Joint Meeting of the Board of Trustees and Investment advisory Committee

Minutes – May 23, 2018

ERS
Employees Retirement System of Texas

August 29, 2018

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

ERS Building – Board Room
200 E. 18th Street, Austin, Texas 78701
May 23, 2018 – 8:00 a.m.

TRUSTEES PRESENT
Doug Danzeiser, Chair
Cydney Donnell, Vice-Chair
I. Craig Hester, Member
Ilesa Daniels, Member
Catherine Melvin, Member

TRUSTEES ABSENT (Excused)
Jeanie Wyatt, Member

IAC PRESENT
Caroline Cooley, Chair
Ken Mindell, Member
Didi Weinblatt, Member
Gene Needles, Member
Bob Alley, Vice-Chair

IAC ABSENT
James Hille, Member
Laura Starks, Member
Lenore Sullivan, Member
Mari Kooi, Member

ERS STAFF PRESENT
Porter Wilson, Executive Director
Catherine Terrell, Deputy Executive Director
Paula A. Jones, Deputy Executive Director and General Counsel
Aaron Ismail, Investment Compliance
Adam Cibik, Investments
Amanda Burleigh, Investments
Amy Cureton, Investments
Anthony Curtiss, Investments
Betty Martin, Investments
Beth Gilbert, Internal Audit
Bernie Hajovsky, Executive Office
Brannon Andrews, Office of General Counsel
Carlos Chujoy, Investments
Cheryl Scott Ryan, Office of General Counsel
Christi Davis, Customer Benefits
Darren Hughes, Investments
DeeDee Sterns, Director of Human Resources
Gabrielle Schreiber, Director of Procurement and Contract Oversight
Jennifer Chambers, Director of Governmental Relations
John Streun, Investments
Juli Davila, Investments
Kathryn Tesar, Director of Benefits Communications
Keith Yawn, Director of Strategic Initiatives

Kelley Davenport, Executive Office
Ken McDowell, Investments
Leah Erard, Executive Office
Leighton Shantz, Investments
Leticia Davila, Investments
Machelle Pharr, Chief Financial Officer
Michael Shoop, Investments
Pablo de la Sierra Perez, Investments
Peter Ehret, Investments
Ricardo Lyra, Investments
Robert Sessa, Investments
Robin Hardaway, Director of Customer Benefits
Shack Nail, Special Projects and Policy Advisor
Sharmila Kassam, Deputy Chief Investment Officer
Susie Ramirez, Executive Office
Tanna Ridgway, Investments
Tom Tull, Chief Investment Officer
Tony Chavez, Internal Audit
Travis Olson, Investments
Wesley Gipson, Investments

VISITORS PRESENT
Aaron Haftl, Aon Hewitt
Bill Hamilton, Retired State Employees Association
Christy Fields, Pension Consulting Associates
David Glickman, Pension Consulting Associates
Katy Fallon-Brown, Legislative Budget Board
Louellen Lowe, Legislative Budget Board
Steve Voss, Aon Hewitt Investment Consultants
Stuart Greenfield, Self
Tiffany Calderon, Humana

2. Joint Meeting of the ERS Board of Trustees and Investment Advisory Committee

1. CALL TO ORDER

1.1 Call Meeting to Reconvene the Board of Trustees

Mr. Doug Danzeiser, Chair of the Board of Trustees (Board) for the Employees Retirement System of Texas (ERS), called to reconvene with the Investment Advisory Committee to take up the following joint Board of Trustees and Investment Advisory Committee agenda items (IAC).

1.2 Call Meeting of the Investment Advisory Committee to Order

Ms. Caroline Cooley, Chair of the IAC for ERS, called the meeting to order and read the following statement:

> A public notice of the Joint Meeting of the ERS 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 8:31 a.m. on Friday, May 11, 2018 as required by Chapter 551, Texas Government Code, referred to as "The Open Meetings Law."

2. MINUTES

2.1 Review and Approval of the minutes to the March 7, 2018 Joint Meeting of the Board of Trustees and Investment Advisory Committee meeting – (Action)

Ms. Caroline Cooley, IAC Chair, opened the floor for a motion on the approval of the minutes from the March 7, 2018 Joint Meeting of the Board and IAC.

The IAC then took the following action:

> **MOTION** made by Mr. Gene Needles, seconded by Mr. Bob Alley, and carried unanimously by the members present that the Investment Advisory Committee of the Employees Retirement System of Texas approve the minutes of the Joint Meeting of the Board and IAC held on March 7, 2018.

