EDUCATIONAL EMPLOYEES' SUPPLEMENTARY
RETIREMENT SYSTEM OF FAIRFAX COUNTY (ERFC)

 $27^{\text{TH}}$  ANNUAL ACTUARIAL VALUATION DECEMBER 31, 2006

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The Board of Trustees
Educational Employees' Supplementary
Retirement System of Fairfax County
Fairfax, Virginia

Dear Board Members:

Submitted in this report are the results of our 27th annual actuarial valuation of the Educational Employees' Supplementary Retirement System of Fairfax County (ERFC), based on data as of **December 31, 2006**.

*Individual member statistical data*, together with the necessary financial data on which the valuation was based, was furnished by your Executive Director and staff. Their efforts in furnishing this material are acknowledged with our appreciation.

*The actuarial assumptions* used in making the actuarial valuation are shown in Section G of this report. The assumptions were adopted by the Trustees following a study of experience covering the five-year period ended June 30, 2004.

This valuation was completed in accordance with actuarial procedures proscribed by the Actuarial Standards Board. The Actuaries involved are members of the American Academy of Actuaries with extensive experience in performing valuations of public employee retirement systems.

Your attention is directed particularly to:

COMMENTS on page 3; Computed Employer Contribution Rate on page B-2; Comparative Statement on page B-3; Short Condition Test on page B-7;

Respectfully submitted,

Brian B. Murphy, FSA, MAAA

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#### **COMMENTS**

ERFC Funding Policy: The ERFC funding policy, as stated in the ERFC Plan Document is "to establish and receive contributions which will remain approximately level from generation to generation of citizens, and which when combined with other assets and investment return thereon, will be sufficient to pay benefits when due while providing a reasonable margin for adverse experience."

**ERFC** Contribution Rate Policy: Actuarial valuations as of odd numbered years (2005, 2007, etc.) are used to set the employer contribution rate for the two year period beginning 18 months after the valuation date. In particular, the December 31, 2005 valuation was used to determine the contribution rate for the period July 1, 2007 to June 30, 2009. That rate is currently 3.37% of payroll. Actuarial valuations of even numbered years, such as this one, provide an interim measure of the financial condition of ERFC and are also used for financial reporting in connection with Governmental Accounting Standards Board (GASB) Statements No. 25 and No. 27, including the determination of the "Annual Required Contribution", or "ARC" in accordance with parameters specified by the GASB. For funding purposes, unfunded accrued liabilities are currently being amortized over a closed 30 year period ending on June 30, 2034. Because of the operation of the contribution rate policy and the requirements of the GASB, there will be years when the figures reported for GASB accounting purposes may differ from the figures reported in the actuarial report for funding purposes, possibly resulting in a Net Pension Obligation (NPO), or a Net Pension Asset (NPA) in some years. If the Contribution Rate Policy is followed consistently, the Actuary expects that such items will, in the long run, be immaterial. The Contribution Rate Policy was adopted on March 21, 2006. A related section of ERFC regulations is reproduced in the appendix of this report.

#### Plan Experience

Financial experience during the year ending December 31, 2006 was favorable. The Funding Policy Contribution is higher than the GASB ARC by 0.23% of payroll, and the Market Value of Assets is \$92.4 Million greater than the funding value (please see page D-3). Both provide a reserve against future bad experience. The market value rate of return as measured by the actuary was 13.8%. The funded ratio is 86.4%, which represents an improvement over last year. If market value of assets were the basis for the measurement, the funded ratio would be 90.8%.

#### **ERFC** Financial Status

We are pleased to report that, based upon the December 31, 2006 valuation; the Fairfax County ERFC is operating in accordance with its funding policy and continues to operate in accordance with actuarial principles of level percent of payroll financing.

# SECTION A FINANCIAL PRINCIPLES

### FINANCIAL PRINCIPLES AND OPERATIONAL TECHNIQUES

**Promises Made, and Eventually Paid.** As each year is completed, the plan in effect hands an "IOU" to each member then acquiring a year of service credit --- The "IOU" says: "The Educational Employees' Supplementary Retirement System of Fairfax County owes you one year's worth of retirement benefits, payments in cash commencing when you qualify for retirement."

The related *key financial questions* are:

Which generation of taxpayers contributes the money to cover the IOU?

**The present taxpayers**, who receive the benefit of the member's present year of service?

*Or the future taxpayers*, who happen to be in Fairfax County at the time the IOU becomes a cash demand?

The law governing plan financing intends that this year's taxpayers contribute the money to cover the IOUs being handed out this year. By following this principle, the employer contribution rate will remain approximately level from generation to generation --- your children and grandchildren will contribute the same percents of active payroll you contribute now.

(There are systems which have a design for deferring contributions to future taxpayers, lured by a lower contribution rate now and putting aside the consequence that the contribution rate must then relentlessly grow much greater over decades of time --- consume now, and let your children face higher contributions after you retire.)

An inevitable by-product of the level-cost design is the accumulation of reserve assets for decades, and the income produced when the assets are invested. *Invested assets are a by-product and not the objective*. *Investment return* becomes, in effect, the third contributor for benefits to employees, and is interlocked with the contribution amounts required from employees and employers.

Translated to actuarial terminology, this level-cost objective means that the contribution rates must total at least the following:

Current Cost (the cost of members' service being rendered this year)

... plus ...

Interest on Unfunded Accrued Liabilities (unfunded accrued liabilities are the difference between (i) liabilities for service already rendered and (ii) the accrued assets of the plan).

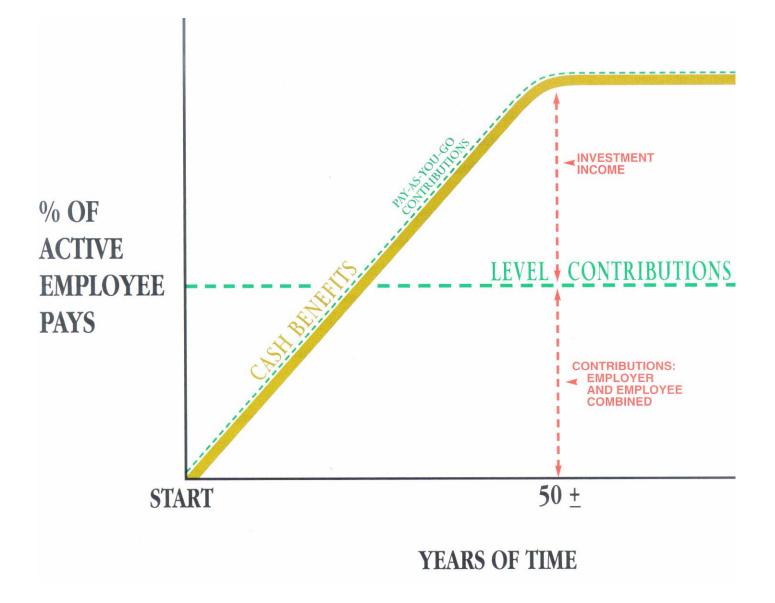
Computing Contributions to Support Plan Benefits. From a given schedule of benefits and from the employee data and asset data furnished, the actuary determines the contribution rates to support the benefits, by means of an actuarial valuation and a funding method.

An actuarial valuation has a number of ingredients such as: the rate of investment return which plan assets are assumed to earn; the rates of withdrawal of active members who leave covered employment before qualifying for any monthly benefit; the rates of mortality; the rates of disability; the rates of pay increases; and the assumed age or ages at actual retirement.

In preparing an actuarial valuation, assumptions must be made as to what the above rates will be for the next year and for decades in the future. Only the subsequent actual experience of the plan can indicate the degree of accuracy of the assumptions.

**Reconciling Differences Between Assumed Experience and Actual Experience.** Once actual experience has occurred and been observed, it will not coincide exactly with assumed experience, regardless of the wisdom of the assumptions and regardless of the skill of the actuary and the millions of calculations made. The demographic future can be predicted with considerable but not 100% precision. However, *inflation rates seem to defy reliable prediction*.

The plan copes with these continually changing differences by having periodic actuarial valuations. Each actuarial valuation is a complete recalculation of assumed future experience, taking into account all past differences between assumed and actual experience. The result is *continuing adjustments in financial position*.



**CASH BENEFITS LINE.** This relentlessly increasing line is the fundamental reality of retirement plan financing. It happens each time a new benefit is added for future retirements (and happens regardless of the design for contributing for benefits).

**LEVEL CONTRIBUTION LINE.** Determining the level contribution line requires detailed assumptions concerning a variety of experiences in future decades, including:

Economic Risk Areas

Rates of investment return

Rates of pay increase

Changes in active member group size

Non-Economic Risk Areas

Ages at actual retirement

Rates of mortality

Rates of withdrawal of active members (turnover)

Rates of disability

### THE ACTUARIAL VALUATION PROCESS

The financing diagram on the opposite page shows the relationship between the two fundamentally different philosophies of paying for retirement benefits: the method where contributions match cash benefit payments (or barely exceed cash benefit payments, as in the Federal Social Security program) and is thus an *increasing contribution method*; and the *level contribution method* which equalizes contributions between the generations.

**The actuarial valuation** is the mathematical process by which the level contribution rate is determined, and the flow of activity constituting the valuation may be summarized as follows:

Covered Person Data, furnished by plan administrator

Retired lives now receiving benefits

Former employees with vested benefits not yet payable

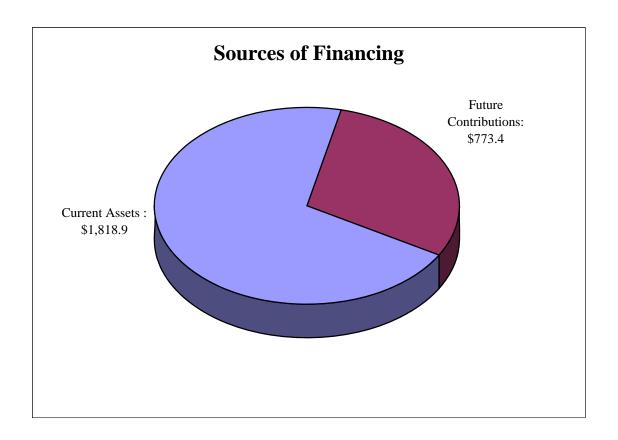
Active employees

- + Asset Data (cash and investments), furnished by plan administrator
- + Assumptions concerning future financial experiences in various risk areas,
  which assumptions are established by the Board of Trustees after consulting with the actuary
- + *The funding method* for employer contributions (the long-term, planned pattern for employer contributions)
- + Mathematically combining the assumptions, the funding method, and the data
- = Determination of:

Plan Financial Position
and/or New Employer Contribution Rate

## **SECTION B**RESULTS OF THE VALUATION

# FINANCING \$2,592.3 MILLION OF BENEFIT PROMISES DECEMBER 31, 2006 (\$ IN MILLIONS)



The pie graph above shows that the total amount of benefit promises made to members in *ERFC* and *ERFC 2001* is \$2,592.3 million, based on plan assumptions as of December 31, 2006. In actuarial terms this is called the present value of future benefit payments. It represents the amount of money, shown in today's dollars, needed to pay benefits to current and future retirees based on plan assumptions. These assumptions are outlined in section G of this report. The \$2,592.3 million would be sufficient to pay promised benefits if plan members leave active employment as expected (retire, quit, etc.), and live exactly according to plan mortality assumptions. A major assumption in calculating the \$2,592.3 million number is that investments earn 7.50% per year.

### COMPUTED EMPLOYER CONTRIBUTION RATES (AS PERCENTS OF ACTIVE MEMBER PAYROLL)

Valuation Date	<b>December 31, 2006</b>	<b>December 31, 2005</b>
Contributions for Period Beginning July 1	2008	2007
Normal Cost (current cost):		
Service Retirement	3.34%	3.27%
Reduced Service Retirement	0.96%	1.05%
Casualty Benefits	0.16%	0.15%
Separation Benefits	1.22%	1.20%
Totals	5.68%	5.67%
Member Contributions	4.00%	4.00%
Employer Normal Cost	1.68%	1.67%
Unfunded Actuarial Accrued Liability	1.46%	1.63%
Contingency Contribution	0.00%	0.07%
Annual Required Contribution (GASB 25)	3.14%	3.37%
Funding Policy Contribution	3.37%	3.37%

The Funding Policy Contribution rate for the two year period beginning July 1, 2007 was determined in connection with the December 31, 2005 valuation. The funding policy contribution for the two year period beginning July 1, 2009 will be determined by the December 31, 2007 valuation. The purpose of the above calculation is to determine the GASB 25 "Annual Required Contribution" for use in financial reporting. The positive gap between the Funding Policy Contribution and the Annual required Contribution increases the likelihood that the contribution rate might continue to remain stable.

Unfunded liability was amortized as a level percent of payroll over 26 years in 2006 and 27 years in 2005. If this pattern continued indefinitely, and there were no gains or losses, unfunded liabilities would be fully amortized on June 30, 2034.

### COMPUTED AND ADOPTED CONTRIBUTION RATE HISTORY

		Adopted Total		
Valuation Date	Active Member Payroll (\$1,000's)	Employer Rate	U.A.A.L. Amort. Years	
2/28/1975	\$ 110,571			
2/29/1980	169,924			
6/30/1983	225,592			
6/30/1985	251,691			
6/30/1986@	277,545			
6/30/1987	305,050			
6/30/1988\$!	340,946	5.49%	19 Yrs.	
6/30/1989	369,575	5.49%	19	
6/30/1990	411,970	5.48%	20	
6/30/1991	451,873	5.48%	20	
6/30/1992	447,474	5.48%	20	
6/30/1993#@	450,530	5.48%	20	
6/30/1994	480,995	5.48%	22	
6/30/1995\$!	521,044	5.98%	20	
6/30/1996	531,060	5.98%	16	
6/30/1997	553,709	5.98%	13	
6/30/1998#!	582,755	4.99%	11	
6/30/1999*	626,015	3.69%	-	
6/30/2000*	678,937	3.69%	-	
6/30/2001\$&	759,906	4.00%	-	
6/30/2002!	781,756	4.29%	30	
6/30/2003\$	866,502	3.37%	29	
12/31/2004#&	977,817	3.37%	28	
12/31/2005&+	1,050,217	3.37%	27	
12/31/2006	1,111,828	3.37%	26	

<sup>\*</sup> Beginning with the 1999 valuation, the adopted rate was not the same as the computed rate.

