

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

MINUTES OF MEETING

There being a quorum, the Investment Committee Meeting was called to order at 9:30 a.m., in the Board's Conference Room, Two Penn Center Plaza, by Rob Dubow, Board Chairperson.

Present:

Rob Dubow, Director of Finance and Chairperson
Paula Weiss, Esquire, Alternate for Director of Finance
Alan Butkovitz, Esquire, City Controller
Harvey Rice, Esquire, Alternate for City Controller
Brian Albert, Alternate for Managing Director
Hilary Cornell, Esquire, Alternate for City Solicitor
James Leonard, Esquire, Alternate for City Solicitor
Celia O'Leary, Alternate for Director of Human Resources
Ronald Stagliano, Employee Trustee
Carol G. Stukes-Baylor, Employee Trustee
Andrew P. Thomas, Employee Trustee
Veronica M. Pankey, Employee Trustee
Folasade A. Olanipekun-Lewis, City Council Designee

Francis X. Bielli, Esquire, Executive Director
Mark J. Murphy, Deputy Executive Director
Sumit Handa, Esquire, Chief Investment Officer
Brad Woolworth, Deputy Chief Investment Officer
John Foulkes, Esquire, Investment Officer
Dominique A. Cherry, Investment Officer
Daniel Falkowski, Investment Officer

Also Attending:

Daina Stanford – Investment Unit
Donna Darby – Investment Unit
Carmen Heyward – Investment Unit
Christopher DiFusco, Esquire – Law Department
Teresa Gray – Board of Pensions
Ken Kent – Cheiron
Anu Patel – Cheiron

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

Also Attending (Continued)

Karen Zangara – Cheiron
Jake Walthour – Cliffwater
Stuart Cameron – PFM
John Spagnola – PFM
Robert O'Donnell, Esquire, O'Donnell Associates
Frances Burns, Executive Director, PICA
Maceo Davis, Quoin Capital, LLC
Amy C. Hummler, Intern, Law Department
Bob Warner, Philadelphia Inquirer
Kevin Graham

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

Agenda Item #1 – Approval of Minutes of February 28, 2013

Mr. Dubow opened the meeting and requested the approval of the revised minutes for January 24, 2013

Mr. Albert made the motion. Mr. Thomas seconded it. There was no discussion. All were in favor. There were no oppositions or abstentions. The motion passed.

Agenda Item #2 – Actuarial Review: Cheiron Valuation and Presentation of the Plan for Fiscal Year Ending June 30, 2012

Mr. Kent Kent of Cheiron and his team presented the firm's preliminary annual valuation of the Pension Fund's assets and liabilities.

Mr. Kent stated that the objective of performing the actuarial valuation was to determine what the costs and liabilities are for the fund, and what the appropriate funding requirement is for the City. The basis for funding is examined in two ways, 1) the minimal municipal obligation ("MMO"), which is defined by State law, and 2) the City's funding policy. Mr. Kent told the Trustees that they would get an overview of the Plan, a look at the Fund's historic trends and the preliminary valuation results. He noted that results were preliminary because based on the outcome of the discussion, the results could potentially change. If there are changes, his team will produce the final valuation report and submit it to the State by the due date. Mr. Kent also stated that he would show the Board stress testing of the Fund which entails looking at the risks of the system, how things should look moving forward and provide the Trustees with information on alternative assumptions.

The overview began by noting that the valuation was done through July 1, 2012, with the period ending the day prior. The Fund's investments returned 0.19% for the fiscal year. However, on an actuarial basis, the returns are smoothed over a ten year period which produced an actuarial return of 2.42%. Since this return is less than the Board's expected return of 8.1%, there is an investment loss of \$261 million. This means that because of the smoothing, the ratio of the actuarial value to market value of assets is 113.6%, up from 110%. This is important because the Plan has in place a valuation corridor so that the actuarial value cannot be greater than 120% of the market value and the actuarial value of the Plan won't get too far away from the market value in the process of smoothing gains and losses over a ten year period. The Fund's actuarial liabilities were higher by about \$36 million and it is noteworthy that this is a relatively small percentage increase. The increase is a function of demographic changes, which means that people behaved somewhat differently from how the model assumptions

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

predicted they would. The funded ratio declined from 49.7% to 48.7% as of July 1, 2012 from the previous year's valuation.

Mr. Kent introduced the other members of his team, Karen Zangara, Anu Patel and Bob Murray.

Ms. Patel began by noting that the active participants remained relatively stable for the most recent valuation year. Turning to page 3 – Participation, the pink part of the chart showed the number of active participants enrolled in DROP, which does vary and showed an increase in participants between years 2003 and 2004 and a small decline in participation rates between years 2008 and 2009. Ms. Patel noted that an increase in the ratio on the top of the bar represents the ratio of inactive to active participants. The way to interpret the ratio is, for instance, for 2012 where the ratio is 0.7, this means for every 10 retirees in the Plan there are 7 active employee participants. The number of retirees drives the amount of money that's been paid out of the plan.

Ms. Patel turned her attention to page 4 – Asset Returns, and stated that over the prior 18 year period we're showing where the market value return of assets has been. The blue line is showing the market value assets return. There is a significant amount of volatility in the market return. Just over the last six year period, beginning around 2007, the Fund was up close to 17%, then dropping down to -20%, then two years later back up to nearly 20%. She noted that this volatility was similar to the experience of other public pension plans.

Ms. Patel continued that the green line on the graph shows the smoothing results. Since 2009, the allowable smoothing period was increased to ten years from five years so that the model will spread gains and losses over a longer period of time. The red line shows the Plan's assumed rate of return, which was historically 9%, then coming down from 9% to 8.75% for five years, then down to 8.25% and gradually going down to 8.15%, then 8.1% this past year.

On page 5 - Annual Cash Flows, the red bars are the benefit payment and expenses being paid out of the plan, they are negative; the gold bars are contributions that are coming into the plan. The black line shows the net cash flows, with contributions coming in minus benefits being paid out to beneficiaries. That line has been negative for the entire period being shown so contributions coming in are less than what's being paid out. Assets are being depleted to make benefit payments. The darker line is showing the net cash flow as a percent of market value.

On page 6 – Funding Policy MMO, it's showing the trends for the MMO, and the City's funding policy. The red bars are the MMO, the black line shows the actual contributions that the City is putting into the Fund. Looking at the chart, you can see for the entire period shown the City has been making payments in line with the MMO.

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

Ms. Patel continued discussing the MMO and City funding policy by noting that the MMO has been gradually increasing. For a couple of years there have been bigger increases due to market related investment losses, and in 2010-2011, there was a change to the assumption rate and investment losses were coupled together with that, magnifying the effect. Ms. Patel discussed the rapidly widening gap between the MMO and the City funding policy. Ms. Patel discussed some of reasons that were driving this gap, emphasizing that the City funding policy is based on amortization periods that are shorter than the MMO.

Turning to page 7 – MMO Contributions by Source, the gray portion on the graph is showing the normal cost and expenses that could remain relatively stable over the period. Based on the assumptions, for the fiscal year ending 2014 it is at about 6% of pay. The normal cost means the annual accrual as people accrue benefits i.e. how much is being accrued each year. The blue portion shows the amortization of the unfunded liability. When the assets are short and don't fully cover the liabilities there's an amount that we call unfunded actual liability which then gets amortized or spread over 15-20 year periods that results in that amortization payment. That amount has been increasing as the unfunded has been increasing. The blue portion of the graph, the top of the 2011, 2012, 2013 years represents the deferred contribution of interest for the years of the allowed deferred contribution. We are actually reflecting in our projections that full deferred contribution amount of \$230 million plus interest related to that has been paid in for the current plan year.

Ms. Patel turned her attention to page 8 – Assets & Liabilities. The bars on the graph show the liabilities in line with the assets. The top of the bar, the top of the purple portion shows what we call the present value of future benefits. How much money do you need today to pay off all the current obligations of the Plan. The top of the lighter purple portion represents how much of that liability is accrued, and the darker portion is the present value of the future contributions (employee and employer). The blue line is the market value of assets. The green line is the smoothed actuarial value, and it still varies from market value. In the last valuation the funded ratio dropped from 49.7% to 49%.

