

ESTERO FIRE RESCUE  
FIREFIGHTERS' RETIREMENT PLAN

ACTUARIAL VALUATION  
AS OF OCTOBER 1, 2014

DETERMINES THE CONTRIBUTION  
FOR THE 2015/16 FISCAL YEAR



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March 14, 2015

## Introduction

This report presents the results of the October 1, 2014 actuarial valuation of the Estero Fire Rescue Firefighters' Retirement 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, 2014 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, accounting disclosures pursuant to Governmental Accounting Standards Board Statement Nos. 25 and 27 (GASB 25/27), 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 V-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 2015/16 plan year. The minimum required contribution rate is 22.12% of covered payroll, which represents an increase of 1.39% of payroll from the prior valuation.

The normal cost rate is 22.17%, which is 1.05% higher 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 2.07% of payroll due to investment losses and decreased by 1.02% of payroll due to demographic





experience. Although the market value of assets earned 7.97% during the 2013/14 plan year, the actuarial value of assets is based on a five-year phase-in of the market value gains and losses that occur after September 30, 2013. On this basis, the actuarial value of assets earned 1.64% during the 2013/14 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 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 22.12% 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 \$267,811 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 and whether additional qualifying benefit improvements have been adopted at that time.

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 \$23,448,541. As illustrated in Table I-A, current assets are sufficient to cover \$14,500,351 of this amount, the employer's 2014/15 expected contribution will cover \$889,091 of this amount, the employer's 2015/16 expected contribution will cover \$991,552 of this amount, and future employee contributions are expected to cover \$1,066,453 of this amount, leaving \$6,001,094 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, 2014, the advance employer contribution is \$531,135, which reflects the advance employer contribution of \$269,920 as of October 1, 2013 plus \$261,215 which was contributed in excess of the minimum required contribution for the 2013/14 plan year as shown in Table III-F.

The District may apply all or any portion of the advance employer contribution towards the minimum required contribution for the 2014/15 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, 2014 would reduce the normal cost rate to 20.68% of payroll and would reduce the minimum required contribution for the 2015/16 plan year to 20.54% 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-C provide information needed by both the plan's and the employer's accountants in order to prepare the relevant financial statements that cover the period October 1, 2013 through September 30, 2014. Tables III-A through III-F provide information concerning the assets of the trust fund. Specifically, Table III-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 that occur after September 30, 2013. Tables IV-A through IV-G provide statistical information concerning the plan's participant population. In particular, Table IV-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 V-A through VI-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, 2014, 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.

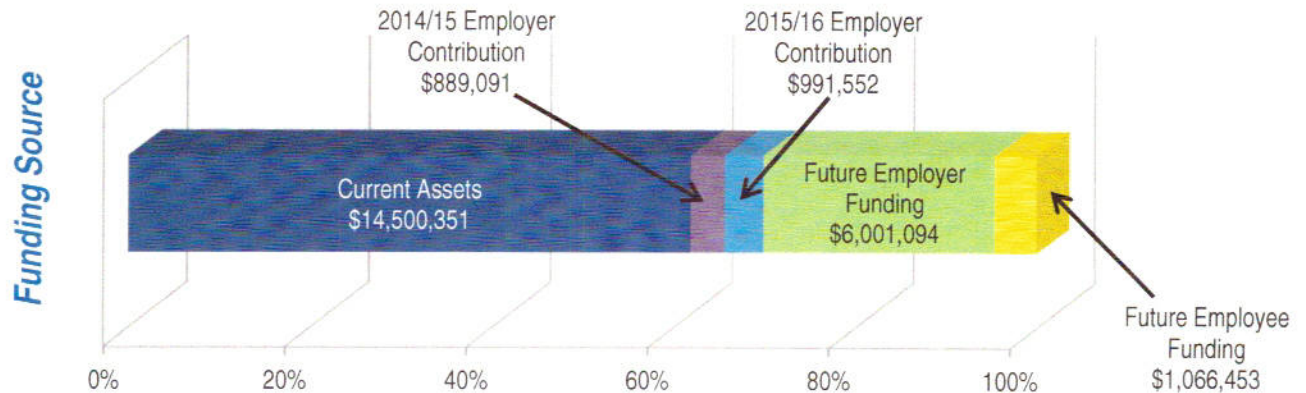
Enrolled Actuary No. 14-04927

*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	\$23,045,249
Present Value of Future Administrative Expenses	\$403,292
Actuarial Value of Assets	(\$14,500,351)
Present Value of Future Employee Contributions	(\$1,066,453)
Present Value of Future Normal Costs	\$7,881,737
Present Value of Future Payroll	÷ \$35,548,453
Normal Cost Rate	= 22.1718%
Expected Payroll	x \$4,288,910
Normal Cost	\$950,929
Adjustment to Reflect Semi-Monthly Employer Contributions	\$33,920
Expected Employer Contribution for the 2014/15 Plan Year	(\$889,091)
Remaining Contribution Due/(Credit) for the 2014/15 Plan Year	\$95,758
	x 0.07
One Year's Interest Charge/(Credit) on the Remaining Contribution	\$6,703
Preliminary Employer Contribution for the 2015/16 Plan Year	\$991,552
Expected Payroll for the 2015/16 Plan Year	÷ \$4,481,911

**Minimum Required Contribution Rate** **22.12%**

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



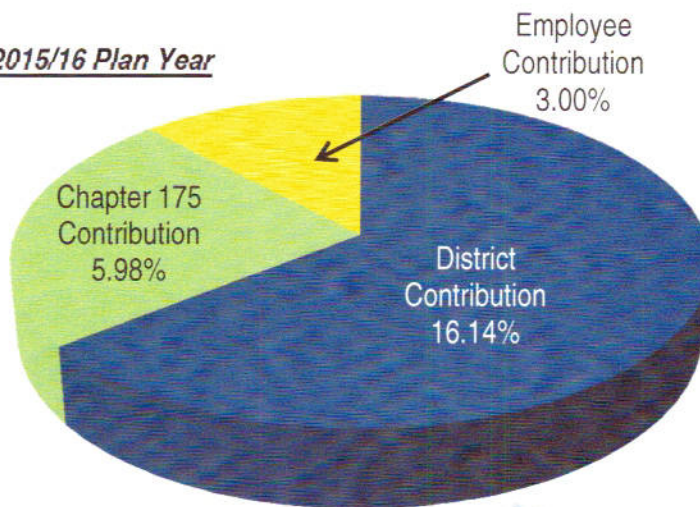


## Minimum Required Contribution

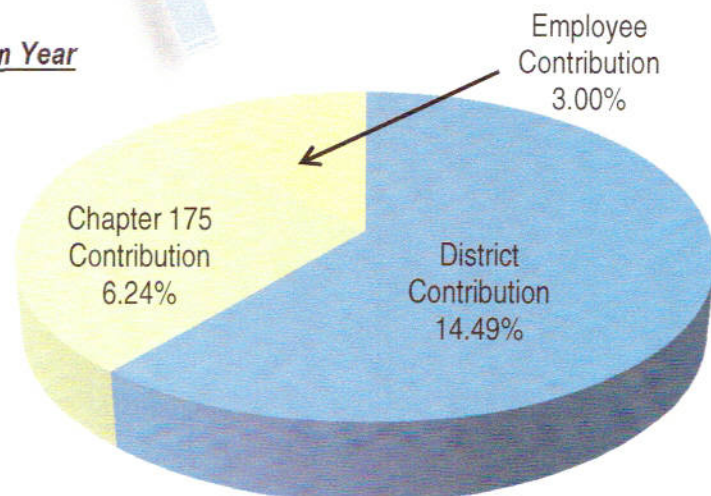
Table I-A  
(continued)

The minimum required contribution rate of 22.12% includes both the District contribution and the allowable Chapter 175 contribution. In addition, employees are required to contribute 3.00% of pensionable earnings. The actual District contribution rate is expected to be approximately 16.14% 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.

