Minutes of the Board of Trustees

April 6-7, 2017

The Board of Trustees of the Teacher Retirement System of Texas met on April 6-7, 2017, in the boardroom located on the fifth floor of the TRS East Building offices at 1000 Red River, Austin, Texas. The following Board members were present:

David Kelly, Chair Karen Charleston Joe Colonnetta David Corpus John Elliott Greg Gibson Christopher Moss Dolores Ramirez

Others present:

Brian Guthrie, TRS Ken Welch, TRS Don Green, TRS Carolina de Onís, TRS Katrina Daniel, TRS Britt Harris, TRS Jerry Albright, TRS Chet Henry, TRS Janet Bray, TRS Heather Traeger, TRS Chris Cutler, TRS Frank Williams, TRS Howard Goldman, TRS Katherine Farrell, TRS Steve Huff, Reinhart Boerner Van Deuren Steve Voss. Aon Hewitt Mike Comstock, Aon Hewitt Dr. Keith Brown, Investment Advisor Michael Johnson, Bridgepoint Consulting

Philip Mullins, TX State Employees Union Patrick Harvey, Walgreens Boots Alliance Joni Lozano, Caremark Tiffany Calderes, Humana Sabina Rahman-Garcia, Humana Sandra Barsenas, ESI Ajay Dalal, ESI Jim Baker, Unite Here

Mr. Kelly called the meeting to order at 9:07 a.m.

1. Call roll of Board members.

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

2. Consider the following administrative items – David Kelly:

A. Approval of the proposed February 22-24, 2017 Board meeting minutes.

On a motion by Mr. Colonnetta, seconded by Ms. Ramirez, the Board unanimously voted to approve the proposed minutes of the February 22-24, 2017 Board meeting.

B. Excusing Board member absences from the February 22-24, 2017 Board meeting.

On a motion by Ms. Charleston, seconded by Ms. Ramirez, the Board unanimously voted to excuse the Mr. Corpus absence on February 24, 2017.

C. Consider consenting to the Board Chair's appointment of the Budget committee members, and receive the Board Chair's public announcement of the Budget chair.

Mr. Kelly announced Dr. Gibson as the new Budget Committee chair.

D. Setting, rescheduling or canceling future Board meetings.

On a motion by Mr. Colonnetta, seconded by Dr. Gibson, the Board unanimously voted to reschedule the July 14, 2017, Board Meeting to July 13, 2017.

3. Provide opportunity for public comment – David Kelly.

No public comment was provided.

4. Receive an update on the TEAM Program – Brian Guthrie and Chet Henry.

Mr. Brian Guthrie announced there are 179 days from the actual switching on of the new system, Phase 1, which will affect all the reporting entities around the state and all the functionality associated with it. Mr. Guthrie reviewed the TEAM Transparency report. Mr. Guthrie discussed TEAM budget: the amount originally budgeted, what is currently budgeted and what has been encumbered to date. He then discussed the risk management review completed on March 8, 2017.

Mr. Chet Henry described the weekly detailed level requirements meetings. He said these meetings are to prevent the requirements gathering problems of Phase 1.

Mr. Guthrie announced the change foreseen in December and February of the change of Hewlett Packard to DXC Technology. He said Hewlett Packard split into two units, HPI and HPE, and HPE is now merging with Computer Sciences Corporation to create this new company called DXC Technology. Mr. Guthrie said the team are all still part of the project. Mr. Kelly requested a letter be sent to the new entity, DXC, to express the mission critical need of this project for TRS and our demand for excellence.

Mr. Guthrie reviewed accomplishments that had occurred since the February board meeting. He said the third round of user business testing is completed. He said they have put in place a feature freeze in order to deliver on time with Phase 1. Mr. Guthrie announced 98 percent of all reporting entities have completed their certification which covers 99.6 percent of all TRS members. Mr. Guthrie discussed the progress of the beta test. Mr. Henry stated the cutover will start September 9, 2017 and go-live October 2, 2017. Mr. Guthrie stated they are looking forward to the second phase and on what was taken on internally such as the customer relationship management project and the health insurance line of business milestones.

