CITY OF PHOENIX EMPLOYEES' RETIREMENT BOARD

200 W. Washington, 10th Floor Phoenix, Arizona 85003

April 17, 2014

MEMBERS PRESENT: Ms. Elizabeth Bissa, Chairperson

Ms. Cathleen Gleason, Vice Chairperson

Mr. John Hedblom, Board Member Mr. Lionel Lyons, Board Member Mr. Rick Naimark, Board Member Mr. Randy Piotrowski, Board Member Mr. Leslie Scott, Board Member Mr. Corey Williams, Board Member

ABSENT: Mr. Neal Young, Board Member

ALSO PRESENT: Ms. Gail Strohl, Retirement Program Administrator

Ms. Paula Whisel, Recording Secretary Atty. Stephanie Hart, Law Department

Ms. Anna Martinez, City of Phoenix Employees' Retirement

System (COPERS)
Mr. Greg Fitchet, COPERS
Ms. Lollita Cordova, COPERS

Ms. Jodi Nicholson, Finance Department Ms. Barbara Trollope, Finance Department Ms. Barbara Coppage, Finance Department Mr. Jeremy Miller, R.V. Kuhns & Associates Mr. Todd Shupp, R.V. Kuhns & Associates Mr. Nick Woodward, R.V. Kuhns & Associates

Mr. Mike Levin, PAAMCO Mr. Jim Meehan, PAAMCO Mr. Scott Warner, PAAMCO Mr. Ben Ghriskey, Fir Tree Mr. Rob Kneip, Fir Tree

Mr. Clint Carlson, Carlson Capital Mr. Tom Kuchler, Carlson Capital Mr. John McKevitt III, Cheiron Mr. Gene Kalwarski, Cheiron Ms. Elizabeth Wiley, Cheiron

The City of Phoenix Employees' Retirement Board met at 17 S. 2nd Avenue, 2nd Floor Subcommittee Room, Phoenix, Arizona on April 17, 2014, at 2:30 p.m., to conduct regular business.

1. Call to Order

Chairperson Bissa called the meeting to order at 2:37 p.m. She stated Mr. Young was unable to attend the meeting. She stated Mr. Lyons and Mr. Naimark would join the meeting in progress.

2. <u>Consideration of Correspondence From RVK Regarding Direct Hedge Fund Manager Recommendations</u>

Mr. Jeremy Miller, Mr. Todd Shupp and Mr. Nick Woodward approached the table.

Mr. Woodward stated Mr. Shupp was RVK's Manager Research Consultant who covers the absolute return asset class. He stated Mr. Shupp lead the project on finding the direct hedge fund managers which they will be recommending today.

Mr. Woodward stated RVK has a new logo. He stated they have officially gone from R.V. Kuhns to RVK. He stated going forward they will refer to themselves as RVK. He stated Mr. Russ Kuhns who started the firm retired about four or five years ago and they felt it was a good time to go with the shorter name. He stated there have been no changes with the way RVK was structuring the firm with the exception of recently adding seven shareholders. He stated there have been no changes to the no conflicts of interest policy they have in place.

Mr. Woodward stated RVK is providing this recommendation and seeking approval from the Board as part of the next step for the absolute return portfolio which was part of the new target asset allocation. He stated it was a move from long/short equity which was the current investments in this space to the absolute return strategy (ARS) asset class. He stated the ARS asset class includes a broader opportunity set of hedge fund type strategies. He stated RVK felt there was a potential for return enhancement as well as risk reduction by moving to the more diversified opportunity set. He stated the target allocation was increased from 10% to 15% so they think this asset class can provide a great benefit to the overall portfolio. He stated the long/short equity and ARS both fall into what RVK calls the alpha bucket which are investments that rely on manager skill. He stated they are investments which allow for tactical asset allocation.

Mr. Woodward stated the first step is to broaden the mandate for PAAMCO which is one of COPERS' long/short equity managers. He stated RVK felt PAAMCO was a top tier manager in the fund of hedge fund space and broadening their mandate made a lot of sense. He stated PAAMCO was here today to present an update.

Mr. Woodward stated the second step is to seek approval from the Board to hire two multistrategy direct funds managers. He stated direct funds take away a layer of the fees and they also have the potential to be a little bit more tactical. He stated RVK reviewed the fund structure and found combining the one fund of fund manager and then some direct managers as well gives the portfolio a nice balance.

Mr. Shupp stated this is a project RVK has been working closely with staff on in terms of what is the next step in the evolution of their absolute return program. He stated RVK thought it made a lot of sense to highlight some of their highest conviction multi-strategy direct managers. He stated Carlson and Fir Tree were here today to present. He stated it might be helpful to hit some of the high points of things that they look for in the direct manager, some common attributes that they both have.

Mr. Shupp stated Carlson and Fir Tree have been around for over 20 years each. He stated RVK likes to see that level of experience which gives the firms time to demonstrate their capabilities and also enhance their institutional quality over time. He stated both of these shops have a strong institutional client base. He stated they are both tactical so they can move across asset classes. He stated they have a lot of tools at their disposal which they use prudently. He stated these managers are careful about risk and the amount of leverage they are using but they are able to move around a little bit more than a traditional

fund of funds. He stated RVK likes to see incentive alignment both at fund of funds and at direct hedge funds. He stated both of these firms have significant amounts of employee capital invested which is positive to have that along side investors. He stated both of these firms are 100% employee owned. He stated both of these shops have attractive long term results. He stated Carlson and Fir Tree implement in very different formats. He stated they both use fundamental bottom-up research.

Mr. Shupp stated Carlson Capital has a relative value type of investment approach so less directional, they take long positions and offset with short positions sometimes in the same capital structure or related types of companies. He stated they are diversified across asset classes and they have relative value equity as well as relative value credit, event driven and other satellite strategies. He stated they will present some core strategies which are the three he just mentioned as well as some satellite strategies. He stated attractive long term risk adjusted results so their 10 year number is ahead of MSCI ACWI Index with about 40% of the volatility.

