



**TOWERS
PERRIN**

HR SERVICES

Employees Retirement System of Texas

August 31, 2005
Actuarial Valuation Report
for Plan Year Beginning
September 1, 2005
and
Fiscal Year Ending
August 31, 2005

EMPLOYEES RETIREMENT SYSTEM OF TEXAS

ACTUARIAL VALUATION REPORT

PREPARED AS OF AUGUST 31, 2005

This report describes the results of an actuarial valuation of the Employees Retirement System of Texas. The Employees Retirement System of Texas retained Towers Perrin to perform this actuarial valuation for the purposes of determining (1) the funding status for the plan year September 1, 2005 through August 31, 2006; and (2) financial statement disclosure and reporting information for the fiscal year ending August 31, 2005.

The consulting actuaries are members of the Society of Actuaries and other professional actuarial organizations and meet their "General Qualification Standard for Prescribed Statements of Actuarial Opinions" relating to pension plans.

The calculations were made as of August 31, 2005. In preparing the results presented in this report, we have relied upon information provided to us regarding plan provisions, plan participants, and plan assets. We have reviewed this information for overall reasonableness and consistency, but have neither audited nor independently verified this information. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information.

The actuarial assumptions and the accounting policies and methods employed in this report have been selected by the plan sponsor, with the concurrence of Towers Perrin.

The funding determination portion of this actuarial valuation has been conducted in accordance with principles of practice prescribed by the Actuarial Standards Board and the requirements of the Texas Government Code.

The financial statement disclosure portion of this actuarial valuation has been conducted according to our understanding of Statements No. 25 and 27 of the Government Accounting Standards Board. The Government Accounting Standards Board requires the use of reasonable assumptions. The actuarial assumptions used are identical to the assumptions used for the funding determination portion of the valuation.

The results shown in this report have been developed based on actuarial assumptions that are considered to be reasonable and within the "best-estimate range" as described by the Actuarial Standards of Practice. Other actuarial assumptions could also be considered to be reasonable and within the best-estimate range. Thus, reasonable results differing from those presented in this report could have been developed by selecting different points within the best-estimate ranges for various assumptions.

The information contained in this report was prepared for the internal use of the Employees Retirement System of Texas and its auditors in connection with our actuarial valuation of the pension plan. It is not intended nor necessarily suitable for other purposes.

Towers Perrin



Leslie P. Finertie, F.S.A., E.A., M.A.A.A., F.C.A.



Steven R. Rusher, F.S.A., E.A., M.A.A.A

EMPLOYEES RETIREMENT SYSTEM OF TEXAS

TABLE OF CONTENTS

<u>TITLE</u>	<u>PAGE</u>
Funding Determination	1

APPENDICES

A	Summary of Plan Provisions.....	6
B	Summary of Assets	10
C	Summary of Member Data and Related Liabilities	12
D	Summary of Recommended Actuarial Assumptions	22
E	Description of Actuarial Methods and Procedures	31
F	GASB 25 and 27 Reporting	33
G	Actuarial Methodology and Pension Terminology	37

EMPLOYEES RETIREMENT SYSTEM OF TEXAS

FUNDING DETERMINATION

A. KEY VALUATION RESULTS

The key results from the current actuarial valuation, along with comparable figures from the prior valuation, are as follows. The "Before Changes" results reflect changes in salaries provided by 2005 legislation that are effective September 1, 2005 and December 1, 2005. The "After Changes" results reflect all changes in salaries, plan provisions and actuarial assumptions.

	August 31, 2005 Valuation		August 31, 2004 Valuation
	After Changes	Before Changes	
Total Contribution Rate	12.450%	12.000%	12.000%
Total Normal Cost			
— percent of payroll	12.280%	12.346%	12.450%
— dollars	\$594,641,604	\$597,746,129	\$574,778,721
Actuarial Value of Assets (AV)	\$20,835,468,872	\$20,835,468,872	\$20,036,646,562
Actuarial Accrued Liability (AAL)	\$21,969,670,180	\$22,040,518,990	\$20,591,847,998
Funded Ratio (AV/AAL)	94.8%	94.5%	97.3%
Net Asset/(Liability) Balance (AV – AAL)	(\$1,134,201,308)	(\$1,205,050,118)	(\$555,201,436)
Amortization Period in Years	Infinite	Infinite	Infinite
Total Contribution to Fund Total Normal Cost plus Amortize the Net Liability Balance, if any, over 31 years as a level percentage of payroll	13.587%	13.735%	13.121%
Valuation Payroll	\$4,842,525,200	\$4,841,526,389	\$4,616,760,675
Reported Payroll	\$4,510,619,073	\$4,510,619,073	\$4,557,079,610
Active Members	131,331	131,331	133,349

B. DETERMINATION OF FUNDED STATUS AND AMORTIZATION PERIOD

The current valuation has been determined based on the actuarial assumptions summarized in Appendix D and the actuarial cost method described in Appendix E.

The actuarial assumptions are used to predict the likelihood of various benefits becoming payable from the plan, the size of those benefits, and the estimated value today of those future benefits. Actual experience may deviate from these assumptions, resulting in actuarial gains and losses.

The actuarial cost method is a budgeting technique, used to allocate total estimated plan liabilities over past, current and future years. Thus, the choice of the cost method does not affect the overall long-term plan costs, but only the incidence of when those costs are reflected. The cost method is designed to give plan costs as a relatively level percentage of payroll if characteristics of the member group do not change significantly.

An actuarial valuation is the process by which the actuarial assumptions and cost method are applied to actual plan provisions, assets, and member data, to develop a funding level sufficient to provide for future benefit payments, the actual ultimate value of which is not now known.

C. CHANGES SINCE LAST VALUATION

Since the prior valuation, there were no changes in actuarial cost methods or actuarial procedures. There were across-the-board salary increases and changes to the longevity pay, hazardous duty pay and salary schedules. Changes in the assumed rates of merit, promotion and longevity salary increases are recommended to reflect the revised salary structure. There were also changes in plan provisions as a result of the passage of SB 1176 and other legislation by the 2005 legislature. The most significant changes include:

- The 90-day waiting period was extended to those hired or rehired after August 31, 2005.
- The standard nonoccupational retirement annuity is actuarially reduced for commencement before the age that the member would have been eligible for a service retirement annuity.
- Nonoccupational disability retirement benefits and death benefit plans are restricted to members who are contributing to ERS at the time of disability or death.
- The state contribution rate was increased from 6% of covered payroll to 6.45% of covered payroll.

D. PLAN EXPERIENCE

For fiscal year 2005 the rate of investment return on the market value of assets was approximately 12.6%. The actuarial value of assets is a smoothed value that recognizes only 20% of outstanding investment gains and losses. The rate of investment return on the actuarial (smoothed) value of assets was approximately 7.5% for fiscal year 2005, which was less than the 8.0% assumed rate. As a result, there was an actuarial loss from investment income (on the actuarial value of assets). As of August 31, 2005 the market value of assets was \$0.4 billion less than the actuarial value. Unless the market value earns more than 8% over the next few years (on the average), unrecognized investment losses will gradually be reflected in the actuarial value of assets and the funded ratio will decrease.

There were also actuarial losses from pay increases that were greater than assumed as a result of the legislative changes (across-the-board salary increases and changes to longevity pay, hazardous duty pay and salary schedules). Demographic changes also produced a net actuarial loss. The most significant component of this actuarial loss was more retirements than expected, primarily the result of the retirement incentive.

The net liability balance of \$555.2 million as of the August 31, 2004 actuarial valuation increased by approximately \$649.8 to \$1,205.0 million as of August 31, 2005 before reflecting legislative plan changes to the ERS benefit structure and changes in actuarial assumptions. Changes in actuarial assumptions and plan provisions decreased the net liability balance by \$70.8 million to \$1,134.2 million as of August 31, 2005.

The following table shows the components of this change for 2005 (all amounts in millions of dollars):

Net Asset/(Liability) Balance as of August 31, 2004:		(\$555.2)
Expected change in net asset/(liability) balance:		
— Interest on net asset/(liability) balance	(\$44.4)	
— Member and State contribution greater/(less) than normal cost	<u>(21.4)</u>	
— Total		(\$65.8)
Actuarial gains/(losses) from experience during year:		
— Actuarial gains/(losses) from investment income:	(\$98.6)	
— Actuarial gains/(losses) from pay increases:		
– Across-the-board pay increases	(\$121.4)	
– Merit, promotion and longevity pay increases	<u>(130.2)</u>	
– Total net gains/(losses) from pay increases		(\$251.6)
— Actuarial gains/(losses) from demographic changes:		
– Death after retirement	\$120.9	
– Purchases of refunded service or service not previously established	(26.7)	
– Proportionate Retirement Program	(3.7)	
– Other demographic changes: service retirements, disability retirements, death benefits, withdrawals, etc.	<u>(324.3)</u>	
– Total net gains/(losses) from demographic changes		<u>(\$233.8)</u>
— Total actuarial gains/(losses)		<u>(\$584.0)</u>
Net Asset/(Liability) Balance as of August 31, 2005 Before Changes in Actuarial Assumptions and Plan Provisions:		(\$1,205.0)
Changes in net asset/(liability) balance due to changes in actuarial assumptions and plan provisions		
— Changes in actuarial assumptions	\$5.4	
— Changes in plan provisions	<u>65.4</u>	
— Total changes in actuarial assumptions and plan provisions		<u>\$70.8</u>
Net Asset/(Liability) Balance as of August 31, 2005 After Changes (reflecting all experience, plan changes and assumption changes):		(\$1,134.2)

E. DISTRIBUTIONS OF NORMAL COST

<u>Type of Benefit</u>	<u>Percent of Payroll</u>		
	<u>August 31, 2005</u>		<u>August 31, 2004</u>
	<u>After Changes</u>	<u>Before Changes</u>	
Service Retirement	9.029%	8.992%	9.012%
Nonoccupational Disability	0.210	0.321	0.328
Occupational Disability	0.021	0.021	0.022
Death	0.240	0.239	0.241
Termination	2.530	2.523	2.597
Expenses	<u>0.250</u>	<u>0.250</u>	<u>0.250</u>
Total	12.280%	12.346%	12.450%

