

NEW MEXICO
PUBLIC EMPLOYEES RETIREMENT ASSOCIATION
INVESTMENT COMMITTEE MEETING

May 30, 2019

This meeting of the Public Employees Retirement Board Investment Committee was called to order by Steve Neel, Committee Vice Chair, at approximately 1:15 p.m. on the above-cited date in the PERA Building, Senator Fabian Chavez, Jr. Board Room, 33 Plaza La Prensa, Santa Fe, New Mexico.

Roll call preceded the Pledge of Allegiance and indicated the presence of a quorum as follows:

Members Present:

Steve Neel, Vice Chair
Dan Mayfield
Loretta Naranjo Lopez [2:40 departure]
Tim Eichenberg, appointed [2:20 departure]

Member(s) Absent:

John Melia, Chair

Other Member(s) Present:

Jackie Kohlasch
David Roybal
Lawrence Davis [1:30 departure]

Staff Present:

Wayne Propst, Executive Director
Susan Pittard, Chief of Staff/General Counsel
Dominic Garcia, Chief Investment Officer
Greg Trujillo, Deputy Executive Director
Renada Peery-Galon, ASD Director
Misty Schoeppner, Deputy General Counsel
Kristin Varela, Deputy CIO
LeAnne Larrañaga-Ruffy, Director of Equity
Anna Williams, Chief Financial Officer
Joaquin Lujan, Co-Head Alpha & Director of Rates & Credit
Karyn Lujan, Deferred Compensation Plan Manager
Trish Winter, Executive Assistant
Emily Garcia, Financial Specialist

Others Present:

Hugh Lawson, Goldman Sachs
Katie Koch, Goldman Sachs
Andrew Hayward, Albourne

James Walsh, Albourne
Tom Toth, Wilshire
Adam Hathaway, Parliamentarian
Lenora Chavez, Retiree
Paul Lium, Nationwide
Aysun Kilic, Rothschild & Co.

2. APPROVAL OF AGENDA

The agenda information items were reorganized to accommodate the travel schedules of presenters.

Mr. Eichenberg moved approval as modified. His motion was seconded by Mr. Mayfield and passed by unanimous voice vote.

3. APPROVAL OF CONSENT AGENDA

Mr. Mayfield moved approval and Mr. Eichenberg seconded. The motion passed without opposition and with Ms. Naranjo Lopez abstaining.

4. CURRENT BUSINESS

A. Information Item: Guest Speaker: Impact of Disruptive Technologies

Chief Investment Officer Dominic Garcia introduced the two speakers from Goldman Sachs that will present new information regarding the impact of disruptive technologies on the economy and the equity market.

Hugh Lawson, Goldman Sachs, said that the firm asked its 50 sector analysts in the equity franchise to identify the themes that were driving investment results and economic activity. The overarching comment is that fundamentally all businesses appear to be technology businesses. They either produce the technology or they use technology. The five specific trends were identified as follows:

- Data-driven world: artificial intelligence, big data, cyber security, internet of things, data infrastructure
- Finance re-imagined: digitization of finance, asset management makeover, blockchain
- Human evolution: precision medicine, robotic surgery genomics, life extension, digital health
- Manufacturing Revolution: robotics, 3D printing, future mobility, drones, clean energy
- New Age Consumer: Ecommerce, social media, online gaming, online music/video, evolution of education, health and wellness, experiences over goods

Mr. Lawson discussed the interconnectivity of the devices used today and said that more data has been created in the past two years than in the entire span of human existence. This accumulation of data can be analyzed to create knowledge. He acknowledged the privacy considerations. What is needed is a deeper/wider pipe, i.e., 5G cellular networks which promises

fiber-like speed over cellular networks making a range of applications that are not possible today. The pattern recognition associated with this information can be very powerful. He recognized the opportunities as well as the challenges it will present.

From an investment point of view, Mr. Lawson said the trend create industry in their own right and he listed a few of the companies in the space: Intel, Alphabet, Microsoft, Amazon.

Finance-wise, Mr. Lawson said the whole infrastructure within which capital is moved and logged will change. Goldman Sachs believes that disruptor ledger technologies have the potential to revolutionize many transactions.

