May 2024

TRUSTEES

TRS Board of Trustees Meeting



Teacher Retirement System of Texas 1000 Red River Street Austin, Texas 78701-2698

TEACHER RETIREMENT SYSTEM OF TEXAS MEETING BOARD OF TRUSTEES

AGENDA

May 2, 2024 – 8:00 a.m. May 3, 2024 – 8:00 a.m.

All or part of the May 2 - 3, 2024 meeting of the TRS Board of Trustees may be held by telephone or video conference call as authorized under Sections 551.130 and 551.127 of the Texas Government Code. The Board intends to have the presiding officer and a quorum physically present at the following location, which will be open to the public during the open portions of the meeting: **1000 Red River, Austin, Texas 78701 in the TRS East Building, 5th Floor, Boardroom.**

Members of the public may provide virtual public comment by registering first with the Board Secretary by submitting an email to <u>publiccomment@trs.texas.gov</u> identifying the name of the speaker and topic, no later than 5:00 pm on May 2, 2024.

The open portions of the Board meeting are being broadcast over the Internet. Access to the Internet broadcast and agenda materials of the Board meeting is provided at <u>www.trs.texas.gov</u>. A recording of the meeting will be available at <u>www.trs.texas.gov</u>.

NOTE: The Board may take up any item posted on the agenda during its meeting on May 2-3, 2024 beginning at the time and place specified on this agenda.

- 1. Call roll of Board members.
- Consider the following administrative matters including Jarvis V. Hollingsworth:
 A. Approval of the February 2024 proposed meeting minutes; and
 - B. Excusing Trustee Absence from the December 2023 meeting.
- 3. Resolution recognizing the service of Andrew Roth Jarvis V. Hollingsworth.
- 4. Review and discuss the Executive Director's report on the following matters Brian Guthrie:
 - A. Administrative operational matters, including updates on financial, audit, legal, staff services, special projects, strategic planning, legislative, personnel matters, Deputy Director search and Moving Forward Together.
 - B. Board operational matters, including a review of draft agendas for upcoming meetings.
 - C. Event notices or reminders; holiday and other schedules of interest; board member, employee or other individual recognitions; and expressions of thanks, congratulations, or condolences.

- 5. Receive the Ombudsman's Quarterly Report Lori LaBrie.
- 6. Review and consider procurements and contracts, including the following Shannon Gosewehr:
 - A. Receive Procurement and Contracts Update;
 - B. Consider accepting the Procurement and Contracting Report.

NOTE: The Board meeting likely will recess after the last item above to take up posted committees and will resume May 2, 2024, Thursday afternoon, to take up items listed below.

- 7. Consider the selection of vendor(s) for the TRS-Care Optional Dental Plan and Optional Vision Plan, including considering a finding that to deliberate or confer in open meeting would have a detrimental effect on the position of the retirement system in the negotiations with a third person – Katrina Daniel and Yimei Zhao.
- 8. Consider the role, performance and engagement of Board Investment Consultants, and consider the contract with Dr. Keith Brown, including considering a finding that to deliberate or confer in open meeting would have a detrimental effect on the position of the retirement system in the negotiations with a third person Brian Guthrie.
- 9. Consider personnel matters, including the appointment, employment, evaluation, compensation, performance, duties, discipline, or dismissal of the Executive Director and Chief Audit Executive Jarvis V. Hollingsworth.

NOTE: The Board meeting likely will recess after the last item above and will resume May 3, 2024, Friday morning, to take up items listed below.

- 10. Provide an opportunity for public comment Jarvis V. Hollingsworth
- 11. Receive the report of the Benefits Committee on its May 2, 2024 meeting and consider the following Committee Chair:
 - A. Acceptance of the Medical Board Meeting minutes of November 2023 and January 2024 meetings;
 - B. Approval of the Benefit Payments for December 2023 February 2024;
 - C. Approval of FY 2025 Rates and Benefits for the self-funded TRS-ActiveCare Plans; and
 - D. Approval of FY 2025 Rates and Benefits for the fully-insured TRS-ActiveCare HMO Plans
- 12. Receive the report of the Investment Management Committee on its May 2, 2024 meeting Committee Chair.

- 13. Receive the report of the Strategic Planning Committee on its May 2, 2024 meeting and consider adopting the proposed fiscal year 2025 29 Strategic Plan Goals, Objectives and Strategies Committee Chair.
- 14. Receive the report of the Budget Committee on its May 2, 2024 meeting including consideration of a budget adjustment and adoption of a resolution making a fiduciary finding to authorize the transfer of pension funds related to the Alpha-Bravo Construction Project Committee Chair.
- 15. Receive the report of the Compensation Committee on its May 2, 2024 meeting Committee Chair.
- 16. Receive the report of the Policy Committee on its May 2, 2024 meeting and consider the following Committee Chair:
 - A. Adopting the proposed amendments to the Litigation Policy;
 - B. Adopting the proposed amendments to the Trustees External Communication Policy;
 - C. Adopting the proposed new Medical Board Policy;
 - D. Adopting the proposed new Retiree Advisory Committee Policy;
 - E. Consider adoption of the following proposed new rules in Subchapter A of Chapter 41 of Title 34, Part 3 of the Texas Administrative Code, related to Retiree Health Care Benefits (TRS-Care):
 - 1. [NEW] §41.15 Optional Dental Benefits Plan
 - 2. [NEW] §41.16 Optional Vision Benefits Plan
- Receive the report of the Audit, Compliance, and Ethics Committee on its May 3, 2024 meeting and consider adopting proposed revisions to the Fiscal Year 2024 Audit Plan Committee Chair.
 - 18. Receive an update on the TEAM Program Andrew Roth, Billy Lowe, Jennifer Whitman and Adam Fambrough.
 - 19. Receive an update from the TEAM Program Independent Program Assessment (IPA) Vendor Laurie Patton, EY.
 - 20. Receive report from Milliman on the 2023 Actuarial Audit of Gabriel, Roeder, Smith & Co. Ryan Falls and Daniel Wade, Milliman, Inc.
 - 21. Receive an update from Actuary on Contribution Methodologies Joe Newton, GRS.
 - 22. Receive Quarterly Data Governance and Information Security Update Martin Cano, Chris Cutler, Heather Traeger, and Frank Williams.
 - 23. Receive the Deputy Director's update Andrew Roth.

24. Review the report of the General Counsel on pending and contemplated litigation, including updates on litigation involving benefit-program contributions, retirement benefits, health-benefit programs, investment matters and open records and on legal or regulatory matters involving certain TRS vendors, investment managers, or other counterparties – Heather Traeger and J.R. Morgan.

The Board may convene in Executive Session under the following, but not limited to:

- A. Texas Government Code, Section 551.071: Consultation with Attorney;
- B. Texas Government Code, Section 551.072: Deliberation Regarding Real Property;
- C. Texas Government Code, Section 551.074: Personnel Matters Relating to Appointment, Employment, Evaluation, Assignment, Duties, Discipline, or Dismissal of Officers or Employees including but not limited to the Executive Director, Chief Audit Executive, Chief Investment Officer.
- D. Texas Government Code, Section 551.076: Deliberation Regarding Security Devices or Security Audits;
- E. Texas Government Code, Section 551.089: Deliberation Regarding Security Devices or Security Audits; or
- F. Texas Government Code, Section 825.115: Applicability of Certain Laws;
- G. Texas Government Code, Section 825.3011: Certain Consultations Concerning Investments.

Minutes of the Board of Trustees

February 15, 2024

The Board of Trustees of the Teacher Retirement System of Texas met on Thursday, February 15, 2024, in the boardroom located on the Fifth Floor in the East Building of TRS' offices located at 1000 Red River Street, Austin, Texas, 78701.

The following Board members were present:

Jarvis V. Hollingsworth, Chair Nanette Sissney Brittny Allred Michael Ball David Corpus John Elliott James Nance Robert H. Walls, Jr. Elvis Williams

Others present:

Brian Guthrie, TRS Andrew Roth, TRS Heather Traeger, TRS Jase Auby, TRS Don Green, TRS Barbie Pearson, TRS Katrina Daniel, TRS Amanda Jenami, TRS Adam Fambrough, Mark Chi, TRS Meghan Bludau, TRS Kyle McKay, TRS Sandy Mitchell, TRS Lori LaBrie, TRS Kate Rhoden, TRS Kirk Sims, TRS Chris Bailey, TRS Katherine Farrell, TRS Suzanne Dugan, Cohen Millstein Keith Brown, Investment Advisor Steve Voss, AON Michael McCormick, AON Benita Harper, AON Amy Danly, ExpressScripts Steve Alexander, BCBSTX Karen Haywood, BCBS

Mr. Hollingsworth called the meeting to order at 8:00 a.m.

1. Call roll of Board members.

Ms. Farrell called the roll. A quorum was present.

2. Consider the following administrative matters – Jarvis V. Hollingsworth

A. Approval of the December 2023 proposed meeting minutes; and

On a motion by Mr. Ball and seconded by Ms. Sissney, the Board unanimously voted to approve the proposed minutes of the December 2023 meeting as presented.

B. Setting, rescheduling or canceling future Board meetings including considering dates for May 2024.

Mr. Hollingsworth said due to conflicts with the April meeting new meeting dates were being proposed, May 2 - 3, 2024. Mr. Elliott noted he had a conflict with the proposed dates but had no objection with moving the meeting.

On a motion by Mr. Corpus, seconded by Mr. Nance, the Board unanimously voted to approve the rescheduling of the April meeting to May 2 - 3, 2024.

- 3. Review and Discuss the Executive Director's report on the following matters Brian Guthrie:
 - A. Administrative operational matters, including updates on financial, audit, investments, legal, staff services, special projects, strategic planning, legislative personnel matters, and Moving Forward Together Update;
 - B. Board operational matters, including a review of draft agendas for upcoming meetings; and
 - C. Event notices or reminders; holiday and other schedules of interest; board member, employee or other individual recognitions; and expressions of thanks, congratulations, or condolences.

Mr. Brian Guthrie said the February meeting is designed for trustee education and to dig deeper into the issues facing the system and programs we run. He reviewed upcoming and past conferences and reviewed TRS' workforce. He noted the average age of employees was 44 years and average TRS tenure at around 6 years. He said the number of employees eligible to retire was at 7.6 percent which is slightly down from last year's 8 percent. He then shared how he has reorganized the Executive Council to include only the 13 chiefs of divisions around the agency, and created the Enterprise Leadership Team to incorporate a larger group of deputies and senior managers in an effort to build bench strength.

Mr. Guthrie announced that NCTR had made following 2024 committee assignments: Mr. Ball on the Legislative Committee, Ms. Sissney on the Trustee Education Committee and Mr. Williams on the Resolutions Committee. He announced his advancement in rank for NASRA to First Vice President and chair of the Special Programs Committee and that Heather Traeger was chair of FINRA National Adjudicatory Council.

He provided an update on headquarters. The Alpha building was finishing up and shared Bravo's interior build-out progress including the second floor where the board room will be located.

Mr. Guthrie reviewed the upcoming board meeting proposed agendas.

4. Receive a Benefit Services Overview regarding the Members Journey – Barbie Pearson, Adam Fambrough and Mark Chi.

Ms. Barbie Pearson stated the member journey covers the different paths TRS members take as they go through the System and would include resources available to members and employers at the various stages. Mr. Mark Chi reviewed the role that employers play in a member's experience including reporting requirements that are uploaded into a portal, such as payroll reports, on a monthly basis and eligibility requirements for TRS. He reviewed employer resources such as TRS Update newsletter, Employer Toolkit and TRS payroll manual. He also noted TRS members receive a welcome to membership letter or packet encouraging the member to register for MyTRS.

Mr. Adam Fambrough reviewed when a member leaves employment. He noted the options for the member were to leave the money or withdraw it in a lump sum, taking a refund. He expanded upon the various resources available to a member who wishes to consider a refund. Ms. Pearson and Mr. Fambrough reviewed the scenario of an active member's death and the beneficiaries' choices. Mr. Fambrough then reviewed the scenario of member who returns to TRS service and the resources available to assist in making service credit repurchasing decisions. The next scenarios reviewed were applying for disability retirement, retirement, employment after retirement and retiree's death benefit.

5. Receive an update on TRS-Care and TRS-ActiveCare health plans including a review of annual performance with benchmark comparisons as well as updates on data analytics enhancements and new pharmacy benefit manager installation – Katrina Daniel, Meghan Bludau and Kyle McKay.

Ms. Meghan Bludau provided a review of the plan performance for fiscal year 2023, the current state of the plans and a look ahead at key initiatives. She said the plans were entering a new generation. She noted under Senate Bill 1444 districts were allowed to leave ActiveCare. This is the third year of that legislation and there has been a high retention rate of districts and project growth in ActiveCare for the upcoming year. She reviewed the benchmarking of ActiveCare with comparable plans and reported the primary plan, the most popular plan offered, was 14 percent lower in total cost. For Care she said it was the seventh straight year of steady premiums. She reviewed how TRS has provided in-person events with retirees including 21 health fairs. Ms. Bludau emphasized the pride TRS has in being cost efficient. She noted for every dollar received at TRS for health benefits, 97 cents goes directly to health care and 3 percent to administrative costs.

Ms. Bludau discussed that under Senate Bill 1444 ActiveCare moved to 20 different regional rates. She reported in Region 18 Midland-Odessa area ActiveCare is 38 percent lower and in Beaumont it is 8 percent lower than competing plans. Ms. Daniel described how ActiveCare is really a product for the employer. She said they present to TASBO and engage with superintendents, directors of HR, CFOs to share the value proposition of ActiveCare. She said in September they expect to enrollment grow by more than 10,000 lives.