The Board of Trustees then took the following action:

> **MOTION** made by Mr. Craig Hester, seconded by Ms. Catherine Melvin, and carried unanimously by the members present that the Board of Trustees approve the minutes of the Joint Meeting of the Board of Trustees and Investment Advisory Committee held on March 7, 2018.

3. ERS INVESTMENT POLICY

3.1 Review of ERS' Investment Policy

Mr. Tom Tull, Chief Investment Officer, Sharmila Kassam, Deputy Chief Investment Officer, and Mr. Steve Voss, Aon Hewitt Investment Consulting (AHIC), presented information on the investment policy.

Mr. Tull noted that at the last meeting Aon presented on best practices of investment policies. The investment policy is the guide for the Trust's asset allocation, the system's delegation of authority, and investment program governance. The objective of the discussion was to receive guidance from the Board as to how they would like to structure the investment policy.

Mr. Voss thanked the Board, IAC, and ERS staff for their engagement and participation in the survey on the ERS investment policy. He noted that Aon sent questionnaires out to staff and the IAC, and held phone calls with all the Board members, and received a remarkable amount of feedback.

Mr. Tull noted that ERS' investment program has significantly evolved. He noted that in 2006, ERS had two asset classes. Today, the trust has eight asset classes, which brings complexity to policies and procedures. He noted the investment policy documents have gone from 22 pages including addendums to the current policy which has more than 250 pages including addendums. He noted that staff have also expanded with approximately 30 employees back in 2006, to more than 70 employees. The delegation of authority to staff has increased allowing them to be more tactical, and providing them ability to take advantage of opportunistic situations as they arise.

Mr. Voss noted that ERS is a very large organization. ERS is approaching $30 billion in aggregate assets. He reiterated Mr. Tull's comments that ERS is far more diversified, and far different than it was a number of years ago. He noted that complexity is something that ERS has to live with, and that a good approach is to work to define the complex policies and procedures in the simplest terms possible, so that all stakeholders have a very clear understanding. This can ensure that there is little ambiguity between ERS staff, including investment staff and the Board.

Mr. Voss presented the results of the investment policy survey. In general there is a good amount of consensus in a variety of different areas. One area of consensus is that there is a fair amount of redundancy in the policy since the policy has evolved over many years with input from many different stakeholders over the years.

Another common theme was a willingness by survey respondents to explore the notion of a principles-based policy versus a rules-based policy. He noted that one challenge for the policy to develop into a principles-based approach is to find the level of detail that gets the Board, IAC and staff comfortable with the document.

Mr. Voss explained that many survey respondents expressed the need for clarity on risk management. Another item was delegation of authority. One Board member asked for a table to summarize the responsibilities of the Board, the IAC, and staff. There were also suggestions on how ERS can make the document more approachable for external stakeholders who are not investment professionals. One idea is to create an executive summary to distill things down to key common elements of the investment program.

Mr. Voss said that the Board feels comfortable with their understanding of the current investment policy. However, there was a fair amount of commentary on the lack of clarity as it relates to the asset class guidelines. He noted there is less familiarity with the guidelines with 90% of IAC members and 70% of staff believing that the asset class guidelines should be removed. He noted the guidelines are considered redundant.

One of the survey questions was "Is the policy as it exists today, burdensome or does it inhibit innovation?" Responses showed 62% of the investment staff indicating that current policy creates a burden, and 38% believe that it prevents innovative investment solutions. He noted that 38% of the senior investment team doesn't feel that they have the right tools in place to be innovative, and that's something the Board and IAC should seek to address.

Mr. Craig Hester asked for some examples of burdens that staff mentioned.

Ms. Sharmila Kassam, Deputy Chief Investment Officer explained that there were limited examples and comments in the survey. Ms. Kassam and Mr. Tull will follow up with senior team members to clarify any concerns.

Ms. Kassam noted one concern is when investment strategies and investment asset classes become more modernized, there is some blending of concepts. For example, hedge funds and private equity may find certain strategies blending, and there are rules in the investment policy that may not address the evolving nature of some of these investment strategies and markets. She noted other examples are issues around process. She noted the discussion for this agenda item is currently about the investment policy itself, but processes will need to be addressed in a future setting.

Ms. Kassam noted the landscape of ERS asset classes and investments in general have changed and some of the IAC members, and the Board, may recognize that it is becoming more difficult to operate different investment portfolios and strategies separately.

Mr. Voss noted that some elements in the main body of the IPS may conflict with elements in the guidelines. This is likely the result of a document that has been worked on by many different people over a long period of time which can create possible areas of ambiguity and confusion for staff.

