CITY OF PONTIAC, MICHIGAN GENERAL EMPLOYEES RETIREMENT SYSTEM BOARD OF TRUSTEES SPECIAL MEETING AUGUST 30, 2016

A special meeting of the Board of Trustees was held on Tuesday, August 30, 2016 at the Marriott Auburn Hills Pontiac Hotel on CenterPoint Parkway, Pontiac, Michigan. The meeting was called to order at 8:46 a.m.

TRUSTEES PRESENT

Jane ArndtNevrus NazarKoné Bowman (arrvd @ 8:50 am)Billie SwazerJanice GaffneyDeirdre WaterRobert GiddingsPatrice WaterWalter Moore, ChairmanPatrice Water

Nevrus Nazarko (*arrvd.* @ 9:00 *am*) Sh Billie Swazer Ke Deirdre Waterman, Mayor (*arrvd* @ 2:35 *pm*) Patrice Waterman

TRUSTEES ABSENT

Sheldon Albritton (absent) Kevin Williams (absent)

OTHERS PRESENT

David Lee, Dahab & Associates Steven Roth, Dahab & Associates Cynthia Billings, Sullivan Ward Deborah Munson, Interim Executive Director Patrick Silvestri, Attucks Asset Mgmt. Cathy Sweeney, Attucks Asset Mgmt. Elizabeth Stevko, Brandywine Global Idanna Appio, First Eagle Amanda Baron, First Eagle Ademir Zeco, GrayCo Alts Keri Hepburn, Invesco Kelvin Liu, Invesco Nili Gilbert, Matarin Kristina Pierce, Mesirow Isaac Green, Piedmont Investment Advisors Clarissa Parker, Piedmont Investment Advisors Anit Sanyal, Piedmont Investment Advisors Doug Roman, PNC Kirk VanDagens, PNC Tal Gunn, Robinson Capital Greg Prost, Robinson Capital Jim Robinson, Robinson Capital Ron Mushock, Systematic Rick Plummer, Systematic Linda Watson, Retiree

The meeting was called to order at 8:46 a.m.

Dahab & Associates- Second Quarter 2016 Performance Review

Mr. Roth discussed the economic environment and the Fund's 2016 second quarter performance report.

It was a decent quarter for domestic equities. The market sold off but the defensive sectors came back at the end of the quarter. GDP growth was in the 2% range.

There was a lot of volatility in the international equity markets due to Brexit, economic uncertainty, political instability and terrorism issues. There was not enough time for the markets to rebound before the end of the quarter.

Mr. Roth reviewed the major indices quarterly returns.

Mr. Lee explained the differences between the indices including the S&P 500 which is an index of large cap stocks and the Russell 3000 which is an index of stocks that has approximately 85% of those stocks in large cap and 15% in mid cap and some in small cap. The Russell Mid-Cap and Russell 2000 are mid-cap and small-cap stock indices. The Russell 2000 is comprised primarily of small-cap stocks. The MSCI EAFE is the international equity index which is comprised of markets outside of the U.S. and Canada. The MSCI Emerging Markets is an index of emerging market countries. The NCREIF ODCE is an open-ended core real estate index. The Barclays Aggregate is an index of core fixed income stocks. Going forward this index will be known as the Bloomberg Barclays Aggregate.

Mr. Roth reviewed the equity return distributions based on capitalization and which type of stock: value; core or growth. Quarterly large cap returns indicated that value outperformed growth with trailing year returns indicating that the three styles provided equal performance.

Mr. Lee explained the difference between large, mid and small cap. Small cap stocks are companies with valuations at \$4 billion or less; large cap company valuations are greater than \$15 billion and mid cap company valuations are somewhere between small cap and large cap.

Chairman Moore thanked Mr. Roth and Mr. Lee for the educational aspect when reviewing the Fund's quarterly performance.

Mr. Roth reported that the total Fund value as of June 30, 2016 was \$460.8 million which represented an increase of \$1.8 million from the quarter ending March 31, 2016 or a performance gain of 1.9%.

He reviewed the individual asset class returns for the quarter including the percentile ranking. The total Fund ranked in the 38^{th} percentile for the quarter. Domestic equity returns were 1.9% versus the index at 2.6%; international equity was at 2.8% versus -1.2%; private equity returns lag behind one quarter and were at -0.8% versus 0.3%; global fixed income was at 0.5% versus 3.4% and fixed income was at 2.2% versus the benchmark at 2.2%.

Trustee Arndt asked that the performance returns be reported net of fees versus gross of fees in the performance books going forward. Mr. Roth indicated they would add a page to the performance report to reflect net of fee returns.

Mr. Lee noted that the two year performance numbers are similar. He indicated that Northern Trust has stated they will charge for quarterly data beyond two years so the same information is being reported for the two-year timeframe. He indicated he has encountered this with custodians before and would work with the custodian to try to get the information at no charge to the System. This is currently a non-issue. They will inform the Board if it becomes an issue.

He also explained how the shadow index is calculated. It is a customized index that matches the portfolio's asset allocation with the corresponding passive indices.

Mr. Roth reported that the year-to-date performance for the Fund was 3.3% versus the index at 2.8% and the one-year performance was -0.2% versus 1.1%.

Trustee Bowman questioned the underperformance.

Mr. Roth indicated that the underperformance was due to the emerging market returns.

Mr. Lee explained that underperformance can be due to over- and under- allocation to asset classes. Allocations can also be fine-tuned based on the needs of the Fund or by using a more specialized index. He also noted that some of the current asset allocations are a little high.

Mr. Roth noted that the five year performance numbers are good.

Mr. Lee stated that the Fund is currently over allocated to equities. They are looking to move the Fund to a more conservative allocation. The current allocation is more appropriate for an underfunded system.

Mr. Roth stated that current quarter private equity performance was held at zero because there was no new data performance numbers to report due to the lag in reporting.

