NEW MEXICO

PUBLIC EMPLOYEES RETIREMENT BOARD

INVESTMENTS COMMITTEE MEETING

March 31, 2016

This meeting of the Public Employees Retirement Board Investments Committee was called to order by Chair Dan Esquibel, at approximately 9:00 a.m. on the above-cited date in the PERA Building, 33 Plaza La Prensa, Senator Fabian Chavez Jr., Board Room, Santa Fe, New Mexico.

1. Roll call was preceded by the Pledge of Allegiance. A quorum was established with the following members present:

Members Present:
Dan Esquibel, Chair
Dan Mayfield, Vice Chair
Paula Fisher
Patricia French
Loretta Naranjo Lopez
John Reynolds

Member(s) Excused:
None

Other Board Members Present:
Brad Winter
Tim Eichenberg
James Maxon
Jackie Kohlasch
Cathy Townes

Staff Members Present:
Wayne Propst, Executive Director
Susan Pittard, Chief of Staff-General Counsel
Jon Grabel, Chief Investment Officer
Greg Trujillo, Deputy Director/Chief Information Officer
Karen Risku, Deputy General Counsel
Renada Peery-Galon, ASD Director
Natalie Cordova, Chief Financial Officer
Misty Braswell, Assistant General Counsel
David Dana, Assistant General Counsel
Jude Perez, Deputy CIO
Joaquin Lujan, Director of Rates and Credit
Danna Varela, Executive Assistant

Mark Montoya, Financial Analyst
Kristin Varela, Portfolio Manager
Emily Lopez, Financial Specialist
Karyn Lujan, Deferred Compensation Plan Manager
Christine Ortega, Portfolio Manager
Lalleh Dayeny, Investment Division

Others Present:
Paul Lium, Nationwide
Thomas Toth, Wilshire
Stephen Marshall, Wilshire
Mark William, Cliffwater
Jonathan Craven, Cavanaugh Macdonald
John Garnett, Cavanaugh Macdonald
Don Wencewicz, AFSCME Retiree

2. APPROVAL OF AGENDA

Mr. Mayfield moved to approve the agenda as presented. His motion was seconded by Ms. French and passed by unanimous [6-0] voice vote.

3. APPROVAL OF CONSENT AGENDA

Chair Esquibel said he reviewed the minutes and they were accurate.

Mr. Mayfield moved to approve the consent agenda and Ms. French seconded. The motion passed by unanimous [6-0] voice vote.

4. CURRENT BUSINESS

A. Chief Investment Officer's Report

1. Investment Performance – January 2016

PERA CIO Jon Grabel said February ended with the fund balance at $13.4 billion, down 1 basis point. Notwithstanding that the fund was down 1 basis point the fund was cash flow negative about $44 million which highlights the fact PERA is a mature pension plan with outflows greater than inflows in terms of contributions from employees and employers.

February was a tale of two months: the market was down sharply the first two weeks with a very strong recovery the second half of the month. The dramatic swing was a function of the fund's high equity exposure. Globally the equity markets were down 10 to 11 percent.

Fiscal year to date the fund is down 5.51 percent. Mr. Grabel said the fund has dramatically recovered during March and is now at $13.84 billion evidencing a very strong month. As a data point, the 10-year return net of fees is 4 percent – a compounded $1 at 4 percent for 10 years is $1.48. Had that $1 earned the 7.75 percent during the 10-

year period it would be worth $2.11. Mr. Grabel said it is important to optimize the strategic asset allocation to have the best diversification across asset categories and try to capture as much upside and protect the downside.

Ms. French congratulated Mr. Grabel on his comments in a recent article in the *New Mexicans*.

2. Cash Plan Update

Mr. Grabel said the change in fund balance was down about $44 million. The cash overlay program was up $8 million which highlights the value of that program in PERA's portfolio. The month finished with a little over $263 million in cash. In terms of sources and uses of cash, for February there was $7 million in private asset distributions, $3 million from the corporate action account, $25 million from hedge fund redemptions, and $47 million from employer and employee contributions. Uses of cash included $92 million in benefits and refunds, $2 million in operational expenses including manager fees, $40 million for private asset capital calls, $45 million was transferred into the collateral account for the overlay program and $100 million was funded into the final tranche of the new alpha port (portable alpha) program.