A majority of participants in the survey responded that they would seek to go to a more principles-based versus rules-based investment policy. He explained the basic differences between rules-based and principles-based policy. He noted that Aon is not advocating to eliminate all rules-based policies, but limit it to areas where it is necessary to spell things out specifically

Mr. Voss noted that a principles-based policy would have higher-level guidelines, which would require calling upon judgment and expertise of professionals throughout the agency. He noted this is where clients have had success making investment decisions more collectively and more broadly across the organization.

Ms. Cooley asked if ERS adopted a principles-based investment policy, what would be used to guide staff in terms of goals, diversification, credit quality, and liquidity profile at the overall plan level. Mr. Voss clarified that Aon does not envision getting rid of every rule, which would create a lot of confusion in the organization. He noted there is a continuum of rules that are detailed, very clear, and unambiguous, that can be tested and reviewed, that could be reported to the Board and IAC as staff does now. The policy could then have the general principles of an asset class with defined benchmarks.

Mr. Mindell commented that one advantage to principles would be in risk management and hedging, where it is very hard to have definitive, rules-based parameters.

Ms. Kassam reiterated that investment staff have internal procedures and internal guidelines within the policy, which get into the granular detail needed to manage the portfolio.

Mr. Hester noted that trustees have two responsibilities in regards to the policy and the portfolios. The first responsibility is to monitor whether staff is generating competitive returns and the second is to monitor if they are taking excessive risk to get those returns. He noted that risk management is one of his priorities as a Trustee on this Board.

Ms. Kassam said that a principles-based policy requires staff to provide reporting that is both concise and complete to give the information required for robust Board and IAC oversight. She noted that level of accountability is very much still what the Board and the IAC expect.

Mr. Danzeiser asked what level of involvement Internal Audit had in these discussions. Mr. Voss confirmed that Internal Audit and Investment Compliance has been involved and provided great feedback.

Ms. Kassam noted that some aspects of the auditing and compliance function will have to evolve with a principles based policy.

Ms. Cooley noted that in her conversations with investment compliance, a large part of the discussion was how does compliance feel about the options and how do they audit against it? She explained a more principles based policy actually allows them to audit for the intention.

Mr. Voss noted common themes among survey respondents were readability and understandability of the document and that both could improve. Other concerns included the size of the document, the asset class guidelines, and risk management.

Mr. Voss solicited guidance in terms of how the Board and IAC would like for the group to spend the time going forward. Following discussion, it was determined that ERS would form a steering committee with membership from the Board and IAC.

Mr. Tull discussed the timeline for this implementation being at least a year.

Ms. Kassam noted investment staff will produce a roadmap for discussion at the August meeting, once staff gets guidance from the steering committee.

Mr. Needles asked for feedback from Aon's experience from doing a rules-based to a principles-based for some clients and the lessons learned in that process. Mr. Voss noted that most of it relates to how to deal with internal audit and compliance, and how to create clarity, and that's in part why it can be a lengthy process. There were no questions or further discussion, and no action was required on this item.

4. INVESTMENT PERFORMANCE

4.1 Review of Investment Performance for the First Calendar Quarter of 2018

Ms. Sharmila Kassam, Deputy Chief Investment Officer, and Mr. Steve Voss, Aon Hewitt Investment Consulting (AHIC), presented the investment performance for the first quarter of 2018.

Mr. Voss provided an overview of fiscal year to date performance and noted that returns were some of the best since Aon has worked with the Trust. The total fund generated a return net of fees of 5.4%, compared to the benchmark of 4.1%, with a total excess return of 1.3%. He also noted that for the one-year period ending March 31, 2018 every asset class has added to performance. He further explained that the plan continues to be highly liquid and in compliance with policy.

Mr. Voss then explained that for the one-year period the Trust’s value began at $26.3 billion and ended at $28.2 billion. During the period there were net benefit payments of about $1.2 billion, and investment earnings of about $3.2 billion that were a result of market beta and consistent alpha from the investment team. He noted that the overweight in global equities and underweight in fixed income have added to performance. He then explained that the one year 12.2% return of the total fund exceeded the 9.4% gained by the benchmark and provided 277 bps of alpha. Mr. Voss went on to explain that this was the largest positive one-year return in over 20 years. He remarked that it was impressive that the investment team was able to achieve alpha on a 0.94 beta. He then explained in detail the excess return calculations for the trust and noted that the investment team’s decision to be overweight in global equites and underweight in rates added roughly 55 bps to the year’s returns.

