

**CITY OF PONTIAC, MICHIGAN
POLICE AND FIRE RETIREMENT MINUTES
SPECIAL MEETING
MAY 23, 2012**

A Special meeting of the Board of Trustees was held on Wednesday, May 23, 2012 at the Soaring Eagle Resort, Ojibway Room, Mt. Pleasant, Michigan. The meeting was called to order at 10:01a.m.

TRUSTEES PRESENT

Lon Britton
John Naglick, Secretary
Craig Storum, Chairman

TRUSTEES ABSENT

Leon Jukowski, Mayor (*absent*)
Matthew Nye (*excused*)

OTHERS PRESENT

Chris Kuhn, Gray & Company
Ellen Zimmermann, Retirement Administrator
Jane Arndt, Assistant
Jennifer Lundmark, American Realty Advisors
Lorena Cabezas, Artio Global Advisors
Robert Friebel, Artio Global Advisors
Jeffrey Detwiler, Garcia Hamilton
Matthew Wells, Garcia Hamilton
Joseph Beuparlant, Loomis Sayles
William (Todd) Fowler, III, Mesirow Financial Institutional Real Estate
Tracey Savage, Mesirow Financial Institutional Real Estate

Jet Taylor, Metropolitan Real Estate
Andrea, Leistra, Munder Capital Mgmt.
Tom Mudie, Munder Capital Management
Brian Duhn, Northern Trust
Timothy Hill, Thornburg Investment Mgmt.
Pete Mitchell, Thornburg Investment Mgmt.
David Schwarzenberger, Wentworth Hauser

CONSULTANT

Re: Capital Markets/Performance Review – First Quarter 2012

Mr. Kuhn pointed out that he used a Hunger Games theme for the capital market review based on the current struggles in the Eurozone.

The Consumer Price Index (CPI) was up 1.7% for the quarter and 2.7% for the year which makes the Fed happy.

The PPI struggled to keep pace but is up a little bit this quarter. It is not as strong as in the past.

There was lots of negative performance in commodities except for oil. There has been a lot of downward pressure on commodities with one-year performance down 16.3%; reversing the trend coming out of the Great Depression..

Trustee Britton questioned whether commodities are normally dominated by oil or gold.

Mr. Kuhn stated that commodities index have different construction methods with some more concentrated in oil and other more diversified; energy is the largest component of all of the

indexes. The commodities index performed differently this quarter due to the significant return differences in oil, corn, and pork bellies.

The Fed Fund Rate is on hold and they do not expect a change through 2014. The markets started moving without interest rates rising. The equity market normally pulls back when interest rate decreased. The Fed is comfortable with interest rates holding their own.

First quarter returns were in the double digits across the equity indexes. Growth had a slight advantage over value. There was a large divergence between sectors for the period with a couple sectors driving the market. Apple helped push the Info Technology sector. It was a sector driven market that will play out over the year.

Fixed income performance was down for the quarter. Barclays Government was down 1% and Barclays Long Government based on thirty year dated securities suffered the worst decline down 5.57%. The Barclays Aggregate contains a modest allocation to government bonds and was up only 0.30% for the period. It was better to be invested in corporate bonds versus government bonds based on the change in the credit spreads. Investors moved into credit and corporate-oriented bonds which offered more yield.

Trustee Naglick noted that 35% of the Fund is invested in fixed income. He asked if these are owned for income.

Mr. Kuhn indicated that the allocation to fixed income is for diversification. In 2008 equities were down 40% and fixed income held its value and increased the value of the portfolio.

Trustee Naglick confirmed that owning fixed income is part of the diversification strategy and a reason to be heavily allocated to fixed income.

There were a couple of issues in fixed income with Northern Trust. The Board is looking at replacing Goode Stable Value with some other index fund. It would have been nice to keep the 7% allocation to Goode in the portfolio.

Chairman Storum stated that when the Republicans are in office bonds go in the toilet.

Trustee Britton questioned that prediction. You do not want to give up diversification.

When everyone else backs off an asset class normally goes in the other direction.

The Board discussed the political ramifications on the market and the economy.

International equity markets generated strong performance for the period but less than U.S. equity markets. Spain has become the new Greece. Japan saw incredible performance up 19% for the quarter. It was due to the Bank of Japan's stimulus program weakening the yen which helped their exports. When their currency is strong it makes it difficult for Japanese companies to compete in the world.

The emerging markets generated low teen returns with their currency positive. The dollar depreciated versus the Euro during the first quarter but there has been a reversal during the second quarter.

International fixed income saw a couple of shining stars in Ireland and Spain during the quarter. The United Kingdom has fallen into a recession. The dollar is depreciating against other currencies with decent returns. This is a good time to be bringing Franklin Templeton on board.

Equities generated good returns for the Fund but there was not much from fixed income.

Trustee Naglick stated that he is proud of Gray & Company because not many funds have made 4% in the last five years.

Mr. Kuhn acknowledged that these good returns were generated because this portfolio is more conservatively positioned in fixed income. That is not always a fair comparison because the State of Michigan has guidelines on how the portfolio can be positioned. California and Texas do not have set guidelines.

Trustee Naglick stated that the Fund may be well funded now

Mr. Kuhn indicated that the three year performance numbers are a perfect snapshot of the market rally. The five year performance numbers capture the market rally and the incredible losses in the market. The Fund is slightly ahead of the policy index for that period.

Trustee Naglick stated that the auditors are anxious to receive the valuation from the actuary.

Mr. Kuhn noted that Northern Trust's performance is inline with the benchmark.

Munder did a good job of outperforming during the past year and made up for their early under performance.

Loomis Sayles continues to do an exceptional job.

Trustee Naglick asked if Tom Mudie is Munder's mid cap portfolio manager.

