

**MINUTES OF THE
TEXAS MUNICIPAL RETIREMENT SYSTEM
Meeting of the Board of Trustees**

May 30, 2019 – 1:30 p.m.

On May 30, 2019, the Board of Trustees of the Texas Municipal Retirement System (TMRS) convened for a meeting at 1:30 p.m. at TMRS Headquarters, located at 1200 North IH 35 in Austin, Texas, with the following members present:

Board of Trustees

Bill Philibert, Chair

David Landis, Vice Chair

Jim Jeffers

Julie Oakley

Jim Parrish

Absent: Jesus Garza

Present also were:

David Gavia, Executive Director
Eric Davis, Deputy Executive Director
TJ Carlson, Chief Investment Officer
Christine Sweeney, General Counsel
Bill Wallace, Director of Communications
Dan Wattles, Director of Governmental Relations
Leslee Hardy, Director of Actuarial Services
Debbie Munoz, Director Member Services
Scott Willrich, Director of Information Resources
Rhonda Covarrubias, Director of Finance
Sandra Vice, Director of Internal Audit
Kristin Qualls, Director of Public Equity
Chris Schelling, Director of Private Equity
Jason Weiner, Director of Fixed Income
Marc Leavitt, Director of Absolute Return
Tom Masthay, Director of Real Estate and Real Return
Dimitry Shishkoff, Director of Risk Management
Karen Jackson, Executive Assistant
Robert Klausner, Klausner, Kaufman, Jensen & Levinson
Marcia Beard, RVK
Amy McDuffee, Mosaic Governance Advisors
Mark White, Albourne America LLC
Tracy Harris, StepStone
Tom Hester, Courtland, a StepStone Company

Also in attendance:

Michelle Mellon-Werch, Assistant General Counsel

Nick O'Keefe, Lead Investment Attorney
Madison Jechow, Assistant General Counsel
Eric Obermier, Assistant Director Information Resources
Eddie Schultz, Assistant Director of Real Assets
David Rodriguez, Senior Regional Manager – City Services
Sean Thompson, Regional Manager – City Services
Melanie Thomas, Process and Content Management Specialist
Sally Case, Investment Operations Manager
Cindy Morse, Investment Support Analyst
Debbie Farahmandi, Investment Operations Specialist
Susan Jacques, Investment Performance Analyst
Geldon Vllahu, Investment Operations Analyst
Celise Cobos, Real Assets Analyst
Kelsey Baldwin, Investment Attorney
Ryan Conner, Risk Management Analyst
Jacob Bowland, Fixed Income Analyst
Melissa Jerkins, Quantitative Analyst
Kurt Cressotti, Compliance Officer
German Gaymer, Fixed Income Analyst
Kevin Notaro, Absolute Return Analyst
Peter Teneriello, Private Equity Analyst
Yvonne Huang, Real Assets Analyst
Andi Focht-Williams, Senior Auditor
Peter Jeske, Operations Analyst
Tricia Solis, Project Specialist
Paula Nguyen, Investment Accountant
Natalie Garza, Communications Analyst
Kenneth Oliver, Actuarial Analyst
Pete Krnavek, Information Systems Manager
Tish Root, Legal Assistant
Stacy White, Executive Assistant
Jason McElvaney, McElvaney Public Affairs
Casey Srader, Government Finance Officers Association of Texas
Kathleen Depweg, City of Arlington
David Riggs, Texas State Association of Fire Fighters
Scott Leeton, Combined Law Enforcement Associations of Texas
Greg Shipley, Combined Law Enforcement Associations of Texas
George Kauffman, City of Garland Retiree

Mr. Philibert called the meeting to order at 1:31 p.m. and Mr. Landis gave the invocation.

1. Consider and Act on Adoption of Minutes from the March 28-29, 2019 and the April 17, 2019 Meetings of the Board of Trustees

Mr. Gavia stated that staff had nothing to add to the minutes as presented.

Mr. Parrish moved that the Board adopt the minutes from the March 28-29, 2019 and April 17, 2019 meetings of the Board of Trustees. Mr. Jeffers seconded the motion, which passed 5-0.

2. Legislative Update and Overview of the 86th Legislative Session, Including Discussion on Status of TMRS Legislation (SB 1337 and HB 2821) and Other Filed and Proposed Legislation, Pension-Related Seminars and Briefings, and Filed Federal Legislation

Mr. Wattles and Mr. McElvaney presented an overview of the completed 86th Legislative Session. The Session officially ended "Sine Die" on May 27, 2019 and a final report will be presented at the June Board meeting. Mr. Lewis sent his regrets for not being able to attend this Board meeting. The three primary reasons for TMRS' success this session are preparation, involvement of stakeholder groups and TMRS's standing at the Capitol. Mr. Gavia noted that having strong sponsors in both the House and Senate was key as well. When approached by TMRS to carry legislation, both Representative Dan Flynn and Senator Joan Huffman indicated they had a full slate of legislation, but agreed to carry the TMRS bill anyway.

