Joint Meeting of the Board of Trustees And Investment Advisory Committee

December 5, 2014

ERS
Employees Retirement System of Texas

Presented for Review and Approval
February 24, 2015

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JOINT MEETING OF THE
BOARD OF TRUSTEES AND
INVESTMENT ADVISORY COMMITTEE
EMPLOYEES RETIREMENT SYSTEM OF TEXAS

December 5, 2014
ERS Auditorium
200 E. 18th Street
Austin, Texas 78701

COMMITTEE MEMBERS PRESENT
James Hille, Vice-Chair
Robert Alley, Member
Caroline Cooley, Member
Monty Jones, Member
Ken Mindell, Member
Laura Starks, Member
Vernon Torgerson, Member

COMMITTEE MEMBERS ABSENT
Lenore Sullivan, Chair

TRUSTEES PRESENT
Brian Ragland, Chair
Doug Danzeiser, Member
Cydney Donnell, Member
I. Craig Hester, Member
Yolanda M. Griego, Member

TRUSTEES MEMBER ABSENT
Frederick E. Rowe, Jr., Vice-Chair

ERS STAFF PRESENT
Ann Bishop, Executive Director
Larry Zeplin, Chief Operating Officer
Tom Tull, Chief Investment Officer
Paula Jones, General Counsel and Chief Compliance Officer
William Nail, Deputy Director of Governmental Affairs
Tony Chavez, Internal Auditor
Robert Kukla, Director of Benefit Contracts
Marci Sundbeck, Manager of Enterprise Risk Management
Ralph Salinas, Director of Human Resource
Catherine Terrell, Director of Governmental Affairs
Michael Wheeler, Chief Financial Officer
Carolyn Anderson, Investments
Kelley Davenport, Executive Office
Leah Erard, Governmental Affairs
Wesley Gipson, Investments
Andrew Hodson, Investments
Lauren Honza, Investments
Dana Jepson, Investments
Jennifer Jones, Governmental Affairs
Sharmila Kassam, Investments
David Lacy, Legal Services
Robert Lee, Investments
Mark Lopez, Benefit Contracts

Betty Martin, Investments
Patti Maugham, Executive Office
Tim Reynolds, Investments
Tanna Ridgway, Investments
Cheryl Scott Ryan, Legal Services
Leighton Shantz, Investments
Robert Sessa, Investments
Michael Shoop, Investments
John Streun, Investments
Chris Tocci, Investments
Mary Jane Wardlow, Governmental Affairs
Karla West, Investments
Keith Yawn, Office of Management Support

ALSO PRESENT
Julian Bostic, Neubuger Berman
Gary Chandler, Texas Department of Public Safety Officers Association
Kristen Doyle, Hewitt EnnisKnupp
Kevin Deiters, NM Education Trust
Justin Edwards, BNY Mellon
Katy Fallon, Legislative Budget Board
Ryan Falls, Gabriel Roeder Smith
Tom Griebel, Retired State Employees Association
Shea Guinn, Game Warden Peace Officer Association
Bill Hamilton, Retired State Employee
Diana Hodges, Office of Texas Senator Joan Huffman
Jimmy Jackson, Texas Department of Public Safety Officers Association
Lisa Kaufman, Texas Public Employees Association
Emily Morgani, Legislative Budget Board
Joe Newton, Gabriel Roeder Smith
Mauro Powers, American Federation of State, County and Municipal Employees Texas Retirees
Paige Rabalais, Neubuger Berman
David Sinclair, Game Warden Peace Officer Association
Steve Voss, Hewitt EnnisKnupp

Mr. Jim Hille, Vice Chair of the Investment Advisory Committee for the Employees Retirement System of Texas called the meeting to order and read the following statement:

> "A public notice of the Joint Meeting of the Board of Trustees and Investment Advisory Committee containing all items on the proposed agenda was filed with the Office of the Secretary of State at 10:48 a.m. on Thursday, November 25, 2014 as required by Chapter 551, Texas Government Code, referred to as 'The Open Meetings Law.'"

XVI. SPEAKER PRESENTATION - WORLD INVESTMENT OUTLOOK ACCORDING TO TEMPLETON

Cindy Sweeting, CFA, the President of Templeton Investment Counsel, LLC presented an in-depth look of current and future world investments, according to Templeton.

XVII. REVIEW AND APPROVAL OF THE MINUTES TO THE AUGUST 19, 2014 JOINT MEETING OF THE BOARD OF TRUSTEES AND INVESTMENT ADVISORY COMMITTEE

Mr. Brian Ragland opened the floor for a motion to approve the minutes of the August 19, 2014 Joint Meeting of the Board of Trustees and Investment Advisory Committee.

The Investment Advisory Committee then took the following action:

MOTION made by Mr. Bob Alley, seconded by Mr. Monty Jones and carried unanimously by the members present that the Investment Advisory Committee approve the minutes of the ERS Joint Meeting of August 19, 2014.

The Board of Trustees then took the following action:

MOTION made by Mr. Brian Ragland, seconded by Ms. Cydney Donnell, and carried unanimously by the members present that the Board of Trustees approve the minutes of the ERS Joint Meeting of August 19, 2014.