Mr. Voss presented return and risk information on a three and 10-year basis and explained how the fund’s sophistication has paid off and could be seen in the level of risk taken. The decision to diversify into private equity, infrastructure, and real estate has added to returns and has reduced risk in the fund. He then noted that when looking in the past, there has never been a time where this magnitude and consistency of returns has happened, other than the 2008 financial crisis.

Mr. Ken Mindell commented about 2017 being one of the lowest volatility markets and asked how much the low volatility environment impacted results to allow the 2.8% outperformance.

Mr. Voss explained that in a low total risk environment staff has increased active risk methodically over time based on dialogue from the IAC. This was achieved by making active decisions of overweighting certain niche asset classes and underweighting other areas within asset classes, which contributed to alpha. He then remarked that staff have the tools and techniques to take a higher level of risk and it has paid off.

Mr. Gene Needles commented that a lot of active managers struggled in the low volatility environment because they needed the volatility and less correlation among individual holdings to achieve alpha. He also noted that in his opinion it was remarkable that staff achieved these returns in a period of low volatility.

Ms. Cydney Donnell commented about risk during a recent down quarter and mentioned that underperformance would have been a result of levels of risk. She noted that she was pleased with the outperformance.

Mr. Voss presented information on long term returns and noted that since the fund has long term liabilities, the allocation is geared towards equities. He then explained how over the last 10 years the fund has benefited from new asset allocation tools. He then discussed in detail the rolling 10-year period of returns versus the policy benchmark and the public benchmark with the assumed rate of return of 7.5%. He mentioned the fund performed well during the late 1990s bull market and noted recent performance has been trending upwards, closer to a rolling 10-year period in excess of 7.5%. He further explained that long term rolling 10-year period returns exceed the public benchmark and were ahead of the policy benchmark.

Mr. Voss summarized the presentation by explaining the quarter was good despite volatility in the capital markets. He reaffirmed the strength of the one-year returns and noted the investment team added $728 million in incremental value for the past 12 months. He noted that this was done without taking an undue level of risk.

PUBLIC TESTIMONY

Mr. Stuart Greenfield (State of Texas Retiree), presented public testimony with regards to the performance of the fund. He expressed concerns that his real purchasing power has declined by a third, and he believes that a different asset allocation would provide better fund performance at a lower cost.

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

5. FIXED INCOME PROGRAM

5.1 Market Update and Program Overview

Mr. Leighton Shantz, Director of Fixed Income, Mr. Peter Ehret, Director of Internal Credit, and Ms. Leticia Davila, Rates Portfolio Manager, presented the market update and program overview for fixed income.

Mr. Shantz outlined the fixed income annual review, and provided background information for the Rates and Credit portfolios. Rates is the liquidity backbone for the Trust, and Credit is part of the return-seeking allocation. Credit is intended to earn a better risk-adjusted return.

Mr. Shantz noted that the Rates and Credit portfolios have combined for an excess return over their respective benchmarks as of the end of March worth $105 million. Of that total, $41million is attributed to the rates portfolio, managed by Ms. Davila and Mr. Tom Roberts, and $64 million in Credit, evenly divided between the external and internal portions. Mr. Ehret and team manage the internal portion.

Mr. Shantz explained that the Rates and Credit portfolios invest in different asset classes. The range of returns between Rates' benchmark's highest and lowest observed annual return is approximately 550 bps versus more than 3000 bps for Credit. He emphasized that although the mandates are both fixed income, they serve vastly different purposes for the Trust, with Rates as a risk reducer and Credit as a return seeker.

The credit benchmark is the Bloomberg Barclays US High Yield 2% Issuer Cap TR Index, and the benchmark for the rates portfolio is the Bloomberg Barclays US Intermediate Treasury TR Index. In both portfolios the average annual return is currently higher than the benchmark. Rates has been remarkably consistent in generating excess returns over the benchmark and cumulatively has an excess return of 100 bps. Credit's cumulative excess return is approximately 450 bps, returning over 32% versus the benchmark's almost 28%. He noted that when looking into excess return, it is necessary to consider the risks taken.

Mr. Shantz reminded the Joint Committee that ERS Investment Policy states Credit has a maximum tracking error of ±300 basis points to its benchmark. He noted that staff have remained in compliance with the risk budget from inception to date. He further noted that 94% of Credit's return (its R-squared) is explained by its benchmark's performance. Credit's beta is 0.84, which is the measure of the portfolio's systematic sensitivity to the performance of the benchmark. Thus for every 100 bps in benchmark return, the Credit portfolio on average has moved 84 bps. Credit has an alpha of 13.4 bps, which is the excess return independent of the benchmark. Mr. Shantz explained that the approximate 13.4 bps per month in alpha annualizes to 160 bps per year. He noted that staff achieved the excess without taking undue risk or violating policy in both portfolios.