Katie Koch, Goldman Sachs, discussed the human evolution theme and stated that emerging markets have created the most dramatic worldwide rise of people out of poverty. She acknowledged there was still a lot to do but there has been a huge reduction in the number of people living in poverty. She spoke with great optimism about the future of healthcare. Previously, Domino's Pizza was considered a powerful tech-enabled consumer company but that same technology can be used in the healthcare sector as a disruptor in that multi-trillion dollar opportunity. She mentioned that it took 20 years ago it took \$3 billion and over 15 years to map DNA. Today, the human genome can be mapped in a couple of days for \$1,000 and probably in early 2020 that mapping will be accomplished for \$100 in a matter of hours. Gene therapy/gene editing could have a profoundly positive impact on the lives of many. Technology will be particularly important in treating people in underserved and remote regions.

Regarding the manufacturing revolution, Ms. Koch talked about robots and how working together with people will change manufacturing. The robotic market will have explosive growth. Dangerous, dull and dirty work will be particularly attractive for robotic interfacing.

The final theme, new age consumer, Ms. Koch said the future of the consumer will look different from the past. There are 2.3 billion millennials around the world and as their spending increases the baby boomers' spending will shrink. Companies able to market to that demographic will do well. Retail will continue to grow online. She discussed the prevalence of social media mentioning that there are more people on Facebook, YouTube, and WhatsApp than live in China. These mediums are very important for consumer companies to get into. By 2025, access versus ownership is going to split.

Ms. Koch said Goldman Sachs believes it is important to be focused on the five themes because the future is going to be different from the past. The themes that have historically performed best over time are the biggest companies in the indexes. Ten years ago the top ten companies in the U.S. market included only two tech companies and five of the top 10 were iconic American brands founded in the 1800s. The top 10 today in the U.S., half are technology, the majority were founded post-WWII. Four of them were founded in the 1990s and Facebook in 2004. In the next 10 years, because of the rate of technology, some of the top 10 may not have been established yet.

Ms. Koch said having active management will help tilt the portfolio more toward the future.

The following are Goldman Sachs' responses to a series of questions posed by Ms. Naranjo Lopez:

- They manage \$150 million in PERA's private equity strategy
- It is hard to predict returns on a short term
- It is possible that private equity and certain forms of credit may generate more than 10 percent
- To achieve a 7.25 percent return, active management, equity related strategies and private assets are essential

Ms. Naranjo Lopez asked whether PERA staff committed additional capital to Goldman Sachs to have them speak today. Ms. Koch and Mr. Lawson responded in the negative.

Mr. Garcia thanked the speakers for their presentation.

D. Information Items: Reference Portfolio Update

Mr. Garcia said the Investment Committee is required to review the reference portfolio at least annually. The reference portfolio serves as a key benchmark to compare the baseline of investing. Staff is recommending no change to the portfolio.

Tom Toth, Wilshire, said the reference portfolio is the simplest and lowest cost portfolio at a risk level at the risk tolerance of the board. It should be diversified but not at the level of the policy portfolio/index or in the actual portfolio and account for PERA's long-term investment horizon and be relevant to PERA as a global investor.

Mr. Toth noted that value can be measured in two ways: return enhancing or risk reducing. The reference portfolio provides a clear and objective means to evaluate performance. The reference portfolio is entirely liquid compared to PERA's portfolio. He discussed risk within the portfolio and the 10-year horizon.

Mr. Toth said Wilshire has worked with PERA staff and recommends maintaining the reference portfolio weights that currently exist: Global equity, 58 percent and Core fixed income, 42 percent.

In response to a series of questions posed by Ms. Naranjo Lopez, Mr. Toth identified himself as PERA's lead contact at Wilshire

- Indicated there is not \$600 million invested in cash
- Wilshire is actively involved in sourcing and evaluating managers in the liquid areas of the portfolio
- Wilshire is registered as an investment advisor with the SEC, and not a broker/dealer

C. Performance Update

1. CIO Update

Mr. Garcia said he received feedback advocating looking long-term rather than the quarter. He reminded the Committee of the five-year strategic goals: maintain appropriate

strategic asset allocation to meet the 7.25 percent; work toward a 30-year funding period of unfunded actuarial accrued liability; meet 100-year annualized returns to equal or exceed the policy benchmark; and achieve a total invest cost at or below 85 basis points. He noted that all of the objectives have been met but the next 10-year investment horizon is going to be very challenging, stated Mr. Garcia.