<sup>@</sup> After change in asset valuation method.

<sup>\$</sup> After change in benefit structure.

<sup>#</sup> After changes in assumptions.

<sup>!</sup> After change in employer contribution rate.

<sup>&</sup>amp; Includes Contingency Contribution.

<sup>+</sup> Reflects new funding policy which establishes the employer rate for a two-year period.

### **ACTUARIAL ACCRUED LIABILITIES**

	Amounts at December 31				
Accrued liabilities for	2006	2005			
Present Active Members	\$ 901,350,278	\$ 867,359,015			
Present Inactive Vested Members	27,222,127	25,225,256			
Present Retirees and Beneficiaries	1,176,979,385	1,130,377,922			
Total Actuarial Accrued Liabilities	\$2,105,551,790	\$2,022,962,193			
Funding Value of Assets	1,818,930,165	1,718,398,545			
Unfunded Actuarial Accrued Liability	\$ 286,621,625	\$ 304,563,648			
Funded Ratio	86.39%	84.94%			

## ASSETS AND LIABILITIES COMPARATIVE STATEMENT

	Active	Con	puted Liabi	lities		Unfunded	
Valuation	Member		Other		Valuation	Accrued	Funded
Date	Payroll	Retired	Members	Total	Assets	Liabilities	<b>%</b>
			(\$ in the	ousands)			
2/28/1975	\$ 110,571	\$ 4,567	\$ 55,613	\$ 60,180	\$ 7,831	\$ 52,349	13.0%
2/29/1980	169,924	38,288	138,708	176,996	74,173	102,823	41.9%
6/30/1985	251,691	96,588	240,351	336,939	221,656	115,283	65.8%
6/30/1986@	277,545	116,773	264,611	381,384	284,195	97,189	74.5%
6/30/1987	305,051	136,073	293,170	429,243	325,127	104,116	75.7%
6/30/1988\$!#	340,946	163,959	343,523	507,482	359,069	148,413	70.8%
6/30/1989	369,575	203,394	357,569	560,963	405,317	155,646	72.3%
6/30/1990	411,970	240,122	404,751	644,873	461,450	183,423	71.6%
6/30/1991	451,873	285,618	432,109	717,727	510,825	206,902	71.2%
6/30/1992	447,474	318,072	445,498	763,570	563,644	199,926	73.8%
6/30/1993#@	450,530	344,160	564,207	908,367	717,701	190,666	79.0%
6/30/1994	480,995	374,849	597,230	972,079	766,480	205,599	78.8%
6/30/1995\$!	521,044	395,249	677,287	1,072,536	839,930	232,606	78.3%
6/30/1996	531,060	436,181	694,363	1,130,544	934,571	195,973	82.7%
6/30/1997	553,709	464,345	751,022	1,215,367	1,045,412	169,955	86.0%
6/30/1998#!	582,755	490,261	788,111	1,278,372	1,194,556	83,816	93.4%
6/30/1999!	626,015	539,917	805,742	1,345,659	1,365,417	(19,758)	101.5%
6/30/2000	678,937	614,739	752,632	1,367,371	1,505,231	(137,860)	110.1%
6/30/2001\$	759,906	667,605	884,953	1,552,558	1,599,219	(46,661)	103.0%
6/30/2002!	781,756	699,251	994,705	1,693,956	1,619,889	74,067	95.6%
6/30/2003\$	866,502	903,963	868,455	1,772,418	1,597,459	174,959	90.1%
12/31/2004#	977,817	1,083,988	851,594	1,935,582	1,643,020	292,562	84.9%
12/31/2005	1,050,217	1,130,378	892,584	2,022,962	1,718,399	304,563	84.9%
12/31/2006	1,111,828	1,176,979	928,573	2,105,552	1,818,930	286,622	86.4%

<sup>@</sup> After change in asset valuation method.

<sup>\$</sup> After change in benefits.

<sup>#</sup> After changes in actuarial assumptions.

<sup>!</sup> After change in employer contribution rate.

# ASSETS AND LIABILITIES EXPRESSED AS PERCENTS OF ACTIVE MEMBER PAYROLL COMPARATIVE STATEMENT

	Active	As Percei	nts of Active Membe	er Payroll
Valuation	Member Payroll	Computed	Valuation	Unfunded
Date	(\$ thousands)	Liabilities	Assets	Liabilities
2/28/1975	\$ 110,571	54%	7%	47%
2/29/1980	169,924	104%	44%	61%
6/30/1985	251,691	134%	88%	46%
6/30/1986@	277,545	137%	102%	35%
6/30/1987	305,051	141%	107%	34%
6/30/1988\$!#	340,946	149%	105%	44%
6/30/1989	369,575	152%	110%	42%
6/30/1990	411,970	157%	112%	45%
6/30/1991	451,873	159%	113%	46%
6/30/1992	447,474	171%	126%	45%
6/30/1993#@	450,530	202%	159%	42%
6/30/1994	480,995	202%	159%	42%
6/30/1995\$!	521,044	206%	161%	45%
6/30/1996	531,060	213%	176%	37%
6/30/1997	553,709	219%	189%	30%
6/30/1998#!	582,755	219%	205%	14%
6/30/1999!	626,015	215%	218%	(3)%
6/30/2000	678,937	201%	222%	(21)%
6/30/2001\$	759,906	204%	210%	(6)%
6/30/2002!	781,756	217%	207%	10%
6/30/2003\$	866,502	205%	184%	21%
12/31/2004#	977,817	198%	168%	30%
12/31/2005	1,050,217	193%	164%	29%
12/31/2006	1,111,828	189%	164%	25%

<sup>@</sup> After change in asset valuation method.

In an inflationary economy the value of dollars is decreasing. Since observation of only the dollar amounts of key facts can be misleading, observation of relationships among key facts tells a more relevant story of the changes in financial strength. *The smaller the ratio of unfunded liabilities to active member payroll, the stronger the system*. Observation of this relative index over a period of years indicates changes in strength.

<sup>\$</sup> After changes in benefits.

<sup>#</sup> After changes in actuarial assumptions.

<sup>!</sup> After change in employer contribution rate.

#### **SHORT CONDITION TEST**

If the contributions to ERFC are level in concept and soundly executed, the System will *pay all promised benefits when due -- the ultimate test of financial soundness*. Testing for level contribution rates is *the long-term test*. A *short condition test* is one means of checking a system's progress under its funding program. In a short condition test, the plan's present assets (cash and investments) are compared with:

- 1) Active member contributions on deposit;
- 2) The liabilities for future benefits to present retired lives;
- 3) The liabilities for service already rendered by active members.

In a system that has been following the discipline of level percent of payroll financing, the liabilities for active member contributions on deposit (Liability 1) and the liabilities for future benefits to present retired lives (Liability 2) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by active members (Liability 3) will be partially covered by the remainder of present assets. The larger the funded portion of Liability 3, the stronger the condition of the system.

	Aggregate A	Actuarial Accru	ıed Liabilities For				
	(1)	(2)	(3)			ion of Ac	
		Retirees	Members		Liabili	ities Cov	ered by
Valuation	Member	and	(Employer Financed	Valuation		Assets	
Date	Contributions		Portion)	Assets	(1)	(2)	(3)
		(	\$1,000s)				
2/28/1977	\$ 11,264	\$ 12,667	\$ 66,649	\$ 28,160	100%	100%	6%
2/29/1980	29,669	38,288	109,040	74,173	100%	100%	6%
6/30/1985	53,395	96,588	186,956	221,656	100%	100%	38%
6/30/1986@	57,753	116,773	206,858	284,195	100%	100%	53%
6/30/1987	66,589	136,073	226,581	325,126	100%	100%	54%
6/30/1988\$#	68,662	163,959	274,861	359,069	100%	100%	46%
6/30/1989	75,917	203,394	281,651	405,317	100%	100%	45%
6/30/1990	83,920	240,122	320,831	461,450	100%	100%	43%
6/30/1991	89,976	285,618	342,133	510,825	100%	100%	40%
6/30/1992	97,502	318,072	347,996	563,644	100%	100%	43%
6/30/1993#@	115,312	344,160	448,895	717,701	100%	100%	58%
6/30/1994	129,428	374,849	467,802	766,480	100%	100%	56%
6/30/1995\$	143,150	395,249	534,137	839,930	100%	100%	56%
6/30/1996	146,228	436,181	548,135	934,571	100%	100%	64%
6/30/1997	144,063	464,345	606,959	1,045,412	100%	100%	72%
6/30/1998#!	149,220	490,261	638,891	1,194,556	100%	100%	87%
6/30/1999!	154,582	539,917	651,160	1,365,417	100%	100%	103%
6/30/2000	157,148	614,739	595,484	1,505,231	100%	100%	123%
6/30/2001\$	178,564	667,605	706,389	1,599,219	100%	100%	107%
6/30/2002!	170,849	699,251	823,856	1,619,889	100%	100%	91%
6/30/2003\$	176,648	903,963	691,807	1,597,459	100%	100%	75%
12/31/2004#	227,725	1,083,988	623,869	1,643,020	100%	100%	53%
12/31/2005	257,142	1,130,378	635,442	1,718,399	100%	100%	52%
12/31/2006	239,780	1,176,979	688,793	1,818,930	100%	100%	58%

<sup>@</sup> After change in asset valuation method.

<sup>\$</sup> After change in benefits.

<sup>#</sup> After changes in actuarial assumptions.

<sup>!</sup> After change in employer contribution rate.

# CHANGE IN UNFUNDED ACCRUED LIABILITIES DURING THE YEAR ENDING DECEMBER 31, 2006 (\$ IN MILLIONS)

	As of Dec	cember 31
	2006	2005
Beginning unfunded liabilities (UAAL):	\$304.6	\$292.6
2. Unfunded liabilities at End:		
a. Normal Cost (5.67% of estimated 2006 payroll)	\$ 61.3	\$ 57.0
b. Member and employer contributions (not including member buy-ins)	78.8	73.6
c. Interest accrual	22.2	21.3
d. Expected UAAL, based on Beginning valuation (1+2a-2b+2c)	309.3	297.3
e. Actual UAAL, from End valuation	286.6	304.6
3. Gains/(Losses) on Period's Financial Activities:		
a. Total: 2d - 2e	\$ 22.7	\$ (7.3)
b. From non-recurring activities and benefit changes	0.0	0.0
c. From differences between assumed and actual		
Experiences in basic risk areas: 3a - 3b	22.7	(7.3)

The above schedule estimates the total gain or loss on the Retirement System activities for the year. The next page shows the breakdown of the total gain or loss by Source. Risk areas related to Assumptions include Economic Risks and Demographic Risks. Economic Risks relate to Pay Increases and Investment Return. Demographic Risks relate to rates of retirement, death, disability, and other terminations. Risks not directly related to assumptions include granted additional service credit, data adjustments, timing of financial transactions, etc.

# CHANGE IN UNFUNDED ACCRUED LIABILITIES GAINS AND LOSSES BY RISK AREA DURING THE YEAR ENDING DECEMBER 31, 2006

		l		
		\$ in millions		
		<b>ERFC</b>		Percent of
Type of Risk Area	<b>ERFC</b>	2001	Totals	Liabilities
Risks Related to Assumptions				
Economic Risk Areas				
Pay Increases	\$0.7	\$(5.4)	\$(4.7)	(0.2)%
Investment Return			23.6	1.2%
Demographic Risk Areas				
Full and Reduced Service Retirements	2.0	0.0	2.0	0.1%
Vested Deferred Retirements	1.4	0.2	1.6	0.1%
Ordinary Death Benefits	0.3	0.0	0.3	0.0%
Service-Connected Death Benefits	0.0	0.0	0.0	0.0%
Ordinary Disability Benefits	(0.2)	0.0	(0.2)	0.0%
Service-Connected Disability Benefits	(0.1)	0.0	(0.1)	0.0%
Terminated with Refund	(2.8)	0.4	(2.4)	(0.1)%
Data Adjustments and Miscellaneous			2.6	0.1%
Gain (or Loss) During Period from Financial Experience			22.7	1.1%
Beginning of Year Accrued Liabilities			2,023.0	100.0%