Mr. Shantz discussed the allocation of funds in the fixed income portfolios. The Credit mandate is primarily comprised of the internal high yield portfolio, which makes up around two-thirds of its $3 billion in assets. He noted the resources devoted to internal management are viewed as a competitive advantage for ERS efforts. Staff use the information gained from its active participation in the markets to identify external opportunities that are deemed more likely to succeed. He noted the remaining billion in Credit is approximately $450 million in ETFs, and eight additional allocations, which comprise the remaining $550 million.

Mr. Shantz noted seven of the eight external allocations are draw-structured commitments. Staff prefer draw structures in credit to ensure the liquidity of the asset matches the liquidity of the investment vehicle and to avoid any investor being able to redeem before an investment had the opportunity to run its full course. The un-drawn commitments of Credit were approximately equal to its ETF allocation.

Mr. Ehret presented an update on the credit portfolio. He noted the portfolio began as a Greenfield effort approximately four and half years ago and has gone from zero to about $2 billion in assets. The internal portfolio has produced excess returns while taking a reasonable amount of risk. Currently the portfolio is a bit under-risked compared to its benchmark's as measured by the allocation to the lowest rated credits, yield, and credit spread.

Mr. Ehret discussed the benchmark, and how the credit benchmark is not investable since it tracks the performance of high yield corporate bonds and does not take into account trading costs, so when analyzing the outperformance there is additional value added to the measurement.

Mr. Ehret noted he is pleased to report the program has ramped up without problems. It has gone very smoothly in terms of performance. There have been no trading or compliance issues. The back office has worked very well to make it a success. He noted there is a lot of operational intensity to the process, such as dealing with consents and corporate actions, and the group that handles those aspects has done really well.

Mr. Ehret discussed current positioning for the high yield portfolio. He commented that staff continue to hold the risk positioning slightly below the benchmark's. Staff monitor risk in a multiple ways, such as tracking error and model beta. He noted the model beta of the portfolio is around 0.85 or 0.9 to the benchmark. Staff also looks at credit ratings. Liquidity in the high-yield market is often challenging, so the team has to be careful about the pacing of changes to both the portfolio and benchmark.

Mr. Ehret explained that one thing the team is concerned about is a flattening yield curve. He noted flattening increases costs for highly levered companies, and the companies in the portfolio have borrowed a lot of money. When rates go up, it squeezes levered long positions in the asset class as well.

Mr. Ehret discussed staffing of the high yield team. He noted the team are happy they were able to recruit Darren Hughes to join. He noted there is an ongoing search for the vacant analyst position.

Mr. Ken Mindell asked for a comparison between the fee structure for external managers and an internal management staff.

Mr. Shantz explained that when he arrived at ERS the only high-yield exposure that existed was in 2012, which was Fountain Capital Management. The allocation from ERS was a material portion of Fountain's assets, and that he understood the allocation was a part of their founding. Their management fee structure was 28 bps, which was considered below market. If one looked at the passive high yield

ETF “HYG”, which is the de facto liquid alternative, it has a management fee of 50 basis points. ERS’ average cost for this program is currently 12 bps.

Mr. Ehret noted the team is managing internal active portfolio for less than an external passive one.

Ms. Davila provided an update for the rates portfolio. The objective of the rates portfolio is to provide liquidity and to preserve capital. The portfolio is primarily comprised of treasuries and it's benchmarked to the intermediate treasury index. From inception through March 2018, the portfolio outperformed its benchmark by about 100 basis points. The portfolio has a tracking error of about 10 basis points, which is well below the 50-basis-point policy limit, with an R-squared of 0.99.

Ms. Davila noted that 99% of the portfolio's returns can be explained by the performance of its benchmark. On average, the portfolio delivered over two basis points of alpha or excess returns, which is over 20 basis points on an annual basis. With a 0.96 beta, the portfolio is producing excess returns at a similar or slightly better risk profile as the benchmark. In terms of market outlook, Ms. Davila noted the team is optimistic on the economy. They expect to see inflation increase pretty gradually, and staff are biased towards higher rates and a flatter curve.

Ms. Davila noted the team is looking for at least two more hikes by the Fed this year, which would result in a year-end, upper-band, Fed funds rate of 2.25%. In terms of the portfolio positioning, the team has been mindful of curve exposures, taking advantage of some pretty attractive short-end rates and more selective when they are extending out on the curve.