Mr. Kuhn indicated that Mr. Mudie is the portfolio specialist.

Wentworth Hauser's performance was 30 basis points behind the benchmark at 10.53% versus 10.86% for the quarter. Their one-year performance was significantly behind the benchmark at -10.09% versus -5.77%. This is a more volatile manager with a very thematic energy strategy. Oil was not a good performer around the globe during the last year.

Thornburg outperformed the benchmark 11.19% versus 10.86% for the quarter but trailed the benchmark -7.35% versus -5.77% for the year.

Garcia Hamilton's transition was rocky but their performance for the second quarter has been very good.

Artio's performance is not being measured against a good benchmark. They are using a global bond set and there is not a good benchmark to measure against. They are looking at making positive contributions to the fund at 2% to 3% per quarter.

Ms. Zimmermann questioned if the Board should be concerned that Artio has lost 50% of their assets.

Trustee Naglick felt that the Board has to look at the big picture.

Ms. Zimmermann felt that when a manager loses 50% of their assets it can affect their business.

Mr. Kuhn stated that all of Artio's losses were on the equity side and not on the fixed income side. Artio lost a lot of their client service individuals.

Mr. Kuhn explained that Goode Stable Value is going away this summer.

Ms. Zimmermann indicated that she received an email from Bruce Goode regarding the closing of their fund. She asked if the Board had any questions.

Mr. Kuhn reviewed the Fund's real estate performance. Real estate returned performance of 3% for the period. Real estate's three year performance is a different cycle from the equity markets. Returns through the downturn indicated that managers who over performed did so because they did not have a lot of leverage in their portfolio.

He compared the NCREIF versus the NCREIF ODCE benchmark and that the ODCE is a better comparison. The Fund's real estate performance was right on top of the index and in the top half of the universe.

They were skeptical of the core real estate numbers because there were not a lot of transactions in 2009 and 2010 and they were not aggressive in their valuations. Even though they did not have a lot of faith in the numbers earlier they are more favorable now that buildings are being fairly valued and transactions are occurring.

Trustee Britton asked if the NCREIF is the appropriate benchmark for REITs.

Mr. Kuhn stated that the benchmark used for REITs is the NAREIT. The underlying investment is real estate and it behaves like a stock.

There was discussion regarding the real estate benchmarks.

Trustee Britton asked if another column could be added with the manager fees.

Mr. Kuhn stated that Section 3 of the Performance Report shows the manager fee schedules.

He noted that they did not have the finalized performance numbers for MFIRE or Metropolitan.

Trustee Naglick questioned whether the Fund is out of securities lending. He referred to the notation for securities lending within the performance report.

Mr. Kuhn said that their report needs to be corrected.

Ms. Zimmermann asked if Metropolitan's numbers are correct.

Mr. Kuhn stated that the -10% is correct. This investment has a private equity structure using a time weighted rate of return. He explained the difference between dollar weighted returns and time weighted rate of returns. He also described the internal rate of return.

Ms. Zimmermann asked if this is a real estate or private equity investment.

Mr. Kuhn said that it is a real estate investment because they buy buildings but it is structured like private equity.

Ms. Zimmermann asked if that is true of both Mesirow and Metropolitan.

Mr. Kuhn stated that both Mesirow and Metropolitan are structured like a private equity investment. They are currently estimating a 1.5 time return of capital. They were just in New York and did their onsite due diligence at Metropolitan. They met with their chief strategist.

Trustee Naglick asked if they have properties all over.

Mr. Kuhn stated that this is a fund of funds and they look for managers all over the world. They look for fifteen to twenty managers around the globe. Metropolitan's first fund was U.S. managers. Mesirow is international. Metropolitan's second fund is global.

Chairman Storum asked about Mesirow's current performance.

Mr. Kuhn referred to their performance history indicating that they have had made some nice distributions. Both funds have turned a corner. Mesirow did make some bad investments early on.

Trustee Britton asked why Munder Capital's benchmark is the S&P 400 versus the Russell Midcap.

Mr. Kuhn stated that Munder changed their benchmark. The S&P Midcap 400 is a harder benchmark. Munder has noted that benchmark in the past. It has a different sector weighting versus the Russell Midcap. They can take a look at both.

He told the Board that he will be bringing a draft of the Investment Policy Statement to the May 31, 2012 meeting. He will also have the search books for the equity index replacement which includes the Northern Trust fixed income index and two equity indexes.

Chairman Storum indicated that he would like Northern Trust included in the search.

Mr. Kuhn also noted that Trustee Britton requested that they provide information on the equity capitalization allocation for the Police & Fire VEBA Fund. He recommended that whatever replacement is selected for the Police & Fire System is also used for the Police & Fire VEBA.

They created a new abbreviated version of the performance report. It contains the same managers as a sub class to show where the pieces are coming together. There are also some new exhibits. He encouraged the Board to check it out.

Chairman Storum indicated that he liked the detail.

Trustee Britton said he would like to look at both formats.

Meeting Break at 10:20 a.m.

Meeting Resumed at 10:29 a.m.

Economic Overview/Markets Roundtable

Mr. Kuhn welcomed the managers and began the introductions and explained the meeting format.

He stated that the economic data suggests that the economy is slow with GDP growth around 2% and consumer spending around 4% to 5%. He asked the managers for their GDP growth projections.

Jeff Detwiler from Garcia Hamilton stated that they felt growth would be stronger than expected but based on the unseasonably warm winter there will be a reversion to the mean. It did take place but we are not there now. The GDP was revised too low. There will not be any rapid growth but this is a good environment to keep inflation in check. Corporate profits grew with spreads tightening which is a good spread environment.