# EXPERIENCE GAINS & LOSSES BY RISK AREA COMPARATIVE STATEMENT (\$ IN MILLIONS)

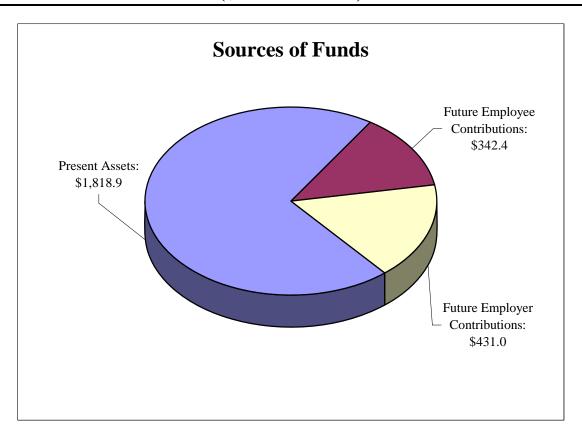
				Disability			Total Ga	in (Loss)
Experience	Pay	Investment		& Death-In	Other			Percent of
Period	Increases	Return	Retirement	Service	Separations	Other	\$	Liabilities
1980-1983	\$(16.2)	\$23.8	\$(16.4)	\$ 8.3	\$ (1.5)	\$ 1.9	\$ (0.1)	(0.1)%
1983-1985	(1.1)	15.3	(18.6)	4.1	(2.8)	2.3	(0.8)	(0.3)%
1985-1986	(6.3)	25.1	(9.8)	1.9	(1.6)	(3.4)	5.9	1.8 %
1986-1987	(4.8)	7.6	(5.7)	3.6	(3.1)	(5.3)	(7.7)	(2.0)%
1987-1988	(17.3)	(2.5)	(8.4)	3.4	1.1	2.6	(21.1)	(4.9)%
1988-1989	(13.0)	12.3	(17.9)	(4.4)	3.3	12.4	(7.3)	(1.4)%
1989-1990	(14.0)	23.6	(18.7)	(4.3)	1.2	(15.9)	(28.1)	(5.0)%
1990-1991	(2.1)	14.4	(25.9)	(5.5)	0.4	(5.0)	(23.7)	(3.7)%
1991-1992	21.2	21.7	(28.4)	(6.0)	(4.0)	2.3	6.8	0.9 %
1992-1993	15.1	34.6	(16.3)	(1.0)	(6.5)	(17.3)	8.6	1.1 %
1993-1994#	(4.1)	4.7	(1.6)	(3.7)	3.5	(15.2)	(16.4)	(1.8)%
1994-1995	(9.7)	25.2	5.1	(1.4)	(4.4)	(5.5)	9.3	0.9 %
1995-1996	(7.7)	45.4	4.1	(1.8)	(5.6)	4.3	38.7	3.6 %
1996-1997	9.9	53.5	2.9	(1.7)	(4.5)	(8.7)	51.4	4.5 %
1997-1998#	(2.6)	81.1	5.9	(0.5)	6.4	(13.9)	76.4	6.3 %
1998-1999*	(8.4)	95.4	0.3	(1.0)	6.5	(3.8)	89.0	7.0 %
1999-2000	(17.6)	62.3	3.8	(1.2)	12.9	38.9	99.1	7.4 %
2000-2001	(9.1)	17.6	(0.3)	(1.0)	13.0	(19.5)	0.7	0.0 %
2001-2002	3.0	(50.4)	3.5	(1.1)	2.6	(29.9)	(72.3)	(4.7)%
2002-2003	18.5	(92.5)	11.0	(0.3)	4.0	(23.3)	(82.6)	(4.9)%
2003-2004#@								
2005	(7.1)	1.9	1.0	0.1	0.0	(3.2)	(7.3)	(0.4)%
2006	(4.7)	23.6	2.0	0.0	(0.8)	2.6	22.7	1.1 %

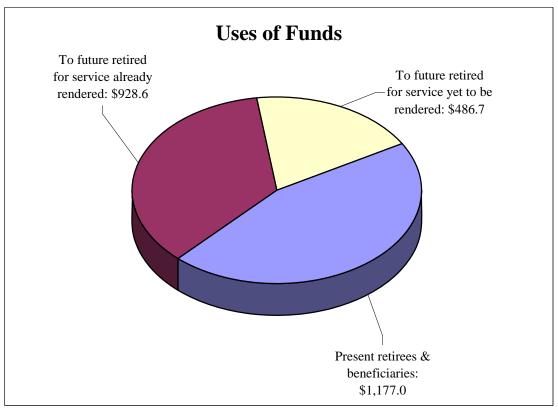
<sup>#</sup> Experience Study.

<sup>\*</sup> Updated Gain Formulas.

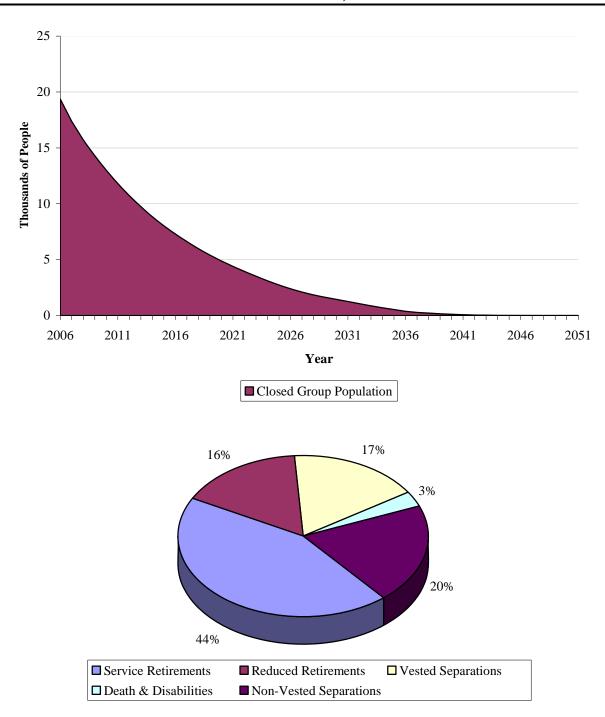
<sup>@</sup> Gain Loss Analysis not performed.

# FINANCING \$2,592.3 MILLION OF BENEFIT PROMISES DECEMBER 31, 2006 (\$ IN MILLIONS)





### EXPECTED DEVELOPMENT OF PRESENT POPULATION DECEMBER 31, 2006



The charts show the expected future development of the present population in simplified terms. The retirement system presently covers 19,371 active members. Eventually, 20% of the population is expected to terminate covered employment prior to retirement and forfeit eligibility for an employer provided benefit. Approximately 77% of the present population is expected to receive monthly retirement benefits either by retiring directly from active service, or by separating from service without withdrawing contributions. 3% of the present population is expected to become eligible for death-in-service or disability benefits. Within 8 years, over half of the covered membership is expected to consist of new hires.

## **SECTION C SUMMARY OF BENEFITS**

# SUMMARY OF PROVISIONS AS OF DECEMBER 31, 2006 MEMBERS HIRED AFTER JULY 1, 1988 BUT BEFORE JULY 1, 2001 ERFC

- 1. **Service Retirement Eligibility.** A member may retire any time after reaching the service retirement date, which is either (i) age 65 with 5 years service or (ii) age 55 with 25 years of service.
- 2. **Reduced Service Retirement Eligibility.** 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.
- 3. **Deferred Retirement 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.
- 4. **Death-In-Service Benefit 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.
- 5. **Disability Retirement Eligibility**. 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.
- 6. **Final Average Compensation (FAC).** A member's final average compensation is the average of the 3 highest consecutive years of salary during eligible employment.
- 7. **Service Retirement Amount.** 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 service would have been completed.

### SUMMARY OF PROVISIONS AS OF DECEMBER 31, 2006 MEMBERS HIRED AFTER JULY 1, 1988 BUT BEFORE JULY 1, 2001 ERFC

#### **Service Retirement Amount (Continued)**

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 1.00 percent of the FAC multiplied by years of credited service.

- 8. **Reduced Service Retirement Amount After 25 Years Service.** Service Retirement amount reduced to reflect retirement age younger than age 55.
- 9. **Reduced Service Retirement Amount After 5-24 Years 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.
- 10. **Deferred Retirement Amount.** Calculated in the same manner as reduced service retirement.
- 11. **Death-In-Service Benefit 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.

# SUMMARY OF PROVISIONS AS OF DECEMBER 31, 2006 MEMBERS HIRED AFTER JULY 1, 1988 BUT BEFORE JULY 1, 2001 ERFC

- 12. **Disability Retirement Amount.** 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.
- 13. **Post-Retirement Increases**. The amount of the monthly benefit is adjusted each March 31, by 3% compounded annually, beginning with the March 31 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).
- 14. **Member Contributions.** Members contribute 4% of their salaries. Interest credits are 5% annually. If a member leaves covered employment before becoming eligible to retire, accumulated contributions are returned upon request.
- 15. **Lifetime Level Benefit (for Retirements after July 1, 2004).** Members are eligible for a lifetime level benefit (LLB) that is calculated by determining the annuitized value of the greater of their accumulated contribution balance or the present value of the currently provided benefit.

#### 16. Optional Forms of Payment.

Option A: 100% Joint and Survivor benefit.
Option B: 50% Joint and Survivor benefit.

Option C: 10 years Certain and Life.

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.

### SUMMARY OF PROVISIONS AS OF DECEMBER 31, 2006 ALTERNATE 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 7/1/88 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:

**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; and

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

*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.

### SUMMARY OF PROVISIONS AS OF DECEMBER 31, 2006 MEMBERS HIRED JULY 1, 2001 OR LATER ERFC 2001

- 1. **Service Retirement Eligibility.** 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.
- 2. **Deferred Retirement Eligibility.** Any member with 5 or more years of credited service that 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.
- 3. **Death Benefit Eligibility.** Any member with 5 or more years of credited service that dies before beginning to receive a pension will have benefits payable to the named beneficiary.
- 4. **Final Average Compensation (FAC).** A member's final average compensation is the average of the 3 highest years of salary during eligible employment.
- 5. **Service Retirement Pension.** 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.
- 6. **Deferred Retirement Pension.** The amount is a lifetime pension equal to 0.8% (eighttenths 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 termination date.

### SUMMARY OF PROVISIONS AS OF DECEMBER 31, 2006 MEMBERS HIRED JULY 1, 2001 OR LATER ERFC 2001

- 7. **Survivor Death Benefit.** 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)
- 8. **Cost-of-Living Adjustments.** The amount of the monthly benefit is adjusted each March 31, by 3% compounded annually, beginning with the March 31 which is more that 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).
- 9. **Members' Contributions.** Members contribute 4% of their salaries. Interest credits are 5% annually. If a member leaves covered employment before becoming eligible to retire, accumulated contributions are returned upon request.
- 10. **Optional Methods of Payment.** Before the effective retirement date, a retiring member may elect one of the following options:
  - a. **Option A.** 100% Joint and Survivor benefit.
  - b. **Option B.** 50% Joint and Survivor benefit.
  - c. **Option C.** 10 Years Certain and Life.

## SAMPLE BENEFIT COMPUTATION FOR *ERFC* MEMBER RETIRING JUNE 30, 2006

#### Data:

Α.	7/1/1951	Date of Birth
B.	7/1/2006	Effective Date
C.	7/1/1981	Membership Date
D.	25.00	ERFC Credited Service
E	25.00	VRS Creditable Service
F.	55.00	Age
G.	Service	Retirement Type
Н.	\$60,000.00	3-Year Average Salary
I.	\$60,000.00	5-Year Average Salary

#### **ERFC** Monthly Benefit Calculation

#### **Lifetime Portion of Full Service Benefit**

J. <i>ERFC</i> Formula Benefit: 1.85% x 25 yrs. x \$60,000 =	\$ 27,750.00
K. minus VRS Adjustment of: 1.65% x 25 yrs. x (\$60,000 - \$1,200) x 70% =	16,978.50
(70% is the VRS Early Service Retirement Reduction Factor for 5 years prior	
to the earlier of age 65 or 30 years of service)	
L. Sub Total	10,771.50
M. plus additional 3% benefit adjustment	323.15
N. Total of Lifetime Portion	11,094.65
Additional Temporary Benefit (until age 66)	
O. Temporary Benefit Formula: 1% x 25 yrs. x \$60,000 =	15,000.00
P. plus additional 3% benefit adjustment	450.00
Q. Total of Additional Temporary Benefit less 54% Reduction	15,450.00
R. Monthly benefit effective $06/30/2006$ at age 55 payable until age 66, $(N + Q)/12 = S$ Monthly benefit effective $07/01/2017$ at age 66 payable for life $N/12 = S$	\$2,212.05 \$ 924.55
5. WIGHING DEHETH EHECHVE U7/U1/ZU17 AL AGE OF DAVADIE FOR THE, IN/TZ =	D 924).)

The above computation does not reflect the alternative "guarantee" benefit which this member might elect. Members are eligible for a lifetime level benefit (LLB) that is calculated by determining the annuitized value of the greater of their accumulated contribution balance or the present value of the currently provided benefit.

## SAMPLE BENEFIT COMPUTATION FOR ERFC 2001 MEMBER

#### Data:

A.	07/01/1970	_Date of Birth
B.	07/01/2030	Effective Date
C.	07/01/2001	Membership Date
D.	29.00	ERFC Credited Service
E.	60.00	Age
F.	Service	Retirement Type
G.	\$60,000.00	3 -Year Average Salary

### ERFC 2001 Monthly Benefit Calculation

### **Lifetime Monthly Benefit**

*ERFC 2001* Formula Benefit: 0.80% x 29 yrs. x \$60,000 / 12 = \$1,160.00

# SECTION D FINANCIAL INFORMATION

## SUMMARY OF FINANCIAL INFORMATION DECEMBER 31, 2006

### Revenues and Expenditures

	December 31			
	2006	2005		
REVENUES:				
a. Member contributions	\$ 43,244,776	\$ 40,362,853		
b. Employer contributions	35,532,122	33,245,249		
c. Investment income				
1. Interest and dividends	48,965,026	38,648,957		
2. Net appreciation	204,460,440	106,514,016		
3. Investment expense	(6,979,207)	(7,124,691)		
4. Other revenue	(7,830,572)	(3,949,871)		
5. Total investment income	238,615,687	134,088,411		
d. Total revenues	317,392,585	207,696,513		
EXPENDITURES:				
a. Refunds of member contributions	3,436,838	2,829,186		
b. Retirement benefits paid	125,381,882	118,720,225		
c. Administrative expense	3,217,988	3,203,494		
d. Total expenditures	132,036,708	124,752,905		
RESERVE INCREASE:				
Total revenues minus total expenditures	\$185,355,877	\$82,943,608		

### Market Value of Assets

	December 31		
	2006	2005	
Invested Assets			
Bonds	\$ 135,232,620	\$ 127,698,566	
Stocks			
a. Common	835,713,104	983,276,245	
b. Preferred	1,501,064	781,444	
Real Estate	75,080,705	65,438,777	
Commingled Funds	831,265,845	526,135,844	
Total Invested Assets	1,878,793,338	1,703,330,876	
Short-term Investments and Cash	174,912,890	164,376,400	
Receivables and Pre-Paid Expenses	8,806,788	10,177,314	
Total Assets	2,062,513,016	1,877,884,590	
Liabilities	151,193,616	151,921,067	
Net Assets	\$1,911,319,400	\$1,725,963,523	

### PORTFOLIO COMPOSITION AT MARKET VALUE

The Market Value of the Portfolio was reported to the Actuary as follows:

	Year Ended December 31				
	200	6	2005		
	Value	% of Total	Value	% of Total	
Bonds	\$ 135,232,620	7.1 %	\$ 127,698,566	7.4 %	
Stocks					
a. Common	835,713,104	43.7 %	983,276,245	57.0 %	
b. Preferred	1,501,064	0.1 %	781,444	0.0 %	
Real Estate	75,080,705	3.9 %	65,438,777	3.8 %	
Commingled Funds	831,265,845	43.4 %	526,135,844	30.5 %	
Short-term Investments and Cash	174,912,890	9.2 %	164,376,400	9.5 %	
Receivables and Pre-Paid Expenses	8,806,788	0.5 %	10,177,314	0.6 %	
Liabilities	(151,193,616)	(7.9)%	(151,921,067)	(8.8)%	
Total Assets	\$1,911,319,400	100.0 %	\$1,725,963,523	100.0 %	

In performing an actuarial valuation, values must be determined for the assets held by the system on the valuation date. This value may be:

- Cost (or amortized costs);
- Current market value; or
- A value produced by a smoothing formula which recognizes the long-term validity of market value without overreacting to the marketplace's short-term moods.

