

**ACTUARIAL VALUATION UPDATED
AS OF FEBRUARY 28, 2003
FOR THE
LAW ENFORCEMENT AND CUSTODIAL OFFICER
SUPPLEMENTAL RETIREMENT FUND OF THE EMPLOYEES
RETIREMENT SYSTEM OF TEXAS**



April 8, 2003

Towers Perrin

April 8, 2003

Ms. Sheila W. Beckett
Executive Director
Employees Retirement System of Texas
18th & Brazos Streets
Austin, Texas 78711-3207

FEBRUARY 28, 2003 UPDATE TO THE LECOSRF VALUATION

Dear Sheila:

This report provides an update to the August 31, 2002 actuarial valuation of the Law Enforcement and Custodial Officer Supplemental Retirement Fund. The valuation was completed based on the actuarial assumptions (See Section II) and benefit provisions (See Section III) as of August 31, 2002 but reflects the effect of investment, salary, and payroll experience on the net asset balance through February 28, 2003.

ACTUARIAL PROCESS

The ERS staff provided Towers Perrin with asset information as of February 28, 2003, and annuitant, contributing and noncontributing member information as of January 31, 2003, or February 28, 2003, if available. Estimates of member contribution information was developed as of February 28, 2003 based on the trends of increases in contributions from September 2002 through January 2003. Noncontributing data as of August 31, 2002 was used without adjustment.

Towers Perrin received summary information regarding the level of contributions, level of monthly annuities and the number of noncontributing members with which we developed updated actuarial accrued liabilities. This process assumed the same distribution of contributing and noncontributing members by age, length of service, and gender. For annuitants as of February 28, 2003, the estimation process assumed the same distribution by age, type of benefit and optional benefit selection as the August 31, 2002 annuitants.

Ms. Sheila W. Beckett

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SUMMARY OF VALUATION RESULTS

Section I summarizes the results of the February 28, 2003 updated valuation. In accordance with legal requirements, actuarial gains or losses due to investment return and changes in compensation and payroll are reflected in the net asset balance recalculated as of February 28, 2003. The actuarial loss resulted from the recognition of the poor investment performance from prior years that was not previously recognized. Section IV summarizes the development of the actuarial value of assets as of February 28, 2003.

For the February 28, 2003 update, the normal cost percentage has not changed. The actuarial value of assets remains greater than the actuarial accrued liability. The remaining period that the net asset balance will support the current \$0 State contribution has decreased to 5.8 years as of February 28, 2003.

Please let us know if you have any additional questions in this regard.

Sincerely,

Leslie P. Finertie

Leslie P. Finertie, FSA, Enrolled Actuary

Steven R. Rusher

Steven R. Rusher FSA, Enrolled Actuary

LPF/SRR:cm

Enclosure

cc: Mr. William S. Nail — Employees Retirement System of Texas

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**LAW ENFORCEMENT AND CUSTODIAL OFFICER SUPPLEMENTAL RETIREMENT FUND
OF THE EMPLOYEES RETIREMENT SYSTEM OF TEXAS**

I. ACTUARIAL VALUATION RESULTS	February 28, 2003	August 31, 2002
Total Contribution Rate		
- current biennium	0.000%	0.000%
- thereafter (assumed)	1.753%	1.753%
Normal Cost		
- percent of payroll	1.753%	1.753%
- dollars	\$23,178,053	\$22,761,576
Actuarial Value of Assets	\$657,391,705	\$655,978,723
Actuarial Accrued Liability	\$539,217,553	\$526,204,753
Funded Ratio	121.9%	124.7%
Net Asset Balance	\$118,174,152	\$129,773,970
Remaining Period in Years that the Net Asset Balance will support the current \$0 State Contribution	5.8	6.6
Valuation Payroll	\$1,322,193,534	\$1,298,593,196
<u>Participant Information</u>		
LECOSRF Annuitants		
Number	3,603	3,502
Monthly Benefits	\$1,718,870	\$1,657,733
Contributing Members		
Number	40,518	40,926
Average Annual Salary	\$32,389	\$31,494
Noncontributing Members	15	15

**LAW ENFORCEMENT AND CUSTODIAL OFFICER SUPPLEMENTAL RETIREMENT FUND
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II. BRIEF SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODOLOGY

ACTUARIAL ASSUMPTIONS AS OF AUGUST 31, 2002

Investment Rate of Return: 8.0% per year, compounded annually, net of expenses.

