

Teacher Retirement System of Texas

February 2019



WHO WE ARE

Our Vision

Earning your trust every day.

Our Core Values

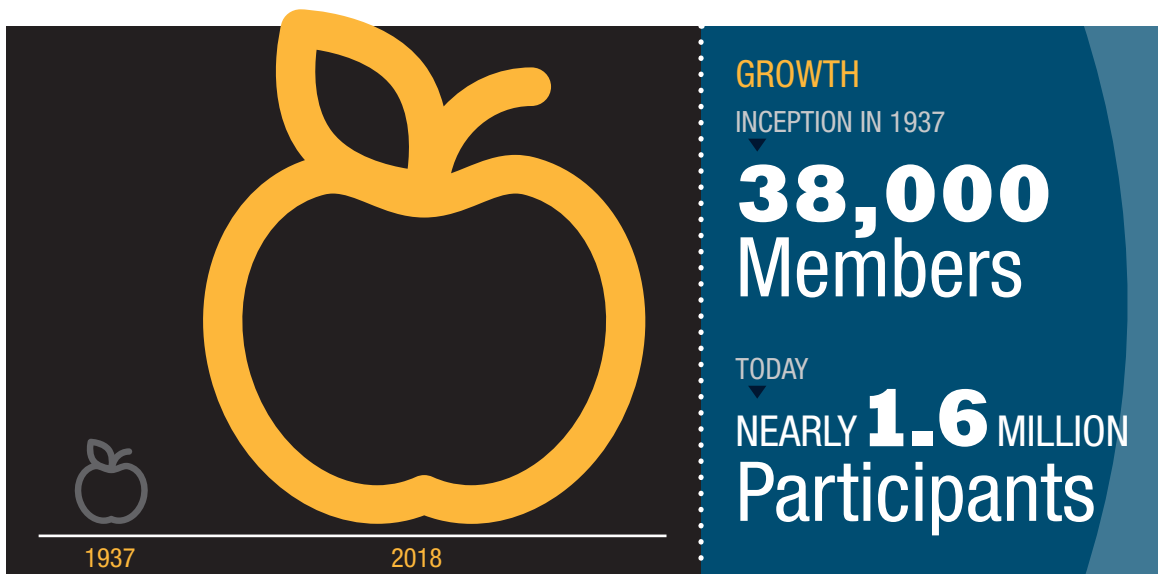


Our Mission

Improving the retirement security of our members by prudently investing and managing the trust assets and delivering benefits that make a positive difference in their lives.

A GREAT VALUE FOR ALL TEXANS

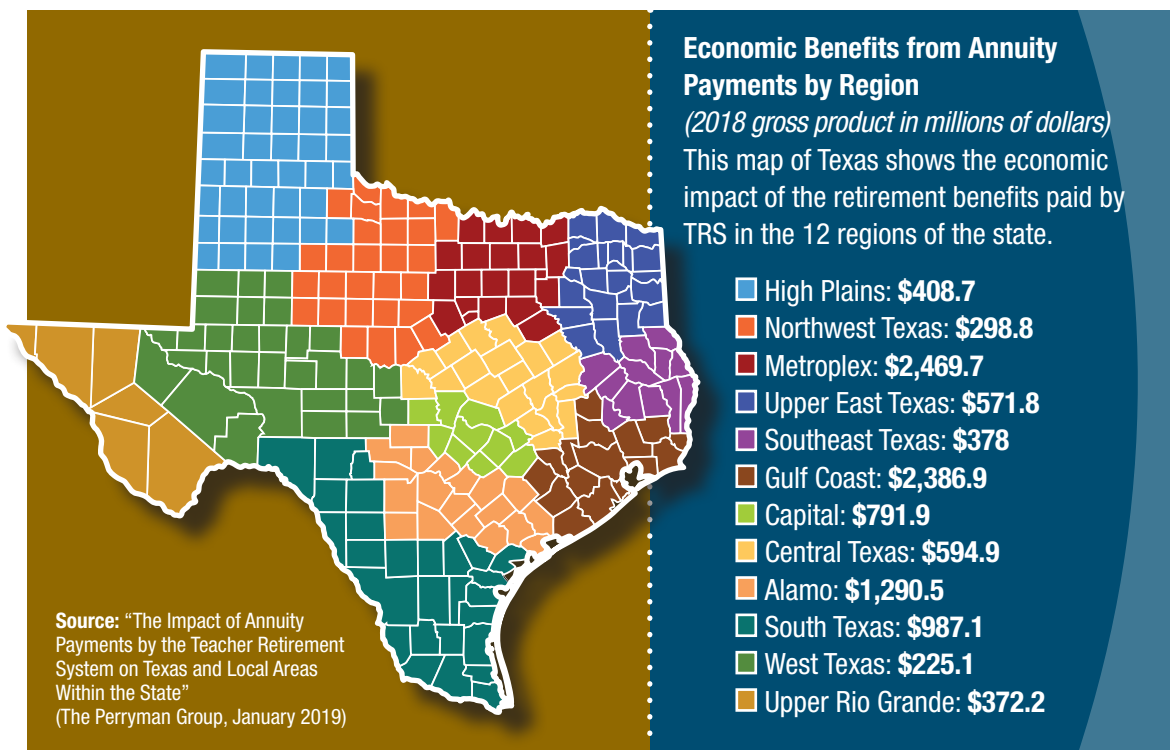
The Teacher Retirement System of Texas (TRS) is one of the largest retirement systems in the nation. The system's core mission is to make a positive difference in the lives of Texas educators by prudently investing and managing trust assets and delivering member benefits. Not only does TRS provide great value to its members, it also benefits all Texans by adding significant dollars to the state and local economies.