XVIII. REVIEW, DISCUSSION AND CONSIDERATION OF ERS RETIREMENT PLANS AND ACTUARIAL VALUATION REPORTS FOR FUNDING AS OF AUGUST 31, 2014:

a. Actuarial Valuation Presentations by Gabriel Roeder Smith - Actuarial Valuation Reports for funding as of August 31, 2014 – §815.206 of the Texas Government Code requires an actuary, as designated by the Board of Trustees (Board) to perform annual valuations of the assets and liabilities of the Employees Retirement System of Texas' retirement funds. The System's consulting actuary for retirement benefits, Gabriel Roeder Smith Company (GRS), has completed the actuarial valuation of the assets and liabilities of:

- The Employees Retirement System Fund (ERS);
- The Law Enforcement and Custodial Officers Supplemental Retirement Fund (LECOSRF); and
- The Judicial Retirement System Plan Two (JRS2).

Ms. Jennifer Jones, Senior Program Specialist in the Governmental Affairs division introduced Mr. Ryan Falls and Mr. Joe Newman from GRS who provided the board a summary of results of the valuation. Mr. Falls stated this is their annual update on the financial health of the retirement system. Mr. Falls reported the purpose of the valuation is to communicate to the board the health of the retirement system, and to measure the actuarial liabilities and funding levels and how those balance out with the current statutory contribution rates that members are contributing to the plan right now. It is also to explain the changes in the actuarial condition of the plans, track changes over time and analyze the future outlook.

Mr. Falls reported to the board that projections are much improved and the depletion date has been extended by 11 years to 2063. Mr. Falls noted market return was 14.7%. The actuarial or smoothed value is at 7.6%. The excess returns on the market value offset most of the outstanding unrecognized losses from prior valuation. There was a $0.4 billion outstanding loss for ERS in 2014 and a $1.8 billion outstanding loss in 2013.

Mr. Falls stated there is still a slight reduction in the funded status. In 2013 the funded ratio was 77.4% and this year it is 77.2%. LECOS and JRS2 had an improvement in funded status, but still on the same path as ERS. JRS2 is not expected to run out of money based on market value of assets.

In 2013, the ERS fund had $7.2 billion in unfunded actual accrued liability and this year it is at $7.5 billion. LECOS and JRS2 each had a slight improvement in the funded ratio this year. The actuarially sound contribution is a contribution that would pay the benefits that are currently accruing and have the contribution level that will pay down the unfunded liabilities over a 31-year period. For ERS that was 18.76%. Mr. Falls noted that if ERS were to get 18.76% for the pay for the next 31 years, and all assumptions were met, the liability would be fully funded and would have a 100% funded ratio for ERS. For FY 2015 contributions are 14.9% of pay, which is a deficit of 3.86%. Mr. Falls stated the 3.86% is the difference between running out of money in 2063 versus being fully funded 31 years from now in 2045.

The shortfall between the actuarially sound contribution rate and the total contribution rate continues to negatively impact the funding status of the plan. Mr. Falls reported the shortfall is decreased primarily due to the increase in the revenue received. The members are contributing 30 basis points of pay more this fiscal year then they were last fiscal year, which is the primary reason for the narrowing of the shortfall. Mr. Falls noted the contributions will ultimately reach 15.5% of pay by FY 2017. The LECOS supplemental retirement fund, the same 31 year contribution rate for this fiscal year would be 2.96%. Mr. Newman then discussed the recent history that shows 10 year trends of different metrics. He stated the funded ratio on market has basically treaded water. The assets have gone up 30%, but the funded ratio has not gone up 30%. Mr. Newman reported the number of payees is twice as many as it was in 2001, which means ERS is paying out twice as much in benefit payments as it was in 2001.

Mr. Falls then reported ERS adopted GASB 67 for plan year ending August 31, 2014. GASB 67 applies to the retirement system and it is consolidated in the annual financial report (CAFR). The new measures reported in the ERS CAFR are total pension liability, plan fiduciary net position and net pension liability. GASB 68 reporting will be required for employer fiscal years ending after June 15, 2015.

The discount rate used in determining the Total Pension Liability (TPL) is a blend of two rates; the long-term expected rate of return on pension plan investments and the yield or index rate for a 20-year, tax-exempt general obligation municipal bond (4.17% as of August 31, 2014).

In summary, SB1459 and 2014 investment returns have helped, but further change is needed. Without a change in contributions or benefits, the funded status will continue to decline and waiting on implement changes will limit the available options for a sustainable solution. Mr. Falls stated that they will continue to closely look at the assumptions every four or five years.

There were no questions or further discussion, and no action was required on this item.

b. Discussion of LECOS Cost Accounting – Ms. Jennifer Jones, Senior Program Specialist in the Governmental Affairs division continued with the discussion of the next agenda item on Law Enforcement and Custodial Officer (LECO) Cost Accounting. Ms. Jones informed the board that last session the ERS omnibus bill (SB 1459) included a requirement that the agency develop separate accounting for assets and liabilities associated with the LECO population compared to other employee classes. This allows identifying separate cost rates for the two populations and potentially setting two different sets of contribution rates for them.

Ms. Jones reported that during discussions of the content of SB 1459 it became clear there was not a good understanding of differences in cost between LECO benefits and benefits of the regular class employees. ERS staff has worked with GRS to develop a methodology to separately identify and account for these items. GRS completed preliminary calculations based on the end of FY 2013, but the numbers are updated to reflect plan funding status as of the end of FY 2014. Ms. Jones recapped that 28% of active members in the ERS plan are from the LECO population.

