FY 2020

Operating Budget Report



TEACHER
RETIREMENT
SYSTEM OF TEXAS

Operating Budget Report Fiscal Year 2020

Teacher Retirement System of Texas

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GOVERNMENT FINANCE OFFICERS ASSOCIATION

Distinguished Budget Presentation Award

PRESENTED TO

Teacher Retirement System of Texas Texas

For the Fiscal Year Beginning

September 1, 2018

Christopher P. Morrill

Executive Director

I am pleased to present TRS' Fiscal Year (FY) 2020 Operating Budget Report, which was prepared in accordance with TRS' General Provisions. An important principle in budgeting is to develop a budget consistent with tactics to achieve strategic goals. Budget staff embarked on the budget process by engaging department managers in submitting and justifying current and long-term financial plans within budget guidelines, instructions and a budget timeline. The approved budget represents the FY 2020 portion of the FY 2020-21 biennial legislative appropriations. The budget is built on strategic planning efforts and represents the agency's funding priorities.

The total administrative operations budget for the Teacher Retirement System of Texas (TRS) for FY 2020 is \$223.9 million across all funds, which includes the addition of 59 full-time equivalent (FTE) positions to focus on enhancing member services, strategically transforming the investment management function and strengthening procurement governance to reduce potential risks and required training programs for the agency.

The agency's efforts continue to focus on the following funding priorities:

- Improving the customer experience by addressing TRS' extraordinary member services challenges, including historic call volumes, excessive hold times and months-long waits to meet with a benefit counselor.
- Focusing on becoming a best-in-class investment management fund and reducing external manager fees as part of the building the fleet initiative.
- Managing the cost of the health care plan, better serving members and member engagement and communications.
- Concluding the TRS Enterprise Application Modernization (TEAM) Program. Trust
 Phase 2 includes Build and User Acceptance Testing (UAT) for retirement
 processing, annuity payroll and tax reporting functionalities.

Benefit Services

Improving the customer experience is a multi-biennial project addressing extraordinary member service challenges. To return to expected service levels, additional staff was needed to manage the volume of customer service interactions, to increase capacity for counseling services and to expand service channel options.

Acting in their fiduciary capacity, the TRS Board of Trustees issued a Fiduciary Finding in FY 2019 that allowed TRS to begin addressing these challenges. In FY 2019, TRS calls increased 6%, while email responses were down 54%. The percentage of calls answered in three minutes has averaged 55% compared to an expectation of 80%. The average handle time to service a call was seven minutes while the average speed to answer a call was six minutes. Prior handle times to service a call had grown from 10 to 30 minutes.

The FY 2020 operating budget includes funding and staff for improving the customer experience. We expect service traffic to normalize as we continue to onboard critical frontline benefit services staff.

Investment Management

The resources requested in this budget will also allow TRS to become a best-in-class investment management fund and reduce the use of external managers. TRS has an opportunity to save \$1.4 billion in fees and carried interest from our investing activities over the next five years. The demand for private market investments from pension and sovereign wealth funds has dramatically increased. As a result, high quality and appropriately risk-adjusted investments are becoming harder to find in scale for the portfolio.

Investment Management (cont.)

Over the past five years, to maintain our competitive advantage, we have implemented a risk parity approach, launched a co-investment platform and pursued alternative investments including direct investing. However, economies of scale are not infinite. Deploying additional capital in the future will take additional resources. As a result, our investments-focused head count will need to increase. Doing so will allow us to reduce external management fees while preserving risk-appropriate returns and will allow TRS to sustainably increase the likelihood of meeting return assumptions. A total of 30 additional investment management positions are included in this budget to address these issues.

Health Care

During the 86th Legislative Session, TRS received \$231 million in supplemental funds to maintain benefits and premiums at 2019 levels. The 2020 Administrative Budget for Health and Insurance Benefits and Long-term Care Insurance Program includes additional funding to complete the health care line of business project and continued customer support. Payroll-related costs increased, resulting from adding three staff members, and Health and Insurance Benefits Operations continues to focus on managing the cost of the plan, better serving members and member engagement and communications.

Support Administration

The 2020 administrative budget for the pension includes funding to keep pace with the enterprise-wide support needs primarily related to improving the customer experience. These support functions are primarily in the areas of Information Technology, Internal Audit and Legal Services.

Support Administration (cont.)

New employer reporting rules adopted by the Governmental Accounting Standards Board (GASB) require more accurate and complete data, increasing demand for data and systems security. These changes also highlighted a need for additional employer auditing to ensure that required retirement contributions are being deposited into the Pension Trust Fund. As fiduciaries, TRS will continue to achieve an appropriate balance of support personnel to frontline service employees.

TEAM and CAPPS

The TEAM project is a cohesive collection of components designed to meet the business and technology objectives of TRS over the next 15-20 years. The associated projects under the TEAM Program include data management, independent program assessment and the pension administration line of business (LOB) solution. The budget includes a total of \$7.7 million for contracted development staff and represents the conclusion of the program.

The Centralized Accounting and Payroll/Personnel System (CAPPS) program is a statewide Enterprise Resource Planning (ERP) system created by the state comptroller to replace our financial system. TRS implemented CAPPS Financials in FY 2018 and CAPPS HR/Payroll in FY 2019. The budget includes \$1.2 million for contracted staff for the project.

Capital Budget

The capital budget includes funding for both physical infrastructure and information systems upgrades. A total of \$3.6 million is included in the budget for capital spending, including \$1.6 million for building and security renovations and \$2.1 million for information system upgrades.

Capital Budget (cont.)

The agency continues to execute building improvement projects. The agency's focus in FY 2020 is the East Building Remodel Project, which is a two-year effort to centralize customer service functions and more efficiently utilize existing space. Funding for information systems upgrades includes network infrastructure upgrades, investment systems upgrades, data center upgrades and a PC workstation refresh program.

Long-Term Considerations

Planning themes include normalizing member service, operationalizing new information technology infrastructure and transforming the investment management function. We expect member service volumes to normalize in the next year or two while we onboard additional staff and quality assurance capability. Doing so will lead to higher than normal support costs while we recruit and train staff.

The TEAM Program has created millions of dollars' worth of new IT-related infrastructure. Maintaining that infrastructure and providing opportunity for IT to deliver on projects that were previously delayed due to TEAM considerations will require planning in the next few years.

The endeavor to retool the investment management function will be a four-to-five year process in which we begin to build internal capabilities previously outsourced. As we do so, possible investment fee savings will have to be tracked and assessed. Finally, our ongoing need to invest in physical infrastructure will continue in the foreseeable future. Although the East Building Remodel Project is the current focus, agencywide considerations have begun for long-term facility needs.

Long-Term Considerations (cont.)

Key components of the budget document include estimated revenue projections for the pension and health care funds, operating budget summaries and information on non-TEAM capital projects. The focus of the TRS 2020 operating budget continues to be updating systems, sustaining a culture of innovation and efficiencies and delivering higher levels of service to our members while maintaining fiscal responsibility.

Distinguished Budget Presentation Award

The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to the Teacher Retirement System of Texas for its annual budget for the fiscal year beginning Sept. 1, 2018. In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as a financial plan, as an operations guide and as a communications device. This award is valid for a period of one year only. We believe our current budget continues to conform to program requirements, and we are submitting it to the GFOA to determine its eligibility for another award.

Don Green

Chief Financial Officer

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228 Agency Bill Assignments

86TH LEGISLATURE 2020-2021

TRS follows a collaborative process in developing the agency's legislative initiatives. Strong working relationships are developed with all stakeholders and maintained in providing cost estimates and impact statement analysis for agency bill assignments. During the 86th legislative session, a total of 7,541 bills and joint resolutions were filed in both the House and Senate. Of those, 1,439 passed the legislature and were sent to the governor. Approximately 18% of all bills and joint resolutions filed became law. The following bills represent those of interest to TRS.

HB1 - General Appropriations Act (Appendix C)

- Increases the state's contribution to the pension fund from 6.80% to 7.50%.
- Maintains member contribution at 7.7%.
- Provides supplemental state funding of \$231 million for the TRS-Care fund to maintain plan year 2019 premiums and benefit levels.
- Increases TRS FTE authority allowing for full implementation of agencywide initiatives to align and improve customer service and reduce investment fees.

SB12 - TRS Pension Reform Bill

- Provides for gradual contribution increases from the state, public education employers and active employees to make the pension fund actuarially sound.
- As a result, eligible members who retired on or before Dec. 31, 2018 will receive a one-time supplemental payment in either the amount of their monthly annuity payment or \$2,000, whichever is less.
- Prior to SB 12, only public education entities that did not contribute to Social Security were required to pay a 1.50% contribution. Starting Sept. 1, 2019 all public education employers began contributing 1.50%.

New Rider
Authority
provides
exemption to
FTE Limitation
for Board
Fiduciary
Finding.

86TH LEGISLATURE 2020-2021

SB500 – Supplemental Appropriations Bill

- Provides \$524 million to fund the increases for the state's contribution to the pension fund from 6.80% to 7.50% in fiscal years 2020 and 2021.
- Provides \$589 million to fund the supplemental annuity check for 405,538 annuitants or alternate payees. Of those, 193,279 will receive \$2,000.
- In total, the state is contributing an additional \$1.113 billion for the biennium to TRS for contributions to the pension plan and supplemental payments to retirees.

TRS Specific Bills

HB 1612: Relating to the authority of the TRS to invest in certain hedge funds. Eliminated a sunset date on TRS' ability to invest up to 10% of pension trust assets in hedge funds. Absent the repeal of the sunset date, the hedge fund limit would have reverted to 5% as of Sept. 1, 2019.

HB 2820: Relating to the registration and certification of certain investment products made available to public school employees. TRS will no longer certify 403(b) companies nor will TRS maintain a list of registered 403(b) investment products. Products will continue to be regulated by the Texas Department of Insurance, the Texas State Securities Board and applicable federal agencies.

SB 1682: Relating to the administration of and benefits payable under the Texas public school retired employees group insurance program and the Texas school employees uniform group health coverage program. Requires TRS to establish a contingency reserve fund equal to 60 days of average projected claims and administrative costs for TRS-Care.

86TH LEGISLATURE 2020-2021

TRS Specific Bills (cont.)

HB 2629: Relating to the deadline to appeal administrative decisions of TRS. Requires the TRS Board of Trustees, in adopting rules governing the appeal of a final administrative decision of TRS, to ensure that rules establishing deadlines for the filing of an appeal afford a member or retiree at least the same amount of time to file an appeal as TRS has to issue a TRS decision. The bill applies to appeals made on or after Jan. 1, 2020.

Bills Impacting TRS and other Agencies

SB 619: Relating to the sunset review process and certain governmental entities subject to that process. Subjects TRS to Sunset review in 2019/2020 rather than 2023/2024.

SB 65: Relating to state contracting and procurement. Provides for additional oversight and requirements in state agency contracting and procurement.

SB 1264: Relating to consumer protections against billing and limitations on information reported by consumer reporting agencies. Prevents out-of-network emergency care, facility-based provider, out-of-network laboratory service, or an out-of-network diagnostic imaging service from balance billing patients in TRS-ActiveCare and TRS-Care. The bill instead requires mediation for participants in TRS health care programs on a disputed out-of-network facility claims. For out-of-network physicians' charges, TRS and the physician will either settle claims in an informal teleconference or in arbitration.

86TH LEGISLATURE 2020-2021

Bills Impacting TRS and other Agencies (cont.)

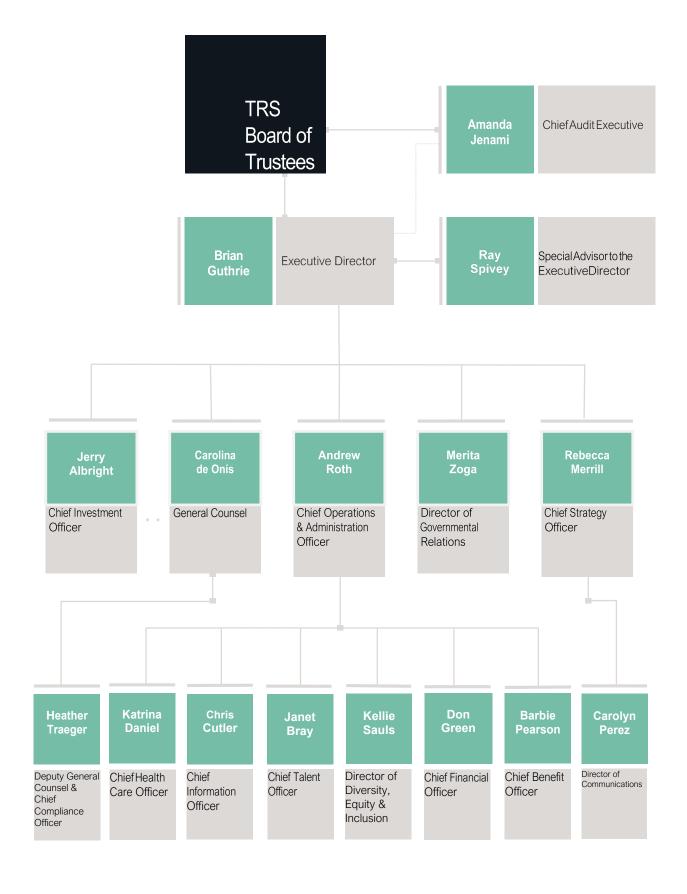
SB 2224: Relating to requiring a public retirement system to adopt a written funding policy. Requires retirement systems to adopt a funding policy. The policy would include a plan to achieve a 100% or more funded ratio.

SB 322: Relating to the evaluation and reporting of investment practices and performance of certain public retirement systems. Requires certain public retirement systems to select an independent firm to evaluate investment practices and performance and make recommendations for improving the retirement systems' investment policies procedures and practices. Public retirement systems are required to include in their annual financial report a listing, by asset class, of all direct and indirect commissions and fees paid by the retirement system for the sale, purchase, or management of its assets and to provide the names of the investment managers engaged by the retirement system.



The Teacher Retirement System of Texas (TRS) was approved in 1936 by an amendment to the Texas Constitution, followed by enabling legislation in 1937 to improve the retirement security of Texas educators. The money in the trust is held exclusively for the benefit of TRS members. The nine-member board of trustees acts as a fiduciary of TRS assets. The board members are appointed by the governor of Texas. Three are direct appointments of the governor. Two are appointed by the governor from a list prepared by the State Board of Education. Two are appointed by the governor from the three public school district member candidates who have been nominated for each position by employees of public school districts. One is appointed by the governor from the three retired member candidates who are nominated by retired TRS members. One is appointed by the governor from the three at-large candidates who have been nominated for the position. TRS retirees, members in public school districts and members in higher education institutions may run for nomination to the at-large trustee position.

TRS ORGANIZATIONAL CHART



TRS STRATEGIC PLAN HIGHLIGHTS

For the period FY 2019-23

The strategic objectives for TRS are developed in accordance with the TRS Board of Trustees' fiduciary duties and support the following statewide objectives of the state of Texas. TRS supports the statewide objectives by effectively serving our members, by operating efficiently and transparently, and by focusing on our mission to make a positive difference in our members' lives.

TRS 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.

Statewide Objectives:

- 1. Accountable to tax and fee payers of Texas.
- Efficient such that maximum results are produced with a minimum waste of taxpayer funds, including through the elimination of redundant and non-core functions.
- Effective in successfully fulfilling core functions, measuring success in achieving performance measures and implementing plans to continuously improve.
- 4. Attentive to providing excellent customer service.
- 5. Transparent such that agency actions can be understood by any Texan.



Goal 1: Sustain a Financially Sound Pension System



Under the Texas Constitution and federal tax law applicable to qualified retirement plans, pension contributions are collected as assets that are held in the trust for the exclusive benefit of plan participants.

With a pension fund, the challenge is to manage the funded ratio and funding period. The funding ratio is expressed as a percentage, specifically the portion of the unfunded liability that exists today as net available assets. It answers the question, "what percentage of the unfunded liability would the pension fund be able to pay today if the expected future liability existed today?" The expected future liability is the total in today's dollars of the next 30 years' worth of annuity payments. The funding period is the number of years the fund would need to pay off the total unfunded liability.

Due to changes in the global economic outlook and expected market conditions, the TRS Board of Trustees lowered the investment return assumption from 8% to 7.25% based on recommendations from the plan's actuary, independent investment advisors and months of public discussion. The lower assumed rate of return caused the unfunded actuarial accrued liability to increase from \$33.0 billion to \$46.2 billion and the funding period to increase from 33 years to 87 years. A 1.5% to 2% increase in the contribution rate would be required to lower the funding period to a range of 31 to 35 years.

Goal 1: Sustain a Financially Sound Pension System (cont.)

The metrics recorded in the chart below are actual figures from the fund's valuation report for the period ending Aug. 31, 2018. We do not provide estimates or projections. The member contribution rate is currently 7.7%. The actuarially determined employer contribution rate, including deferred investment losses, is 9.48%.