Mr. Kent spent some time discussing the Fund's beneficiaries and the timing of when they are reflected in the report. He noted that there was lag time, in terms of report recognition, between the death of an active participant and the start of benefits being collecting by a beneficiary. This year's report reflected an increase in beneficiaries of 4.2%. (Wasn't this an incorrect figure and do we want to footnote the corrected information?) Additionally, Ms. Patel also discussed the total salary increase of 0.1% which is lower than what the assumption for the plan is each year.

Ms. Zangara turned to page 20 – Stress Testing the Future. The market value return was .19%, and the actuarial value was 2.4%. The pension adjustment fund ("PAF") increased slightly from \$987,000 to \$988,000 and there were no distributions. Addressing historical market value returns, the three year average is at 11.15%. The ten

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

year average is 6.56%. The current investment assumption is 8.1%. DROP account balances are approximately \$217 million or 5.2% of the market value of assets.

Mr. Dubow asked what the figures were last year.

Mr. Zangara informed him that it was 4% last year and 3.2% the prior year What do these numbers refer to?.

Ms. Zanga turned to page 11 – Actuarial Asset Determination, and discussed the smoothing of assets and the determination of the actuarial value of assets. She explained the methodology for doing this and noted the market value of assets of \$4.15 billion. Noting the ten year smoothing method, and after showing the historical gains and losses on the market value of assets, as well as the deferred amount of \$565 million, Ms. Zangara stated the total actuarial value of assets was \$4.7 billion. This represents no change from the previous year.

There was a brief discussion between Mr. Dubow and Mr. Kent about a small amount of money, \$51,000 and the PAF. Mr. Kent indicated that last year there were corrections made to previous distributions. This resulted in a small outflow of \$51,000. Mr. Dubow indicated that he was satisfied with the explanation.

Ms. Zangara briefly addressed slide 12 – Pension Adjustment Fund, and noted that the PAF had approximately \$987,000 and with an investment return of 0.4% (for what period? Should this match the returns cited above?), there would be no distribution for the year.

She went to page 13 – Demographic Experience and discussed actuarial liability gains and losses. The past two years showed pay increases of \$68 million and \$59 million. She then discussed a loss of \$67 million with respect to inactive participants. There was a delay in the reporting of survivors and beneficiaries, approximately 740 people, with an average age of 67 years old.

Mr. Dubow asked if this meant there was a loss against the actuary's assumption.

Mr. Kent replied that he believed it to be a two year phenomena. He indicated that if it continued that when they performed their experience analysis they would look and see if there assumptions were not actually capturing what was going on. They might potentially need to add another assumption.

Mr. Dubow asked if an assumption was being made that these individuals were entering the plan with no credits when in fact they had credits.

Mr. Kent told him that the assumption was no liability for new entrants but that there actually is a liability because of the credits.

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

Ms. Zangara said the last category on page 13 is other gains and losses which could be changes in benefits, changes of status, or just a variety of different gains and losses that are seen when you examine the liabilities.

Mr. Kent discussed the \$700,000,000 a year being received by the retirees and how if they were to live just one month longer than assumed, the figure increases to \$720,000,000. He noted that if the expectations are wrong, it is easy to have material losses each year. He said that he wasn't seeing that here and that the assumption was tightly captured.

Ms. Olenipekun-Lewis asked if the \$54 million was testing the assumptions and analysis that goes back into the valuation. Mr. Kent told her that it gets amortized over fifteen years for gains and losses.. He explained that in the case of the \$54 million, it decreased the MMO but that for the (loss of) \$36 million, it increased the MMO by approximately \$3.6 million.

Mr. Dubow asked if the actuaries could talk about the survivor issue, the \$67 million they had indicated hadn't been reported.

Ms. Zangara explained that when they Cheiron gets the data as of July 1, 2011, they report the number of deaths for retirees. If they don't have survivor information with those deaths, they assume everything is gone. Mr. Dubow indicated that he understood.

Ms. Zangara went to page 14 - key results, she said the page was interesting because it gives a different perspective of the fund. The page looks at the present of all your future benefits that would be paid under the fund, based upon your current population. It looks at last year, at about \$10.5 billion, to this year, \$10.7 billion, and then it says what assets you have. The present value of future normal costs is about \$629 million, and the present value of future employee contributions is approximately \$343 million. The current market value of assets, not smoothed, is \$4.2 billion. In terms of the present value of the future amortization of payments, there is a deficit of \$564 million (Where is this calculated?). That was an increase over the prior year, which was \$459 million. The year before that had a \$729 million deficit. She asked if there were any questions.

Mr. Dubow asked for the deficit in 2010. Ms. Zangara told him it was \$729 million.

Ms. Zangara said the actuarial liability is \$9.7 billion versus \$9.5 last year. The actuarial value of assets stayed flat at \$4.7 billion, unfunded increased to about \$5 billion, and the funded ratio at 48.7%. On a market value basis, the funded ratio is 42.9%. She turned to page 15 - MMO contributions. She referenced fiscal year end 2013 which is being driven by the July 1, 2011 valuation results and fiscal year end 2014 which is determined from the July 1, 2012 valuation results. The city's normal costs decreased about \$500,000 primarily because of the decrease in the population. The payroll stayed about flat. The amortization payment was \$405 million last year and \$429 million this

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

year. The amortization increased because of an asset loss of \$260 million and the liability loss of \$36 million. The deferred contributions are showing for fiscal year 2013.

Mr. Dubow asked what the 2013 MMO was without the deferred contribution. Ms. Zangara replied \$492 million.

Mr. Kent briefly discussed the City's cost to the plan as it related to legacy cost. He explained that the City's cost in the plan is really 6%. The 6% is the contribution that's going into the plan to pay for the benefits that are being earned. The employees are paying 3.3%. In any comparison of this plan to other system, Ken advised starting by looking at the City cost of 6%. Ken said that plan was intended to cost 9%-10% of the payroll, and Mr. Dubow asked him what he meant by that.

Mr. Kent told that Board that if the Plan was fully funded, the cost would be 9.42% of payroll, 1/3 paid by the employees, 2/3 paid by the City. If you were to compare this plan to another plan which cost 7% of payroll for the employer and 5% of payroll for the employee, the comparison is really to their 12% of payroll to the Fund's 9.4% of payroll. It is this legacy cost that brings the Fund's percentage for the MMO in 2014 to 36.32%. Ken explained that because the plan's active to non-active ratio was just 0.7, there is a distorted view of the cost as a percentage of payroll.

Ms. Zangara went to page 16 – MMO Gain/Loss Summary. The first column shows the actuarial liabilities. The expected amount was \$9.65 billion and the calculated amount was \$9.69 billion, leading to the loss of just below \$36 million. The middle column shows the actuarial assets at the beginning of the year, \$4.7 billion. Looking at the calculations for contributions coming into the plan and the expenses going out, there is a negative cash flow of \$115 million. Taking the expected return on assets of 8.1%, they'd expect to see about a \$5 billion actuarial value of assets but instead came in around \$4.7 billion for a loss of approximately \$260 million. She noted that loss could be amortized.

Mr. Dubow asked what the assumption would have been, and Ken replied that this was a 2.4% return. Ken explained that this is where the \$260 million comes in as a loss because it is the difference between what you expected to receive which would have produced an asset value of \$4.97 billion versus what was received, 2.4%, to produce the asset value of \$4.71 billion. Mr. Dubow indicated that this answered his question for now.

Ms. Zangara moved to page 17 - Funding Policy Contribution Rate. The normal cost for fiscal year 2014 is the same as on the MMO page. The most important note is looking at the amortization payment, 47% of pay for 2014. This amortization payment increased because the amount of contributions expected under the funding policy and the amount coming in resulted in a gap. This causes an additional loss into the funding policy because not only do we have these other losses from the prior pages but also

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

another \$150 million loss since the contributions weren't as expected. That increases the amortization of the funding policy.

Mr. Dubow said that it is \$240 million higher, the funding policy, for year 2014. Mr. Kent replied that next year the \$240 million, if it is not paid, becomes a loss that get's amortized over 15 years.