### For the 2015/16 Plan Year

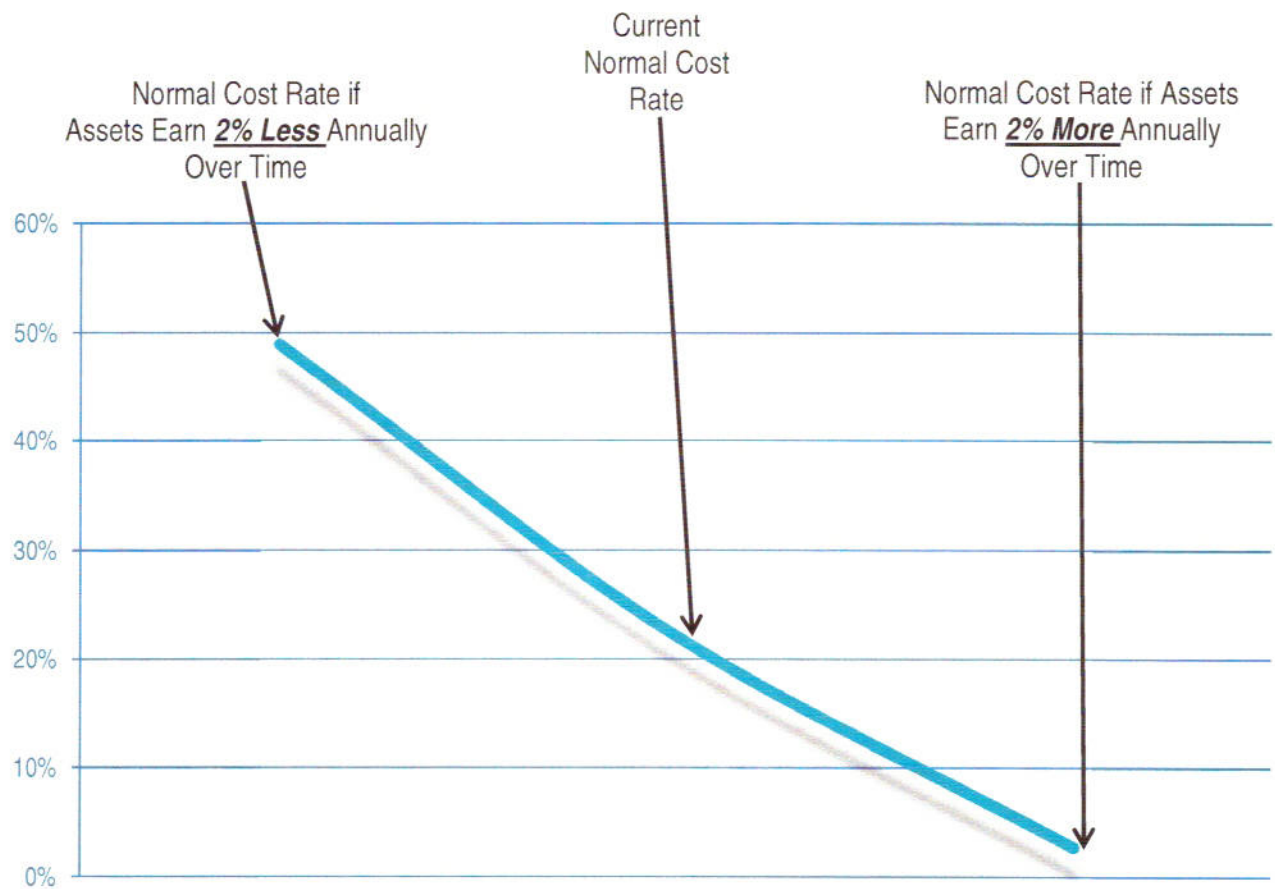


### For the 2014/15 Plan Year



# Sensitivity Analysis

Table I-B



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





## Gain and Loss Analysis

Table I-C

Previous normal cost rate	21.12%
Increase (decrease) due to investment gains and losses	2.07%
Increase (decrease) due to demographic experience	-1.02%
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>22.17%</u>



Present Value of Future Benefits

Table I-D

	Old Assumptions w/o Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
<u>Actively Employed Participants</u>			
Retirement benefits	\$17,616,615	\$17,616,615	\$17,616,615
Termination benefits	\$1,713,064	\$1,713,064	\$1,713,064
Disability benefits	\$1,139,345	\$1,139,345	\$1,139,345
Death benefits	\$156,294	\$156,294	\$156,294
Refund of employee contributions	\$64,477	\$64,477	\$64,477
Sub-total	<b>\$20,689,795</b>	<b>\$20,689,795</b>	<b>\$20,689,795</b>
<u>Deferred Vested Participants</u>			
Retirement benefits	\$1,184,372	\$1,184,372	\$1,184,372
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	<b>\$1,184,372</b>	<b>\$1,184,372</b>	<b>\$1,184,372</b>
<u>Due a Refund of Contributions</u>	<b>\$33,917</b>	<b>\$33,917</b>	<b>\$33,917</b>
<u>Deferred Beneficiaries</u>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<u>Retired Participants</u>			
Service retirements	\$653,792	\$653,792	\$653,792
Disability retirements	\$306,885	\$306,885	\$306,885
Beneficiaries receiving	\$176,488	\$176,488	\$176,488
DROP participants	\$0	\$0	\$0
Sub-total	<b>\$1,137,165</b>	<b>\$1,137,165</b>	<b>\$1,137,165</b>
<u>Grand Total</u>	<b><u>\$23,045,249</u></b>	<b><u>\$23,045,249</u></b>	<b><u>\$23,045,249</u></b>
Present Value of Future Payroll	\$35,548,453	\$35,548,453	\$35,548,453
Present Value of Future Employee Contribs.	\$1,066,453	\$1,066,453	\$1,066,453
Present Value of Future Employer Contribs.	\$7,881,737	\$7,881,737	\$7,881,737





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	\$7,122,294	\$7,122,294	\$7,122,294
Termination benefits	\$890,919	\$890,919	\$890,919
Disability benefits	\$695,625	\$695,625	\$695,625
Death benefits	\$73,800	\$73,800	\$73,800
Refund of employee contributions	\$50,020	\$50,020	\$50,020
Sub-total	<b>\$8,832,658</b>	<b>\$8,832,658</b>	<b>\$8,832,658</b>
<u>Deferred Vested Participants</u>			
Retirement benefits	\$1,184,372	\$1,184,372	\$1,184,372
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	<b>\$1,184,372</b>	<b>\$1,184,372</b>	<b>\$1,184,372</b>
<u>Due a Refund of Contributions</u>	<b>\$33,917</b>	<b>\$33,917</b>	<b>\$33,917</b>
<u>Deferred Beneficiaries</u>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<u>Retired Participants</u>			
Service retirements	\$653,792	\$653,792	\$653,792
Disability retirements	\$306,885	\$306,885	\$306,885
Beneficiaries receiving	\$176,488	\$176,488	\$176,488
DROP participants	\$0	\$0	\$0
Sub-total	<b>\$1,137,165</b>	<b>\$1,137,165</b>	<b>\$1,137,165</b>
<u>Grand Total</u>	<b><u>\$11,188,112</u></b>	<b><u>\$11,188,112</u></b>	<b><u>\$11,188,112</u></b>



