TEACHER RETIREMENT SYSTEM OF TEXAS MEETING
BOARD OF TRUSTEES

AGENDA

February 17, 2022 – 8:00 a.m.

TRS East Building, 5th Floor, Boardroom

All or part of the February 17, 2022, 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 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 Katherine.Farrell@trs.texas.gov identifying the name of the speaker and topic.

The open portions of the February 17, 2022, Board meeting are being broadcast over the Internet. Access to the Internet broadcast of the Board meeting is provided at www.trs.texas.gov.

NOTE: The Board will NOT take up the following agenda items: 12, 14, 17, 18, 19 and 20. The Board may take up any remaining agenda items out of order during its meeting on Thursday, February 17, 2022, beginning at the time and place specified on this agenda.

1. Call roll of Board members.

2. Consider Board administrative matters, including approval of the December 7-8, 2021 proposed meeting minutes – Jarvis V. Hollingsworth.


4. Discuss the Executive Director's report on the following – Brian Guthrie:

   A. Administrative operational matters, including updates on financial, audit, investments, legal, staff services, board administration activities, special projects, risk assessment, workforce matters, long term facilities including El Paso Regional Office, Red River headquarters, and new headquarters.

   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 an overview of the proposed Fiscal Year 2023 – 2027 Strategic Plan Goals, Objectives and Strategies – Caasi Lamb.


7. Receive an update on TRS health plans including key legislation and consider the adoption of a resolution directing staff to apply funds appropriated by Senate Bill 8 as passed by the 87th Texas Legislature in the Third Called Special Session to issue a one-time payment for TRS-Care and offset future plan year premium costs for TRS-ActiveCare participants – Katrina Daniel and Monica Bernal.


10. Receive a Diversity, Equity and Inclusion Update – Kellie Sauls.

11. Receive and consider an update from Organizational Excellence – Andrew Roth, Janet Bray and Chris Bailey:
   A. TRS Classification Review;
   B. Executive Succession Planning, including the Executive Director, Chief Investment Officer, Chief Audit Executive and the Executive Council Members.

12. Receive an annual update on TRS Data Protection and Security – Andrew Roth, Frank Williams, Kristi Glasgall and Heather Traeger.


15. Discuss Internal Audit’s upcoming External Quality Assurance Review – Katie Linczer.

16. Receive CIO Update including Fleet Strategy; Talent Management; Accomplishments; Notices; Awards; Key Dates and Upcoming Events; and Market Update – Jase Auby.

17. Receive Emerging Manager Annual Update - Kirk Sims.


20. Receive the annual update on ESG – Lauren Gellhaus, Meredith Jones and Steve Voss, AON.

21. Receive an update and consider an amendment to the proxy voting services contract with ISS related to the use of certain proxy voting benchmarks – Ryan Leary.

22. 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.

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, Deputy Executive Director, Chief Auditor 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;

F. Texas Government Code, Section 825.115(e): Regarding a Procurement; or

G. Texas Government Code, Section 825.3011: Certain Consultations Concerning Investments.
Minutes of the Board of Trustees

December 7, 2021

The Board of Trustees of the Teacher Retirement System of Texas met on Thursday, December 7, 2021, 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:
Nanette Sissney, Acting- Chair
Michael Ball
David Corpus
John Elliott
James Nance
Robert H. Walls, Jr.

The following Board member attended virtually:
Jarvis V. Hollingsworth, Chair

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
Janet Bray, TRS
Martin Cano, TRS
Lori LaBrie, TRS
Katherine Farrell, TRS
Bernie Bozzelli, TRS
Billy Lowe, TRS
Jennifer Whitman, TRS
Adam Fambrough, TRS

Keith Robinson, Focus Consulting
Keith Brown, Investment Advisor
Jonathan Scofield, EY
Richard Holt, EY
Steve Voss, AON
Michael McCormick, AON

Others attending virtually:
Luke Bierman, Cohen Millstein

Mr. Hollingsworth provided a welcome and explained he was attending the meeting virtually due to unavoidable circumstances. He noted due to his physical absence, Ms. Sissney had graciously agreed to preside over the meeting as the acting Board Chair.

Ms. Sissney called the meeting to order at 8:02 a.m.
1. **Call roll of Board members.**

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

2. **Consider the following administrative matters:**
   
   a. **Approval of the September 2021 proposed meeting minutes; and**

   On a motion by Mr. Corpus, seconded by Mr. Elliott, the Board unanimously voted to approve the September 2021 proposed meeting minutes as presented.

   b. **Consider excusing Trustee’s absences from the September 2021 meeting.**

   On a motion by Mr. Nance, seconded by Mr. Walls, the Board unanimously voted to excuse Mr. Moss’ absence from the September 16, 2021 board meeting.

3. **Resolution recognizing the service of Bernie Bozzelli – Jarvis V. Hollingsworth.**

Ms. Sissney invited Bernie Bozzelli forward as she read the following resolution into the record:

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Resolution

Whereas, Bernie Bozzelli joined the Teacher Retirement System of Texas (TRS) in May 1995 as an internal auditor and permanently joined the trading group in 1997. He became the Investment Management Division’s (IMD) Head of Trading in 2010; and

Whereas, during Bernie’s 24 years in the trading group he participated in over a trillion dollars of trades across the stock, derivative and foreign exchange markets; and

Whereas, during his time as leader he modernized the trading team by implementing the latest technology, driving best practices, and using data to constantly improve the quality of execution. His care for his team was always on display both in his fishbowl office at 816 Congress or in his closet at 1000 Red River; and

Whereas, Bernie served over a decade on the IMD’s Management Committee including as its chairman and regularly shared his bullish market outlook while training the committee on the importance of a reverse head and shoulders formation; and

Whereas, he also served as an Internal Investment Committee member since 2013 and read every page of the 427 investment recommendations before the committee during his tenure. He evaluated and rendered his vote on $113 billion of capital investment; and

Whereas, when Bernie became Head of Trading, the Dow was at 10,428, and as of today, it is just under 36,000; The stock market produced a 360% return due to Bernie’s leadership; and

Whereas, he was an expert real estate investor as evidenced by his prescient investments in single family housing; and

Whereas, Bernie’s love of the mission was only rivaled by his love of Longhorn football and landing a five-pound bass. He could always be found with a fishing pole on hand whenever he was close to a body of water. Luckily, in the next stage of his life, there will be ample time to fish the lakes of South Carolina; and
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**Whereas,** when Bernie embarks on the next exciting chapter of his life, he should indeed reflect with pride on his accomplishments. He was always diligent, fair, and true to his view of the best interest of the teachers of Texas;

**Now, therefore, be it resolved,** that the board of trustees and staff of the Teacher Retirement System of Texas recognize the accomplishments and contributions of Bernie Bozzelli at TRS during his highly successful career with the retirement system and express their sincere appreciation on behalf of TRS members both present and future,

**And be it further resolved,** that a copy of this resolution be presented to Bernie Bozzelli and entered into the record of the board for Dec. 7, 2021.

On a motion by Mr. Moss, seconded by Mr. Elliott, the board unanimously approved the proposed resolution.

Mr. Bozzelli expressed his appreciation and stated he was the lucky one for he was able to work his entire career at an organization like TRS with an awesome and righteous mission, to serve the teachers of Texas.

4. **Chief Operations and Administration Officer (COAO) update including update on the El Paso Regional Office – Andrew Roth.**

Mr. Andrew Roth provided an update on the Regional Office in El Paso. Ms. Barbie Pearson introduced Tony Pena, the new Director of the Regional Office. Mr. Roth reported the El Paso Office was on track and on schedule to begin serving members in the spring of 2022.

Mr. Roth then discussed talent management. He said across the enterprise there was a higher rate of turnover, and an increased rejection of employment offers. He reported that the additional resources provided by the Trustees were continuing to be hired and trained as allowed by the constraints of the FTE cap. He noted Pension Benefits leadership is reviewing the possibility of hiring contact center employees statewide as that team has successfully worked remotely since the start of the pandemic.

5. **Receive TRS Quarterly Complaint Report – Lori LaBrie.**

Ms. Lori LaBrie introduced herself providing her background, referenced the training she’s received at TRS and how she looks forward to listening and learning more about the members.

Ms. Katherine Farrell provided a summary of the activity of the third calendar quarter which included traffic through the Ombuds office and agency wide communications.

6. **Review and consider procurements and contracts, including the following – Martin Cano:**
   
   A. **Receive Procurement and Contracts Update;**
   
   B. **Consider Procurement and Contracting Report.**

Mr. Martin Cano presented a status update noting training continues for the Procurement and Vendor e-Systems (PAVES). He reported that fifty-one TRS employees took the State Contract Management training and thirty-three became certified contract managers. He said the Comptroller of Public Accounts completed their contracts audit with TRS receiving a compliant rating.
Mr. Cano reviewed the Contract Procurement report.

On a motion by Mr. Nance, seconded by Mr. Ball, the Board unanimously voted to accept the Procurement and Contracting report as presented by staff.

7. **Receive an update on the TEAM Program – Brian Guthrie, Billy Lowe, Jennifer Whitman and Adam Fambrough.**

Ms. Jennifer Whitman provided an overview on the TEAM Program dashboard regarding schedule, scope and budget. She highlighted two successful releases for calendar year 2021, the health insurance line of business (HILOB) system release in April and the pension line of business payment address release in October. She noted for calendar year 2021 the program is under projected expenditures, the delta comprised of lapsed salary costs.

Mr. Billy Lowe provided a review of the recent release in October, the pension line of business payment address functionality. He reported the go live defect score was 54 which was significantly below the threshold 225 defect score.

Mr. Adam Fambrough reviewed the value derived from the release and noted the teams worked very collaboratively. He noted this payment address release was a foundational release which will be built upon for future releases.

8. **Receive an update from the TEAM Program Independent Program Assessment (IPA) Vendor – Jonathan Scofield and Richard Holt, EY.**

Mr. Jonathan Scofield provided an overview of the cube methodology, the grading scale EY uses to evaluate projects, and shared next steps. He reported the evaluation of a 5.44, a rating increase since the last report. He said the increase is due to a mixture of improved program governance, product management and technical solutions. He said the team has moved from a quarterly look at risk to monthly noting this will make a big difference. He also noted improvements to planning methodology as well. He stated current risks are legislative session delays, multiple sources of program data, and how manual processes can decrease the efficiency of the team.

At 9:28 a.m., Ms. Sissney announced the board would recess to take up the scheduled committee meetings and then will reconvene the Board to take up the executive evaluations.

At 3:09 p.m., Ms. Sissney announced the Board meeting as reconvened and agenda items 9 and 10 would be taken up together.

9. **Receive a presentation on the evaluation process of the Executive Director, Chief Audit Executive and Chief Investment Officer – Janet Bray and Keith Robinson.**

10. **Consider personnel matters, including the appointment, employment, evaluation, compensation, performance, duties, discipline, or dismissal of the Executive Director, Chief Audit Executive and Chief Investment Officer, or Ombudsman:**
A. Discuss and consider the evaluation, compensation, and duties of the Executive Director, including exceeding the salary limits listed in the schedule of exempt positions in the General Appropriations Act of the 2022 and 2023 Biennium;
B. Discuss and consider the evaluation, compensation, and duties of the Chief Investment Officer, including exceeding the salary limits listed in the schedule of exempt positions in the General Appropriations Act of the 2022 and 2023 Biennium;
C. Discuss and consider the compensation and duties of the Chief Audit Executive.

Ms. Janet Bray introduced Mr. Keith Robinson and announced next annual evaluation process would add a fourth person, the new ombudsman. Mr. Keith Robinson reviewed the steps taken for the evaluations which began in August. He said an online competency rating as well as a performance rating with all of the Trustees and variety of direct reports, peers and others within the agency. He reported once the data is collected reports are reviewed with each executive going through the findings and discuss a bit about historically how they have improved over the past few years.

At 3:14 p.m., Ms. Sissney announced the board would recess for agenda items 10A – C under Sections 551.071 and 551.074 of the Government Code to discuss personnel matters and consult with legal counsel, as needed.

At 6:02 p.m., Ms. Sissney reconvened the Board meeting.

At 6:03 p.m., she noted there was no more scheduled business before the Board and announced the board would recess until tomorrow morning.
December 8, 2021

The Board of Trustees of the Teacher Retirement System of Texas met on December 8, 2021 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:

Nanette Sissney, Acting- Chair
Michael Ball
David Corpus
John Elliott
James Nance
Robert H. Walls, Jr.

The following Board member attended virtually:
Jarvis V. Hollingsworth, Chair

Others present:

Brian Guthrie, TRS
Andrew Roth, TRS
Don Green, TRS
Heather Traeger, TRS
Jase Auby, TRS
Barbie Pearson, TRS
Katrina Daniel, TRS
Amanda Jenami, TRS
Caasi Lamb, TRS
Martin Cano, TRS
Katherine Farrell, TRS
Carolyn Perez, TRS
Michelle Barnett, TRS
Addison Reagan, TRS

Keith Brown, Investment Advisor
Joe Newton, GRS
Dan Sibilik, GRS
Steve Voss, AON
Jordan Ash, Private Equity Stakeholder Project
Craig Campbell, Austin Retired Teacher
Association
Leroy DeHaven, TRTA President
Beatriz Rodriguez, Refresco employee

Others attending virtually:
Luke Bierman, Cohen Millstein

At 9:30 am the Acting-Chair reconvened the board meeting and without objection called up Agenda Item 11.

11. Provide an opportunity for public comment.

Mr. Jordan Ash, representing Private Equity Stakeholder Project, continued to express concern regarding TRS’ investment partner PAI Partners, a private equity firm that is a co-owner of Refresco.
Dr. Craig Campbell, Austin Retired Teachers Association, was unable to attend but left written comments on cost of living adjustments and the ombudsman’s role.

Mr. Leroy DeHaven, president of Texas Retired Teacher Association (TRTA), expressed appreciation to the Governor and Texas Legislature for the supplemental payment. He expressed concern about the impact inflation is having on TRS retirees’ income and support a review on the economic benefit if the Legislature were to authorize a pension increase for members.

Ms. Beatriz Rodriguez, Refresco employee, through an interpreter expressed concern about TRS’ investment in Refresco and its unsafe working conditions.

Ms. Sissney announced taking up agenda items 12 and 13 together.

12. Receive the TRS Pension Trust Fund Actuarial Valuation for the fiscal year ending August 31, 2021 – Joe Newton and Dan Siblik, GRS.

13. Receive the TRS-Care Actuarial Valuation and Other Post-Employment Benefits (OPEB) reports for the fiscal year ending August 31, 2021 – Katrina Daniel.

Mr. Joe Newton presented the valuation update for this year, as of August 31, 2021. He said the report takes in the financial data, demographic data and the current benefit provisions and contribution provisions to determine the health of the fund. He reported the unfunded liability came in at $47.6 billion. He stated this was very significant for the unfunded liability was not predicted to come down until 2028 to 2030 time frame. He reported the funding ratio was close to 79.1 percent and the funding period went down to 23 years, a three year acceleration on that metric.

Mr. Dan Siblik stated the market value return on the assets, which was 25 percent for the plan year, far exceeded the assumed 7.25 percent. He noted this was equivalent to three years of contributions. Mr. Newton explained the smoothing of the returns and how the 23-year funding period contains a cushion of $20 billion deferred gains. He said the cushion could be used in various ways such as lowering the assumed rate of return to 6.6 percent and still be full funded over the 23-year period. He also noted keeping the rate at 7.25 percent is not an inconsistent position. Mr. Newton then reviewed the mortality rate. He noted the consistent results for 2016 through 2019 and a surge in the summer of 2020. He stated the mortality rate increased to 20 to 25 percent for the retiree group.

Mr. Newton then reviewed the retired TRS-Care and OPEB value. He reported the net OPEB liability was $38.6 billion. He noted that in 2016 it was $76 billion and after the changes to TRS-Care occurred it has steadily declined since. For the discount rate he said they use a municipal bond yield which was down from 298 to 195.

14. Receive an overview of the upcoming TRS of Texas Experience Study, including the purpose of the study and a presentation on Capital Market Assumptions – Caasi Lamb and Joe Newton, GRS.

Ms. Caasi Lamb provided background information regarding the experience study. She noted the study was statutorily required at least every five years but TRS performs it every four years. She
described the process of the actuary gathering the data, performing the analysis and making a set of recommendations for the Board to adopt a set of assumptions. She said the new assumptions will need to be adopted prior to the FY 22 valuation.

Mr. Newton provided further review of the process. He noted the investment return assumption is the one the Board has more flexibility in control and actual decision making. He said the valuation process previously discussed is based on a lot of assumptions about the future and new information and changing patterns have developed since the last experience study, referencing the Great Resignation as an example. Mr. Newton then discussed national trends and said there was a dramatic decline in investment expectations.

Mr. Steve Voss provided an update regarding the capital market assumptions for ten- and 30-year assumptions built upon income, growth and inflation. He stated for the ten year, there was a 6.9 percent return and for 30 year a 7.2 percent return. Mr. Newton then discussed the options in utilizing the deferred gains of $20 billion to hedge long term and lower the assumption rate or keeping it the same and have the hedge for the short term. He said that was just one of many issues to be reviewed and he was not ready to make a recommendation at this time.

Mr. Voss continued by stating the inflation assumption over a 30-year period was at 2.2 percent. He said this was a forward-looking number and actual inflation over the last 12 months was slightly above six percent. He said it would moderate up and down but trend lower on a go-forward basis than what it has been in the last twelve months.

Mr. Guthrie concluded by stating the question of mitigating short term risk or long-term risk is one that can not be done in a vacuum. He noted stakeholders are very mindful and very concerned about future benefit enhancements. He said as fiduciaries they have to look at the long-term sustainability of the fund.

15. Receive the report of the Benefits Committee on its December 7, 2021 meeting and consider the following – Committee Chair:

A. Acceptance of the Medical Board Meeting minutes of the July and September 2021 meetings; and  
B. Approval of the Benefit Payments for September 2021 to November 2021.

Mr. Ball, Committee Chair, provided the following report of the Benefits Committee:

The Benefits Committee met on December 7, 2021. The committee approved the proposed minutes of the Benefits Committee for the September 16, 2021 meeting.

The Committee received an update on the Medical Board. The committee recommends to the Board the acceptance of the Medical Board meeting minutes for July and September 2021.

The Committee also received an update on benefit payments for September through November 2021. The committee recommends to the Board the approval of benefit payments for September through November 2021.
The Committee received an update on Benefit Services operations for the first two months of the first quarter of fiscal year 2022. This report included an update on Benefit Services workload, including a discussion on the impact of the new positions approved for the back office processing and the incremental improvements in the response times as training and hiring continues for Benefit Services.

The Committee received an update from the Retirees Advisory Committee Chair on the most recent Retirement Advisory Committee meeting which occurred on October 18, 2021. The Committee received a general update on health plan administration and operations.

And finally, the Committee received an update on the claim audit reports for the self-insured TRS medical plans for the TRS-Care and TRS-ActiveCare.

Mr. Ball concluded the report with the following motions:

On a motion by Mr. Ball, the Board unanimously voted to accept the Medical Board’s meeting minutes for July and September 2021 meetings, as recommended by the Benefits Committee.

On a motion by Mr. Ball, the Board unanimously voted to approve the benefit payments for September through November 2021, as recommended by the committee.

16. Receive the report of the Budget Committee on its December 7, 2021 meeting – Committee Chair:

Ms. Sissney, Committee Chair, provided the following report of the Budget Committee:

The Budget Committee met Tuesday, December 7th. The first item of business was approval of the minutes of the July 15, 2021 Budget Committee meeting.

Mrs. Duarte introduced the Annual Comprehensive Financial Report (ACFR) for fiscal year 2021 and provided an explanation on the name change and provided an update on membership data. Mrs. Duarte then passed on the presentation to Ms. Zigmond who provided a high-level overview of the 2021 ACFR which showed a net position for the Pension Trust Fund of $201.8 billion including $48.7 billion in additions and $12.3 in deductions. Overviews of the TRS-Care and TRS-ActiveCare funds were also presented. Mr. Chan concluded the presentation with an overview of the investment asset allocation and provided an update to reporting changes per Legislative mandates.

Mr. Green presented a high-level overview of the FY 2021 year-end budget. He explained the agency efforts in responding to legislative directives to identify cost savings in managing the economic ramifications of COVID-19. Mr. Green then provided an update on the FY 2022 budget and considerations for potential funding concerns. Mr. Green also provided an update on the FY 2022 FTEs.
17. Receive the report of the Policy Committee on its December 7, 2021 meeting and consider adoption of the following – Committee Chair:

   A. Proposed adoption of the Inactive Account Policy;
   
   B. Proposed amendments to the Trustee Ethics Policy, Employee Ethics Policy, Conflict of Interest Disclosure Statement, Disciplinary Action Disclosure statement, and Ethics Compliance Statement for Employees and Certain Contractors;
   
   C. Proposed adoption of new TRS rule 41.13, relating to One-Time Reenrollment Opportunity, in Subchapters A of Chapter 41 of Title 34, Part 3 of the Texas Administrative Code.

Mr. Elliott, Committee Chair, provided the following report of the Policy Committee:

The Policy Committee met on December 7, 2021.

The committee approved the proposed minutes of its September 2021 meeting.

The committee recommended to the Board adoption of the proposed Inactive Accounts Policy.

The committee recommended to the Board adoption of the proposed amendments to Trustee Ethics Policy, Employee Ethics Policy, Conflict of Interest Disclosure Statement, Disciplinary Action Disclosure Statement, and Ethics Compliance Statement for Employees and Certain Contractors.

The committee recommended to the Board adoption of proposed new TRS rule 41.13, relating to One-Time Reenrollment Opportunity, in Subchapter A of Chapter 41 of Title 34, Part 3 of the Texas Administrative Code.

The committee authorized for publication in the Texas Register notice of the proposed amendments to TRS Rule 25.21, relating to Compensation Subject to Deposit and Credit, in Subchapter B of Chapter 25 in Title 34, Part 3 of the Texas Administrative Code.

Mr. Elliott concluded his report with the following motions:

On a motion by Mr. Elliott, the Board voted to adopt the proposed Inactive Accounts Policy, as recommended by the Policy Committee.

On a motion by Mr. Elliott, the Board voted to adopt the proposed amendments to Trustee Ethics Policy, Employee Ethics Policy, Conflict of Interest Disclosure Statement, Disciplinary Action Disclosure Statement, and Ethics Compliance Statement for employees and certain contractors, as recommended by the Policy Committee.
On a motion by Mr. Elliott, the Board voted to adopt the proposed new TRS rule 41.13, relating to a One-Time Reenrollment Opportunity, in Subchapter A of Chapter 41 of Title 34, Part 3 of the Texas Administrative Code, as recommended by the Policy Committee.

18. **Receive the report of the Investment Management Committee on its December 7, 2021 meeting – Committee Chair.**

Mr. Corpus, Committee Chair, provided the following report of the Investment Management Committee:

The Investment Management Committee met on December 7, 2021. Jase Auby began with his CIO Update. The Third Quarter 2021 Performance Review was then presented by Steve Voss and Mike McCormick of Aon.

Next an Annual Update of Absolute Return was presented by Ashley Baum, followed by the Annual Update of Risk and Portfolio Management presented by James Nield and Mark Telschow.

Concluding the Investment Management Committee, Bernie Bozzelli and Jamie Llano presented the Annual Update of the Trading Group.

19. **Receive the report of the Audit, Compliance, and Ethics Committee on its December 7, 2021 meeting and consider adoption of proposed Audit Plan for Fiscal Year 2022 – Committee Chair.**

Ms. Sissney, Acting-Committee Chair, provided the following report of the Audit, Compliance and Ethics Committee:

The Audit, Compliance and Ethics Committee met on Tuesday, December 7, 2021. The Committee approved the minutes of the September 16, 2021, Audit Compliance and Ethics Committee meeting.

Crowe, LLP, Auditors presented the results of the financial audit of the TRS investment Company of Texas, TRICOT, for the fiscal year 2021. The General Counsel and Chief Compliance Officer presented routine compliance reports.

Internal Audit staff presented the results of audits on the Special Opportunities Portfolio operations, information security training and awareness program, and the Internal Audit quality assurance and improvement program. Internal Audit staff also presented the Internal Audit annual report for fiscal year 2021, the status of prior audit recommendations and various administrative reports.

20. **Receive the report of the Strategic Planning Committee on its December 8, 2021 meeting – Committee Chair.**

Mr. Walls, Committee Chair, provided the following report of the Strategic Planning Committee:

The Strategic Planning Committee met on December 8, 2021.
Ms. Caasi Lamb and representatives from the Public Policy Research Institute and Elite Research provided survey results from the Reporting Employer Satisfaction Survey and Member Satisfaction Survey.

Ms. Lamb, along with strategic plan objective owners, discussed and reviewed the results forum information for the 2021-2025 TRS Strategic Plan objectives. The objectives included: attract, retain, and develop a diverse and highly competent staff; identify appropriate solutions for TRS facilities and space requirements; and improve strategic communications. Ms. Lamb also provided an overview of the Enterprise Stoplight Report.


Ms. Addison Reagan discussed the member and legislative outreach for the “Moving Forward Together” stakeholder communications. She reported presenting around the State at the 20 TRTA District Conferences, 60 legislative offices and all active and retiree organizations. She noted questions focused on the decision to move impacting the potential for a cost-of-living adjustment in the future. She said to address these concerns the analysis conducted by TRS’ third-party actuary was shared that there would be no negative impact to the actuarial health of the fund as a result of the move.

Ms. Carolyn Perez provided an update on external communications since the vote to move forward with the new headquarters. She noted the long-term facilities project has been rebranded as Moving Forward Together. She reported two high profile media mentions since the vote and over 50 comments on social media. She said the plan is to publish articles in all of TRS’ publications as significant milestones are hit such as moving divisions over to Alpha and when Bravo is nearing completion. She added in an effort to forge and cultivate a relationship with the Mueller community by giving an informational presentation on TRS to the Mueller Commission.

Ms. Michelle Barnett provided an overview of internal communications. She said this was a big change for the employees so they want to make sure they are both well-informed and appropriately engaged. She said an Agency-wide town hall meeting was held to provide information to employees about the Board decision as well as an update on progress. She reported an internal page, OCM Connect Intranet page, that will serve as the source of information throughout the project. She said a post move survey is planned to identify any obstacles or hurdles that were not anticipated and address them.

22. 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 and personnel matters.
   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.

Mr. Brian Guthrie reviewed upcoming and past conferences and meetings. He provided an update on a monumental effort that took place last month, moving TRS computing services from Red River headquarters to a very secure data center facility. He said this move was both safer and more cost effective to have all TRS computing power moved to this location. By utilizing this space off-site it saves over 2,000 square feet of office space that would be at a significant expense to rebuild at the Mueller location. Mr. Guthrie concluded by reviewing items for February and April Board meetings.

23. Receive an update and consider long term facilities planning including the disposition of the Red River campus, status updates on the TRS headquarters project, leasing of Alpha office space and leases at 816 Congress 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 negotiations with a third person– Brian Guthrie, Andrew Roth, Martin Cano.

Mr. Guthrie provided an overview as to how things have progressed since the September meeting where the purchase of the two buildings in Mueller were approved. He reported the purchase and sales agreement (PSA) was signed. As part of signing the PSA, escrow amounts were submitted for approximately $38 million. He said the top three floors of Alpha will be occupied by Health Insurance Benefits and Investment Management divisions, the other floors are planning to lease. He reported the design work for the Bravo building has started. He said at the end of the presentation they would be seeking to have the authority delegated to him to sign the potential leases. Ms. Traeger noted this was required because the Board procurement policy states any lease that exceeds three years in duration needs to go through the Board.

Mr. Andrew Roth reported that after closing, the developer will commit to a Guaranteed Maximum Price. He reiterated when the next payments for Alpha and Bravo would be due. He said Red River is anticipated to go on the market in January with CBRE engaged as the broker. Mr. Roth concluded by reporting that the Umlauf sculpture currently out front of Red River will move to the new building as a symbol of continuity.

On a motion by Mr. Moss, seconded by Mr. Corpus, the Board unanimously voted to approve the following resolution delegating authority to the Executive Director to sign tenant leases in the Alpha Building:

Resolution of the Board of Trustees
Authorizing Actions Relating to Leasing Certain Commercial Office Space in the Alpha Building of the New TRS Headquarters Campus

WHEREAS, Texas Government Code §821.007 provides that the buildings comprising the home office (referred to here as “administrative headquarters”) of the Teacher Retirement System (“TRS”) are under the control and custodianship of the retirement system;
WHEREAS, a Request for Proposal ("RFP") was issued in 2019 to interested entities to solicit design and build proposals to develop a potential new administrative headquarters for TRS;

WHEREAS, TRS received and evaluated the RFP proposals for a new TRS administrative headquarters;

WHEREAS, at the September 2020 Board meeting, the Board by resolution authorized and instructed the Executive Director, or his delegee, to expend funds and to take all actions and do all things necessary or desirable to negotiate on the same or better financial terms as presented to the Board and on such other terms and conditions deemed by the Executive Director to be in the best interest of TRS for a final, proposed contract for the purchase of real property and for the design and build of a new administrative headquarters for TRS with the finalists;

WHEREAS, From September 2020 through August 2021, TRS conducted extensive due diligence, including conducting space planning and workplace study activities, developing a cost-benefit analysis, engaging in stakeholder outreach, conducting an employee perspectives survey and negotiating and executing a non-binding term sheet with the top developer finalist;

WHEREAS, At the September 2021 Board meeting, the staff recommendation for the new TRS headquarters included the purchase of two buildings in the Mueller Business District, known as the “Alpha” and “Bravo” buildings. The plan presented included the leasing of certain office space in the Alpha building to other tenants;

WHEREAS, In September 2021, the Board authorized and instructed the Executive Director or his delegee, with the assistance of TRS employees and TRS’s broker and owner’s representative, to expend funds and to take all actions and do all things necessary or desirable to continue negotiations on the same or better financial terms presented to the Board and on such other terms and conditions deemed by the Executive Director to be in the best interest of TRS to finalize contracts for new administrative headquarters for TRS, including the purchase of the project known as the “Alpha” building and for the purchase of a design-and-build project known as the “Bravo” building;

WHEREAS, In September 2021, the Board authorized and instructed the Executive Director or his delegee, with the assistance of TRS employees and TRS’s broker and owner’s representative, to expend funds, procure all necessary goods or services, and to take all actions and do all things necessary or desirable to negotiate and sign all agreements related to the purchase and sale of Alpha and Bravo, including all ancillary agreements;

WHEREAS, TRS entered into a Membership Interest Purchase Agreement for the purchase of the Alpha building on November 10, 2021;

WHEREAS, TRS intends to occupy three floors of the Alpha building and lease out the other two floors to commercial office tenants;
WHEREAS, TRS is working with a commercial broker to market the available office space and, after closing and until all of the available space is leased, TRS will begin negotiating and entering into a lease agreements with prospective tenants;

Now, therefore be it

RESOLVED, That the Board of Trustees finds it is in the best value for TRS to lease space in the Alpha Building which will not be wholly occupied by TRS; and

RESOLVED, That the Executive Director be and hereby is delegated authority and directed to take any necessary actions to negotiate and execute one or more commercial office space leases for portions of the Alpha building that are not wholly occupied by TRS on such terms and conditions and for such period as the Executive Director in his discretion deems to be advisable and in the best interest of TRS and to use commercially reasonable efforts to negotiate the terms of such lease(s) with one or more qualified tenants; and

RESOLVED, That the Executive Director is authorized to (a) contract and pay for brokerage services and commissions for leases, (b) consider, negotiate, and agree to lease terms that the Executive Director deems reasonable and in the best interest of TRS, and (c) expend such budgeted and available TRS funds and enter any agreements and related documents as the Executive Director deems in his discretion to be reasonably necessary and advisable to achieve the objectives of these resolutions; and

RESOLVED, That the Executive Director is directed to report to and update the Board at its regular meetings, as requested, on the actions taken and activities performed under these resolutions; and

RESOLVED, That nothing in these resolutions may be construed as a contract, an offer to contract with a power of acceptance that would form a contract, or an acceptance of an offer to contract and the retirement system is not and will not be legally bound to any agreement unless and until the Executive Director has executed and delivered definitive agreements relating to the subject matter, as applicable.

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 retulatory matters involving certain TRS vendors, investment manaters, or other counterparties – Heather Traeger.

At 11:48 a.m., Ms. Sissney announced the Board will go into Executive Session for agenda item 24 under Section 551.071 of the Government Code, to consult with legal counsel.

At 12:04 p.m., Ms Sissney reconvened the Board meeting and with no more scheduled business before the Board adjourned the meeting.