Ms. Daniel reviewed the impact of supplemental funds on ActiveCare. She said receiving \$638 million in federal funds resulted in lowering the revenue collected from employers. Last session the State provided \$588.5 million to help revenues get back to cost to prevent a dramatic increase in premiums. She said in order to keep the increase in revenue at or below a 10 percent increase another \$386 million will be needed for the coming legislative biennium. Further discussion ensued regarding funding by State and districts. Mr. Kyle McKay concluded by reviewing examples of how data was used to identify key trends and to make health care plan decisions.

- 6. Consider authorizing for publication in the Texas Register notice of the following proposed new rules in Subchapter A of Chapter 31 of Title 34, Part 3 of the Texas Administrative Code, related to Retiree Health Care Benefits (TRS-Care) Heather Traeger, Roberto Cortes-Moreno and Katrina Daniel:
 - A. [NEW] §41.15 Optional Dental Benefits Plan; and
 - B. [NEW] §41.16 Optional Vision Benefits Plan.

Ms. Sandy Mitchell presented the proposed dental and vision rules for TRS-Care. She said the offering of optional vision and dental benefits was a new statutory requirement. She stated in order to roll out the vision and dental benefits timely the rules and procurement process are occurring at the same time.

On a motion by Mr. Ball, seconded by Mr. Nance, the Board voted unanimously to publish the proposed rules for the dental and vision plans as presented by staff.

7. Receive the Ombudsman's Annual Report – Lori LaBrie.

Ms. Lori LaBrie reviewed the function and purpose of the Ombudsman's Office (Ombuds). She said calendar year 2023 had a total of 664 communications to the Ombuds. She noted email was the most preferred method of contact. She reviewed the demographics of those reaching out to the office with active members being the highest. She reported the social media topics that received the most comments were the COLA/stipend, health and social security. Ms. LaBrie said the point in time complaints totaled 206 for 2023 with the top trending matters being: extended wait time, timeliness of response and incomplete information provided. She concluded with highlights for the year one being traveling with Health and Benefits to teams to meet with members. She said another being the first installment of "The Ombuds Corner" in the TRS News.

8. Receive report on investment practices and performance evaluation and consider resolution directing submission of the report to the Pension Review Board as directed by Texas Gov't Code §802.109 – Kate Rhoden, Mike McCormick and Benita Harper, Aon.

Ms. Kate Rhoden provided an overview of the statutory requirements regarding the independent firm evaluating the System's investment practices and performance. She noted the statute does allow for the firm to have an existing relationship with the System, as long as the firm does not directly or indirectly manage investments for the System. She reported Aon was selected to perform the evaluation and had performed the inaugural evaluation for TRS back in 2020. Ms. Benita Harper reported that Aon reviewed documents, interviews and research to draft the report.

She and Mr. Mike McCormick reviewed the five areas the report covers concluding that the system is performing in a manner consistent with best-in-class peers.

On a motion by Mr. Corpus, seconded by Ms. Sissney the Board unanimously voted to adopt the following resolution:

RESOLUTION RELATING TO REPORT REQUIRED BY SECTION 802.109, TEXAS GOV'T CODE February 15, 2024

WHEREAS, Government Code Section 802.109 requires the Teacher Retirement System of Texas, a public retirement system ("TRS" or the "system"), to select an independent firm to evaluate the system's investment practices and performance and recommend improvements to its investment policies, procedures and practices;

WHEREAS, Section 802.109 authorizes a public retirement system to engage a firm with an existing relationship with the system that does not directly or indirectly manage investments of the system, and TRS engaged Aon Hewitt Investment Consulting, Inc., the Board of Trustees' general investment consultant ("Aon Hewitt"), to study the system's investment practices and performance and prepare the report and recommendations, if any, as required by Section 802.109;

WHEREAS, Section 802.109 requires that the report under Section 802.109 be filed with the governing body of the system, the TRS governing body being the Board of Trustees, not later than May 1; and

WHEREAS, Section 802.109 requires the Board to submit the report to the Pension Review Board not later than the 31st day after the date the Board receives the report;

Now therefore, be it:

RESOLVED, That the Board having received the report from Aon Hewitt pursuant to Government Code Section 802.109, hereby authorizes and directs the Executive Director or his designee to submit the report to the Pension Review Board not later than the 31st day after the Board received the report.

9. Review and discuss the CIO Update including Talent Management; Accomplishments; Notices, Key Dates and Upcoming Events – Jase Auby.

Mr. Jase Auby provided the CIO update and the semi-annual market update. He noted the Trust ended the calendar year 2023 with a preliminary one-year return of 9.7 percent, 200 basis points of alpha to the portfolio. He said last month IMD held its annual town hall with Mr. Hollingsworth as the keynote speaker. He announced the Excellence in Investing award was given to Will Carpenter and D'Oncee Brockington, with the Spotlight award going to Gay Clifton. He noted in September a recommendation would likely be coming forward to add a second securities lending agent. He concluded by providing the market update commenting on the markets in general.

10. Receive the Strategic Asset Allocation Study Education Session – James Nield, Mike Simmons and Dr. Keith Brown.

Mr. Auby provided an introductory overview of Strategic Asset Allocation (SAA). Dr. Keith Brown noted the SAA was a vital process. He reviewed the decisions the Board will be asked to make and provided a historical perspective in terms of asset allocation in the pension fund world over the last 20 years. He noted finding the right solution, the right portfolio mix is impossible without understanding the nature of the problem, the liabilities that need to be paid. He said the liabilities drive the way one things about managing and constructing the portfolio. He said in addition to allocating assets at a strategic level but also in an indirect way of controlling the amount of risk within the portfolio, the policy-level allocation.

Mr. Mike Simmons reviewed the timeline for the SAA where in December there was a discussion of best practices and long-term objectives. He said for this meeting, asset class review, peer review and capital market assumptions would be covered. He said TRS divides assets into three categories based on how they respond to economic conditions: global equity assets, stable value assets and real return. He noted risk parity crossed all three categories of assets to balance risk from all three categories of assets. He then reviewed peer performance and industry trends noting the largest trend has been moving towards private equity and away from public equity. He then discussed the survey of TRS 16 different external partners who have expertise in cross-asset forecasts. Mr. Auby noted over the past 18 months staff has conducted research and have developed four key questions. He reviewed the questions, focusing on risk, the mix of public equity, private equity and government bonds. He concluded by emphasizing the Board keeping in mind the long-term time horizon of the System.

11. Receive the Annual Review of Emerging Manager Program - Kirk Sims.

Mr. Kirk Sims began by announcing the Emerging Manager Program outperformed its benchmark by 227 basis points over the one-year period. He said the program continues to be allocated to 53 percent diverse managers since its inception. He reported there were three additional graduates from the program in 2023, bringing the total to six in the last two years. He said the virtual Emerging Manager Conference will be held on February 28th with 1,200 people already registered for the conference. He noted the program was entering its 19th year with \$6.2 billion and 14 graduates having backed 232 managers and 299 investments.

12. Receive an update from the Board's Compensation Consultant – Josh Wilson and Susan Lemke, Mercer Consulting.

Mr. Josh Wilson reviewed the compensation philosophy for the Investment Management Division (IMD) that was put in place in 2007 where the base salaries are targeted at the top quartile of public pension peers. He said the question rises as to who the public peers are and that group currently consisted of eight Systems surveyed by McLagan, a leading financial services survey. He said the philosophy for incentive pay was to target the bottom quartile of private asset management group from McLagan which had surveyed 450 private entities. Mr. Wilson said McLagan was certainly the leader in this space but expressed concerns of the public peer survey containing just eight participants. He also compared the way IMD had everyone within the incentive plans with peers that segmented the adjacent investment and non-investment related positions. He concluded by noting different philosophies exist and every System does it differently. He said it was important to find what works for the organization, for the people and the culture. He recommended having a complementary survey to McLagan for the public pension peers. Ms. Chris Bailey noted that additional survey data was available to TRS regarding the public pension set to meet the request to expand on the base salaries' side.

Mr. Hollingsworth announced agenda items 13 and 14 both will be taken up in executive session.

- 13. Consider personnel matters, including the appointment, employment, evaluation, compensation, performance, duties, discipline or dismissal of the Executive Director and Chief Audit Executive Jarvis V. Hollingsworth
- 14. Review the report of the General Counsel on pending and contemplated litigation, including updates on litigation involving benefit-program contributions, retirement benefits, health-benefit programs, investment matters and open records and on legal or regulatory matters involving certain TRS vendors, investment managers, or other counterparties Heather Traeger and J.R. Morgan.

At 4:00 p.m., Mr. Hollingsworth announced the board would recess into executive session on the following agenda items and sections of the Government Code: Items 13 under Section 551.074 and 557.071 to discuss personnel matters and consult with legal counsel as needed; and Item 14, under Section 551.071 of the Government Code to consult with legal counsel as needed.

At 6:14 p.m., Mr. Hollingsworth reconvened the Board meeting.

At 6:14 p.m., Mr. Hollingsworth noted there was no more scheduled business before the Board and announced the meeting was recessed until 8:00 a.m. tomorrow morning.

February 16, 2024

The Board of Trustees of the Teacher Retirement System of Texas met on Thursday, February 16, 2024, in the boardroom located on the Fifth Floor in the East Building of TRS' offices located at 1000 Red River Street, Austin, Texas, 78701.

The following Board members were present:

Jarvis V. Hollingsworth, Chair Nanette Sissney Brittny Allred Michael Ball David Corpus John Elliott James Nance Robert H. Walls, Jr. Elvis Williams

Others present:

Brian Guthrie, TRS Andrew Roth, TRS Heather Traeger, TRS Jase Auby, TRS Don Green, TRS Barbie Pearson, TRS Katrina Daniel, TRS Amanda Jenami, TRS Michelle Pagan, TRS Martin Cano, TRS Frank Williams, TRS Katherine Farrell, TRS Suzanne Dugan, Cohen Millstein Keith Brown, Investment Advisor Steve Voss, AON Michael McCormick, AON Benita Harper, AON Josh Wilson, Mercer Jordan Ash, Private Equity Stakeholder Project

Mr. Hollingsworth called the meeting to order at 8:00 a.m.

15. Provide an opportunity for public comment.

Mr. Jordan Ash, representing the Private Equity Stakeholder Project, expressed concern that the Texas Teachers Retirement System was one of the largest investors in Blackstone Real Estate Partners X that was buying Tricon Residential, and the result would worsen the housing affordability crisis and harm tenants.

16. Receive an update on proposed changes to the Fiscal Year 2025 – 2029 Strategic Plan Goals, Objectives and Strategies – Don Green and Michelle Pagan.

Mr. Don Green reviewed the State's biennial strategic planning and budgeting process. He noted the Board was to adopt the new strategic plan at the upcoming May meeting and the budget at the July meeting. He provided a draft of the proposed changes to the strategic plan continuing to simplify the plan by reducing the objectives by three and strategies by nine. Ms. Michelle Pagan noted the focus was to streamline and continue to maintain the strategic direction for many of the major projects currently underway. She provided greater detail regarding the additional strategies and the deletion of three objectives and 14 strategies that were combined or completed.

17. Receive an Overview of Social Security and TRS Benefits – Andrew Roth.

Mr. Andrew Roth provided a background on the enabling legislation of Social Security, the highlevel funding and benefits compared to TRS Pension. He also discussed the Windfall Elimination Provision (EP) and the Government Pension Offset (GPO).

18. Receive annual ethics and fiduciary training – Heather Traeger and Suzanne Dugan.

Ms. Heather Traeger and Ms. Suzanne Dugan, provided the annual ethics and fiduciary training reviewing scenarios, with the assistance of Mr. Guthrie and Mr. Roth, that focused on the roles and responsibilities of Trustees and their fiduciary responsibilities.

19. Receive a Data Management and Protection Update – Martin Cano, Heather Traeger and Frank Williams.

At 10:00 a.m., Mr. Hollingsworth announced the Board would go into executive session under the following agenda item and sections of the Government Code: Item number 19 under sections 551.076, 551.089 and 551.071, to discuss data management and protection and consult with legal counsel as needed.

At 10:52 a.m., Mr. Hollingsworth reconvened the open meeting.

At 10:55 a.m., Mr. Hollingsworth adjourned the meeting.

APPROVED BY THE BOARD OF TRUSTEES OF THE TEACHER RETIREMENT SYSTEM OF TEXAS ON THE __ DAY OF MAY 2024.

ATTESTED BY:

Katherine H. Farrell Secretary to the TRS Board of Trustees

Date

TAB 4



Executive Director Report

Presentation Date: May 2, 2024 Presented By: **Brian Guthrie**





Topics for Discussion

General Updates

Legislative Update

TRS Care Medicare Plan Improvements

Deputy Directory Search

Timeline for 2025 TRS Trustee Election

One TRS: Moving Forward Together

Honors and Special Acknowledgments

Upcoming Board Meeting Agendas



General Updates



Upcoming Conferences and Meetings:

- May 19 22, 2024: NCPERS Annual Conference, Seattle, WA
- July 21 24, 2024: NCTR 24th Annual Trustee Workshop, Berkeley, CA
- July 2024: TRS SPN, New York, NY

Past Meetings and Updates:

- February 24-26, 2024: NASRA/NCTR Winter Meeting, Washington, D.C.
- February 28, 2024: TRS/ERS Emerging Manager Conference, Virtual
- March 4 6, 2024: Cll's 2024 Spring Conference "Governance as a Guidepost," Washington, D.C.