Mr. Shupp stated Fir Tree was founded in 1994. He stated they have a different approach here and a straight forward one. He stated the fund which they are highlighting is the Value Fund. He stated Fir Tree describes their approach as value buying at a margin of safety type. He stated they do employ what they call positive activisms so they will take some board seats and try to push for their agenda. He stated they call it positive because they are not trying to be contentious as they push for change at a given company. He stated Fir Tree is also diversified across asset classes so they have value equities and some mortgage credit in the portfolio. He stated this was a higher type of risk return profile than Carlson.

Mr. Shupp stated RVK thought it would be a nice combination of these two managers for the initial direct investment. He stated another thing RVK likes about Fir Tree is their patience approach. He stated they require a significant margin of safety as they buy securities and if they do not see that they will hold cash until they do see the market turn in their favor. He stated right now their funds are soft closed and they are not taking any new capital except for RVK clients.

Mr. Shupp stated Carlson and Fir Tree are high quality, high conviction firms. He stated RVK thinks it was good diversification and a way to bring down the fee load. He stated they would be a nice compliment to the PAAMCO portfolio who tends to focus on smaller emerging managers and these are larger more well established managers.

Mr. Woodward stated RVK was recommending \$60 million to each of these managers, which would equal about what PAAMCO has at \$125 million. He stated in the future they may look at another direct hedge fund manager to round out the total 15% allocation.

Ms. Gleason asked both of these companies were operating a number of years without being SEC registered if that was typical or why would you not be registered and then decide to be registered. Mr. Shupp stated Carlson has been registered for quite some time and Fir Tree was a more recent firm to register. He stated Fir Tree felt they were up to par across the board and it was a formality. He stated RVK views it as important but they recognize some firms who have been SEC registered have had flaws under the hood. He stated currently hedge funds do have to be registered over a certain asset level.

Ms. Gleason asked what was the difference between a soft lock and a hard lock. Mr. Shupp stated in the Carlson fund there was a reference to hard locks and soft locks. He stated the soft lockup means you can redeem your capital on a quarterly basis if you pay a redemption fee. He stated if you are willing to lock up for three years you do get a

reduction in the management fee, which is pretty material. He stated with the hard lockup you are not getting your capital returned. He stated for Fir Tree the only share class that they are currently accepting capital in is the rolling two year lockup share class. He stated Fir Tree does allow for up to 10% of your prior year-end capital to be redeemed for rebalancing purposes so it was not as if you cannot get anything from that investment.

Ms. Gleason asked what was a gate provision and why would Carlson have it and Fir Tree does not. Mr. Shupp stated if in any given quarter for that fund if they received over 20% in redemption requests from their clients they could at their discretion harden up that redemption and say this is all they are going to allow you to take. He stated it was a safety mechanism which they have not used in the past but it does exist. He stated in the Fir Tree example they do not have a gate but part of the reason is they have the longer liquidity windows.

Mr. Woodward stated liquidity for the total portfolio is something they want to be aware of and it was something they monitor. He stated there was some illiquidity in the real estate portfolio but given the liquidity in other parts of the portfolio RVK was comfortable with this part.

Mr. Piotrowski stated how does the fees compare to the industry standard. Mr. Shupp stated it does vary across the industry but a historical standard fee would be the 2% management fee and 20% performance fee. He stated PAAMCO has a lower average fee than that but they have a much different investment style and invest in smaller managers.

Mr. Piotrowski stated one reason the City went with PAAMCO before is the oversight they provide. He asked who would provide the same oversight or equivalent oversight that PAAMCO was giving in the fund of funds situation. Mr. Shupp stated in terms of who came across these funds, who was recommending these funds this was RVK. He stated RVK has done a lot of work with PAAMCO in this case to pull in some of their resources particularly the operational due diligence side. He stated PAAMCO has looked at these two funds in a variety of different aspects operationally and are comfortable with them from a back office perspective. He stated on a risk measurement over time PAAMCO has also agreed to provide oversight. He stated there is a reporting mechanism called Open Protocol which provides a lot of granular detail. He stated both firms report in a consistent format and PAAMCO would be able to take the information into their system and produce a report for COPERS.

3. Update on PAAMCO's Portfolio and Due Diligence Discussion

Mr. Mike Levin, Mr. Jim Meehan and Mr. Scott Warner entered the room.

Mr. Meehan stated he remembers being in this room five years ago when the Board was considering getting into hedge funds. He stated it has been a great five years from PAAMCO's perspective. He stated now the Board was embarking on a hedge fund program. He stated PAAMCO likes to be thought of as an extension of staff. He stated the things they are going to be talking about and doing on your behalf with respect to operational due diligence and the risk migration which RVK spoke to. He stated PAAMCO does that as part of their regular process at PAAMCO. He thanked the Board for the opportunity to extend the relationship and hopes it continues to grow.

Mr. Meehan stated PAAMCO continues to be a very strong and notable player in the hedge fund of fund space. He stated currently PAAMCO just passed their 14th year of being in the business. He stated currently PAAMCO has under management \$9 billion of institutional money.

Mr. Meehan stated PAAMCO continues to expand the overall partnership at the firm. He stated both himself and Mr. Warner were fortunate enough to be asked to be partners of the firm in January 2013. He stated they also just added four new partners as of January 2014. He stated all of them have a huge vested interest as employees in what they do. He stated PAAMCO continues to focus on delivering strong returns.

Mr. Warner stated for 2013 the COPERS portfolio returned 15% beating their customized benchmark which was predominately long/short equity in an equity market neutral portfolio. He stated in 2014 PAAMCO switched to a new index which was more representative of the expanded mandate. He stated the HFRI fund of fund composite index is a peer group benchmark which covers lots of hedge fund strategies, not just long/short equity and equity market neutral. He stated that got off to a good start so far this year. He stated for 2013 they did not keep with the S&P Index on the total return basis which is not what long/short equity is designed to do. He stated PAAMCO was very proud of the 15% they delivered given they were taking less than a third of the risk of the market and they delivered half the return.