A new report on rebalancing events was presented and reviewed by Mr. Grabel. A mandatory rebalance occurred to address a breaching as defined in the current strategic asset allocation of the core fixed income exposure. The most cost effective manner to rebalance in this case was through the overlay program that achieved half-way to target. AQR was allocated $100 million for the alpha port program with $40 million from cash and the balance of $60 million from core fixed income.

Mr. Grabel noted the volatility of the market during February was such that the core fixed income breached the policy range again following the rebalance.

3. Other Updates

Mr. Grabel provided the following updates:

- A special IC meeting is scheduled for April 12th
- An education session/presentation with BYNM on risk measurement is scheduled to occur on April 28th following the Board meeting in Albuquerque
- The Listed Infrastructure proposals were received and the evaluation committee will be meeting
- The Multi-Strategy Credit RFP was released and responses are due on April 15th

B. <u>Informational Item</u>: Strategic Asset Allocation

Mr. Propst pointed out that Mr. Craven and Mr. Garrett were present from Cavanaugh Macdonald to field any actuarial questions.

Thomas Toth, Wilshire Consulting, said PERA's disciplined rebalancing process has paid dividends in terms of the market rebounding through March.

Mr. Toth reminded the IC that the mission of a defined benefit plan is to be able to pay the benefits promised to participants. Asset allocation is the most important decision that the Board addresses because it is the key driver of managing the risk around the mission of providing the promised benefits.

Asset allocation serves to maximize the safety of the benefits while minimizing the cost to the plan sponsor. Finding the optimal portfolio that does both is the goal.

In terms of diversification, Mr. Toth noted that more asset categories within a portfolio does not necessarily translate to greater diversification. True diversification occurs when assets act differently depending on the economic environment.

Referring to the "buckets" or asset categories, Mr. Toth identified the largest driver of risk within the portfolio as global equity which includes hedged equity exposure, private equity, as well as low-volatility equity. Global equity provides exposure to economic growth. When the economy is doing well this "bucket" will reflect that and has the highest level of expected return with volatility.

The risk mitigation "bucket" is the portfolio's core fixed income or the relatively plain vanilla investments in stable investment grade fixed income securities with high levels of liquidity. This is not a high returning asset class but it does not vacillate like global equity. Long duration core fixed income was included which provides good downside protection as well as increases the interest rate sensitivity of the portfolio; cash as a liquidity source was also included.

The credit-oriented "bucket" is a hybrid of growth exposure and the safety/risk mitigating asset classes. Credit oriented assets have relatively strong cash flow characteristics with higher yields than those found in the pure risk reduction and mitigation asset classes. The credit-oriented exposure is similar to the fixed income plus portion of the current portfolio.

Real assets provide inflation protection within the portfolio. From a strategic perspective real assets also provide protection from unanticipated levels of inflation, stated Mr. Toth.

Chair Esquibel asked about Wilshire's modeling and Mr. Toth said the asset class assumptions are developed by Wilshire's investment research group. The group conducts a full rewrite at the beginning of each year and does updates quarterly based on market movements. He identified the models used by Wilshire and how projections are developed. Wilshire overlays the models with an IGV, income growth valuation, and checks for reasonableness on the dividend discount model.

Mr. Grabel said in addition to the quantitative work that goes into assumptions for a dividend discount model for global equities, on a practical level staff, BNYM, Wilshire and Cliffwater all worked together to place PERA's existing managers within the construct.

Chair Esquibel asked what methodology was used to balance between liquid and illiquid assets to achieve PERA's goal. Mr. Toth pointed to a qualitative exercise in asset allocation which he likened to a mosaic approach of what the cash flow and illiquidity profiles are with the mission to pay the promised benefits to the participants as the key.

Mr. Toth said the actual assumptions that are derived from the bucketing were optimized by the underlying asset classes using the expected return as well as the risk. One of the benefits of working within buckets is it simplifies the number of asset classes and provides the ability to obtain a better view of the drivers of return and risk.

