



Actuarial Valuation Report

Educational Employees' Supplementary Retirement System of
Fairfax County

For the Fiscal Year Ending June 30, 2018

Measurement Date June 30, 2018

Introduction

This report documents the results of the actuarial valuation for the fiscal year ending June 30, 2018 for the Educational Employees' Supplementary Retirement System of Fairfax County ("ERFC"). The plan is a single-employer plan and does not issue a separate financial statement. As a result, all reporting requirements are included in the employer's financial statement. These results are based on a Measurement Date of June 30, 2018. The information provided in this report is intended strictly for documenting information relating to ERFC and plan disclosure and reporting requirements.

Determinations for purposes other than the financial accounting requirements may be significantly different from the results in this report. Thus, the use of this report for purposes other than those expressed here may not be appropriate.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board. In addition, the valuation results are based on our understanding of the financial accounting and reporting requirements under U.S. Generally Accepted Accounting Principles as set forth in Government Accounting Standards Board Statement 68 (GASB 68) including any guidance or interpretations provided by ERFC and/or its audit partners prior to the issuance of this report. The information in this report is not intended to supersede or supplant the advice and interpretations of ERFC's auditors. Additional disclosures have been included as per GASB 67 requirements.

Future actuarial measurements may differ significantly from the current measurements presented in this report due (but not limited to) to such factors as the following:

- Plan experience differing from that anticipated by the economic or demographic assumptions;
- Changes in actuarial methods or in economic or demographic assumptions;
- Increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and
- Changes in plan provisions or applicable law.

Due to the limited scope of our assignment, we did not perform an analysis of the potential range of such future measurements.

Funded status measurements shown in this report are determined based on various measures of plan assets and liabilities. For entity and plan disclosure and reporting purposes, funded status is determined using plan assets measured at market value. Plan liabilities are measured based on the interest rates and other assumptions summarized in the Actuarial Assumptions and Methods section of this report.

These funded status measurements may not be appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations, and funded status measurements for ERFC and plan disclosure and reporting purposes may not be appropriate for assessing the need for or the amount of future contributions.

In conducting the valuation, we have relied on personnel, plan design, and asset information supplied by ERFC as of the valuation date. In addition, we have relied on the information provided by GRS in the Annual Actuarial Valuation Report as of December 31, 2017 for ERFC. Please see the Actuarial Assumptions and Methods Section of this report for additional details.

While we cannot verify the accuracy of all the information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy or completeness of the information and believe that it has produced appropriate results.

The actuarial assumptions and methods used in this valuation are described in the Actuarial Assumptions and Methods section of this report. ERFC selected the economic and demographic assumptions and prescribed them for use for purposes of compliance with GASB 68. Aon provided guidance with respect to these assumptions, and it is our belief that the assumptions represent reasonable expectations of anticipated plan experience.

The undersigned are familiar with the near-term and long-term aspects of pension valuations and collectively meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. The information provided in this report is dependent upon various factors as documented throughout this report, which may be subject to change. Each section of this report is considered to be an integral part of the actuarial opinions.

To our knowledge, no colleague of Aon providing services to ERFC has any material direct or indirect financial interest in ERFC. Thus, we believe there is no relationship existing that might affect our capacity to prepare and certify this actuarial report for ERFC.



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Accounting Requirements

Development of GASB 68 Net Pension Expense

Calculation Details

The following table illustrates the Net Pension Liability under GASB 68.

	Fiscal Year Ending 06/30/2017	Fiscal Year Ending 06/30/2018
(1) Pension Liability	\$ 3,094,309,317	\$ 3,238,436,290
(2) Plan Fiduciary Net Position	<u>2,304,281,654</u>	<u>2,446,279,897</u>
(3) Net Pension Liability	\$ 790,027,663	\$ 792,156,393
(4) Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	74.47%	75.54%
(5) Deferred Outflow of Resources for Contributions Made After Measurement Date	\$ 0	\$ 0

Expense

The following table illustrates the pension expense under GASB 68.

	Fiscal Year Ending 06/30/2017	Fiscal Year Ending 06/30/2018
(1) Service Cost	\$ 78,925,763	\$ 88,599,697
(2) Interest Cost	209,515,636	221,106,804
(3) Expected Investment Return	(150,832,175)	(165,387,582)
(4) Employee Contributions	(43,062,632)	(44,169,100)
(5) Administrative Expense	4,059,408	4,300,927
(6) Plan Changes	(1,038,793)	0
(7) Amortization of Unrecognized		
(a) Liability (Gain)/Loss	(4,245,290)	(2,387,625)
(b) Asset (Gain)/Loss	9,623,820	5,072,238
(c) Assumption Change (Gain)/Loss	<u>10,447,431</u>	<u>10,447,431</u>
(8) Total Expense	\$ 113,393,168	\$ 117,582,790

Shown below are details regarding the calculation of Service and Interest Cost components of the Expense.

	Fiscal Year Ending 06/30/2017	Fiscal Year Ending 06/30/2018
(1) Development of Service Cost:		
(a) Normal Cost at Beginning of Measurement Period	\$ 78,925,763	\$ 88,599,697
(2) Development of Interest Cost:		
(a) Total Pension Liability at Beginning of Measurement Period	\$ 2,937,100,755	\$ 3,094,309,317
(b) Normal Cost at Beginning of Measurement Period	78,925,763	88,599,697
(c) Actual Benefit Payments	(173,385,583)	(177,720,296)
(d) Discount Rate, Beginning of Measurement Period	7.25%	7.25%
(e) Interest Cost	\$ 209,515,636	\$ 221,106,804
(3) Development of Expected Investment Return:		
(a) Plan Fiduciary Net Position at Beginning of Measurement Period	\$ 2,107,587,698	\$ 2,304,281,654
(b) Actual Contributions—Employer	80,094,538	91,704,877
(c) Actual Contributions—Employee	43,062,632	44,169,100
(d) Actual Benefit Payments	(173,385,583)	(177,720,296)
(e) Administrative Expenses	(4,059,408)	(4,300,927)
(f) Other	0	0
(g) Expected Return on Assets, Beginning of Measurement Period	7.25%	7.25%
(h) Expected Return	\$ 150,832,175	\$ 165,387,582