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	\$7,002,142	\$7,002,142	\$7,002,142
Termination benefits	\$513,692	\$513,692	\$513,692
Disability benefits	\$695,625	\$695,625	\$695,625
Death benefits	\$53,342	\$53,342	\$53,342
Refund of employee contributions	\$116,556	\$116,556	\$116,556
Sub-total	<b>\$8,381,357</b>	<b>\$8,381,357</b>	<b>\$8,381,357</b>
<u>Deferred Vested Participants</u>			
Retirement benefits	\$1,184,372	\$1,184,372	\$1,184,372
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	<b>\$1,184,372</b>	<b>\$1,184,372</b>	<b>\$1,184,372</b>
<u>Due a Refund of Contributions</u>	<b>\$33,917</b>	<b>\$33,917</b>	<b>\$33,917</b>
<u>Deferred Beneficiaries</u>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<u>Retired Participants</u>			
Service retirements	\$653,792	\$653,792	\$653,792
Disability retirements	\$306,885	\$306,885	\$306,885
Beneficiaries receiving	\$176,488	\$176,488	\$176,488
DROP participants	\$0	\$0	\$0
Sub-total	<b>\$1,137,165</b>	<b>\$1,137,165</b>	<b>\$1,137,165</b>
<u>Grand Total</u>	<b><u>\$10,736,811</u></b>	<b><u>\$10,736,811</u></b>	<b><u>\$10,736,811</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	\$11,033,342	\$11,033,342	\$11,033,342
Termination benefits	\$1,155,628	\$1,155,628	\$1,155,628
Disability benefits	\$762,456	\$762,456	\$762,456
Death benefits	\$102,407	\$102,407	\$102,407
Refund of employee contributions	\$51,475	\$51,475	\$51,475
Sub-total	<b>\$13,105,308</b>	<b>\$13,105,308</b>	<b>\$13,105,308</b>
<u>Deferred Vested Participants</u>			
Retirement benefits	\$1,184,372	\$1,184,372	\$1,184,372
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	<b>\$1,184,372</b>	<b>\$1,184,372</b>	<b>\$1,184,372</b>
<u>Due a Refund of Contributions</u>	<b>\$33,917</b>	<b>\$33,917</b>	<b>\$33,917</b>
<u>Deferred Beneficiaries</u>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<u>Retired Participants</u>			
Service retirements	\$653,792	\$653,792	\$653,792
Disability retirements	\$306,885	\$306,885	\$306,885
Beneficiaries receiving	\$176,488	\$176,488	\$176,488
DROP participants	\$0	\$0	\$0
Sub-total	<b>\$1,137,165</b>	<b>\$1,137,165</b>	<b>\$1,137,165</b>
<u>Grand Total</u>	<b><u>\$15,460,762</u></b>	<b><u>\$15,460,762</u></b>	<b><u>\$15,460,762</u></b>



## GASB 25/27 Results

## Table II-A

**Development of the Net Pension Obligation (Asset)**

Net Pension Obligation (Asset) as of October 1, 2013	(\$1,173,593)
Annual Pension Cost for the 2013/14 Plan Year	\$898,149
Employer Contributions for the 2013/14 Plan Year	(\$1,113,639)
Net Increase (Decrease) in NPO	(\$215,490)
<b>Net Pension Obligation (Asset) as of October 1, 2014</b>	<b>(\$1,389,083)</b>





## GASB 25/27 Disclosures

## Table II-B

***Schedule of Employer Contributions***

Year Ended September 30	Annual Required Contribution	% Contrib.	Annual Pension Cost	% Contrib.
2009	\$593,216	100%	\$593,216	100%
2010	\$830,871	99%	\$830,871	99%
2011	\$893,305	100%	\$893,584	100%
2012	\$1,052,687	91%	\$1,053,057	91%
2013	\$1,062,507	221%	\$1,065,819	221%
2014	\$926,323	120%	\$898,149	124%

***Schedule of Funding Progress***

Actuarial Valuation Date	(1) Actuarial Value of Assets	(2) Actuarial Accrued Liability * (AAL)	(3) Unfunded AAL (UAAL) (2) - (1)	(4) Funded Ratio (1) ÷ (2)	(5) Covered Payroll	(6) UAAL as % of Covered Payroll (3) ÷ (5)
October 1, 2009	\$3,802,396	\$5,417,885	\$1,615,489	70.18%	\$3,626,884	44.54%
October 1, 2010	\$4,732,004	\$6,685,999	\$1,953,995	70.77%	\$3,742,880	52.21%
October 1, 2011	\$6,873,907	\$9,049,483	\$2,175,576	75.96%	\$4,086,455	53.24%
October 1, 2012	\$8,155,956	\$10,591,334	\$2,435,378	77.01%	\$4,070,894	59.82%
October 1, 2013	\$13,182,471	\$13,702,130	\$519,659	96.21%	\$4,234,095	12.27%
October 1, 2014	\$14,500,351	\$15,460,762	\$960,411	93.79%	\$4,288,910	22.39%

\* The AAL has been calculated under the entry age normal cost method.

**Additional Information**

Valuation Date **October 1, 2014**

Actuarial Cost Method **Aggregate**

Amortization Method **Level percentage, open**

Remaining Amortization Period **30 years**

Asset Valuation Method **Five-year smoothed market value**

Discount Rate **7.00%**

Salary Increase Rate **4.50%**



## SFAS 35 Disclosures

## Table II-C

Actuarial Present Value of Accrued Benefits

	<u>As of October 1, 2013</u>	<u>As of October 1, 2014</u>
<u>Vested Benefits</u>		
Participants currently receiving benefits	\$1,151,390	\$1,137,165
Other participants	\$8,180,334	\$9,599,646
Sub-total	<u>\$9,331,724</u>	<u>\$10,736,811</u>
<u>Non-Vested Benefits</u>	\$412,410	\$451,301
<u>Total Benefits</u>	<u><u>\$9,744,134</u></u>	<u><u>\$11,188,112</u></u>
<u>Funded Percentage</u>	138.06%	142.40%
(based on the market value of assets)		

Statement of Change in Actuarial Present Value of Accrued Benefits

<u>Actuarial Present Value as of October 1, 2013</u>	<u>\$9,744,134</u>
<u>Increase (Decrease) Due To:</u>	
Interest	\$682,089
Benefits accumulated	\$864,310
Benefits paid	(\$102,421)
Plan amendments	\$0
Changes in actuarial methods and assumptions	\$0
Net increase (decrease)	<u>\$1,443,978</u>
<u>Actuarial Present Value as of October 1, 2014</u>	<u><u>\$11,188,112</u></u>