The value used in the actuarial valuation may thus differ from the value used in the system's financial statements. This does not mean that one is "right" and the other is "wrong;" each is appropriate for the purpose for which it is used.

A smoothing formula has been in use for ERFC valuations since 1986, which in its present form is illustrated on page D-4. Last year a new requirement was instituted to prevent unreasonably large differences between the market value and the funding value of assets. The recognized assets must always be between 85% and 115% of the market value (see Page D-3).

### DEVELOPMENT OF FUNDING VALUE OF RETIREMENT SYSTEM ASSETS

Year Ended December 31:	2006	2007	2008	2009	2010
A. Funding Value Beginning of Year	\$1,718,398,545				
B. Market Value End of Year	1,911,319,400				
C. Market Value Beginning of Year	1,725,963,523				
D. Non-Investment Net Cash Flow	(50,041,822)				
E. Investment Return Assumed Rate	7.5%				
1. Market Total: B-C-D	235,397,699				
2. Amount for Immediate Recognition	127,003,323				
3. Amount for Phased in Recognition (E1-E2)	108,394,376				
<ul> <li>F. Phased in Recognition of Investment Return</li> <li>1. Current year: 0.20*E3</li> <li>2. First Prior Year</li> <li>3. Second Prior Year</li> <li>4. Third Prior Year</li> <li>5. Fourth Prior year</li> <li>6. Total Phased-In</li> </ul>	21,678,875 1,891,244 0 0 0 23,570,119	\$ 21,678,875 1,891,244 0 0 23,570,119	\$ 21,678,875 1,891,244 0 23,570,119	\$ 21,678,875 1,891,244 23,570,119	\$ 21,678,878 21,678,878
	23,370,119	23,370,119	23,370,119	23,370,119	21,070,070
<ul> <li>G. Funding Value End of Year</li> <li>G1. Preliminary Funding Value End of Year: A+D+E2+F6</li> <li>G2. Upper Corridor Limit: 115% x B</li> <li>G3. Lower Corridor Limit: 85% x B</li> <li>G4. Funding Value End of Year</li> </ul>	1,818,930,165 2,198,017,310 1,624,621,490 1,818,930,165				
H. Actual/Projected Difference Between  Market Value and Funding Value	92,389,235	68,819,116	45,248,997	21,678,878	0
I. Market Rate of Return	13.8%				
J. Ratio of Funding Value to Market Value	95.2%				

The Funding Value of Assets recognizes assumed investment return (line E2) fully each year. Differences between actual and assumed investment return (line E3) are phased in over a closed 5-year period. During periods when investment performance exceeds the assumed rate, Funding Value of Assets will tend to be less than Market Value. During periods when investment performance is less than the assumed rate, Funding Value of Assets will tend to be greater than Market Value. The Funding Value of Assets is *unbiased* with respect to Market Value. If assumed rates are exactly realized for 4 consecutive years, Funding Value will become equal to Market Value.

### **FUNDING VALUE HISTORY**

	June 30	June 30	December 31	December 31
Year Ended	2002	2003	2004	2005
A. Funding Value Beginning of Year	\$ 1,599,218,679	\$ 1,619,889,279	\$ 1,597,459,083	\$ 1,643,019,915
B. Market Value End of Year	1,369,372,874	1,349,792,227	1,643,019,915	1,725,963,523
C. Market Value Beginning of Year	1,488,764,682	1,369,372,874	1,349,792,227	1,643,019,915
D. Non-Investment Net Cash Flow	(47,079,677)	(49,571,094)	(81,766,933)	(47,941,309)
E. Investment Return Assumed Rate	7.5%	7.5%	7.5%	7.5%
E1. Market Total: B-C-D	(72,312,131)	29,990,447	374,994,621	130,884,917
E2. Amount for Immediate Recognition	118,175,913	119,632,780	127,327,765*	121,428,695
E3. Amount for Phased in Recognition (E1-E2)	(190,488,044)	(89,642,333)	0*	9,456,222
F. Phased in Recognition of Investment Return				
F1. Current year: 0.20*E3	(38,097,609)	(17,928,467)	0	1,891,244
F2. First Prior Year	(24,524,640)	(38,097,609)	0	0
F3. Second Prior Year	(12,610,887)	(24,524,640)	0	0
F4. Third Prior Year	669,721	(12,610,887)	0	0
F5. Fourth Prior year	24,137,779	669,721	0	0
F6. Total Recognized Investment Gain or Loss	(50,425,636)	(92,491,882)	0	1,891,244
G. Funding Value End of Year				
G1. Preliminary Funding Value End of Year: A+D+E2+F6	1,619,889,279	1,597,459,083	1,643,019,915	1,718,398,545
G2. Upper Corridor Limit: 115% x B				1,984,858,051
G3. Lower Corridor Limit: 85% x B				1,467,068,995
G4. Funding Value End of Year				1,718,398,545
H. Actual/Projected Difference Between				
Market Value and Funding Value	(250,516,405)	(247,666,856)	0 *	7,564,978
I. Market Rate of Return	(4.9)%	2.2%	28.6%**	8.1%
J. Ratio of Funding Value to Market Value	118.3%	118.3%	100.0%	99.6%

<sup>\*</sup> Funding value reset to market value. \*\* Calculated over the 18 month period of 6/30/2003 to 12/31/2004.

## SECTION E COVERED MEMBER DATA

## ERFC MEMBERS WOMEN ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2006 BY ATTAINED AGE AND YEARS OF SERVICE

Age		Yea	rs of Ser	vice to Va	aluation l	Date			Totals	
Group	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	No.	Salary	Average
20-24										
25-29	9	137						146	\$ 7,429,331	\$50,886
30-34	28	563	37	1				629	35,577,199	56,562
35-39	24	448	292	46	1			811	50,099,061	61,774
40-44	19	330	193	172	37	3		754	47,310,049	62,745
45-49	27	461	237	207	153	43	1	1,129	71,805,883	63,601
50-54	10	585	347	286	267	186	24	1,705	113,041,590	66,300
55-59	14	501	435	356	296	168	41	1,811	122,022,186	67,378
60	2	62	81	91	78	13	1	328	21,860,710	66,649
61	2	30	57	65	45	11	2	212	14,872,924	70,155
62		43	35	45	34	13	1	171	11,492,170	67,206
63	2	17	26	31	29	7	2	114	7,766,412	68,126
64	1	17	23	38	29	10		118	8,059,523	68,301
65		4	11	26	17	6	1	65	4,200,597	64,625
66		5	6	9	11	3		34	2,301,115	67,680
67		6	7	4	6	4		27	1,540,675	57,062
68		4	1	5	6			16	982,574	61,411
69		2	2	3	3	2	1	13	857,537	65,964
70		1	1	2	3	1	1	9	526,607	58,512
71			1		1	1		3	191,541	63,847
72		1	1		2		1	5	185,185	37,037
73				1				1	80,165	80,165
74		1						1	29,906	29,906
75 & Over		1		1	1	1	1	5	281,506	56,301
Totals	138	3,219	1,793	1,389	1,019	472	77	8,107	\$522,514,446	\$64,452

While not used in the financial computations the following group averages are computed and shown because of their general interest.

Age: 49.5 years. Service: 13.4 years. Annual Pay: \$64,452

## ERFC MEMBERS MEN ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2006 BY ATTAINED AGE AND YEARS OF SERVICE

Age		Y	ears of Se	rvice to V	Valuation	Date			Totals	
Group	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	No.	Salary	Average
15-19										
20-24										
25-29	4	15						19	\$ 916,273	\$48,225
30-34	5	168	21					194	11,475,518	59,152
35-39	5	189	147	14				355	23,441,909	66,034
40-44	1	111	105	71	10			298	20,547,055	68,950
45-49		101	66	49	67	15		298	22,278,122	74,759
50-54	1	83	48	47	90	100	15	384	31,938,665	83,174
55-59	3	76	52	38	39	28	9	245	18,821,328	76,822
60		16	9	6	3	2		36	2,722,403	75,622
61		14	11	4	1			30	2,234,412	74,480
62		8	8	2	1	1		20	1,470,329	73,516
63		8	6	1	2			17	1,173,632	69,037
64		12	4	6	2			24	1,741,265	72,553
<i>(5</i>		1	2	1	2			11	001 127	81,922
65		4	3	1	3			11	901,137	
66 67		4 3	1	1	1			7	464,264	66,323
67		3	1	1	1			6	432,036	72,006
68		1	1	1				2	172,661	86,331
69		1						1	35,517	35,517
70							1	1	88,453	88,453
71		2	1					3	173,735	57,912
72			1					1	32,982	32,982
73					1			1	89,063	89,063
74		1	1	1				3	87,687	29,229
75 & Over			1	1				2	102,755	51,378
Totals	19	816	487	244	221	146	25	1,958	\$141,341,201	\$72,187

While not used in the financial computations the following group averages are computed and shown because of their general interest.

Age: 46.4 years. Service: 13.3 years. Annual Pay: \$72,187

## ERFC 2001 MEMBERS WOMEN ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2006 BY ATTAINED AGE AND YEARS OF SERVICE

Age		Yea	rs of Ser	vice to Va	aluation I	Date			Totals	
Group	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	No.	Salary	Average
15-19	1							1	\$ 17,315	\$17,315
20-24	528							528	22,082,370	41,823
25-29	1,969	144						2,113	98,339,179	46,540
30-34	921	153						1,074	54,547,121	50,789
35-39	650	88						738	36,644,660	49,654
40-44	648	76						724	32,170,135	44,434
45-49	744	128						872	37,469,912	42,970
50-54	630	128						758	36,311,922	47,905
55-59	386	92						478	24,177,983	50,582
60	48	11						59	3,314,083	56,171
61	32	9						41	2,189,658	53,406
62	20	3						23	1,130,727	49,162
63	13	2						15	842,275	56,152
64	13	5						18	899,115	49,951
65	8	2						10	467,761	46,776
66 66	3	2						5	226,488	45,298
67	2	1						3	220,488	69,487
68	4	1						4	208,461	52,258
69	4							4	209,031	32,238
09										
70	2							2	137,138	68,569
71	1							1	71,252	71,252
72	1							1	90,113	90,113
73										
74										
75 & Over										
Totals	6,624	844						7,468	\$351,546,699	\$47,074

While not used in the financial computations the following group averages are computed and shown because of their general interest.

Age: 37.5 years. Service: 2.5 years. Annual Pay: \$47,074

## ERFC 2001 MEMBERS MEN ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2006 BY ATTAINED AGE AND YEARS OF SERVICE

Age		Yea	rs of Ser	vice to Va	aluation l	Date		ı	Totals	
Group	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	No.	Salary	Average
15-19										
20-24	90							90	\$ 3,615,074	\$40,167
25-29	432	27						459	21,252,713	46,302
30-34	289	55						344	17,546,327	51,007
35-39	223	36						259	14,453,325	55,804
40-44	145	22						167	9,571,120	57,312
45-49	159	19						178	10,279,441	57,750
50-54	121	15						136	7,684,624	56,505
55-59	105	14						119	7,079,712	59,493
60	24	4						28	1,605,951	57,355
61	10	2						12	752,436	62,703
62	8	3						11	606,271	55,116
63	7	4						11	646,695	58,790
64	4							4	199,095	49,774
65	3	1						4	222,629	55,657
66	4	2						6	352,877	58,813
67	2	2						2	136,394	68,197
68	1							1	71,252	71,252
69	2	1						3	123,493	41,164
07	2	1						3	123,473	41,104
70	1							1	66,427	66,427
71	2							2	106,578	53,289
72										
73										
74	1							1	52,796	52,796
75 & Over										
Totals	1,633	205						1,838	\$96,425,230	\$52,462

While not used in the financial computations the following group averages are computed and shown because of their general interest.

Age: 37.9 years. Service: 2.5 years. Annual Pay: \$52,462

### ALL ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2006 BY ATTAINED AGE AND YEARS OF SERVICE

Age		Yea	ars of Ser	vice to V	aluation l	Date			Totals	
Group	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	No.	Salary	Average
15-19	1							1	\$ 17,315	\$ 17,315
20-24	618							618	25,697,444	41,582
25-29	2,414	323						2,737	127,937,496	46,744
30-34	1,243	939	58	1				2,241	119,146,165	53,167
35-39	902	761	439	60	1			2,163	124,638,955	57,623
40-44	813	539	298	243	47	3		1,943	109,598,359	56,407
45-49	930	709	303	256	220	58	1	2,477	141,833,358	57,260
50-54	762	811	395	333	357	286	39	2,983	188,976,801	63,351
55-59	508	683	487	394	335	196	50	2,653	172,101,209	64,870
60	74	93	90	97	81	15	1	451	29,503,147	65,417
61	44	55	68	69	46	11	2	295	20,049,430	67,964
62	28	57	43	47	35	14	1	225	14,699,497	65,331
63	22	31	32	32	31	7	2	157	10,429,014	66,427
64	18	34	27	44	31	10		164	10,898,998	66,457
65	11	11	14	27	20	6	1	90	5,792,124	64,357
66	7	13	7	10	12	3		52	3,344,744	64,322
67	4	10	8	5	7	4		38	2,317,566	60,989
68	5	4	2	6	6			23	1,435,518	62,414
69	2	4	2	3	3	2	1	17	1,016,547	59,797
70	3	1	1	2	3	1	2	13	818,625	62,971
71	3	2	2	_	1	1	_	9	543,106	60,345
72	1	1	2		2		1	7	308,280	44,040
73	•			1	1			2	169,228	84,614
74	1	2	1	1	_			5	170,389	34,078
75 & Over	•	1	1	2	1	1	1	7	384,261	54,894
Totals	8,414	5,084	2,280	1,633	1,240	618	102	19,371	\$1,111,827,576	\$57,396

While not used in the financial computations the following group averages are computed and shown because of their general interest.

