

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

October 22, 2015 – 1:30 p.m.

On October 22, 2015 the Board of Trustees of the Texas Municipal Retirement System (TMRS) convened for a meeting at 1:30 p.m. at Downtown Hilton Austin, 500 E. 4th Street in Austin, Texas, with the following members present:

Board of Trustees

Julie Oakley, Chair
Jim Parrish, Vice Chair
Roel “Roy” Rodriguez
Bill Philibert
Jim Jeffers
David Landis

Present also were:

David Gavia, Executive Director
Rhonda Covarrubias, Director of Finance
Eric Davis, Deputy Executive Director
Kristie O’Hara, Director of Human Resources
TJ Carlson, Chief Investment Officer
Christine Sweeney, General Counsel
Bill Wallace, Director of Communications
Dan Wattles, Director of Governmental Relations
Kristin Qualls, Director of Equities
Leslee Hardy, Director of Actuarial Services
Robert Klausner, Klausner, Kaufman, Jensen & Levinson
Marc Leavitt, Director of Absolute Return
Chris Schelling, Director of Private Equity
Tom Masthay, Director of Real Estate
Karen Jackson, Executive Assistant
Marcia Beard, RVK
Joe Newton, Gabriel, Roeder, Smith and Company
Mike Elio, StepStone
Brian Borton, StepStone
Amy McDuffee, Aon Hewitt Investments
Lisa Needle, Albourne

Also in attendance:

David Rodriguez, Regional Manager – City Services
Eddie Schultz, Real Estate Analyst
Martha deLivron, Investment Analyst
Chris Tindell, Investment Analyst

Greg Shipley, Combined Law Enforcement Associations of Texas
Mike Finley, City of Arlington
Cody Hill, Arlington Professional Fire Fighters
George Kauffman, City of Garland
David Riggs, Texas State Fire Fighters Association
Keith Dagen, Government Finance Officers Association of Texas
Neil Patel, Fin-News.com
Monica Houston

Ms. Oakley called the meeting to order at 10:30 a.m. The pledge of allegiance was recited and Ms. Oakley gave the invocation.

1. Executive Session

At 10:31 a.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. No action was taken during the Executive Session and five of the six members of the Board that were present before the executive session are still present. The meeting was opened to the public again at 1:39 p.m.

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

Mr. Carlson introduced the newest member of the Investment team, Chris Tindell, Investment Analyst for Private Equity, and updated the Board regarding the current search for a Fixed Income Director.

Mr. Carlson discussed the progress of the Request for Proposal for the General Investment Consultant and noted that the review team is on track for a December recommendation. He also discussed the \$435 million rebalance from Fixed Income into the Absolute Return strategies. Mr. Carlson noted that during the third quarter of 2015, the investment team took 368 manager meetings.

(Mr. Rodriguez rejoined the meeting this agenda item)

3. RVK Quarterly Investment Report

Ms. Beard began by stating the information given in this report is preliminary due to the late receipt of the audited data. September ended a difficult quarter. News from China caused a sell-off in equities and commodities were down due to oil prices. The mixed economic news in the U.S. led the Federal Reserve not to increase interest rates.

The target fund allocations have been updated in the report to reflect changes adopted in the asset allocation. Ms. Beard reviewed the total fund performance targets over the rolling five-year period. The System fell below the target of 6.45%, but active management outperformed in the passive only index. Ms. Beard discussed the asset class composite performance and reviewed each asset class noting performance differences compared to the benchmark.

4. Consider and Act on Amendments to the Investment Policy Statement Regarding Private Equity

Mr. Carlson noted this is a continuation of the process to build out the Private Equity asset class. Mr. Schelling reviewed the reasons to add Private Equity and how it would enhance the total fund performance.

The first recommendation is that the long term policy objective for Private Equity for periods of five years or greater be changed from the S&P 500 + 5.00% to the Russell 3000 + 3.00% to have a more closely tied benchmark.

Mr. Schelling reviewed the three principal strategies. The strategy diversification should include ranges of 40.0% to 75.0% for Buy-out and Control strategies, 5.0% to 25.0% for Venture, Growth, and Minority strategies, and 10.0% to 35.0% for Special Situations and Opportunistic strategies. He discussed the delegation of co-investment authority noting that fees must be at or below approved fund management fees and size is limited to 25% of commitment of approved fund or \$25 million, whichever is lower.