Reconciliation of Net Pension Liability

Shown below are details regarding the Total Pension Liability, Plan Fiduciary Net Position, and Net Pension Liability for the Measurement Period from June 30, 2017 to June 30, 2018:

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (c) = (a) – (b)
Balance Recognized at 06/30/2017 (Based on 06/30/2017 Measurement Date)	\$ 3,094,309,317	\$ 2,304,281,654	\$ 790,027,663
Changes Recognized for the Fiscal Year:			
Service Cost	\$ 88,599,697	N/A	\$ 88,599,697
Interest on the Total Pension Liability	221,106,804	N/A	221,106,804
Changes of Benefit Terms	0	N/A	0
Differences Between Expected and Actual Experience	12,140,768	N/A	12,140,768
Changes of Assumptions	0	N/A	0
Benefit Payments	(177,720,296)	(177,720,296)	0
Contributions From the Employer	N/A	91,704,877	(91,704,877)
Contributions From the Employee	N/A	44,169,100	(44,169,100)
Net Investment Income	N/A	188,145,489	(188,145,489)
Administrative Expense	N/A	(4,300,927)	4,300,927
Net Changes	\$ 144,126,973	\$ 141,998,243	\$ 2,128,730
Balance Recognized at 06/30/2018 (Based on 06/30/2018 Measurement Date)	\$ 3,238,436,290	\$ 2,446,279,897	\$ 792,156,393

Liability (Gain)/Loss

The following table illustrates the liability gain/loss under GASB 68.

	Fiscal Year Ending 06/30/2017	Fiscal Year Ending 06/30/2018
(1) Pension Liability at Beginning of Measurement Period	\$ 2,937,100,755	\$ 3,094,309,317
(2) Service Cost	78,925,763	88,599,697
(3) Interest on the Total Pension Liability	209,515,636	221,108,804
(4) Changes of Benefit Terms	(1,038,793)	0
(5) Changes of Assumptions	23,334,195	0
(6) Benefit Payments	<u>(173,385,583)</u>	<u>(177,720,296)</u>
(7) Expected Pension Liability at End of Measurement Period	\$ 3,074,451,973	\$ 3,226,295,522
(8) Actual Pension Liability at End of Measurement Period	<u>3,094,309,317</u>	<u>3,238,436,290</u>
(9) Pension Liability (Gain)/Loss	\$ 19,857,344	\$ 12,140,768
(10) Average Future Working Life Expectancy	6.6385	6.5355
(11) Total Pension Liability (Gain)/Loss Amortization	\$ 6,506,220	\$ 1,857,665
(12) Pension Overall Liability (Gain)/Loss Amortization	2,991,240	1,857,665
(13) Pension Assumption Change (Gain)/Loss Amortization	3,514,980	0

Asset (Gain)/Loss

The following table illustrates the asset gain/loss under GASB 68.

	Fiscal Year Ending 06/30/2017	Fiscal Year Ending 06/30/2018
(1) Pension Asset at Beginning of Measurement Period	\$ 2,107,587,698	\$ 2,304,281,654
(2) Contributions—Employer	80,094,538	91,704,877
(3) Contributions—Employee	43,062,632	44,169,100
(4) Expected Investment Income	150,832,175	165,387,582
(5) Benefit Payments	(173,385,583)	(177,720,296)
(6) Administrative Expense	(4,059,408)	(4,300,927)
(7) Other	<u>0</u>	<u>0</u>
(8) Expected Pension Asset at End of Measurement Period	\$ 2,204,132,052	\$ 2,423,521,990
(9) Actual Pension Asset at End of Measurement Period	<u>2,304,281,654</u>	<u>2,446,279,897</u>
(10) Pension Asset (Gain)/Loss	\$ (100,149,602)	\$ (22,757,907)
(11) Amortization Factor	5	5
(12) Pension Asset (Gain)/Loss Amortization	\$ (20,029,920)	\$ (4,551,581)

Deferred Outflows/Inflows

The following table illustrates the Deferred Inflows and Outflows as of June 30, 2018 under GASB 68.

	Deferred Outflows	Deferred Inflows
(1) Difference Between Actual and Expected Experience	\$ 24,157,967	\$ (16,912,901)
(2) Net Difference Between Expected and Actual Earnings on Pension Plan Investments	\$ 97,080,442	\$ (78,296,088)
(3) Assumption Changes	<u>41,258,977</u>	<u>0</u>
(4) Sub Total	\$ 162,497,386	\$ (95,208,989)
(5) Contributions Made in Fiscal Year Ending 2018 After Measurement Date	<u>0</u>	<u>0</u>
(6) Total	\$ 162,497,386	\$ (95,208,989)

Amortization of Deferred Inflows/Outflows

The table below lists the amortization bases included in the deferred inflows/outflows as of June 30, 2018.

Date Established	Type of Base	Period		Balance		Annual Payment
		Original	Remaining	Original	Remaining	
Pre-GASB 67	Liability (Gain)/Loss	7.0000	2.0000	\$ (19,051,630)	\$ (4,430,495)	\$ (2,924,227)
06/30/2014	Liability (Gain)/Loss	6.4496	2.4496	(17,051,192)	(6,476,152)	\$ (2,643,760)
06/30/2014	Asset (Gain)/Loss (Net)	5.0000	1.0000	131,137,367	26,227,475	\$ 26,277,473
06/30/2015	Liability (Gain)/Loss	6.5997	3.5997	(11,011,883)	(6,006,254)	\$ (1,668,543)
06/30/2015	Asset (Gain)/Loss (Net)	5.0000	2.0000	177,132,419	70,852,967	\$ 35,426,484
06/30/2015	Assumptions	6.5997	3.5997	45,752,095	24,954,742	\$ 6,932,451
06/30/2016	Liability (Gain)/Loss	6.6385	4.6385	19,857,344	13,874,864	\$ 2,991,240
06/30/2016	Asset (Gain)/Loss (Net)	5.0000	3.0000	(100,149,602)	(60,089,762)	\$ (20,029,920)
06/30/2016	Assumptions	6.6385	4.6385	23,334,195	16,304,235	\$ 3,514,980
06/30/2017	Liability (Gain)/Loss	6.5355	5.5355	12,140,768	10,283,103	\$ 1,857,665
06/30/2017	Asset (Gain)/Loss (Net)	5.0000	4.0000	<u>(22,757,907)</u>	<u>(18,206,326)</u>	\$ (4,551,581)
	Total Charges			\$ 239,331,974	\$ 67,288,397	