Miss Munson noted that private equity's returns are self-reported.

Mr. Roth indicated that private equity performance is audited annually and usually follows the GAAP accounting method. Private equity discounts cash flows similar to equities to value their assets.

Mr. Lee explained that private equity is an illiquid and long-term investment.

He described rolling or trailing returns as annualized returns ending for a specific period. This is accomplished by adding a new period or quarter and dropping the oldest quarter.

He indicated that having a manager's three- to five-year performance numbers is okay but longer term is better in the investment world.

Mr. Roth explained the investment growth chart. He noted that the chart used the actuarial return assumption of 7.5% with the System's current assets for the period of June, 2011 through June, 2016. The chart displayed the Fund's dollar value for the past five years which performed close to the actuarial valuation.

Mr. Lee indicated that for the period, the Fund had negative cash flow indicated by the line moving towards southeast quadrant. Good returns will help negative cash flow.

Chairman Moore questioned the \$400.00 per month temporary increase effect on the System's portfolio.

Mr. Lee stated that any money taken out of the Fund decreases the value of the Fund. The Fund is still overfunded.

Mr. Roth provided an overview of the broad asset allocation for the current and previous quarter. He noted the current asset allocation percentage and the target allocation. The asset allocation was broken down into three categories: domestic equity; international equity, private equity and domestic fixed income which included high yield.

He stated that the one-year performance for Piedmont at -3.9% versus the benchmark at 4.0% and Lombardia at -3.1% versus 2.9% hurt the overall performance of the Fund.

The manager performance summary reviewed each manager's performance as well as their percentile rankings compared to their specific peer universe.

He reviewed the preliminary performance as of July 31, 2016. The quarter-to-date performance for the Fund was 3.1% and the year-to-date performance was 6.5%. He noted that July was a kind month to the Fund.

Meeting Break at 9:30 a.m. Meeting Resumed at 9:45 a.m.

Economic Overview/Markets Roundtable

Chairman Moore welcomed the managers and began the introductions around the table.

Mr. Lee explained the format of the roundtable sessions to the managers. He opened the discussion by asking the managers what impact Brexit has had on the market and will have going forward.

Idanna Appio from First Eagle indicated that Brexit will be a multi-year process and there is a long road ahead.

Doug Roman from PNC felt that the Brexit rebound will not be a factor in the global markets. The markets will react to how Ford and GM perform.

Ron Mushock from Systematic stated that everyone thought that there would be a big reaction to Brexit like Y2K. But it turned out to be a non-event. From a portfolio prospective they owned shares in Invesco that lost 25% in one day surrounding Brexit. After the fact they hedged their currency exposure. It was a lesson learned not to panic.

Ademir Zecco from GrayCo Alts stated that the effect of Brexit will be delayed and the impact will be seen in the manufacturing sector. There will be no real effect in the European economy. It will be important to watch the upcoming markets.

Anit Sanyal from Piedmont Investment Advisors stated that there was some impact on the UK economy. It should get shifted around by the end of the quarter. The UK's best consumer credit data came out last week. There could be long-term secondary effects.

Nili Gilbert from Matarin Capital stated that investors will have to wait and see the meaningful impact of Brexit. It could take the European Union and United Kingdom two years. There have been some effects in the currency markets. There could be issues with the state of the large banks based in the UK, Europe and the world. There also needs to be compromises between the banking unions across borders. This is a bad time for a realignment of treaties in Europe as well as the importance of understanding the effect on financial services and big banks.

Mr. Lee asked the managers to share their thoughts on the direction of interest rates.

Jim Robinson from Robinson Capital stated that the Fed decided to delay the rate hike in June. Now that unemployment rates are reasonably good versus a year ago the Fed needs to get rates off zero which will support the European community. Short-term treasuries will see rates of 1% to 1.5% with long-term rates lower.

Kelvin Liu from Invesco Private Equity indicated that there were no immediate reactions to Brexit but investors were cautious. Interest rates will go up for the short-term and for the longrun can only go up. The trends are optimistic for small businesses.

Kristina Pierce from Mesirow Private Equity stated that the buyout side is susceptible to the rising rate environment. The focus should be on growth equity and not financial engineering.

Mr. Lee asked Ms. Pierce to explain her financial engineering term.

Ms. Pierce explained that that is when investors are active on the refinancing front to take advantage on the low interest rate environment.

Ms. Appio stated that interest rates will increase in December. This will be the path of industry going forward. Janet Yellen would like to keep interest rates lower but cannot because globally this is a neutral interest rate environment world. At the meeting in Jackson Hole, Janet Yellen indicated that interest rates will not be as high as in past environments. Old monetary policies are no longer. This creates a difficult world for investors. This is the new, less complicated normal.

Ms. Gilbert indicated that the Federal Reserve policy is being forecast to raise rates in September. The main reason is the international property inflation forecast. Inflation has achieved the Fed target which makes it harder and harder to justify raising rates. Rising rates will slow things down which is generally negative for equities but the Fed sees the economy rising.

As the central banks raise rates it should resolve the active manager issues. The market will be rewarded with speculative stocks versus strong cash generating companies which is what happened in 2012 and 2013.

Currently there is a search for yield with money being put into high dividend yielding cash stocks like telecoms which are more costly than the broader stock market. The Fed raising rates will be traditional long-term.

Mr. Roman agreed with Ms. Gilbert's assessment. Yield plays and commodities performed well. We need a market where these types of yields are not normal. There is a need to look for real organic growth which has not been the norm since 2009. There needs to be a change of policy with more fundamentals factoring in.

Isaac Green from Piedmont Investment Advisors stated that the economy has become stronger and now the Fed wants to raise rates to vet the short end of the curve. The long end of the curve has been imploded by Fed policy. With quantitative easing built in the Fed balance sheet has not moved in ten years. Ten year rates should be higher based on the normal yield curve. There is no way to know what the policy will be for the long-term or what the winners or losers will be in the market.