## Actuarial Value of Assets

Table III-A

	<u>Net Investment Gain (Loss)</u>		<u>Unrecognized Gain (Loss)</u>
For the 2010/11 plan year	N/A	x 20%	N/A
For the 2011/12 plan year	N/A	x 40%	N/A
For the 2012/13 plan year	N/A	x 60%	N/A
For the 2013/14 plan year	\$1,125,520	x 80%	\$900,416
			<u>\$900,416</u>

Market Value of Assets as of October 1, 2014 \$15,931,902

Minus DROP account balances \$0

Minus advance employer contributions (\$531,135)

Minus excess Chapter 175/185 contributions \$0

Adjustment for unrecognized gain or loss as shown above,  
but restricted to an amount that keeps the actuarial value  
of assets within an 80%-120% corridor of the market value (\$900,416)

**Actuarial Value of Assets as of October 1, 2014 \$14,500,351**

<u>Historical Actuarial Value of Assets</u>	
October 1, 2005	\$1,287,142
October 1, 2006	\$1,806,377
October 1, 2007	\$2,557,480
October 1, 2008	\$3,186,640
October 1, 2009	\$3,802,396
October 1, 2010	\$4,732,004
October 1, 2011	\$6,873,907
October 1, 2012	\$8,155,956
October 1, 2013	\$13,182,471
October 1, 2014	\$14,500,351

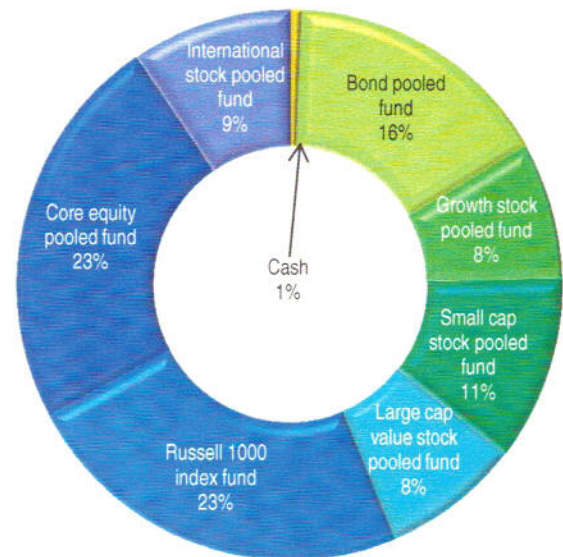


## Market Value of Assets

Table III-B

As of October 1, 2014

<b>Market Value of Assets</b>	<b><u>\$15,931,902</u></b>
Cash	\$95,549
Bond pooled fund	\$2,547,976
Growth stock pooled fund	\$1,273,988
Small cap stock pooled fund	\$1,735,808
Large cap value stock pooled fund	\$1,305,837
Russell 1000 index fund	\$3,726,414
Core equity pooled fund	\$3,726,414
International stock pooled fund	\$1,512,861
Employer contribution receivable	\$6,163
Employee contribution receivable	\$892

**Historical Market Value of Assets**

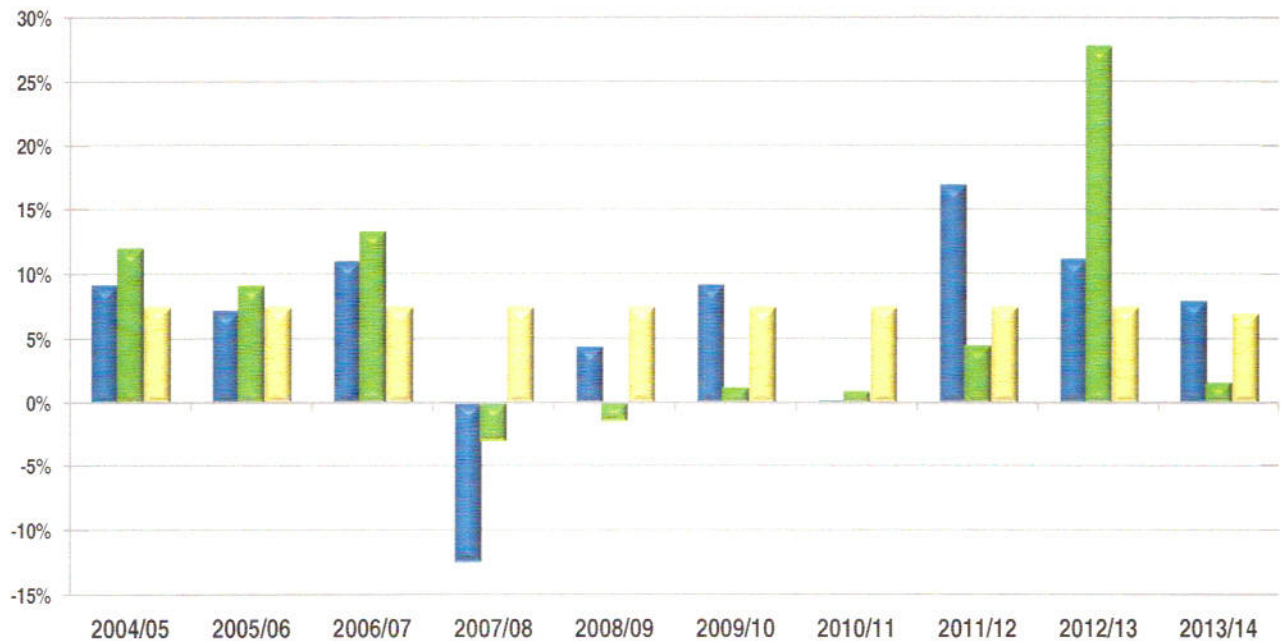
October 1, 2005	\$1,604,540
October 1, 2006	\$2,200,316
October 1, 2007	\$3,084,095
October 1, 2008	\$3,635,859
October 1, 2009	\$4,997,691
October 1, 2010	\$6,719,379
October 1, 2011	\$7,683,850
October 1, 2012	\$10,055,571
October 1, 2013	\$13,452,391
October 1, 2014	\$15,931,902





## Investment Return

Table III-C

*Annual Investment Returns*

■ Market Value Return  
 ■ Actuanal Value Return  
 ■ Assumed Return

Plan Year	Market Value Return	Actuarial Value Return	Assumed Return
2004/05	9.19%	12.03%	7.50%
2005/06	7.20%	9.17%	7.50%
2006/07	11.05%	13.35%	7.50%
2007/08	-12.47%	-3.06%	7.50%
2008/09	4.43%	-1.48%	7.50%
2009/10	9.20%	1.21%	7.50%
2010/11	0.20%	0.94%	7.50%
2011/12	16.97%	4.51%	7.50%
2012/13	11.18%	27.83%	7.50%
2013/14	7.97%	1.64%	7.00%
10yr. Avg.	6.20%	6.27%	7.45%