ATTESTED BY:

__________________________________________   _________________________
Katherine H. Farrell     Date
Secretary to the TRS Board of Trustees
TAB 4
Executive Director’s Report

Brian Guthrie
February 17, 2022
General Updates
Moving Forward Together Update
El Paso Regional Office Update
TRS Workforce Demographics
Enterprise Stoplight Report
Special Honors and Acknowledgments
Future Meeting Agendas
Upcoming Conferences and Meetings:

- March 7 – 9, 2022: Council of Institutional Investors Spring Conference, Washington, D.C.
- March 30, 2022: TRS Public SPN Summit, Austin, TX

Past Meetings and Updates:

- January 19, 2022: TRS/ERS Emerging Manager Conference, Virtual
Moving Forward Together Update

HO Project

Red River Disposition

Disposition Timeline:
• CBRE selected as broker for disposition
• Release Offering Memorandum (OM) by mid-February 2022
• Initial offers due in April
• Interview Finalists late spring / early summer
• Finalists brought to Board in July or September
• Transaction complete late 2022 / early 2023

Alpha Building:
• Working through core and shell construction
• Moving through design activities; build-out scheduled to begin Summer 2022
• Finalizing contracts for a leasing broker and property manager

Bravo Building:
• Earth-moving work has begun
• Lease signed February 2022
• Training
  • Regional Office Director
  • Six Counselors
• Opening summer 2022
### TRS Workforce Demographics

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Gender</th>
<th>Average Age (Years)</th>
<th>Average TRS Tenure (Years)</th>
<th>FY 2021 Turnover Rate</th>
<th>Employees Eligible to Retire*</th>
</tr>
</thead>
<tbody>
<tr>
<td>White (53%)</td>
<td>56% Female</td>
<td>44.0</td>
<td>6.7</td>
<td>14.6%</td>
<td>14.6%</td>
</tr>
<tr>
<td>Hispanic (24%)</td>
<td>44% Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black (13%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian/American Indian (10%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Based on rule of 80
TRS Workforce Demographics

Retirement Eligibility Trends

*Estimates are based on active employees as of 01/31/2022. Estimates for FY 2022, 2024, and FY 2027 are made using the rule of 80
## Retirement Eligibility Projections*

<table>
<thead>
<tr>
<th>Division</th>
<th>Eligible Employees</th>
<th>January 2022</th>
<th>January 2024</th>
<th>January 2027</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent Eligible</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Executive Division</strong></td>
<td>23</td>
<td>2.6%</td>
<td>31</td>
<td>3.5%</td>
</tr>
<tr>
<td><strong>Investment Management</strong></td>
<td>4</td>
<td>0.5%</td>
<td>6</td>
<td>0.7%</td>
</tr>
<tr>
<td><strong>Benefit Services</strong></td>
<td>17</td>
<td>1.9%</td>
<td>24</td>
<td>2.7%</td>
</tr>
<tr>
<td><strong>Finance</strong></td>
<td>9</td>
<td>1.0%</td>
<td>11</td>
<td>1.3%</td>
</tr>
<tr>
<td><strong>Information Technology</strong></td>
<td>25</td>
<td>2.9%</td>
<td>30</td>
<td>3.4%</td>
</tr>
<tr>
<td><strong>Health and Insurance Benefits</strong></td>
<td>0</td>
<td>%</td>
<td>2</td>
<td>0.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>78</td>
<td>8.9%</td>
<td>104</td>
<td>11.9%</td>
</tr>
</tbody>
</table>

| **Executive Council Members**          | 6                  | 42.9%        | 8            | 57.1%        | 8            | 57.1%        |

Notes:
*Estimates are based on the rule of 80 using active employees as of 01/31/2022 and includes return-to-work retirees.

**Executive Division includes Legal & Compliance, Internal Audit, Business Administration, Information Security, Communications, Government Relations, Organizational Excellence, and Strategic Initiatives.
• OE launched a Power BI dashboard in 2021 to provide Chief Officers and Executives with workforce data, data is updated quarterly

• Sections include drill downs for division and department data in addition to historical trends

• Dashboard has three sections:
  • Talent Overview: Includes current headcount for employees and contractors as well as select demographics
  • Talent Pipeline: Includes data on applicant submissions, time to offer and new employee surveys
  • Turnover and Retirement Eligibility: Includes current and historical trends for separations and retirements
Enterprise Stoplight Report

RISK CATEGORY LEVEL - Threat to Achieving TRS Goals & Objectives

EXPECTED RISK CATEGORY TREND - NEXT 12-24 MONTHS

HIGH  ELEVATED  CAUTION  GUARDED  LOW
INCREASE  DECREASE  NO CHANGE
Barbie Pearson, Board of Directors President

Brian Guthrie, Executive Masters Program Advisory Council
TRS is a Top Workplaces USA Winner

• Recognition comes entirely from employee feedback in a survey of 15 culture drivers

• Drivers measure employees’ opinions of agency values, employee/manager communication, and ability to innovate and operate efficiently

• In addition to this win, in November TRS was recognized as an Austin Top Workplace for the 10th time
Upcoming Board Agenda

April 28 - 29, 2022

April 28, 2022

Committees

**Strategy and Planning Committee**
- Results Forum Report Out
- Adopt 2023-27 Strategic Plan

Benefits Committee
- ActiveCare & Care plan design & rates
- Operational Updates
- Approval of Benefits

Budget Committee
- FY2022 mid year and FTE Report

Policy Committee
- Authorization to Approve & Sign Vouchers
- Begin Rule Review

Investment Management Committee
- CIO Update
- 4th Quarter Performance Review
- Annual Rvw of Public Mkts
- Semi-annual Risk Report

ACE Committee
- Internal Audit and Compliance Reports

April 29, 2022

Board
Committee Reports
ED Report
Ombuds Report
TEAM Update
Procurement Report
Custodial Bank Selection
COAO Report
Experience Study
Moving Forward Together Update
Data Protection and Security
IA Training
Upcoming Board Agenda

July 14 – 15, 2022

July 14, 2022

Committees

Strategic Planning Committee
• Results Forum Report Out

Benefits Committee
• Operational Updates
• Approval of Benefits

Budget Committee
• Propose Adoption of FY2023 Budget
• HUB Goals

Policy Committee
• Rule Review

Investment Management Committee
• CIO Update
• 1st Quarter Performance Review
• External Private Market Update

Audit, Compliance and Ethics Committee
• Internal Audit and Compliance reports

July 15, 2022

Board

Committee Reports
ED Report
Ombuds Report
TEAM Update
Procurement Report
Experience Study
COAO Report
Moving Forward Together Update
### Overview of February Meeting

**February 17, 2022**

- Customer Service Improvement Plan
- TRS-Care one-time payment
- Proxy Voting
- TRS Classification System
- Trustee Fiduciary Training
- TRS Succession Planning (Executive Session)
TAB 5
Agenda

• Background & Process
• Strategic Fit & Alignment
• Proposed Changes
• Year Ahead
• Appendix A: TRS 2023-27 Draft Strategic Plan
• Appendix B: TRS Strategy Cycle
Background & Process

Develop a new plan every even-numbered year

Submit plan to LBB and Governor’s Office every even-numbered year

Present results forum report to Strategic Planning Committee of the Board quarterly

Align Executive Director’s Areas of Focus with the Strategic Plan
Background & Process

Current Strategic Plan

**4 Goals**

**17 Objectives**

**42 Strategies**

01. Sustain a financially sound pension system.

02. Continuously improve our benefit delivery.

03. Facilitate access to competitive, reliable health care benefits for our members.

04. Ensure that people, processes, and technology align to achieve excellence in the delivery of services to members.
### Opportunities
1. Regional offices
2. Enterprise data management
3. Value proposition for increased staffing
4. Cyber security
5. Educate stakeholders
6. Hybrid work
7. OneTRS
8. Healthcare plans of choice
9. Attract and retain employers in TRS-ActiveCare
10. Compensation philosophy

### Customer Needs
1. Improved service levels
2. TRUST Phase II and user experience release
3. Staffing to meet member and employer needs
4. Secure member self-service
5. Ease of access to TRS (Regional offices)
6. Comprehensive health care coverage that delivers on value

### Threats
1. Failure to meet rate of return
2. Failure to meet service levels
3. Recruit, retain and develop talent
4. Multi-state payroll complexities
5. Cyber security
6. New headquarters
7. Culture and engagement
8. Third-party risk management
9. Procurement requirements

### Internal Operational Needs
1. Conversion of contractors to FTEs
2. Enterprise data management
3. Process efficiencies
4. Staffing in shared services to support core line of business activities
5. Recruit, retain and develop talent
6. Hybrid work
7. Procurement processes
8. Budgeting to meet member and employer needs

---

How well does the Strategic Plan address the top opportunities, threats, customer needs, and internal operational needs?
Proposed Changes

Deletion of completed items

Revision of existing text

Addition of new initiatives

Progression of existing initiatives
<table>
<thead>
<tr>
<th>Current Objectives and Strategies</th>
<th>2023-27 Strategic Plan Proposed Amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 1:</strong> Improve communication regarding pension funding needs.</td>
<td>No proposed changes.</td>
</tr>
<tr>
<td><strong>Strategy 1:</strong> Serve as a trusted resource and engage with policymakers on pension funding.</td>
<td></td>
</tr>
<tr>
<td><strong>Objective 2:</strong> Increase identification of underpayments and collection of future contributions to TRS.</td>
<td>No proposed changes.</td>
</tr>
<tr>
<td><strong>Strategy 1:</strong> Increase testing coverage of high-risk reporting employers.</td>
<td></td>
</tr>
<tr>
<td><strong>Objective 3:</strong> Achieve the trust's actuarial assumed rate of return as measured on rolling 20-year periods.</td>
<td>No proposed changes.</td>
</tr>
<tr>
<td><strong>Strategy 1:</strong> Maintain an effective investment governance structure.</td>
<td></td>
</tr>
<tr>
<td><strong>Strategy 2:</strong> Enhance current competitive advantages and total returns.</td>
<td></td>
</tr>
<tr>
<td><strong>Strategy 3:</strong> Manage cost structures to increase net alpha generated.</td>
<td></td>
</tr>
<tr>
<td><strong>Objective 4:</strong> Improve communication regarding the impact of changing pension plan design.</td>
<td>No proposed changes.</td>
</tr>
<tr>
<td><strong>Strategy 1:</strong> Serve as a trusted resource and engage with policymakers on pension plan design.</td>
<td></td>
</tr>
</tbody>
</table>

**GOAL 1** Sustain a financially sound pension system.
### GOAL 2
Continuously improve our benefit delivery.

<table>
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<tr>
<th>Current Objectives and Strategies</th>
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<tbody>
<tr>
<td><strong>Objective 1:</strong> Improve the customer service experience for members and employers.</td>
<td></td>
</tr>
<tr>
<td><strong>Strategy 1:</strong> Increase capacity to serve members.</td>
<td></td>
</tr>
<tr>
<td><strong>Strategy 2:</strong> Improve response time to reporting employers.</td>
<td></td>
</tr>
<tr>
<td><strong>Strategy 3:</strong> Provide additional online functionality.</td>
<td></td>
</tr>
<tr>
<td><strong>Strategy 4:</strong> Build and define operational support for Benefit Services.</td>
<td></td>
</tr>
<tr>
<td><strong>Strategy 5:</strong> Consolidate customer service inquiries regarding health care and pension benefits into one call center (One Team One Mission).</td>
<td></td>
</tr>
<tr>
<td><strong>Objective 1:</strong> Improve the customer service experience for members and employers.</td>
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<td><strong>Strategy 5:</strong> Consolidate customer service inquiries regarding health care and pension benefits into one call center (One Team One Mission).</td>
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</tbody>
</table>

Strategy 5 would be a milestone under Strategy 1.
## Proposed Changes

### GOAL 2
Continuously improve our benefit delivery.

<table>
<thead>
<tr>
<th>Current Objectives and Strategies</th>
<th>2023-27 Strategic Plan Proposed Amendments</th>
</tr>
</thead>
</table>
| **Objective 2**: Improve timeliness and accuracy in employer-reported data.  
  **Strategy 1**: Improve and enhance the reporting employer portal.  
  **Strategy 2**: Begin using data analytics tools to review employer-reported data. | **Objective 2**: Improve timeliness and accuracy in employer-reported data.  
  **Strategy 1**: Improve and enhance the reporting employer portal.  
  **Strategy 2**: Begin using data analytics tools to review employer-reported data. |

Strategy is now operational.
## Proposed Changes

### GOAL 3
Facilitate access to competitive, reliable health care benefits for our members.

<table>
<thead>
<tr>
<th>Current Objectives and Strategies</th>
<th>2023-27 Strategic Plan Proposed Amendments</th>
</tr>
</thead>
</table>
| **Objective 1:** Improve communication efforts regarding health care funding needs.  
  **Strategy 1:** Serve as a trusted resource and engage with policymakers on health care funding. | No proposed changes. |
| **Objective 2:** Increase the value of health care benefits.  
  **Strategy 1:** Engage the best health care vendors through competitive procurement to ensure our members have the highest value health care.  
  **Strategy 2:** Re-engineer TRS-ActiveCare to better meet employer needs. | **Objective 2:** Increase the value of health care benefits.  
  **Strategy 1:** Engage the best health care vendors through competitive procurement to ensure our members have the highest value health care.  
  **Strategy 2:** Re-engineer TRS-ActiveCare to better meet employer needs.  
  **Strategy 3:** Use data analytics tools to provide assurance on health care claims compliance. |
| **Objective 3:** Improve the health of our members.  
  **Strategy 1:** Improve engagement of plan participants with an initial focus on populations with high impact conditions, such as diabetes.  
  **Strategy 2:** Optimize disease management for high-risk populations. | No proposed changes. |

New strategy provides an efficient way to verify compliance with the plan and identify overpayments.
Proposed Changes

**GOAL 4** Ensure that people, processes, and technology align to achieve excellence in the delivery of services to members.

<table>
<thead>
<tr>
<th>Current Objectives and Strategies</th>
<th>2023-27 Strategic Plan Proposed Amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 1:</strong> Attract, retain, and develop a diverse and highly competent staff.</td>
<td></td>
</tr>
<tr>
<td><strong>Strategy 1:</strong> Position TRS as a destination employer to meet the needs of our current and future workforce.</td>
<td><strong>Strategy 1:</strong> Position TRS as an employer of choice to meet the needs of our current and future workforce.</td>
</tr>
<tr>
<td><strong>Strategy 2:</strong> Promote a strong workplace culture that is inclusive and fosters creativity and innovation.</td>
<td><strong>Strategy 2:</strong> Promote a strong workplace culture that is inclusive and fosters creativity and innovation.</td>
</tr>
<tr>
<td><strong>Strategy 3:</strong> Improve diversity representation at all levels of the organization.</td>
<td><strong>Strategy 3:</strong> Improve diversity representation at all levels of the organization.</td>
</tr>
<tr>
<td><strong>Strategy 4:</strong> Expand learning and development opportunities.</td>
<td><strong>Strategy 4:</strong> Expand learning and development opportunities.</td>
</tr>
<tr>
<td><strong>Strategy 5:</strong> Develop and implement a comprehensive workforce strategy that includes expanded remote work, onsite facility needs, appropriate staffing levels, and the technological tools necessary to support appropriate workforce strategies.</td>
<td><strong>Strategy 5:</strong> Develop and implement a comprehensive workforce strategy that includes expanded remote work, onsite facility needs, appropriate compensation and staffing levels, and the technological tools necessary to support appropriate workforce strategies.</td>
</tr>
</tbody>
</table>

Amend strategy to reference employer of choice. Added compensation to comprehensive workforce strategy.
### GOAL 4
Ensure that people, processes, and technology align to achieve excellence in the delivery of services to members.

<table>
<thead>
<tr>
<th>Current Objectives and Strategies</th>
<th>2023-27 Strategic Plan Proposed Amendments</th>
</tr>
</thead>
</table>
| **Objective 2:** Advance and enhance IT systems and services.  
  **Strategy 1:** Build, maintain and enhance a robust, highly available IT environment in support of applications and services.  
  **Strategy 2:** Expand and ease the ability to perform TRS work from anywhere, at any time, and across most any device.  
  **Strategy 3:** Provide advanced data analytics tools and data management practices to gain business intelligence and improve decision-making.  
  **Strategy 4:** Implement modern information systems across all lines of business divisions with priority on modernization of legacy systems.  
  **Strategy 5:** Enhance the operating model for continuous business process improvement that enables transparent, data-driven decisions and rapid delivery of high-quality IT capabilities. | **Objective 2:** Advance and enhance IT systems and services.  
  **Strategy 1:** Develop, build, maintain, and enhance a robust, highly available IT environment systems and infrastructure in support of applications and services TRS business needs.  
  **Strategy 2:** Expand and ease the ability to perform TRS work evolve from anywhere, at any time, and across most any device an office-centric design to a hybrid remote work environment that provides greater fluidity, flexibility, and security.  
  **Strategy 3:** Provide advanced data analytics tools and data management practices to gain business intelligence and improve decision-making.  
  **Strategy 4:** Implement modern information systems across all lines of business divisions with priority on modernization of legacy systems and  strategic digital transformation.  
  **Strategy 5:** Improve  Enhance the digital operating technology models for to enhance continuous business process improvement that enables transparent, data-driven decisions and rapid delivery of high-quality IT capabilities and provide operational efficiencies. |

Amend strategies to reflect the new way we work, importance of strategic digital transformation, and focus on transformative operating models that provide for greater operational efficiencies.
### GOAL 4
Ensure that people, processes, and technology align to achieve excellence in the delivery of services to members.

<table>
<thead>
<tr>
<th>Current Objectives and Strategies</th>
<th>2023-27 Strategic Plan Proposed Amendments</th>
</tr>
</thead>
</table>
| **Objective 3:** Enhance the information security program.  
  **Strategy 1:** Provide a secure computing environment that supports a data privacy and integrity framework.  
  **Strategy 2:** Develop an information security framework based on adaptive security architecture best practices to manage and mitigate cyber-security threats. | **Objective 3:** Enhance the information security program to effectively counter current and emerging threats and risks facing TRS.  
  **Strategy 1:** Optimize security architecture and operational capabilities to thwart advanced threats and mitigate vulnerabilities. Provide a secure computing environment that supports a data privacy and integrity framework.  
  **Strategy 2:** Develop a comprehensive governance, risk, and compliance program to include security and privacy management, risk/fraud forecasting, and education. Develop an information security framework based on adaptive security architecture best practices to manage and mitigate cyber-security threats. |

Amend objectives and strategies to reflect enterprise vision of Information Security Office.
**GOAL 4** Ensure that people, processes, and technology align to achieve excellence in the delivery of services to members.

<table>
<thead>
<tr>
<th>Current Objectives and Strategies</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 4:</strong> Identify appropriate solutions for TRS facilities and space requirements.</td>
<td><strong>Objective 4:</strong> Execute on identifying appropriate solutions for TRS facilities needs and space requirements.</td>
</tr>
<tr>
<td></td>
<td><strong>Strategy 1:</strong> Complete build-out and move-in activities for the new TRS headquarters buildings. Successful completion of generational solution for housing all of TRS.</td>
</tr>
<tr>
<td></td>
<td><strong>Strategy 2:</strong> Identify best value to the pension trust fund for the disposition of existing headquarters. Obtain legislative approval and funding for regional offices.</td>
</tr>
<tr>
<td></td>
<td><strong>Strategy 3:</strong> Identify resource needs and develop project plans associated with opening additional regional offices.</td>
</tr>
<tr>
<td><strong>Strategy 1:</strong> Successful completion of generational solution for housing all of TRS.</td>
<td></td>
</tr>
<tr>
<td><strong>Strategy 2:</strong> Obtain legislative approval and funding for regional offices.</td>
<td></td>
</tr>
</tbody>
</table>

Update objective to include all facilities-related activities. New strategies reflecting next steps on new headquarters, disposition of current headquarters, and plans for regional offices.
**Proposed Changes**

**GOAL 4** Ensure that people, processes, and technology align to achieve excellence in the delivery of services to members.

<table>
<thead>
<tr>
<th>Current Objectives and Strategies</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 5:</strong> Foster a culture of fiduciary responsibility and ethical conduct.</td>
<td>No proposed changes.</td>
</tr>
<tr>
<td><strong>Strategy 1:</strong> Embed/Integrate culture of ethics and compliance within the business process.</td>
<td></td>
</tr>
<tr>
<td><strong>Strategy 2:</strong> Enhance visibility of, and accessibility to, Legal &amp; Compliance throughout TRS.</td>
<td></td>
</tr>
</tbody>
</table>
**GOAL 4** Ensure that people, processes, and technology align to achieve excellence in the delivery of services to members.

<table>
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<tr>
<th>Current Objectives and Strategies</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 6</strong>: Improve and maintain effective procurement and contract management practices.</td>
<td><strong>Objective 6</strong>: Improve and maintain effective procurement and contract management practices.</td>
</tr>
<tr>
<td><strong>Strategy 1</strong>: Implement significant program recommendations related to the Purchasing &amp; Contracts Enhancement Plan.</td>
<td><strong>Strategy 1</strong>: Implement significant program recommendations related to the Purchasing &amp; Contracts Enhancement Plan.</td>
</tr>
<tr>
<td><strong>Strategy 2</strong>: Implement source to pay software system.</td>
<td><strong>Strategy 2</strong>: Implement source to pay software system.</td>
</tr>
<tr>
<td><strong>Strategy 3</strong>: Increase the number of utilized Historically Underutilized Businesses (HUBs).</td>
<td><strong>Strategy 23</strong>: Increase the number of utilized Historically Underutilized Businesses (HUBs).</td>
</tr>
<tr>
<td><strong>Strategy 4</strong>: Promote purchasing selection practices that foster meaningful and substantive inclusion of historically underutilized businesses (HUBs).</td>
<td><strong>Strategy 4</strong>: Promote purchasing selection practices that foster meaningful and substantive inclusion of historically underutilized businesses (HUBs).</td>
</tr>
<tr>
<td><strong>Strategy 5</strong>: Improve outreach activities to foster and strengthen relationships among HUB vendors, prime contractors, and purchasers.</td>
<td><strong>Strategy 5</strong>: Improve outreach activities to foster and strengthen relationships among HUB vendors, prime contractors, and purchasers.</td>
</tr>
<tr>
<td><strong>Strategy 6</strong>: Leverage Diversity, Equity, &amp; Inclusion (DE&amp;I) outreach and partnerships to identify and work with HUB-eligible businesses as a pipeline for HUB contracted services.</td>
<td><strong>Strategy 6</strong>: Leverage Diversity, Equity, &amp; Inclusion (DE&amp;I) outreach and partnerships to identify and work with HUB-eligible businesses as a pipeline for HUB contracted services.</td>
</tr>
</tbody>
</table>

Delete source to pay strategy as implementation is complete. Move Strategies 4-6 to Schedule C: HUB Plan. Add new strategy for third-party risk management.
Proposed Changes

**GOAL 4** Ensure that people, processes, and technology align to achieve excellence in the delivery of services to members.

<table>
<thead>
<tr>
<th>Current Objectives and Strategies</th>
<th>2023-27 Strategic Plan Proposed Amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 7:</strong> Improve strategic communications.</td>
<td><strong>Objective 7:</strong> Improve strategic communications.</td>
</tr>
<tr>
<td><strong>Strategy 1:</strong> Ensure that member-facing content is easily understandable and accessible to readers.</td>
<td><strong>Strategy 1:</strong> Ensure that member-facing content is easily understandable and accessible to readers.</td>
</tr>
<tr>
<td><strong>Strategy 2:</strong> Develop a communication and outreach plan to better help members and employers plan for retirement.</td>
<td><strong>Strategy 2:</strong> Develop a communication and outreach plan, implement and monitor the Member and Employer Outreach Plan to better help members and employers plan for retirement.</td>
</tr>
</tbody>
</table>

Update strategy to reference plan adopted by the Board.
**GOAL 4** Ensure that people, processes, and technology align to achieve excellence in the delivery of services to members.

<table>
<thead>
<tr>
<th>Current Objectives and Strategies</th>
<th>2023-27 Strategic Plan Proposed Amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 8:</strong> Evaluate automation and technology solutions to enhance existing processes.</td>
<td><strong>Objective 8:</strong> Evaluate automation and technology solutions to enhance existing processes.</td>
</tr>
<tr>
<td><strong>Strategy 1:</strong> Investigate best practices and feasibility of incorporating artificial intelligence into Legal &amp; Compliance processes.</td>
<td><strong>Strategy 1:</strong> Investigate best practices and feasibility of incorporating artificial intelligence into Legal &amp; Compliance organizational processes.</td>
</tr>
<tr>
<td><strong>Strategy 2:</strong> Identify opportunities for improved productivity, process efficiencies, and performance monitoring.</td>
<td><strong>Strategy 2:</strong> Identify opportunities for improved productivity, process efficiencies, and performance monitoring.</td>
</tr>
<tr>
<td><strong>Strategy 3:</strong> Enhance oversight of custodian bank’s reporting on fair value of investment assets and investment-related activities.</td>
<td></td>
</tr>
</tbody>
</table>

Broaden strategy to entire organization. New strategy will help ensure investment information is reported to the legislature, the Board, regulatory entities, and other external users timely and accurately.
## GOAL 4
Ensure that people, processes, and technology align to achieve excellence in the delivery of services to members.

<table>
<thead>
<tr>
<th>Current Objectives and Strategies</th>
<th>2023-27 Strategic Plan Proposed Amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 9:</strong> Develop a centralized data management framework for digital and physical data.</td>
<td><strong>Strategy 1:</strong> Establish a cross-functional data governance body to develop methods, responsibilities, and processes to standardize, integrate, protect, and store organizational data.</td>
</tr>
<tr>
<td><strong>Strategy 2:</strong> Analyze the current state of data governance and operationalize the review and assessment of proposed projects in accordance with the data management framework.</td>
<td>Add objective and strategies related to development of a data management framework and associated governance.</td>
</tr>
</tbody>
</table>
Year Ahead

### Fiscal Year 2022

- **February 2022 Board Meeting**
  - Strategic Fit/Alignment
  - Review Draft FY 23-27 Strategic Plan

- **April 2022**
  - Strategic Planning Committee
  - Results Forum Report Out (Q1)
  - Achieve the investment rate of return
  - Improve the customer service experience
  - Increase identification of underpayments and collection of future contributions
  - Improve timeliness and accuracy in employer-reported data

- **July 2022**
  - Strategic Planning Committee
  - Results Forum Report Out (Q2)
  - Advance and enhance IT systems and services
  - Enhance the information security program
  - Improve and maintain effective procurement and contract management
  - Fiduciary responsibility and ethical conduct

- **September 2022**
  - Strategic Planning Committee
  - Results Forum Report Out (Q3)
  - Improve pension funding communication
  - Improve communication regarding the impact of changing plan design
  - Improve health care funding needs communication
  - Increase the value of health care benefits
  - Improve the health of our members

- **December 2022**
  - Strategic Planning Committee
  - Results Forum Report Out (Q4)
  - Adopt FY 2023 Areas of Focus

### Fiscal Year 2023

- **February 2022 Board Meeting**
  - Strategic Planning Committee

- **April 2022**
  - Strategic Planning Committee
  - Adopts FY 23-27 Strategic Plan

- **July 2022**
  - Strategic Planning Committee
  - AOF Update
  - Mid-Year KPI Data

- **September 2022**
  - Strategic Planning Committee
  - End of Year KPI Data

### Strategic Plan FY 2021

- **December 2021**
  - Strategic Planning Committee
  - Results Forum Report Out (Q4)
  - Attract, retain and develop a highly diverse and competent staff
  - Facilities and space requirements
  - Improve strategic communications

- **End of Year KPI Data**

### AOF Update

- **March 2022**
  - Strategic Planning Committee
  - AOF Update
  - Mid-Year KPI Data

- **December 2022**
  - Strategic Planning Committee
  - End of Year KPI Data

---

**Notes:**
- **Results Forum Report Out**
- **Adopt FY 2023 Areas of Focus**

---
GOAL 1  Sustain a financially sound pension system.

Objective 1: Improve communication regarding pension funding needs.
   Strategy 1: Serve as a trusted resource and engage with policymakers on pension funding.

Objective 2: Increase identification of underpayments and collection of future contributions to TRS.
   Strategy 1: Increase testing coverage of high-risk reporting employers.

Objective 3: Achieve the trust’s actuarial assumed rate of return as measured on rolling 20-year periods.
   Strategy 1: Maintain an effective investment governance structure.
   Strategy 2: Enhance current competitive advantages and total returns.
   Strategy 3: Manage cost structures to increase net alpha generated.

Objective 4: Improve communication regarding the impact of changing pension plan design.
   Strategy 1: Serve as a trusted resource and engage with policymakers on pension plan design.
GOAL 2  Continuously improve our benefit delivery.

Objective 1: Improve the customer service experience for members and employers.
  Strategy 1: Increase capacity to serve members.
  Strategy 2: Improve response time to reporting employers.
  Strategy 3: Provide additional online functionality.
  Strategy 4: Build and define operational support for Benefit Services.

Objective 2: Improve timeliness and accuracy in employer-reported data.
  Strategy 1: Improve and enhance the reporting employer portal.
Objective 1: Improve communication efforts regarding health care funding needs.
   Strategy 1: Serve as a trusted resource and engage with policymakers on health care funding.

Objective 2: Increase the value of health care benefits.
   Strategy 1: Engage the best health care vendors through competitive procurement to ensure our members have the highest value health care.
   Strategy 2: Re-engineer TRS-ActiveCare to better meet employer needs.
   Strategy 3: Use data analytics tools to provide assurance on health care claims compliance.

Objective 3: Improve the health of our members.
   Strategy 1: Improve engagement of plan participants with an initial focus on population with high impact conditions, such as diabetes.
   Strategy 2: Optimize disease management for high-risk populations.
GOAL 4  Ensure that people, processes, and technology align to achieve excellence in the delivery of services to members.

Objective 1: Attract, retain, and develop a diverse and highly competent staff.

- **Strategy 1:** Position TRS as an employer of choice to meet the needs of our current and future workforce.
- **Strategy 2:** Promote a strong workplace culture that is inclusive and fosters creativity and innovation.
- **Strategy 3:** Improve diversity representation at all levels of the organization.
- **Strategy 4:** Expand learning and development opportunities.
- **Strategy 5:** Develop and implement a comprehensive workforce strategy that includes expanded remote work, onsite facility needs, appropriate compensation and staffing levels, and the technological tools necessary to support appropriate workforce strategies.

Objective 2: Advance and enhance IT systems and services.

- **Strategy 1:** Develop, maintain, and enhance IT systems and infrastructure in support of TRS business needs.
- **Strategy 2:** Expand and evolve from an office-centric design to a hybrid remote work environment that provides greater fluidity, flexibility, and security.
- **Strategy 3:** Provide advanced data analytics tools and data management practices to gain business intelligence and improve decision-making.
- **Strategy 4:** Implement modern information systems across all lines of business with priority on modernization of legacy systems and strategic digital transformation.
- **Strategy 5:** Improve digital operating technology models to enhance continuous business process improvement and provide operational efficiencies.
GOAL 4  Ensure that people, processes, and technology align to achieve excellence in the delivery of services to members.

Objective 3: Enhance the information security program to effectively counter current and emerging threats and risks facing TRS.

   Strategy 1: Optimize security architecture and operational capabilities to thwart advanced threats and mitigate vulnerabilities.
   
   Strategy 2: Develop a comprehensive governance, risk, and compliance program to include security and privacy management, risk/fraud forecasting, and education.

Objective 4: Execute on TRS facilities needs.

   Strategy 1: Complete build-out and move-in activities for the new TRS headquarters buildings.
   
   Strategy 2: Identify best value to the pension trust fund for the disposition of existing headquarters.
   
   Strategy 3: Identify resource needs and develop project plans associated with opening additional regional offices.

Objective 5: Foster a culture of fiduciary responsibility and ethical conduct.

   Strategy 1: Embed/Integrate culture of ethics and compliance within the business process.
   
   Strategy 2: Enhance visibility of, and accessibility to, Legal & Compliance throughout TRS.
GOAL 4  Ensure that people, processes, and technology align to achieve excellence in the delivery of services to members.

Objective 6: Improve and maintain effective procurement and contract management practices.
  Strategy 1: Implement significant program recommendations related to the Purchasing & Contracts Enhancement Plan.
  Strategy 2: Increase the number of utilized Historically Underutilized Businesses (HUBs).

Objective 7: Improve strategic communications.
  Strategy 1: Ensure that member-facing content is easily understandable and accessible to readers.
  Strategy 2: Implement and monitor the Member and Employer Outreach Plan to better help members and employers plan for retirement.

Objective 8: Evaluate automation and technology solutions to enhance existing processes.
  Strategy 1: Investigate best practices and feasibility of incorporating artificial intelligence into organizational processes.
  Strategy 2: Identify opportunities for improved productivity, process efficiencies, and performance monitoring.
  Strategy 3: Enhance oversight of custodian bank’s reporting on fair value of investment assets and investment-related activities.
Objective 9: Develop a centralized data management framework for digital and physical data.

Strategy 1: Establish a cross-functional data governance body to develop methods, responsibilities, and processes to standardize, integrate, protect, and store organizational data.