Mr. Warner stated the headwinds PAAMCO faced in the first year of the portfolio with the high yield restriction they have overcome that and then some. He stated in November 2013 before the high yield restriction had been lifted the portfolio was predominantly long/short equity and some equity market neutral. He stated fast forward to today you see a tremendous amount of change in the portfolio. He stated PAAMCO has been disciplined about not raising too much cash and managing where they are looking to diversify the strategies. He stated today PAAMCO has a much more diversified portfolio something that can be considered more all weather. He stated they should be able to generate returns in greater differences of market outcomes and market climates. He stated the big things PAAMCO has looked to add are long/short credit and distressed debt. He stated with the additional funds which are coming in next month PAAMCO will continue to reduce long/short equity, not redeeming any more but diluting the overall allocation.

Mr. Warner stated currently the portfolio looks quite a bit different than it did just four months ago. He stated PAAMCO benefited from the exact opportunities they mentioned when they came here last. He stated he believed he talked about the Lehman liquidation. He stated since they last spoke they have made two more distributions which has been beneficial to claim holders.

Mr. Warner stated PAAMCO is a plain vanilla fund of funds and if their only two decisions were picking which funds and how much to give them, their return would have been 9.5%. He stated PAAMCO did a good job of identifying managers and weighting sectors appropriately which outpaced the benchmark. He stated because of how they invest and structure their investments often times they have opportunities to do co-investments or to change a manager's mandate. He stated PAAMCO can be tactical in adding capital during the middle of a month which are funds of one with only PAAMCO's client money or managed accounts where PAAMCO is the investment manager and they hire the hedge fund to be the subadvisor. He stated this has added an additional 250 basis points to the return. He stated how PAAMCO seeks to invest that collectively is picking good managers and structuring them to your advantage when negotiating fees.

Mr. Warner introduced Mr. Mike Levin who was a senior operational due diligence professional at PAAMCO. He stated Mr. Levin did a significant amount of work on these two direct investments which the Board was considering. He stated they thought he could share what was operational due diligence, why it was important and what PAAMCO thinks about that process.

Mr. Levin stated he thinks of operational due diligence as everything that was not the invested risks. He stated everything besides investing in a position is under his realm so there was a lot of different areas that it covers and a lot of different work they have to do which was integral to hedge fund investing.

Mr. Levin stated structural, taxation and corporate governance were questions they were asking before including gates and lock ups. He stated the legal documentation around investing in hedge funds was very complicated and you have to read every one of these documents. He stated other things they look for in a legal document is expenses which are part of the fund.

Mr. Levin stated when you go out of the long/short equity realm it was all exchange traded instruments and pricing becomes more complicated. He stated there was a lot of judgment and other service providers involved in the valuation process. He stated a big portion of his time when he was reviewing managers was looking at their valuation policies and procedures. He stated he wants to make sure it was independent from the investment manager and what they are doing on the valuation side is independent and consistent for month to month.

Mr. Rick Naimark entered the room.

Mr. Warner stated Mr. Levin has an audit background. He stated their process around pricing was an audit process so Mr. Levin will go onsite and pull quotes, look for documentation and do random sampling.

Mr. Levin stated it was important the managers have a robust compliance staff. He stated with a lot of regulations coming up there was a significant burden on hedge funds for reporting, full disclosures and oversight on insider trading. He stated PAAMCO wants to make sure all of their managers have appropriate controls, compliance people and people who are actually overseeing what the investment team is doing and keeping them accountable to all the Securities Exchange Commission (SEC) rules.

Mr. Levin stated PAAMCO spent a lot of time onsite with the managers doing random selections of pricing of their trading positions and reviewing compliance rules. He stated they meet with the team and ask them about their processes and quiz them to make sure they are up to date with best practice in the industry. He stated a lot of the process that PAAMCO does is onsite looking through documentation of the manager. He stated they are not taking anything for granted on a manager.

Mr. Levin stated PAAMCO needs the ability to work with the managers. He stated after he was done seeing them there could be things he thinks could be improved or changed. He stated a lot of his job was consulting with these managers. He stated they are not only just assessing the managers they are helping them get better. He stated on an ongoing basis he was consulting with them to keep up them up to that best practice level which they expect at PAAMCO.

Mr. Meehan stated they have a veto right on the managers they consider for their portfolios at PAAMCO. Mr. Levin stated the veto is very important. He stated it was getting new systems, new people, adding to their compliance department and all of these things cost money to the manager. He stated unless he can go to them and say if you do not add this new system or if you do not add people on your compliance team they are not going to feel comfortable investing. He stated this pulls a lot of weight.

Mr. Williams asked if this was an ongoing process for reviewing. Mr. Levin stated it was a continuous process. He stated he sees them before you invest and on an ongoing basis he will keep in touch with them and go out and visit them continually.

Mr. Hedblom asked Mr. Levin if he had to do much consulting with Fir Tree or Carlson. Mr. Levin stated they were pretty good because they have been around for a long time and have an institutional infrastructure. He stated he was really happy with what he saw from both organizations. He stated he did have some suggestions but nothing that was egregious or over the top. He stated with all hedge funds there is always areas of improvement but these firms really put an emphasis on the back office. He stated both firms have state of the art technology in compliance, trading and accounting.

Ms. Gleason asked how PAAMCO was compensated for providing this oversight to COPERS for Carlson and Fir Tree. Mr. Meehan stated because of the assets COPERS invested with PAAMCO, they are not charging additional fees for any of these services. He stated PAAMCO would like to think of themselves as an extension of staff. He stated the Board was kind enough to give PAAMCO \$60 million. He stated PAAMCO considers that as part of the overall package and are happy to provide the service.

Mr. Levin, Mr. Meehan and Mr. Warner left the table.

4. Consideration of Potential Direct Hedge Fund Managers

a) Fir Tree

Mr. Ben Ghriskey and Mr. Rob Kneip entered the room.

Mr. Ghriskey stated Fir Tree was founded in 1994. He stated what has differentiated Fir Tree is what went into that founding in 1994. He stated the founder of their firm Mr. Jeff Tannenbaum came out of the private equity business. He stated Mr. Tannenbaum had worked with Mr. Jerry Kohlberg the founder of KKR. He stated when Mr. Kohlberg left KKR he started a private equity firm called Kohlberg and Associates. He stated Mr. Tannenbaum was hired to work and build that firm along side Mr. Kohlberg. He stated after six years of working together in private equity Mr. Kohlberg retired into philanthropy and Mr. Tannenbaum used this as an opportunity to launch Fir Tree.

