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

September 22, 2016 – 1:30 p.m.

On September 22, 2016, 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**
Jim Parrish, Chair
Bill Philibert, Vice Chair
Julie Oakley
Roel “Roy” Rodriguez
David Landis

Absent: Jim Jeffers

**Present also were:**

David Gavia, Executive Director
Eric Davis, Deputy Executive Director
TJ Carlson, Chief Investment Officer
Christine Sweeney, General Counsel
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
Jesse Pittman, Project Manager
Kristin Qualls, Director of Public Equity
Mark Leavitt, Director of Absolute Return
Chris Schelling, Director of Private Equity
Tom Masthay, Director of Real Assets
Jason Weiner, Director of Fixed Income
Dimitry Shishkoff, Director of Risk Management
Sandra Vice, Director of Internal Audit
Karen Jackson, Executive Assistant
Marcia Beard, RVK
Alex Williams, RVK
Amy McDuffee, Aon Hewitt Investments
Lisa Needles, Albourne

**Also in attendance:**

Michelle Mellon-Werch, Assistant General Counsel
Nick O’Keefe, Senior Staff Attorney
Madison Jechow, Assistant General Counsel
Michael Schaff, Assistant General Counsel
Mr. Parrish called the meeting to order at 1:37 p.m. Ms. Oakley gave the invocation and the Pledge of Allegiance was recited.

1. **Consider and Act on Consent Agenda**
   
   Mr. Gavia stated that Staff had nothing to add to the consent agenda as presented. There were no changes suggested by the Board.

   Mr. Philibert made a motion that the Board adopt the consent agenda as presented. Mr. Landis seconded the motion, which passed 5-0.

2. **Consider and Act on Meeting Dates and Locations for 2017 Board of Trustees Meetings**
   
   Mr. Gavia presented the dates proposed by staff for discussion. The list includes dates for a possible off-site Board planning meeting and noted potential conflicts with other meetings of statewide organizations.

   The Board requested additional time to review the proposed 2017 dates.
3. **Consider and Act on Advisory Committee Appointments**
Mr. Wattles discussed the recommended changes to two Group Class organizations. There are five Individual Class vacancies that are currently not being filled at this time due to the changes in the Charter to take effect in 2018.

The Texas State Association of Fire Fighters nominated David Riggs as their representative and Billy Whitson as their alternate. The Texas Municipal Human Resources Association nominated Bonita Hall as its representative and Tadd Phillips as its alternate. The nominees’ applications, biographies and nomination letters were presented in the Board materials.

Mr. Landis moved that the Board approve:

- Appointment of David Riggs to a six-year term to expire on December 31, 2022 to represent the Texas State Association of Fire Fighters on the TMRS Advisory Committee on Benefit Design in the Group Class.
- Appointment of Billy Whitson as the alternate representative for the Texas State Association of Fire Fighters on the TMRS Advisory Committee on Benefit Design in the Group Class.
- Appointment of Bonita Hall to a six-year term to expire on December 31, 2022 to represent the Texas Municipal Human Resources Association on the TMRS Advisory Committee on Benefit Design in the Group Class.
- Appointment of Tadd Phillips as the alternate representative for the Texas Municipal Human Resources Association on the TMRS Advisory Committee on Benefit Design in the Group Class.

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

4. **Consider and Act on Non-Core Fixed Income Manager Search Recommendation(s)**
Mr. Carlson introduced Mr. Weiner, Mr. Gaymer and Mr. Williams (RVK) to discuss the Non-Core Fixed Income manager search recommendations. Mr. Weiner highlighted the Non-Core Fixed Income search timeline. He discussed High Yield considerations. High Yield bonds allow for further diversification of the portfolio and have performed well during rising interest rate environments. The main return driver is income generation. The leading concern is the higher default rate risk associated with High Yield borrowers. The goal of this search is to identify managers that have a track record of selecting solid borrowers that have produced attractive returns.