Trustee Stagliano asked them to talk about estimated payroll in the report.

Mr. Kent said that for purposes of calculating, they get the payroll feed from the City every June 30. They start with the projected pay increases based on the assumptions printed in the back of the book page 22 – Salary Scale.

Mr. Stagliano asked if they assumed employees are going to get raises, and Ken replied yes.

The pay growth assumption is a very long assumption. Ken noted, as an example, that someone starting employment now with the City at age 20 might have much slower pay growth than they are anticipating. Ken also addressed the report's inflation assumptions and the challenges associated with setting the rate, knowing when inflation might rise, and so forth.

Mr. Dubow asked how they calculated inflation.

Mr. Kent told him that they use different sources to come up with a long term assumption for inflation. Ken indicated the inflation number can range from 2.5% to 3.5% and that while some systems will use 4% these Systems are in the process of lowering that number.

Mr. Dubow asked what number is being used for the City's Fund.

Mr. Kent said they are using 3.5% for the salary scale growth assumption. Ken stated that inflation isn't used for the City system except as a component of a building block because the plan has no cost of living tied to inflation. Ken noted that the salary growth assumption is at 3.5% and that perhaps that doesn't seem realistic based upon information shown in a prior slide. The assumptions are moved in steps. Ken said that in addition to talking about moving the discount rate down they would talk about moving the salary scale down since they are connected.

Mr. Dubow asked if the total salary cost was a combination of the number of employees and the salary per employee.

Mr. Kent told him that there are two assumptions. We have a salary scale which says you look at an individual, you see what their pay is and you project how their pay is going to grow over their working lifetime to get a projected benefit; that's salary scale.

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

Payroll growth assumption looks at the entire payroll and attempts to determine if it will grow, stay the same, or shrink. Ken said the payroll growth assumption was not as important anymore for this fund. The amortization basis used to be assumed to grow based on the payroll growth assumption so it was critical. Now that you're amortizing over a level dollar amount which means you are paying off the unfunded each year instead of allowing it to accumulate, it's not as critical. The salary scale is critical. The table in the back provides some surprising rates of expectation from year to year. What we've illustrated here is what we call 20 basis points or 0.2% across the board and we'll be able to illustrate what the implications are.

Mr. Kent turned to page 20 – Stress Testing the Future. The top graph, bars in the liabilities show the present value of all benefits which Karen talked about and then the present value? of the actuarially? accrued line value which is the way the rest of the world looks at your funded status and what's the important measurement. (This sentence doesn't seem to make any sense?) Across the top is the funded status; the funded status is still anticipated to be going down, and the reason for that is there's still over \$500 million of difference between the assets we're recognizing for funding and the market value of assets.

This graph shows a lot of information. It shows the MMO which remains relatively stable but declines slowly overtime, and declining MMO is a good thing. Ken discussed the impact of receiving the MMO in a lump sum payment and how it could negatively impact cash flow. If, for example, the MMO was made in minimum payments the cash flow would become immaterial and investments could be made for a longer duration.

Ken began to discuss the next five years and noted it was critical to look at that time period because of the required five year plan. He said last year's projection for 2013 showed the MMO would be \$617 million but is \$728 million which reflects the payback of the deferred contribution. While only a portion of the deferral was scheduled to be paid back, the entire amount has actually all been paid. He noted that given the additional payments, the MMO is lower.

City Controller Butkovitz asked if by putting \$111 million extra into the Fund the City saved \$140 million. Ken said yes, because of the \$140 million, \$135 of which was received a year early.

Mr. Butkovitz then asked what would happen if we did the same thing the following year.

Mr. Kent indicated that if you put in \$100 million more than the MMO the following year there would be a benefit not only from the contribution but because you are retiring a debt. By retiring the debt, you no longer owe any interest. Ken made an analogy to the federal deficit. He noted that you assume you are retiring an 8% debt because that is the rate.

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

Mr. Dubow asked if the prepayment was \$125 million, what happened to the other \$14 million. Ms. Olanipekun-Lewis asked if that was part of the refinancing. Mr. Kent said yes, it was part of the loss.

Ms. Olanipekun-Lewis asked if the number in 2013 included the savings for the refinancing of the pension obligation bonds (“POBs”).

Mr. Kent replied that the POB’s were a different refinancing.

Executive Director Bielli said that there were two different things. There was the repayment of the deferred amount, but then the City was able to refinance some other bonds so that they had an additional \$22 million going into the Pension Fund. That wasn’t done until October.

Ms. Olanipekun-Lewis said that will be in the next report.

Ms. Stukes-Baylor asked which refinancing the discussion was about – the one on the slides or the one in the book? Ken stated it was the one in the book, though he noted the one in the book was just a placeholder and illustration.

Mr. Handa asked Mr. Kent to explain how he calculates expected risk and how he chose 12%. Mr. Kent said the 12% was a placeholder, and the Board should tell him what to make that number.

Mr. Kent offered to change the number for illustrative purposes. For example, if you assume that it’s 1929, and we’re going to experience all the returns from 1929 forward based on your asset allocation in very broad terms this tool shows you where the MMO could go and how much there’s a lag if we have 3 or 4 negative years. The MMO would be gradually going up and then would stay elevated; it would remove our risk for negative cash flow because the MMO would grow to a level equivalent to what you’re paying out in benefits. The other big concern is that if that occurred you could be seeing a significant drop in funding status.

Mr. Kent then looked at more positive scenarios.

Ms. Olanipekun-Lewis noted that going forward you’re dropping off historical legacy and liabilities. The model is predicting the Plan will be fully funded at a faster rate.

Mr. Kent told her she was correct but that the key element is really to understand where the numbers could go.

Mr. Dubow said that while he has, traditionally been very critical of pension obligation bonds, given the virtually zero interest rate now, could that not be a potential solution to this problem?

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

Mr. Kent replied that somebody is buying new bonds, they're getting a return and they're not expecting a default. If the Pension Fund takes those dollars and then puts them in a diversified portfolio, the difference between what you're going to pay out in interest and what you're hoping to accumulate in return is really a swap of risk.

Mr. Butkovitz asked what the City could expect to pay in interest on obligation bonds right now.

Mr. Kent first said he was not sure because it's would be sensitive to the City's bond rate.

Mr. Butkovitz and Mr. Kent had a short discussion about possibly getting a 4% or 4.5% rate. Mr. Butkovitz then asked Mr. Kent if he thought the Fund could get better than a 4% return.

Mr. Kent said he didn't have an opinion as to whether or not you can beat the rate. He suggested that the Board had to be sensitive to how much more risk you may be taking. To be able to take a dollar at 4% and say you can get 5% return means that you're taking a risk because right now most dollars have the same value.

Mr. Bielli said that while we can't predict the future rates and returns, we can look at our historical rates and returns since 1988, close to an 8% average. He asked if it would make sense to use the historical rate and return since 1988, almost 8%. Mr. Kent replied that the Fund's history is one the best examples.

Mr. Butkovitz asked what the rate was when pension obligation bonds were issued in 1998.

Mr. Kent said he believed it was somewhere in the 6% compared to a 9% assumption, but when you compare it to an assumption rate keep in mind the assumption is really supposed to be a measurement of the risk of the system not necessarily a measurement of what your return should or could be.

Mr. Butkovitz said the Plan had to earn more than 4%. Mr. Kent said that you needed to remember that if you issue bonds at 4%, anything you buy with that money probably has more risk than the bonds. You could earn more than 4%, but if you don't, you could end up paying twice.

Mr. Butkovitz asked if Mr. Kent could insert a payoff of the/a? pension obligation bond into these assumptions and see what these things would look like. Mr. Kent said he couldn't at the moment. He offered to provide that information to the Board at a later time if they gave him the necessary information.

Mr. Kent suggested a 20 basis points reduction in the salary scale. He explained that for every ten basis points reduction in salary scale, it's a reduction of approximately \$2.3

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

million dollars. Right now, the sum or the average of the salary scale is 5.2%, and this would bring it down to 5%. He said it was clear from some of the discussions that the expectation is long term it will be lower than that but he suggested the Board do it in steps. Ken also referenced GASB in relation to the Pension Adjustment Fund. The PAF is anticipated to take excess returns, deposit them into an account for the Board to be able to decide how it gets distributed. GASB says this amount should be reported.