Mr. Ghriskey stated there are four pillars of the firm. He stated the number one and most important fact is that in 1994 they launched with a two year rolling lockup on their capital base. He stated from day one they have been focused on aligning themselves with stable capital. He stated that two year lockup from day one ensured they aligned themselves with investors who understood the advantage of time arbitrage. He stated they did not have to put up returns every week, every month, every quarter, they could make investments they could hold for a multiyear basis. He stated compounding capital is very powerful having to come up with ideas every week is very difficult. He stated being able to build a business with that kind of stability has allowed them to add breath and depth to their investment team and build a firm they think has a repeatable pattern of investing over the years.

Mr. Ghriskey stated the top 15 investors have been with Fir Tree on average for nine years. He stated they have never had an issue with inflows, outflows and redemptions. He stated currently Fir Tree was closed to new investments. He stated they have allocated some capacity to RVK and COPERS as a result of their discussions. He stated they have never been in a rush to grow assets, it was always about aligning ourselves with the right investors.

Mr. Ghriskey stated the second key principle is they apply a broad value mandate. He stated in 1994 the investment management business was fixated between debt and equity, large cap and small cap. He stated it was much less unique today but it was important for them to know they are constantly comparing ideas against each other. He stated they are not just looking at equity investments or debt investments, they are often approaching the situation and evaluating the best way to buy that investment. He stated value for them is the constant. He stated they apply the up/down framework to situations. He stated that pattern gets applied to debt, equity, to opportunities in the US, non-US, sovereign credit. He stated it also means that during periods where things are not interesting they are not forced to put money to work.

Mr. Ghriskey stated the third key point is how Fir Tree structures the organization. He stated they operate just like you do, they sit around the table together and discuss ideas. He stated Fir Tree does not allocate capital to a portfolio manager who was then responsible for putting it to work on his own. He stated he did not think that was an efficient use of capital. He stated Fir Tree thinks it was much better to use the full resources of a team to uncover the best ideas, the best opportunities. He stated they also think it was helpful by using a team approach that everyone was aware of what everyone else is working on.

Mr. Ghriskey stated the Value Fund which they are talking about today is roughly 30 investments and those 30 investments have been worked on by the entire team. He stated it also means compensation is off of one portfolio so individual portfolio managers or analysts are paid on the collective performance of the team.

Mr. Ghriskey stated Fir Tree's fourth pillar has an active philosophy of investing. He stated activism is not a strategy for Fir Tree it was a way of thinking. He stated they really think of themselves as owners of businesses, lenders and they become actively engaged in those underlying investments. He stated they are not just looking at blinking red and green lights on a screen and figuring out what to buy and sell, they are engaging. He stated if they are buying something they think is cheap there is a reason or there are things they believe are not being properly priced into the private market and they are willing to get involved in those situations to unlock value. He stated so at times it can be simply just suggesting ideas that a company can do to unlock value.

Mr. Ghriskey stated it was those primary four pillars which they built Fir Tree into who they are today. He stated it starts with a stable capital base, a broad value mandate, a team oriented culture and an active philosophy.

Mr. Lionel Lyons entered the room.

Mr. Ghriskey stated the fund's total assets are \$12.5 billion. He stated \$11 billion of the \$12.5 billion are in their two hedge funds. He stated the Value Fund is the flagship fund launched in 1994. He stated the other hedge fund offering is the Capital Opportunity Fund which is the credit portion of the Value Fund portfolio. He stated same team, same investments just excludes the equities you would find in the fund. He stated \$1.5 billion was in private equity real estate. He stated Fir Tree thinks the real estate space is very unique today and has a tremendous amount of opportunities if you can apply a broad mandate to look across public and private residential and commercial. He stated Fir Tree did not want to do private equity in their hedge funds so they launched a separate structure allowing them to less liquid, longer duration investments. He stated the marketable sides of real estate you would find in the Value Fund.

Mr. Ghriskey stated Fir Tree has two offices, one in New York and one in Miami. He stated the majority of the team, the entire trading desk, and the legal back office is in New York.

Mr. Ghriskey stated every month RVK tracks how much Fir Tree has in debt, equities, corporates and structured credit. He stated by having the broad mandate it does not matter if they are buying a corporate bond or an equity it was the underlying theme that was driving the exposure. He stated special situations to them are just equity situations where they were not finding necessarily fundamental value outright in an equity opportunity or in a company it was more they were investing around a very specific event. He stated Fir Tree hedges around the event by hedging out the exposure to the underlying sector or to the underlying fundamentals of that individual company. He stated they are finding good opportunities today in some litigation plays.

Mr. Ghriskey stated commercial real estate is a big thing for Fir Tree. He stated this is not buying equity in an office building, this was buying marketable opportunities where they believe the market was misunderstanding the embedded real estate value. He stated their big focus has been on new reissued REITs. He stated Fir Tree has been playing in some new reissued REIT spaces such as Ireland and Mexico where these companies have a huge advantage to execute on purchasing real estate. He stated REITs are very correlated to interest rates so they are not wanting to take interest rate risk and will often either short or hedge interest rates outright or use comparable REITs in other markets to hedge out some of the interest rate dispersion.

Mr. Ghriskey stated value equities are what you think of in value equities. He stated these are outright shorts of individual companies they think are either cheap or overvalued. He stated this has been the biggest part of their portfolio where exposures have been reduced over the last 18 months. He stated there are still companies they own in their value bucket which are companies that have been in the portfolio for over a year. He stated on the short side they have tried to find pattern recognition and look for overlevered companies who have not taken advantage of low interest rates to lower debt.