Ms. Jones reported ERS could choose to continue the status quo of leaving benefits and contribution rates as they are, but if the legislature is interested in separation there are two options. The first option is to make it one fund which would blend the LECOSRF into ERS fund and set different contribution rates by the two populations. This might be administratively easier in part due to most of the LECO employee class will have some amount of regular class employee service. The other option is to fully separate ERS and LECO into two separate funds with different contribution rates. This is believed to be administratively more complex to do, and may be easier to explain to member populations if they are part of one plan or the other. Ms. Jones stated both options would require a statutory amendment and option 2 would require a favorable IRS determination, which will delay implementation.

Ms. Jones then discussed the two tables below with the board on the demographic profile of active members and retirees and also the assets and liabilities and total contributions:

Summary Comparison of Assets and Liabilities Accounting by Employee Population
As of End of FY 2014

	Regular Class State Employees	Law Enforcement & Custodial Officers
Membership		
Number of:		
Active members	97,078	37,084
Retirees and beneficiaries*	79,640	16,200
Inactive Vested	14,239	2,500
Inactive Non-vested	62,058	17,710
Total Membership	253,015	73,494
Valuation Payroll (billions)	$4.6	$1.6
Contribution Rates		
Member	6.90%	7.40%
Agency	0.50%	0.50%
State	7.50%	9.20%
Total Contribution Rate	14.90%	17.10%
Actuarially Sound Contribution Rate (%)	18.12%	23.51%
Contribution Rate Sufficiency	(3.22%)	(6.41%)
Assets		
Market Value (billions)	$20.4	$5.5
Actuarial Value (billions)	$20.7	$5.6
Actuarial Information		
Normal Cost Rate (%)	11.30%	14.12%
Actuarially Accrued Liability (billions)	$26.0	$8.1
Unfunded Actuarially Accrued Liability (billions)	$5.3	$2.6
Funded Ratio (%)	79.8%	68.6%
Funding Period	Never	Never

**Annuitants with at least 10 years of CPO service are identified as LECO annuitants. Inactive members with at least three-fourths of total service certified as CPO service are identified as LECO inactive members. These headcounts are shown for illustration purposes and do not directly relate to the methods used to allocate individual liabilities to the two populations.*

See the summary table on the following page on the demographic, salary and benefit information for the Regular Class and LECO populations.

Demographic Summary Results as of August 31, 2014		
	Regular Class	LECO
Member metrics	State Employees Elected Officials District Attorneys	Law enforcement and custodial officers (DPS, TABC, TPWD, TDCJ)
Active Contributing Members	97,078	37,084
Average Age	45.0	42.3
Average Years of Service	9.6	8.9
Average Annual Salary	$45,440	$41,584
Non-contributing members, vested*	14,239	2,500
Non-contributing members, non-vested*	62,058	17,710
Annuitants		
Retirees and beneficiaries*	79,640	16,200
Average annual annuity	$19,030	$23,048
Service Retirements	70,435	14,995
Disability Retirements	2,330	193
Beneficiaries	6,875	1,012
Average Years of Service**	22.6	21.4
Average Age at Retirement**	59.0	55.5
Average Age as of 8/31/14**	69.2	63.4

**Annuitants with at least 10 years of CPO service are identified as LECO annuitants. Inactive members with at least three-fourths of total service certified as CPO service are identified as LECO inactive members. These headcounts are shown for illustration purposes and do not directly relate to the methods used to allocate individual liabilities to the two resulting plans.*
***Annuitant demographics are based only on Service Retirements from ERS.*

Ms. Jones reported that going forward ERS will be sharing results with policymakers during the 2015 session. If there is a different approach desired by the legislature, ERS will work with them on any statutory amendments they want to pursue and let them know about any logistical hurdles related to an IRS determination letter if it is needed. ERS will also update the numbers for the 2015 valuation.

There were no questions or further discussion, and no action was required on this item.

XIX. <u>REVIEW AND DISCUSSION OF THE STATE OF ERS' UNFUNDED PENSION LIABILITY:</u>

a. Legal Issues Related to ERS' Pension Funding – Mr. Tim Sims, First Assistant General Counsel presented the next agenda item on Legal issues related to ERS' pension funding. The ERS legal staff have researched and analyzed legal issues related to ERS pension funding. Mr. Sims reported that *Trammell* is a 1937 Texas Supreme Court case that held public pension retirees benefits subject to statutory changes reducing future benefits. Mr. Sims reported Officer Trammell retired from the Dallas Police Department in 1933 after 20 years of service. During the Great Depression, the plan administering his retirement benefits became insolvent. The legislature authorized the plan to reduce retiree benefits including Officer Trammell's annuity, which was reduced by more than half. The Texas Supreme Court held that Officer Trammell's pension rights were subject to the legislature's power to modify or repeal the pension statute.

In 2013 the Houston Court of Appeals 1st District stated in *Klumb vs Houston Municipal Employees Pension System* a pensioner in a statutory pension plan does not have a vested right to retirement benefits pension. This case is currently pending before the Texas Supreme Court. Mr. Sims also mentioned the *Williams vs. Houston Fireman's Relief and Retirement Fund* out of the Houston Court of Appeals 1st district from 2003 where they stated a fireman's request to transfer retirement service credit did not violate the Texas Constitution prohibition against retroactive laws.

Mr. Sims reported that Texas Constitution Article 16, §66 does exempt non-statewide plans from *Trammell's* holding; however the amendment does not apply to ERS.