Mr. McElvaney added that the House and Senate seemed to get along well this session. With a new Speaker and House Committee Chair, being flexible was also a key to the success of TMRS. Staff's work behind the scenes was beneficial and a testament to the fact that TMRS was not called upon to formally testify as a resource on their bill.

Mr. Wattles reviewed the activities of the TMRS Legislative Committee during the session. He noted that the Senate approved the reappointment of Mr. Parrish and the appointment of Mr. Garza.

A total of 7,795 bills and resolutions were filed during the session, which is considerably higher than the 7,002 bills and resolutions filed during the 85th Regular Session. Only 20% of the bills filed were passed; half of those bill passed were in the last five days. Of the 7,795 total bills filed, 1,562 passed and 59 of the 327 bills that we tracked were passed.

The pre-session initiatives that were highlighted by State leadership passed, which included school funding and property tax reform. Increased funding for the Teacher Retirement System (TRS) also passed. The bill to increase funding for TRS provides for an increase in the state's contribution from 6.8 percent in 2020 to an eventual 8.8 percent in 2024. The bill also provides for a one-time annuity payment of \$2,000 for retirees.

Bills affecting TMRS include SB 322, which is an investment reporting bill and would require each public retirement system to have an "independent" firm evaluate and report on the system's investment practices and performance. The evaluation would be performed every three years for systems with assets over \$100 million. Current Board consultants can be considered independent if they do not, or have not managed, investments for the System. Mr. Carlson feels that most of the required information is already available and we will be able to use our independent investment consultants. The Pension Review Board (PRB) will be involved in developing rules and compiling the reports to the legislature. SB 2224 also

passed, which will require all systems to adopt a written funding policy. TMRS already has a written funding policy, so will be in compliance with this requirement.

Mr. Wattles identified four bills that would have directly affect TMRS but that did not pass. These include: HB 2396 Return to Work; HB 4587 a flat rate Cost-of-Living adjustment (COLA); HJR 143, a bill that could have affected TMRS' investing authority; and, SB 29 which would have prohibited cities and states expending funds to lobby the Texas Legislature on four issues.

The PRB did receive additional funding and a position for purposes of implementing Senate Bill 322. A new PRB Chair has also been appointed by the Governor, who will be seated at their June quarterly meeting.

Mr. Wattles thanked all of the staff that participated in the legislative process. Mr. Philibert added his appreciation to the team.

3. Consider and Act on Amendments to the Internal Audit Charter

Ms. Vice began by reviewing the purpose for the Charter, including establishing functional reporting relationship with the Board, authorizing access to records and personnel, and defining the scope of activities. The Charter was originally approved in December 2016 and must be reviewed periodically and changes approved by the Board and management. The amendments to the Charter add the following: 1) reference to Core Principles for the Professional Practice of Internal Auditing; 2) purpose and key elements of the Quality Assurance and Improvement Program; and 3) other information from the Institute of Internal Audit's model charter.

Ms. Vice answered questions regarding maintaining confidentiality of data such as personally identifiable information (PII) and Health Insurance Portability and Accountability Act (HIPPA) data.

Mr. Jeffers moved that the Board approve the Internal Audit Charter as amended. Mr. Landis seconded the motion, which passed 5-0.

4. Consider and Act on Real Estate Manager Search Recommendation(s)

Mr. Masthay, Mr. Schultz and Mr. Hester with Courtland, a StepStone Company (Courtland) presented the Real Estate manager recommendation. The proposed recommendation is for two investment vehicles with one manager.

Mr. Schultz discussed Pennybacker V, LP (Fund V) fund and Pennybacker Extended Investment Vehicle (EIV). Fund V is a value-add Real Estate strategy and they will invest in middle market commercial real estate. The proposal also includes a recommendation to simultaneously close on the EIV, which will be a continuation of this strategy with the investment period starting at the conclusion of the investment period for Fund V. Pennybacker utilizes in-house resources to develop a system which incorporates portfolio and market data for faster more integrated decision making. The firm has expanded their

footprint to cover “Dynamic Growth Markets” across the United States’ markets and in the areas of multi-family, industry and distressed situations.

Mr. Hester added Pennybacker pursues a value-oriented investment strategy seeking undervalued commercial real estate assets in markets with favorable supply-demand fundamentals.

Mr. Philibert asked if we had done an extended vehicle like this before. Mr. Carlson answered that we have done follow-on initiatives, but not exactly like this. On this extended vehicle, there will be fee savings of a significant amount.