Mr. Gaymer noted that this was a traditional search process and he reviewed the search criteria. Thirty-nine managers were sent Requests for Information (RFI) and thirty managers responded. Mr. Landis and Ms. Oakley asked about background checks and how managers get included in the database that was utilized for this search. Mr. Weiner explained when background checks are conducted in the search process Mr. Weiner also explained that managers can voluntarily submit their information to RVK’s third party database and most managers want to do this in order to be considered for client searches. Mr. Gaymer discussed the minimum qualifications and the RFI scoring criteria. The top ten strategies (9
different managers) were selected and were chosen for semi-finalist interviews. After TMRS’ due diligence, two managers were chosen for recommendation (see chart below).

Mr. Gaymer discussed the characteristics of Columbia including Columbia’s strategy, performance expectation and distinguishing features. Columbia has an experienced team with deep analytical experience. The firm can also draw on parent firm’s resources and relatively low management fees.

Mr. Weiner presented the second finalist, Neuberger. Neuberger has a very experienced team with a dedicated high yield portfolio management team as well as a research analyst team that covers high yield bonds and bank loans. Neuberger’s focus is on large and liquid issuers that use a disciplined checklist to avoid deteriorating credits and avoid defaults. Mr. Weiner reviewed performance expectations and distinguishing features.

Ms. Oakley asked additional questions about manager scoring and Mr. Weiner explained the review process and how the best managers are selected from a strong group of potential managers. Ms. Oakley also asked about lawsuits and the team answered there were no concerns at this time.

Mr. Rodriguez moved that the Board:

(i) 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:

<table>
<thead>
<tr>
<th>Name of Investment Manager, Investment Fund, or Fund Strategy</th>
<th>Asset Class Strategy</th>
<th>Initial Investment Allocation</th>
<th>Background Check Required (Yes or No)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbia Management Investment Advisers, LLC (Columbia)</td>
<td>High Yield</td>
<td>$300 million</td>
<td>No</td>
</tr>
<tr>
<td>Neuberger Berman Investment Advisers LLC (Neuberger)</td>
<td>High Yield</td>
<td>$300 million</td>
<td>No</td>
</tr>
</tbody>
</table>

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

Mr. Philibert seconded the motion, which passed 5-0.
5. **Consider and Act on Absolute Return Manager Search Recommendation(s)**
Mr. Carlson introduced Mr. Leavitt, Ms. deLivron and Ms. Needles of Albourne to discuss the Absolute Return Manager search.

Mr. Landis asked for further clarification regarding background checks. Mr. Carlson explained the difference between money staying with the TMRS custodian vs. money being traded by a manager outside the TMRS custodian. Money that leaves the custodian to be invested by a manager would require a background check of key individuals at that manager.

Mr. Leavitt reviewed progress made to date on the Absolute Return portfolio. Ms. deLivron discussed the manager search process and reviewed the scoring matrix. Two managers were selected, D.E. Shaw Valence Fund LLC (Valance) and Redmile Capital Fund LP (Redmile). The $70 million recommended for Valance is a lift out from the Blackstone portfolio, so it is not a new allocation to the Absolute Return Strategy portfolio.

The addition of Valence and Redmile takes into account individual investment quality as well as diversification benefits at the manager, strategy and portfolio level. Mr. Leavitt discussed the current direct portfolio versus the Absolute Return portfolio through Blackstone with regard to strategy.

Mr. Leavitt highlighted the firm and fund characteristics of Valance and noted the size of the staff. Valance is an equity-focused, multi-strategy portfolio that invests in statistical equity arbitrage, quantitative volatility and convertible arbitrage and discretionary long/short equity trading strategies. This is a highly numeric strategy that is looking for statistical advantages. The three strategies within this fund are uncorrelated and have high risk-adjusted return profile. Issues to watch include transparency due to the proprietary nature of their process as well as leverage which is mitigated by the fact that it is a very broad portfolio.

Ms. deLivron discussed Redmile and highlighted the firms characteristics including their senior, cohesive team. The fund’s focus is in the healthcare sector. This will add volatility as well as the potential for outsized gains. The team’s background in science gives them an advantage in the analysis of investments. Issues to watch are investor concentration (3 primary investors) and binary biotech exposure. However, the manager has a good track record of risk management.