There are several reasons why *Trammell* may not apply to ERS. Mr. Sims stated one of the reasons is the rejection of the gratuity model for public pension plans. Since 1937, the model has been left behind in most states. In the *Trammell* case, the court cited five opinions from other states in support of its holding. ERS' analysis of those five cases has shown they have all been superseded or overturned by later decisions in those courts. He stated the vast majority of the states in the United States recognize public employees have vested rights to their benefits. Additional changes in the Texas Constitution, the Internal Revenue Code and case law regarding impairment of contracts may affect the *Trammell* decision.

Mr. Sims reported on the impairment of contracts clause of the federal constitution in cases beginning with the *United States Trust Company vs. New Jersey* in 1977 and *Energy Reserves Group vs. Kansas Power & Light* in 1983.

Also, §67 of the Texas Constitution Article XVI mandates certain minimum requirements for ERS retirement plans. There is a 12% minimum contribution by employees and the state. He reported financing of benefits must be based on sound actuarial principles, assets of the system must be held in trust for the benefit of its members and those assets cannot be diverted. The legislative history on the constitutional amendments underlying ERS benefit plans are also important in analyzing how *Trammell* might be applied.

Mr. Sims then discussed the IRS plan qualification requirement that a plan must follow its written requirements, the plan benefits must be definitely determinable and members must vest by normal retirement age. §815.507 of the Texas Government Code states the ERS plan provisions are intended to be construed and administered so as to be considered to be a qualified plan by the IRS.

Mr. Sims concluded stating *Trammell* predates the current federal case law on impairment of contracts, the rejection of the gratuity approach, constitutional changes to the ERS plans and the Internal Revenue Code. No federal or Texas case has analyzed *Trammell* in light of these considerations.

The next issue that Mr. Sims reported on was the 10% maximum on state contributions found in §67(b)(3). The maximum applies to state contributions based on aggregate compensation to ERS members, but should be harmonized with the requirement that financing of benefits must be based on sound actuarial principles and the emergency clause.

Mr. Sims briefly discussed the time frame on applying the maximum to the ERS plans and stated the context of §67(b)(3) indicates that it limits monthly state contributions and not necessarily lump sum appropriations. Any appropriation statute providing funding to the retirement system will carry a presumption of constitutionality that's found in §311.021 of the Texas Government Code. Among those presumptions, the statute is intended to comply with the constitutions of the state and the United States and the entire statute is intended to be effective. Mr. Sims reported that calculating the maximum, should be harmonized with the 30 year statutory amortization requirement.

Mr. Sims addressed some questions, and no action was required on this item.

b. Projected Cost Impacts of Retirement Benefit Reductions - Ms. Cathy Terrell, Director of Governmental Affairs, informed the board that every legislative session, the legislature asks ERS for options that could reduce the cost of the retirement program. ERS models a number of benefit reduction options and provides the estimated actuarial impact of each option. There are limited ways to address the trust fund's financial unstability - you can either increase revenues, decrease costs, or a combination of both. This agenda item addressed only options to decrease costs by reducing employee benefits through plan design change.

The options included potential grandfathering criteria. In order to be grandfathered, a member must meet one of the following requirements on August 31, 2015:

- be age 50 or older,
- meet the Rule of 70 by combining age and creditable service, or
- have at least 25 years of creditable service.

Ms. Terrell reported about 59% of current employees would not be grandfathered and could be affected by these benefit modification options. Under this criteria, the benefit reductions could affect 79,000 employees, 55,000 are regular class employees and 24,000 law enforcement/custodial officers.

Ms. Terrell reviewed the benefit options that were developed. Option 1 would base retirement benefits on a 60-month final average salary. It could reduce roughly $400 million of the unfunded liability and reduces the actuarially sound contribution by .48%. Option 2 would eliminate the ability to use unused leave for accrual and eligibility. Option 3 would replace the current multiplier of 2.3% with a 2% multiplier. Under this option, employees would earn 2.3% per year for service up to 12/31/2015 and starting in January 1, 2016, employees would earn 2.0% per year of service.

Option 4 would give more employees Tier 2 benefits. Tier 2 benefits apply to employees who were hired from 9/1/2009 to 8/31/2013. The benefits are lower than people hired prior to 2009. This option would put non-grandfathered employees in this tier of benefits. This option could reduce the unfunded liability by about $1.3 billion and lowers the actuarially sound contribution by 1.34%.

Option 5 would apply an even greater benefit reduction level to more people. This option would apply Tier 3 benefits which currently only apply to employees hired after 9/1/2013. Option 6 combines a 2% multiplier for future service and applying Tier 2 benefits to non-grandfathered employees. Option 7 combines a 2% multiplier for future years of service and applies Tier 3 benefits to non-grandfathered employees.

Only options 5, 6, and 7 will make the fund sound and only when combined with increased contributions. Combining options 3 and 5 saves the most money. Finally, Option 8, which would apply to all current employees, the multiplier is reduced to from 2.3% to 2% for years of service after 1/1/16. Option 8 reduces the unfunded liability by $500 million and reduces the contribution needed going forward by 1.72%.

Ms. Terrell then discussed with the board some of the workforce issues related to reducing retirement benefits which include the potential for legal challenges, and the potential for employees to "rush to retirement" and have an adverse actuarial impact on the trust. This is particularly critical since 10% of the workforce is currently eligible to retire, and 24% will be eligible to retire in the next five years. Benefit reductions also impact the state's ability to recruit and retain a qualified workforce, and can affect workforce productivity. Additional benefit levels also add to administrative complexity and equity among workers.