Ms. Gilbert indicated that Fed policy cannot control the long end of the treasury yield curve when global central bank policies overseas have so much money coming into U.S. treasuries.

Mr. Mushock explained that the current interest rate environment has not stimulated the economy. The Fed has crowded out traditional savings and created overvalued equity stocks. Businesses are unable to expand because they are being penalized due to lower valuations and are being forced to cut heads and costs due to the flat rates. Interest rates need to be increased. The monetary policies and negative rates have had an opposite effect on the economy.

Mr. Lee stated that some could argue that the U.S. created this economic environment.

Mr. Mushock pointed out that the Fed can control rates at the short end but not at the long end. Unemployment is lower but still behind the curve. Negative earnings are about to turn positive which should create an acceleration in earnings. GDP growth should be 1% to 2% going forward. To control wage based inflation the Fed needs bond vigilantes.

Mr. Robinson indicated that European markets are currently buying \$100 billion in bonds.

Mr. Mushock explained that investors are spending 22 times earnings for stocks while at the same time risking 50% of the capital. Investors are over paying for yield.

Mr. Lee asked if rates will stay lower for longer or will they begin rising sooner rather than later. He also questioned whether investors should index assets versus using active managers.

Mr. Roman stated that with the yield trade and these types of variables it is not a good environment to invest in passive management. Investors are taking bigger bets on the long play by moving into passive. If the markets return to a state of normalcy than passive investments would come into play. Financials and healthcare are the best performing sectors which is not normal. Active management is better for this type of environment.

Mr. Mushock indicated that it made sense in the 1990's for investors to move into indices for large cap. Why pay 60 basis points for subpar results. He thinks that active management is an easy decision for investors with stocks trading at peak multiples like Cisco at 50 times its multiple and GE at 45 times. The index is in the bottom quartile. From a timing perspective, if you buy the index now you would be looking into a hodge podge of overvalued stocks. Over the next five years most active managers will be outperforming. Active management holds up better in this type of environment.

Pat Silvestri from Attucks Asset Management stated he has heard this argument a number of times. From a client viewpoint his firm would like to go through a full market cycle. However, we have not seen a full market cycle in more than ten years. There have been a few underperforming quarters but not a bear market. There has to be a true bear market. You want to be sure the market has been through some negative periods for indices to be rewarding. This is the worse time to make a switch to a passive approach in the domestic equity space.

Mr. Roman noted that the Bogle Investment Group's average return for investors is usually lower than the index fund returns because investors tend to chase returns and sell or buy at the wrong times. Investors moving to passive would be going in at the wrong time.

Chairman Moore stated that this is an important year due to the politics in the news. He asked what effects the presidential election could have on the overall marketplace.

Mr. Silvestri indicated that presidential elections do have an effect on the markets. He noted that Hillary Clinton would be more predictable than Donald Trump. And uncertainty drives the markets nuts.

Mr. Prost from Robinson Capital stated that because of the separation of powers the presidential race is less destructive in the marketplace.

Mr. Green stated that there is an undertone in the market with regard to both candidates especially looking at the working person. On the Trump side it is not always clear. The discussion around trade could stimulate job creation and help the average guy. From the populous perspective, there is inflationary pressure from both platforms. If things start working it could break the consensus.

Ms. Appio stated that overseas Trump versus Clinton is far worse. Foreigners have a violent reaction to Trump.

Mr. Sanyal stated that the presidential elections have had adverse effects with rhetoric being so negative, consumer spending erratic and a number of secular issues. However, consumer confidence is showing signs of strength. There is hope for the U.S. economy.

Ms. Gilbert said there has been rising populism around the world regarding income inequality. Low interest rates have contributed to income inequality and have benefitted the wealthy. You shouldn't look at the political cycle impact of politics on the market but its policy on the economy.

Mr. Mushock said that regardless of whichever platform wins there needs to be more fiscal stimulus to the middle class. Government can be more helpful but not just dictating monetary policy.

First Eagle stated that the new normal is one of lower growth which has created the world focus on income inequality. U.S. growth is 1% and Japan's growth is .5%. This will be with us for some time especially due to the political aspect.

Mr. Lee asked the managers about reversion to the mean and whether at some point in time the market will right size. There was an article in the Wall Street Journal which indicated how the market can get back to average.

Mr. Green said that it is harder to take the conflict out of the market globally. Economic growth is driven by economic trends with baby boomers spending less; this will affect the growth rate. The under thirty-five age group is under-employed, unable to buy their own homes and isn't investing. During the next five years the baby boomers will be exiting the economy. The market will come into biological growth. There are questions regarding Europe, Japan and China and the shaping of demographics in Turkey. Because of what is happening outside of the United States, there is a temporary phenomenon of money flowing into the U.S. economy.

Mr. Liu said there will be reversion to the mean in the public market. The improvement in the market will be a reversal in the true aspect of the class. He used Apple's stock as an example. Apple is issuing ownership of the companies which allows passive owners of the company. This is also happening with Google, Twitter and Alibaba. Private equity used to back small, high potential companies but now are putting money into these other companies like Google.

Mr. Lee questioned the valuations for private versus public companies. Unicorns are private companies that are valued over \$1 billion based on public valuations, but it appears that unicorn companies are now worth less.

Ms. Pierce agreed and explained that public companies like Twitter are not doing well. Companies need to be careful about going public. She discussed how capital is raised and that by the time a company is positioned to go public they are worth \$1 billion which is why they have to be careful. In the early stages companies can increase by two times their value which makes some companies overpriced. This causes investors to be nervous about whether they should get into the IPO. It also causes a company to consider whether they should go public or stay private. It is best to invest in a company with not much value.