Age: 43.5 years. Service: 8.1 years. Annual Pay: \$57,396

## ACTIVE MEMBERS BY YEARS OF SERVICE DECEMBER 31, 2006

Service	Nu	mber of Memb	ers	Annual	Pays
Years	Males	Females	Total	Total	Average
0	375	1,593	1,968	\$ 86,102,217	\$43,751
1	383	1,708	2,091	95,819,227	45,825
2	378	1,418	1,796	86,058,498	47,917
3	268	1,104	1,372	69,586,899	50,719
4	248	939	1,187	61,512,049	51,821
5	246	1,069	1,315	71,148,790	54,106
6	260	958	1,218	66,229,659	54,376
7	233	845	1,078	60,624,461	56,238
8	154	682	836	47,684,545	57,039
9	128	508	636	38,019,557	59,779
10	101	436	537	33,620,004	62,607
11	100	304	404	25,629,201	63,439
12	121	390	511	33,833,351	66,210
13	114	369	483	32,042,867	66,341
14	51	295	346	23,484,789	67,875
15	46	267	313	21,763,327	69,531
16	72	347	419	29,836,820	71,210
17	44	295	339	24,590,077	72,537
18	47	279	326	23,666,666	72,597
19	35	201	236	17,635,122	74,725
20	54	256	310	24,331,279	78,488
21	45	224	269	21,335,939	79,316
22	50	197	247	19,506,149	78,972
23	38	186	224	18,724,774	83,593
24	34	156	190	16,065,830	84,557
25	41	160	201	17,581,709	87,471
26	31	113	144	12,630,271	87,710
27	29	83	112	9,937,224	88,725
28	23	56	79	6,711,979	84,962
29	22	60	82	7,353,396	89,676
30 & Up	25	77	102	8,760,900	85,891
Totals	3,796	15,575	19,371	\$1,111,827,576	\$57,396

### PERSONS IN VALUATIONS - COMPARATIVE STATEMENT

#### **Active Members**

					An	nual	Price
					Incre	ase In	Inflation
					Avera	ge Pay	(CPI-U)
Valuation		Number		Average	Last	Last	Last
Date	ERFC	ERFC 2001	Number	Pay	Year	5 Years	Year
2/28/1974	7,429		7,429	\$13,087			
2/28/1975	8,075		8,075	13,693			
2/28/1976	8,609		8,609	15,929			
2/29/1980	8,990		8,990	18,901			
6/30/1983	9,359		9,359	24,104			
6/30/1985	9,596		9,596	26,229			
6/30/1986	10,084		10,084	27,523	4.9 %		1.8 %
6/30/1987	10,560		10,560	28,887	5.0 %		3.7 %
6/30/1988	10,727		10,727	31,784	10.0 %		4.0 %
6/30/1989	11,019		11,019	33,540	5.5 %		5.2 %
6/30/1990	11,539		11,539	35,702	6.4 %	6.4 %	4.7 %
6/30/1991	12,313		12,313	36,699	2.8 %	5.9 %	4.7 %
6/30/1992	12,308		12,308	36,356	(0.9)%	4.7 %	3.1 %
6/30/1993	12,330		12,330	36,539	0.5 %	2.8 %	3.0 %
6/30/1994	12,873		12,873	37,365	2.3 %	2.2 %	2.5 %
6/30/1995	13,287		13,287	39,215	5.0 %	1.9 %	3.0 %
6/30/1996	13,110		13,110	40,508	3.3 %	2.0 %	2.8 %
6/30/1997	13,473		13,473	41,098	1.5 %	2.5 %	2.3 %
6/30/1998	13,806		13,806	42,210	2.7 %	2.9 %	1.7 %
6/30/1999	14,449		14,449	43,326	2.6 %	3.0 %	2.0 %
6/30/2000	15,050		15,050	45,112	4.1 %	2.8 %	3.7 %
6/30/2001	15,955		15,955	47,628	5.6 %	3.3 %	3.2 %
6/30/2002	15,363	711	16,074	48,635	2.1 %	3.4 %	1.1 %
6/30/2003	13,934	3,804	17,738	48,850	0.4 %	3.0 %	2.1 %
12/31/2004	11,856	6,864	18,720	52,234	6.9 %	3.8 %	3.3 %
12/31/2005	10,895	8,186	19,081	55,040	5.4 %	4.1 %	3.4 %
12/31/2006	10,065	9,306	19,371	57,396	4.3 %	3.8 %	2.5 %

#### PERSONS IN VALUATIONS - COMPARATIVE STATEMENT

Retired Lives

		Average		Active	Total
Valuation		Annual	Total	Member	Benefits as %
Date	Number	Benefit	Benefits	Payroll	of Payroll
2/28/1974	-	\$ -	\$ -	\$ 97,221,025	
2/28/1975	195	3,463	675,344	110,571,258	0.61%
2/28/1976	456	3,270	1,491,310	137,131,905	1.09%
2/29/1980	1,012	4,238	4,288,395	169,924,320	2.52%
6/30/1983	1,448	5,136	7,437,571	225,592,433	3.30%
6/30/1985	1,823	6,220	11,339,462	251,691,261	4.51%
6/30/1986	2,047	6,614	13,539,032	277,545,288	4.88%
6/30/1987	2,232	7,007	15,639,820	305,050,734	5.13%
6/30/1988	2,425	7,629	18,502,289	340,945,603	5.43%
6/30/1989	2,679	8,671	23,230,719	369,574,756	6.29%
6/30/1990	2,932	9,354	27,428,027	411,970,032	6.66%
6/30/1991	3,209	10,146	32,559,349	451,872,668	7.21%
6/30/1992	3,311	10,960	36,289,308	447,473,936	8.11%
6/30/1993	3,486	11,307	39,417,339	450,530,273	8.75%
6/30/1994	3,775	11,285	42,600,996	480,995,439	8.86%
6/30/1995	3,927	11,529	45,274,131	521,044,021	8.69%
6/30/1996	4,225	11,843	50,036,473	531,060,397	9.42%
6/30/1997	4,478	11,908	53,322,514	553,709,472	9.63%
6/30/1998	4,773	12,156	58,018,744	582,754,912	9.96%
6/30/1999	5,113	12,383	63,312,850	626,015,364	10.11%
6/30/2000	5,344	13,201	70,548,074	678,937,233	10.39%
6/30/2001	5,766	13,167	75,922,636	759,905,510	9.99%
6/30/2002	6,375	13,645	86,985,606	781,756,005	11.13%
6/30/2003	6,729	14,493	97,522,562	866,501,799	11.25%
12/31/2004	7,451	14,767	110,029,000	977,817,281	11.25%
12/31/2005	7,710	15,077	116,242,812	1,050,216,544	11.07%
12/31/2006	8,029	15,370	123,402,840	1,111,827,576	11.10%

Total benefits as a % of payroll are much higher than total contributions as a % of payroll. This is an expected condition in a well funded plan such as ERFC.

# ORIGINAL BENEFIT FORMULAS (BEFORE JULY 1, 1988) RETIREES AND BENEFICIARIES DECEMBER 31, 2006 BY TYPE OF BENEFIT BEING PAID

			Annual Amounts	3
		Payable	Temporary	Current
Type of Pension Being Paid	No.	for Life	Supplement	Benefits
Age and Service - Normal:				
Straight Life	756	\$9,470,228		\$9,470,228
Optional Forms	29	442,481		442,481
Age and Service - Early:				
Straight Life	568	3,930,616	\$362,073	4,292,689
Optional Forms	24	243,976	32,045	276,021
Optional Forms	27	2-3,770	32,043	270,021
Age and Service Totals	1,377	14,087,301	394,118	14,481,419
Duty Disability:				
Straight Life	11	270,626		270,626
Straight Life	11	270,020		270,020
Non-Duty Disability				
Straight Life	72	573,288		573,288
Age and Service Survivor				
Beneficiary, Duty Death, and				
Non-Duty Death	46	350,868		350,868
	120	1.104.702		1 104 702
Other Totals	129	1,194,782		1,194,782
Total Benefits	1,506*	\$15,282,083*	\$394,118	\$15,676,201

<sup>\*</sup> Includes benefits split in 1 Domestic Relations Order (DRO).

# BENEFIT FORMULAS (EFFECTIVE JULY 1, 1988) RETIREES AND BENEFICIARIES DECEMBER 31, 2006 BY TYPE OF BENEFIT BEING PAID

			Annual Amounts	<u> </u>
		Payable	Temporary	Current
Type of Pension Being Paid	No.	for Life	Supplement	Benefits
Age and Service - Normal:				
Straight Life	3,046	\$38,043,360	\$31,693,552	\$69,736,912
Optional Forms	319	3,883,063	3,464,108	7,347,171
Age and Service - Early:				
Straight Life	2,793	13,388,034	14,545,888	27,933,922
Optional Forms	128	767,947	825,766	1,593,713
Optional Forms	120	707,517	025,700	1,373,713
Age and Service Totals	6,286	56,082,404	50,529,314	106,611,718
Duty Disability:				
Straight Life	15	45,060	1,736	46,796
Optional Forms	1	1,525		1,525
Non-Duty Disability:				
Straight Life	131	432,014	5,987	438,001
Optional Forms	18	53,966	1,492	55,458
A I Camaia - Camaia				
Age and Service Survivor				
Beneficiary, Duty Death, and		226.504	222 922	550.226
Non-Duty Death	66	326,504	232,822	559,326
Other Totals	231	859,069	242,037	1,101,106
Outer rotats	231	637,007	2+2,037	1,101,100
Total Benefits	6,517*	\$56,941,473*	\$50,771,351	\$107,712,824

<sup>\*</sup> Includes benefits split in 27 DROs.

# BENEFIT FORMULAS (EFFECTIVE JULY 1, 2001) RETIREES AND BENEFICIARIES DECEMBER 31, 2006 BY TYPE OF BENEFIT BEING PAID

		<b>Annual Amounts</b>
		Current
Type of Pension Being Paid	No.	Benefits
Age and Service - Normal:		
Straight Life	5	\$11,622
Optional Forms	1	2,193
Age and Service - Early:		
Straight Life		
Optional Forms		
	_	
Age and Service Totals	6	13,815
Duty Dischility		
Duty Disability: Straight Life		
Optional Forms		
Optional Porms		
Non-Duty Disability:		
Straight Life		
Optional Forms		
P		
Age and Service Survivor		
Beneficiary, Duty Death, and		
Non-Duty Death		
Other Totals		
Total Benefits	6	\$13,815

# ORIGINAL BENEFIT FORMULAS (BEFORE JULY 1, 1988) RETIREES AND BENEFICIARIES DECEMBER 31, 2006 CURRENT ANNUAL BENEFITS - TABULATED BY ATTAINED AGES

Attained		Annual
Ages	No.	Amount
52	1	\$ 11,524
55	3	17,036
56	4	22,583
57	1	5,829
58	6	34,400
59	14	63,731
60	8	41,587
61	19	84,812
62	6	27,876
63	15	106,581
64	7	32,851
65	6	53,384
66	6	67,187
67	15	162,834
68	38	449,685
69	39	616,057
70	63	1,046,138
71	73	1,153,892
72	61	1,061,457
73	54	924,832
74	72	990,132
75	63	891,895
76	76	957,596
77	74	1,003,797
78	69	764,076
79	83	802,131
80-84	347	2,721,918
85-89	202	1,210,156
90 & Up	81	350,224
Total	1,506	\$15,676,201

# BENEFIT FORMULAS (EFFECTIVE JULY 1, 1988) RETIREES AND BENEFICIARIES DECEMBER 31, 2006 CURRENT ANNUAL BENEFITS - TABULATED BY ATTAINED AGES

Attained		Annual
Ages	No.	Amount
Under 40	6	\$ 31,358
40-44	7	20,387
46	2	5,997
47	1	2,639
48	5	36,174
49	5	17,154
50	11	131,739
51	15	204,589
52	23	486,598
53	45	1,126,893
54	94	2,079,986
55	188	4,131,411
56	232	5,214,872
57	326	7,158,509
58	407	9,331,094
59	490	10,007,159
60	397	8,045,501
61	394	8,390,144
62	420	8,333,426
63	492	10,079,987
64	403	7,839,415
65	320	4,168,253
66	285	2,650,471
67	308	2,905,889
68	270	2,905,328
69	214	2,175,670
70-74	794	7,329,408
75-79	314	2,618,803
80 & Up	49	283,970
Totals	6,517	\$107,712,824

# ERFC 2001 RETIREES AND BENEFICIARIES DECEMBER 31, 2006 CURRENT ANNUAL BENEFITS - TABULATED BY ATTAINED AGES

Attained		Annual
Ages	No.	Amount
60		
61		
62	3	\$ 6,589
63		
64	1	2,092
65	1	2,941
66		
67		
68		
69	1	2,193
70-74		
75-79		
80 & Up		
Totals	6	\$13,815

# ORIGINAL BENEFIT FORMULAS (BEFORE JULY 1, 1988) INACTIVE VESTED MEMBERS DECEMBER 31, 2006 ANNUAL DEFERRED BENEFITS - BY ATTAINED AGES

Attained		Annual
Ages	No.	Amount
47	1	\$ 1,204
51	1	1,915
52	4	7,579
53	9	12,453
54	5	7,431
55	1	1,751
56	3	4,728
57	3	8,345
58	3	6,939
59	5	8,981
60	3	2,828
61	3	5,078
62	2	1,397
Totals	43	\$70,629