Ms. Davila explained the team is expecting over $1 trillion of net supply in each of the next two years. That is over two times 2017’s net issuance, and takes the government back to 2009-2010 levels. The team thinks that treasury prices are going to have to drop and yields increase in order to entice investors to come in and absorb additional supply.

Ms. Davila noted that the portfolio has a duration of approximately 3.7 years overall, with the mortgage component duration longer so the Treasuries are shorter to off-set them. The portfolio has a little shorter duration compared to its benchmark.

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

5.2 Review of Securities lending program

Mr. Leighton Shantz, Director of Fixed Income, presented the review of the securities lending program.

Mr. Shantz said ERS has an intrinsic value securities lending program. Currently, intrinsic value is defined as 41 basis points of spread over the Overnight Bank Funding Rate (OBFR). This is an index or a rate published by the New York Federal Reserve Bank that is a volume-weighted combination of Fed funds and overnight Eurodollar time deposits.

Mr. Shantz noted two important traits to the program; the lending agent indemnifies ERS against all losses caused by the failure of a counterparty to return a security and also against losses in collateral invested in REPO. REPO stands for a “repurchase agreement”, where the lender of cash effectively buys a bond with an agreement of the seller to repurchase it with the proceeds of the loan, plus interest. The two price differences equals the interest. ERS allows its securities lending agent to invest collateral only in overnight government REPO. This is an unusual limitation for most securities lending programs.

Mr. Shantz described the return for each loan is a very small spread. However what the program is trying to do is maximize the risk-adjusted return, rather than the revenue. It believes it does this by taking very little risk. He noted when both indemnifications are from one counterparty, the obligation is to watch that counterparty carefully. Staff monitors the credit default swap spread of the lending agent as a risk management tool. The agent’s CDS is a live market-facing, reactive, real-time indication of what the market thinks about the lending agent's credit risk. If CDS spread starts widening or goes too wide, then the program is temporarily stopped.

Mr. Shantz noted that ERS suspended the securities lending program in 2016 when CDS indicated that risks were elevated disproportionately to the returns the program could generate. The program has subsequently been fully restored, and currently demands at least a spread of 41 basis points over OBFR. Revenue for the fiscal year-to-date for the program is just under $3.3 million, on-track with prior years and expected to finish the year with around $5.5 million in revenue. He noted the amount of lending, or utilization, is unusually low. Currently $410 million is outstanding compared to $1.4 billion when he began working at ERS. This lower amount of lending is intentional.

Lastly Mr. Shantz pointed out that since the Fed began hiking short-term rates, the composition of the program’s revenue has switched from primarily rebates to the collateral.

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

6. REAL ESTATE PROGRAM

6.1 Market Update and Program Overview

Mr. Robert Sessa, Director of Real Estate, Ms. Amy Cureton, Real Estate Portfolio Manager, Mr. Tony Cardona, Real Estate Portfolio Manager, Ms. Christy Fields, Managing Director – Pension Consulting Alliance, and David Glickman, Managing Director – Pension Consulting Alliance, presented the market update and program overview for real estate.

Mr. Sessa explained that the real estate program is made up of both private real estate and public real estate. Private real estate has about a 70% weighting and public real estate has about a 30% weighting. The overall portfolio target weight is 12%. The portfolio is currently underweight at 9.4%. Private real estate is more underweight, a function of the just recently increased allocation. On the public real estate side, the underweight is primarily a function of an intentional view of the market, and staff are currently assessing the market to cover that underweight, which could happen in the next few months or quarters.

Mr. Sessa gave an update on the team, noting that real estate has a very strong team, and he acknowledged some other people that are definitely instrumental to the success of the program such as the legal team, operations, the administration team, and the Office of Procurement and Contract Oversight (OPCO). He noted it is important to acknowledge them, because it is part of the whole process and they are instrumental in helping get over the finish line and be successful.

Mr. Cardona presented an update on the public REIT program. The total value of the REIT portfolio is $720 million, which is comprised of the U.S. REIT portfolio at 49% of total and the international REIT portfolio at 51%. The distribution on a geographic basis shows the U.S. represents 47% followed by Asia at 30%, continental Europe at 13%, the U.K. at 5%, and other at 5% regionally. The FTSE EPRA/NAREIT developed index Asia represents a 2% overweight and North America represents the largest underweight at 4.9%.