Mr. Ghriskey stated the residential real estate space for Fir Tree has been the biggest differentiator in their business over the last eight years. He stated Fir Tree has made a lot of money on the over sell off of residential real estate. He stated Fir Tree was looking at the individual value which is loan on a residential home and identifying the best way to buy that. He stated from 2008 to 2012 the best way to buy residential loans was in structure credit. He stated Fir Tree did something

fairly unique in this space in that their investments from day one have been focused not just on the value of overall security but the value of each individual loan by loan. He stated they identified loans which never belonged in the securitizations and therefore they have been leading the effort to realize value back from the banks that issued these. He stated the banks issued a tremendous amount of fraudulent originated paper. He stated today the opportunity set was vastly different because it was no longer cheap to find these in structure credit so they were actually buying loans outright, getting the underlying board to re-perform and then selling them. He stated Fir Tree was not into foreclosing that was not their strategy, their strategy is a modification strategy.

Mr. Ghriskey stated the sovereign space was big. He stated it was extremely interesting and today represents a fairly neutral biased portfolio where Fir Tree was heavily invested in some distressed opportunities in the sovereign space. He stated these investments vary from investments in Latin America to investments in Eastern Europe. He stated situations you read about in the newspapers every day are causing massive dislocations which they can take advantage of. He stated Fir Tree has the ability to understand capital structures and be able to go long and short. He stated a lot of people focus on sovereign credit which are not hedge funds, nor capital structure investors, they are outright investors.

Mr. Ghriskey stated Fir Tree was always looking for cheap options. He stated they spend about 30 basis points a year on that type of opportunity. He stated last year Fir Tree's biggest winner was their puts on Japanese Yen.

Mr. Ghriskey stated he thought it was better to look at the equity exposure which is the amount of equity at risk or equity exposure in the fund today to give the Board a sense of what the volatility is in their portfolio. He stated it was an average opportunity. He stated it was more eclectic idiosyncratic opportunities. He stated Fir Tree was really turning over a lot of stones and building an eclectically mixed portfolio.

Mr. Piotrowski asked say an investor gives you \$100 million to invest how does this translate amongst these investment themes. Mr. Ghriskey stated every month the portfolio calc generates a net asset value so your X amount of dollars would just purchase X amount of shares and you would buy a piece of this portfolio. He stated unlike a private equity fund where you get shares of it you are buying into a commingled portfolio.

Mr. Williams asked about the average opportunity. Mr. Ghriskey stated over 20 years there have been probably five to 10 periods where the opportunity set was absolutely amazing. He stated for the rest of the time it was an average period for a value buyer. He stated they are very worried about risk and when you look at corporate credit markets in the US to them they were not interesting at all. He stated when you look at distressed opportunities globally there are few of them. He stated equity values have been driven by market expansion over the last year and a half and it has not been great underlying fundamentals. He stated as a firm who was driven by fundamental and identifying fundamental value those are what get them most excited. He stated they are finding things to do which is very common for Fir Tree.

Mr. Naimark asked about the length of the investment period and distribution period. Mr. Ghriskey stated it was a hedge fund and they were operating with a two year rolling lockup period. He stated if you make an investment it was locked up for two years and then after two years it was locked up for another two years. He stated during that two year rolling period you can redeem up to 10% of your balance in any one year. He stated full liquidity was given to you on that anniversary date every two years. He stated there was no liquidation period in this fund.

Mr. Ghriskey and Mr. Kneip left the room.

b) Carlson Capital

Mr. Clint Carlson and Mr. Tom Kuchler entered the room.

Mr. Kuchler stated he was a member of the Investor Relations Team at Carlson Capital. He introduced Mr. Carlson the founder of the firm and Chief Investment Officer.

Mr. Kuchler stated the firm was founded in 1993. He stated Carlson Capital currently manages \$8.4 billion in assets. He stated they manage across several hedge fund structures with their flagship product being their \$5.9 billion multistrategy fund called Double Black Diamond. He stated Double Black Diamond is the fund which they would be speaking about today.

Mr. Kuchler stated with respect to Carlson Capital's infrastructure they have developed a very robust infrastructure to support that capital base. He stated they employ 167 professionals; 87 investment professionals and 80 in the back office. He stated the majority of their team was based at their headquarters in Dallas, Texas. He stated Carlson Capital has set up some satellite research offices in New York, Greenwich, Connecticut and London.

Mr. Kuchler stated about 65% of their capital is institutional capital. He stated a large bulk of that comes from public pension plans and private plans. He stated Carlson Capital found these type of investors were a good fit for them. He stated they are attracted to the fact their strategies are not correlated to their more traditional equity and fixed income portfolios. He stated they have historically through their 20 year history preserved investor capital and they have consistently generated stable returns and avoided substantial downside draw downs.

Mr. Carlson stated Carlson Capital started in 1993 and they have been doing the same thing for 20 years and he hopes the next 20 years to do the same thing. He stated while that sounds like it was not very ambitious of a goal but creating a beatable investment process and keeping the long term track record is a difficult challenge.

Mr. Carlson stated if he could sum up what their philosophy is their absolute priority is that their investors have more money at the end of the year than what they started the year with. He stated Carlson Capital worries about the market environment and how much risk do you want to take. He stated the term absolute return does not guarantee they are going to make money every year but they try to maximize the probability they are going to make money in every year and earn some superior returns in the process. He stated this was the core of their philosophy and it was the way he likes to invest. He stated he has substantial commitment to the fund as most other hedge fund managers do.

Mr. Carlson stated the two fundamental concepts of investing are diversification and hedging. He stated in the multi-strategy fund Carlson Capital has eight different strategies. He stated they have 26 separate portfolio managers who have a high degree of autonomy who focus a lot on collaboration across the disciplines. He stated if you look at Double Black Diamond today it will be roughly 900+ individual investment ideas in there. He stated an investment idea is where they have a thesis. He stated one of the differentiators about how Carlson Capital executes the investment process is they really focus on hedging at the position level.

Mr. Carlson stated Carlson Capital's largest strategy was something very few people do and they call it equity relative value which was pairs trading. He stated an example of a pairs trade would be they are long Target and short Walmart and their thesis is that Target is the faster grower and they think over the next year Target will outperform Walmart. He stated by setting up a trade like this they have taken the market risk out of the trade and have also taken the risk that retailing does particularly poorly or discounters do particularly poorly. He stated 90% of what he does is purely focused on stock picking on an individual level in setting this up as a pairs trade.