As of March 31, 2019, PERA has exceeded its actuarial hurdle of 7.25 percent by generating 10 percent for the past 10 years, for 30 years at 8.5 percent and prior to that 8.9 percent. The periods that failed to meet that hurdle were within the great recession and dot.com bust. He used a graph comparing PERA's actual portfolio growth net of all fees and the passive reference portfolio. The graph demonstrates that the inclusion of active management in the 1990s has added to the fund although, during the great recession much of that was degraded. Private assets and active management has produced additional value add over the passive portfolio at the same risk level.

Mr. Garcia reviewed four-year rolling periods returns since 1985 and found that the portfolio outperformed the passive approximately 61 percent of the time. Also, PERA's outperformance is larger than its underperformance: bigger winners than losers.

The big challenges the investment team is focused on is bridging the gap, maneuvering through late cycle economy and managing liability bulge and burgeoning negative cash flow of the system. Bridging the gap includes improved risk diversification, improving private asset allocation and thoughtful active management selection. He discussed the Nevada strategy which has come up in previous meetings, and stated that the strategy increases risk and does not meet PERA's goals.

Ms. Naranjo Lopez stated that PERA incurred a "loss-opportunity" of \$2 billion from the equity market, and asked what options staff is considering to improve those results. Mr. Garcia repeated that PERA's portfolio is highly diversified and a comparison of an all-stock portfolio is inappropriate. Staff is actively engaged in many strategies to improve the performance of investments over the next 10 years relative to the simple passive portfolio.

Ms. Naranjo Lopez asked why staff does not invest capital in-house and pointed out that Nevada and other public pensions that do – up to 2/3s of their assets. Mr. Garcia stated that he would welcome in-house investing. It requires resources that currently the division does not have.

Ms. Naranjo Lopez asked what percentage of staff incentive compensation is tied to individual team or department decisions. Mr. Garcia responded said that PERA does not have incentive compensation and he reminded her that she opposed a bill that would have introduced that kind of compensation.

2. Quarterly Performance Review

3. Quarterly Market Review

Mr. Toth provided actual results of the portfolio against the expectations over a series of timeframes. Expectations were based on PERA's strategic asset allocation and Wilshire's long-term capital market assumptions from 2009. There was an expected return of 7.75 percent and 11.24 risk expectation. Since that period of time, the portfolio has performed really well. The

actual 10-year results are closer to 10 percent and compounded over a 10-year timeframe that is very meaningful.

Mr. Toth showed comparison results if PERA had been invested in a simple, transparent, low cost index set of strategies/reference portfolio and a policy index. While those portfolios did well, PERA's did better.

Mr. Toth reviewed PERA's risk budget which is divided by three components: the market beta risk/passive, market performance/allocation, and selection. He discussed how the portfolio protects itself on the downside while it might not keep pace on the upside. When the markets were particularly challenged in 4Q 2018, PERA's portfolio protected significant value on the downside and did so with relatively little volatility.

Mr. Toth noted that the Board packet includes a great deal of information and data on performance with quarterly, monthly, flash reports and full listing of all the managers.

D. Information Item: Quarterly Staff Consultant Report, Credit Portfolio Review

Mr. Garcia reminded the Committee that each quarter a report from the staff consultant occurs.

Joaquin Lujan, Co-Head Alpha & Director of Rates & Credit, said the \$15.4 billion fund has four asset categories: equity, risk mitigation, real assets and credit. Credit comprises 15 percent of the portfolio or \$2.23 billion of liquid and illiquid strategies. Wilshire serves as PERA's liquid asset consultant and Albourne the illiquid consultant.