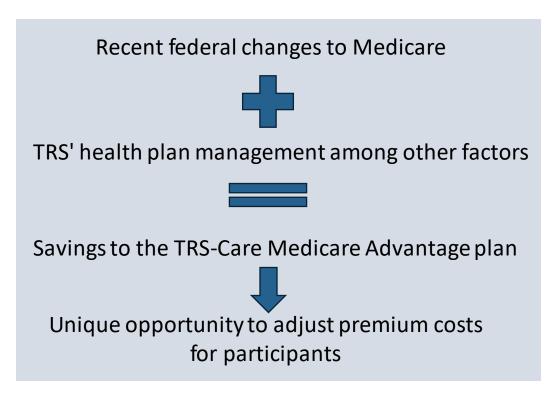
Interim Charges

- The Lt. Governor, who presides over the Senate, issues interim charges for Senate committees.
- The Speaker of the House issues interim charges for House committees to study.
- Lt. Gov. Dan Patrick issued 57 interim charges for Senate committees.
- Senate committees have begun scheduling hearings and will continue throughout the summer and fall to gather research on interim charges and issue recommendations to the 89th Legislative Session.
- To date, House interim charges have not yet been issued.

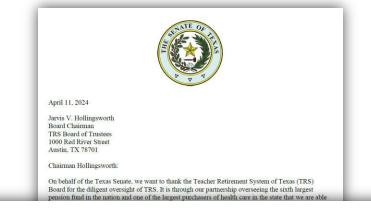


TRS-Care Medicare Plan Improvements

TRS' focus is on offering the most **comprehensive health coverage** for the **best value** while maintaining the **long-term solvency of the funds** in keeping with our fiduciary responsibility for retired and active public education members.



TRS received correspondence from legislative leadership indicating their **direction to use savings in the TRS-Care fund balance to reduce 2025 Medicare Advantage premiums** and allow for a one-time enrollment for eligible retirees, who will receive communications this summer.



Therefore, if the Board is able to act within its existing authority, we would recommend implementing a one-time re-enrollment opportunity due to the premium decreases for those who may have left the program. Furthermore, as the savings to the TRS-Care fund are a direct result of changes in the Medicare space, we fully support a proposal to reduce premiums for this population beginning in January 2025.

The Texas Senate is also pleased to hear that the non-Medicare population in the TRS-Care Standard Plan will not see a premium increase next year, as has been the case since 2017. Together, we can continue to take a balanced approach to manage the TRS-Care fund's long-term stability.

Sincerely,

Lt. Governor Dan Patrick

Senator Joan Huffman



Deputy Director – Search Overview

Position Posted – March 15th

• Position advertised on TRS, general job posting sites and specific Pension Health and Executive job postings

Preliminary Interviews – April 9th

• Interviews conducted via Teams by OE

Enterprise Leadership and Exec. Council Interviews – April 19 & 22nd

- Multiple panel interviews
- Members of Enterprise Leadership and Executive Council
- Meet and greet with Executive Director

Executive Council Interviews – April 30th

- One panel consisting of members of Executive Council
- Interview with Executive Director
- Meet and greet with current Deputy Director, Asst. Deputy Director, and support staff

Executive Director/Trustee Interview – May 1st

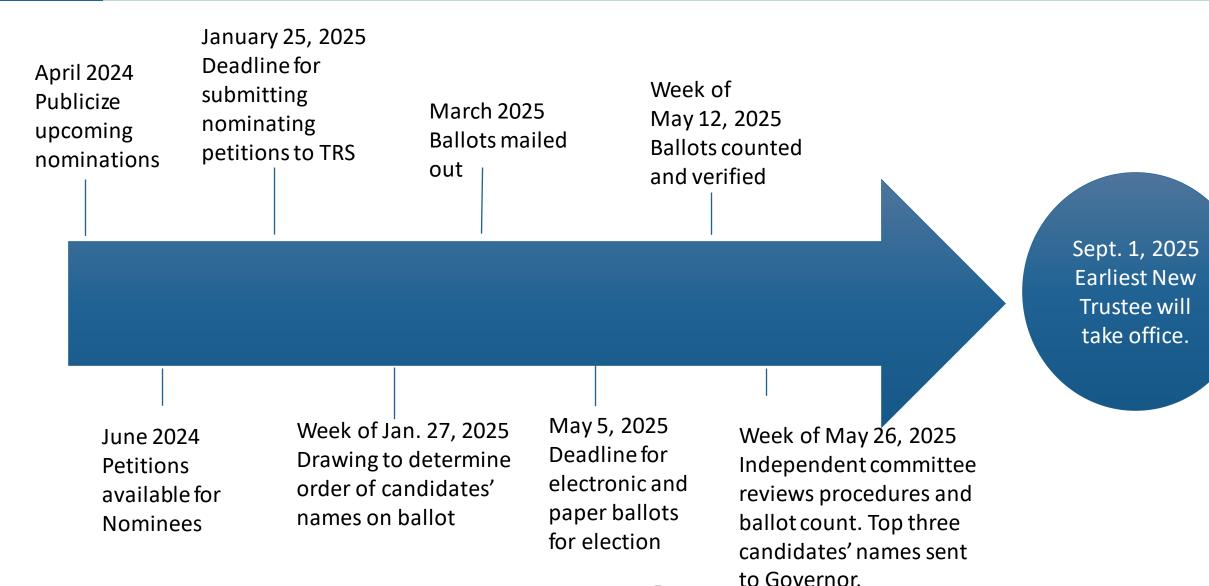
• Chair Hollingsworth, Vice Chair Sissney, and Executive Director

Next Steps – Week of May 6th

- Offer extended by end of next week
- New Deputy Director start date June/July



Timeline for 2025 Public School District Trustee Election

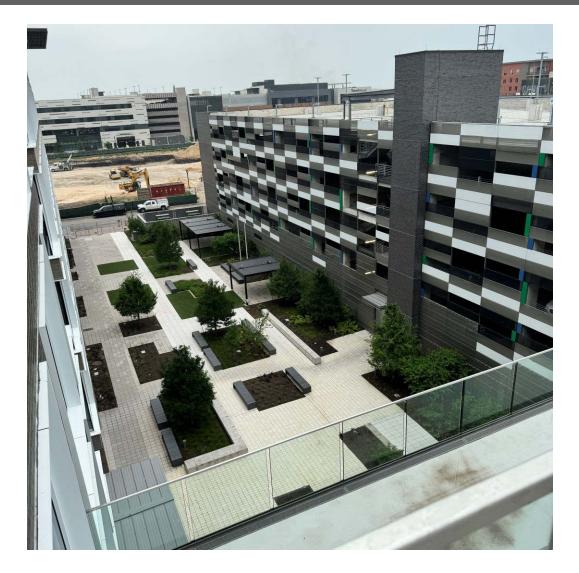


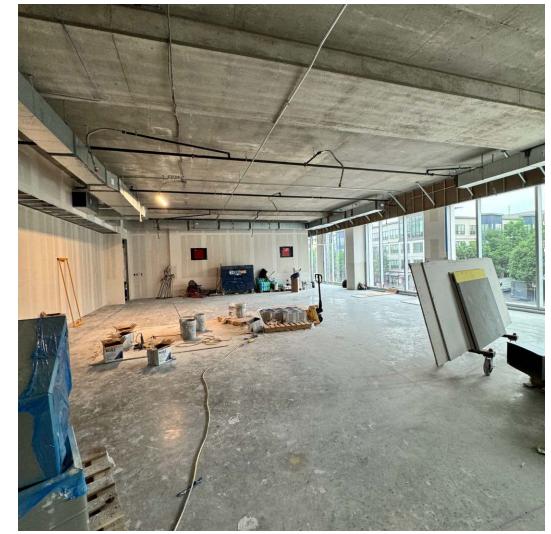
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One TRS: Moving Forward Together



BRAVO SHELL and T.I. CONSTRUCTION STATUS





One TRS: Moving Forward Together

XTX

KEY UPCOMING MILESTONES

Milestone	Target Date
Bravo Office Shell Construction Complete	March 2024
Security/Facilities Office in Bravo Garage Complete	September 2024
Bravo Tenant Improvement Construction Complete	December 2024
Bravo Move-In	Early-Mid 2025

Bravo Office Shell

 The office shell construction is substantially complete. There is minor finish work remaining in the courtyard and garage top deck.

Bravo Tenant Improvement Construction

 Construction is underway across all floors of the building and is progressing on schedule.



Honors and Special Acknowledgments



CIO Magazine names Jase Auby one of 2023's Power 100

Leadership takes on many forms. This year, for our annual Power 100 list of CIO allocators, we found it in gravitas, adaptability, tenure, assets under management and change-making.



Upcoming Board Meeting Agendas

July 18, 2024

Benefits Committee

- Operational Updates
- Approval of Benefits
 Medical Board Minutes

Investment Management Committee

- CIO Update •
- 1st Quarter Performance Review
- Annual Review of Private Markets
- **Review of IPS Modifications**
- Strategic Asset Allocation Recommendation
- Review Proposed IPS Amendments

Budget Committee

Proposed Adoption of FY 2024 Budget

Compensation Committee

- Staffing, turnover Mercer Update

Policy Committee

- Procurement Policv
- Adoption of Proposed Rules Publication of Proposed Rules ٠

Strategic Planning Committee

Results Forum Report Out ٠

ACE Committee

Internal Audit and Compliance Reports •

July 19, 2024

Committee Reports ED Report **Ombuds Report** Procurement Report Deputy Director Report Information Security Update



Upcoming Board Meeting Agendas



Benefits Committee

- Operational Updates
- Approval of Benefits
 Medical Board Minutes

Investment Management Committee

- CIO Update
- 2nd Quarter Performance Review ٠
- Review of the Semi-Annual Risk Report ٠

Budget Committee

Proposed Adoption of FY 2024 Budget

Compensation Committee

- Staffing, turnover
- Mercer Update

Policy Committee

- Investment Policy Statement
- Benefits Counseling Policy Adoption of Proposed Rules

Strategic Planning Committee

Results Forum Report Out

ACE Committee

Internal Audit and Compliance Reports •

September 20, 2024

Committee Reports ED Report **Ombuds Report** Procurement Report Deputy Director Report Information Security Update



Honors and Special Acknowledgments



Colorado PERA Board of Trustees Names Andrew Roth as New CEO/Executive Director

March 15, 2024

DENVER-The Colorado Public Employees Retirement Association (PERA) Board of Trustees announced today that Andrew Roth has been named as PERA's Chief Executive Officer/Executive Director, effective May 13.

Roth is currently the Deputy Director for the <u>Teacher Retirement System of Texas</u>, the sixth largest public pension system in the United States with assets under management of more than \$185 billion. Roth becomes the eighth executive director of the \$56 billion Colorado retirement system, which was established in 1931 by the Colorado General Assembly.





TAB 5



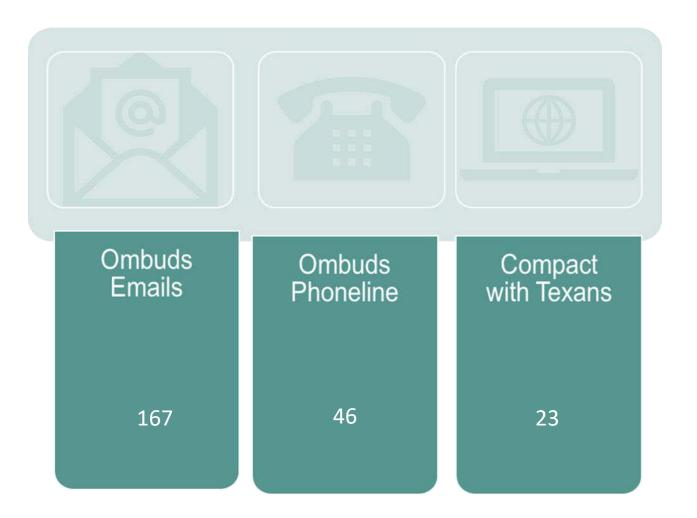
Ombuds Quarterly Report

Presentation Date: May 2, 2024 Presented By: Lori LaBrie



Ombuds Communications January – March 2024



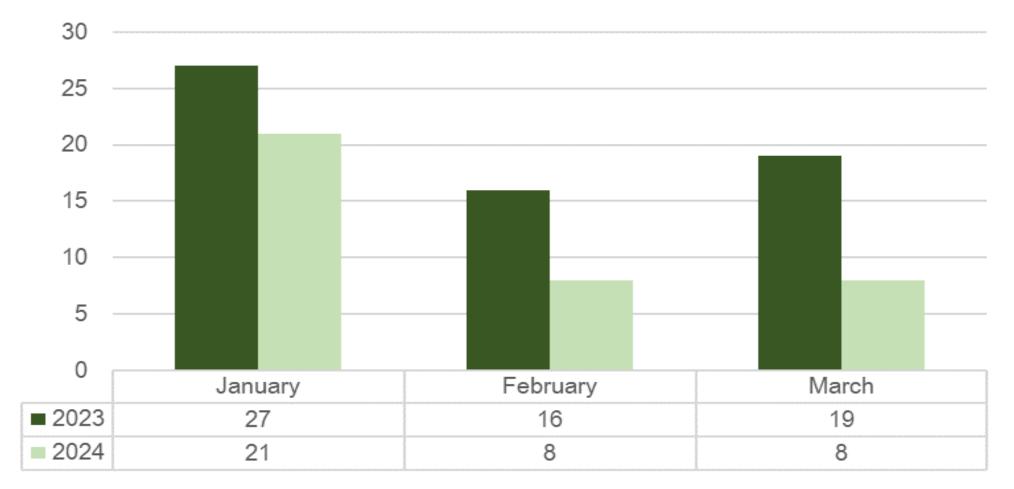


Total Ombuds Communications: 236

Social Media Comments on Large-Scale Agency Issues ("Hot Topics")

January	February	March
2024	2024	2024
Health Care	Health Care	Retirement
(67)	(87)	(30)
COLA	Retirement	Investments
(41)	(15)	(11)
MyTRS	1099-R	Annuity Payments
(11)	(12)	(6)