Ms. Needles noted that Albourne concurred with both recommendations.

Ms. Oakley moved that the Board:
(i) 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:
<table>
<thead>
<tr>
<th>Name of Investment Manager, Investment Fund, or Fund Strategy</th>
<th>Asset Class Strategy</th>
<th>Initial Investment Allocation</th>
<th>Background Check Required (Yes or No)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D.E. Shaw Valence Fund, L.L.C. (Valence)</td>
<td>Relative Value</td>
<td>$70 million*</td>
<td>Yes</td>
</tr>
<tr>
<td>Redmile Capital Fund, L.P. (Redmile)</td>
<td>Long/Short Equity</td>
<td>$60 million</td>
<td>Yes</td>
</tr>
</tbody>
</table>

* Lift-out from Treaty Oak Fund. Exact allocation depends on Treaty Oak position size at time of transfer. Expected to be approximately $70 million

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

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

6. **Fixed Income Annual Asset Class Review**

Mr. Weiner and Mr. Gaymer presented the annual review of the Fixed Income asset class. Treasury yields are near record lows as a result of global central bank policies. There has been a bull market since the mid 1980’s. The Japanese and European central banks continue to expand their balance sheets causing interest rates to reach unprecedented levels. This has pushed investors to U.S. bonds keeping returns down. There is currently not an expectation of a rate hike in 2016 or 2017. Rates are likely to remain low and investors continue to search for yields in other asset classes. Market reactions are making it difficult for the Federal Reserve to increase rates given the tepid economic growth and very low inflation expectations. Mr. Weiner concluded by presenting the market value and return results for both Core and Non-Core Fixed Income.

Mr. Gaymer reviewed the pacing plan and stated that there will be another manager recommendation at the December 2016 Board meeting. He then reviewed the manager report cards.

Mr. Weiner reported that at the February 2016 Board meeting, the Securities Lending program was suspended. The final result, including resolution of the legacy assets, was a slight gain on the program.

In conclusion, both TMRS Staff and RVK concur that no structural changes are needed. PIMCO has been removed from the watch list and Staff will continue to monitor managers and address any highlighted issues. There will be a continued expansion of the Non-Core allocation and reduction of the Core Fixed Income.

7. **Quarterly Investment Staff Report/Asset Class Updates**

Mr. Carlson reviewed the current target and actual allocations. The Board requested a new chart be included in the quarterly Investment Staff report that shows the total diversification progress including commitments. As of June, the one-year gross performance was 1.8% compared to the benchmark of 1.3%. On a five-year basis, TMRS has outperformed the benchmark across all asset classes.
Ms. Qualls reviewed Public Equities and noted there has not been much change in the portfolio. She reviewed the current passive/active allocations and discussed the June performance.

Mr. Masthay discussed the Real Estate portfolio management structure. Funds are called by managers. He also reviewed the Real Return portfolio and noted managers that have drawn funds. The global linkers portfolio is down, but the portfolio is within range of the benchmark year-to-date. Ms. Oakley asked if there are managers that should have drawn capital that have not yet done so. Mr. Masthay discussed this issue.

Mr. Leavitt reviewed the Absolute Return portfolio. He discussed diversification within the super strategies and stated that is has been a challenging year for hedge fund returns.

Mr. Schelling presented an update for Private Equity. There are eleven managers plus two approved at the August Board meeting for a total of thirteen total commitments. The portfolio has a good diversification of deployed capital and returns are flat as staff continues to deploy funds.

Ms. Reed discussed Investment Policy Statement compliance objectives. There were no active violations of the guidelines based on 365 separate compliance tests. She updated the Board on the changes and improvements that have been made to the compliance systems.

Mr. Shishkoff reviewed the Total Fund Risk and noted that even though markets have been volatile, TMRS remains below the risk assumption. He discussed Total Risk Fund Tracking Error.

In the supplemental information provided to the Board, Mr. Carlson pointed out that reference material; information on management fees and pacing plan information are also included in those materials. He discussed what the Board can expect in 2017 in regards to the pacing plan which will be presented at the December Board meeting.