Mr. Toth reviewed the strategic rationale to assist in understanding why credit is in the portfolio. Credit serves as a balance of exposures to economic growth with income generation. Growth opportunities are driven by improving economic fundamentals. The income generation is higher than government securities. And importantly, the idiosyncratic opportunities within credit are quite varied and the diversification benefits provide value to the total fund. The expected return is 6.15 percent, expected risk is 10.1 percent, and the expected active return is 4 percent. He reviewed the risks within the credit portfolio, e.g., a borrower who cannot pay back a loan. The underlying complexity of the portfolio was itemized. The portfolio contains 33 percent liquid credit, 20 percent emerging market, 28 percent illiquid credit and 20 percent illiquid credit/hedge funds.

Andrew Hayward, Albourne, reviewed the breakdown of the portfolio by region of both liquid and illiquid. There is 65 percent allocated to the United States. The US is 25 percent of global GDP and 43 percent of the world equity market capitalization. China's investable credit opportunities are further behind their weight in the global economy. He expected the allocation to Asia, currently at 5.1 percent, to grow as the financial market growth catches up with its economic growth there; Europe at 11.6 percent and ROW (rest of the world) 16.1 percent. He provided the private market breakdown by vintage year and noted the diversity in that group.

Mr. Toth provided the history of PERA's dedicated exposure to credit oriented assets starting in 2015. At that time, a change in allocations was established with the core fixed income

assets to serve as the risk mitigating part of the portfolio; high yield, emerging market debt and multi-sector credit managers were added to the portfolio.

Over the one-, three- and five-year timeframes, the portfolio has outperformed, stated Mr. Toth. The portfolio has a lower beta orientation/lower market sensitivity orientation relative to the index.

James Walsh, Albourne, provided an overview of the private asset performance of the portfolio and noted the outperformance on a one-, three-, five-, ten-year periods as well as since inception. The strength in last year is attributable to the selloff in credit at the end of last year. The defensive positioning by managers is appropriate. The portfolio is well diversified. Mr. Walsh said it was important to have capital (dry powder) for when opportunities arise.

Mr. Neel asked how the “dry powder” was being managed. Mr. Walsh said managers like Oak Tree have vehicles that are advantageous to the investor. Mr. Lujan said in March 2018, staff in partnership with Albourne, have been researching capital contingent vehicle ideas. With the right capital contingent strategy, triggers can be set, i.e. spreads, and capital can be called and rotated out of the high yield index into higher spread opportunities. Mr. Garcia said staff has discussed liquidity stress with Albourne and Wilshire based on expected cash flow and returns.

E. Information Item: Investment Division Updates
1. Cash Plan & Rebalance Update

Kristen Varela, Deputy CIO, reminded the Committee that the materials are posted on the portal. The cash plan data for January indicates that the fund paid out \$102 million in benefit payments of which \$46 million came from contributions and \$55 million from the investment account. February was quite similar and in March the benefit payment was the same with contributions covering \$44 million and the investment account covering \$54 million. The strategic asset is tracked in comparison to its approved weightings. She noted that global equity is overweight because that is where the majority of the capital to fund risk parity will be derived.

2. Manager Selection Activity Report

Ms. Varela said three mandates/managers have been approved. A global core fixed income manager was hired to address a contract expiration. The total fund overlay services and an illiquid real estate position were addressed. She reviewed each of the selections, highlighting the scope of work, selection of semi-finalists, final selection and base fee and minimum fee where appropriate. The total fund overlay has been under development with staff since 2013.

3. Securities Lending Update

Ms. Varela stated that for 1st quarter, PERA averaged \$552 million of securities on loan and \$667,000 was received in gross earning.

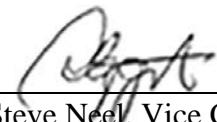
5. OTHER BUSINESS

None was offered.

6. ADJOURNMENT

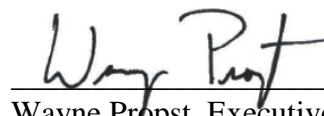
Having lost the quorum 30 minutes earlier, this meeting adjourned at approximately 3:10 p.m.

Approved by:



Steve Neel, Vice Chair
Investment Committee

ATTEST:



Wayne Propst, Executive Director