

## COMPREHENSIVE ANNUAL FINANCIAL REPORT

For Fiscal Year Ended August 31, 1989

**Teacher Retirement System of Texas** 







## 1989

# COMPREHENSIVE ANNUAL FINANCIAL REPORT

For Fiscal Year Ended August 31, 1989 Years' Highlights

		RUST FUND
	1989	1988
MEMBERSHIP		
Member Accounts	496,189	483,453
New Members	65,964	63,418
Members Withdrawing	38,142	37,411
Service Retirements	5,734	5,428
Disability Retirements	602	640
In-Service Deaths	687	777
Deaths After Retirement	2,598	2,727
Annuitants	108,626	105,035
IONETARY		
Member Deposits	\$ 637,979,017	\$ 597,368,593
Accounts Refunded	118,507,638	113,178,276
Benefits Paid	935,943,118	874,560,122
State Contributions	704,644,447	663,222,962
Increase in Long Term		
Investment Holdings	2,300,414,700	2,089,350,910
Income from Investments	1,549,338,981	1,408,427,998
Administrative Expenses	20,399,555	16,506,750
	EXPENDABLE	TRUST FUND
NROLLMENT	70.010	70.650
Retirees	76,212 782	73,652
Surviving Spouses	702	670 3
Surviving Dependent Children Dependents	7,842	7,062
	7,042	1,002
ONETARY	<b>计图:设计图</b> 数是	
Member Contributions	\$ 20,789,215	\$ 19,598,520
State Contributions	37,420,711	31,357,632
Retiree Contributions	25,428,632	23,948,600
Income from Investments	8,802,914	5,703,832
Administrative Expenditures	561,343	484,684
Claim Expenditures	51,529,034	41,472,241
Retention Expenditures	4,650,730	4,130,071

## TABLE OF CONTENTS

INTRODUCTORY SECTION	
Board of Trustees	3
Executive Secretary's Message	4
Decade of the '80s	6
Staff and Advisors	8
FINANCIAL SECTION	
State Auditor's Opinion Letter	11
General Purpose Financial Statements	
Exhibit I - Combined Balance Sheet - All Fund Types	
and Account Groups	12
Exhibit II - Comparative Statement of Revenues,	
Expenditures and Changes in Fund Balance -	
Expendable Trust Fund	16
Exhibit III - Comparative Statement of Revenues,	
Expenses and Changes in Fund Balance -	17
Pension Trust Fund Exhibit IV - Comparative Statement of Changes in	11
Financial Position - Pension Trust Fund	18
Notes to the Financial Statements	19
Combining and Individual Fund Financial Statements	.10
Exhibit A - Combining Balance Sheet - Fiduciary Fund Types	30
Exhibit B - Statement of Changes in Assets and	
Liabilities - Agency Funds	34
Supporting Schedules	
Schedule 1 - Comparative Schedule of Revenues,	
Expenses and Changes in Account Balance -	
Pension Trust Fund	
Member Savings Account	36
State Contribution Account	37
Retired Reserve Account	38
Benefit Increase Reserve Account	39 40
Interest Account	41
Expense Account Schedule 2 - Combined Schedule of Revenues and Expenses/	41
Expenditures for the Expense Account and the Expense	
Reserve Budget and Actual on Budgetary Basis -	
Fiduciary Funds	42
Schedule 3 - Comparative Schedule of Investment	
Portfolio - Pension Trust Fund	44
ACTUADIAL SECTION	
ACTUARIAL SECTION	49
Actuary's Letter Actuarial Balance Sheet	50
Summary of Benefits	52
Guinnary of Benefits	
INVESTMENT SECTION	
Investment Overview	55
Return on Assets	56
Investment Summary	57
Distribution of Investments	58
STATISTICAL SECTION	
Growth of the System	61
Revenues and Expenses	62
Sources and Distributions	62
Income from State, Members, and Investments	63
Payments and Reserves	63
Retiree Health Insurance	64

TEXAS STATE DOCUMENT
UNIVERSITY OF TEXAS PAN AMERICAN
EDINBURG, TEXAS 78539-2999

## **Introductory Section**

U.S. GOVERNMENT DOCUMENT DEPOSITORY LIBRARY NO. 610

AUG 2 9 1990 UNIVERSITY OF TEXAS PAN AMERICAN EDINBURG, TEXAS 78539-2999

#### **Board of Trustees**

Mary W. Kasting 1989, Administrative Assistant, Copperas Cove ISD, Copperas Cove



Edward H. Wicker (Chairman), 1991, Rancher and Businessman, Beeville



Stephen C. Mahood 1993, Investments/ Businessman, Dallas



Sheila Payne (Vice Chairman), 1991, Counselor, Arlington ISD, Arlington



Frank Monroe 1993, Retired Superintendent, Highland Park ISD, Dallas



Henry M. Bell, Jr. 1989, Senior Chairman of the Board, First City National Bank, Tyler



C. A. Roberson 1993, Chancellor, Tarrant County Junior College, Fort Worth



George M. Crowson 1989, Harris County School Superintendent, Houston



Dana Williams 1991, Retired Superintendent, Corpus Christi ISD, Corpus Christi



Terms expire August 31



he Board of Trustees is responsible for the administration of the system under provisions of the state constitution and

laws. The board is composed of nine trustees who are appointed to staggered terms of six years. Three trustees (Bell, Mahood, and Wicker) are appointed by the governor. Two trustees (Williams and Crowson) are appointed by the State Board of Education. Two trustees (Payne and Kasting) are appointed by the governor from the three public school district active member candidates who have been nominated for each position by employees of public school districts. One trustee (Roberson) is appointed by the governor from the three higher education active member candidates nominated by employees of institutions of higher education. One trustee (Monroe) is appointed by the governor from the three retired member candidates who are nominated by retired TRS members. Appointments are subject to confirmation by the Senate.

## Executive Secretary's Message

#### Retirement law changes

The 71st Texas Legislature enacted retirement law changes in 1989 which were of great significance, fulfilling the wishes of many for improvements to early retirement benefits, vesting, retirement options, and post-retirement increases.

A consortium of 25 professional associations, reminiscent of the spirit of unity which made passage of retiree health insurance legislation a reality in 1985, gave its support to legislation which provided the

following:

• Normal age retirement without reduction to members age 55 with 30 years of service and an improved early age retirement schedule began September 1, 1989. Annuities of those taking early age retirement in May through August 1989 could be adjusted to the new provisions beginning September 1, 1989.

• A pop-up feature for service retirement options 1 and 2 allowed the retiree to begin receiving a standard annuity if the designated beneficiary predeceases the retiree. The new options became effective September 1, 1989. May, June, July, and August 1989 retirees could choose either the old or new options 1 and 2 provisions. The new pop-up options have a greater reduction from the standard annuity than the previous options 1 and 2.

• Years required for members to be vested for service retirement benefits upon reaching retirement age - even though they leave covered employment, if they do not withdraw their deposits - was reduced

from 10 years to 5 years.

• A \$10,000 lump sum payment to the beneficiary of a retiree who dies after September 1, 1989 was added as an optional death benefit.

• Retiree and beneficiary benefit increases not to exceed \$100 per month were granted, beginning September 1, 1989,

based on date of retirement or death of a member, as follows: 16 percent before September 1, 1975; 12 percent after August 31, 1975 but before September 1, 1980; 8 percent after August 31, 1980 but before September 1, 1983; 4 percent after August 31, 1983 but before September 1, 1986. Increases did not apply to the survivor benefit payments or to disability retirement benefits for persons with less than 10 years of creditable service.

Funding of the annuity increases was provided by greater than expected income

earned by TRS investments.

In addition to benefit improvements, the Legislature authorized more efficient custodial arrangements for assets through depository trust use and securities lending that is expected to earn the fund millions of

dollars each year.

The 71st Legislature set the rate for the state contribution to TRS at 7.65 percent for the next four years, beginning September 1, 1989. The law states that the rate will return to 8 percent beginning September 1, 1993. Payment of state contributions for June, July, and August 1991 will be delayed until September 1991. The state will pay TRS the greater of 8 percent or the rate of yield on the deferred amount that TRS would have earned had the payments not been delayed.

TRS was included in a law passed by the 71st Legislature concerning property rights of Texas public employee pension plan participants and their spouses and qualified domestic relations orders.

Effective September 1, 1990, TRS laws, except for some adopted late in the session, were recodified, renumbered and transferred from Title 110B, Revised Statutes, to Subchapter C of Title 8, Texas Government Code.

These benefit improvements and changes were made without any additional cost to the taxpayers of the state.

#### **Investments**

The TRS pension trust fund investment portfolio grew \$2.2 billion, or 12.7 percent in book value, during the 1988-89 fiscal year. The total book value as of August 31, 1989, was \$19.3 billion. Market

value of the fund increased a more spectacular \$4.75 billion, or 24.8 percent during the year. The total market value of the fund was \$23.94 billion at year end.

Investment performance continues to be ranked as "very satisfactory," with a 17.5 percent total rate of return over the last five-year period. This rate of return includes the unrealized appreciation in market value. More detailed statistics are contained in the body of this report.

#### Growth of the system

Benefits paid during 1988-89 approached the \$1 billion mark at \$935,943,118, and the number of annuitants reached 108,626. Member accounts, at 496,189, came close to the one-half million level. Service retirements showed increases while disability retirements, in-service deaths, and deaths after retirement were slightly decreased. The number of members withdrawing accounts increased as did the value of accounts refunded.

Despite a fluctuating state contribution rate and benefit improvements paid for by TRS, the system's unfunded actuarial accrued liability remains below the 31-year funding ceiling established by the legislature.

#### Services

As the size of the system increases, TRS continues to emphasize services which are offered to its members and annuitants. Important programs such as preretirement education continue to be enhanced and expanded. Instructive videotapes and special publications designed to encourage members to begin thinking about their retirement early in their careers have been issued. Individual retirement counseling, offered at locations around the state as well as in Austin, continues to grow. Members counseled at the regional meetings totaled 2,318 in 1988-89. In addition, TRS staff made presentations to 131 active and retiree groups. Sixty-three group health insurance presentations were also made.

To keep members and annuitants informed, a general information booklet describing TRS benefits is mailed to each member and to new members as they are added. An annual Statement of Account containing the member's account balance, salary, deposits, and fees for the year and an estimate of any eligible service retire-

ment benefit is provided for each member. TRS News - containing financial and actuarial information, changes in retirement law, Board of Trustees election information and ballots, and other pertinent information - is mailed to members and annuitants at their home addresses. A monthly newsletter is mailed to school districts, professional organizations, and persons in key leadership positions in education in the state.

With the advent of the '90s, TRS can look back with satisfaction on a decade of progress and growth. As the number of members and retirees continues to grow, TRS must strive to improve and expand its services to them. Construction of additional office space to be occupied in 1990 will aid in this endeavor. The system will maintain its ongoing commitment to provide courteous and efficient service which members and annuitants deserve into the '90s and beyond.

#### Goals for the future

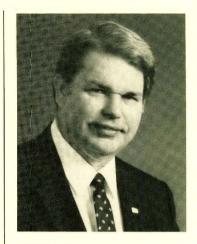
The system must remain financially healthy and actuarially sound to pay the benefits already provided by law. Some other worthwhile objectives include:

- Funding at an even, predictable, dependable level
- An orderly, reliable procedure for post-retirement increases rather than ad hoc increases
- Continued improvements of TRSmanaged health insurance and sound option for long-term care insurance
- Well informed, alert members who will make early plans for their transition to an adequately financed and happy retirement life.

Sincerely,

Bruce Hineman

Bruce Hineman Executive Secretary



1988-89

On behalf of the Board of Trustees and staff of the Teacher Retirement System of Texas, we are pleased to present this Comprehensive Annual Financial Report for the fiscal year ended August 31, 1989, the 52nd year of operation of the system. In addition to the financial statements audited by the State Auditor, this report contains an actuarial valuation for the fiscal year ended August 31, 1989 by The Wyatt Company of Dallas, a summary of TRS benefits, and other statistical and historical information.

#### Decade of the '80s

The decade of the '80s saw remarkable growth and performance for TRS and its constituents.

## TRS funded \$1 billion in retiree increases, including:

1981 - 7 to 21 percent 1984 - 3 to 9.5 percent 1987 - 5 to 20 percent 1989 - 4 to 16 percent

The state funded a portion of the 1981 increases. Percentage of increase was based on retirement date.

Net result: A person who retired in 1980 received post-retirement increases which, compounded, amounted to 26.9 percent. The percentage increase was higher for those who retired before 1980.

## Benefits were substantially improved by the Legislature.

• Salary basis: Reduced from five- to three-best-years average salary for benefit calculation. (1981)

• Early age retirement: Unreduced standard annuity at age 55 with 30 years of service, plus better reduction schedule for retirement with 20 years before age 60. (1989)

• Pop-up feature: Options 1 and 2 provide that the retiree's benefit will "pop up" to the standard (and higher) annuity if the designated beneficiary dies first. (1989)

• Vesting: Reduced from 10 to 5 years. (1989)

• Tax breaks: Allowed TRS members to participate in certain qualifying salary reduction plans without losing TRS salary credit. (1985)

• Tax shelter: Effective January 1, 1988, provided tax sheltering of employee contributions to TRS, thus reducing salary for tax purposes without changing the contract salary amount, increasing takehome pay, and deferring taxes on contributions until after retirement. (1987)

• Grace period: Allowed retirees 45 days after retirement to revoke retirement, return benefits, and return to active service. (1981)

• Return to service: Reduced from five to two years the consecutive service required after a retired member returns to active service before re-retirement is allowed. (1981)

• Part-time employment: A retiree's re-employment in public education without loss of benefits was allowed for as much as full time for five consecutive months between September and June, as a substitute for no more than 120 days during a school year, or on no more than half time during any month. Disability retirees

allowed employment as substitute for no more than 90 days in a school year. (1985)

• Beneficiaries: Lump sum payment to beneficiary upon death of a retiree, and as part of the survivor benefit plan which a beneficiary may select upon the death of an active member, was increased from \$1,500 to \$2,500 for deaths on or after September 1, 1985. (1985)

- The beneficiary of a retiree who dies after August 31, 1989 may select the previous survivor benefits or a \$10,000 lump sum payment. (1989)

- Lump sum death benefit to beneficiary of active members was increased to twice the member's salary or \$60,000, whichever is less, for deaths occurring on or after September 1, 1987. (1987)

- Death benefit at least equal to member's accumulated contributions at time of death was guaranteed. (1987)

Also in 1989, TRS was brought under provisions of the State Qualified Domestic Relations Order (QUADRO) law pertaining to community rights of ex-spouses of TRS members.

## Group health insurance for TRS retirees established by Legislature.

TRS was designated to administer the program enacted in 1985. It is called TRS-Care and it began operation September 1, 1986.

TRS-Care provides basic health insurance coverage at no cost to TRS retirees not covered by any other state-funded program. A higher level of coverage, and coverage for spouses and dependents of retirees as well as for surviving spouses and dependent children of active public school members with 10 or more years of service who died on or after September 1, 1986, may be purchased.

The program is funded by contributions of .25 percent of annual compensation paid by public school employees, state contributions now at .5 percent of that same compensation, and payments by participants for expanded coverage.

Aetna Life Insurance Company was chosen as the insurance carrier. Mail-order prescriptions, available under TRS-Care 3, are provided at a minimum price by National Rx Services. To serve TRS retirees, Aetna established a special claims office in San Antonio and National Rx set up a distribution point in Dallas.

A nine-member advisory committee of active and retired school people held hear-

ings and then made recommendations to the TRS Board on minimum standards, plan features, rules changes, and legislation.

More than 76,000 TRS retirees, plus additional thousands of dependents and survivors, were enrolled in TRS-Care as of August 31, 1989.

## Outstanding investment performance helped fuel expansion.

Investments by the system consistently outperformed most of its peers during the decade, and at a fraction (1/24) of the management fees paid money managers for

other systems.

Book value of the TRS fund grew from \$5.3 billion on August 31, 1980 to \$19.3 billion by August 31, 1989. This growth was despite (a) reduced state contributions to TRS for most of the decade and (b) a severe stock market decline. However, TRS recovered rather quickly from that October 19, 1987 drop (the worst since the Great Depression) because of the high quality and diversity of its investment portfolio.

The investment success enabled (a) TRS to maintain a relatively short estimated period for amortizing its unfunded liability, (b) the state to reduce contributions to ease state budget problems, and (c) TRS to still fund four postretirement increases during the decade.

Investments now add more to the TRS fund than state and member contributions combined. In fiscal 1989 the sources of TRS funds were: State, 21 percent; members, 20 percent; and investments, 59 percent.

## State rate of contributions to TRS down for much of decade.

The state contribution rate to TRS was 8.5 percent for the 1979-83 four-year period, then was lowered to 7.1 percent for two years, back up to 8 percent for the next two years, down to 7.2 percent for 1987-89 biennium, and will be 7.65 percent for the four years beginning September 1, 1989.

TRS members contributed 6.65 percent for 1979-83, then 6 percent for 1983-85, and

6.4 percent since then.

## Membership has had sustained growth.

The number of TRS members grew from 261,290 on August 31, 1980 to 496, 189 as of August 31, 1989.

Annuitants on August 31, 1989 num-

bered 108,626, compared to 72,832 on August 31, 1980. Benefit payments to annuitants and beneficiaries zoomed from \$312 million to \$935 million during the same period.

## New services, equipment, and facilities have kept pace, including:

- Purchase of a larger, faster mainframe computer to provide speedier service to members.
- Participation in the statewide Electric Pages system of telecommunication to provide information to school districts and other participants.
- Production of computer diskettes with which members can calculate their own projected retirement benefit estimates.
- Production of videotapes on the system's 50-year history and the TRS-Care group insurance.
- Increased emphasis on preretirement education and planning for active members. *Planning Your Retirement* workbook was prepared and distributed to some 75,000 members nearing retirement eligibility. Also produced and sent to school districts a companion *Facilitator's Guide* to assist school districts in holding preretirement education seminars for employees.
- Produced and distributed a videotape, For Your Service: TRS Benefits, to each school district to assist in explaining benefits and the importance of long-term retirement planning.
- Expanded electronic fund transfer to replace checks in distributing monthly annuity payments. Some 65 percent of annuitants now use EFT.
- Increased communication with members: Began TRS-Care Pulse newsletter for group insurance participants. The everymember newsletter was renamed TRS News and expanded. The monthly Up-Date continued to keep school officials informed. And a special TRS-written booklet, A look at the future, went to each member to encourage individual retirement planning.
- The 50th anniversary of TRS (1986-87) was observed with appropriate ceremonies and publication of a 250-page book, *Vision, Vigilance, and Victory,* recording the system's history.
- Construction began in 1987 on a new TRS office building to adjoin the existing headquarters. Occupancy was expected in February 1990.