Strategy 2: Analyze the current state of data governance and operationalize the review and assessment of proposed projects in accordance with the data management framework.
### Background & Process

**Odd Fiscal Year**

**Q1**
- Board adopts Executive Director’s Areas of Focus
- Executive Council holds executive retreat

**Q2**
- Session begins
- Board:
  - Conducts Executive Director’s evaluation
  - Reviews Strategic Plan fit and alignment

**Q3**
- Session ends
- Board adopts Strategic Plan updates, if needed

**Q4**
- Board adopts annual operating budget

**Even Fiscal Year**

**ongoing**
- Conduct enterprise risk assessments
- Hold quarterly results forum
- Review mission statement and core values every four years
Customer Service Improvement Initiative: Focus On Excellence

Brian Guthrie, Andrew Roth, Barbie Pearson, Janet Bray, Chris Cutler, Adam Fambrough, Jennifer Whitman, and Billy Lowe
February 17, 2022
I. Key Areas of Opportunity
   i. Benefit Estimates
   ii. Retirements
   iii. Death Claims
   iv. Telephone Contact Center
   v. Employer Services

II. Technology Enhancements: TEAM

III. Enterprise Staffing

IV. Next Steps
## Focus On Excellence: Key Areas of Opportunity

<table>
<thead>
<tr>
<th>Business Activity</th>
<th>Objectives</th>
<th>Target</th>
<th>Q1</th>
<th>FY22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refunds</td>
<td>Refunds validated within five business days of receiving final deposit and all paperwork</td>
<td>95%</td>
<td>94.58%</td>
<td>94.58%</td>
</tr>
<tr>
<td>Benefit Estimates</td>
<td>Benefit estimates mailed within 31 days of request</td>
<td>90%</td>
<td>16.73%</td>
<td>16.73%</td>
</tr>
<tr>
<td>Retirements</td>
<td>Retirees receiving first annuity payment on time</td>
<td>98%</td>
<td>57.29%</td>
<td>57.29%</td>
</tr>
<tr>
<td>Death Claims (acknowledged)</td>
<td>Claims acknowledged within 14 days of receipt of death notification</td>
<td>90%</td>
<td>91.27%</td>
<td>91.27%</td>
</tr>
<tr>
<td>Death Claims (payments)</td>
<td>Claims payments issued within 31 days of receipt of all required paperwork</td>
<td>95%</td>
<td>16.83%</td>
<td>16.83%</td>
</tr>
<tr>
<td>Telephone Calls</td>
<td>Calls answered within three minutes</td>
<td>80%</td>
<td>44.65%</td>
<td>44.65%</td>
</tr>
<tr>
<td>Office Visits</td>
<td>Number of office visits available annually (target increase FY2019)</td>
<td>20,000</td>
<td>4,392</td>
<td>4,392</td>
</tr>
<tr>
<td>Office Visits Conducted</td>
<td>In-person: 1,392</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Live-video: 912</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Telephone: 464</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Walk-ins: 39</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reporting Employer</td>
<td>Regular payroll reports completed by the end of each quarter (cumulative for fiscal year)</td>
<td>90%</td>
<td>93.08%</td>
<td>93.08%</td>
</tr>
<tr>
<td>Quality Assurance</td>
<td>Telephone Counseling Center quality reviews.</td>
<td>4,260</td>
<td>1,550</td>
<td>1,550</td>
</tr>
</tbody>
</table>
Customer Service Focus

• The primary areas in Benefits Services with difficulty in meeting service level targets are Benefit Estimates, Retirement Processing, Death Claim Payments, the Telephone Contact Center (TCC), and Employer Services.

• TRS has been unable to consistently meet established service level targets in most of those areas since go-live with TRUST in 2017.
Customer Service Focus

• Staff conducted a comprehensive analysis to identify specific actions to improve customer service metrics and identified the following opportunities:
  ➢ Procedure change
  ➢ Policy Change
  ➢ Process improvement
  ➢ System enhancements
  ➢ Enhanced staffing (to keep pace with member growth)

• Completion of the 3-year plan occurs with the final deployment of the TRUST system (payment annuity) in FY25
## Focus On Excellence – Benefit Estimates

### Trends Over Time

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Avg. FTEs</th>
<th>Benefit Estimates</th>
<th>Service Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2017</td>
<td>13</td>
<td>80,469</td>
<td>99.06%</td>
</tr>
<tr>
<td>FY 2018</td>
<td>14</td>
<td>74,631</td>
<td>77.30%</td>
</tr>
<tr>
<td>FY 2019</td>
<td>13</td>
<td>91,213</td>
<td>77.08%</td>
</tr>
<tr>
<td>FY 2020</td>
<td>13</td>
<td>94,412</td>
<td>86.87%</td>
</tr>
<tr>
<td>FY 2021</td>
<td>14</td>
<td>97,631</td>
<td>13.00%</td>
</tr>
<tr>
<td>Solutions</td>
<td>Opportunity</td>
<td>Additional Resources</td>
<td>Business Unit</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>----------------------</td>
<td>----------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>Post Retirement Packet on website</td>
<td>Procedure Change</td>
<td>No</td>
<td>Benefit Services, Communications</td>
</tr>
<tr>
<td>Add three additional team members during FY2022 and three during FY2023</td>
<td>Enhanced Staffing</td>
<td>Yes</td>
<td>Benefit Services, Finance, Legal and Compliance, OE</td>
</tr>
<tr>
<td>Limit number of estimates that can be requested:</td>
<td>Procedure Change</td>
<td>Yes</td>
<td>Benefit Services, Communications, IT</td>
</tr>
<tr>
<td>• current FY plus one additional fiscal year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• two estimates per year for members</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enhance retirement packet creation to leverage Business Administration staff and equipment</td>
<td>Process Improvement</td>
<td>Yes</td>
<td>Business Administration, Benefit Services, IT</td>
</tr>
</tbody>
</table>
Focus On Excellence - Retirements

Trends Over Time

Avg. FTEs

- FY 2017: 13
- FY 2018: 14
- FY 2019: 13
- FY 2020: 13
- FY 2021: 14

Retirements

- FY 2017: 20,426
- FY 2018: 19,385
- FY 2019: 23,820
- FY 2020: 19,770
- FY 2021: 23,155

Service Level

- FY 2017: 99.76%
- FY 2018: 90.09%
- FY 2019: 96.09%
- FY 2020: 99.54%
- FY 2021: 94.16%
<table>
<thead>
<tr>
<th>Solutions</th>
<th>Opportunity</th>
<th>Additional Resources</th>
<th>Business Unit</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deploy enhancements to payment address validations</td>
<td>System Enhancement</td>
<td>Yes</td>
<td>Benefit Services, IT</td>
<td>February 2022</td>
</tr>
<tr>
<td>Add three additional team members during FY 2022 and three during FY 2023</td>
<td>Enhanced Staffing</td>
<td>Yes</td>
<td>Benefit Services, Legal and Compliance, OE</td>
<td>FY2022 - April 2022 FY2023 - TBD</td>
</tr>
<tr>
<td>New MyTRS features enhanced retirement application process, reducing the number of unacceptable applications</td>
<td>System Enhancement</td>
<td>Yes</td>
<td>Benefit Services, IT</td>
<td>April 2022</td>
</tr>
<tr>
<td>Create and deploy dedicated training team</td>
<td>Enhanced Staffing</td>
<td>Yes</td>
<td>Benefit Services, Finance, Legal and Compliance, OE</td>
<td>January 2023</td>
</tr>
</tbody>
</table>
### Trends Over Time

#### Death Claims

<table>
<thead>
<tr>
<th>Year</th>
<th>Death Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2017</td>
<td>10,613</td>
</tr>
<tr>
<td>FY 2018</td>
<td>9,234</td>
</tr>
<tr>
<td>FY 2019</td>
<td>9,677</td>
</tr>
<tr>
<td>FY 2020</td>
<td>9,158</td>
</tr>
<tr>
<td>FY 2021</td>
<td>10,560</td>
</tr>
</tbody>
</table>

#### New Deaths

<table>
<thead>
<tr>
<th>Year</th>
<th>New Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2017</td>
<td>11,390</td>
</tr>
<tr>
<td>FY 2018</td>
<td>11,776</td>
</tr>
<tr>
<td>FY 2019</td>
<td>12,295</td>
</tr>
<tr>
<td>FY 2020</td>
<td>14,059</td>
</tr>
<tr>
<td>FY 2021</td>
<td>16,359</td>
</tr>
</tbody>
</table>

#### Death Claims SL2

<table>
<thead>
<tr>
<th>Year</th>
<th>SL2 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2017</td>
<td>95.00%</td>
</tr>
<tr>
<td>FY 2018</td>
<td>78.00%</td>
</tr>
<tr>
<td>FY 2019</td>
<td>54.71%</td>
</tr>
<tr>
<td>FY 2020</td>
<td>67.30%</td>
</tr>
<tr>
<td>FY 2021</td>
<td>17.55%</td>
</tr>
</tbody>
</table>

#### New Deaths SL

<table>
<thead>
<tr>
<th>Year</th>
<th>SL (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2017</td>
<td>98.50%</td>
</tr>
<tr>
<td>FY 2018</td>
<td>95.90%</td>
</tr>
<tr>
<td>FY 2019</td>
<td>76.08%</td>
</tr>
<tr>
<td>FY 2020</td>
<td>95.50%</td>
</tr>
<tr>
<td>FY 2021</td>
<td>28.20%</td>
</tr>
</tbody>
</table>

### Avg. FTEs

<table>
<thead>
<tr>
<th>Year</th>
<th>FTEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2017</td>
<td>15</td>
</tr>
<tr>
<td>FY 2018</td>
<td>14</td>
</tr>
<tr>
<td>FY 2019</td>
<td>14</td>
</tr>
<tr>
<td>FY 2020</td>
<td>15</td>
</tr>
<tr>
<td>FY 2021</td>
<td>18</td>
</tr>
</tbody>
</table>

---

**Target SL**

- Death Claims 95%
- New Death 90%
## Focus On Excellence – Death Claims

<table>
<thead>
<tr>
<th>Solutions</th>
<th>Opportunity</th>
<th>Additional Resources</th>
<th>Business Unit</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create and deploy dedicated training team</td>
<td>Enhanced Staffing</td>
<td>Yes</td>
<td>Benefit Services OE</td>
<td>January 2023</td>
</tr>
<tr>
<td>Deploy enhancements to payment address validations</td>
<td>System Enhancement</td>
<td>Yes</td>
<td>IT, Benefit Services</td>
<td>February 2022</td>
</tr>
<tr>
<td>Real-time communication between TRUST and Legacy</td>
<td>System Enhancement</td>
<td>Yes</td>
<td>IT, Benefit Services</td>
<td>August 2022</td>
</tr>
<tr>
<td>Continue internal process improvements afforded by splitting claims into two teams: one for active member and one for retiree deaths</td>
<td>Process Improvement</td>
<td>No</td>
<td>Benefit Services</td>
<td>August 2022</td>
</tr>
<tr>
<td>Training revised to allow new employees to begin performing work sooner (after eight weeks instead of 16 weeks)</td>
<td>Process Improvement</td>
<td>No</td>
<td>Benefit Services</td>
<td>Complete</td>
</tr>
<tr>
<td>Train new employees on payment process once proficiency gained in report of new deaths</td>
<td>Process Improvement</td>
<td>No</td>
<td>Benefit Services</td>
<td>Complete</td>
</tr>
</tbody>
</table>
| Add three additional team members during FY2022 and two during FY2023    | Enhanced Staffing    | Yes                  | Benefit Services OE         | FY2022 - April 2022  
FY2023 - TBD            |
Focus On Excellence – Telephone Contact Center (TCC)

Trends Over Time

Calls Abandoned
FY 2017: 46,190
FY 2018: 197,205
FY 2019: 80,838
FY 2020: 92,847
FY 2021: 101,701

Calls Answered
FY 2017: 550,865
FY 2018: 424,436
FY 2019: 575,651
FY 2020: 510,816
FY 2021: 565,907

Service Level
FY 2017: 68.60%
FY 2018: 15.10%
FY 2019: 54.58%
FY 2020: 45.75%
FY 2021: 44.20%
### Focus On Excellence – Telephone Contact Center (TCC)

<table>
<thead>
<tr>
<th>Solutions</th>
<th>Opportunity</th>
<th>Additional Resources</th>
<th>Business Unit</th>
<th>Timing</th>
</tr>
</thead>
</table>
| Explore options for:  
✓ Improvements to member authentication process  
✓ Proactive Member Outreach via SMS Messaging | | Yes | IT, Information Security, Benefit Services, Legal and Compliance | July 2022 |
| Increase number of self-service options with rollout of new MyTRS, such as appointment scheduling | System Enhancement | Yes | IT, OE, Finance, Benefit Services, Communications, Legal and Compliance | April 2022 |
| Create and deploy dedicated training team | Enhanced Staffing | Yes | Benefit Services, Finance, OE | FY 23 |
| Implement Chat feature fiscal 2023 | System Enhancement | Yes | IT, Finance, OE, Benefit Services, Legal and Compliance | FY 23 |
| Streamline Interactive Voice Response (IVR) experience | System Enhancement | No | IT, Benefit Services | FY 23 |
| Increase staffing to levels necessary to meet service levels | Enhanced Staffing | Yes | Benefit Services, OE, IT, Finance | Ongoing |
| Utilize remote work strategy | Policy change | No | Benefit Services, Legal and Compliance, OE, IT | Underway |
### Trends Over Time

<table>
<thead>
<tr>
<th></th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>FY 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calls</td>
<td>13,753</td>
<td>20,321</td>
<td>12,099</td>
<td>12,693</td>
<td>8,554</td>
</tr>
<tr>
<td>E-Mails</td>
<td>182,109</td>
<td>280,583</td>
<td>273,848</td>
<td>267,408</td>
<td>263,481</td>
</tr>
<tr>
<td>Service Level</td>
<td>100%</td>
<td>91.60%</td>
<td>95.72%</td>
<td>93.15%</td>
<td>99.48%</td>
</tr>
</tbody>
</table>

**Avg. FTEs**

- FY 2017: 8
- FY 2018: 11
- FY 2019: 12
- FY 2020: 15
- FY 2021: 14
## Focus On Excellence – Employer Services

<table>
<thead>
<tr>
<th>Solutions</th>
<th>Opportunity</th>
<th>Additional Resources</th>
<th>Business Unit</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduct comprehensive review of validations to identify opportunities to reduce overrides</td>
<td>Process Improvement</td>
<td>No</td>
<td>Benefit Services IT</td>
<td>August 2022</td>
</tr>
<tr>
<td>Create and deploy dedicated training team</td>
<td>Enhance Staffing</td>
<td>Yes</td>
<td>Benefit Services OE</td>
<td>January 2023</td>
</tr>
<tr>
<td>Update training methodology</td>
<td>Process Improvement</td>
<td>No</td>
<td>Benefit Services</td>
<td>Underway</td>
</tr>
<tr>
<td>Add sufficient staff to handle the ongoing workload needs</td>
<td>Enhance Staffing</td>
<td>Yes</td>
<td>Benefit Service IT, Finance, Legal and Compliance, OE</td>
<td>Underway</td>
</tr>
</tbody>
</table>
TEAM MAINTENANCE & ENHANCEMENT – CUSTOMER SERVICE RELEASE (CSR) ROADMAP

FOCUS

- Responsive Model
- Continuous Value Delivery to the “3 pillars” of our customer base: Members, Reporting Employers, Business Users through problem identification and resolution
- Enterprise Risk Mitigation
- Positive Service Level Agreement Impact

ROADMAP

<table>
<thead>
<tr>
<th>Member Improvements</th>
<th>Reporting Employer Improvements</th>
<th>Business User Improvements</th>
</tr>
</thead>
</table>

CUSTOMER VALUE

- Reduce manual steps through process efficiencies and automation
- Improve and consolidate user interfaces
- Fully automate workflows
- Reduce processing time through real time vs. overnight processing
- Improve data validations
- Web Self Service enhancements
Add additional staff to supplement the Customer Service Releases and mitigate impact of resource allocation shifts on the TEAM Roadmap allowing for:

- A **resource pool** that can **dynamically** react to **shifting needs** and **priorities** across the TEAM portfolio

<table>
<thead>
<tr>
<th>Solutions</th>
<th>Opportunity</th>
<th>Additional Resources</th>
<th>Business Unit</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduct analysis of resource needs for Customer Services Releases</td>
<td>Enhanced Staffing</td>
<td>No</td>
<td>Information Technology</td>
<td>February 2022</td>
</tr>
<tr>
<td>Conduct schedule and resource analysis for Retirement Application &amp; Death Claims Processing Release and Payroll, BAA &amp; Tax Reporting Release and re-baseline TEAM Roadmap schedule as necessary</td>
<td>Enhanced Staffing</td>
<td>No</td>
<td>Information Technology</td>
<td>February 2022</td>
</tr>
<tr>
<td>Add additional staff needed to support the new effort dedicated to Customer Services Releases</td>
<td>Enhanced Staffing</td>
<td>Yes</td>
<td>Information Technology OE</td>
<td>February 2022</td>
</tr>
<tr>
<td>Add additional staff and backfills needed to support the TEAM Roadmap as scheduled</td>
<td>Enhanced Staffing</td>
<td>Yes</td>
<td>Information Technology OE</td>
<td>FY 2022</td>
</tr>
</tbody>
</table>
MyTRS Demonstration
Focus on Excellence: Benefits Staffing Recruitment

- Talent pools in the Austin market are reduced due to increased competition and a high volume of job postings
- Qualified candidates are highly recruitable, and receive multiple job offers to consider
- TRS has seen a significant drop in applications for FY 21 despite an increase in postings
- Applications numbers have increased in FY 22 with the addition of the El Paso applicant market due to regional expansion
- 38% of applicants withdraw, decline or simply do not respond to recruiters during the hiring process
- Not all employees make it through the probationary process. From FY 2021 to the present, 26 employees (OV and TCC) left during first 6 months of employment

### Applications Received

<table>
<thead>
<tr>
<th>Year</th>
<th>Applications Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 20</td>
<td>485</td>
</tr>
<tr>
<td>FY 21</td>
<td>411</td>
</tr>
<tr>
<td>FY 22</td>
<td>318</td>
</tr>
</tbody>
</table>

### Reasons Candidate Drop Out of Hiring Process

- No reason given, 30.2%
- Accepted other offer, 17.9%
- Compensation, 6.6%
- Other, 7.5%
- No response, 37.7%
Focus on Excellence: Benefits Staffing Recruitment

- Counseling positions are posted throughout the year to stagger hiring cohorts
- Positions are posted typically for 30 days, however hiring managers begin reviewing applicants as they apply
- Typical recruitment efforts include online job postings through Indeed, LinkedIn and on college and university career boards
- The Talent Acquisition Team has begun direct sourcing through LinkedIn, and targeted university outreach to increase applicant pools
- Talent teams over-recruit for positions because at least 15% of applicants decline or withdraw from the hiring process
- If there is a strong candidate pool, additional positions are approved for immediate hiring

### Job Postings

<table>
<thead>
<tr>
<th></th>
<th>FY 2020</th>
<th>FY 2021</th>
<th>FY 2022 YTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Visit Counselors</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Telephone Counselors</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>El Paso Counselors</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Employees Hired</td>
<td>33</td>
<td>51</td>
<td>28</td>
</tr>
</tbody>
</table>

### FY 2022 Hiring Roadmap*

<table>
<thead>
<tr>
<th></th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Postings</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Target # of positions to fill</td>
<td>10</td>
<td>27</td>
<td>24</td>
<td>39</td>
</tr>
<tr>
<td>Actual positions filled</td>
<td>6</td>
<td>22</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note - Positions may be actively recruited and posted during one quarter but the actual hiring date may cross over to the next quarter or fiscal year
### Office Visit Counselors

**Staffing Trends**

<table>
<thead>
<tr>
<th></th>
<th>FY 19</th>
<th>FY 20</th>
<th>FY 21</th>
<th>FY 22 YTD</th>
<th>FY 22 Projected Turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisitions</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>1</td>
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<td>Separations</td>
<td>0</td>
<td>4</td>
<td>9</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Turnover Rate**

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 19</td>
<td>25%</td>
</tr>
<tr>
<td>FY 20</td>
<td>22%</td>
</tr>
<tr>
<td>FY 21</td>
<td>17%</td>
</tr>
<tr>
<td>FY 22 YTD</td>
<td></td>
</tr>
</tbody>
</table>

Note: FY 22 projections for separations are based on current turnover trends.

### Telephone Counselors

**Staffing Trends**

<table>
<thead>
<tr>
<th></th>
<th>FY 19</th>
<th>FY 20</th>
<th>FY 21</th>
<th>FY 22 YTD</th>
<th>FY 22 Projected Turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisitions</td>
<td>11</td>
<td>14</td>
<td>28</td>
<td>9</td>
<td>42</td>
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<tr>
<td>Separations</td>
<td>11</td>
<td>28</td>
<td>21</td>
<td>21</td>
<td></td>
</tr>
</tbody>
</table>

**Turnover Rate**

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 19</td>
<td>27%</td>
</tr>
<tr>
<td>FY 20</td>
<td>18%</td>
</tr>
<tr>
<td>FY 21</td>
<td>41%</td>
</tr>
<tr>
<td>FY 22 YTD</td>
<td>30%</td>
</tr>
</tbody>
</table>

Note: FY 22 projections for separations are based on current turnover trends.
Focus on Excellence: Benefits Staffing and Vacancies

### Positions Approved to Post: Office Visit Counselors

<table>
<thead>
<tr>
<th>Month</th>
<th>Filled</th>
<th>Vacant</th>
<th>Filled + Vacant</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-20</td>
<td>6</td>
<td>13</td>
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<tr>
<td>O-20</td>
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<td>67</td>
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<tr>
<td>N-20</td>
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<td>61</td>
</tr>
<tr>
<td>D-20</td>
<td>6</td>
<td>20</td>
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<tr>
<td>J-21</td>
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<td>M-21</td>
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<td>J-22</td>
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</tbody>
</table>

### Positions Approved to Post: Telephone Counselors

<table>
<thead>
<tr>
<th>Month</th>
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<th>Vacant</th>
<th>Filled + Vacant</th>
</tr>
</thead>
<tbody>
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<td>J-22</td>
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</tbody>
</table>

### Office Visit Counselors

<table>
<thead>
<tr>
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<th>Filled</th>
<th>Vacant</th>
<th>Filled + Vacant</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-20</td>
<td>6</td>
<td>13</td>
<td>66</td>
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</tbody>
</table>

### Telephone Counselors

<table>
<thead>
<tr>
<th>Month</th>
<th>Filled</th>
<th>Vacant</th>
<th>Filled + Vacant</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-20</td>
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<td>J-22</td>
<td>66</td>
<td>62</td>
<td>128</td>
</tr>
</tbody>
</table>
Staffing Opportunities

• In FY 21, Benefit Services staff worked approx. 31,000 hours of overtime.
  • Hours equate to approx. 15 FTEs
  • Pay equates to 22 FTEs

• In FY 19, staff implemented contact center software that doubled the capacity for the number of members in the contact center queue, eliminating the busy signal members received on high volume days.

• Also in FY21, TRS paid Teleperformance approx. $830,000 to answer approx. 8% of the total calls. $830,000 equals approx. 10 FTEs.

• TRS staff achieve higher quality ratings than contract staff and are able to handle more complicated calls without having to transfer the member.

• In terms of increasing workload, in addition to more members, the number and timing of various significant communication efforts has also increased. For example, in FYs 21 and 22, TRS handled a supplemental payment, new tax tables and corresponding net pay change letters, 1099s, and new processes for inactive accounts.
Staffing Analysis

- Internal assessment conducted by Pension Benefits Workforce Management in 2022 indicates 115 FTEs needed for the TCC to achieve service level targets.

- Increasing staff in Benefit Services directly impacts the ability of other business areas to provide the necessary support to Benefit Services.

- For example, payroll, benefits, talent management, compensation, employee relations, printing, mail, imaging, records and information management, information security, IT, and legal and compliance all see increases to workload with additional staffing in the Benefit Services area.

- In April, staff will identify and present to the BOT a specific number of additional resources needed enterprise-wide to support consistently meeting service level targets.
Focus On Excellence: Next Steps

- Staff will begin implementing the 3-year plan outlined in this deck
- Staff will provide an enterprise resource ask necessary to meet the solutions identified in this presentation
- Staff will report on status on each area identified in the Focus on Excellence
Focus On Excellence

Questions
Appendix : Additional Cost Information
• Adding 100+ staff will still keep TRS well below the peer average of front office FTEs per 10,000 members

• Likely TRS’ position on this graph will not change even with the addition of 100 FTEs

• Front Office FTEs helps drive back-office workload

• Source: CEM Benchmarking
• Adding 100+ staff will not impact TRS’ cost per active member but will dramatically improve service levels.

• Staffing level analysis driven by unmet workload, use of overtime and mandatory overtime, and analysis of areas that are unable to meet service levels due to limited staffing.

• Source: CEM Benchmarking.
• Total costs excluding major projects indicates TRS has an opportunity to invest in key and critical business areas

• The question this chart poses for management: What does TRS need to do that staffing constraints prevent us from doing?

• A $200 billion financial institution has administrative needs that are critical and urgent

• A growing membership and increasingly complex regulatory environment and statutory framework should drive costs up; our cost is falling

• Source: CEM Benchmarking
Leanness and efficiency are hallmarks of TRS.

The trend in total pension administration costs (including major projects) shows TRS cost remains well below that of its peers.

The challenge with operating so close to the margins from a staffing perspective: TRS is severely constrained in its ability to respond to regular surges in business demand.

For example, mandatory overtime has been in use for 5 years, driving staff burn-out and increased turnover.

Source: CEM Benchmarking
Customer Service Update
Service Level for Carriers is 90% within 1 Minute

TRS-Care & TRS-ActiveCare Calls
Received by Carriers

Service Level HIB & ACT
TRS-ActiveCare District Participation Update
TRS Conducted Extensive, Multi-Method Outreach Campaign to Employers before December 31st Deadline to Notify TRS of Decision to Leave or Join TRS-ActiveCare
### Outreach & Engagement to TRS-ActiveCare Employers

Each employer engaged an average of 31 times before December 31st

<table>
<thead>
<tr>
<th>Category</th>
<th>Engagement Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct email Recipients</td>
<td>23,606</td>
</tr>
<tr>
<td>Digital Resource Engagement</td>
<td>12,818</td>
</tr>
<tr>
<td>Regional Rating Attendees</td>
<td>1,254</td>
</tr>
<tr>
<td>Your Future Your Way Meetings</td>
<td>200</td>
</tr>
<tr>
<td>District Ambassador Outreach</td>
<td>151</td>
</tr>
</tbody>
</table>
• TRS collected health plan info from 39 districts outside of TRS-ActiveCare
• Goal was to learn how TRS plans compare to market
• 141 plans included in data set are available to 82% of employees in non-participating districts
• 2021 or 2021-22 plan year
TRS-ActiveCare Contributions Comparison

2021-22 Contribution Comparison: Employee-Only Coverage

U.S. Public Education Average

Texas Non-Participating Schools Average

TRS-ActiveCare

Employer | Employee
--- | ---
U.S. Public Education Average: 562 (Employer) + 107 (Employee) = 669
Texas Non-Participating Schools Average: 451 (Employer) + 122 (Employee) = 573
TRS-ActiveCare: 330 (Employer) + 132 (Employee) = 462

TRS total premium per member below peers

U.S. Public education is from U.S. Bureau of Labor Statistics 2021 data. Texas non-participating is based on 141 plans with data for 2021-22 or 2021 plan years. Texas non-participating data represents average of each district. Plans outside of TRS-ActiveCare may offer different plan designs which impact premiums.
2021-22 Contribution Comparison: Employee-Family Coverage

United States of Public Education

<table>
<thead>
<tr>
<th></th>
<th>Employer</th>
<th>Employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRS Districts</td>
<td>$373</td>
<td>$1,133</td>
</tr>
<tr>
<td>Texas Non Participating Schools Average</td>
<td>$461</td>
<td>$855</td>
</tr>
<tr>
<td>United States of Public Education</td>
<td>$1,097</td>
<td>$617</td>
</tr>
</tbody>
</table>

U.S. Public education is from U.S. Bureau of Labor Statistics 2021 data. Texas non-participating is based on 141 plans with data for 2021-22 or 2021 plan years. Texas non-participating data represents average of each district. Plans outside of TRS-ActiveCare may offer different plan designs which impact premiums.
Comparison of Total Monthly Costs

Total cost of health care per employee are $115 lower per month in TRS

Prior slides showed only contributions. This slide adds employee-cost sharing to these contributions to show total cost. It also weights enrollment by tier so that different pricing strategies for dependents are accounted for.

See appendix for methodology notes.
• Move to regional pricing having intended effect
• 90% of employers remained in program
• Statewide premium impact of change in participating employers expected to be <1%
• Final regional factors & rates set at April board meeting
90% of Participating Employers Chose TRS-ActiveCare for 2022-23 plan year

Districts Staying

985 Districts

Districts Leaving

114 Districts
TRS-Care One-Time Re-Enrollment Update
HB 2022 provides a one-time reenrollment opportunity for former TRS-Care retirees

- Who are eligible for Medicare, and
- Who voluntarily terminated their enrollment between Jan 1, 2017, and Dec 31, 2019

- As of January 2022, 648 applications have been sent by TRS
- 347 applications have been submitted to TRS

Jan 1, 2022 Coverage Starts
Jan 1, 2022 324 Enrollments
Dec 31, 2023 Reenrollment Deadline
TRS is conducting Extensive, Multi-Method Outreach Campaign to Notify eligible former TRS-Care Retirees about opportunity to Re-Enroll into TRS-Care.

- **Virtual Meetings**
- **Email Campaigns**
- **Mail Outreach**
- **Digital Resources**
On average each member was engaged 15 times as of January 2022

- Digital Resources Engagement: 420,324
- In-Home Mail Outreach: 66,751
- Email Campaign Recipients: 26,645
- Virtual Meetings Attendees: 124
COVID-19 Funding Update
• 87th TX Legislature (3rd Special) Appropriated $286M to TRS health programs
• Allows TRS to obtain reimbursement for COVID-19 related claims from one-time federal funding source
• Improves affordability in TRS-ActiveCare by eliminating need to increase premiums to recover from prior COVID-19 expenses
• Improved TRS-Care fund balance enables a one-time payment of $448.12 to TRS retirees or surviving spouses in March of 2022
• The Office of the Ombuds provides TRS members and retirees with an additional contact for addressing concerns or issues.

• The Ombuds may be contacted when a member or retiree has been unable to obtain information through normal TRS channels or is dissatisfied with the customer service received through normal TRS channels.

• The Ombuds serves as an escalated resource for members as opposed to a first point of contact, like the telephone counseling centers.

• The Ombuds is an independent office designed to offer a neutral and impartial review of member and retiree concerns and will provide an initial response to member and retiree outreach within five (5) business days.

• The Ombuds also serves as an additional contact for stakeholder organizations.
Log incoming calls and emails to the Ombuds Office for tracking and follow up.

Assess all contacts and, if necessary, refer to managers for resolution.

Help to make it easier for members to resolve their complaints, concerns and inquiries.

Inform members throughout their complaint process.

Collaborate with internal departments to ensure a seamless and efficient process to resolution.

Build and maintain trust by taking pride in our work and always do what we say we will.
Components of Complaints Log

Classification/Source:

- Ombud
  - Compact with Texans
  - Email
  - Voicemail
  - "Contact Us" page
- Call Center (after survey)
- Chief Compliance Officer
- Employees
- Government Affairs / Legislators
- Hotline
- In Person
- Legal Counsel
- Office Visit Counseling
- Privacy Officer
- Reporting Employers
- SAO or CAE
- Social Media
- Stakeholders
- Trustees
- Written Correspondence

Complaints Log:

- Ombuds Communications
- Appeals Log
- OE Ethics Related Matters (OE)
- Large-Scale Agency Issues (External)
- "Complaints"

"Complaint"*:

- Written
- Involves dissatisfaction with TRS, TRS Employee, TRS Contractor
- Not limited to dissatisfaction with a regulation or statute.
- Requests or implies that TRS will respond or take action

* Communication is considered a "Complaint" if all conditions are satisfied
The Ombuds' Identification of Complaints…

The Ombuds will consider the following factors when determining whether to open a case for review:

- Involves dissatisfaction with TRS, TRS Employee, TRS Contractor
- Whether or not the caller has contacted the department where the issue/question/concern resides, and it is already under review.
- Whether or not the process or policy not followed at any point has been a pattern.
- If the case is already under appeal.
### Contact Volume

*Emails and voicemail as of beginning of June 2021*

<table>
<thead>
<tr>
<th>Ombuds Communications 2021</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td>161</td>
</tr>
<tr>
<td>Voicemail</td>
<td>368</td>
</tr>
<tr>
<td>Compact with Texans</td>
<td>132</td>
</tr>
<tr>
<td><strong>Total Count:</strong></td>
<td><strong>661</strong></td>
</tr>
</tbody>
</table>

- Representative of the total number of communications and inquiries.
- Representative of the number of comments, not unique commenters.
Q1 2021 RECEIVED 42 COMPLAINTS WITH 0 OUTSTANDING

Q2 2021 RECEIVED 35 COMPLAINTS WITH 0 OUTSTANDING

Q3 2021 RECEIVED 19 COMPLAINTS WITH 0 OUTSTANDING

Q4 2021 RECEIVED 39 COMPLAINTS WITH 0 OUTSTANDING

135 Total Complaints for 2021
Top 3 Complaints 2021

- Timeliness of Response
- Incorrect Information Provided
- Extended Wait Times

Point-in-Time Complaints

- Vaccine Robo call
- TRS Investment Strategy Concern
- Privacy Concern
- Long Term Facilities
- Failure to Respond
- Human Error
- Lost Paperwork
- Rude or Inappropriate Commentary
- Technology Concerns
- Fraud
- Incorrect Information Provided
- Incomplete Information Provided
- Extended Wait Time
- Timeliness of Response

Graph showing the distribution of complaints.
### Details of Complaints

#### Past Concerns...
- Death Benefit Processing & Distribution of Death Benefits
- Allegations of Delay in Annuity or Refund Processing
- Extended Phone Wait-times

#### Current Concerns...
- Extended Phone Wait-times
- Timeliness of Response (processing payments, addressing concerns or general questions)
- Incomplete or Incorrect Information Provided
Summary

**Highlights and Accomplishments…**

- Established the newly created Ombuds office.
- Completed the Ombuds website. Included links to key departments, resources and information for member ease of navigation.
- Connected with state agency Ombuds from around the state for future collaborations, trainings, etc.
- Shadowed counselors and met with major departments regarding procedures for receiving, logging, processing and resolving member concerns.
- Introduced myself to 60+ legislative offices, active and retired member associations, as well as spent time with some of our retirees leading one of the organizations.