F. ACTUARIAL BALANCE SHEET

	August 31, 2005		August 31, 2004
	After Changes	Before Changes	
<u>Actuarial Assets:</u>			
Actuarial Value of Tangible Assets	\$20,835,468,872	\$20,835,468,872	\$20,036,646,562
Actuarial Present Value of Future Normal Costs			
Member	\$2,334,898,058	\$2,331,726,584	\$2,248,977,273
Employer	<u>2,346,572,548</u>	<u>2,369,034,209</u>	<u>2,323,943,183</u>
Total	<u>\$4,681,470,606</u>	<u>\$4,700,760,793</u>	<u>\$4,572,920,456</u>
Total	\$25,516,939,478	\$25,536,229,665	\$24,609,567,018
<u>Actuarial Liability:</u>			
Actuarial Present Value of Benefits			
Active members			
— service retirement	\$13,524,085,713	\$13,504,301,524	\$12,764,777,842
— nonoccupational disability	250,418,138	362,062,273	350,167,811
— occupational disability	13,042,939	13,020,381	12,596,149
— death before retirement	269,866,483	269,425,358	256,136,279
— termination	<u>952,288,916</u>	<u>951,031,650</u>	<u>946,750,221</u>
— total	\$15,009,702,189	\$15,099,841,186	\$14,330,428,302
Inactive members	755,404,679	755,404,679	672,396,482
Annuitants	<u>10,886,033,918</u>	<u>10,886,033,918</u>	<u>10,161,943,670</u>
Total	\$26,651,140,786	\$26,741,279,783	\$25,164,768,454
<u>Net Asset/(Liability) Balance:</u>	(\$1,134,201,308)	(\$1,205,050,118)	(\$555,201,436)

Refer to Appendix B for additional detail regarding assets.

EMPLOYEES RETIREMENT SYSTEM OF TEXAS

APPENDIX A

SUMMARY OF PLAN PROVISIONS

A. MEMBERS

All employees of state agencies in a full-time or part-time position (after a 90-day waiting period) and elected state officials.

B. SERVICE RETIREMENT BENEFITS

Service Retirement Eligibility:

Last day of any month following attainment of:

- age 60 and 5 years of service, or
- the sum of age and service is at least 80, or
- age 55 and 10 years of service as a commissioned peace officer or a custodial officer, or
- age 50 and 20 years of service as a commissioned peace officer or a custodial officer, or
- age 60 and 8 years of elected class service, or
- age 50 and 12 years of elected class service.

Standard Service Retirement Annuity:

Monthly annuity payable for life equal to 2.3% of average monthly compensation times years of service. Average monthly compensation is the highest 36 month average. The standard service retirement annuity may not be less than \$150 nor more than 100% of average monthly compensation. For elected class members, a monthly annuity payable for life equal to 2.3% of the State salary of a district judge times years of service.

Optional Service Retirement Benefits:

Five optional forms and partial lump sum option assumed actuarially equivalent to standard annuity.

Automatic Increase:

For elected class members only, adjusted automatically as the state salary of a district judge increases.

C. DISABILITY RETIREMENT BENEFITS

Occupational Disability Retirement:

Monthly annuity payable for life equal to 2.3% of average monthly compensation on date of injury/onset of illness times years of service, with a minimum of the greater of 35% of average monthly compensation or \$150 and a maximum of 100% of average monthly compensation. Average monthly compensation is the average of the highest 36 months of salary.

Nonoccupational Disability Retirement:

Monthly annuity payable for life equal to 2.3% of average monthly compensation times years of service, with a maximum of 100%. The benefit amount is actuarially reduced for commencement before the age that the member would be eligible for a service retirement annuity. Average monthly compensation is the average of the highest 36 months of salary. The minimum service credit for elected class members is 8 years.

Eligibility for nonoccupational disability retirement benefits is 8 years of elected class service, or 6 years of elected class service plus 2 years of military service established before 1/1/78 or 10 years of employee class service. Members must be contributing to the system at the time of disability to be eligible for disability retirement.

Optional Disability Retirement Benefits:

Five optional forms assumed actuarially equivalent to standard annuity.

Automatic Increase:

For elected class members only, adjusted automatically as the state salary of a district judge increases.

D. DEATH BENEFITS

Before Retirement:

Contributing to the System at the Date of Death, with 10 or More Years of Service, or Less Than 10 Years of Service But Eligible to Retire and Survived By a Spouse or Minor Children:

Death benefit plan filed by member, beneficiary, or estate payable as a lifetime annuity or 10-year certain annuity. Amount calculated as if the member had retired while eligible for retirement, reduced for the selected optional form of payment (either Option 1 or Option 4).

Less Than 10 Years of Service and Not Eligible to Retire, or Eligible to Retire but Not Survived by a Spouse or Minor Children, or if Selected in Lieu of a Death Benefit Plan:

Refund of member's contributions with interest plus, if member is contributing at the date of death, 5% of the member's accumulated contributions for each full year of service with a maximum of 100% of the member's accumulated contributions.

Occupational Death:

Additional benefit paid to the surviving spouse or dependent children equal to one year's salary based on rate at the time of death.

Member With at Least 8 Years of Elected Class Service:

If not eligible for death benefit plan, spouse receives life annuity equal to one-half of member's accrued benefit at age 60. If no surviving spouse, refund of contributions plus interest and, if a contributing member, 5% of the account times years of service with a maximum of 100%.

After Retirement:

For standard annuity and option based on optional form selected, not less than excess of accumulated contributions at retirement over the monthly annuity benefits paid before the annuity terminates. In addition, a lump sum death benefit of \$5,000 is paid.

E. VESTED BENEFITS AFTER TERMINATION OF EMPLOYMENT

Service Retirement Benefit:

Deferred retirement benefit with 5 or more years of service, forfeitable if contributions withdrawn or death occurs before retirement. (8 years of service for elected class members.)

Nonoccupational Disability Benefit:

Refund of member's contributions with interest.

Death Benefit:

Refund of member's contributions with interest

F. WITHDRAWAL BENEFITS

Refund of member's contributions plus interest at an annual rate of 5%. Withdrawal cancels membership and forfeits all other benefits.

G. CONTRIBUTIONS

Members:

Legislators:	8% of gross salary.
All others:	6% of compensation, which includes base salary and longevity and hazardous duty pay but excludes overtime pay. Member contributions cease when a member has accrued a benefit of 100% of average compensation.

State of Texas:	The State contribution is 6.45% of payroll. Additional State contributions are made for lump sum death benefits for retirees, for allowable service credits not previously established, and annual membership fees.
-----------------	---

H. CHANGES IN PLAN PROVISIONS

Since the prior valuation, there were changes in plan provisions from SB 1176 and other legislation. The most significant changes include:

- The 90-day waiting period was extended to those hired or rehired after August 31, 2005.
- The standard nonoccupational retirement annuity is actuarially reduced for commencement before the age that the member would have been eligible for a service retirement annuity.
- Nonoccupational disability retirement benefits and death benefit plans are restricted to members who are contributing to ERS at the time of disability or death.
- The state contribution rate was increased from 6% of covered payroll to 6.45% of covered payroll.

I. REFERENCES

For a complete description of all of the provisions of the law which describe the Employees Retirement System of Texas, see Texas Government Code, Title 8, Subtitle B. Alternatively, the staff of the Employees Retirement System of Texas can provide more of the details of the provisions.

EMPLOYEES RETIREMENT SYSTEM OF TEXAS

APPENDIX B

SUMMARY OF ASSETS

A. SOURCE OF INFORMATION

Towers Perrin used the plan asset data provided without audit.

B. VALUES

	August 31, 2005	August 31, 2004
Market Value of Plan Assets	\$20,448,700,225	\$18,797,737,524
Actuarial Value of Total Assets	\$20,835,468,872	\$20,036,646,562

The calculation of the actuarial value of assets is based on the market-related value of plan assets, with five-year smoothing of unexpected returns. The market-related value is equal to the value of net assets held in trust for pension benefits (fair value of investments plus the carrying value [net of depreciation] of other assets and liabilities) as of the valuation date.

Specifically, the actuarial value of assets is determined as the expected value of plan assets as of the valuation date plus 20% of the difference between the market-related value and the expected value. The expected value equals the actuarial value of plan assets as of the prior valuation date, plus contributions, less benefit payments and administrative expenses, all accumulated at the assumed rate of interest to the current valuation date.

C. ASSET RECONCILIATION

1.	Value of Plan Assets, August 31, 2004	\$18,797,737,524
2.	Contributions	590,289,889
3.	Net Transfers from TRS	35,011,646
4.	Benefits paid	1,292,290,782
5.	Net administrative expenses	13,219,650
6.	Investment return	2,331,171,598
7.	Value of Plan Assets, August 31, 2005: (1)+(2)+(3)-(4)-(5)+(6)	\$20,448,700,225

D. DEVELOPMENT OF ACTUARIAL VALUE OF PLAN ASSETS

1.	Actuarial Value of Plan Assets, August 31, 2004	\$20,036,646,562
2.	Contributions	590,289,889
3.	Net Transfers from TRS	35,011,646
4.	Benefits paid	1,292,290,782
5.	Expenses	13,219,650
6.	Expected investment return at 8%	1,575,723,369
7.	Expected Value of Plan Assets, August 31, 2005: (1)+(2)+(3)-(4)-(5)+(6)	\$20,932,161,034
8.	Market-related Value of Plan Assets, August 31, 2005	20,448,700,225
9.	Difference: (8)-(7)	(483,460,809)
10.	Adjustment to expected value: 20% x (9)	(96,692,162)
11.	Actuarial Value of Plan Assets, August 31, 2005: (7)+(10)	\$20,835,468,872

EMPLOYEES RETIREMENT SYSTEM OF TEXAS

APPENDIX C

SUMMARY OF MEMBER DATA AND RELATED LIABILITIES

A. MEMBER DATA AS OF AUGUST 31, 2005

The results in this actuarial valuation report are based on the member and annuitant data provided by ERS. We have reviewed this data for reasonableness and consistency, but we have not audited it. All actuarial computations performed by Towers Perrin are directly dependent on the accuracy and completeness of the information provided.