5. Receive a presentation from the TEAM Program Independent Program Assessment (IPA) Vendor – Michael Johnson, Bridgepoint Consulting.

Mr. Michael Johnson stated Bridgepoint Consulting's role is to report to the Board and executive director on the project, focused on risks in: scope, quality, schedule and cost. Mr. Johnson reviewed how the TEAM transparency report is an average of parties' input. He said Bridgepoint's input differed in two areas, the schedule and cost scores. For scheduling Mr. Johnson said the concern identified was the competing and overlapping of Phase 1 and Phase 2 activities. As for quality, Mr. Johnson stated there is much improvement in Phase 2 from Phase 1. He said there is significant progress on the data conditioning and the member account balances. As for cost, Mr. Johnson said the risk is if the schedule slips there will be a cost impact.

6. Review and discuss the Executive Director's report on the following:

- A. Administrative operational matters, including updates on the following: Executive Director's goals, financial awareness project, audit, legal, staff services, investments, board administration, special projects, actuarial matters and strategic planning.
- B. Board operation 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. Guthrie provided general updates. He then reviewed the midyear actuarial valuation. He reported the unfunded liability is now 36.6 years, a slight increase since August 2016. Mr. Guthrie discussed the legislative session and status of certain bills. He provided an update on the Governor's hiring freeze. He discussed the status of his employment goals in preparation for his review in July. Mr. Guthrie then reviewed possible agenda items for the June and July meetings.

7. Receive a report on TRS Workforce Overview – Janet Bray.

Ms. Janet Bray provided a review of the TRS Workforce. She gave a snapshot of the TRS employee profile. She pointed out the percentage of employees eligible to retire is 15.7 percent, down from 32.3 percent in FY 13. Ms. Bray reported the turnover rate for FY 16 was 11.2 which was considerably lower than the state rate of 21.4 percent. She discussed the succession planning process TRS is putting in place.

8. Review the Executive Performance Incentive Pay Plan for the plan year beginning July 1, 2017 – Janet Bray.

Ms. Janet Bray provided the plan overview of the executive director's performance incentive plan. She said the program was piloted in December 1, 2015 and are in the first full period of the plan that started July 2016 through June 2017. She said this plan measures four components: leadership effectiveness, member satisfaction, the operational effectiveness and employee engagement. Ms. Chris Bailey reviewed the current measures regarding the validity, attainability and how they align with TRS' strategic plan. She noted an area that currently does not have a

direct link to the strategic plan is related to the Executive Director's oversight of investment management. She also identified areas in the plan where modifications may be proposed moving forward. She said one area is to create a separate bonus calculation to address the Executive Director's oversight of the investment management division, using the same criteria as the investment management division bonus which ranges from five to twenty-five percent. Ms. Bray concluded by discussing the next steps. In June the Trustees will be presented the finalized measures for final sign-off for the next years and in July the evaluations for the Executive Director, Chief Investment Officer and Chief Audit Officer will be conducted.

9. Receive a report on Cybersecurity – Chris Cutler.

Mr. Chris Cutler reported on the key role that cybersecurity plays here at TRS in protecting information, reviewed the protections and mitigations in place to protect TRS' information. Mr. Cutler reviewed the important role of information security training and testing as part of the overall security program. Mr. Frank Williams provided real examples of malware affecting local governments and small pension plans. He discussed cyber-insurance and how TRS is proactively looking into it. He said ninety-five percent of all security incidents involve human error, typically, someone clicked on the wrong item. Mr. Williams described phishing, spear phishing and whaling attacks. He discussed the formation of the Information Security Advisory Team which includes a volunteer from each of the departments at TRS. In conclusion, Mr. Ken Welch recognized Mr. Williams and Mr. Kyle Colson for having just received certification as Application Assault Certified Professionals.