Mr. Parrish made a motion that the Board amend the IPS to include the proposed Private Equity language. Mr. Philibert seconded the motion, which passed 6-0.

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

Mr. Leavitt, Ms. deLivron and Lisa Needle from Albourne presented the Absolute Return Strategy Manager recommendations. Mr. Leavitt reviewed the search process timeline as well as highlighted the rebalance to this asset class from Fixed Income. He discussed the manager search process. The evaluation team took 229 meetings with 127 distinct managers from across a variety of strategies. Fourteen managers were selected for finalist review with six selected for final due diligence.

Mr. Leavitt reviewed the executive summary of manager recommendations. He discussed the recommended fund, strategy classification and the recommended allocation. He noted that great care was taken to diversify across strategies and the sizing of managers was based on both qualitative and quantitative factors.

Ms. deLivron discussed three of the finalists, Alyeska, Graticule and Värde. She highlighted the characteristics of each manager and what made them attractive. Mr. Leavitt reviewed the next three finalists, Myriad, Roystone and Southpoint. He discussed key features for each manager and noted that each has “skin” in the fund which gives each manager incentive to perform. The six managers provide good diversification on a stand-alone basis and this mix of managers gives TMRS a differentiated profile to protect against large draw downs.

Ms. Needle summarized Albourne’s participation in the search and recommendation process and Albourne agrees with the approval of the six recommended managers.

The six recommended managers and the recommended allocations are as follows:

Manager Name	Allocation
Alyeska Fund, LP	\$75 million
Graticule Asia Macro Fund, LP	\$75 million
Värde Investment Partners, LP	\$75 million
Myriad Opportunities US Fund Limited	\$60 million
Roystone Capital Partners, LP	\$60 million
Southpoint Qualified Fund, LP	\$60 million
Total	\$405 million

Mr. Rodriguez moved that the Board (i) approve the six new absolute return strategy investment allocations to the 6 different managers (also known as fund sponsors) discussed for investment in the hedge fund structures of the managers or their affiliates as discussed, each as proposed, at fees no greater than those proposed in the staff memo, and in accordance with the TMRS IPS absolute return strategy guidelines, and each individually contingent on favorable background checks and successful negotiation of the investment agreements; and (ii) authorize the Executive Director to negotiate, execute and deliver contract(s) and any other documents necessary that are satisfactory to the System for such investments. Mr. Parrish seconded the motion, which passed 6-0.

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

Mr. Schelling along with Mr. Elio and Mr. Borton from StepStone presented manager recommendations for Private Equity. Mr. Schelling reviewed the Private Equity search process timeline and highlighted how the process was coordinated with StepStone since they were recently retained as a consultant. Mr. Schelling discussed search process objectives, excess return potential, portfolio diversification and targeted commitment level. He reviewed the steps in the manager search process. The manager universe was screened from 118 managers down to 16 finalists resulting in six funds for recommendation. Mr. Schelling discussed the scoring matrix and listed the 17 finalist funds.

Mr. Schelling summarized the manager recommendations noting each funds strategy, target return and recommended allocation. He discussed manager selection portfolio considerations and strategy diversification. The target portfolio moves closer to targeted allocations, overweighting special situations for: capital deployment, J-curve mitigation and tactical opportunity. Mr. Schelling reviewed manager and geographic diversification.

Mr. Klausner asked how “carried interest” will be reported. StepStone will track that and it will be reported to the Board.

Mr. Schelling reviewed characteristics for each of the recommended managers noting the expected return bridge, reasons to invest as well as risks and mitigants.

The six recommended managers and the recommended allocations are as follows:

Manager Name	Allocation
Carlyle Energy Mezzanine Fund II, LP	\$65 million
TSSP Adjacent Opportunities Partners (B), LP	\$75 million
H.I.G. Bayside Loan Opportunity Fund IV, LP	\$60 million
Searchlight Capital II, LP	\$50 million
Harvest Partners VII, LP	\$50 million
Tritium I, LP	\$50 million
Total	\$350 million