Amounts Recognized in the deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in the pension expense as follows:

Year End December 31:

2019	\$ 45,132,264
2020	\$ 20,322,747
2021	\$ (12,142,342)
2022	\$ 6,969,066
2023	\$ 6,011,884
Total Thereafter	\$ 994,778

Statement of Fiduciary Net Position¹

	Fiscal Year Ending June 30, 2018
Assets	
Cash Equivalents	\$ 197,335,330
Receivables	
Contributions	\$ 0
Investment Income	3,128,184
Accounts Receivable – Sale of Investments	2,844,020
Other receivables	0
Total Receivables	<u>\$ 5,972,204</u>
Investments	
Equities	\$ 710,610,287
Bonds and Mortgage Backed Securities	87,634,696
U.S. Government Obligations	8,645,113
Preferred Securities	4,505,494
Real Estate	200,098,771
Global Asset Allocation	240,779,487
Better Beta	121,560,075
Hedge Fund of Funds	118,564,588
Private Equity	88,913,409
Commingled Fixed Income Funds	558,234,827
Commingled Equity Funds	243,116,043
Total Investments	<u>\$ 2,382,662,760</u>
Other	\$ 39,369
Total Assets	\$ 2,586,009,693
Liabilities	
Payables	
Accounts Payable & Securities Purchased	\$ 5,921,045
Securities lending Collateral	133,787,644
Other	21,107
Total Liabilities	<u>\$ 139,729,796</u>
Net Position Restricted for Pensions	\$ 2,446,279,897

Statement of Change in Fiduciary Net Position

	Fiscal Year Ending June 30, 2017
Additions	
Contributions:	
Employer	\$ 91,704,877
Employee	44,169,100
	<hr/>
Total Contributions	\$ 135,873,977
Investment Income:	
Net Increase in Fair value of Investments	\$ 169,848,297
Interest and Dividends	29,445,533
Real Estate	2,498,060
Less Investment Expense	(14,366,955)
	<hr/>
Net Investment Income	\$ 187,424,935
Other	720,554
	<hr/>
Total Additions	\$ 324,019,466
Deductions	
Benefit Payments/Refunds	\$ 177,720,296
Administrative Expenses	4,300,927
Other	0
	<hr/>
Total Deductions	\$ 182,021,223
Net Increase in Net Position	\$ 141,998,243
Net Position restricted for Postemployment benefits Other than Pensions	
Beginning of year	\$ 2,304,281,654
	<hr/>
End of Year	\$ 2,446,279,897

Plan Fiduciary Net Position Projection

We have relied on the information presented by GRS in the GASB Statement Nos. 67 and 68 Accounting Report for ERFC as of June 30, 2017 for purposes of determining the interest rate. There have been no changes in plan provisions or assumptions since the GRS report was prepared. Further, the actual contributions made by ERFC during Fiscal 2018 were greater than the projected amount in the GRS report. Hence, we believe the prior analysis reasonably supports the use of a 7.25% interest rate.

Investment Return Schedule

	Fiscal Year Ending June 30				
	2014	2015	2016	2017	2018
Annual money-weighted rate of return, Net of investment expense ¹	15.91%	1.49%	(0.63%)	12.14%	8.29%

¹ Annual money weighted rate or return, net of investment expense as supplied by ERFC Staff.

Sensitivity

The following table illustrates the impact of interest rate sensitivity on the Net Pension Liability for fiscal year ending June 30, 2017:

	1% Decrease (6.25 %)	Current Rate (7.25%)	1% Increase (8.25%)
(1) Total Pension Liability	\$3,488,740,546	\$3,094,309,317	\$ 2,771,054,985
(2) Plan Fiduciary Net Position	<u>\$2,304,281,654</u>	<u>\$2,304,281,654</u>	<u>\$ 2,304,281,654</u>
(3) Net Pension Liability	\$1,184,458,892	\$ 790,027,663	\$ 466,773,331

The following table illustrates the impact of interest rate sensitivity on the Net Pension Liability for fiscal year ending June 30, 2018:

	1% Decrease (6.25%)	Current Rate (7.25%)	1% Increase (8.25%)
(1) Total Pension Liability	\$3,614,094,900	\$3,238,436,290	\$ 2,862,777,680
(2) Plan Fiduciary Net Position	<u>\$2,446,279,897</u>	<u>\$2,446,279,897</u>	<u>\$ 2,446,279,897</u>
(3) Net Pension Liability	\$1,167,815,003	\$ 792,156,393	\$ 416,497,783

Disclosure—Changes in the Net Pension Liability and Related Ratios

Changes in the Net Pension Liability and Related Ratios¹

	Fiscal Year Ending	
	2017	2018
Total Pension Liability		
Service Cost	\$ 78,925,763	\$ 88,599,697
Interest Cost	\$ 209,515,536	\$ 221,106,804
Changes of Benefit Terms	\$ (1,038,793)	\$ 0
Differences Between Expected and Actual Experiences	\$ 19,857,344	\$ 12,140,768
Changes of Assumptions	\$ 23,334,195	\$ 0
Benefit Payments	\$ (173,385,583)	\$ (177,720,296)
Net Change in Total Pension Liability	\$ 157,208,562	\$ 144,126,973
Total Pension Liability (Beginning)	\$ 2,937,100,755	\$ 3,094,309,317
Total Pension Liability (Ending)	\$ 3,094,309,317	\$ 3,238,436,290
Plan Fiduciary Net Position		
Contributions—Employer	\$ 80,094,538	\$ 91,704,877
Contributions—Member	\$ 43,062,632	\$ 44,169,100
Net Investment Income	\$ 250,981,777	\$ 188,145,489
Benefit Payments	\$ (173,385,583)	\$ (177,720,296)
Administrative Expense	\$ (4,059,408)	\$ (4,300,927)
Other	\$ 0	\$ 0
Net Change in Plan Fiduciary Net Position	\$ 196,693,956	\$ 141,998,243
Plan Fiduciary Net Position (Beginning)	\$ 2,107,587,698	\$ 2,304,281,654
Plan Fiduciary Net Position (Ending)	\$ 2,304,281,654	\$ 2,446,279,897
Net Pension Liability (Ending)	\$ 790,027,663	\$ 792,156,393
Net Position as a Percentage of Pension Liability	74.47%	75.54%
Covered-Employee Payroll	\$ 1,430,259,607	\$ 1,469,629,439
Net Pension Liability as a Percentage of Payroll	55.24%	53.90%