#### Staff & Advisors

#### ADMINISTRATIVE STAFF

Bruce Hineman, Executive Secretary Ronald Douglas, Deputy Executive Secretary

Joe Perrone, Chief Investment Officer Randy Mercer, Director, Member Benefits

William Baker, General Counsel Wayne Fickel, Controller Stanford Blake, Director, Group Insurance

Billy W. Mauldin, *Director*, Management Information Systems John Bird, *Director*, Staff Services

#### INVESTMENT COUNSEL

Wellington Management Company, Boston

#### REAL ESTATE COUNSEL

Roulac Real Estate Consulting Group, Chicago

#### **CONSULTING ACTUARY**

The Wyatt Company, Dallas

## INVESTMENT ADVISORY COMMITTEE

Gordon T. Wise, Chairman, Partner, Tri-Vest Group, Ltd., Houston

Edward B. Kelley, Vice Chairman, Executive Vice President - Real Estate, USAA, San Antonio

Harold M. Achziger, President, Texas American Investments Management, Inc., Fort Worth

Marc Cuenod, Executive Director and Treasurer, The Sealy and Smith Foundation for John Sealy Hospital, Galveston

David E. Hoener, Senior Vice President, Wertheim Schroder, Dallas

Van R. Hoisington, President, Hoisington Investment Management Co., Houston

A. S. (Tony) Levatino, Executive Vice President, NCNB Texas National Bank, Dallas

John S. Williams, Vice President Fixed Income, Barrow, Hanley, MeWhinney & Strauss, Inc., Dallas

#### MEDICAL BOARD

Dr. Seldon O. Baggett, Austin Dr. Homer R. Goehrs, Austin Dr. Donald E. Pohl, Austin

#### TEXAS PUBLIC SCHOOL RETIRED EMPLOYEES GROUP INSURANCE PROGRAM ADVISORY COMMITTEE

Vivian R. Bowser, Chairperson, Houston

John D. Thompson, Vice Chairman, Seminole Mary Sue Beaty, Kilgore

Janella W. Gutierrez, Corpus Christi Wadella Heath, Killeen Angel Ramirez, El Paso Russell E. Sayers, Austin Beverly Tabor, Mesquite Nelda Van Dyke, Brenham

# Financial Section



#### OFFICE OF THE STATE AUDITOR

TWO COMMODORE PLAZA 206 EAST NINTH ST., SUITE 1900

MAILING: P.O. BOX 12067 AUSTIN, TEXAS 78711-2067

PHONE:

(512) 479-4700

LAWRENCE F. ALWIN, CPA State Auditor

SHARON W. LEGGETT, CPA First Assistant

April 6, 1990

Members of the Board of Trustees. **Teacher Retirement System of Texas** Honorable William P. Clements, Jr., Governor Members of the Legislature State of Texas

Ladies and Gentlemen:

We have audited the financial statements, listed as Exhibits I-IV in the Table of Contents, of the

#### TEACHER RETIREMENT SYSTEM OF TEXAS

a component unit of the State of Texas, as of and for the year ended August 31, 1989. These financial statements are the responsibility of the System's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Teacher Retirement System of Texas at August 31, 1989, and the results of its operations and the changes in financial position of the Pension Trust Fund for the year ended in conformity with generally accepted accounting principles.

Our audit was made for the purpose of forming an opinion on the financial statements taken as a whole. The combining and individual fund financial statements, identified as Exhibits A and B and supplemental schedules, identified as Schedules 1 through 3, in the table of contents of the Financial Section, are presented for purposes of additional analysis and are not a required part of these financial statements. This information has been subjected to the auditing procedures applied in our audit of Exhibits I-IV and, in our opinion, is fairly stated in all material respects in relation to the financial statements taken as a whole.

Respectfully,

State Auditor

### **Combined Balance Sheet**

ALL FUND TYPES AND ACCOUNT GROUPS - AUGUST 31, 1989 (With Comparative Memorandum Totals for August 31, 1988)

	FIDUCIA	RY FUND TYPE
ASSETS	Tro	ıst and Agency (Exhibit A)
CURRENT ASSETS:		
Cash in Bank	\$	2,745,300
Cash in State Treasury		220,849,894
Short Term Investments		167,479,070
Accounts Receivable		accidence and two sales of the
Sale of Investments		5,281,014
Member Contributions		21,347,305
State Contributions - School Districts		1,140,410
Other		854,861
Due from General Revenue Fund - State Contributions		46,578,377
Due from School Districts		5,505,974
Dividends Receivable		47,112,728
Interest Receivable		225,661,319
Prepaid Assets		146,410
TOTAL CURRENT ASSETS	\$	744,702,662
LONG TERM INVESTMENTS:		
Fixed Income	Φ.	2 5 41 105 045
U S Treasury		3,541,125,845
U S Government Agency - Mortgages		3,231,698,128
U S Government Agency - Other		950,677,429 10,000,000
Municipals		175,730,807
Mortgages Other		2,785,114,412
Corporate Real Estate	•	2,700,114,412
Direct Participating Mortgages		1,399,716,883
Fixed Rate Mortgages		512,791,558
Equities Equities		6,339,058,485
TOTAL LONG TERM INVESTMENTS	\$1	8,945,913,547
FIXED ASSETS:		
Land - Home Office	\$	1,658,310
Land - Subsidiaries		30,977,012
Building - Home Office		3,368,785
Building - Subsidiaries		91,977,173
Building - Construction in Progress		19,572,442
Furniture and Equipment - Home Office		3,931,925
Furniture and Equipment - Subsidiaries		16,090
Subtotal	\$	151,501,737
Less Accumulated Depreciation		(6,136,612
NET FIXED ASSETS	\$	145,365,125
OTHER DEBITS:		
Resources to be Provided in Future Years	\$	
Deferred Assets	*	14,216,222
TOTAL OTHER DEBITS	\$	14,216,222
TOTAL ASSETS AND OTHER DEBITS	<u>\$1</u>	9,850,197,5

ACCOUN	T GROUPS			TOTALS -	- MEMORANDU	M ONLY
eral Fixed Assets	Ge T	neral Long erm Debt		1989	August 31,	1988
\$	\$		\$	2,745,300 220,849,894 167,479,070	\$	1,096,557 91,122,199 477,100,000
				5,281,014 21,347,305 1,140,410 854,861 46,578,377 5,505,974 47,112,728 225,661,319 146,410		600,942 17,840,404 1,337,527 198,274 28,463,798 4,952,938 43,867,074 202,450,091 161,771
\$ -0-	\$	-0-	\$	744,702,662	\$	869,191,575
\$	\$			3,541,125,845 3,231,698,128 950,677,429 10,000,000 175,730,807 2,785,114,412	\$	3,164,130,378 2,829,231,626 922,109,257 10,000,000 266,558,311 2,684,760,499
				1,399,716,883 512,791,558 6,339,058,485		1,003,249,807 485,024,502 5,250,022,521
\$ -()-	\$	-0-	\$1	8,945,913,547	\$1	16,615,086,901
\$ 44,588	\$		\$	1,658,310 30,977,012 3,368,785 91,977,173 19,572,442 3,976,513 16,090	\$	1,658,310 3,580,000 3,362,176 64,710,384 9,953,514 3,551,301 3,284
\$ 44,588	\$	-0-	\$	151,546,325 (6,136,612)	\$	86,818,969 (4,291,655
\$ 44,588	\$	-0-	\$	145,409,713	\$	82,527,314
\$	\$	15,740	\$	15,740 14,216,222	\$	13,187 497,340
\$ -()-	\$	15,740	\$	14,231,962	\$	510,527
\$ 44,588	\$	15,740	\$1	9,850,257,884	\$1	17,567,316,317

(to next page)

#### **EXHIBIT I**

### **Combined Balance Sheet**

ALL FUND TYPES AND ACCOUNT GROUPS - AUGUST 31, 1989 (With Comparative Memorandum Totals for August 31, 1988) (concluded)

	FIDUCIA	RY FUND TYPE
LIABILITIES, DEFERRED CREDITS, AND FUND EQUITY		ist and Agency (Exhibit A)
CURRENT LIABILITIES: Accounts Payable Benefits Payable Due to State's General Revenue Fund	\$	7,509,370 4,171,036 5,505,974
TOTAL CURRENT LIABILITIES	\$	17,186,380
LONG TERM LIABILITIES: Compensable Absences Payable- not Funded by Current Resources	\$	-0-
DEFERRED CREDITS: Commitment Fees	\$	2,436,125
FUND EQUITY: Investment in General Fixed Assets Fund Balances Reserved for:	\$	
Member Savings Account State Contribution Account Retired Reserve Account	5,635,262,20 5,395,991,40 8,346,367,02	
Benefit Increase Reserve Account Expense Account Claims Incurred but Unreported Extense Reserve Account	302,225,06- 20,206,18- 18,534,00	
Future Retention, Claims, and Administrative Expenditures		111,989,173
TOTAL FUND EQUITY	\$19	9,830,575,051
TOTAL LIABILITIES, DEFERRED		
CREDITS, AND FUND EQUITY	\$19	9,850,197,556

	ACCOUN	T GROUPS			TOTALS -	- MEMORANDUN	M ONLY
Ge	neral Fixed Assets	Ge T	eneral Long Ferm Debt		1989	August 31,	1988
\$		\$		\$	7,509,370 4,171,036 5,505,974	\$	5,400,350 4,280,666 4,952,939
\$	-0-	\$	-0-	\$	17,186,380	\$	14,633,955
\$	-0-	\$	15,740	\$	15,740	\$	13,187
\$	-0-	\$	-0-	\$	2,436,125	\$	4,211,953
\$	44,588	\$		\$	44,588	\$	42,970
				5	5,635,262,208 5,395,991,400 8,346,367,021 302,225,064 20,206,185 18,534,000	4	5,057,465,447 4,780,746,371 7,288,766,963 310,339,910 16,272,753 21,678,000
\$	44,588	\$	-0-	\$19	111,989,173 9,830,619,639	\$17	73,144,808 7,548,457,222
\$	44,588	\$	15,740		0,850,257,884		7,567,316,317

EXHIBIT II

# Comparative Statement of Revenues, Expenditures and Changes in Fund Balance EXPENDABLE TRUST FUND

	Year Ended August 31,			· ·
		1989		1988
REVENUES:				
Member Contributions	\$	20,789,215	\$	19,598,520
State Contributions from State of Texas		37,420,711		31,357,632
Retiree Contributions		25,428,632		23,948,600
Interest		8,802,914		5,703,832
TOTAL REVENUES	\$	92,441,472	\$	80,608,584
EXPENDITURES:				
Insurance Retention Paid	\$	4,650,730	\$	4,130,071
Insurance Claims Paid		51,529,034		41,472,241
Operating Expenditures (Sch. 2)		561,343		484,684
TOTAL EXPENDITURES	\$	56,741,107	\$	46,086,996
EXCESS OF REVENUES				
OVER EXPENDITURES	\$	35,700,365	\$	34,521,588
FUND BALANCE - September 1, 1988		94,822,808		60,301,220
FUND BALANCE - August 31, 1989	\$	130,523,173	\$	94,822,808

# Comparative Statement of Revenues, Expenses and Changes in Fund Balance PENSION TRUST FUND

	Year Ended August 31,		
	1989	1988	
REVENUES:			
Member Contributions	\$ 627,536,746	\$ 589,531,522	
State Contributions from State of Texas	684,702,849	646,612,253	
State Contributions from Local School Districts	19,941,598	16,610,709	
Interest	1,186,910,371	1,103,127,812	
Dividends	352,868,763	300,190,830	
Net Gain on Disposition of Securities	416,097,274	258,503,514	
Reinstatement of Withdrawals	10,442,271	7,837,071	
Reinstatement Fees	9,052,120	6,532,981	
Membership Fees	5,034,817	4,872,406	
Income from Retired Employees Group Insurance	60,015	65,791	
Income from TRS Subsidiaries	9,559,847	5,109,356	
Unclaimed School District Deposits	926	-,,	
Bequests and Donations	2,500		
TOTAL REVENUES	\$ 3,322,210,097	\$ 2,938,994,245	
EXPENSES:			
Benefits Paid	\$ 935,943,118	\$ 874,560,122	
Withdrawal of Member Accounts	118,507,638	113,178,276	
Transfer to Employees Retirement System	899,352	110,11.0,21.0	
Operating Expenses (Sch. 1)	20,399,555	16,506,750	
TOTAL EXPENSES	\$ 1,075,749,663	\$ 1,004,245,148	
TO THE EAR BRODE	Ψ 1,010,110,000	Ψ 1,001,210,140	
NET INCOME	\$ 2,246,460,434	\$ 1,934,749,097	
FUND BALANCE - September 1, 1988	17,453,591,444	15,518,842,347	
FUND BALANCE - August 31, 1989	\$19,700,051,878	\$17,453,591,444	

# **Comparative Statement of Changes in Financial Position**

PENSION TRUST FUND

	Year Ended August 31, 1989 1988		
SOURCES OF FUNDS:		1000	
Operations:			
Net Income	\$ 2,246,460,434	\$ 1,934,749,097	
Expenses not Requiring Working Capital	Ψ 2,240,400,434	Ψ 1,334,743,037	
Depreciation Depreciation	497,374	495,511	
Loss on Sales/Dispositions of Fixed Assets	3,254	38,196	
Depreciation and Amortization from	-,	33,200	
Subsidiaries	1,576,490	924,674	
TOTAL WORKING CAPITAL			
PROVIDED BY OPERATIONS	\$ 2,248,537,552	\$ 1,936,207,478	
Proceeds from Sales of Fixed Assets	638	15,938	
TOTAL SOURCES			
	\$ 2,248,538,190	\$ 1,936,223,416	
APPLICATIONS OF FUNDS:	* (0 000 to t = 000)		
Increase in Long Term Investment Holdings	\$ (2,300,414,700)	\$ (2,089,350,910	
Purchases of Fixed Assets	(464,582)	(922,897	
Building Construction in Progress	(9,618,928)	(7,698,695	
Increase in Fixed Assets from Subsidiaries Deferred Assets	(54,676,607) (13,917,303)	(39,363,905	
	(13,917,303)	(464,242	
TOTAL APPLICATIONS	\$ (2,379,092,120)	\$ (2,137,800,649	
NET DECREASE IN			
WORKING CAPITAL	\$ (130,553,930)	\$ (201,577,233	
WORKING CAPITAL - September 1, 1988	791,566,519	993,143,752	
WORKING CAPITAL - August 31, 1989	\$ 661,012,589	\$ 791,566,519	
INCDEASE (DECDEASE) IN			
INCREASE (DECREASE) IN CURRENT ASSETS:			
Cash in Bank	\$ 1,648,743	\$ 534,094	
Cash in State Treasury	124,976,856	(119,482,468	
Short Term Investments	(305,496,493)	(109,000,000	
Accounts Receivable:	(000,430,430)	(103,000,000	
Sale of Investments	4,680,072	600,942	
Member Contributions	3,692,101	(1,024,694	
State Contributions - School Districts	(197,117)	1,337,527	
Investment Income	25,430,221	36,177,963	
Other	642,483	25,716	
Due from General Revenue - State Contributions	16,217,678	(8,533,498	
Prepaid Assets	(15,361)	(69,308	
DECREASE (INCREASE) IN	(10,001)	(00,000	
CURRENT LIABILITIES:			
Accounts Payable	(4,018,571)	(1,739,700	
Benefits Payable Commitment Fees	109,630 1,775,828	(1,798,323 1,394,516	
	1,110,020	1,094,010	
NET DECREASE IN	Φ (100 FE0 000)	<b>A</b> (001 === 000	
WORKING CAPITAL	\$ (130,553,930)	\$ (201,577,233	

#### **Notes to the Financial Statements**

## I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### A. ENTITY

The Teacher Retirement System of Texas administers retirement and disability annuities, and death and survivor benefits to employees and beneficiaries of employees of the public school system of Texas. It operates primarily under the provisions of Texas Constitution Article XVI, Section 67 and Texas Revised Civil Statutes Annotated, Title 110B, Subtitle D.

The system also administers proportional retirement benefits under Chapter 13, Tex. Rev. Civ. Stat. Ann., Title 110B, § 13.001 *et seq.* 

Effective September 1, 1985, the system began administering the Texas Public School Retired Employees Group Insurance Program which provides insurance coverage for certain persons (and their dependents) who retire under the Teacher Retirement System of Texas. The statutory authority for the Insurance Program is Tex. Ins. Code Ann. art. 3.50-4.

Included in this report are TRST Eldridge, Inc., TRST Congress, Inc., TRST Sun City, Inc., and TRST Centerside, Inc. In a meeting June 11, 1982, the Board of Trustees authorized the TRS staff to establish special purpose corporations for the purpose of holding title to real estate. The board further authorized the staff to organize and transfer assets to non profit and for profit corporations created for the purpose of holding title to property acquired through foreclosure or deed in lieu of foreclosure in order to protect the system's investments. The system owns all the shares of the title-holding corporations and maintains control of the corporations by appointing the five members of the Board of Directors. Serving on the board at the inception of each corporation were two members of the Teacher Retirement System of Texas board and three system employees. Corporate directors are subject to appointment and removal by the Board of Trustees. All income collected by the corporations, less expenses. must be remitted to the system. For financial reporting purposes, the system and the wholly owned subsidiary corporations are considered one entity. (Refer to note X. for additional disclosure.)

For reporting purposes the Teacher Retirement System of Texas is considered a component unit of the State of Texas.

#### B. BASIS OF PRESENTATION

The accompanying financial statements of the Teacher Retirement System of Texas have been prepared to conform with generally accepted accounting principles (GAAP) as established by the Governmental Accounting Standards Board (GASB).

The system's wholly owned subsidiaries, are presented on a consolidation basis with the pension trust fund.

#### C. FUND STRUCTURE

The accounts of the Teacher Retirement System of

Texas are organized on the basis of funds and account groups, each of which is considered a separate accounting entity. The operations of each fund are accounted for with a complete set of self balancing accounts that comprise its assets, liabilities, fund equity, revenues, and expenditures or expenses. The funds and account groups used to reflect the system's transactions are as follows:

#### **Fiduciary Fund Types**

Pension Trust Funds - Pension trust funds are used to account for the public employee retirement systems administered by the respective boards.

Expendable Trust Funds - Expendable trust funds are used to account for trust funds whose principal and interest may be expended in the course of their designated operations.

Agency Funds - Agency funds are used to account for assets held as an agent for individuals, other government entities, and/or other funds. These funds are custodial in nature and do not involve measurement of results of operations.

Under Tex. Rev. Civ. Stat. Ann., Title 1108, § 35.405, the system is authorized to collect monies received by employers, as defined in section 31.001(7), from federal or private sources to pay for their applicable shares of state retirement contributions. The system is required to deposit all such collections in the state's General Revenue Fund, thus reimbursing the General Revenue Fund from which all state contributions were originally paid (see note I.F.).

The system is also authorized under Tex. Rev. Ctv. Stat. Ann., Title 1108, § 35.4051, to collect monies from the governing board of each general academic teaching institution and each medical and dental unit, from noneducational and general funds of the institution or unit, for state contributions that are made based on any portion of a member's salary that is paid from the noneducational and general funds. The system is required to deposit all such collections in the state's General Revenue Fund, thus reimbursing the General Revenue Fund from which all state contributions were originally paid (see note I.F.).

#### **Account Groups**

General Fixed Assets - Fixed assets used by the system are accounted for in the General Fixed Assets Account Group, with the exception of those acquired by and accounted for in the pension trust fund.

General Long Term Debt - This account group is used to account for long term debt to be financed in future periods from the expendable trust fund.

#### D. MEMORANDUM TOTALS

The total columns on the financial statements are captioned "Memorandum Only" to indicate that they are for informational purposes only. Data in these columns does not present the financial position in conformity with GAAP, nor is such data comparable to a consolidation.

#### E. BASIS OF ACCOUNTING

Basis of accounting relates to the timing of the

measurement and recognition of revenues and expenditures or expenses in the accounts for reporting in the financial statements.

Expendable trust funds are accounted for using the modified accrual basis of accounting. Revenues are recognized when they become measurable and available as net current assets. Expenditures are generally recognized when the related fund liability is incurred. An exception to this general rule involves the cost of employees' compensated absences, which is not recognized until payment is made.