Mr. Carlson stated Carlson Capital has 14 portfolio managers who are each responsible for an industry and they construct their own portfolios.

Mr. Carlson stated Carlson Capital does the same thing in the credit markets and the bond markets. He stated the equity relative value is about 32% of the portfolio and the credit relative value is in the low 20%.

Mr. Carlson stated Carlson Capital has an event-driven strategy which was the business he came from of merger arbitrage and special situations. He stated event-driven was looking at companies who are either going through mergers or doing spin offs, restructurings, other corporate events and trying to figure out what the value will be once the event occurs or if the event will occur.

Mr. Carlson stated the third largest strategy is the traditional long/short. He stated the reason they break things into strategies is to manage risk. He stated he knows where he is making money and why he was making money and he can manage the risk better by breaking the portfolio up into multiple strategies.

Mr. Carlson stated when Carlson Capital started they did event-driven, convertible arbitrage and pairs trading. He stated convertible arbitrage is where you are looking for cheap convertible bonds and hedging out the equity risk. He stated that business kind of went away. He stated they have a small amount of it now just to keep their hand in it. He stated they built a non-agency mortgage backed securities portfolio back in 2009 which worked out very well for them.

Mr. Carlson stated Carlson Capital does a limited amount of illiquid investments. He stated energy and financials were two areas where they are really good at and they limit their exposure to 10% of the fund. He stated his belief is this is your money and if you want it back you should get it back. He stated Carlson Capital always tries to do the right thing by their investors.

Mr. Carlson stated Carlson Capital will not do anything with their investors' money that they would not do with their own money. He stated 82% of his net worth is in one of the funds they run.

Mr. Carlson stated this is how Carlson Capital allocates between strategies. He stated each business unit has a lead person who he talks to every day about what they are seeing regarding their opportunities and the risks. He stated they have an Investment Committee meeting every two weeks and they bring those senior guys in and talk about where they should be going. He stated he proposes allocation changes and they discuss it. He stated it was about soliciting the opinion of your top people. He stated above the Investment Committee is the Management Committee who deals with management issues of the firm, performance issues of portfolio managers and sets the risk levels for the individual portfolios within the fund.

Mr. Carlson stated he was in this business because he loves it and he will never give up managing capital. He stated he runs a firm book where the portfolio manager put their ideas for possible inclusion in the portfolio. He stated they were the best ideas on a risk adjusted basis. He stated generally Carlson Capital does not have a lot of things in their portfolio which they think are going to double.

Mr. Carlson stated there were two things which contribute to the investment returns, the opportunity set and the skill of the manager. He stated in 2009 they saw the real opportunity in mortgage backed securities, they built a team and made an allocation.

Mr. Carlson and Mr. Kuchler left the room.

Ms. Gleason moved to go forward with an allocation to Fir Tree and Carlson and utilize PAAMCO's due diligence of those two firms. Mr. Hedblom seconded the motion.

Mr. Naimark stated he saw one with higher returns but also higher risk and one was a little closer to the line on the risk return profile. He asked if this was the right mix. Mr. Miller stated it was not just the mix of the direct managers they chose but also the two direct managers with PAAMCO as well as the rest of your portfolio. He stated PAAMCO is going to be finding managers who are fund of fund and those managers are going to be newer more emerging managers. He stated they are going to be a little more concentrated doing different things in more esoteric areas. He stated in addition to that you have one manager who was a little bit more relative value.

Mr. Shupp stated there was no perfect index in this space so they show HFN multistrategy index. He stated looking over the long term RVK was impressed with the risk return profile looking at it relative to the ACQI global equity market and the Barclays Global Aggregate Bond Index. He stated for Carlson even though it was not the highest absolute performer it was the lower volatility approach. Mr. Miller stated one thing that was asked about was the due diligence. He stated PAAMCO was doing that but they will only perform that service for up to five managers for no fee. Mr. Woodward stated five free then after that it was \$50,000 per manager. He stated what if PAAMCO was not in the portfolio for some reason does the Board lose that service. He stated you would lose that service but RVK does have a third party service as part of their direct hedge research. He stated the cost is about \$8,000 to \$10,000 per third party review for operational due diligence.

Ms. Gleason asked about option 1 and option 2 for Carlson Capital. Mr. Miller stated RVK does not see a problem with locking up money given the fee savings the Board would get.

Ms. Gleason amended her motion to include option 2 with Carlson Capital. Mr. Hedblom seconded the amended motion. The motion carried unanimously.

5. Consideration of Securities Lending Collateral Pool Recommendation

Mr. Woodward stated as part of the custody conversion one of the aspects RVK was looking at is the securities lending portfolio and specifically the cash collateral reinvestment strategy. He stated RVK was working very closely with BNY Mellon on the multiple options available to COPERS. He stated what RVK was recommending today is a custom separate account in which you would own all the securities in the account. He stated RVK has taken the core separate account profile which is similar to 2a-7 guidelines. He stated 2a-7 guidelines are the Securities Exchange Commission's (SEC) rules for money market funds and they have made it a little bit more conservative. He stated RVK thinks it was a prudent and reasonable base to start with your portfolio. He stated there will likely be a small earnings reduction and BNY Mellon has been okay with all these changes. He stated included in appendix 1 is the proposed investment guidelines. He stated RVK thinks it is a much more conservative, tighter guidelines set than what they currently have as well as the CORE separate account options available.

Mr. Lyons moved to approve RVK's recommendation of implementing a cash collateral reinvestment program with BNY Mellon, managed as a separate account, utilizing the investment guidelines attached as Appendix 1. Mr. Williams seconded the motion. The motion carried unanimously.

Mr. Miller, Mr. Shupp and Mr. Woodward left the room.

6. Presentation by Cheiron Regarding Potential COPERS Plan Changes

Mr. Gene Kalwarski, Mr. John McKevitt and Ms. Elizabeth Wiley entered the room.

Mr. Kalwarski stated he was the Chief Executive Officer of Cheiron and also a Consulting Actuary. He stated he has been involved in taxpayer initiatives in San Jose, San Diego, and legislative initiatives in Maine.