There was considerable discussion about the financial and workforce impact of benefit reductions. No action was required on this item.

XX. <u>REVIEW, DISCUSSION AND CONSIDERATION OF INVESTMENT PERFORMANCE OF THE SYSTEM'S ASSETS:</u>

A. Fiscal Year 2014 Investment Performance - Ms. Betty Martin, Director of Investment Services at ERS and Mr. Tom Heiner and Mr. Justin Edwards of BNY Mellon, presented the review, discussion and consideration of the investment performance of the system's assets.

Ms. Martin outlined the discussion and then turned the presentation over to Mr. Heiner. He began his discussion regarding asset class performance. The ERS total fund return for the FY2014, net of fees was 14.58%. It underperformed the total policy benchmark by 42 basis points (bps). The Fund underperformed the policy over the three- and five-year periods by four and two bps, however, over the ten year period, the Fund outperformed by 33 bps. Return seeking assets returned 18.15% for the fiscal year and 13.32% over the three-year period.

Global equity posted a return of 20.28% for the year. It underperformed its benchmark by 71 bps; however, over the three-year period, it exceeded the benchmark by 109 bps. Real assets posted double digit returns for FY2014, with a public real estate asset class returning 19.58%, private real estate 12.45%, and private infrastructure 9.04%. The rates asset class returned 2.54% for the fiscal year, exceeding its benchmark by 31 bps.

Mr. Edwards discussed the drivers of the performance relative to the policy. The two biggest contributors to the performance were international public equity and private real estate. International public equity had a negative 42 bps effect, and private real estate had a positive 40 bps effect on the benchmark.

Mr. Craig Hester asked about the calculations for the 2% of cash in the Trust. Mr. Leighton Shantz, Director of Fixed Income, explained that the cash is composed only of treasury bills, which returned three to five bps; the majority of the return came from securities lending and settlements for the entire Trust which was accounted for in the cash account. Mr. Hester asked about the split between securities lending and class action. Mr. Shantz said that securities lending revenue for the fiscal year was approximately $8 million. Mr. James Hille asked if the absolute return portfolio contributes to cash return. Mr. Shantz then explained that the absolute return is a separate portfolio. The staff try to keep a limited amount of cash and that low denominator causes the percentage return to appear high given that the revenue was independent of it.

There were no questions or further discussion, and no action was required on this item.

B. Third Calendar Quarter of 2014 Investment Performance - Mr. Tom Tull, Chief Investment Officer and Ms.Kristen Doyle and Mr. Steve Voss, consultants from Hewitt EnnisKnupp, presented the Third Calendar Quarter 2014 investment performance. Staff regularly reviews the performance of the Fund in order to monitor the asset allocation implementation plan and advisory manager selection. The purpose is to test the continued validity of investment decisions and to trigger an analysis of underperformance or undue volatility.

Mr. Tull began by presenting an excerpt about the Alliance of Interest Association (AOI). It is a nonprofit organization formed in 2009 by a number of different institutional investors. The objective of the organization is to have a better dialogue with the funding investors and to have a better sense of negotiations between hedge funds and investors for the benefit of all involved. The guidelines have now been issued and are now being presented to the Board. Mr. Robert Lee, Director of Hedge Funds, is currently on the Board for AOI and Ms. Sharmila Kassam, Deputy Chief Investment Officer, is on the Investor Steering Committee. Many public funds, such as Texas, Florida, SBA, OMERS, and TRS openly endorse the AOI guidelines.

Mr. Tull discussed the performance of the Trust and the importance of diversification of the ERS portfolio. With the current volatility in the market, Mr. Tull explained how diversification of portfolios reduces the risk in investing. When ERS started in 1947, the Investments division was only authorized to invest in fixed income. Over time, staff were allowed to invest in equities and in other asset classes as the market evolved. With the evolution comes risk and opportunity, for example currently, ERS is investing in opportunities in the alternatives sector.

Ms. Doyle continued the discussion of diversification. To illustrate diversification of the Fund, she showed a graph of the rolling 10-year historical return of gains from theoretical diversification. She showed that as time goes on equity is more volatile, but with a diversified portfolio the returns are more consistent. She then examined actual gains of the Trust due to diversification.

Diversified portfolios have evolved over time. As a result of diversification, the Trust has been able to evolve its asset allocation to produce returns in excess of 8% on a compound basis over the 25-year time period. This diversified portfolio has allowed ERS to earn market value above the S&P 500 over the long-term horizon, and supported two-thirds of retirees' annuities to be paid from Trust's investment earnings. However, contributions from the State to the Trust are still needed because investment earnings alone cannot close the gap of unfunded liability. For example, had all contributions from the State been made $2.1 billion in returns would have been generated and invested over the last 20 years.

Mr. Voss discussed the impact of risk and how it has to be balanced to maintain performance. He also discussed exploiting scale within an asset class. For example, being able to invest in hedge funds within asset classes on a tactical basis, to exploit and add value, not just have an absolute return allocation. Active exposures that benefitted the Trust in calendar year 2014 included over-weighting the U.S. market, building an internal high yield portfolio, investing in smaller private market managers with more negotiation on terms, and using exchange traded funds (ETFs), options and futures to express intentional exposures more efficiently.

Mr. Tull concluded the presentation. He said that staff manages the Trust prudently and the staff's objective is to manage the assets cost effectively and at a competitive rate of return at reasonable administrative costs net of fees. Investment staff efficiently manage the trust by: internally trading in public markets, using smaller private market managers to leverage fees, and co-investments.