VALUE TO THE TEXAS ECONOMY

Benefits Stay in Texas and Stimulate the Economy

In addition to providing retirement benefits to former public education employees, TRS benefit payments generate economic stimulus to communities throughout Texas. The funds provide members with a stable income stream, and the resulting spending contributes to a broad spectrum of industries.



Retirement Benefits:

- In 2018, TRS paid more than **\$10.1 billion** in retirement benefits to more than 420,000 retirees and their beneficiaries.
- More than **\$9.7 billion** of these retirement benefits were for service retirements, with the balance for disability and death and survivor benefits.
- Over 94 percent of these benefit payments, or approximately **\$9.6 billion**, went directly to retirees and their beneficiaries who live and spend these dollars in Texas.

Economic Stimulus

- Retirees spending their benefits provide a notable economic stimulus to communities throughout the state.
- When spent locally, these payments generate additional expenditures on an ongoing basis.
- The estimated increase in business activity generated by retirement benefit payments is illustrated below:

Annual Impact of Payments on Texas Businesses (2018)

 **TOTAL EXPENDITURES: \$22.4 BILLION**

 **PERSONAL INCOME: \$6.7 BILLION**

 **PERMANENT JOBS: 137,729**

Total Economic Impact

Pension Annuities in Texas

TRS retirees living in Texas received a total of **\$9.6 billion** in monthly checks in 2018.

\$8.0 BILLION

Direct Impact

Retirees spent their pension income on **goods and services** from Texas businesses in 2018.

Example: A retired teacher goes to a restaurant and purchases a meal.



\$8.4 BILLION

Indirect Impact

Using the income received by TRS retirees, Texas businesses purchased items through the **supply chain** such as supplies and labor.

Example: The restaurant owner pays an employee.



\$6.0 BILLION

Induced Impact

Employees spent some of their income with **other Texas businesses** in 2018.

Example: The restaurant employee uses his or her wages to purchase furniture.

Total Economic Impact

\$22.4 BILLION The sum of the direct, indirect and induced benefits from TRS pension checks totaled **\$22.4 billion** in 2018.

Source: "The Impact of Annuity Payments by the Teacher Retirement System on Texas and Local Areas Within the State"
(The Perryman Group, January 2019)

Tax Revenue

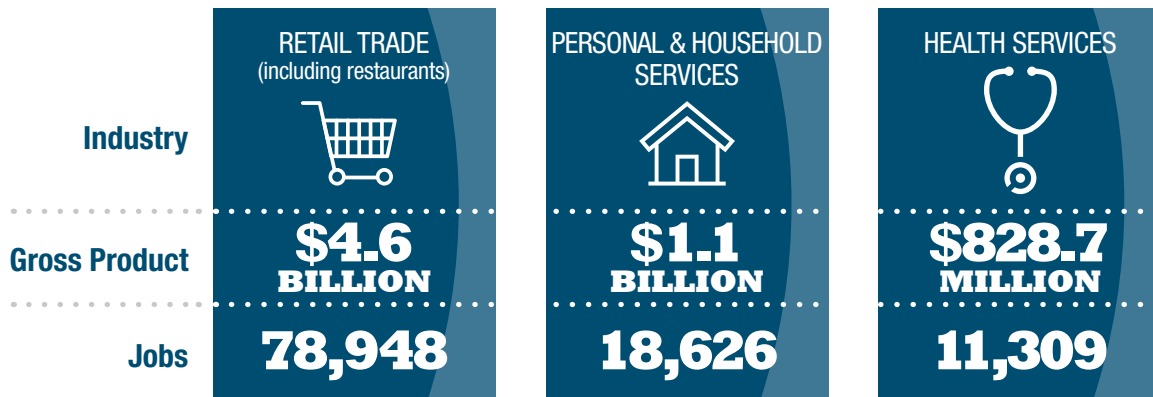
- Retirement benefits and the associated economic stimulus generate tax revenue.
- Over **\$1.06 billion** in state revenues and **\$565 million** in local government revenues were generated in 2018.



Source: "The Impact of Annuity Payments by the Teacher Retirement System on Texas and Local Areas Within the State"
(The Perryman Group, January 2019)

Economic Impact by Industry

All major industrial sectors experienced gains in business activity resulting from TRS annuity payments in 2018. Industry groups experiencing the largest effects include:



Source: "The Impact of Annuity Payments by the Teacher Retirement System on Texas and Local Areas Within the State"
(The Perryman Group, January 2019)



Investing in Texas Businesses

TRS provides capital for businesses in Texas. TRS has **\$8.7 billion** worth of holdings in Texas-based businesses and **\$16.3 billion** invested or committed to Texas-based money managers.



Retiree Volunteer Hours

In 2017, retirees contributed **6.2 million** hours of community volunteer service to Texas communities valued at more than **\$156 million**.


Source: Texas Retired Teachers Association


VALUE FOR STATE & MEMBER CONTRIBUTIONS


Benefits from Member Contributions

By contributing to TRS, school employees are investing in a retirement program that provides several major advantages:

 **Retirement Security** A total of 96 percent of TRS public school members do not participate in social security. As a result, employees in these districts are not eligible for social security when they retire.