Mr. Hester noted that the EIV is similar in concept to extending the period of a closed-end fund.

David Landis moved that the Board approve the following:

- 1) Authorize the following allocation(s), each as proposed and in accordance with the TMRS Investment Policy Statement, with an initial investment allocation up to the amount set out below and at fees no greater than presented in the TMRS Staff memo, each individually contingent on favorable background checks, if required below, successful negotiation of the investment agreements, and the proposed allocation to the EIV Fund also being contingent on TMRS’ receipt of a final recommendation by Courtland of the EIV Fund following the approval of the EIV by the StepStone Real Estate’s Investment Committee:

Name of Investment Manager, Investment Fund or Fund Strategy	Asset Class Strategy	Initial Investment Allocation	Background Check Required (Yes or No)
Pennybacker V, LP (“Fund”) & associated Extended Investment Vehicle (“EIV”)	Value-Add Real Estate	Up to \$75 million to Fund \$37.5 million to EIV	Yes

- 2) Approve and incorporate by reference for all purposes the Board Standard Investment Authorizations for each such investment allocation.

Julie Oakley seconded the motion, which passed 5-0.

5. Consider and Act on Real Return Manager Search Recommendation(s)

Mr. Masthay, Mr. Schultz and Mr. White from Albourne America LLC (Albourne) discussed the Real Return manager search recommendations. The proposed recommendation is for three investment vehicles and related co-investments. The proposed manager recommendation is as follows: Orion Mine Finance Fund III, LP (Orion) and Co-Invest; Appian Natural Resources Fund II, LP (Appian) and Co-Invest; and Global Infrastructure Partners IV-A/B, LP (GIP IV).

Mr. Masthay reviewed the Real Return portfolio construction and statistics. He discussed the percentages in mining credit which tend to be shorter term vehicle structures, and infrastructure which are longer term structures.

Mr. Masthay reviewed Orion: Orion has positioned itself to be a one-stop capital provider, providing all the debt, equity and production linked financing options to mining companies. Its strategy typically targets companies which have established, reputable management teams that would benefit from commercial assistance. Orion's strategy is to invest in near to production mines.

Mr. Masthay compared Orion's and Appian's strategies and reviewed Appian: Both Orion and Appian are focused on metals, but Appian is more equity focused, providing development and expansion capital to public and private mining companies and assets. Appian's strategy is to bring technical expertise to its investment process and companies in which it invests.

Mr. White noted that this portfolio is designed to produce income after inflation. The portfolio is now filling in gaps in the exposure make-up of the portfolio. Orion adds income and equity exposure while Appian adds the growth perspective.

Global Infrastructure Partners (GIP) is an infrastructure specialist asset manager focused on energy, transport, water, and waste industries. GIP IV will be a continuation of the firm's flagship strategy of targeting high-quality assets, focusing on large, complex transactions and strategic joint ventures. GIP adds value by having a large staff with deep operations knowledge which supports their understanding of the deal before investing. GIP targets very large deals relative to most competitors, and finds deals that have something they can improve. Renewables are expected to be a significant allocation in the upcoming fund.

Mr. White added that GIP IV is one of the three major players in infrastructure and they are likely to have significant exposure to core-plus or value-added infrastructure.

Ms. Oakley moved that the Board approve the following:

- 1) Authorize the following allocation(s), each as proposed and in accordance with the TMRS Investment Policy Statement, with an initial investment allocation up to the amount set out below and at fees no greater than presented in the TMRS Staff memo, each individually contingent on favorable background checks, if required below, and successful negotiation of the investment agreements:

Name of Investment Manager, Investment Fund or Fund Strategy	Asset Class Strategy	Initial Investment Allocation	Background Check Required (Yes or No)
Orion Mine Finance Fund III, LP ("OMFF III") and Co-Invest	Private Real Return	Up to \$100mm Fund \$50mm Co-Invest	Yes

Appian Natural Resources Fund II, LP ("ANRF II") and Co-Invest	Private Real Return	Up to \$75 Fund \$25mm Co-Invest	Yes
Global Infrastructure Partners IV-A/B, LP ("GIP IV")	Private Real Return	\$150 Million	Yes

- 2) Approve and incorporate by reference for all purposes the Board Standard Investment Authorizations for each such investment allocation.

Mr. Parrish seconded the motion, which passed 5-0.

6. Consider and Act on Private Equity Manager Search Recommendation(s)

Mr. Schelling, Mr. Teneriello and Ms. Harris from StepStone Group presented the proposed manager recommendation for Udata Partners VI, LP (Udata IV). Mr. Carlson began by stating that TMRS is now starting to get the "first call" recognition when managers have a new idea and want a good partner.