Member data collected as of August 31, 2005 has been used as the basis for performing this valuation.

Section B contains a summary of active members used in the current valuation. The summary is based on age on the last birthday and completed years of service as of August 31, 2005, and pay determined from reported contributions for August 2005 for contributing members and from reported pay for noncontributing active members.

Section C contains a summary of annuitant data used in the current valuation. The annuitant summary is based on the monthly benefit reported as of August 31, 2005.

B. SUMMARY DATA ON ACTIVE AND INACTIVE MEMBERS

	<u>August 31, 2005</u>	<u>August 31, 2004</u>
<u>Active Members</u>		
Number:		
Male	61,173	62,134
Female	<u>70,158</u>	<u>71,215</u>
Total	131,331	133,349
Average Annual Rate of Salary:	\$34,345	\$34,174
Average Years of Service Credit:	9.3	9.2
Average Age:	43.0	42.7
Accumulated Member Contributions:	\$3,012,703,591	\$2,937,938,414
<u>Inactive Members</u>		
Vested:		
Male	5,441	5,075
Female	<u>8,063</u>	<u>7,607</u>
Total	13,504	12,682
Accumulated Member Contributions:	\$389,979,540	\$357,656,213
Nonvested:		
Male	19,634	18,870
Female	<u>23,941</u>	<u>23,106</u>
Total	43,575	41,976
Accumulated Member Contributions:	\$79,407,785	\$72,554,730

These figures exclude those who retired August 31, because they were included as retirees in the valuation. The average annual rate of salary is based on the member contributions for the month of August for contributing members and reported pay for noncontributing active members.

The following four tables show additional detail for active members, by classification.

ELECTED CLASS MEMBERS

ANALYSIS OF PARTICIPANT DATA AS OF SEPTEMBER 1, 2005

ACTIVE PARTICIPANT DISTRIBUTION BY AGE AND COMPLETED YEARS OF SERVICE

Age Last Birthday	Completed Years of Service													Total			
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34					
15-19	Number	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Tot Pay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Avg Pay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	Number	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Tot Pay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Avg Pay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	Number	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
	Tot Pay	7,200	0	14,400	0	0	0	0	0	0	0	0	0	0	0	0	21,600
	Avg Pay	7,200	0	7,200	0	0	0	0	0	0	0	0	0	0	0	0	7,200
30-34	Number	4	0	3	1	0	0	0	0	0	0	0	0	0	0	0	11
	Tot Pay	123,300	0	21,600	101,700	0	0	0	0	0	0	0	0	0	0	0	362,700
	Avg Pay	30,825	0	7,200	101,700	0	0	0	0	0	0	0	0	0	0	0	32,973
35-39	Number	7	2	8	0	6	0	1	0	0	0	0	0	0	0	0	24
	Tot Pay	428,400	203,400	246,600	0	400,860	0	7,200	0	0	0	0	0	0	0	0	1,286,460
	Avg Pay	61,200	101,700	30,825	0	66,810	0	7,200	0	0	0	0	0	0	0	0	53,603
40-44	Number	6	3	4	0	8	9	10	0	0	0	0	0	0	0	0	40
	Tot Pay	475,020	305,100	208,318	0	719,100	253,800	355,500	0	0	0	0	0	0	0	0	2,316,838
	Avg Pay	79,170	101,700	52,080	0	89,888	28,200	35,550	0	0	0	0	0	0	0	0	57,921
45-49	Number	10	1	7	2	8	21	20	0	0	0	0	0	0	0	0	73
	Tot Pay	486,178	7,200	239,400	203,400	709,618	1,055,520	1,053,450	313,326	0	0	0	0	0	0	0	4,068,092
	Avg Pay	48,618	7,200	34,200	101,700	88,702	50,263	52,673	78,332	0	0	0	0	0	0	0	55,727
50-54	Number	3	6	5	1	2	13	19	5	5	0	0	0	0	0	0	59
	Tot Pay	305,100	420,261	225,000	7,200	203,400	556,618	704,826	131,526	320,526	0	0	0	0	0	0	2,874,457
	Avg Pay	101,700	70,044	45,000	7,200	101,700	42,817	37,096	26,305	64,105	0	0	0	0	0	0	48,720
55-59	Number	3	0	7	0	2	9	17	4	10	0	0	0	0	0	0	55
	Tot Pay	210,600	0	333,900	0	108,900	631,800	1,134,130	197,460	789,372	0	0	0	0	0	0	3,630,406
	Avg Pay	70,200	0	47,700	0	54,450	70,200	66,714	49,365	78,937	0	0	0	0	0	0	66,007
60-64	Number	3	1	6	0	5	7	7	4	6	2	2	1	1	2	1	45
	Tot Pay	210,600	101,700	45,812	0	226,025	333,900	230,944	28,800	211,860	108,900	7,200	7,200	7,200	1,716,342		
	Avg Pay	70,200	101,700	7,635	0	45,205	47,700	32,992	7,200	35,310	54,450	7,200	7,200	7,200	38,141		
Over 64	Number	3	0	2	0	1	4	7	7	1	1	3	3	1	3	3	30
	Tot Pay	116,100	0	108,900	0	101,700	123,300	135,418	50,400	7,200	101,700	21,600	773,518	773,518			
	Avg Pay	38,700	0	54,450	0	101,700	30,825	19,345	7,200	7,200	101,700	7,200	25,784				
Total	Number	40	13	44	4	32	66	81	24	22	3	5	340				
	Tot Pay	2,362,498	1,037,661	1,443,930	312,300	2,469,604	3,071,038	3,621,468	721,512	1,328,958	434,844	36,000	17,050,413				
	Avg Pay	59,062	79,820	32,817	78,075	77,175	46,531	44,709	30,063	60,407	72,474	7,200	50,148				

Average Age = 52.0 Average Service = 9.4



LECO MEMBERS

ANALYSIS OF PARTICIPANT DATA AS OF SEPTEMBER 1, 2005

ACTIVE PARTICIPANT DISTRIBUTION BY AGE AND COMPLETED YEARS OF SERVICE

Age Last Birth Day	Completed Years of Service													Total	
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34			
15-19	Number	14	0	0	0	0	0	0	0	0	0	0	0	0	206
	Tot Pay	4,166,594	357,708	0	0	0	0	0	0	0	0	0	0	0	4,526,302
	Avg Pay	21,711	25,551	0	0	0	0	0	0	0	0	0	0	0	21,972
20-24	Number	1,066	637	444	376	175	84	0	0	0	0	0	0	0	2,792
	Tot Pay	24,399,736	16,245,484	11,664,966	10,139,226	4,892,484	2,771,676	0	0	0	0	0	0	0	70,113,572
	Avg Pay	22,889	25,503	26,272	26,966	27,957	29,486	0	0	0	0	0	0	0	25,112
25-29	Number	706	504	484	613	400	1,204	58	0	0	0	0	0	0	3,969
	Tot Pay	17,432,804	13,844,368	13,902,060	18,070,490	11,687,244	37,550,542	1,920,128	0	0	0	0	0	0	114,407,656
	Avg Pay	24,692	27,469	28,723	29,479	29,218	31,188	33,106	0	0	0	0	0	0	28,825
30-34	Number	541	392	373	513	368	1,895	1,171	33	0	0	0	0	0	5,286
	Tot Pay	13,263,878	10,734,724	10,633,336	15,178,484	10,887,510	62,563,130	40,744,880	1,157,918	0	0	0	0	0	165,163,860
	Avg Pay	24,517	27,385	28,508	29,588	29,586	33,015	34,795	35,088	0	0	0	0	0	31,246
35-39	Number	422	278	320	366	285	1,626	1,609	662	44	0	0	0	0	5,612
	Tot Pay	10,456,646	7,439,880	9,149,974	10,675,564	8,186,152	52,494,614	56,258,520	25,434,798	1,591,202	0	0	0	0	181,667,350
	Avg Pay	24,779	26,762	28,594	29,168	28,723	32,285	34,965	38,421	36,164	0	0	0	0	32,375
40-44	Number	341	247	246	337	247	1,303	1,480	701	22	0	0	0	0	6,020
	Tot Pay	8,397,548	6,663,686	6,897,910	9,575,914	7,225,074	40,878,472	50,198,594	28,313,656	854,734	0	0	0	0	203,104,570
	Avg Pay	24,626	26,978	28,040	28,415	29,251	31,373	33,918	40,390	38,852	0	0	0	0	33,738
45-49	Number	250	201	191	262	195	1,125	1,188	724	331	8	0	0	0	5,243
	Tot Pay	6,095,670	5,325,252	5,187,142	7,316,652	5,578,704	34,896,834	40,260,544	29,371,922	16,393,482	361,270	0	0	0	183,533,540
	Avg Pay	24,383	26,494	27,158	27,926	28,609	31,019	33,859	38,245	49,527	45,159	0	0	0	35,005
50-54	Number	175	153	168	199	150	978	1,167	553	139	40	0	0	0	3,887
	Tot Pay	4,245,970	4,015,972	4,590,324	5,600,382	4,306,784	30,257,726	39,306,836	20,413,412	7,564,522	2,418,678	0	0	0	129,848,654
	Avg Pay	24,263	26,248	27,323	28,143	28,712	30,938	33,682	36,914	43,200	60,467	0	0	0	33,406
55-59	Number	128	117	125	159	128	737	757	358	85	31	6	0	0	2,667
	Tot Pay	2,960,306	3,102,002	3,337,796	4,389,642	3,579,588	22,455,828	25,472,230	12,786,210	3,397,748	1,862,304	384,128	0	0	85,502,860
	Avg Pay	23,127	26,513	26,702	27,608	27,966	30,469	33,649	35,716	39,974	60,074	64,021	0	0	32,060
60-64	Number	54	50	61	82	64	354	315	131	21	2	4	0	0	1,144
	Tot Pay	1,253,324	1,293,060	1,716,608	2,239,074	1,817,972	10,672,050	10,390,366	4,573,224	837,890	283,542	98,834	0	0	35,457,696
	Avg Pay	23,210	25,861	28,141	27,306	28,406	30,147	32,985	34,910	39,900	49,417	70,438	0	0	30,994
Over 64	Number	21	13	16	26	17	106	89	27	7	0	1	0	0	324
	Tot Pay	410,782	341,164	417,888	659,622	453,468	3,164,270	2,998,428	1,014,106	228,918	73,510	0	0	0	9,803,620
	Avg Pay	19,561	26,243	26,118	25,370	26,675	29,852	33,690	37,559	32,703	73,510	0	0	0	30,258
Total	Number	3,896	2,606	2,428	2,933	2,029	9,422	7,834	3,628	1,747	81	11	0	0	37,150
	Tot Pay	93,085,258	69,363,320	67,498,004	83,845,050	58,614,980	297,705,142	267,550,526	138,850,572	74,243,530	26,944,868	4,741,086	0	0	1,183,149,680
	Avg Pay	23,893	26,617	27,800	28,587	28,889	31,597	34,152	38,272	42,498	50,364	64,104	0	0	31,848