Ms. Olanipekun-Lewis asked if you make an assumption of what x plus x would be.

Mr. Kent said they run this type of projection for a thousand iterations. Letting the returns vary randomly within a range that's acceptable for the asset allocation over one thousand runs. We then determine how often those runs produce deposit into the Pension Adjustment Fund. We take the present value of that and compare that to the liabilities of the present value of the benefits to determine that's worth about .54%. If it is a cost of living adjustment we'd be saying that's theoretically going to deliver .54% COLA to the retirees over the future history of this system. That's what happens if we add those three assumptions to the system. The 2014 MMO would be approximately \$23 million higher.

Mr. Bielli asked for reasons, if any, besides from the general public clamor over reducing the assumption rates and a lesser target to meet in our investment programs if there were other advantages to reducing the Board's assumed rate of return.

Mr. Kent replied that it gets you down to a more realistic value of the benefits. Also, if a defined benefit was a marketable security right now that value would be at its peak because interest rates are so low and they're so expensive. Everybody would love a defined benefit plan. Few people can afford them on their own. The whole objective of the process is gradually reducing the risk of the system, and improving the probability that the costs stabilize.

Mr. Dubow asked Mr. Kent to read him the list of numbers from his last projection so that he could write them down.

Mr. Kent offered to get him a snapshot of the screen and send it to him by the end of the day. He then read Mr. Dubow the numbers: 529.7 [for fiscal year 2014], 551.7, 572.6, 592.2, 611.1

Mrs. Stukes-Baylor asked what those figures represented.

Mr. Kent said they included changing the investment assumption to 7.95%, changing the salary scale by reducing it 20 basis points.

Mrs. Stukes-Baylor asked why would it make sense to change the salary scale when there have been no salary increases. Mr. Kent said the salary scale assumes growth over a person's career.

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

Mrs. Stukes-Baylor replied that it wasn't happening and hadn't happened in five years. She asked when that assumption would catch up with the Fund in the same way that the survivor dollar amount caught up.

Mr. Kent indicated that they would look at that next year. In our presentation we said in the last two years it's been a fifty or sixty million gain because salaries have grown slower than assumed.

Discussion ensued among Ms. Stukes-Baylor, Mr. Albert, and Ms. O'Leary about the pace of salary increases, promotions, and cost of living increases. Mr. Kent suggested that the Board not change the salary scale all at once but instead phase it in.

Mrs. Stukes-Baylor said that there would be a large amount of employees exiting via DROP in May or June of this calendar year.

Mr. Kent explained that they would not account for it until the valuation was done.

Mr. Dubow asked if someone currently in DROP is built into the projections. Mr. Kent said yes.

Mr. Dubow asked if the assumption is that people who replace those leaving via DROP begin at starting salaries.

Mr. Kent said the assumption is everybody takes a step up, and new entrants come in at the bottom.

Mr. Butkovitz asked if Mr. Kent was running the pension obligation bond scenarios.

Mr. Kent told him not today but that he would build one and then he will provide the Board with an illustration of what the financial impact is. They would model bonds of \$1 billion and \$5 billion.

Mr. Dubow – suggested that the Board consider the information presented and to come back and decide at the next meeting on changes to the assumption.

Discussion ensued among several Board members and Mr. Kent regarding additional scenarios they wanted modeled prior to the next meeting.

Agenda Item # 3B – Real Estate: Cliffwater LLC Third Quarter 2012 Real Estate Review and Portfolio Report

Mr. Walthour presented. As of 9/30/12, the total capital commitments for the real estate portfolio totaled \$268.2 million. There are 13 Partnerships that are currently active total

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

contributions since the program began of \$232.4 million, and total distributions of \$26.2 million, resulting in a fair value of \$181.3 million.

Looking at the performance of the portfolio since inception, the numbers speak for themselves as to why we made some structural changes to the portfolio and continue to make some changes to the portfolio. The portfolios had a net IRR of -3.07 versus the benchmark return over that time period of 7.4 and that really has more to do with the timing of the bulk of the investment portfolio which was vintage years 2006 and 2007.

You'll see where most of the investments were made in section 8.2 of the report showing that the most capital went out in years 2006 and 2007. There's been very little activity since when you compare to years 2011 and 2012.

Section A-1, gives you a sense of how the portfolio is diversified. Forty-Three percent of the portfolio is in Core Real Estate. At some stage, the next reporting cycle, that number will change dramatically, as the Board has redeemed out of Invesco Core Real Estate and J.P. Morgan Core Real Estate. The total allocation to real estate will come down slightly but the stage focus will change quite dramatically. The portfolio is predominantly North America with a heavy emphasis in Office and Industrial. There are number of things that we've been talking about more recently that would diversify further away from some of these larger allocations.

Agenda Item #3C – Real Estate: Staff Fourth Quarter 2012 Real Estate Portfolio Update

Mr. Handa - Axonic Capital was funded in December, it's not in the current report numbers, but will be reflected in the next quarterly numbers and also in reports when the Board meets again in March.

Mr. Walthour – It's safe to say when we look at the calendar year number, I think it's 12%, that does not reflect what's been a fairly positive period for real estate. Those numbers are not yet reflected in the calendar year numbers so that would also boost the return, and when adding private equity and hedge funds that will put to the Fund probably somewhere over 13% for the year.

Agenda item # 4A – Additional Capital Recommendation – Beach Point Total Return Offshore Fund II Ltd.

Mr. Handa gave an overview of the history of Beach Point that the Board allocated \$30 million to in June of 2012. Mr. Handa pointed out that if you look at Beach Point's returns since inception, performance has been very consistent and positive, with not a single down month. Although there is no guarantee that this will continue into the

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

future, looking at the longer track record with the firm, they were averaging around 11% net to investors over a 15 year period.

Mr. Handa indicated that Staff is recommending, along with Cliffwater, adding an additional \$20 million to the strategy. He explained that by adding more capital, the City would achieve economies of scale with the manager and the management fees would decrease from 1.5% down to 1.35%. In addition, a hurdle rate would be included, meaning the manager would be required to earn at least a 4% return before any performance fee would be paid. This helps to further align Beach Point's interest with the return objectives of the Pension Fund.

Mr. Walthour from Cliffwater presented on Beach Point and referenced a slight variation between Staff's recommendation and Cliffwater's recommendation. Mr. Walthour indicated that Staff would like to recommend an additional \$20 million dollars to be allocated to Beachpoint, however, Cliffwater's recommendation allows for up to \$75 million. He indicated that it was Cliffwater's view that two things ought to be considered in light of this type of recommendation; First, at 75 million dollars it will still be less than 2% of the total Plan assets, Second, just because Cliffwater provides the option for up to \$75, it doesn't mean that the Plan must invest up to \$75 million immediately.

This format provides a level of flexibility for Investment Staff and the Board to execute quickly for future allocations to the strategy.

Mr. Bielli and Mr. Handa said they appreciated the intention of Cliffwater providing for increased flexibility, but that it was preferable for Investment Staff to present to the Board whenever there is an increase in allocation. If necessary, Investment Staff can call an emergency meeting to tactically increase capital to Managers, however, it would be unlikely that this would be required.

Mrs. Stukes-Baylor stated that in the past, the Board had discussed providing Investment Staff a little leeway to execute on a strategy when a Manager is closing their fund under a tight timeframe. Investment Staff would still have the authority to give them more, but if we put in place a range now, we wouldn't have to worry about an emergency meeting.

A discussion ensued weighing the pros and cons of having an allocation recommendation range versus a specific amount. Although having a range would certainly provide added flexibility, there were concerns about the impact on the decision making process by the Board.