Point-in-Time (PIT) Complaints Comparison January – March 2024

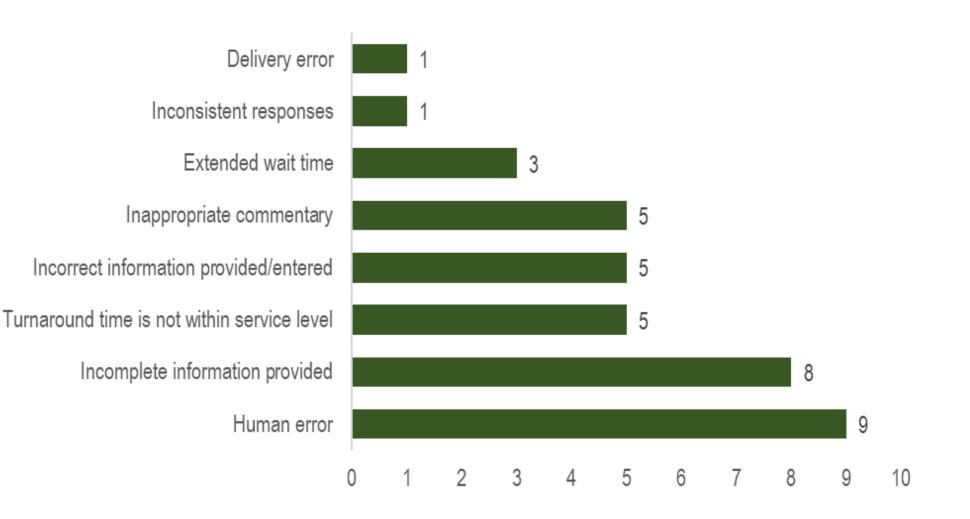


Total Point-in-Time Complaints Received:

January – March 2024 – 37 January – March 2023 – 62 Outstanding: 0

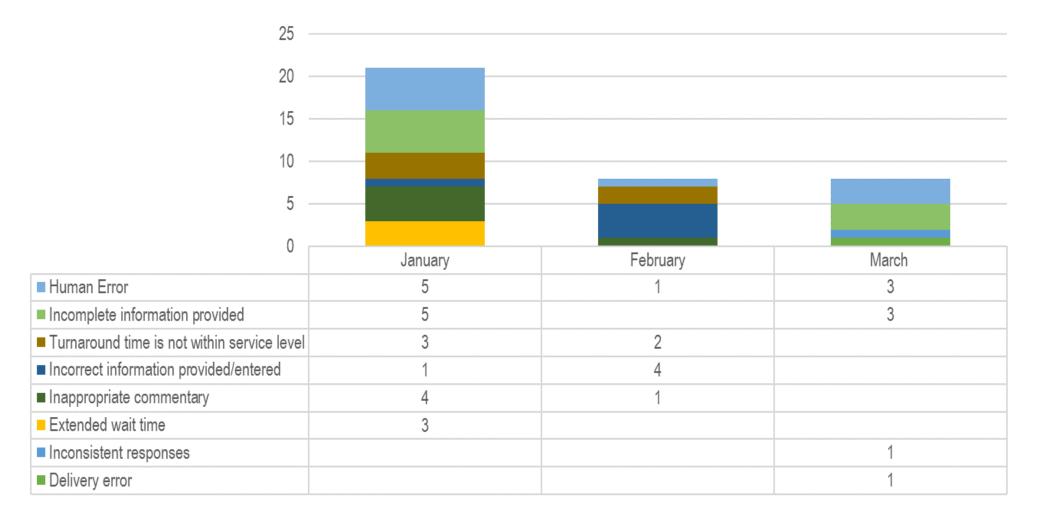


Point-in-Time Complaints by Category January – March 2024





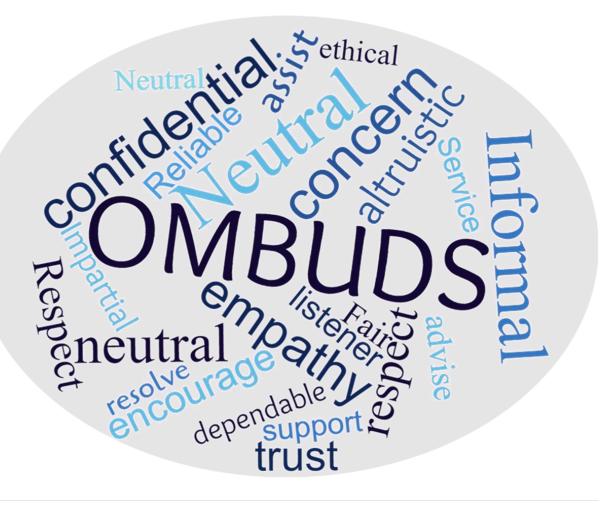
Point-in-Time Complaints by Category January – March 2024





Ombuds Contact Info:

Direct Phoneline: 833.873.2331 Email: Ombuds@trs.texas.gov Intake form: https://www.trs.texas.gov/Pages/ombuds.aspx



TAB 6



Business Administration

May 2, 2024

<u>Presented By:</u> Shannon Gosewehr, Chief Business Administration Officer Blender Hill, HUB Coordinator, Procurement & Contracts Kathy Bridgeman, Director, Contract Management Office

Historically Underutilized Business (HUB)

A <u>Historically Underutilized Business</u> (HUB) is generally defined as:

- Texas-based Business (corporation, sole proprietorship or joint venture)
- For Profit
- At least 51% owned and operated by person(s) of economically disadvantaged groups:
 - Black Americans
 - Hispanic Americans
 - Asian Pacific Americans
 - Native Americans
 - American Women
 - Veterans with at least a 20% service-connected disability

Statutes and rules establishing the State of Texas HUB Program requirements:

- Texas Government Code, Title 10, Subtitle D, Chapter 2161; and
- Title 34, Texas Administrative Code, Part 1, Chapter 20, Subchapter D.

HUB Goals – TRS Board of Trustees

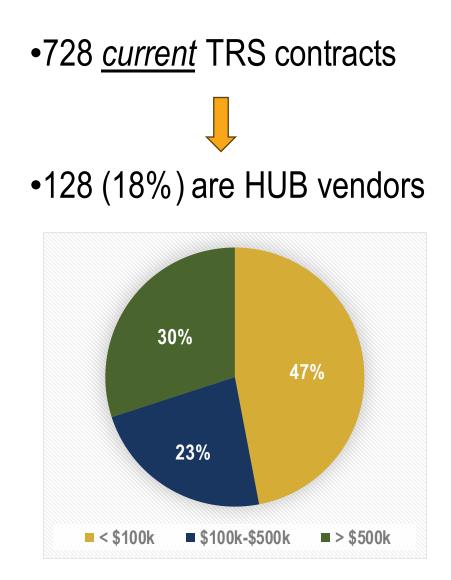
FY 2024 HUB Goals

Procurement Category	TRS HUB Goals	Statewide HUB Goals*
Special Trade Construction	50%	32.90%
Commodities	35%	21.10%
Professional Services	10%	23.70%
All Other Services	25%	26.00%

* Link: https://comptroller.texas.gov/purchasing/vendor/hub/disparity/#goals

Assessment of the TRS HUB Program





TRS vs. State of Texas HUB Percentage by Expenditures (Last 5 Years)

Year	TRS HUB % Expenditures	State of Texas HUB % Expenditures
2019	23.64%	12.77%
2020	23.36%	11.74%
2021	29.95%	10.48%
2022	29.33%	11.83%
2023	31.43%	12.80%

** TRS is ranked 37 out of 181 state agencies and universities in HUB % of Expenditures **

"Connecting Small Businesses to Texas-Sized Opportunities," Texas Comptroller's Annual Report FY 2023

Survey sent to Current Vendors

Questions included:

- How familiar are you with the HUB program?
- Are you interested in learning more about the HUB program?
- If so, how can we reach you?
- Which HUB program components are of interest to you?
- Overall, how would you rate our HUB program?
- Please indicate why you selected the rating?
- Are you certified as a HUB?

Survey participants wanted to learn more about:

- Subcontracting opportunities
- Bidding
- Creating a HUB Subcontracting Plan
- Obtaining/Maintaining HUB Certification

Strengths, Weaknesses, Opportunities, and Threat (SWOT) Analysis

Strengths	Weaknesses
TRS has a strong brand (name and recognition)	 Education Better inform our vendors about the HUB program Train vendors on types of supplies/services available
Full-time HUB coordinator	
Social Media PushInvolving OCE and Communications	
Opportunities	Threats
Educational outreach about the HUB Program	Emerging Technology
Meet and Greets with Vendors	Specialty Investment Market – Number of HUBs who may be ready, willing and able to participate
New Solicitations for "Professional Services" Contracts	
Supplier Diversity Programs / Mentor Protégé	

External	Internal
Attending, Hosting & Cohosting HUB Forums	Meeting with the Business Units
Conducting Meet and Greets with HUBs, Purchasing & the Business units	Collaborating with Outreach, Culture & Engagement team (OCE) on outreach efforts at colleges and universities
Educating the HUBs on what we buy	Participating in Spot Bid Fairs as a vehicle to meet new HUBs
Marketing to HUBs in key procurement areas	Working with Marketing team to promote small business events on Social Media
Identifying Mentor-Protégé opportunities	
Collaborating with Supplier Diversity Programs	
Creating a short list of HUBs who are ready, willing and able	

TRS will be participating in "Doing Business Texas Style" Spot Bid Fair & HUB Expo

Sponsored by state Senator Royce West and the Statewide HUB Program

Irving Convention Center May 14-15, 2024

The 2023 Spot Bid Fair awarded more than \$3.3 million in contracts for goods and services to HUB vendors.



HUB Certification

- Cohost a HUB Certification workshop (Forum) with the Comptroller's Office
 - Invite vendors to attend
 - Ask the Comptroller's office to bring Certification staff members to answer questions
- Collaborate with Statewide HUB Program to assist vendors with certification
- Certification Reminders
 - Monitor our vendors HUB certification dates (monthly)



www.Texas4HUBS.org

In FY23, 16,841 HUBs were currently certified according to the *Statewide Historically Underutilized Business Program, Education & Outreach* 2023

1. We're Doing Great

- HUB Spend Percentage by Expenditure or Utilization
- Hosting and participating in HUB events

2. Improvement Opportunities

- Educate vendors on what we buy
- Identify key organizations for Professional Service HUBs
- Identify firms for future Mentor-Protégé contracts

3. We have a plan

- Work on increasing the participation in Professional Services (Financial, Medical, Architectural/Engineering)
- Engaging our HUB firms

4. We will be back

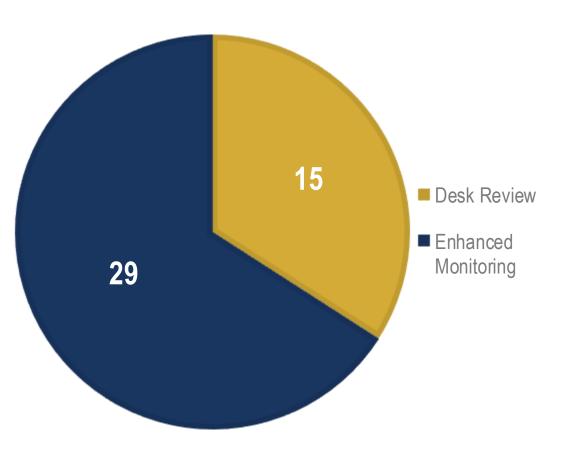
• September we will be back to discuss our HUB goals and results

TRS Contract Management Office (CMO)

Management, Monitoring, Oversight

FY24 Contract Monitoring Plan Update

- 2024 is a transition year for CMO contract monitoring
- New Board Contract Management Process put in place December 2023
- Plan includes contracts identified under new process
 - Desk Reviews (15)
 - Enhanced Monitoring (29)
- **58%** of 2024 contract monitoring reviews completed

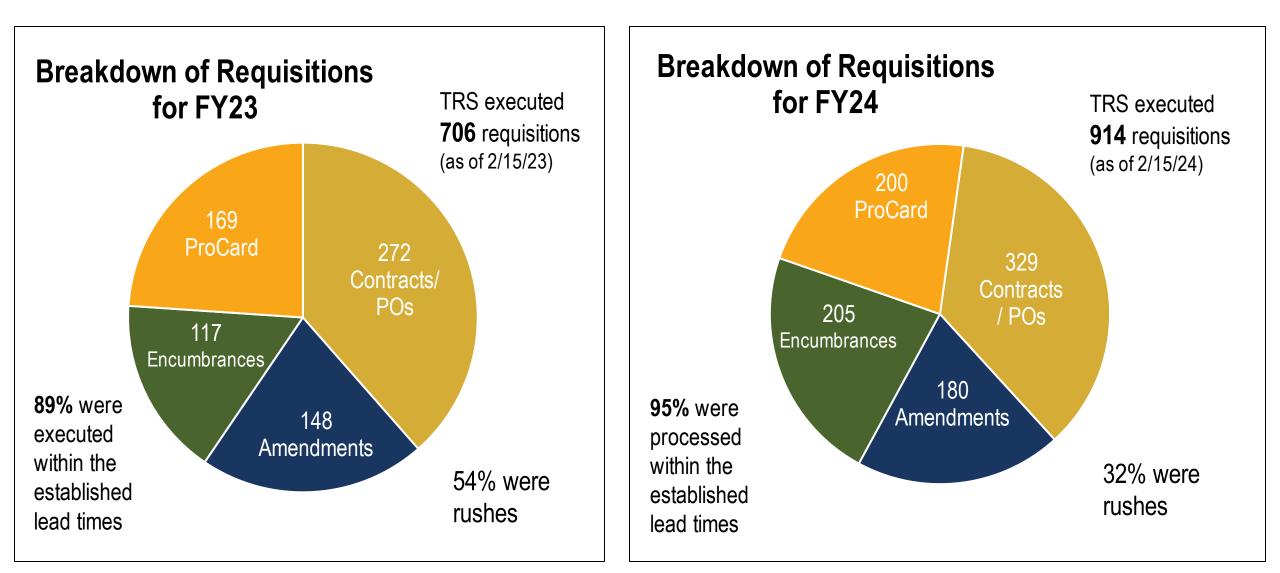


FY24 CMO CONTRACT MONITORING

EVENTS

Procurement Overview

Procurement Process Improvements (FY23 \rightarrow FY24)