# BENEFIT FORMULAS (EFFECTIVE JULY 1, 1988) INACTIVE VESTED MEMBERS DECEMBER 31, 2006 ANNUAL DEFERRED BENEFITS - BY ATTAINED AGES

Attained Ages	No.	Annual Amount
		Ф. 1.001
25 27	2	\$ 1,901
28	6 25	8,530 38,029
29	35	53,414
30	36	59,273
31 32	70 77	113,973 127,921
33	96	181,328
34	87	163,577
35	104	199,017
36	100	198,586
37 38	117	252,034 224,937
38	107	·
39	97	212,318
40	101	206,766
41	76	149,932
42 43	76 73	159,376 166,957
44	62	153,078
45	51	143,210
46 47	53 49	176,412
48	37	125,224 89,833
49 50	53	163,858
50	60	174,527
51 52	70	189,765
52 53	69 73	185,326 216,786
		·
54	72	213,173
55 56	47 27	116,432
56 57	27 26	91,643 73,887
58	26 25	80,024
59 60	19	72,767 53 735
60	20	53,735
61 62	20 8	50,777 36,584
62	2	7,892
64	5	19,048
Over 65	3	6,891
Totals	2,136	\$4,958,741
1 Otals	4,130	φ <del>1,</del> 730,/41

# ERFC 2001 INACTIVE VESTED MEMBERS DECEMBER 31, 2006 ANNUAL DEFERRED BENEFITS - BY ATTAINED AGES

Attained Ages	No.	Annual Amount
24	1	ф 027
24	1	\$ 937
26 27	2	5,380
27	6 4	15,715 10,537
28 29	4	9,791
		·
30	4	9,414
31	6	13,161
32	5	10,571
33	1	2,342
34	1	1,881
35	1	1,872
36	1	1,978
37	2	4,067
38	1	2,311
39	2	1,757
40	1	1,004
41	2	1,565
42	1	2,535
43	2	3,760
45	1	2,649
46	2	3,311
47	1	814
48	1	3,346
50	3	7,535
52	1	2,193
54	1	1,922
55	1	3,373
56	2	3,551
57	2	5,979
58	1	2,898
59	2	5,028
Totals	65	\$143,177

## SECTION F FINANCIAL REPORTING (GASB)

## FINANCIAL REPORTING IN COMPLIANCE WITH GOVERNMENTAL ACCOUNTING STANDARDS BOARD (GASB) REQUIREMENTS

The provisions of GASB Statement No. 25 became effective for periods beginning after June 15, 1996. This Statement established financial reporting standards for defined benefit *plans*. (GASB Statement No. 27, which is effective for periods beginning after June 15, 1997 establishes standards for the financial reports of state and local governmental *employers* with regard to pension expense and related liabilities, as well as required supplementary information.)

Defined benefit plan reporting under Statement No. 25 will include two financial statements with notes and two required schedules with notes. In response, the following exhibits appear on the next several pages:

- Statement of Plan Net Assets Available for Benefits (page F-2) provides information about the market value of plan assets by investment category.
- Statement of Changes in Plan Assets Available for Benefits (page F-3) shows a reconciliation of beginning-of-year market value with the end-of-year market value.

The relevant notes to the financial statements are on page F-4.

- The Schedule of Funding Progress (page F-5) shows the most recent history of the actuarial value of assets, actuarial accrued liability, their relationship, and the relationship of the unfunded actuarial accrued liability to payroll.
- The Schedule of Employer Contributions (page F-6) provides a history of the Annual Required Contribution (ARC) and a year-by-year comparison of the ARC to the actual contributions.

A summary of actuarial methods and assumptions completes the Statement No. 25 information on page F-7.

A development of the Annual Pension Cost (APC) and the Net Pension Obligation under GASB Statement No. 27 is found on page F-8.

### STATEMENT OF REPORTED PLAN ASSETS

	Decem	ber 31	
	2006	2005	
Assets			
Cash and short-term investments			
Cash	\$ 1,311,782	\$ 947,552	
Cash with fiscal agents	(46,549)	1,092,939	
Cash collateral for securities on loan	147,205,643	136,929,359	
Short-term investments	26,442,014	25,406,550	
Prepaid assets	24,792	24,792	
Total cash and short-term investments	\$ 174,937,682	\$ 164,401,192	
Receivables			
Member contributions			
Employer contributions			
Interest and dividends	3,698,136	3,048,260	
Securities sold	5,083,369	7,103,771	
Miscellaneous accounts receivable	491	491	
Total receivables	\$ 8,781,996	\$ 10,152,522	
Investments at fair value			
U.S. government obligations	\$ 34,579,095	\$ 40,420,055	
Mortgage-backed securities	5,498,167	14,666,169	
Domestic corporate and other bonds	53,746,309	44,879,874	
International and Convertible bonds	41,409,049	27,732,468	
Real estate	75,080,705	65,438,777	
Common stock	835,713,104	983,276,245	
Preferred stock	1,501,064	781,444	
Commingled funds	831,265,845	526,135,844	
Total investments	\$1,878,793,338	\$1,703,330,876	
Total assets	\$2,062,513,016	\$1,877,884,590	
Liabilities			
Accounts payable	\$ 0	\$ 0	
Securities purchased	3,987,973	14,991,708	
Securities lending collateral	147,205,643	136,929,359	
Total liabilities	\$ 151,193,616	\$ 151,921,067	
Net assets held in trust for pension benefits	ф1 041 <b>2</b> 42 422	ф1 <b>727</b> 0 / 2 <b>7</b> 22	
(a schedule of funding progress is presented on page F-5)	\$1,911,319,400	\$1,725,963,523	

### STATEMENT OF CHANGES IN REPORTED PLAN ASSETS

	Reconciliation as of December 31		
	2006	2005	
Additions			
Contributions			
Employer	\$ 35,532,122	\$ 33,245,249	
Member	43,244,776	40,362,853	
Total Contributions	78,776,898	73,608,102	
Investment income			
Net appreciation	204,460,440	106,514,016	
Interest and dividends	38,291,103	33,198,910	
Net securities lending	(7,830,572)	(3,949,871)	
Miscellaneous	10,673,923	5,450,047	
Total investment income	245,594,894	141,213,102	
Less: Investment expenses	6,979,207	7,124,691	
Net investment income	238,615,687	134,088,411	
Total additions	317,392,585	207,696,513	
Deductions			
Benefits	125,381,882	118,720,225	
Refunds	3,436,838	2,829,186	
Administrative expense	3,217,988	3,203,494	
Total deductions	132,036,708	124,752,905	
Net increase	\$ 185,355,877	\$ 82,943,608	
Net assets held in trust for pension benefits:			
Beginning of year	\$1,725,963,523	\$1,643,019,915	
End of year	\$1,911,319,400	\$1,725,963,523	

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2006

Membership information as of December 31, 2006, the date of the latest actuarial valuation, is as follows:

Retirees and beneficiaries	8,029
Inactive members	2,244
Active members	19,371
Total	29,644

#### Plan Description

The ERFC is a single employer defined benefit pension plan that provides service, reduced service, disability, and death benefits to plan members and their beneficiaries. Annual post-retirement cost-of-living increases of 3% are effective each March 31.

#### **Contributions**

Plan members currently contribute 4% of pay. The employer's funding policy provides for periodic employer contributions based upon a fundamental financial objective of having rates of contribution which remain relatively level from generation to generation of employees. To determine the employer contribution rates and to assess the extent to which the fundamental financial objective is being achieved, ERFC has actuarial valuations prepared annually. In preparing those valuations, the entry age actuarial cost method is used to determine normal cost and actuarial accrued liabilities (see page G-2 for further details).

Unfunded actuarial accrued liabilities are amortized by level percent-of-payroll contributions over a period of future years not in excess of 30.

On the basis of the December 31, 2006 actuarial valuation, the Annual Required Employer Contribution determined in accordance with GASB Statement No. 25 for accounting purposes was determined to be 3.14% of payroll as follows:

1) Normal Cost	5.68%
2) Accrued Liability	1.46%
3) Total	7.14%
4) Member Contribution	4.00%
5) Annual Required Contribution	3.14%

# REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF FUNDING PROGRESS (DOLLAR AMOUNTS IN THOUSANDS)

	Actuarial	<b>Actuarial Accrued</b>	Unfunded			UAAL as a	
Actuarial	Value	Liability (AAL)	AAL	Funded	Covered	Percent of	
Valuation	of Assets	- Entry Age	(UAAL)	Ratio	Payroll	<b>Covered Payroll</b>	
Date	(a)	(b)	(b) - (a)	(a)/(b)	(c)	[(b) - (a)] / (c)	
6/30/90	\$ 461,450	\$ 644,873	\$ 183,423	71.56 %	\$ 411,970	44.52 %	
6/30/91	510,825	717,727	206,902	71.17 %	451,873	45.79 %	
6/30/92	563,644	763,570	199,926	73.82 %	447,474	44.68 %	
6/30/93	717,701	908,367	190,666	79.01 %	450,530	42.32 %	
6/30/94#	766,480	972,079	205,599	78.85 %	480,995	42.74 %	
6/30/95	839,930	1,072,536	232,606	78.31 %	521,044	44.64 %	
6/30/96	934,572	1,130,544	195,972	82.67 %	531,060	36.90 %	
6/30/97	1,045,412	1,215,367	169,955	86.02 %	553,709	30.69 %	
6/30/98	1,194,556	1,282,615	88,059	93.13 %	582,755	15.11 %	
6/30/98#	1,194,556	1,278,372	83,816	93.44 %	582,755	14.38 %	
6/30/99	1,510,953	1,345,659	(165,294)	112.28 %	626,015	-	
6/30/00	1,505,231	1,367,371	(137,860)	110.08 %	678,937	-	
6/30/01\$	1,599,219	1,552,558	(46,661)	103.01 %	759,906	-	
6/30/02	1,619,889	1,693,956	74,067	95.63 %	781,756	9.47 %	
6/30/03\$	1,597,459	1,772,418	174,959	90.13 %	866,502	20.19 %	
12/31/04#	1,643,020	1,935,582	292,562	84.89 %	977,817	29.92 %	
12/31/05	1,718,399	2,022,962	304,563	84.94 %	1,050,217	29.00 %	
12/31/06	1,818,930	2,105,552	286,622	86.39 %	1,111,828	25.78 %	

<sup>#</sup> Experience Study.

<sup>\$</sup> After change in benefit structure.

#### SCHEDULE OF EMPLOYER CONTRIBUTIONS

Valuation	Annual	
Year	Required	Percent
Ended	Contribution	Contributed
6/30/1991	\$24,839,920	100%
6/30/1992	24,909,099	100%
6/30/1993	25,445,123	100%
6/30/1994	26,935,383	100%
6/30/1995	29,225,043	100%
6/30/1996	30,087,963	100%
6/30/1997	35,159,514	100%
6/30/1998	36,932,114	100%
6/30/1999	38,422,667	100%
6/30/2000	35,655,898	100%
6/30/2001	29,145,883	100%
6/30/2002	30,849,067	100%
6/30/2003	34,506,630	100%
12/31/2004	34,417,581	100%
12/31/2005	33,245,249	100%
12/31/2006	35,532,122	100%

The figures on this page show the actual employer contribution required for compliance with Governmental Accounting Standards (GASB No. 27). A figure of 100% in the 'Percent Contributed' column means that the employer contribution complied with Governmental Accounting Standards. The figures are prepared in draft form for review by the auditor. Please note that valuations completed after June 30, 2003 were done on a calendar year basis.

#### SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation date December 31, 2006

Actuarial cost method Individual entry age actuarial cost method (see page G-2)

Amortization method Level percent of payroll

Remaining amortization period 26 years

Asset valuation method 5-year smoothed market

85%/115% corridor

Actuarial assumptions

Investment rate of return\* 7.50%
Projected salary increase\* 4.0 -8.2%
\*Includes wage inflation at 3.75%
Cost-of-living adjustments 3.00%

# DETERMINATION OF ANNUAL PENSION COST (APC) AND NET PENSION OBLIGATION (NPO) UNDER GOVERNMENTAL ACCOUNTING STANDARDS BOARD STATEMENT NO. 27

Fiscal	ARC	Interest on	ARC	Not	APC			
Year Ended	(Annual Required	Prior Year's		Net Change	(Annual Pension	Actual ER	Change	New NPO
June 30	ER Conts)	NPO	(NPO Amort)	to ARC	Cost)	Contribution	in NPO	Balance
1995	\$29,225,043	\$0	\$0	\$0	\$29,225,043	\$29,225,043	\$0	\$0
1996	30,087,963	0	0	0	30,087,963	30,087,963	0	0
1997	35,159,514	0	0	0	35,159,514	35,159,514	0	0
1998	36,932,114	0	0	0	36,932,114	36,932,114	0	0
1999	38,422,667	0	0	0	38,422,667	38,422,667	0	0
2000	35,655,898	0	0	0	35,655,898	35,655,898	0	0
2001	29,145,883	0	0	0	29,145,883	29,145,883	0	0
2002	30,849,067	0	0	0	30,849,067	30,849,067	0	0
2003	34,506,630	0	0	0	34,506,630	34,506,630	0	0
2004	34,417,581	0	0	0	34,417,581	34,417,581	0	0
2005	33,245,249	0	0	0	33,245,249	33,245,249	0	0
2006	35,532,122	0	0	0	35,532,122	35,532,122	0	0

The figures above are prepared in draft form for review and approval by the auditor. Please let us know if there are any audit adjustments.



#### **APPENDIX**

# SUMMARY OF ASSUMPTIONS USED FOR ERFC ACTUARIAL VALUATION ASSUMPTIONS ADOPTED BY BOARD OF TRUSTEES AFTER CONSULTING WITH ACTUARY

The actuarial assumptions used in making the valuation are shown in this Appendix of the report. The assumptions were established for the December 31, 2004 actuarial valuation, based upon a study of experience during the period July 1, 1999 to June 30, 2004.