Mr. Kalwarski stated the initiative has two basic components changing the compensation and the compensation which was used is a formula for benefits. He stated they want it limited to base salary and to exclude unused sick time, vacation or other compensation not paid in money. He stated the final average comp period has been changed from a consecutive three years to a five year average. He stated closing the defined benefit (DB) plan but it states the contributions still can be paid on the backs of the defined contribution (DC) plan members to fund the unfunded liability of the DB plan.

Ms. Wiley stated in the very last section it talks about the amortization approaches on the initiative. She stated in the initiative the last section actually deals with the payment of the liabilities and amortization of COPERS. She stated what the initiative states is the City may either continue to use its current amortization schedule or amortize pension debt over total payroll including the payroll associated with the adopted plan for future hires and current employees who elect that plan. She stated basically it was saying in determining the amount they are going to pay for the unfunded actuarial liability (UAL) it was done as a percentage and they can pay it on the whole salary. She stated the new people are only in the DC plan and the City of Phoenix was going to pay whatever percentage on their salaries as well as to COPERS to pay it down.

Mr. Naimark stated 100% of the UAL, other than the 5% and whatever the Tier II members who stay are paying, is going to be paid by the City under this plan. Ms. Wiley stated the dollars are going to be the same. She stated the reason it was important is the Tier II contribution rate is defined as a percentage. She stated if they changed and were calculating it so it was the same amount of dollars that need to be paid if you do it over smaller salary the percentage can grow very likely to a point where your Tier II can be required to pay more than 100% of their salary.

Mr. Kalwarski asked who fills in the holes on these initiatives because there are so many holes. He stated the voters vote then who was responsible for filling in. Ms. Gleason stated that is why the City has outside counsel looking at this also to see where there are conflicts between the existing Charter and the new language.

Ms. Wiley asked for the ballot will they write what the rules are going to be for it or will they vote basically on this. Mr. Naimark stated it will be voted on and then they will probably have to amend the Charter and go to the voters to cleanup certain language. Ms. Wiley stated it does not define what the effective date of the act is.

Ms. Gleason stated there are a lot of things that are not clear. She asked what if somebody decides to go to the DC plan then what happens if they are vested in the DB do they still get to stay there and take a deferred benefit.

Ms. Wiley stated 30 days after effective date so the effective date will not be the date of the vote. Mr. Naimark stated the City Council certifies the vote approximately two weeks after the election.

Ms. Gleason stated this was going to be pretty complicated from a back office standpoint in terms of getting payroll systems set up, etc. She stated there was no way to do it in 30 days after a vote.

Mr. Kalwarski stated the DC plan has to be set up and it says the City will be providing matching contributions which will not exceed 8%, but it does not say the City will match dollar for dollar. He stated it also says if current employees are offered the option to change to a DC plan but that will be contingent upon Federal approval.

Ms. Wiley stated your existing 401(a) when they make the election there was a limited period that they can make it and at the point at which they have made it they continue making that percentage for their career. She stated it was irrevocable so letting them switch at this point changes the amount they are paying. Ms. Gleason stated it could risk the tax status of the Plan.

Mr. Kalwarski stated Florida allows participants to elect at the beginning, then one other time in their lifetime.

Mr. Naimark stated in the City's case it took them years to get clarity from the IRS regarding their existing 401(a). He stated they do not know whether this initiative requires them to set up a different 401(a) or use the existing plan but the IRS would have to approve the change. Ms. Wiley stated you cannot have multiple 401(a) plans.

Mr. Kalwarski stated despite the fact that it says contingent on Federal approval, current members who do not elect the new plan shall not receive City contributions to any retirement plan other than COPERS. Ms. Gleason stated the 457 was the employee's deferred money.

Ms. Wiley stated anyone receiving the excess benefit arrangement (EBA) payment is already retired. She stated it was also a pass-through so this one might be fine.

Mr. Kalwarski stated San Jose had a similar problem where they had all these holes. He stated their fiduciary counsel asked Cheiron to first provide all the actuarial holes that are in the law so he could address those and once he addressed those he went on to the administrative matters and the legal matters.

Ms. Wiley stated Cheiron does not understand what the City's matching structure was. She stated Cheiron did not model any of the employee contributions because they have no way to propose what those would be so they just modeled what the employer contributions are produced by whatever formula.

Mr. Kalwarski stated the Board asked Cheiron to look at the changes in compensation, both changes and the closure of the DB plan replaced with a DC plan with no current members going into the DC plan and all Tier II going into the DC plan. He stated the Board did not ask what the impact might be if Tier I members elected to go into the DC plan. He stated it would be extremely difficult to cost out because the younger people are more likely to take a DC plan, the older people are likely to take a DB plan and you are going to end up with the highest cost of both worlds. Ms. Wiley stated people who know they are leaving are more likely to take the DC plan versus those who are not going to leave are more likely to take the DB plan so you have an anti-selection effect which Cheiron did not attempt to model.

Ms. Wiley stated assuming the initiative was effective January 1, 2015, Tier I members who have the least amount of service already have 1.5 years of service so they are reasonably likely to stay. She stated the other is the DC with this uncertainty of what the matching is which the City Council can change every year up to 8%.

Mr. Kalwarski stated what Cheiron is going to show was not a complete analysis because they do not have all the facts but the Board will see impacts that are useful. He stated a change in benefits has not been analyzed. Ms. Wiley stated Cheiron just looked at the level of benefits the members will receive. She stated they did not look at any way it was not within the scope of that but it was obviously a huge part of any decision and impact particularly looking from the perspective of the City. She stated Cheiron was asked to look at what the City's total cost for COPERS and they were not considering any of the HR issues.

Ms. Wiley stated Cheiron started looking just at the normal cost rates. She stated this is the continuing costs assuming you do not have any unfunded liability. She stated the focus is on the City's part of the normal cost. She stated Tier I members contribute 5% of pay and the City pays the remainder of the cost of the benefits. She stated for Tier I 14.69% was their total normal cost. She stated for Tier II people they are paying half of their normal cost which was 18.84%. She stated for every dollar of salary that is in Tier II half of the UAL rate which would otherwise be paid by the City is paid by the members currently.