Ms. Doyle began the HEK presentation of the third calendar quarter performance. She began with a look at performance in major capital markets. In the large cap, US equities had the best performance. In the US bond market, rates continue to fall, while there is a strong 15% return for treasuries year-to-date.

She moved on to the total performance of the Fund. ERS' investment performance net of fees showed that during the 2014 third calendar quarter, the Fund underperformed with a return of -0.98% and underperformed the total benchmark by approximately 4 bps. The Fund trailed the benchmark by 29 bps over the previous one-year period. Global credit, real assets, and absolute return components contributed a positive relative value. The remaining asset classes were flat or detracted from relative performance during the period.

For the quarter, positive relative performance in the global credit, real assets, and absolute return components were offset by underperformance in the global equity component, which created a negative allocation effect.

The global equity component underperformed the weighted equity benchmark due to the U.S. equity underweight to large cap equities, and manager underperformance within the international component. The domestic equity component's underweight to large cap equity relative to the S&P 1500 was a detractor and source of a negative benchmark effect over the quarter and trailing 1-year period.

During the last quarter, global credit added value due to the manager's outperformance of their benchmarks. It was the largest contributor over the trailing 1-year period and had a strong relative performance in the ERS High Yield portfolio. The real assets component appreciated 10.3% over the trailing 1-year period.

Private real estate and infrastructure produced double-digit returns during the period. The public real estate component outperformed for the quarter, but underperformed over the trailing 1-year period. The internal REIT/REOC strategy added relative value over the trailing quarter and slightly detracted over the 1-year period.

The rates component performed in line with the Barclays Intermediate U.S. Treasury Index during the third quarter and outperformed the primary benchmark by 40 bps over the trailing 1-year period.

During the third quarter, absolute return outperformed its primary benchmark by 0.5% and outperformed its benchmark by 2.8% during the trailing 1-year period.

There were no questions or further discussion, and no action was required on this item.

XXI. REVIEW AND DISCUSSION OF ANNUAL ANALYSIS OF PORTFOLIO LIQUIDITY AS OF SEPTEMBER 30, 2014

Mr. Leighton Shantz, Director of Fixed Income and Mr. Ben Bowman, Head of External Fixed Income Advisors, discussed the review of the annual analysis of the portfolio liquidity as of September 30, 2014.

Mr. Shantz began the discussion by reminding the Board of when the assets allocation changed and the Rates portfolio was created for such times when it was in the Trust's interest to sell liquidity and buy stocks as opposed to sell stocks to pay benefit payments. Mr. Shantz then turned the presentation to Mr. Bowman.

Due to the growth of the Trust's private assets, the Board required assurances that the Trust had the capacity to generate enough liquidity to cover all calls on committed capital. When liquidity was first evaluated in 2008, staff anticipated growth in private equity and private real estate assets, and have subsequently expanded to include private infrastructure as well. In the past, the Trust evaluated its liquidity by estimating its "three-day liquidity" and subsequently calculating that coverage to meet un-drawn commitments. That is the three-day liquidity divided by uncalled capital.

The Plan's total market value increased 4.2% from $24,457 million in September 2013 to $25,486 million in September 2014. However, staff estimates that available liquidity within three days fell by 2.9% due to the net effect of several portfolio allocation changes, including the transition of fixed income assets to their new mandates. The fixed income transition drove the reduction in liquidity because $1 billion in liquid investment grade ETFs were sold. The coverage ratio decreased from 5.82x in September 2013 to 4.10x in September 2014, also due to a 38% increase in uncalled capital commitments, and the 2.9% decrease in staff's liquidity. These results reflect the estimated transaction costs.

Mr. Bowman went on to discuss the new structure of the fixed income portfolios, and since the last presentation to the Joint Committee the fixed income book was separated into a Credit portfolio and a Rates portfolio. The Rates portfolio is comprised of highly liquid U.S. Government backed securities and is by design set-up as the primary source of liquidity for the Trust.

Staff believes these changes to the structure of the Trust's fixed income allocation, specifically the 15% allocation to the Rates portfolio, simplify the process of evaluating liquidity. Rates portfolio is approximately $4.9 billion whose primary investment function is as a source of liquidity; comprised of the most historically liquid and least volatile assets. The current allocation is $3.3 billion in U.S. Treasuries and $800 million in Agency MBS, the rest being lower risk transition assets. Rates covered un-drawn capital commitments by over 12x, and just the U.S. Treasury component covered it by over 8x. This analysis assumes no other liquidations of any other assets in the Trust and does not account for any income or distributions.

The new asset allocation gives portfolio managers greater freedom to seek out higher-returning assets where the compensation for "selling liquidity" can generate returns in excess of the foregone yield from the Rates allocation.

Mr. Bowman explained the benefits of this preferred methodology. The Plan aims to be conservative and to use quarterly capital calls, rather than monthly, it avoids sourcing liquidity from return seeking assets which the Trust is more likely going to want to buy, and it simplifies the calculation by having easily observable inputs and straightforward calculations. Assumptions such as the liquidity of various asset classes and market impact costs of transacting in them are eliminated. The fixed income team is philosophically consistent in having the Rates portfolio set aside primarily for providing liquidity.