Tom Mudie from Munder Capital said that the consensus is asking where growth will come from. John Naglick brought up the fact that the fiscal cliff is coming up in the first quarter of 2013. Slow growth will obviously cause problems. Tony Dong is a bottom up manager but he is paying more attention to the macro and top down approach.

David Schwarzenberger from Wentworth, Hauser & Violich agreed that growth in the U.S. will be in the 2% to 2.5% range. Globally growth will be slightly above average. The IMF has projected growth in the 3% to 3.5% range. Historically, the U.S. has driven growth however it is now coming from the emerging markets. Growth in the developed world will continue at a slower pace than the emerging markets. Europe is currently in a recession. Growth in Japan and

the U.S. will be in the 2% to 2.5% range. He indicated that China has lowered their growth projections to 7.5%.

Joseph Beauparlant from Loomis Sayles indicated that they believe the two main drivers are housing and unemployment where there has been a slight improvement. Growth will take baby steps and push the matrix to get to 3% to 4%. The recovery will be more of an l-shaped and will bounce along the bottom for now. The unemployment numbers have been decent but not enough to push projections.

Jennifer Lundmark from American Realty Advisors stated that from the housing perspective this is the first time since 2005 that they are seeing positive signs. Rentals seem to be increasing. Currently there is a quality market for family housing. They are seeing strong employment in pockets around the country.

Mr. Kuhn asked what areas in the country are seeing a growth in employment.

Ms. Lundmark indicated that Seattle, Silicon Valley and Houston have seen strong employment pockets of growth. She also noted that shadow vacancy ratings are up a little bit.

Todd Fowler from Mesirow stated that these are upward trends but it is hard to predict in an election year. New York City has added approximately fifty-five thousand jobs since 2010.

Ms. Lundmark stated that they are predicting a saw tooth recovery.

Jet Taylor from Metropolitan indicated that they do not look at the residential area but noted that apartments and rentals are strong in their space. Apartments are at their lowest vacancy rates in the last ten years.

Mr. Kuhn stated that with the slow job growth and wage inflation he cannot see the mechanics in place to drive the economy.

Robert Friebe from Artio stated that there is not enough stress in the economy to drive inflation near term but if you look long-term there is a lot of debt. He used an example of how the debt has grown. You would have to spend \$3 million dollars per minute (\$2,939,640) or \$176,378,400 per hour or \$4,233,081,600 per day which is more than four billion dollars of added debt per day. He referred to the European debt crisis and stated that the U.S. needs to wake up because they have the same structural problems here. It could take years to fix the problem. Look at the price of gold which is an issue but there are a lot of smart people putting their assets in gold.

Mr. Schwarzenberger stated that this is a huge deficit at \$15 trillion dollars. It will take 31,000 years to pay off this debt. Historically, we have dealt with debt by growing our way out or inflating our way out. With no growth this will eventually become an issue.

Mr. Kuhn asked how long before we see the affect.

Mr. Schwarzenberger stated that it will take two to five years and will not just affect the U.S. but the entire developed world.

Ms. Lundmark indicated that real estate is usually a good hedge against inflation because it writes shorter term leases and builds in the CPI into the leases.

Mr. Kuhn asked if there is anyone expecting inflation that is not built into inflation. He asked that the managers share their outlook in Greece and in Spain who is in the same trap.

Timothy Hill from Thornburg said that they are not buying much in the PIGS countries or anything south of France. Europe is the 800 pound gorilla in the room that is driving everything. It seems that it was getting better at the beginning of the year but it was just a band aid. Their sense is this is being looked at from a political not an economic perspective. The question is what is Germany getting out of this paradox of currency strength. If their economy and currency is too strong you can check off the rest of Europe. Germany is driving their global economy.

Mr. Friebel stated that it is difficult to predict from a political perspective. It would help if they could come together and give Germany the power to tax or it can fall apart. The PIGS are Germany's customers. Greece's economy is the size of Philadelphia and this is just a precursor to Italy and Spain. They look for global companies that sell outside of the Europe. You need to choose the right economies and companies.

Mr. Fowler from Mesirow stated that there needs to be a continual time off. There is too much uncertainty and Germany has the most to risk. There needs to be more political will to keep the European Union together.

The State of Illinois is also in bad shape like Greece. He questioned who will be there to bail out Illinois. There is too much political will. Their economy is relatively small. It should work out the best for everyone. The real estate market is bifurcated as is Europe. Need to get back in Northern Europe which is a better situation from a real estate perspective. There is no clarity.

Mr. Kuhn asked Mr. Friebel if they are staying away from Europe.

Mr. Friebel indicated that there are good companies and investments in Europe.

Mr. Fowler said that timing is important and they are waiting until after the elections in Greece. From a real estate perspective there are tremendous buying opportunities but they need to wait for more clarity and stay away for the near term.

Mr. Schwarzenberger stated that they are global thinkers. Greece is too leveraged. They are opportunistic that the Eurozone will stay intact. They cannot see Greece making it on their own with their own currency.

Mr. Kuhn asked if the trustees had any questions.

He asked the managers about interest rates and how the Fed has put them on hold. Do they see rates pushed higher or out over the next thirty years?

Jeff Detwiler from Garcia Hamilton stated that TIPS are five years out with negative yields. Inflation will be around 2% and the market will not be a factor. The problems in Greece started when the treasuries were downgraded. The European Central Bank needs to maintain liquidity but they were slow to act. The crisis in the U.S. was acted on quickly which pushed liquidity into the economy. As long as the U.S. economy is sluggish expect interest rates to stay the same and there will not be any inflation problems. It is different for long-term rates. Operation Twist has pushed yields down on the longer end of the curve. As the U.S. recovers the market will start to ignore what is happening in Europe. He does not see rates rising anytime soon.