**Moving Forward…**

- Attend monthly meetings with internal stakeholders.
- Complete creation of database to increase efficiencies in managing and monitoring member inquiries and complaints and identify trends.
- Continue training on TRS divisional processes, protocols and services (i.e., TRS benefits, active & retired membership, death claims, refunds, etc.) to remain knowledgeable and current on matters relating to member concerns.
- Identify opportunities for improvements in member communication, follow up, and outreach.
- Provide a trusted, accessible service by listening and being timely in responses.
- Reassess complaints categories.
Annual Fiduciary Training

• Transparency
• Conflicts of Interest
• Roles and Responsibilities
• “Every regular, special, or called meeting of a governmental body shall be open to the public, except as provided by this chapter.” *Tex. Gov’t Code § 551.002*

• Basis in common law: “decisions entrusted to governmental bodies must be made by the body as a whole at a properly called meeting.” *OAG Handbook*

• “The provisions of [the Act] are mandatory and are to be liberally construed in favor of open government.”¹

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¹ See *City of Laredo v. Escamilla*, 219 S.W.3d 14, 19 (Tex. App.—San Antonio 2006, pet. denied)
Open Meetings Act – Notice Requirement

- Public advance written notice of the date, hour, place, and subject of all board and committee meetings required.
- Posted in *Texas Register* 7 days before the day of the meeting.
- Notice must be *adequate*
  - Items of special interest to the public.
- Actions taken without proper notice are voidable.
• An action or deliberation (i.e., discussion) by quorum of Board or Board committee
• A discussion of Board business between a quorum and a third person
• A “gathering at which Board members listen or talk to anyone else about Board business”
  • Includes gathering conducted by Board, for which Board is responsible, attended by Board or committee quorum, or called by Board
• TRS may meet in a closed meeting, or Executive session, only when expressly authorized to do so by statute

• The Open Meetings Act contains specific exceptions to the requirement
  • Attorney/Client Discussion
  • Personnel
  • Real Property
  • Procurement
  • Cybersecurity
  • Audit
  • Investments
Open Meetings Act – Examples of Violations

- Quorum of Board conducts “meeting” without proper notice
- Fails to provide adequate notice of a discussion item
- Participates in unauthorized executive session
- Participates in “walking quorum” or “daisy chain”
  - knowingly engaged in a communication among a series of communications that each occur outside of a Board meeting and that concern an issue within the Board’s authority, where the members engaging in the individual communications constitute fewer than a quorum but those engaging in the series of communications constitute a quorum
  - knew at the time the member engaged in the communication that the series of communications would involve a quorum and would constitute a deliberation, once a quorum was reached
"A Tarrant County grand jury indictment says a complaint claims they discussed board business, specifically the Cultural Competence Action Plan, in a series of private text messages."

"The KCBD Investigates team learned from a Lubbock County employee that an information technology meeting at Lubbock County attended by, among others, all five members of the Commissioners Court was not posted."
OPEN MEETINGS ACT
FIDUCIARY PERSPECTIVE
“Under the fundamental philosophy of the American constitutional form of representative government that adheres to the principle that government is the servant and not the master of the people…it is the policy of this state that each person is entitled, unless otherwise expressly provided by law, at all times to complete information about the affairs of government and the official acts of public officials and employees.” Tex. Gov’t Code, § 552.001

“This chapter shall be liberally construed in favor of granting a request for information.” Tex. Gov’t Code, § 552.001
Public Information Act – What is Public Information?

Information that is written, produced, collected, assembled, or maintained .... in connection with the transaction of official business:

- By TRS;
- For TRS and TRS owns the information, has a right of access to it, or spends or contributes public money for the purpose of writing, producing, collecting, assembling, or maintaining the information; or
- By a Trustee or employee of TRS in his or her official capacity and the information pertains to official TRS business
• What can TRS withhold?
  • Member records
  • Certain, specific sensitive information
  • Information subject to a previous determination

• TRS must obtain OAG ruling to withhold other information
  • Information is sent to the OAG for review

• Information involving privacy or property interests of third parties
Public Information Act – Trustee Written Communications

• Emails
• Separate TRS business from personal or business emails
  • TRS specific email account
  • Identifies capacity in which Trustee is communicating
  • Litigation and regulatory requests
• Text Messages
• Responding to PIA request
Fort Bend ISD board members during historic safety meeting text “...we are fooling around! Lol”

Part 2: KPRC 2 Investigation reveals the districts tough fight to keep board meeting text messages private at the public’s expense
Recordkeeping

• Recordkeeping is a component of Transparency
• Retention requirements and the TRS Records Retention Schedule
• Trustee records
RECORDKEEPING
FIDUCIARY
PERSPECTIVE
Conflicts of Interest
A trustee may not have a direct or indirect interest, engage in a business transaction or professional activity, or incur any obligation that is in substantial conflict with the proper discharge of the trustee’s duties in the public interest. *Tex. Gov’t Code § 572.001*

A member of a governmental body may not have a personal financial interest in a contract entered into by the governmental body. The common law doctrine also seeks to avoid the appearance of impropriety. *Tx. Attn. Gen. Op. GA-0351*
Trustee Conflicts of Interest – TRS Policies

Trustee Ethics Policy
• Personal advantage
• Gifts
• Use of TRS resources
  • Travel Policy
  • Using staff resources
• Personal investments
• Referrals
• Blackout periods
• Co-fiduciary responsibility

• Code of Ethics for Contractors
• Employee Ethics Policy
• TRS Persons List
Trustee Conflicts – Common Sources of Conflicts

- Business relationships or interests
- Service on a company board
- Campaign contributions or solicitations
- Ownership or financial interests
- Family relationships
- Close personal friendships
- Employment by a TRS business vendor or an offer of a benefit or gift by a TRS vendor
- Being asked to serve in another governmental position
Limitations on Trustee eligibility:

- Employment or participation in management of entity receiving TRS funds (unless on behalf of the retirement system)
- Ownership or control of more than 10% interest in entity receiving TRS funds (unless on behalf of the retirement system)
- Paid or employment of, or consultant for, an investment or insurance Texas trade association
- Required to register as lobbyist in Texas because compensated activities related to Board’s operations
- Annuitant (limited to direct appointments by governor)
- Use or receive substantial amount of tangible goods, services or funds from TRS
• Should not make personal investments that could reasonably be expected to create a substantial conflict between the trustee’s private interest and the public interest

• May not have an interest in gains from TRS investments and may not receive compensation for service, other than authorized expenses

• May not have an interest, engage in a business transaction or professional activity, or incur any obligation that is in substantial conflict with the proper discharge of the trustee’s duties in the public interest

• Common law – conflicts of interest
Specific Reporting Requirements

• Monthly contracting and procurement review email (SB 65)
• Quarterly TRS vendor report email (personal trading)
• Managed account reporting
• Personal Financial Statement
• Annual ethics certification
• Annual training certification
• Annual contracting and procurement certification
Risks of Improper reporting

- Recusal from participation
- Jeopardize Trustee eligibility
- Inhibit TRS contracting (void contracts)
- Personal fines
- Criminal penalties
- Reputational risk
Houston ISD moves to sever contract with vendor amid investigation into possible conflict of interest

HISD confirmed the investigation after the Houston Chronicle began asking district officials about a potential conflict of interest involving district administrator Reginald Bush and BlazinBrook Management LLC, a company that contracts with the school district to provide tutoring services.
CONFLICTS OF INTEREST

FIDUCIARY PERSPECTIVE
Roles & Responsibilities
Role of Board

• Oversight role, rather than management
  • Focus on long-term, big picture

• Setting Policy
  • Distinguish between policy decisions and business decisions
  • Robust, clear and comprehensive policies (such as IPS and Proxy Voting Policy)

• Appropriate delegation
  • Delegation is a fiduciary function
  • Duty of Care; Duty of Prudence

• Ensure appropriate level of Board reporting
  • Sufficient information for decision-making and periodic review
• Effective board oversight of vital functions
• Ensure that management has appropriately addressed critical functions, such as:
  • Enterprise Risk Management (ERM) process for operational risk
  • Procurement and contracting
  • Oversight of cybersecurity and information security
  • Adequate succession planning and BCP
  • Budget oversight
  • Benefit administration
  • Investment Management
• The Board speaks only as a body through its actions taken in open meetings
• No individual trustee speaks for or binds the Board or the retirement system
  • Trustee Communications
• A discussion in a Board meeting without a vote does not constitute a Board decision
• The Board operates through its committee structure:
  • ACE
  • Benefits
  • Budget
  • Compensation
  • Investment Management
  • Policy
  • Strategic Planning
• Trustees don’t represent constituencies
  • Exclusive Benefit Rule; Duty of Loyalty; “One Hat Rule”
Board Resources

Board Consultants

• Fiduciary Counsel
  • Suzanne Dugan, Cohen Milstein

• Investment Advisory Services
  • Aon Investments
  • Dr. Keith C. Brown

• Actuary
  • Gabriel, Roeder, Smith & Company (GRS)
ROLES & RESPONSIBILITIES

FIDUCIARY PERSPECTIVE
1. DE&I Benchmark Guide
2. Member Impact
3. Strategic Plan
4. DE&I Highlights FY21
5. DE&I Goals and Objectives FY22
6. Areas of Focus FY22
7. DE&I Strategy, Performance Metrics and Measurement
DE&I Strategic Plan – Global Diversity, Equity and Inclusion Benchmarks (GDEIB)

- Best practices (est. 2006)
  - 112 Expert Panelists
  - Multiple Industries
  - Global and Domestic Companies

- Integrated systems approach
- Comprehensive and adaptable
- 4 groups, 15 categories, 275 benchmarks at 5 levels
DE&I Strategic Plan – Global Diversity, Equity and Inclusion Benchmarks (GDEIB)

Inactive
No DEI work has begun; diversity and a culture of inclusion are not part of organizational goals.

Reactive
A compliance mindset; actions are taken primarily to comply with relevant laws and social pressures.

Proactive
A clear awareness of the value of DEI; starting to implement DEI systemically.

Progressive
Implementing DEI systematically; showing improved results and outcomes.

Best Practice
Demonstrating current best practices in DEI; exemplary for other organizations globally.
DE&I Strategic Plan – Global Diversity, Equity and Inclusion Benchmarks (GDEIB)

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Best Practice
Demonstrating current best practices in DEI; exemplary for other organizations globally.
Member Impact

1. A positive, inclusive work environment facilitates top performance from TRS employees.

2. When TRS employees perform at their best, members benefit from improved customer service, stronger investment decisions, and improved retention of top talent.

3. A diverse and inclusive workforce that reflects the diversity of TRS membership contributes to member confidence in our situational sensitivity.

DE&I training contributes to membership service. DE&I work contributes to a workplace that helps employees feel valued and perform at their best for members. A strong DE&I program lends competitive strength to TRS as we strive to recruit and retain top talent.
Diversity, Equity & Inclusion Strategic & Annual Areas of Focus Plan

2021-2025 SHARED SERVICES STRATEGIC PLAN

DIVERSITY

Goal 1: Support the development and recruitment from a highly skilled, diverse candidate pool specific to division and departmental needs to build a high performing, mission-driven employee base that reflects the state of Texas.

Overarching Strategy: Recruit, retain and develop a diverse organization accounting for the current eligible workforce and a future workforce demographic. Given the demographic shifts across the U.S., specifically in Texas, the increasing accessibility enablement that technology offers and the growing understanding of the strengths offered through neurodiversity, TRS looks to expand its recruiting pool of top talent.

Objectives: 4
Strategies: 17
Milestones: 73
DE&I Strategic Plan

Diversity, Equity & Inclusion Strategic & Annual Areas of Focus Plan

2021-2025 SHARED SERVICES STRATEGIC PLAN

EQUITY

Goal 2: Address organizational systems and proactively challenge and train to manage and/or eliminate bias, harassment and discrimination in demonstration of our equal opportunity policy and equitable access commitment.

Overarching Strategy: Ensure and promote an inclusive and equitable organizational culture. The business case for diversity relies heavily on diversity and equity as the entrée to an inclusive culture. Representation matters but engaging the contributions of those varied representations increases return on investment in many facets. As individuals and teams engage their strengths in their work, achieve positive outcomes and results, and gain recognition for the impact on the organization, they expect to progress in their career within the organization. Those doing business with TRS in various capacities, will be encouraged to engage diversity and inclusion aligned and equitable practices and to progress ESG investment practices. This progression is the next stage of acknowledgement, recognition and values-based business practices, holding ourselves accountable in addition to those organizations with which TRS partners.

Objectives: 7
Strategies: 24
Milestones: 51
DE&I Strategic Plan

Diversity, Equity & Inclusion Strategic & Annual Areas of Focus Plan

2021-2025 SHARED SERVICES STRATEGIC PLAN

INCLUSION

**Goal 3:** Build on the legacy of the TRS culture to ensure that the organization remains a welcoming and satisfying place to work and with which to partner for all TRS employees, contractors, vendors, as well as strategic and community partners.

**Overarching Strategy:** Support innovative professional development, career progression and open leadership succession planning. The sense of belonging, value and ownership in the organization and its achievements creates a culture of inclusion. It creates an environment where all employees are welcomed and supported in addition to different perspectives and contributions being sought and valued. When the culture of inclusion is strong, internal institutionalized and individualized barriers to success are uncovered, addressed and eliminated.

Objectives: 5
Strategies: 19
Milestones: 46
Milestones:
63 of 65 Milestones completed for FY20 and FY21

Areas of Impact:
- Affinity Networks (internal ERGs/external networks)
- Annual Sr. Leadership Training
- TRS Employee DE&I Council
- Brand Awareness Plan
FY 2021 Highlights

70%
More than 70% of job seekers nationwide are looking for a company with dedicated commitment to DEI. The Manifest

“Diversity”
TRS Employees added “diversity” to list of core values for the first time during the 2021 Core Values Refresh.

300
Nearly 300 TRS employees have participated in at least one DEI designated activity, event or training.

4.70
In 2021 TRS employees scored DEI foundational training, Cultural Intelligence and Managing Bias, an average rating of 4.70 (out of 5). 1/2021

6 | 250
In less than one year, TRS employees established 6 active Employee Resource Groups (ERGs) with a total membership of nearly 250 so far. This is about 1/4 of TRS’ total workforce.

8
TRS employees identified 8 DEI related internal teambuilding and social connection activities for TRS.

14
TRS employees identified 14 DEI related training and development opportunities they would like to see at TRS.

DEI helps us meet the needs of our employees in a changing employment landscape.
Information Sessions:
• Texas Women’s University
• University of Texas – El Paso
• University of Houston
• University of Texas – Dallas
• St. Edwards University
• Flatiron School

Professional Organizations:
• ALPFA – El Paso
• Black Is Tech

TRS Hosted Events:
• IMD Open House
• TRS Tech feat. Chris Cutler
FY2022 Goals and Objectives

Milestones:

48 Milestones for FY22

Areas of Impact:

- HUB Plan
- Hybrid Considerations
- Diverse Talent
- TRS DEI Best Practices
Areas of Focus FY 2022

• Diversity Recruiting

• Hybrid work impacts:
  o Inclusion Innovation
  o Retention Factors

• Training:
  o Integrate DE&I to existing trainings
  o Map DE&I training program

• Environmental Social Governance (ESG)
  o Continued collaboration and partnership

• Procurement & Contracts: connect affinity networks for HUB

• IMD: Diversity Recruiting Consult; IMD Summit Panel feat. ESG and DE&I

• OE-Learning & Development: DE&I training integration and training programs

• IT: Diversity Recruiting

• Benefit Services and HIB: Inclusion focus

• OE: Retention
RFP Update

• Currently in Contract Negotiation Phase

• We are on target with initial projected timeline

• Benefit to Members
Organizational Excellence

TRS Classification and Compensation Review

Andrew Roth and Janet Bray
February 17, 2022
The Pandemic was a Tipping Point

- Employees want to work but are more selective on what type of work and where
- Remote work provided employees autonomy they don’t want to lose going back to an office
- A backlog of resignations and job postings opened the floodgates for talent competition

Widespread Burnout has Spurred Turnover

- Time at home allowed employees to reflect on what they wanted in life
- After the initial shock of the pandemic, employees began to explore career and life pivots
- Companies paying low wages or with poor working conditions are struggling to stay staffed

The Great Reassessment

- Companies are shifting talent strategies
- Recruiters are offering generous and unprecedented hiring packages to attract top talent
- Remote work and flexible work schedules are the expectation for employees
- Companies need to dedicate cash to help attract and retain talent, especially with hot jobs

Employee Choices and Autonomy are Key

- Entrepreneurship is booming, the gig economy is growing, and traditional 9-5 roles are less desirable
- Employees have options beyond their current geographic location
- Remote work has created a global workforce and companies are exploring options across the US and beyond to fill vacant positions
TRS by the Numbers

**TURNOVER**

YTD Turnover has increased **134%** from FY 2021 – from 32 separations to 75. From Sept. 2021 to Dec. 2021, TRS has paid out **$1.3 million** to departing employees for accrued vacation and overtime.

**HIRING**

In the past six months, **34** people have declined jobs due to compensation.

**LABOR MARKET**

Austin unemployment rate is currently **2.9%**, meeting the pre-pandemic rate of **2.9%**.

TRS currently has **142** vacancies, of which **67** are in the posting and recruitment process.

Last posting for Data Architect took **292** days to fill, TRS is anticipating **3** upcoming vacancies for the same role.

Hiring increased **49%** in the Austin Metro area over the last year (Oct to Oct).

If turnover rates continue, TRS may need to fill up to **300** positions just to maintain current staffing levels.

Recruiters consistently see candidates expecting **10-20%** more than what TRS offers, and employees have left for 20-40% pay increases plus bonuses.

Austin Chamber of Commerce reports **92,000** current job postings in December – up by **2,500** from the previous month.
Turnover is trending higher for FY 2022

- Q1 FY 2021 was 2.4%, Q1 FY 2022 is 4.6%
- Separations from September to January (to date) are higher than all of FY 2020
- If turnover rates follow the current trend, TRS will need to fill over 300 positions to remain appropriately staffed

Filling vacant positions may be challenging

- In FY 2021, TRS filled 160 positions (excluding interns)
- TRS currently has 175 contractors, and usage (although costly) may need to increase to manage workloads
Direct and Indirect Costs of Turnover

Indirect costs include:
- Impact to employee morale and culture
- Decreases to employee productivity
- Increases in workload and burnout
- Loss of employee engagement
- Customer service declines
- Loss of institutional knowledge

Direct costs include:
- 67% increase in costs to pay out annual and overtime leave at separation
- Additional recruitment costs related to advertising positions and time necessary to interview candidates
- Increased premiums to hire new staff and resulting financial impact to address internal pay equity
- Costs for contractors to fill vacant or hard to fill positions may run 150% to 200% above the cost of an employee
- Increased training costs
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Changes to the State Classification Plan – SAO Methodology

- The Classification Plan is designed as a broad framework to cover generic roles and positions. For example, Programmers versus Java Developers, Attorneys versus a Tax or Health Care Attorney
- Positions in the Plan are a “one size fits all approach” that covers over 150,000 employees in 100 agencies ranging from small (20-30 employees) to large (30,000+ employees) employers
- When reviewing changes to the plan, the SAO specifically looks to see what impact those changes have across the state, and the default is to minimize changes and impact wherever possible
- Organizations typically adjust ranges on an annual basis to match market movement however the State does not follow that methodology - the last time State ranges were updated was 2016
- Changes that have low or zero cost to implement or cover large groups of employees across multiple agencies have a greater chance of approval.
- Requests specific to an agency or a small group of individuals have about a 50% chance of implementation, less if the requests don’t meet SAO thresholds
  - In 2020, SAO approved 54% of agency requests
  - In 2018, SAO approved 40% of agency requests
  - In 2016, SAO approved 59% of agency requests
The Impact of TRS Changes on State Agencies

One of the greatest obstacles to make changes in the State Classification Plan is the potential impact on other agencies, especially in terms of implementation costs.

<table>
<thead>
<tr>
<th>State Agency Programmers/Developers</th>
<th>State Agency Enterprise/Network Systems Administrators</th>
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<td>Senior, 430</td>
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**Java Developer:**
Moving Intermediate level Programmers and Developers to the minimum of a market competitive range would impact **220 employees in 35 agencies, with a potential cost of $1,988,277**

**Enterprise Systems Specialist:**
Moving Intermediate level Systems Administrators to the minimum of a market competitive range would impact **151 employees in 33 agencies, with a potential cost of $3,569,756**

For TRS to make changes for both positions (8 employees), the cost is $116,250, and the expanded ranges would greatly impact our ability to recruit and retain staff.
Using a TRS Classification Plan

Pros

• Provides TRS with an agile structure that increases flexibility and options for TRS to adapt more quickly to changes in the market

• Gives TRS the ability to create much-needed unique job classifications tailored to the pension industry and TRS-specific business needs

• A TRS Classification system improves our ability to recruit and retain talent with clearly defined job titles, levels, and career paths

• Contains strong governance protocols and clear guidelines for implementation

• Addresses pay equity concerns with the current piecemeal approach by ensuring all TRS employees are on one classification structure

• Allows TRS to immediately address high priority positions

• TRS has the authority to move to its own system as have numerous other state entities

Cons

• Although high priority positions may be immediately addressed, full implementation will take 2-3 years

• TRS will see additional cost to move employees to market-competitive ranges
Although the State Classification Plan is widely recognized, many state entities manage their own structure.

73 Higher Education institutions maintain their own compensation structure.

23 agencies can partially or fully utilize unclassified positions based on business needs (see Appendix C for complete listing); examples include:

- State Auditor’s Office
- Sunset Advisory Commission
- Treasury Safekeeping Trust (Comptroller’s Office)
- Article VIII, Self-Directed Semi-Independent agencies (e.g. Department of Banking)

Currently the state has over 4,500 employees in unclassified positions.

TRS has 38 employees in unclassified positions. These include senior leadership at IMD and Investment Attorneys.

Note: Listing of State Agencies with the authority for unclassified positions can be found in Appendix C.
• The State uses 3 structures with 53 separate pay ranges - TRS will only need 1 structure with 22 pay ranges

• The TRS structure will mirror the State’s structure but still allow TRS the flexibility to tailor positions, titles, and pay ranges

• Each position is assigned to a salary group that has a corresponding minimum and maximum salary for each position

• Unlike the State structure which is rarely adjusted, TRS will have the ability to reassign jobs to new salary groups based upon changes in the market
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How will TRS Target Adjustments?

**Positions below market**
- Positions more than 10% below market will be adjusted to market competitive ranges
- Data from salary surveys, as well as data obtained during the recruitment process will be used to identify positions that are the highest risk due to low salary
- TRS needs ~$5 million to adjust non-IMD employee salaries to a market competitive rate
- Costs for FY 2022 implementation can be absorbed with current salary lapse dollars

**Equity issues as a result of hiring**
- As TRS works through moving employees to a new structure, the hiring process may create internal equity issues
- As candidates are hired, OE will review employees in similar roles and on the team to ensure current employees are not adversely affected

**Groups with high turnover rates**
- TRS will monitor turnover rates and identify individuals or teams at risk of leaving due to compensation
- Equity adjustments may need to happen over a period or through several cycles until TRS sees turnover diminish to normal levels
- TRS will also explore other options (e.g., retention bonuses) to help ensure staff in key positions are retained

---

**Cost Breakdown – Non-IMD Positions**

- Benefit Services: 20%
- Executive: 27%
- Finance: 13%
- HIB: 11%
- IT: 29%

**Notes:**
- The Executive Division includes Legal & Compliance, Business Administration, Strategy, Internal Audit, and Organizational Excellence
- Additional details on market pricing and costing can be found in Appendix J
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Comprehensive Classification Review (CCR)

• Engagement with Deloitte Consulting; project ran from June to December 2019
• List of deliverables in Appendices M and N
• Work included review of salary structure, recommendations for updates, market reviews, and deliverables to create a TRS specific salary structure

Implemented CCR Recommendations:

• Updates to job description formats
• Leveling guides for management and career ladder development
• Updated methodology for market reviews
• Updated leveling for positions to the extent possible with current State Classification structure

• Further action on CCR scheduled for April 2020, but paused due to uncertainties related to COVID, Sunset review, and the upcoming Legislative Session

• TRS is now ready to move forward with full implementation of a new Classification Structure
Staff Recommendation

• Given the pressing talent needs for TRS, staff recommends TRS implement a TRS specific classification structure

• Authority to implement our own structure comes from the following government code sections:
  • *Government Code 825: Subchapter A, Sec. 825.208(b): The retirement system is exempt from Section 651.002 Chapter 660, and Subchapter K, Chapter 659, to the extent the board of trustees determines an exemption is necessary for the performance of fiduciary duties.*

• If approved, TRS staff will begin implementation and provide an update to the Board at the April 2022 meeting
Appendix A: TRS Terminations by Month – Division Breakdown

**Benefit Services**

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Appendix B: TRS Terminations by Month by Type

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### Appendix C: Authority to Implement Classification Plan Changes

- State of Texas primarily uses the State Classification Plan for the salary structure, job classifications, and job descriptions of state positions however some agencies, including TRS are exempt from using the Plan:
  - Government Code 825: Subchapter A, Sec. 825.208(b): The retirement system is exempt from Section 651.002 Chapter 660, and Subchapter K, Chapter 659, to the extent the board of trustees determines an exemption is necessary for the performance of fiduciary duties.

- Institutions of Higher Education manage their own compensation system and classification structure. Currently the state has 73 universities covering 188,140 employees

- Several agencies have the ability use unclassified positions for positions, however many smaller agencies mirror the State Plan because they do not have resources to manage their own plan

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<td>Board of Law Examiners</td>
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<td>Board of Public Accountancy</td>
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<td>Comptroller’s Treasury Safekeeping Trust Company</td>
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Appendix D: Unclassified Positions at TRS

TRS first used unclassified positions in 2014 to address hiring and recruitment challenges related to Investment Attorneys

- Market average for positions was above maximum of the State Classification Plan
- Legal specializations critical to TRS business needs are not reflected in the State’s structure
- TRS submitted a request to SAO to create investment specific attorney positions, but the request was not approved
- TRS currently has 12 unclassified attorneys, including General Counsel and Chief Compliance Officer

With the creation of a London Office in 2016, TRS moved TRICOT secondees into unclassified positions

- Although employees are in classified titles (e.g. Investment Analyst or Portfolio Manager), there is no mechanism to add salary adjustments to account for overseas assignment costs or other adjustments
- TRS currently has 7 employees in these positions

In 2018, unclassified positions were created for Senior Managing Directors, Managing Directors, and Senior Directors at IMD

- Market average salaries for these positions were above the maximum of any position in the State Classification Plan and above the salary range for any state position
- Without the use of unclassified positions, IMD was unable to implement market adjustments as a result of the 2018 McLagan study
- TRS currently has 19 employees in these positions
• On average, TRS employees are within 10-15% of the maximum of their current pay range

• Current ranges are not all aligned with market, so assessing market competitiveness is difficult

• Compensation team is seeing increased challenges to find appropriate titles and levels for new positions

• Even with funding, TRS will be unable to increase salaries for many employees due to salary range maximums

• In the next 2-3 years through merit and other adjustments, 42% of employees will hit the maximum of current state ranges – which are not competitive with market

• There is no mechanism to pay an employee outside of a pay range, so pay is capped
Appendix F: Compensation Philosophy

• **Purpose**
  - A compensation philosophy provides overall direction and guiding principles for how an organization will deliver pay.
  - Provides a way to create a framework for consistency, and a way to communicate pay philosophy to employees and applicants.
  - Demonstrates management’s commitment to continually review and assess compensation for employees based on internal equity and external market competitiveness.

• **Background**
  - TRS began working on formalizing a compensation philosophy for headquarter employees in 2014.
  - As part of the CCR (Comprehensive Classification Review) in 2019, the philosophy was refined and finalized as part of the project.
  - TRS currently uses the guide to assist in reviewing compensation, but cannot fully realize the philosophy while using the State Classification Plan.
### Ability to Attract and Retain

- Attracting and retaining high quality staff equips the agency to better serve members
- Competitive compensation structures allow TRS to recruit competitively
- Although turnover is expected, high rates have a fiscal and productivity impact on the agency
- TRS-specific classifications allow applicants to clearly understand positions

### Increased Flexibility

- TRS’ needs have evolved beyond what the generic state structure can provide
- The ability to overall structures to keep pace with changes in market allows TRS to proactively manage compensation costs
- Structure and compensation can adjust up or down depending upon labor market trends
- TRS can develop new jobs and roles as work evolves and new roles emerge

### Accuracy and Clarity of Information

- TRS specific plan ensures accuracy in categorization and placement of jobs – especially with specialized or niche positions
- Clearly defined titles, levels, and career paths allows employees to see options within the agency
- Current structure is cumbersome and difficult to understand – a TRS plan will increase transparency
- Recruiters can efficiency source for candidates using streamlined titles that reflect the actual work and role

### Efficiency

- Job data (internal and external) can more easily and quickly be analyzed and reviewed
- Maintaining one structure streamlines work processes and reduces administrative burden
- Streamlined titles and levels can easily be uploaded and maintained in databases – to allow for efficiencies in budgeting and forecasting compensation costs
Market Pricing

- Goal of market pricing is to determine the “going rate” or cost of labor for a particular job
- Salary surveys (subscription-based) are the established tool and process used to assess compensation for a variety of positions
- Data is obtained through third party sources with established history of providing valid and reliable data from both private and public sector positions.
- Survey data is tailored to the position, industry, and labor market appropriate for the role. Examples include:
  - Security Guard – includes survey data from local market (Central Texas/Austin), from all industries
  - IT Positions – includes survey data from the regional market (Texas), from all industries, but tailored to specific IT skill set (e.g. ESB Developers)
  - Senior Director, Investment Accounting – includes survey data from national labor market, focused on the financial services industry, including pension funds
- Access to survey data allows TRS to customize searches based on the specific needs of a position, or to find data on new and emerging roles

Cost Estimation

Goal of cost estimations is to use the data obtained in market pricing to estimate budgetary impact using a two-step process

Step 1: Overall costs to align with market
- Data from market reviews is used to determine the cost of labor for a position
- Market rates are then set as targets for employee pay
- To calculate the cost to bring positions to a market competitive range, the total cost of positions at TRS is compared to the expected cost of positions in the market
- The difference in cost is used to forecast the additional payroll needed to adjust employee salaries

Step 2: Individual impact on employee’s salaries
- Once decisions are made on overall budget, individual employee impact can be assessed
- Reviews of employee qualifications, experience, skills, and performance are required to make individual recommendations to an employee’s base pay
- Detailed changes to individual employees and cost to adjust their salaries will require further analysis on a job-by-job basis once the new TRS Compensation Plan is implemented
Appendix I: TRS Salary Survey Sources

Market analysis was conducted from November 2021 to January 2022 on all positions within the Teacher Retirement System of Texas. McLagan data was previously used for IMD market analysis. Four main sources were used for market benchmarking purposes of other positions throughout the agency.

- CompData, Banking and Financial Services Benchmarking (used across some jobs within the Executive and IT divisions)
- Mercer/Gartner IT Salary Survey (used mainly for IT positions)
- PayFactors (used across all divisions)
- Willis Towers Watson, Professional, Support, and Middle Management Positions - General Industry and Financial Services (used across all divisions)

The compensation surveys listed above are purchased by the agency through a subscription and consist of data representing hundreds of organizations that TRS competes with for quality talent. Organization participation varies between surveys, and ranges from 750 to more than 2,500 organizations.

In addition, TRS conducts an annual survey of executive-level positions in Public Pension funds to provide targeted data for the Executive Director, Chief Audit Executive, and other Chief Officer Positions.
## Appendix J: How Employees are Placed in Salary Ranges

<table>
<thead>
<tr>
<th>Base Pay Tier</th>
<th>Market Competitive Tier</th>
<th>Performance Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Minimum</strong></td>
<td><strong>Midpoint/Target</strong></td>
<td><strong>Maximum</strong></td>
</tr>
<tr>
<td>• Represents the minimum salary range for the position.</td>
<td>• Represents the “target” salary range for positions that are in line with the market average for similar professional positions.</td>
<td>• Represents pay rates above the market average for similar professional positions.</td>
</tr>
<tr>
<td>• Individuals placed here may be new to the position, have limited experience in the field, or may not be meeting current performance targets.</td>
<td>• Individuals placed here are skilled performers, bring strong experience to the position, and are currently meeting performance targets.</td>
<td>• Individuals placed here have additional expertise, qualifications, licenses, or certifications above what is required for the job.</td>
</tr>
<tr>
<td>• This area may be used if there are limited funds available to adjust salaries.</td>
<td>• Although this area represents the market average, not all employees will be paid here.</td>
<td>• This area may be used to compensate individuals who are outstanding performers, exceed current performance targets, or are critical skill experts.</td>
</tr>
</tbody>
</table>
Appendix K: Governance Framework

• Governance frameworks are important in compensation management to identify key decision makers, ensure consistency in decision making, and create policy and process documents detailing how salary administration works.

• Currently, TRS uses the State’s governance structure as outlined in Government Code. With limited exceptions, those standards will remain.

• Additional components specific to TRS will be added to our governance process (e.g. frequency of updating salary schedules, addition/deletion of positions).