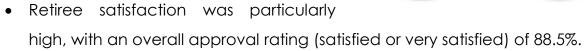
TRS Trust Fund Actuarial Snapshot	8/31/18	Goal
Funded Ratio	76.9%	≥80%
State Contribution Rate	6.8%	
Non-Social Security School District Contribution Rate	1.5%	
Member Contribution Rate of Payroll	7.7%	
Funding Period (years)	87 years	≤30 years
Actuarially Determined Employer Contribution (ADEC)	9.48%	
Are contributions sufficient to fund future liabilities?	No	Yes

During the 86th legislative session in 2019, Senate Bill 12 was passed which gradually increases the contributions from the state, public education employers and active employees to make the pension fund actuarially sound. Both the funded ratio and funding period are affected by a number of variables including membership, covered payroll growth, longevity and investment returns. TRS is required to adopt a written funding policy, detailing a plan to achieve a funded ratio of the pension trust system that is equal to or greater than 100% by Jan. 1, 2020.

Goal 2: Continuously Improve Our Benefit Delivery

 Increase the capacity to serve more members by addressing staffing limitations

According to the 2017 Member Satisfaction Survey:



- Active members also gave TRS a very high overall rating (satisfied or very satisfied)
 of 82.5%.
- In addition to the 2017 Member Satisfaction Survey, other ongoing functions to build and maintain strong, customer-focused relationships include reporting key performance measures to the Legislative Budget Board (LBB) and including them in the agency's Biennial Legislative Appropriations Request.

Key Performance Measures	FY 2018 Target	FY 2018 Actual	Explanation
TRS expense per member (Benefit Administration Expenses)	\$29	\$40.78	Actual was higher than target as a result of an increase in employee count and salary increases. In addition to TEAM program increased expenses.
Investment expense per member in basis points (bp)	24bp	14.1bp	The decrease in investing activity expense is primarily due to lower external manager fees paid out of the trust in FY 2018.
Service level percentage of calls answered in specified time interval	80%	15.10%	The decrease in service level is due to membership base growing in size and complexity in addition to stagnant benefit services staffing levels.
Number of benefit claim applications processed annually (service and disability retirements, refunds and death claims)	72,000	68,632	All applications are processed. Any variance is due to the number of applications received.



Goal 3: Facilitate Access to Competitive, Reliable Health Care Benefits for Our Members

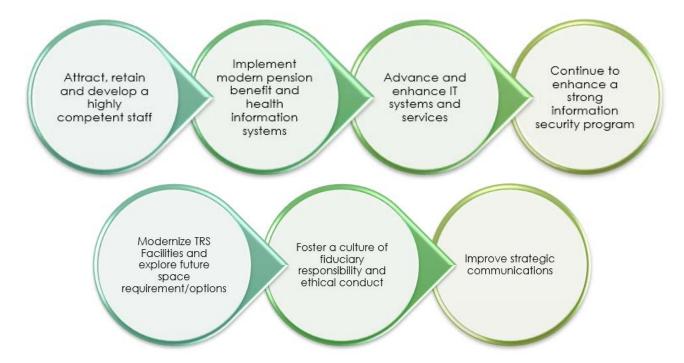


In FY 2019, over \$1.3 billion was provided by multiple funding sources for TRS-Care. State, district and active employee contributions are based on a percentage of active employee payroll rather than by medical trend. Required state contributions totaled almost \$425 million, including proportionality amounts received from the districts elsewhere classified as district contributions.

Over \$2.3 billion was received in FY 2018 from three funding sources for TRS-ActiveCare. Because the level of legislated state and district funding has not changed since inception of the plan, employees shoulder the majority of the costs.

TRS will continue to manage and monitor TRS-Care and TRS-ActiveCare cost trends, assess existing cost containment strategies while exploring new initiatives and educate health care consumers on the optimal use of TRS health plan benefits. TRS will continue to enhance health data analytics to drive key decision making to support cost management and resource maximization.

Goal 4: Ensure That People, Processes and Technology Align to Achieve Excellence in the Delivery of TRS Goals



• TRS is often selected as a Top Workplace in Austin as part of the Austin American-Statesman's workplace survey. TRS is a preferred employer because of its mission and culture and because it provides employees with the tools needed to succeed. In FY 2019, this includes expanding recruitment efforts, redesigning new employee orientation and creating a six-month onboarding program to help new employees adjust and acclimate to TRS culture.



Goal 4: Ensure that People, Processes and Technology Align to Achieve Excellence in the Delivery of TRS Goals (cont.)

- FY 2019-20 appropriations includes funding for a 5% merit pool for IMD and a 3% merit pool for Red River staff. Merit allocations continue to be centralized. The executive director and chief operations and administration officer work with managers to determine merit allocations through a departmental analysis.
- Continue to increase employee in-house learning opportunities and development.
- Maintain a desirable work environment that includes efficient use of space.
- Continue to provide organizational change management support throughout the TEAM Program.

Goal 5: Promote Purchasing Selection Practices That Foster Meaningful and Substantive Inclusion of Historically Underutilized Businesses (HUBs)

TRS is committed to adhering to the HUB Program and for operating under the highest ethical standards.



TRS will continue to:

- Support and implement responsibilities as determined by the Texas Comptroller of Public Accounts (CPA).
- Host the annual TRS HUB forum and participate in local and selected statewide HUB events, including CPA forums.
- Conduct one-on-one meetings with HUB vendors and assist with identifying business opportunities with TRS and other state agencies, as well as assist vendors in becoming certified or recertified as a Texas HUB.

FINANCIAL POLICIES AND GUIDELINES

The goal of TRS is to develop and submit a balanced budget so that the agency operates in accordance with the guidelines of the General Appropriations Act (GAA) adopted by the 86th Texas Legislature. A balanced budget is one in which the total revenues equal total estimated expenditures. The budget for FY 2020 is balanced and prepared in accordance with board policy and guidelines and Generally Accepted Accounting Principles (GAAP).



➤ Basis of Budgeting

The TRS budget is managed using the accrual basis of accounting for all funds in accordance with budgetary accounting practices. Under the accrual basis, revenues are recognized when they become available and measurable. Expenditures are recognized when the liability is incurred regardless of related cash flows. The basis of accounting for budget purposes is the same as the basis of accounting used in the audited financial statements.

> Policies

Bylaws of the Board of Trustees of the Teacher Retirement System of Texas Art. 3 Section 3.1.3 Budget Committee.

The board shall have a Budget Committee, which shall meet as necessary at the call of its chairman to:

- (a) recommend budgets for approval by the board;
- (b) recommend intra-budget transfers and budget amendments for approval by the board; and
- (c) monitor implementation of the operating budgets of the pension trust and other programs.

Art. 5 Section 5.4 Budgets and Fiscal Year.

The budgets of the pension trust fund and any other trust funds administered by TRS are adopted by the board and may be amended by the board in subsequent meetings. The TRS fiscal year shall begin Sept. 1 and shall end the following Aug. 31.

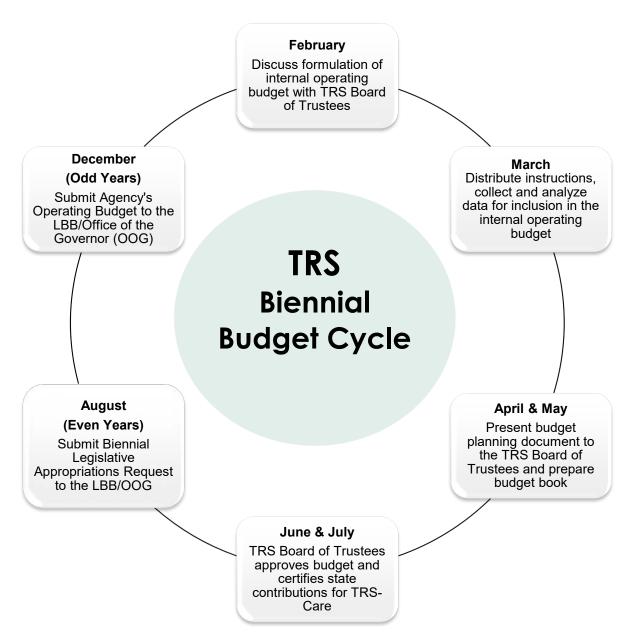
The full Bylaws of the TRS Board of Trustees can be found at https://www.trs.texas.gov/TRS Documents/bot bylaws.pdf

> Planning

The development of the operating budget is a participatory process that includes a series of meetings with agency management to create the budget. Budget instructions are sent to all department managers to submit requests for operating and capital expenditures for the upcoming fiscal year and for the next biennium during even numbered years (see diagram on the following page). Salaries and other personnel costs are developed by budget staff using assumptions required to fund assumed expenditures. Department managers review the staffing list to ensure accuracy. Department managers are instructed to use a baseline budgeting approach plus needed funding for cost escalators. Requests for additional funds and staff are evaluated for increasing work demands, changing methods of operations and delivery of mission critical services.

➤ Budget Policy

As a part of the state of Texas budget process, TRS prepares a detailed Legislative Appropriations Request (LAR) under the guidelines of the state's Legislative Budget Board (LBB). The appropriations request itemizes the funding TRS needs to operate. The requests include performance measures designed to ensure the money is spent efficiently and effectively.



➤ Budget Policy (cont.)

- A single-year budget will be presented to the TRS Board annually for approval.
 The total approved budget for operating expenses and capital outlay cannot be exceeded without the approval of the TRS Board.
- The budget emphasizes implementing the current strategic plan.
- Capital projects not started or completed in the current fiscal year have Unexpended Budget (UB) authority, which means any remaining funds for those projects in the first year of the biennium can be moved to the next fiscal year within the same biennium.
- The general provisions of the budget authorize the executive director, or deputy director/chief operations and administration officer in the absence of the executive director, to transfer budgeted funds up to \$100,000 or 12.50% of a major expense category (whichever is greater) between major expense categories, provided that the total approved budget for operating expenses and capital outlay is not exceeded. This provision applies separately to the TRS Pension Trust Fund and the Retired and Active Health Benefits Funds.

➤ Long-Term Financial Policy



TRS strategic planning is a long-term and future-oriented process of assessment, goal setting and decision-making. It includes a multiyear view of objectives and strategies for the accomplishment of agency goals in service to the agency's core mission. Clearly defined results provide feedback that leads to program performance that influences future planning, resource allocation and operating decisions. The strategic planning process incorporates and sets direction for all agency operations by the following:

- Prepare a five-year (FY 2019-FY 2023) forecast that supports the agency core
 areas of providing excellent customer service to TRS participants and
 reporting entities; and prudently investing and managing trust assets. The
 forecast will strive to depict a positive operation position.
- Annually evaluate trends from a budget-to-actual perspective and from a historical year-to-year perspective to identify areas where resources have been over or under allocated. This would improve the accuracy of revenue and expenditures forecast by decreasing the impact of recurring historical variances.

➤ Budget Monitoring

Budget staff continuously monitor financial performance relative to the adopted budget, supporting timely decision-making by senior management. On a monthly basis, budget staff perform budget-to-actual or budget-to-projected actual comparisons of expenditures. Staffing levels are also monitored and earned lapse to date is calculated. On a quarterly basis, budget staff meet with department managers to discuss current year expenditure trends and patterns and any issues that may have a fiscal impact. The following diagram depicts the various monitoring time frames:



Daily

Verify and monitor budget and expense entries



Monthly

Analyze, reconcile and report budgetary data



Quarterly

Prepare and report budgetary data to LBB and TRS Board of Trustees



Annually

Fiscal and appropriation year-end budgetary closing and reporting process

EXPLANATION OF REVENUE SOURCES AND CHANGES IN FUND BALANCES

The system's accounts are organized on the basis of funds, each of which is considered a separate accounting entity. The operations of each fund are accounted for with a self-balancing set of accounts that comprise its assets, liabilities, revenues, and expenses. The fund balance is defined as the difference between the assets and liabilities of the fund consistent with GASB Statement 54. TRS maintains three major funds in two categories.

Fiduciary Funds

Fiduciary funds, which have an appropriated component, include the pension trust fund and TRS-Care. Fiduciary funds are used to report assets held in a trustee capacity on behalf of others. The reporting focus is on net position and changes in net position. The agency's operating budget is sourced from each fund respectively. Benefits are paid from the pension trust fund. Health care claims are paid from TRS-Care.

Proprietary Fund

The system's proprietary fund, TRS-ActiveCare, does not include any appropriated funds. This fund is used to account for business type activities or those for which a fee is charged to external users for goods and services. The reporting focus is on the determination of operating income, changes in net position, financial position and cash flows. Benefits and operating expenses are paid from TRS-ActiveCare.

Appropriated Funds

Only the fiduciary funds include an appropriated component. For the pension trust fund, administrative expenses and the state's share of the employer contributions are appropriated by the state legislature. The administrative expenses are funded by trust fund assets while the state's employer contributions are general taxpayer revenue. For TRS-Care, the health care program for retired teachers, the state's contributions are appropriated general taxpayer revenue.

TRS Board of Trustees

Fiduciary Funds - Assets held in trust for members (Includes appropriated funds)

Proprietary Funds -Business-type activities (Non-appropriated funds)

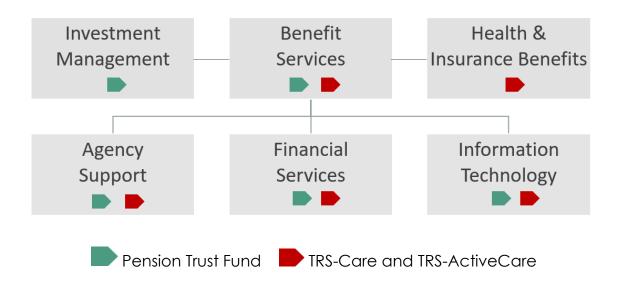
TRS Pension Trust Fund

TRS-Care Fund

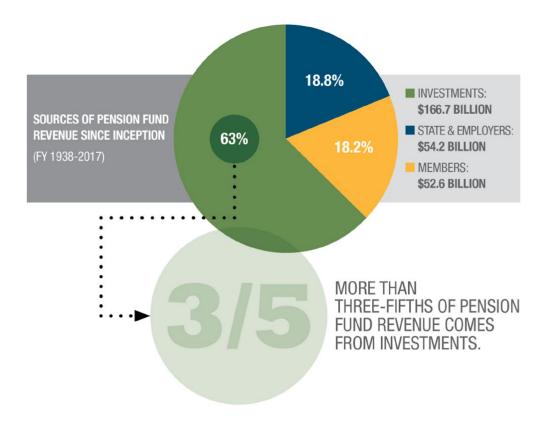
TRS-ActiveCare Fund

Fund and Department Structure

All of the divisions and departments within TRS are funded by the pension trust fund with the exception of the Health Insurance Benefits Division. The Health Insurance Benefits Division is funded with health care funds which includes both TRS-Care and TRS-ActiveCare. A cost allocation process is used to transfer support costs from the other divisions, including the Agency Support, Information Technology (IT), Finance and Benefit Services Divisions to the health care funds.



Funding for the pension trust fund is derived from four main sources: member contributions, state contributions, employer contributions and investment income. In the defined benefit plan, contributions are invested to generate income from which benefits are paid. The majority of pension fund revenue has historically come from investment returns.



Senate Bill 12, which was passed during the regular session of the 86th Legislature, provides for increasing contribution rates from all sources over the next few years to make the pension fund actuarially sound.

	Current	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
STATE	6.80%	7.50%	7.50%	7.75%	8.00%	8.25%	8.25%
MEMBERS	7.70%	7.70%	7.70%	8.00%	8.00%	8.25%	8.25%
PUBLIC ED EMPLOYER	1.50%*	1.50%	1.60%	1.70%	1.80%	1.90%	2.00%

^{*}Prior to SB12, only public education entities that did not contribute to Social Security were required to pay a 1.50% contribution. Beginning 9/1/2019 all public education employers began contributing 1.50%.

Member Contributions

Member contributions are established in statute and are currently 7.7% of eligible compensation. There are over 870,000 actively contributing members in TRS, growing at a rate of approximately 2% per year.

State Contributions

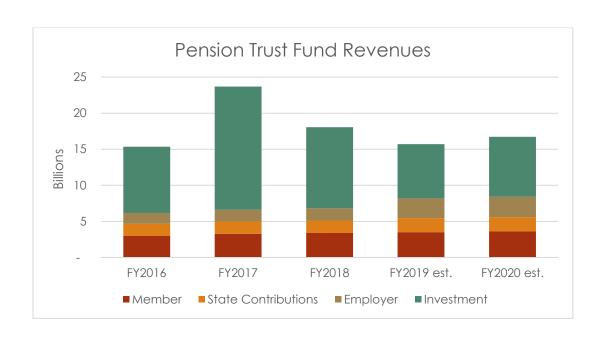
The state contribution rate is established in the General Appropriations Act (GAA) and is scheduled to increase from 6.8% of eligible compensation to 7.5% beginning in FY 2020.

Employer Contributions

All public education employers contribute 1.5% of payroll. There were 1,326 contributing employer entities for FY 2018.

Investment Income

The invested assets of the pension trust fund are a major contributor of resources used to pay annuitants. Since the fund's inception in 1938, 62% of all trust fund revenue is related to investments. The current assumed rate of return is 7.25%.