Solicitations and Contracts with a Value of \$1 Million or More per Year

	Q1	Q2	Q3	Q4	Total
New Executed Contracts	5	1	0	0	6
New Executed Health Contracts	2	0	0	0	2
New FY24 Solicitations	7	0	0	0	7

TAB 7



TRS Health

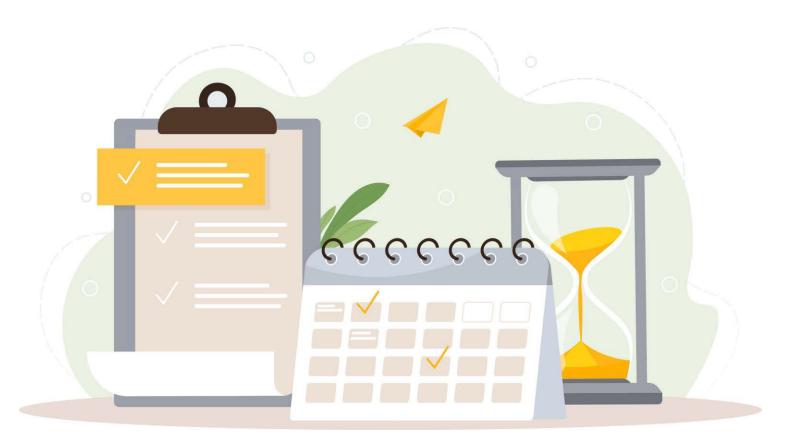
Thursday, May 2, 2024—TRS Board Meeting

Presented By: Yimei Zhao, Senior Director, Health Finance Jeff Bain, Director, Health Contracts Segal Consulting





- TRS Health Finance Presentation - Open
- Dental Finalists
 Presentations
- Vision Finalists
 Presentations
- TRS Health Finance Presentation -Executive



TRS-Care Dental and Vision Plans to be Established



- Section 1575.1601 added to Chapter 1575 of the Insurance Code by Senate Bill (S.B.) 1854 of the 88th Legislature, Regular Session, 2023
- Requires TRS to establish or contract for and make available under the TRS-Care program an optional plan that provides coverage for dental and vision care for retirees, dependents, surviving spouses, and surviving dependent children

Dental & Vision Request for Proposal (RFP) Phases



Solicitation Milestone Dates:

10/13/2023: Posted Solicitation
12/06/2023: Submission of Proposals
02/02/2024: Bid Evaluation
02/21-22/2024: Finalist Meetings
04/03/2024: BAFO Evaluation
05/2/2024: TRS Board Awards Contract(s)

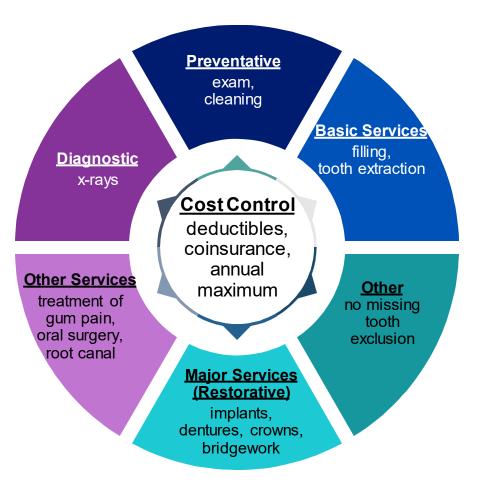
Approach to Dental & Vision Evaluations

Objective: Procure affordable, high-quality preferred provider organization (PPO) dental and vision insurance options for TRS members

- Strike a balance between premium affordability and benefits
- Successfully implement and administer plans by 1/1/2025
- Select dental and vision carriers that can provide the most competitive services in the areas of:
 - Benefit design and administration
 - Premiums
 - Customer services
 - Member communications and participant engagement
 - Provider network services
 - Account management
 - Insurance operations

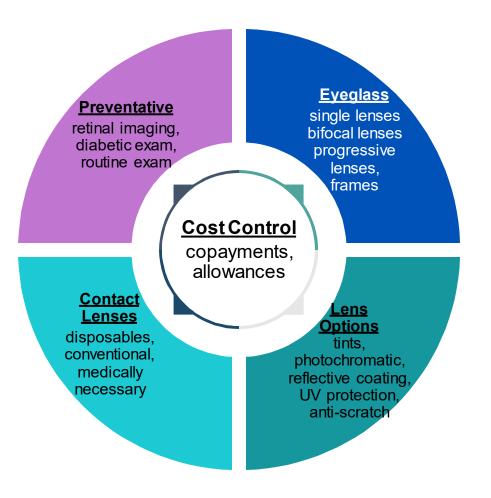
Market Benefit and Premium Research – Dental

- A marketplace analysis was conducted across other state and large employer plans specific to retirees to identify comparable coverages and benefit options for retiree-only plans, and one example is:
 - \$60.00/month with a \$1,500 maximum benefit
 - Estimated annual total premium could be around \$40M based on an 15% enrollment estimate
- Findings were used to establish a base model of benefits for vendors to bid on



Market Benefit and Premium Research - Vision

- A marketplace analysis was conducted across other state and large employer plans specific to retirees to identify comparable coverages and benefit options for retiree-only plans, and one example is:
 - \$13.00/month with a \$150 allowance
 - Estimated annual total premium could be around \$8M based on an 15% enrollment estimate
- Findings were used to establish a base model of benefits for vendors to bid on







Summary of Minimum Qualifications

- Five (5) years' experience providing dental/vision services with similarly sized accounts
- Experience with servicing accounts from at least one (1) employer group covering at least 50,000 lives
- Valid certificate of authority issued by the Texas Department of Insurance
- Capacity to securely receive, store, transmit, and destroy sensitive data in compliance with State and Federal laws, regulations and rules

Evaluation Scoring Structure

Category	Weight
Non-Financial Criteria	40%
Financial Criteria	60%
Total	100%

TRS Dental & Vision Request for Proposal Team

Dental & Vision RFP Procurement Team— Over 60 Years of Health Care Purchasing Experience

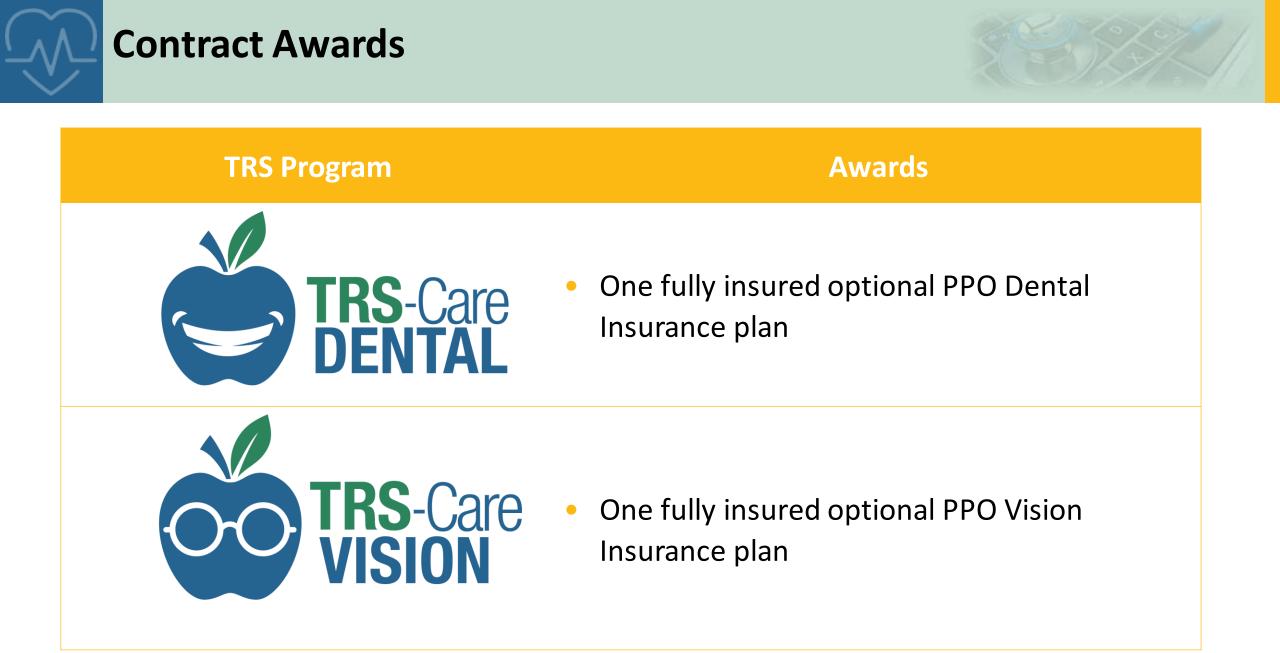
Teams:

- TRS Health Finance
- TRS Procurement and Contracts (P&C)
- TRS Legal and Compliance (L&C)
- TRS Health Operations
- TRS Health Engagement
- Segal Consulting

Qualifications:

- Credentials include RN, CPA, MAcc, CTCM, CTCD, CEBS, CFE and PhD
- TRS team member experience includes insurance regulation, group health plan management, finance, health care consulting, governmental purchasing and contract negotiation
- Segal Consulting has assisted public plans and employers for 80 years and currently consults to more than one-third of state-level plans in the country





TAB 8



Independent Investment Advisor

Presentation Date: May 2, 2024 Presented By: Brian Guthrie





- Fiduciary duty and Board Bylaws charge the Board with obtaining expert advice and assistance with respect to its investment functions.
- In 1993, the Board decided to engage an independent investment advisor in addition to the investment consultants retained at that time.
- Previous advisors were:
 - John Peavy who resigned to become the TRS Chief Investment Officer; and
 - Craig Hester who resigned to become the Chairman of the ERS Board
- Current advisor, Dr. Keith Brown, has served since 2002.



Scope of Work and Contract Status

- Dr. Brown's scope of work includes:
 - Attending Board and Committee meetings when investment reports are presented.
 - Offering independent advice to the Board regarding staff and investment counsel recommendations, including providing a written opinion on such matters in Board materials.
 - Providing advice to the Board regarding TRS investment matters, including advice on investment policies, asset allocation, and cash flow.
 - Being available to Board members for questions or consultation regarding TRS investment matters. Including office hours prior to board meetings.
 - Bringing to the Board's attention any IMD actions that Dr. Brown thinks necessitate Board discussion.
- Contract Status:
 - September 1, 2017, Dr. Brown and TRS agreed to five-year term agreement with two one-year renewals.
 - Dr. Brown's contract expires August 31, 2024.

TAB 18

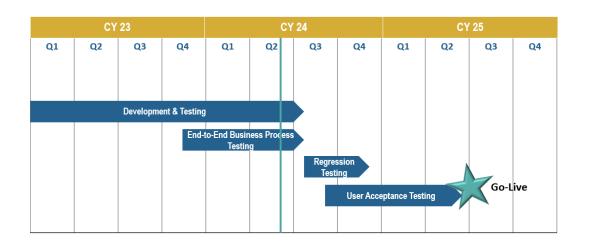


TEAM Update

May 3, 2024 Presented By: Chris Cutler, Adam Fambrough, Billy Lowe, Jennifer Whitman

TEAM – WHERE WE ARE NOW

Annuity Payroll, Benefit Adjustment & Tax Reporting (PBT)



KEY STATUS UPDATES

Achievements

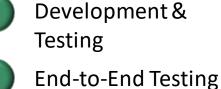
- Began Parallel Payroll testing
- Began setting up General Ledger testing
- Pension & Health Line of Business Systems Production Releases
 - 2/10/2024
 - 4/21/2024

Key Goals Upcoming

- 06/28/2024 First Dry-Run Cutover
- 07/31/2024 IT begins Regression Testing
- Pension & Health Line of Business Systems Production Releases
 - 6/23/2024
 - 8/18/2024

Workstream Status







Data Migration



Data Reconciliation



Parallel Payroll Testing

Change Management



General Ledger Testing

Regression Testing

User Acceptance Testing





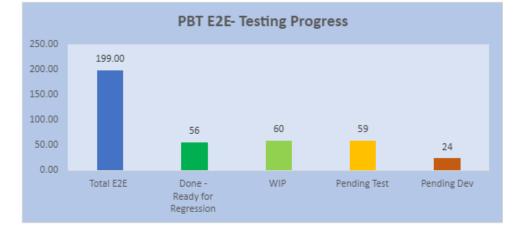
TYPES OF TESTING

Development Testing

3021 Development & QA Tickets

End-to-End Business Process Testing

199 Business Processes



Automation

Functional Area	# Scripts	Completed	%
GL Data	745	679	91
Phase 2	353	116	33

Parallel Payroll Testing Target = 100%

Payroll & Mock	Passed %	Business Accepted %	Under Review%
Dec-Mock 131	99.37%	0.11%	0.52%
Jan -Mock 132	97.51%	0.10%	2.39%
Feb- Mock 133	98.43%	0.08%	1.49%

General Ledger Testing

Over 23,000 transactions

Regression Testing

199 Business Process Tests, Performance Tests, Role Based Security Tests, ADA Compliance Test, Batch Schedule Tests, Use Cases/Artifacts Tests