 **Freedom from Investment Decisions** Rather than having to buy and sell investments, rebalance portfolios, and reallocate assets based on their age, TRS members can count on a strong team to manage their contributions before and after retirement.

 **Protection from Investment Risk** TRS members are assured that their pensions will not be affected even by declines in financial markets.

 **Certainty of Payments** TRS members know that they will not outlive their monthly benefits. And, if they are married, they have the option of payments that continue throughout their lifetime or that of their spouse, whichever is longer.

Changes to Contributions

The member contribution rate increased during fiscal years 2015-17.

In fiscal year 2015, non-social security school districts and charter schools began contributing 1.5 percent of the statutory minimum salary for employees whose positions are subject to the state minimum salary schedule.

Contributions to TRS Pension Fund

Contribution Rate			
Fiscal Year	State	Member	Employer
1990-1991	7.65%	6.4%	-
1992-1995	7.31%	6.4%	-
1996-2007	6%	6.4%	-
2008-2009	6.58%	6.4%	-
2010-2011	6.64%	6.4%	-
2012	6%	6.4%	-
2013	6.4%	6.4%	-
2014	6.8%	6.4%	-
2015	6.8%	6.7%	1.5%
2016	6.8%	7.2%	1.5%
2017	6.8%	7.7%	1.5%
2018	6.8%	7.7%	1.5%

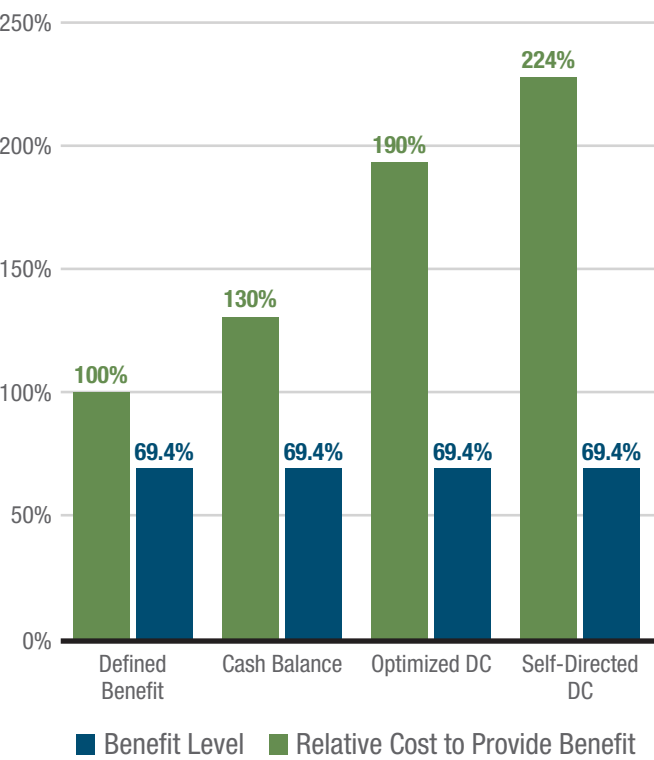
In 2018, nearly 873,000 active TRS members contributed about **\$3.4 billion** to the TRS Pension Trust Fund.

Source: "Teacher Retirement System of Texas Actuarial Valuation Report" (GRS Retirement Consulting, August 2018)

The Value of a Defined Benefit Plan

Actuarial modeling shows that, to provide the same level of benefits, other plan designs are 30 to 124 percent more expensive than the current TRS defined benefit plan.

Costs to Provide Current Benefits by Plan Design



Source: TRS Pension Benefit Design Study, December 2018

The spending power of a typical retiree in the TRS defined benefit plan is almost **44 percent more** than it would be if that retiree were in a defined contribution plan. This means that a defined benefit plan has greater economic impact than a defined contribution plan.

- **Defined Benefit (TRS Plan)**
• Members, employers and the state contribute to an investment pool which is professionally managed. Retirement eligibility is based on service credit and age. Members receive an annuity determined by service credit and salary.
- **Cash Balance**
• Members would receive pay and investment credits into a “virtual account.” Contributions would be pooled and professionally managed. At retirement, the account balance would be annuitized.
- **Optimized Defined Contribution**
• Members would have no discretion over investment decisions while employed and would be invested into a mutual fund based on his or her retirement target date.
- **Self-Directed Defined Contribution**
• Investments would be self-directed and the member would manage the account for the duration of his or her retirement.