Mesirow indicated they are bold in venture capital. There has been some bias with private investors buying shares in companies like Snapchat which has raised billions of dollars. He also noted that Microsoft is buying LinkedIn. In this volatile environment it is less important and not as popular to issue an IPO.

Mr. Zecco indicated that in the buyout space at ten times the investment multiple it is hard to find money. There are increasingly more smaller-sized companies in the venture capital space.

You have to look and find companies in the early stage environment. The larger companies are in the buyout space.

Mr. Lee asked the managers what keeps them up at night.

Mr. Silvestri stated that the new rules for money market funds prime and non-prime to change from \$1.00 per share to a floating rate.

Mr. Sanyal indicated that the biggest situation is the need to go back to bond vigilantes. He is worried that an aberration comes in that will weaken the dollar and there will be a surge in oil prices; Brexit and European issues. He noted that Italian banks are in the headlines and there are always mega rate issues.

Ms. Appio stated that – having worked at the Federal Reserve - she worries about the central banks based on their ineffective monetary policy. There could be issues with regard to Japan coming from the September Fed meeting. She noted that the central banks have been making economic policies and controlling the economy and financial markets since the 1970's. And, Japan still has no inflation without having any additional policies in place.

There is also the risk with regard to China who is trying to transition their financial markets from a state-controlled economy to a market-controlled economy which no one thought would happen.

Ms. Gilbert responded that it is the state of monetary policy and its impact on the economy including the domestic equity space which could discourage clients from investing in high end domestic equities. She is also concerned about the economic slowdown and what is real growth. She also has concerns about being stuck in a low growth environment for a long time. Mean reversion in the market with some fundamental reality could build in to less momentum when it occurs. We have been stuck in this environment for nine years and she cannot see a way forward and there is not a lot of memory behind for investors. There is a need for a third revolution in manufacturing that could affect global growth for some time. There are limits of driving growth through increasing the strength of the dollar. We need to get back to a path of innovation.

Mr. Roman indicated he is concerned about overvalued fixed income and monetary policy.

Meeting Break at 11:30 a.m Meeting Resumed at 11:40 a.m.

Systematic – Mid Cap Value

Rick Plummer, CFA, Senior Equity Analyst Ron Mushock, CFA, Portfolio Manager, Partner

Mr. Plummer reported that there have been some changes to their investment team. They shelved their all cap product and refocused to their other mandates including mid cap. They also added an analyst.

They have no conflicts of interests and are in compliance with the System's IPS and reporting requirements.

They have matched the benchmark since inception but the last five years have been tough with the flight to low-value, high-risk stocks and the interest rate environment.

Mr. Mushock indicated that their first five years were strong but the last five years have been weak. The environment has changed dramatically to a low interest rate environment.

The markets are not now nor have ever been dividend driven. If you go back five years and look, dividends versus stocks performance was -5%. Dividend yield is unsustainable due to unsustainable organic growth. Stock prices are correlated to dividend yields. Five years ago there was an earnings to stock price correlation.

Mr. Mushock explained that the market has transitioned from a deep contrarian to earnings growth. The highest dividend paying stocks are paying 17 times earnings when they usually pay 13 to 14 times earnings.

It is a dividend drive yield market with investors overpaying for shares with a lot of principle risk. Their preference is for low share prices with less volatility.

In order to find relative value versus the index they have been positioned in riskier stocks for the last five years.

They bought lowest volatility stocks to get returns. The risk return relationship is a crazy environment.

In order to buy lower volatility stocks you have to pay 21.3 times earnings versus higher volatility stocks at 13.8 times earnings. This is difficult for a value manager.

No matter how good a manager you are this is not so much a matter of skill as it is a matter of stocks. You would have to buy overvalued stocks, which goes against their value strategy. Every time interest rates have increased they have outperformed.

Mr. Lee askes what will happen if interest rates do not rise.

Mr. Mushock stated that with stocks being so overvalued and overpriced the best action is for them to stay the course.

He told the Board that the reason why low volatility stocks are doing so well is because investors think they are low risk. However, he would argue that they are high risk. Recent performance realizes an increase of one cent each day versus twenty-five cents per day with better market fundamentals.

Mr. Plummer indicated that with the out-performance of low volatility stocks flowing into the index they feel their strategy will benefit.

Mr. Plummer and Mr. Mushock left at 11:59 a.m.

Attucks Asset Management – Manager of Manager Portfolios (Michigan Centric & Emerging) Patrick Silvestri, Chief Investment Officer

Catherine Sweeney, Management Director

Mr. Silvestri indicated that Attucks is in compliance with the System's Investment Policy Statement and does not have any material personal or business relationship with any trustee or staff member.

He explained to the Board that the only change that was made to the portfolio was the replacement of Herndon with Matarin.

Ms. Sweeney provided a review of the large cap core performance. On April 1, 2016 the assets allocated to Herndon were transferred to the replacement – Matarin - and \$2M was transferred to Piedmont due to their underweight in the portfolio.

She also reported that Lombardia is closing their large cap core product at the end of the year. Kelly Kho is retiring and George Castro passed away last year. They still have \$2 billion in assets under management with most of the assets in their small cap mandate and their international value product.

She indicated that Mr. Silvestri and Mr. Bond had come in to discuss their global equity portfolio with the finance sub-committee as part of their forward thinking. The managers performed well last year but have underperformed this year. When growth is outperforming value it is difficult for these managers to match the rebound.

Ativo has a concentrated portfolio with twenty-five stocks with smaller capitalization large cap stocks.

Matarin came out of Invesco and is currently selling out the Herndon securities. They only have performance returns for May and June.

Last year was tough for Lombardia.

Piedmont performed well in 2015 but has underperformed in 2016.

Oakbrook provides index-like returns. They are looking for other opportunities to use them.

The characteristics of the large cap core portfolio were reviewed.

Mr. Silvestri explained the weighted average market capitalization and the number of holdings in the Oakbrook portfolio.