Given the capital call coverage ratio of 4.10x, staff continue to believe the Trust has sufficient liquidity to fund maximum capital calls from private markets in addition to meeting its obligations for annuity payments and other costs. In this context, the proper sizing of the Rates portfolio is an important consideration, and staff believe it is appropriately sized at 19% of the Trust as of September 30, 2014, with a final policy target of 15% based on the asset allocation adopted by the ERS Board of Trustees.

Mr. Ken Mindell asked how staff plans to reduce the 19% allocation in Rates to the target of a 15% allocation. Mr. Shantz explained that the 4% is being deployed into credit. He explained that credit cannot always be deployed quickly because it is not consistently liquid or available and that staff have a conservative outlook on its present value. Mr. Mindell asked about the use of derivatives. Mr. Shantz said that the Trust is overweight in equities, so the use of Rates, rather than derivatives, to better equitize was a consideration of the Risk Committee.

There were no questions or further discussion, and no action was required on this item.

XXII. Review and Discussion of the Derivatives Program

Mr. Carlos Chujoy, Risk Management Portfolio Manager and Mr. Leighton Shantz, Director of Fixed Income began the presentation on the review and discussion of the Derivatives Program. Staff have and will continue to use derivatives per the ERS *Investment Policy* to manage portfolios and reduce risk; and implement investment strategies effectively at a lower cost.

Mr. Shantz introduced the new initiatives in the derivatives program with the utilization of exchange traded options in the Credit portfolio. ERS has utilized ETF contracts prior to the start of his tenure. Currently options trades are to enhance the implement of trades they are attempting to execute in the cash market. The focus is only on effective execution of ETFs, and involves writing options at “strikes” (prices) where staff are interested in limit orders. By using options to enhance execution, staff is able to shift the possible return distribution more in the Trust’s favor for the same desired purchases and sales.

Mr. Shantz discussed that staff assumes all contracts written will be fully assigned, and only writes them at strike prices and volatility levels it believes to be advantageous to the Trust over utilizing limit orders.[1] Options allow the Trust to earn a premium (cash payment) for its willingness to commit to execute at desired price levels. The option is beneficial versus a limit order because the Trust collects a premium for options sold, regardless of the underlying security reaching the desired transaction price level.

Mr. Ken Mindell asked if options were being sold at the underlying cost. Mr. Shantz gave an example of writing a call. He said they write a call when they believe the option is fully valued or needs to rebalance and seek a desired strike if the implied volatility is high enough. The positive aspect of options is that if the option expires out of money and is not economically viable for the holder to execute, the Trust keeps the premium.

Mr. Shantz discussed aspects of risk involved in the derivatives program. Staff may use options to hedge risks in cases where it is better to buy rather than to try to sell securities at current prices. Utilization of options effectively reduces the downside risk to the Trust. The agency gets compensated with premiums for price levels in underlying securities it has interest in transacting. All tracking error and holdings restrictions are still in place. During FY2015, staff will also continue to explore the best utilization of listed options in equities portfolios through a taskforce of members from the Public Equities team, including the traders and portfolio managers, and the Risk Management and Applied Research (RMAR) team.

Mr. Chujoy began his portion of the presentation regarding the future of the derivatives program and its effect on the Trust. Historically, futures were utilized to efficiently rebalance Trust asset exposures back to policy targets. Recently, staff covered the redemption of equities from an external manager by using futures to express an overexposure to the U.S. market versus the redemption from an international portfolio. As the U.S. market rallied, a portion of the position was sold at a 4% un-annualized profit.

During FY2015, staff will continue to evaluate the current state of information systems as the derivatives program expands study options used in the portfolio. The ERS Operations team wishes to hire an additional staff member.

There were no questions or further discussion, and no action was required on this item.

XXIII. Review and Discussion of the Risk Management and Applied Research Program

Mr. Carlos Chujoy, Risk Management Portfolio Manager and Mr. Robert Lee, Director of Hedge Funds presented the review and discussion of the Risk Management and Applied Research program. The RMAR program is used to identify and measure salient investment risks relevant to the trust, monitor those risks and respond and manage investment risks.

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[1] A limit order is an order to attempt to transact at certain price limits.

Mr. Chujoy introduced the members of the RMAR team, which supports the Risk Management Committee, as well as all the asset classes and various internal investment committees: Carlos Chujoy, RMAR Portfolio Manager; Kelley Hewell, Portfolio Manager; Stuart Williams, Portfolio Manager; and the research team: Joy Seth, and interns, Satitpong Chantarajirawong and Yu Tang.

Mr. Lee stated the voting members of the Risk Committee are comprised of: Tom Tull, Chief Investment Officer; Sharmila Kassam, Deputy Chief Investment Officer; Carlos Chujoy, RMAR Portfolio Manager; John Streun, Director of Public Equities; Leighton Shantz, Director of Fixed Income; and Robert Lee, Director of Hedge Funds. The Risk Committee will have non-voting members from the senior investment staff as needed. The Trust uses a Risk Committee to consider relevant information and to recommend actions that will either avoid negative outcomes or enhance positive outcomes. The other function is to assure that the risk constraints established by the ERS Board of Trustees (Board) in the ERS Investment Policy are being observed.

Mr. Chujoy outlined the accomplishments of RMAR over the year. Since the ERS Joint Board meeting on December 5, 2013, the RMAR team has made significant progress in the area of measurement and reporting. The RMAR team utilizes new software for their risk reporting. This new reporting software creates a "dashboard" allowing for multiple reports that serve as a way to communicate to members of the Risk Committee from a top level standpoint, risk and returns for the plan in all asset classes, all portfolios, over different time periods. The new dashboard reviews risk in various ways at the Trust level. This reporting takes into account: internal versus external management, liquidity, exposures by asset classes and return seeking versus risk reduction/liquidity assets, drawdown and excess return metrics, correlations, and stress testing.