¹ GASB 68 was effective first the year beginning in 2014 and requires plan sponsors to report changes in Net Pension Liability for a rolling 10 year period

Disclosure—Contribution Schedule

Contributions

	Fiscal Year Ending	
	2017	2018
Actuarially Determined Contribution	\$ 80,305,269	\$ 93,543,467
Contributions Made in Relation to the Actuarially Determined Contribution	\$ 80,094,538	\$ 91,704,877
Contribution Deficiency (Excess)	\$ 210,731	\$ 1,838,590
Covered-Employee Payroll	\$ 1,430,259,607	\$ 1,469,629,439
Contributions as a Percentage of Payroll ¹	5.60%	6.24%

Notes to Schedule:

Valuation Date: Actuarial valuations performed as of odd numbered years typically determine the contribution rate for the two year period beginning 18 months after the valuation date. The December 31, 2015 valuation was used to determine the funding policy contribution rates for Fiscal 2018 and 2019. Each actuarial valuation determines an ADEC for the period beginning 18 months after the valuation date. The December 31, 2015 valuation determined the ADEC for Fiscal 2018.

Methods and assumptions used to determine contribution rates:

Actuarial Cost Method	Entry Age Normal with 24-year closed amortization period for initial unfunded and subsequent actuarial gains/losses from July 1, 2016.
Asset Valuation Method	5-Year smoothed market; 25% corridor.
IRS Limit Increases	2.50%
Salary Increases	3.75% to 9.05% including inflation
Investment Rate of Return	7.25%.
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition.
Mortality	The mortality table used to measure retired life mortality was 90% of the male rates and 79% of the female rates of the RP-2014 mortality Total Data Set Healthy Annuitant Mortality tables, adjusted for mortality improvement back to the base year of 2006. Mortality rates for a particular calendar year are determined by applying the fully generational MP-2016 Mortality Improvement scale to the above- described tables. Tables were extended below age 50 with a cubic spline to the published Juvenile rates. The corresponding Disabled and Employee tables were used for disability and pre-retirement mortality, respectively.

¹ Covered payroll in 2016 and later is reported in accordance with GASB 82. The ratio in the last row cannot always be compared to contributions required by the ERFC Board's funding policy.

Appendix

Participant Data

The actuarial valuation was based on personnel information from ERFC records as of December 31, 2017. Following are some of the pertinent characteristics from the personnel data as of that date. Prior year characteristics are also provided for comparison purposes. Both age and service have been determined using years and months as of the valuation date.

	December 31, 2016	December 31, 2017
Active Participants	21,748	21,841
Inactives With Deferred Benefits	4,446	4,746
Inactives Receiving Payment	11,367	11,729
Total Participants	37,561	38,316

Asset Allocation

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2018 are summarized in the following table:

Asset Class¹	NEPC 30 Year Expected Real Arithmetic Rate of Return	Allocation
Domestic Equity (Large Cap)	5.92%	16.5%
Domestic Equity (Small/Mid Cap)	6.71%	6.0%
International Equity	6.71%	12.0%
Emerging International Equity	9.46%	5.0%
EMD (Local Currency)	4.38%	3.0%
Core US Fixed Income	1.14%	4.0%
Diversified Fixed Income	2.50%	16.0%
Absolute Return Fixed income	1.67%	6.0%
Real Estate (Core)	4.38%	4.5%
Real Estate (REIT)	5.75%	3.5%
Private Equity	8.73%	3.5%
Hedge Funds	3.86%	5.0%
GAA	4.76%	10.0%
Risk Parity	4.45%	5.0%
Total		100.0%

The discount rate used to measure the total pension liability is 7.25%.

¹ These rates of return reflect ERFC's best estimate.

Actuarial Assumptions and Methods

Discount Rate	7.25% ¹
20-Year Municipal Bond Rate	3.87%, End of Measurement Period
Municipal Bond Rate Basis	Bond Buyer GO 20-Bond Municipal Bond Index
Expected Return on Assets	7.25%
Salary Increases	See Table I.
General Inflation	2.75%
Retirement Age	
Active Participants	See Table II.
Terminated Vested Participants	At plan commencement age provided in terminated vested member data
Mortality Rates	
Healthy and Disabled	The mortality table used to measure retired life mortality was 90% of the male rates and 79% of the female rates of the RP-2014 mortality Total Data Set Healthy Annuitant Mortality tables, adjusted for mortality improvement back to the base year of 2006. Mortality rates for a particular calendar year are determined by applying the fully generational MP-2016 Mortality Improvement scale to the above-described tables. Tables were extended below age 50 with a cubic spline to the published Juvenile rates. The corresponding Disabled and Employee tables were used for disability and pre-retirement mortality, respectively.
Withdrawal Rates	See Table III.
Disability Rates	See Table IV.
Decrement Timing	Middle of year decrements, with 100% retirement occurring at beginning of year.
Surviving Spouse Benefit	It is assumed that 100% of males and 100% of females have an eligible spouse for purposes of death-in-service benefits, and that males are 3 years older than their spouse.
Administrative Expenses	Actual administrative expenses during the measurement period are recognized in expense.

¹ Based on the prior actuaries analysis the employer's funding policy, projected assets are projected to always be sufficient to cover projected benefit payments, so the EROA is used as the discount rate.

COLA Adjustment	Members hired prior to July 1, 2017: 3% (actual COLA). Members hired on/after July 1, 2017: 2.59% (long-term estimate of provision of 100% of CPI-U capped at 4%; see GRS letter dated November 22, 2016).
Asset Method	Fair market value.
Actuarial Cost Method	Entry Age Normal cost method.
Measurement Date	June 30, 2018
Measurement Period	June 30, 2017 to June 30, 2018
Valuation Date	December 31, 2017
Census Data	As of December 31, 2017.

Changes in Financial Accounting Methods/Assumptions Since the Prior Year

Method Changes

There have been no method changes in the financial accounting valuation since the prior year.