## Asset Reconciliation

## Table III-D

	<u>Market Value</u>	<u>Actuarial Value</u>
<b>As of October 1, 2013</b>	<b>\$13,452,391</b>	<b>\$13,182,471</b>
<b><i>Increases Due To:</i></b>		
Employer Contributions	\$839,232	\$839,232
Chapter 175/185 Contributions	\$535,622	\$535,622
Employee Contributions	\$134,012	\$134,012
Share Plan Transfer	\$0	\$0
Total Contributions	<u>\$1,508,866</u>	<u>\$1,508,866</u>
Interest and Dividends	\$0	
Realized Gains (Losses)	\$0	
Unrealized Gains (Losses)	<u>\$1,125,520</u>	
Total Investment Income	<u>\$1,125,520</u>	\$225,104
Other Income	\$0	
<b>Total Income</b>	<u><b>\$2,634,386</b></u>	<u><b>\$1,733,970</b></u>
<b><i>Decreases Due To:</i></b>		
Monthly Benefit Payments	(\$93,875)	(\$93,875)
Refund of Employee Contributions	(\$8,546)	(\$8,546)
DROP Credits		\$0
Total Benefit Payments	<u>(\$102,421)</u>	<u>(\$102,421)</u>
Investment Expenses	\$0	
Administrative Expenses	(\$52,454)	(\$52,454)
Advance Employer Contribution		(\$261,215)
Excess Chapter 175/185 Contribution		\$0
<b>Total Expenses</b>	<u><b>(\$154,875)</b></u>	<u><b>(\$416,090)</b></u>
<b>As of October 1, 2014</b>	<u><b>\$15,931,902</b></u>	<u><b>\$14,500,351</b></u>



## Historical Trust Fund Detail

Table III-E

**Income**

Plan	Employer	Chapter	Employee	Share		Realized	Unrealized	
<u>Year</u>	<u>Contribs.</u>	<u>Contribs.</u>	<u>Contribs.</u>	<u>Plan</u>	<u>Interest /</u>	<u>Gains /</u>	<u>Gains /</u>	<u>Other</u>
				<u>Transfer</u>	<u>Dividends</u>	<u>Losses</u>	<u>Losses</u>	<u>Income</u>
2004/05	\$181,825	\$140,205	\$54,547	\$0	\$0	\$0	\$120,905	\$0
2005/06	\$233,252	\$185,628	\$69,976	\$0	\$0	\$0	\$132,145	\$0
2006/07	\$307,711	\$269,186	\$75,365	\$0	\$0	\$0	\$276,638	\$0
2007/08	\$609,411	\$331,070	\$101,797	\$0	\$0	\$0	-\$446,665	\$0
2008/09	\$726,676	\$373,692	\$118,295	\$0	\$0	\$0	\$186,989	\$0
2009/10	\$821,645	\$327,823	\$117,544	\$0	\$0	\$0	\$515,402	\$0
2010/11	\$890,424	\$336,261	\$122,143	-\$285,127	\$0	\$0	\$14,624	\$0
2011/12	\$720,076	\$267,811	\$125,340	\$0	\$0	\$0	\$1,387,118	\$0
2012/13	\$2,083,349	\$0	\$205,447	\$0	\$0	\$0	\$1,244,635	\$0
2013/14	\$839,232	\$535,622	\$134,012	\$0	\$0	\$0	\$1,125,520	\$0

**Expenses**

Plan	Monthly				<b><u>Other Actuarial Adjustments</u></b>		
<u>Year</u>	<u>Benefit</u>	<u>Contrib.</u>	<u>Admin.</u>	<u>Invest.</u>	<u>DROP</u>	<u>Advance</u>	<u>Excess</u>
	<u>Payments</u>	<u>Refunds</u>	<u>Expenses</u>	<u>Expenses</u>	<u>Credits</u>	<u>Employer</u>	<u>Chapter</u>
						<u>Contribs.</u>	<u>Contribs.</u>
2004/05	\$0	\$22,851	\$18,728	\$0	\$0	-\$74,470	\$86,962
2005/06	\$7,373	\$318	\$17,534	\$0	\$0	-\$54,452	\$134,494
2006/07	\$12,726	\$9,866	\$22,529	\$0	\$0	-\$88,877	\$218,052
2007/08	\$18,305	\$3,794	\$21,750	\$0	\$0	\$0	\$279,936
2008/09	\$18,305	\$0	\$25,515	\$0	\$0	\$184,594	\$322,558
2009/10	\$18,305	\$13,843	\$28,578	\$0	\$0	\$51,134	\$276,689
2010/11	\$67,160	\$0	\$46,694	\$0	\$0	\$267,811	-\$1,405,798
2011/12	\$93,875	\$0	\$34,749	\$0	\$0	\$34,049	\$0
2012/13	\$93,875	\$0	\$42,736	\$0	\$0	-\$267,668	\$0
2013/14	\$93,875	\$8,546	\$52,454	\$0	\$0	\$261,215	\$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 III-F

**DROP Account Reconciliation**

DROP Balance as of October 1, 2013	\$0
DROP Benefit Credits	\$0
DROP Investment Credits	\$0
DROP Benefits Paid Out	\$0
Net DROP Credit	\$0
DROP Balance as of October 1, 2014	\$0

**Advance Employer Contribution**

Advance Employer Contribution as of October 1, 2013	\$269,920
Additional Employer Contribution	\$1,374,854
Minimum Required Contribution	(\$1,113,639)
Net Increase in Advance Employer Contribution	\$261,215
Advance Employer Contribution as of October 1, 2014	\$531,135

**Excess Chapter 175/185 Contribution**

Excess Chapter 175/185 Contribution as of October 1, 2013	\$0
Additional Chapter 175/185 Contribution	\$535,622
Allowable Chapter 175/185 Contribution	(\$535,622)
Net Increase in Excess Chapter 175/185 Contribution	\$0
Excess Chapter 175/185 Contribution as of October 1, 2014	\$0



## Allowable Chapter 175/185 Contribution

Table III-G

**1997 Base Amounts**

Chapter 175 Regular Distribution	\$0
Chapter 175 Supplemental Distribution	\$0
Chapter 185 Distribution	\$0

**Qualifying Benefit Improvements**

Prior Resolution	\$51,134
Resolution 2011-03	\$216,677



## Historical Chapter 175/185 Contributions

Table III-H

**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	\$0	\$0
1999 Distribution	\$0	\$0	\$0	\$0
2000 Distribution	\$17,375	\$0	\$0	\$0
2001 Distribution	\$44,684	\$0	\$0	\$0
2002 Distribution	\$82,744	\$0	\$0	(\$113,193)
2003 Distribution	\$104,260	\$0	\$0	(\$53,243)
2004 Distribution	\$140,205	\$0	\$0	(\$51,134)
2005 Distribution	\$185,628	\$0	\$0	(\$51,134)
2006 Distribution	\$269,186	\$0	\$0	(\$51,134)
2007 Distribution	\$288,552	\$42,518	\$0	(\$51,134)
2008 Distribution	\$328,893	\$44,799	\$0	(\$51,134)
2009 Distribution	\$327,823	\$0	\$0	(\$51,134)
2010 Distribution	\$333,647	\$2,614	\$0	(\$267,811)
2011 Distribution	\$338,804	\$0	\$0	(\$267,811)
2013 Distribution	\$535,622	\$0	\$0	(\$535,622)
Interest Adjustment				\$2,371
Transfer to Share Plan				(\$356,120)
One-Time Use				(\$1,189,121)