Mr. Rodriguez made a motion that the Board (i) approve the 6 new private equity allocations to the six different managers (also known as fund sponsors) discussed for investment in the fund structures of the managers or their affiliates as discussed, each as proposed, at fees no greater than those described, and in accordance with the TMRS IPS private equity guidelines, and each individually contingent on favorable background checks and successful negotiation of the investment agreements, (ii) approve for each such allocation which may include the option to participate in the fund’s distribution reinvestment programs and may exceed the authorized commitments by the value of the distribution reinvestments, when TMRS Staff and its private equity consultant determine that it is economically advantageous to do so and in accordance with the TMRS IPS private equity guidelines, (iii) in conjunction with such allocations, revise its private equity pacing plan to reflect a targeted deployment level of \$350 million for 2015, and (iv) authorize the Executive Director to negotiate, execute, acknowledge, and deliver any and all contracts, agreements, and other documents or instruments satisfactory to the System and necessary or appropriate to give effect to such investments. Management fees are not included in the capital commitment amounts and may be paid through cash flow of the investment, capital calls, or via invoice. Mr. Landis seconded the motion, which passed 6-0.

7. Review and Discussion of Annual Proposed Investment Policy Statement Revisions

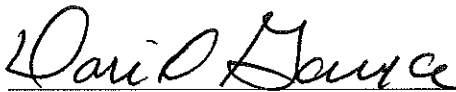
Mr. Carlson presented proposed amendments for the annual review of the Investment Policy Statement (IPS). Mr. Carlson noted RVK also reviewed the recommended changes.

Highlights of the 2015 recommended changes include: changes made to conform with Board decisions made since the last IPS update, wording clarifications, deletion of language that is no longer necessary due to current implementation status of the program, and the adoption of TMRS consultant recommendations on fixed income sub-asset classes allowed with updated ranges.

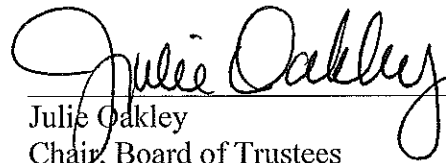
A change was suggested to separate value-add at 0-50% and opportunistic at 0-25%.

8. Executive Session

Executive Session was not called. Mr. Parrish made a motion to recess the meeting for the day at 5:12 p.m. until 9:00 a.m. on Friday, October 23, 2015. Mr. Philibert seconded the motion, which passed 6-0.



David Gavia
Executive Director



Julie Oakley
Chair, Board of Trustees

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

October 23, 2015

On October 23, 2015 the Board of Trustees of the Texas Municipal Retirement System (TMRS) convened for a meeting at 9:00 a.m. at TMRS Headquarters, located at Downtown Hilton Austin, 500 E. 4th Street in Austin, with the following members present:

Board of Trustees

Julie Oakley, Chair
Jim Parrish, Vice Chair
David Landis
Jim Jeffers

Absent: Roel "Roy" Rodriguez
Bill Philibert

Present also were:

David Gavia, Executive Director
Eric Davis, Deputy Executive Director
Kristie O'Hara, Director of Human Resources
TJ Carlson, Chief Investment Officer
Christine Sweeney, General Counsel
Rhonda Covarrubias, Director of Finance
Leslee Hardy, Director of Actuarial Services
Robert Klausner, Klausner, Kaufman, Jensen & Levinson
Debbie Munoz, Director of Member Services
Bill Wallace, Director of Communications
Dan Wattles, Director of Governmental Relations
Scott Willrich, Director of Information Resources
Jesse Pittman, Project Manager
Marc Leavitt, Director of Absolute Return
Karen Jackson, Executive Assistant
Marcia Beard, RVK
Joe Newton, Gabriel, Roeder, Smith and Company
Amy McDuffee, Aon Hewitt Investment
Brent Banister, Cavanaugh Macdonald Consulting, LLC

Also in attendance:

David Rodriguez, Regional Manager – City Services
Peter Jeske, Project Specialist
Michelle Mellon-Werch, Assistant General Counsel
Eddie Schultz, Real Estate Analyst

Ariel Chou, Actuarial Analyst
Mike Finley, City of Arlington
Greg Shipley, Combined Law Enforcement Associations of Texas
Cody Hill, Arlington Professional Fire Fighters
George Kauffman, City of Garland
Keith Dagen, Government Finance Officers Association of Texas
David Riggs, Texas State Fire Fighters Association

Ms. Oakley called the meeting to order and the meeting was reconvened at 9:00 a.m. The pledge of allegiance was recited.