Average Age = 40.8 Average Service = 8.3



ALL OTHER ERS MEMBERS

ANALYSIS OF PARTICIPANT DATA AS OF SEPTEMBER 1, 2005

ACTIVE PARTICIPANT DISTRIBUTION BY AGE AND COMPLETED YEARS OF SERVICE

Age Last Birthday	Completed Years of Service													Total		
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34				
15-19	Number	210	17	3	0	0	0	0	0	0	0	0	0	0	0	230
	Tot Pay	3,297,316	279,570	39,204	0	0	0	0	0	0	0	0	0	0	0	3,616,090
	Avg Pay	15,702	16,445	13,068	0	0	0	0	0	0	0	0	0	0	0	15,722
20-24	Number	1,755	725	396	306	254	134	0	0	0	0	0	0	0	0	3,570
	Tot Pay	37,290,280	15,849,086	8,393,302	6,479,296	5,736,846	3,183,632	0	0	0	0	0	0	0	0	76,932,442
	Avg Pay	21,248	21,861	21,195	21,174	22,586	23,758	0	0	0	0	0	0	0	0	21,550
25-29	Number	1,895	1,088	840	935	986	1,686	50	0	0	0	0	0	0	0	7,480
	Tot Pay	48,400,994	29,818,344	23,834,860	27,309,968	29,623,942	49,260,366	1,555,046	0	0	0	0	0	0	0	209,803,520
	Avg Pay	25,541	27,407	28,375	29,209	30,045	29,217	31,101	0	0	0	0	0	0	0	28,049
30-34	Number	1,484	856	698	893	1,145	3,817	1,101	66	0	0	0	0	0	0	10,060
	Tot Pay	38,507,764	24,711,662	20,654,622	27,904,128	36,679,184	129,902,346	38,378,764	2,405,464	0	0	0	0	0	0	319,143,934
	Avg Pay	25,949	28,869	29,591	31,248	32,034	34,033	34,858	36,446	0	0	0	0	0	0	31,724
35-39	Number	1,152	749	548	753	966	3,732	3,080	1,210	110	0	0	0	0	0	12,300
	Tot Pay	30,990,194	21,413,370	16,599,840	23,821,496	30,953,876	128,699,704	120,664,484	47,099,186	4,374,778	0	0	0	0	0	424,616,928
	Avg Pay	26,901	28,589	30,292	31,635	32,043	34,485	39,177	38,925	39,771	0	0	0	0	0	34,522
40-44	Number	1,017	668	505	705	860	3,301	3,264	2,855	1,469	180	0	0	0	0	14,824
	Tot Pay	26,718,254	20,499,392	15,336,814	21,419,470	26,652,850	112,920,448	128,116,874	126,102,632	62,461,828	7,406,428	0	0	0	0	547,634,990
	Avg Pay	26,272	30,688	30,370	30,362	30,992	34,208	39,251	44,169	42,520	41,147	0	0	0	0	36,942
45-49	Number	982	592	525	683	855	3,223	3,168	2,731	2,313	1,466	61	0	0	0	16,599
	Tot Pay	26,640,146	16,756,112	16,422,092	21,106,508	27,178,798	110,322,936	124,939,970	117,227,462	106,530,518	64,253,506	2,712,996	0	0	0	634,091,044
	Avg Pay	27,128	28,304	31,280	30,903	31,788	34,230	39,438	42,925	46,057	43,829	44,475	0	0	0	38,201
50-54	Number	772	453	425	576	757	2,783	2,893	2,444	1,798	1,046	351	17	0	0	14,315
	Tot Pay	21,776,552	13,542,712	12,994,182	18,506,932	23,904,556	97,563,194	114,314,520	102,023,580	77,944,740	48,633,752	16,323,234	769,384	548,297,338	0	548,297,338
	Avg Pay	28,208	29,896	30,575	32,130	31,578	35,057	39,514	41,745	43,351	46,495	46,505	45,258	38,302	0	38,302
55-59	Number	540	316	292	409	538	2,032	2,249	1,822	811	416	305	94	0	0	9,824
	Tot Pay	15,924,106	10,215,320	9,172,030	13,105,530	17,638,136	72,069,064	87,424,412	74,498,592	34,781,880	19,064,256	15,782,814	5,145,774	374,821,914	0	374,821,914
	Avg Pay	29,489	32,327	31,411	32,043	32,785	35,467	38,873	40,888	42,888	45,828	51,747	54,742	38,154	0	38,154
60-64	Number	143	115	118	147	212	932	842	558	208	123	61	50	0	0	3,509
	Tot Pay	4,405,808	3,644,172	3,609,192	4,421,552	7,062,604	32,254,906	32,641,140	22,633,760	9,015,564	5,680,992	2,893,608	2,649,652	130,912,950	0	130,912,950
	Avg Pay	30,810	31,688	30,586	30,079	33,314	34,608	38,766	40,562	43,344	46,187	47,436	52,993	37,308	0	37,308
Over 64	Number	56	40	49	57	97	336	236	146	58	31	14	10	0	0	1,130
	Tot Pay	1,758,216	1,106,466	1,412,672	1,815,572	3,108,318	10,532,830	9,104,908	6,092,188	2,699,232	1,503,316	830,714	583,398	40,547,830	0	40,547,830
	Avg Pay	31,397	27,662	28,830	31,852	32,045	31,348	38,580	41,727	46,538	48,494	59,337	58,340	35,883	0	35,883
Total	Number	10,006	5,619	4,399	5,464	6,670	21,976	16,883	11,832	6,767	3,262	792	171	93,841	0	93,841
	Tot Pay	255,709,630	157,836,206	128,468,810	165,890,452	208,539,110	746,709,426	657,140,118	498,082,864	297,808,540	146,542,250	38,543,366	9,148,208	3,310,418,980	0	3,310,418,980
	Avg Pay	25,556	28,090	29,204	30,361	31,255	33,978	38,923	42,096	44,009	44,924	48,666	53,498	35,277	0	35,277