User Acceptance Testing 12 UAT (3 Week) Test Cycles



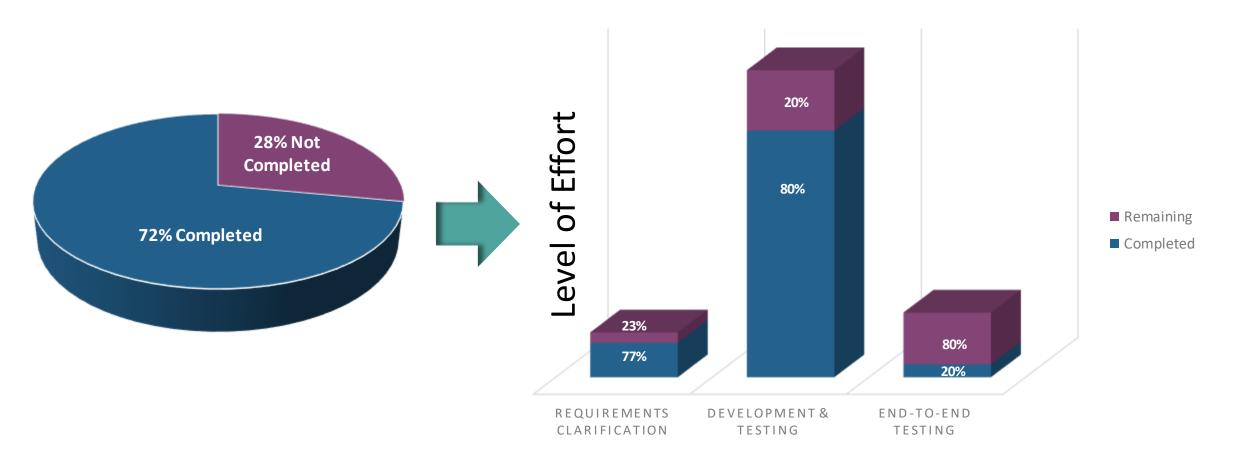




Annuity Payroll, Benefit Adjustment & Tax Reporting (PBT)

Percent of Work Completed

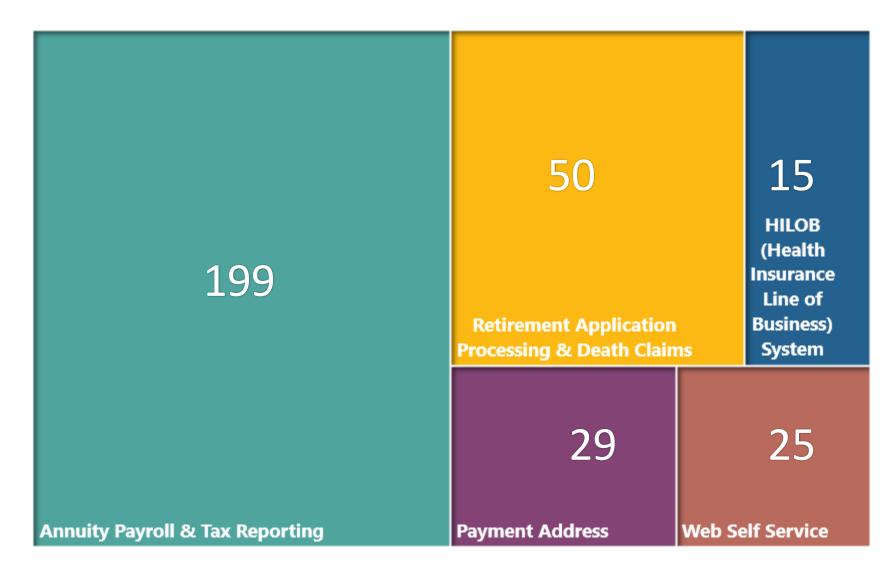
Percent of Work Completed By Type





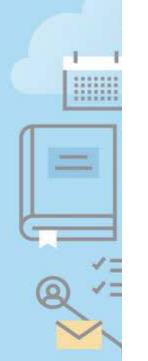
TEAM ROADMAP RELEASES – SIZE







CHANGE MANAGEMENT



Show & Tell Recordings

-

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TESTING TYPES - DEFINITIONS

- **Parallel Payroll Testing** Payroll is run in both the new and legacy system then compared
- End-to-End Testing Testing performed on completed functional business processes during the development phase
- **Development Testing** Testing performed on individual sections of code as development is completed.

- General Ledger Testing Testing performed to ensure transactions are posting correctly to accounts.
- Regression Testing Testing performed on all completed functional business processes after development has completed.
- User Acceptance- Testing performed by users from all affected business areas on completed functional business processes.

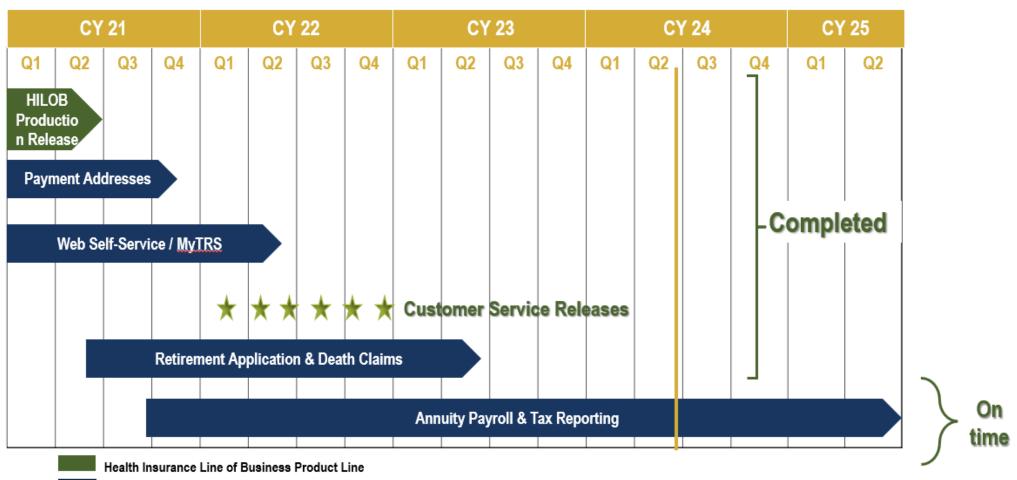




TEAM Budget Update

Amounts in millions

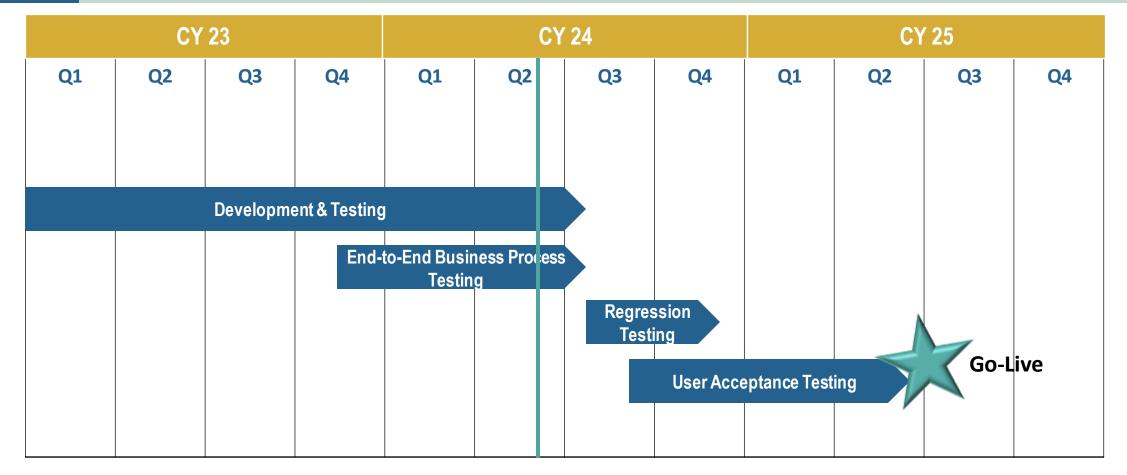






Customer Service Releases (CSR)





TAB 19

Independent Program Assessment (IPA)

TRS Enterprise Application Modernization (TEAM) Program

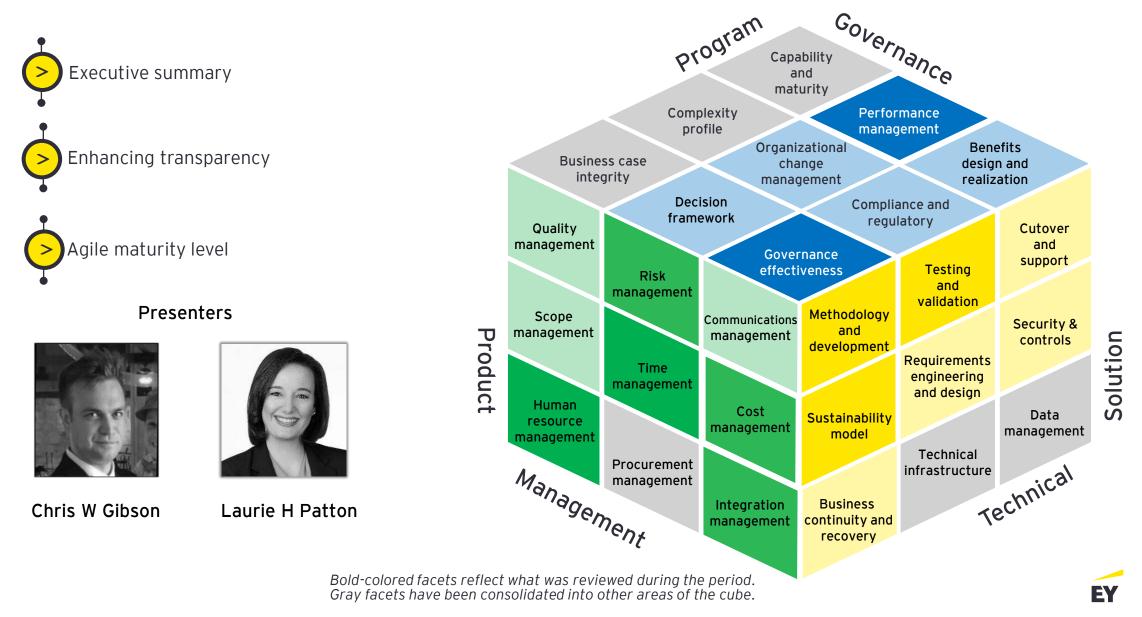
TRS Board of Trustees May 2024

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Building a better working world

Agenda and assessment framework

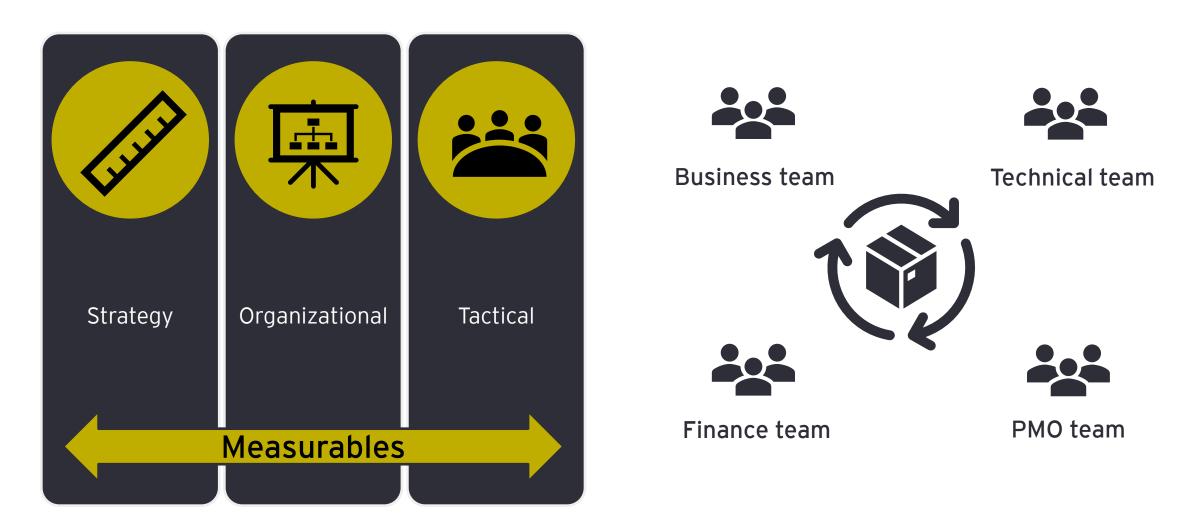


Executive summary

Program status	
Overall	TEAM leaders are identifying risks on an ongoing basis and keeping stakeholders updated on the current pace of work to monitor the program's health.
Scope	TEAM continues to prioritize the MVP for PBT and have formulated mitigation strategies for the data migration status change.
Schedule	TEAM remains committed to meeting deadlines for PBT release and has shifted resources to handle workload complexities within data migration efforts.
Budget	TEAM has shifted resources based on delivery needs. Overall, there has been no reductions to the program's operating budget.