Pension trust funds are accounted for on the accrual basis of accounting. Revenues are recognized when earned and expenses are recognized when the liability is incurred, regardless of the timing of related cash flows.

## F. BUDGETS, BUDGETARY ACCOUNTING, AND APPROPRIATIONS

The system's pension trust fund receives appropriations for state contributions for retirement benefits and periodic retirement benefit increases. In fiscal years 1989 and 1988, state contributions were made to the retirement system at the rate of 7.2% of the aggregate compensation paid to retirement system members each year. One-twelfth of the estimated annual contributions was received each month, with an adjustment to actual-accrued in the financial statements following the end of the year.

Pension trust fund administrative operating costs are accounted for through the fund's Expense Account. The revenues and expenses of this account are controlled by means of an annual budget approved by the Board of Trustees. Revenue sources for the account include retirement membership fees and, if necessary, transfers from the fund's Interest Account.

The system's expendable trust fund also receives appropriations from the state's General Revenue Fund. In the fiscal years 1989 and 1988 the state contributed an amount equal to .45% and .40%, respectively, of the salary of each active employee as defined in the  $T_{\rm EX}$  Ins.  $C_{\rm ODE}$  Ann. art. 3.50-4, § 2(1). The rate will increase .05% yearly through the fiscal year 1990. One-twelfth of the estimated annual contributions was received each month, with an adjustment to actual-accrued in the financial statements following the end of the year.

Expendable trust fund administrative operating costs are accounted for through the fund's expense reserve. The revenues and expenditures of this reserve are controlled by means of an annual budget approved by the Board of Trustees. Operating expenditures in any fiscal year may not exceed one percent of the contributions to the program by the state, active members, and covered participants for 1989 and 1988.

Schedule 2 (Combined Schedule of Revenues and Expenses/Expenditures for the Expense Account and the Expense Reserve Budget and Actual on a Budgetary Basis) presents comparisons of the budget adopted by the Board of Trustees with actual data on a budgetary basis. Since accounting principles applied for purposes of developing data on a budgetary basis differ from those used to present financial statements in conformity with GAAP, a reconciliation of these differences is required. The major reconciling items

are due to unbudgeted financial activity of wholly owned subsidiary corporations (see note X.) not reported on the budget statement but reported on the GAAP statements and expenses/expenditures budgeted and reported on the budget statement that do not qualify for expenditure recognition on the GAAP statements.

## G. ASSETS, LIABILITIES, AND FUND BALANCE

#### Consumable Inventories

Pension trust fund supplies and postage are accounted for under the consumption method. Under this method inventories are recorded as expenses when they are used rather than when purchased.

#### **Investments**

Fixed income and real estate securities are valued at cost with discount or premium amortized using the effective interest rate method. Equity securities are valued at cost.

Certain securities exchanges, consisting of closelyrelated sale and purchase transactions, are accounted for using the exchange, or cost transfer, method. Under this method the gain or loss on the sale is deferred as an adjustment to the book value of the security purchased and is thus amortized over the life of that security. The following limitations are observed in the use of the exchange method:

- The security sold and the security purchased must be investment grade bonds with a fixed maturity value.
- Both ends of the exchange must be in sight; that is, the sale must be made in clear contemplation of reinvesting the proceeds.
- The exchange must be consummated within a reasonable amount of time, usually within a week and in all cases within one month.
- Substantially all of the proceeds of the sale must be reinvested.
- 5. There must be an improvement in book yield as a result of the exchange, after adjustment of the book value of the bond purchased to reflect the deferral of any "gain" or "loss" on the related sale.

Any sale of a security which does not meet all of the above conditions is accounted for as a completed transaction.

As provided in Tex. Rev. Civ. Stat. Ann., Title 1108, §§ 35.308(2) and 35.310(a), net capital gains or losses realized from the sale, call, maturity, or conversion of securities are accumulated in the pension trust fund's Interest Account and transferred annually to the fund's State Contribution Account together with any other balance remaining in the Interest Account. Accordingly at August 31, 1989 and 1988, the amounts transferred were \$416,097,274 and \$258,503,514, respectively.

Included in Long Term Investments are Federal Home Loan Mortgage Corporation Bonds for which principal repayments are not paid to the bond holder until one month after they are due. This is the standard practice of the Federal Home Loan Mortgage Corporation; therefore, such repayments are not recog-

nized until the payments are received. The amounts due the pension trust fund on August 31, 1989 and 1988 were \$1,450,655 and \$1,954,173, respectively.

On June 29, 1988 Telex Corporation merged with Memorex Corporation. The pension trust fund relinquished 5,200 shares of Telex common stock at a cost of \$240,916 and a market value at June 29, 1988 of \$254,800. The system received 10.33 shares of Memorex Telex convertible preferred stock per share of Telex common stock. Per Accounting Principles Board Opinion No. 29, the issues received were recorded at the market value of the stock relinquished at June 29, 1988. This transaction increased the valuation of the stock on the books of the pension fund by \$13,884.

On December 30, 1988 CP National Corporation merged with Alltel Corporation. The pension trust fund relinquished 9,600 shares of CP National common stock at a cost of \$250,368 and a market value at December 30, 1988 of \$396,000. The system received 1.15 shares of Alltel common stock per share of CP National common stock. Per Accounting Principles Board Opinion No. 29, the issues received were recorded at the market value of the stock relinquished at December 30, 1988. This transaction increased the valuation of the stock on the books of the pension fund by \$145,632.

On March 15, 1989 Hospital Corporation of America (HCA) submitted a tender offer for all outstanding common stock. The pension trust fund relinguished 94,734 shares of HCA common stock at a cost of \$3,203,627 and a market value at March 15, 1989 of \$4,698,790. The system received \$568,400 par value of HCA subordinated debentures, 15,789 shares of HCA preferred stock and \$4,073,564 cash. Per Accounting Principles Board Opinion No. 29, the nonmonetary assets received were recorded based on their proportionate share of the total consideration received multiplied by the market value of the stock relinquished at March 15, 1989. The nonmonetary assets acquired decreased the pension fund's valuation of the stocks by \$163,978 and increased the valuation of the bonds by \$358,803.

On July 21, 1989 Smithkline Beckman Corporation merged with Beecham Corporation. The pension trust fund relinquished 321,400 shares of Smithkline Beckman common stock at a cost of \$11,336,050 and a market value at July 21, 1989 of \$19,364,722. The system received 321,400 shares of Smithkline Beecham PLC preferred stock, 160,700 shares of Allergan common stock, 58,899 shares of Beckman common stock, and \$1,767,700 cash. Per Accounting Principles Board Opinion No. 29, the nonmonetary assets received were recorded based on their proportionate share of the total consideration received multiplied by the market value of the stock relinquished at July 21, 1989. The nonmonetary assets acquired increased the valuation of the stock on the books of the pension fund by \$7,285,311.

TRS utilizes registered real estate advisors who are compensated for their services in the form of an asset management fee, based on a percentage of the outstanding loan balance on a project, which is deducted from the monthly interest payment collected by the advisor from the borrower. The net interest payment is then forwarded to TRS. The fees earned by real estate

advisors on direct real estate investments for fiscal years 1989 and 1988 were \$5,354,523 and \$4,575,610, respectively.

In 1982, the Board of Trustees authorized direct commercial real estate mortgages as an alternative and prudent investment for up to 15% of the book value of the fund's assets. The real estate investment objectives give primary consideration to safety of capital and maximum income. It also provides diversification and an inflation hedge for the TRS portfolio. The system considers itself to be a long-term investor, so that long-term returns, or appreciation, are given relatively more emphasis than short-term returns, or cash flow.

As of August 31, 1989, TRS's real estate portfolio consisted of 44 projects with a balance of \$1.913 billion. This portfolio is well diversified covering 13 states with investments in retail centers, office buildings, industrial warehouses, hotels, and apartment complexes. TRS's investment in each project is evidenced by a promissory note with the real estate serving as collateral.

As of August 31, 1989, loan repayment terms on five projects with a principal balance of \$166,032,232 have been restructured. These restructurings have occurred due to the changing economic and market conditions which have diminished the borrower's ability to meet the original contract terms. In order to protect the interest of the system, TRS has amended various contract terms such as the interest rate, monthly payment amount, prepayment factors, and participation share of future cash flows. There has been no reduction in the principal loan balances.

A part of the restructuring usually involves the temporary reduction of the "contract" interest rate to a "payment" interest rate. The difference between the restructured "payment" rate and "contract" rate is deferred and accrued until the borrower's ability to pay has improved. The borrower is required to pay net cash flow on the project to TRS until the deferred interest is paid. As of August 31, 1989 and 1988, TRS had a deferred interest balance on these restructured projects totalling \$11,412,312 and \$4,942,354, respectively. The restructured terms do not provide for interest on this balance due to the conditions described in the preceding paragraph. This deferred interest is not recorded on the financial records of the system, but a detailed listing is maintained for each project. Currently, there is insufficient historical data or a reasonable method to estimate the amount of the balance that is uncollectible, if any. Therefore, the deferred interest which is paid by the borrower is recognized as revenue only upon actual receipt. TRS recorded \$10,065,925 as interest income in the financial statements for fiscal year 1989 from these five projects. TRS would have recorded as interest income \$17,099,248 from these projects in fiscal year 1989 had there been no deferral of interest.

#### **Fixed Assets**

A pension trust fund is accounted for on a cost of services or capital maintenance measurement focus. This means all assets (whether current or long term) associated with the fund's activity are included on its balance sheet. Depreciation has been provided over the

estimated useful lives of the assets using the straight line method. The estimated useful lives are as follows:

	<b>Years</b>
Building	50
Building Improvements	15
Furniture and Equipment - Office	5

Purchases of fixed assets by an expendable trust fund are reported as expenditures. They are capitalized at cost or, if not purchased, at appraised value on the date of acquisition. There is no provision for depreciation or obsolescence of these fixed assets since replacements are financed from current resources.

#### Liabilities

Accounts payable represents the liability for the value of assets or services received at the balance sheet date for which payment is pending.

Benefits payable represents the liability for retirement, disability, or death benefits due at balance sheet date for which payment is pending.

Employee compensable leave balances for the pension trust fund are accounted for on a cost of service measurement focus. This means that all liabilities associated with a fund's activity are included on its balance sheet instead of in a General Long Term Debt Account Group. Salary costs related to employees' rights to be compensated for future absences are accrued as expenses of the period in which services are rendered.

Employee compensable leave balances for this fund at August 31, 1989, and the system's monetary liability, computed by multiplying the ending balance of compensable leave times the year-end average individual employee hourly salary rate, were as follows:

	Hours	<b>Dollars</b>
Annual Leave	40,386	\$683,365
FLSA Compensatory Time	404	4,344
State Compensatory Time	2,873	62,384
Total	43,663	\$750,093

(Note: FLSA hours accumulated are one and one-half times hours worked.)

The difference between the balances at August 31, 1989 and 1988, has been included in the fund's expenses of the year ended August 31, 1989.

Employee compensable leave balances not funded by current resources represents the liability that the expendable trust fund will be required to liquidate in the future and arises from the accumulated compensable leave due employees as of August 31, 1989. See note III.B. for a summary of changes in expendable trust fund employee compensable leave balance.

#### **Fund Balance**

The pension trust fund Benefit Increase Reserve Account was established by the legislature in 1977 to account for all reserves for post-retirement increases or other adjustments of initial benefit payments authorized by law on or after January 31, 1975. Tex. Rev. Civ. Stat. Ann., Title 1108, § 35.307.

The law provides that interest will be credited to the Benefit Increase Reserve Account at a rate recommended by the actuary and approved by the Board of Trustees as representing a reasonable anticipation of earnings from the investment of assets accrued to the Benefit Increase Reserve Account. Accordingly at August 31, 1989 and 1988 funds in the Benefit Increase Reserve Account were credited with interest at the rate of 8.38% on the average annual balance of funds allocable to increases provided in 1975; at the rate of 9.56% on the average annual balance of funds allocable to increases provided in 1977; at the rate of 10.55% and 10.36% on the average annual balance of funds allocable to increases provided in 1979; at the rate of 13.69% on the average annual balance of funds allocable to the 1981 emergency increase; and at the rate of 14.96% and 14.95% on the average annual balance of funds allocable to the 1981 regular increase.

## H. INTERFUND TRANSACTIONS AND BALANCES

Transactions between the system's funds have been analyzed and classified in accordance with the following criteria which are consistent with generally accepted accounting principles.

#### **Quasi-external Transactions**

These transactions are reported using the appropriate classification accounts for revenues or expenditures/expenses as if being transacted with parties external to the state, i.e., they are not presented as transfers. The accrual of quasi-external transactions are classified as Due From Other Funds and Due To Other Funds on the balance sheet.

The pension trust fund provides various services to the expendable trust fund and accounts for these services as quasi-external transactions.

## I. INTERAGENCY TRANSACTIONS AND BALANCES

Interagency transactions have been analyzed and classified using the above criteria for quasi-external transactions.

#### II. INDIRECT COSTS

The state contributions paid to the pension fund, discussed in note I.F., included payments related to employees of the system totaling \$602,997 in 1989 and \$555,877 in 1988. Since these costs were paid indirectly, they are not reflected as an operating expense in Exhibit II, Comparative Statement of Revenues, Expenditures and Changes in Fund Balance - Expendable Trust Fund and Exhibit III, Comparative Statement of Revenues, Expenses and Changes in Fund Balance - Pension Trust Fund.

## III. DETAIL NOTES ON ACCOUNT GROUPS A. GENERAL FIXED ASSETS

A summary of changes in General Fixed Assets for fiscal year 1989 follows:

#### **Furniture and Equipment**

Balance September 1, 1988	٠.	\$42,970
Additions		1,707
Deductions	-	(89)
Balance August 31, 1989		\$44,588

#### B. GENERAL LONG TERM DEBT

The following is a summary of changes in employees' compensable leave balances, which reflect employees' accrued rights to future compensated absences. Changes and balances are stated in terms of hours.

	Annual Leave	FLSA Compensatory Time	State Compensatory Time	Totals
Compensable Leave Hours -				
September 1, 1988	989	<b>2</b>	14	1,005
Leave Hours Earned	1,009	17	574	1,600
Leave Hours Compensated:				
By Time Off	(833)	(19)	(554)	(1,406)
Leave Hours Transferred Out	(69)	-0-	-0-	(69)
Compensable Leave Hours August 31, 1989	1,096	-0-	34	1,130

(Note: FLSA hours accumulated are one and one-half times hours worked.)

The expendable trust fund monetary liabilities for compensable future absences as of August 31, 1989, computed by multiplying the above ending balances times the year-end average individual employee hourly salary rate, were as follows:

Annual Leave	\$15,223
FLSA Compensatory Time	-0-
State Compensatory Time	517
TOTAL (Exhibit I)	\$15,740

#### IV. EMPLOYEES' RETIREMENT PLAN

The state has a joint contributory retirement plan for substantially all its employees. The employees of the Teacher Retirement System of Texas participate in the same plan they administer.

The latest actuarial-computed pension liability valuation of the system exceeded the total assets of the system as of August 31, 1989. The actuary calculated the amortization period for the unfunded pension liability at 20.9 years. Contribution rates of members and the state during fiscal year 1989 were 6.4% and 7.2%, respectively.

Total state contributions related to the system's employees for the year ended August 31, 1989 were \$602,997 (see note II.).

#### V. DEFERRED COMPENSATION

In accordance with  $T_{\rm EX}$  Rev. Civ.  $S_{\rm TAT}$ .  $A_{\rm NN}$  art. 6252-3b, employees of the system are permitted to participate in the state's Deferred Compensation Program. This program allows employees to defer a portion of their monthly salary for income tax and investment purposes. The state has no additional or unfunded liability for this. Participation in the program is summarized as follows:

	1989
Amount Contributed	\$ 97,097
Amount Withdrawn by Reason of Retirement or Termination	(14,500)
Cumulative Amounts at August 31 for Persons Employed at Year-End	\$419,109
Number of Employees Participating at Year-End	21

#### VI. DEPOSITS

The statutes governing the system's pension and ex-

pendable trust funds require all cash, except for the travel advance account which is maintained in the First City Bank of Austin and for the securities clearing accounts as identified in note VI.C., be deposited in the State Treasury. The system may keep on deposit with the State Treasurer available cash not exceeding 10% of the total assets of the retirement system.

#### A. DEPOSIT IN BANK

The balance of \$2,745,300 is detailed as follows:

1. \$12,000 is in an interest bearing account used for travel advances only and is fully insured.

2. The remaining \$2,733,300 is from the four wholly owned subsidiaries, TRST Eldridge, Inc.; TRST Congress, Inc.; TRST Centerside, Inc.; and TRST Sun City, Inc. (see note X.).

a. TRST Eldridge, Inc.

1.) \$109,963 is in a checking account with North Carolina National Bank of Texas in Houston and is fully insured by FDIC up to \$100,000, leaving an uninsured balance of \$9,963. This account is the primary operating account, and cash flows at certain times during the year will create balances which may be higher than at year end.

2.) \$97,561 is in a money market account with Texas Commerce Bank Houston and is fully insured by FDIC up to \$100,000.

3.) \$79,553 is in a business investment account with First City Bank Austin and is fully insured by FDIC up to \$100,000. This account is used to hold excess funds from the operating account, and cash flows at certain times during the year will create balances which may be higher than at year end.

b. TRST Congress, Inc.

1.) \$36,870 is in a checking account with First City Bank Austin and is fully insured by FDIC up to \$100,000. This account is the primary operating account, and cash flows at certain times during the year will create balances which may be higher than at year

2.) \$97,211 is in two money market accounts with First Interstate Bank Austin and is fully insured by FDIC up to \$100,000.

- 3.) \$79,606 is in two money market accounts with Texas Commerce Bank Austin and is fully insured by FDIC up to \$100,000. This account is used to hold excess funds from the operating account, and cash flows at certain times during the year will create balances which may be higher than at year end.
- 4.) \$100,000 is in a money market account with North Carolina National Bank of Texas in Austin and is fully insured by FDIC up to \$100,000.
- The remaining \$951,594 is deposited in two bank holding companies. These deposits are diversified among various banks of the holding company and each respective bank maintains a balance less than \$100,000. All deposits are fully insured by FDIC up to \$100,000.

c. TRST Centerside, Inc.

1.) \$277,570 is in four accounts with Wells Fargo Bank in San Diego, California and is fully insured by FDIC up to \$100,000, leaving an uninsured balance of \$177,570. These accounts are operating accounts, and cash flows at certain times during the year will create balances which may be higher than at year end.

2.) \$90,162 is in a money market account with Tokai Bank in San Diego, California and is fully insured by FDIC up to \$100,000.

d. TRST Sun City, Inc.

1.) \$591,062 is in two accounts with First Interstate Bank in Phoenix, Arizona and is insured by FDIC up to \$100,000, leaving an uninsured balance of \$491,062. These accounts are the primary operating accounts, and cash flows at certain times during the year will create balances which may be

higher than at year end.

2.) \$70,784 is in a business investment account with First City Bank Austin and is fully insured by FDIC up to \$100,000. At the inception of this account, the balance was higher than at year end. Another account through First City Bank Austin is an insured saving account with a balance of \$151,364. These deposits are diversified among various banks of the holding company and each respective bank maintains a balance less than 100,000. All deposits are fully insured by FDIC up to \$100,000.