Mr. Chujoy concluded his portion of the presentation by outlining three key changes/improvements to risk monitoring. First, there have been improvements in stress testing across all the ERS asset classes. Second, derivatives are now used for the purpose of improving implementation. And third, through the monthly asset allocation meetings, there has been improvement from the tactical asset allocation framework that was set in 2013. The RMAR team and Risk Committee will continue to improve upon and support these processes.

Mr. Lee discussed the additional roles of the RMAR team and Risk Committee. Over the past twelve months, the Risk Committee has investigated and studied the various asset classes to understand the drivers, catalysts and risk management processes for a comprehensive review of asset class risk management. Risk management at the Trust level will continually be refined by the evolving developments within the asset classes and how risk is viewed to incorporate additional tools and resources.

Another role of the Risk Committee is the response to exogenous and systematic risks that may materially impact the Trust. In October 2013, the Risk Committee reviewed the effect of technical U.S. government default on securities lending. Also in March 2014, the Risk Committee formalized a securities moratorium policy on Russia that was implemented by the CIO temporarily. Although the Russian Moratorium is not currently in place, the Investment staff is closely reviewing the conditions in Russia and Ukraine.

Mr. Lee explained that the Risk Committee also reviews the risk allocation size of new types of investments to avoid these investments from having a material impact on risk at the Trust level. These investments are still subject to official sizing and investments approval by the respective internal investment committees, which include a fixed income CLO strategy, a directional growth portfolio investment and a direct lending manager.

RMAR has pursued the FY2014 initiatives for improving Risk Committee reporting, database development and ad hoc reporting and analysis. The database development is a strategic project, identified by the Investment Division, to leverage the existing ERS Eagle PACE database (currently used for Investment Accounting) to enhance risk management processes and tools.

Although, the Risk Committee, supported by the RMAR team, is currently well equipped to monitor and analyze major risks to the Trust, every effort is being made to maintain best practices while improving internal capabilities. Investment staff along with Information Systems staff are underway in hiring a consultant and working towards evaluating the database development. After spending time with each of the asset classes for a better understanding of their risk management practices, RMAR will spend FY2015 focusing on providing specialized ad hoc reporting for asset classes, the Risk Committee and the CIO.

Ms. Caroline Cooley applauded the new risk reports and inquired about decisions that were made based upon findings from the Risk Committee. Mr. Lee said that the decision to reduce the exposure in small-cap was made by the Risk Committee. He continued that the committee was growing uncomfortable by the overweight of that exposure.

There were no questions or further discussion, and no action was required on this item.

XXIV. ANNUAL REVIEW AND CONSIDERATION OF ERS' INVESTMENT POLICY
(This agenda item was taken out of order and presented December 4, 2015.)

Ms. Sharmila Kassam, Deputy Chief Investment Officer, presented the annual review and consideration of ERS' Investment Policy.

Ms. Kassam explained that staff annually reviews the policy and recommends changes as needed. The primary purpose of the proposed revisions is to clarify certain ethics policy requirements based on review of applicable state laws and certain minor non-substantive changes.

One of the modifications to the investment policy will be updated language to clarify that when traveling to speak and/or actively participating in a conference, when approved by the Executive office, the staff member is allowed direct third-party reimbursement, as allowed under State ethics laws.

1.) 5.1 – Code of Ethics and Personal Activities
  C. Attendance at Business Meetings/Functions
    i. Change "ground transportation" to "transportation"

The second modification is erroneous references to the Texas Trust Code in five of the addendums. This erroneous reference will be deleted from the Investment policy.

2.) Delete the erroneous references to the Texas Trust Code from the listed addendums.
  Addendum I, Private Equity
  Addendum II, Real Estate
  Addendum X, Hedge Fund Program
  Addendum XII, Fixed Income
  Addendum XIII, Private Infrastructure

The floor was open for a motion that the Board of Trustees of the Employees Retirement System of Texas approve the proposed revisions to the ERS Investment Policy as presented in this agenda item.

The Board of Trustees then took the following action:

MOTION made by Ms. Cydney Donnell, seconded by Mr. Craig Hester and carried unanimously by the members present that the Board of Trustees approve the proposed revisions to the ERS Investment Policy as presented in this agenda item.

XXV. SET 2015 MEETING DATES FOR THE JOINT MEETING OF THE ERS BOARD OF TRUSTEES AND INVESTMENT ADVISORY COMMITTEE, THE MEETING OF THE BOARD OF TRUSTEES AND THE MEETING OF THE AUDIT COMMITTEE

The dates for the 2015 meetings Joint Meeting of the ERS Board of Trustees and Investment Advisory Committee, the Meeting of the Board of Trustees and the Meeting of the Audit Committee were as follows:

Joint Meeting Dates:
Tuesday, February 24, 2015
Tuesday, May 19, 2015
Tuesday, August 18, 2015

2-Day Workshop:
Thursday - Friday, December 3 & 4, 2015

XXVI. ADJOURNMENT OF THE JOINT MEETING OF THE BOARD OF TRUSTEES AND INVESTMENT ADVISORY COMMITTEE

The December 5, 2014 Joint Meeting of the ERS Board of Trustees and Investment Advisory Committee adjourned at 3:25 pm.