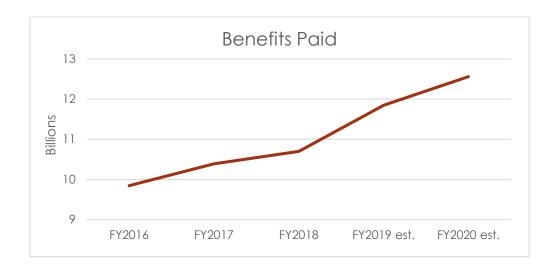
Pension Trust Fund	Actual FY 2018	Estimated FY 2019	Estimated FY 2020	Variance FY 2019 to FY 2020
Member Contributions	3,402,311,568	3,501,723,246	3,606,774,943	3%
State Contributions (Appropriated)	1,719,442,836	1,965,466,951	1,989,646,207	1%
Employer Contributions	1,695,269,319	2,732,567,136	2,814,544,150	3%
Investment Earnings/Return	11,250,921,905	7,510,036,452	8,315,322,640	11%
Total Revenues	18,067,945,628	15,709,793,785	16,726,287,940	6%
Benefits Paid	10,700,496,538	11,847,723,189	12,558,586,580	6%
Admin Expenses - Appropriated (excluding investing activity expenses)	64,926,169	43,874,525	45,190,761	3%
Total Expenses	10,765,422,707	11,891,597,714	12,603,777,341	6%
Net Increase (Decrease)	7,302,522,921	3,818,196,071	4,122,510,599	8%
Net Position, Beginning of Year	147,266,378,912	154,568,901,833	158,387,097,904	2%
Net Position, End of Year	154,568,901,833	158,387,097,904	162,509,608,503	3%

Projections

With an expected 3% annual growth in covered payroll, the member contributions amount should grow in the range of 3 to 6%.

The state's share of employer contributions is appropriated to TRS by the state legislature. Employer contributions should follow suit since the basis of payroll, that is covered payroll, is the same as member contributions.

Investment earnings are largely dependent on global market conditions and the asset allocation strategy. The annual rate of return on investments for the pension fund for the year ended Aug. 31, 2018 was 8.2%. The investment earnings amount projected includes both investment returns and investment earnings.



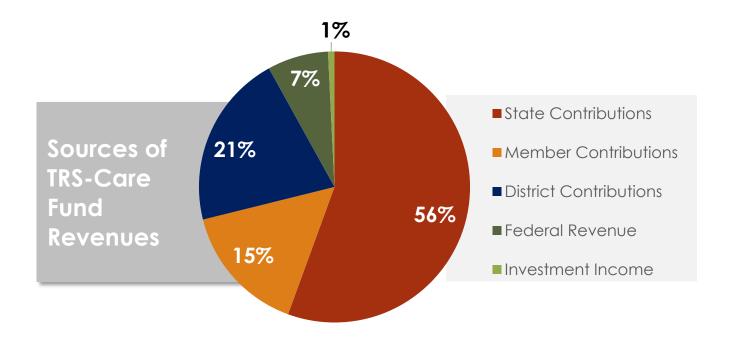
Benefits paid generally grow 6% per year. Administrative expenses for benefit operations are expected to increase slightly in the near term due to an increased focus on customer service along with inflationary increases. Investing costs are generally netted against investment returns. Reduced investing costs going forward should support investment returns.

The FY 2020 budget contains additional state funding as enacted through the 86th Legislature, Regular Session:

- \$524 million to fund the increases for the state's contribution to the pension fund from 6.80% to 7.50% in fiscal years 2020 and 2021.
- \$589 million to fund the supplemental annuity check for 405,538 annuitants or alternate payees. Of those, 193,279 will receive \$2,000.
- In total, the state is contributing an additional \$1.113 billion for the biennium to TRS for contributions to the pension plan and supplemental payments to retirees.

The program is financed on a pay-as-you go basis, and benefits are contingent on funding availability. Revenue for TRS-Care comes from six sources. These include state contributions, active member contributions, district contributions, retiree premiums, federal programs and investment income.

State legislative action provided TRS-Care a one-time payment of supplemental funding in the amount \$231 million to maintain plan year 2019 premiums and benefit levels in the 2020-21 biennium. Federal revenue is dependent upon congressional action and continued program funding.



Annual Contributions

• State contributions, active member contributions and district contributions are generally defined as a percentage of the active employee payroll. The current contribution amount is 1.25% of active payroll for state contributions, 0.65% for active members and 0.75% for district contributions.

Retiree Premiums

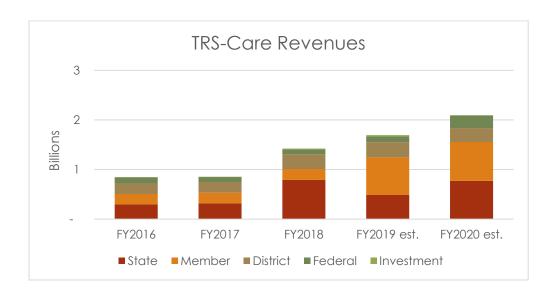
 Retiree premiums are tiered by years of service, Medicare status, dependent coverage and plan election.

Federal Funds

Federal funds received are related to Medicare Part D which provide retiree
prescription drug subsidy reimbursements on behalf of certain plan participants.
Additional subsidies are received under TRS-Care's Employer Group Waiver Plan
(EGWP) for direct subsidies, catastrophic reinsurance subsidies and low-income
subsidies.

Investment Income

 Investment income is earned on the cash balance that is maintained with the State of Texas Treasury.



TRS-Care, Health Care Program for Retirees	Actual FY 2018	Estimated FY 2019	Estimated FY 2020	Variance FY 2019 to FY 2020
State Contributions (Appropriated)	790,188,628	487,509,401	772,546,332	58%
Member Contributions	221,325,377	757,854,377	781,893,005	3%
District Contributions	296,098,420	305,606,218	281,191,981	-8%
Federal Revenue	103,402,579	119,433,178	253,862,879	113%
Investment Income	10,930,281	25,046,771	5,356,627	-79%
Total Revenues	1,421,945,285	1,695,449,945	2,094,850,824	24%
Health Care Claims Paid	985,436,050	907,083,532	1,777,704,635	96%
Administrative Expenses	6,672,488	10,532,570	12,105,934	15%
Total Expenses	992,108,538	917,616,102	1,789,810,569	95%
Net Increase (Decrease)	429,836,747	777,833,843	305,040,255	-61%
Net Position, Beginning of Year	368,737,886	798,574,633	1,576,408,476	97%
Net Position, End of Year	798,574,633	1,576,408,476	1,881,448,731	19%

Projections

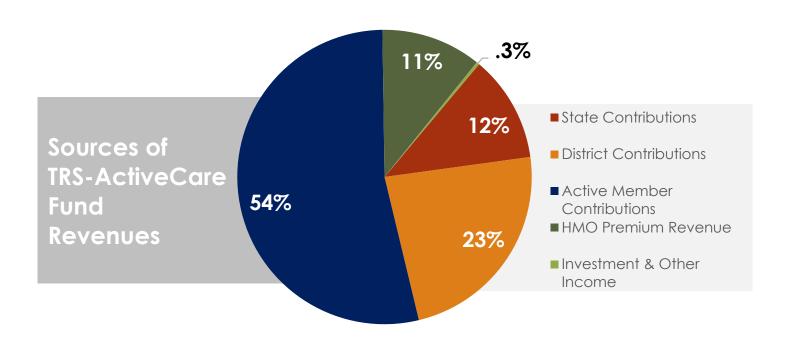
The covered employee payroll that serves as a base for three of the six revenue sources is expected to grow along with the growth of active teachers. Payroll growth is expected to average 3% per year through FY 2020 with a 2% growth thereafter. The state's share of employer contributions is appropriated to TRS by the state legislature. The state's contribution rate remains at 1.25% and the district contribution rate remains at 0.75%.

Health care claims expense, including pharmaceutical costs, have been increasing 7 to 10% per year for the last decade. That trend is expected to continue in the near term. TRS' administrative expenses will go up more than the historical average over the next couple of years due to an increase in staffing and project spending associated with upgrading the technology infrastructure used to serve members.

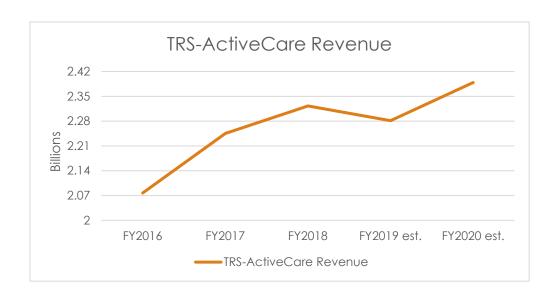
Federal funds are projected to increase due to retiree drug subsidies provided by Medicare Part D. Although expected claims expense will continue to outpace revenue growth, the TRS-Care Fund is expected to remain solvent through FY 2023.

TRS-ACTIVECARE, HEALTH CARE PROGRAM FOR ACTIVE TEACHERS

The program is financed on a pay-as-you go basis. Revenue for TRS-ActiveCare comes from state contributions, district contributions and employee contributions. State funding is \$75 per month per employee, provided through the school finance formulas. The district contribution is a minimum of \$150 per month per employee, but districts may (and typically do) contribute more. Employee contributions vary by plan election and coverage selected. The other revenue category includes applicable federal revenue, payments for COBRA coverage, as well as reimbursements the state of Texas makes for the payment of benefits provided to TRS employees. Claims expense has been increasing about 3% per year. Administrative expenses include an expected increase in actuarial and consulting support costs.



TRS-ACTIVECARE, HEALTH CARE PROGRAM FOR ACTIVE TEACHERS



TRS-ActiveCare, Health Care Program for Active Teachers	Actual FY 2018	Estimated FY 2019	Estimated FY 2020	Variance FY 2019 to FY 2020
Premiums	2,315,669,026	2,270,358,211	2,383,876,122	5%
Investment Income	6,883,872	10,623,456	4,900,376	-54%
Other Revenue	259,417	166,139	259,417	56%
Total Revenues	2,322,812,315	2,281,147,806	2,389,035,915	5%
Health Care Claims Paid	2,361,013,081	2,219,416,746	2,285,999,248	3%
Administrative Expenses	3,311,679	5,065,180	4,228,300	-17%
Total Expenses	2,364,324,760	2,224,481,926	2,290,227,548	3%
Net Increase (Decrease)	(41,512,445)	56,665,880	98,808,367	74%
Net Position, Beginning of Year	97,804,829	56,292,384	112,958,264	101%
Net Position, End of Year	56,292,384	112,958,264	211,766,631	87%

TRS-ACTIVECARE, HEALTH CARE PROGRAM FOR ACTIVE TEACHERS

Projections

Both state contributions and district contributions are affected by the growth in the number of active teachers. Historically, the number of teachers is highly correlated to the state's population. Population growth has averaged 1.8% per year over the past 30 years. For the next few years (i.e. through FY 2021), that growth is expected to average 2 to 3% per year.

Member contributions are highly dependent upon member elections of coverage. More members are opting out of coverage which might lead to a slowing in the growth of member contributions overall. The chart on the previous page includes state contributions, member contributions and district contributions in the premiums revenue category. Premiums have been increasing roughly 5% per year.

403(B) CERTIFICATION PROGRAM

A 403(b) plan is also known as a tax-sheltered annuity (TSA) plan. It is an optional retirement plan for employees of public school districts in Texas. TRS certifies and oversees the registration process and provides guidance to districts and registered providers. Teachers who elect this option interact directly with the third-party provider. TRS does not take custody of the contributions or provide investment oversight.

The revenue associated with this program is based on a fee paid by providers which is \$3,000 per registration. The revenue varies annually based on the number of providers who choose to register. The resulting certification is good for three years after which the provider must recertify.

Projections

Since registrations are for a three-year period, not all companies will pay to register every year. Administrative expenses include staff costs related to overseeing the certification process. HB 2820 (86th Legislature, Regular Session) removed TRS' authority to certify 403(b) companies and maintain a list of registered 403(b) investment products as of Sept. 1, 2019. Products will continue to be regulated by the Texas Department of Insurance, the Texas State Securities Board and applicable federal agencies.

403(b) Certification Program	Actual FY 2018	Estimated FY 2019	Estimated FY 2020	Variance FY 2019 to FY 2020
Fee Revenue	413,000	30,000	-	-100%
Interest Income	8,601	13,703	-	-100%
Total Revenues	421,601	43,703	-	-100%
Administrative Expenses	132,031	380,790	-	-100%
Total Expenses	132,031	380,790	-	-100%
Net Increase (Decrease)	289,570	(337,087)	-	-100%
Net Position, Beginning of Year	254,593	544,163	207,076	-62%
Net Position, End of Year	544,163	207,076	207,076	0%

SUMMARY OF

FY 2020

OPERATING

BUDGET

PENSION TRUST FUND AND COMMISSION CREDITS

Administrative Operations

	Pension Trust Fund	Commission Credits	FY 2020 Total	FY 2019 Total
Sources of Funds	10114	Gredin	TOTAL	Tordi
Legislative Appropriations	135,932,451	-	135,932,451	108,807,828
TEAM/CAPPS Unexpended Balances	8,933,215	-	8,933,215	18,871,404
Fringe Benefits	21,191,800	-	21,191,800	20,158,421
Performance Incentive Compensation	11,376,000	-	11,376,000	11,360,000
Commission Credits	-	30,118,400	30,118,400	28,699,996
Total Sources	177,433,466	30,118,400	207,551,866	187,897,649
Uses of Funds				
Wages and Benefits	103,703,600	-	103,703,600	81,584,208
Performance Incentive Compensation	11,376,000	-	11,376,000	11,360,000
Professional Fees and Services	16,129,100	9,579,100	25,708,200	18,362,494
Support Costs	8,505,075	536,300	9,041,375	18,027,952
Travel	2,337,300		2,337,300	1,842,325
Operating Costs	25,699,176	20,003,000	45,702,176	36,190,465
Capital Projects	750,000		750,000	1,658,801
TEAM/CAPPS Unexpended Balances	8,933,215	-	8,933,215	18,871,404
Total Uses	177,433,466	30,118,400	207,551,866	187,897,649

Pension Trust Fund

Section 825.312 of the Texas Government Code provides that the retirement system shall pay from the expense account of the retirement system account for the pension trust fund all administrative expenses of the retirement system. Administrative operations include all agency operations for benefit administration, investment management and shared support for the agency. The state legislature appropriates funding from the pension trust fund to pay for operations. Funding for both fringe benefits and performance incentive compensation payments is appropriated separately.

Pension Trust Fund and Commission Credits (cont.)

During the 86th Texas Legislature, TRS received new rider authority allowing the transfer of unexpended balances from the TEAM and CAPPS Appropriations into the new biennium for FY 2020. The agency is allowed to carry forward capital project funding within a biennium. The TEAM and CAPPS Program is a large, multiyear capital project that involves creating a new IT platform for benefits administration and a single financials and human resources/payroll administration software solution for Texas state agencies.

Commission Credits

The Commission Credits Program is budgeted and balanced in an addendum to the TRS Administrative Annual Budget in accordance with budgetary accounting practices. Any trust funds administered by TRS are adopted by the board and may be amended by the board in subsequent meetings. The TRS fiscal year begins Sept. 1 and ends the following Aug. 31.

Section 28(e) of the Securities Exchange Act of 1934 ("Section 28(e)") provides a "safe harbor" for investment advisers who incur higher commissions for discretionary client accounts they manage in order to receive brokerage and research services that may or may not benefit those clients. The revenue generated via Commission Credits is spent exclusively for investment management purposes. Commission Credit revenue is not appropriated by the legislature.

HEALTH AND INSURANCE BENEFITS AND 403(B) CERTIFICATION PROGRAM

Administrative Operations

	TRS- Care	TRS- ActiveCare	403(b)	FY 2020 Total	FY 2019 Total
Sources of Funds					
Reserved for Administrative Operations	12,105,934	4,228,300	-	16,334,234	15,190,474
Total Sources	12,105,934	4,228,300	-	16,334,234	15,190,474
		-	-	-	
Uses of Funds					
Wages and Benefits	7,179,834	2,252,600	-	9,432,434	8,298,007
Professional Fees and Services	4,012,900	1,897,400	-	5,910,300	5,851,801.00
Support Costs	74,600	25,900	-	100,500	99,342.00
Travel	218,400	10,600	=	229,000	230,200.00
Operating Costs	620,200	41,800	-	662,000	711,124.00
Total Uses	12,105,934	4,228,300	-	16,334,234	15,190,474

Health and Insurance Benefits

TRS is authorized by Chapter 1575, Texas Government Code (TRS-Care); Chapter 1579 (TRS-ActiveCare); and Chapter 1576, Texas Government Code (Long-Term Insurance Program) to provide health high-value and cost-effective health care and customer service for retired and active employees of Texas school districts open enrollment charter schools and other eligible participating entities.

The chart above is a summary of the FY 2020 budget by fund for the Health and Insurance Benefits Program. The health care funds operate on a pay-as-you-go basis; collect revenue from members, employers and the state; and use that funding to pay for claims and administrative operations. The amounts above are for administrative operations only and do not include claims expenses. None of the amounts above are appropriated.

403(b) Certification Program

HB 2820 (86th Legislature, Regular Session) removed TRS' authority to certify 403(b) companies and maintain a list of registered 403(b) investment products.