#### B. CERTIFICATE OF DEPOSITS

CD's in the amount of \$11,503,507 are included in

the total amount identified as Short-Term Investments. \$11,000,000 of the CD's are from the expendable trust fund. The remaining \$503,507 are from TRST Sun City, Inc. and are reflected in the pension fund total. Each CD is for \$100,000 or less per bank, is insured by FDIC, and is held in custody by a member of a bank holding company. The CD's are diversified by using three major bank holding companies. At August 31, accrued interest of \$74,713 was not insured by

#### C. SECURITIES CLEARING ACCOUNT

The system is authorized to contract with one or more commercial banks to serve as custodians of the system's cash or securities pending completion of an investment settlement and may authorize a bank acting as custodian to invest the cash so held in such short-term securities as the Board of Trustees determines. Effective June 1989 the securities clearing account with TRS's agent in New York was restructured to provide FDIC coverage for all funds flowing through this account. This coverage provides up to \$100,000 per pension plan participant. During the period September 1988 to June 1989, the system's highest balance in this account was \$113,281,203 of which only \$100,000 was insured. At August 31, 1989 all clearing accounts had a cumulative balance of \$900,446. These clearing accounts are structured to provide maximum FDIC coverage for all funds flowing through these accounts.

#### VII. INVESTMENTS

#### A. LEGAL PROVISIONS AND OTHER CONSTRAINTS

- 1. Article XVI, Section 67 of the Constitution of the State of Texas authorizes the Board of Trustees to invest the funds of the system in such securities as the board may consider prudent investments. In making investments, the board "shall exercise the judgment and care under the circumstances then prevailing that persons of ordinary prudence, discretion, and intelligence exercise in the management of their own affairs, not in regard to speculation, but in regard to the permanent disposition of their funds, considering the probable income therefrom as well as the probable safety of their capital" (the prudent person rule). The legislature by law may further restrict the investment discretion of the board.
- 2. The board has set high quality investment standards with prime consideration given to safety of capital and maximum income, sustainable over time. In order to insure a continuing flow of income to be used to pay benefits promised to participants years into the future, emphasis is placed on quality, potential long term yield, and diversification.

Categories of permissible investments are:

a. Bonds, notes and other evidence of indebted-

- 1.) Issued, assumed or guaranteed in whole or in part by the United States or any agency of the United States.
- 2.) Issued by a United States corporation.
- 3.) Issued by foreign governments and corporations in U. S. dollar denominations

("Yankee Bonds").

 Issued by foreign governments and corporations when the country of origin is approved by the Investment Advisory Committee and the Board of Trustees.

- b. Common and preferred stocks of United States corporations and American Depository Receipts or common stocks of foreign corporations that are listed on a major United States stock exchange or are traded in the U.S. by the United States National Association of Securities Dealers.
- Shares of open-ended or closed mutual funds and collective investment trusts that are invested in non-U. S. securities.
- Mortgages on properties located within the United States

1.) Mortgage pass-throughs.

2.) Direct mortgages on developed properties.

- e. Commercial paper and U.S. Treasury Bills will be used for investing all funds awaiting long term commitments.
- 4. No more than 3% of the book value of the total assets of the fund may be invested in the preferred and/or common stock of one corporation.
- 5. Less than 5% of the voting stock of any corporation

may be owned.

 With the exception of the U.S. Government and its agencies, no more than 3% of the book value of the total assets of the fund will be invested in the debt obligations of any one corporation, including its subsidiaries. No more than 1% of the book value of the total assets of the fund will be invested in any one mortgage.

8. No more than 15% of the book value of the portfolio will be invested in direct mortgages.

 No more than 10% of the total book value of all assets of the fund will be invested in non-U. S. securities or shares of trusts invested therein.

#### B. LEVEL OF RISK

The system's investments have been categorized to give an indication of the level of risk assumed by the system at year end. Category 1 includes investments that are insured or registered or for which the securities are held by the system or its agent in the system's name. Category 2 includes uninsured and unregistered investments for which the securities are held by the broker's or dealer's trust department or agency in the system's name. Category 3 includes uninsured and unregistered investments for which the securities are held by the broker or dealer, or by its trust department or agent but not in the system's name.

As of August 31, 1989, all investments of the system, except for mutual funds which are not categorized, are classified in Category 1 which bears the least risk. All investments are registered in the name of Teacher Retirement System or its nominee name, TRS TEX, and are held in custody by the State Treasurer of Texas except for those held in book entry through the Federal Reserve Board or the Depository Trust Company which are held in custody by the

system's agent.

The book value and market value of investments at August 31, 1989 are as follows:					
Types of Securities	<b>Book Value</b>	Market Value			
SHORT TERM INVESTMENTS Corporate Bonds Commercial Paper	\$ 30,975,563 125,000,000	\$ 32,021,683 125,386,658			
Total Short Term Investments (Category I)	\$ 155,975,563	\$ 157,408,341			
LONG TERM INVESTMENTS Fixed Income: U.S. Treasury Bonds	\$ 3,541,125,845	\$ 3,972,351,891			
U S Government Agency Mortgages Other Municipals Mortgages - Other Corporate	3,231,698,128 950,677,429 10,000,000 175,730,807 2,785,114,412	3,225,008,313 968,461,868 9,570,100 215,778,522 2,789,670,294			
Equities: Common Stock Common Stock - Small Growth Common Stock - Global	5,886,175,985 251,666,882 173,991,462	9,565,656,373 292,169,931 195,007,400			
Total Long Term Investments (excluding Real Estate)	\$17,006,180,950	\$21,233,674,692			
Real Estate: Direct Participating Mortgages Fixed Rate Mortgages	1,399,716,883 512,791,558	1,399,716,883 512,791,558			
Total Long Term Investments (Category I)	\$18,918,689,391	\$23,146,183,133			
Equities: Small Growth - Mutual Funds Global - Mutual Funds	\$ 1,224,156 26,000,000	\$ 1,622,075 25,891,404			
Total Equities - Mutal Funds (Uncategorized)	\$ 27,224,156	\$ 27,513,479			
Total Long Term Investments (Exh. I)	\$18,945,913,547	\$23,173,696,612			

Note: Included in the valuation on page 25 are amounts related to the expendable trust fund which are as follows:

	_ <u>B</u>	Book Value		Market Value	
Short Term Investments - Long Term Investments -	\$	30,975,563	\$	32,021,683	
Fixed Income - Corporate	\$	66,455,606	\$	66,907,448	

A current market value for real estate is not reported due to an unidentifiable market. Although the appraisal value of the note itself is available, the present value of future cash flows relies heavily on assumption of future events occurring. Therefore, book value is reported for the market value of the real estate mortgages.

## C. MORTGAGE INVESTMENT COMMITMENTS

At August 31, 1989, the pension trust fund was committed to future investment in commercial real estate mortgages as follows:

<b>Anticipated Closing</b>	Amount	
Fiscal Year 1990 (19)	\$359,160,000	
Fiscal Year 1991 (2)	\$104,700,000	

#### VIII. CONTINGENT LIABILITY

Sick leave, the accumulation of which is unlimited, is earned at the rate of eight hours per month and is taken only in the event of illness or paid to the estate of an employee in the event of death. The maximum sick leave that may be paid an employee's estate is one-half of the employee's accumulated entitlement or 336 hours, whichever is less. The system's policy is to recognize the cost of any sick leave when paid. No liability is recorded in the General Long Term Debt Account Group since experience indicates the probability of a material effect on any given year's operation, as a result of death or abnormally high rate of illness, is minimal.

In addition, under Tex. Ins. Code Ann. art. 3.51-7, the retirement system was contingently liable to pay a lump sum death benefit amounting to \$5,000, when added to the death benefit authorized under Tex. Rev. Civ. Stat. Ann., Title 110B, to the beneficiaries of deceased, retired employees.

#### IX. CONTINUANCE SUBJECT TO REVIEW

As provided by Tex. Rev. Civ. Stat. Ann., Title 110B. § 35.006, "The board of trustees of the Teacher Retirement System of Texas is subject to the Texas Sunset Act (Chapter 325, Government Code), but is not abolished under that Act. The board shall be reviewed under that Act during the period in which state agencies abolished September 1, 1991, and every 12th year after that date are reviewed."

#### X. OTHER

#### TRST No. 1, Inc. and TRST Eldridge, Inc.

The Board of Trustees authorized the TRS staff to establish special purpose corporations for the purpose of holding title to real estate in a meeting June 11, 1982. In a meeting October 29, 1986 the board further authorized the staff to organize and transfer assets to nonprofit corporations created for the purpose of holding title to property acquired through foreclosure or deed in lieu of foreclosure in order to protect the system's investments. In a meeting

November 12, 1987 the board further authorized the staff to organize and transfer assets to for profit corporations created for the same purposes described above. The corporations must remit profits from the management and sale of the property to the system. Corporate directors are subject to appointment and removal by the Board of Trustees.

TRST No. 1, Inc. was incorporated on October 29, 1986 for the purposes discussed above. The corporation held title to an office building project in Houston, Texas as a result of a foreclosure December 2, 1986. At the date of foreclosure the book value of the mortgage on this project was \$33,981,700 and the market value was \$28,900,000. The system's real estate advisor for this project continued to assist the corporation with the management and disposal of this property as required in the advisor's agreement with the system.

The Board of Directors of TRST No. 1, Inc. adopted a resolution October 28, 1987 authorizing the liquidation and dissolution of TRST No. 1, Inc. pursuant to the Texas Non-Profit Corporation Act. Pursuant thereto, all of the assets and liabilities of TRST No. 1, Inc. were transferred to the Teacher Retirement System of Texas October 29, 1987.

TRST Eldridge, Inc. was incorporated, as a regular business corporation, on October 28, 1987 for the purpose of holding title to real estate as discussed above. The corporation now holds assets and liabilities liquidated from TRST No. 1, Inc., and received through the Teacher Retirement System of Texas on October 30, 1987 in exchange for all of the shares of common stock. The system's real estate advisor for this project continues to assist the corporation with the management and disposal of this property as required in the advisor's agreement with the system.

#### TRST Congress, Inc.

TRST Congress, Inc. was incorporated on March 7, 1988 for the purpose of holding title to an office building project in Austin, Texas. On March 14, 1988 the borrower, TRS and TRST Congress, Inc., entered into a master agreement which provided for a transfer from the borrower to TRST Congress, Inc., of the office building project and all associated rents and accounts. In accordance with the agreement, on March 15, 1988 the borrower deeded the project to TRST Congress, Inc. The transfer of the project to TRST Congress, Inc., did not extinguish the indebtedness owed by the borrower to TRS. Prior to foreclosure, TRS assigned the first mortgage note, the deed of trust, and all other loan documents to TRST Congress, Inc., in exchange for all of the shares of common stock of the corporation. On April 5, 1988 TRST Congress, Inc., purchased the property at the foreclosure sale. At the date of foreclosure the book value of the mortgage on this project was \$48,951,063 and the market value was \$39,139,419. The system's real estate advisor for this project is continuing to assist the corporation with the management and disposal of this property as required in the advisor's agreement with the system.

#### TRST Sun City, Inc.

TRST Sun City, Inc. was incorporated on May 25, 1989, for the purpose of holding title to six shopping centers in Sun City, Arizona. Assets were transferred by way of deed (in lieu of foreclosure) from the borrower to TRST Sun City, Inc. on July 14, 1989. At the date of transfer the book value of the mortgage on this project was \$34,610,000 and the market value was \$27,493,401. The Teacher Retirement System of Texas assigned the loan documents to the corporation in exchange for all of the shares of common stock of the corporation. The system's real estate advisor for this project is continuing to assist the corporation with the management and disposal of this property as required in the advisor's agreement with the system.

#### TRST Centerside, Inc.

TRST Centerside, Inc. was incorporated on April 28, 1989, for the purpose of holding title to an office building project in San Diego, California. Assets were transferred by way of deed (in lieu of foreclosure) from the borrower to TRST Centerside, Inc. on May 12, 1989. At the date of the transfer the book value of the mortgage on this project was \$27,818,470 and the market value was \$27,300,000. The Teacher Retirement System of Texas assigned the loan documents to the corporation in exchange for all of the shares of common stock of the corporation. The system's real estate advisor for this project is continuing to assist the corporation with the management and disposal of this property as required in the advisor's agreement with the system.

#### **Construction in Progress**

The Board of Trustees of the Teacher Retirement System of Texas have contracted with Jessen Associates Inc. Architects & Planners of Austin, Texas for the expansion of the Teacher Retirement facilities on the block bounded by Tenth St. on the south, Eleventh St. on the north, Trinity St. on the west, and Red River St. on the east. The project consists of the construction of a parking garage and office building.

#### XI. PENSION DISCLOSURE

#### A. PLAN DESCRIPTION

The Teacher Retirement System of Texas is the administrator of a multiple-employer public employee retirement system (PERS). It is a cost-sharing PERS with one exception; all risks and costs are not shared by the employer (unless the employer is a senior college, medical school, or a state agency in which case the employer is considered the State of Texas) but are the liability of the State of Texas. By statute, the State of Texas contributes to the retirement system an amount equal to the current authorized rate times the aggregate annual compensation of all members of the retirement system during that fiscal year.

For members of the retirement system entitled to the minimum salary for certain school personnel under Section 16.056, Education Code, the employing district shall pay the state's contribution on the portion of the member's salary that exceeds the statutory minimum.

For reporting purposes the Teacher Retirement System of Texas is considered a component unit of the

State of Texas.

At August 31, 1989 the number of participating employing districts was:

1,091
,
94
14
1,199

All employees of public, state-supported educational institutions in Texas who are employed for 1/2 or more of the standard work load and who are not exempted from membership under Texas Revised Civil Statutes Annotated, Title 110B, Subtitle D, Section 32.002 are covered by the system.

At August 31, 1989 the Teacher Retirement System of Texas membership consisted of:

Retirees and beneficiaries currently	
receiving benefits	108,439
Terminated employees entitled to benefits but not yet receiving them	2,223
, and a	
Total	110,662
	*
Current Employees	
Fully-Vested	176,714
Non-Vested	291,593
Total	468,307

A brief statement about benefit provisions and authority under which these provisions are established is located in note I.A.

Normal service retirement is at age 65 with 10 years of service, age 60 with 20 years of service, or when age plus years of service equal 95. Reduced service retirement is at age 55 with at least 10 years of service or any age with 30 years of service. Effective September 1, 1989 the normal service retirement was changed to members at age 65 with 5 years of service, age 60 with 20 years of service, and age 55 with 30 years of service. Reduced service retirement was changed to age 55 with 5 years of service and any age below 55 with 30 years of service. Additional benefit information is located on page 52 of this Comprehensive Annual Financial Report.

A member is fully vested after 10 years of creditable service and entitled to any benefit for which eligibility requirements have been met. Effective September 1, 1989 the vesting provision of 10 years

was reduced to 5 years.

The State of Texas contributions were 7.2% for fiscal years 1988 and 1989. Effective September 1, 1989 state law provides a state contribution rate for fiscal years 1990 and 1991 of 7.65%. Member contributions are 6.4% for fiscal years 1988-91. These rates are set by state statutes.

The actuarially determined contribution require-

ments for fiscal year 1989 was 6.4% for the employee and 7.2% for the state. In certain instances, the reporting district (Public School, College, University, Medical School or State Agency) is required to make all or a portion of the state's 7.2% contribution.

#### B. SUMMARY OF SIGNIFICANT ACCOUNT-ING POLICIES AND PLAN ASSET MATTERS

**Basis of Accounting** 

Refer to note I.E.

Method Used to Value Investments

Refer to note I.G.

#### C. FUNDING STATUS AND PROGRESS

The amount shown below as "pension benefit obligation" is a standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to date. The measure is the actuarial present value of credited projected benefits and is intended to help users assess the Teacher Retirement System of Texas

funding status on a going-concern basis, assess progress made in accumulating sufficient assets to pay benefits when due, and make comparisons among PERS. The measure is independent of the actuarial funding method used to determine contributions to the system, discussed in D. below.

The pension benefit obligation was determined as part of an actuarial valuation at August 31, 1989. Significant actuarial assumptions used include:

- 1. A rate of return on the investment of present and future assets compounded annually of:
  - a. 8.00% for retired, active, and inactive participants;
  - b. 8.38% for the 1975 legislative benefit increase;
  - c. 9.56% for the 1977 legislative benefit increase;
  - d. 10.30% for the 1979 legislative benefit increase; and
  - e. 14.32% for the two 1981 legislative benefit increases.
- A projected salary increase which averages 7.75% per year.

The total unfunded pension benefit obligation of the Teacher Retirement System of Texas as of August 31, 1989, was as follows:

Pension benefit obligation: Retirees and beneficiaries currently receiving benefits and terminated	
employees not yet receiving benefits	\$ 9,158,073,376
Current employees:	
Accumulated employee contributions including allocated	
investment income	\$ 5,591,759,345
Employer-financed vested	\$ 8,677,121,417
Employer-financed non-vested	\$ 1,183,243,830
Total pension benefit obligation	\$24,610,197,968
Net assets available for benefits (book value)	
(market value is \$23,885,168,724)	\$19,657,450,843
Unfunded pension benefit obligation	\$ 4,952,747,125

## D. CONTRIBUTIONS REQUIRED AND CONTRIBUTIONS MADE

\$1,037,622,140.

The system's funding policy provides for periodic employer and employee contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are sufficient to accumulate sufficient assets to pay benefits when due. These rates, which are calculated using entry age normal actuarial cost method, are established through state statutes based upon testimony from the system's

Increase in pension benefit obligation due to plan amendment:

actuary. Actuarial implications due to changes between the recommended rates and the established rates are determined by the system's actuary. State statutes require the amortization period for the unfunded actuarial accrued liability not to exceed thirty (30) years by more than one year. Total contributions to the pension plan in 1989 amounted to \$1,332,181,193 of which \$627,536,746 was from members, \$684,702,849 was from the State of Texas, and \$19,941,598 was from the local school districts. Current contribution rates are indicated in section A. of this note.

#### E. TEN-YEAR HISTORICAL TREND INFORMATION

Analysis of Funding Progress (in million of dollars)

Fiscal Year	(1) Net Assets Available for Benefits	(2) Pension Benefit Obligation	(3) Percentage Funded (1)-(2)	(4) Unfunded Pension Benefit Obligation (2)-(1)	(5) Annual Covered Payroll	(6) Unfunded Pension Benefit Obligation as a Percentage of Covered Payroll (4)-(5)
1987	\$15,528.2	\$20,127.7	77.1%	\$4,599.4	\$8,646.4	53.2%
1988	\$17,465.1	\$21,784.4	80.2%	\$4,319.3	\$9,165.6	47.1%
1989	\$19.657.5	\$24,610.2	79.9%	\$4.952.7	\$9.763.6	50.7%

Analysis of the dollar amounts of net assets available for benefits, pension benefit obligation, and unfunded pension benefit obligation in isolation can be misleading. Expressing the net assets available for benefits as a percentage of the pension benefit obligation provides one indication of TRS's funding status on a going-concern basis.

Analysis of this percentage over time indicates whether the system is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the PERS. Trends in unfunded pension benefit obligation and annual covered payroll are both affected by inflation. Expressing the unfunded pension benefit obligation as a percentage of annual covered payroll approximately adjusts for the effects of inflation and aids analysis of TRS's progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the PERS.