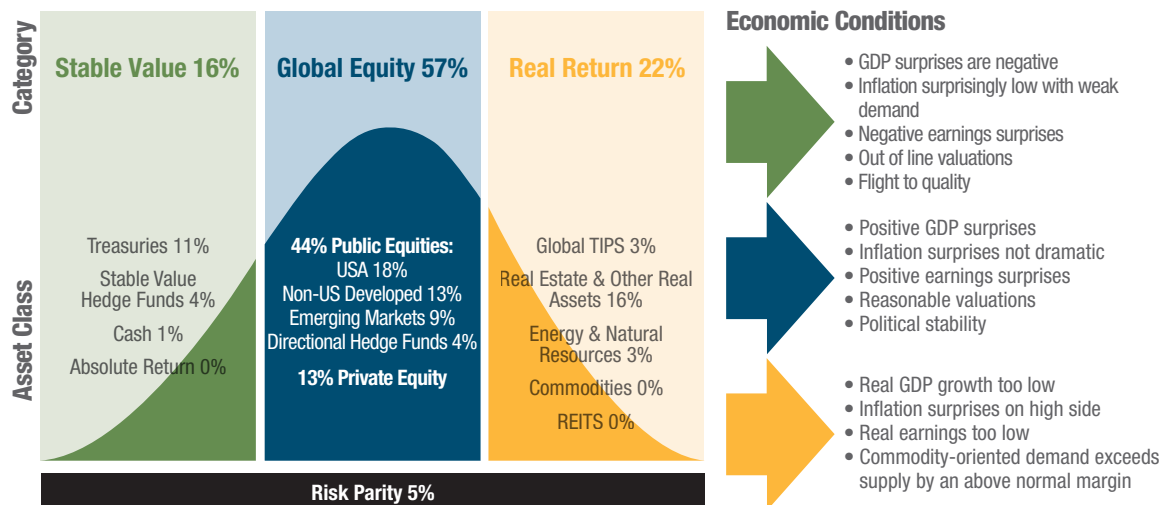
Annual Economic Impact: Monetary Values in Billions		
	Defined Benefit	Defined Contribution
Total Expenditures	\$22.4	\$13.2
Gross Product	\$10.8	\$6.3
Personal Income	\$6.7	\$3.9
Employment (Permanent Jobs)	137,729	80,897

Source: “The Impact of Annuity Payments by the Teacher Retirement System on Texas and Local Areas Within the State” (The Perryman Group, January 2019)

VALUE FROM INVESTMENTS

TRS Diversification Framework

The Investment Management Division of TRS manages its diversification process by constructing three separate portfolios of various sizes. The percentage allocations are based on the likelihood of each scenario occurring, based on historical experience. Each portfolio is defined by GDP growth, inflation, earnings growth, productivity, political stability, and valuation.



Strengths of the TRS Pension Trust Fund

The TRS pension trust fund is:

Large – As of Dec. 31, 2018, TRS manages the sixth largest U.S. public pension fund with a market value of **\$145.4 billion**. The fund's size enables TRS to pursue large attractive opportunities not available to a majority of the marketplace.

Long-term – TRS' size and membership composition allow for a long-term view in managing the investment portfolio and avoiding short-term investment limitations and constraints.

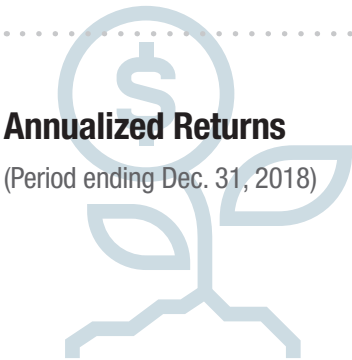
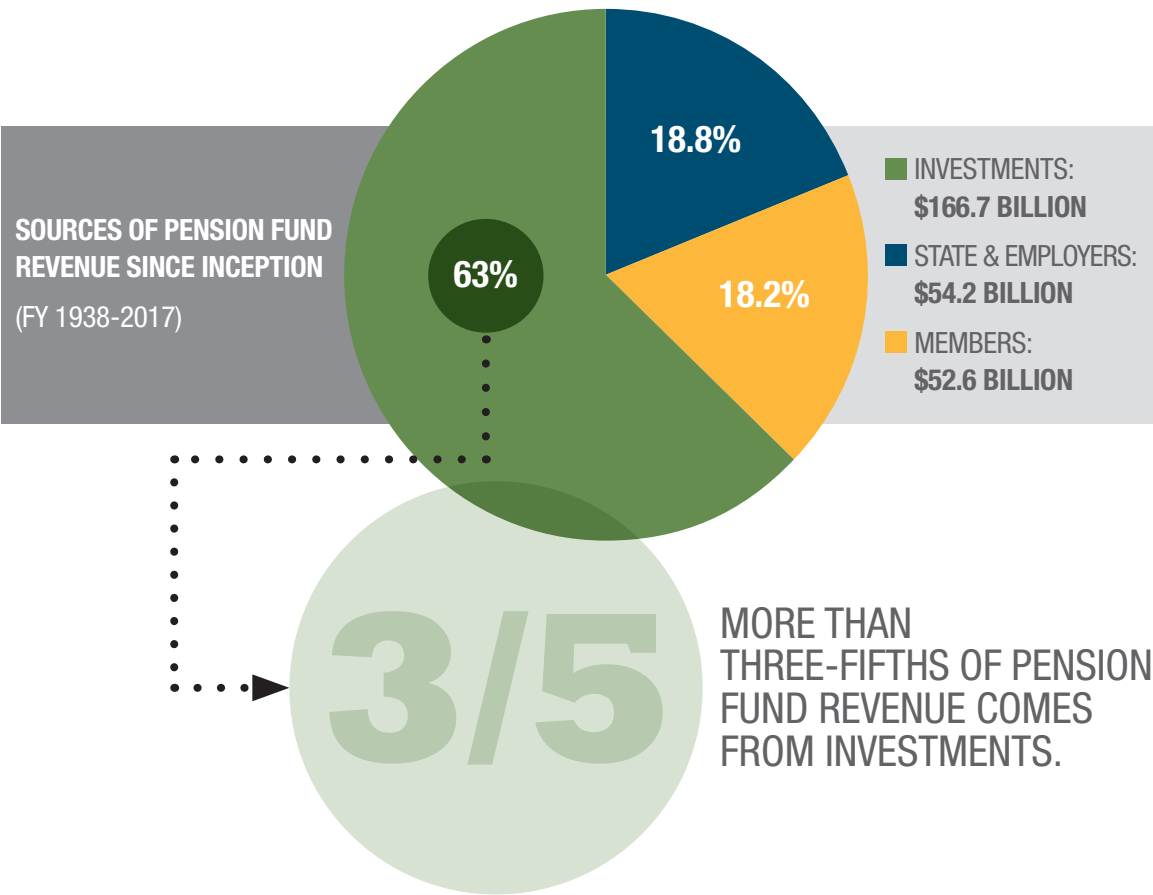
Liquid – With **\$95.7 billion** in highly liquid assets as of Dec. 31, 2018 (approximately 65 percent of the total portfolio), the TRS portfolio is structured with access to liquidity well in excess of what is needed to pay regular monthly benefits.