EXPENSES BY DEPARTMENT

Department/Division	Expended FY 2018	Budgeted FY 2019	Budgeted FY 2020	Variance t FY 2019 to F	
Board of Trustees	187,821	344,505	218,500	(126,005)	-37%
Executive	1,011,919	970,482	696,800	(273,682)	-28%
Chief Operations and Administration Office	-	-	362,200	362,200	100%
Diversity	_	_	205,000	205,000	100%
Internal Audit	2,174,572	2,341,692	2,755,200	413,508	18%
Legal & Compliance	5,049,073	6,030,147	7,408,700	1,378,553	23%
Governmental Relations	406,018	455,226	450,500	(4,726)	-1%
Strategic Initiatives	865,019	1,505,364	1,355,500	(149,864)	-10%
Risk Management & Strategic Planning	1,175,058	1,275,257	620,600	(654,657)	-51%
Communications	884,543	1,418,284	1,645,800	227,516	16%
Organizational Excellence	2,955,919	3,971,106	5,086,000	1,114,894	28%
Administrative Costs*	500,600	4,914,187	12,643,076	7,728,889	157%
Agency Support	15,210,542	23,226,250	33,447,876	10,221,626	44%
Investment Operations	37,540,277	48,274,691	55,164,900	6,890,209	14%
London Office	2,015,232	2,968,235	3,032,200	63,965	2%
Singapore Office	-	-	2,443,800	2,443,800	100%
Commission Credits	23,449,866	28,699,996	30,118,400	1,418,404	5%
Investment Management	63,005,375	79,942,922	90,759,300	10,816,378	14%
Benefit Services	1,081,607	1,598,050	672,300	(925,750)	-58%
Benefit Processing	5,565,532	6,498,581	6,905,800	407,219	6%
Benefit Counseling	4,416,605	5,495,126	7,016,800	1,521,674	28%
Benefit Accounting	1,209,271	1,560,663	1,972,800	412,137	26%
Benefit Services	12,273,015	15,152,420	16,567,700	1,415,280	9 %
Financial	273,901	290,484	336,300	45,816	16%
Accounting Operations	1,973,905	2,240,827	2,961,300	720,473	32%
Administrative Operations	4,891,662	4,430,973	4,304,300	(126,673)	-3%
Staff Services	520,725	705,734	773,100	67,366	10%
Facilities Services	1,159,670	10,313,566	2,864,100	(7,449,466)	-72%
Printing, Mail & Supply	3,882,321	3,825,769	3,926,600	100,831	3%
Security	136,767	178,170	311,100	132,930	75%
Safety and Prevention	-	-	903,800	903,800	100%
Financial	12,838,951	21,985,523	16,380,600	(5,604,923)	-25%

^{*}Administrative costs include retiree health insurance, unemployment compensation, lump-sum payments, space planning consultants, supplies, furniture, contingency amounts for health care, printing and mailing.

EXPENSES BY DEPARTMENT (CONT.)

Department/Division	Expended FY 2018	Budgeted FY 2019	Budgeted FY 2020	Variance FY 2019 to F	
Information Technology	1,775,662	2,962,685	10,599,900	7,637,215	258%
Enterprise Infrastructure Services	12,652,762	18,004,184	19,159,875	1,155,691	6%
Information Systems Green	2,003,587	1,749,988	1,908,000	158,012	9%
Information Systems Gold	1,859,817	2,141,808	2,738,700	596,892	28%
Delivery & Quality Management	498,167	719,699	1,434,800	715,101	99%
Information Security	-	-	1,107,100	1,107,100	100%
Enterprise Architecture	-	-	1,224,400	1,224,400	100%
Business Relationship Management	-	1,376,628	1,814,100	437,472	32%
Project Management Office	10,284	50,000	1,476,300	1,426,300	2853%
Information Technology	18,800,279	27,004,992	41,463,175	14,458,183	54%
TEAM Program	11,585,294	16,922,703	7,733,215	(9,189,488)	-54%
HILOB Project	1,040,344	2,125,395	2,531,700	406,305	19%
CAPPS Implementation	1,554,633	3,662,840	1,200,000	(2,462,840)	-67%
TRS-Care Administrative	7,246,098	8,156,561	9,574,234	1,417,673	17%
TRS-ActiveCare Administrative	3,402,949	4,517,985	4,228,300	(289,685)	-6%
403(b) Certification Program	151,127	390,533	-	(390,533)	-100%
Agency Total	147,108,607	203,088,124	223,886,100	20,797,976	10%

EXPENSES BY DEPARTMENT (CONT.)

During the 86th Texas Legislature, TRS received new rider authority allowing the transfer of unexpended balances from the TEAM and CAPPS Appropriations into the new biennium for FY 2020.

- The TEAM Program is a \$100+ million, multiyear effort to modernize the major IT systems that TRS uses to administer benefits. There are several projects involved, including the line of business (LOB), data management, program management, application architecture and website redesign. The personnel costs that were charged to the TEAM project are now allocated among the various departments for FY 2020, such as Information Technology and Benefit Services.
- CAPPS is a statewide enterprise resource planning (ERP) system created by the state comptroller. TRS began implementing CAPPS in FY 2018 with a two-year time frame.
 Although most of the implementation cost will be borne by the state comptroller, TRS will assume the costs associated with linking CAPPS with the TRS IT infrastructure.

The Health Insurance Line of Business (HILOB) project was originally part of the TEAM Program LOB project but has since been separated out. An internal business decision was made in late FY 2016 to pursue HILOB outside the scope of the original LOB project to better focus on the health care complexities and unique needs of those members.

The overall increase in the budget from year to year is related to additional FTEs added to focus on enhanced member services and an initiative to strategically transform the investment management division potentially saving \$1.4 billion in investing fees over the next five years. The added positions create increases across all divisions except for financial services, which is decreasing due to a reduction with large scale remodeling projects.

House Bill 2820 (86th Legislature, Regular Session) removed TRS' authority to certify 403(b) companies and maintain a list of registered 403(b) investment products.

Agency Support

Expense Category	Expended FY 2018	Budgeted FY 2019	Budgeted FY 2020
Salaries and Benefits	11,361,664	16,883,720	24,027,200
Professional Fees and Services	1,712,700	2,926,312	3,470,800
Other Operating Expenses	2,136,178	3,416,218	5,949,876
Expense Category Total	15,210,542	23,226,250	33,447,876

Purpose:

Agency Support consists of a variety of oversight departments including Executive Director staff, Diversity, Equity and Inclusion, Internal Audit, Legal & Compliance, Governmental Relations, Communications, Organizational Excellence, Strategic Initiatives, Risk Management, Intern and Agencywide programs. The division provides direction to the agency in developing and implementing strategies and programs to promote effective and responsible operations.

Division Goals:

Aligning to the TRS Strategic Plan, Agency Support ensures that people, processes and technology align to achieve excellence in the delivery of TRS goals. It is our objective to foster a culture of fiduciary responsibility and ethical conduct.

Key Performance Indicators (KPI)	Annual Target
Train 100% of staff on ethical standards annually	100%
Respond to 100% of customer inquiries received via social media within one hour on business days	100%
Perform 100% regular and random quarterly testing and reports	100%
Observe # of reported policy violations, review and respond to trends	Minimal
Produce all TRS/IMD publications by established deadlines	100%

Investment Management

Expense Category	Expended FY 2018	Budgeted FY 2019	Budgeted FY 2020
Salaries and Benefits	33,921,728	43,427,841	49,901,100
Professional Fees and Services	7,434,386	10,320,108	11,205,100
Other Operating Expenses	21,649,261	26,194,973	29,653,100
Expense Category Total	63,005,375	79,942,922	90,759,300

Purpose:

The Investment Management Division (IMD) is responsible for implementing investment policies within approved guidelines, maximizing effectiveness of resources provided, delivering transparent reporting and pre-notification of pending external investments, complying with relevant laws, collaborating with audit processes and implementing board objectives.

Division Goals:

Aligning to the TRS Strategic Plan, IMD maintains current competitive advantages, long-term sustainability and total investment returns by prudently and transparently investing trust fund dollars using an asset allocation designed to achieve an efficient risk-adjusted return using key external partners and periodically comparing against peers.

Key Performance Indicators (KPI)	Annual Target
Return in excess of the benchmark return for the Total Trust (Three-Year Rolling)	+100 bp
Return in excess of the benchmark return for Private Markets investments (Three-Year Rolling)	+155 bp
Return in excess of the benchmark return for Active Public Markets investments (One-Year Rolling)	+100 bp
Percent of portfolio capital plan in principal investments approved	2018: 33%
(cumulative year-to-date)	2019: 35%
Percent of internal public equity allocation	55%
External manager annual fee savings	2018: \$53M
	2019: \$64M
Total return over three and five years relative to the Board's assumed rate of return	7.25%

Benefit Services

Expense Category	Expended FY 2018	Budgeted FY 2019	Budgeted FY 2020
Salaries and Benefits	11,273,112	13,625,029	15,988,900
Professional Fees and Services	502,673	1,213,609	346,800
Other Operating Expenses	497,230	313,782	232,000
Expense Category Total	12,273,015	15,152,420	16,567,700

Purpose:

The Benefit Services Division assists members, retirees and their beneficiaries by providing accurate and timely processing of benefits and the delivery of comprehensive information to help participants make better financial, retirement and health care decisions. Benefit Services also coordinates and administers online resources for reporting entities to submit reports and to find information on topics such as eligibility, compensation and legislative updates.

Division Goals:

Aligning to the TRS Strategic Plan, Benefit Services continues to focus on improving the customer service experience.

Key Performance Indicators (KPI)	Annual Target
Refunds validated within five business days of receiving final deposit and all paperwork	95%
Benefit estimates mailed within 31 days	90%
Retirees receiving first annuity payment within 31 days of TRS receiving required information or due date, whichever is later	98%
Claims acknowledged within 14 days of receipt of death notification	90%
Claims payments issued within 31 days of receipt of all required paperwork	95%
Calls answered within three minutes	80%
Available benefit counseling office visits	20,000

Financial Services

Expense Category	Expended FY 2018	Budgeted FY 2019	Budgeted FY 2020
Salaries and Benefits	5,769,476	6,222,105	7,325,900
Professional Fees and Services	1,523,027	1,182,109	1,677,500
Other Operating Expenses	5,546,448	14,581,308	7,377,200
		-	
Expense Category Total	12,838,951	21,985,522	16,380,600

Purpose:

The Financial Services Division is responsible for supporting the mission of TRS through sound, customer-focused fiscal and administrative management that includes a variety of support services while ensuring fiscal responsibility. These activities include accounting services, budget planning and analysis, records management, print and mail services, security and facility safety and maintenance.

Division Goals:

Aligning to the TRS Strategic Plan, Financial Services continues to support the core services by sustaining a financially sound pension system and achieving excellence in the delivery of TRS goals. Two areas of focus for Financial Services are Procurement and Contract's three-year strategic improvement process and the agency's short-term and long-term occupancy strategies.

Key Performance Indicators (KPI)	Annual Target
Increase data analytics to identify reporting errors and missing information in TRUST	100%
Improve space optimization	100%
Increase number of HUBs utilized for Commodities	40%
Increase number of HUBs utilized for Other Services	15%
Increase number of HUBs utilized for Professional Services	5%
Increase number of HUBs utilized for Special Trade	40%

Information Technology

Expense Category	Expended FY 2018	Budgeted FY 2019	Budgeted FY 2020
Salaries and Benefits	9,064,325	11,071,374	17,836,500
Professional Fees and Services	392,174	2,720,355	9,008,000
Other Operating Expenses	9,343,780	13,213,263	14,618,675
Expense Category Total	18,800,279	27,004,992	41,463,175

Purpose:

The IT Division is responsible for all aspects of TRS' IT resources and systems implementation. IT seeks to be business enablers, providing technology and information solutions that enhance the efficiency and effectiveness of TRS and make a positive difference in members' lives. IT does this through six teams focused on the division's core values of excellence, integrity and customer service, which complement the overall agency core values.

Division Goals:

Aligning to the TRS Strategic Plan, Information Technology ensures that people, processes and technology align to achieve excellence in the delivery of TRS goals.

Key Performance Indicators (KPI)	Annual Target
Percent of network/systems uptime	99.9%
Percent of business-critical application uptime	99.5%
Percent of available system capacity	80%
Business customer satisfaction in overall system user experience	93%
Agency satisfaction rate of new digitalized workplace model	99.9%
Time to remediate risks/vulnerabilities identified in penetration and vulnerability scans	30 days

TEAM Program

Expense Category	Expended FY 2018	Budgeted FY 2019	Budgeted FY 2020
Salaries and Benefits	6,354,670	7,050,218	-
Professional Fees and Services	5,175,616	9,868,654	7,733,215
Other Operating Expenses	55,008	3,832	-
Expense Category Total	11,585,294	16,922,704	7,733,215

Purpose:

TEAM, a multiyear initiative, is the name for the related projects that will modernize TRS technologies and business processes, allowing greater flexibility in providing service to TRS membership and reducing the risks of obsolete technology.

Division Goals:

Aligning to the TRS Strategic Plan, the TEAM program implements a modern pension benefit system increasing identification of underpayments and collection of contributions to TRS.

Key Performance Indicators (KPI)	Annual Target
Increase data analytics to identify reporting errors and missing information in the Line of Business (LOB) system	100%
Percent Complete – Design, build and test pension LOB system components – phase two	92%
Percent Complete – Go live with phase two of the pension LOB system	50%

CAPPS Program

Expense Category	Expended FY 2018	Budgeted FY 2019	Budgeted FY 2020
Salaries and Benefits	896,116	1,346,372	-
Professional Fees and Services	644,364	2,208,188	1,200,000
Other Operating Expenses	14,153	108,280	-
			_
Expense Category Total	1,554,633	3,662,840	1,200,000

Purpose:

CAPPS is the official name of the statewide ERP system created by the ProjectONE team. CAPPS provides a single financials and human resource (HR)/payroll administration software solution for Texas state agencies. CAPPS allows aging and inefficient legacy systems to be replaced with an easy-to-use, easy-to-update system that can be scaled to meet the needs of any agency regardless of complexity and size. Reporting is easier and more accurate with CAPPS. Agency functions are recorded in a common data language on an interconnected system that allows financial and HR/payroll departments to exchange information quickly, safely and reliably.

Division Goals:

Aligning to the TRS Strategic Plan, the CAPPS project ensures our processes and technology align to achieve excellence in the delivery of TRS goals.

Key Performance Indicators (KPI)	Annual
	Target
Number of Organizational Excellence touchpoint meetings with management on	Data
career paths	Collection

Health Care Programs

Expense Category	Expended FY 2018	Budgeted FY 2019	Budgeted FY 2020
Salaries and Benefits	5,923,929	8,298,007	9,432,434
Professional Fees and Services	5,192,859	5,851,801	5,910,300
Other Operating Expenses	723,730	1,040,666	991,500
Expense Category Total	11,840,518	15,190,474	16,334,234

Description: The Health and Insurance Benefits Division (HIB) works with outside contracted vendors to administer the health care plans offered under the TRS-Care and TRS-ActiveCare plans. HIB also supports the long-term care insurance program for active members and retirees. The HIB team has a strong customer service interest in supporting TRS members and retirees with their health and insurance benefits needs.

Division Goals:

Aligning to the TRS Strategic Plan, the HIB Division focuses on improving communication efforts regarding health care funding needs, increasing the value of health care benefits and improving the health of our members.

Key Performance Indicators (KPI)	Annual Target
Cost savings associated with relying less on external vendors	\$150,000
Average annual increase in cost of claims experienced by TRS-Care and TRS-ActiveCare compared to S&P trend	>0%
Increase number of plan participants in value-based care arrangements (total enrollment)	24.72% (TRS-ActiveCare) 10.8% (TRS-Care)
Member engagement metrics as measured by percent of members who open the Pulse email and then click to read articles	23% email 3% articles
Increase number of TRS-Care participants in diabetes management programs (total enrollment)	6.64%
Increase number of TRS-ActiveCare participants in diabetes management programs (total enrollment, excluding HMOs)	4.76%
Percent Complete – Design, build and test Health Care Line of Business (HILOB) system components	87%
Percent Complete – Go live with the HILOB system	50%

Expenses by Fund PENSION TRUST FUND

The pension trust fund is the main source of funds for TRS operations. This funding is appropriated to TRS by the state legislature. When the TRS Board of Trustees adopts the operating budget, the approved funding is transferred from the assets of the pension fund to an administrative fund to pay for operations in that fiscal year.

The overall increase in the budget from year to year is related to additional FTEs added to focus on enhanced member services and an initiative to strategically transform the Investment Management Division, potentially saving \$1.4 billion in investing fees over the next five years.