The ten year historical trend information of revenues by source and expenses by type is located on page 62 of this Comprehensive Annual Financial Report. Contributions were made in accordance with state statutes during this ten year period and are as follows:

Fiscal Year	State	\$ Change in Year of Change	Member	\$ Change in Year of Change
1988-89	7.2%	(73,691,440)	6.4 %	
1986-87	8.0%	74,747,621	6.4 %	33,428,339
1984-85	7.1%	(93,980,881)	6.0 %	(43,813,650)
1980-83	8.5%	43.966.657	6.65%	, , , , , , , , , , , , , , , , , , , ,

There has been one retirement formula change during the past ten years. In 1981 the five year average salary was reduced to three years. The amount of dollar change would not significantly affect the benefits paid for the year the change became effective.

A total of five post-retirement benefit adjustments have occurred since fiscal year 1980. In September 1979 the state appropriated funds for this adjustment which increased state contributions and benefit payments for that year by \$149,178,000 and \$10,828,921, respectively. The 1981 adjustment was funded by the state and the system during fiscal year 1981. The state contributions increased by \$188,750,000. This benefit adjustment became effective in two fiscal years. The first became effective February 1981 as an emergency and increased the benefits for that year by \$7,019,688. The second became effective September 1981 and increased that fiscal year's benefits by \$26,401,526. The two remaining benefit adjustments were funded internally by the system. The 1984 adjustment became effective in August and increased the benefits for that year by \$1,967,460. The 1987 adjustment also became effective in August and increased the benefits paid by \$3,975,342 for fiscal year 1987.

#### XII. ACTUARIAL VALUATION

The Actuarial Balance Sheet and Actuarial Letter, which were prepared by The Wyatt Company of Dallas, Texas, are presented in the actuarial section of this report. These are considered to be necessary for adequate financial disclosure and are made a part of these notes by reference. The Board of Trustees has established funding criteria for

the actuarial balance sheet deficiency to be in the range of approximately 30 years based on the assumption of a 6% growth in covered payroll. At August 31, 1989, the annual actuarial valuation conducted by The Wyatt Company disclosed that the actuarial balance sheet deficiency will be funded over a period of 20.9 years in the future assuming that payroll grows at an aggregate compound rate of 6% per year.

Combining Balance Sheet FIDUCIARY FUND TYPES - AUGUST 31, 1989 (With Comparative Memorandum Totals for August 31, 1988)

	PENSION TRUST FUND
ASSETS	Retirement
CURRENT ASSETS: Cash in Bank Cash in State Treasury Short Term Investments Accounts Receivable	\$ 2,745,300 207,954,282 125,503,507
Sale of Investments Member Contributions State Contributions - School Districts Other Due from General Revenue Fund - State Contributions	5,281,014 20,123,929 1,140,410 840,757
Due from School Districts Dividends Receivable Interest Receivable Prepaid Assets	41,479,032 47,112,728 222,358,255 146,410
TOTAL CURRENT ASSETS	\$ 674,685,624
Fixed Income U S Treasury U S Government Agency - Mortgages U S Government Agency - Other Municipals Mortgages Other Corporate Real Estate Direct Participating Mortgages Fixed Rate Mortgages Equities  TOTAL LONG TERM INVESTMENTS	\$ 3,541,125,845 3,231,698,128 950,677,429 10,000,000 175,730,807 2,718,658,806 1,399,716,883 512,791,558 6,339,058,485 \$18,879,457,941
FIXED ASSETS:  Land - Home Office Land - Subsidiaries Building - Home Office Building - Subsidiaries Building - Construction in Progress Furniture and Equipment - Home Office Furniture and Equipment - Subsidiaries	\$ 1,658,310 30,977,012 3,368,785 91,977,173 19,572,442 3,931,925 16,090
Subtotal Less Accumulated Depreciation	\$ 151,501,737 (6,136,612)
NET FIXED ASSETS	\$ 145,365,125
DEFERRED ASSETS	\$ 14,216,222
TOTAL ASSETS AND OTHER DEBITS	\$19,713,724,912

EXPENDABLE TRUST FUND		AGENCY FUND		TOTALS — MEMORANDUM ONLY			
Retired Employees Group Insurance		Collections on Behalf of the State's General Revenue Fund		1989 (Exhibit I)		August 31, 1988	
\$	12,895,612 41,975,563	\$		\$	2,745,300 220,849,894 167,479,070	\$	1,096,557 91,122,199 477,100,000
	1,223,376 14,104 5,099,345		5,505,974		5,281,014 21,347,305 1,140,410 854,861 46,578,377 5,505,974		600,942 17,840,404 1,337,527 198,274 28,463,798 4,952,938
	3,303,064		3,5 5 5,0 1		47,112,728 225,661,319 146,410		43,867,074 202,450,091 161,771
\$	64,511,064	\$.	5,505,974	\$	744,702,662	\$	869,191,575
\$	66,455,606	\$			3,541,125,845 3,231,698,128 950,677,429 10,000,000 175,730,807 2,785,114,412	\$	3,164,130,378 2,829,231,626 922,109,257 10,000,000 266,558,311 2,684,760,499
					1,399,716,883 512,791,558 6,339,058,485		1,003,249,807 485,024,502 5,250,022,521
\$	66,455,606	\$	-0-	\$1	8,945,913,547	\$	16,615,086,901
\$		\$		\$	1,658,310 30,977,012 3,368,785 91,977,173 19,572,442 3,931,925 16,090	\$	1,658,310 3,580,000 3,362,176 64,710,384 9,953,514 3,508,331 3,284
\$	-0-	\$	-0-	\$	151,501,737 (6,136,612)	\$	86,775,999 (4,291,655)
\$	-0-	\$	-0-	\$	145,365,125	\$	82,484,344
\$	-0-	\$	-0-	\$	14,216,222	\$	497,340
\$	130,966,670	\$	5,505,974	\$1	9,850,197,556	\$	17,567,260,160

(to next page)

#### EXHIBIT A

Combining Balance Sheet FIDUCIARY FUND TYPES - AUGUST 31, 1989 (With Comparative Memorandum Totals for August 31, 1988) (concluded)

	PEN	PENSION TRUST FUND	
LIABILITIES, DEFERRED CREDITS, AND FUND EQUITY	Retirement		
CURRENT LIABILITIES: Accounts Payable Benefits Payable Due to State's General Revenue Fund	\$	7,065,873 4,171,036	
TOTAL CURRENT LIABILITIES	\$	11,236,909	
DEFERRED CREDITS: Commitment Fees	\$	2,436,125	
FUND EQUITY: Fund Balances Reserved for: Member Savings Account State Contribution Account Retired Reserve Account Benefit Increase Reserve Account Expense Account Claims Incurred but Unreported Future Retention, Claims, and Administrative Expenditures	5	,635,262,208 ,395,991,400 ,346,367,021 302,225,064 20,206,185	
TOTAL FUND EQUITY	\$19	,700,051,878	
TOTAL LIABILITIES, DEFERRED CREDITS, AND FUND EQUITY	<u>\$19</u>	,713,724,912	

	EXPENDABLE TRUST FUND	T FUND FUND  Collections on Behalf of the State's General		TOTALS — MEMORANDUM ONLY				
En	Retired nployees Group Insurance					August 31,	1988	
\$	443,497	\$	5,505,974	\$	7,509,370 4,171,036 5,505,974	\$	5,400,350 4,280,666 4,952,939	
\$	443,497	\$	5,505,974	\$	17,186,380	\$	14,633,955	
\$	-0-	\$	-0-	\$	2,436,125	\$	4,211,953	
\$	18,534,000	\$		į	5,635,262,208 5,395,991,400 8,346,367,021 302,225,064 20,206,185 18,534,000		5,057,465,447 4,780,746,371 7,288,766,963 310,339,910 16,272,753 21,678,000	
\$	111,989,173 130,523,173	\$	-0-	<b>Q10</b>	111,989,173 9,830,575,051	<b>Q1</b>	73,144,808	
\$	130,966,670	\$	5,505,974		9,850,197,556		7,548,414,252 7,567,260,160	

### EXHIBIT B

### Statement of Changes in Assets and Liabilities AGENCY FUNDS - YEAR ENDED AUGUST 31, 1989

UNAPPROPRIATED RECEIPTS				
Collections on Behalf of the State's General Revenue Fund	Balances September 1, 1988	Additions	Deductions	Balances August 31, 1989
ASSETS				
Cash	\$	\$72,286,183	\$72,286,183	\$
Due from Reporting				
Districts	4,952,939	5,505,974	4,952,939	5,505,974
TOTAL ASSETS	\$ 4,952,939	\$77,792,157	\$77,239,122	\$ 5,505,974
LIABILITIES Due to State's	A 4 050 000	A 5 505 054	A 4050 000	<b>*</b>
General Revenue Fund	\$ 4,952,939	\$ 5,505,974	\$ 4,952,939	\$ 5,505,974

The accompanying Notes to the Financial Statements are an integral part of this financial statement.

## Comparative Schedule of Revenues, Expenses and Changes in Account Balance PENSION TRUST FUND - YEAR ENDED AUGUST 31, 1989

	MEMBER SAV	INGS ACC	NGS ACCOUNT 1988		
REVENUES: Member Deposits					
Eligible for State Contributions Not Eligible for State Contributions	\$ 627,536,746 10,442,271	\$	589,531,522 7,837,071		
TOTAL REVENUES	\$ 637,979,017	\$	597,368,593		
EXPENSES:					
Withdrawal of Member Accounts Transfer to Employees Retirement System	\$ 118,507,638 295,026	\$	113,178,276		
TOTAL EXPENSES	\$ 118,802,664	\$	113,178,276		
OPERATING TRANSFERS IN: Allocation from Interest Account Transfer from Retired Reserve Account	\$ 253,294,321	\$	226,752,925		
for Dormant Accounts	239,613				
TOTAL OPERATING TRANSFERS IN	\$ 253,533,934	\$	226,752,925		
OPERATING TRANSFERS OUT: Transfer to Retired Reserve Account to Fund Benefits Transfer to Retired Reserve Account for Dormant Accounts	\$ 194,712,507	\$	169,296,615 1,043,497		
Transfer to Expense Account for Membership Fees Deducted from Refunds	201,019		159,580		
TOTAL OPERATING TRANSFERS OUT	\$ 194,913,526	\$	170,499,692		
NET INCREASE IN ACCOUNT BALANCE	\$ 577,796,761	\$	540,443,550		
ACCOUNT BALANCE - September 1, 1988	5,057,465,447		4,517,021,897		
ACCOUNT BALANCE - August 31, 1989	\$ 5,635,262,208	\$	5,057,465,447		

# Comparative Schedule of Revenues, Expenses and Changes in Account Balance PENSION TRUST FUND - YEAR ENDED AUGUST 31, 1989 (With Comparative Totals for August 31, 1988)

	STATE CONTRIBUTION ACCOUNT 1989 1988				
REVENUES: State Contributions - General Revenue State Contributions - School Districts Reinstatement Fees Bequests and Donations	\$ 684,702,849 19,941,598 9,052,120 2,500	\$ 646,612,253 16,610,709 6,532,981			
TOTAL REVENUES	\$ 713,699,067	\$ 669,755,943			
EXPENSES: Transfer to Employees Retirement System	\$ 604,326	\$ -0-			
OPERATING TRANSFERS IN: Allocation from Interest Account Transfer from Interest Account for Balance of the Reserve for Gain or Loss on Disposition	\$ 658,370,479	\$ 597,842,425			
of Securities Retirement Benefits Forfeited While Member	416,097,274	258,503,514			
Returned to Teaching Retirement Benefits Waived by Member	1,311,442 454,174	1,148,994 421,788			
TOTAL OPERATING TRANSFERS IN	\$ 1,076,233,369	\$ 857,916,721			
OPERATING TRANSFERS OUT: Transfer to Retired Reserve Account to Fund Benefits Transfer to Retired Reserve Account for Retirement Increases per S.B. 490, 71st Leg., Reg. Sess. (1989)	\$ 676,683,944 460,074,288	\$ 614,797,945			
Transfer to Retired Reserve Account Based on Actuarial Valuation as of August 31, 1988 and 1989	37,324,849	77,804,334			
TOTAL OPERATING TRANSFERS OUT	\$ 1,174,083,081	\$ 692,602,279			
NET INCREASE IN ACCOUNT BALANCE	\$ 615,245,029	\$ 835,070,385			
ACCOUNT BALANCE - September 1, 1988	\$ 4,780,746,371	\$ 3,945,675,986			
ACCOUNT BALANCE - August 31, 1989	\$ 5,395,991,400	\$ 4,780,746,371			

# Comparative Schedule of Revenues, Expenses and Changes in Account Balance PENSION TRUST FUND - YEAR ENDED AUGUST 31, 1989

		1989	ERVE ACCOUNT 1988		
REVENUES:					
Unclaimed School District Deposits	\$	926	\$	-0-	
EXPENSES:					
Benefits Paid					
Service Retirement Annuities	\$	783,198,989	\$	725,060,561	
Disability Retirement Annuities		40,207,404		36,080,519	
Death and Survivor Benefits		Set at Passe in the Process of			
Accumulated Savings		94,821		133,676	
Annual Salary		25,812,663		24,613,339	
Survivor Annuities		18,677,975		18,809,155	
Life Annuities		19,041,922		17,690,921	
60 Monthly Payments		5,108,332		5,518,753	
Remainder of Contributions		432,403		664,051	
TOTAL EXPENSES	\$	892,574,509	\$	828,570,975	
	Ψ	032,374,303	Ψ	020,010,010	
OPERATING TRANSFERS IN:					
Transfer from Member Savings Account	Ф	104 710 507	Ф	100 000 015	
to Fund Benefits	\$	194,712,507	\$	169,296,615	
Transfer from State Contribution Account		CTC COO 044		C1 4 707 04F	
to Fund Benefits		676,683,944		614,797,945	
Allocation from Interest Account		583,158,845		536,713,118	
Transfer from Member Savings Account				1 042 407	
for Dormant Accounts				1,043,497	
Transfer from State Contribution Account					
for Retirement Increases per S.B. 490,		460 074 200			
71st Leg., Reg. Sess. (1989)		460,074,288			
Transfer from State Contribution Account Based					
on Actuarial Valuation as of August 31, 1988		37,324,849		77,804,334	
and 1989		37,324,049		11,004,004	
TOTAL OPERATING	Ф	1 051 054 499	e	1 200 GEE E00	
TRANSFERS IN	\$	1,951,954,433	Ъ	1,399,655,509	
OPERATING TRANSFERS OUT:					
Retirement Benefits Forfeited While Member					
Returned to Teaching	\$	1,302,566	\$	1,142,029	
Retirement Benefits Waived by Member		238,613		326,990	
Transfer to Member Savings Account					
for Dormant Accounts		239,613			
TOTAL OPERATING					
TRANSFERS OUT	\$	1,780,792	\$	1,469,019	
NET INCREASE IN					
ACCOUNT BALANCE	\$	1,057,600,058	\$	569,615,515	
ACCOUNT BALANCE - September 1, 1988		7,288,766,963		6,719,151,448	
P			\$		

# Comparative Schedule of Revenues, Expenses and Changes in Account Balance PENSION TRUST FUND - YEAR ENDED AUGUST 31, 1989

	1	E ACCOUNT 1988		
EXPENSES: Benefits Paid from Increases		43,368,609	\$	45,989,147
OPERATING TRANSFERS IN: Allocation from Interest Account	\$	35,478,200	\$	36,174,832
OPERATING TRANSFERS OUT: Retirement Benefits Forfeited While Member Returned to Teaching Retirement Benefits Waived by Member	\$	8,876 215,561	\$	6,965 94,798
TOTAL OPERATING TRANSFERS OUT	\$	224,437	\$	101,763
NET DECREASE IN ACCOUNT BALANCE	\$	(8,114,846)	\$	(9,916,078)
ACCOUNT BALANCE - September 1, 1988  ACCOUNT BALANCE - August 31, 1989	\$	310,339,910 302,225,064	\$	320,255,988 310,339,910

# Comparative Schedule of Revenues, Expenses and Changes in Account Balance PENSION TRUST FUND - YEAR ENDED AUGUST 31, 1989

	INTEREST ACCOUNT			
	1989	1988		
REVENUES:				
Interest on:				
Treasury Bonds	\$ 346,275,460	\$ 310,950,778		
U S Government Agency Obligations	371,830,165	372,214,949		
Municipal Interest Income	850,000	1,447,265		
Real Estate	161,402,044	143,902,282		
Mortgage - Other	28,857,739	8,974,364		
Corporate Bonds	242,229,951	225,848,673		
Short Term Commercial Notes	25,503,443	30,888,995		
Cash Balance in State Treasury	9,961,569	8,900,506		
Dividends	352,868,763	300,190,830		
Net Gain on Disposition of Securities	416,097,274	258,503,514		
TOTAL REVENUES	\$ 1,955,876,408	\$ 1,661,822,156		
OPERATING TRANSFERS IN:				
Transfer from Expense Account for				
Net Income from Subsidiaries	\$ 3,535,106	\$ 1,399,330		
OPERATING TRANSFERS OUT: Allocation of Interest to Member Savings Account State Contribution Account Retired Reserve Account Benefit Increase Reserve Account Expense Account Transfer to State Contribution Account for Balance in the Reserve for Gain or Loss on Disposition of Securities	\$ 253,294,321 658,370,479 583,158,845 35,478,200 13,012,395 416,097,274	\$ 226,752,925 597,842,425 536,713,118 36,174,832 7,234,672 258,503,514		
TOTAL OPERATING TRANSFERS OUT	\$ 1,959,411,514	\$ 1,663,221,486		
NET INCREASE IN				
ACCOUNT BALANCE	\$ -0-	\$ -0-		
ACCOUNT BALANCE - September 1, 1988	-0-	-0-		
ACCOUNT BALANCE - August 31, 1989	\$ -0-	\$ -0-		

# Comparative Schedule of Revenues, Expenses and Changes in Account Balance PENSION TRUST FUND - YEAR ENDED AUGUST 31, 1989 (With Comparative Totals for August 31, 1988)

		EXPENSE 1989	T 1988	
DEVENIUES.		1303		1366
REVENUES:	<sub>C</sub>	F 024 017	Ф	4.070.400
Membership Fees	\$	5,034,817	\$	4,872,406
From Retired Employees Group Insurance Rental Income from Subsidiaries		60,015		65,791
		9,527,958		5,067,956
Interest Income from Subsidiaries		31,889		41,400
TOTAL REVENUES	\$	14,654,679	\$	10,047,553
EXPENSES:				
Operating Expenses				
Salaries	\$	8,223,670	\$	7,627,627
FICA		867,346		805,622
Group Insurance		436,779		365,236
Miscellaneous Employee Benefits		8,514		11,837
Compensable Absences		109,751		74,951
Contracted Temporary Services		3,916		8,954
Professional Services				0,904
		1,054,178		921,553
Office Supplies		33,151		30,720
Printing Supplies		349,716		182,981
EDP Supplies		52,893		46,698
Microfilm		55,212		56,171
Postage		747,704		620,149
Telephone		98,687		74,832
Dues and Fees		140,676		90,479
Maintenance and Repairs		284,356		275,035
Travel		269,362		225,517
Rentals		173,349		153,352
Subscriptions		71,438		59 640
Securities Clearing Cost		267,844		52,648
EDP Software				135,861
		289,704		172,519
Other		21,515		18,780
Plant Operations		2,905,171		1,811,787
Depreciation		1,875,443		1,328,611
Loss on Sales/Dispositions of Fixed Assets		3,254		38,197
Administrative Expenses from Subsidiaries		380,190		371,119
Amortization of Lease Commissions		198,421		91,573
Taxes and Insurance from Subsidiaries		1,477,315		913,941
TOTAL EXPENSES	\$	20,399,555	\$	16,506,750
OPERATING TRANSFERS IN:				
Allocation from Interest Account	\$	13,012,395	\$	7,234,672
Membership Fees Deducted from Refunds	4	201,019	Ψ	159,580
TOTAL OPERATING		,		
TRANSFERS IN	\$	13,213,414	\$	7,394,252
OPERATING TRANSFERS OUT:				
Transfer to Interest Account for Net				
Income from Subsidiaries	\$	3,535,106	\$	1,399,330
NET INCREASE (DECREASE) IN				
ACCOUNT BALANCE	\$	3,933,432	\$	(464,275
ACCOUNT BALANCE - September 1, 1988		16,272,753		16,737,028
ACCOUNT BALANCE - August 31, 1989	\$		Ф	
ACCOUNT DALANCE - August 31, 1909	Φ	20,206,185	\$	16,272,753