Salary Increases: Salary increase rates include 4.0% annual increase for inflation plus increases for merit, promotion and longevity (MPL). See Appendix D – Summary of Actuarial Assumptions of the August 31, 2002 Actuarial Valuation Report for sample rates.

Payroll Growth: 4.0% per year, compounded annually.

Mortality:

Active Lives: Tables based on LECOSRF experience; see Appendix D – Summary of Actuarial Assumptions of the August 31, 2002 Actuarial Valuation Report for sample rates.

Service Retirees and Beneficiaries: 1994 Group Annuity Mortality, male and female tables. See Appendix D – Summary of Actuarial Assumptions of the August 31, 2002 Actuarial Valuation Report for sample rates.

Disability Retirees: Tables based on ERS and LECOSRF experience. See Appendix D – Summary of Actuarial Assumptions of the August 31, 2002 Actuarial Valuation Report for sample rates.

Disability Retirement:

Rates of Disability Retirement: Graded tables based on LECOSRF experience. See Appendix D – Summary of Actuarial Assumptions of the August 31, 2002 Actuarial Valuation Report for sample rates.

Option Selection Percentage:	<u>Standard</u>	<u>Option 1</u>	<u>Option 4</u>
Male Members	35%	50%	15%
Female Members	65%	20%	15%

<p>Beneficiary Characteristics: Male Members Female Members</p>	<p>Member is three years older than female beneficiary. Member is four years older than male beneficiary.</p>						
<p>Termination of Employment:</p>	<p>Graded tables based on LECOSRF experience. See Appendix D – Summary of Actuarial Assumptions of the August 31, 2002 Actuarial Valuation Report for sample rates.</p>						
<p>Service Retirement: Rates of Service Retirement:</p>	<p>Graded tables based on LECOSRF experience. See Appendix D – Summary of Actuarial Assumptions of the August 31, 2002 Actuarial Valuation Report for sample rates.</p>						
<p>Form of Payment:</p>	<p>Standard Annuity (Life Annuity).</p>						
<p>Credited Service:</p>	<p>Assumed one year earned in each future year employed. Service credit upon service retirement is assumed to be increased by 2.3% for accumulated leave.</p>						
<p>Death Benefit Plan: Option Selection Percentage: Male Members Female Members</p>	<table border="0"> <tr> <td style="text-align: center;"><u>Option 1</u></td> <td style="text-align: center;"><u>Option 4</u></td> </tr> <tr> <td style="text-align: center;">75%</td> <td style="text-align: center;">25%</td> </tr> <tr> <td style="text-align: center;">40%</td> <td style="text-align: center;">60%</td> </tr> </table>	<u>Option 1</u>	<u>Option 4</u>	75%	25%	40%	60%
<u>Option 1</u>	<u>Option 4</u>						
75%	25%						
40%	60%						
<p>Beneficiary Characteristics: Male Members Female Members</p>	<p>Member is three years older than female beneficiary. Member is four years older than male beneficiary.</p>						
<p>Missing Data:</p>	<p>Entry age is assumed to be age 30 and sex is assumed to be male if data is missing.</p>						

**LAW ENFORCEMENT AND CUSTODIAL OFFICER SUPPLEMENTAL RETIREMENT FUND
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ACTUARIAL COST METHODS AND PROCEDURES AS OF AUGUST 31, 2002

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 increase percentage effective on or after September 1 and projected according to the actuarial assumptions for the upcoming fiscal year.

D. CHANGES IN ACTUARIAL METHODS AND PROCEDURES

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

**LAW ENFORCEMENT AND CUSTODIAL OFFICER SUPPLEMENTAL RETIREMENT FUND
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III. BRIEF SUMMARY OF PLAN PROVISIONS AS OF AUGUST 31, 2002

A. MEMBERSHIP

- A "law enforcement officer" who has been commissioned by the Department of Public Safety, Texas Alcoholic Beverage Commission, State Purchasing and General Services Commission Capital Area Security Force, Parks and Wildlife Department and commissions recognized by the Commission on Law Enforcement Officers Standards and Education.
- A "custodial officer" employed by the Texas Department of Corrections and certified by the department as having normal duties of supervising and having direct contact with inmates.