Assumption Changes

The financial accounting valuation reflects the following assumption changes:

- The municipal bond rate was increased from 3.56% to 3.87%

Reliance on Information from Prior Actuary

We have relied on the information provided by GRS in the Annual Actuarial Valuation Report as of December 31, 2017 for ERFC. Specifically, the pension liability, the normal cost, and covered payroll are based on information from the report. While we cannot verify the accuracy of all the information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy or completeness of the information and believe that it has produced appropriate results.

Actuarial Assumptions and Methods

Table I

Salary Increase Assumption

Pay Increase Assumption			
Service Index	Merit & Seniority	Base (Economy)	Increase Next Year
1	5.80%	3.25%	9.05%
2	4.00%	3.25%	7.25%
3	3.30%	3.25%	6.55%
4	3.10%	3.25%	6.35%
5	2.50%	3.25%	5.75%
6	2.40%	3.25%	5.65%
7	2.30%	3.25%	5.55%
8	1.70%	3.25%	4.95%
9	1.60%	3.25%	4.85%
10	1.40%	3.25%	4.65%
11	1.40%	3.25%	4.65%
12	1.40%	3.25%	4.65%
13	1.40%	3.25%	4.65%
14	1.40%	3.25%	4.65%
15	0.90%	3.25%	4.15%
16	0.80%	3.25%	4.05%
17	0.70%	3.25%	3.95%
18	0.50%	3.25%	3.75%
19	0.50%	3.25%	3.75%
20	0.40%	3.25%	3.65%
21	0.30%	3.25%	3.55%
22	0.20%	3.25%	3.45%
23	0.20%	3.25%	3.45%
24	0.20%	3.25%	3.45%
25	0.00%	3.25%	3.25%
Ref:	739	3.25%	

Table II
Retirement Rates

Ages	ERFC (Hired Before 7/1/2001)		ERFC 2001 Tier 1 (Hired 7/1/2001-6/30/2017)			ERFC 2001 Tier 2 (Hired On/After 7/1/2017)	
	Type of Retirement		Age Based	Service	Service Based	Age Based Rule of 90 Met?	
	Service	Reduced Service				Yes	No
45		2.0%					
46		2.0%					
47		2.0%					
48		2.0%					
49		2.0%					
50		2.0%					
51		3.0%					
52	35.0%	6.0%	17.5%	30	17.5%		
53	35.0%	7.0%	17.5%	30	17.5%	35.0%	0.0%
54		8.0%				35.0%	0.0%
55		6.0%					
56	35.0%	4.0%	17.5%	31	17.5%		
57	25.0%	4.0%	12.5%	32	12.5%	35.0%	0.0%
58	25.0%	4.0%	12.5%	33	12.5%	35.0%	0.0%
59	25.0%	4.0%	12.5%	34	12.5%	35.0%	0.0%
60	25.0%	7.0%	10.0%	35	10.0%	35.0% *	0.0%
61	30.0%	8.0%	10.0%	36	10.0%	35.0%	0.0%
62	30.0%	13.0%	10.0%	37	10.0%	35.0%	0.0%
63	30.0%	13.0%	10.0%	38	25.0%	35.0%	0.0%
64	30.0%	13.0%	20.0%	39	40.0%	35.0%	0.0%
65	30.0%		25.0%	40 & Up	100.0%	35.0%	0.0%
66	30.0%		30.0%			35.0%	0.0%
67	25.0%		25.0%			35.0%	30.0%
68	25.0%		15.0%			35.0%	15.0%
69	20.0%		15.0%			35.0%	15.0%
70	20.0%		15.0%			35.0%	15.0%
71	20.0%		15.0%			35.0%	15.0%
72	20.0%		15.0%			35.0%	15.0%
73	30.0%		15.0%			35.0%	15.0%
74	30.0%		15.0%			35.0%	15.0%
75 & Over	100.0%		100.0%			100.0%	100.0%
Ref:	2891	2893	2892		2894	999	999

* The probability is 60% at age 60 for people who first meet the Rule of 90 at age 60.

The age column index does not apply to the service based retirements. In ERFC 2001 Tier 1, an individual can retire at 30 years of service regardless of age. In ERFC 2001 Tier 2, an individual would be able to retire at FSSA with 5 years of service or when the sum of age and service is greater than or equal to 90. FSSA is assumed to be age 67 for members hired on/after July 1, 2017

Table III

Withdrawal Rates

Service	% of Active Participants Withdrawing	
	Males	Females
0 - 1	13%	15%
1 - 2	12%	14%
2 - 3	11%	13%
3 - 4	9%	11%
4 - 5	7%	9%
5 - 6	6%	9%
6 - 7	5%	9%
7 - 8	4%	9%
8 - 9	4%	6%
9 - 10	4%	5%
10 - 11	4%	5%
11 - 12	3%	4%
12 - 13	3%	4%
13 - 14	3%	3%
14 - 15	2%	3%
15 - 16	2%	3%
16 - 17	1%	3%
17 - 18	1%	2%
18 - 19	1%	2%
19 - 20	1%	2%
20 - 21	1%	2%
21 - 22	1%	2%
22 - 23	1%	2%
23 - 24	1%	2%
24 - 25	1%	2%
Ref:	1671	1672

In addition, forfeiture occurs when a vested person separates from service and withdraws contributions thereby forfeiting future rights to an employer financed benefit. The total probability of forfeiture is obtained by multiplying the probability of withdrawal above by 10%. Forfeiture rates do not apply to individuals who are eligible for retirement at time of termination.