Mr. Toth referring to the alternative policy portfolio page as the meat of the presentation said the current portfolio has an expected return of 6.76 percent based on Wilshire's asset allocations with a standard deviation/risk of 11.4 percent. The contribution of asset volatility is currently driven at 83 percent by global equity. In fact, prior to the PERA's previous asset allocation that percentage would have been higher. Across all of the alternatives the risk contribution from equity has gone down to as low as 65 percent. The Sharpe ratio for the alternatives all have a better risk-adjusted return expectations.

Chair Esquibel asked what kind of global effect it would have on the market if all of Wilshire's clients employed the same asset allocation structure. Mr. Toth said Wilshire does not manage the assets necessary to move the liquidity in capital markets across the globe which are in the trillions of dollars.

Mr. Grabel said clarified that the asset class buckets are a function of labels as opposed to changing the underlying securities that PERA owns.

To the extent that the Board decides to change the asset allocation structure, Mr. Grabel pointed out that most of the change can be accomplished through rebalancing with existing managers with the exception of an RFP process for a global low volatility equity manager(s). He noted that the increases in credit oriented fixed income and real assets take time to accomplish.

Calling attention to the fact that PERA has already lost a billion dollars within the year, Ms. Naranjo Lopez said she wanted to know how much this would cost PERA, whether it would increase liabilities, and will this change ensure a billion dollars will not be lost again. Stating that the past is the past, Mr. Grabel said the goal of the exercise is to best position the portfolio prospectively. The alternatives can be implemented through rebalancing.

Chair Esquibel said he supported the rebalancing exercise but his concern is reaching the full funding as required by SB27 within the 30-year timeframe. Stephen Marshall, Wilshire Consulting managing director of the asset allocation group, responded that long-term return goals and minimizing short-term volatility are two sides of the same coin. The objective is to find portfolios that decrease the probability of losing a significant amount of money in the short term relative to the current portfolio, and at the same time increase the probability of reaching funding goals.

Mr. Grabel said the three alternatives presented by Wilshire better position PERA to reach the funding objectives than the current portfolio.

Mr. Mayfield noted a significant change in the alternatives in credit oriented fixed income. He asked whether there was more risk associated with the change if interest

rates increase. Mr. Grabel said the rate sensitive portion of the portfolio is related more to risk reduction which in the provided scenarios decreases. The drivers of credit oriented fixed income are the underlying strengths of corporate balance sheets and is less interest rate sensitive. The prospects for interest rate increases impact the portfolio in a variety of different ways.

Mr. Marshall said the first step in the process was to ensure the components of the buckets were optimized improving the risk return tradeoff of the current asset allocation structure. The next step was to take the four buckets/broad asset classes to make sure they were also optimal. The three proposed alternatives are on the mean variance of the efficient frontier. He highlighted the tangible benefits to diversification.

Mr. Toth noted that when the current portfolio structure was adopted it was within the efficient frontier; however, markets evolve and the asset allocation process needs to be conducted regularly to take into account that evolution.

Mr. Grabel mentioned his preference to Alternative 2 and Mr. Marshall said he understands why anything to the right of that alternative may not be appropriate. In this low return rate environment when return expectations are lower it could give rise to a lower discount rate.

Mr. Marshall said ideally the portfolio should be balanced to perform well in high growth as well as low growth environments, inflationary and deflationary environments.

Mr. Mayfield said with 4+ percent as the actual return over the last 10 years and 7.75 percent as the expected, he asked how that impacts the solvency ratio for 2030. He added it appears the assumption on expected returns may need to be lowered. Mr. Propst said the projections have used the 7.75 percent assumption.

John Garrett, actuary, said the 7.75 percent is not used in determining what a number is going to be projected in the future. The cash flow/benefit payments expected to be paid from the system to all the members in the plan at the valuation date are discounted back to the day. That number changes every time an experience study is conducted. The discounted rate/rate of return is used for generations, 70 years to 80 years of cash flow, whereas the efficient frontier is looking at 10 years.