10. Discuss the: Fourth Quarter 2016 Performance Review – Steve Voss and Mike Comstock, Aon Hewitt.

Mr. Mike Comstock presented the trust performance review on a year-to-date basis through December 31st, which included market returns, market value change, asset allocation, and total fund performance. He noted for the 4th quarter, fixed income came under stress due to rising interest rates and the rising U.S. dollar. He reported the trust did return a positive 0.1 percent for the quarter which outperformed the benchmark. He said the positive 0.1 percent return was equal to 64 basis points of outperformance. Mr. Comstock reported 2016 ended on a relative high note with a 7.8 percent return compared to 7.2 percent for the performance benchmark. Mr. Comstock provided an update as to the first quarter for 2017. There was discussion on the risk versus revenue returns as compared to the peer group. Mr. McCormick noted that the target risk for TRS' plan was 11 percent but over a five year period the risk was 5 ½ percent with an 8.4 percent return, meeting the actuarial return.

At 2:13 p.m., Mr. Kelly announced the Board would recess for the rest of the day in order to take up the noticed committee meetings.

The Board of Trustees of the Teacher Retirement System of Texas reconvened on April 7, 2017, in the boardroom located on the fifth floor of the TRS East Building offices at 1000 Red River Street, Austin, Texas. The following board members were present:

David Kelly, Chair Karen Charleston David Corpus Joe Colonnetta John Elliott Greg Gibson Christopher Moss Dolores Ramirez

Others present:

Brian Guthrie, TRS
Ken Welch, TRS
Don Green, TRS
Carolina de Onís, TRS
Katrina Daniel, TRS
Amy Barrett, TRS
Jerry Albright, TRS
Barbie Pearson, TRS
Howard Goldman, TRS
Heather Traeger, TRS
Jimmie Savage, TRS
Allen MacDonell. TRS
Katherine Farrell, TRS
Rogier Slingerland, CEM Benchmarking

Ted Melina Raab, Texas AFT Sabina Rahman-Garcia, Humana Ajay Dalal, ESI Gilbert Gonzales, ESI Sandra Barsenas, ESI Jim Baker, United Here

Mr. Kelly called the meeting to order at 9:06 a.m.

1. Call role of Board members.

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

11. Provide Opportunity for public comments – David Kelly.

No public comment was provided.

12. Review Deputy Director's report, including matters related to administrative, financial and staff services operations – Ken Welch.

Mr. Ken Welch reported the service levels on telephone counseling and health care areas significantly improved as compared to February. He said the telephone counseling center hold time is just over one minute, the target level is two. He reported the shifting of certain calls to a one stop shop for telephone counseling has worked well He said the addition of outside

resources to help on health care has brought down hold times from almost 15 minutes to below three minutes.

Mr. Welch announced for the 27th time in a row TRS has received the Government Finance Officers Association Certificate of Excellence for the CAFR. Mr. Welch informed the Trustees they had all met the Pension Review Board minimum education training requirement. Mr. Welch provided an update on other activities occurring at TRS. He announced Jay LeBlanc of the Energy Risk Management received the designation as a certified risk management professional.

13. Receive a report on Global Pension Trends – Rogier Slingerland.

Mr. Rogier Slingerland provided a report on global pension trends. He said over the past ten years, cost efficiencies has become a focus, especially straight through processing, automation. He said with more information on-line has not resulted in a reduction of full time employees (FTEs) for the contact centers. Mr. Slingerland said a big thing is flex work and telecommuting. As a result he said productivity has gone up and employee satisfaction has gone up a lot. From a cost perspective it's been very efficient, he reported on client had five building sand was able to reduce it to three and operate in the same way. Mr. Slingerland discussed communications with members and social media.

14. Receive the report of the Investment Management Committee on its April 6, 2017, meeting – Joe Colonnetta.

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

The Investment Management Committee met on April 6, 2017. The committee approved the proposed minutes of the December 1, 2016 meeting. The first presentation was an overview of the public internal markets given by Chi Chai, Patrick Cosgrove, KJ Van Ackeran. Following, there was a presentation given by Bernie Bozelli, Steve Patterson and Jaime Llano with the annual review of trading. The final presentation was an update on Phase 2 of Project Alpha conducted by Jase Auby, Dale West and Chi Chai.