Table IV

Sample Rates of Separation From Active Employment

Ages in	% of Active Members Dying or Becoming Disabled within Next Year											
	Death*				Disability							
	Ordinary		Duty		Ordinary		Duty					
2017	Men	Women	Men	Women	Men	Women	Men	Women				
20	0.0188%	0.0064%	0.0019%	0.0006%	0.0117%	0.0048%	0.0029%	0.0012%				
21	0.0208%	0.0065%	0.0021%	0.0006%	0.0117%	0.0048%	0.0029%	0.0012%				
22	0.0227%	0.0065%	0.0023%	0.0006%	0.0117%	0.0048%	0.0029%	0.0012%				
23	0.0238%	0.0067%	0.0024%	0.0006%	0.0142%	0.0074%	0.0036%	0.0018%				
24	0.0242%	0.0069%	0.0024%	0.0006%	0.0149%	0.0081%	0.0037%	0.0020%				
25	0.0228%	0.0071%	0.0023%	0.0007%	0.0146%	0.0082%	0.0036%	0.0020%				
26	0.0218%	0.0074%	0.0022%	0.0007%	0.0142%	0.0082%	0.0035%	0.0021%				
27	0.0212%	0.0077%	0.0021%	0.0007%	0.0140%	0.0086%	0.0035%	0.0022%				
28	0.0210%	0.0081%	0.0021%	0.0008%	0.0142%	0.0094%	0.0036%	0.0024%				
29	0.0212%	0.0086%	0.0021%	0.0008%	0.0149%	0.0106%	0.0037%	0.0027%				
30	0.0215%	0.0091%	0.0022%	0.0009%	0.0158%	0.0122%	0.0040%	0.0031%				
31	0.0221%	0.0098%	0.0022%	0.0009%	0.0171%	0.0140%	0.0043%	0.0035%				
32	0.0228%	0.0104%	0.0023%	0.0010%	0.0186%	0.0158%	0.0046%	0.0040%				
33	0.0236%	0.0110%	0.0024%	0.0010%	0.0202%	0.0178%	0.0050%	0.0044%				
34	0.0244%	0.0116%	0.0024%	0.0011%	0.0218%	0.0196%	0.0054%	0.0049%				
35	0.0252%	0.0121%	0.0025%	0.0011%	0.0234%	0.0214%	0.0059%	0.0054%				
36	0.0258%	0.0127%	0.0026%	0.0012%	0.0252%	0.0232%	0.0063%	0.0058%				
37	0.0265%	0.0133%	0.0026%	0.0012%	0.0271%	0.0250%	0.0068%	0.0062%				
38	0.0273%	0.0141%	0.0027%	0.0013%	0.0291%	0.0268%	0.0073%	0.0067%				
39	0.0284%	0.0151%	0.0028%	0.0014%	0.0314%	0.0287%	0.0078%	0.0072%				
40	0.0298%	0.0163%	0.0030%	0.0015%	0.0339%	0.0308%	0.0085%	0.0077%				
41	0.0317%	0.0177%	0.0032%	0.0016%	0.0367%	0.0331%	0.0092%	0.0083%				
42	0.0342%	0.0195%	0.0034%	0.0018%	0.0399%	0.0357%	0.0100%	0.0089%				
43	0.0373%	0.0215%	0.0037%	0.0020%	0.0435%	0.0386%	0.0109%	0.0097%				
44	0.0411%	0.0239%	0.0041%	0.0022%	0.0475%	0.0419%	0.0119%	0.0105%				
45	0.0456%	0.0267%	0.0046%	0.0025%	0.0520%	0.0456%	0.0130%	0.0114%				
46	0.0508%	0.0298%	0.0051%	0.0028%	0.0570%	0.0498%	0.0143%	0.0124%				
47	0.0568%	0.0332%	0.0057%	0.0031%	0.0626%	0.0545%	0.0157%	0.0136%				
48	0.0634%	0.0370%	0.0063%	0.0034%	0.0689%	0.0598%	0.0172%	0.0149%				
49	0.0708%	0.0411%	0.0071%	0.0038%	0.0760%	0.0658%	0.0190%	0.0164%				
50	0.0789%	0.0454%	0.0079%	0.0042%	0.0842%	0.0726%	0.0210%	0.0181%				
55	0.1333%	0.0704%	0.0133%	0.0065%	0.1469%	0.1228%	0.0367%	0.0307%				
60	0.2279%	0.1016%	0.0228%	0.0095%	0.2447%	0.1770%	0.0612%	0.0443%				
Ref:	$\frac{0.50}{sb} \times 0$	$\frac{2133}{sb} \times 0$	$\frac{0.43}{sb} \times 0$	$\frac{2134}{sb} \times 0$	$\frac{0.05}{sb} \times 0$	$\frac{2133}{sb} \times 0$	$\frac{0.04}{sb} \times 0$	$\frac{2134}{sb} \times 0$	0.08 x 16	0.08 x 17	0.02 x 16	0.02 x 17

* Applicable to calendar year 2017. Rates in future years are determined by the MP-2016 projection scale

Actuarial Assumptions and Methods

Discussion of Actuarial Assumptions and Methods

ERFC selected the economic and demographic assumptions and prescribed them for use for purposes of compliance with GASB 68. Aon provided guidance with respect to these assumptions, and it is our belief that the assumptions represent reasonable expectations of anticipated plan experience.

Calculation of Normal Costs and Liabilities

The method used to calculate the service cost and projected benefit obligation for determining pension expense is the entry age normal cost method. Under this cost method, the actuarial accrued liability is based on a prorated portion of the present value of all benefits earned to date over expected future working life time as defined by GASB. The proration is determined so that the cost with respect to service accrued from date of hire is recognized as a level percentage of pay each year. The Normal Cost is equal to the prorated cost for the year of the valuation.

Accounting Information Under GASB 68

Benefit obligations and expense/(income) are calculated under U.S. Generally Accepted Accounting Principles as set forth in Government Accounting Standards Board Statement 68.

The total pension liability represents the actuarial present value of benefits based on the entry age normal cost method as of the measurement date. The service cost represents the actuarial present value of benefits that are attributed to the 2018 fiscal year, reflecting the effect of assumed future pay increases.

The pension expense is the annual amount to be recognized in the income statement as the cost of pension benefits for this plan for the period ending June 30, 2018.

Plan Provisions

Eligibility to Participate

ERFC Members Hired After July 1, 1988 but Before July 1, 2001

Contributions

Effective July 1, 2012, members contribute 3% of their salaries. Interest credits are 5% annually through June 30, 2017, and 4% annually thereafter. If a member leaves covered employment before becoming eligible to retire, accumulated contributions are returned upon request. Members who receive a refund of contributions and are later rehired become members of ERFC 2001 Tier 2.

Eligibility for Retirement

Normal Retirement

A member may retire any time after reaching the service retirement date, which is either (i) age 65 with 5 years of service or (ii) age 55 with 25 years of service

Early Retirement

A member with 25 years of service but younger than age 55 may retire after age 45. A member with less than 25 years of service and younger than age 65 may retire after age 55.