8. **Executive Session**
   At 4:31 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. No action was taken during the Executive Session and due to the loss of a quorum, the meeting ended at 5:51 p.m.

David Gavia  
Executive Director

Jim Parrish  
Chair, Board of Trustees
MINUTES OF THE
TEXAS MUNICIPAL RETIREMENT SYSTEM
Meeting of the Board of Trustees

September 23, 2016 – 8:00 a.m.

On September 23, 2016, the Board of Trustees of the Texas Municipal Retirement System (TMRS) reconvened for a meeting at 8:00 a.m. at TMRS Headquarters, located at 1200 North IH 35 in Austin, Texas, with the following members present:

Board of Trustees
Jim Parrish, Chair
Bill Philibert, Vice Chair
Roel “Roy” Rodriguez
David Landis

Absent: Julie Oakley
Jim Jeffers

Present also were:
David Gavia, Executive Director
Eric Davis, Deputy Executive Director
Christine Sweeney, General Counsel
TJ Carlson, Chief Investment Officer
Rhonda Covarrubias, Director of Finance
Leslee Hardy, Director of Actuarial Services
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
Sandra Vice, Director of Internal Audit
Kristin Qualls, Director of Public Equity
Chris Schelling, Director of Private Equity
Tom Masthay, Director of Real Assets
Jason Weiner, Director of Fixed Income
Dimitry Shishkoff, Director of Risk Management
Karen Jackson, Executive Assistant
Marcia Beard, RVK
Amy McDuffee, Aon Hewitt Investments

Also in attendance:

David Rodriguez, Regional Manager – City Services
Madison Jechow, Assistant General Counsel
Jennifer Andrews, Members Service Manager
Adrienne Strong, Human Resources Generalist
Jennifer Andrews, Members Service Manager
Mr. Parrish called the meeting to order and the meeting was reconvened at 9:01 a.m.

9. **Review and Discuss Advisory Committee Study Topic Meetings**
Mr. Gavia introduced Mr. Wattles, Ms. McDuffee and Mr. Newton to discuss the Advisory Committee meetings held to date.

Mr. Wattles reviewed the two topics the Board requested the Advisory Committee to review: Cost of Living Adjustments (COLAs) and Return to Work. He highlighted the process of review and explained the outcome of producing a list of pros and cons for each option. Ms. McDuffee noted that this was in line with the Committee’s new charge. Mr. Wattles gave an overview of the current provisions and history of Return to Work, including recent legislative attempts to amend this provision.

Mr. Wattles discussed the current COLA provisions and explained the “catch-up feature” as well as recent legislative attempts to amend this provision. He presented some statistics relating to COLA coverage. Mr. Parrish stated he is concerned about making a change that may impact future benefit security. Mr. Rodriguez noted that the Board’s goal at the beginning of this year’s process was to drive the discussion as opposed to simply reacting since in the last few legislative sessions a bill has been presented. Mr. Parrish asked if there was any urgency to change the catch-up provision. Ms. McDuffee indicated that issue wasn’t necessarily urgent, but a desire to have “more tools in the tool box”. Mr. Wattles added that
some groups are afraid that if the catch-up provision is changed, more cities could elect to reduce or eliminate existing COLAs if they can re-adopt them in future years without the catch-up. It was also noted that a resolution has been submitted to the Texas Municipal League (TML) to support a change to the TMRS COLA by removing the catch-up provision.

Mr. David Riggs, representing the Texas State Association of Fire Fighters (TSAFF), commented that the TSAFF Board voted in support of both the Return to Work and COLA provisions, but the TSAFF Board was reluctant to introduce a bill this session. However, they feel that TMRS should be prepared in the event a bill is introduced. Based on his experience and discussion with his city's officials, Mr. Riggs felt that adding another COLA tool would be beneficial.

Mr. Parrish asked if there was any urgency on the Return to Work provision. Ms. McDuffee stated that there was not and it was again about the desire to have more tools. Mr. Newton felt that there was more sentiment in favor of the Return to Work provision. Mr. Rodriguez indicated that he did not have any desire that a person should be allowed to "double dip", but rather it was an equity issue. Mr. Philibert stated that it is an earned benefit that should be received. Mr. Landis felt that if the perception is that return to work is double dipping that it will be a hard obstacle to overcome.