Ms. Pankey stated that she thought there needed to be guidelines set if the Board wanted to engage in open ended recommendations. For Beach Point, Investment Staff, Cliffwater and the Board have been monitoring them for a year, looked at their performance over this timeframe, and are now considering giving them an additional \$20 million. Ms. Pankey stated that she thought there should be guidelines on how long

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

a manager should be monitored / reviewed before allocating additional capital. Ms. Pankey stated that she would have concerns if the Board approved a manager tomorrow and then three or four months later gave the Manager another \$40 million.

Mr. Walthour stated that the Board had previously decided to run the portfolio in a more opportunistic fashion and Cliffwater believes that this is the preferred route. Cliffwater thought this might be a way of approving allocations that allow the Board to be slightly more opportunistic, however, Cliffwater understands the Board's concerns.

Mr. Dubow – requested a motion for an additional allocation. Mr. Albert made a motion to follow the staff recommendation for an additional \$20 million allocation to Beach Point. Mr. Stagliano seconded. All were in favor with the exception of one abstention by Ms. Stukes-Baylor. There were no oppositions. The motion passed.

Mrs. Stukes-Baylor had a follow up question regarding the impact of the asset allocation and the possible need for additional guidelines. She indicated that she thought clarification on how investments are monitored under the new asset allocation would be useful. She said she would like guidelines that allow Investment Staff the flexibility to take advantage of opportunities, while also ensuring there are proper controls in place.

Mr. Handa stated Investment Staff will work with Cliffwater and create some guidelines that afford a clear and proper review of the Fund's portfolios, and then will bring these guidelines back to the Board for discussion. He suggested that as a starting point, Staff draft guidelines in the spirit of providing more leeway while still maintaining adequate monitoring controls. If it is preferred, a Subcommittee can be established once a draft of the guidelines is presented.

Agenda Item #4B – Additional Capital Recommendation – Taconic Opportunity Master Fund L.P.

Mr. Handa presented an overview and performance of Tactonic Capital, a hedge fund investment in the portfolio. Mr. Handa indicated that he thought Taconic was a very conservative investor, producing solid returns while also having very low volatility and a sound management process. Investment Staff had met with the team on several occasions, with the most recent visit this February. Returns have been very consistent and volatility has been low. For these reasons, Investment Staff is recommending an additional \$20 million allocation.

Mr. Butkovitz noticed a typo in the performance numbers between Cliffwater and Investment Staff's report and indicated he would like to see an amended report before taking action. Investment Staff and Cliffwater agreed to amend the report and present at the next Board meeting.

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

Agenda Item #6 – General Consultant Performance Report for the Fourth Quarter 2012 and Flash Report for the Period ended January 2013

Mr. Walthour presented. It was a very strong quarter for most of the risky asset categories, financial asset categories with equities playing a significant leadership role, with international equities and emerging markets doing far better than U.S. equity managers. Within fixed income, the investment grade fixed income area did worse than the more risky areas of fixed income like high-yield and corporate bonds. From a year to date perspective it is a very strong year for the performance of various equity markets, and fixed income held its own with credits and high yield doing much better than some classic investment grade fixed income categories.

On a trailing 3 month basis the fund outperformed its benchmark by 12 basis points, but underperformed by 31 basis points for calendar year. Once you factor in the lag performance of hedge funds which were positive, and the lag performance of real estate and private equity which were positive, that underperformance should disappear and the Plan will actually have outperformed the benchmark for the calendar year.

The non-U.S. equity emerging markets category contributed the most to the Plan's underperformance. This was simply due to a transition issue which is now fixed. As you remember we terminated the underperforming emerging markets managers and then we had to put index representation in place and that took us a little bit of time to achieve due to some of the contracting issues and now that's actually cured but it did have a drag on the overall portfolio results.

As to the remaining categories for the trailing 3 months, U.S. equities outperformed but non-U.S. Equity developed markets underperformed. That had a lot to do with the fact that if you look at most U.S. Equity managers and their outperformance of their benchmark over the course of the last decade they've pretty much been able to achieve that by being underweight Japan as Japan has been a market that's been in decline for the better part of the decade. Over the course of the last two months as Japan has sought to weaken the yen and hopefully spur economic growth, the markets in Japan have rallied and managers were caught with a significant underweight to Japan so that underweight in international equities is far more exaggerated than we would normally see.

U.S. equities continue to struggle with the performance of active managers. On a quarterly basis 4 to 5 actives underperformed their benchmark and on a calendar year basis, 3 of the 4 actives which actually have a year of performance underperformed their benchmark. It's something we've been talking about for a while now. At some stage, the Board should develop a plan as to how to move money perhaps into indices where you're not paying fees for underperformance compared to the performance of the index. For the quarter, Geneva was a significant underperformer and that had a lot to do with their securities selection, particularly a couple of issues that they had in the

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

portfolio. They also did poorly in the energy and technology sectors. Fisher underperformed primarily due to stock selection within consumer discretionary, financials. They also had a healthcare overweight. The overall performance of the opportunity fund for the quarter was primarily driven by the underperformance of FIS. PFM was just 8 basis points off the benchmark while FIS was almost a full percentage point. Once again I think they continue to struggle with the U.S. equity portion of the portfolio as the total plan struggled for that portion of the portfolio as well.

In International Equity, most of the underperformance was due to significant underweight to Japan from each of these managers. We were particularly concerned about Barings International. Barings trailing numbers were negative while the markets were up almost 6% which led to an almost 7% underperformance, that's a significant deviation off the benchmark.

Mr. Handa – Barings had an overweight in two gold stocks and that's what caused them to sell off their performance. Staff was not concerned on this particular issue.

Mr. Walthour – Causeway had a slight underperformance of 18 basis points November through January. I think that was mostly due to their positions in Japan and Korea. It might be worth noting Staff doesn't have a significant concern. When a manager's 600 basis points above its benchmark we do not?? have a significant concern unless their changing their risk management process or the weighting of their positions that could very well occur again and I think that would be too much to tolerate on a sustained basis.

We had the performance of the real assets portfolio. I think we should take our hat off to these managers. They did very well in rising markets last year. If you look at the trailing 3 month numbers, when the markets were down, they still outperformed. To us that's the sign of a really good active manager. They're still able to capture a lot of the upside when the markets are down, they're still able to capture alpha. All three of the MLP managers did a very good job of capturing alpha

Hedge Fund performance, the portfolio underperformed by 34 basis points. That has most to do with ESG with a 5.6% underperformance number for November through January. We'll probably talk to staff about the classification of that number. We think it might best suited in the non-U.S. emerging portfolio because that's sort of a benchmark that it's been marked against even though it's a hedge fund.

Ms. Weiss – You think you're looking at the wrong benchmark?

Mr. Walthour – Not the wrong benchmark, perhaps it's in the wrong portfolio. The goal of this manager is to outperform long exposure over time by being both long and short in emerging markets and we do have the ability, given the new asset allocation, to put some alternative managers into those buckets. I think when you classify here, given that it can experience extreme underperformance when equity markets are rallying.

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

Through the short side of the portfolio, it's going to cause the overall absolute return portfolio to underperform. I think it's a matter of where it's classified.

Ms. Pankey – Where are you looking at to reclassify?

Mr. Walthour – Non U.S. equity emerging. Since inception the manager's done quite well relative to a long-only benchmark. It's pretty heroic that they're able to outperform a long-only benchmark given the short side of the portfolio. You're going to have these periods where you're going to see extreme differences between your benchmark performance and their performance.

Mr. Walthour – Carol had a question about whether or not this was going to change the asset allocation. The way I would look at this is the non U.S. equity.??? You still have a lot of room to get yourself back to target, if you move that over, what it would effectively do is reduce the Hedge Fund allocation and increase the U.S. equity allocation

Ms. Weiss – You're going to get back to us if that's the recommendation, reclassification?

Mr. Walthour – Yes. Other Hedge Funds to note would be Mason. Their performance for the month and third quarter continues to lag their benchmark. In January they're again lagging their benchmark as you look at the course of one year, it's pretty significant. In terms of which managers contributed the most in the fourth quarter, 2012, Non-U.S. equity developed, Northern Trust indexed. Causeway and Ceredex, active equity managers, non-U.S. and U.S. was Mackay Shields, and the Independence Fund was one of the top contributors. The bottom performers were Kynikos which you would expect given it has short biased fund and equities for the most part up across the board.