Disability Retirement

An active member with 5 or more years of service who becomes totally and permanently disabled may be retired and receive a disability pension. The 5-year service requirement is waived if the disability is service-connected.

Normal Retirement Benefit

For payment periods during the retired member's lifetime 103% times (i) minus (ii) where:

- (i) means 1.85 percent of the FAC multiplied by years of credited service, and
- (ii) means 1.65 percent of the portion of VRS FAC in excess of \$1,200, multiplied by applicable years of creditable Virginia service; provided if the member is younger than age 65 and if creditable Virginia service is less than 30 years, the result of such multiplication shall be reduced for each month before the earlier of:
 - (1) attainment of age 65; and
 - (2) the date when 30 years of service would have been completed.

The reduction shall be one-half of 1% for each of the first 60 months and four-tenths of one percent for each month beyond 60 months, if any.

For payment periods, if any, before the age the member becomes eligible for full Social Security benefits, an additional temporary benefit equal to 103% times 1.00 percent of the FAC multiplied by years of credited service.

Early Retirement Benefit

Accrued benefit to early retirement date payable at normal retirement date reduced according to the following schedule:

After 25 years of service: Service Retirement amount reduced to reflect retirement age younger than age 55.

After 5 years of service, but before 25 years of service: For payment periods during the retired member's lifetime, the Service Retirement amount payable at age 65 reduced to reflect retirement age younger than age 65. For payment periods before the age the member becomes eligible for full Social Security benefits, an additional temporary benefit equal to the Service Retirement temporary benefit reduced to reflect retirement age younger than age 65.

Disability Benefit

The amount is 103% times a lifetime pension equal to 0.25 percent of the FAC multiplied by years of credited service. Credited service shall be increased by the time period from disability retirement to the date when the member would have reached the service retirement date. The minimum pension payable is 2.5 percent of FAC.

Vested Deferred Benefit
Eligibility

An inactive member with 5 or more years of service will be entitled to a pension with payments beginning at age 55, provided she/he does not withdraw accumulated member contributions.

Amount

Calculated in the same manner as early retirement benefits.

Final Average Compensation (FAC)

A member's final average compensation is the average of the 3 highest consecutive years of salary during eligible employment.

Forms of Payment
Normal Form

The assumed normal form of benefit is the straight life form.

Optional Forms

Option A: 100% Joint and Survivor benefit. Benefit is 85% of the straight life amount adjusted for the difference in age between the retiree and beneficiary. The maximum benefit is 94% of the straight life amount.

Option B: 50% Joint and Survivor benefit. Benefit is 91% of the straight life amount adjusted for the difference in age between the retiree and beneficiary. The maximum benefit is 97% of the straight life amount.

Option C: 10 years Certain and Life. Benefit is 96% of the straight life amount.

Option D: Single sum payment not exceeding member's accumulated contribution balance, plus a single life annuity actuarially reduced from the pension amount otherwise payable.

Post-Retirement Increases

The amount of the monthly benefit is adjusted each March 31st, by 3% compounded annually, beginning with the March 31st which is more than three full months after the member's effective retirement date. Pensions of members that retire in the immediately preceding calendar year are increased by 1.489% (one-half a year's increase).

Spouse's Preretirement Death Benefit
Statutory Death Benefits

Eligibility

An active member with 5 or more years of service who dies will have benefits payable to the surviving spouse or other eligible beneficiary. The 5-year service requirement is waived if the death is service-connected..

Amount

If the member is eligible for a service or reduced service retirement then an eligible named beneficiary will receive such benefits reduced based upon an Option A (in the case of a spouse or an ex-spouse subject to a DRO) or Option B (in case of another eligible beneficiary) election. If not, the eligible named beneficiary will receive an amount equal to 103% times a lifetime pension equal of 0.25% of the FAC multiplied by years of credited service, and also reduced in connection with an Option A or Option B election. Credited service shall be increased by the time period from the date of death to the date when the member would have reached service retirement with a minimum of 10 years of service used, provided the death was service-connected. If a named beneficiary is not eligible for either of these types of benefits, the named beneficiary will receive a refund of the member's accumulated contributions.

Alternative Benefits Available to Members with Some Service Before July 1, 1988

Service Retirement: Alternate Amount
After Full Social Security Age

A member with service before 7/1/1988 may elect, at time of retirement, to receive an alternate benefit amount for payment periods after full Social Security age. The Alternative Guarantee amount is the amount that would have been received after the individual reached eligibility for full Social Security benefits under the Old Plan (pre – July 1, 1988) formulas. The amount is 103% of the total of:

- (i) the amount payable under June 30, 1987 benefit provisions,
- (ii) plus, if the retiring member is younger than full Social Security age and if creditable Virginia service is less than 30 years, 1.65 percent of VRS average final compensation in excess of \$1,200, multiplied by years of creditable Virginia service, and further multiplied by a certain percent based upon the number of months that retirement occurs before reaching the earlier of the above two conditions; such percent is one half of one percent for each of the first 60 such months and four-tenths of one percent for each of the next 60 such months, if any.

Reduced Service Retirement: Alternate
Amount with 25 Years or more Years of
Service

By election at time of retirement, such a member may elect to receive 103% of the following combination of benefits:

- (i) To age 55, 2.85 percent of the 3-year average annual salary multiplied by years of credited service, then actuarially reduced to reflect retirement age younger than age 55;
- (ii) From age 55 to 65, the amount to age 55 reduced by: 1.65 percent of the portion of VRS average final compensation in excess of \$1,200, multiplied by applicable years of creditable Virginia service; provided if creditable Virginia service is less than 30 years, the result of such multiplication shall be actuarially reduced for each month before the earlier of (1) attainment of age 65; and (2) the date when 30 years' service would have been completed; and
- (iii) From age 65 for life, the amount payable at age 65 according to June 30, 1987 provisions or the amount payable at age 65 according to July 1, 1988 provisions.

Plan Changes Since the Prior Year

The financial accounting valuation does not reflect any plan changes.