Mr. Beauparlant from Loomis Sayles stated that he is in agreement with Mr. Detwiler. He sees inflation rates up to 2% to 2.25% toward the end of the year. Right now inflation is at 1.75%. People should be buying stocks because rates are going up and they have no where to go but up. He likes the equity side. Fixed income assets need to be moved to equities. Treasury rates could go down to 1% by the end of the year.

Trustee Britton said that he read in the press that baby boomers are searching for yield. Is their searching important to the managers' strategy?

Mr. Detwiler stated that with the Fed on hold short-term investors are pushing yields in treasuries out further. Treasuries are not the place to be.

Mr. Friebel stated that there are two ways to reach either decrease quality or go longer. High yield is less sensitive to rate changes. Investors are definitely reaching for yields. The Fed is pushing everyone into a pool. Everyone will have to meet the bogie at the end of the year.

Ms. Lundmark said that real estate is an income producing investment. There is currently huge capital flow into the space. Cap rates and spreads to treasuries are at historical high. You cannot get into the fixed income market.

Trustee Britton asked with private investors pushing on the market has there been dramatic or little effect.

Mr. Kuhn indicated that retail investors are still buying bonds looking to get 3% going forward and still reaching out.

Mr. Duhn said that they have a huge money market fund and they are seeing their clients slowing moving into equity funds with an overweight to high yield and large cap U.S. equity. It is hard to distinguish what is going on with everyone talking about facebook. There were a lot of individual investors but a lot of them dropped out. There are so many other factors affect the economy. If Obama gets elected there will be \$500 billion in taxes that are going to hit.

Mr. Kuhn asked if 2012 is repeating 2011 and if there is a Ground Hog Day affect. He also asked about the debt ceiling issue.

Mr. Beuparlant stated that we should not see another Japanese Tsunami or the issues that occurred in the Middle East last spring. There is no big negative catalyst. We are in between movements. There is not one big one but could be some volatility during the next six months.

Mr. Kuhn asked how much exuberance or fear is built into the equity markets.

Mr. Mudie stated that equities are attractive based on interest rates. Earnings growth is slow. Retail brokers are putting money in bond funds out of equity funds. There is not a lot of exuberance. The trailing ten-year performance is just starting to barely recover.

Mr. Kuhn asked about the equity market performance below historical averages.

Mr. Hill said that they are looking for value. They do not look at the market that way. They look at it on a company by company basis.

Mr. Friebel said that private equity is not his game. Bearishness is at an all time high in retail.

Mr. Mudie stated that low interest rates justify the multiple.

Mr. Kuhn asked if the market is overplayed the high yielding stocks trade.

Mr. Duhn stated that they just launched a growing dividend product last year. It has had a run with plays into weighting large cap companies with billions in cash on their balance sheets and that offer dividends and stock buy-backs. He believes they have an allocation to that asset class but that strategy is done.

Mr. Hill stated that you can look at dividends two ways either as a retail game with a dividend-focused product or for their tax impact. Dividends mean cash flow and there is a lot of off shore demand for cash flow products in other countries.

Mr. Kuhn asked about the affect of Japan's downgraded debt by Fitch and their incredibly cheap bonds.

Mr. Detwiler stated that imports will not affect the U.S. rates. Japan's rates are based on their economy.

Mr. Schwarzenberger indicated that Japan's debt to GDP is over 200%. They cannot fund internally so they will outsource to external markets.

Mr. Kuhn felt that this may not be sustainable.

Mr. Friebel indicated that rates in the U.S. will be determined by off shore investors. This is a precursor to what will happen in the U.S.

Mr. Hill stated that they are underweight to Japan. It is interesting that Japan posted a current account deficit. The U.S. is not in the same situation. Japan has poor demographics compared to the U.S.

Mr. Fowler stated that they have a similar view of Japan. They look at tactical situations. Tokyo is interesting. They do not see long-term real estate perspectives for Japan.

Mr. Taylor said that they like the Tokyo demographic and they are buying office and distressed debt at a 50% discount and financing at 2%. Rents are down 25%. It is a nice positive spread and the best in the developed markets. It is an interesting place to put money.

Mr. Kuhn asked if there were any questions.

Trustee Britton indicated that there are two Police & Fire Retirement System funds one is a fully funded pension fund and is a closed system. They are reviewing the actuarial valuation at the end of the month and they will know the Fund's liability at that time. The other fund is a VEBA Fund that is severely underfunded. He asked the managers how they would position the Funds.

Mr. Hill said that based on his experience in the industry he would de-risk the fully funded plan. For the VEBA Fund he would consider the David Swanson model with alternatives, private equity, hedge funds, international equity, emerging markets stocks that are domiciled in emerging markets not as economy. That would add a lot of potential volatility.

Mr. Taylor stated that there are a lot of good opportunities in real estate with returns currently in the low to mid teens without taking a lot of risk. With funds on the upswing and fundamentals firming up, cheap debt and low inflation this is a good time for the VEBA Fund to invest in value added and opportunistic. Real estate returns can help pickup that funding gap.

Ms. Lundmark said that the

Mr. Duhn said that the Board could de-risk the Pension Fund by investing in a low cost, passive management strategy.

Ms. Cabezas said that she would add an international equity strategy to the VEBA like a dedicated emerging market manager. The portfolio would be composed of hedge fund, real estate and infrastructure depending on your risk aversion. The best long-term perspective would be to go in into alternative asset classes.

Ms. Leistra referred to the Pension Plan and said that you cannot take the risk off the table. Long-term you need a diversified portfolio that makes sense. Scrap the last ten years and diversify the portfolio.

Mr. stated that liability driven investing is better for the Pension System. Take the cash flow based on actuarial valuation and matches fixed income maturities and coupons with liabilities in order to increase returns or decrease risk. The way to control liabilities is to plan up front. If

you invest in a fixed income product you need to layer in some equities and alternatives to make sure you have the cash flow on hand when needed. Balance how much risk you layer in.