Low Leverage – The TRS investment portfolio has low levels of leverage (the use of borrowed funds to make investments). Because of this, TRS is better able to withstand periods of market volatility and less likely to sustain permanent capital losses during market downturns.

Local – Since the opening of a London investments office in October 2015, TRS has a small staff on the ground in local markets — in the case of London — with access to U.K. and European investment opportunities.

Investment Performance is Vital to Funding Benefits

The Investment Management Division of TRS focuses on achieving long-term returns to secure members' retirement futures.

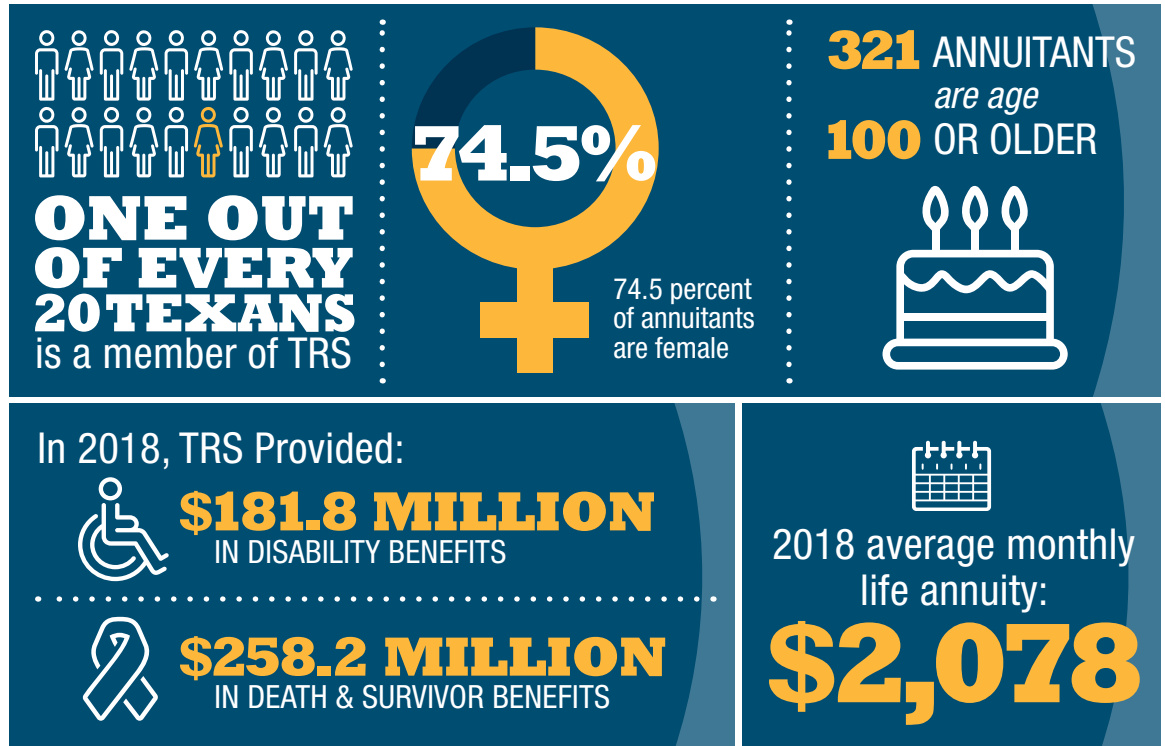


Time Period (Years)	Return (Percentage)
1	-1.3%
3	7.7%
5	6.3%
10	9.3%
25	7.8%

VALUE TO EDUCATION

TRS Provides Financial Security to Members and Their Families

TRS serves a vital role to nearly **1.6 million** active and retired members working in public education.



2018 Benefit Distribution

Monthly Benefit	Number of Retired Members	Percent of Retired Members
\$1 – \$1,000	131,328	31.2%
\$1,001 – \$2,000	96,119	22.9%
\$2,001 – \$3,000	98,494	23.4%
\$3,001 – \$4,000	59,636	14.2%
\$4,001 – \$5,000	22,219	5.3%
>\$5,000	12,662	3%
Total	420,458	100%

Continuously Improving Member Services



Online Access

Members may access information about their accounts by visiting the *MyTRS* web self-service section of the TRS website. After setting up user IDs and passwords, active members, retirees and beneficiary annuitants can view their personal account or benefit information. They can also sign up to receive TRS publications and announcements electronically.

As a result of progress being made on the TEAM project, a multi-year effort to modernize TRS' non-investment computer systems, active members will experience some temporary and minimal reductions in the functionality of *MyTRS*. It is currently not possible to access the following information online:

- Members' beneficiary information,
- Service credit purchase forms (once they have been created for a cost statement), and
- Replacement retirement packets (still available by contacting TRS directly).