The MLP managers had negative performance in addition to Trilogy but interestingly the MLP managers have snapped back significantly in the month of January. They're actually up almost 12%, the same for year to date. The top performing managers were Causeway, Ceredex, Emerald, J.P. Morgan Emerging Market Bond ETF and the Northern Trust International Index and the bottom performer was Mason. Only one of your bottom performers is actually investing, so they weren't creating a large drawdown.

For the most part, after we got through the threat of the fiscal cliff in January money returned back to the market in a very big way, thus far six, eight weeks into the year. That's pretty much proven to be a sustained 2-month rally with some volatility this week but has been a strong contributor to your portfolio given your overweight to U.S. equities.

Fixed income markets are continuing to show signs of backing off, rates have come down so far reports of the last four or five years (clarify). Certain sectors within the fixed income market are starting to back up which leads to negative performance and

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

something that could be a risk particularly to the investment grade portions of your portfolio. High Yield continues to do better. Flows continue to be positive but investment grade fixed income where yields are so low there is no yield to be chased money isn't flowing in, money's actually flowing out, in favor of equities.

Mrs. Stukes-Baylor – It seems like all the new investments are in Alternatives. What's happening to the other asset classes that are doing well but we're not giving any money to them. We have managers that are performing well but we are not increasing the allocation so that they can be active in the market. I don't understand that. You had Emerald 17.64% last year; you had Brandywine that did great last year. We haven't given them additional capital.

I read the report on Brandywine, it said to leave the allocation like it is so that's what I'm asking. The report already recommended that we don't do anything with Brandywine. We already missed that boat if I'm not mistaken. We should have given to Brandywine when Alan talked about it six months ago.

Mr. Handa – I believe it was October, November when Alan asked about Brandywine. I also believe at the same time we had 5% of the fund exposed to one manager, it was a risk and we'll talk about it in greater detail on how they've been able to generate their returns, I believe there's a lot of risk involved in how they got there. I also believe that the end product in what their investing in, the returns as just highlighted by Jake are not there anymore so it caused them to question whether or not we should be increasing the amount.

Mrs. Stukes-Baylor – I'm not disagreeing with the argument. You're defending something I already said that I agree with. We already missed the boat, like we always do. We already miss the opportunity to give them money to make money. My confusion is sometimes you want to say we need to be more risky and we need to be more opportunistic, the next month we say we need to be more cautious, we need to be more on low key. We have the managers viewing the other side of our asset allocation where there is no movement and there has not been any movement in two years on that side of the asset allocation.

The last time the Plan hired active public market managers was when we hired New South, unfortunately that contract did not go through. We're in the process of concluding a contract with Snyder and I believe that will be done in very short order.

Ms. Weiss – In looking at the asset allocation are we underweight in those areas?

Mr. Walthour – You're underweight in Hedge Funds.

Ms. Weiss – How are we in equity and non -U.S. equity?

Mr. Walthour – You're overweight.

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

Ms. Weiss – That might answer Carol's question as to why we haven't been looking to add dollars in those areas. I think that was your question, right Carol? Why aren't we looking at the equity portion of the portfolio to add more dollars to look at new managers? However, if our asset allocation is showing that we're overweight in there right now then we wouldn't be seeking these types of managers. We'd be rebalancing away from them.

Mrs. Stukes-Baylor – Let's go back to what Veronica said. What happened to the 2 managers that we fired, that we put in the index? Does the indexing add to overweight in non U.S.? Is that where your index fund is at? We have managers that have beaten the benchmark that we're not giving any money to. We increased the allocation which is not clear to me for non -U.S., for fixed income, for small cap and mid cap. We terminate active managers but then we don't hire new active managers, we index the money.

Ms. Stukes-Baylor – I think we're at a stalemate so we can agree to disagree. I see we're doing more Hedge Funds, we're doing more risky stuff when you want to do risky stuff, but when you want to deal with managers that are doing risky stuff you're saying we shouldn't do it that way. That's why I don't understand. We are increasing our investment in Hedge Funds. We're investing in real estate which has demonstrated some serious risks in the past, but when you want to talk to us about an active public markets manager, you're saying it's too risky, we shouldn't be doing that. I'm confused about that. On this side we take the left hand and make all the cookie in the world. On the right hand we throw the dough out. That's what I don't understand.

Mr. Bielli – Part of the issue, as Paula said, on page 26 shows the asset allocation, where we're overweight and where we're underweight, put aside the pros and cons and bury them for a second, this is called fund A, it's an equity fund. We're \$246.3 million dollars overweight in U.S. equity, if we were to add to Emerald we would be \$200 and whatever else we had overweight, if the question is should we visit the asset allocation, that's a different question but given the current asset allocation unless you're taking from someone else and giving the asset to Emerald (this sentence needs an ending).

Mr. Walthour – Sometimes the worse time to invest in something is after it's done well because usually in this game things go up and then they regress back down to the mean. Adding to a manager after they've done really well sometimes seems like a logical decision but that's what happens a lot of the time when you're picking new managers, you tend to pick the top quartile that have done well and then over time after you've hired them, they migrate down to the bottom quartile and then you fire them and then you pick today's top quartile and they migrate down to the bottom.

Mrs. Stukes-Baylor – So that's why we just added to those two real estate because they was doing well.

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

Mr. Rice – That wasn't the question. BeachPoint was also doing well.

Mr. Handa – BeachPoint is a Hedge Fund, they make money on the long and the short side. A long only manager only makes money when the markets go up. If we were to allocate additional dollars to managers on a long only side and there's nothing wrong with doing that, you're first assumption is that the market will go up. Second assumption is that this manager will outperform over that period of time. You invest in a BeachPoint strategy or a Hedge Fund you're not making that same assumption, first assumption, you're not making an assumption the market will go up or down. You're making an assumption that they will perform regardless of the market.

Mr. Rice – When you reviewed BeachPoint history, you just didn't review the months with us, you looked back at their current record.

Mr. Handa – We went back 15 years.

Mr. Walthour – It's not just about performance it's actually a look at their style and investment process. When you put a BeachPoint in the portfolio, yes, it's a Hedge Fund but it's actually reducing the risk of the Opportunistic fixed income portion of the portfolio because they have both long and short investments and will have a lower volatility profile in the long only manager. At this point in time what we've been saying is that rates have come down so low that you need a manager that's more nimble and what BeachPoint does is it's a more active firm in terms of its trading, to get out of the way, to capture small term opportunities, to get out, and back in when they need to. It also has the ability to go short when those rates are backing up a little longer term. It can profit from investments designed to actually increase or decrease in value. It may sound like a riskier investment but at this point in the cycle given where rates are, we think Hedge Funds are probably the most appropriate vehicle to protect you from a serious back up in rates. If you get a real back up in rates, you're completely exposed.

Mrs. Stukes-Baylor – What happened to them? Didn't something happen to them more recently? Was it KKR? In the fund that we have with them.

Mr. Handa – KKR managers have 120 billion dollars in assets. We have a customized account that has nothing to do with the issues and I believe that were raised in a few articles over the last 2 weeks, particular, TXU. I believe that's what the issue was. There were a couple articles. There are always articles on KKR. They manage such a large amount of money across so many strategies that there's likely to be some news story about them.

Mrs. Stukes-Baylor – I have to ask my historian because Moon is the one who called me and told me that the article that's in the paper has definitely a lot to do with us. Let me get back to, I will get back to you

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

Mr. Handa – One other point about long only dollars. In the last 2 years the Board has allocated \$200 plus million to Causeway, a long only strategy. They're up over 21%. They were our largest contributor, probably our best performer. We invested in Ceredex also they were up by 18%.

Mrs. Stukes-Baylor – Are these Hedge Funds?

Mr. Handa – These are long only managers. Traditionally, Geneva as well. In aggregate, it's almost \$300 plus million that was allocated to long-only managers over the last two years and they've all been positive contributors to the plan. Causeway was our best performer; they've outperformed their benchmark by 98 point basis points.