15. Receive the report of the Risk Management Committee on its April 6, 2017, meeting. – Karen Charleston.

Ms. Charleston, the Committee Chair, provided the following report of the Risk Management Committee:

The Risk Management Committee met on April 6, 2017. The committee approved the proposed minutes of the December 1, 2016 meeting. A presentation was given reviewing the investment risk report which was presented by James Nield.

16. Receive the report of the Policy Committee on its April 6, 2017, meeting and consider the following related matters – David Corpus:

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

The Policy Committee met on April 6, 2017. The committee approved the proposed minutes of the December 1, 2016 meeting. The committee recommended to the Board adoption of proposed amendments to the proxy voting policy. The committee received an update on the 403(b) rulemaking. Staff reported that it will lay out the proposed rule amendments at the Policy Committee's June meeting. Staff also sought committee approval to publish draft rules in the Texas Register for public comment. The plan is to conclude the rule review by this September.

Mr. Corpus concluded the report with a motion. He moved that the Board adopt the proposed amendments to the proxy voting policy as recommended by the Policy Committee.

Mr. Kelly called the question asking for all those in favor. The Board unanimously voted in favor.

17. Receive the report of the Budget Committee on its April 6, 2017, meeting and consider the following related matters – Greg Gibson:

Dr. Gibson, the Committee Chair, provided the following report of the Budget Committee:

The Budget Committee met on April 6, 2017. The committee approved the proposed minutes of the July 29, 2016 meeting. Mr. Green presented a recap of the FY 2017 operating budget by fund, division and expense category. A total of \$12.8 million, or 8 percent of the operating budget is expected to remain unspent at the end of this current fiscal year. A resolution was discussed and adopted by the Budget Committee to bring to the Board today authorizing an increase in the current fiscal budget for TRS-Care of \$800,000 to pay for the HILOB project.

Dr. Gibson concluded the report with a motion. He moved for the Board to adopt the proposed resolution authorizing an increase in the current fiscal year budget for TRS-Care administrative operation budget as recommended by the Budget Committee. Mr. Kelly called the question asking for all those in favor. The Board unanimously voted to approve the following resolution:

Board of Trustees of the Teacher Retirement System of Texas RESOLUTION

AMENDING THE FISCAL YEAR 2017 ADMINISTRATIVE OPERATIONS BUDGET FOR THE TEXAS PUBLIC SCHOOL RETIRED EMPLOYEES GROUP BENEFITS PROGRAM (TRS-CARE)

April 6-7, 2017

Whereas, Section 1575.054 of the Insurance Code authorizes the Teacher Retirement System of Texas (TRS) as trustee of the Texas Public School Retired Employees Group Benefits Program (TRS-Care) to pay the expenses incurred in developing and administering the group program as provided by a budget adopted by the trustee;

Whereas, On July 29, 2016, the TRS Board of Trustees (Board) adopted the Fiscal Year (FY) 2017 Administrative Operations Budget and General Provisions for the TRS-Care program and provided that program operations be funded from the TRS-Care fund;

Whereas, The FY 2017 TRS-Care Administrative Operations Budget currently includes an amount budgeted for wages, benefits and professional services;

Whereas, Unanticipated but mission-critical activities have resulted in additional operating expenses above those budgeted for wages, benefits and professional services in FY 2017, for the development of the health insurance line of business project; and

Whereas, TRS management and the Budget Committee of the Board recommend that the TRS-Care Administrative Operations Budget for wages, benefits and professional services for FY 2017 be increased by \$800,000 bringing the total TRS-Care budget to \$6,586,696; now, therefore, be it

Resolved, That the Board, on behalf of TRS as trustee of TRS-Care, hereby amends the FY 2017 TRS-Care Administrative Operations Budget to increase the amount budgeted for wages, benefits and professional services by \$800,000 bringing the total TRS-Care budget to \$6,586,696.