Ms. Sweeney stated that they are looking for a replacement for City National Rochdale but it has been hard to find one for the portfolio.

NorthPointe and Seizert have been underperforming. They spoke with them yesterday regarding their performance.

Seizert's performance is up 400 basis points for the first six weeks of the third quarter.

Mr. Silvestri indicated that large cap value is rebounding. NorthPointe has been underperforming due to their allocation to energy stocks. Seizert is improving as the financial cycle is maturing.

Ms. Sweeney indicated that they had provided Dahab a write-up on global equity performance and proposed changes to the asset allocation. They have to address Lombardia Capital and City National Rochdale.

Miss Munson asked if they included the ethics policy disclosure statement in their report.

Mr. Silvestri indicated they will forward a copy of the statement to Miss Munson.

Ms. Sweeney and Mr. Silvestri left at 12:19 p.m.

Piedmont Investment Advisors Large Cap Core

Isaac G, Green, CFA, President, CEO, Chief Investment Officer, Portfolio Manager Amit Sanyal, CFA, Sr. Vice President, Portfolio Manager Clarissa Parker,

Ms. Parker provided an overview of the portfolio and firm update. They currently have \$5.84 billion in assets under management. They recently launched a smart beta program that they have been back testing for years.

In 2011 they sold a 30% interest in the company to Rosemont Partners. On August 19, 2016 they bought back their shares and are now 100% employee-owned.

Their large cap core strategy has \$1.8 billion in assets under management.

They recently signed a letter of intent to buy a Durham-based firm with \$45 million in their equity strategy and over \$1 billion assets in fixed income. They are bringing on their investment professionals.

Trustee Nazarko asked if that would change the structure of their firm.

Ms. Parker explained that they have twenty employees and it would not affect the structure of the firm.

Mr. Roth asked if the new employees would have ownership in the firm.

Mr. Green stated that the employees would be evaluated to determine if they could buy into the ownership of the firm. The senior team member who is primarily fixed income will join the Executive Committee and have an option of buying into the firm within the first year.

Mr. Green told the Board that 2016 has been a challenging year performance-wise. There under performance ended in July and they are outperforming in August. There is so much fear in the market based on the economy with high dividend yield stocks outperforming the market which is not attractive.

Mr. Sanyal stated that the last quarter was a dynamic quarter with higher distressed volatility stocks being rewarded. They are not allocated to those types of stocks. They are getting most of their underperformance back in the third quarter. Companies with high cash-flow yields are not being rewarded.

He discussed their stock holdings including American Airlines which was one of their best performing stocks. Brexit, the Zika virus and terrorism has impacted airline stocks. There have been some fare wars going on and some capacity issues. Delta is also a strong manager. Target was a disappointment.

In 2015 they were rewarded for their holdings in Amazon and Facebook but these companies have flattened in 2016. They added to their manufacturing sector allocation.

When rates collapsed they added financials based on a rising rate environment including MetLife and Charles Schwabb.

Trustee Nazarko asked about their sell off of Mylan.

Mr. Green indicated that they sold off Mylan before the Epipen issue came out in the news.

Mr. Green, Ms. Parker and Mr. Sanyal left at 12:37 p.m.

Matarin Capital – Large Cap Core

Nili Gilbert, CFA, CAIA – Co-Founder & Portfolio Manager

Ms. Gilbert thanked the Board for the opportunity. Because management of the System's portfolio has been short she took the time to introduce the organization and review their investment process.

Matarin Capital was founded in July, 2010. She is a cofounder and the portfolio manager. Matarin started with \$1.5 million in assets under management and currently has \$800 million in assets under management. There has been firm growth in assets each year with many of their clients adding to their accounts.

The principals of the team all left jobs at high quality firms as portfolio managers. They have appeared in write-ups in the Wall Street Journal and Bloomberg. The company is 100% employee-owned. There is no outside capital and they are invested alongside their clients.

She reviewed the bios of the firm principals. There are five women and two men.

The System invested in their large cap strategy on May 1, 2016. Their strategy has outperformed the benchmark since inception. They deliver good risk-adjusted returns with returns 1% to 3% above the S&P annually. They have won seven awards for their downside protection based on the four and a half year track record. Each of their quarters has ranked in the seventh percentile and their downside

protection is in the eleventh percentile. They have five institutional clients in the large cap mandate totaling \$170 million.

She explained their active management philosophy. They believe markets are inefficient and are driven by investor emotion including fear and ego that come into play. This causes stock prices to move away from what will drive fair value and drive returns systematically. They take advantage of inefficiencies on behalf of their clients, offering a differentiating pattern of returns.

She described their equity investment process which includes four fundamental concepts including good businesses; inexpensive valuations; shareholder-friendly leadership and drivers for near-term outperformance.

They look for good businesses with high cash flow generators and steady growth. They watch for out-of-favor stocks that are situated to outperform the fundamentals. They also look for companies with shareholder-friendly leadership that have a record of adding value through capital allocation decisions. These companies fit their strategy.

She reviewed their portfolio characteristics. They are sector neutral and rely on stock picking for their performance. She noted that industrials have outperformed the index while healthcare has underperformed.

Trustee Nazarko asked about the portfolio's price-to-book value characteristic at 3.3% versus the benchmark at 2.7%.

Ms. Gilbert stated that they do not look at price-to-book value to evaluate value companies in large cap.

Ms. Gilbert left at 12:57 p.m.

PNC Capital Advisors

Douglas J. Roman, CFA, CMT, Managing Director, Large Cap Advantage Equity Kirk VanDagens, CIMA, Senior Client Advisor, Vice President

Mr. VanDagens introduced himself and Doug Roman to the Board. He indicated that Mr. Roman has been recognized by the Wall Street Journal as one of the best large cap managers.

