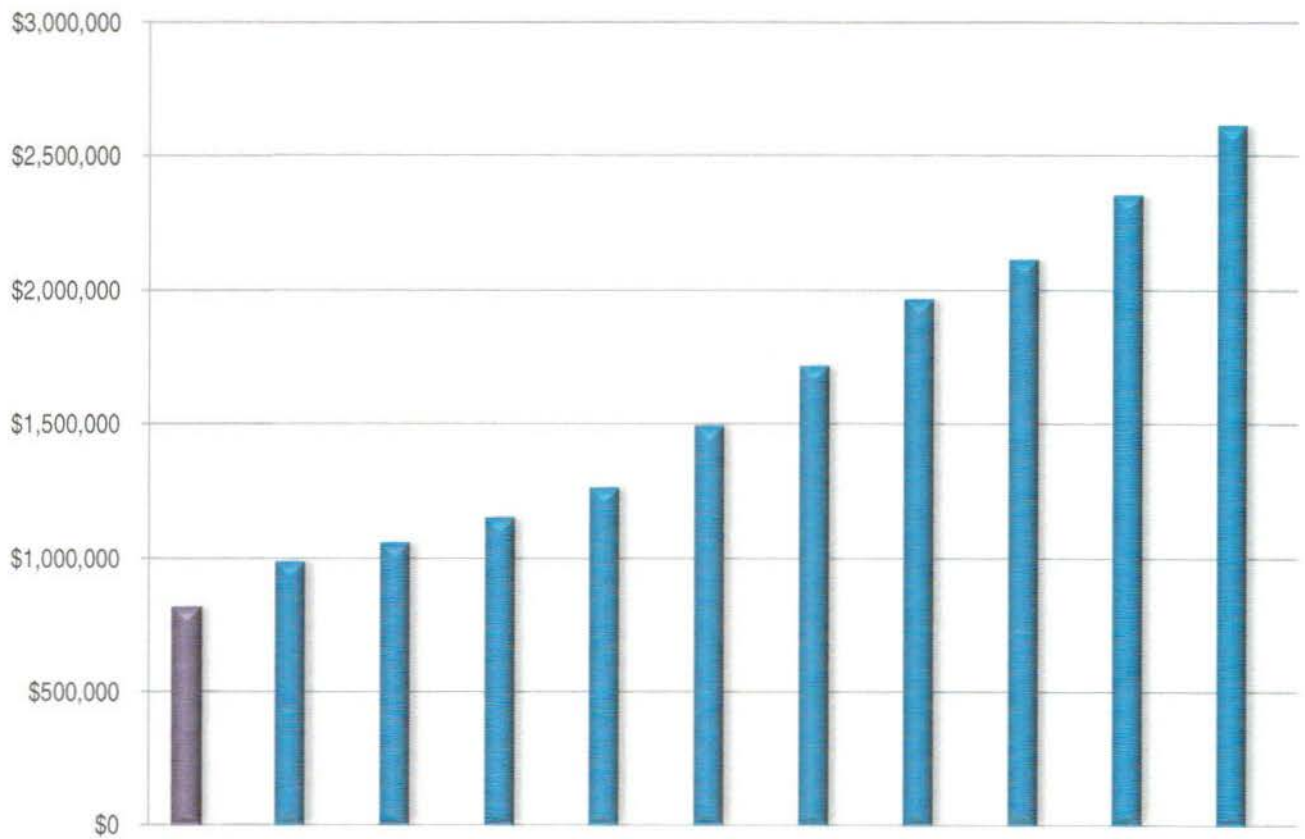
Average Monthly Benefit

Service Retirements	\$4,922.74
Disability Retirements	\$2,486.52
Beneficiaries Receiving DROPs	Not applicable
DROPs	\$4,725.59
Deferred Vested Participants	Not applicable
Deferred Beneficiaries	Not applicable