Mr. Schwarzenberger asked what the assumed rate and funding credit based on the actuarial valuation is for the VEBA Fund. You need to take a lot more risk, increase contributions or decrease liabilities. The fully funded plan has a higher risk tolerance.

Mr. Fowler said that from a real estate perspective they need to take a global view which takes risk out of the spectrum. It is not likely returns in the U.S. will be sufficient, so you need a global view.

Mr. Detwiler said that you need to be careful when reducing risk. Severely de-risking could impact reaching your target. There is not a lot of cushion for the under funded plan and you could hurt the plan. There are immediate liquidity needs so you need to look at a bar bell type portfolio. Fixed income will meet needs and the rest of the portfolio can take on risk which will fuel growth for future.

Mr. Kuhn asked the managers if they have worked with any plans that are doing something interesting.

Mr. Schwarzenberger said that he has seen clients adopt the Bill Gross model with convertible strategies and less exposure to fixed income.

Ms. Leistra said that at NCPERS they were talking about investing in infrastructure referring to CALPERS which is currently investing in infrastructure. Unless there is good compliance it is too good to be true.

Chairman Storum asked Mr. Hill how he would position the VEBA Fund.

Mr. Hill said that he has a long history in hedge funds. The real estate ideas are compelling along with long commodity plays. He likes the commodities indices, private equity and the David Swenson model.

Meeting Break at 12:00 p.m.

Meeting Resumed at 1:00 p.m.

Manager Presentations

American Realty Advisors - Real Estate

Jennifer Lundmark

Ms. Lundmark stated that their performance for the first quarter of 2012 was strong including over the last year. They underperformed their peers due to the lack of leverage in their portfolio compared to their peers. Their leverage was 15% versus the ODCE which was closer to 25% so they did not bounce up as much as the more levered managers.

American Realty is never highly leveraged. Their maximum is 40% and they are normally in the 15% to 30% range. They have a low leverage strategy but there is still a lot of value. The best time to add leverage to the portfolio is early in the cycle. They recently added five multi-family assets to their portfolio with attractive debt around 4% and is now leveraged around 20%. This should help their portfolio. Their valuations will not come up as much. They will monitor performance closely.

They were buying assets in the multi-tenant space which tend to have smaller tenants. Smaller companies were hit harder during the economic crisis and they were unable to get financing so they went out of business. As a result occupancy was down. They are now more focused on credit quality in the portfolio. They are currently looking at single tenants for industrial buildings. They are looking at a single tenant building in Silicon Valley and different asset profiles.

Having more cash in the fund was a drag on the portfolio. Cash in the fund at the end of the year was around 10% and is now at 6.5%. None of their assets were hit hard. Their portfolio is diversified by geographic location and type.

In February they hired Lee Menifee at CBRE to take a top down look at their portfolio and the buying and disposing of assets. He is looking at sectors versus specific markets. He feels that energy is an attractive sector. They are now looking for exposure in energy and think that buying energy assets in Houston is a different way to position the portfolio.

Trustee Naglick confirmed that the System is invested in one large portfolio.

Ms. Lundmark indicated that it is a core commingled fund with seventy assets and two hundred investors. It is a diversified and liquid portfolio. It is different from Metropolitan. There is quarterly liquidity and the fund never closes. It is different than a closed end fund.

Trustee Naglick confirmed that they can always add new investors.

Ms. Lundmark stated that they are looking at strip malls with grocery anchors, retail, multi-family, office and distribution facilities. The fund receives 80% of the returns from income and 20% from increases in property values. Their goal is returns of 8% to 10% with a focus on income. They are not looking to buy distressed properties.

People are looking for an income this year and there is a lot of capital coming in which causes valuations to increase. Overall, the economy needs to improve. Capital returns are balanced with high quality assets. The USA Today indicated that jobs in the auto industry are increasing but Hewlett Packard just announced a large layoff. Real estate needs job growth and they are waiting for the new construction to come back. Housing has ties to the drag on the overall economy.

They are looking for properties in areas with strong local employment especially good for multi-family which can provide strong performance and good income. There are a lot of big hurdles out there.

She addressed the question asking what the trustees can do. She stated that the trustees can keep them abreast of any regulatory issues in the State of Michigan that could affect the investment vehicle.

There was discussion regarding which benchmark should be used and whether they are in compliance with the Investment Policy Statement or if it should be revised.

Trustee Naglick asked if there is a limit in how much can be invested in real estate.

Mr. Kuhn indicated that 10% of the portfolio can be invested in real estate. The American Realty Fund is not technically registered.

Ms. Lundmark left at 1:22 p.m.

Loomis Sayles – Small Cap Value

Mr. Beauparlant

Mr. Beauparlant described what helped and hindered their performance. Year-to-date performance through April 30, 2012 was strong up 10.9% and 1% ahead of the benchmark. Their one-year performance was -0.41% versus the benchmark at -4.06%. He indicated that 2011 was an extremely volatile year especially for bottom up stock pickers, particularly during the third quarter. It is a testament to the skill of their portfolio management team that they will not always out perform but will perform well in all markets.

He described their top five and bottom five performers. He stated that there are always more names that they like so they are quick to remove poor performers.

He reviewed their sector attribution. They found alpha in seven out of nine sectors. They were underweight to financials because banks are still not back to where they were but otherwise they are pretty close to the benchmark. Their weighting to consumer discretionary added 194 basis points of performance.

They do not utilize a top down strategy. They are benchmark aware and they do not take any large or small bets.