B. SERVICE RETIREMENT BENEFITS

Service Retirement Eligibility:

Last day of any month following attainment of:

- age 50 and 20 years of service as a law enforcement or custodial officer or,
- the sum of age and service is at least 80.

Standard Service Retirement Annuity:

Monthly annuity payable for life equal to a percentage of final average compensation, multiplied by years and months of service. Final average compensation is the highest 36 months average paid while a law enforcement or custodial officer. The percentage is the sum of the percentage factor for a standard service retirement under ERS plus 0.5%.

The monthly annuity payable shall be reduced by retirement benefits payable for service as a law enforcement or custodial officer under the regular employee provisions of ERS.

Early Service Retirement Eligibility:

Last day of the month following completion of 20 years of service.

Reduced Early Service Retirement Annuity:

Standard service retirement benefit reduced by an early retirement factor if the sum of age and service is less than 80.

<u>Age at Retirement</u>	<u>Percentage of Normal Retirement Benefit</u>
38	33.0%
39	36.1
40	39.5
41	43.2
42	47.3
43	51.8
44	56.7
45	62.2
46	68.3
47	75.0
48	82.5
49	90.8

The monthly benefit is further reduced by the amount of the monthly benefit that the retiree is entitled to receive at age 50 for service as a law enforcement or custodial officer according to the regular retirement benefit provisions of ERS.

Optional Service Retirement Benefits:

Five optional forms plus partial lump sum option assumed actuarially equivalent to life annuity. Member must choose the same form under ERS and this Fund.

C. DISABILITY RETIREMENT BENEFITS

Occupational Disability Retirement:

Standard service retirement benefit percentage, with a minimum of 50%, times member's final average compensation, without reduction for age. Maximum benefit is 100% of salary. If the member's condition makes the person incapable of gainful occupation and is considered total disability under federal Social Security law, the standard disability retirement annuity is 100% of the member's final average compensation. Benefit is offset by payment from ERS under the standard disability provisions applicable to regular employees.

Nonoccupational Disability

None from this Fund.

Retirement:

Optional Disability Retirement Benefits:

Five optional forms assumed actuarially equivalent to standard annuity. Member must choose the same form under ERS and this Fund.

D. DEATH BENEFITS

Before Retirement with 20 or More Years of Service:

Death benefit plan filed by member, beneficiary or estate payable as a lifetime annuity or 10-year certain annuity, offset by the death benefit payable from ERS under provisions for regular employees.

After Retirement:

Based on optional form selected.

E. VESTED BENEFITS AFTER TERMINATION OF EMPLOYMENT

Service Retirement Benefit:

Deferred retirement benefit with 20 or more years of service, forfeitable if regular employee contributions from ERS are withdrawn.

Death Benefit:

Vested in death benefit plan with 20 years of service. Forfeitable if regular employee contributions are withdrawn from ERS before death.

F. WITHDRAWAL BENEFITS

None from this Fund.

G. CONTRIBUTIONS

Members:

None.

State of Texas:

For fiscal year 2003 there is no State contribution.

H. CHANGES IN PLAN PROVISIONS

There were no changes in plan provisions since the prior valuation.

I. REFERENCES

For a complete description of all of the provisions of the law which describe the Commissioned Law Enforcement and Custodial Officer Supplemental Retirement Fund,

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.

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IV. BRIEF DEVELOPMENT OF ACTUARIAL VALUE OF PLAN ASSETS

	<u>February 28, 2003</u>	<u>August 31, 2002</u>
1. Actuarial value of plan assets, prior valuation	\$655,978,723	\$647,756,655
2. Contributions	\$0	\$5,275
3. Benefits paid	\$11,598,068	\$20,762,288
4. Expected investment return at 8%, prorated for period less than one year	\$26,007,188	\$50,990,252
5. Expected value of plan assets: (1) + (2) - (3) + (4)	\$670,387,843	\$677,989,894
6. Market value of plan assets	\$540,426,464	\$567,934,041
7. Difference: (6) - (5)	(\$129,961,379)	(\$110,055,853)
8. Adjustment to expected value: 20% x (7), adjusted for period less than one year	(\$12,996,138)	(\$22,011,171)
9. Actuarial value of plan assets: (5) + (8)	\$657,391,705	\$655,978,723