The Colleyville Resolution was distributed to the Board and Mr. Newton noted that it does mention both the catch-up provision and a flat rate option.

10. TMRS Board Education: Introduction to Rate Stabilization Techniques

Mr. Randall stated that under the current funding policy and structure in which rates are annually determined, contribution rates are as stabilized as possible. In order to get further rate stabilization, another structure or additional layer of smoothing is necessary. This presentation is informational and not a recommendation. Different rate stabilization structures and techniques will be presented and discussed.

Even though the current funding policy provides a high degree of stabilization, there are techniques to provide more stability. Mr. Newton explained what a funding policy does. It is a systematic set of procedures used to determine the contributions needed to be made in the current year, or a pattern for many years. It must address how the contributions will be made for ongoing benefits as well as how to finance gains or losses as experience occurs. Mr. Newton explained the various components of a funding policy: actuarial cost method, asset smoothing method, amortization methods, stabilization techniques, procedures for plans with lower funded ratios and surplus management. He highlighted the current TMRS policy and discussed the policies regarding the amortization of actuarial losses. Mr. Newton cited TMRS' statutes and the Board Rules regarding the funding policy. He reviewed the goals of a funding policy: benefit security, contribution volatility and intergenerational equity. He discussed how these goals interplay and have to be balanced with each other. Mr. Newton presented the results of various stochastic modeling and reviewed scenarios that matched the TMRS investment return assumption. He noted that the current funding policy will produce annual increases or decreases in the contribution rate even under scenarios in which the
investment return is met over a period of time. Mr. Newton discussed the Decision Tree and that it must be reviewed if a change is desired. He stated that Entry Age Normal (EAN) still remains the appropriate funding method. Mr. Newton reviewed various funding structures: annually determined, hybrid approaches with required/automatic minimums and three other structures that do not fit TMRS's goals because they do not provide adequate benefit security.

Mr. Newton discussed hybrid structures. This approach would set a contribution rate and the rate would stay the same unless experience forces the rate to increase or the city becomes 100% funded. In his hybrid structure example, the calculated contribution equals the EAN normal cost plus 20 year amortization of the UAAL. For underfunded plans, the required contribution equals the greater of the calculated contribution or last year's required contribution rate. For plans that are fully funded, the required contribution equals the normal cost. He explained how a hybrid structure would work under various scenarios and compared the differences in volatility between a hybrid structure and the current policy.

Mr. Newton listed other examples of contribution rate stabilization techniques: longer amortization periods and increasing or decreasing corridors. He reviewed how these various techniques look on a graph by comparing contribution rate volatility and funded ratios under these alternatives versus the current structure.

Mr. Newton discussed surplus management and how it falls into contribution strategies. In multi-employer plans, there have been some plans that are overfunded and some that are underfunded. He reviewed TMRS' current surplus management techniques and how other plans are dealing with surpluses. By combining stabilization features with surplus management, hopefully the Board has gained some perspective on other options available.

Mr. Parrish stated that he hopes this will begin a process to keep TMRS proactive and look and plan for the future by reviewing all the options available.

11. Chief Investment Officer Management Update including Governance, Personnel, Manager Updates and Other Related Matters
Due to the Quarterly Staff Report and the annual asset class review presentation, Mr. Carlson did not have any additional updates.

12. Executive Director Update – Legal Department Overview
Ms. Sweeney reviewed the creation of TMRS' Legal Department. Prior to 2001, TMRS was supported solely by outside legal counsel. She introduced the Legal staff in attendance and described the different areas of support Legal provides.

13. Executive Director and Staff Reports
Mr. Gavia presented the reports for discussion. There was nothing in addition to the reports presented.
14. **Call for Future Agenda Items**

Mr. Landis made a motion to adjourn the meeting. Mr. Philibert seconded, which passed 4-0. The meeting was adjourned at 10:19 a.m.

---

David Gavia  
Executive Director

Jim Parrish  
Chair, Board of Trustees