Mr. Schelling reviewed the Private Equity due diligence process and the pacing model. Because this additional investment is simply an upsize of a previously approved fund, it will be included in the pacing plan total for 2018. As part of the Udata VI commitment, an additional \$25 million allocation has been offered, which will get TMRS to a discounted fee level. Inclusive of the above recommendation, the 2018 Private Equity search process will now have culminated in approximately \$482 million of closed and/or recommended investments, in line with the \$500 million pacing model goal for the year. The proposed recommendation is more like an amendment to the original approval.

Udata is a growth equity firm that targets investments in business-to-business software and software-enabled services sectors in undercapitalized geographies outside of the Bay Area. They have a strong performance in growth equity and an experienced and cohesive team. Their strong growth equity performance is not from just investing in software and software-enabled services sectors, but more specifically from focusing on companies selling "business-to-business" products.

Mr. Parrish moved that the Board approve the following:

- 1) Authorize the following allocation(s), each as proposed and in accordance with the TMRS Investment Policy Statement, with an initial investment allocation up to the amount set out below and at fees no greater than presented in the TMRS Staff memo, each individually contingent on favorable background checks, if required below, and successful negotiation of the investment agreements:

Name of Investment Manager, Investment Fund, or Fund Strategy	Asset Class Strategy	Initial Investment Allocation	Background Check Required (Yes or No)
Updata Partners VI, L.P.	Growth	\$25 million	Yes

- 2) Approve and incorporate by reference for all purposes the Board Standard Investment Authorizations for each such investment allocation.

Ms. Oakley seconded the motion, which passed 5-0.

7. TMRS Trustee Education: Successor Funds

This item was postponed until a future date.

8. RVK Quarterly Report

For a second consecutive year, RVK received the Greenwich Quality Leader Award. RVK is one of three firms among large US consultants to receive this award.

Ms. Beard presented the first quarter report for 2019. Regarding capital markets, risk assets and fixed income markets performed well over the first quarter, largely driven by the decision by the Federal Reserve to hold interest rates level. The losses in the fourth quarter of 2018 have been recouped in first quarter of 2019. Markets are actually now anticipating two rate cuts in 2019, as opposed to what was previously expected to be four rate increases during the year. There were no negative returns for the first quarter as well as the calendar-year-to-date. Yield curves continue to flatten; however, the labor market hasn't reflected recessionary fears.

Ms. Beard reviewed asset allocations and noted over and under weight classes. Performance has out-performed the benchmark in all periods except the one-year period.

Total fund objectives and performance were discussed. Regarding the total fund return objectives for the five-year rolling return, performance was less than the assumed long-term rate of return and policy index, but it was greater than the actual allocation benchmark. Against our peers, TMRS was protected on the downside more than our peers.

Risk and return were reviewed and returns are moving up, but additional risk is currently not being added. Asset Class Composite Performance was highlighted and Ms. Beard indicated the objectives test was reviewed for all asset classes using the five-year rolling return.

Ms. Beard discussed performance and allocation for each asset class. She noted that public equity is no longer split into US and International, but is now a "total" equity (global) portfolio.

Core Fixed Income's objective is for capital preservation and it has outperformed the benchmark. Non-Core Fixed Income's objective is diversification, capital appreciation and capital preservation. This has helped boost the Fixed Income return in total.

Real Return, Real Estate, Absolute Return and Private Equity were highlighted and Ms. Beard explained that more detailed information is included in the Supplemental Report.

9. Chief Investment Officer Management Update, Including Governance, Personnel, Manager Updates and Other Investment Related News or Matters

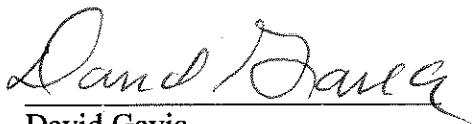
Mr. Carlson introduced Celise Cobos, the new Private Equity Analyst. The Investment Department continues to recruit for the Public Equity Analyst.

Mr. Carlson noted the Investment team took over 455 manager meetings in the first quarter. TMRS is on pace to see approximately 1,700 managers this year. Additional information, including proposed agenda schedule updates as well as pacing, quarterly performance, risk and compliance updates, are included in the supplemental Staff Report in the Diligent Resource Center.

10. Executive Session

At 4:16 p.m., the Board entered into Executive Session, pursuant to Texas Government Code §§551.071 and 551.074 to consult with Legal Counsel to receive legal advice, and to discuss personnel matters. The meeting was opened to the public again at 4:55 p.m. No action was taken during the Executive Session and all members of the Board that were present before the Executive Session were still present.

At 4:55 p.m. the meeting was adjourned.



David Gavia
Executive Director



Bill Philibert
Chair, Board of Trustees