Mr. Roman explained their investment philosophy. They believe that earnings drive stock prices. They do not believe they are smarter than other managers, which is why they focus on companies they believe will exceed consensus earnings estimates. They buy companies that have the ability to exceed earnings estimates with stable to improving fundamentals and attractive valuations.

He explained their investment process. He noted that value traps hurt performance so you have to avoid lower trading stocks. They are very process oriented.

He described the portfolio characteristics. He referred to their price-to-earnings ratio and explained that they have a quality priced bias. This differentiates whether you exceed expectations. They have a quality bias. He provided a description of their quantitative model.

He stated that active managers have a difficult time beating the benchmark based on emotions and behaviors. You have to be process and rules oriented.

Mr. VanDagens told the Board that Mr. Roman took over the portfolio which is why there are two sets of numbers.

Mr. Roman stated that they are underperforming year-to-date.

Mr. VanDagens provided an overview of their performance. Quarter-to-date performance gross of fees is 2.37% versus the benchmark at 4.58%; year-to-date performance is 1.11% versus 6.30%; one-year performance is 1.71% versus 2.86%; three-year performance is 11.09% versus 9.87%; five-year performance is 11.96% versus 11.37% and their since inception performance is 13.36% versus 14.53%.

Mr. Roman explained that their quantitative model does not work in this type of market environment.

He discussed their sector investments. Their one-year performance numbers were good as well as their three-year performance numbers. Their recent performance was well below the benchmark.

They do not plan on making any changes to their strategy. The best way to beat the benchmark is with cheaper stocks with a quality bias.

Mr. Lee questioned their 2009 market returns.

Mr. Roman explained their performance issues in 2009.

Mr. Roman and Mr. VanDagens left at 1:17 p.m.

Mesirow Financial Private Equity

Kristina Pierce, CFA, Senior Vice President

Ms. Pierce provided an overview of the firm. Since inception they have \$4.6 billion in private equity commitments with 99% institutional clients. Their eighteen employee team is based in Chicago. Their investment committee averages over twenty-five years of investment experience.

Their focus is to optimize capital under management to maximize the opportunity set. Their portfolio construction is strategy based and they employ a simple client-centric allocation policy.

She reviewed the bios of the financial and support teams.

She explained that private equity has a one-quarter reporting lag. Fund IV is a more mature fund, a vintage year 2006. It has a net IRR of 1.8 times to 2.0 times. The System committed \$5.0 million with contributions of \$4.50 million with distributions to date of \$3.15 million. Fund VI will be fully committed within the next twelve months. Total contributions to date for both funds total \$5.38 million.

She described the diversification strategy for the funds. They have moderately-sized portfolios to provide diversification by manager, vintage year and sub-asset class strategy. They use a bottom up driven strategy. Their exposure is to premier U.S. and non-U.S. private equity managers including

buyout, growth equity, venture capital, mezzanine and distressed/turnaround strategies. They emphasize a highly selective and rigorous manager selection process with commitments to only eight to twelve funds per year.

She further explained the sub-asset classes, geography and transaction types.

She told the Board that the vintage year for Fund IV was extended through the crisis due to the 2008 to 2009 timeframe. This pushed the timeframe out to 2011 to 2012. She indicated that the System should expect another distribution within the next week or so. Fund IV had contributions of \$909.6 million with thirty-nine underlying managers.

Chairman Moore asked if they invest in emerging managers.

Ms. Pierce said they have no allocations to emerging managers but they would consider an emerging manager. She did note that Trinity Ventures is somewhat of an emerging manager.

She described some the funds that were performance drivers in Fund IV including TSG6 L.P., Thoma Bravo Fund X, L.P. and The Huron Fund III, L.P.

Fund VI was formed in 2013 and is in its early stage. The current fund size is \$658.1 million with 85.9% in committed capital. There are currently twenty-four underlying managers. There are thirty-one primary commitments with 29.5% of the capital drawn. She reviewed three of the fund's better performing funds including Thoma Bravo Fund IX, L.P., Spectrum Equity Investors V, L.P. and Olympus Growth Fund VI, L.P.

She told the Board that they are in the process of opening Fund VII which will continue with the same strategy as Funds IV and VI with a 70%/30% allocation.

Mr. Lee asked if they are lukewarm to core investments.

Ms. Pierce stated that they kept their core fund separate as a way to lower fees and to offer private equity investments to investors with a 70/30% allocation and 0% to 10% in secondaries.

Ms. Pierce left at 1:30 p.m. Meeting Break at 1:30 p.m. Meeting Resumed at 2:05 p.m.

Robinson Capital Management – Intermediate Fixed Income

Greg Prost, CFA, Chief Investment Officer Talmadge Gunn, Senior Portfolio Manager

Mr. Gunn introduced himself and Mr. Prost to the Board. He indicated that they manage an intermediate government credit portfolio for the System.

Mr. Prost told the Board that their process is to provide downside risk when there are big blurs in the cycle. There was discussion during the roundtable session about whether the S&P outperforms active management. In 2008 fixed income managers were not there to protect on the downside. They were buying too much junk and taking too much risk.

Mr. Gunn told the Board that as fixed income managers they are not paid to take risk.

Mr. Prost described their investment style as sector rotation. They hold a lot of individual names.

Mr. Lee asked the amount of assets under management in fixed income.

Mr. Gunn indicated that the company has \$375 million in assets under management with \$41 million in intermediate fixed income. The rest is held in enhanced cash.

Mr. Prost said that the Fed had indicated they were looking to raise rates in early spring; however Brexit was the major reason the Fed held rates in June. However, with the strong unemployment numbers he believes interest rates will increase this fall.

He reviewed the business versus consumer confidence model. He noted that fixed income managers get nervous when spreads widen.

Mr. Lee asked if they would lengthen the duration if they perceived more interest rate risk.

Mr. Prost stated that the market is not as robust for companies to pay off debt. Investors are worried about the corporate bond market and could take more risk. They believe yield spreads will widen.