Mr. Walthour – If you look at this asset allocation chart, priorities should be those areas on the left hand side because those are the ones that are underweight. You've got to try to figure out all of the time, how to get them to the center line; so we're at target with respect to private markets, you have to be extremely cautious, making allocations. We're talking about investments where you might not see any positive cash flow for some time. We've been working with Franklin Park and Staff and others to try and find investment opportunities where perhaps you can get some current cash flow in over the near term as opposed to waiting for the J curve to be mitigated by returns on investments.

Mr. Walthour – The month of January, the fund was 8 basis points above the total fund policy benchmark. It's important to note that we're now using the new benchmark for the new asset allocation, this is the new benchmark: for trailing 3 months, slightly under the benchmark but for the fiscal year to date number at 9.44%. We think that's a very good return thus far for the fiscal year in terms of looking at the one year number, 11% (What does this mean?), you know you're equity like returns and you've done that with far less volatility in the equity market. We're pretty pleased about ?????

Ms. Weiss – Do you know how we're doing in relation to other comparable size funds

Mr. Walthour – We can find that information out. We generally don't like to get into what we call peer benchmarking because everybody has their own liability stream, risk tolerance but we can find out for funds your size.

Mr. Handa – I do have a sense of how we did relative to other funds, public as well as corporate plans for 2012. The public plans, on averaged generated about 12.3% and corporate plans were around 12.9%, that's the average. Obviously people did worse, some people did better. We were up. I believe we'll have the final marks for real estate and private equity within another month or so. I believe once as we get that we'll be up around 13% for the calendar 2012 number. In terms of if we would compare ourselves, how we're doing versus everyone else. A lot of the things that we took, a lot of the steps that we did, getting in there, continuing on, later on in the year began to bear fruit. The asset allocation is moving along as planned, the results have been good, even

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

though there's has been a lot of friction in terms of manager turnover, keeping extra cash at times and obviously changing of the Custodian Bank. As a result I still think it's been a positive performance. I think we fared well

Mr. Walthour – In terms of getting to the target allocation, that's something that you should take your time doing in moving towards and being opportunistic as you find opportunities take money from where your overweight and put it to where your underweight. I don't think we ever recommended in one fell swoop, one day we're going to move this thing to a new target asset allocation. Sometimes people will outperform, sometimes they'll underperform, but the goal is just keep moving month by month toward the target.

In terms of select manager contributions for January, best performing managers were the MLP managers, you may remember last month, they were some of your bottom performing managers but the market really favored MLP's and the energy sectors overall in a really good way with 11% to 12% performance. The next best performers were Fisher and Rhumblin which were both U.S. equity managers. The detractor in terms of performance, it was Kynokos in a rising equity market. Their short bias was going to cause them to generally underperform.

Emerging markets bonds traded off a little bit as did some of the fixed income asset classes. That gets back to what we were talking about earlier about when rates start to back up, you're going to start to experience some pain in the portfolio. I think that happened a little bit in the month of January. Despite that and despite being overweight fixed income relative to the target you still managed to outperform the benchmark.

International equities and Emerging Markets equities generally underperformed, yet despite that you still managed to outperform your benchmark. This portfolio when we look at it holistically is performing well. Nothing in this portfolio is big enough to hurt you to the point where you still can't outperform your benchmark which is good. Usually when you have 41% of the portfolio underperforming you can pretty much bet you can underperform for the month. You've got some non correlation benefits in there. U.S. equities continues to be a space where indexing is the way to go. It's just a very difficult area to find active managers that can consistently have success in the long run in terms of beating the benchmark.

Within opportunistic fixed income you outperformed by 9 basis points with an absolute return. Hedge Funds you outperformed by 10 basis points, real assets by 330 basis points, private assets 32 basis points. Overall I think it was a very good month for this portfolio despite only 7 basis points above the benchmark

Ms. Pankey – As it pertains to the uncertainty of Japan and monitoring investments, how long should we monitor performance before we think we need to take any action? Given where they are now if we are on that same trail for 6 consecutive months, 3 consecutive months, at what point does it warrant an action?

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

Mr. Walthour – Given that it's not a function of the manager's skill, it's more a function of an issue of the market. I'm not sure you'd want to get to the point any time soon where you thought about terminating the managers. I think you just have to accept the fact that there's an issue in the market that may very well be very temporary. Let's say Japan has risen 20% the last 2 months, that could reverse itself quickly and we've already seen days where Japan has been down 2.5% in one day. I don't think anyone believes Japan has made significant structural changes and you're going to see a reflation in the economy and more economic growth and rising stock market on a sustained basis. I think it's a temporary phenomena, it has a lot to do with a currency devaluation. When they import their profit back to Japan it results in a higher level of earnings. It's not necessarily a long term fundamental change in Japan that we see at this stage. We think it's temporary and when it gets to the point where the market feels that it's gotten too frothy, it will trade off and it will trade off significantly and that's probably when we'll see those managers have a big outperformance during those months.

Ms. Pankey – I understand that. There is no time frame. Six months is not too long to stay in this position

Mr. Walthour – We don't think so, if there was a specific issue with the manager we'd say obviously we'd have to move. For U.S. equities, a fair amount of the exposure at this stage is indexed and that's where you've done well recently. There are portions of domestic equities that are still actively managed. You've had some performance issues over the course of the last month ranging from 12 basis points to almost 2% in terms of underperformance. The opportunity funds, PFM was down 6 basis points for the month, nothing to be concerned about, delivering a 4.15% return, that's pretty good given their asset allocation. FIS was up 5% and outperformed by 9 basis points, that's pretty good given their asset allocation. The performance of those funds is always under the microscope. Fiscal year numbers, PFM delivered 12.25%, FIS delivered 13.26%, those are pretty good contributions to the overall return of the plan. Eaton Vance and Trilogy are in liquidation mode, the money has gone over to Rhumblin, the emerging markets index. Because the investment was made during the month you actually don't see an actual return. You'll see it next month.

Mr. Walthour – Within investment grade fixed income, Brandywine outperformed by 200 basis points. Merganser outperformed by 23 basis points. They didn't face a negative overall fixed income environment which is good. Opportunistic fixed income, most of the managers underperformed, the savior was the convertibles manager which delivered 120 basis points of outperformance. The Hedge Fund portfolio or absolute return as we're calling it now outperformed by 10 basis points, the key driver was your macro manager Bridgewater. Taconic delivered 42 basis points of positive performance. Kynokos, 170 basis points of positive performance. Those managers experienced positive results while a lot of your other managers experienced negative

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

results. The non correlated effect of the overall portfolio led to a positive result which is what we've been trying to achieve.

Real Assets was a big boost to the portfolio's overall return but relative to the benchmark was negative. In the month of December during a negative environment, those managers produced positive outperformance. This month, slightly negative outperformance but they saved you more on the downside and didn't quite make up as much on the upside but we'd rather see that benefit on the downside.

Private real estate for the month, underperformance by 150 basis points, this is on a lag basis. Private assets outperformed by 32 basis points. Private equity was up by 20 basis points and Private debt was up by 500 basis points.

Agenda Item #7 – Brandywine Update

Mr. Handa presented as follows: There was a question posed, I believe it was October or November, about Brandywine regarding whether or not we should increase the dollar allocation, and if so why, if not, then why? I had an idea of that time of what my own belief was. I wanted Cliffwater also to conduct an independent review of Brandywine.

As the memo highlights, we are very pleased with their performance and that's certainly not in question. They have almost 4.5% of the Plan's assets and that's been a good thing for overall performance. However, there is some risk with what they do to generate returns. Some of their performance has come from investment in currencies and they're permitted to do that and they are very good at it, and hats off to do them for doing such a good job, but Staff does have concerns about the risks involved. We are recommending that we hold the position as it is with Brandywine managing approximately 4.5% of Plan assets.

Agenda Item #8 – Fourth Quarter 2012 Opportunity Fund Reports And Flash Reports for Opportunity Fund Managers for Period Ending January 31, 2013

Mr. Spagnola presented. The total fund on the net basis after all expenses, returned 14.49 versus the benchmark at 14.25 as of December 31, 2012, exceeding the benchmark by 24 basis points. It was a good year in terms of investment returns. Outperformance occurred in most cases across domestic equity, international equity and fixed income. Seven of the ten strategies outperformed for the full year. For domestic equity, six strategies outperformed for the full year.