• The governance framework provides consistent standards on mapping of jobs, job titles and levels.
Appendix L: Governance Framework Outline

- **Program Governance**
  - Philosophy and Objectives
  - Governance Stakeholders and Roles
  - Compensation Planning Timeline
  - Communication

- **Components of Compensation**
  - Jobs
  - Job Creation Process
  - Job Titles
  - Job Levels
  - Job Descriptions
  - Market Data
  - Market Benchmarking
  - Market Process
  - Salary Structure

- **Compensation Administration**
  - Compensation Review Process
  - New Hire Salary Determination
  - Equity Reviews
  - Counter Offers
  - Salary Exceptions
  - Promotions
  - Demotions
  - Reclassifications
  - Merit Pay
  - Sample Annual Merit Increase Guidelines
  - One-Time Merit
  - Equity Adjustments
  - Line-item Exempt and Unclassified positions
  - Temporary/Acting assignments
  - Salary Structure Administration
## Appendix M: Summary of 2019 Deloitte Project Phases and Key Deliverables

<table>
<thead>
<tr>
<th>Phase</th>
<th>Deliverables</th>
</tr>
</thead>
</table>
| Phase I: Interview Key Stakeholders, Draft Compensation Philosophy | • Conducted interviews with TRS management  
 • Conducted a custom survey of select employees  
 • Facilitated onsite workshop with EC members to discuss development of a compensation philosophy  
 • Drafted TRS Compensation Philosophy |
| Phase II: Update Job Classification System | • Review job descriptions and provide options to update and streamline documents  
 • Conduct job structure current state analysis  
 • Assess and develop recommendations for TRS specific job categories/functions/families  
 • Develop career ladder and reporting structure recommendations |
| Phase III: Conduct market review of benchmark positions | • Assess list of positions prioritized for the study  
 • Deliver pay competitiveness analysis findings |
| Phase IV: Evaluate variable pay and incentive opportunities and plans | • Conduct current state assessment of TRS plans  
 • Provide options for expanded Executive incentive plan (if appropriate)  
 • Provide variable pay options for TRS staff |
| Phase V: Presentations for Board meeting | • Provided status update, September 2019  
 • Provided project summary, December 2019 |
## Appendix N: Summary of 2019 Deloitte Project Phases and Key Deliverables (cont.)

<table>
<thead>
<tr>
<th>Phase</th>
<th>Deliverables</th>
</tr>
</thead>
</table>
| **Phase VI:** Develop TRS Salary Structure | • Develop salary schedules and salary grade recommendations based on market review  
• Provide recommendations on pay range reassignments  
• Provide options to address cost of individual salary adjustments if plan is implemented |
| **Phase VII:** Develop Salary Administration Guidelines | • Provide recommendations to update salary administration guidelines to align with new structure |
| **Phase VIII:** Develop a Total Rewards Model | • Delivered a ½ day total rewards workshop to Organizational Excellence staff  
• Facilitated access to Bersin’s online system for research tools, white papers, and other materials  
• Provided a recommendation for a Total Rewards Strategy that can be used for recruitment, retention, and the development of an employee value proposition |
| **Phase IX:** Develop Governance | • Provided recommendations on best practices for job creation, job catalog maintenance, and pay administration policy maintenance |
| **Phase X:** Prepare final report for EC | • Delivered project report and update to EC members |
| **Phase XI:** Develop communication materials and toolkits | • Developed communication timeline and goals  
• Conducted current state assessment and recommendations to expand communication and OCM work  
• Developed toolkits and standard templates that can be used for communicating with managers and employees |
Governance and Risk Management Training

Internal Audit Division

Amanda G. Jenami, CPA, CIA, CISA, CIDA, CFSA, CFE, CGAP, CRMA, MBA

February 18, 2022
Section 1. Corporate Governance
   a) Background
   b) Lessons from Recent Governance Failures
   c) Guiding Principles
   d) American Corporate Governance Index (ACGI) 2021

Section 2: Top Risks of 2022
CORPORATE GOVERNANCE
Corporate governance is the *overarching* set of policies, procedures, and relationships that enables an organization to:

- **Establish** objectives
- **Set ethical boundaries** to the acceptable means with which those objectives will be met
- **Monitor** the achievement of objectives
- **Reward** successful achievements
- **Discipline** inappropriate attempts to meet objectives
- **Aligned** with the needs and interests of its primary stakeholders.
<table>
<thead>
<tr>
<th>Board</th>
<th>Executive Management</th>
<th>Internal Audit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishes tone at the top; Sets risk appetite and ethical boundaries</td>
<td>Sets policies and procedures; enables the organization to identify, articulate and meet objectives</td>
<td>Has a CAE that reports directly to the Board, is independent, is a resource for Board and management</td>
</tr>
<tr>
<td>Provides strategic oversight for long-term value creation</td>
<td>Establishes and executes strategies, develops budgets, and delegates responsibilities</td>
<td>Provides risk-based and objective assurance, advice, and insight</td>
</tr>
<tr>
<td>Provides effective oversight of management’s activities</td>
<td>Monitors the achievement of goals and objectives; rewards or mitigate results</td>
<td>Improves operations through an objective, systematic, and disciplined approach</td>
</tr>
<tr>
<td>Ensures Internal Audit is sufficiently resourced and independent from management</td>
<td>Keeps the board fully informed on status of goals and objectives and of risks</td>
<td>Brings a cross-functional, enterprise-wide perspective to evaluate and improve risk management, control and governance</td>
</tr>
</tbody>
</table>
LESSONS FROM SOME RECENT GOVERNANCE FAILURES
What Boards could learn from the Boeing Scandal

Governance Gaps

1. Hire board members for expertise and objectivity
   a) Safety and engineering
   b) Sectionalism

2. Ensure the board structure aligns with industry needs
   a) No Board Safety Committee until April 2019
   b) Safety Review Board
   c) Audit Committee focused on financial risk

3. Implement sustainable strategies focused on long-term performance
   a) Wholesale cost cutting
   b) Training costs

4. Prepare for the worst case

5. Manage for truth and realism

6. Practice accountability
Reforms
1. Create Aerospace Safety Committee (ASC)
2. Modify Senior Executive compensation incentives
3. Remove many of the prior board members
4. Appoint of new board members
5. Appoint an independent ombudsman
6. Require separation of CEO and Chair positions
7. Provide an annual public report on safety-related enhancements implemented since the 737 MAX air disasters

Boeing directors (current and former) agreed to pay $237 million to settle the shareholder lawsuit.
Lessons from Recent Scandals: “Culture eats strategy for breakfast”

Wells Fargo Admits to Yet Another Fraud

September 27, 2021

- Bank overcharged 771 commercial customers for foreign exchange services
- Systematically charged higher markups on transactions than they represented the Bank would charge
- Concealed these overcharges through various misrepresentations and deceptive practices
- Wells Fargo agreed to pay $72.6 million in restitution and civil penalties
- FX sales specialists’ bonuses exclusively tied to sales
- Took adverse employment actions against 20 employees

Trading hard-earned reputation for short-term profits
GUIDING PRINCIPLES OF CORPORATE GOVERNANCE
The Guiding Principles of Corporate Governance

1. Clear communication across the company
2. Meet stakeholder expectations
3. Board performance: monitor management
4. Incentivize performance with sustainable long-term strategies
5. Ensure company culture is healthy, and regularly monitored
6. Information given to the Board
7. External disclosures
8. Evaluate governance

Principles from NACD, NY Stock Exchange, COSO, Business Roundtable, the Investor Stewardship Group, Neel Corporate Governance Center, the IIA
AMERICAN CORPORATE GOVERNANCE INDEX (ACGI)
American Corporate Governance Index (ACGI) Survey : Background

Questions & Scoring:
• Based on the Guiding Principles
• Capture effectiveness of corporate governance enterprise wide
• Impact of increased focus on ESG
• Governance oversight of ESG issues
• Responses aggregated using a scale of 0-100
• Score translated into a letter grade A - F

Survey of Companies listed on US Stock Exchanges:
• Number of responses:
  • 2019: 128
  • 2020: 131
  • 2021: 86
• Companies of various sizes, complexities, and industries
ACGI Scores by Principle

Source: The IIA’s American Corporate Governance survey, 2021. Scores were assigned by the research team based on analysis of multiple factors. n = 86 for 2021. n = 131 for 202. n = 128 for 2019.
Quick observations on how ESG Governance has changed

KEY TAKEAWAYS
• Majority in early stages of ESG
• Increased monitoring of ESG issues and performance
• Increased emphasis on DE&I hiring (at all levels)
• Enhanced awareness/ visibility
• Improved transparency within the company
• Strengthening relationships with key stakeholders in local communities

OPPORTUNITIES FOR IMPROVEMENT
• Need higher quality ESG information for both decision makers and stakeholders
• Need better handle on identifying, collecting, and verifying data pertaining to ESG
• Internal Audit should provide assurance on ESG performance and reporting
Principle 1: Clear communication across the company

Regular and constructive interaction occurs among key stakeholders groups.

B-

Key Contributing Principles

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership/ Board communications are clear, actionable, and collaborative.</td>
<td>82%</td>
<td>86%</td>
<td>85%</td>
</tr>
<tr>
<td>Right information gets to the right decision-makers timely.</td>
<td>75%</td>
<td>79%</td>
<td>77%</td>
</tr>
</tbody>
</table>

Opportunity for Improvement

- Communications between members of senior leadership may be weakening, perhaps due to the ongoing pandemic-induced strain.

Source: 2021 IIA American Corporate Governance
n = 128 for 2019, n = 131 for 2020 & n = 86 for 2021
The Board

1. Openness, transparency, and candor among board members
2. Discuss a wide variety of well-substantiated perspectives
3. Focus on the highest value opportunities and the most critical risks
4. Full board discussions are crucial
5. Hear from independent advisors
6. Avoid conflicts of interest
**Principle 3: Board performance**

Board members should act in the best interest of the company.

Source: 2021 IIA American Corporate Governance
n = 128 for 2019, n = 131 for 2020 & n = 86 for 2021

<table>
<thead>
<tr>
<th>Key Contributing Principles</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board members should act in the best interest of the company.</td>
<td>80%</td>
<td>85%</td>
<td>83%</td>
</tr>
<tr>
<td>Board members are not afraid to offer opinions that are contradictory to or conflict with those of the CEO.</td>
<td>75%</td>
<td>76%</td>
<td>76%</td>
</tr>
</tbody>
</table>

**GOOD PRACTICE**

1. Exhibit independence and objectivity
2. Provide diverse perspectives (industry and technical expertise, culture, thought)
3. Exhibit a commitment of time and active involvement
4. Receive ongoing education and training (including on areas of emerging risk)
5. Undergo regular, robust evaluations (for improved governance)
Principle 5: Corporate culture

The Board should ensure that the culture of the company is healthy and regularly monitored.

Key Contributing Principles

<table>
<thead>
<tr>
<th>‘Tone at the top’ is communicated to and consciously embodied across all levels of the company.</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>78%</td>
<td>82%</td>
<td>80%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board consciously thinks and talks about the company’s culture.</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>74%</td>
<td>78%</td>
<td>75%</td>
<td></td>
</tr>
</tbody>
</table>

KEY TAKEAWAYS

- Tone at the Top embodied by:
  - Executive management: 88%
  - Middle management: 80%
  - Rank and file employees: 72%
  - Across geographical regions: 75%
- Maintaining corporate culture virtually is difficult
- Evaluating culture throughout the organization is difficult

OCCUPRUNITIES FOR IMPROVEMENT

- More frequent culture Board/management conversations

Source: 2021 IIA American Corporate Governance
n = 128 for 2019, n = 131 for 2020 & n = 86 for 2021
Principle 6: Information given to the Board

Structures exist to ensure the Board receives timely, complete, relevant, accurate, and reliable information to perform its oversight effectively.

Key Contributing Principles

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board members ask whether the information presented to the Board is accurate and complete.</td>
<td>67%</td>
<td>68%</td>
<td>69%</td>
</tr>
<tr>
<td>Board protects proprietary information given to the Board.</td>
<td>69%</td>
<td>69%</td>
<td>64%</td>
</tr>
<tr>
<td>CEO does not heavily filter or water down “bad” news before it goes to the Board.</td>
<td>81%</td>
<td>82%</td>
<td>81%</td>
</tr>
</tbody>
</table>

Source: 2021 IIA American Corporate Governance
n = 128 for 2019, n = 131 for 2020 & n = 86 for 2021

KEY TAKEAWAYS

- 14% of respondents - cybersecurity breach related to information given to the Board
- Only 35% of respondent’s companies require Board members to use either corporate emails or board portals to protect proprietary company information

OPPORTUNITIES FOR IMPROVEMENT

- Each board member should have unrestricted access to management, as needed
- Board has responsibility to protect information
### Top Risks of 2022: Background

#### Qualitative Interviews

- 30 Board members
- 30 C-suite executives
- 30 Chief Audit Executives (CAEs)
- 90 Different Organizations (North America)

#### Risk

- Knowledge of the risk
- Organizational capability to address the risk
- Relevance of risk to organization
Top Risks for 2022

1. Cybersecurity
2. Talent Management
3. Organizational Governance
4. Data Privacy
5. Culture
6. Economic and Political Volatility
7. Change in Regulatory Environment
8. Supplier and Vendor Management
9. Disruptive Innovation
10. Social Sustainability
11. Supply Chain Disruption
12. Environmental Sustainability

Risks presented in the order of relevance
Top Risks of 2021 & 2022

2021
1. **Business Continuity/ Crisis Response**
2. Cybersecurity
3. Talent Management
4. Culture
5. Organizational Governance
6. Disruptive Innovation
7. Data Governance
8. **Board Information**
9. Third Party Risks
10. Economic and Political Volatility
11. Sustainability

2022
1. Cybersecurity
2. Talent Management
3. Organizational Governance
4. Data Privacy
5. Culture
6. Economic and Political Volatility
7. **Change in Regulatory Environment**
8. Supplier and Vendor Management
9. Disruptive Innovation
10. **Social Sustainability**
11. Supply Chain Disruption
12. **Environmental Sustainability**

Some risks are unchanged, some have been updated while others have been added. Universally applicable.
A Major Cybersecurity Breach is Reported Every Month

<table>
<thead>
<tr>
<th>Date</th>
<th>Company</th>
<th>Impact</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/2021</td>
<td>Microsoft Exchange</td>
<td>250,000 servers</td>
<td>Zero-day exploits</td>
</tr>
<tr>
<td>4/2021</td>
<td>Colonial Pipeline</td>
<td>100 gigabytes of data; shutdown of 5,500 miles pipeline; higher fuel prices; lines at the pump</td>
<td>Compromised former employee’s VPN account; Password leaked to dark web; Ransome of $4.4 million paid</td>
</tr>
<tr>
<td>6/2021</td>
<td>JBS, USA</td>
<td>Shut down plants/ food supply</td>
<td>$11 million ransom</td>
</tr>
<tr>
<td>6/2021</td>
<td>LinkedIn</td>
<td>700 million users</td>
<td>Data posted for sale on dark web</td>
</tr>
<tr>
<td>7/2021</td>
<td>Kaseya</td>
<td>Supply chain attack (800-1,500 clients)</td>
<td>Demanded $70 million ransom</td>
</tr>
<tr>
<td>7/2021</td>
<td>US Dept of Labor</td>
<td>Phony unemployment claims $87B insurance fraud</td>
<td>Organized crime used bots to file claims from nearly 170 countries using stolen identities</td>
</tr>
<tr>
<td>8/2021</td>
<td>Accenture</td>
<td>6 terabytes of data</td>
<td>Demanded $50 million in ransom</td>
</tr>
<tr>
<td>8/2021</td>
<td>T-Mobile</td>
<td>40 million customers</td>
<td>Attempted to sell data on the dark web</td>
</tr>
</tbody>
</table>

Growing sophistication and variety of attacks means that cybersecurity is an ever-evolving risk. Unpredictable and not easily controllable; external factors augment risk velocity.
NEW RISKS OF 2022

• Environmental Sustainability
• Social Sustainability
• Supply Chain Disruption
• Data Privacy
• Change in Regulatory Environment
Environmental Sustainability

#1. Texas Freeze (February 2021)

- An estimated 69% of the state lost power
- Cost approx. $195 billion and 246 deaths

# 2. Hurricane Ida (August 2021)

- Caused $75B worth of damage in Louisiana and the Northeast
- 115 fatalities
Environmental Sustainability (continued)

#3. Western Wildfires (Summer – December)

- Nearly 1,000 homes and several businesses were destroyed (December in Colorado)
- Devastating fires in California over the summer
- Altogether, damage estimated at $10.6 billion

#4. Tornadoes

Tornadoes ripped a 250-mile path of destruction across Kentucky and neighboring states in December 2021
Supply Chain Disruption

Shipping delays have impacted:
- Housing market
- Delays in large kitchen appliances
- Shortage of chips (auto)

Containers wait to be loaded at the Long Beach port as cargo ships sit idle in the distance in October 2021.
There are more than **40** privacy laws worldwide, including:

- Health Insurance Portability & Accounting Act (HIPAA)
- Fair Credit Reporting Act (FCRA)
- Children’s Online Privacy Protection Act (COPPA)
- California Privacy Rights Act (CCPA)
- Gramm Leach Bliley Act (GLBA)
- Family Education Rights & Privacy Act (FERPA)
Data Privacy (continued)

Notable GDPR Data Privacy Violation Fines:

- Amazon ($877 million)
- WhatsApp ($255 million)
- Google Ireland ($102 million)
- Zoom ($85 million)
- Google LLC ($68 million)
- British Airways ($26 million)
- Marriott ($23.8 million)
- Facebook ($68 million)

EU’s General Data Protection Regulation went into effect in May 2018.

Potential new regulation on facial recognition, biometrics, genetic information, connected devices, location tracking, algorithms.
(i) Significant gaps exist between risk relevance and organizational capability for Talent Management, Cybersecurity, Disruptive Innovation, Data Privacy.

(ii) Other areas to pay attention to: Culture and Economic and Political Volatility.

(iii) The Relevance-Capability gap reflects potentially significant risk management vulnerabilities.

Source: OnRisk 2022 qualitative survey. n = 90
Board members rated disruptive innovation more relevant than senior executives by 27 points.

Nearly every CAE (97%) rated cybersecurity as highly relevant; Boards lagged by 10 points and executives lagged by 20 points.

Perceptions of risk relevance vary greatly across ESG components. Organizational Governance holds far greater relevance.
Individual Risks – Survey Results & Proposed Actions
Cybersecurity Risk: Survey Results & Proposed Actions

PROPOSED ACTIONS:
• Understand legal implications of cyber risks.
• Ensure appropriate time is allocated for management, IA, and outside SMEs to brief Board members on emerging cyber threats, organizational efforts, and existing vulnerabilities.

PROPOSED ACTIONS:
• Consistently evaluate emerging cyber threats.
• Get different perspectives on current status.
• Incorporate cyber risks and responses into crisis management program.
• Have board/management discussions of which risks to avoid, accept, mitigate or transfer.
• Implement a data governance program beyond basic classification.
• Develop specific risk management plans.

PROPOSED ACTIONS:
• Perform routine evaluations of RM functions related to cybersecurity.
• Identify opportunities to educate management and the Board on emerging cyber risks.

AVERAGE RATINGS BY RESPONDENT GROUP

Source: OnRisk 2022 qualitative survey. n = 90.
Five-fold increase in remote job postings (on LinkedIn)
More than 46% of workers plan to move (& work remotely)
WFH has eliminated the limitation of geographic considerations
Profound impact on attitudes about work/life balance
Many workers are reconsidering career paths
Generational gaps are now becoming emphasized!
The Great Resignation: A Growing Number of Workers are Leaving Jobs Voluntarily

<table>
<thead>
<tr>
<th>Month</th>
<th># of Quits</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2021</td>
<td>4.0 million</td>
</tr>
<tr>
<td>May 2021</td>
<td>3.6 million</td>
</tr>
<tr>
<td>June 2021</td>
<td>3.9 million</td>
</tr>
<tr>
<td>July 2021</td>
<td>4.0 million</td>
</tr>
<tr>
<td>August 2021</td>
<td>4.3 million</td>
</tr>
<tr>
<td>September 2021</td>
<td>4.4 million</td>
</tr>
<tr>
<td>October 2021</td>
<td>4.2 million</td>
</tr>
</tbody>
</table>

Bureau of Labor Statistics

High profile labor strikes at Hollywood sets, Kellogg and John Deere (for better pay and benefits)

Number of open jobs in the US in October 2021: **11 million**
Talent Management: Survey Results & Proposed Actions

**PROPOSED ACTIONS:**
- Carefully weigh tightening labor market and how it relates to worker expectations in salaries, benefits & work/life balance.
- Implement and measure work arrangement preferences and their effect on employee morale, productivity, and retention efforts.
- Screen job applicants for turnover risk.
- Obtain internal audit's input on RTO plans and related range of risks, including impact to culture.

**PROPOSED ACTIONS:**
- Provide assurance around talent management.
- Support board and executive management in the analysis of data resulting from employee surveys, exit interviews, or diversity and inclusion initiatives.

**AVERAGE RATINGS BY RESPONDENT GROUP**

- **BOARD**
  - Capability: 33%  50%  83%
  - Knowledge: 37%  43%  90%
  - Relevance: 53%  80%  87%

- **CAEs**
  - Capability: 37%  43%  90%
  - Knowledge: 53%  80%  87%
  - Relevance: 53%  80%  87%

- **C-SUITE**
  - Capability: 53%  80%  87%
  - Knowledge: 53%  80%  87%
  - Relevance: 53%  80%  87%

*Source: OnRisk 2022 qualitative survey. n = 90.*
Culture: Survey Results & Proposed Actions

**PROPOSED ACTIONS:**

- Consider asking for an independent assessment of the organizational culture.
- Ensure executive goals and incentives are aligned with an effective organizational culture.

**AVERAGE RATINGS BY RESPONDENT GROUP**

- **BOARD**
  - Capability: 27%
  - Knowledge: 47%
  - Relevance: 70%
- **CAEs**
  - Capability: 40%
  - Knowledge: 47%
  - Relevance: 70%
- **C-SUITE**
  - Capability: 37%
  - Knowledge: 57%
  - Relevance: 70%

**PROPOSED ACTIONS:**

- Establish consistent processes to gauge the culture and communicate those perceptions to the board timely.
- Obtain internal audit’s input on RTO plans and related range of risks, including impact to culture.
- Find ways to teach organization’s culture to workers hired during the pandemic.

**CAE**

**PROPOSED ACTIONS:**

- Be cognizant of potential misalignment as the organization transitions to a post-pandemic world.
- Provide assurance or advisory services related to culture.
Key Takeaways

- Create a culture of openness, transparency, and candor among board members and between the board and management.
- Build the board agenda around the highest value opportunities and the most critical risks of the organization.
- Have frequent culture conversations with management.
- Receive regular risk management plan updates on cybersecurity, talent management, culture, and data governance.
- Understand legal implications of cyber risks.
Questions?
Appendices
APPENDIX 1A: 10 Proactive Questions Every Board Member Should Be Asking

1. If you designed the agenda, what would be on it?
2. What is the executive not telling you that you feel you need to know?
3. How is the external world changing in ways that are not reflected in your board conversations?
4. What don’t you know about the company that you’re most concerned about?
5. What do you see always being discussed but never resolved?
6. What are you not discussing that you need to talk about?
7. Are we addressing all the stakeholders, not just the shareholders? If so, how, and what’s the order of priority?
8. Are we adequately discussing longer-term issues, both internal and external?
9. How well do we know and trust each other?
10. How would we describe the organization’s culture? Would we all describe it the same way, and is the culture consistent across the company?

APPENDIX 1B - Principle 2: Meeting stakeholder expectations

Key Contributing Principles

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify key stakeholders. Obtain regular feedback on whether policies meet stakeholder needs and expectations.</td>
<td>81%</td>
<td>86%</td>
<td>80%</td>
</tr>
<tr>
<td>Leadership is cognizant of how corporate operations impact ESG issues.</td>
<td>73%</td>
<td>76%</td>
<td>76%</td>
</tr>
<tr>
<td>Company has not been subject to shareholder litigation, proxy fights, or ‘vote no’ campaigns.</td>
<td>80%</td>
<td>89%</td>
<td>72%</td>
</tr>
</tbody>
</table>

KEY TAKEAWAYS

- Largest decrease related to increased shareholder activism, proposals, voting, and litigation.
- A small decline in the extent to which the company is considering a wide range of stakeholder interests when making business decisions.

The Board should ensure that key stakeholders’ feedback is regularly solicited to ensure stakeholder needs are met.

Source: 2021 IIA American Corporate Governance
n = 128 for 2019, n = 131 for 2020 & n = 86 for 2021
APPENDIX 1C - Principle 4: Sustainable strategies with long term focus

The Board should ensure that the company maintains a sustainable strategy focused on long-term performance and value.

Key Contributing Principles

<table>
<thead>
<tr>
<th>Principle</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>The company's strategic goals are clearly communicated to and well-known across the company.</td>
<td>77%</td>
<td>80%</td>
<td>76%</td>
</tr>
<tr>
<td>The company is not willing to sacrifice long-term strategy for the benefit of short-term interests.</td>
<td>67%</td>
<td>70%</td>
<td>73%</td>
</tr>
<tr>
<td>Employees receive adequate training to complete expected job duties.</td>
<td>70%</td>
<td>76%</td>
<td>70%</td>
</tr>
</tbody>
</table>

**OPPORTUNITIES FOR IMPROVEMENT**

- Communicate the long-term strategy across the company
- Incentive systems for employees should ensure long–term corporate objectives are accomplished in an ethical manner
- Improve quality of training given to employees
- Provide resources to effectively respond to crises and disruptions as they arise

Source: 2021 IIA American Corporate Governance  
\* n = 128 for 2019, n = 131 for 2020 & n = 86 for 2021
APPENDIX 1D - Principle 7: External disclosures

The Board ensures that corporate disclosures are transparent and accurate, and in compliance with legal requirements and ethical norms.

Source: 2021 IIA American Corporate Governance
n = 128 for 2019, n = 131 for 2020 & n = 86 for 2021

Key Contributing Principles

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employers are familiar with how to report violations of law or policy.</td>
<td>78%</td>
<td>82%</td>
<td>82%</td>
</tr>
<tr>
<td>The internal audit function is adequately staffed, in terms of both the number of staff and expertise of the staff.</td>
<td>77%</td>
<td>76%</td>
<td>74%</td>
</tr>
</tbody>
</table>

KEY TAKEAWAYS

- Senior executives and boards desire a broader scope for internal audit services
- Increased incidences of restatement, cybersecurity, or internal control issues

OPPORTUNITIES FOR IMPROVEMENT

- Internal Audit should have unfiltered access to Audit Committee
- IA should be adequately resourced
- Board should oversee the assessment of risk of fraud
- Board should have processes for employees and other stakeholders to report suspected fraud or misconduct
Companies should be purposeful and transparent in choosing their key policies and procedures related to corporate governance to allow key stakeholders an opportunity to evaluate whether they are optimal for the company.

<table>
<thead>
<tr>
<th>Key Contributing Principles</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Board seeks out feedback on whether corporate governance is operating effectively.</td>
<td>72%</td>
<td>75%</td>
<td>77%</td>
</tr>
<tr>
<td>The company formally evaluates the full system of corporate governance on a regular basis.</td>
<td>70%</td>
<td>71%</td>
<td>72%</td>
</tr>
</tbody>
</table>

**KEY TAKEAWAYS**

Continue to improve to ensure that:
- Governance systems beyond the boardroom
- Issues are identified in a timely manner
- Correct information is provided to the right people at the right time

**OPPORTUNITIES FOR IMPROVEMENT**

- Board should regularly evaluate the full system of corporate governance
- The evaluations should encourage the reporting of potential deficiencies at all levels, including within the Board
(i) Senior executives tended to be more confident about organizational capability for most risks.
(ii) Board organizational capability scores 20 points lower for Talent Management and Environmental Sustainability.
(iii) CAEs less confident about supplier and vendor management
APPENDIX 2B: Data Privacy: Survey Results & Proposed Actions

**BOARD**

**PROPOSED ACTIONS:**
- Expect education on key aspects of data governance and request briefings from management and internal audit on how the organization strategically manages data.

**C-SUITE**

**PROPOSED ACTIONS:**
- Drive leading practices in data governance that ensure compliance with laws and regulations as well as progress toward meeting strategic objectives.

**CAE**

**PROPOSED ACTIONS:**
- Provide training to board members on the key aspects of data governance and provide assurance that management practices are leading edge.

---

**AVERAGE RATINGS BY RESPONDENT GROUP**

- **BOARD**
  - 77% Capabilities
  - 50% Knowledge
  - 40% Relevance

- **C-SUITE**
  - 77% Capabilities
  - 53% Knowledge
  - 53% Relevance

- **CAEs**
  - 33% Capabilities
  - 53% Knowledge
  - 77% Relevance

Source: OnRisk 2022 qualitative survey. n = 90.
**APPENDIX 2C: Economic & Political Volatility – Survey Results & Proposed Actions**

**PROPOSED ACTIONS:**
- Engage management and internal auditors in discussions regarding potential economic and political outcomes and inquire about the readiness of organizations to be flexible.

**C-SUITE**

**PROPOSED ACTIONS:**
- Build contingencies and scenario plans for dealing with potential outcomes.
- Communicate with the board about the potential upsides and downsides of political changes and economic swings.

**CAE**

**PROPOSED ACTIONS:**
- Better educate internal auditors on how economic and political uncertainties may affect the likelihood of achieving organizational objectives.
APPENDIX 2D: Disruptive Innovation – Survey Results & Proposed Actions

**BOARD**

**PROPOSED ACTIONS:**
- Share with the organization any guidance and wisdom accumulated through outside and diverse experiences.
- Set expectations for management to provide proactive strategies that leverage innovation for competitive advantage and to be prepared to react timely to disruption.

**C-SUITE**

**PROPOSED ACTIONS:**
- Leverage the knowledge of board members to identify ways to innovate and identify competitors’ attempts to disrupt business as usual.

**CAE**

**PROPOSED ACTIONS:**
- Ensure a thorough understanding of strategic risks and opportunities to leverage innovation to be disruptive.
- Identify potential risks that could inhibit organizations’ strategies to innovate and disrupt.

**AVERAGE RATINGS BY RESPONDENT GROUP**

- Source: OnRisk 2022 qualitative survey. n = 90.
APPENDIX 2E: Organizational Governance – Survey Results & Proposed Actions

**PROPOSED ACTIONS:**

- Continually emphasize the importance of risk alignment among key management players.
- Reject siloed or decentralized approaches to risk management.
- Promote internal audit's role in providing independent assurance over this risk area.

**C-SUITE**

**PROPOSED ACTIONS:**

- Align with the Board on the relevance of organizational governance.
- Maintain healthy dialogue around risk management and all key governance roles.

**CAE**

**PROPOSED ACTIONS:**

- Maintain a consistent line of communication with board members to ensure their needs are being met.

**AVERAGE RATINGS BY RESPONDENT GROUP**

<table>
<thead>
<tr>
<th>Category</th>
<th>Capability</th>
<th>Knowledge</th>
<th>Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOARD</td>
<td>47%</td>
<td>67%</td>
<td>80%</td>
</tr>
<tr>
<td>CAEs</td>
<td>67%</td>
<td>73%</td>
<td>70%</td>
</tr>
<tr>
<td>C-SUITE</td>
<td>60%</td>
<td>73%</td>
<td>83%</td>
</tr>
</tbody>
</table>

Source: OnRisk 2022 qualitative survey. n = 90.
APPENDIX 2F: Environmental Stability – Survey Results & Proposed Actions

**BOARD**

**PROPOSED ACTIONS:**
- Require management to build sustainability into strategic plans.
- Set expectations of internal auditors to provide assurance related to sustainability reporting.

**C-SUITE**

**PROPOSED ACTIONS:**
- Recognize sustainability’s growing importance to organizational stakeholders, including customers, employees, and investors.
- Identify opportunities to enhance long-term stakeholder value by embracing sustainability leadership as a strategic opportunity.

**CAE**

**PROPOSED ACTIONS:**
- Educate internal audit teams about emerging risks related to sustainability and how sustainability fits into organizations’ operational and strategic priorities.

---

**AVERAGE RATINGS BY RESPONDENT GROUP**

**Source:** OnRisk 2022 qualitative survey. n = 90.

- **Capability**: 27%, 43%, 47%
- **Knowledge**: 23%, 23%, 30%
- **Relevance**: 50%, 50%, 40%
PROPOSED ACTIONS:

- Require management to build sustainability into strategic plans.
- Set expectations of internal auditors to provide assurance related to voluntary sustainability reporting.

PROPOSED ACTIONS:

- Recognize sustainability's growing importance to organizational stakeholders, including customers, employees, and investors.
- Identify opportunities to enhance long-term stakeholder value by embracing sustainability leadership as a strategic opportunity.

PROPOSED ACTIONS:

- Educate internal audit teams about emerging risks related to sustainability and how sustainability fits into organizations' operational and strategic priorities.

AVERAGE RATINGS BY RESPONDENT GROUP

Source: OnRisk 2022 qualitative survey. n = 90.
APPENDIX 2H: Supplier & Vendor Management – Survey Results & Proposed Actions

**PROPOSED ACTIONS:**
- Evaluate internal audit plans to ensure that adequate resources are allocated to third-party risks.
- Request periodic status updates on key third-party relationships.

**C-SUITE**

**PROPOSED ACTIONS:**
- Maintain a comprehensive list of third-party arrangements.
- Develop risk-based approach for procuring and monitoring relationships.

**CAE**

**PROPOSED ACTIONS:**
- Regularly monitor procurement and monitoring processes.
- Include engagements to review third-party relationships that are operationally or strategically important.

**AVERAGE RATINGS BY RESPONDENT GROUP**

Source: OnRisk 2022 qualitative survey. n = 90.
• **CYBERSECURITY**: The growing sophistication and variety of cyberattacks continue to wreak havoc on organizations' brands and reputations, often resulting in disastrous financial impacts. This risk examines whether organizations are sufficiently prepared to manage cyber threats that could cause disruption and reputational harm.