Also, members who access their annual statement information online will only be able to see information updated through Sept. 1, 2016. Their online account information will remain unchanged until the new *MyTRS* is available. Once the TEAM project is completed, TRS will expand *MyTRS* offerings. Watch the website for new information.



Remote Counseling

TRS offers members the option to meet with a counselor through the internet. All that is needed is a personal computer or tablet with a camera and a reliable internet connection. To schedule a live video counseling session, call **1-800-223-8778**.



Board Meetings

TRS provides live webcasts of all board and committee meetings. All board materials are available on the TRS website prior to each meeting. This allows viewers to follow along while watching the live broadcast. Each day's webcast is also recorded. The recordings are then placed into a searchable catalogue for easy, on-demand viewing. All board webcasts are archived by year on the TRS website.



Social Media

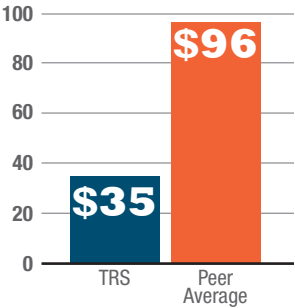
Visit us at **www.trs.texas.gov** and click on the social media icons.



Low Administrative Cost

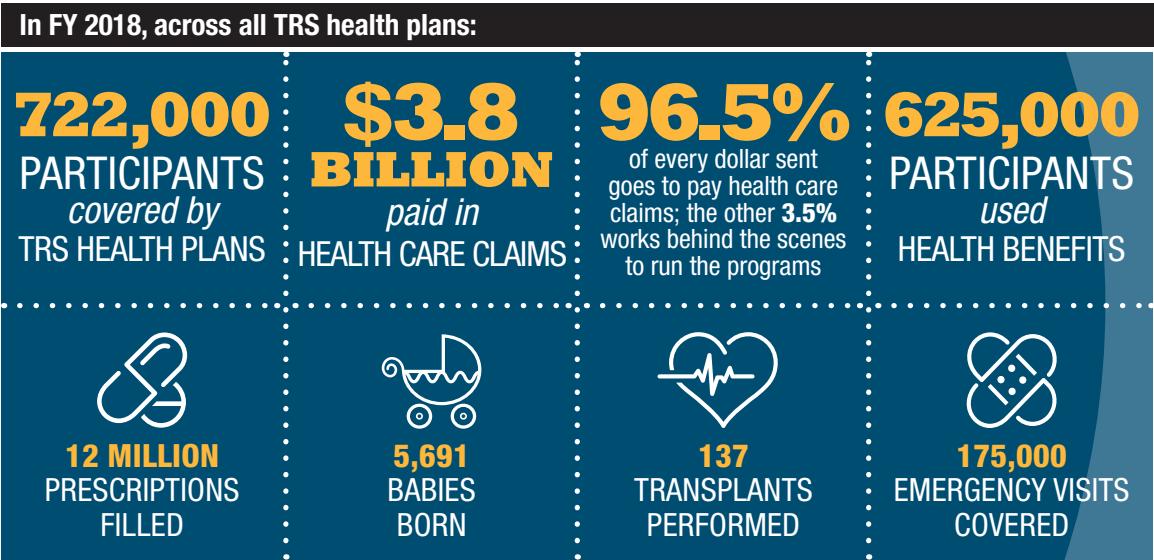
According to an independent study, the pension administration cost of TRS is well below that of other similarly sized systems.

Source: “2017 Benchmarking Analysis for Teacher Retirement System of Texas” (May 2018)



Health Benefit Program

The TRS health programs serve **722,000 Texans** and are funded by state, school district and member contributions. TRS is the second largest buyer of health care in Texas, behind the Medicaid program. In addition to how much TRS pays its annuitants, the billions of dollars paid into medical services and prescription drugs support Texas’ growing economy. The majority of the paid claims goes to the medical community in Texas, thereby supporting jobs, families and the advancement of health care in the state.



TRS-Care

The health care program for public school retirees expended over **\$1.6 billion** for services covering over **236,000 participants** in 2018.

TRS-ActiveCare

The health care program for active public school employees expended over **\$2.2 billion** for services covering nearly **486,000 participants** in 2018.