Terminology		Recommendat	ions status	s	
PBT: Payroll, annuity, and tax reporting	PI planning: Program Increment planning	ecommendations s	since project		
M&E: Maintenance and enhancements	Measurables/metrics: Metrics assessing confidence, productivity	inceptior		86	5 18
MVP: Minimum viable product	capabilities, efficiency, and business realization	■ C	Closed On	n-hold ∎In-progre	SS

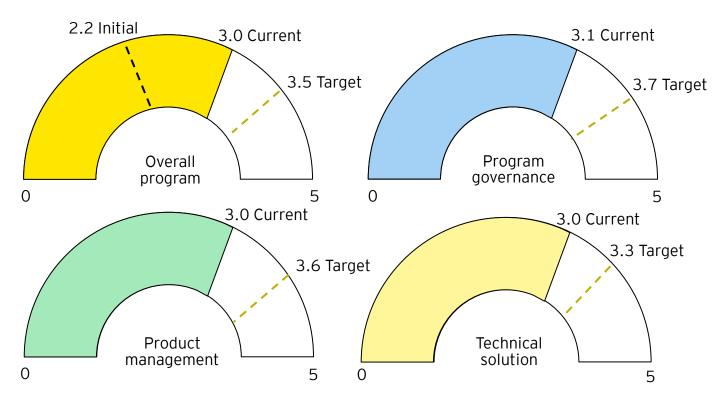
Enhancing transparency





FACETS	Initial	Current	Target
Decision framework	2.0	3.2	4.0
Organizational change management	2.0	3.0	3.5
Performance management	1.5	3.0	4.0
Governance effectiveness	2.0	3.0	3.5
Benefits design and realization	1.5	3.1	3.5
Compliance and regulatory	3.0	3.0	3.5
Quality management	1.7	3.0	3.5
Risk management	2.2	3.0	3.5
Communications management	2.4	3.0	4.0
Scope management	2.2	3.0	4.0
Time management	2.5	3.0	4.0
Cost management	2.5	3.0	3.0
Integration management	2.5	3.3	3.5
Human resource management	2.5	3.0	3.5
Methodology and development	2.0	3.3	3.5
Testing and validation	2.2	3.1	3.5
Cutover and support	2.1	3.0	3.0
Sustainability model	1.8	2.6	3.0
Requirements engineering	2.0	2.8	3.5
Business continuity	2.5	2.7	3.5
Security and controls	3.0	3.3	3.3

Agile maturity level



Bold facets reviewed this period



1	2	3	4	5
Ad-hoc Agile	Evolving Agile	Hybrid/streamlined Agile	Leading scaled Agile	Scaled Agile optimized
 There is evidence that the enterprise has recognized that issues exist and need to be addressed. There are, however, no standardized processes; instead, there are ad hoc approaches that tend to be applied on an individual or case-by- case basis. The overall approach to management is disorganized. Agile is used inconsistently across the organization and testing is predominantly manual. 	 Processes have developed to the stage where similar procedures are followed by different people undertaking the same task. Teams start to exhibit some consistent Agile habits and knowledge sharing begins to occur across teams but there is no formal training or communication of standard procedures, and responsibility is left to the individual. There is a high degree of reliance on the knowledge of individuals and, therefore, errors are likely. 	 Procedures, roles and responsibilities have been standardized and documented, and communicated through training. It is mandated that these processes should be followed; however, it is unlikely that deviations will be detected. The procedures themselves are not sophisticated but are the formalization of existing practices. Organization follows hybrid Agile practices which includes waterfall and Agile. 	 Management monitors and measures compliance with procedures and takes action where processes appear not to be working effectively. Measurement systems in place to track business value realization. Processes are under constant improvement. Automation and tools are used in a limited or fragmented way. Successful use of Agile at larger scale is portrayed. 	 Processes have been refined to a level of leading practice, based on the results of continuous improvement and readiness modeling with other enterprises. IT is used in an integrated way to automate the workflow, providing tools to improve quality and effectiveness, making the enterprise quick to adapt. Lean and Agile are part of the organizational culture. Continuous organizational learning and optimization of work processes occur.

TAB 20

TAB 21



Actuarial Audit Results

Teacher Retirement System of Texas

Ryan Falls, FSA, EA, MAAA Daniel Wade, FSA, EA, MAAA MAY 3, 2024



Agenda

- Key Takeaway
- Purpose and Scope
- Actuarial Audit Process
- Areas of Review
 - Membership Data
 - Assumptions
 - Liability Replication
 - Funding Results
 - Reports





Based on our review of the census data, experience study documents, liability replications, and actuarial valuation reports, we believe the results of the August 31, 2023 actuarial valuation of TRS are reasonable, based on reasonable assumptions and methods, and the report complies with the Actuarial Standards of Practice.

Our report includes a series of observations and recommendations that we believe could further enhance the actuarial valuations of TRS going forward.



Purpose & Scope

- Purpose: Independent Review of work performed by the retained actuary (GRS) for the August 31, 2023 actuarial valuation
- Scope:
 - Verification of demographic data
 - Evaluation of actuarial asset methods
 - Confirmation of the valuation results, including liability replication
 - Review the actuarial assumptions and methodology for compliance with actuarial standards and applicable statutes
 - Determination of the accuracy of funding computations and appropriateness of recommended contribution rates
 - Assessment of the communication of valuation results



Actuarial Audit Process

- Preliminary discussions with TRS staff
- Gather necessary information
- Demographic Data
 - Assess accuracy
 - Test for missing elements
 - Compare data provided by TRS to data used by GRS
- Review demographic and economic assumptions and methodology

Actuarial Audit Process (continued)

- Valuation liability calculations
 - Check individuals
 - Perform full parallel valuation
 - Compare results to GRS
 - Reconcile differences
- Appropriateness of funding computations
 - Funding period
 - Recommended contribution rates
- Review of reports
 - Appropriate information and scope?
 - Easy to understand and find information?
 - Consistent with Actuarial Standards of Practice?

C Milliman

Membership Data

- Reviewed data supplied by TRS
 - Reviewed for reasonableness
 - Confirmed that all necessary information was included
- Reviewed data used in GRS's valuation
 - Performed independent data editing
- Conclusion
 - Demographic data used by GRS in valuation is appropriate and complete

Assumptions

Economic

- Overall package of economic assumptions is reasonable
 - Long-term expected rate of return on assets of 7.00% is reasonable given TRS's assumptions for inflation and the capital market assumptions used in GRS's analysis
 - Also aligned with the capital market assumptions from Milliman's investment consultants.
 - Inflation assumption at 2.30% is reasonable based on recent forecasts
 - Payroll growth assumption of 2.90% is reasonable and supported by historical trends and forecasts

Demographic

 Based on comparison to other large teacher systems and the experience study completed in July 2022, the TRS demographic assumptions are appropriately supported and reasonable



Assumptions (continued)

Mortality Assumption

- Fiscal Years ended 2020 and 2021 were excluded from GRS's analysis
- We support the approach
- Total A/E ratios by year and gender for the United States for ages 65 and beyond:

Year	Females	Males
2020	120.9%	123.5%
2021	111.6%	115.2%
2022	107.8%	108.2%
2023	99.3%	98.9%

- Study from Retirement Plans Experience Committee of the Society of Actuaries based on data from the Centers for Disease Control and Prevention.
- Period studied from April 1, 2020 through June 30, 2023.

C Milliman

Liability Replication (\$ in billions)

	G	RS	Mill	liman	Ratio of Milliman / GRS	
Present Value of Benefits						
Retirees	\$	124.0	\$	123.2	99.4%	
Actives		179.7		178.5	99.4%	Includes projected future benefits (pay and s for all current members
Inactives		10.2		10.2	99.3%	
	\$	313.9	\$	311.9	99.4%	

Entry Age Accrued Liability

.

Retirees Actives Inactives	\$ \$	124.0 123.3 10.2 257.5	\$ \$	123.2 122.5 10.2 255.9	99.4% 99.4% 99.3% 99.4%	Accrued liability based on "actuarial cost method" (Entry Age Normal)
Entry Age Normal Cost		12.10%		11.97%	98.9%	Typically where we see the greatest differences in an actuarial audit. GRS normal cost rates are reasonable



Funding Results

- Calculation of Funding Period is appropriate
 - Years until the Unfunded Actuarial Accrued Liability (UAAL) is expected to be eliminated based on the statutory contribution rates
 - 29 years as of August 31, 2023
- Calculation of Statutory Actuarially Determined Employer Contribution is appropriate
 - Contribution that will cover the normal cost and eliminate the UAAL over the funding period presented in the valuation, but not less than the contribution rate needed to produce a 30-year funding period
 - 9.40% of pay as of August 31, 2023



Funding Results (continued)

Calculation of the "Reasonable" Actuarially Determined Contribution (ADC)

- New contribution calculated and presented as part of August 31, 2023 actuarial valuation
- Developed to be consistent with the Board's Pension Funding Policy
 - Pension Funding Policy indicates that a declining UAAL over time will be evidence that contribution and benefit policies are being implemented consistent with achieving a funded ratio of 100%
 - Primarily a disclosure item for the Board to assess statutory contribution rates
 - Also, more consistent with guidance included in new Actuarial Standards of Practice
- Reasonable ADC is the contribution rate needed to cover normal cost plus interest on the UAAL
 - Intended to eliminate "negative amortization"
 - Contribution rate assumed to change (if necessary) on September 1 following the next legislative session
 - 10.39% of pay as of August 31, 2023, as presented in the actuarial valuation report
- Reasonable ADC presented in actuarial valuation report was slightly higher than needed to avoid negative amortization
 - To improve the consistency and transparency of this new calculation, we encourage GRS to clearly define the level of margin they will add into this calculation in future years

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Reports

- GRS reports comply with the Actuarial Standards of Practice
- Actuarial audit report includes a series of possible enhancements to improve communication and disclosure in future valuation reports, for example:
 - Discussion and characterization of new Low-Default-Risk Obligation measure
 - Aligning valuation report with TRS handbooks and literature with references to benefit "tiers"
 - Description of certain assumptions
- Possible enhancements to the communication only and do not impact the results of the valuation



Thank you

Caveats and Disclaimers

The findings presented in these materials detail our full-scope audit review of the August 31, 2023 actuarial valuation performed by Gabriel, Roeder, Smith & Co. ("GRS") for the Teacher Retirement System of Texas ("TRS").

All calculations and determinations are based on TRS's actuarial valuation assumptions and methods as approved for use by the TRS Board and benefit provisions as specified by TRS. The plan provisions, assumptions and methods used in this presentation are the same as those disclosed in GRS's August 31, 2023 valuation report.

In preparing this presentation, we relied, without audit, on information (some oral and some in writing) supplied by TRS staff. This information includes, but is not limited to, benefit provisions, employee data, and financial information. In our examination of the data provided by TRS, we found it to be reasonably consistent and comparable with data used for August 31, 2023 actuarial valuation as provided to us by GRS. Since these audit results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our results may need to be revised.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, our findings are complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board and the applicable Code of Professional Conduct, amplifying Opinions, and supporting Recommendations of the American Academy of Actuaries.

Milliman's work product was prepared exclusively for TRS for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning TRS operations, and uses TRS data, which Milliman has not audited. It is not for the use or benefit of any third party for any purpose. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.

The consultants who worked on this assignment are retirement actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel. The actuaries who prepared this presentation are independent of TRS, and we are not aware of any relationship that would impair the objectivity of our work.

We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

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TAB 22



Teacher Retirement System of Texas

A Look at the Peer Universe of Contribution Methodologies

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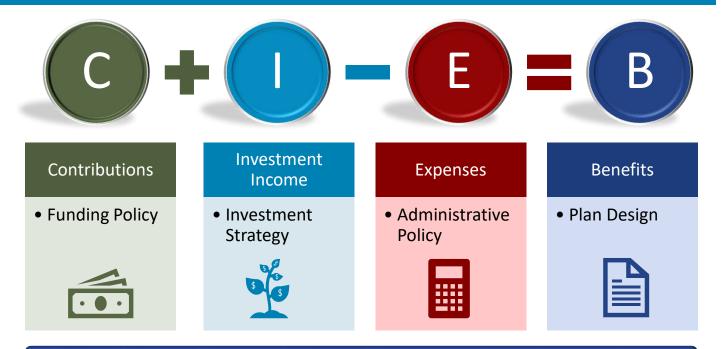
Agenda

- Defining Different Approaches to Determining Contributions
- Defining Negative Amortization
- A Look at the Peer Universe
- Stress Testing the Peer Universe
- What can be Learned and Applied to TRS?





Basic Retirement Funding Equation



"Money In = Money Out"



Categories of Contribution Policies and Examples

• Actuarially Determined: Contributions change annually based on a predetermined formula with specific goals and parameters

- Fixed Rate (Statutory) Contributions: Contributions are set by statute, or the legislative budget process. Requires legislative action to change, and almost always has no requirement to change.
 - Doing nothing is an option

- Combination approaches with mostly fixed or legislatively set contributions, but requires change based on specific limitations
 - If a limitation is hit, there is a requirement for change

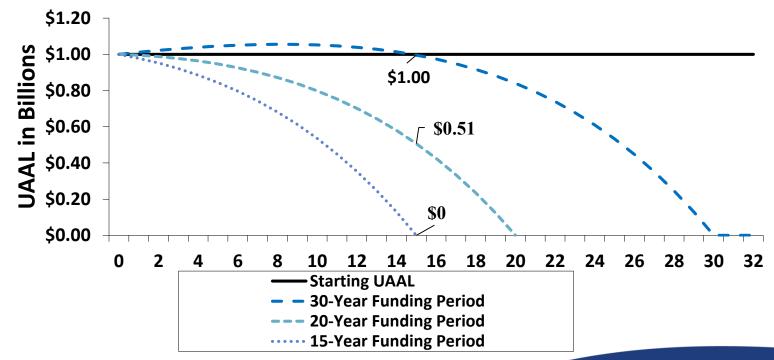
• A majority of plans in the country

- TRS
- Most small plans in Texas
- Handful of other statewide
 plans

- TRS Board Policy
- Utah
- South Carolina



Another distinguishing factor is whether the policy incorporates Negative Amortization: When the contributions do not cover the interest accruals, the UAAL is expected to increase year over year





NASRA Survey Data (Largest 116 plans) Grouped by Contribution Policy

	Actuarially Determined Contributions	Generally Fixed Contributions, Requirement for Change (Combination)	Statutorily Set Contributions, No Requirement for Change (Fixed Rate)
Currently Experiencing Negative Amortization	22 Plans Avg Fund Ratio: 62% Average Funding Period: 22	8 Plans Avg Fund Ratio: 71% Average Funding Period: 23	18 Plans Avg Fund Ratio: 68% Average Funding Period: 37
Currently Experiencing Positive Amortization	60 Plans Avg Fund Ratio: 81% Average Funding Period: 11	6 Plans Avg Fund Ratio: 79% Average Funding Period: 8	2 Plans Avg Fund Ratio: 59% Average Funding Period: 16



Generally, if assumptions are met, the universe of systems is projected to improve significantly over the next 20 years

			Current	Projected 10 Years	Projected 20 Years
Actuarially determined	Positive amortization	Funded ratio	81%	95%	100%
		Funding period	11	2	NA
	Negative amortization	Funded ratio	62%	75%	93%
		Funding period	22	12	3
Combination approaches:	Positive amortization	Funded ratio	79%	92%	100%
fixed most of the time, but have specific		Funding period	8	2	NA
requirements for change	Negative amortization	Funded ratio	71%	82%	93%
		Funding period	23	13	5
Fixed/Legislatively set	Positive amortization	Funded ratio	59%	85%	100%
contributions, No requirement for		Funding period	16	6	NA
change	Negative amortization	Funded ratio	68%	76%	87%
		Funding period	37	27	17



The universe of peer systems varies widely in current funded status, from below 20% to over 100%

The colors represent what contribution strategy the system is currently utilizing.