Mr. Cardona noted cumulative excess total returns since the inception of the program as of March 31, 2018 were 67 bps. The domestic REIT, cumulative excess return was 68 bps, and the international REIT portfolio was 31 bps of outperformance. The two geographies that were principal drivers of the performance were Japan and continental Europe, whereas the U.S. detracted. On a five-year basis, the total effect, shows 9 bps of outperformance, which is driven principally by stock selection. Virtually all geographies contributed to attribution with the exception of Hong Kong.

Mr. Sessa moved into the private real estate update, which is about 70% of the overall real estate book. He noted the overall debt ratio; with the leverage of the portfolio around 50%, well below the policy limit of 65%. He noted that the team was in compliance with all guidelines. For the fiscal year to date ending March 31, the portfolio received $100 million more in distributions than were called. Unfunded commitments as of March are around $715 million.

Ms. Cureton presented further information on the private real estate portfolio. All allocations for private real estate are currently within ERS policy limits. Residential remains the largest overweight, which includes traditional multifamily, with diversified exposure through some other residential property types, including student housing, senior housing and manufactured housing. Staff has reduced the overweight to Industrial, which makes the portfolio closer to a neutral weight for the time being.

Ms. Cureton explained that fundamentals for the industrial sector have remained very strong, but staff has some concerns about stretched valuations and protectionist policies. The team expects to remain neutral going forward. Strategic underweights for the portfolio are in office and retail, but staff are definitely looking selectively and tactically to add exposure there when it makes sense.

Ms. Cooley asked if the private portfolio was merged with the public portfolio, if the weightings would change significantly.

Mr. Sessa noted that it is really challenging to blend all of the asset weightings, and the team has thought of doing that. The listed side is moving at a different pace than the private side, and so the team always looks at that for comparison. He noted that the team has a similar view on the public side, but sometimes they're moving a little differently. Staff is a little bit more favorable in office properties on the listed side as it is showing a little bit better relative value.

Mr. Sessa explained in terms of retail, the team is being selective because they think there are some great opportunities out there, but it's not a broad-based set where one can just buy and probably make money. He noted there are true structural issues in this space that the team needs to be aware of in making sure we're not buying a wrong asset or an asset that truly is a value trap.

Mr. Tull commented that the team recognizes the REITs are challenged at the present time in the marketplace and the team is revisiting. He noted that staff has to be cognizant of the fact we are also invested in REITs to some extent in some of the other portfolios within the Trust, so we need to keep it in balance before we recover or get back to a full market weight. He noted as of now there's no hurry, and the team is evaluating.

Ms. Cureton described geographic weights of the portfolio with international representing about 23% of the current portfolio. The team is continuing to focus on growing the international exposure, particularly with new commitments in Asia. Staff are also selectively evaluating potential new investments in U.K. and Europe and eventually in South America.

Ms. Cureton noted that ERS tracks various amenities that are value drivers in real estate and in demand from tenants. LEED certification and Walk Score are just two of the most widely adopted metrics in the space, and based on the studies, seem to produce some long-lasting return premiums. LEED, (Leadership in Energy and Environmental Design) is a green-building rating system measuring different components of sustainability and energy efficiency. There are four levels, with platinum being the highest. ERS' select portfolio has 16% LEED-certified properties. She noted that in terms of walkability, the portfolio scores very well at 40% of the select portfolio scores above 70, which is very walkable.

Ms. Christy Fields presented the inaugural presentation for Pension Consulting Alliance and provided a market update for real estate from the consultant's perspective.

Mr. Glickman explained from a broad market perspective, PCA shares much of staff's reasoning. To summarize the market in all three major geographic regions and in all property types, he noted a very simple phrase, nothing's cheap. There is tension between the desire to get to the recently increased interim commitment target, and retaining the right amount of discipline on the other, and so far, that's been maintained in the portfolio.

Mr. Glickman noted the space markets globally are pretty close to equilibrium right now. There is not a lot of excess supply, and while construction has increased compared to the first years after the global financial crisis there's still a reasonable amount of discipline and underwriting that's been done by the construction lenders. With few exceptions, PCA has not seen a huge burst of oversupply in almost any property type in almost any market.

Mr. Glickman discussed the financial real estate markets, leveraged businesses, regulations, interest rate effects, current income assets, and general market conditions with regards to the real estate market. He noted that real estate is a leveraged business and firms can still borrow money at reasonable rates and in reasonable amounts, and PCA would expect that for the next year or two with the amount of capital that is available on the sidelines, firms are going to be able to continue to invest.

Ms. Fields noted that staff have been able to deploy capital relatively aggressively and successfully and have strong performance to date. ERS is now at a point where some of the closed-end funds are mature, seasoned and are returning capital that the team needs to reinvest. She noted in the current market environment, when the team needs to continue to ramp up underwriting activities, they should do so in a very disciplined and thoughtful way.