• **TALENT MANAGEMENT**: The increased need for and acceptance of remote operations, including working from home, as well as continued dynamic labor conditions, are redefining how work gets done. This risk examines the challenges organizations face in identifying, acquiring, upskilling, and retaining the right talent to achieve their objectives.

• **ORGANIZATIONAL GOVERNANCE**: Governance encompasses all aspects of how an organization is directed and managed — the system of rules, practices, processes, and controls by which it operates. This risk examines whether organizations' governance assists or hinders achievement of objectives.

• **DATA PRIVACY**: The growing list of regulations from jurisdictions around the world is making data privacy increasingly complex and dynamic. This risk examines how organizations protect sensitive data in their care and ensure compliance to all applicable laws and regulations.

• **CULTURE**: With an increasing percentage of professional employees working remotely full or part time, organizations are challenged to maintain, enhance, or control their organizational culture. This risk examines whether organizations understand, monitor, and manage the tone, incentives, and actions that drive the desired behavior.

• **ECONOMIC AND POLITICAL VOLATILITY**: The ongoing impacts of the pandemic combined with the normal dynamics of macroeconomic cycles have the potential to create volatility in the markets in which organizations operate. This risk examines the challenges and uncertainties organizations face in a dynamic and potentially volatile economic and political environment.
• **CHANGE IN REGULATORY ENVIRONMENT:** Fundamental changes in government appetite for regulation can have a significant impact on organizations, including those not considered heavily regulated. This risk examines the challenges organizations face in a dynamic and ambiguous regulatory environment.

• **SUPPLIER AND VENDOR MANAGEMENT:** For an organization to be successful, it has to maintain healthy and fruitful relationships with its external business partners and vendors. This risk examines organizations’ abilities to select and monitor third-party relationships.

• **DISRUPTIVE INNOVATION:** We are in an era of innovative business models, fueled by disruptive technologies. This risk examines whether organizations are prepared to adapt to and/or capitalize on disruption.

• **SOCIAL SUSTAINABILITY:** Increasingly, there is a recognition that organizations have significant influence on individuals who they employ, who work in their value chain, who consume their products and services, and who live in their communities. This risk examines the ability of organizations to understand and manage the direct and indirect impacts their actions have on individuals and communities.

• **SUPPLY CHAIN DISRUPTION:** The disruption to business-as-usual operations globally, rooted in the global pandemic, has highlighted the need for resilience in supply chains in support of organizations’ achievement of strategic objectives. This risk examines whether organizations have built in the flexibility to adapt to current and future supply chain disruptions.

• **ENVIRONMENTAL SUSTAINABILITY:** Organizations are facing increased pressure from stakeholders, including shareholders, regulators, customers, and employees, to evaluate and disclose how they are impacting the environment in which they operate. This risk examines the ability of organizations to reliably measure, evaluate, and accurately report on their environmental impacts.
Katie Linczer,
CIA, CPA, CRMA
February 18, 2022
Who Audits the Auditors?
1. QAIP and QAR Requirements
2. External Assessments
   a) Focus of an external QAR
   b) What happens in an external QAR
3. Different Approaches to External Assessments
4. Recommended QAR Team
5. QAR Process
Quality Assurance Review (QAR)

Texas Gov’t Code, Chapter 2102
(Texas Internal Auditing Act)

IIA’s Standards for the Professional Practice of Internal Auditing & Code of Ethics

GAO’s Generally Accepted Gov’t Auditing Standards (GAGAS)

TRS’ Internal Audit Charter
Institute of Internal Audit (IIA) Standards
• Requirements of the QAIP
• Internal Assessments
• External Assessments
• Reporting on QAIP
• The CAE **must** develop and maintain a QAIP that covers all aspects of the internal audit activity.

• The QAIP **must** include both *internal* and *external* assessments.
A QAIP should evaluate Internal Audit’s:

- **Conformance** with IIA Standards and IIA’s Code of Ethics

- Operational **efficiency** and **effectiveness**
IIA – External assessments **must** be conducted at least once every 5 years by a qualified, independent reviewer or review team from outside the organization.

GAO – An audit organization should obtain peer review report dated not later than 3 years and 6 months from the year-end of the previous peer review.

The CAE **must** discuss with the board:
• The need for external assessments
• The qualifications and independence of the external reviewer
Internal Audit Approach
The Two Different Approaches to QAR

• Independent Team Assessment

• Self Assessment with Independent Validation
An independent peer review team

- Mr. Stephen Hillerman, CIA, CIGA, CRMA, Chief Audit Executive, NYSCRF & NYSLRS
- Mr. Carim Cervantes, CIA, CFE, CIGA, Internal Auditor, NYSCRF & NYSLRS
The Qualifications We Sought

• Retirement System/ Pension Fund experience
• Has led at least several QARs
• Has been recipient to several QARs
• Well regarded within the profession
• Excellent knowledge of the *Standards*
QAR Methodology & Timeline
What Happens in an External QAR?

• Obtain stakeholder feedback
• Assess compliance with the IIA Code of Ethics and the Standards
• Assess IA Charter, policies & procedures
• Review staff experience & qualifications
• Inspect audit work papers
Who Gets Interviewed?

• Board Members
• Executive Management
• Auditees
Estimated Timeline

- Fieldwork/ Interviews (Virtual) May
- Report June
- Presentation to ACE Committee July
Time for....

Questions?
APPENDIX

Our Peer Review Team
The Team Lead

Mr. Stephen R Hillerman, Chief Audit Executive, NYSLRS

- 35 years with New York State and Local Retirement Systems (NYSLRS)
- 18 years, Chief Audit Executive (NYSLRS)
- Board member, Past-President, and Past Finance Chair of the Albany Chapter of the IIA
- Past President, Past Vice President and Past Board member of the Association of Public Pension Fund Auditors (APPFA).
- Certifications: CIA, CRMA, CIGA
Mr. Carim Cervantes, Associate Internal Auditor, NYSLRS

• 10 years Audit Experience
• 7 years as an Internal Auditor
• 4 years with New York State and Local Retirement Systems (NYSLRS)
• Officer of the Albany Chapter of the IIA
• Committee Member of The Conference That Counts
• Serves as a Director for the Chief Executive Committee of New York Capital Chapter of AGA
• Certifications: CIA, CFE, CIGA
• Current member of IIA, AGA, ACFE, and IGA
TAB 16
INVESTMENT MANAGEMENT DIVISION

CIO UPDATE

Jase Auby,  
Chief Investment Officer

Mike Attanucci,  
Associate

February 2022
CIO Update

IMD at a Glance

Priorities

- **Total Trust.** Ended 2021 calendar year at an all-time high in assets under management ($204B). Preliminary 1-year return of 18.4%

- **Return to Office.** Moved to voluntary return to office status in January while continuing to monitor COVID conditions due to the Omicron variant

- **Emerging Managers.** Virtually hosted the 2022 Emerging Manager Conference with over 2,200 attendees, including representation from 65 allocators

Key Dates and Upcoming Events

<table>
<thead>
<tr>
<th>Event</th>
<th>Location</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Council of Institutional Investors (CII)</td>
<td>Washington, DC</td>
<td>March 7-9, 2022</td>
</tr>
<tr>
<td>Spring Conference</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategic Partnership Network (SPN)</td>
<td>Austin, TX</td>
<td>March 30, 2022</td>
</tr>
<tr>
<td>Public Summit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Our People

<table>
<thead>
<tr>
<th>Snapshot as of January 2022</th>
<th>Activity</th>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMD FTEs</td>
<td></td>
<td>32</td>
<td>29</td>
<td>6</td>
</tr>
<tr>
<td>Shared-Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contractors</td>
<td></td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Contractors</td>
<td></td>
<td>0</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Contractors</td>
<td></td>
<td>32</td>
<td>31</td>
<td>25</td>
</tr>
</tbody>
</table>

- **Recruiting and Talent Management Activities**
  - **Town Hall.** Hosted virtual annual Town Hall event to emphasize IMD strategy and 2022 priorities
    - Included guest panel from Texas Retired Teacher Association (TRTA)
  - **Announced winners of the Annual Excellence in Investing Award and Spotlight Award**
  - **Recruiting.** Actively recruiting for 28 positions
  - **Internship Program.** Currently recruiting for the IMD Intern Class of 2022, targeting six interns in Public Markets and two interns in Private Markets
Market Update
Executive Summary

• The second half of 2021 was characterized by:
  o **US equities** broke all-time highs and outperformed other developed and emerging markets by a wide margin
  o Continued deployment of US **fiscal support** with enactment of the $1.2 trillion bipartisan infrastructure bill
  o **Energy** prices and stocks continued a strong recovery, with WTI Crude Oil up 68% on the year
  o Slowdown in global growth as **supply chain pressures** impeded production and stressed businesses
  o Above average worldwide **inflation** led by the US, with annual consumer price index rates near a 30-year high

• In the first half of 2022, markets are focused on:
  o Elevated **inflation** likely to remain in the short-term before easing and settling above pre-pandemic levels
  o **International equities** expected to gain traction, driven by post-COVID earnings, and reasonable valuations
  o Mid-cycle factors will result in slowing, yet above-trend, global economic **growth**
  o Potential for recently discovered COVID-19 **Omicron** variant to disrupt momentum of global recovery
  o Global central bank normalization of **monetary policy** due to above-trend inflation and rebound of growth
2021 In Review

Overview

• Pandemic
  • 61% of the world population has received at least one dose of a COVID vaccine
  • Over five million have died worldwide from COVID with 800,000 in the US
  • The Omicron variant now makes up over 95% of all US COVID cases

• Policy
  • Congress provided the $1.9 trillion American Rescue Plan with direct financial payments, increases to tax credits, extended unemployment benefits, and small business support
  • In November 2021, President Biden signed the bipartisan $1.2 trillion infrastructure bill to improve America’s bridges, roads, broadband, and water and energy systems

• Economy
  • Real GDP increased 5.7% for calendar year 2021. Consensus forecasts are for 3.8% in 2022 and 2.5% in 2023
  • Inflation accelerated throughout the year at its fastest pace since the 1980’s, with headline CPI up 7.0% in 2021 and core CPI (excluding food and energy prices) up 5.5%. Consensus is for headline CPI of 4.8% in 2022 and 2.4% in 2023

• Markets
  • The S&P 500 advanced 28.7% in 2021, including seventy record all-time highs (the second-most in any year ever)
  • Global merger and acquisition activity topped $5 trillion (all-time high) in total value from more than 60,000 transactions
  • MSCI US Value beat Growth (by 0.9%), US outperformed EAFE (by 16%), and Energy was the best performing sector (up 54%)

Source: Bloomberg, FRED, BEA, Dealogic
66% of assets had positive returns in calendar year 2021

- **Top 5:** WTI 68%, Natural Gas 64%, Bitcoin 60%, Cotton 49%, Aluminum 42%
- **Bottom 5:** Brazil Equities -24%, China Equities -22%, Silver -12%, Japanese Yen -12%, South Korean Won -9%

![Asset Class Performance - Calendar Year 2021](image-url)

Source: Bloomberg
2021 In Review
Market leaders and laggards

US large-cap equities significantly outperformed in 2021...

...with energy, real estate, and tech sectors leading the way

2021 Global Market Returns

S&P 500 29%
EAFE - Europe 16%
Russell 2000 15%
EAFE+C 13%
EAFE - Far East 1%
EM -3%

2021 Global Market Returns

S&P 500 29%
EAFE - Europe 16%
Russell 2000 15%
EAFE+C 13%
EAFE - Far East 1%
EM -3%

S&P 500 Sector Returns

Energy 48%
Real Estate 42%
Tech 33%

Source: Bloomberg
2021 In Review
Labor markets and inflation faced major disruption from the pandemic

Labor shortages and recovery of wages fed higher demand...

...and annual core CPI swelled to a 30-year high

Payroll and Labor Participation

Consumer Price Index (CPI) YoY Rate

2021 In Review
Fed policy remains on the front of investors minds

The Fed is expected to raise rates...
...with returns historically strong following recent rate hikes

Source: Credit Suisse, Bloomberg, Atlanta Federal Reserve
Conclusion

• Market Update
  o The second half of 2021 was characterized by exceptionally strong US equity performance, enactment of fiscal stimulus and accommodative monetary policy, amid a backdrop of record-breaking inflationary pressures
  o Over the first half of 2022, global markets are expected to produce positive returns with international equities gaining on the US, however, investors are focused the potential of continued inflation, surges in COVID cases due to the Omicron variant, and the Fed’s monetary policy actions
APPENDIX
Strategic Asset Allocation

Diversification Framework

- Stable Value 21%
- Global Equity 54%
- Real Return 21%

Public Equities:
- USA 18%
- Non-US Developed 17%
- Emerging Markets 9%
- Stable Value 16%
- Hedge Funds 5%
- Private Equity 14%

Real Estate 15%
- Energy, Natural Resources, Infrastructure 6%

Total Global Equity 54%

Government Bonds 16%
- Absolute Return 0%

Stable Value Hedge Funds 5%

Total Stable Value 21%

Real Estate 15%
- Energy, Natural Resources & Infrastructure 6%

Commodities 0%

Total Real Return 21%

Total Risk Parity 8%

Net Asset Allocation Leverage -4%

Total Trust 100%
Macroeconomic Update

Inflation, Growth, Leading Economic Indicators (LEI)

Equity Risk Premium is the forward earnings yield of the local equity market index less applicable 10 year government bond yield

For USA, 10yr US Treasuries; for Europe, 10yr German gov. bonds; for Japan, 10yr Japanese gov. bonds; for EM, a blend of 10yr Chinese, South Korean, and Brazilian gov. bonds
Public Equities
40% of TRS Policy Benchmark

Regional Performance
As of 12/31, USD, % Annualized

<table>
<thead>
<tr>
<th>Region</th>
<th>2H 2021</th>
<th>1-Year</th>
<th>5-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA IMI (18% of BM)</td>
<td>26.1</td>
<td>9.4</td>
<td>18.2</td>
</tr>
<tr>
<td>Non-US Developed (13%</td>
<td>2.5</td>
<td>12.6</td>
<td>9.6</td>
</tr>
<tr>
<td>of BM)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emerging Markets (9%</td>
<td>4.0</td>
<td>9.9</td>
<td>16.3</td>
</tr>
<tr>
<td>of BM)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>-9.3</td>
<td>0.4</td>
<td>1.7</td>
</tr>
<tr>
<td>Japan</td>
<td>-2.5</td>
<td>8.5</td>
<td></td>
</tr>
</tbody>
</table>

Regional Valuations
As of 12/31, Forward PE (2002-2021)

Regional Earnings
As of 12/31, Forward EPS Indexed to 100

Global Sector Performance
As of 12/31, USD, % Annualized, Sorted by 1-Year

<table>
<thead>
<tr>
<th>Sector</th>
<th>2H 2021</th>
<th>1-Year</th>
<th>5-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>-1.1</td>
<td>5.8</td>
<td>14.8</td>
</tr>
<tr>
<td>Info Tech</td>
<td>5.5</td>
<td>5.9</td>
<td>15.2</td>
</tr>
<tr>
<td>Financials</td>
<td>3.3</td>
<td>7.0</td>
<td>15.1</td>
</tr>
<tr>
<td>Healthcare</td>
<td>4.5</td>
<td>12.2</td>
<td>16.6</td>
</tr>
<tr>
<td>Cons Disc</td>
<td>1.9</td>
<td>4.5</td>
<td>12.0</td>
</tr>
<tr>
<td>Industrials</td>
<td>-2.0</td>
<td>9.4</td>
<td>14.4</td>
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<tr>
<td>Materials</td>
<td>7.5</td>
<td>11.3</td>
<td>14.6</td>
</tr>
<tr>
<td>Telecom</td>
<td>-2.0</td>
<td>8.1</td>
<td>12.3</td>
</tr>
<tr>
<td>Cons Staples</td>
<td>-1.0</td>
<td>10.1</td>
<td>13.1</td>
</tr>
<tr>
<td>Utilities</td>
<td>-2.0</td>
<td>10.1</td>
<td>12.3</td>
</tr>
</tbody>
</table>

Source: Bloomberg, FactSet
Note: All returns are in US Dollar terms
Fixed Income

16% of TRS Policy Benchmark

### Performance

**As of 12/31, USD, % Annualized**

<table>
<thead>
<tr>
<th></th>
<th>2H 2021</th>
<th>1-Year</th>
<th>5-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Bonds (16% of BMark)</td>
<td>3.6</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>-4.6</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>TIPS</td>
<td>4.2</td>
<td>6.0</td>
<td>5.3</td>
</tr>
<tr>
<td>Non-US Government Bonds</td>
<td>-3.9</td>
<td>2.7</td>
<td>1.6</td>
</tr>
<tr>
<td>High Yield</td>
<td>6.3</td>
<td></td>
<td></td>
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</tbody>
</table>

### Cash Rate

**As of 12/31, %**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>-3.0</td>
<td>-3.2</td>
<td>-3.4</td>
<td>-3.5</td>
</tr>
<tr>
<td>2005</td>
<td>-2.7</td>
<td>-2.9</td>
<td>-3.1</td>
<td>-3.2</td>
</tr>
<tr>
<td>2007</td>
<td>-2.4</td>
<td>-2.6</td>
<td>-2.8</td>
<td>-2.9</td>
</tr>
<tr>
<td>2010</td>
<td>-2.1</td>
<td>-2.3</td>
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<td>-2.6</td>
</tr>
<tr>
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<td>-1.2</td>
<td>-1.4</td>
<td>-1.6</td>
<td>-1.7</td>
</tr>
<tr>
<td>2021</td>
<td>-0.9</td>
<td>-1.1</td>
<td>-1.3</td>
<td>-1.4</td>
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<tr>
<td>2024</td>
<td>-0.6</td>
<td>-0.8</td>
<td>-1.0</td>
<td>-1.1</td>
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</tbody>
</table>

### Yields

**As of 12/31, %**

<table>
<thead>
<tr>
<th></th>
<th>Government Bonds</th>
<th>Non-US Govt Bonds</th>
<th>TIPS</th>
<th>High Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>2.0</td>
<td>2.2</td>
<td>1.6</td>
<td>1.4</td>
</tr>
<tr>
<td>2013</td>
<td>2.2</td>
<td>2.4</td>
<td>1.8</td>
<td>1.6</td>
</tr>
<tr>
<td>2014</td>
<td>2.4</td>
<td>2.6</td>
<td>2.0</td>
<td>2.2</td>
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<tr>
<td>2015</td>
<td>2.6</td>
<td>2.8</td>
<td>2.2</td>
<td>2.4</td>
</tr>
<tr>
<td>2016</td>
<td>2.8</td>
<td>3.0</td>
<td>2.4</td>
<td>2.6</td>
</tr>
<tr>
<td>2017</td>
<td>3.0</td>
<td>3.2</td>
<td>2.6</td>
<td>2.8</td>
</tr>
<tr>
<td>2018</td>
<td>3.2</td>
<td>3.4</td>
<td>2.8</td>
<td>3.0</td>
</tr>
<tr>
<td>2019</td>
<td>3.4</td>
<td>3.6</td>
<td>3.0</td>
<td>3.2</td>
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<tr>
<td>2020</td>
<td>3.6</td>
<td>3.8</td>
<td>3.2</td>
<td>3.4</td>
</tr>
<tr>
<td>2021</td>
<td>3.8</td>
<td>4.0</td>
<td>3.4</td>
<td>3.6</td>
</tr>
<tr>
<td>2022</td>
<td>4.0</td>
<td>4.2</td>
<td>3.6</td>
<td>3.8</td>
</tr>
</tbody>
</table>

### US Yield Curve

**As of 12/31, Yield to Maturity, %**

- 3m: 1.0, 1.2, 1.4, 1.6, 1.8, 2.0, 2.2, 2.4, 2.6, 2.8, 3.0, 3.2, 3.4, 3.6, 3.8, 4.0
- 1y: 1.2, 1.4, 1.6, 1.8, 2.0, 2.2, 2.4, 2.6, 2.8, 3.0, 3.2, 3.4, 3.6, 3.8, 4.0
- 2y: 1.4, 1.6, 1.8, 2.0, 2.2, 2.4, 2.6, 2.8, 3.0, 3.2, 3.4, 3.6, 3.8, 4.0
- 5y: 1.6, 1.8, 2.0, 2.2, 2.4, 2.6, 2.8, 3.0, 3.2, 3.4, 3.6, 3.8, 4.0
- 7y: 1.8, 2.0, 2.2, 2.4, 2.6, 2.8, 3.0, 3.2, 3.4, 3.6, 3.8, 4.0
- 10y: 2.0, 2.2, 2.4, 2.6, 2.8, 3.0, 3.2, 3.4, 3.6, 3.8, 4.0, 4.2
- 30y: 2.2, 2.4, 2.6, 2.8, 3.0, 3.2, 3.4, 3.6, 3.8, 4.0, 4.2, 4.4

Source: Bloomberg, MSCI, FactSet (note all returns are in US Dollar terms)

1 Taylor Rule Definition: A central bank nominal policy rate set equal to a neutral real rate plus the current level of inflation, which responds to changes in the inflation gap (as measured by the difference between the current rate of inflation and the central bank’s inflation target) and the output gap (as measured by the difference between NAIRU and the current unemployment rate).
Hedge Funds
5% of TRS Policy Benchmark

Performance
As of 12/31, USD, % Annualized

<table>
<thead>
<tr>
<th>Strategy</th>
<th>2H 2021</th>
<th>1-Year</th>
<th>5-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stable Value</td>
<td>2.2</td>
<td>1.5</td>
<td>0.3</td>
</tr>
<tr>
<td>Directional</td>
<td>4.8</td>
<td>5.3</td>
<td>0.7</td>
</tr>
<tr>
<td>Equity Long/Short</td>
<td>0.0</td>
<td>0.3</td>
<td>0.7</td>
</tr>
<tr>
<td>Credit</td>
<td>7.8</td>
<td>6.6</td>
<td>3.8</td>
</tr>
<tr>
<td>CTA</td>
<td>7.5</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>Macro</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Average Hedge Fund Fees
As of 9/30, Average Management Fee Per Strategy (%)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity Hedge</td>
<td>1.1</td>
<td>1.2</td>
<td>1.3</td>
<td>1.4</td>
<td>1.5</td>
<td>1.6</td>
<td>1.7</td>
<td>1.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Event Driven</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Macro</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Relative Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fund of Funds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Alpha Versus Equivalent Risk Equity
As of 12/31, Cumulative Jensen’s Alpha, Indexed to 100

Hedge Fund Launches v. Liquidations
As of 9/30, Count of Net Launches (Launches – Liquidations)

Source: Bloomberg, HFR

1Jensen’s alpha is a measure of alpha versus the equity market at equivalent risk. For example, if hedge funds are 20% as risky as the market then they are judged to have a 20% equity/80% cash benchmark.
Private Equity
14% of TRS Policy Benchmark

Performance¹
As of 12/31, USD, % Annualized

<table>
<thead>
<tr>
<th></th>
<th>2H 2021</th>
<th>1-Year</th>
<th>5-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Equity (14% of BMark)</td>
<td>21.0</td>
<td>18.8</td>
<td>17.7</td>
</tr>
<tr>
<td>Buyout</td>
<td>53.9</td>
<td>44.6</td>
<td>19.3</td>
</tr>
<tr>
<td>Venture</td>
<td>18.8</td>
<td>28.0</td>
<td>9.9</td>
</tr>
<tr>
<td>Private Debt</td>
<td>25.5</td>
<td>10.4</td>
<td></td>
</tr>
</tbody>
</table>

Multiples
As of 12/31

<table>
<thead>
<tr>
<th></th>
<th>Public to Private Spread</th>
<th>Russell 1000 Index</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2x</td>
<td>3x</td>
</tr>
<tr>
<td></td>
<td>8x</td>
<td>13x</td>
</tr>
<tr>
<td></td>
<td>18x</td>
<td>23x</td>
</tr>
</tbody>
</table>

Transaction Volume
As of 9/30

<table>
<thead>
<tr>
<th></th>
<th>Capital Invested ($)bn</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>400</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>434</td>
<td></td>
</tr>
</tbody>
</table>

Fundraising Activity
As of 12/31

<table>
<thead>
<tr>
<th></th>
<th>Capital Raised ($)bn</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>2002</td>
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</tr>
<tr>
<td>2003</td>
<td>400</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>286</td>
<td>229</td>
</tr>
</tbody>
</table>

Source: State Street Bank, Preqin, S&P
Note: Market data for US Large Buyout Market unless specified otherwise
¹PE Benchmark performance shown as TWRs, PE Strategy (Buyout, Venture, Private Debt) performance shown as IRRs. PE Benchmark and Strategy performance based on valuations as of 9/30/2021.
Real Estate
15% of TRS Policy Benchmark

Performance\(^\text{1}\)

<table>
<thead>
<tr>
<th>Property Type</th>
<th>2H 2021</th>
<th>1-Year</th>
<th>5-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real Estate (15% of BMark)</td>
<td>5.6</td>
<td>7.1</td>
<td>5.6</td>
</tr>
<tr>
<td>Office</td>
<td>3.3</td>
<td>4.9</td>
<td>5.3</td>
</tr>
<tr>
<td>Apartment</td>
<td>10.4</td>
<td>13.4</td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td>2.5</td>
<td>0.7</td>
<td>1.1</td>
</tr>
<tr>
<td>Industrial</td>
<td>20.8</td>
<td>16.4</td>
<td></td>
</tr>
</tbody>
</table>

Cap Rates

<table>
<thead>
<tr>
<th>Year</th>
<th>Average</th>
<th>Apartments</th>
<th>Industrial</th>
<th>Office</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>5.0%</td>
<td>5.5%</td>
<td>6.0%</td>
<td>6.5%</td>
<td>7.0%</td>
</tr>
<tr>
<td>2012</td>
<td>5.5%</td>
<td>6.0%</td>
<td>6.5%</td>
<td>7.0%</td>
<td>7.5%</td>
</tr>
<tr>
<td>2013</td>
<td>6.0%</td>
<td>6.5%</td>
<td>7.0%</td>
<td>7.5%</td>
<td>8.0%</td>
</tr>
<tr>
<td>2014</td>
<td>6.5%</td>
<td>7.0%</td>
<td>7.5%</td>
<td>8.0%</td>
<td>8.5%</td>
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<tr>
<td>2015</td>
<td>7.0%</td>
<td>7.5%</td>
<td>8.0%</td>
<td>8.5%</td>
<td>9.0%</td>
</tr>
<tr>
<td>2016</td>
<td>7.5%</td>
<td>8.0%</td>
<td>8.5%</td>
<td>9.0%</td>
<td>9.5%</td>
</tr>
<tr>
<td>2017</td>
<td>8.0%</td>
<td>8.5%</td>
<td>9.0%</td>
<td>9.5%</td>
<td>10.0%</td>
</tr>
<tr>
<td>2018</td>
<td>8.5%</td>
<td>9.0%</td>
<td>9.5%</td>
<td>10.0%</td>
<td>10.5%</td>
</tr>
<tr>
<td>2019</td>
<td>9.0%</td>
<td>9.5%</td>
<td>10.0%</td>
<td>10.5%</td>
<td>11.0%</td>
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<tr>
<td>2020</td>
<td>9.5%</td>
<td>10.0%</td>
<td>10.5%</td>
<td>11.0%</td>
<td>11.5%</td>
</tr>
</tbody>
</table>

Income Growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Average</th>
<th>Apartments</th>
<th>Industrial</th>
<th>Office</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>-30.0</td>
<td>-20.0</td>
<td>-10.0</td>
<td>0.0</td>
<td>10.0</td>
</tr>
<tr>
<td>2004</td>
<td>-20.0</td>
<td>-10.0</td>
<td>-5.0</td>
<td>5.0</td>
<td>10.0</td>
</tr>
<tr>
<td>2005</td>
<td>-10.0</td>
<td>-5.0</td>
<td>0.0</td>
<td>5.0</td>
<td>10.0</td>
</tr>
<tr>
<td>2006</td>
<td>0.0</td>
<td>5.0</td>
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<td>145.0</td>
<td>150.0</td>
<td>155.0</td>
<td>160.0</td>
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</table>

Composition of Returns

<table>
<thead>
<tr>
<th>Year</th>
<th>Income</th>
<th>Appreciation</th>
<th>Total Return</th>
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<tbody>
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<td>2001</td>
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<tr>
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<td>75.0</td>
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<td>85.0</td>
</tr>
<tr>
<td>2020</td>
<td>80.0</td>
<td>85.0</td>
<td>90.0</td>
</tr>
</tbody>
</table>

Source: Bloomberg, NCREIF, Real Capital Analytics, State Street Bank

\(^{1}\)Property Type Return Indices are Property-level indices and do not reflect leverage or asset management fees, whereas NCREIF ODC E is a fund-level index and is levered and net of fees. Returns are for US-based properties only. Real Estate Benchmark and Strategy performance (Office, Apartment, Retail, Industrial) shown as TWRs based on valuations as of 9/30/2021.
Energy, Natural Resources and Infrastructure

6% of TRS Policy Benchmark

### Performance

<table>
<thead>
<tr>
<th></th>
<th>As of 12/31, USD, % Annualized</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENRI (6% of BMark)</td>
<td>2H 2021</td>
</tr>
<tr>
<td>Natural Resources</td>
<td>9.7</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>18.4</td>
</tr>
</tbody>
</table>

### Energy Prices

As of 12/31

- Crude Spot (LHS, $/bbl)
- Natural Gas Spot (RHS, $/mmbtu)

### Energy Equity Performance

As of 12/31

- S&P 500 Energy Total Return Index (LHS, Price)
- Crude Spot (RHS, $/bbl)

### Oil Market Production

As of 9/30

- US (LHS)
- Saudi Arabia (LHS)
- OPEC (RHS)

Source: State Street Bank, Bloomberg, Cambridge, EIA

1ENRI Benchmark performance shown as TWRs; ENRI Strategy (Natural Resources and Infrastructure) shown as IRRs. ENRI benchmark and Strategy performance based on valuations as of 9/30/2021
Executive Summary

Key Objectives

**Performance**
- The Program’s performance has continued to be affected by the COVID environment, resulting in the 5-year return of -134 bp versus the benchmark
- Total portfolio underperformance driven primarily by private markets
- Public markets portfolios have outperformed this year, benefitting from redemptions and additions of new managers

**Manager Graduation**
- Since program inception, 7 managers have been promoted to the TRS Premier List and received a Trust-level commitment
- Trust-level commitments to EM Program graduates is $3.4 billion

**Commitment to Diversity**
- 53% of total capital allocated since inception, and 46% of capital allocated in 2021 have been to diverse managers

Key Accomplishments

**EM Select**
- Established Public Markets EM Select Program
- External Public Markets is evaluating managers for potential EM Select allocations
- Two Private Equity and three Real Estate managers received EM Select allocations totally $330 million since 2019

**Program Activity**
- 56% of private markets capital allocated to Innovation
- Conducted 127 intro meetings and 103 update calls
- Program Director participated in 26 engagement activities including publications across well known media outlets and investor conferences
- TRS / ERS hosted the second annual virtual Emerging Manager Conference on January 19, 2022
- Nominated by Institutional Investor for Advocate of the Year

Source: State Street as of September 30, 2021; TRS IMD
TRS Emerging Manager Program Team

**EM Program Team**
- Tommy Heitz, CAIA
  - Associate
- Olivia Dwan
  - Admin - Contractor

**Key Partners**
- Private Markets
  - Charles Pippen
    - Dedicated GCM Secondee
    - (Onsite at TRS in Austin)
- Public Markets

**EM Program Advisors**
- Jase Auby, CFA
  - Chief Investment Officer
- Carolyn Hansard
  - Sr. Director
    - Energy, Infrastructure, & Natural Resources
- Scott Ramsower
  - Director
    - Private Equity
- Matt Halstead
  - Director
    - Real Estate
- Michael Ijeh, CAIA
  - Associate
    - Public Markets
Emerging Manager Program Highlights

17
Years Program History

$4.9 bn
Underlying Commitments
$5.9 bn program size

#
200
Managers Backed

7
TRS Graduates to Premier List

$3.4 bn invested with Graduates at the Trust Level

5
EM Select Commitments

$330 mm invested EM Select Managers at the Trust Level

$330
Investments

53%
Diverse Manager Commitments

Source: TRS IMD
Performance and Commitments
As of September 30, 2021

Emerging Manager Program

<table>
<thead>
<tr>
<th>Total Time Weighted Returns</th>
<th>1-Yr</th>
<th>3-Yr</th>
<th>5-Yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returns</td>
<td>25.6%</td>
<td>10.3%</td>
<td>11.1%</td>
</tr>
<tr>
<td>Benchmark</td>
<td>30.2%</td>
<td>13.3%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Alpha (bp)</td>
<td>-458</td>
<td>-296</td>
<td>-134</td>
</tr>
</tbody>
</table>

Underlying Allocations: $4,927 MM
- Private Equity: $2,292
- Real Estate: $1,562
- Public Markets: $832
- ENRI: $242

Net Asset Value: $2,549 MM
- Private Equity: $1,235
- Real Estate: $731
- Public Markets: $527
- ENRI: $56

Commitments by Diversity Type
- Non-minority: 46.5%
- Women: 14.4%
- African American: 13.6%
- Asian American: 7.2%
- Hispanic American: 17.9%

Source: State Street and TRS IMD
Benchmark is an asset weighted composition of State Street Private Equity Index, NCREIF ODCE Index, Cambridge Index, HFRI Fund of Funds Composite Index, USA IMI, MSCI EAFE + Canada, and MSCI Emerging Markets
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### Year in Review - Emerging Manager Program