TRS Pension Trust Fund

	Expended FY 2018	Budgeted FY 2019	Budgeted FY 2020	Variance f FY 2019 to F	
Salaries and Wages	52,689,896	60,806,464	81,715,100	20,908,636	34%
Longevity Pay	570,000	619,323	786,700	167,377	27%
Retirement Contributions	3,582,913	4,345,931	5,416,200	1,070,269	25%
Social Security	3,608,048	4,441,415	6,311,700	1,870,285	42%
Contributions					
Health Insurance	4,195,730	9,516,436	9,369,800	(146,636)	-2%
Contributions					
Benefit Replacement Pay	52,270	70,000	34,100	(35,900)	-51%
Other Employee Benefits	2,144	70,500	70,000	(500)	-1%
Performance Incentive	6,683,583	11,360,000	11,376,000	16,000	0.1%
Comp					
Total Salaries and Benefits	71,384,584	91,230,069	115,079,600	23,849,531	26%
Professional Fees and Services	5,317,562	9,407,893	16,129,100	6,721,207	71%
Consumable Supplies, Fuels	367,549	474,235	599,775	125,540	26%
Utilities	2,330,591	2,542,517	1,771,200	(771,317)	-30%
Travel	1,293,665	1,842,325	2,337,300	494,975	27%
Rentals	3,345,331	4,652,603	4,600,500	(52,103)	-1%
Dues, Fees, Staff	496,940	733,626	1,067,800	334,174	46%
Development					
Subscriptions and	18,020	499,581	607,800	108,219	22%
Reference Information	007.557	150.000	40 / 000	077.500	17.407
Printing and Reproduction	227,557	159,380	436,900	277,520	174%
Postage, Mailing, Delivery	3,062,798	2,409,977	1,924,100	(485,877)	-20%
Software Purchases and Service	5,193,183	6,004,748	8,261,400	2,256,652	38%
Computer Hardware	968,949	719,293	577,500	(141,793)	-20%
Service	•		•	, , ,	
Miscellaneous Expenses	1,807,453	3,244,990	7,271,976	4,026,986	124%
Insurance Premiums	657,010	771,920	883,800	111,880	14%
Furniture and Equipment -	1,836,216	2,397,273	4,555,900	2,158,627	90%
Expensed					
Building/Equipment	195,437	9,862,878	1,533,600	(8,329,278)	-84%
Maintenance					
Total Operating Expenses	21,800,699	36,315,346	36,429,551	114,205	0.3%
Furniture and Equipment - Capitalized	169,729	1,658,801	862,000	(796,801)	-48%
Total Fund Expenses	98,672,574	138,612,109	168,500,251	29,888,142	22%

Expenses by Fund TEAM & CAPPS PROGRAM

During the 86th legislative session, TRS received appropriation and FTE authority for ongoing strategic efforts that will require continued staff support to sustain membership growth with new technologies. Now entering the final year of the TEAM & CAPPS Program, the agency has transitioned service experts and the related personnel and operating costs to their respective departments in FY 2020.

The budget for professional fees and services will be utilized to add reporting requirement changes, and other programmatic changes, to the member services platform. There are several projects the agency continues to focus on including the new LOB system, the new call center and new procurement software.

TEAM & CAPPS Program

	Expended	Budgeted	Budgeted		Variance from	
	FY 2018	FY 2019	FY 2020	FY 2019 to F	Y2020	
Salaries and Wages	5,753,088	6,600,331	-	(6,600,331)	-100%	
Longevity Pay	75,860	82,120	-	(82,120)	-100%	
Retirement Contributions	391,210	411,615	-	(411,615)	-100%	
Social Security Contributions	423,970	496,974	-	(496,974)	-100%	
Health Insurance	598,407	774,450	-	(774,450)	-100%	
Contributions						
Benefit Replacement Pay	8,250	10,400	-	(10,400)	-100%	
Other Employee Benefits	-	20,700	-	(20,700)	-100%	
Total Salaries and Benefits	7,250,785	8,396,590	-	(8,396,590)	-100%	
Professional Fees and	5,819,980	12,076,841	8,933,215	(3,143,626)	-26%	
Services						
Consumable Supplies	665	120	-	(120)	-100%	
Travel	1,831	-	-	-	-	
Subscriptions and	_	29,201	_	(29,201)	-100%	
Reference Information						
Software Purchases and	7,771	79,000	-	(79,000)	-100%	
Service						
Miscellaneous Expenses	57,552	3,791	-	(3,791)	-100%	
Furniture and Equipment	1,341	-	-	-	_	
Building/Equipment	_	-	_	_	-	
Maintenance						
Total Operating Expenses	69,160	112,112	-	(112,112)	-100%	
Total Fund Expenses	13,139,925	20,585,543	8,933,215	(11,652,328)	-57%	

Expenses by Fund COMMISSION CREDITS

Commission Credits refer to the use of a credited portion of brokerage commissions incurred during trade execution to obtain goods, services or research. Under board policy, Commission Credits are used to pay for research plus goods and services that support the investment decision-making function of TRS. Using Section 28(e) of the Securities and Exchange Act as guidance, trades must not be created solely to generate Commission Credit revenue, and best trade execution must not be sacrificed.

Examples of uses include investment research, data services and reference materials, seminars/conferences, portfolio management services, professional services and information systems.

Commission sharing relates to sharing a portion of the execution costs on internally traded securities while commission recapture relates to recapturing a portion of the execution costs on externally traded securities (i.e. securities traded by our external portfolio managers).

IT services costs, as reflected in the subscriptions and reference information category, will continue to rise with higher charges for Bloomberg and FactSet licenses along with expected development costs related to internally created software platforms.

Commission Credits

	Expended	Budgeted	Budgeted	Variance	
	FY 2018	FY 2019	FY 2020	FY 2019 to F	
Professional Fees and Services	6,247,397	8,954,600	9,579,100	624,500	7%
Rent, Building and Parking	402,758	495,720	536,300	40,580	8%
Dues, Fees, Staff	277,185	117,500	75,000	-42,500	-36%
Development					
Subscriptions and	12,961,506	1,092,215	1,037,500	-54,715	-5%
Reference Information					
Software Purchases and	766,234	1,769,221	2,073,900	304,679	17%
Service					
Miscellaneous Expenses	2,780,962	16,219,372	16,786,600	567,228	3%
Furniture & Equipment	13,824	51,368	30,000	-21,368	-42%
Other Operating Expenses	17,202,469	19,745,396	20,539,300	793,904	4%
Total Expenses	23,449,866	28,699,996	30,118,400	1,418,404	5%
Revenue Sources					
State Street Bank	7,401,901	7,933,334	8,457,900	524,566	7%
Partnership Agreement					
Commission Sharing	15,466,242	19,966,662	20,860,500	893,838	4%
Commission Recapture	581,723	800,000	800,000	-	-
Total Revenue	23,449,866	28,699,996	30,118,400	1,418,404	5%

Expenses by Fund TRS-CARE FUND

TRS-Care was created in 1985 to provide health insurance for retired teachers and district employees. There are approximately 253,000 Texans covered by TRS-Care. TRS spends approximately \$1.4 billion per year on health care claims under this program.

All of the claims and administrative expenses are paid out of the TRS-Care Fund. The expenses outlined on the next page are only the administrative expenses and pay for the costs associated with the TRS employees who operate TRS-Care. They are not appropriated by the state legislature.

Increases in salaries and benefits result from adding staff to enhance health data analytics capabilities to support cost-management and resource maximization. The decrease in professional fees and services is related to the reduced reliance on the use of a third-party call center contractor to handle additional call volume.

TRS-Care Fund

	Expended FY 2018	Budgeted FY 2019	Budgeted FY 2020	Variance f FY 2019 to F	
Salaries and Wages	2,989,675	4,357,597	5,725,534	1,367,937	31%
Longevity Pay	58,060	68,840	54,000	(14,840)	-22%
Retirement Contributions	203,298	233,840	364,300	130,460	56%
Social Security Contributions	222,210	307,701	414,000	106,299	35%
Health Insurance	368,729	531,613	563,600	31,987	6%
Contributions					
Benefit Replacement Pay	6,445	8,831	1,100	(7,731)	-88%
Other Employee Benefits	115	10,000	10,000	_	0%
Total Salaries and Benefits	3,848,532	5,518,422	7,132,534	1,614,112	29%
Professional Fees and Services	3,791,076	3,851,800	4,012,900	161,100	4%
	0.070	7,000	7 000	200	207
Consumable Supplies	2,079	7,000	7,200	200	3%
Utilities	86,340	7,000	7,200	200	3%
Travel	46,517	207,000	218,400	11,400	6%
Rentals	30,000	33,200	44,700	11,500	35%
Dues, Fees, Staff	7,972	14,900	10,200	(4,700)	-32%
Development Subscriptions and		6,000	6,200	200	3%
Reference Information	_	8,000	0,200	200	3/0
Printing and Reproduction	65,897	178,500	183,900	5,400	3%
Postage, Mailing, Delivery	132,773	129,000	132,900	3,900	3%
Software Purchases and	300	-	_	_	_
Service					
Miscellaneous Expenses	279,683	307,134	327,100	19,966	7%
Furniture and Equipment	997	7,000	7,200	200	3%
Building/Equipment	-	15,000	15,500	500	3%
Maintenance					
Total Operating Expenses	652,558	911,734	960,500	48,766	5%
Total Fund Expenses	8,292,166	10,281,956	12,105,934	1,823,978	18%

Expenses by Fund TRS-ACTIVECARE FUND

TRS-ActiveCare was created in 2001 to provide health insurance for active teachers and district employees. There are approximately 478,000 Texans covered by TRS-ActiveCare. TRS spends approximately \$1.9 billion per year on health care claims under this program.

All claims and administrative expenses are paid out of the TRS-ActiveCare Fund. The expenses outlined on the next page are only the administrative expenses and pay for the costs associated with the TRS employees who operate TRS-ActiveCare. They are not appropriated by the state legislature.

Increased salaries and benefits costs for the TRS-ActiveCare Fund are related to additional staff to handle customer service volume and the increased complexity of service interactions.

TRS-ActiveCare Fund

	Expended FY 2018	Budgeted FY 2019	Budgeted FY 2020	Variance t FY 2019 to F	
Salaries and Wages	1,590,419	2,073,424	1,780,800	(292,624)	-14%
Longevity Pay	23,200	27,380	23,100	(4,280)	-16%
Retirement Contributions	108,148	119,974	112,500	(7,474)	-6%
Social Security Contributions	116,923	157,647	128,300	(29,347)	-19%
Health Insurance	173,897	265,828	182,500	(83,328)	-31%
Contributions					
Benefit Replacement Pay	1,031	1,300	-	(1,300)	-100%
Other Employee Benefits	-	10,000	10,000	-	0%
Total Salaries and Benefits	2,013,618	2,655,553	2,237,200	(418,353)	-16%
Professional Fees and	1,322,112	1,753,500	1,897,400	143,900	8%
Services					
Consumable Supplies	118	3,000	3,100	100	3%
Utilities	<u>-</u>	1,500	1,500		0%
Travel	15,657	20,200	10,600	(9,600)	-48%
Rentals	22,700	30,642	19,200	(11,442)	-37%
Dues, Fees, Staff	3,128	9,000	9,300	300	3%
Development					
Subscriptions and	-	1,000	1,000	-	0%
Reference Information					
Printing and Reproduction		2,625	2,700	75	3%
Postage, Mailing, Delivery	403	4,915	5,100	185	4%
Miscellaneous Expenses	25,177	30,550	35,500	4,950	16%
Furniture and Equipment	35	3,500	3,600	100	3%
Building/Equipment	-	2,000	2,100	100	5%
Maintenance					
Total Operating Expenses	67,218	108,932	93,700	(15,232)	-14%
	0.400.040	4 54 7 00 7	4 000 000	(000 (07)	
Total Fund Expenses	3,402,948	4,517,985	4,228,300	(289,685)	-6%

Expenses by Fund 403(B) CERTIFICATION PROGRAM

A 403(b) is a tax-sheltered annuity (TSA) plan and can be either an annuity contract or custodial account. These plans are offered as an option to school district employees. Certified companies are required to register their 403(b) products with TRS (80th Texas Legislative Session, 2007, HB 2427), and they pay a fee of \$3,000 to do so. TRS was responsible for overseeing and managing the certification and registration process for both companies and products.

House Bill 2820 (86th Legislature, Regular Session) removed TRS' authority to certify 403(b) companies and maintain a list of registered 403(b) investment products as of Sept. 1, 2019. Products will continue to be regulated by the Texas Department of Insurance, the Texas State Securities Board and applicable federal agencies.

403(b) Certification Program

	Expended	Budgeted	Budgeted		
	FY 2018	FY 2019	FY 2020	FY 2019 to F	Y2020
Salaries and Wages	52,178	96,020	-	(96,020)	-100%
Longevity Pay	980	1,200	-	(1,200)	-100%
Retirement Contributions	3,548	6,189	-	(6,189)	-100%
Social Security	3,853	6,963	-	(6,963)	-100%
Contributions					
Health Insurance	6,943	11,660	-	(11,660)	-100%
Contributions					
Other Employee Benefits	-	2,000	-	(2,000)	-100%
Total Salaries and Benefits	67,502	124,032	-	(124,032)	-100%
Professional Fees and	79,670	246,501	-	(246,501)	-100%
Services					
Travel	-	3,000	-	(3,000)	-100%
Dues, Fees, Staff	3,430	11,000	-	(11,000)	-100%
Development					
Miscellaneous Expenses	526	6,000	-	(6,000)	-100%
Total Operating Expenses	3,956	20,000	-	(20,000)	-100%
		·			
Total Fund Expenses	151,128	390,533	-	(390,533)	-100%

FULL-TIME EQUIVALENT EMPLOYEES (FTEs)

Division	Actual FY 2018	Budgeted FY 2019	Budgeted FY 2020	Variance FY 2019 to FY 2020
Pension Funded				
Benefit Services	168.2	228.0	228.0	-
Communications	4.3	6.5	7.5	1.0
Executive	4.0	6.0	6.0	-
Finance	65.9	78.3	84.3	6.0
Governmental Relations	2.0	2.0	2.0	-
Information Technology	128.1	116.5	131.5	15.0
Internal Audit	10.8	11.0	14.0	3.0
Investment Management	145.0	167.0	190.0	23.0
Legal & Compliance	24.4	31.0	38.0	7.0
Organizational Excellence	17.5	31.0	31.0	-
Project Management Office	12.1	13.0	13.0	-
Strategy Office	6.0	6.0	8.0	2.0
Total Pension Funded FTEs	588.3	696.3	753.3	57.0
Health Care Funded				
TRS-Care	19.3	32.0	35.0	3.0
Agency Support to TRS-Care	22.8	25.0	25.0	-
HILOB TEAM Project	2.7	11.0	11.0	-
TRS-ActiveCare	15.8	16.0	16.0	-
Agency Support to TRS-ActiveCare	8.0	7.0	7.0	-
Optional Insurance Program	0.8	1.0	1.0	-
403(b) Certification Program	1.0	1.0	-	(1.0)
Total Health Care Funded FTEs	70.4	93.0	95.0	2.0
Grand Total	658.7	789.3	848.3	59.0

FULL-TIME EQUIVALENT EMPLOYEES (FTEs)

Explanation of FTE Variances

The difference between the budgeted level for FY 2020 and the budgeted level for FY 2019 is the addition of 59 FTEs as approved by the TRS Board of Trustees. Thirty of these new FTE positions are for reducing investment fees by hiring more investment professionals inhouse and reducing the use of external managers. Twenty-one of these new FTE positions are for augmenting customer service, developing internal technologies and infrastructure and reducing our reliance on more expensive contract services. Eight of these new FTE positions are due to the increased number of competitive procurements, enhanced governance to reduce potential risks and required training programs for the agency.

Improving the Customer Experience

- Six FTE positions added in Finance; due to the increased number of competitive procurements and enhanced governance and for augmenting customer service,
- Eleven FTE positions added in Information Technology to provide more robust data security, support new technologies, including a Voice over Internet Protocol (VoIP) call center platform and provide enhanced testing and quality management,
- Three FTE positions added in Internal Audit,
- Three FTE positions added in Legal and Compliance to provide additional support for procurement services,
- Two FTE positions added in the Strategy Office to support the Enterprise Risk Management program, and

FULL-TIME EQUIVALENT EMPLOYEES (FTEs)

Improving the Customer Experience (cont.)

 One FTE position added in Communications to improve engagement and outreach for TRS publications.

Reducing External Investment Fees

- Twenty-three FTE positions added to strategically transform the Investment Management Division by insourcing certain investing processes potentially saving external management fees and effectively scaling operations to meet the needs of the growing pension fund,
- Three FTE positions added in Legal and Compliance to support the Investment Management Division and to provide additional support for procurement services, and
- Four FTE positions added in Information Technology to support investment management with new technologies.

Health Care Funded Positions

Growth in FTE positions in the health care funds is due to additional:

- Policy staff to work on retiree insurance issues as well as to oversee member communications efforts related to plan changes,
- Finance staff to better track cost savings, provide enhanced contractual oversight, and provide additional analytical support for actuarial analysis, and
- Customer service staff to handle additional call volume.

CAPITAL PROJECTS

A capital budget is defined as an asset with a biennial project cost or unit cost in excess of \$100,000. Without the approval of the governor or LBB, agencies may transfer appropriation amounts not exceeding 25% as defined by Article IX provisions of the GAA. Priorities are established by the board of trustees via the strategic planning process.

There are two categories of capital projects in the budget. Repair and rehabilitation of buildings and facilities include projects associated with maintaining the agency's four-acre, two building complex comprising 255,000 square feet of assignable space. Acquisition of IT resources includes all of TRS' technology-related infrastructure, including mainframe computers, desktop computers, software platforms, teleconferencing equipment and phone-switching equipment.