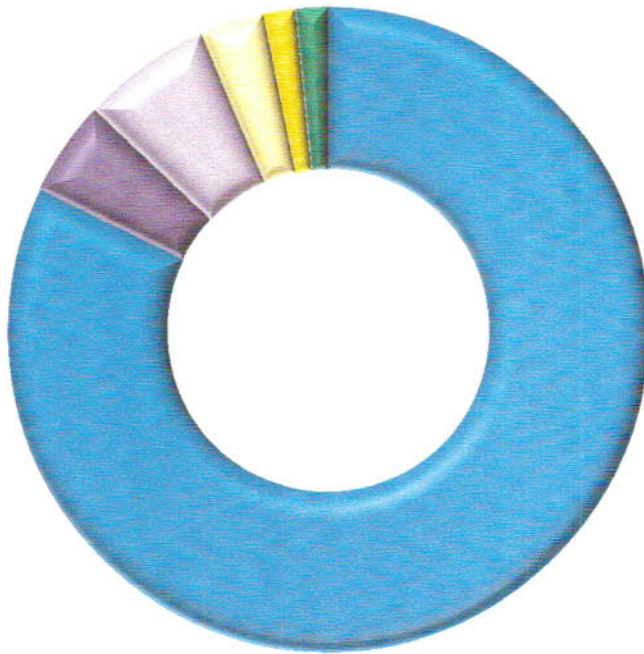




## Summary of Participant Data

Table IV-A

As of October 1, 2014

Actively Employed Participants

Active Participants	51
DROP Participants	0

Inactive Participants

Deferred Vested Participants	3
Due a Refund of Contributions	4
Deferred Beneficiaries	0

Participants Receiving a Benefit

Service Retirements	2
Disability Retirements	1
Beneficiaries Receiving	1

**Total Participants 62**Number of Participants Included in Prior Valuations

	<i>Active</i>	<i>DROP</i>	<i>Inactive</i>	<i>Retired</i>	<i>Total</i>
October 1, 2005	41	0	1	0	42
October 1, 2006	49	0	0	1	50
October 1, 2007	50	0	3	2	55
October 1, 2008	51	0	2	2	55
October 1, 2009	52	0	4	2	58
October 1, 2010	51	0	3	2	56
October 1, 2011	50	0	3	4	57
October 1, 2012	50	0	4	4	58
October 1, 2013	53	0	6	4	63
October 1, 2014	51	0	7	4	62



## Data Reconciliation

Table IV-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, 2013</u>	53	0	1	5	0	2	1	1	63
<u>Change in Status</u>									
Re-employed									
Terminated	(2)		2						
Retired									
<u>Participation Ended</u>									
Transferred Out									
Cashed Out				(1)					(1)
Died									
<u>Participation Began</u>									
Newly Hired									
Transferred In									
New Beneficiary									
<u>Other Adjustment</u>									
<u>October 1, 2014</u>	51	0	3	4	0	2	1	1	62

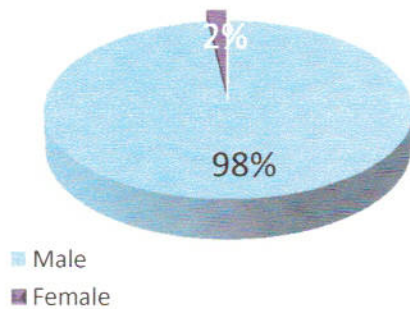


## Active Participant Data

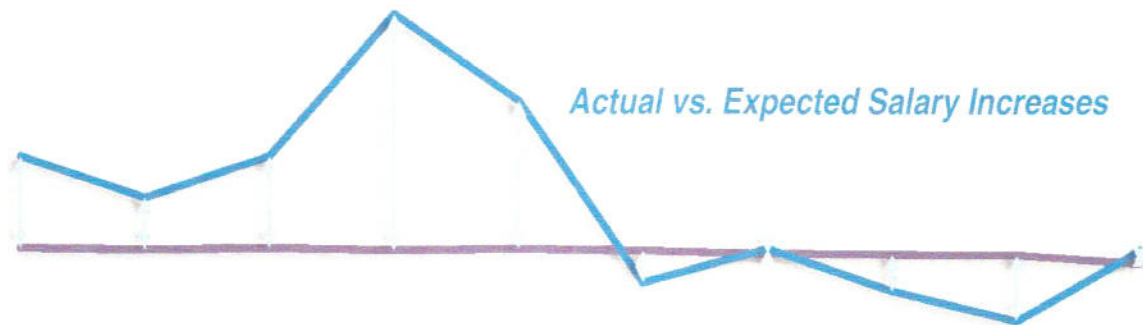
## Table IV-C

As of October 1, 2014

## Gender Mix



Average Age	39.1 years
Average Service	9.5 years
Total Annualized Compensation for the Prior Year	\$4,375,465
Total Expected Compensation for the Current Year	\$4,288,910
Average Increase in Compensation for the Prior Year	5.50%
Expected Increase in Compensation for the Current Year	4.50%
Accumulated Contributions for Active Employees	\$1,032,260



## Active Participant Statistics From Prior Valuations

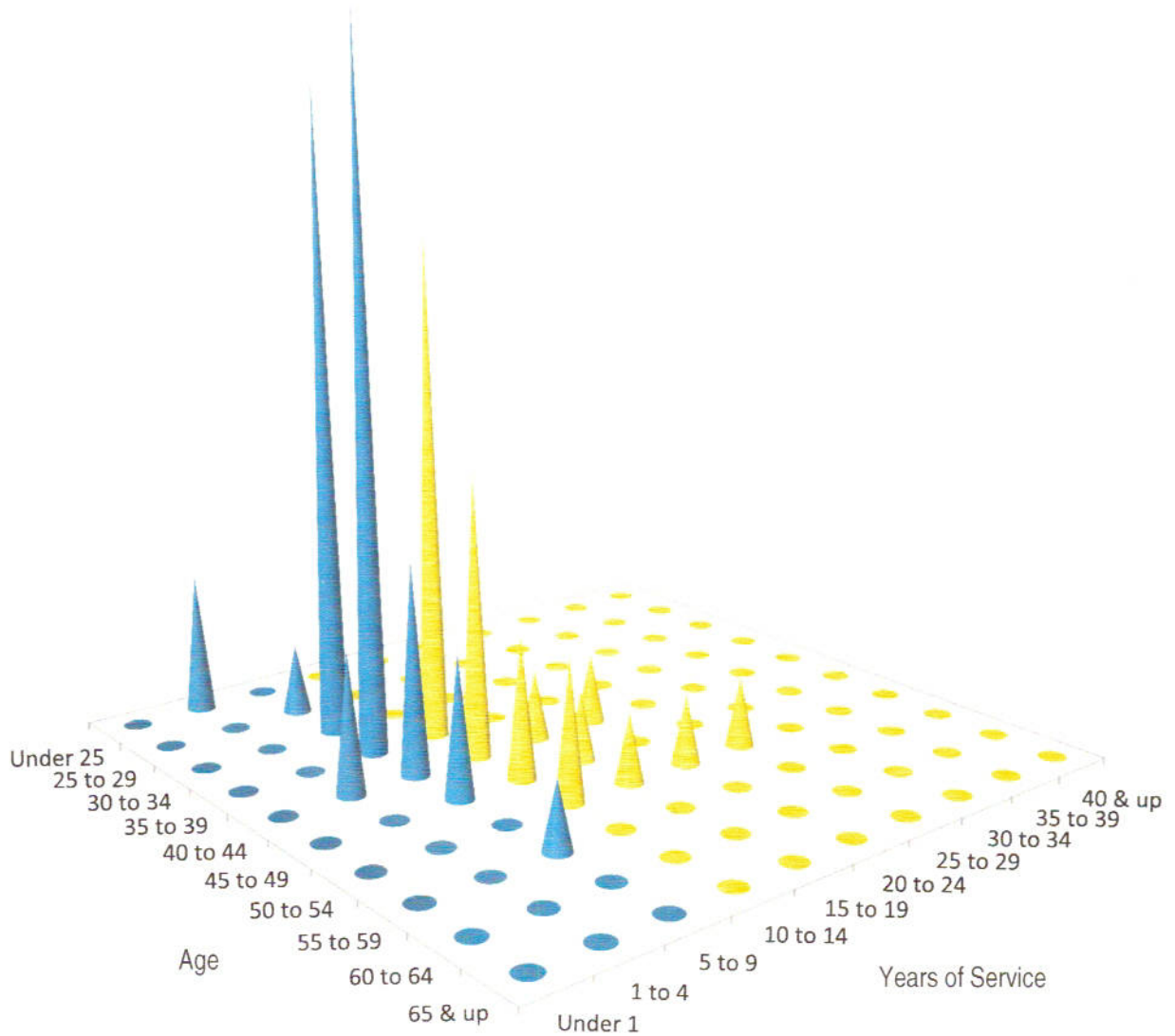
	Average Age	Average Service	Average Salary	Average Expected Salary Increase	Average Actual Salary Increase
October 1, 2005	34.3	4.6	\$41,555	5.69%	12.42%
October 1, 2006	34.9	4.8	\$47,602	5.53%	9.35%
October 1, 2007	34.0	5.0	\$50,106	5.64%	12.39%
October 1, 2008	34.6	5.9	\$65,869	5.46%	22.95%
October 1, 2009	35.3	6.0	\$73,889	5.56%	16.53%
October 1, 2010	36.5	7.1	\$76,456	5.41%	3.08%
October 1, 2011	36.8	7.5	\$82,281	5.22%	5.57%
October 1, 2012	37.4	8.2	\$82,097	5.14%	2.47%
October 1, 2013	38.4	8.9	\$81,233	5.11%	0.25%
October 1, 2014	39.1	9.5	\$85,793	4.50%	5.50%