They recently hired Jeff Schwartz onto the small cap portfolio management team. He came from Palisades, California and is a University of Michigan graduate. He is a nice balance with Joe Gatz. They did not want to bring in a mirror of Joe Gatz.

They are still running the same process since the early 1990's. Performance has been good. Jeff and Joe have to agree before putting a name into the portfolio. It is a good team approach. Their process is still the same.

He addressed the question regarding hurdles and headwinds. They have always done well in all markets. They have the most difficulty during negative and positive news flows which drive the

market. When everything moves together they can lose some of their positive performance edge. They could underperform if there is huge news out of Europe.

There is nothing the trustees can do other than keeping the same guidelines and verify that the performance numbers are inline with Gray & Company. There are no IPS issues in compliance or an alert would pop up.

Trustee Naglick stated that Loomis Sayles is a bright spot in the portfolio.

Mr. Beauparlant left at 1:36 p.m.

Artio Global Investors – High Yield

Lorena Cabezas

Robert Friebel

Mr. Friebel addressed what helped and hurt the portfolio. Their one-year performance for the portfolio was 2.75% versus the index at 5.11%. They underperformed by 236 basis points which in their view is unacceptable. There were a couple of reasons

The Central Bank crisis drove rates down. Interest rates are normally not a high yield performance detractor. Credit quality and money market funds usually see performance issues. They were underweight in terms of duration. Their impression was that the U.S. economy was recovering and that interest rates would rise.

With the economy improving they were long in single B versus BB-rated credits. When interest rates rise B-rated credits are less sensitive. They were long in single B which caused two-thirds of their under performance.

Their exposure to good solid companies in Europe was down slightly. They were focusing on European companies that have global mandates but were slightly underweight versus the universe but held a 15% to 20% exposure. This was responsible for one-third of their under performance.

Their exposure to the emerging market corporate and sovereign credit helped their performance.

He addressed what they would do differently. They would shorten their duration to four to five years which would be within half of a year of the benchmark. They are seeing a difference from the benchmark is why they are still somewhat short. They will be much closer to the benchmark going forward.

The have not paired back their European exposure and overall they have come in slightly. The solid companies will be fine. They are also finding that European companies that are global in nature will do fine but are staying away from companies with an out of bound exposure to the Eurozone. The PIGS countries are most challenging. They like the Czech broadcaster Time Warner and feel that cable companies are growing. They are comfortable with the leverage. Cable companies in Germany were loaned 40% of their capital.

The European crisis in Greece and the implication of macro events are drowning out any good investments or companies for bottom up investors. There is paralysis at the policy level. Trustee Britton asked if they are struggling to find a good benchmark.

Ms. Cabezas stated that she does understand why there is not a constrained or cash high yield benchmark that could be used.

Mr. Kuhn stated that Gray & Company uses one and he would be happy to make the change.

Mr. Friebel said that it would be better if they managed to a benchmark that manages global high yield events versus the Merrill Lynch High Yield that manages to domestic high yield events. During the first quarter European paper came back. Now the crisis has come back. It is a better way to verify returns.

Ms. Cabezas stated that their performance in line with the benchmark and they are achieving their goals. Year-to-date they are flattish to the existing benchmark. They are in compliance with the IPS.

Trustee Naglick confirmed that Artio's high yield total fund is \$100 million and the System's investment in that fund is \$5 million.

Chairman Storum questioned whether their underperformance was due to duration and whether this is why they are currently up versus the benchmark.

Mr. Friebel stated that much of the underperformance was due to the European crisis. Their duration is back in line with the benchmark at 15%. They roared back during the first quarter but their performance has flattened out.

Mr. Kuhn asked if they decreased the volatility by a sell off and are they now buying it back.

Mr. Friebel said that they try not to do LEC funds. This way they avoid the risk on/risk of behavior. The capital appreciation is staggering.

Ms. Cabezas & Mr. Friebel left at 1:58 p.m.

Thornburg Investment Management - International Equity

Timothy Hill

Pete Mitchell

The portfolio managers are keenly aware of the difficult environment but an equity investment they manage money in high quality stocks at a discount. This period they are looking for discounts selectively buying with cash. They are a bottom up manager. Europe continues to do nothing to resolve the issues.

They have three buckets in their strategy. They allocate 40% to deep value cyclicals, 40% to consistent earners that have held their value and 20% in emerging franchises. It is all about consistency.

They have exposure to a Swiss company Syngenta which is similar to Monsanto that wants to be more effective about feeding the world. They do not own any stocks in the PIGS. They have some exposure to peripheral European companies from a domiciled perspective. In the third quarter they had some quality swaps. Deutsche Bank has had some credit issues. They own one purely Swedish bank and a position in HSBC which is English-based.

Having positions in blue chip consistent earners helped their performance especially their position in a Brazilian airline company Embrear. Consumer discretionary helped a lot and they were overweight to Kingfisher which is the Home Depot of the United Kingdom.

They have a 15% weighting to emerging markets from a domiciled basis. They were underweight to Japan but own multinational exporters Toyota which was a value play and Komatsu which manufactures tractors and mining equipment which was an infrastructure play. They are underweight to basic materials and industrials. They have taken a defensive position in Europe due to the financial crisis. The rest is kept in cash.

They would not do anything different. They will continue to run the same investment process which has provided above average top quartile performance.

Their style play is meant to work in different environments. They are positioned accordingly to deal with the lack of employment in Europe and the U.S. along with a hard or soft landing in China.

They did not do well in one-trick pony markets. The fall in European financials hurt them but banks in the United Kingdom will do well.

There is nothing the trustees can do since this is a commingled investment vehicle.

He said that there could be opportunities for the VEBA Fund in an all cap product which has been a top end performer.

They believe their performance numbers are in line with Gray & Company but will verify. They are in compliance with the IPS.