Eligibility to Participate	Members Hired On/After July 1, 2001 but Before July 1, 2017 (ERFC 2001 Tier 1)
Contributions	Effective July 1, 2012, members contribute 3% of their salaries. Interest credits are 5% annually through June 30, 2017, and 4% annually thereafter. If a member leaves covered employment before becoming eligible to retire, accumulated contributions are returned upon request. Members who receive a refund of contributions and are later rehired become members of ERFC 2001 Tier 2.
Eligibility for Retirement Normal Retirement	A member may retire at age 60 with 5 or more years of credited service, or after 30 years of credited service regardless of age.
Normal Retirement Benefit	The amount is a lifetime pension equal to 0.8% (eight-tenths of one percent) of FAC at retirement multiplied by years of credited service. If necessary, the pension will be increased to make the reserve value of the pension equal to the member's accumulated contributions as of the retirement effective date.
Vested Deferred Benefit Eligibility	Any member with 5 or more years of credited service who terminates employment prior to the service retirement date, will be eligible to receive a deferred vested pension commencing at age 60, provided accumulated contributions are left on deposit with the Plan.
Amount	The amount is a lifetime pension equal to 0.8% (eight-tenths of one percent) of FAC at termination multiplied by years of credited service. If necessary, the pension will be increased to make the reserve value of the pension equal to the member's accumulated contributions as of the effective retirement date
Final Average Compensation (FAC)	A member's Final Average Compensation is the average of the 3 highest years of salary during eligible employment.
Forms of Payment Normal Form	The assumed normal form of benefit is the straight life form.
Optional Forms	Option A: 100% Joint and Survivor benefit. Benefit is 85% of the straight life amount adjusted for the difference in age between the retiree and beneficiary. The maximum benefit is 94% of the straight life amount. Option B: 50% Joint and Survivor benefit. Benefit is 91% of the straight life amount adjusted for the difference in age between the retiree and beneficiary. The maximum benefit is 97% of the straight life amount.

Option C: 10 years Certain and Life. Benefit is 96% of the straight life amount.

Post-Retirement Increases

The amount of the monthly benefit is adjusted each March 31st, by 3% compounded annually, beginning with the March 31st which is more than three full months after the member's effective retirement date. Pensions of members that retire in the immediately preceding calendar year are increased by 1.489% (one-half a year's increase).

Spouse's Preretirement Death Benefit Statutory Death Benefits Eligibility

Any member with 5 or more years of credited service who dies before beginning to receive a pension will have benefits payable to the named beneficiary..

Amount

The amount is a lifetime pension equal to 0.8% (eight-tenths of one percent) of FAC multiplied by years of credited service at the date of death. If necessary, the pension will be increased to make the reserve value of the pension equal to the member's accumulated contributions as of the date of death. The pension will be adjusted in accordance with an Option A (in the case of a spouse or an ex-spouse subject to a DRO) or Option B (in case of another eligible beneficiary) election payable immediately unless the member did not reach the service retirement eligibility prior to death, in which case the pension is reduced for each month that the member was younger than age 60 on the date of death in the following manner:

- a. One-half of 1% for each of the first 60 months and four-tenths of one percent for each month beyond 60 months (the number of months used for reduction is not to exceed the difference between the member's credited service at death and 30 years).

Plan Changes Since the Prior Year

The financial accounting valuation does not reflect any plan changes.

Eligibility to Participate	Members Hired On/After July 1, 2017 (ERFC 2001 Tier 2)
Contributions	Members contribute 3% of their salaries. Interest credits are 4% annually. If a member leaves covered employment before becoming eligible to retire, accumulated contributions are returned upon request.
Eligibility for Retirement Normal Retirement	A member may retire at Full Social Security Age (FSSA) with 5 or more years of credited service, or when the sum of age plus service is greater than or equal to 90 (i.e., "Rule of 90").
Normal Retirement Benefit	The amount is a lifetime pension equal to 0.8% (eight-tenths of one percent) of FAC at retirement multiplied by years of credited service. If necessary, the pension will be increased to make the reserve value of the pension equal to the member's accumulated contributions as of the retirement effective date.
Vested Deferred Benefit Eligibility	Any member with 5 or more years of credited service who terminates employment prior to the service retirement date, will be eligible to receive a deferred vested pension commencing at FSSA, provided accumulated contributions are left on deposit with the Plan.
Amount	The amount is a lifetime pension equal to 0.8% (eight-tenths of one percent) of FAC at termination multiplied by years of credited service. If necessary, the pension will be increased to make the reserve value of the pension equal to the member's accumulated contributions as of the effective retirement date.
Final Average Compensation (FAC)	A member's Final Average Compensation is the average of the 5 highest years of salary during eligible employment.
Forms of Payment Normal Form	The assumed normal form of benefit is the straight life form.
Optional Forms	Before the effective retirement date, a retiring member may elect one of the following options: Option A: 100% Joint and Survivor benefit. Benefit is 85% of the straight life amount adjusted for the difference in age between the retiree and beneficiary. The maximum benefit is 94% of the straight life amount.

Option B: 50% Joint and Survivor benefit. Benefit is 91% of the straight life amount adjusted for the difference in age between the retiree and beneficiary. The maximum benefit is 97% of the straight life amount.

Option C: 10 years Certain and Life. Benefit is 96% of the straight life amount

Post-Retirement Increases

The amount of the monthly benefit is adjusted each March 31st, by 100% of the Consumer Price Index (CPI-U) (with a cap of 4%) compounded annually, beginning with the March 31st which is more than three full months after the member's effective retirement date. Pensions of members that retire in the immediately preceding calendar year are increased by one-half a year's increase.

Spouse's Preretirement Death Benefit Statutory Death Benefits Eligibility

Any member with 5 or more years of credited service who dies before beginning to receive a pension will have benefits payable to the named beneficiary..

Amount

The amount is a lifetime pension equal to 0.8% (eight-tenths of one percent) of FAC multiplied by years of credited service at the date of death. If necessary, the pension will be increased to make the reserve value of the pension equal to the member's accumulated contributions as of the date of death. The pension will be adjusted in accordance with Option A (in the case of a spouse or an ex-spouse subject to a DRO) or Option B (in case of another eligible beneficiary) election payable immediately unless the member did not reach the service retirement eligibility prior to death, in which case the pension is reduced for each month that the member was younger than service retirement eligibility on the date of death in the following manner:

One-half of 1% for each of the first 60 months and four-tenths of one percent for each month beyond 60 months (the number of months used for reduction is based on the lesser of FSSA or the age the member would have attained "Rule of 90").

Plan Changes Since the Prior Year

The financial accounting valuation does not reflect any plan changes.