9. Consider and Act on Adoption of Minutes from the September 23, 2015 Meeting of the Board of Trustees

Mr. Gavia stated that Staff had nothing to add to the minutes as presented. There were no changes suggested by the Board.

Mr. Landis made a motion that the Board adopt the minutes from the September 23, 2015 Meeting of the Board of Trustees. Mr. Parrish seconded the motion, which passed 4-0.

10. Review and Discussion of the Proposed Amortization Policy Change due to the Experience Study and Phase In Plan (formerly #11 on the Friday, October 23, 2015 agenda)

Mr. Newton discussed the proposal that new actuarial losses be amortized over a 25 year ladder for all cities while emphasizing that the existing liability would remain on their current paths. The TMRS Act generally points to a 25 year amortization period. In 2007, with the change in the funding method, the Board elected to allow certain cities to extend their amortization period out to 30 years with new loss liabilities laddered at 30 years. Rate increases in excess of 0.5% were also eligible to be phased in over an 8 year period ending in 2016. The split between 25 and 30 year amortization cities is about 50/50. Now that the 2007 phase-in is coming to an end, Mr. Newton suggested that it is time to get all cities back on a uniform period for amortizing new losses (including benefit enhancements). This will also shorten the time until positive UAAL amortization is achieved.

Recent actuarial studies have pointed to shorter amortization periods being used; although the studies are non-binding model practices. The goal is to control against negative amortization. The impact on the system as a whole is relatively small. Mr. Newton gave examples of the impact of several loss scenarios. Shorter amortization periods are somewhat more costly over the short-term, but significantly less costly in the long-term. The 30-year period has negative amortization for nine years where the 25 year stays nearly flat from the outset. Mr. Newton then gave examples for sample cities of the impact of benefit enhancements under the 25 and 30 year loss amortization periods.

From a larger perspective, the combination of 10 year smoothing and 30 year amortization creates potentially a 40 year pay off period. Changing to the 25 year amortization puts the pay off in a shorter range and does not necessitate a need to review the smoothing policy.

GRS's recommendation is for a maximum 25 year amortization period for all new losses that occur after the December 31, 2015 valuation, including those created by all non-ad hoc benefit enhancement or experience differing from expectations. Mr. Klausner added that TMRS is not doing away with the option to use the 30 year period in the future, but rather would be moving toward the more prudent shorter amortization period.

Mr. Newton next reviewed the impact of the experience study on: 1) all cities, 2) cities without repeating COLAs, and 3) cities with repeating COLAs. He discussed the distribution of cities by rate change, both on a city basis and payroll weighted basis. Mr. Newton discussed phase-in approaches used in 2007 and 2013 as example of how the Board could phase-in these rate increases. The Board could also re-amortize liability increases as a means to help off-set contribution rate increases. While this would reduce the rate impact for many cities, it would also delay the funding progress.

Mr. Newton presented four options that could be used to address the short term rate increases: 1) let the increases occur, 2) allow phase-in to the higher rate at 0.50% annually, 3) re-amortize the UAAL to the extent possible and necessary to offset the increase, and 4) a combination of phase-in and re-amortization. GRS recommends using the phase-in approach since most of the change is in the normal cost and not the UAAL. It will be less complicated, keeps the current funding time frame and reduces negative amortization.

The Board requested a list showing which cities would see a rate increase based on these assumption changes of 1.00% or more.

11. Receive and Review Actuarial Audit Report Findings (formerly item #10 on the Friday, October 23, 2015 agenda)

Mr. Gavia introduced Mr. Brent Banister, Chief Pension Actuary, from Cavanaugh Macdonald Consulting, LLC (CavMac) to discuss the results of the actuarial audit. The goal of this actuarial audit is to verify the reasonableness and accuracy of valuation results, provide an independent review of the 2015 draft experience study and review actuarial work in the administration and operation of TMRS. According to Mr. Banister, this was a very clean audit.

With regard to the valuation process, Mr. Banister stated that there was very little data preparation required due to the very clean data. The individual salary smoothing is fairly complex and CavMac suggested this be reviewed to determine if the extra effort is worth it. The answer may be simply that it is. There were no significant issues with the valuation calculations based on the cities used in the limited replication.