# Combined Schedule of Revenues and Expenses/Expenditures for the Expense Account and the Expense Reserve Budget and Actual on Budgetary Basis

FIDUCIARY FUNDS - YEAR ENDED AUGUST 31, 1989

	PENSION TR	PENSION TRUST FUND - EXPENSE ACCOUNT			
	Budget	Actual	Variance - Favorable (Unfavorable		
REVENUES:  Membership Fees Income from Retired Employees Group Insurance Appropriation from State's General Revenue Fund Active Member Contributions Retirees Contributions	\$ 4,900,000	\$ 5,034,807 60,015	\$ 134,807 60,015		
TOTAL REVENUES	\$ 4,900,000	\$ 5,094,822	\$ 194,822		
EXPENSES/EXPENDITURES:  Operating Expenses/Expenditures:     Salaries     FICA     Group Insurance     Miscellaneous Employee Benefits     Compensable Absences     Contracted Temporary Services     Professional Services     Office Supplies     Printing Supplies     EDP Supplies     Microfilm     Postage     Telephone     Dues and Fees     Maintenance and Repairs     Travel     Rentals     Subscriptions     Securities Clearing Cost     EDP Software     Other     Plant Operations     Depreciation     Loss on Sales/Dispositions of Fixed Assets     Office Space     Equipment Purchases     Data Processing Services	\$ 8,758,078 925,775 487,715 22,000 65,000 3,920 1,033,100 37,000 300,229 73,465 69,500 741,525 103,000 125,884 361,120 307,860 171,880 62,850 518,000 223,300 43,300 424,500 500,000	\$ 8,223,670 867,346 436,779 5,787 109,751 3,915 1,054,178 33,848 343,926 58,824 53,209 739,252 98,687 126,943 287,643 269,362 173,349 71,334 239,539 221,641 24,242 313,599 497,374 3,254	\$ 534,408 58,429 50,936 16,213 (44,751) 5 (21,078) 3,152 (43,697) 14,641 16,291 2,273 4,313 (1,059) 73,477 38,498 (1,469) (8,484) 278,461 1,659 19,058 110,901 2,626 (3,254)		
TOTAL EXPENSES/EXPENDITURES	\$15,359,001	\$14,257,452	\$ 1,101,549		
	Revenues		Expenses		
Totals from Expense Account - Schedule 1 Less Amounts from Wholly Owned Subsidiaries:	\$14,654,669		\$20,399,555		
Income Depreciation Amortization Administrative Plant Operations Taxes and Insurance Difference Between GAAP Basis and Budgetary Basis	(9,559,847)		(1,378,069 (198,421 (380,190) (2,590,746 (1,477,315) (117,362)		
TOTALS PER ABOVE BUDGETARY BASIS SCHEDULE	\$ 5,094,822		\$14,257,452		

E	EXPENDABLE	TRUST	FUND - EXP	ENSE R	ESERVE	TOTALS - (MEMORANDUM ONLY)					
	Budget	udget Actual		Fa	ariance - avorable favorable)	Budget	Actual	F	Variance - Favorable (Unfavorable)		
\$		\$		\$		\$ 4,900,000	\$ 5,034,807 60,015	\$	134,807 60,015		
	345,000 191,670 243,000		374,206 207,892 254,286		29,206 16,222 11,286	345,000 191,670 243,000	374,206 207,892 254,286		29,206 16,222 11,286		
\$	779,670	\$	836,384	\$	56,714	\$ 5,679,670	\$ 5,931,206	\$	251,536		
\$	251,328 31,039 15,180	\$	248,273 28,947 14,385	\$	3,055 2,092 795	\$ 9,009,406 956,814 502,895 22,000	\$ 8,471,943 896,293 451,164 5,787	\$	537,463 60,521 51,731 16,213		
	79,800 2,000		94,768 871		(14,968) 1,129	65,000 3,920 1,112,900 39,000	109,751 3,915 1,148,946 34,719		(44,751) 5 (36,046) 4,281		
	30,250		32,234		(1,984)	330,479 73,465 69,500	376,160 58,824 53,209		(45,681) 14,641 16,291		
	80,000 3,600 3,815 2,500		84,058 1,443 3,385 38		(4,058) 2,157 430 2,462	821,525 106, <b>6</b> 00 129,699 363,620	823,310 100,130 130,328 287,681		(1,785) 6,470 (629)		
	29,500 800		18,841 904		10,659	337,360 171,880 63,650	288,203 173,349 72,238		75,939 49,157 (1,469)		
	3,000		304		3,000	518,000 223,300	239,539 221,641		(8,588) 278,461 1,659		
	3,000				3,000	46,300 424,500 500,000	24,242 313,599 497,374 3,254		22,058 110,901 2,626 (3,254		
	10,500 600 48,000		11,025 969 19,652		(525) (369) 28,348	10,500 600 48,000	11,025 969 19,652		(5,254) (525) (369) 28,348		
\$	591,912	\$	559,793	\$	32,119	\$15,950,913	\$14,817,245	\$	1,133,668		

Expenditures

Total Operating Expenditures - Exhibit II

\$ 561,343

Difference Between GAAP Basis and Budgetary Basis

(1,550)

## Comparative Schedule of Investment Portfolio Pension trust fund

	TOTAL	U S TREASURY BONDS	U S GOV'T AGENCY OBLIGATIONS
YEAR ENDED AUGUST 31, 1989			
ADDITIONS: Purchases Exchanges-In Discount Amortized	\$ 3,469,006,005 1,445,605,360 18,575,626	\$ 549,112,500 579,323,344 3,709,580	\$ 511,413,684 577,083,671 9,226,234
Mergers TOTAL ADDITIONS	18,367,743 \$ 4,951,554,734	\$ 1,132,145,424	\$ 1,097,723,589
DEDUCTIONS:  Bond Calls and Maturities Sales Exchanges-Out Premium Amortized Non-Monetary Exchange	\$ 152,275,817 971,217,946 1,462,361,834 2,855,967 62,428,470	\$ 753,936,236 1,213,721	\$ 115,486,744 6,700,037 539,604,336 503,634
TOTAL DEDUCTIONS	\$ 2,651,140,034	\$ 755,149,957	\$ 662,294,751
NET INCREASE (DECREASE)	\$ 2,300,414,700	\$ 376,995,467	\$ 435,428,838
BOOK VALUE - September 1, 1988 BOND RECATEGORIZATION	\$16,579,043,241	\$ 3,164,130,378	\$ 3,751,340,883 (4,394,164
BOOK VALUE RESTATED - September 1, 1988	\$16,579,043,241	\$ 3,164,130,378	\$ 3,746,946,719
BOOK VALUE - August 31, 1989	\$18,879,457,941	\$ 3,541,125,845	\$ 4,182,375,557
YEAR ENDED AUGUST 31, 1988  ADDITIONS: Purchases Exchanges-In Discount Amortized Mergers	\$ 2,895,271,154 3,253,521,998 11,971,325 13,884	\$ 634,503,125 862,857,295 3,704,179	\$ 363,343,128 1,960,685,155 4,500,802
TOTAL ADDITIONS	\$ 6,160,778,361	\$ 1,501,064,599	\$ 2,328,529,085
DEDUCTIONS: Bond Calls and Maturities Sales Exchanges-Out Premium Amortized Non-Monetary Exchange	\$ 196,631,279 519,014,953 3,305,044,237 1,785,919 48,951,063	\$ 21,676,725 1,355,523,177 1,203,266	\$ 115,799,920 61,332,080 1,491,247,325 191,15
TOTAL DEDUCTIONS	\$ 4,071,427,451	\$ 1,378,403,168	\$ 1,668,570,476
NET INCREASE (DECREASE)	\$ 2,089,350,910	\$ 122,661,431	\$ 659,958,609
BOOK VALUE - September 1, 1987 BOND RECATEGORIZATION	\$14,489,692,331	\$ 3,041,468,947	\$ 1,615,308,443 1,476,073,83
BOOK VALUE RESTATED - September 1, 1987	\$14,489,692,331	\$ 3,041,468,947	\$ 3,091,382,27
BOOK VALUE - August 31, 1988	\$16,579,043,241	\$ 3,164,130,378	\$ 3,751,340,88

MUNICIPALS		CIPALS MORTGAGES OTHER		CORPORATE BONDS	REAL ESTATE		EQUITIES
\$		\$	24,235	\$ 168,002,393 289,198,345 5,517,973	\$	490,314,966 97,604	\$ 1,750,162,462
\$	-0-	\$	24,235	\$ 358,803 463,077,514	\$	490,412,570	\$ 1,768,171,402
\$	-0-	\$	29,875,633 65,370,143	\$ 4,234,221 220,012,328 168,821,262 67,736	\$	2,679,219 1,070,749	\$ 679,135,438
			121	07,730		62,428,470	
\$	-0-	\$	95,245,903	\$ 393,135,547	\$	66,178,438	\$ 679,135,438
\$	-0-	\$	(95,221,668)	\$ 69,941,967	\$	424,234,132	\$ 1,089,035,964
\$	10,000,000	\$	266,558,311 4,394,164	\$ 2,648,716,839	\$	1,488,274,309	\$ 5,250,022,521
\$	10,000,000	\$	270,952,475	\$ 2,648,716,839	\$	1,488,274,309	\$ 5,250,022,521
\$	10,000,000	\$	175,730,807	\$ 2,718,658,806	\$	1,912,508,441	\$ 6,339,058,485
\$		\$		\$ 407,434,475 429,979,548	\$	108,816,709	\$ 1,381,173,717
			2,420	3,702,660		61,264	13,884
\$	-0-	\$	2,420	\$ 841,116,683	\$	108,877,973	\$ 1,381,187,601
\$		\$	42,686,190 23,137,051 26	\$ 36,770,083 1,919,564 435,136,684 65,213	\$	1,375,086 59,461,189 326,263 48,951,063	\$ 374,625,395
\$	-0-	\$	65,823,267	\$ 473,891,544	\$	110,113,601	\$ 374,625,395
\$	-0-	\$	(65,820,847)	\$ 367,225,139	\$	(1,235,628)	\$ 1,006,562,206
\$	10,000,000	\$	-0- 332,379,158	\$ 4,089,944,689 (1,808,452,989)	\$	1,489,509,937	\$ 4,243,460,315
\$	10,000,000	\$	332,379,158	\$ 2,281,491,700	\$	1,489,509,937	\$ 4,243,460,315
\$	10,000,000	\$	266,558,311	\$ 2,648,716,839	\$	1,488,274,309	\$ 5,250,022,521

## Actuarial Section

THE Wyatt COMPANY

AN INDEPENDENT WORLDWIDE BENEFITS AND COMPENSATION CONSULTING FIRM

ACTUARIAL SERVICES
COMPENSATION PROGRAMS
ADMINISTRATIVE SYSTEMS
INTERNATIONAL SERVICES
ORGANIZATION SURVEYS

1900 NCNB CENTER, TOWER II 325 NORTH ST. PAUL STREET DALLAS, TEXAS 75201 (214) 979-3800 EMPLOYEE BENEFITS

EMPLOYEE COMMUNICATIONS

RISK MANAGEMENT

INSURANCE CONSULTING

HEALTH CARE CONSULTING

February 6, 1990

#### **BOARD OF TRUSTEES**

Teacher Retirement System of Texas

#### Summary of Actuarial Report Requested by State Auditor

The State Auditor's office has requested that we summarize the results of the actuarial valuation of the Teacher Retirement System of Texas as of August 31, 1989. The actuarial valuation report reveals that the Teacher Retirement System of Texas is an actuarially sound system based on our current actuarial assumptions and that the present actuarial value of assets (\$23.3 billion) plus the contributions required by the law in the future will be sufficient to meet the payments to the present active and retired members and their beneficiaries.

 $The \, actuarial \, assumptions \, and \, methods \, used \, in \, this \, valuation \, are \, those \, adopted \, by \, the \, Board \, based \, on \, the \, 1985 \, Experience \, Study:$ 

- 1. Mortality for retired members is based on the 1983 Group Annuity Mortality Table for males and the 1983 Group Annuity Mortality Table for females with a one year set-forward in age. An extensive study of actual mortality experience of retired members under the System indicates that this mortality table is appropriate but contains little or no conservatism.
- 2. Mortality for active members is based on a table constructed from the actual experience of the Teacher Retirement System of Texas.
- 3. Disability, retirement, and withdrawal rates are based on actual experience of the Teacher Retirement System of Texas. Retirement and withdrawal rates take a select and ultimate form. Retirement rates have been increased at certain age/service combinations to reflect anticipated experience due to the improved retirement provisions passed by the 1989 Legislature.
- 4. An investment return assumption of 8%, compounded annually, is used with regard to computations for retired persons and for active members. An interest rate of 8.38%, compounded annually, is used with regard to the 1975 Legislative increase for retired members; a rate of 9.56%, compounded annually, is used with regard to the 1977 Legislative increase; a rate of 10.30%, compounded annually, is used with regard to the 1979 Legislative increase; and a rate of 14.32%, compounded annually, is used with regard to that portion of the two 1981 Legislative increases which was not funded by reserves released from the Retired Reserve Account.
- 5. Salary scale for projecting future salaries: A study of actual experience of the Teacher Retirement System of Texas has been used as the basis for construction of step-rate/promotional salary scale tables which appear to be reasonable. In addition, a general salary increase assumption of 6½% is used.
- 6. Actuarial value of assets is determined under a market over book adjusted asset valuation method which recognizes unrealized appreciation in equity market values over a five-year rolling average period.
- 7. Funding of the Unfunded Actuarial Accrued Liability is based on the excess of assumed future State contributions over the amount of such contributions required to fund the normal cost of benefits provided by the System. Basing the normal cost for the System on a study of all new entrants hired in the period from 1985 through 1988, the normal cost is 12.05% of payroll (6.40% by members plus 5.65% by the State), which is 2% of payroll less than the total contributions being paid by the members and by the State. It is assumed that the excess amount of 2% of payroll contributed by the State will be utilized to fund the unfunded actuarial accrued liability of \$3.489 billion (as shown on the actuarial balance sheet) over a period of 20.9 years in the future, assuming that payroll grows at an aggregate compound rate of 6% per year. All funding calculations assume that the State contribution rate will remain at 7.65%.

Based on the above assumptions and the actuarial results shown in the report, it is our opinion that the Teacher Retirement System of Texas is actuarially sound and if the payroll in the future increases at the rate of 6%, compounded annually, the unfunded actuarial accrued liability of \$3.489 billion will be amortized over a period of 20.9 years in the future.

Respectfully submitted, THE WYATT COMPANY

Richard B. Mallett, FSA Actuary

chard B. Mallett

W. Michael Carter, FSA

Actuary

Actuarial Balance Sheet SHOWING PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES AFTER ACTUARIAL ADJUSTMENT TO RETIRED RESERVE ACCOUNT Actuarial Valuation as of August 31, 1989