# Active Age-Service Distribution

Table IV-D



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



Active Age-Service-Salary Table

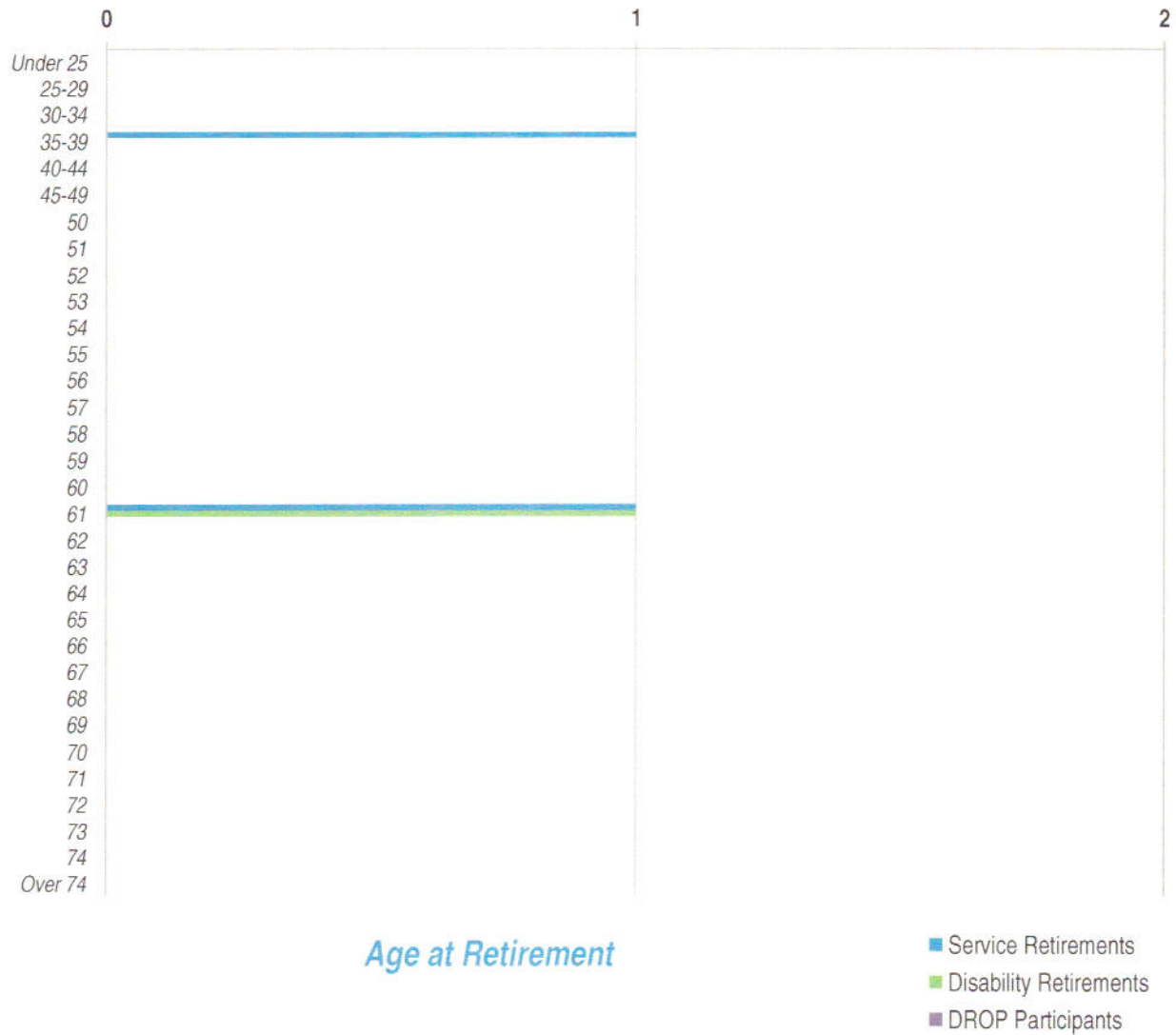
Table IV-E

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	2	0	0	0	0	0	0	0	0	2
Avg.Pay	0	61,522	0	0	0	0	0	0	0	0	61,522
25 to 29	0	0	1	0	0	0	0	0	0	0	1
Avg.Pay	0	0	62,129	0	0	0	0	0	0	0	62,129
30 to 34	0	0	9	0	0	0	0	0	0	0	9
Avg.Pay	0	0	78,348	0	0	0	0	0	0	0	78,348
35 to 39	0	0	10	7	0	0	0	0	0	0	17
Avg.Pay	0	0	82,743	90,806	0	0	0	0	0	0	86,063
40 to 44	0	2	3	4	1	1	0	0	0	0	11
Avg.Pay	0	58,379	84,621	85,563	123,168	99,811	0	0	0	0	85,077
45 to 49	0	0	2	2	1	0	0	0	0	0	5
Avg.Pay	0	0	81,172	89,382	138,250	0	0	0	0	0	95,872
50 to 54	0	0	0	2	1	1	1	0	0	0	5
Avg.Pay	0	0	0	114,406	102,450	69,896	99,811	0	0	0	100,194
55 to 59	0	0	1	0	0	0	0	0	0	0	1
Avg.Pay	0	0	105,912	0	0	0	0	0	0	0	105,912
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	0	4	26	15	3	2	1	0	0	0	51
Avg.Pay	0	59,951	81,416	92,364	121,289	84,854	99,811	0	0	0	85,793