Ms. Donnell commented that one other thing that needs to be addressed is the fact that construction costs have gone up tremendously. She noted that there are projected to be 15% to 20% increases this year, on top of 10% to 15% the prior year.

Ms. Cooley asked where the portfolio could find value given that it is an expensive market. Mr. Glickman noted PCA would support increasing or considering increasing the domestic REIT positions; simply because PCA believes there is a discount to be captured over time between the

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

6.2 Consideration of Proposed Real Estate Annual Tactical Plan for Fiscal Year 2018 – Fiscal Year 2019 – (Action)

Mr. Robert Sessa, Director of Real Estate, and Mr. Adam Cibik, Real Estate Portfolio Manager, presented the proposed real estate annual tactical plan for fiscal year 2018 – fiscal year 2019.

Mr. Sessa noted that the tactical plan is used as a guide, and it is not to be blindly followed. It is not meant to be overly prescriptive and is intended to give staff some guidelines and set the stage, but the team continues to monitor market conditions. The real estate portfolio is currently 6.9% of the trust, with a 9% long term target. The team has set an internal target of 8% within the next year.

Mr. Cibik said the team has focused on the non-core space, with one small core commitment for this fiscal year in retail. Ultimately, the portfolio is expected to be near the top band of the real estate allocation or around $787 million, as indicated to the Board and IAC last year.

Mr. Cibik noted that most of the new commitments in the coming months will be in the non-core space. The fiscal year 2019 tactical plan continues the trend of an underweight to core with most of the focus on the non-core space. The team is going to remain very constrained in the core space for the next couple of years although it plans to retain flexibility in order to re-enter the core space in the future. .

Mr. Cibik noted the team is still going to target about $500-550 million of new commitments each year going forward to balance with money that is returning to the portfolio. The team does not know precisely when assets will be sold and distributions will be received, so they are going to try to keep it at that steady state. Currently it is around 20% to 30% income.

Mr. Sessa noted that core properties are buy and hold, and so the portfolio is looked at more from a perspective of IRR and yield. For non-core, it would be anywhere from 1.5 to 2 times. If it is debt, it is probably going to be more in the 1.2 to 1.5 times, depending on the duration of the loans. On the non-core equity side, 1.5 to 2 times depending on the portfolio risk. So the team seeks good ideas that fit within the portfolio. The team is de-risking the portfolio with a variety of property types.

Mr. Danzeiser asked if commitments and capital proposed for the coming years are really the focus of what is the essence of the tactical plan to you.

Mr. Sessa confirmed that the total capital to be deployed is the most important thing as those are big decisions about putting money to work. Another important component is the weighting relative to the target weighting. The team has found that trying to be too prescriptive on the number of deals may be, disingenuous.

Mr. Tull also noted it is a pretty dynamic environment and times can change dramatically so it is better to have a more generic number of deals as a target.

Ms. Caroline Cooley, IAC Chair, opened the floor for a motion on the approval of the proposed real estate tactical plan.

The IAC then took the following action:

MOTION made by Mr. Ken Mindell, seconded by Mr. Gene Needles, and carried unanimously by the members present that the Investment Advisory Committee of the Employees Retirement System of Texas approve the ERS real estate portfolio annual tactical plan for fiscal year 2018 to fiscal year 2019, as presented in Exhibit A to be Appendix A of the ERS Real Estate Guidelines and Procedures.

The Board of Trustees then took the following action:

MOTION made by Ms. Cydney Donnell, seconded by Ms. Catherine Melvin, and carried unanimously by the members present that the Board of Trustees approve the ERS real estate portfolio annual tactical plan for fiscal year 2018 to fiscal year 2019, as presented in Exhibit A to be Appendix A of the ERS Real Estate Guidelines and Procedures.

7. CALENDAR

7.1 Set date for the next Joint meeting of the ERS Board of Trustees and Investment Advisory Committee, the next meeting of the Board of Trustees and the next meeting of the Audit Committee

The date for the next meeting is scheduled for Wednesday August 29, 2018. There will be a two-day workshop held on Tuesday – Wednesday, December 11-12, 2018.

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

8. ADJOURNMENT

8.1 Adjournment of the Joint Meeting of the Board of Trustees and Investment Advisory Committee and recess of the Board of Trustees.

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

8.2 Recess of the Board of Trustees. Following a temporary recess, the Board of Trustees will reconvene to take up the remaining Board agenda

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