CTUARIAL ASSETS	Augu 1989	st 31, 1988
	1303	1300
RESENT ASSETS AT ACTUARIAL VALUE:	Ф 0 051 144 750	ф 7 000 F00 400
Retired Reserve Account (Actuarially Determined)	\$ 8,351,144,759	\$ 7,289,502,432
1975 Benefit Increase Reserve Subaccount	11,999,733	17,377,827
1977 Benefit Increase Reserve Subaccount	68,827,175	70,607,555
1979 Benefit Increase Reserve Subaccount	51,208,981	52,346,993
1981 Benefit Increase Reserve Subaccount	170,189,175	170,007,535
Member Savings Account	5,633,976,824	5,057,465,447
State Contribution Account Expense Accounts and Miscellaneous	5,392,499,046	4,780,010,901
	33,879,219	27,812,675
TOTAL PRESENT ASSETS	\$19,713,724,912	\$17,465,131,365
Adjustment to Book Value Due to Actuarial	0.505.005.100	0.000 500 000
Asset Valuation Method	3,587,907,103	2,630,786,285
TOTAL ACTUARIAL VALUE OF		
PRESENT ASSETS	\$23,301,632,015	\$20,095,917,650
ROSPECTIVE ASSETS:		
Present Value of Future Contributions		
by Present Members	\$ 7,591,668,754	\$ 7,414,181,553
Present Value of Future Normal Costs		
Contributed by the State	6,702,020,073	5,931,345,242
Unfunded Actuarial Accrued Liability	3,488,722,355	3,890,216,133
TOTAL PROSPECTIVE ASSETS	\$17,782,411,182	\$17,235,742,928
OTAL ACTUARIAL ASSETS	\$41,084,043,197	\$37,331,660,578
OTAL ACTUARIAL ASSETS	\$41,084,043,197	\$37,331,660,578
	Augu	
		\$37,331,660,578 st 31, 1988
CTUARIAL LIABILITIES RESENT VALUE OF BENEFITS	Augu	st 31,
CTUARIAL LIABILITIES RESENT VALUE OF BENEFITS RESENTLY BEING PAID:	Augu	st 31,
CTUARIAL LIABILITIES  RESENT VALUE OF BENEFITS RESENTLY BEING PAID: Benefits other than Legislative Increases	Augu	st 31,
CTUARIAL LIABILITIES  RESENT VALUE OF BENEFITS RESENTLY BEING PAID: Benefits other than Legislative Increases for Retired Members	1989 Augu	st 31, 1988
CTUARIAL LIABILITIES  RESENT VALUE OF BENEFITS RESENTLY BEING PAID: Benefits other than Legislative Increases for Retired Members Service Retirement Benefits	1989 Augu 1989 \$ 7,724,359,546	st 31, 1988 \$ 6,734,810,833
CTUARIAL LIABILITIES  RESENT VALUE OF BENEFITS RESENTLY BEING PAID: Benefits other than Legislative Increases for Retired Members Service Retirement Benefits Disability Retirement Benefits	1989 Augu 1989 \$ 7,724,359,546 343,068,636	st 31, 1988 \$ 6,734,810,83; 296,564,84
CTUARIAL LIABILITIES  RESENT VALUE OF BENEFITS RESENTLY BEING PAID: Benefits other than Legislative Increases for Retired Members Service Retirement Benefits Disability Retirement Benefits Death Benefits	\$ 7,724,359,546 343,068,636 204,872,952	\$ 6,734,810,833 296,564,841 180,046,867
CTUARIAL LIABILITIES  RESENT VALUE OF BENEFITS RESENTLY BEING PAID: Benefits other than Legislative Increases for Retired Members Service Retirement Benefits Disability Retirement Benefits	1989 Augu 1989 \$ 7,724,359,546 343,068,636	\$ 6,734,810,833 296,564,841 180,046,867
CTUARIAL LIABILITIES  RESENT VALUE OF BENEFITS RESENTLY BEING PAID: Benefits other than Legislative Increases for Retired Members Service Retirement Benefits Disability Retirement Benefits Death Benefits	\$ 7,724,359,546 343,068,636 204,872,952	\$ 6,734,810,833 296,564,841 180,046,867 78,079,893
CTUARIAL LIABILITIES  RESENT VALUE OF BENEFITS RESENTLY BEING PAID: Benefits other than Legislative Increases for Retired Members Service Retirement Benefits Disability Retirement Benefits Death Benefits Present Survivor Benefits  TOTAL BASIC RESERVES  Benefits Provided Retired Members	\$ 7,724,359,546 343,068,636 204,872,952 78,843,625	\$ 6,734,810,83: 296,564,84 180,046,86 78,079,89
CTUARIAL LIABILITIES  RESENT VALUE OF BENEFITS RESENTLY BEING PAID: Benefits other than Legislative Increases for Retired Members Service Retirement Benefits Disability Retirement Benefits Death Benefits Present Survivor Benefits  TOTAL BASIC RESERVES  Benefits Provided Retired Members by 1975 Legislative Increase	\$ 7,724,359,546 343,068,636 204,872,952 78,843,625 \$ 8,351,144,759	\$ 6,734,810,833 296,564,84 180,046,865 78,079,893 \$ 7,289,502,432
CTUARIAL LIABILITIES  RESENT VALUE OF BENEFITS RESENTLY BEING PAID: Benefits other than Legislative Increases for Retired Members Service Retirement Benefits Disability Retirement Benefits Death Benefits Present Survivor Benefits  TOTAL BASIC RESERVES  Benefits Provided Retired Members by 1975 Legislative Increase Service Retirement Benefits	\$ 7,724,359,546 343,068,636 204,872,952 78,843,625 \$ 8,351,144,759 \$ 31,279,056	\$ 6,734,810,833 296,564,84 180,046,863 78,079,893 \$ 7,289,502,432
CTUARIAL LIABILITIES  RESENT VALUE OF BENEFITS RESENTLY BEING PAID: Benefits other than Legislative Increases for Retired Members Service Retirement Benefits Disability Retirement Benefits Death Benefits Present Survivor Benefits  TOTAL BASIC RESERVES  Benefits Provided Retired Members by 1975 Legislative Increase Service Retirement Benefits Disability Retirement Benefits	\$ 7,724,359,546 343,068,636 204,872,952 78,843,625 \$ 8,351,144,759 \$ 31,279,056 764,868	\$ 6,734,810,833 296,564,84 180,046,865 78,079,893 \$ 7,289,502,432 \$ 35,106,996 848,844
CTUARIAL LIABILITIES  RESENT VALUE OF BENEFITS RESENTLY BEING PAID: Benefits other than Legislative Increases for Retired Members Service Retirement Benefits Disability Retirement Benefits Death Benefits Present Survivor Benefits  TOTAL BASIC RESERVES  Benefits Provided Retired Members by 1975 Legislative Increase Service Retirement Benefits	\$ 7,724,359,546 343,068,636 204,872,952 78,843,625 \$ 8,351,144,759 \$ 31,279,056	\$ 6,734,810,833 296,564,84 180,046,863 78,079,893 \$ 7,289,502,432 \$ 35,106,996 848,844
CTUARIAL LIABILITIES  RESENT VALUE OF BENEFITS RESENTLY BEING PAID: Benefits other than Legislative Increases for Retired Members Service Retirement Benefits Disability Retirement Benefits Death Benefits Present Survivor Benefits  TOTAL BASIC RESERVES  Benefits Provided Retired Members by 1975 Legislative Increase Service Retirement Benefits Disability Retirement Benefits	\$ 7,724,359,546 343,068,636 204,872,952 78,843,625 \$ 8,351,144,759 \$ 31,279,056 764,868	\$ 6,734,810,83; 296,564,84; 180,046,86; 78,079,89; \$ 7,289,502,432; \$ 35,106,996; 848,84; 1,564,188;
RESENT VALUE OF BENEFITS RESENTLY BEING PAID: Benefits other than Legislative Increases for Retired Members Service Retirement Benefits Disability Retirement Benefits Death Benefits Present Survivor Benefits  TOTAL BASIC RESERVES  Benefits Provided Retired Members by 1975 Legislative Increase Service Retirement Benefits Disability Retirement Benefits Disability Retirement Benefits Disability Retirement Benefits Death Benefits  TOTAL 1975 INCREASE RESERVES	\$ 7,724,359,546 343,068,636 204,872,952 78,843,625 \$ 8,351,144,759 \$ 31,279,056 764,868 1,538,112	\$ 6,734,810,83; 296,564,84; 180,046,86; 78,079,89; \$ 7,289,502,43; \$ 35,106,996; 848,84; 1,564,18;
RESENT VALUE OF BENEFITS RESENTLY BEING PAID: Benefits other than Legislative Increases for Retired Members Service Retirement Benefits Disability Retirement Benefits Death Benefits Present Survivor Benefits  TOTAL BASIC RESERVES  Benefits Provided Retired Members by 1975 Legislative Increase Service Retirement Benefits Disability Retirement Benefits Disability Retirement Benefits Disability Retirement Benefits Death Benefits  TOTAL 1975 INCREASE RESERVES  Benefits Provided Retired Members	\$ 7,724,359,546 343,068,636 204,872,952 78,843,625 \$ 8,351,144,759 \$ 31,279,056 764,868 1,538,112	\$ 6,734,810,833 296,564,841 180,046,867 78,079,891 \$ 7,289,502,432 \$ 35,106,996 848,844 1,564,188
CTUARIAL LIABILITIES  RESENT VALUE OF BENEFITS RESENTLY BEING PAID: Benefits other than Legislative Increases for Retired Members Service Retirement Benefits Disability Retirement Benefits Death Benefits Present Survivor Benefits  TOTAL BASIC RESERVES  Benefits Provided Retired Members by 1975 Legislative Increase Service Retirement Benefits Disability Retirement Benefits Disability Retirement Benefits Death Benefits  TOTAL 1975 INCREASE RESERVES  Benefits Provided Retired Members by 1977 Legislative Increase	\$ 7,724,359,546 343,068,636 204,872,952 78,843,625 \$ 8,351,144,759 \$ 31,279,056 764,868 1,538,112 \$ 33,582,036	\$ 6,734,810,833 296,564,841 180,046,867 78,079,891 \$ 7,289,502,432 \$ 35,106,996 848,844 1,564,188 \$ 37,520,028
RESENT VALUE OF BENEFITS RESENTLY BEING PAID: Benefits other than Legislative Increases for Retired Members Service Retirement Benefits Disability Retirement Benefits Death Benefits Present Survivor Benefits  TOTAL BASIC RESERVES  Benefits Provided Retired Members by 1975 Legislative Increase Service Retirement Benefits Disability Retirement Benefits Disability Retirement Benefits Death Benefits  TOTAL 1975 INCREASE RESERVES  Benefits Provided Retired Members by 1977 Legislative Increase Service Retirement Benefits	\$ 7,724,359,546 343,068,636 204,872,952 78,843,625 \$ 8,351,144,759 \$ 31,279,056 764,868 1,538,112 \$ 33,582,036 \$ 39,829,980	\$ 6,734,810,833 296,564,841 180,046,867 78,079,891 \$ 7,289,502,432 \$ 35,106,996 848,844 1,564,188 \$ 37,520,028
CTUARIAL LIABILITIES  RESENT VALUE OF BENEFITS RESENTLY BEING PAID: Benefits other than Legislative Increases for Retired Members Service Retirement Benefits Disability Retirement Benefits Death Benefits Present Survivor Benefits  TOTAL BASIC RESERVES  Benefits Provided Retired Members by 1975 Legislative Increase Service Retirement Benefits Disability Retirement Benefits Death Benefits  TOTAL 1975 INCREASE RESERVES  Benefits Provided Retired Members by 1977 Legislative Increase Service Retirement Benefits Disability Retirement Benefits Disability Retirement Benefits	\$ 7,724,359,546 343,068,636 204,872,952 78,843,625 \$ 8,351,144,759 \$ 31,279,056 764,868 1,538,112 \$ 33,582,036 \$ 39,829,980 1,332,684	\$ 6,734,810,833 296,564,841 180,046,867 78,079,891 \$ 7,289,502,432 \$ 35,106,996 848,844 1,564,188 \$ 37,520,028 \$ 43,691,064 1,438,620
CTUARIAL LIABILITIES  RESENT VALUE OF BENEFITS RESENTLY BEING PAID: Benefits other than Legislative Increases for Retired Members Service Retirement Benefits Disability Retirement Benefits Death Benefits Present Survivor Benefits  TOTAL BASIC RESERVES  Benefits Provided Retired Members by 1975 Legislative Increase Service Retirement Benefits Disability Retirement Benefits Death Benefits  TOTAL 1975 INCREASE RESERVES  Benefits Provided Retired Members by 1977 Legislative Increase Service Retirement Benefits Disability Retirement Benefits Disability Retirement Benefits Disability Retirement Benefits	\$ 7,724,359,546 343,068,636 204,872,952 78,843,625 \$ 8,351,144,759 \$ 31,279,056 764,868 1,538,112 \$ 33,582,036 \$ 39,829,980 1,332,684 1,782,768	\$ 6,734,810,833 296,564,841 180,046,867 78,079,891 \$ 7,289,502,432 \$ 35,106,996 848,844 1,564,188 \$ 37,520,028 \$ 43,691,064 1,438,620 1,813,620
for Retired Members Service Retirement Benefits Disability Retirement Benefits Death Benefits Present Survivor Benefits  TOTAL BASIC RESERVES  Benefits Provided Retired Members by 1975 Legislative Increase Service Retirement Benefits Disability Retirement Benefits Death Benefits  TOTAL 1975 INCREASE RESERVES  Benefits Provided Retired Members by 1977 Legislative Increase Service Retirement Benefits Disability Retirement Benefits	\$ 7,724,359,546 343,068,636 204,872,952 78,843,625 \$ 8,351,144,759 \$ 31,279,056 764,868 1,538,112 \$ 33,582,036 \$ 39,829,980 1,332,684	\$ 6,734,810,833 296,564,841 180,046,867 78,079,891 \$ 7,289,502,432 \$ 35,106,996 848,844 1,564,188 \$ 37,520,028

Benefits Provided Retired Members by 1979 Legislative Increase Service Retirement Benefits Disability Retirement Benefits Death Benefits	\$	28,364,172 721,104 1,316,856	\$	31,662,648 796,788 1,335,228
TOTAL 1979 INCREASE RESERVES	\$	30,402,132	\$	33,794,664
Benefits Provided Retired Members by 1981 Legislative Increases Service Retirement Benefits Disability Retirement Benefits Death Benefits	\$	123,772,320 3,777,648 3,665,892	\$	86,357,067 2,517,762 2,574,435
TOTAL 1981 INCREASE RESERVES	\$	131,215,860	\$	91,449,264
TOTAL PRESENT VALUE OF BENEFITS PRESENTLY BEING PAID	\$	8,589,290,219	\$	7,499,209,692
PRESENT VALUE OF BENEFITS PAYABLE IN THE FUTURE TO PRESENT ACTIVE MEMBERS: Service Retirement Benefits	\$2	8,583,054,143		6,006,350,627
Disability Retirement Benefits Disability Prior to Vesting Disability After Vesting		2,266,196 868,958,261		2,301,166 886,468,107
TOTAL DISABILITY BENEFITS	\$	871,224,457	\$	888,769,273
Refunds of Contributions on Withdrawal	\$	1,713,520,499	\$	1,650,880,424
Death and Survivor Benefits Two Times Pay Refund of Contributions Five Year Annuity Life Annuity Survivor Benefit	\$	196,589,692 3,026,106 96,520,762 394,547,186 11,212,907	\$	195,698,210 3,062,836 98,167,191 388,952,980 11,145,019
TOTAL DEATH BENEFITS	\$	701,896,653	\$	697,026,236
TOTAL ACTIVE MEMBER LIABILITIES	\$3:	1,869,695,752	\$2	9,243,026,560
PRESENT VALUE OF BENEFITS PAYABLE IN THE FUTURE TO PRESENT INACTIVE MEMBERS: Terminated Vested Participants Retirement Benefits	\$	32,975,378	\$	31,932,263
Death Benefits	<b>*</b>	2,143,577	Ψ	2,073,740
TOTAL TERMINATED VESTED BENEFITS	\$	35,118,955	\$	34,006,003
Refunds of Contributions to Terminated Non-vested Members	\$	10,148,458	\$	10,603,187
Future Survivor Benefits Payable on Behalf of Present Annuitants	\$	523,515,744	\$	501,622,733
TOTAL INACTIVE LIABILITIES	\$	568,783,157	\$	546,231,923
OTHER LIABILITIES AND RESERVES: Reserve for Expenses, and Benefits and Accounts Payable	\$	56,274,069	\$	43,192,403
TOTAL ACTUARIAL LIABILITIES		1,084,043,197		7,331,660,578
	Ψ4	1,004,040,137	φυ	7,001,000,078

#### **Summary of Benefits**

The Teacher Retirement System of Texas makes provision for retirement, disability, and death and survivor benefits to all employees of public education in Texas. Benefits are financed by member and state contributions. The major benefit provisions are as follows:

#### Service Retirement

Normal retirement age is 65 with 5 years of service, 60 with 20 years of service, or 55 with 30 years of service. The standard life annuity benefit formula is 2 percent of average annual salary for the best three years of service multiplied by the years of service. At normal retirement age, the minimum monthly standard annuity is the greater of \$75.00, \$6.50 per month per year of service, or the formula standard annuity. Total payments shall in no case be less than accumulated contributions at retirement. At death, any excess would be paid to the beneficiary.

Optional plans actuarially reduced from the standard annuity are: joint lifetime with 100 percent to surviving beneficiary or if the beneficiary dies before the retiree, the retiree's future monthly annuity payment will increase to the amount of the standard annuity; joint lifetime with 50 percent to surviving beneficiary or if the beneficiary dies before the retiree, the retiree's future monthly annuity payment will increase to the amount of the standard annuity; lifetime with five years certain; and lifetime with 10 years certain.

A member may receive a reduced annuity at age 55 with at least 5 years of service or at any age below 55 with 30 or more years of service. The normal retirement benefit for early age retirement is reduced according to a set of factors, based on age at date of retirement and years of service, adopted by the Board of Trustees.

#### Disability Retirement

With less than 10 years of service, monthly payments would be \$50 for the shorter of the duration of the disability or number of months of service as of the date of disability retirement. With at least 10 years of service, a disabled member may receive the greater of accrued retirement income or \$6.50 per month per year of service, payable for the duration of the disability. Disability is presumed continuous if it continues past age 60.

#### **Death and Survivor Benefits**

Should death occur before retirement, a benefit is provided even if the member is absent from service because of illness, on disability retirement, or within 5 years of being eligible to retire when leaving employment. The beneficiary will receive one of the following payment plans:

1. A lump sum payment equal to twice the member's annual compensation, but not to exceed \$60,000. 2. Sixty monthly payments equal to the member's standard annuity without reduction for age, if eligible.

3. Lifetime payments equal to a reduced standard annuity, calculated like a joint annuity with 100 percent to surviving beneficiary option plan, if eligible.

4. A return of the member's deposits with interest.

5. Survivor benefits of \$2,500 lump sum payment plus \$200 per month to beneficiary spouse with minor children continuing until youngest child reaches age 18. At age 65, the spouse would begin receiving \$100 per month for life.

If the member is absent from service without good cause, the benefit is the return of accumulated contributions.

A disability retiree's beneficiary can choose one of the above plans or a \$10,000 lump sum payment.

Upon the death of a service retiree, the eligible beneficiary may choose to receive either a \$10,000 lump sum payment, or a \$2,500 lump sum payment plus, if a spouse or dependent parent, \$100 per month beginning immediately or upon reaching 65 years of age, whichever is later.

#### Vesting of Benefits

Members with at least 5 years of creditable service have a vested right to service retirement benefits upon reaching retirement age, even though they leave covered employment, if they do not withdraw deposits.

#### Health Insurance



n addition to the benefits above, the Texas Public School Retired Employees Group Insurance Program, TRS-Care, makes available a basic level of health insurance

coverage to TRS public school retirees without cost. Eligible are TRS retirees who are not eligible for coverage by Texas State College and University Employees Uniform Insurance Benefits Program, Texas Employees Uniform Group Insurance Benefits Program, or any other State of Texas employee group health insurance program. A higher level of coverage and coverage for spouses of retirees and for surviving spouses and dependents of retirees and of deceased eligible active members are also available for purchase. The program is financed by state and active public school member contributions and payments by the insured. The program is administered by the TRS Board of Trustees.

### **Investment Section**

#### Authority



he constitution of the State of Texas provides that the Board of Trustees shall invest the funds of the system in such securities as the board may

consider prudent investments. In making investments, the board "shall exercise the judgment and care under the circumstances then prevailing that persons of ordinary prudence, discretion, and intelligence exercise in the management of their own affairs, not in regard to speculation, but in regard to the permanent disposition of their funds, considering the probable income therefrom as well as the probable safety of their capital" (the prudent person rule). The prudent person standard has enabled the Board of Trustees to enhance control over fund risk and return parameters.

#### Policy

The board has set high quality investment standards with prime consideration given to safety of capital and maximum income, sustainable over time. In order to insure a continuing flow of income to be used to pay benefits promised to participants years into the future, emphasis is placed on quality, potential long term yield, and optimal diversification.

#### **Operations**

Trustees are assisted in the implementation of investment objectives by an investment staff, outside professional counsel, and an Investment Advisory Committee.

The 26 member investment staff, 19 of whom are professional, is responsible for management of the funds of the system within the provisions of the investment policy as established by the board. They are also responsible for execution of all securities transactions and report quarterly to the board.

The Investment Advisory Committee, composed of a minimum of five and a maximum of nine prominent Texas investment specialists, is appointed by the Board of Trustees. The committee meets quarterly with the executive secretary, investment staff, and outside counsel to discuss investments and recommend policy changes to the board.

All purchases, sales, and exchanges of securities are made by the staff in accordance with the constitutional authority granted to the Board of Trustees, further restricted by the policy and quarterly instructions pertaining to specific securities, asset allocation, as well as yield and price objectives. Conventional institutional investment customs and practices are followed in adhering to the "prudent person rule."

TRS retains Wellington Management Company of Boston as outside equity and fixed income investment counsel. In addition, five registered real estate advisors are utilized to assist in the selection of appropriate real estate investments. They are: Alex Brown Realty Advisors, Baltimore; FIA Associates, Inc., Sacramento; Lomas and Nettleton, Dallas; The Boston Company, Boston; and L. J. Melody Co., Houston. Real estate proposals are submitted to one of these advisors for initial screening and analysis. Each proposal is evaluated on its own merits, and those considered appropriate are presented by the advisor to the TRS staff. Once a commitment is made, the advisor then provides asset management services through its life in the TRS portfolio.

#### Portfolio

The TRS Pension Trust Fund investment portfolio is now \$19.3 billion in size at book value, having grown approximately \$2 billion in the 1988-89 fiscal year. It is well diversified and has enjoyed excellent performance in all respects. During the year, capital gains realized from the portfolio totaled more than \$416 million. The portfolio is completely internally managed.

Performance is measured against the S&P 500 stock index, the Shearson Lehman Aggregate Bond Index, and the 90-day T-bills rate representing cash. Real estate performance is being measured against the Russell Real Estate Index.