Some minor issues found in the valuation calculations were discussed. The first is the COLA assumption does not fully reflect the restoration of purchasing power feature. GRS has already proposed a change which addresses this in the experience study. The second item is the Actuarial Value of Assets is determined without reflecting interest on net cash flow. Third, two items required in the valuation report should be added. One is the summary of the basic plan provisions for each city and the second is a listing of amortization bases for each

city. Mr. Banister also suggested adding explanatory text for tables and some descriptions of methods should be clarified.

Regarding assumptions and methods, focus turned to the experience study. The fact that there was not a lot of margin in the inflation assumption was briefly discussed. The discount rate seemed appropriate and the mortality assumption review produced a reasonable assumption. The termination assumption is very complex and it was suggested to look for a way to simplify it, but this may not be possible. The assumption was used accurately. The rate of forfeiture could be reviewed due to the complexity of assumption. No suggestions were made regarding the disability assumption. One area that might need more detail regarding the assumption is the rate of expected partial lump sum distributions.

Mr. Banister reviewed the cost method, asset smoothing method and amortization methods with no major comments and found them to be reasonable. Regarding the administrative items, the IRC Section 415 calculations appear fine. The GRID Tool is calculating appropriate costs for benefit changes. The approach to developing the annuity purchase rates was also found to be reasonable.

In conclusion with regard to the stated purposes for the audit, Mr. Banister noted that the work is reasonable, accurate and appropriate. He reiterated that this is a very clean audit. Mr. Gavia asked how often actuarial audits are usually conducted. Mr. Banister stated that TMRS basically had an audit when GRS came on Board, but typically every five to ten years is appropriate.

12. Review and Discussion of the Proposed 2016 Operating Budget

Mr. Gavia introduced Ms. Covarrubias to present the preliminary draft budget and discuss the thought process that went into the five year projections.

Ms. Covarrubias discussed the alignment of the budget with the strategic plan. Goal 1 focuses on financial stability and long-term viability of the plan. She noted the actuarial fees and contingencies for legislative studies as well as a rate stabilization study and asset/liability study. Goal 2 focuses on customer service and communications. She discussed funds to implement Straight-Through Processing from enrollment to retirement by expanding the delivery of self-service capabilities in MyTMRS and TMRS City Portal. 2016 will continue with the TMRS Direct project and new consulting includes city contribution process reengineering. Goal 4 included a discussion on requested new positions.

Ms. Covarrubias discussed accomplishments during 2015 noting the achievements in the actuarial audit and experience study, TMRS Direct, SOC 1- Type 2 audit and projects that will be completed by year end.

The five major budget sections were reviewed: Personnel Services, Professional Services, Communication, Rentals and Equipment Maintenance and Miscellaneous. Ms. Covarrubias discussed the proposed Personnel inclusions and noted the new items included in Professional Services. The Rentals and Equipment section includes costs for using Disaster Recovery as a service (DRaaS) and new software. The Miscellaneous section was discussed,

noting that half of this category relates to on-line data services and includes additional investment-related services and HR/payroll data services. A request was made to break down the Miscellaneous category further into Data Services and truly Miscellaneous items. The Capital Expenditures is significantly reduced due to the construction project rolling off, but it does include remodel contingency funds, control system changes and funds for SAN (storage area network) storage.

Ms. Covarrubias discussed the new personnel requested and reviewed the rationale behind each request. She next moved into future projections highlighting the major projects and activities projected for the next five years. The discussion was closed with Ms. Covarrubias noting that no action was required, but that the Board will be presented with the final 2016 budget at its December meeting.

13. Consider and Act on Meeting Date and Locations for 2016 Board of Trustees Meetings

Mr. Gavia noted that he requested and received feedback from the Trustees regarding conflicts with the dates proposed at the September Board meeting. All meetings will be held in Austin and the dates suggested for 2016 were as follows:

February 18-19
March 23-24
May 19-20
June 23-24
August 18-19
September 22-23
October 20-21
December 8-9

Mr. Jeffers made a motion the Board set the meeting dates and locations for 2016 as suggested. Mr. Parrish seconded, which passed 4-0.

14. Call for Future Agenda Item

No items were mentioned.

Mr. Landis made a motion to adjourn the meeting. Mr. Parrish seconded, which passed 4-0. The meeting was adjourned at 11:56 a.m.



David Gavia
Executive Director



Julie Oakley
Chair, Board of Trustees