Mr. Marshall provided a comparison of the current portfolio structure with Alternative 2 noting that some volatility is upside volatility. Across the risk spectrum from the very pessimistic to the very optimistic, Alternative 2 performs better. In the very optimistic there is a slight improvement for the current alternative.

Mr. Toth noted that the alternatives have a higher level of illiquidity in the portfolio and he posed the question of whether there was comfort in that liquidity profile. The current portfolio has about 70 percent immediate liquidity. The liquidity of the alternatives on an immediate or less than two weeks basis is about 55 percent.

A stress test was conducted on the alternatives by implementing the 2007-2009 credit crisis to ascertain how the alternative portfolios would handle that level of market volatility when it comes to illiquid assets, i.e., would it be more difficult to make benefit

payments? The answer was no. The ability to rebalance remains intact and was not impaired by the stressed timeframe. The test included the need to annually generate $500,000,000 in cash.

Mr. Grabel said in theory the more diversified portfolio has a higher net asset value. PERA's current portfolio has a higher level of liquidity than most of its peers.

Mr. Grabel said PERA's cash needs should also reflect the unfunded capital commitments. He offered to provide that dollar amount which he estimated at less than $500,000,000. The analysis and optimization was done on a fully funded basis, not current manager calls.

Chair Esquibel asked that the consultants address the discount rate and any cause and effect to drop the rate to where it should be. Jonathan Craven, actuary, said valuations are conducted by projecting all the benefit payments the plan is promising to make into the future. Because today's dollar will not be the same in 100 years, a rate is used to discount payments back to the current period. That is compared to the assets and a determination of how much of the accrued liability is unfunded. The expected investment return is used as the discount rate. If the assets are expected to earn 7.75 percent the benefit payments are discounted at 7.75 percent. The valuation study is conducted to recalibrate the expected return.

Mr. Garrett said based on the allocation study, Cavanaugh Macdonald will develop a reasonable range for the discount rate. The short-term capital market assumptions have a lower inflation rate than the longer-term assumptions. He expected the reasonable range to be between the high 6s and high 8s.

In terms of GASB, Mr. Craven said they conduct a solvency study on benefit payments annually. The actuaries project what the benefit payments, the contributions and the expected returns will be. If the benefit payments outstrip all of the contributions and investment income the fund goes insolvent. At that point GASB says: You can't earn 7.75 percent because you have no assets. Then a municipal bond rate is used to discount the rest of the benefit payments when insolvency is reached.

Currently, PERA shows the net pension liability on financial statements discounted at 6.75 percent, stated Mr. Grabel. Mr. Garrett said the lower the discount rate the more contributions will be required.

Ms. Naranjo Lopez asked, what changed that NMPERA is considering lowering the rate and that the organization is not meeting the goal of 100 percent? Why didn't we look at the current proposed lower rate of return when we were changing the rate from 8 percent to 7.75? Chair Esquibel answered that it was the market that changed. Ms. Naranjo Lopez said she wanted the consultants to answer the question and Mr. Garrett said he agreed with the chairman. He said when 7.75 percent is not attained the outcome changes.

Mr. Garrett said there will be times PERA will be well 100 percent funded at 2043 and other times PERA will be well below 100 percent because the annual market return causes that much volatility.

Mr. Craven remarked that as of the last projection the fund was at 113.4 percent.

He pointed out that 30 years ago 10-year bonds were paying double digits now they are paying less than 2 percent.

Mr. Grabel said the portfolio today is 83 percent equity risk and this strategic asset allocation presentation has shown that the risks can be bettered balanced across more asset categories which potentially will increase returns and reduce the volatility associated with that. There is the potential for the fund to be in a better place as it relates to the apportionment of the PERA fund assets regardless of what the discount rate is.

5. OTHER BUSINESS

None was presented.

6. ADJOURNMENT

Having completed the agenda and with no further business to come before the committee, Chair Esquibel declared this meeting adjourned at 10:55 a.m.

Approved by:

Dan Esquibel, Chair
Investments Committee

ATTEST:

Wayne Propst, Executive Director