Mr. Hill & Mr. Mitchell left at 2:08 p.m.

Metropolitan Realty – Real Estate

Jet Taylor

Mr. Taylor told the Board that their performance returns were good last year and that they raised \$300 million. The YMCA hired them as their international mandate and they opened a Hong

Kong office. They also hired John Seau who graduated from Brown University. The company is continuing to grow at a good pace.

The market is bifurcated. Real estate yields are at 5% to 6.5% look good as compared to fixed income at below 4%.

They look to renovate, rent up and sell properties. Pricing changed very little but will kick up as well.

Fund VI is a vintage 2008 fund which is seasoned with 77% of the capital called. Performance is up 16% with multiples at 1.48 times up to 1.58 times the investment on the dollar.

Fund VII is a vintage 2010 fund with 30% of the capital called. Performance is -11% but that is not uncommon based on where the investment is in the J-curve. This fund will do better than Fund VI which is up to mid teen performance.

Apartments helped drive their performance with 16% gains. Secular changes have seen home ownership drop. There are forty million apartment units and rents increase in apartments. This represents only half of what is needed. Industrials are driven by Gross Domestic Product (GDP).

Their exposure to office hurt them because leasing in the sector is slow and spotty.

The fund is invested in domestic, international and global managers. There is less overweight to apartments and is neutral to overweight in retail. Grocery and drug stores are seeing yields at 7% which should be an attractive asset overtime. They are now leasing in the upper teens to lower twenties so returns will double. If job growth declines it would hurt performance.

This is a commingled fund so there are not changes needed to the IPS and there is nothing the trustees can do.

Trustee Naglick questioned whether this is a domestic real estate fund.

Mr. Taylor stated that it is a domestic fund. The fund has one hotel manager and distressed. The fund has passed the bottom of the cycle. Core prices are up and value added and opportunistic are attractive.

Mr. Kuhn said that he has done some research in core. The markets in Washington, D.C., New York, Chicago, Los Angeles and San Francisco have done well. Markets like Seattle and Miami have not done much.

Mr. Taylor indicated that core buyers want the most liquid valuations.

Meeting Break at 2:22 p.m.

Meeting Resumed at 2:28 p.m.

Garcia Hamilton – Fixed Income

PFRS
Manager Review Meeting
May 23, 2011

Jeffrey Detwiler
Matthew Wells

Mr. Wells told the Board that they appreciate the business. This is a recent investment with inception in July, 2011. They are 100% employee owned. At inception they had \$2.6 billion in assets under management and are now at \$3 billion.

Mr. Detwiler stated that they are in compliance with the IPS and that their performance numbers match those reported by Gray & Company.

There is nothing for the trustees to do but help maintain a great relationship.

Since inception in July, 2011 they have outperformed the benchmark 60 basis points. They have outperformed through an investment cycle, a recovery cycle and the accommodating Fed. They were over weight to the spread product thinking the economy would grow. They were underweight to treasuries which they feel is a risky strategy. The third quarter of 2011 was volatile and it hurt their performance when treasuries were downgraded and there was a rush to safe haven along with the issues in Europe.

They stick to their guns with no major over reactions to tighter spreads in corporates. There was a rebound in the corporate sector through March, 2012 and they outperformed the benchmark 200 basis points.

What hurt their performance was the continual volatility and another rush to treasuries.

The key is to be patient, to be long-term investors and do not change strategies.

Trustee Naglick asked how it affects their portfolio performance when the market muddles along.

Mr. Detwiler stated that if treasury rates rise it would be a positive data point for corporate yields and spreads will tighten.

Trustee Naglick asked if it would hurt value.

Mr. Detwiler stated that corporate bonds would outperform and in that scenario should be okay. The shorter the duration the less affect there is to rising interest rates. Overall, interest rate sensitivity is less than the benchmark.

Trustee Britton asked if they have looked into including municipal bonds in their portfolio.

Mr. Detwiler stated that it does not make sense for this portfolio or strategy. The Build America Bonds have low liquidity and low spreads. For an institutional investor corporates make more sense compared to BABS where there is not a lot of opportunity for the risk.

Mr. Detwiler and Mr. Wells left at 2:39 p.m.

Wentworth, Hauser & Violich – International Equity

Dave Schwarzenberger

Mr. Schwarzenberger stated that their performance attribution trailed the benchmark -10.07% versus -5.77%. April's performance was up 75 basis points versus the benchmark. They have given up some of that performance in May down -8.5% versus -8.1%. Their year-to-date performance is -7.8% versus the benchmark at -9.8%.

They utilize a thematic, top down sector oriented approach looking at supply and demand imbalances that will persist overtime. Their current theme overweight is to emerging markets, energy, and industrials. They are overweight to the energy and materials sectors.

Within the energy sector they have an overweight to oil field service companies at 8.5% versus the benchmark at 6%. They do not like oil reserve issues, contract issues or issues concerning replenishing reserves. They were in the wrong place over the last year but are in the right place now. They sold off a couple of mining companies.

They are underweight to healthcare and materials which was the best performing sectors and hurt their second and third quarter performance. They have an underweight to financials and consumer staples which benefitted their portfolio. The last ten years have been a lost decade.

Over their long-term performance history Dick Hirayama has gotten it right. He does not try to position the portfolio for secular themes. Inflation will cause some pressure but the holdings in the portfolio should provide a hedge if there are issues.

He indicated that the complete implosion of Europe, the stoppage in China and the slowdown in the U.S. have been hurdles for them.

He indicated that the trustees can help by giving them the discretion to manage the portfolio. They are in full compliance with the IPS.

Mr. Schwarzenberger left at 2:54 p.m.

Mesirow Financial International - Real Estate

William (Todd) Fowler, III

Tracey Savage

Mr. Fowler told the board that the account information is accurate and they do not have any compliance issues.