Average Age = 43.8 Average Service = 9.7



All ACTIVE MEMBERS

ANALYSIS OF PARTICIPANT DATA AS OF SEPTEMBER 1, 2005

ACTIVE PARTICIPANT DISTRIBUTION BY AGE AND COMPLETED YEARS OF SERVICE

Age Last Birthdate	Completed Years of Service													Total		
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34				
15-19	Number	402	31	3	0	0	0	0	0	0	0	0	0	0	0	436
	Tot Pay	7,465,910	637,278	39,204	0	0	0	0	0	0	0	0	0	0	0	8,142,392
	Avg Pay	18,572	20,557	13,068	0	0	0	0	0	0	0	0	0	0	0	18,675
20-24	Number	2,821	1,362	840	682	429	228	0	0	0	0	0	0	0	0	6,362
	Tot Pay	61,690,016	32,094,570	20,058,268	16,618,522	10,629,330	5,955,308	0	0	0	0	0	0	0	0	147,046,014
	Avg Pay	21,868	23,564	23,879	24,367	24,777	26,120	0	0	0	0	0	0	0	0	23,113
25-29	Number	2,602	1,592	1,326	1,548	1,386	2,890	108	0	0	0	0	0	0	0	11,452
	Tot Pay	65,840,998	43,662,732	37,751,320	45,380,458	41,311,186	86,810,908	3,475,174	0	0	0	0	0	0	0	324,232,776
	Avg Pay	25,304	27,426	28,470	29,316	29,806	30,038	32,178	0	0	0	0	0	0	0	28,312
30-34	Number	2,029	1,248	1,074	1,407	1,513	5,715	2,272	99	0	0	0	0	0	0	15,357
	Tot Pay	51,894,942	35,446,386	31,309,558	43,184,312	47,566,694	192,581,576	79,123,644	3,563,382	0	0	0	0	0	0	484,670,494
	Avg Pay	25,577	28,403	29,152	30,692	31,439	33,698	34,826	35,994	0	0	0	0	0	0	31,560
35-39	Number	1,581	1,029	876	1,119	1,257	5,358	4,690	1,872	154	0	0	0	0	0	17,936
	Tot Pay	41,875,240	29,056,650	25,996,414	34,497,060	39,540,888	181,194,318	176,930,204	72,533,984	5,965,980	0	0	0	0	0	607,590,738
	Avg Pay	26,487	28,238	29,676	30,628	31,457	33,818	37,725	38,747	38,740	0	0	0	0	0	33,875
40-44	Number	1,364	918	755	1,042	1,115	4,613	4,754	3,951	2,170	0	0	0	0	0	20,884
	Tot Pay	35,590,822	27,468,178	22,443,042	30,995,384	34,597,024	154,052,720	178,670,968	170,201,614	90,775,484	8,261,162	0	0	0	0	753,056,398
	Avg Pay	26,093	29,922	29,726	29,746	31,029	33,395	37,583	43,078	41,832	40,897	0	0	0	0	36,059
45-49	Number	1,242	794	723	947	1,058	4,369	4,376	3,503	3,037	1,797	0	0	0	0	21,915
	Tot Pay	33,221,994	22,088,564	21,848,634	28,626,560	33,467,120	146,275,290	166,253,964	146,912,710	139,276,586	80,646,988	3,074,266	0	0	0	821,692,676
	Avg Pay	26,749	27,819	30,219	30,229	31,632	33,480	37,992	41,939	45,860	44,879	44,555	0	0	0	37,495
50-54	Number	950	612	598	776	909	3,774	4,079	3,002	1,968	1,185	17	17	17	17	18,261
	Tot Pay	26,327,622	17,978,945	17,809,506	24,114,514	28,414,740	128,377,538	154,326,182	122,568,518	85,393,314	56,198,274	18,741,912	769,384	681,020,449	45,258	37,294
	Avg Pay	27,713	29,377	29,782	31,075	31,259	34,016	37,834	40,829	43,391	47,425	47,933	45,258	45,258	45,258	37,294
55-59	Number	671	433	424	568	668	2,778	3,023	2,184	906	454	101	101	101	101	12,546
	Tot Pay	19,095,012	13,317,322	12,843,726	17,495,172	21,326,624	95,156,692	114,030,772	87,482,252	38,969,000	21,056,378	17,645,118	5,537,102	463,955,180	54,823	36,980
	Avg Pay	28,458	30,756	30,292	30,801	31,926	34,254	37,721	40,056	43,012	46,380	52,515	54,823	54,823	54,823	36,980
60-64	Number	200	166	185	229	281	1,293	1,164	693	235	132	55	55	55	55	4,698
	Tot Pay	5,869,732	5,038,932	5,371,612	6,660,526	9,106,602	43,260,856	43,262,450	27,235,784	10,065,314	6,175,134	3,101,342	2,938,604	168,086,988	53,429	35,778
	Avg Pay	29,349	30,355	29,036	29,086	32,408	33,458	37,167	39,301	42,831	46,781	47,713	53,429	53,429	53,429	35,778
Over 64	Number	80	53	67	83	115	446	332	180	66	33	15	14	14	14	1,484
	Tot Pay	2,285,098	1,447,630	1,939,460	2,475,194	3,663,486	13,820,400	12,238,754	7,156,694	2,935,350	1,584,026	932,414	646,462	51,124,968	46,176	34,451
	Avg Pay	28,564	27,314	28,947	29,822	31,856	30,987	36,864	39,759	44,475	48,001	62,161	46,176	46,176	46,176	34,451
Total	Number	13,942	8,238	6,871	8,401	8,731	31,464	24,798	15,484	8,536	3,803	876	187	131,331	187	131,331
	Tot Pay	351,157,386	228,237,187	197,410,744	250,047,802	269,623,694	1,047,485,606	928,312,112	637,654,948	373,381,028	173,921,962	43,495,052	9,891,552	4,510,619,073	9,891,552	4,510,619,073
	Avg Pay	25,187	27,705	28,731	29,764	30,881	33,292	37,435	41,182	43,742	45,733	49,652	52,896	52,896	52,896	34,345

Average Age = 43.0 Average Service = 9.3



C. ANNUITANT BENEFITS AS OF AUGUST 31, 2005

Type of Annuity	Number of Accounts	Monthly Payment*
Service Retirements and Beneficiaries:		
Male Annuitants:		
Straight Life	13,061	\$23,202,188
Joint & Full	6,754	10,981,266
Joint & One-Half	5,224	11,235,389
Life With 60 Months Certain	313	570,090
Life With 120 Months Certain	855	1,400,930
Joint & Three-Fourths	3,462	7,598,819
Annuity Certain	<u>178</u>	<u>126,087</u>
Male Total	29,847	\$55,114,769
Female Annuitants:		
Straight Life	26,031	\$34,913,931
Joint & Full	1,407	1,860,342
Joint & One-Half	1,835	3,012,901
Life With 60 Months Certain	400	594,132
Life With 120 Months Certain	631	792,564
Joint & Three-Fourths	548	878,983
Annuity Certain	<u>306</u>	<u>242,592</u>
Female Total	<u>31,158</u>	<u>\$42,295,445</u>
Total Service Retirements	61,005	\$97,410,214
TRS Reimbursing ERS	4,746	\$3,434,687
ERS Reimbursing TRS	<u>1,877</u>	<u>486,341</u>
Net ERS Service Retirements	62,882	\$94,461,868

* Includes benefit increases provided by 2005 legislation effective December 1, 2005.

Type of Annuity	Number of Accounts	Monthly Payment*
Disability Retirements:		
Male Annuitants:		
Straight Life	822	\$798,918
Joint & Full	198	176,038
Joint & One-Half	70	68,783
Life With 60 Months Certain	15	12,327
Life With 120 Months Certain	28	26,543
Joint & Three-Fourths	61	53,220
Annuity Certain	<u>0</u>	<u>0</u>
Male Total	1,194	\$1,135,829
Female Annuitants:		
Straight Life	1,349	1,069,262
Joint & Full	91	76,641
Joint & One-Half	62	58,188
Life With 60 Months Certain	12	10,248
Life With 120 Months Certain	39	31,083
Joint & Three-Fourths	19	21,328
Annuity Certain	<u>0</u>	<u>0</u>
Female Total	1,572	\$1,266,750
Total Disability Retirements	2,766	\$2,402,579
TRS Reimbursing ERS	122	43,913
ERS Reimbursing TRS	<u>72</u>	<u>14,633</u>
Net ERS Disability Retirements	2,838	\$2,373,299
TOTAL SERVICE AND DISABILITY RETIREMENTS	63,771	\$99,812,793
 TRS Reimbursing ERS	4,868	3,478,600
 ERS Reimbursing TRS	<u>1,949</u>	<u>500,974</u>
NET ERS SERVICE AND DISABILITY RETIREMENTS	65,720	\$96,835,167

* Includes benefit increases provided by 2005 legislation effective December 1, 2005.

D. AVERAGE AGE, SERVICE AND BENEFIT OF ANNUITANTS AS OF AUGUST 31, 2005

	Number of Annuitants	Average			Service at Retirement
		Monthly Benefit*	Age at Retirement	Age at 08/31/2005	
All Annuitants in Pay Status					
Elected Class	707	\$3,092.99	55.71	69.64	15.75
Law Enforcement & Custodial Officers	4,940	\$2,006.27	53.76	62.23	26.55
Regular State Employees	<u>57,761</u>	\$1,518.59	58.35	67.59	22.52
Total ERS	63,408	\$1,574.14	57.96	67.19	22.76
Service Retirees (Excludes Disability Retirees & Beneficiaries)					
Elected Class	543	\$3,242.18	56.56	68.58	15.27
Law Enforcement & Custodial Officers	4,259	\$2,125.76	54.11	61.48	26.83
Regular State Employees	<u>49,053</u>	\$1,596.30	59.29	67.62	22.75
Total ERS	53,855	\$1,654.76	58.85	67.14	23.00
Disability Retirees					
Elected Class	1	\$2,176.25	57.97	76.81	9.08
Law Enforcement & Custodial Officers	131	\$920.91	44.80	58.25	8.01
Regular State Employees	<u>2,634</u>	\$865.51	50.45	60.98	15.18
Total ERS	2,766	\$868.61	50.18	60.86	14.84
Beneficiaries					
Elected Class	163	\$2,601.63	52.90	73.13	17.39
Law Enforcement & Custodial Officers	550	\$1,339.55	53.15	69.04	28.75
Regular State Employees	<u>6,074</u>	\$1,174.22	54.23	70.22	23.81
Total ERS	6,787	\$1,221.90	54.11	70.19	24.04
All Annuitants Not Yet in Pay Status					
Law Enforcement & Custodial Officers:					
— With LECOSRF Benefit	363	\$1,463.73	43.96	45.83	21.64

* Includes benefit increases provided by 2005 legislation effective December 1, 2005.

E. RETIREMENT MEMBERS BY TYPE OF BENEFIT AS OF AUGUST 31, 2005

Amount of Monthly Benefit	Number of Annuitants	Type of Retirement			Option Selected				
		Service	Disability	Life	Option 1	Option 2	Option 3	Option 4	Option 5
0 – 300	4,160	4,039	121	2,434	859	284	63	376	144
301 – 600	9,721	8,880	841	7,032	1,437	517	92	319	324
601 – 900	9,854	8,922	932	7,215	1,292	627	108	260	352
901 – 1,200	8,222	7,744	478	5,849	1,068	716	94	176	319
1,201 – 1,500	7,026	6,782	244	4,706	932	769	94	139	386
1,501 – 2,000	8,959	8,800	159	5,541	1,162	1,246	138	186	686
2,001 – 2,500	7,138	7,096	42	4,161	874	1,234	69	162	638
2,501 – 3,000	5,011	4,999	12	2,594	647	1,008	55	128	579
3,001 – 4,000	4,134	4,129	5	2,172	540	774	46	76	526
4,001 – 10,999	<u>1,495</u>	<u>1,491</u>	<u>4</u>	<u>782</u>	<u>214</u>	<u>237</u>	<u>17</u>	<u>28</u>	<u>217</u>
Total*	65,720	62,882	2,838	42,486	9,025	7,412	776	1,850	4,171

* Includes 1,949 TRS annuitants reimbursed by ERS and 363 LECOSRF annuitants not yet eligible to begin an annuity from ERS.