Repair or Rehabilitation of Buildings and Facilities

Project	Expended FY 2018	Budgeted FY 2019	Budgeted FY 2020	Description
Building Renovations	215,471	9,112,411	1,500,000	Provides funding to continue a multi- year effort to more efficiently utilize agency space within the scope of our strategic plan.
Security Renovations	-	-	100,000	Update TRS headquarters' security equipment to ensure a safe and secure environment for staff, members and visitors.
TOTAL	215,471	9,112,411	1,600,000	

CAPITAL PROJECTS

Acquisition of Information Resource Technologies

Project	Expended FY 2018	Budgeted FY 2019	Budgeted FY 2020	Description
Network Infrastructure	131,903	808,597	500,000	Provides the development, design, implementation and maintenance of the IT infrastructure as relates to premise-based and cloud-based infrastructure applications and security requirements.
Data Center Upgrade	50,000	802,000	600,000	Upgrading and expanding the Data Center infrastructure and peripherals to reduce capacity constraints and issues with compatibility and obsolescence.
Investment Systems Modernization	206,189	533,811	450,000	Define, develop, and implement technical infrastructure to support the Investment Management Division's ability to achieve the TRS trust fund's actuarial rate of return strategy. Includes enhanced trading workflow, data warehouse and business intelligence capability, as well as security infrastructure to ensure that TRS' data is safe.
PC Workstation Refresh	256,488	483,512	500,000	Desktop Technology Refresh policy sets standards for replacing outdated hardware technology, PC and laptop computer systems every two to four years depending on its placement and use requirements.
Telephone Counseling Center (TCC) Upgrade	-	2,000,000	-	Upgrade the TCC's technology to include the ability for members to call, email or chat with call center staff for benefit issues and questions.
Pension Legislation	-	200,000	-	Anticipates legislative changes and supports the agency's mission and strategic plans.
TOTAL	644,580	4,827,920	2,050,000	

CAPITAL PROJECTS

Acquisition of Information Resource Technologies (cont.)

Project	Expended FY 2018	Budgeted FY 2019	Budgeted FY 2020	Description
CAPPS Project	1,384,232	3,415,768	1,200,000	Implementation of CAPPS, the statewide ERP system, that provides a single financials and human resources (HR)/payroll administration software solution for Texas state agencies, replacing TRS legacy systems and Texas Comptroller of Public Accounts' Uniform Statewide Payroll/Personnel System (USPS)
TEAM Program	10,286,118	15,455,637	7,733,215	TEAM is the name of the related projects that will modernize TRS' technologies allowing greater efficiency and flexibility in providing services to TRS membership.
TOTAL	11,670,350	18,871,405	8,933,215	

TRS has been approved new rider authority related to unexpended balances of Pension Trust Funds remaining as of Aug. 31, 2019 approved under the provisions of Article III-35, Rider 2, Capital Budget of Senate Bill 1, Eighty- fifth Legislature, for the TEAM Program FY2018/19 (estimated to be \$4,800,000); and for the ERP Project (estimated to be \$500,000), are appropriated for the same purposes in FY 2020.

Discussion of Debt and Debt Limitations

TRS does not issue debt nor does it have a statutory debt limitation. Capital projects are financed on a pay-as-you-go basis with pension trust fund assets. Although TRS is a state agency in Texas, TRS owns its facilities and related infrastructure.

Impact on Operating Budget

Most of the capital budget projects undertaken relate to repair and maintenance activity with no discernable impact on the operating budget outside the cost of the project itself. Building renovation projects in FY 2020 will focus on small scale solutions to create space for additional staff as the agency continues to pursue long-term occupancy strategies.

GENERAL PROVISIONS

The Teacher Retirement System (TRS) uses as guidelines the provisions of Article IX (General Provisions) of the General Appropriations Act adopted by the 86th Texas Legislature (GAA) in administering the system to the extent that the Executive Director or a designee acting in the absence of the Executive Director determines that individual provisions of Article IX are in the best interests of TRS and are not in conflict with applicable TRS laws, fiduciary duties, or policies. In addition, it is the intent of the TRS Board of Trustees (board) that the General Provisions also apply to the TRS-Care Fund, and the TRS-ActiveCare Fund. The following provisions are also subject to this paragraph.

PENSION TRUST FUND ADMINISTRATIVE OPERATIONS – In adopting the related Budget Resolution, the board finds that authorizing expenditures from the Pension Trust Fund to pay for TRS' administrative operating expenses for the fiscal year is necessary to perform the fiduciary duties of the board. Further, the Legislature has not appropriated money from the State's general revenue fund for TRS to use in paying operating expenses for the fiscal year.

use of commission credits – The board finds that the expenditure of commissions and credits, including soft dollars, commission sharing agreements, and cash recapture agreements (together, "Commission Credits") to obtain research, goods, and services supporting the investment function are necessary for the efficient and effective administration of pension trust fund assets and performance of the board's fiduciary duties. Uses of Commission Credits shall be administered in accordance with the board's Commission Credits Policy and applicable law.

HEALTH BENEFITS FUNDS – Operations of the Texas Public School Retired Employees Group Benefits Program are funded from the Retired Employees Group Health Insurance Fund (the TRS-Care Fund). Operations of the Texas School Employees Uniform Group Health Coverage Program are funded from the Texas School Employees Uniform Group Coverage Trust Fund (the TRS ActiveCare Fund).

contractor provided resources – As part of the contracting process for goods and services (including investment management services), TRS has access to additional resources for operations, including services, credits deducted from payables, temporarily-assigned, non-TRS workers, or allowances, as part of the total contract consideration provided by the vendors or investment managers. Such resources may only be used or expended to the same extent, and for the same purposes, and are subject to the same duty of care and general requirements and policies, as other pension trust fund assets.

PERSONNEL SERVICES:

• Hiring and Personnel Actions – The Executive Director, or Deputy Director/Chief Operations and Administration Officer in the absence of the Executive Director, is authorized to hire personnel, to transfer personnel within the agency, and to approve base salaries, salary changes, and other personnel actions, including but not limited to promotions, demotions, re-assignment, merits, and recruitment and retention bonuses. TRS will generally base its salary schedules, position classifications, and salary administration practices on the provisions of Article IX, Chapter 659 of the Government Code, and other relevant legislation to the extent the Executive Director determines a particular provision is in the best interest of the system and not in conflict with applicable law, fiduciary duty or TRS policy. The board will set the salary rate for the Executive Director. The Executive Director is authorized to set the base salaries for other exempt positions within the not-to-exceed amounts listed in the GAA or any amended limits adopted by the board from time to time.

PERSONNEL SERVICES:

- Performance Pay Plans— The Executive Director, or Deputy Director/Chief Operations and Administration Officer in the absence of the Executive Director, is authorized to implement performance pay plan(s) as approved from time to time by the board, including authorizing payment of the performance pay to the extent funds have been included in the approved budget for that purpose or are otherwise made available through the Budget Execution Authority in these General Provisions.
- Longevity Pay and Benefit Replacement Pay The board authorizes the payment
 of Longevity Pay and Benefit Replacement Pay in addition to base pay. The
 payment of Longevity Pay and Benefit Replacement Pay to eligible TRS
 employees shall be administered in a manner consistent with the provisions of
 Chapter 659 of the Government Code and other relevant legislation.

OTHER PERSONNEL COSTS – Other Personnel Costs, including Employer Retirement Contributions, Employer FICA Contributions, Employer Health Insurance Contributions, and Benefit Replacement Pay, as estimated in the GAA, are necessary for efficient TRS operations, and may be revised by the Executive Director, or Deputy Director in the absence of the Executive Director, if needed to pay operating expenses for the fiscal year.

professional Services – The Executive Director, or Deputy Director/Chief Operations and Administration Officer in the absence of the Executive Director, is authorized to contract for professional services and approve and disburse professional fees to persons or firms who render such professional services to TRS. The board finds that the budget for Professional Services authorized in this document is necessary to the performance of its fiduciary duties.

COUNSELING SERVICES – In accordance with Texas Government Code, Chapter 825, Subchapter G, the board authorizes the Executive Director or his designees, to the extent feasible, to make individual retirement benefits counseling sessions available to members in conjunction with informational or educational presentations that TRS provides for groups throughout the state, in order to promote efficiency and minimize the cost of such services. TRS will determine the geographic regions most in need of retirement benefits counseling and will provide retirement benefits counseling services in these regions throughout Texas.

TRAVEL - In accordance with TRS policy, the Executive Director, or Deputy Director/Chief Operations and Administration Officer in the absence of the Executive Director, is authorized to reimburse employee and trustee travel expenses at amounts that are reasonable and necessary to conduct official TRS business. The board finds that such reasonable and necessary expenses are necessary for the performance of fiduciary duties. These expenses may include additional allowances above standard or state law rates for transportation and meals. Travel expense reports requesting reimbursement must be submitted timely, and with proper documentation as set forth in the TRS Travel Guide.

programs, the Executive Director, or Deputy Director/Chief Operations and Administration Officer in the absence of the Executive Director, is authorized to transfer budgeted funds up to \$100,000 or 12 1/2% of an expense category, whichever is greater, between different expense accounts and major expense categories, so long as the total approved budget for operating expenses and capital outlay is not exceeded. This provision applies separately to the Pension Trust Fund, the TRS-Care Fund, and the TRS-ActiveCare Fund.

CONTINGENCY FOR CATASTROPHIC OCCURRENCES – In the event of a catastrophic occurrence which destroys or incapacitates TRS' physical plant and/or primary operating resources, the Executive Director, Deputy Director/Chief Operations and Administration Officer, or Chief Financial Officer may exceed the total approved budget to the extent necessary to achieve recovery of operational capabilities. The Executive Director, Deputy Director/Chief Operations and Administration Officer, or Chief Financial Officer will notify the Budget Committee of the board, as soon as possible, of the extent of the situation and the budgetary impact.

Contracts that Exceed \$1,000,000 in Value

The Procurement and Contracts Department is responsible for acquiring goods and services, including developing and advertising solicitations, evaluating responses, awarding purchase orders, contract negotiations, tracking and reviewing contracts and reporting. The Contract Administration Policy is administered consistent with applicable federal and state laws and TRS policies and procedures, as well as with TRS' fiduciary responsibilities.

CONTRACTOR	DESCRIPTION	START DATE	END DATE	CONTRACT AMOUNT
AETNA U S HEALTHCARE	TRS-ACTIVE CARE HPA	09/01/2014	08/31/2020	558,333,334
SCOTT & WHITE HEALTH PLAN	TRS ACTIVE CARE HMO	09/01/2014	08/31/2020	471,666,665
SHA LLC	TRS ACTIVE CARE HMO	09/01/2014	08/31/2020	398,666,667
HEALTH CARE SERVICES CORPORATION	TRS ACTIVE CARE HMO	09/01/2014	08/31/2020	113,333,334
STATE STREET BANK AND TRUST COMPANY	SSB MASTER CUSTODIAN CONTRACT	08/01/2015	07/31/2020	110,000,000
AETNA U S HEALTHCARE	TRS-CARE HPA	09/01/2016	12/31/2019	99,000,000
HUMANA	TRS-CARE MEDICARE ADVANTAGE PLAN	01/01/2017	12/31/2019	93,000,000
TC AUSTIN BLOCK 71 LLC	NEW BUIDLING LEASE FOR IMD	02/14/2019	10/31/2031	80,665,484
CAREMARK INC	PHARMACY BENEFIT MGR SERVICES	09/01/2017	08/31/2020	60,000,000
PERSPECTA STATE & LOCAL INC	TEAM LOB PROJECT	10/04/2013	12/31/2019	45,267,667
COUSINS 816 CONGRESS LLC	CURRENT BUIDLING LEASE FOR IMD	10/28/2008	03/31/2021	22,032,584
SILVERSCRIPT INSURANCE COMPANY	PHARM. BENEFIT MGR EGWP	01/01/2018	12/31/2019	21,000,000
CBRE INC	BROKER SERVICES	03/13/2019	03/12/2022	13,594,000
COBOS DESIGN & CONSTRUCTION INC	CONSTRUCTION SERVICES	10/12/2015	08/31/2020	10,563,421
ALBOURNE AMERICA LLC	INVESTMENT ADVISORY SERVICES	09/01/2018	08/31/2023	10,000,000
PROVALIANT HOLDINGS LLC	TEAM PROGRAM MGMT SERVICES	11/15/2011	11/15/2019	9,954,367
ADVANCED CALL CENTER TECHNOLOGIES LLC	OVERFLOW CALL CENTER SERVICES	03/06/2017	12/31/2019	6,932,000
TEACHER RETIREMENT INVESTMENT COMPANY OF TEXAS LTD	TRICOT INTERCOMPANY AGREEMENT	09/01/2015	12/31/2019	6,239,240
GLOBALSCOPE COMMUNICATIONS CORPORATION	CALL CENTER MODERNIZATION	01/01/2018	12/31/2021	5,507,200
MSCI BARRA LLC	MSCI SCHEDULE A CUSTOM INDEX	09/26/2011	02/29/2020	5,282,671
AON HEWITT	INVESTMENT ADVISORY SERVICES	09/01/2018	08/31/2023	4,250,000
GABRIEL ROEDER SMITH & COMPANY	HEALTH CARE ACTUARIAL SERVICES	09/01/2017	08/31/2020	4,000,000

Contracts that Exceed \$1,000,000 in Value (cont.)

CONTRACTOR	DESCRIPTION	START DATE	END DATE	CONTRACT AMOUNT
BLOOMBERG FINANCE LP	BLOOMBERG SOFTWARE LICENSE	05/11/2006	03/01/2021	3,499,524
EFRONT FINANCIAL SOLUTIONS INC	EFRONT SOFTWARE	08/25/2011	09/30/2019	3,428,600
CAREMARK INC	PHARMACY BENEFIT MGR SERVICES	09/01/2017	12/31/2019	3,270,000
TEXAS FACILITIES COMMISSION	CONSTRUCTION SERVICES UPGRADE	06/16/2017	08/31/2021	3,150,000
CHICAGO CLEARING CORP	INVESTMENT-RELATED LITIGATION	03/02/2018	03/01/2020	3,150,000
FINANCIAL RECOVERY TECHNOLOGIES LLC	INVESTMENT-RELATED LITIGATION	03/29/2018	03/28/2020	3,150,000
ERNST & YOUNG LLP	FOREIGN TAX AGENT	05/01/2018	04/30/2021	3,000,000
AXIOMA	AXIOMA SOFTWARE SERVICES	02/11/2013	02/10/2021	2,783,851
SALTHOLDINGS CORP	MEDICARE ENROLLMENT	09/01/2017	08/31/2020	2,500,000
ERNST & YOUNG LLP	AUDIT SERVICE MASTER AGREEMENT	01/01/2016	12/31/2019	2,136,545
COUSINS 816 CONGRESS LLC	14TH FLOOR ADDED 816 CONGRESS	08/01/2018	03/31/2021	2,001,071
GREENHILL & CO LLC	PE BROKER SERVICES FOR IMD	02/15/2019	02/15/2020	2,000,000
ADDISON PROFESSIONAL FINANCIAL SEARCH LLC	TEAM PROGRAM ASSESSMENT SERVICES	01/03/2013	12/31/2019	1,935,000
SHI GOVERNMENT SOLUTIONS INC	MICROSOFT ENTERPRISE AGMT	01/01/2017	12/31/2019	1,766,288
TEXAS DEPT OF INFORMATION RESOURCES	DIR VOICE AND DATA SERVICES	09/01/2013	08/31/2020	1,584,760
MSCI BARRA LLC	PORTFOLIO RISK MANAGEMENT	05/01/2019	04/30/2021	1,496,500
MCCOY-ROCKFORD INC	FURNITURE AGENCYWIDE	08/27/2018	08/31/2020	1,464,000
GREEN STREET TOPCO LLC	IMD GSA RESEARCH SUBSCRIPTION	04/06/2011	03/31/2020	1,420,000
COMMUNICATION SPECIALIST INC	PRINTING AND MAILING SERVICES	05/28/2015	05/27/2020	1,388,399
INTERNATIONAL BUSINESS MACHINES CORPORATE	CLAIMS AUDIT SERVICES	11/01/2015	12/31/2019	1,300,000
DEALCLOUD INC	DEALCLOUD LICENSE SUBSCRIPTION	08/01/2018	07/31/2024	1,281,717
UNITED HEALTHCARE	НМО	09/01/1998	12/31/2019	1,140,000
PRESIDIO NETWORKED SOLUTIONS GROUP LLC	CO-LOCATION AND DISASTER RECOVERY WORKSPACE	02/01/2018	05/31/2021	1,123,459
CANON FINANCIAL SERVICES INC	LEASE: MULTIFUNCTION COPIER	07/01/2016	07/07/2020	1,022,062
ALLIED CONSULTANTS	STAFF AUGMENTATION	07/17/2014	08/31/2020	1,012,880

AppendixSection

APPENDIX A:

COST DRIVERS, STATISTICAL AND SUPPLEMENTAL DATA

Membership

Membership Facts and Figures

Membership racts and rigures					
Membership					
Number of	August 31, 2018	August 31, 2017			
Current Members:					
Active Contributing	872,999	864,261			
Inactive Non-vested	193,498	174,918			
Inactive Vested	105,000	98,110			
Total Current Members	1,171,497	1,137,289			
Retire	ement Recipients:				
Service	391,927	379,765			
Disability	11,914	11,802			
Survivor	16,617	16,201			
Total Retirement Recipients	420,458	407,768			
TOTAL MEMBERSHIP	1,591,955	1,545,057			

Members Retiring Fiscal Year Ended 8/31/18

Members Retiring

Number Retiring	20,273	
Average Age at Retirement	60.2	
	00.2	
Average Service Credit	24.2	
Average Monthly Annuities:		
Life Annuities	\$2,078	

Pension Fiduciary Net Assets

Pension Fiduciary Net Assets (as of 8/31)

relision riducially Net Assets (as of 6/51)		
	2018 (billions)	2017 (billions)
Net Position	\$154.569	\$147.362
Member Contributions	3.361	3.243
State Contributions – General Fund	1.716	1.698
Pension Payments to Retirees & Beneficiaries	10.270	9.869

Funding Status

TRS Pension Funding Status

The refision randing status				
	2018	2017		
Statutory Contri	bution Rate	s		
State	6.80%	6.80%		
Member	7.70%	7.70%		
Actuarial Information				
Covered Payroll	\$44.956 billion	\$43.164 billion		
Normal Cost %	11.6%	9.9%		
Unfunded Actuarial Accrued Liability (UAAL)	\$46.165 billion	\$35.471 billion		
UAAL as % of Pay	102.70%	82.20%		
Funded Ratio	76.90%	80.50%		

Investments

Investments (as of 8/31)

	Value (in Billions)	Annual Rate of Return
2009	87.713	-13.06
2010	94.925	10.72
2011	106.048	15.5
2012	109.993	7.6
2013	116.705	9.0
2014	131.595	16.9
2015	127.042	-0.3
2016	132.762	7.4
2017	145.916	12.6
2018	154.700	8.2

PENSION MEMBERSHIP GROWTH

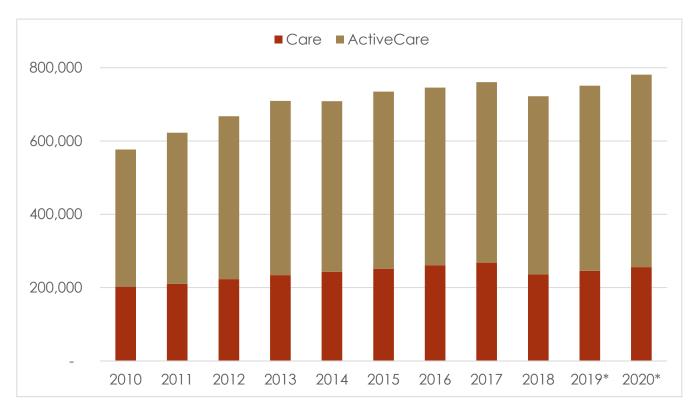


Active members – 17% growth
Retired members – 42% growth
*Projected based on historical trending

This chart shows the trend in the number of TRS members over time for both active members and retired members. The rate of growth for retirees is triple that of active members. The growth of active members has traditionally been correlated to state population growth, which is expected to grow an average of 1.8% per year through 2050 according to the Texas State Demographer.

The growth in retired members depends on a number of factors and can be influenced by the number of teachers reaching retirement age, the change in benefits design, the change in state funding provided to local districts and general economic conditions. The number of teachers reaching retirement age is expected to increase with the baby boomer population aging into retirement and will plateau as that generation fully engages in retirement.

HEALTH CARE MEMBERSHIP GROWTH

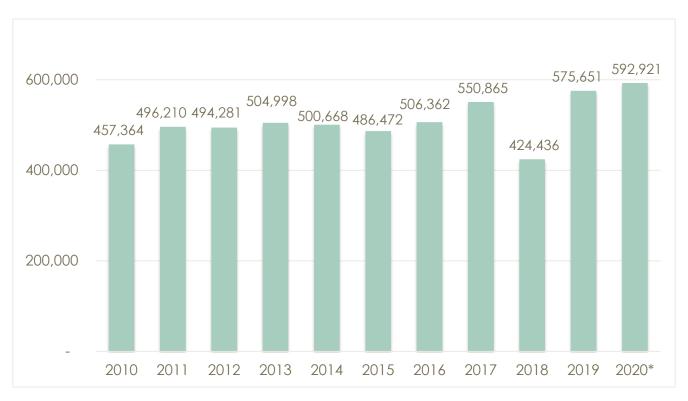


TRS-Care Membership – 17% growth
TRS-ActiveCare Membership – 30% growth
*Projected based on historical trending

This chart shows the historical growth in the membership of our health care programs. The growth in TRS-Care, the health care plan for retirees, is largely dependent upon the growth in our number of retired members.

The growth in TRS-ActiveCare, the health care program for active TRS members, is dependent on a host of factors including the growth in active TRS members and the number of districts that choose to participate in the program. We have seen an acceleration of district participation in ActiveCare over the past decade accounting for the substantial growth in TRS-ActiveCare enrollment.

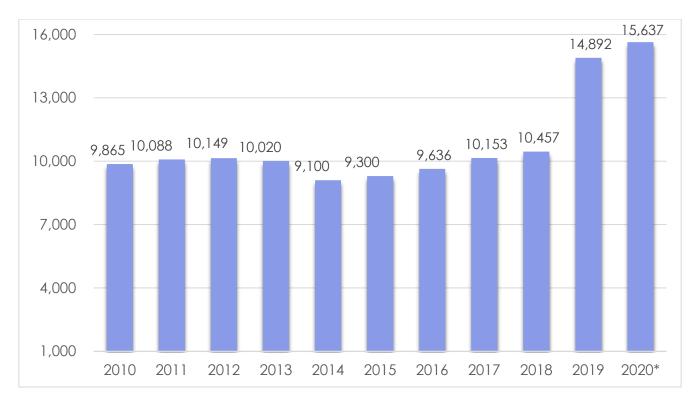
PHONE CALLS ANSWERED



*Projected based on historical trending

This chart displays the call volume handled by the TRS' TCC over time. The call volume is dependent upon membership growth as well as the number of members choosing to retire in a given year. In future years, as web-based, self-service features are added to the TRS website, call volume may decrease. Call volume has a trickle-down effect on other areas of the benefits division in that calls can create processing actions which consume additional staff time.

OFFICE COUNSELING VISITS



*Projected based on historical trending

This chart shows the office counseling visit volume over time. The office visit volume is dependent upon membership growth as well as the number of members choosing to retire in a given year. In future years, as web-based, self-service features are added to the TRS website, office visit volume may decrease.

For the near future, we are expecting an increase in the number of office visits as the number of retirement age active members increases. This may be a trend for the next five-to-seven years or longer before the office visit volume plateaus and potentially declines as younger generations of members increasingly interact with web-based tools.

BENEFIT PROCESSING ACTIVITY



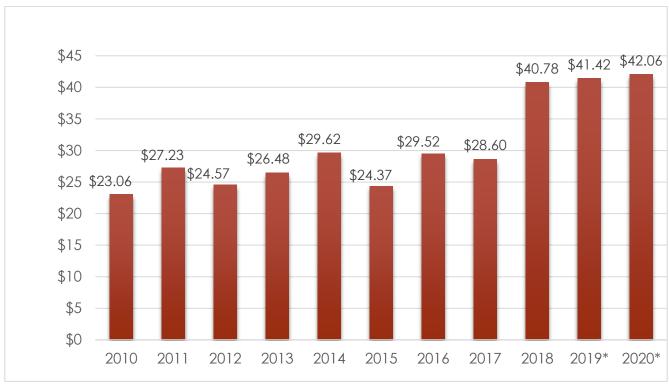
*Projected based on historical trending

Overall 53% Growth Refunds – 40% Retirements – 43% Beneficiary Claims – 130%

This chart shows the pension benefit processing volume over time for the main beneficiary activities. The processing volume is dependent upon membership growth as well as the number of members choosing to retire in a given year. In future years, as web-based, self-service features are added to the TRS website, processing volume may decrease.

For the near future, TRS expects an increase in volume as the number of retirement age active members increases. This may be a trend for the next five-to-seven years or longer before the volume plateaus and potentially declines as younger generations of members increasingly interact with web-based tools.

BENEFIT COST PER MEMBER



FY 2011 included one-time cost of expensed technology project
*Projected based on historical trending

The benefit cost per member is defined by the total benefit cost divided by the number of members. This data is collected and calculated by a company called CEM Benchmarking Incorporated, a consulting company that specializes in performance data for large, public pensions. TRS is then compared to 13 peer pension plans for the purposes of measuring performance.

The cost per member number is exclusive of investment costs and includes all administrative expenses related to running the pension plan. Costs related to running the health care programs are excluded as well. The expectation going forward is that costs will continue to increase due to inflationary pressure on normal operating costs as well as inflationary pressure in the local job market. Austin is fast becoming a relatively expensive job market for employers. TRS is no different.

17.07 13.75 16.29 15.94 11.70

INVESTMENT EXPENSES AS BASIS POINTS OF NET ASSETS

FY 2011 included one-time cost of expensed technology project
*Projected based on historical trending

2015

2016

2018

2017

2019*

2020*

2014

2013

2010

2011

2012

This investment expense table measures how much TRS spends to generate investment gains. This measure is defined in terms of basis points relative to the net pension assets. A basis point is one hundredth of a percentage point.

This data is used to measure the performance of the investment management function. Measuring performance in terms of basis points is a standard investment industry metric. TRS costs have increased over time as investment returns are increasingly harder to come by due to current economic and stock market conditions. IMD has increased staffing to more effectively position the pension fund for growth and to effectively mitigate risk.

FULL-TIME EQUIVALENT (FTE) EMPLOYEES

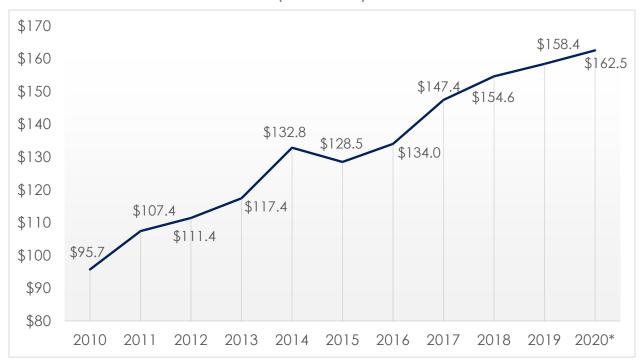


The average FTE numbers above exclude FTEs related to TEAM, health care and interns. They also include certain long-term contractors in accordance with instructions provided by the State Auditor's Office (SAO).

TRS participates in the biennial legislative appropriations process in requesting funds for administrative operations. In the GAA, the legislature establishes state employment levels on FTEs. The agency reports quarterly to the SAO the actual FTEs relative to the cap. Through legislative intent, TRS is exempt from including the TEAM and intern FTEs in the calculation. The chart above displays the average number of FTEs by fiscal year measured against the FTE cap.

PENSION TRUST FUND BALANCE

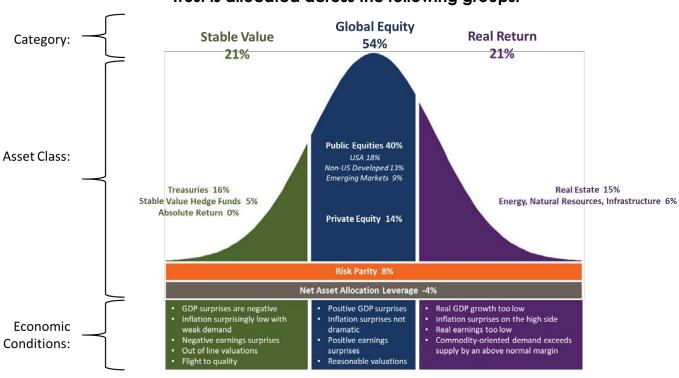
(In Billions)



*Projected based on Actuarial Assumption of 7.25% growth

The annual rate of return on investments for the pension fund for the year ended Aug. 31st, 2018 was 8.2%.

Trust is allocated across the following groups:



APPENDIX B:

GLOSSARY

Appropriated – Refers to the dollars or associated full-time equivalent positions authorized for specific fiscal years and to the provisions for spending authority.

Annual Operating Budget – A detailed, one-year financial plan supporting the agency's business operations. The one-year period is from Sept. 1 through Aug. 31. The agency's operating budget communicates resource needs and allocates those resources to the appropriate functional parties charged with executing the strategic vision of the agency.

Appropriation Year (AY) – Refers to the specific fiscal year for which an appropriation is made. The appropriation year dictates the year to which the expenditure is authorized/charged.

Base Request – The base request represents the basis for the agency's biennial budget. The base request cannot exceed the appropriated amount established by the legislature through the prior biennial GAA, adjusted for Article IX appropriation reductions.

Biennium – Two-year funding cycle for legislative appropriations.

Budgeted – Refers to the planned level of expenditures, performance, or number of full-time equivalent positions for a particular fiscal year.

Capital Budget – The portion of an agency's appropriation that is restricted to expenditures for designated capital construction projects or capital acquisitions.

Commission credits - Include soft dollars, commission sharing agreements, and cash recapture agreements (together known as "Commission Credits"). "Soft dollars" refer to the use of a credited portion of brokerage commissions incurred for securities or futures trade execution to obtain goods, services, or research through a securities or futures broker or futures commission merchant (each, a "broker"), commission recapture arrangements ("CRAs") refer to an institutional brokerage discount resulting from a negotiated rebate of commissions; and "commission sharing arrangements" ("CSAs") are a category of soft dollars that refers to the use of a cash account administered by a TRS custodian or broker which is funded from a portion of its brokerage commissions so that such custodian or broker may obtain, at TRS' instruction, investment research services from such broker or custodian, an executing broker or other third parties.

Expended – Refers to the actual dollars or positions used by an agency or institution during a completed fiscal year; a goal or strategy; an object of expense; or an amount from a particular method of finance.

General Appropriations Act (GAA) – The law that appropriates biennial funding to state agencies for specific fiscal years and sets provisions for spending authority.

Fiscal Year (FY) – Sept. 1 through Aug. 31 and specified by the calendar year in which the fiscal year end, e.g. FY 2020 runs from Sept. 1, 2019 through Aug. 31, 2020.

Full-Time Equivalents (FTEs) – Units of measure that represent the monthly average number of state personnel working 40 hours per week.

Fund Balance – The difference between assets and liabilities in a governmental fund. TRS follows the guidelines as outlined in GASB 54.

Key performance indicators "KPI" - A quantifiable measurement used to evaluate the success of an organization or of a particular activity in which it engages.

Key Performance Measure – A measure that indicates the extent to which an agency is achieving its goals or objectives and that is identified in the GAA, along with targeted performance objectives for each year of the biennium. These can be outcome, output, efficiency, or input/explanatory measures.

Lapsed Funds – The unobligated balance in an item of appropriation that has not been encumbered at the end of a fiscal year or at the end of the biennium. Appropriations expire if they are not (1) obligated by Aug. 31 of the appropriation year in which they were made, or (2) expended within two years following the last day of the annual year.

Legislative Budget Board (LBB) – A legislative agency consisting of the lieutenant governor, speaker of the house, and eight members of the legislature who initiate state budget policy and who have specific charges to direct the expenditure and appropriation of state funds.

Measure – An indicator of agency effort and accomplishments. Measures indicate agency accomplishments already achieved, planned, or required by legislative directive.

Method of Finance – This term usually appears as a heading for a table that lists the sources and amounts authorized for financing certain expenditures or appropriations made in the GAA. A source is either a "fund" or "account" established by the comptroller, or a category of revenues or receipts (e.g. federal funds).

Office of the Texas Governor (OOG) – Governmental appointment consisting of state officials and members of state boards, commissions and councils that carry out the laws and direct the policies of state government activities.

Pension Trust Fund (960) – TRS administers retirement and related benefits to employees and beneficiaries of employees of the public, state-supported, educational institutions of Texas. It operates primarily under the provisions of the Texas Constitution, Article XVI, Section 67 and Texas Government Code, Title 8, Subtitle C. The pension trust fund is a defined benefit retirement plan that is a qualified pension trust under Section 401 (a) of the Internal Revenue Code.

Programs – The FY 2020 Operating Budget request covers funding for each division. Amounts identified in the approved budget estimates reflect the most appropriate strategy for core activities and continuing programs.

TRS-ActiveCare Fund (855) – Provides health care coverage to employees (and their dependents) of participating public education entities. Optional life and long-term care insurance, which are provided to active members and retirees, are also accounted for in the fund. Authority for the plan can be found in the Texas Insurance Code, Title 8, Subtitle H, Chapter 1579 and in the Texas Administrative Code, Title 34, Part 3, Chapter 41. The plan began operations on Sept. 1, 2002.

TRS-Care Fund (989) – An employee benefit trust fund that provides health care coverage for certain persons (and their dependents) who retire under TRS. The statutory authority for the program is Texas Insurance Code, Chapter 1575 and Texas Administrative Code, Title 34, Part 3, Chapter 41. The inception of the plan was in fiscal year 1986.