#### 2021 Priorities

<table>
<thead>
<tr>
<th>1) EM Select for Public Markets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective:</strong> In partnership with the TRS EPU team, begin to evaluate a transitional capital program for Hedge Fund and Long Only Equity Emerging Managers to transition from the traditional Emerging Manager Program sized allocations to Trust size allocations. This will also allow greater interactivity between high performing EMP managers and EPU.</td>
</tr>
<tr>
<td><strong>Result:</strong> Working with RockCreek, EM Select qualifying criteria as been set. Managers have been ranked, and EPU has started diligence on two top-tier managers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2) Analytics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective:</strong> In conjunction with the EMP partners and TRS data teams, continue to expand the EMP’s analytic capability.</td>
</tr>
<tr>
<td><strong>Result:</strong> Dashboards have been enhanced with a broad spectrum of new types of data, allowing the team to automate reports that have historically been manually built and maintained.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3) Hedge Fund Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective:</strong> As part of our commitment to continuous improvement, the EMP will do a deep dive on the hedge fund portfolio.</td>
</tr>
<tr>
<td>• Review current portfolio, sizing and structure</td>
</tr>
<tr>
<td>• Evaluate prospective managers</td>
</tr>
<tr>
<td><strong>Result:</strong> Reviewed all HF managers and invested in two new managers in the HF portfolio.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4) Service Provider Competitive Landscape</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective:</strong> Survey investment capability of emerging manager industry specialists.</td>
</tr>
<tr>
<td><strong>Result:</strong> Surveyed global landscape of asset managers providing emerging manager type programs across public and private market managers. The EMP is in the process of developing a Premier List for emerging manager industry specialists.</td>
</tr>
</tbody>
</table>
## Looking Ahead – Emerging Manager Program

### Focus Areas for 2022

<table>
<thead>
<tr>
<th>1) Data Analytics</th>
<th>Objective: Continue to build out data analytic capability</th>
</tr>
</thead>
<tbody>
<tr>
<td>2) EMP Public Equities</td>
<td>Objective: Evaluate tech focused sector funds for potential addition to long only equity or hedge fund portfolio</td>
</tr>
<tr>
<td>3) EMP Internship</td>
<td>Objective: Evaluate opportunity to develop internship program</td>
</tr>
</tbody>
</table>
History of Emerging Manager Program Allocations

Source: TRS IMD
Note: Represents timing of underlying allocations to investment managers. US Dollars in millions.
Portfolio Diversification – Investment Type

Private market investments in calendar year 2021

Source: TRS IMD
Portfolio Diversification
NAV as of June 30, 2021

Private Equity
- Women, 6%
- Asian American, 15%
- African American, 22%
- Hispanic American, 19%
- Non Minority, 38%

Real Estate
- Women, 22%
- Asian American, 4%
- African American, 2%
- Hispanic American, 19%
- Non Minority, 53%

ENRI
- Asian American, 8%
- Non Minority, 23%
- African American, 36%
- Hispanic American, 19%
- Women, 33%

Diversity

Strategy
- Venture Capital, 8%
- Mid/Small Buyout, 61%
- Growth, 19%
- Credit/Special Situations, 12%

Private Equity
- Rass, 20%
- Core, 3%
- Value-Add, 46%
- Opportunistic, 31%

ENRI
- Natural Resources, 17%
- Infrastructure, 55%
- Energy, 28%

Source: TRS IMD
Portfolio Diversification
NAV as of September 30, 2021

**Diversity**
- Women, 82%
- African American, 18%
- Other minorities, 8%

**Strategy**
- Long Only Equity 100%
- Equity Long/Short, 38%
- Event Driven, 24%
- Equity Market Neutral, 11%
- Credit, 27%

**Benchmark Composition**
- US IMI 49%
- MSCI EAFE + Canada 28%
- MSCI Emerging Markets 23%

Source: TRS IMD

Benchmarks are HFRI Fund of Funds Composite Index for the hedge fund and an asset weighted mix of USA IMI, MSCI EAFE + Canada, and MSCI Emerging Markets for the long only equity fund.
TAB 18
UPDATE ON IMD LEGAL & COMPLIANCE

Heather Traeger, General Counsel & Chief Compliance Officer

Denise Lopez, Team Lead, Investments

February 2022
L&C guiding principles: better deal terms, risk mitigation, compliance, ethical integrity, and profit center

- Expert Legal Advice
- Relentless Client Focus
- Trusted Business Partner
Heather Traeger  
General Counsel & Chief Compliance Officer  
JD, University of Houston  
BA, Williams College

Denise Lopez, CPA  
Team Lead, Investments  
JD, Cornell  
BBA, UT Austin

---

**INVESTMENT COMPLIANCE**

- Chris Bowlin  
  Compliance Counsel  
  JD, Texas Wesleyan  
  MS, BS, Texas A&M

- Michael Schaff  
  Compliance Counsel  
  JD, Hofstra University  
  BS, UT Austin

- Adam Costa  
  Sr. Compliance Specialist  
  BA, University of Pittsburgh

- Elena Ivanova  
  Compliance Specialist  
  BA, MEBIK

- Vacancy  
  Compliance Specialist (1)

**INVESTMENT LEGAL**

- Deanna Buck, CPA  
  Investment Counsel  
  LLM, NYU  
  JD, BA, Georgetown

- Bianca Sandoval Green  
  Investment Counsel  
  JD, BA, UT Austin

- J.R. Morgan  
  Investment Counsel  
  JD, UCLA  
  BA, BS, Evergreen State

- Anna Espinosa  
  Legal Assistant  
  BA, Paralegal Certification, UT Austin

- Novi Campbell  
  Legal Assistant  
  Paralegal Certification, UT MA, Southern Illinois  
  BA, Universitas Indonesia

- Vacancy  
  Investment Counsel (2)

---

**EMPLOYMENT / IP**

- Steve Poliner  
  Investment Counsel  
  JD, NYU  
  BS, BA, Duke University

- Bo Simmons  
  Investment Counsel  
  JD, Columbia  
  BA, University of Missouri

- Howell Li  
  Investment Counsel  
  JD, Boston College  
  MA, Harvard  
  BA, Berkeley

- Lisa Lopez  
  Legal Assistant  
  BA, Paralegal Certification, University of Incarnate Word

---

**BOARD, PIA, PROCUREMENT**

- Stephanie Perkins  
  Assistant General Counsel  
  JD, UT Austin  
  BA, Vanderbilt

- Alice McAfee  
  Team Lead, Government Procurement Solutions (GPS)  
  JD, MA, BA, UT Austin

---

**Shared Services**

- Adam Costa  
  Sr. Compliance Specialist  
  BA, University of Pittsburgh

- Elena Ivanova  
  Compliance Specialist  
  BA, MEBIK

---

**36**  
Advanced degrees and certificates

**15**  
Years average of legal experience

**13**  
Years average of compliance experience
Sourcing & Building Partnerships
• Work directly with external manager's L&C teams

Investment Due Diligence & Decision Making
• Work with IMD early in investment and operational due diligence process to address potential issues
• Analyze structuring, regulatory and policy issues

Legal & Closing Process
• Work side-by-side with IMD in negotiating terms and documenting the business deals
• Manage legal negotiation, external counsel, document drafting

Monitoring and Governance
• Address post-investment issues
• File and track regulatory forms

Source: TRS IMD
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## Implemented Best Practices

- Increased scope and degree of compliance monitoring, testing and reporting
- Automated annual exempt account certification for Covered Persons
- Developed internal task force to track and manage legislative session proposals, responses and bills
- Incorporated L&C component into IMD initiatives (e.g., ESG committee, SPAC committee, Digital Asset Working Group)
- Consulted on custody RFP and research and consultant contracts
- Evaluated, tested and implemented e-discovery and legal hold technology
- Completed internal counsel manual
- Held "Anatomy of an LPA" and Cyber Security Addendum training

## Adhered to New Requirements

- Began implementation of new legislative and Sunset requirements (e.g., restricted securities, contracting)
- Analyzed amended regulations (e.g., anti-money laundering, know-your-customer, OFAC and privacy laws) and updated standard responses
- Tested Employee Ethics Policy adherence
- Analyzed impact of new and amended non-U.S. holdings reporting requirements
- Developed Investment Integrity Policy FAQ to reflect changes to IPS
# Investment Legal & Compliance: 2022 Priorities

## Training
- Legal & Compliance Investment Summit 2022
- Continued IMD and department training programs

## Legal 3.0
- Updating key business terms for fund negotiation in collaboration with Real Estate
- Assess legal, regulatory and custodial issues with respect to investment in digital assets
- Partner with Investment Operations and Derivatives to meet initial margin regulations by September 2022

## Office Initiatives
- Tricot 2.0 – Local Hires
- Long-term facilities work streams
- Procurement and contracting-IMD process
- Data architecture and governance

## Best Practices
- Enhance data controls for MNPI and securities filings
- Enhance Securities Litigation program efficiencies and returns including onboarding of third-party firm
- DE&I initiatives
APPENDIX
**Better Deal Terms**

- Walk side-by-side with IMD through full transaction life cycle
- Understand “must-have” versus “nice-to-have” and have judgement and experience to differentiate
- Deliver creative solutions for IMD innovations
- Provide confidence to IMD to conduct business in new markets, jurisdictions and financial arenas
- Enhance IMD and TRS brand
- Advise on business issues, structures, legal requirements, and “Texas Way” on terms

**Culture of Compliance and Ethical Integrity**

- Craft cultural realignment to reflect sophistication and scope of IMD operations
- Build compliance and risk awareness into daily business processes
- Provide centralized resource to IMD for questions and concerns
- Inform management and trustees of compliance efforts

**Risk Mitigation**

- Avoid litigation, regulatory deficiencies, criminal and civil penalties, headline risk, and policy violations for failure to satisfy legal and policy obligations
- Identify and address emerging risks
- Prevent unnecessary disruption of transactions
- Employ technology and systematic procedures to enhance risk mitigation program
- Organize information-sharing sessions with peers
- Significant involvement in industry and regulatory groups on issues of shareholder and investor rights

**Profit Center**

- Develop expertise to take advisory, consulting, and training function in-house and reduce reliance and associated costs on consultants or external counsel
- Design and implement technology and operational solutions that allow scaling of functions and staff
- Strategic management of costs: selective distribution of internal vs external workload and deliberative selection of external counsel and consultants
- Internal staffing: maintain legal fees for 4 consecutive years despite year-on-year increase in number and complexity of transactions)
- Securities class actions: drive lower fees, seek participation opportunities, and support innovations to market to increase recoveries
Annual Investments Legal & Compliance Summit

• 2021 marked the 6th year L&C has hosted the Summit
• Opportunity for all of TRS’s external counsel to meet with TRS L&C and IMD for two days of legal education
• Goal: discuss current market trends, identify opportunities to improve TRS's position as investor, and address TRS specific legal and compliance issues
  • 10 national law firms attended, over 30 attorneys
  • 8 separate sessions, most qualifying for CLE; all moderated by internal L&C counsel with external counsel panelists
  • Topics ranged from navigating GP led secondaries to legal and regulatory considerations of digital assets
  • DE&I in the legal profession was also discussed with representatives from two firms’ DE&I committee chairs
TAB 19
Investment Management Pay Update
Teacher Retirement System of Texas
February 2022
# About McLagan

## Overview
McLagan is the financial services industry’s leading compensation consulting and pay and performance benchmarking firm. McLagan is part of Aon’s Human Capital Solutions business.

## Services
- Compensation consulting/advisory
- Compensation studies
- Business performance and productivity benchmarking (headcount, payout rates, margins)

## Clients
- 800+ asset management organizations, including 49 of top 50 advisory firms, 100+ corporate and public plan sponsors, 60+ endowments and foundations, hedge funds, PE firms, banks, insurance companies, and family offices
- Investment and commercial/retail banks
- Investor services companies
- Private client/wealth management firms
- Specialized real estate firms

## Value Proposition
1. In-depth financial services industry focus and experience
2. Unparalleled, proprietary pay and performance data
3. Seamless global coverage and consulting support
4. General management perspective
5. Experienced, long-tenured consultants
6. Integrity and discretion

## Size & Scope
- Employees: ~250

## Aon
- Since 1999, McLagan has been a wholly owned subsidiary of Aon (NYSE).
- McLagan’s clients benefit from: (1) the flexibility and entrepreneurial culture of a small company; and (2) the resources of Aon, the world’s largest HR consulting firm.
McLagan’s Work with Leading Institutional Investors

- McLagan provides institutional asset owners with a wide range of pay-related services, including:
  - Pay level benchmarking through our annual compensation surveys.
  - Compensation consulting/advisory including:
    - Executive compensation.
    - Compensation philosophy development.
    - Peer group evaluation.
    - Short- and long-term performance-based incentive plan design.
    - Salary structures / pay band development.

- Some of our institutional asset owner consulting clients are listed below:

<table>
<thead>
<tr>
<th>Public Funds</th>
<th>Corporate Plan Sponsors</th>
<th>Endowments &amp; Foundations</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPPIB</td>
<td>DuPont</td>
<td>Harvard Management Co.</td>
</tr>
<tr>
<td>CalPERS</td>
<td>General Motors Asset Mgt.</td>
<td>KAUST</td>
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<td>Colorado PERA</td>
<td>Kodak</td>
<td>Kellogg Foundation</td>
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<td>Mass PRIM</td>
<td>Lockheed Martin</td>
<td>Rice University</td>
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<tr>
<td>New Zealand Super</td>
<td>Nokia</td>
<td>Stanford Management Co.</td>
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<td>Ohio STRS</td>
<td>NRRIT</td>
<td>Texas Christian University</td>
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<td>State of Wisconsin IB</td>
<td>US Steel</td>
<td>Washington U in St. Louis</td>
</tr>
<tr>
<td>Virginia Retirement Sys.</td>
<td>UPS</td>
<td>Yale University</td>
</tr>
</tbody>
</table>
McLagan’s Work with Public Asset Management Firms

- Beyond our work with institutional asset owners, McLagan is the leading compensation consulting firm for the broader investment industry.
- Our ongoing compensation consulting work and proprietary surveys provide us with unique insights and perspectives about market pay practices and pay trends.
- The following table: (1) permits us to highlight our involvement, since these relationships are publicly-disclosed in proxy statements; and (2) underscores the breadth and quality of our asset management-related consulting capabilities.

<table>
<thead>
<tr>
<th>Firm</th>
<th>McLagan’s Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB</td>
<td>Provide management with ongoing compensation support</td>
</tr>
<tr>
<td>Artisan Partners</td>
<td>Board compensation consultant</td>
</tr>
<tr>
<td>BlackRock</td>
<td>Provide management with ongoing compensation support</td>
</tr>
<tr>
<td>Brightsphere</td>
<td>Board compensation consultant</td>
</tr>
<tr>
<td>Cohen &amp; Steers</td>
<td>Provide management and the Board with ongoing consulting support</td>
</tr>
<tr>
<td>Franklin</td>
<td>Provide management with ongoing compensation support; meet with the Board annually</td>
</tr>
<tr>
<td>Janus Henderson</td>
<td>Board compensation consultant</td>
</tr>
<tr>
<td>Schroders</td>
<td>Provide management and the Board with ongoing consulting support</td>
</tr>
<tr>
<td>Victory Capital</td>
<td>Provide management and the Board with ongoing consulting support</td>
</tr>
<tr>
<td>Virtus</td>
<td>Provide management with ongoing compensation support</td>
</tr>
</tbody>
</table>
Investment Management Compensation Trends – Public Funds

- YE 2020 salaries and total cash compensation stay the course (i.e., up +3% at median).
- While many funds froze base salaries due to the pandemic, these freezes have been lifted as the labor market and asset levels have rebounded.
- Significant turnover for EDs and CIOs across leading public funds, mostly due to retirements and departures to the private sector (e.g., Maryland SRPS, North Dakota, New Mexico PERA, PA PSERS, CalSTRS, MOSERS, CalPERS, Penn SERS).
- Many funds continue to struggle in their executive search efforts, often due to:
  - Prohibitions about use of search firms.
  - Pay-related limitations/constraints.
  - Perceptions of challenging internal politics.
  - Robust labor market in the private sector (e.g., asset management firms, OCIOs, E&Fs, family offices, etc.).
- Many funds explore remote long-term work opportunities.
- 2021 Salaries continue to rise (i.e., up +2% at median).
- Several funds begin development of long-term incentive plans.
## Oh Canada!

### CEO / ED

<table>
<thead>
<tr>
<th>Position</th>
<th>Salary (CAD $000s)</th>
<th>Total Cash (CAD $000s)</th>
<th>Total Comp (CAD $000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIMCO</td>
<td>$500</td>
<td>$1,632</td>
<td>$2,761</td>
</tr>
<tr>
<td>BcIMC</td>
<td>$588</td>
<td>$1,953</td>
<td>$3,086</td>
</tr>
<tr>
<td>PSP</td>
<td>$504</td>
<td>$1,709</td>
<td>$2,086</td>
</tr>
<tr>
<td>Caisse de Depot</td>
<td>$500</td>
<td>$4,357</td>
<td>$5,521</td>
</tr>
<tr>
<td>CPPIB</td>
<td>$625</td>
<td>$2,605</td>
<td>$3,166</td>
</tr>
<tr>
<td>OTPP</td>
<td>$565</td>
<td>$2,342</td>
<td>$2,907</td>
</tr>
<tr>
<td>OMERS</td>
<td>$565</td>
<td>$2,029</td>
<td>$2,594</td>
</tr>
<tr>
<td>Average</td>
<td>$625</td>
<td>$2,389</td>
<td>$2,991</td>
</tr>
</tbody>
</table>

### Top Inv. Position

<table>
<thead>
<tr>
<th>Position</th>
<th>Salary (CAD $000s)</th>
<th>Total Cash (CAD $000s)</th>
<th>Total Comp (CAD $000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIMCO</td>
<td>$300</td>
<td>943</td>
<td>1,947</td>
</tr>
<tr>
<td>BcIMC</td>
<td>$455</td>
<td>1,313</td>
<td>2,197</td>
</tr>
<tr>
<td>PSP</td>
<td>$353</td>
<td>1,286</td>
<td>2,219</td>
</tr>
<tr>
<td>Caisse de Depot</td>
<td>$500</td>
<td>1,094</td>
<td>2,948</td>
</tr>
<tr>
<td>CPPIB</td>
<td>$500</td>
<td>1,993</td>
<td>3,486</td>
</tr>
<tr>
<td>OTPP</td>
<td>$458</td>
<td>1,836</td>
<td>4,536</td>
</tr>
<tr>
<td>OMERS</td>
<td>$500</td>
<td>1,962</td>
<td>4,676</td>
</tr>
<tr>
<td>Average</td>
<td>$438</td>
<td>1,489</td>
<td>3,113</td>
</tr>
</tbody>
</table>

### Average (USD)

- **Salary**: $440, $1,911, $3,334
- **Total Cash**: $2,000, $3,500, $5,000
- **Total Comp**: $2,500, $3,000, $3,500
Investment Management Compensation Trends – Private Sector

- YE 2020: Revenues +5% → total compensation up +5% (at median) for employees below $500K and flat for employees above $1M

- YE 2021:
  - A totally unprecedented year for pay decision-making given the confluence of:
    1. **Record high revenues**. Fueled by beta, 2021 will be the best P&L year ever.
    2. **Frenetic labor market activity** resulting from:
       - A strong economy.
       - COVID-enabled remote work and remote hiring.
       - Intense business innovation (supported by strong P&Ls).
  - **Incentives**: Substantial increases. The best year ever. Within diversified firms, **incentive pools should be up 20% or more** at YE 2021, driving payouts of 25%+ for top-performing senior investment professionals.
  - **Base salaries**: Substantial movement. **Base salaries up 5-10% for most staff**.
Long-term Incentives are Significant for Senior Investment Professionals

As private sector firms dominate the labor market for TRS’ talent, it is important to be aware of pay practices outside of public fund peers.
McLagan’s Work with TRS

McLagan has had a long-standing relationship with TRS:

- **1998**: First conversations with TRS about investment industry market data and McLagan’s consulting services.

- **2006-2007**: McLagan partnered with TRS to present information to the newly formed Board Compensation Committee about competitive market pay practices, incentive plan design approaches, and TRS’ relative pay positioning versus public and private investment management organizations (for current and prospective staffing levels). TRS adopted its compensation philosophy to:
  - Target base salaries at the 75th percentile of leading public funds.
  - Target incentive compensation at the 25th percentile of private sector firms.

- Starting 2014 and because of significant lagging shown on the 2007 study, TRS partnered with McLagan for regular compensation reviews every two years:
  - **2014**: McLagan conducted the first detailed pay-level review since TRS adopted a formal compensation philosophy and new incentive plan. This results showed TRS lagging its targeted philosophy from both a base and incentive opportunity standpoint.
  - **2016**: Pay benchmarking study was updated.
  - **2018**: Pay benchmarking study was updated again.
  - **2020**: Study delayed due to COVID.
  - **2021**: Pay benchmarking study updated again including UK-based data for local strategy hiring at TRICOT.
  - **2023**: Next anticipated comprehensive review.
2021 TRS Compensation Analysis - Process

In 2021 McLagan conducted a pay review of TRS’ staff using the following steps:

1. Worked with TRS to benchmark their employees to McLagan’s survey positions.

2. Assembled the US market compensation data for TRS’ current peer groups. One peer set is other leading US public funds and the other is a broad range of private sector firms (investment advisory firms, banks, insurance companies, corporate pensions, endowments & foundations).

3. Completed and presented a pay analysis which assessed the competitiveness of TRS’ base salary and incentive compensation for US-based employees against TRS’ peer groups. This consisted of McLagan:
   1. Analyzing TRS’ market positioning relative to TRS’ stated compensation philosophy.
   2. Providing TRS with a detailed spreadsheet that included the competitive pay level benchmarks (e.g., 25th, 50th, and 75th percentiles for base salary, bonus, total cash compensation, and total compensation) for each covered employee as well as for positions in which TRS does not have a current incumbent.

4. Additionally, McLagan provided guidance on competitive pay levels for TRS’ UK-based investment staff by presenting the market compensation data for UK-based incumbents within both the private sector industry and asset owner organizations.
Michael Vosler is an associate partner in McLagan’s asset management practice, focusing on traditional/long-only asset management organizations. Michael helps clients effectively manage their human capital through pay level benchmarking, annual and long-term incentive plan design, and headcount and staffing analysis.

Michael also leads sales compensation covering both intermediary and institutional sales plan design. For the past fourteen years, Michael has served as the compensation survey manager for McLagan’s U.S. Investment Product Sales and Marketing Survey and the Canadian Investment Management Survey. In addition to leading the survey in Canada, Michael works closely with many leading Canadian pension funds on pay-related issues.

Michael joined McLagan in 2007. Prior to joining the firm, he spent seven years at PwC/Buck Consultants in their compensation consulting practice.
Michael Oak oversees our institutional investor clients including public funds, corporate plan sponsors, endowments, and foundations. For these clients, Mr. Oak specializes in:

• Board advisory / Executive compensation.
• Incentive plan design / Pay for performance.
• Compensation philosophy & peer group development.
• Compensation benchmarking & salary banding.

Mr. Oak also works with a broad range of investment management firms on compensation related issues including managing our Performance Intelligence Study, a general ledger benchmarking for asset management firms. Mr. Oak is a frequent speaker on pay related topics at numerous industry conferences.

Prior to joining McLagan in 2010, Mr. Oak worked as a mathematical statistician for the U.S. Department of Agriculture and in the executive compensation practice at Pearl Meyer & Partners’ Houston, TX Office. Mr. Oak holds a B.S. in Biometry & Statistics and a Master’s degree in Applied Statistics from Cornell University.

Mr. Oak resides in Virginia with his wife Jen, who is a veterinarian at a non-profit wildlife teaching hospital. Outside of work, Mr. Oak enjoys spending time outdoors and giving back to the community. Mr. Oak is a volunteer Paramedic and serves as president of his local fire department.
Corporate Plan Sponsors

APG Asset Management
AT&T
Church Pension Group
DuPont Capital Management
Eastman Kodak Company
Eli Lilly and Company
Ernst & Young
General Motors Investment Mgmt.
IBM Corporation
ICMA Retirement Corporation
Johnson & Johnson
Lockheed Martin Investment Mgmt. Co.
Lumen Technologies
National Rural Electric Cooperative Assoc.
Nokia Investment Management Co.
Pension Boards United Church of Christ
Portico Benefit Services
Textron
UAW Retiree Medical Benefits Trust
UMWA Health & Retirement Funds
UPS Capital Corporation
USS & Carnegie Pension Fund
Wespath Benefits & Investments
YMCA Retirement Fund

Public Funds

Alaska Permanent Fund Corporation
Alaska Retirement Management Board
Arizona State Retirement System
California Public Employees’ Ret. Sys.
California State Teachers’ Ret. Sys.
Colorado PERA
Contra Costa County Employees’ Ret. Assoc.
Employees Retirement System of Texas
Employees’ Ret. Fund of City of Dallas
Fire and Police Pension Association
Hawaii Employees’ Retirement System
Indiana Public Retirement System
Iowa Public Employees Retirement System
Kentucky Teachers Retirement System
Maine PERS
Maryland State Retirement & Pension Sys.
Massachusetts PRIM
Minnesota State Board of Investment
Missouri Local Gov’t. Employees Ret. Sys.
Missouri State Employees’ Ret. System
Montana Board of Investments
Municipal Employees’ Ret. Sys. of Michigan
Municipal Fire & Police Ret. Sys. of Iowa
Nebraska Investment Council
New Mexico Retirement Board
New Mexico State Investment Council
NYS Common Retirement Fund
NYS Teachers’ Retirement System
Ohio Public Employees Retirement System
Oklahoma Public Employees Retirement Sys
Orange County Employees Ret. System
Oregon Public Employees Retirement Fund
PA State Employees’ Retirement System
Public Employee Retirement System of Idaho
Public Employees’ Ret. System of Nevada
Public Schools Ret. Systems of Missouri
School Employees Ret. System of Ohio
South Carolina Retirement System
South Dakota Investment Council
State Board of Administration of Florida
State of Idaho Endowment Fund Inv. Board
State of Michigan Retirement System
State of New Jersey Pension Fund
State of Wisconsin Investment Board
State Teachers Retirement System of Ohio
State Universities Retirement System
Teacher Retirement System of Texas
Teachers’ Retirement System of Louisiana
Tennessee Consolidated Retirement System
Texas County & District Retirement System
Texas Municipal Retirement System
Utah Retirement Systems
Utah School & Institutional Trust Fund Office
Virginia Retirement System
Washington State Investment Board
West Virginia Investment Management Board
Wyoming Retirement System
## McLagan Survey Participants – Asset Owners…

<table>
<thead>
<tr>
<th>Endowments &amp; Foundations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amherst College</td>
</tr>
<tr>
<td>Andrew W. Mellon Foundation</td>
</tr>
<tr>
<td>Baylor College of Medicine</td>
</tr>
<tr>
<td>Boston Foundation</td>
</tr>
<tr>
<td>Boston University</td>
</tr>
<tr>
<td>Bowdoin College</td>
</tr>
<tr>
<td>Brandeis University</td>
</tr>
<tr>
<td>Brown University</td>
</tr>
<tr>
<td>California Institute of Technology</td>
</tr>
<tr>
<td>Carnegie Mellon University</td>
</tr>
<tr>
<td>Casey Family Programs</td>
</tr>
<tr>
<td>Columbia University</td>
</tr>
<tr>
<td>Commonfund Group</td>
</tr>
<tr>
<td>Cystic Fibrosis Foundation</td>
</tr>
<tr>
<td>Duke University</td>
</tr>
<tr>
<td>Emory University</td>
</tr>
<tr>
<td>Georgetown University</td>
</tr>
<tr>
<td>Georgia Tech Foundation, Inc</td>
</tr>
<tr>
<td>Grinnell College</td>
</tr>
<tr>
<td>Harvard Management Company</td>
</tr>
<tr>
<td>Helmsley Charitable Trust</td>
</tr>
<tr>
<td>Howard Hughes Medical Institute</td>
</tr>
<tr>
<td>Indiana University Health</td>
</tr>
<tr>
<td>Institute for Advanced Study</td>
</tr>
<tr>
<td>Johns Hopkins University</td>
</tr>
<tr>
<td>Lehigh University</td>
</tr>
<tr>
<td>Margaret A. Cargill Philanthropies</td>
</tr>
<tr>
<td>Metropolitan Museum of Art</td>
</tr>
<tr>
<td>MIT Investment Management Company</td>
</tr>
<tr>
<td>Mount Holyoke College</td>
</tr>
<tr>
<td>Multilateral Endowment Mgmt. Company</td>
</tr>
<tr>
<td>New York Presbyterian Hospital</td>
</tr>
<tr>
<td>Novant Asset Management</td>
</tr>
<tr>
<td>Penn State University</td>
</tr>
<tr>
<td>Phillips Academy Andover</td>
</tr>
<tr>
<td>Princeton University</td>
</tr>
<tr>
<td>Rainwater Charitable Foundation</td>
</tr>
<tr>
<td>Rice University</td>
</tr>
<tr>
<td>Rockefeller University</td>
</tr>
<tr>
<td>San Manuel Band of Mission Indians</td>
</tr>
<tr>
<td>Stanford Management Company</td>
</tr>
<tr>
<td>Texas A&amp;M Foundation</td>
</tr>
<tr>
<td>Texas Christian University</td>
</tr>
<tr>
<td>Texas Tech University</td>
</tr>
<tr>
<td>TIFF Advisory Services, Inc.</td>
</tr>
</tbody>
</table>
McLagan Methodology

The data below is illustrative and should only be used for the purpose of understanding McLagan’s methodology for completing the competitive pay analysis.

<table>
<thead>
<tr>
<th>Employee</th>
<th>Salary</th>
<th>T.Comp</th>
<th>Position</th>
<th>Salary</th>
<th>T.Comp</th>
<th>Position</th>
<th>Salary</th>
<th>T.Comp</th>
<th>Position</th>
<th>Salary</th>
<th>T.Comp</th>
<th>Quartile Positioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee 1</td>
<td>$400</td>
<td>$825</td>
<td>CEO</td>
<td>$280</td>
<td>$588</td>
<td>$350</td>
<td>$735</td>
<td>$380</td>
<td>$815</td>
<td>$316</td>
<td>$632</td>
<td>3rd quartile</td>
</tr>
<tr>
<td>Employee 2</td>
<td>325</td>
<td>675</td>
<td>CIO</td>
<td>248</td>
<td>471</td>
<td>310</td>
<td>589</td>
<td>326</td>
<td>650</td>
<td>339</td>
<td>662</td>
<td>3rd quartile</td>
</tr>
<tr>
<td>Employee 3</td>
<td>285</td>
<td>535</td>
<td>PM - Level 10</td>
<td>220</td>
<td>418</td>
<td>275</td>
<td>523</td>
<td>330</td>
<td>627</td>
<td>361</td>
<td>694</td>
<td>3rd quartile</td>
</tr>
<tr>
<td>Employee 4</td>
<td>250</td>
<td>450</td>
<td>PM - Level 09</td>
<td>204</td>
<td>388</td>
<td>255</td>
<td>485</td>
<td>306</td>
<td>581</td>
<td>329</td>
<td>618</td>
<td>3rd quartile</td>
</tr>
<tr>
<td>Employee 5</td>
<td>225</td>
<td>325</td>
<td>PM - Level 08</td>
<td>184</td>
<td>345</td>
<td>230</td>
<td>391</td>
<td>276</td>
<td>469</td>
<td>318</td>
<td>586</td>
<td>3rd quartile</td>
</tr>
<tr>
<td>Total</td>
<td>$1,485</td>
<td>$2,810</td>
<td></td>
<td>$1,136</td>
<td>$2,210</td>
<td>$1,420</td>
<td>$1,617</td>
<td>$3,143</td>
<td></td>
<td>31%</td>
<td>27%</td>
<td>3%</td>
</tr>
</tbody>
</table>

The total salary spend for TRS is $1,485 and the stated comp philosophy salary (75th percentile of leading public funds) is $1,617.

This employee’s total compensation falls in the market third quartile.

The total bonus spend for TRS is 16% below the stated comp philosophy (25th percentile of private sector firms).
ESG INVESTING
ANNUAL UPDATE

Lauren Gellhaus,
Head of ESG

Meredith Jones,
Partner Responsible
Investment & ESG
Advisory

February 2022
Agenda

• Aon Update
  o ESG Trends
  o ESG Regulations

• IMD Update
  o 2021 IMD Accomplishments
  o Special Topic: ESG Integration Project
  o Focusing on Financial Materiality
  o Looking Ahead: Goals, Current State, and Next Steps
ESG Investing

• ESG stands for Environmental, Social, and Governance
• Without an industry-wide accepted definition, how each organization defines ESG differs
• ESG language within Investment Policy Statement (Article 1.5):
  o "Environmental, social, and governance (ESG) factors influence the performance of TRS’s investments. In making investment decisions, the Investment Division will consider ESG factors that are material to long-term returns and levels of risk. Materiality of specific ESG factors vary across strategies, companies, sectors, geographies and asset classes. All investments must be made prudently and in accordance with fiduciary and ethical standards, without promoting interests unrelated to the portfolio’s stated objectives of controlling risk and achieving a long-term rate of return."
Trends in ESG Investing

• Driven by natural disasters, COVID 19 and social movements, interest in Environmental, Social and Governance continues to accelerate across a range of stakeholders

• Global Asset Owners have increased resources, policy adoption, and oversight of ESG Investing

• Conversations around climate change/decarbonization have also intensified

• Regulatory changes and policy responses are further driving activity in ESG investing
Growth of Principles for Responsible Investment (PRI) Signatories 2006-2021

The Principles for Responsible Investment (PRI) is a United Nations-supported international network of investors working six principles:

- **Principle 1**: We will incorporate ESG issues into investment analysis and decision-making
- **Principle 2**: We will be active owners and incorporate ESG issues into our ownership policies and practices.
- **Principle 3**: We will seek appropriate disclosure on ESG issues by the entities in which we invest.
- **Principle 4**: We will promote acceptance and implementation of the Principles within the investment industry.
- **Principle 5**: We will work together to enhance our effectiveness in implementing the Principles.
- **Principle 6**: We will each report on our activities and progress towards implementing the Principles.