Texas Gross Amounts By Region and County

Fiscal Year 2018 Annuity Benefit Payments

COUNTY NAME	ANNUITY PAYMENTS (in millions)	NUMBER OF ANNUITANTS	COUNTY NAME	ANNUITY PAYMENTS (in millions)	NUMBER OF ANNUITANTS	COUNTY NAME	ANNUITY PAYMENTS (in millions)	NUMBER OF ANNUITANTS
ANDERSON	\$22.9	1,000	COLLINGSWORTH	\$1.8	82	GLASSCOCK	< \$1.20	<50
ANDREWS	\$7.0	258	COLORADO	\$13.1	555	GOLIAD	\$4.9	196
ANGELINA	\$36.8	1,673	COMAL	\$11.0 - \$100.0	501+	GONZALES	\$10.0	447
ARANSAS	\$13.9	574	COMANCHE	\$8.8	388	GRAY	\$7.5	331
ARCHER	\$4.8	211	CONCHO	\$2.4	101	GRAYSON	\$56.9	2,369
ARMSTRONG	\$1.1 - \$6.0	51 - 250	COOKE	\$18.2	793	GREGG	\$54.0	2,348
ATASCOSA	\$21.2	950	CORYELL	\$21.7	976	GRIMES	\$15.7	717
AUSTIN	\$16.5	668	COTTLE	\$1.1 - \$6.0	51 - 250	GUADALUPE	\$61.1	2,630
BAILEY	\$1.9	100	CRANE	\$1.8	73	HALE	\$13.8	567
BANDERA	\$14.4	588	CROCKETT	\$1.6	86	HALL	\$1.2	63
BASTROP	\$37.2	1,621	CROSBY	\$3.2	161	HAMILTON	\$6.0 - \$10.0	251 - 500
BAYLOR	\$2.2	89	CULBERSON	< \$1.20	<50	HANSFORD	\$2.3	94
BEE	\$13.3	598	DALLAM	\$1.3	64	HARDEMAN	\$1.1 - \$6.0	51 - 250
BELL	\$107.2	4,535	DALLAS	\$611.2	23,550	HARDIN	\$24.5	1,104
BEXAR	\$633.3	26,825	DAWSON	\$5.0	221	HARRIS	\$1,148.4	45,133
BLANCO	\$8.0	323	DE WITT	\$10.8	505	HARRISON	\$27.2	1,207
BORDEN	< \$1.20	<50	DEAF SMITH	\$5.3	263	HARTLEY	\$1.6	70
BOSQUE	\$11.8	512	DELTA	\$1.1 - \$6.0	51 - 250	HASKELL	\$1.1 - \$6.0	51 - 250
BOWIE	\$38.5	1,630	DENTON	\$220.0	8,337	HAYS	\$92.1	3,768
BRAZORIA	\$132.6	5,126	DICKENS	\$1.1 - \$6.0	51 - 250	HEMPHILL	\$1.6	69
BRAZOS	\$118.7	4,942	DIMMIT	\$4.9	201	HENDERSON	\$39.8	1,729
BREWSTER	\$6.0 - \$10.0	251 - 500	DONLEY	\$2.3	97	HIDALGO	\$265.6	11,007
BRISCOE	\$1.1 - \$6.0	51 - 250	DUVAL	\$6.0 - \$10.0	251 - 500	HILL	\$18.5	831
BROOKS	\$1.1 - \$6.0	51 - 250	EASTLAND	\$10.0	449	HOCKLEY	\$13.4	574
BROWN	\$22.8	977	ECTOR	\$39.3	1,697	HOOD	\$40.0	1,597
BURLESON	\$11.0 - \$100.0	501+	EDWARDS	\$1.1 - \$6.0	51 - 250	HOPKINS	\$16.5	741
BURNET	\$32.8	1,287	EL PASO	\$273.4	12,016	HOUSTON	\$12.0	548
CALDWELL	\$20.6	939	ELLIS	\$66.5	2,647	HOWARD	\$10.7	499
CALHOUN	\$9.9	433	ERATH	\$23.1	989	HUDSPETH	\$1.1	57
CALLAHAN	\$7.5	331	FALLS	\$6.5	312	HUNT	\$37.0	1,641
CAMERON	\$153.8	6,239	FANNIN	\$16.0	704	HUTCHINSON	\$8.0	359
CAMP	\$6.3	270	FAYETTE	\$11.0 - \$100.0	501+	IRION	< \$1.20	<50
CARSON	\$1.1 - \$6.0	51 - 250	FISHER	\$1.1 - \$6.0	51 - 250	JACK	\$3.6	155
CASS	\$16.2	743	FLOYD	\$3.5	168	JACKSON	\$8.6	348
CASTRO	\$2.3	110	FOARD	< \$1.20	<50	JASPER	\$19.8	836
CHAMBERS	\$19.2	722	FORT BEND	\$248.4	9,136	JEFF DAVIS	\$1.1 - \$6.0	51 - 250
CHEROKEE	\$21.9	1,005	FRANKLIN	\$5.6	215	JEFFERSON	\$103.3	4,288
CHILDRESS	\$3.0	144	FREESTONE	\$9.3	427	JIM HOGG	\$3.4	137
CLAY	\$6.0	270	FRIO	\$6.2	296	JIM WELLS	\$18.5	873
COCHRAN	\$2.2	64	GAINES	\$4.6	199	JOHNSON	\$55.7	2,347
COKE	\$1.1 - \$6.0	51 - 250	GALVESTON	\$211.4	8,087	JONES	\$7.2	322
COLEMAN	\$1.1 - \$6.0	51 - 250	GARZA	\$2.1	89	KARNES	\$7.7	364
COLLIN	\$226.2	8,474	GILLESPIE	\$11.0 - \$100.0	501+	KAUFMAN	\$42.9	1,705