Mr. Spagnola indicated he was pleased to see one of the managers they had been a little concerned about, Palisades, bounce back on a net basis, almost 300 basis points ahead of its benchmark. PFM is still watching the manager closely.

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

Herndon's been a very good manager. Performance beat the benchmark for the year. Since inception was over 5.5%. They've had this benchmark since they were part of the portfolio in April of 2007.

Philadelphia Trust had a better second half of the year after a bad start in the beginning. They are a manager that PFM has been a little bit more concerned about. Near term not as strong, five year number still good, since inception, still good. A lot of active managers have underperformed, especially domestic equity in this environment.

Profit had a nice bounce back. PFM moved them from probation to the watch list. Mar Vista, for the second half of the year outperformed, but for the full year underperformed. They're a manager PFM needs to see over a full cycle instead of the up market that has occurred over the last three years. They were the two managers PFM was focused on and will continue to monitor. Mar Vista is currently on Watch

Mr. Spagnola moved the discussion to international equity. Cheswold Lane had a good year and beat it's benchmark by a good margin, however, Herndon experienced underperformance. PFM has exposure to Herndon both in the international and domestic portfolios; it has not been in the portfolio all that long.

The two managers in fixed income did really well, over 9% for both of them, beating their benchmarks, using spread products. The manager GW tends to have more exposure to non-investment grade while The manager Garcia tends to stay in the investment grade area, both of them with spreads tightening really outperformed.

Mr. Stagliano – Does Herndon have different managers for each of their strategies?

Mr. Cameron – Yes, they have large cap growth, large cap value and international equity. They manage them all similarly from a philosophical perspective, but they are individual PMs. I focus on domestic equity. Randell King is the value manager there. He's been with the strategy since inception

Ms. Pankey – Profit Investment's not on watch?

Mr. Cameron – We removed them a number of quarters ago. We had them on probation. At that point, it triggered an internal search for us to make sure they are the best in what they do for the fund. We came to the conclusion that nothing changed from our original thesis. We decided we still liked the team in place and process and we took them off Probation to Watch. Fortunately they've had a pretty good run since then.

Ms. Pankey – I was just a little confused because it was reported that you took them from probation to watch.

Mr. Cameron – Yes, we have five levels of monitoring. It depends, what level they're on in that process for how closely we're continuing to do our due diligence. We monitor

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

every manager on a monthly basis. We're going to spend a little bit more time on the ones that are problem managers. Watch could be short term performance, or personnel. Probation is actually a step further where at that point, it triggers an internal search. Are these the best managers? Let's look at the universe again. We don't usually like to make a jump from probation to off watch. A natural step is probation to watch list and then coming off. Profit is in the middle of that process.

Mr. Spagnola – Overall we think the fund's in good shape, since inception, with 7 of the 11 strategies are outperforming. We're focusing on a couple we talked about here today. The opportunity fund is performing to if not exceeding our expectations.

Mr. Woolworth – Make sure you have an excess return line on the flash report going forward.

Ms. Weiss – When a company actually does reach the probation level, how long do you let them sit there, if they're not trending upward?

Mr. Spagnola – It's usually a couple of quarters, no more than that. It's a little bit different because we have to find a better replacement. Unless we are convinced of our conviction and another manager being able to do a better job, it doesn't create the impetus to make the change. Probation is generally two quarters, but it's not hard set.

Mr. Bielli – Those two fixed income investments in PFM, they almost doubled the index in the most recent period of time. They said it was because they went into spread products. How much more risk is that?

Mr. Handa – I don't know what specific instruments they were involved in. Last year treasuries were all around 2%, and the high yield market last year rallied about 14.5% - 15%, so the spread between the two is generally what people look at. If you're investing in high yield, it was a good year across the board. You have to take that into account. The high yield market right now is compressed down to about 6%. If you were to go out and buy just a high yield index, you'd get back about 6%. The spread between the 10 year and 6 year is about 500 basis points. That compression has happened. You won't necessarily get the same return but that is the risk. That's the risk that people look at; historically speaking, it's attractive.

Agenda Item # 9 – Fourth Quarter 2012 Directed Commissions Report

Mr. Falkowski - Local Minority's Brokers Program, the fund's equity managers directed 31% of their trades to local minority brokers. For 2012, the managers directed 30%. Mr Falkowski noted that Carol at the last Board meeting had asked about the passive managers' participation in the local/minority brokerage program. Mr. Falkowski noted that Rhumbline directed 84% of their commissions and Northern Trust directed 47% during the fourth quarter. Both of these had a lot of participation. Rhumbline used 4

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

different brokers. Northern Trust used one but their trading was a lot lower than Rhumblin.

Commission Recapture's Program, the fund recaptured approximately \$17,500 during the fourth quarter. This is a decrease of 14% from the third quarter and the decrease is primarily due to overall lower total commissions and a slight decrease in the recapture rate. The recapture rate for the fourth quarter was just under 15% and for 2012 it was at 21%.

Agenda Item # 10 – Chief Investment Officer's Report

Mr. Handa presented the Securities Lending income for January at approximately \$160,000. Total securities lending income for the prior year in 2012 was nearly \$2.3 million, a significant increase from the \$1.5 million generated by State Street in 2011 and 2010. The exposure to the Quality D portfolio has improved in terms of value with an increase (decrease?) of approximately \$108,000.

Mr. Handa reviewed the Diversity Manager AUM report. He stated that Rhumblin had been removed from the report as they no longer qualify under city guidelines as a minority owned firm. This shifted the percentage AUM numbers down in the report. However, Rhumblin is a passive manager, so the loss of fee income for reporting purposes for OEO was muted, with fee income declining by approximately 15 basis points from approximately 23% to approximately 22.75%.

Mr. Handa discussed the Independence Fund report showing monthly performance as of the end January versus the S& P 500. He indicated that the Independence Fund decreased by approximately 60 basis points in February and that the fund very tightly hedged with minimal market exposure. Mr. Handa indicated that he confirmed the exposure of the Independence Fund and found that it has been averaging about 15% exposure to markets.

Ms. Pankey asked if Investment Staff was looking to replace Rhumblin with another minority manager.

Mr. Handa stated that Staff was not specifically looking to replace Rhumblin in terms of a minority firm, however, Staff has been taking steps to increase the diversity of the overall portfolio in terms of exposure.

Mr. Bielli stated that City Council's measurement for diversity participation is focused on the fees paid to managers. The loss of Rhumblin had virtually no effect on fees paid overall because it was an index fund, with very low fees to begin with. Even though assets under management by diversity managers declined, the actual fees paid to diversity managers did not decline very much.

**BOARD OF PENSIONS AND RETIREMENT
INVESTMENT COMMITTEE MEETING
FEBRUARY 28, 2013**

A discussion ensued regarding the participation percentage goals for the pension Plan.

Ms. Stukes-Baylor asked if the minutes could be searched to indicate what was agreed upon for the percentage of participation by diversity managers. She wanted to clarify what the goal was and whether it was an aspirational goal or not.

Ms. Weiss requested a motion to adjourn the Investment Committee Meeting. Mr. Stagliano made the motion and Mr. Albert seconded. There was no discussion. All were in favor. There were no oppositions or abstentions. The motion passed.

Ms. Weiss requested a motion to reconvene the Board of Pensions and Retirement to affirm all actions taken at the Investment Committee and Deferred Compensation Plan Committee Meetings. Mr. Albert made the motion and Mr. Thomas seconded. There was no discussion. All were in favor. There were no oppositions or abstentions. The motion passed.

Ms. Weiss requested a motion to adjourn the Board of Pensions and Retirement Meeting. Mr. Albert made that motion and Ms. O'Leary seconded. There was no discussion. All were in favor. There were no oppositions or abstentions. The motion passed.

The Investment Committee of the Board of Pensions and Retirement approved the Minutes on _____

Paula Weiss, Esquire
Alternate Board Chair