ESG Investing is on an upward trajectory with asset managers and asset owners, and adoption is higher now than at any time in the past.
## Results for 2021 Responsible Investment Survey

<table>
<thead>
<tr>
<th><strong>56%</strong></th>
<th><strong>Climate change</strong> (61%)</th>
<th><strong>55%</strong></th>
<th><strong>Socioeconomic inequality</strong> (27%)</th>
<th><strong>1 in 6</strong></th>
<th><strong>Cyber risk</strong> (25%)</th>
<th><strong>Net Zero</strong></th>
<th><strong>1 in 4</strong></th>
<th><strong>want to see more consistent data on ESG factors</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>say ESG investing will soon become the norm</td>
<td>are seen as top investment concerns globally</td>
<td>believe responsible investments will lead to better risk-adjusted returns</td>
<td>have committed to aligning portfolios to net zero</td>
<td>have some of their portfolio allocated to responsible investments, with many more intending to increase future allocation</td>
<td>have some of their portfolio allocated to responsible investments, with many more intending to increase future allocation</td>
<td>is responding proactively in anticipation of regulation</td>
<td></td>
<td>47%</td>
</tr>
</tbody>
</table>

### 66%
- Over a third have personnel dedicated to responsible investment
- Engaged with responsible investing through ESG integration has doubled since 2019 (41%)
- 42% intend to align their investment portfolios to net zero before 2050
- 69% Most respondents with exposure to responsible investments are either satisfied or very satisfied with their returns to date

### Source:
Aon’s 2021 Global Perspectives In Responsible Investment,, December 2021

To create the 2021 Global Perspectives on Responsible Investing report Aon relied on the following information: A quantitative online survey with global institutional investors, including Aon clients, was conducted between April and June 2021. The survey captured sentiments of 271 investment professionals globally. The survey respondents included corporate and public defined benefit, defined contribution, insurance, foundations and endowments and “other” investors.
ESG Performance Trends

<table>
<thead>
<tr>
<th>Index</th>
<th>2021 Return (Gross)</th>
<th>10 Years (Gross)</th>
<th>Beta</th>
<th>Tracking Error</th>
<th>3 Year Standard Deviation</th>
<th>3 Year Sharpe Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSCI World ESG Leaders (USD)</td>
<td>25.29%</td>
<td>13.45%</td>
<td>0.99</td>
<td>1.24</td>
<td>16.81%</td>
<td>1.27</td>
</tr>
<tr>
<td>MSCI World ESG Focus (USD)</td>
<td>22.11%</td>
<td>13.62%</td>
<td>1.01</td>
<td>0.70</td>
<td>17.22%</td>
<td>1.24</td>
</tr>
<tr>
<td>MSCI World</td>
<td>22.35%</td>
<td>13.32%</td>
<td>1.00</td>
<td>0.0</td>
<td>17.29%</td>
<td>1.20</td>
</tr>
</tbody>
</table>

All index performance is gross of any fund or transaction fees that may be incurred in an investable vehicle.

**MSCI World ESG Leaders (USD):** The ESG Leaders Indexes target sector and region weights consistent with those of the underlying indexes to limit the systematic risk introduced by the ESG selection process. The methodology aims to include securities of companies with the highest ESG ratings representing 50% of the market capitalization in each sector and region of the parent Index. Inception (September 28, 2007)

**MSCI World ESG Focus:** The index is constructed by selecting constituents from MSCI World Index through an optimization process that aims to maximize exposure to ESG factors for a target tracking error budget under certain constraints. Inception (November 30, 2006)

Source: MSCI

Performance of ESG-themed investments will vary, but broadly ESG investing appears to result in equal to slightly positive performance.
Administration Change Leading to Action on Climate Change

- The Biden administration has put **climate change at the core of its policy agenda**. This will have significant ramifications for the economy and has the potential to alter the investment landscape in the US as well.

- The announcement that the Department of Labor would not enforce Trump-era rules that made it more difficult to consider ESG factors when making investment decisions, combined with a number of climate change related executive orders is part of a **growing shift towards responsible and sustainable investing, similar to recent developments in Europe**.

- The shift in policy is likely to **benefit investments that support the transition to net zero emissions, offer climate change solutions or improve resilience to climate change risks**.

- The SEC is currently reviewing public comments in response to a March 2021 questionnaire on climate change disclosure. Reports indicate the SEC received approximately 550 unique comment letters, mostly from investment, banking/financial organizations and corporate entities, that were **generally (75%) supportive of mandatory climate disclosures**.

Due to increased federal attention, it will likely become increasingly difficult for asset managers, asset owners and companies to ignore climate change and ESG issues.
Federal ESG Regulations Are Changing

- “Financial Factors in Selecting Plan Investments” (the Rule) became effective:
  - ERISA plan fiduciaries should not offer investment option(s) if they **subordinate returns or increase risk for the purpose of nonpecuniary objectives**
  - Prohibits ERISA fiduciaries from including investment strategies that “consider, include, or indicate the use of non-pecuniary factors” as a plan’s QDIA

- Department of Labor (DOL) announces a new **non-enforcement policy** regarding:
  - “Financial Factors in Selecting Plan Investments”
  - “Fiduciary Duties Regarding Proxy Voting and Shareholder Rights”
  - The Rule, however, is **still technically in effect**

- The DOL issued a Proposal explicitly permitting fiduciaries to consider climate change and other environmental, social, and governance (ESG) factors when selecting investments and exercising shareholder rights
  - The Proposed Rule is open for public comment until **December 13, 2021**, 60 days from publication in the Federal Register
  - The DOL will review the public comments and may revise the proposal before issuing a final rule in 2022

Recent changes are part of an ongoing pendulum of regulatory actions on ESG
Texas ESG Regulations Are Also Changing

- SB – 13 – Relating to state contracts with and investments in certain companies that boycott energy companies
  - Under this bill, the Texas Comptroller will prepare a list of such companies and send it to Texas public pension plans for their review to determine if they are invested in any of the companies.
  - If investments are present, there are certain processes that must be followed for reporting and divestment
  - Effective September 1, 2021

- SB – 19 – Prohibits any Texas governmental agency from contracting with companies that discriminate against the firearm or ammunition industries
  - This is applicable to all contracts by government agencies for contracts of a significant size and there is no divestment requirement
  - Effective September 1, 2021

Each of these have potential implications for fulfillment of fiduciary duty and availability of investment funds.
2021 IMD Accomplishments

- **Established Trust-Wide Policy**: Board approved addition of ESG language within the IPS

- **Expanded Resources & Tools**: Initiated SASB Alliance membership, Subscribed to MSCI ESG ratings & benchmarks

- **Formalized Efforts**: Created ESG Committee, added ESG Head to Proxy Committee, ESG Head developed into full-time role

- **Conducted ESG Research Projects**: Completed an ESG Integration Project, Researched ESG within systematic strategies

- **Continued ESG Education**: Numerous ESG-focused learning opportunities (i.e. session on the Intersection of ESG and DE&I)

- **Increased Industry Involvement**: Active participant in and held Board seats within standard setting organizations, involved in ESG working groups, and served as a panelist at various ESG-focused conferences

Note: 1) “SASB” stands for Sustainable Accounting Standards Board. SASB is part of the Value Reporting Foundation, a global nonprofit organization that seeks to help businesses and investors develop a shared understanding of enterprise value.

2) Board seats held within the following standard setting organizations: CII (Katy Hoffman), SBAI (Dale West), ILPA (Scott Ramsower), ESG-focused working groups: SBAI (Lauren Gellhaus)
ESG Committee

Committee Members

- Lauren Gellhaus, Committee Chair, ESG
- Dale West, Executive Sponsor, Global Public Markets
- Jean-Benoit Daumerie, Strategic Partners / External Public
- Marissa Hogan, Internal Fundamental
- Stephen Kim, Risk
- Maddie Kurapati, ENRI
- Chase Lewis, Real Estate (TRICOT)
- Edward Stroud, Private Equity (TRICOT)
- Dylan Campbell, Special Opportunities
- Howell Li, Legal & Compliance

• Comprised of individuals from across the IMD, including representatives from Public Markets, Private Markets, Risk, and Legal & Compliance

• Purpose of the ESG Committee is to drive Trust-wide ESG initiatives. The secondary purpose is to collaborate across groups to share ideas, best practices, research, and tools to prudently advance the IMD’s ESG efforts

• Non-permanent committee members rotate after 18-months of committee service, with the next rotation scheduled for May 2022

Note: The Chair and Executive Sponsor are permanent members of the ESG Committee. The rotating ESG Committee members include eight representatives from across the IMD.
Special Topic: ESG Integration Project

- **Overview:** The ESG Committee surveyed Public and Private invested partners
- **Purpose:** Understand how invested partners integrate ESG within investment processes
- **Deliverable:** Report addressing current ESG landscape, key take-aways, and next steps for IMD

- 18 Firms Surveyed
- $43B of Invested Capital Represented
- 26 Survey Responses Received
- 24 External Meetings Conducted
- Identify Next Steps for TRS

Identify Next Steps for TRS

External Meetings Conducted

Survey Responses Received

$43B of Invested Capital Represented

18 Firms Surveyed
The Trust-wide ESG Integration project surveyed 18 firms to identify industry best practices and advise TRS’ next steps

**General ESG Take-Aways**

- ESG is complex, nuanced, and continually evolving
- Successful integration takes time, buy-in, and willingness to adjust
- ESG will be a perpetual theme in the industry

**Organizational Approach**

- Engagement is a critical piece of ESG strategy
- Investment teams responsible for ESG throughout diligence, underwriting, and monitoring
- Client preferences drive negative screens

**Risk Management**

- Institutional investors remain focused on risk and returns
- Most view ESG considerations as general guidelines

**Resources & Frameworks**

- Consistent, accurate, and relevant data is generally missing
- Limited consensus around what and how to measure
- Use of industry frameworks is widespread (SASB Materiality Map)
Focusing on Financial Materiality

- TRS ESG efforts are focused on financial materiality and the ‘SASB Materiality Map’
  - Focuses exclusively on the disclosure of financial material ESG information
  - Identifies issues most relevant to financial performance across 77 industries
  - Applies to public and private markets

- 26 business-related issues across 5 dimensions

Note: SASB defines materiality as “issues that are reasonably likely to impact the financial condition or operating performance of a company and therefore are most important to investors.”
Source: SASB
Focusing on Financial Materiality Example

**SASB Materiality Map Excerpt**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>General Issue Category</th>
<th>Health Care Delivery</th>
<th>Electric Utilities &amp; Power Generators</th>
<th>Software &amp; IT Services</th>
<th>Advertising &amp; Marketing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership &amp; Governance</td>
<td>Business Ethics</td>
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<td></td>
<td>Competitive Behavior</td>
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<td></td>
<td>Management of the Legal &amp; Regulatary Environment</td>
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<td></td>
<td>Critical Incident Risk Management</td>
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<td></td>
<td>Systemic Risk Management</td>
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<tr>
<td>Business Model &amp; Innovation</td>
<td>Product Design &amp; Lifecycle Management</td>
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<td>Business Model Resilience</td>
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<td>Supply Chain Management</td>
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<td>Materials Sourcing &amp; Efficiency</td>
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<td>Social Capital</td>
<td>Physical Impacts of Climate Change</td>
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<td>Access &amp; Affordability</td>
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<td>Product Quality &amp; Safety</td>
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<td>Customer Welfare</td>
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<td>Selling Practices &amp; Product Labeling</td>
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<td>Human Capital</td>
<td>Labor Practices</td>
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<td>Employee Engagement, Diversity &amp; Inclusion</td>
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<td>Air Quality</td>
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<td>Energy Management</td>
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<td>Water &amp; Wastewater Management</td>
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<td>Waste &amp; Hazardous Materials Management</td>
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<td></td>
<td>Ecological Impacts</td>
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</tr>
</tbody>
</table>

**Health Care Delivery Example**

- **SASB Industry Description**: The Health Care Delivery industry owns and manages hospitals, clinics, and other health care-related facilities.
- **11 relevant issues identified, including the following three (3) categories**:

<table>
<thead>
<tr>
<th>General Issue Category</th>
<th>Disclosure Topic: Health Care Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Quality &amp; Safety</td>
<td>Quality of Care &amp; Patient Satisfaction</td>
</tr>
<tr>
<td>Customer Welfare</td>
<td>Management of Controlled Substances</td>
</tr>
<tr>
<td>Selling Practices &amp; Product Labeling</td>
<td>Pricing &amp; Billing Transparency</td>
</tr>
</tbody>
</table>

Source: SASB
| **Maintain Broad ESG Awareness Across the IMD** | **Current State:** ESG updates provided to Board annually, ongoing IMD-wide educational ESG series, and IMD ESG resource page with wide range of toolkits, guides & research  
**Next Steps:** Continue trust-wide education, increase asset class specific education, work with individual teams to address specific educational ESG needs, and continue ESG research (i.e. ESG in China) |
| **Formalize ESG Integration Efforts & Process** | **Current State:** Deal teams often ask ESG questions during the due diligence process through calls and / or through questionnaires. ENRI team established a principal investment ESG assessment tool. Investment teams represented on ESG Committee  
**Next Steps:** Formalize documentation of material ESG considerations within the due diligence and underwriting process |
| **Equip IMD with Tools & Resources to Evaluate Material ESG Considerations** | **Current State:** New resources added during past year including MSCI ESG tools, SASB Materiality Map, and BloombergNEF subscription  
**Next Steps:** Continue to assess resources, adding additional tools and resources if they are shown to be value additive. Evaluate existing industry resources and frameworks (i.e. ILPA ESG Assessment Framework, SASB Engagement Guide) |

Note: "NEF", within the BloombergNEF tool, stands for "New Energy Finance"
ESG Integration Project Questionnaire

Organization

• How does your organization define ESG?
• How does your organization view ESG (i.e. a risk mitigant, alpha source, means of influencing change, other)?
• Within the broader ESG landscape, which initiatives are a priority for your organization?
• Does your organization, or individuals therein, participate in ESG-related initiatives, coalitions, and / or working groups? If so, which one(s)?
• What would cause your organization to increase, or decrease, its ESG efforts?

ESG Integration

• How are ESG beliefs expressed within and across your portfolios (i.e. investing in new sectors / themes that capture the ESG trend, full ESG integration, overweight / underweight to particular sectors, positive tilt, best in class, thematic investments, exclusionary approaches, other)?
• Who performs the ESG analysis at your organization (i.e. portfolio analyst, separate ESG analyst, separate ESG team, other)?
• What has been the most difficult / time consuming part of integrating ESG into the investment making decision process? Are there any lessons learned you can share?
• How do you determine which ESG risks are material? Do you use any frameworks, such as SASB or TCFD, as part of this process? If so, which ones and what are your impressions of the strengths and weaknesses of each?
• Are there table stakes ESG factors that must be met for you to make an investment? Would failure to meet certain ESG thresholds prevent you from making an investment? If so, what are those factors / thresholds, and do you anticipate them evolving over time?
• Provide examples of instances when you have identified elevated ESG risk and 1) divested from or chosen to not move forward with an investment or 2) decided to include the investment and the rationale for each.
ESG Integration Project Questionnaire, Continued

Measurement, Monitoring, and Reporting

• How is ESG measured within and across your portfolios? Which external data vendors, due diligence specialists, 3rd party verification services, proprietary data and/or analysis are used to measure and influence investment and portfolio construction decisions?

• What does ESG monitoring of investments and reporting look like for your firm?

• What do you look at to determine how successful your ESG efforts are/where improvements can be made?

Engagement

• (Private Markets) How active of a role do you play with your portfolio companies to improve their ESG standing? Would you seek out ESG underperformers as a source of opportunity?

• (Public Markets) To what extent is engagement with companies a part of your ESG approach? Would you seek out an ESG laggard as a source of opportunity?

Miscellaneous

• As TRS continues its ESG journey, is there anything that has not already been addressed within this questionnaire that you believe is worth noting?
UPDATE ON PROXY VOTING GUIDELINES

Ryan Leary, Proxy Committee

February 2022
Agenda

I. TRS’s Proxy Voting Policy
II. Summary of Changes to Benchmark Policy Guidelines
III. Board Diversity and New Climate Provisions
IV. Custom Policy to Meet TRS Objectives
V. Proposed Modifications to Benchmark Policy Guidelines
VI. Costs and Conclusion
TRS Proxy Voting Policy

• **Purpose:** Proxy votes are a Trust asset

• **Objective:** Ensure proxies are voted in the best economic interests of the Trust to control risk and achieve a long-term rate of return

• Policy calls for the TRS Board to retain an independent Proxy Advisor to analyze proxy issues, make voting recommendations, and vote proxies as an agent of TRS
  - An annual average of over 60,000 ballot item votes worldwide makes in-house voting impractical

• Institutional Shareholder Services (ISS) is TRS’s Proxy Advisor

• Policy delegates administration duties to the Chief Investment Officer, who appoints the IMD Proxy Committee, including three investment professionals, the Head of ESG and members from Legal & Compliance and Investment Operations

• The IMD Proxy Committee implements TRS’s Proxy Voting Policy

• On matters of special importance to TRS, the Board may direct the IMD Proxy Committee to vote TRS proxies differently than recommended by the Proxy Advisor when doing so is in the best economic interests of the pension plan
Since at least 2013, TRS has voted based on ISS’s Benchmark Policy Guidelines

- ISS’s updates to its Benchmark Policy Guidelines come into effect on Feb 1st each year
- IMD Proxy Committee reviewed the 2022 updates to ensure alignment with TRS’s objective and has provided them to the Board with a summary of important changes

### Board Diversity
- Tighter Requirements
- Expanding Required Minimum Threshold to More Companies

### Climate
- Board Accountability on Climate
- Say on Climate Proposals

### Other Governance Changes
- Unequal Voting Rights in U.S.
- Use of ESG Metrics in European Executive Compensation Plans
- Various Other Changes
Board Diversity Requirements Coming into Effect

- In latest updates, ISS expanded gender and racial/ethnic targets in US, Canada, Japan, UK & Ireland
- Requirements from previous updates are coming into effect in many regions this year

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<thead>
<tr>
<th></th>
<th>Minimum Board Gender/Racial/Ethnic Policy</th>
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<tbody>
<tr>
<td></td>
<td>Americas</td>
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<td>US</td>
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<td>Gender Diversity</td>
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<td>2021</td>
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<td>2024</td>
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<tr>
<td>Europe, Middle East, Africa</td>
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<td>UK &amp; Ireland</td>
<td>2020</td>
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<td>33(^{%})/1(^{%})</td>
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<td>2021</td>
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<tr>
<td>Other</td>
<td>2020</td>
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<td>2024</td>
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<td>Asia Pacific</td>
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<td>30(^{%})/1(^{%})</td>
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<td>2023</td>
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<td>2024</td>
</tr>
</tbody>
</table>

Notes:
1. Percent reflects a minimum percent of diverse Board directors. A number means the required number of diverse directors.
2. Requirement applies only to moderate to large companies.
3. Requirement applies only to small companies.
New Climate Additions

Board Accountability on Climate

• ISS is focusing on 167 high greenhouse gas (GHG) emitting companies identified by Climate Action 100+.

• Vote against directors at companies without appropriate direct emissions reduction targets, and insufficient disclosure based on a framework established by Task Force for Climate-Related Financial Disclosures (TCFD).

Say on Climate Proposals

• Vote on management or shareholder climate transition or reporting plans.

• In 2021, there were over two dozen management Say on Climate proposals on ballot across the globe. The proposals were seen in Canada, France, South Africa, Spain, Switzerland, the UK, the U.S., and Australia.

• “Say-on Climate” shareholder proposals emerged late in 2020 and the number increased in 2021, generally asking companies to publish a climate action plan and to put it to a regular shareholder vote.
Custom Policies

- Custom policies allow clients to vote according to specific guidelines and philosophies
  - For example, for director elections, if client chooses to not use “Board Accountability on Climate” guidelines in determining director election votes, then vote recommendations will be determined via other guidelines
  - According to ISS, a majority of clients with TRS’s profile customize or are in the process of customizing ISS’s voting policies, and clients using the benchmark policy have shown increased interest in customization recently
Custom Policy Allows TRS to Vote According to Plan’s Best Interests

- Proxy Advisors and their clients may not share the same viewpoint on all ballot items in terms of how to vote to best control risk and maximize returns for shareholders
  - ISS recommendations reflect their research and client input
- Thus, the majority of ISS’s clients who are large, complex and sophisticated use a custom policy or are transitioning to a custom policy to implement their viewpoint
- A custom policy facilitates TRS voting proxies differently than recommended by the Proxy Advisor when doing so is in the best economic interests of the pension plan
- The IMD recommends that TRS implement a custom policy to vote proxies in the best economic interests of the plan
- With the flexibility that a custom policy provides, IMD recommends modifications to the benchmark policy guidelines pertaining to climate change and Special Purpose Acquisition Company (SPAC) mergers
ESG IPS Statement Guides Climate Change Voting Policy

• IPS Statement Highlights ESG Impact While Focusing on Risk and Long-Term Return Objectives

“Environmental, social, and governance (ESG) factors influence the performance of TRS’s investments. In making investment decisions, the Investment Division will consider ESG factors that are material to long-term returns and levels of risk. Materiality of specific ESG factors vary across strategies, companies, sectors, geographies and asset classes.

All investments must be made prudently and in accordance with fiduciary and ethical standards, without promoting interests unrelated to the portfolio’s stated objectives of controlling risk and achieving a long-term rate of return.”

TRS IPS 1.5 Total Fund Investment Standard
IMD Recommends Changes to Align with Board Policy

• Both the Proxy Policy and ESG statement in the IPS refer to the best economic interests of the fund

• As compared to ISS’s benchmark policy guidelines’ climate provisions, the IMD has differing views on what voting actions are in the best economic interests of the TRS pension plan
  o Climate change disclosure is important for the IMD to effectively consider possible material factors to long-term returns and levels of risk
  o Climate action plans are best left to company board and management’s evaluation of the feasibility and financial impact that such programs may have on shareholder value
    ▪ Company management is supervised by a corporate board that has a fiduciary duty to shareholders
## Recommendation 1: Proposed Climate Modifications

<table>
<thead>
<tr>
<th>Director Elections</th>
<th>Action</th>
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<tbody>
<tr>
<td>• The IMD favors increased disclosure</td>
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<tr>
<td>• Management is better positioned to assess what constitutes appropriate emission reduction targets for the company and ISS voting guidelines are too proscriptive regarding action plans</td>
<td>Exclude ISS Requirements</td>
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</table>

<table>
<thead>
<tr>
<th>Management Climate Proposals</th>
<th>Action</th>
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<tbody>
<tr>
<td>• Climate change action plans are best left to company management’s evaluation of the feasibility and financial impact that such programs may have on shareholder value</td>
<td>Vote with Management</td>
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<thead>
<tr>
<th>Shareholder Climate Proposals</th>
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<tbody>
<tr>
<td>• The IMD favors increased disclosure</td>
<td></td>
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<tr>
<td>• Climate change action plans are best left to company management’s evaluation of the feasibility and financial impact that such programs may have on shareholder value</td>
<td>Vote with Management on Action Plans</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Proposals Restricting Business with Fossil Fuel Companies</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Restrictions on legal business is contrary to shareholder return maximization</td>
<td>Vote Against Proposals</td>
</tr>
</tbody>
</table>
Special Purpose Acquisition Companies (SPACs)

- Special Purpose Acquisition Companies (SPACs) are publicly listed holding companies that raise cash via an IPO for the purpose of merging with unidentified private firms. Cash from a SPAC’s IPO is held in a custodial account until a merger closes.

- SPACs have been around for many years but became more popular around five years ago when investors’ decision to redeem shares for cash in the custodian account was separated from the vote on the merger.

Source: Wolfe Research

Number of SPACs Raised and Value of SPAC IPOs 2004-2021

Source: Wolfe Research
Recommendation 2: Special Purpose Acquisition Companies (SPACs)

- ISS reviews each SPAC merger and makes a recommendation based on the merits of the transaction. A feature of SPACs is that if a merger is not approved, it removes TRS’s option to redeem.

- Without customizing the TRS voting guidelines, TRS would follow the vote exception process each time to override an ISS recommendation to vote against SPAC mergers.

- IMD recommends that TRS vote its SPAC shares “FOR” any SPAC merger in order to best protect TRS’s economic interests.

**Example:** TRS holds $10 redemption value shares that trade at $9.80 after a proposed merger announcement. TRS wishes to exit.

- Approved Merger: TRS will redeem at $10.
- Failed Merger: TRS will sell at $9.80 or must continue to hold the shares.
Custom Policy Enables Voting According to Best Economic Interests

- IMD recommends TRS institute a custom policy with ISS to vote proxies according to the Board’s direction to vote in the best economic interests of the pension plan.
- IMD recommends modifications to the benchmark policy guidelines pertaining to climate change and Special Purpose Acquisition Company (SPAC) mergers.
- A custom policy with ISS requires additional fees of approximately $20,000 annually to cover client specific efforts.
Institutional Investor Proxy Practices

With Custom Policy

TRS becomes more active in proxy management with modifications to ISS’s benchmark policy guidelines

- Full delegation to external managers
  - No direct guidance on voting standards

- Delegation to third party
  - Utilize third party voting standards

- Delegation to third party
  - Provide voting standards to third party

- In-House
  - Voting standards created and implemented internally

More resources required
More active as a shareholder
The IMD Proxy Committee Implements TRS’s Proxy Voting Policy

- Maintains Records and Provides Transparency to TRS’s Board of Trustees
- Oversees TRS’s Relationship with the Proxy Advisor (ISS)
- Engages with Proxy Advisor to Ensure Alignment with and Adherence to TRS’s Objectives
- Manages Proxy Vote Exceptions and Special Cases
- Reviews and Recommends Proxy Voting Policy Changes to Board
- Manages and Reviews IMD Proxy Committee Procedures
Proxy Voting Exception Process

1. Corporate Vote Scheduled
2. Exception Request Initiated by External or Internal PM
   - Memo prepared detailing rationale for exception vote(s)
3. IMD Proxy Committee Recommends Exception
   - TRS believes Proxy Advisor recommendation(s) is not in best economic interests for TRS.
4. Approved by CIO
5. Provide Notice to Executive Director and Board Policy Committee Chair
6. Instruct Proxy Advisor of Vote Exception
7. Exception Reported in Board’s Quarterly Report

≥ 10 Business Days

≥ 5 Business Days

Submitted to CIO
2021 Voting Summary

• For Calendar Year 2021, TRS Voted:
  o On 64,687 ballot items
  o Among 4,716 companies
  o At 6,458 meetings
  o In 68 countries

• ISS Recommendations do not Always Align with Management
  o In 2021, TRS voted against approximately 10% of management recommendations

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<th>TRS Vote</th>
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<tr>
<td>For</td>
<td>55,624 (87.2%)</td>
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<tr>
<td>Against</td>
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<tr>
<td>None</td>
<td>363 (0.6%)</td>
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</table>
2021 Climate Votes

• For Calendar Year 2021, TRS Voted:
  o On 26 Say on Climate Proposals
  o Against Management on Two Shareholder Say on Climate Proposals
    ▪ Charter Communications (Report on Greenhouse Gas Emissions Disclosure)
    ▪ Booking Holdings (Annual Investor Advisory Vote on Climate Plan)
  o On Other Climate Shareholder Proposals Types
    ▪ 38 Proposals for a Report on Climate Change
    ▪ 11 Proposals on Greenhouse Gas Emissions
    ▪ 11 Proposals for Climate Change Action
  o Against Zero Directors Based on Insufficient Emissions Reduction Targets and/or TCFD Disclosure

<table>
<thead>
<tr>
<th>Say on Climate TRS Votes and Management Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Guidance</td>
</tr>
<tr>
<td>----------------------</td>
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<tr>
<td>For</td>
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<td>Against</td>
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</table>
Proxy Advisors Differ on Climate

- Both Favor Disclosure, But ISS Is More Proscriptive

**ISS**

- **Favors Disclosure**: Requires detailed disclosure of climate risks according to TCFD that includes board governance measures, corporate strategy, risk management analyses and metrics and targets.
- **Will Vote Against Directors based on Climate**: Requires detailed disclosure and “appropriate” emissions reduction targets.
- **Case-by-case on Management Climate Transition/Disclosure Plans**: Considers quality of disclosure, third-party approval of climate data and emission targets, net zero commitment, lobbying activities, industry factors and peer comparisons, and other factors.
- **Case-by-case on Shareholder Proposals**: Considers quality of disclosure, emission levels and targets, performance on emission metrics, any controversy, burden of request, and other factors.

**Glass Lewis**

- **Favors Disclosure**: Broadly supportive of companies’ providing robust disclosure concerning their climate strategies.
- **May Vote Against Directors**: Could vote against board members responsible for poor environmental oversight that threatened shareholder value.
- **Case-by-case on Management Climate Transition/Disclosure Plans**: Considers the company’s industry and size; whether the company’s GHG emissions targets and the disclosure of these targets appear reasonable in light of its operations and risk profile; and where the company is on its climate reporting journey.
- **Case-by-case and Cautious on Shareholder Proposals**: For enhanced disclosure but believes that the setting of a company’s long-term climate strategy (which Glass Lewis believes should be indistinguishable from the company’s long-term business strategy) is a function that is best served by the board, which has a fiduciary duty to shareholders. For these proposals, they consider the company’s existing climate governance framework, initiatives, and reporting; the company’s industry and size; and the company’s exposure to climate-related risks.

Source: ISS 2022 Policy Guidelines, Glass Lewis 2022 ESG Policy Guidelines
DE&I in Benchmark Policy Guidelines

- ISS Promotes Board Diversity through Votes in Director Elections
- ISS Favors Reasonable Disclosure on DE&I Proposals and Generally Case-by-Case on Proposals Requesting Action

### Equality of Opportunity
- Generally vote for proposals to disclose EEO-1 data
- Generally vote against proposals seeking diversity efforts of suppliers

### Board Diversity
- Minimum gender and/or racial/ethnic requirements for most developed countries
- Requirements are increasing in next few years
- One director racial/ethnic requirements are newer and will apply in US, UK, and Ireland in 2022
- Vote case-by-case on proposals seeking increased representation

### Gender / Racial Equity
- Vote case-by-case for report on pay data by group or company’s policies to reduce pay gaps
- Vote case-by-case for racial equity audits based on company policies, public statements, engagement with stakeholders, any controversy, and actions versus market norms, and the existence of any internal policy review

### Sexual Orientation
- Generally vote for proposals seeking modification of company policy statements to prohibit discrimination
- Generally vote against proposals to extend or eliminate benefits from domestic partners as should be left to company’s discretion

#### Calendar Year 2021 TRS Votes on DE&I Proposals

<table>
<thead>
<tr>
<th>Proposal Type</th>
<th>Number of Proposals</th>
<th>Voted For</th>
<th>Voted Against</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board Diversity</td>
<td>7</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Report on EEO</td>
<td>12</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Gender Pay Gap</td>
<td>6</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Workplace Sexual Harassment</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
ISS Policy Development Process

- Every year, ISS conducts a global policy review process and updates the ISS Benchmark Proxy Voting Guidelines for the upcoming year.

- TRS's Proxy Committee reviews updates to the ISS Benchmark Policy, confirms that they are appropriate for TRS, and prepares a summary to the TRS Board highlighting key changes.
ISS Specialty Policies

- In addition to its Benchmark policy which TRS has utilized, ISS offers six specialty policies, with half of those policies related to ESG initiatives:

  Generally, greater focus on board independence and executive compensation; however, this policy is not broadly utilized by ISS’s public fund clients who like TRS rely solely on ISS’s Benchmark Policy.
  - Of ISS’s 185 public fund clients, only ~1% of ISS clients use the Public Fund Policy.
  - Some key differences between ISS’s Benchmark Policy and its Public Pension Policy include:
    - Reliance on public fund’s custom classifications/definitions across areas such as board composition and independence, auditor-related topics, and executive and director compensation.
    - Tenure taken into consideration with respect to board independence and auditor rotations.
    - With respect to board diversity, support of shareholder proposals which ask company to make greater efforts to search for female and minority candidates.
ISS Specialty Policies, Cont’d.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Description</th>
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<tbody>
<tr>
<td>Taft-Hartley Policy</td>
<td>Greater focus on board independence and executive compensation.</td>
</tr>
<tr>
<td>SRI Policy</td>
<td>Traditional SRI investor perspective on social, environmental and economic issues.</td>
</tr>
<tr>
<td>Sustainability Policy</td>
<td>Supportive of greater ESG disclosure, policies and practices that are consistent with ESG-related globally accepted norms and best practices.</td>
</tr>
<tr>
<td>Climate Policy</td>
<td>Emphasis on disclosure of company’s performance record on emissions, company activities’ impact on climate and its climate strategy, and comparison with other companies’ practices in the same sector.</td>
</tr>
<tr>
<td>Faith-Based Policy</td>
<td>Attention to economic, environmental and social justice concerns aligned with Catholic faith-based beliefs.</td>
</tr>
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Details on the different policies can be found on the ISS website: [https://www.issgovernance.com/policy-gateway/voting-policies/](https://www.issgovernance.com/policy-gateway/voting-policies/)