F. RETIREEES AND BENEFICIARIES ADDED TO AND REMOVED FROM THE ANNUITY PAYROLLS

Employees Retirement Fund	Number of Annuitants	Benefit Amount		Average Annual Benefit
		Monthly	Annually	
August 31, 2004	61,845	\$90,836,838.48	\$1,090,042,062	\$17,625
Added to Rolls	5,006	7,492,596.56	89,911,159	
Removed from Rolls	(1,922)	(2,316,195.70)	(27,794,348)	
(est).				
Other Beneficiaries (est).	<u>791</u>	<u>821,928.06</u>	<u>9,863,136</u>	
August 31, 2005**	65,720*	\$96,835,167.40	\$1,162,022,009	\$17,681

* Includes 1,949 TRS annuitants reimbursed by ERS and includes 363 LECOSRF annuitants not yet eligible to begin an annuity from ERS

** Includes benefit increases provided by 2005 legislation effective December 1, 2005.

EMPLOYEES RETIREMENT SYSTEM OF TEXAS

APPENDIX D

SUMMARY OF RECOMMENDED ACTUARIAL ASSUMPTIONS

A. ACTUARIAL ASSUMPTIONS

Investment Rate of Return:	8.0% per year, compounded annually.
Administrative Expenses:	0.25% of pay per year.
Salary Increases:	
Employee Class Members:	Salary increase rates include 4.0% annual increase for inflation plus increases for merit, promotion and longevity. See sample rates.
Elected Class Members:	Legislators receive no increases, but district judge salary used for benefits is expected to increase 4.0% annually. Others expected to receive 4.0% increase, with district judge salary used if greater.
Payroll Growth:	4.0% per year, compounded annually.
Cost-of-Living Increases for Elected Class Members:	4.0% per year, compounded annually.
Mortality:	
Active Lives:	Tables based on ERS experience; see sample rates.
Service Retirees and Beneficiaries:	1994 Group Annuity Mortality, male and female tables.
Disability Retirees:	Table based on ERS experience; see sample rates.

Disability Retirement:

Rates of Disability Retirement:

Graded tables based on ERS experience.

Option Selection Percentage:

Male Members

Female Members

StandardOption 1Option 4

50%

40%

10%

75%

15%

10%

Beneficiary Characteristics:

Male Members

Member is three years older than female beneficiary.

Female Members

Member is same age as male beneficiary.

Termination of Employment:

Graded tables based on ERS experience; see sample rates.

Withdrawal of Contributions:

Graded tables based on ERS experience; see sample rates.

Service Retirement:

Rates of Service Retirement:

Graded tables based on ERS experience; see sample rates.

Form of Payment:

Standard Annuity (Life Annuity)

Credited Service:

Assumed one year earned in each future year employed. Service credit at service retirement and at death in service is assumed to be increased by 2.6% for Regular members and 4.6% for LECO members for accumulated leave.

Transfers from ERS to TRS:

Contributing ERS Members:

3% of regular state employee and LECO members who cease contributing to ERS will transfer ERS service credit to TRS.

Noncontributing ERS Members:

Records of ERS and TRS are matched to determine former ERS members who are currently actively contributing under TRS.

TRS Retirement Age:

Former ERS members who are or become contributing TRS members are assumed to continue to earn service credit under TRS until first eligible for unreduced service retirement benefits, retire at the time and transfer ERS service credit to TRS.

TRS Salary Increases:

5.5% per year.

Death Benefit Plan:

Option Selection Percentage:
 Male Members
 Female Members

<u>Option 1</u>	<u>Option 4</u>
75%	25%
60%	40%

Beneficiary Characteristics:

Male Members

Member is three years older than female beneficiary.

Female Members

Member is same age as male beneficiary.

Missing Data:

Entry age is assumed to be age 30 for the employee class and age 45 for the elected class and sex is assumed to be male if data is missing. The number of missing data items was immaterial.

B. SAMPLE RATES

Annual Salary Increases for Merit, Promotion and Longevity – Regular State Members:

Age	Male and Female – Based on Years of Service						
	0	1	2–4	5–9	10–14	15–19	20+
20	6.80%	5.25%	4.75%	4.65%			
25	6.70	5.25	4.75	4.35	3.95%		
30	6.00	5.25	4.45	3.85	3.65	3.20%	
35	5.50	4.75	4.25	3.55	3.35	3.00	3.00%
40	5.50	4.55	4.05	3.45	3.05	2.70	2.60
45	5.30	4.55	3.95	3.35	2.95	2.60	2.40
50	4.90	4.55	3.85	3.25	2.75	2.30	2.20
55	4.50	4.35	3.55	2.95	2.45	2.00	1.80
60	2.90	2.95	2.65	2.45	2.35	1.90	1.80

Annual Salary Increases for Merit, Promotion and Longevity – LECO Members:

Age	Male and Female – Based on Years of Service				
	0	1	2–4	5–9	10+
20	10.0%	5.0%	2.2%	2.1%	2.0%
25	10.0	5.0	2.2	2.1	2.0
30	10.0	5.0	2.2	2.1	2.0
35	10.0	5.0	2.2	2.1	2.0
40	10.0	5.0	2.2	2.1	2.0
45	10.0	5.0	2.2	2.1	2.0
50	10.0	5.0	2.2	2.1	2.0
55	10.0	5.0	2.2	2.1	2.0
60	10.0	5.0	2.2	2.1	2.0

Annual Rates of Termination – Regular State Members:

Age	Male and Female – Based on Years of Service										
	0	1	2	3	4	5–6	7–9	10–14	15–19	20–24	25+
20	49%	31%	27%	25%	19%	19%	11%	6%	3%	2%	0%
25	32	26	23	19	17	17	10	6	3	2	0
30	25	22	18	17	14	14	9	6	3	2	0
35	24	20	16	14	12	12	8	5	3	2	0
40	22	18	15	13	10	10	8	5	3	2	0
45	22	16	12	11	9	7	6	5	3	2	0
50	22	14	12	10	9	7	6	4	3	2	0
55	20	13	10	8	7	5	5	4	3	2	0
60	23	18	16	13	12	10	0	0	0	0	0

Annual Rates of Termination – LECO Members:

Males and Females – Based on Years of Service													
Age	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10-14</u>	<u>15-19</u>	<u>20+</u>
20	29%	25%	18%	18%	17%	17%	16%	11%	11%	11%	0%	0%	0%
25	25	20	16	16	15	14	14	10	10	10	10	0	0
30	24	19	15	15	11	10	10	10	9	9	9	0	0
35	24	15	13	13	10	10	9	8	8	7	6	2	0
40	23	14	10	10	10	10	9	7	7	7	6	2	0
45	21	13	9	9	9	9	8	7	7	7	5	2	0
50	19	10	8	8	6	5	5	5	5	5	5	2	0
55	18	10	8	8	6	5	5	4	4	4	4	2	0
60	25	22	10	10	6	5	5	0	0	0	0	0	0

Annual Rates of Termination – Elected Class Members: 5% for all ages

Annual Rates of Withdrawal of Employee Contributions by Vested Terminated Members – Based on Years of Service:

Age	Regular State Members				LECO Members			
	<u>5-10</u>	<u>10-15</u>	<u>15-20</u>	<u>20+</u>	<u>5-10</u>	<u>10-15</u>	<u>15-20</u>	<u>20+</u>
20-24	100%	100%	0%	0%	100%	0%	0%	0%
25-34	85	80	60	0	90	85	80	0
35-44	75	65	60	50	85	75	65	0
45-54	65	55	50	35	75	65	55	0
55+	55	45	40	25	65	0	0	0

All Elected Class Vested Terminated Members are assumed not to withdraw employee contributions

Active Mortality Rates – Regular State Members:

Age	Occupational		Nonoccupational	
	Females	Males	Females	Males
20	0.001%	0.002%	0.026%	0.036%
25	0.001	0.002	0.026	0.048
30	0.001	0.002	0.032	0.059
35	0.001	0.002	0.043	0.063
40	0.001	0.002	0.064	0.079
45	0.001	0.002	0.088	0.118
50	0.001	0.002	0.129	0.195
55	0.001	0.002	0.207	0.336
60	0.001	0.002	0.400	0.608
65	0.001	0.002	0.777	1.109

Active Mortality Rates – LECO Members:

Age	Occupational		Nonoccupational	
	Females	Males	Females	Males
20	0.001%	0.003%	0.034%	0.044%
25	0.001	0.003	0.035	0.058
30	0.001	0.003	0.042	0.071
35	0.001	0.003	0.057	0.076
40	0.001	0.003	0.085	0.097
45	0.001	0.003	0.117	0.144
50	0.001	0.003	0.171	0.237
55	0.001	0.003	0.275	0.408
60	0.001	0.003	0.533	0.739
65	0.001	0.003	1.036	1.349

Active Mortality Rates – Elected Class Members: Same as Nonoccupational Active Mortality Rates for Regular State Members

Disability Retirement Rates – Regular State Members:

Age	Occupational	Nonoccupational	
	Female & Males	Females	Males
20	0.003%	0.000%	0.000%
25	0.003	0.000	0.000
30	0.003	0.028	0.057
35	0.003	0.087	0.135
40	0.004	0.186	0.144
45	0.007	0.302	0.213
50	0.008	0.430	0.308
55	0.011	0.724	0.514
60	0.015	0.000	0.000
65	0.018	0.000	0.000

Disability Retirement Rates – LECO Members:

Age	Occupational (Females & Males)		Nonoccupational
	Total	Non-Total	Females & Males
20	0.0002%	0.0008%	0.000%
25	0.0002	0.0008	0.000
30	0.0006	0.0024	0.016
35	0.0012	0.0048	0.054
40	0.0018	0.0072	0.101
45	0.0028	0.0112	0.169
50	0.0040	0.0160	0.284
55	0.0048	0.0192	0.424
60	0.0054	0.0216	0.000
65	0.0052	0.0208	0.000

Disability Retirement Rates – Elected Class Members: Same as Nonoccupational Disability Retirement Rates for Regular State Members

Service Retirement Rates – Regular State Employees:

First Year Eligible to Retire

<u>Age</u>	<u>Females</u>	<u>Males</u>
36-44	0%	0%
45-49	45	20
50	50	40
51-54	50	40
55	50	50
56-59	50	50
60	25	20
61-64	15	20
65	15	20
66-69	15	20
70+	100	100

