

**ACTUARIAL VALUATION UPDATED
AS OF FEBRUARY 28, 2003
FOR 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 ERS VALUATION

Dear Sheila:

This report provides an update to the August 31, 2002 actuarial valuation of the Employees Retirement System of Texas as required by law. 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.

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.

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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. Consequently, the amortization period remains at 0.0 years.

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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EMPLOYEES RETIREMENT SYSTEM OF TEXAS

I. ACTUARIAL VALUATION RESULTS	February 28, 2003	August 31, 2002
Total Contribution Rate	12.000%	12.000%
Normal Cost		
- percent of payroll	12.709%	12.709%
- dollars	\$652,267,749	\$632,869,285
Actuarial Value of Assets	\$19,080,325,916	\$18,909,071,718
Actuarial Accrued Liability	\$18,951,271,469	\$18,449,520,698
Funded Ratio	100.7%	102.5%
Net Asset Balance		
- from member contributions	\$62,217,149	\$221,227,861
- from state contributions	66,837,298	238,323,159
Amortization Period in Years	0.0	0.0
Valuation Payroll	\$5,132,334,371	\$4,979,531,987
 Participation Information		
Net ERS Annuitants		
Number	52,517	51,738
Monthly Benefit (ERS Portion)	\$78,103,054	\$76,196,075
Contributing Members		
Number	149,063	148,957
Average Annual Salary	\$34,042	\$33,053
Noncontributing Members		
Vested	11,064	11,128
Nonvested	38,525	37,578

EMPLOYEES RETIREMENT SYSTEM OF TEXAS

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:	
Employee Class Members:	Salary increase rates include 4.0% annual increase for inflation plus increases for merit, promotion and longevity. See Appendix D – Summary of Actuarial Assumptions of the August 31, 2002 Actuarial Valuation Report for sample rates.
Elected Class Members:	Legislators receive no increases, but district judge salary used for benefits is expected to increase 6.0% 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:	6.0% per year, compounded annually.
Mortality:	
Active Lives:	Tables based on ERS 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:	Table based on ERS 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 ERS 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%
Beneficiary Characteristics:			
Male Members	Member is three years older than female beneficiary.		
Female Members	Member is four years older than male beneficiary.		
Termination of Employment:	Graded tables based on ERS experience. See Appendix D – Summary of Actuarial Assumptions of the August 31, 2002 Actuarial Valuation Report for sample rates.		
Withdrawal of Contributions:	Graded tables based on ERS experience. See Appendix D – Summary of Actuarial Assumptions of the August 31, 2002 Actuarial Valuation Report for sample rates.		
Service Retirement:			
Rates of Service Retirement:	Graded tables based on ERS experience. See Appendix D – Summary of Actuarial Assumptions of the August 31, 2002 Actuarial Valuation Report for sample rates.		
Form of Payment:	Standard Annuity (Life Annuity).		
Credited Service:	Assumed one year earned in each future year employed. Service credit at retirement is assumed to be increased by 2.3% 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:	<u>Option 1</u>	<u>Option 4</u>
Male Members	75%	25%
Female Members	40%	60%

Beneficiary Characteristics:

Male Members Member is three years older than female beneficiary.

Female Members Member is four years older than 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.

ACTUARIAL COST METHODS AND PROCEDURES AS OF AUGUST 31, 2002A. 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 available net asset balance is the net asset balance reduced by the actuarial present value of the excess of future normal costs over contributions assuming the current contribution rate is maintained permanently.

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.

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 have been adopted since the prior actuarial valuation.

EMPLOYEES RETIREMENT SYSTEM OF TEXAS

III. BRIEF SUMMARY OF PLAN PROVISIONS AS OF AUGUST 31, 2002

A. MEMBERS

All employees of state agencies in a full-time or part-time position 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, a licensed Railroad Commission employee who has served at least five years as an investigator for the oil field theft detection division, 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. The standard service retirement annuity may not be less than \$150 nor more than 100% of average monthly compensation. Average monthly compensation is the highest 36 month average.

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%. 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.

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:

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:

10 or more years of service. Nonoccupational disability benefit forfeitable if contributions withdrawn before disability.

Death Benefit:

Vested in death benefit plan if 10 years of service, forfeitable if contributions withdrawn before death.

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.

State of Texas: The State contribution is 6.00% 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

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 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

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	\$18,909,071,718	\$18,394,458,066
2. Contributions	\$311,074,059	\$627,906,826
3. Net transfers from TRS	\$11,801,075	\$21,092,046
4. Benefits paid	\$536,866,034	\$977,428,924
5. Expected investment return at 8%, prorated for period less than one year	\$752,083,051	\$1,458,419,443
6. Expected value of plan assets: (1) + (2) + (3) - (4) + (5)	\$19,447,163,869	\$19,524,447,457
7. Market value of plan assets	\$15,778,784,337	\$16,447,568,765
8. Difference: (7) - (6)	(\$3,668,379,532)	(\$3,076,878,692)
9. Adjustment to expected value: 20% x (8), adjusted for period less than one year	(\$366,837,953)	(\$615,375,739)
10. Actuarial value of plan assets: (6) + (9)	\$19,080,325,916	\$18,909,071,718