Unexpended Balance (UB) or Carry-Forward – The unobligated amount left in an item of appropriation at the end of an appropriation period. The term also refers to the amount of an appropriation, a fund or a category of revenue which is brought forward (appropriated) to the subsequent fiscal year. Agencies must have legislative authority to move funds from one year to the next and/or from one biennium to the next biennium.

APPENDIX C:

GENERAL APPROPRIATIONS ACT FY 2020-21 TEACHER RETIREMENT SYSTEM

	For the Years	_
Method of Financing:	August 31, 2020	August 31, 2021
General Revenue Fund	\$2,650,811,540	\$2,517,080,301
GR Dedicated – Estimated Other Educational and General Income Account No. 770	\$23,714,800	\$25,042,829
Teacher Retirement System Trust Account Fund No. 960	<u>\$140,358,084</u>	\$141,219,354
Total, Method of Financing	<u>\$2,814,884,424</u>	<u>\$2,683,342,484</u>
This bill pattern represents an estimated 2.5% of this agency's estimated total available funds for the biennium.		
Number of Full-Time-Equivalents (FTE):	745.3	745.3
Schedule of Exempt Positions:		
Executive Director	\$337,266	\$337,266
Deputy Director Investment Officer Chief Investment Officer	357,000 551,250	357,000 551,250
Investment Fund Director	360,000	360,000
Investment Fund Director	360,000	360,000
Investment Fund Director Investment Fund Director	350,000 330,000	350,000 330,000
Investment Fund Director	300,000	300,000
Items of Appropriation: A. Goal: TEACHER RETIREMENT SYSTEM To Administer the System as an Employee Benefit Trust.		
A.1.1. Strategy: TRS - PUBLIC EDUCATION RETIREMENT Retirement Contributions for Public Education Employees. Estimated.	\$1,838,552,963	\$1,908,574,620
A.1.2. Strategy: TRS - HIGHER EDUCATION RETIREMENT Retirement Contributions for Higher Education Employees. Estimated.	179,233,677	189,244,210
A.1.3. Strategy: ADMINISTRATIVE OPERATIONS A.2.1. Strategy: RETIREE HEALTH – STATUTORY FUNDS	135,932,451 430,408,362	136,572,439 448,951,215
Healthcare for Public Ed Retirees Funded by Statute. Estimated.		
A.3.1. Strategy: RETIREE HEALTH – SUPPLEMENTAL FUNDS Healthcare for Public Ed Retirees Funded by Supplemental State Funds.	230,756,971	0
Total, Goal A: TEACHER RETIREMENT SYSTEM Grand Total, TEACHER RETIREMENT SYSTEM	\$2,814,884,424 \$2,814,884,424	\$2,683,342,484 \$2,683,342,484
Object-of-Expense Informational Listing: Salaries and Wages	\$82,807,184	\$82,807,185
Other Personnel Costs	2,680,148,975	2,548,004,521
Professional Fees and Services	13,314,936	13,114,680
Fuels and Lubricants	3,453	3,453
Consumable Supplies	596,133	596,484
Utilities	1,245,231	1,245,282
Travel	1,997,569	2,234,874
Rent - Building	3,796,962	4,942,155
Rent - Machine and Other		
	676,115	685,795
Other Operating Expense	26,535,866	25,746,055
Capital Expenditures	3,762,000	3,962,000
Total, Object-of-Expense Informational Listing	<u>\$2,814,884,424</u>	<u>\$2,683,342,484</u>

Estimated Allocations for Employee Benefits and Debt Service Appropriations Made Elsewhere in this Act:

Employee Benefits Social Security	\$ 4,698,994	\$ 4,722,489
Benefits Replacement	 44,240	 37,604
Total, Estimated Allocations for Employee		
Benefits and Debt Service Appropriations		
Made Elsewhere in this Act	\$ 4,743,234	\$ 4,760,093

1. Performance Measure Targets. The following is a listing of the key performance target levels for the Teacher Retirement System. It is the intent of the Legislature that appropriations made by this Act be utilized in the most efficient and effective manner possible to achieve the intended mission of the Teacher Retirement System. In order to achieve the objectives and service standards established by this Act, the Teacher Retirement System shall make every effort to attain the following designated key performance target levels associated with each item of appropriation.

	<u>2020</u>	2021
A. Goal: TEACHER RETIREMENT SYSTEM		
Outcome (Results/Impact):		
TRS Retirement Fund Annual Operating Expense Per Member in		
Dollars (Excluding Investment Expenses)	31	30
TRS Retirement Fund Investment Expense as Basis Points of		
Net Assets	17	19
Service Level Percentage of Calls Answered in Specified		
Time Interval	79%	80%
A.1.3. Strategy: ADMINISTRATIVE OPERATIONS	/970	8070
Output (Volume):		
Number of TRS Benefit Applications Processed	72,000	72,000

Capital Budget. None of the funds appropriated above for Strategy A.1.3, Administrative Operations, may be expended for capital budget items except as listed below. The amounts shown below shall be expended only for the purposes shown and are not available for expenditure for other purposes.

	2020		2021	
a. Repair or Rehabilitation of Buildings and acilities				
(1) Building Renovations	\$	1,500,000	\$	1,500,000
(2) Security Renovations Total, Repair or Rehabilitation of Buildings		100,000		100,000
and Facilities	\$	1,600,000	\$	1,600,000
b. Acquisition of Information Resource Technologies				
(1) TEAM Program FY2018/2019	\$	UB	\$	UB
(2) Data Center Upgrade		600,000		600,000
(3) Network Infrastructure (4) PC Workstation Refresh		500,000 500,000		500,000 500,000
(5) Investment System Modernization		450,000		450,000
(3) Investment System Wodernization		,		
(6) Pension Legislation		0		200,000
Total, Acquisition of Information Resource				
Technologies	\$	2,050,000	\$	2,250,000
c. Centralized Accounting and Payroll/Personnel System (CAPPS) (1) Centralized Accounting and Payroll/Personnel System (CAPPS) –				
Enterprise Resource Planning (ERP) Project.		UB		UB
Total, Capital Budget	\$	3,650,000	\$,850,000
Method of Financing (Capital Budget): Teacher Retirement System Trust Account Fund				
No. 960	\$	3,650,000	\$	3,850,000
Total, Method of Financing	\$	3,650,000	\$	3,850,000
		-,		

- 3. Updated Actuarial Valuation. The Teacher Retirement System shall contract with an actuary to perform a limited actuarial valuation of the assets and liabilities of the Teacher Retirement System as of February 28 in those years when the Legislature meets in regular session. The purpose of the valuation shall be to determine the effect of investment, salary, and payroll experience on the unfunded liability, the amortization period, and the state contribution rate which results in a 30- year amortization period of the retirement system.
- 4. State Contribution to Teacher Retirement Program. The amounts specified above in Strategy A.1.1, TRS-Public Education Retirement, \$1,838,552,963 in fiscal year 2020 and \$1,908,574,620 in fiscal year 2021, and A.1.2, TRS-Higher Education Retirement, \$179,233,677 in fiscal year 2020 and \$189,244,210 in fiscal year 2021 are based on a state contribution of 6.8 percent of payroll in each year of the 2020-21 biennium, estimated.
- 5. State Contribution to Texas Public School Retired Employees Group Insurance Program. The amounts specified above in Strategy A.2.1, Retiree Health-Statutory Funds, \$430,408,362 in fiscal year 2020 and \$448,951,215 in fiscal year 2021 are based on a state contribution of 1.25 percent of payroll for each fiscal year, estimated.

The retirement system shall notify the Legislative Budget Board, the Governor, and its membership prior to establishing premiums, regarding the impact such premiums will have on retiree costs for TRS-Care insurance.

It is the intent of the Legislature that the Teacher Retirement System control the cost of the retiree insurance program by not providing rate increases to health care providers and pharmacy providers during the 2020-21 biennium without providing 60 days' notice to the Legislative Budget Board.

- 6. Excess Benefit Arrangement Account. There is hereby appropriated to the Teacher Retirement System all funds transferred or deposited into the Excess Benefit Arrangement Account established in the General Revenue Fund for the purpose of paying benefits as authorized by Government Code §825.517.
- 7. Transfer of Other Educational and General Income. The Comptroller of Public Accounts is hereby authorized to transfer the necessary appropriations made above in Strategy A.1.2, TRS- Higher Education Retirement from Other Educational and General Income to institutions of higher education to meet their obligations and comply with the proportionality policy as expressed in the Article IX provision entitled Benefits Paid Proportional by Method of Finance.
- 8. Exempt Positions. Notwithstanding the limitations contained in the Article IX provision entitled Scheduled Exempt Positions, the TRS Board of Trustees may determine the salaries of the positions listed above in the Schedule of Exempt Positions without limitation.
- 9. Annual School District Contribution Rate to TRS-Care. The annual contribution rate for school districts for fiscal years 2020 and 2021 shall be 0.75 percent of total payroll.
- 10. Full-Time Equivalent Positions Intern Exemption. The number of Full-Time Equivalent (FTE) positions held by undergraduate and graduate students in the Intern Program of the Teacher Retirement System (TRS) shall be exempt from Article IX, Sec. 6.10. Limitation on State Employment Levels. This provision will not change the cap on the Number of Full-Time
 - Equivalents (FTE) for TRS listed elsewhere in this Act. TRS shall provide to the Legislative Budget Board, the Governor, the Comptroller of Public Accounts, and the State Auditor's Office a report of the number of FTEs associated with the Intern Program each fiscal year.
- 11. Limitation on Funds Appropriated to the Teacher Retirement System (TRS). It is the intent of the Legislature that none of the funds appropriated by this Act or from Teacher Retirement System Pension Trust Fund Account No. 960 may be used for the purpose of hiring an external communications consultant.
- 12. Limitation on Retirement Contributions to Public Community/Junior Colleges. General Revenue related funds appropriated above in Strategy A.1.2, TRS Higher Education Retirement, for retirement contributions for Public Community/Junior Colleges are limited to 50 percent of the state contribution of 6.8 percent in fiscal year 2020 and 6.8 percent in fiscal year 2021 of the total covered payroll for Public Community and Junior Colleges, in accordance with Government Code Section 825.4071.

13. Performance Incentive Compensation Payments. The Teacher Retirement System Board of Trustees may make performance incentive compensation payments to the staff of the Investment Management Division based on investment performance standards adopted by the Board prior to the beginning of the period for which any additional compensation is paid. Such amounts as may be necessary to make performance incentive payment under the plan approved by the Board are hereby appropriated from the Teacher Retirement System Pension Trust Fund Account Fund No. 960.

The Teacher Retirement System Board of Trustees shall notify the Legislative Budget Board and the Governor at least 45 days prior to the execution of any performance incentive payment based on the Retirement Trust Fund's investment performance. Funds shall be appropriated pursuant to this rider for performance incentive payments only in a fiscal year following a year in which the Retirement Trust Fund experiences a positive return.

- 14. Settle-Up Dollars Directed to TRS-Care. Any settle-up payments made in the fiscal year ending August 31, 2021, from the Teacher Retirement System of Texas pension fund or from the TRS- Care program are appropriated to the TRS-Care program. Settle-up funds are all estimated General Revenue appropriations for fiscal year 2020 in excess of the state's actual statutory obligations for retirement and retiree insurance contributions, and those funds are reappropriated to the TRS- Care program, for deposit to the Texas Public School Retired Employees Group Insurance Trust Fund. For the purposes of this section, settle-up payments from the pension fund include any net payments made in excess of the state's total obligation to both Public Education Retirement and Higher Education Retirement.
- 15. Appropriation Transfers between Fiscal Years for TRS-Care. In addition to the transfer authority provided elsewhere in this Act and in order to provide for benefits through the Texas Public School Retired Employees Group Benefits Program (TRS-Care), the Teacher Retirement System is authorized to transfer General Revenue funds appropriated to Strategy A.2.1, Retiree Health Statutory Funds, in fiscal year 2021 to fiscal year 2020 and such funds are appropriated for fiscal year 2020. Such transfers may only be made subject to the following:
 - a. Transfers under this section may be requested only upon a finding by the TRS Board of Trustees that the fiscal year 2020 costs associated with providing retiree health benefits will exceed the funds appropriated for these services for fiscal year 2020.
 - A transfer is not authorized by this section unless it receives the prior written approval of the Governor and the Legislative Budget Board.
 - c. The Comptroller of Public Accounts shall cooperate as necessary to assist the completion of a transfer and spending made under this section.
- 16. Contingent Appropriation of Pension Trust Funds for GASB Statement Implementation. Upon a finding of fact by the Teacher Retirement System Board of Trustees that additional resources are necessary to implement accounting guidelines related to Governmental Accounting Standards Board statements and pronouncements, the Teacher Retirement System is appropriated such additional funds as approved by the Board from the Teacher Retirement System Pension Trust Fund Account No. 960 to communicate such guidelines to affected members and employers, and to acquire additional audit and actuarial services as needed for implementation.
 - Within thirty days of such a finding, the Teacher Retirement System Board of Trustees shall provide written notification to the Legislative Budget Board and the Governor of the amounts anticipated to be necessary to achieve these purposes.
- 17. TRS-Care Shortfall. It is the intent of the Legislature that resolving the long-term solvency of TRS-Care be a shared fiscal responsibility between the state, school districts, employees, and retirees.
- 18. Medicare Enrollment for Eligible Members of TRS-Care. Out of funds appropriated above, TRS shall identify members of TRS-Care who are eligible for Social Security Disability or Medicare benefits, and provide information and assistance necessary for eligible members to enroll in the programs to help ensure the solvency of the TRS-Care fund.
- 19. Additional Funding for TRS-Care. Funds appropriated above in Strategy A.3.1, Retiree Health Supplemental Funds include \$230,756,971 in General Revenue Funds in fiscal year 2020 for the TRS-Care program to maintain plan year 2019 premiums and benefit levels in the 2020-21 biennium. These funds are in addition to the \$879,359,577 in General Revenue Funds appropriated above in Strategy A.2.1, Retiree Health-Statutory Funds, estimated to be necessary to fulfill the state's statutory contribution to TRS-Care.

- 20. Right to Shop Incentive. It is the intent of the Legislature that the Teacher Retirement System incentivize members of TRS-Care and TRS-ActiveCare to shop for lower cost care within the health plans in order to achieve shared savings. Pursuant to the provisions of Insurance Code§1575.109, §579.052, and Article IX, Sec. 7.12, Notification of Certain Purchases or Contract Awards, Amendments, and Extensions, the agency may contract with a third-party vendor for this purpose.
- 21. Exception to FTE Limitation for Board Fiduciary Finding.
 - (a) In addition to the funding and "Number of Full-Time Equivalents (FTE)" appropriated above, the Teacher Retirement System (TRS) is authorized to employ additional FTEs and contract workers under a Fiduciary Finding of the TRS Board of Trustees (the Board) if the Board determines the additional staff are necessary to perform the fiduciary duties of the Board, pursuant to Government Code §825.313.
 - (b) It is the intent of the Legislature that the Board approve a statement of justifications and objectives for adopting the additional FTEs, contract workers, and any additional funding related to those staff. No later than 30 business days following the adoption of a Fiduciary Finding pursuant to subsection (a), TRS shall submit to the Legislative Budget Board (LBB) and the Governor:
 - (1) A statement of the justifications and objectives for the additional funding and staff;
 - (2) The current operating budget, as approved by the Board, for each fiscal year of the 2020-21 biennium that is amended by the Fiduciary Finding described in subsection (a);
 - (3) Performance metrics proposed by TRS to evaluate the impact of additional staff on the Board's objectives in approving the additional staff; and
 - (4) Any additional information requested by the LBB or the Governor regarding the Fiduciary Finding described in subsection (a).
 - (c) No later than October 31 following a fiscal year for which the TRS Board has adopted a Fiduciary Finding described in subsection (a), TRS shall provide a report to the LBB and the Governor on:
 - (1) The actual number of additional FTEs and contract workers hired during the preceding fiscal year pursuant to subsection (a);
 - (2) The actual total expenditures for the preceding fiscal year related to additional FTEs and contract workers described in subsection (c) (1); and
 - (3) A report on the agency's actual performance on metrics described in subsection (b)(3) for the preceding fiscal year.
- 22. Unexpended Balances: TEAM and CAPPS Projects. In addition to amounts appropriated above, any unexpended balances of Pension Trust Funds remaining as of August 31, 2019 approved under the provisions of Article III-35, Rider 2, Capital Budget of Senate Bill 1, Eighty- fifth Legislature, Regular Session, 2017, for the TRS Enterprise Application Modernization (TEAM) Program FY2018/19 (estimated to be \$4,800,000); and for the Centralized Accounting and Payroll/Personnel System (CAPPS) Enterprise Resource Planning (ERP) Project (estimated to be \$500,000), are appropriated for the same purposes in Strategy A.1.3, Administrative Operations, for the fiscal year beginning September 1, 2019.

Any unexpended balances of these funds remaining as of August 31, 2020, are appropriated to the Teacher Retirement System for the fiscal year beginning September 1, 2020, for the same purposes.



Teacher Retirement System of Texas

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