After First Year Eligible to Retire

<u>Age</u>	<u>Females</u>						<u>Males</u>				
	<u>0-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>0-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>
36-44	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
45-49	0	0	0	0	0	25	0	0	0	0	0
50	0	0	0	0	0	25	0	0	0	0	10
51-54	0	0	0	0	30	25	0	0	0	20	10
55	0	0	0	0	30	30	0	0	0	15	10
56-59	0	0	0	30	30	30	0	0	25	15	10
60	10	20	30	30	30	30	15	20	25	30	20
61-64	10	20	25	30	30	30	15	20	25	30	20
65	15	20	30	30	50	50	15	25	30	40	40
66-69	15	20	20	20	25	25	15	20	20	15	15
70+	100	100	100	100	100	100	100	100	100	100	100

Service Retirement Rates – LECO Members:

First Year Eligible to Retire

<u>Age</u>	<u>Females</u>	<u>Males</u>
36-44	1%	1%
45-49	3	3
50	39	25
51-54	16	12
55	16	12
56-59	16	12
60	31	21
61-64	31	11
65	46	37
66-69	23	18
70+	100	100

After First Year Eligible to Retire

<u>Age</u>	<u>Females</u>		
	<u>0-9</u>	<u>10-19</u>	<u>20+</u>
36-44	0%	0%	1%
45-49	0	0	2
50	0	0	30
51-54	0	0	12
55	0	12	24
56-59	0	12	12
60	24	24	24
61-64	24	24	24
65	35	35	35
66-69	18	18	18
70+	100	100	100

<u>Age</u>	<u>Males</u>									
	<u>0-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-23</u>	<u>24</u>	<u>25-26</u>	<u>27</u>	<u>28</u>	<u>29-34</u>	<u>35+</u>
36-44	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%
45-49	0	0	0	3	3	3	3	3	3	3
50	0	0	26	29	30	45	47	50	50	60
51-54	0	0	13	14	15	11	12	12	14	14
55	0	12	13	30	30	22	24	25	30	30
56-59	0	12	13	14	13	11	12	12	14	14
60	21	24	26	43	45	45	47	50	50	60
61-64	11	24	26	29	30	28	29	31	36	36
65	37	41	45	50	50	40	40	43	50	50
66-69	18	20	22	24	25	19	20	21	24	24
70+	100	100	100	100	100	100	100	100	100	100

Service Retirement Rates – Elected Class Members:

<u>Age</u>	<u>Male & Female</u>
50-59	10%
60-64	15%
65-74	20%
75+	100%

Mortality Rates – Retirees and Beneficiaries:

Age	Service Retirees & Beneficiaries (1994 GAM)		Disability Retirees*	
	Females	Males	Females	Males
15	0.0216%	0.0345%	2.50%	3.38%
20	0.0284	0.0507	2.50	3.38
25	0.0291	0.0661	2.50	3.38
30	0.0351	0.0801	2.25	2.53
35	0.0478	0.0851	2.03	1.95
40	0.0709	0.1072	1.99	1.97
45	0.0973	0.1578	2.13	2.25
50	0.1428	0.2579	2.44	2.68
55	0.2294	0.4425	2.80	3.37
60	0.4439	0.7976	3.14	4.42
65	0.8636	1.4535	3.52	5.09
70	1.3730	2.3730	3.90	5.91
75	2.2686	3.7211	4.67	7.16
80	3.9396	6.2027	7.09	10.15
85	6.7738	9.7240	10.72	15.98
90	11.6265	15.2931	16.82	25.25
95	18.6213	23.3606	25.25	37.89
100	27.6427	31.7238	37.89	56.84
105	38.3597	40.7224	56.84	85.27
110	48.2325	48.6745	100.00	100.00
115	50.0000	50.0000	100.00	100.00
120	100.0000	100.0000	100.00	100.00

* For females, assumption is 95% of PBGC disabled mortality grading to 100% from age 85 to 90. For males, assumption is 70% of PBGC disabled mortality grading to 100% from age 60 to 90.

C. CHANGES IN ACTUARIAL ASSUMPTIONS

Since the prior valuation, actuarial assumptions were changed. The rates of assumed annual salary increases for merit, promotion, and longevity were changed slightly.

EMPLOYEES RETIREMENT SYSTEM OF TEXASAPPENDIX EDESCRIPTION OF ACTUARIAL METHODS AND PROCEDURES**A. ACTUARIAL COST METHOD - NORMAL COST AND ACTUARIAL ACCRUED LIABILITY**

The method used to determine the normal cost and actuarial accrued liability is the entry age actuarial cost method, described below:

Entry age is determined as the member's age on the valuation date minus years of service credit as of the valuation date.

On the actuarial valuation date, the actuarial present values of projected benefits and valuation earnings for each active employee included in the actuarial valuation whose attained age is less than the assumed latest retirement age are determined at the individual's entry age. For each such individual, the individual normal cost is the actuarial present value of projected benefits at entry age, divided by the actuarial present value of valuation earnings at entry age, multiplied by the individual's valuation earnings for the valuation year. The sum of all individual normal costs is the normal cost for the valuation year.

The excess on the actuarial valuation date of the actuarial present value of projected benefits for all individuals included in the actuarial valuation over the sum of the actuarial present values of future individual normal costs is the actuarial accrued liability. The excess of the actuarial accrued liability over the actuarial value of plan assets is the unfunded actuarial accrued liability. If the unfunded actuarial accrued liability is negative, the excess of the actuarial value of plan assets over the actuarial accrued liability is called the net asset balance.

The actuarial gain (loss) is a measure of the difference between actual experience and that expected based upon the actuarial assumptions between two actuarial valuation dates. Under this actuarial cost method, the actuarial gains (losses) are directly calculated and reduce (increase) the unfunded actuarial accrued liability.

Adjustments to the unfunded actuarial accrued liability can result from changes in actuarial assumptions and plan provisions. Such adjustments are determined by calculating, as of the actuarial valuation date, the increase or decrease in the unfunded actuarial accrued liability resulting from the change.

B. ACTUARIAL VALUE OF PLAN ASSETS

The actuarial value of plan assets is based on the market-related value of plan assets, with five-year smoothing of unexpected returns. The market-related value is equal to the value of net assets held in trust for pension benefits (fair value of investments plus the carrying value [net of depreciation] of other assets and liabilities) as of the valuation date.

Specifically, the actuarial value of assets is determined as the expected value of plan assets as of the valuation date plus 20% of the difference between the market-related value and the expected value. The expected value equals the actuarial value of plan assets as of the prior valuation date, plus contributions, less benefit payments and administrative expenses, all accumulated at the assumed rate of interest to the current valuation date.

C. OTHER ACTUARIAL VALUATION PROCEDURES

No provision was made in this actuarial valuation for the limitations of Internal Revenue Code Section 415.

Valuation payroll (earnings applied to the current valuation year) is the expected payroll for the fiscal year following the valuation date. It is based on reported payroll determined from August member contributions increased to reflect the across-the-board salary increases effective on or after September 1 and projected according to the actuarial assumptions for the upcoming fiscal year.

No liability was included for benefits which are funded by special State appropriations.

State appropriations for membership fees have been ignored.

D. CHANGES IN ACTUARIAL METHODS AND PROCEDURES

No changes in the actuarial cost method or procedures have been adopted since the prior actuarial valuation.

EMPLOYEES RETIREMENT SYSTEM OF TEXAS

APPENDIX F

GASB 25 AND 27 REPORTING

A. DISCLOSURE OF PENSION INFORMATION

Actuarial calculations under Statement No. 25 of the Governmental Accounting Standards Board (GASB 25) are for purposes of providing the required supplementary information to the financial statement of the plan. The calculations and disclosures reported in this section have been made on a basis consistent with our understanding of GASB 25.

Beginning with the fiscal year ending August 31, 1996, the System has prepared the plan's financial statements in accordance with GASB 25, which supersedes GASB 5 for the plan's financial reporting. Effective with the fiscal year ending August 31, 1998, the State has prepared financial statements in accordance with Statement No. 27 of the Governmental Accounting Standards Board (GASB 27), which supersedes GASB 5 for the employer's financial reporting.

B. SCHEDULE OF FUNDING PROGRESS

	Actuarial Valuation Date	
	August 31, 2005	August 31, 2004
1. Actuarial Value of Assets	\$20,835,468,872	\$20,036,646,562
2. Actuarial Accrued Liability (AAL)	\$21,969,670,180	\$20,591,847,998
3. Unfunded AAL (UAAL): (2)-(1)	\$1,134,201,308	\$555,201,436
4. Funded Ratio: (1)÷(2)	94.8%	97.3%
5. Covered Payroll (Valuation Payroll as of the Actuarial Valuation Date)	\$4,842,525,200	\$4,616,760,675
6. UAAL as a Percentage of Covered Payroll: (3)÷(5)	23.4%	12.0%

C. SCHEDULE OF EMPLOYER CONTRIBUTIONS

	Year Ended August 31	
	2006	2005
1. Actuarial Valuation Date	August 31, 2005	August 31, 2004
2. Annual Required Contribution (ARC)		
a. Employer's Normal Cost (Percentage of Covered Payroll)	6.280%	6.450%
b. UAAL	\$1,134,201,308	\$555,201,436
c. Amortization of UAAL	\$56,040,018	\$27,432,078
d. Amortization of UAAL (Percentage of Covered Payroll)	1.157%	0.594%
e. ARC (Percentage of Covered Payroll): (a)+(d)	7.437%***	7.044%***
f. Covered Payroll	\$4,842,525,200*	\$4,569,274,344**
g. ARC: (e)x(f)	\$360,138,599*	\$321,859,685
3. Employer Contributions		\$276,034,664
4. Percentage Contributed: (3)÷(2)(g)		85.8%
5. Excess Contributions/ (Contribution Deficiencies): (3)-(2)(g)		(\$45,825,021)

* Valuation payroll as of the actuarial valuation date. After the end of the fiscal year, the dollar amount of the ARC will be recalculated based on the actual payroll for the fiscal year.

** Estimated covered payroll for the fiscal year calculated from the actual State contributions for the fiscal year and the appropriated State contribution rate.

*** ARC equals employer's normal cost plus the amount to amortize the UAAL over 40 years (see "Notes to Trend Data"). For the year ending August 31, 2007 (based on the results of the August 31, 2006 actuarial valuation) the maximum amortization period will be 30 years as required by GASB 25 and GASB 27.