#### ECONOMIC ASSUMPTIONS

The investment return rate used in making the valuation was 7.5% per year, compounded annually (net after administrative expenses). The real rate of return over wages or the "spread" is defined to be the portion of total investment return which is more than the wage inflation rate. Based upon an assumed wage inflation rate of 3.75%, the 7.5% investment return rate translates to an assumed real rate of return over wages of 3.75%.

**Pay increase assumptions** for individual active members are shown for sample ages on page G-5. Part of the assumption for each age is for merit and/or seniority increase, and the other 3.75% recognizes wage inflation. No specific price inflation assumption is needed for this valuation.

*The number of active members* is assumed to continue at the present number.

**Total active member payroll** is assumed to increase 3.75% annually in the long term, which is the portion of the individual pay increase assumptions attributable to wage inflation. This assumed increase is recognized in the funding of unfunded actuarial accrued liabilities.

#### NON-ECONOMIC ASSUMPTIONS

The mortality table used to measure active and retired life mortality was the 1994 Group Annuity Mortality Table set back 2 years for males and 1 year for females. Related values are shown on page G-5 along with the rates used for disabled mortality.

**The probabilities of retirement** for members eligible to retire are shown on page G-6.

The probabilities of withdrawal from service, death-in-service and disability are shown for sample ages on page G-7.

The individual entry age actuarial cost method of valuation was used for determining actuarial accrued liabilities and normal cost. The method determines separate normal costs for *ERFC* and for *ERFC 2001* and blends the results together to produce the normal costs shown on page B-2. This means that in the long run, the normal cost will become the normal cost of *ERFC 2001*, which is slightly higher than the blended figure shown on page B-2.

Unfunded actuarial accrued liabilities are amortized to produce contribution amounts (principal and interest) which are level percent of payroll contributions.

Present assets (cash and investments) are valued on a market-related basis effective June 30, 1986.

Page D-3 provides specifics. A one time adjustment toward market was made in connection with the 1990-93 experience study and an additional one-time adjustment set the funding value equal to the market value as of December 31, 2004. An 85%-115% market value corridor was added in the December 31, 2005 valuation.

The data about persons now covered and about present assets was furnished by the System's administrative staff. Although examined for general reasonableness, the data was not audited by the Actuary.

The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (M.A.A.A.).

### ERFC REGULATIONS – FUNDING POLICY AND EMPLOYER CONTRIBUTION RATE

(Applicable to *ERFC* and *ERFC* 2001)

Pursuant to their authority under § 15.03 of the *ERFC* Plan Document and § 10.03 of the *ERFC* 2001 Plan Document, the Trustees have adopted the following regulations governing determination of the employer contribution rate and implementation of the funding policy pursuant to §§ 3.05 and 16.03 of the *ERFC* Plan Document and §§ 3.05 and 11.03 of the *ERFC* 2001 Plan Document.

**16.03A Purpose of Regulations.** The funding policy of the Plan is stated in § 16.03 of the *ERFC* Plan Document and § 11.03 of the *ERFC 2001* Plan Document. That policy is "to establish and receive contributions which will remain approximately level from generation to generation of citizens and which, when combined with other assets and investment return thereon, will be sufficient to pay benefits when due while providing a reasonable margin for adverse experience." Section 3.05 in each Plan Document provides that the employer "shall contribute a percentage of each Member's Salary, at a rate to be determined by the actuary in accordance with the funding policy set forth in this Plan Document." Within the broader context of the stated funding policy, the objectives of the Trustees are:

- (1) To make consistent progress toward 100% funding of the Plan and to maintain 100% funding once it has been attained;
- (2) To stabilize the employer contribution rate and avoid sharp increases or decreases due to specific events or short-term conditions; and
- (3) To maintain the Plan's funding in accordance with principles of actuarial practice and standards issued by the Government Accounting Standards Board (GASB).

**16.03B Frequency of Actuarial Valuations.** The actuary shall prepare annual actuarial valuations based upon calendar-year data. Whenever possible, the valuation for a particular year should be presented to the Trustees within the first 120 days of the following calendar year.

16.03C Schedule for Setting the Employer Contribution Rate. The Trustees will determine the Employer contribution rate biennially, in consultation with the actuary, based upon the actuarial valuation for the most recently completed calendar year. The rate shall be set and communicated to the Employer at least 9 months in advance of the effective date so that it will be available for use in the Employer's budgetary process. Each rate shall remain in effect for two consecutive fiscal years. The first rate to be set in accordance with this schedule will be based on the actuarial valuation as of December 31, 2005. It will become effective July 1, 2007, and will remain in effect through June 30, 2009.

**16.03D The Employer Contribution Rate.** The Employer contribution rate will be set at a level that is expected to:

- (1) pay all normal costs accruing under the Plan during the fiscal years for which the rate is effective;
- (2) amortize any unfunded liabilities in compliance with GASB standards; and
- (3) take into consideration the difference between actuarial and market value of Plan assets and the amortization period for unfunded liabilities.

16.03E The Amortization Period for Unfunded Liabilities. In the biennial determination of the Employer contribution rate, the amortization period for unfunded liabilities will be set within the parameters permitted by GASB standards. If those standards and the other principles stated in §§ 16.03A and 16.03D permit, the Employer contribution rate to be effective July 1, 2007, through June 30, 2009, will use 27 years as the amortization period for unfunded liabilities. In setting the Employer contribution rate for years beginning July 1, 2009, or later, the Trustees may change the amortization period within the parameters permitted by GASB standards, with the expectation that the amortization period will be reduced over time, consistent with § 16.03A(1).

16.03F The Valuation of Plan Assets. The actuarial value of Plan assets shall be determined as a 5 year smoothed Market Value of Assets. The smoothing technique shall fully recognize the assumed return each year. It shall further spread the difference between the actual return and the assumed return in equal installments over the current year and four future years. In the event that the method would result in an actuarial value of assets that is less than 85% of market value or more than 115% of market value, the actuarial value of assets shall be reset to 85% of market value or 115% of market value, as the case may be, and the total difference between market and actuarial value shall be spread over 4 future years.

### SINGLE LIFE RETIREMENT VALUES

### STANDARD MORTALITY

	Present V	alue of \$1				
Sample	Monthly	for Life	Future Life			
Attained	Increasing 3.	0% Annually	Expectan	cy (years)		
Ages	Men	Women	Men	Women		
55	\$183.72	\$195.47	27.95	31.11		
60	165.91	178.85	23.52	26.49		
65	146.49	160.36	19.39	22.11		
70	126.51	140.71	15.66	18.08		
75	106.26	119.31	12.34	14.31		
80	85.94	97.25	9.40	10.93		
Ref:	261 x 1.00	262 x 1.00				
	sb 2	sb 1				

### **DISABLED MORTALITY**

	Present Value of \$1			
Sample	Monthly	for Life	Futur	e Life
Attained	Increasing 3.	0% Annually	Expectan	cy (years)
Ages	Men	Women	Men	Women
55	\$128.18	\$144.69	17.14	20.34
60	118.67	135.13	15.18	18.04
65	110.09	110.09 124.28		15.71
70	99.71	111.15	11.60	13.27
75	86.55	94.60	9.55	10.66
80	70.31	76.56	7.37	8.17
Ref:	309 x 0.70	310 x 0.90		
	sb 0	sb 0		

### PROBABILITIES OF RETIREMENT FOR MEMBERS ELIGIBLE TO RETIRE

	Hired Befo	ore 7/1/2001	Hired o	n or After	7/1/2001
	Type of R	Retirement	Age		Service
Ages	Service	<b>Reduced Service</b>	Based	Service	Based
45		5%			
46		5%			
47		5%			
48		5%			
49		5%			
50		6%			
51		7%			
52		8%			
53		9%			
54		10%			
55	50%	10%		30	35%
56	40%	5%		31	28%
57	30%	5%		32	21%
58	30%	5%		33	21%
59	30%	5%		34	21%
60	30%	10%	21%	35	21%
61	40%	10%	28%	36	28%
62	40%	20%	28%	37	28%
63	25%	20%	18%	38	35%
64	25%	20%	18%	39	50%
65	50%		50%	40 & Up	100%
66	40%		40%		
67	30%		30%		
68	40%		40%		
69	20%		20%		
70	20%		20%		
71	20%		20%		
72	30%		30%		
73	40%		40%		
74	50%		50%		
75	100%		100%		
76	100%		100%		
77	100%		100%		
78	100%		100%		
79	100%		100%		
80	100%		100%		
Ref:	542	541	666		667

The age column index does not apply to the service based retirements. In *ERFC 2001* an individual can retire at 30 years of service regardless of age.

## SAMPLE RATES OF SEPARATION FROM ACTIVE EMPLOYMENT BEFORE RETIREMENT

			% of Active Members								
			Separating Within Next Year								
	Years		Deat	th			Disa	bility			
	of	Ordi	Ordinary Duty			Ordi	nary	Du	ıty	Ot	her
Ages	Service	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
25	3 & Up	0.04%	0.02%	0.01%	0.00%	0.06%	0.03%	0.01%	0.01%	12.00%	15.80%
30		0.06%	0.02%	0.01%	0.00%	0.06%	0.05%	0.02%	0.01%	8.50%	12.00%
35		0.06%	0.03%	0.01%	0.00%	0.09%	0.09%	0.02%	0.02%	5.75%	8.20%
40		0.07%	0.05%	0.01%	0.01%	0.14%	0.12%	0.03%	0.03%	4.30%	5.00%
45		0.10%	0.07%	0.01%	0.01%	0.21%	0.18%	0.05%	0.05%	2.90%	3.70%
50		0.16%	0.10%	0.02%	0.01%	0.34%	0.29%	0.08%	0.07%	2.50%	3.20%
55		0.27%	0.16%	0.04%	0.02%	0.59%	0.49%	0.15%	0.12%	2.50%	3.00%
60		0.47%	0.29%	0.06%	0.04%	0.98%	0.71%	0.24%	0.18%	2.50%	3.00%
Ref:		0.75 x 261	0.75 x 262	0.1 x 261	0.1 x 262					214	214
		sb 2	sb 1	sb 2	sb 1	0.3 x 16	0.3 x 17	0.1 x 16	0.1 x 17	319	318

Rates of separation for members with less than 3 years of service are assumed to be: 18% in the first year, 15% in the second year and 12% in the third year.

### SAMPLE PAY INCREASE ASSUMPTIONS FOR AN INDIVIDUAL MEMBER

	Pay I	ncrease Assum	ption
Sample	Merit &	Base	Increase
Ages	Seniority	(Economy)	Next Year
20	4.45%	3.75%	8.20%
25	3.25%	3.75%	7.00%
30	2.75%	3.75%	6.50%
35	2.35%	3.75%	6.10%
40	2.05%	3.75%	5.80%
45	1.55%	3.75%	5.30%
50	1.15%	3.75%	4.90%
55	0.75%	3.75%	4.50%
60	0.35%	3.75%	4.10%
65	0.25%	3.75%	4.00%
Ref:	124		

Age at		Sa	mple Entry A	Age	
Separation	25	30	35	40	45
30	0.5000				
31	0.4854				
32	0.4708				
33	0.4563				
34	0.4417				
35	0.4271	0.5000			
36	0.4125	0.4816			
37	0.3979	0.4632			
38	0.3833	0.4447			
39	0.3688	0.4263			
40	0.3542	0.4079	0.5000		
41	0.3396	0.3895	0.4750		
42	0.3250	0.3711	0.4500		
43	0.3104	0.3526	0.4250		
44	0.2958	0.3342	0.4000		
45	0.2813	0.3158	0.3750	0.5000	
46	0.2667	0.2974	0.3500	0.4611	
47	0.2521	0.2789	0.3250	0.4222	
48	0.2375	0.2605	0.3000	0.3833	
49	0.2229	0.2421	0.2750	0.3444	
50	0.2083	0.2237	0.2500	0.3056	0.5000
51	0.2003	0.2257	0.2350	0.2667	0.4125
52	0.1792	0.2033	0.2230	0.2007	0.3250
53	0.1772	0.1684	0.2000	0.2276	0.3230
54	0.1540	0.1500	0.1730	0.1500	0.2575

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 "other separation" from page G-7 by the probability of forfeiture from this table. The table does not apply to individuals who are eligible for retirement at time of termination.

### **Example 2.1** Investment Return and Inflation: Past and Future

#### **Inflation Distortions**

Inflation's impact on investment return is not uniform from year to year. A common expectation for Real Investment Return (the portion of Total Return remaining after Inflation) is in the area of 3% to 4% annually.

Over the last 30 years, Real Return exceeded that range on average. However, for parts of the period it was actually negative. It is very difficult to maintain a long-term portfolio allocation during periods of negative real return.

### Annual Investment Return (including Income) expressed as REAL RETURN (Remainder after Inflation)

No. Years		Cash	Bonds (L	ong Term)				
Ended	Inflation	Equiv.	US	Corporate	Stocks	Real Retu	urn for San	nple Fund
December	(CPI)	(T Bills)	Treasury	(Sol. Bro)	(S & P 500)	A	В	С
1/2002	2.4%	(0.7)%	15.0%	13.6%	(23.9)%	1.4%	(6.3)%	(12.1)%
1/2003	1.9	(0.9)	(0.4)	3.3	26.3	8.6	13.6	17.5
1/2004	3.3	(2.0)	5.0	5.2	7.4	5.0	5.5	5.8
1/2005	3.4	(0.4)	4.3	2.4	1.5	2.4	2.0	1.7
1/2006	2.5	2.2	(1.3)	0.7	13.0	3.9	6.6	8.7
5/1975	6.9	(1.0)	(0.7)	(0.8)	(3.5)	(1.2)	(1.7)	(2.1)
5/1980	9.2	(1.3)	(6.9)	(6.2)	4.3	(2.6)	(0.4)	1.3
5/1985	4.8	5.2	11.5	12.3	9.4	10.7	10.2	9.8
5/1990	4.1	2.6	6.4	6.1	8.6	6.7	7.2	7.6
5/1995	2.8	1.5	10.0	9.1	13.4	10.0	10.8	11.3
5/2000	2.5	2.6	4.9	3.2	15.4	7.7	10.0	11.7
5/2006	2.7	(0.4)	4.4	5.0	3.4	4.3	4.1	3.8
30/2006	4.2%	1.7%	4.6%	4.6%	8.0%	5.7%	6.3%	6.8%

### Sample Funds (Only three of many reasonable samples)

	A	В	C
Cash: T-Bills	10 %	10 %	10 %
Bonds: US	30	20	10
Bonds: Corp	30	20	15
Stock	30	50	65

For many pension plans, Benefit Increases after Retirement have fallen short of keeping up with inflation. The retired life group has been hurt more than the active life group. The investment return necessary for the indexing of benefits after retirement probably cannot be realized during a period of high inflation.