18. Receive the report of the Audit Committee on its April 7, 2017, meeting – Chris Moss.

Mr. Moss, the Committee Chair, provided the following report of the Audit Committee:

The Audit Committee met at 8:30 on Friday, April 7, 2017, in the 5th Floor Boardroom. The TRS compliance officer presented her routine compliance reports, internal audit staff presented the results of projects, including the quarterly investment compliance testing, follow up audit of outstanding audit recommendations of reporting entities, and prior audit and consulting recommendation status and innovation project status. Internal audit staff presented audit administrative reports for FY 2017 and audit staff accomplishments.

19. Receive the report of the Chief Benefit Officer and consider related action, including: A. Approve proposed minutes of the January 2017 Medical Board meeting.

Ms. Barbie Pearson presented for approval the January 20, 2017 Medical Board meeting minutes.

Mr. Moss moved, Ms. Ramirez seconded and the Board unanimously voted to approve the January 20, 2017 Medical Board meeting minutes as presented by staff.

B. Approve the list of members qualified for retirement for December through February.

Ms. Pearson present for Board approval the list of members qualified for retirement for December 2016 through February 2017.

Ms. Charleston moved, Dr. Gibson seconded and the Board unanimously voted to approve the list of members qualified for retirement for December 2016 through February 2017.

20. Receive a report on the London Office – Don Green, Jerry Albright and Carolina de Onis.

Mr. Jerry Albright reported the London office opened 18 months ago in November 2015. Mr. Albright provided the background as to why the London office was opened. Ms. Carolina de Onis provided an update regarding the time and resources it took into getting the office opened. Mr. Don Green reported from the operational standpoint of opening the office. Mr. Albright concluded by stating how opening the London office was a cross departmental project that required unbelievable coordination and talent. Mr. Allen MacDonell provided an update on how 2016 went and what are the plans for the upcoming year.

21. Receive a report on Records Management Project – Don Green.

Mr. Don Green provided an update on the records management, e-records project. Mr. Green said that email storage alone for a four year period has grown from six terabytes to 16 terabytes of data which equates to about an \$800,000 cost. He said the real cost is not the storage but the time individuals in the organization use to search and retrieve data. Mr. Green reported the records project's objective is geared towards helping with redundant, obsolete and trivial information (ROT). A goal he said is to create centralized repositories and standard processes. He said they are looking at various technologies to assist in creating an automated process for

electronic records information. Mr. Green stated June 2018 is the target for completing this records management project. Mr. Green concluded by thanking his records management team: Mr. Jimmie Savage, Bob O'Connor and Jeanel Walker.

22. Receive an update on TRS Facilities and Surrounding Area - Don Green.

Mr. Don Green for the facilities discussion focused on what projects have been undertaken to make current facilities better over the years. He said plans are under development to remodel the first three floors of the Red River East Building. Mr. Green provided updates on the state fire marshal safety inspections and DPS' security inspection. Mr. Green concluded by giving an update on the local development that is going on around Red River, what the City of Austin calls the Innovation Zone.

23. 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 and open records — Carolina de Onis.

This agenda item was not taken up.

24. Consider personnel matters, including the appointment, employment, evaluation, compensation, performance, duties, discipline or dismissal of the Executive Director, Chief Investment Officer or Chief Audit Executive. – David Kelly.

This agenda item was not taken up.

25. Consult with the Board's attorney(s) in Executive Session on any item listed above on this meeting agenda as authorized by Section 551.071 of the Texas Open Meetings Act (Chapter 551 of the Texas Government Code). – David Kelly.

This agenda item was not taken up.

At 11:55 a.m., Ms. Ramirez moved, Dr. Gibson seconded, and the Board unanimously voted to adjourn.

APPROVED BY THE BOARD OF TRUSTEES OF THE TEACHER RETIREMENT SYSTEM OF TEXAS ON THE 1st DAY OF June 2017.

ATTESTED BY:

Katherine H. Farrell

Let 15/17

Date 15/17

Secretary to the TRS Board of Trustees