There have been a significant number of systems move from a Fixed/Legislative approach to an Actuarial Approach over the last decade, so they may show as a green dot now, but historically were a red dot. That explains most of the greens on the lower left part of the chart.

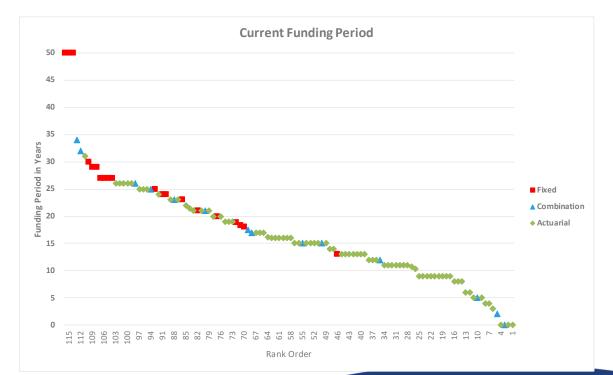




However, it also varies in its contribution strategy. Plans utilizing actuarial funding have reacted to the Great Recession and the decrease in assumed returns faster than ones that require statutory or legislative changes

65 of the 116 are currently in positive amortization (paying down principal on the UAAL)

Positive amortization begins when the funding period is around 20 years





Projected 20 years into the future, the financial outlook for a majority of plans looks healthy

67% of systems have reached full funding

Notice the difference of how the colors are distributed

Projected Funded Status after 20 Years 120% 100% 80% **Funded Status** 60% Fixed Combination Actuarial 40% 20% 0% Rank Order

NASRA Public Funds Survey, projected individually by system by GRS



Stress Test

- As shown, a vast majority of the systems are expected to improve significantly over the next 20 years if assumptions are met
- However, even modest adverse experience could impact many plans, especially the ones with fixed contributions
- The following recreates the projections, but assumes a -3% return the first year, followed by the assumed 7%
 - This would be similar to assuming 6.0% returns for a decade followed by 7%
 - This would also be similar to assuming 6.5% over the next 20 years





When a stress event is included in the projection, plans with contributions that automatically and appropriately adjust do so, and continue to improve, while the ones that do not fall further behind

				Stressed	Scenario
			Current	Projected 10 Years	Projected 20 Years
Actuarially determined	Positive amortization	Funded ratio	81%	91%	100%
		Funding period	11	6	NA
	Negative amortization	Funded ratio	62%	71%	92%
		Funding period	22	13	5
Combination approaches: fixed	Positive amortization	Funded ratio	79%	89%	100%
most of the time, but have specific requirements for change		Funding period	8	4	NA
	Negative amortization	Funded ratio	71%	73%	82%
		Funding period	23	17	8
Fixed/Legislatively set	Positive amortization	Funded ratio	59%	76%	96%
contributions, No requirement for change		Funding period	16	9	2
	Negative amortization	Funded ratio	68%	66%	74%
		Funding period	37	44	34

For the stress test, we have included one specific example that represents one System with the 3 different strategies

- A fixed rate statutory policy (no change to contribution rate)
- A combination strategy that forces positive amortization
 - If the UAAL is not projected to begin to decline in the next 5 years, increase the contribution rate so that it is
 expected to begin to decline immediately
- An actuarially determined approach using amortization layers is the most common methodology used in the industry, which places "layers" of the UAAL over fixed amortization schedules. This could be designed to not change the costs per year much up front but provides significant protection to the system over the long term and will force the system towards full funding
 - For example, put the current UAAL over a fixed schedule like currently expected
 - For any new UAAL that is created in the future, create a new 20 year schedule for that "layer"
 - It closes the amortization period and forces it towards zero
 - Contributions will react immediately as necessary to continue that goal



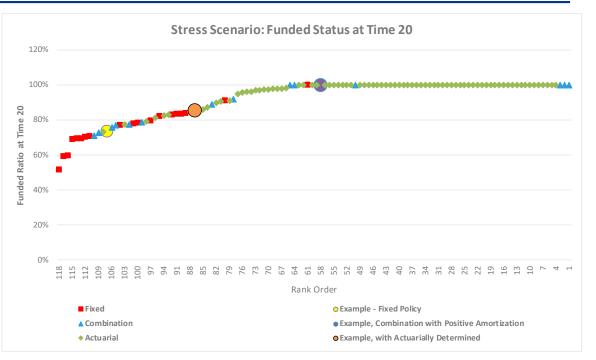


Even in the stressed scenario, most Actuarially Determined contribution polices have reached full funding, while most fixed rate plans are still less than 80% funded

In the specific example, this specific Combination policy focuses on remaining in positive amortization, thus would react the quickest, and would reach full funding in 20 years

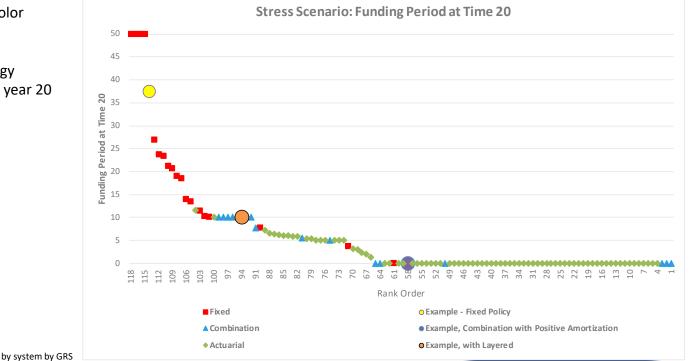
This would also be the least expensive over time as it would generate the least interest charges

The actuarial approach is a middle ground as the current UAAL is amortized over the original period while the new layer based on the stress event would be put over 20





By year 20, essentially all Actuarially Determined strategies have less than 10 years left to full funding, while essentially all Fixed Rate strategies have more than 10 years left, with many over 20



Notice the huge difference by color (contribution strategy)

In the example, the Fixed strategy would still have 37 years left, at year 20

NASRA Public Funds Survey, projected individually by system by GRS

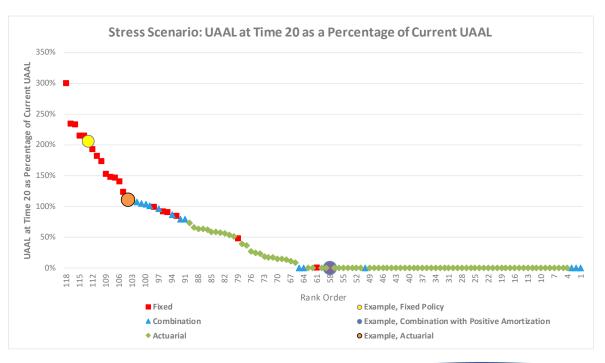


The UAAL is larger after 20 years for essentially all fixed rate plans, while smaller for all strategies that react

Notice the huge difference by color (contribution strategy)

In the example, the fixed strategy would have an UAAL that is double what the UAAL is at time 0

Most bond raters work based on comparisons to others. How will the plan sponsors of the systems in red be seen in comparison to the green ones?



NASRA Public Funds Survey, projected individually by system by GRS



It becomes easy to assess a system's likelihood of future success by the contribution strategy

	Actuarially Determined Contributions	Generally Fixed Contributions, Requirement for Change (Combination)	Statutorily Set Contributions, No Requirement for Change (Fixed Rate)
Currently Experiencing Negative Amortization	High Probability	Low Probability	Low Probability no successful real life example
Currently Experiencing Positive Amortization	High Probability	High Probability	High Probability, but Uncommon Situation









TAB 23



Deputy Director Update

May 3, 2024 Presented By: Andrew Roth, Deputy Director



Agenda

- I. Background CEM Benchmarking
- II. Service Score
- III. Cost Information
- IV. Closing Remarks



I. Background: CEM Benchmarking

CEM BENCHMARKING

- Established in 1991
- Benchmarks approximately 500 public and corporate pension funds in 25 countries across the globe
- The TRS peer group includes other large and complex U.S. public pension funds

	Custom Peer Group for TRS of Texas					
		Number of members (in 000s)				
		Active				
#	System	Members	Annuitants	Total ¹		
1	CalPERS	924	789	1,713		
2	TRS of Texas	953	490	1,443		
3	Florida RS	645	483	1,128		
4	NYSLRS	514	515	1,029		
5	CALSTRS	459	329	788		
6	Virginia RS	354	240	594		
7	Washington State DRS	352	226	578		
8	Ohio PERS	298	221	518		
9	Pennsylvania PSERS	258	249	507		
10	Michigan ORS	165	287	452		
11	Indiana PRS	250	174	424		
12	Oregon PERS	184	165	349		
	Median	353	268	586		
	Average	446	347	794		



The TRS journey to above average is remarkable

- TRS invested in resources to improve member service; and yet remains lowcost relative to peers
- Put another way: TRS provides topquadrant service for bottom-quadrant cost
- Given our size (and member growth), this is a remarkable achievement







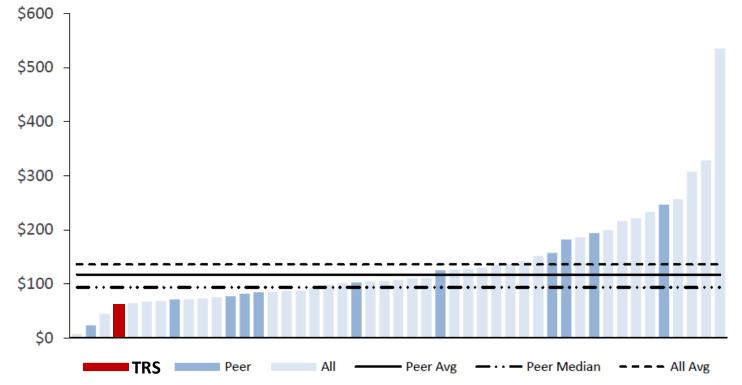
TRS Service Score is 78; Peer Average Score is 76

- TRS' service score rose over the past year and for the first time in 8 years is above the peer average
- Call Center outcomes improved dramatically over the past year as the result of increased staffing, improved training, and a relentless focus on excellence
- Reduced call center wait times for members are a significant driver for improvement in the score
- Benefit estimates, adding annuitants and survivors to payroll, and service credit purchases all improved as well
- **Takeaway:** adequate TRS staffing makes a huge difference for TRS members



CEM Cost Score Has Risen

- Over the past 8 years, TRS costs have risen approximately 8.6% per year
- As peer costs have also risen, TRS remains in the same place relative to peers: at the low-end of costs to be among the most efficient and least costly systems

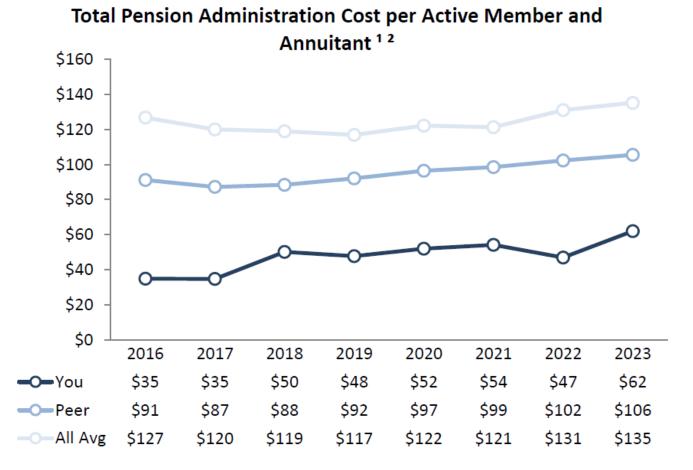


Pension Administration Cost Per Active Member and Annuitant

III. Cost Information

Cost Score Drivers

- Cost remains low because TRS has relatively fewer
 FTEs per member and has lower support costs per member (2.1 vs. 3.3 FTEs per 10,000)
- Support costs are defined as Finance, Legal, IT, and Business Admin
- Under-investing in shared services is a risk





Five Years with TRS as the Deputy Director (and Chief Operations and Administration Officer, or COAO)

- Honor and a privilege to serve TRS and its 2 million+ members
- Grateful to work with an exceptional team dedicated to serving members
- Team rose to meet multiple challenges with tenacity and vigor: a new headquarters, COVID, the Customer Service Improvement Initiative, TEAM, and a host of other critical efforts to serve our members





of more than 600 member calls were answered within 3 minutes



Paid monthly to annuitants *as of Oct. 2023*



TRS' Red River Sales Price *Campus will complete move in 2024*