#### Investment Overview

#### **Return on Assets**

PENSION TRUST FUND - FISCAL YEARS ENDING AUGUST 31 (MILLIONS)

	1985	1986	1987	1988	1989	3 Years	5 Years
BEGINNING BOOK VALUE	\$ 9,851	\$11,383	\$13,428	\$15,528	\$17,465	\$13,428	\$ 9,851
Net Contributions Added	337	411	398	270	293	961	1,709
Interest and Dividend Income	978	1,111	1,214	1,408	1,540	4,162	6,251
Net Realized Gains	217	523	488	259	416	1,163	1,903
ENDING BOOK VALUE	\$11,383	\$13,428	\$15,528	\$17,465	\$19,714	\$19,714	\$19,714
NET UNREALIZED GAINS							
AT YEAR END	854	3,282	3,614	1,720	4,227	4,227	4,227
ENDING MARKET VALUE	\$12,237	\$16,710	\$19,142	\$19,185	\$23,941	\$23,941	\$23,941
RETURN FROM INTEREST AND DIVIDEND INCOME *	9.76%	9.59%	8.91%	8.99%	8.74%	8.85%	8.95%
RETURN FROM NET	0070	0.0070	0.0170	0.0070	011 270	0.0070	0.0070
REALIZED CAPITAL							
GAINS **	2.17	4.51	3.58	1.65	2.36	2.47	2.72
CASH RETURN ON BOOK							
VALUE	11.93%	14.10%	12.49%	10.64%	11.10%	11.32%	11.67%
	* Interest	Returns	$=\frac{2}{(B+E)}$				

I = Interest, Dividends and Fixed Income Amortizations

2N

(B + E - N - I)

N = Net Realized Gains (Losses) from the Sale of Assets

B = Beginning Book Value

\*\* Return from Net Gains =

E = Ending Book Value

### Total Time Weighted Returns \* FOR PERIODS ENDING SEPTEMBER 30, 1989

(By Holbein Associates)

	1985	1986	1987	1988	1989	3 Years	5 Years
TOTAL PORTFOLIO TRS Inflation (CPI)	22.0% 3.2%	28.5% 1.8%	16.7% 4.3%	3.4% 4.3%	19.7% 4.4%	12.6% 4.3%	17.5% 3.6%
COMMON STOCKS TRS S&P 500	18.0% 14.5%	33.0% 31.9%	41.1% 43.3%	-11.3% -12.3%	28.9% 32.9%	17.3% 18.6%	20.4% 20.3%
BOND RETURNS TRS Shearson Lehman Govt/Corp Index	26.7% 21.2%	28.2% 20.7%	1.4% 4%	14.9% 12.8%	14.3% 11.3%	9.1% 7.7%	16.1% 12.8%
ASSET ALLOCATION (AVERAGE) Bonds Common Stocks Other	52.8% 38.5% 8.7%	53.8% 37.9% 8.3%	48.7% 40.1% 11.2%	51.3% 37.2% 11.5%	49.0% 40.5% 10.5%	49.7% 39.2% 11.1%	51.1% 38.8% 10.1%

<sup>\*</sup> These rates include unrealized appreciation in market values.

Investment Summary
PENSION TRUST FUND (UNCONSOLIDATED)

	Book Value Yield				
HOLDINGS	8-31-89	8-31-88	8-31-89	8-31-88	
FIXED INCOME					
U S Treasury	\$ 3,541,125,845	\$ 3,164,130,378	10.06%	10.08%	
U S Government Agency - Mortgages	3,231,698,128	2,829,231,626*	9.55%	9.51%	
U S Government Agency - Other	950,677,429	922,109,257	9.25%	9.30%	
Municipals	10,000,000	10,000,000	8.50%	8.50%	
Mortgage - Other	175,730,807	266,558,311*	14.36%	13.92%	
Corporate	2,718,658,806	2,648,716,839	9.24%	9.36%	
REAL ESTATE					
Direct Participating Mortgages	1,399,716,883	1,003,249,808	10.07%	10.23%	
Fixed Rate Mortgages	512,791,558	485,024,502	9.42%	9.08%	
EQUITIES	6,339,058,485	5,250,022,527	6.07%	6.22%	
INVESTMENT IN SUBSIDIARIES	122,832,820	68,039,419	3.42%	3.42%	
INVESTMENT IN DEFERRED ASSE	<b>TS</b> 13,494,098		11.71%		
SHORT TERM INVESTMENTS	332,966,282	513,989,426	8.79%	7.96%	
TOTAL	\$19,348,751,141	\$17,161,072,093	8.47%	8.61%	

<sup>\*</sup>August 31, 1988 restated due to recategorization

The market values of Fixed Income and Equities on August 31, 1989 were \$11,113,933,540 and \$10,080,347,183, respectively. A current market value for real estate is not reported due to an unidentifiable market. Although the appraisal value of the note itself is available, the present value of future cash flows relies heavily on assumption of future events occurring. Therefore, book value is reported for the market value of the real estate mortgages.

#### SHORT TERM INVESTMENTS

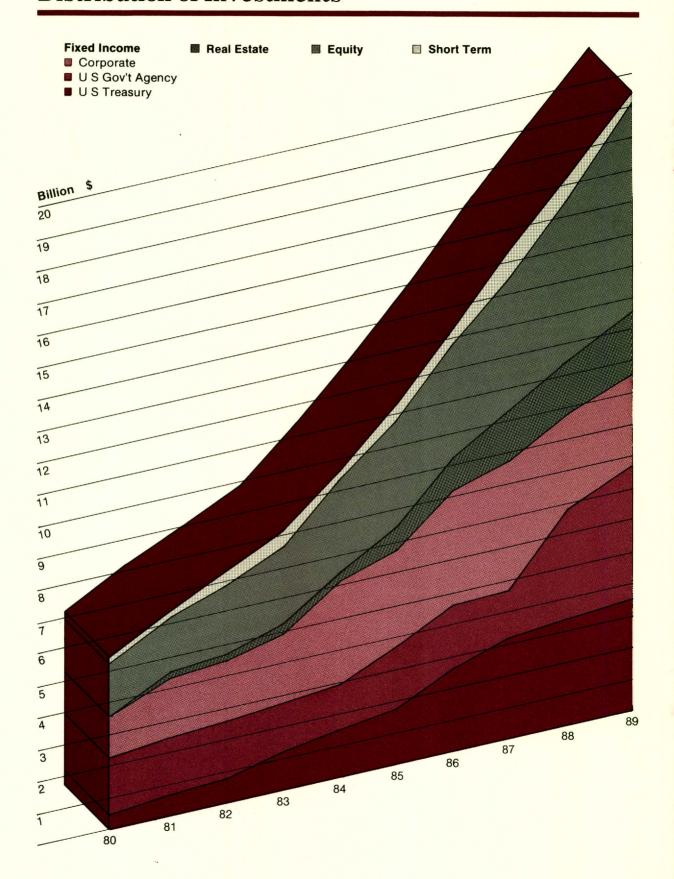
The Teacher Retirement System's policy of keeping interim funds invested in short term commercial paper until permanently invested in fixed income, real estate, and equity securities, or used for payment of benefits, provided income of \$25,503,443.

#### **TRANSACTIONS**

Investment holdings of Teacher Retirement System excluding Short Term Investments increased by \$2,368,702,192 during the year ended August 31, 1989. The System has continued its policy of bond exchanges in order to improve the quality and yield of the portfolio. Investment activity within the various classes of securities is summarized as follows:

Purchases Fixed Income Real Estate Equity TOTAL	Par Value \$1,306,314,674 490,054,966	Cost \$1,228,887,380 490,054,966 1,750,162,462 \$3,469,104,808	9. 9. 3.	ield 42% 39% 87%
Sales Fixed Income	<b>Par Value</b> \$ 300,325,659	Proceeds \$ 304,416,030		or (Loss) 382,417
Equity	Shares 23,331,485	Proceeds \$1,095,931,866		or (Loss) 878,811
Non-Monetary Transactions Gain on Mergers Real Estate Value Reductions TOTAL		\$ 9,669,470 (7,635,069) \$ 2,034,401		
Exchanges Fixed Income for Fixed Income	<b>Par Value</b> \$1,500,611,248	New Book Value \$1,445,605,360	Book Yield Improv. 0.22%	Market Yield Spread 0.16%
Calls and Maturities Fixed Income Real Estate TOTAL	Par Value \$ 153,222,707 2,655,733 \$ 155,878,440			

### **Distribution of Investments**



## Statistical Section

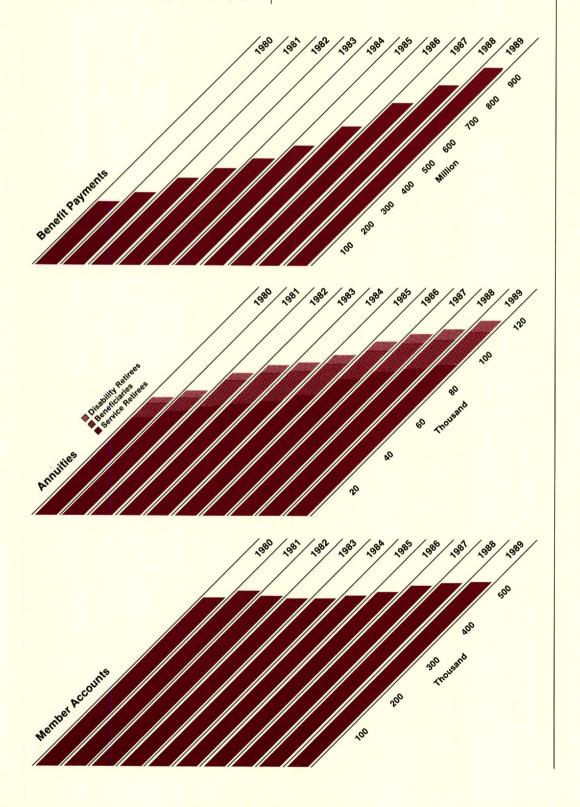




enefit payments during 1988-89 totaled more than \$935 million, an increase of \$61 million over the previous year. By August, 1989, the monthly annuity pay-

roll had grown to \$82.6 million with over 108 thousand annuitants receiving payments. Annuities, including multiple pay-

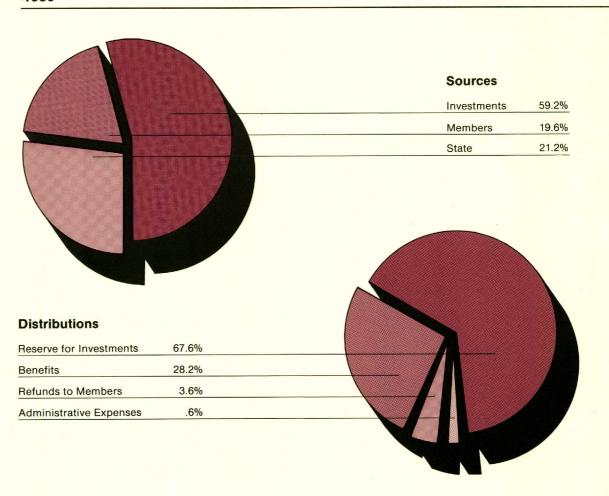
ments to one person and payments deferred to a later date, totaled 114,798. The number of member accounts increased by 12,736. Investment holdings increased by 2.2 billion during the year, and the total exceeded \$19.3 billion with an average annual yield on investments of 8.47 percent.



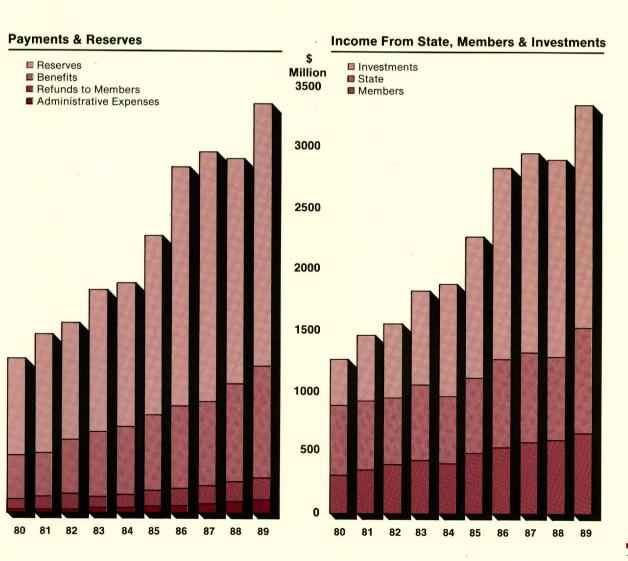
### Revenues and Expenses PENSION TRUST FUND

	1989	1988	1987	1986
REVENUES:				
From Members	\$ 652,065,954	\$ 608,773,980	\$ 575,497,331	\$ 551,144,622
From State	704,644,447	663,222,962	716,368,692	664,423,297
From Investments	1,965,436,255	1,666,931,512	1,701,638,498	1,633,893,596
From Employees Retirement				
System				2,652,849
From Other Sources	63,441	65,791	61,882	64,141
TOTAL REVENUES	\$3,322,210,097	\$2,938,994,245	\$2,993,566,403	\$2,852,178,505
EXPENSES:				
Administrative Expenses	\$ 20,399,555	\$ 16,506,750	\$ 12,856,551	\$ 11,116,650
For Refunds to Members	118,507,638	113,178,276	110,658,346	108,618,403
For Benefits	935,943,118	874,560,122	755,349,430	668,607,972
For Employees Retirement				
System	899,352			
TOTAL EXPENSES	\$1,075,749,663	\$1,004,245,148	\$ 878,864,327	\$ 788,343,025

#### 1989



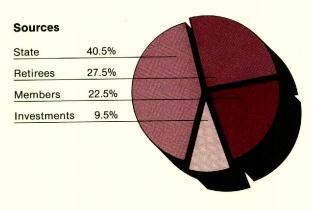
1985	1984	1983	1982	1981	1980
\$ 475,045,919 546,091,813 1,194,394,037	\$ 416,750,729 476,617,325 970,909,876	\$ 435,699,218 537,636,697 794,640,586	\$ 397,229,540 492,125,991 638,167,624	\$ 344,471,695 624,256,858 515,170,268	\$ 302,963,034 522,894,587 382,398,628
61,494	67,730	65,377	5,002 67,376	40,866 62,007	3,370,198 55,994
\$2,215,593,263	\$1,864,345,660	\$1,768,041,878	\$1,527,595,533	\$1,484,001,694	\$1,211,682,441
\$ 10,327,020 105,426,368 591,064,691	\$ 9,611,199 92,909,745 513,647,103	\$ 8,756,070 79,479,802 465,984,587	\$ 8,034,987 98,734,966 427,927,689 2,683	\$ 6,662,972 85,529,492 352,501,433 1,380,410	\$ 5,942,657 78,788,643 312,675,657 2,325,712
\$ 706,818,079	\$ 616,168,047	\$ 554,220,459	\$ 534,700,325	\$ 446,074,307	\$ 399,732,669

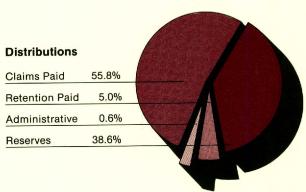


### **Retiree Health Insurance**

EXPENDABLE TRUST FUND

	1989	1988
REVENUES		
Members	\$20,789,215	\$19,598,520
State	37,420,711	31,357,632
Investments	8,802,914	5,703,832
Retirees	25,428,632	23,948,600
TOTAL	\$92,441,472	\$80,608,584
EXPENDITURES		
Administrative	\$ 561,343	\$ 484,684
Claims Paid	51,529,034	41,472,241
Retention Paid	4,650,730	4,130,071
TOTAL	\$56,741,107	\$46,086,996
INCOME FROM (in millions)		
Members	\$20.8	\$19.6
State	37.4	31.4
Investments	8.8	5.7
Retirees	25.4	23.9
TOTAL	\$92.4	\$80.6
PAYMENTS & RESERVES		
Reserves	\$35.7	\$34.5
Administrative	0.6	0.5
Claims Paid	51.5	41.5
Retention Paid	4.6	4.1
TOTAL	\$92.4	\$80.6
ENROLLMENT		
Retirees	76,212	73,652
Surviving Spouses	782	670
Surviving Dependent Children	7	3
Dependents	7,842	7,062
TOTAL	84,843	81,387





### **Teacher Retirement System** of Texas

#### HISTORICAL DATA

#### **Constitutional Amendments**

- 1936 Authorized legislature to create the Teacher Retirement System.
- 1956 Permitted contribution rate to be increased, authorized complete restructuring of benefit program as passed by the previous legislature, and enabled funds to be invested in corporate stocks and bonds.
- 1965 Granted trustees broader investment authority thus allowing for sale of major holdings in low interest bearing school, municipal, and Treasury bonds with reinvestment of funds into higher yielding securities.
- 1968 Removed from the constitution the salary ceiling on which contributions are based.
- 1975 Completely revised constitutional provisions and permitted the state contribution rate to increase from 6 percent to 10 percent.

#### **Post Retirement Increases**

Laws granting increases were enacted in 1969, 1971, 1975, 1977, 1979, 1981, 1984, 1987, and 1989. Benefit increases enacted in 1977 varied from 15 percent for some 1941 retirees to 4 percent with graduated increases based on length of retirement and service giving older retirees with long service greater increases.

Benefit increase percentages apply to the average retiree for each year. Not all members retiring during the year received the increase indicated since increases were based on the effective date of retirement.

There were no major benefit increases before 1969, although members who retired before 1969 received either the same or greater increases than the 1969 retirees.

Retirement Year	Compounded Benefit % Increase	Retirement Year	Compounded Benefit % Increase
1968	210.8	1979	35.7
1969	150.3	1980	26.9
1970	149.3	1981	16.7
1971	98.5	1982	16.7
1972	97.7	1983	13.4
1973	88.0	1984	9.2
1974	68.2	1985	4.0
1975	67.5	1986	4.0
1976	59.4	1987	0.0
1977	37.1	1988	0.0
1978	37.1	1989	0.0

#### **Contribution Rates**

#### Rates are set by the Texas Legislature

Year	State	Member	Salary
1937-57	5%	5%	of 1st \$3,600
1957-69	6%	6%	of 1st \$8,400
1969-77	6%	6%	of 1st \$25,000
1977-79	7.5%	6.65%	of 1st \$25,000
1979-83	8.5%	6.65%	of total
1983-85	7.1%	6%	of total
1985-87	8%	6.4%	of total
1987-89	7.2%	6.4%	of total
1989-93	7.65%	6.4%	of total

Each member pays a \$10 per year fee for administrative costs.

#### **Retirement Formula Improvements**

- 1941- Benefits based primarily on contributions with small in-1953 creases provided by four legislatures.
- The five year average salary plan based on 1950-55 salaries, using 1 percent of average salary for each year of prior service and 1½ percent for membership years.
- 1963 Terminal average salary plan began. Formula based on average of member's highest ten annual salaries with 1 percent of average allowed for prior service years and 1½ percent allowed for membership years.
- 1969 Factor increased to 1.65 percent for all service.
- 1971 The ten year average salary reduced to five years and the factor increased to 1.75 percent.
- 1977 The benefit factor raised to 2 percent.
- 1979 The \$25,000 salary limit removed.
- 1981 The five year average salary reduced to three years.
- 1989 Pop-up feature added to options 1 and 2.





Teacher Retirement System of Texas 1000 Red River Street/Austin, Texas 78701-2698 (512) 397-6400