For the year their gross performance is up 11.8%, up 7.4% after management fees and up 4.4% net of fees. He indicated that 64% of the capital has been called and only 30% had been called at the same time last year. After three years the fund is up 18% on an annualized basis.

Woodbourne Capital has deployed 100% of their capital and has made some distributions. They sold a Brazilian position for 3.3 times the multiple.

They are seeing tremendous opportunities and are well positioned to provide double digit returns and are fully committed. There are seventeen underlying funds in the portfolio with 33% of the investments in Asia, 34% in Europe and 31% in America excluding the U.S. The balance allocated to domestic investments.

Patience benefitted portfolio performance. They are globally focused niche managers that look for globally diversified funds.

One hurdle is the limited access to debt capital in Europe which is hindering dispositions. They need liquidity in the market in order to grow cash flow. The slow down in China is another issue. They would love to see 7% to 7.5% growth in the U.S. There are a lot of natural resources being used in China and a lot of demand. Reduced housing prices in China would add value and opportunity. Chinese consumers are price sensitive.

The trustee can continue to ask the tough questions and demand good answers. They could also attend the annual meeting Mesirov holds for their investors.

Chairman Storum indicated that they do not need any additional meetings.

They are committed to being 100% funded and are 64% committed today. This has been a deeper J-curve than forecasted. Over the next few months they would like to see committed capital reach 80%.

He noted that there are currently some good opportunities in Brazil and Canada.

Trustee Naglick confirmed that the System still has capital that needs to be called.

Mr. Kuhn indicated that the investment was for \$5.2 million.

Trustee Britton asked if the managers are leveraged. He also confirmed that MFIRE is a manager of managers

Mr. Fowler stated that the underlying managers are leveraged at around 48% with a 65% cap. They will not investment with a manager that has more leverage than 75%.

Mr. Kuhn stated that this is a different strategy with regard to leverage. The fund started with 30% leverage and can go up to 70%.

Mr. indicated that these investments do not require leverage in order to achieve returns.

Mr. Fowler & Ms. Savage left at 3:09 p.m.

Northern Trust – Indexed Fixed Income

PFRS
Manager Review Meeting
May 23, 2011

Brian Duhn

Mr. Duhn thanked the Board for their business. They have been providing investment performance since 2002.

They attempt to replicate the returns of the respective benchmark.

The lending funds have helped offset fees with 12 basis points of positive tracking with fees of 5 basis points.

He has been doing some different work with Chris Kuhn by going into non-lending funds where the fees are a little higher. But based on their relationship with the City of Pontiac Retirement Systems they are charging a flat fee of 5 basis points for the Russell Value and Growth index funds and 6 basis points for the Aggregate index fund.

Their investment style is replicating the benchmark.

The trustees can help by continuing to work with the consultant and keep the lines of communication open and to be understanding during market volatility.

It has been an absolute pleasure meeting everyone.

Trustee Britton stated that the litigation is with the custodian not with these folks.

Mr. Duhn told the Board that there is a Chinese wall between the groups. Bernard Walsh just told him about the litigation within the last week.

Trustee Britton indicated that the Board was not happy with what happened and they looked at it as one business. They were upset with the defense's strategy that it was the victim's fault.

Mr. Duhn stated that he came to Northern Trust because of their philosophy and culture. He has had conversations with clients in the past. Securities lending is a challenging discussion. He wishes everything could be more transparent.

Ms. Zimmermann told the Board that Bernard Walsh is great and responding and being a fixer.

Mr. Duhn left at 3:18 p.m.

Munder Capital – Mid Cap Equity

Andrea Leistra

Tom Mudie

Ms. Leistra told the Board that they are in compliance with the System's IPS. It has been one year since she met with the Board. During that time Andy May has left and was replaced with Robert Crosky who has been a senior portfolio manager with Munder since 1993.

Mr. Mudie told the Board that it was a good year. What helped them was strong stock selection and making good market bets and a neutralized sector selection. There were four sectors that made the most contributions with consumer staples being the best performer. There was nothing too drastic that detracted from performance.

Tony Dong is a bottom up manager but he has paid more attention to the macro environment than normal due to everything that is going on in the world.

They have seen some positive signs in the housing market and are looking at two stocks to add to their portfolio with one having dividend yield. They are taking a more conservative versus aggressive approach.

The market turmoil can create high correlations and has been a hurdle for them especially during the second half of last year. Their portfolio lags on the upside when the stock market is strong. However, they outperformed during the first quarter when the market was strong. Earnings growth is slowing which can be challenging for companies who do not meet estimates as we have seen this May.

The trustees are doing a good job being committed to the Fund.

Their numbers match within a few basis points of what Gray & Company is reporting.

They are in compliance with the IPS.

Ms. Leistra and Mr. Mudie left at 3:28 p.m.

Meeting Wrapup

Mr. Kuhn asked if the trustees liked this format better. He also asked if there was anything else he could do to make it better.

Ms. Zimmermann stated that she liked the new format.

Trustee Britton said that the only thing he would change would be to receive the questions with the manager responses for handouts in an electronic format.

Trustee Naglick said that he would like to talk more about the index strategy.

Mr. Kuhn told the Board that he will bring information to the June meeting regarding the large cap index fund. He will also bring information on how the investment strategies are working together in the VEBA Fund. He noted that the real estate performance came back and is working well. After looking at that today it appears that they timed the investment well. He will also take a look at the fixed income portfolio.

Chairman Storum said that he liked the discussion of real estate in the VEBA.

Mr. Kuhn indicated that according to Ms. Billings real estate does not qualify for the VEBA Fund because those funds are not registered with the SEC.

The meeting adjourned at 3:34 p.m.