Mr. Gunn told the Board that they are operating in accordance with all applicable System statutes.

Mr. Gunn reviewed their performance. Their year-to-date performance net of fees is 4.07% versus the benchmark at 4.07%; one-year performance at 4.64% versus 4.33%; three-year performance at 3.30% versus 2.95% and since inception 3.47% versus 2.97%.

They took some bad sector bets in areas that show value.

Miss Munson asked if they are in compliance with the System's policy regarding gifts and dinners.

Mr. Gunn indicated he would forward the disclosure statement to confirm compliance.

Mr. Gunn and Mr. Prost left at 2:25 p.m.

Brandywine Global Investment Management – Global Fixed Income Elizabeth Mathew Stevko, CFA, Institutional Relationship Manager

Ms. Stevko introduced herself to the Board. They have \$69.8 billion in assets under management with the majority allocated to fixed income.

They have recently added three fixed income professionals, one portfolio manager and two analysts.

They have produced good returns since inception at 7.69% versus the benchmark at 10.87%.

They are a global fixed income shop that allocates to different countries and currencies. There is a lot of demand for safe havens in bonds which is why they are returning negative yields in bonds. In order to return good yields they have invested in U.S. treasuries and Australian bonds. They also

invested in corporate bonds as well as thirty year bonds in Apple. They made investments in emerging markets in Mexico and Brazil and currency investments in Brazil, Chile and South Africa.

There are opportunities in emerging markets but you have to invest in places where there is price appreciation. They do not normally invest in corporate bonds. Their country allocations include Poland, Sweden and Norway. They are not investing in Germany. Most of their investments are in American markets. Their currency allocations has them participating in natural transitions which are beneficial. This helps them make use of flexibility with the barbell approach.

She explained that the barbell approach lets them take more risk on price appreciation while offsetting or hedging the risk by investing in American markets and developing nations. They invest primarily in AAA bonds in the U.S. and Australia.

Their global macro outlook sees the Fed's policy having impact on the U.S. dollar which will enhance global versus domestic influences in the market. There is investor concern with regard to China's commitment to an "L" shaped economic growth profile. Commodity prices will remain stable. Developing countries will see improved economic fundamentals with attractive asset valuations. Growth in Europe and Japan will remain flat with growth in the U.S., China and the emerging markets.

They are positive on their growth maintaining position.

First Eagle Investment Management – Global Value Equities

Amanda Barron, Assistant Vice President

Ms. Barron introduced herself to the Board. She provided an ownership update. The Arnhold family has sold more of their position in the company to Blackstone and Corsair Capital. This allows the employees to put more money into the company. The firm currently has \$95 billion in assets under management. The company has two hundred and seven employees.

She reviewed the firm organization primarily referring to the global value team. There have been a few additions and one departure from the company.

As of yesterday, the portfolio was up over 10%. Gold was the story along with the equity position. The cash position is currently 16.5%. Elevated cash holding is not based on market timing. They hold cash until they find good opportunities. Gold returns are doing very well. They use gold as a hedge. The current allocation in gold is over 12% but they try not to exceed 15% because it could signal a call on the price of gold. They try to stay around 10%.

There was a question regarding the SEC investigation.

Ms. Barron indicated that they felt it was based on an industry-wide sweep within the mutual fund community. They have a sub-TA agreement where they misclassified an expense. They ran their own sweep and found more. They settled with the SEC for \$40 million dollars which included a \$12.5 million penalty. The SEC could not find that there was intent.

Ms. Billings asked about the Department of Labor inquiry.

Ms. Barron stated that the DOL inquiry was not related to the SEC issue. There has been no update regarding the DOL matter. They are still sorting through the data.

She noted that they thought volatility could be their friend and believed that Brexit would improve performance.

Ms. Barron left at 2:59 p.m.

GrayCo Alternative Partners Fund I – Private Equity

Ademir Zecco, CAIA, Managing Director, Alternative Investments

Mr. Zecco provided a recap of the Fund I status and portfolio statistics. As of June 30, 2016 the current value of investments was \$29,158,490. Cumulative contributions are \$31,193,084 with \$10,799,948 in cumulative distributions/withdrawals. The total gains/losses are \$8,765,354 with an internal rate of return since inception of 10.8%. The portfolio is invested in private equity at 78%; hedge funds at 13% and real estate at 9%.

He reviewed the underlying managers and their performance in the fund.

Millennium International is an underlying hedge fund investment which has been a strong contributor to the fund returning 10.2% on an annualized basis relative to the hedge fund aggregate index at 4.7%.

Third Point is an event driven strategy that was added to the fund in January 2012. It has posted solid performance annualizing a 9.9% return.

Going forward they feel that these funds will return 8% to 12%.

He noted that the System has contributed \$4 million of the \$6 million committed capital to date.

He reviewed the private equity portfolio. To date there are cumulative contributions of \$20.6 million with cumulative distributions of \$2.4 million. The total value of investments is \$22.5 million. The investments have generated an internal rate of return of 11.0% with an investment multiple of 1.21.

He reviewed the underlying managers in the fund. Edgewater Growth Capital Partners III, L.P. Edgewater makes growth equity and buyout investments in high quality, lower middle market companies. To date the fund has seventy investments across seventeen platforms.

He told the Board that The Energy & Minerals Group Fund II, L.P. makes control investments in the global natural resources industry. The fund has generated an annualized IRR of 18.7% with an investment multiple of 1.64.

Freeport Financial SBIC Fund, L.P. is a direct lending vehicle that makes senior secured, floating rate loans to middle market companies. It currently has generated an IRR of 6.4% with an investment multiple of 1.14. The fund has made two new investments and two scheduled distributions.

Southeastern Global Partners (SEG) is an opportunistic hybrid investment vehicle. It is managed by GrayCo who created a wrapper around the investment vehicle to allow GrayCo to make co-investments as a limited partner alongside the general partner. SEG also supports established minority entrepreneurs.