D. ANNUAL PENSION COST AND NET PENSION OBLIGATION

The State's annual pension cost and net pension obligation for the current and prior year were as follows:

	Year Ended August 31	
	2006	2005
1. Annual required contribution (ARC)	\$360,138,599*	\$321,859,685
2. Interest on net pension obligation	(6,615,336)	(9,976,159)
3. Adjustment to annual required contribution	(4,085,734)	(6,161,430)
4. Annual pension cost, APC: (1)+(2)-(3)	\$357,608,997	\$318,044,956
5. Employer contributions		(\$276,034,664)
6. Increase/(decrease) in net pension obligation: (4)+(5)		\$42,010,292
7. Net pension obligation beginning of year	(\$82,691,702)	(\$124,701,993)
8. Net pension obligation end of year: (6)+(7)		(\$82,691,702)

* After the end of the fiscal year, the dollar amount of the ARC will be recalculated based on actual payroll for the fiscal year.

E. NOTES TO TREND DATA

	Year Ended August 31	
	2006	2005
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Open	Level Percent Open
Remaining Amortization Period (Years)	40.00**	40.00**
Asset Valuation Method	5-year smoothed market	5-year smoothed market
Actuarial Assumptions:		
Investment Rate of Return*	8.0%	8.0%
Projected Salary Increases*	0% –10.8%	0% –10.8%
* Includes Inflation at	4.0%	4.0%
Cost-of-living Adjustments		
– employee class	None	None
– elected class	4.0%	4.0%

** After the end of the year, the amortization period will be recalculated based on the revised dollar amounts of the ARC and APC. For the year ending August 31, 2007 (based on the results of the August 31, 2006 actuarial valuation) the maximum amortization period will be 30 years as required by GASB 25 and GASB 27.

F. SOLVENCY TEST

	Actuarial Accrued Liabilities	Valuation Assets	Portion of AAL Covered by Valuation Assets
	<hr/>	<hr/>	<hr/>
Active Member Contributions (includes Non-contributing)	\$3,482,090,916	\$3,482,090,916	100.0%
Retirees and Beneficiaries	10,886,033,918	10,886,033,918	100.0%
Active Members (Employer Financed Portion)	<u>7,601,545,346</u>	<u>6,467,344,038</u>	85.1%
Total	\$21,969,670,180	\$20,835,468,872	

EMPLOYEES RETIREMENT SYSTEM OF TEXASAPPENDIX GACTUARIAL METHODOLOGY AND PENSION TERMINOLOGYA. ACTUARIAL METHODOLOGY

This section summarizes the conceptual methodology used in preparing the Actuarial Balance Sheet in this valuation.

Actuarial Methodology

The actuarial valuation of a defined benefit plan is comprised of two separate processes.

First, the actuarial present value, as of the actuarial valuation date, of both current and projected benefits to be paid under the plan is determined. In determining the actuarial present value of these benefits, actuarial assumptions must be made as to the number of members eventually receiving benefits, the amount of benefits to be paid, and the portion of the benefit obligation to be covered by future investment earnings.

Second, the financing of these benefit obligations on an advance basis is established. An actuarial cost method is applied to determine the Actuarial Accrued Liability, which is the amount of the eventual cost that has accrued as of the actuarial valuation date. The actuarial cost method also establishes the Normal Cost, which is the rate at which future costs will accrue annually after the actuarial valuation date.

Actuarial Assumptions

The true cost of a member's pension benefit is not known until the final benefit payment has been made. Consequently, the exact cost of plan benefits for the current employee group will not be determinable for 50 to 75 years. Since provision for this cost must be made prior to the exact determination, a model is established that will estimate the future cost of plan benefits. The model utilizes parameters which require assumptions as to the future occurrences of various events affecting the demographic profile of the employee group and the assets of the pension fund. Such actuarial assumptions include death, retirement, termination, disability, salary increases and investment return. Current and long-term economic factors, the nature of the covered workforce, and significant features of the plan must be considered in the selection of a set of actuarial assumptions to assure the reasonableness of the results predicted by the actuarial assumptions.

While care is taken in the selection of actuarial assumptions, actual experience is expected to deviate from these actuarial assumptions over the short term. The suitability of the actuarial assumptions is measured by how closely the experience of the plan, on a long-term basis, conforms to projected results. Deviations from projected results are called actuarial gains and losses. Periodic actuarial valuations will measure the extent of these gains and losses as of an actuarial valuation date. If either actuarial gains or losses predominate, then it is possible that one or more of the actuarial assumptions is no longer appropriate. Thus, actuarial assumptions must be continually monitored for reasonableness and subsequent cost estimates may be modified accordingly. While individual actuarial assumptions are intended to be representative, it is the aggregate effect of all actuarial assumptions working together that determines their appropriateness.

Actuarial Liabilities

Actuarial liabilities include the actuarial present value of all future benefits and expenses. To determine the actuarial present value of all future benefits, the probability of future events which establish benefit payments is forecast utilizing the actuarial assumptions. The plan provisions and current employee data are used to forecast the amount of benefits to be paid. Actuarial assumptions for survival among retired members are used to estimate the duration of these benefit payments. Each probable benefit payment is then discounted to the actuarial valuation date using the actuarial assumption for investment return. These discounted payments are then summed to arrive at the total actuarial present value of benefits.

Assets

The assets at any time are equal to the sum of present assets in the pension fund plus future assets. Future assets will result from future contributions and future investment return on all assets.

Actuarial Balance Sheet

The actuarial balance sheet of a retirement plan displays the fundamental financial status of the plan on the actuarial valuation date. As stated previously, the actuarial liabilities are the sum of the actuarial present value of all future projected benefit payments to current active and inactive plan members. Current assets in the pension fund plus the actuarial present value of future contributions comprise the total assets of the plan.

Actuarial Cost Method

To determine the funding requirements of the plan, it is necessary to adopt an actuarial cost method. The choice of the actuarial cost method does not affect the actuarial balance sheet financial status, which is a function only of the plan provisions, actuarial assumptions, employee data and assets. However, the actuarial cost method has a direct impact on the incidence of the funding requirements. The actuarial cost method allocates the actuarial present value of future employer contributions between the past and future, and thus establishes the Unfunded Actuarial Accrued Liability and Normal Cost, respectively.

The funding requirements for each plan year equal the Normal Cost for that year plus an amortization payment in respect of the Unfunded Actuarial Accrued Liability.

B. PENSION TERMINOLOGY

The following terms are defined in accordance with standard pension terminology adopted by the actuarial profession.

Accumulated Plan Benefit

The amount of an individual's benefit (whether or not vested) as of a specified date, determined in accordance with the terms of a pension plan and based on compensation (if applicable) and service to that date.

Actuarial Accrued Liability

That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of pension plan benefits and expenses which is not provided for by future Normal Costs.

Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension costs, such as mortality, withdrawal, disablement, and retirement; changes in compensation; rates of investment earnings and asset appreciation or depreciation; and other relevant items.

Actuarial Cost Method

A procedure for determining the Actuarial Present Value of pension plan benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, in the form of a Normal Cost and an Actuarial Accrued Liability.

Actuarial Gain (Loss)

A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.

Actuarial Present Value

The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions.

Actuarial Value of Plan Assets

The value of cash, investments and other property belonging to a pension plan, as used by the actuary for the purpose of an Actuarial Valuation.

Actuarial Valuation

The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a pension plan.

Actuarially Equivalent

Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.

Amortization Payment

That portion of the pension plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Normal Cost

That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

Projected Benefits

Those pension plan benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits.

Unfunded Actuarial Accrued Liability

The Excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.

C. ACCOUNTING TERMINOLOGY

The following terms are defined in accordance with accounting profession terminology.

Actuarial Present Value of Total Projected Benefits

The value as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment. Total projected benefits include all benefits estimated to be payable to all plan members as a result of their service through the valuation date and their expected future service.

Amortization Period (Closed or Open Basis)

A closed amortization period is a specific number of years that is counted from one date and, therefore, declines to zero with the passage of time. An open amortization period is one that begins again or is recalculated at each actuarial valuation date.

Annual Pension Cost

A measure of the periodic cost of an employer's participation in a defined benefit pension plan.

Annual Required Contributions of the Employer (ARC)

The employer's periodic required contributions to a defined benefit pension plan, calculated in accordance with the parameters.

Contribution Deficiencies (Excess Contributions)

The difference between the annual required contributions of the employer (ARC) and the employer's actual contributions in relation to the ARC.

Employer's Contribution

Contributions made in relation to the annual required contributions of the employer (ARC).

Funded Ratio

The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Investment Return Assumption (Discount Rate)

The rate used to adjust a series of future payments to reflect the time value of money.

Level Dollar Amortization Method

The amount to be amortized is divided into equal dollar amounts to be paid over a given number of years; part of each payment is interest and part is principal (similar to a mortgage payment on a building). Because payroll can be expected to increase as result of inflation, level dollar payments generally represent a decreasing percentage of payroll.

Level Percentage of Projected Payroll Amortization Method

Amortization payments are calculated so that they are a constant percentage of the projected payroll of active plan members over a given number of years. The dollar amount of the payments generally will increase over time as payroll increases due to inflation; in dollars adjusted for inflation, the payments can be expected to remain level.

Market-Related Value of Plan Assets

A term used with reference to the actuarial value of assets. A market-related value may be market value (or estimated market value) or a calculated value that recognizes changes in market value over a period of, for example, three to five years.

Net Pension Obligation (NPO)

The cumulative difference since the effective date of GASB Statement between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost

For GASB Statements 25 and 27, the term refers to employer normal cost.

Parameters

The set of requirements for calculating actuarially determined pension information included in financial reports.

Payroll Growth Rate

An actuarial assumption with respect to future increases in total covered payroll attributable to inflation; used in applying the level percentage of projected payroll amortization method.

Pension Expenditures/Expense

The amount recognized by an employer in each accounting period for contributions to a pension plan.