Projected Benefit Payments

Table III-G



Actual

For the period October 1, 2014 through September 30, 2015

\$820,451

Projected

For the period October 1, 2015 through September 30, 2016

\$992,738

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

\$1,063,844

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

\$1,157,642

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

\$1,268,197

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

\$1,495,973

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

\$1,718,201

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

\$1,969,645

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

\$2,115,970

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

\$2,356,410

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

\$2,612,404



Summary of Actuarial Methods and Assumptions

Table IV-A

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 4.50% per annum, 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 Mortality Table for annuitants, projected to 2015 by Scale AA, as published by the Internal Revenue Service (IRS) for purposes of Internal Revenue Code (IRC) section 430; generational improvements in mortality have not been assumed.
- Post-retirement mortality: Sex-distinct rates set forth in the RP-2000 Mortality Table for annuitants, projected to 2015 by Scale AA, as published by the Internal Revenue Service (IRS) for purposes of Internal Revenue Code (IRC) section 430; generational improvements in mortality have not been assumed.
- Disability: Age- and gender-based rates of disability were assumed, ranging from 0.067% for males and 0.040% for females at age 25, 0.119% for males and 0.118% for females at age 35, 0.462% for males and 0.435% for females at age 45, and 1.000% for males and 0.840% for females at age 55; all disabilities are assumed to be service-related.



Summary of Actuarial Methods and Assumptions

Table IV-A

(continued)

- Termination: With respect to participants with less than 10 years of service, the termination rates are both gender- and service-based, ranging from 15.00% for males and 10.01% for females with less than two years of service to 4.30% for males and 4.75% for females with between eight and 10 years of service; with respect to participants with at least 10 years of service, the termination rates are both gender- and age-based, ranging from 4.28% for males and 5.41% for females at age 25 to 0.00% for both genders at age 55.
- Retirement: For those participants who have met the age and service requirements to retire, retirement is assumed to occur at the rate of 10% per year during each of the three years prior to normal retirement age; alternatively, 40% of participants who reach their normal retirement age are assumed to retire immediately, with 20% assumed to retire during each of the next two years after the attainment of normal retirement age and 100% assumed to retire three years after the attainment of normal retirement age. No early retirements are assumed to occur prior to age 50.

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 1.00% 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

No assumptions or methods have been changed since the previous valuation was completed.



Summary of Plan Provisions

Table V-A

1. Monthly Accrued Benefit

3.50% of Average Final Compensation multiplied by Credited Service

2. Normal Retirement Age and Benefit

- **Age**

Age 55 with at least 10 years of Credited Service; or
Any age 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 66²/₃% joint and contingent annuity (optional);
Actuarially reduced 75% joint and contingent annuity (optional);
Actuarially reduced 100% joint and contingent annuity (optional); or
Any other actuarially equivalent form of payment approved by the Board other than a single lump sum payment

(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 District.
- **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 firefighter.
- **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 District-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 District.
- **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 District-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 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 participant in the line of duty prior to retirement, his beneficiary will receive the greater of the participant's Monthly Accrued Benefit or 50% of the participant's salary payable for life. In the case of the death of a vested participant other than in the line of duty 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 three years of Compensation out of the last 10 years of employment (or career average, if higher).

10. Compensation

Fixed monthly compensation or, in the case of voluntary firefighters, actual compensation for services rendered; annual compensation in excess of \$200,000 (as indexed) is excluded in accordance with 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. In the case of a full-time firefighter, prior service earned before January 12, 2014 as a volunteer firefighter is counted for vesting and eligibility purposes only. In addition, Credited Service includes prior service with the Oneco-Tallevast and Samoset Fire Districts.



Summary of Plan Provisions

Table V-A

(continued)

12. Participation Requirement

All firefighters of the Southern Manatee Fire & Rescue District automatically become a participant in the plan on their date of hire.

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

3.50% of earnings

15. Definition of Actuarially Equivalent

- **Interest Rate**

7.00% per annum

- **Mortality Table**

Unisex mortality table promulgated by the Internal Revenue Service (IRS) for purposes of determining the amount of lump sum distributions pursuant to Internal Revenue Service (IRC) section 417(e)(3)

16. Plan Effective Date

March 11, 1997

17. 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 96 months. Interest is credited on the DROP accounts at the rate of 6.50% per annum.

18. Retiree Health Supplement

Participants who retire from active service with a normal or disability retirement benefit receive a monthly post-retirement health supplement equal to \$15 for each year of service, with a minimum monthly benefit of \$50 and a maximum monthly benefit of \$450. In addition, this monthly supplement is paid to the participant's eligible spouse during the period that a retirement benefit is payable to the spouse, provided that the participant was either receiving a normal or disability retirement benefit or was eligible for normal retirement at his death.



Summary of Plan Amendments

Table V-B

There were no significant plan amendments adopted since the completion of the previous valuation.