## Inactive Participant Data

Table IV-F

Average Monthly Benefit

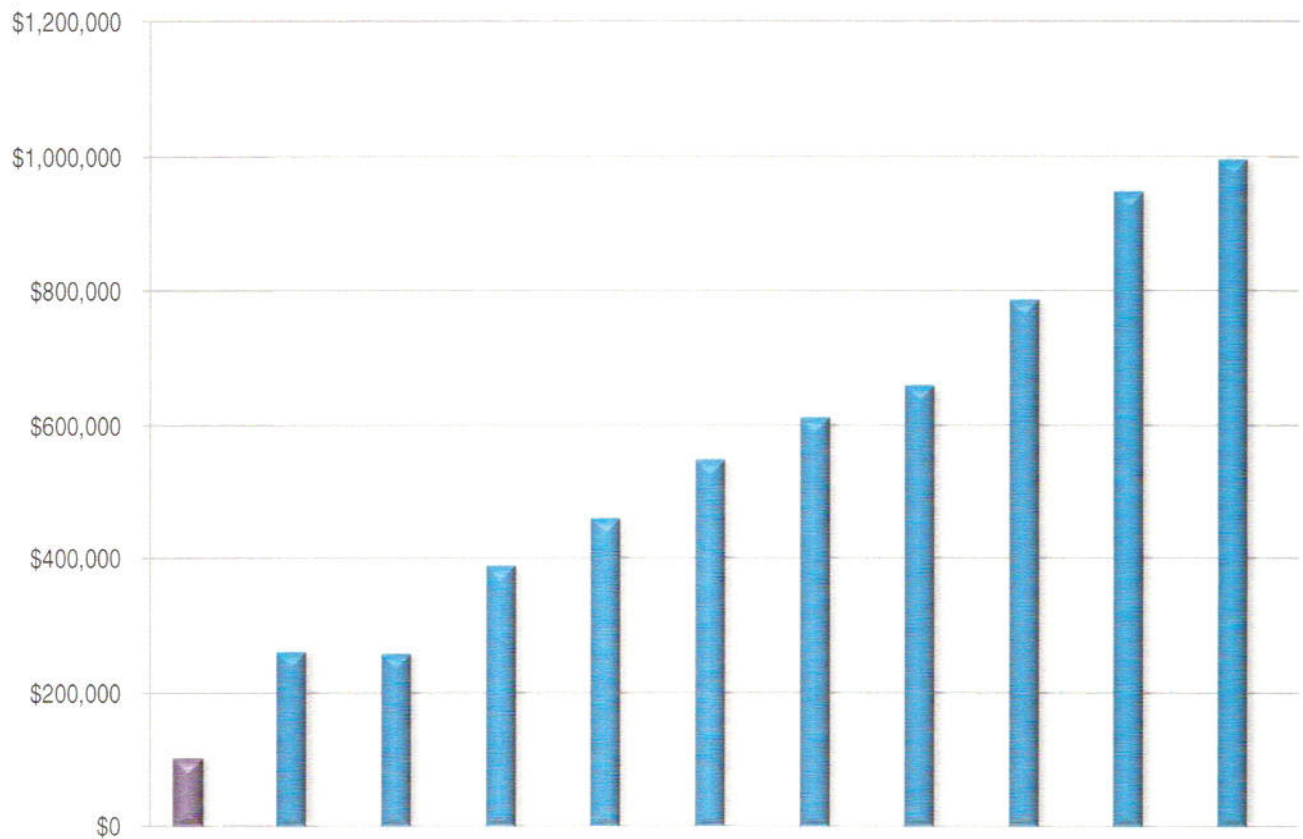
Service Retirements	\$2,313.31
Disability Retirements	\$2,080.49
Beneficiaries Receiving	\$1,115.83
DROP Participants	Not applicable
Deferred Vested Participants	\$3,208.38
Deferred Beneficiaries	Not applicable





## Projected Benefit Payments

Table IV-G

Actual

For the period October 1, 2013 through September 30, 2014

\$102,421

Projected

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

\$263,083

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

\$260,082

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

\$389,411

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

\$460,714

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

\$548,590

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

\$612,051

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

\$660,709

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

\$786,574

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

\$947,668

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

\$996,197



## Summary of Actuarial Methods and Assumptions

Table V-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, adjusted to reflect a five-year phase-in of the net investment gains and losses that occur after September 30, 2013.

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; future generational improvements in mortality have not been reflected.
- 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; future generational improvements in mortality have not been reflected.



## Summary of Actuarial Methods and Assumptions

## Table V-A

(continued)

- 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.
- 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 whose normal retirement age is age 53 or earlier, retirement is assumed to occur at the rate of 15% at age 50, 10% at each of ages 51 and 52, and 100% at the earlier of age 53 or normal retirement age. For those participants whose normal retirement age is age 54 or later, retirement is assumed to occur at the rate of 15% at each of ages 50 through 54 and 100% at age 55, except that 40% retirement is assumed to occur at a normal retirement age of 54.

## 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 1.75% 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 V-B

No assumptions or methods were changed since the completion of the previous valuation.



## Summary of Plan Provisions

## Table VI-A

### 1. Monthly Accrued Benefit

2.00% of Average Final Compensation multiplied by Credited Service earned prior to December 1, 2000 plus 3.70% of Average Final Compensation multiplied by Credited Service earned during the period December 1, 2000 through September 30, 2010 plus 3.00% of Average Final Compensation multiplied by Credited Service earned after September 30, 2010

### 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<sup>2</sup>/<sub>3</sub>% 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);  
Any other actuarially equivalent form of payment approved by the Board; or  
Actuarially equivalent lump sum distribution (automatic if the single sum value of the participant's benefit is less than or equal to \$1,000)

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

### 3. Early Retirement Age and 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



# Summary of Plan Provisions

## Table VI-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 VI-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 (or career average, if higher)

### 10. Compensation

Fixed monthly compensation; 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. Firefighters hired on or before December 1, 2000 who did not opt to participate in the plan until January 1, 2007 do not receive credit for service prior to 2007 unless they make a contribution equal to the full actuarial cost of their prior service. In addition, the participant may purchase up to five additional years of Credited Service for certain military service or other firefighter service by paying into the plan the full actuarial cost thereof, subject to the restrictions on such service purchases as set forth in the legal plan document.



## Summary of Plan Provisions

## Table VI-A

(continued)

### 12. Participation Requirement

All full-time firefighters of the Estero Fire District who are hired after December 1, 2000 automatically become a participant in the plan on their date of hire. Firefighters hired on or before December 1, 2000 could elect to participate as of that date or were given an additional opportunity to participate effective January 1, 2007. The Fire Chief may irrevocably opt not to participate in the plan.

### 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

### 15. 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

### 16. Plan Effective Date

December 1, 2000

### 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 60 months. The DROP accounts are credited with interest at the rate of 6.50% per annum.



## Summary of Plan Amendments

Table VI-B

No significant plan changes were adopted since the previous valuation was completed.