Miss Munson asked about the underlying funds in Southeastern Global Partners.

Mr. Zeco indicated that there are six underlying investments: ClearRock; Legacy Partners; Partners Select; Algodon Wines; Clearview and Ebony Media.

He indicated that SEG made a \$200,000.00 bridge loan to ClearRock. They invested \$155,000.00 in Legacy Partners. They made a \$500,000.00 investment in Partners Select in senior debt and senior equity which they are writing off. After questioning, Mr. Zeco clarified that they are writing down the value of the securities that they hold. As with other equity investments, the value could rise again depending on the performance of the company.

He continued that they purchased 100,000.00 shares in Algodon Wines, which is on track to IPO in September 2016. They own 10% of preferred stock in Clearview. They also own \$887,000.00 in preferred stock in Ebony Media.

Parmenter Realty Fund IV, L.P. is a value-added real estate fund which focuses on office properties in the southeast. To date there are cumulative contributions of \$3.5 million with cumulative distributions of \$2.1 million. The total value of investments is \$4.8 million. Since inception the fund has acquired fourteen assets and has generated an annualized IRR of 11.5% with a 1.35 investment multiple.

Mr. Zecco reviewed the schedule of investments as of June 30, 2016.

Miss Munson asked about the partnership's investment in Edgewater. She indicated that the limited partnership agreement (LPA) appears to indicate that the \$5M commitment to Edgewater would be an acquisition of the ownership interest of Edgewater's current owner which would be different type of investment from the other funds.

Mr. Zecco indicated that he has no knowledge of the LPA's description of the investment in Edgewater. He indicated that he would research this question and provide an answer in writing.

Miss Munson questioned the investment in ClearRock. She noted that this loan had been reported in GrayCo's audited financial statements. Subsequent to the bridge loan being granted, it was determined that ClearRock was not going to continue as a going concern. The loan is being paid off with interest in a timely fashion. She noted that Yolanda Waggoner – the former Co-CEO of Gray & Company – had signed the Article of Organization.

Mr. Zeco indicated that this company was formed by Ms. Waggoner.

Miss Munson asked whether any other current or former employees owned all or part of any of the underlying investments in the SEG fund.

Mr. Zecco said no.

Miss Munson asked whether Mr. Gray owned all or part of any of the underlying investments in the SEG fund.

Mr. Zeco responded that Mr. Gray did not have any ownership interests in any of the underlying investments.

Mr. Zecco left at 3:28 p.m.

Invesco Private Equity - Fund V Kelvin Liu, Partner Keri Hepburn,

Mr. Liu reported that the System made a commitment of \$2.5 million. The fund has drawn down approximately 66% of the System's committed capital totaling \$1.6 million to date. The estimated net asset value including cumulative distributions as of June 30, 2016 was \$1.9 million totaling \$3.1 million. He noted that the remaining capital will not be drawn down.

He provided a recap of Fund V's progress report. He told the Board that 95.2% of the aggregate fund commitments have been drawn by the underlying partnerships. A total of \$116 million has been distributed. The diversified gross IRR is 15.7% as of March 31, 2016 with a diversified net IRR of 12.4%.

Performance continues to be strong specifically in the venture portfolio. He provided the overall internal rate of return for the three portfolios including U.S. venture with a gross IRR of 23.2%: U.S. buyout with a gross IRR of 11.5% and international with a gross IRR of 12.5%. He discussed the risk associated with each portfolio.

He assessed the fund's year-over-year annualized returns for both gross and net performance versus the benchmark. He explained that private equity reporting is always one quarter behind.

He described the gross aggregate fund performance year-over-year costs versus total asset value by portfolio including net asset value and distributions.

He examined the largest distributions by portfolio during the second quarter of 2016 including Battery Ventures VIII from the U.S. Venture portfolio; RoundTable Healthcare III from the U.S. Buyout portfolio and Carlyle Europe Partners III from the International portfolio.

He reviewed the Fund V financial summary as of June 30, 2016 which included the number of commitments in each portfolio; the number funds in each portfolio; the percentage of drawn downs from each portfolio; the percentage of distributions from each portfolio; the estimated remaining net asset value of each portfolio and the gross internal rate of return for each portfolio. The chart also provided the total for Fund V for each category including a total overall commitment of \$125.7 million; a total of nineteen funds; percentage of drawdowns of 95.2%; percentage of distributions of 98.6%; estimated remaining net asset value of \$91.7 million and a total gross IRR of 15.7%.

He described the portfolio diversification in Fund V. He explained that private equity is risky. You have to determine the timing to mature the investment while trying to mitigate risk which is why portfolio diversification is so important. He explained how Brexit and rising interest rates can affect the portfolio.

He examined the profile of holdings for each portfolio. He reported that Union Square Ventures is an early venture fund that was added to the portfolio in 2009. The fund started with an \$8 million investment in Twilio which is now worth \$515 million due to their IPO issued in June. The company supplies the backend application for Uber. This is just one of the latest offerings for Union Square.

Mr. Liu indicated that there was an issue raised by the SEC regarding the historical methodology of fee disclosures by the WL Ross & Company.

Mr. Lee asked if there was any impact to the System.

Mr. Liu stated that the company paid a small fine to the SEC and reimbursed \$11.8 million in fees. There was no impact to the System.

Ms. Hepburn indicated that they included information regarding their latest Fund offerings.

Ms. Hepburn and Mr. Liu left at 3:47 p.m.

Dahab & Associates Wrap-up

Mr. Lee recommended a change to the meeting format. He felt that the managers should be provided a minimum of twenty minutes for their individual presentations. He also suggested that more breaks were needed throughout the meeting. He also proposed that the round table session be shortened to allow additional time for the manager presentations.

The meeting adjourned at 4:04 p.m.