COUNTY NAME	ANNUITY PAYMENTS (in millions)	NUMBER OF ANNUITANTS	COUNTY NAME	ANNUITY PAYMENTS (in millions)	NUMBER OF ANNUITANTS	COUNTY NAME	ANNUITY PAYMENTS (in millions)	NUMBER OF ANNUITANTS
KENDALL	\$11.0 - \$100.0	501+	MOTLEY	< \$1.20	<50	STERLING	< \$1.20	<50
KENEDY	< \$1.20	<50	NACOGDOCHES	\$39.0	1,647	STONEWALL	< \$1.20	<50
KENT	< \$1.20	<50	NAVARRO	\$21.5	920	SUTTON	\$2.1	80
KERR	\$34.5	1,409	NEWTON	\$5.3	233	SWISHER	\$3.8	180
KIMBLE	\$1.1 - \$6.0	51 - 250	NOLAN	\$8.5	383	TARRANT	\$554.9	21,356
KING	< \$1.20	<50	NUECES	\$138.7	5,756	TAYLOR	\$68.8	2,658
KINNEY	\$2.4	96	OCHILTREE	\$2.9	125	TERRELL	< \$1.20	<50
KLEBERG	\$19.4	871	OLDHAM	\$1.1 - \$6.0	51 - 250	TERRY	\$5.0	222
KNOX	\$1.1 - \$6.0	51 - 250	ORANGE	\$32.6	1,481	THROCKMORTON	\$1.1 - \$6.0	51 - 250
LA SALLE	\$2.7	112	PALO PINTO	\$12.6	514	TITUS	\$12.5	512
LAMAR	\$24.8	1,102	PANOLA	\$11.3	507	TOM GREEN	\$54.7	2,274
LAMB	\$5.7	250	PARKER	\$54.2	2,180	TRAVIS	\$362.8	14,072
LAMPASAS	\$11.0 - \$100.0	501+	PARMER	\$2.8	135	TRINITY	\$6.0 - \$10.0	251 - 500
LAVACA	\$11.0 - \$100.0	501+	PECOS	\$5.9	271	TYLER	\$9.9	449
LEE	\$9.0	409	POLK	\$27.6	1,179	UPSHUR	\$17.5	808
LEON	\$11.0 - \$100.0	501+	POTTER	\$29.3	1,417	UPTON	\$1.2	57
LIBERTY	\$24.7	1,098	PRESIDIO	\$2.6	119	UVALDE	\$15.9	681
LIMESTONE	\$12.5	524	RAINS	\$5.7	258	VAL VERDE	\$19.8	800
LIPSCOMB	\$2.1	87	RANDALL	\$75.9	3,095	VAN ZANDT	\$26.8	1,175
LIVE OAK	\$6.1	272	REAGAN	< \$1.20	<50	VICTORIA	\$39.6	1,780
LLANO	\$11.0 - \$100.0	501+	REAL	\$1.1 - \$6.0	51 - 250	WALKER	\$43.6	1,692
LOVING	< \$1.20	<50	RED RIVER	\$6.0	292	WALLER	\$22.2	941
LUBBOCK	\$156.8	6,169	REEVES	\$4.2	208	WARD	\$3.8	199
LYNN	\$2.9	133	REFUGIO	\$4.5	179	WASHINGTON	\$23.2	953
MADISON	\$6.4	303	ROBERTS	< \$1.20	<50	WEBB	\$79.9	3,193
MARION	\$4.1	197	ROBERTSON	\$11.0 - \$100.0	501+	WHARTON	\$24.5	1,006
MARTIN	\$1.8	81	ROCKWALL	\$40.2	1,440	WHEELER	\$2.7	123
MASON	\$1.1 - \$6.0	51 - 250	RUNNELS	\$6.8	278	WICHITA	\$50.1	2,090
MATAGORDA	\$18.8	762	RUSK	\$24.2	1,083	WILBARGER	\$6.9	291
MAVERICK	\$18.0	697	SABINE	\$5.3	257	WILLACY	\$9.8	440
MCCULLOCH	\$1.1 - \$6.0	51 - 250	SAN AUGUSTINE	\$1.1 - \$6.0	51 - 250	WILLIAMSON	\$189.7	7,453
MCLENNAN	\$98.2	4,197	SAN JACINTO	\$14.9	622	WILSON	\$23.1	977
MCMULLEN	< \$1.20	<50	SAN PATRICIO	\$27.9	1,259	WINKLER	\$2.8	122
MEDINA	\$26.7	1,117	SAN SABA	\$1.1 - \$6.0	51 - 250	WISE	\$25.2	1,004
MENARD	\$1.1 - \$6.0	51 - 250	SCHLEICHER	\$1.8	78	WOOD	\$26.3	1,125
MIDLAND	\$45.0	1,810	SCURRY	\$9.2	379	YOAKUM	\$4.2	172
MILAM	\$12.8	602	SHACKELFORD	\$1.9	70	YOUNG	\$8.9	385
MILLS	\$1.1 - \$6.0	51 - 250	SHELBY	\$11.5	522	ZAPATA	\$5.7	262
MITCHELL	\$3.4	169	SHERMAN	< \$1.20	<50	ZAVALA	\$5.3	222
MONTAGUE	\$11.3	475	SMITH	\$107.4	4,543			
MONTGOMERY	\$188.2	7,425	SOMERVELL	\$6.2	246			
MOORE	\$5.0	215	STARR	\$20.9	1,000			
MORRIS	\$7.2	321	STEPHENS	\$4.6	190			

TRS has provided selected data in ranges to avoid disclosure of confidential information and to comply with Sections 552.0038 and 825.507, Texas Government Code.



Board of Trustees

Jarvis V. Hollingsworth, Chair
Missouri City

Dolores Ramirez, Vice Chair
San Benito

Joe Colonna
Dallas

David Corpus
Humble

John Elliott
Austin

Dr. Greg Gibson
Schertz

Christopher Moss
Lufkin

James “Dick” Nance
Hallettsville

Nanette Sissney
Whitesboro

Executive Director
Brian K. Guthrie