### Changes in Economic Assumptions within an Economic Environment of Inflation

There is powerful motivation to increase the assumed Investment Return used in actuarial calculations, with or without a related increase in Employee Pay Base, because such an assumption change decreases computed contributions. A contribution rate decrease (i) offers relief for employer budget problems and/or (ii) offers a "no cost" way to provide benefit increases.

The wisdom of Investment Return assumed for the future can be determined only by future events. Will the investment record of the next 30 years be the same as the last 30 Years? Will it be like the 5-year period ended in 1980? Better? Worse? What will happen when "Baby Boomers" begin to swell the retired population?

#### **Basic Series**

### For a type of investment, Red means a REAL Return less than 3% [(Total - Inflation) < 3%]

### For Inflation, RED means a purchasing power loss

	[(Total Innancing Cope]						
	Large Company	Small Company	Long-Term Corporate	Long-Term Government	Intermediate Term Government	U.S. Treasury	
Year	Stocks	Stocks	Bonds	Bonds	Bonds	Bills	Inflation *
1926	11.62	0.28	7.37	7.77	5.38	3.27	-1.49
1927	37.49	22.10	7.44	8.93	4.52	3.12	-2.08
1928	43.61	39.69	2.84	0.10	0.92	3.56	-0.97
1929	-8.42	-51.36	3.27	1.17	6.01	4.75	0.20
1930	-24.90	-38.15	7.98	4.66	6.72	2.41	-6.03
1931	-43.34	-49.75	-1.85	-5.31	-2.32	1.07	-9.52
1932	-8.19	-5.39	10.32	16.84	8.81	0.96	-10.30
1933	53.99	142.87	10.38	-0.07	1.83	0.30	0.51
1934	-1.44	24.22	13.84	10.03	9.00	0.16	2.03
1935	47.67	40.19	9.61	4.98	7.01	0.17	2.99
1936	33.92	64.80	6.74	7.52	3.06	0.18	1.21
1937	-35.03	-58.01	2.75	0.23	1.56	0.31	3.10
1938	31.12	32.80	6.13	5.53	6.23	-0.02	-2.78
1939	-0.41	0.35	3.97	5.94	4.52	0.02	-0.48
1940	-9.78	-5.16	3.39	6.09	2.96	0.00	0.96
1941	-11.59	-9.00	2.73	0.93	0.50	0.06	9.72
1942	20.34	44.51	2.60	3.22	1.94	0.27	9.29
1943	25.90	88.37	2.83	2.08	2.81	0.35	3.16
1944	19.75	53.72	4.73	2.81	1.80	0.33	2.11
1945	36.44	73.61	4.08	10.73	2.22	0.33	2.25
1946	-8.07	-11.63	1.72	-0.10	1.00	0.35	18.16
1947	5.71	0.92	-2.34	-2.62	0.91	0.50	9.01
1948	5.50	-2.11 10.75	4.14	3.40	1.85	0.81	2.71
1949	18.79	19.75	3.31	6.45	2.32	1.10	-1.80
1950	31.71	38.75	2.12	0.06	0.70	1.20	5.79 5.77
1951 1952	24.02	7.80	-2.69 3.52	-3.93 1.16	0.36	1.49	5.87
1952 1953	18.37 -0.99	3.03 -6.49	3.52 3.41	1.16 3.64	1.63 3.23	1.66 1.82	0.88 0.62
1953 1954	-0.99 52.62	-6.49 60.58	3.41 5.39	3.64 7.19	3.23 2.68	1.82 0.86	-0.50
1954		20.44	0.48	-1.29			0.37
1955	31.56 6.56	4.28	-6.81	-5.59	-0.65 -0.42	1.57 2.46	2.86
1957	-10.78	-14.57	8.71	7.46	7.84	3.14	3.02
1958	43.36	64.89	-2.22	-6.09	-1.29	1.54	1.76
1959	11.96	16.40	-0.97	-2.26	-0.39	2.95	1.50
1960	0.47	-3.29	9.07	13.76	11.76	2.66	1.48
1961	26.89	32.09	4.82	0.97	1.85	2.13	0.67
1962	-8.73	-11.90	7.95	6.89	5.56	2.73	1.22
1963	22.80	23.57	2.19	1.21	1.64	3.12	1.65
1964	16.48	23.52	4.77	3.51	4.04	3.54	1.19
1965	12.45	41.75	-0.46	0.71	1.02	3.93	1.92
1966	-10.06	-7.01	0.20	3.65	4.69	4.76	3.35
1967	23.98	83.57	-4.95	-9.18	1.01	4.21	3.04
1968	11.06	35.97	2.57	-0.26	4.54	5.21	4.72
1969	-8.50	-25.05	-8.09	-5.07	-0.74	6.58	6.11
1970	4.01	-17.43	18.37	12.11	16.86	6.52	5.49
1971	14.31	16.50	11.01	13.23	8.72	4.39	3.36
1972	18.98	4.43	7.26	5.69	5.16	3.84	3.41
1973 1974	-14.66	-30.90	1.14	-1.11	4.61	6.93	8.80 12.20
1974	-26.47	-19.95	-3.06	4.35	5.69	8.00	
1975 1976	37.20	52.82 57.38	14.64 18.65	9.20 16.75	7.83 12.87	5.80 5.08	7.01 4.81
1976	23.84 -7.18	57.38 25.38	18.65 1.71	-0.69	12.87 1.41	5.08 5.12	6.77
1977	-7.18 6.56	23.46	-0.07	-0.69 -1.18	3.49	5.12 7.18	9.03
1976	18.44	43.46	-0.07 -4.18	-1.16	4.09	10.38	13.31
1980	32.42	39.88	-4.16 -2.62	-3.95	3.91	11.24	12.40
1981	-4.91	13.88	-0.96	1.86	9.45	14.71	8.94
1982	21.41	28.01	43.79	40.36	29.10	10.54	3.87
1983	22.51	39.67	4.70	0.65	7.41	8.80	3.80
1984	6.27	-6.67	16.39	15.48	14.02	9.85	3.95
1985	32.16	24.66	30.09	30.97	20.33	7.72	3.77
1986	18.47	6.85	19.85	24.53	15.14	6.16	1.13
1987	5.23	-9.30	-0.27	-2.71	2.90	5.47	4.41
1988	16.81	22.87	10.70	9.67	6.10	6.35	4.42
1989	31.49	10.18	16.23	18.11	13.29	8.37	4.65
1990	-3.17	-21.56	6.78	6.18	9.73	7.81	6.11
1991	30.55	44.63	19.89	19.30	15.46	5.60	3.06
1992	7.67	23.35	9.39	8.05	7.19	3.51	2.90
1993	9.99	20.98	13.19	18.24	11.24	2.90	2.75
1994	1.31	3.11	-5.76	-7.77	-5.14	3.90	2.67
1995	37.43	34.46	27.20	31.67	16.80	5.60	2.54
1996	23.07	17.62	1.40	-0.93	2.10	5.21	3.32
1997	33.36	22.78	12.95	15.85	8.38	5.26	1.70
1998	28.58	-7.31	10.76	13.06	10.21	4.86	1.61
1999	21.04	29.79	-7.45	-8.96	-1.77	4.68	2.68
2000	-9.11	-3.59	12.87	21.48	12.59	5.89	3.39
2001	-11.88	22.77	10.65	3.70	7.62	3.83	1.55
2002	-22.10	-13.28	16.33	17.84	12.93	1.65	2.38
2003	28.70	60.70	5.27	1.45	2.40	1.02	1.88
2004	10.87	18.39	8.72	8.51	2.25	1.20	3.26
2005	4.91	5.69	5.87	7.81	1.36	2.98	3.42

GABRIEL ROEDER SMITH & COMPANY from SBBI Yearbook

 <sup>\*</sup> Calculated using December to December CPI-U (1982-84=100, when available), not seasonally adjusted.

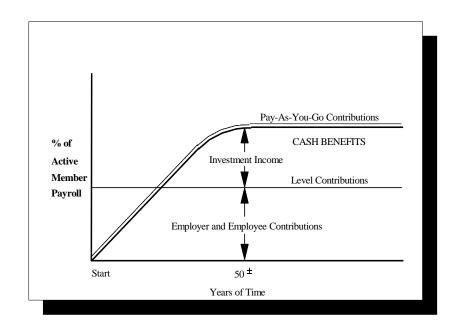
#### SELECTION OF ASSUMPTIONS USED IN ACTUARIAL VALUATIONS

#### **Economic Assumptions**

Investment return
Pay increases to individual employees:
the portion for economic changes
Active member group size and
total payroll growth

#### **Demographic Assumptions**

Actual ages at service retirement
Pay increases to individual members:
the portion for merit & seniority
Disability while actively employed
Separations before retirement
Mortality after retirement
Mortality before retirement



#### RELATIONSHIP BETWEEN PLAN GOVERNING BODY AND THE ACTUARY

The actuary should have the primary responsibility for choosing the *demographic* assumptions used in the actuarial valuation, making use of specialized training and experience.

The actuary and other professionals can provide guidance concerning the choice of suitable economic assumptions, but the basis of the economic assumptions is the assumed rate of *inflation*, a quantity which defies accurate prediction. Given an assumed rate of future inflation, it is very important that this rate be applied in a consistent manner in deriving the assumed rate of investment return, the economic portion of the assumption on pay increases to individual employees, and the assumed rate of growth of active member payroll. Consistent application of assumptions is an area in which the actuary has specialized training.

A sound procedure is that the actuary suggests reasonable alternatives for economic assumptions, followed by discussion involving the actuary, the Plan Governing Body, and other professionals, and the Plan Governing Body then makes a final choice from the various alternatives.

#### **DEFINITIONS OF TECHNICAL TERMS**

**Accrued Service**. Service credited under the system which was rendered before the date of the actuarial valuation.

Actuarial Accrued Liability. The difference between the actuarial present value of system benefits and the actuarial present value of future normal costs. Also referred to as "past service liability."

Actuarial Assumptions. Estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment return and pay increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (pay increases and investment return) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

Actuarial Cost Method. A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future benefits" between future normal costs and actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

**Actuarial Equivalent**. One series of payments is said to be actuarially equivalent to another series of payments if the two series have the same actuarial present value.

Actuarial Gain (Loss). The difference between actual unfunded actuarial accrued liabilities and anticipated unfunded actuarial accrued liabilities -- during the period between two valuation dates. It is a measurement of the difference between actual and expected experience.

**Actuarial Present Value**. The single sum now which is equal to a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payment.

Actuary. A person who is trained in the application of probability and compound interest to problems in business and finance that involve payment of money in the future, contingent upon the occurrence of future events. Most actuaries in the United States are Members of the American Academy of Actuaries. The Society of Actuaries is an international research, education and membership organization for actuaries in the life and health insurance, employee benefits, and pension fields. It administers a series of examinations leading initially to Associateship and the designation A.S.A. and ultimately to Fellowship with the designation F.S.A.

**Amortization**. Paying off an interest bearing liability with periodic payments as opposed to paying it off with a single sum payment.

**Normal Cost.** The portion of the actuarial present value of future benefits that is assigned to the current year by the actuarial cost method. Sometimes referred to as "current cost."

*Unfunded Actuarial Accrued Liabilities*. The difference between actuarial accrued liabilities and valuation assets. Sometimes referred to as "unfunded past service liability" or, strangely, "unfunded supplemental present value" or simply as "unfunded liability."

*Valuation Assets.* The value of plan assets recognized for valuation purposes. This may not be the same value that is used by the plan for financial reporting.

### MISCELLANEOUS AND TECHNICAL ASSUMPTIONS DECEMBER 31, 2006

Marriage Assumption: 100% of males and 100% of females are assumed to be married

for purposes of death-in-service benefits. Male spouses are

assumed to be three years older than female spouses.

**Pay Increase Timing:** Nine months after the valuation date (October 1).

**Decrement Timing:** Decrements of all types are assumed to occur mid-year.

Eligibility Testing: Eligibility for benefits is determined based upon the age

nearest birthday and service nearest whole year on the date the

decrement is assumed to occur.

**Miscellaneous Loads:** For members hired prior to July 1, 2001 computed liabilities

and normal costs are increased by 3% to reflect service credit

for unused sick leave that may be granted at retirement.

**Decrement Relativity:** Decrement rates are used directly from the experience study,

without adjustment for multiple decrement table effects.

**Decrement Operation:** Disability and turnover do not operate during retirement

eligibility.

**Incidence of Contributions:** Contributions are assumed to be received continuously

throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at

the time contributions are made.

**Normal Form of Benefit:** The assumed normal form of benefit is the straight life form.

**Benefit Service:** Exact Fractional Service is used to determine the amount of

benefit payable.

**Actuarial Equivalent** 

**Factors:** 

Effective January 1, 2006. The interest rate is 7.5%, except for Small Pension payouts where the interest rate, if smaller, is the rate for 20-year Treasury Notes raised to the next highest integer from the December 1<sup>st</sup> preceding the Calendar year of retirement. Mortality is based upon a 30% unisex blend of the 1994 Group Annuity Mortality Table set back 2 years for

males and 1 year for females.

ERFC Board of Trustees c/o Dr. Alan Belstock, Executive Director 8001 Forbes Place, Suite 300 Springfield, Virginia 22151

Re: The Report of the ERFC Annual Actuarial Valuation December 31, 2006

Dear Alan:

Enclosed are 25 copies of the report. We look forward to seeing you at the Retreat.

Sincerely,

Judith A. Kermans

JAK/clb Enclosures