Ms. Wiley stated the DC plan details are not specified so Cheiron did their initial analysis at the maximum which the City was doing and assuming every employee elected to make the contribution that results in the City making 8% for them. She stated when they show the five year change it also reflects the compensation definition change.

Ms. Wiley stated looking at the normal cost rates they start with the 2013 valuation. She stated the City's part for both tiers are pretty close currently, 9.7% for Tier I and 9.4% for Tier II. She stated the first thing Cheiron did in the modeling was see what happens with the change in compensation definition to say it was just base pay. She stated what they did is not precise. She stated in the valuation Cheiron had a 9% load they were applying to the retirement benefits, which was an assumption that existed from the previous actuary. She stated they did look at it in the 2010 experience study which was from the years 2004-2009 and found it was reasonable at about 9%. She stated there have already been changes with the snapshot and the number should already be coming down. She stated in this analysis in the valuation it was 9% and when they change the definition it goes down to zero. She stated this is something that will definitely need to be looked at either with a full experience study or a stand alone item.

Ms. Wiley stated one thing to keep in mind is between Tier I and Tier II the reason Tier II total normal cost is so much higher is not really about the underlying multipliers themselves. She stated the Tier II multipliers are slightly better, they are going from 2.1% up to 2.3% and going from 2% down to .5%. She stated the really significant part is that in Tier II the value of the accumulated contributions are expected in many cases to be more valuable than the annuity. She stated if you have someone who terminates with 12 years of service in Tier I most of the time their deferred annuity is more valuable so they assume they leave their money in the fund and then take the deferred annuity. She stated with Tier II who has these high contribution percentages, the interest that is paid is the lesser of the five year calendar year returns and the valuation assumption which is currently 7.5% and with a minimum of at least zero percent.

Ms. Wiley stated the impact of changing the definition of compensation without closing the plan would be about \$5 million in savings for fiscal year ending 2016. She stated in the last year of their analysis it was about \$14 million in savings. She stated if on top of that they also add on moving to a five year final average compensation definition instead of the three year it was an additional \$1 million in savings for fiscal year ending 2016 and for 2034 it was another \$6 million for a \$20 million total.

Mr. Naimark asked in their definition of compensation did they exclude fringe and deferred compensation. Ms. Wiley stated their definition was base salary but it lists a few things that are excluded and that includes the sick/vacation pay and also any pay related to an expense being reimbursed but it did not have deferred compensation.

Mr. Kalwarski asked if the City was required to put costs associated with the ballot initiative before the voters. He stated they had to do it in San Diego.

Ms. Wiley stated both of these changes in compensation are going to have the effect of cost savings from the City's perspective. She stated in Cheiron's modeling they did it to show the change in the definition of compensation without having the final average compensation change.

Ms. Wiley stated Cheiron looked at the additional impact of closing COPERS to new entrants as of January 1, 2015 and offering a DC plan to them with an 8% City contribution. She stated COPERS has 18 months worth of Tier II members who they assume will switch to the DC plan. She stated in the first year there was an additional \$1 million cost and then in the last representative year it is a \$67 million additional cost. She stated Tier II members pay half of the UAL so when you do not have those members coming into the plan the City is now paying that portion.

Atty. Hart asked if the \$67 million was time adjusted. Ms. Wiley stated in the numbers today they are not showing any discounting. She stated one of the things they need to discuss at the end is what exact sets of numbers for tables they want and whether they want them both with discounting and without on the contribution side. Mr. Naimark stated it was helpful not to discount so it compares to the pension reform analysis which had been done.

Ms. Wiley stated Cheiron looked at in addition to all the new entrants they assumed those 18 months worth of Tier II members all decided to join the DC plan.

Chairperson Bissa stated for the first year there is only a \$1 million savings overall. Ms. Wiley stated it was because it was just 18 months worth of people who would have been paying half of UAL where the City was now paying their UAL as well.

Ms. Wiley stated the closing cost of COPERS increases the expected cost to the City in total over the next 20 years. She stated they looked at the 20 year period and all of this analysis is focused on that. She stated it was key to keep in mind the amortization period which was adopted was 25 years so this is still paying down the huge \$2 billion UAL. She stated when you get through the very end of all that it was not an increased cost. She stated the City contributions to the DC plan are additional costs that do not exist right now.

Ms. Wiley stated in terms of the City's contributions specific to COPERS it was expected that over this entire 20 year period they are going to remain very nearly the exact same. She stated the Tier II members are paying half of the total contribution rates and those rates are expected to be very close to the total normal cost. She stated basically for those people in Tier II their contributions are paying for their benefits and the contributions the City makes for them are actually just paying down the UAL. She stated in the DC plan you would be using their salaries to pay the UAL, not really reaping much benefit. She stated the amortization is the same amount of dollars no matter whose salary you are putting it over no matter who is paying it.

Ms. Gleason stated so a lot of the savings from the already accomplished pension reform goes away if this gets voted in because now the savings came from Tier II people paying half the cost.

Mr. Naimark stated when Segal was doing the analysis of something similar to this they modeled closing the plan to new entrants, not allowing an opt thing, and the City contributing 5%, 7% or 10% for a DC plan for the new people. He stated the City contributing 5% saved \$100 million over a certain period. He stated the savings did not start occurring for 20 years though.

Ms. Wiley stated the source of the savings are actually very different. She stated it was hard to compare the differences because it was done under GASB 25/27 which required when you close a plan you fund it on a level dollar basis. She stated right now Cheiron was assuming the City paying off their unfunded liability was the same percentage of salary so as the total payroll grows those payments grow as well. She stated in that case it was the amount you pay in year 1 was the same as what you pay in year 20 in terms of dollars.

Mr. Naimark stated that is why the City did not choose to do that at that time because \$600 million which was the projection of savings at that time was way more savings than closing the plan and contributing just 5% to people.

Ms. Wiley stated the initiative outlines what its intents are and if your intent is to not make the cost such that you cannot afford essential services you are closing it than you are increasing the cost.

Ms. Wiley stated in all of today's scenarios they are going to assume 7.5% is earned every year. She stated the last valuation COPERS was currently funded at 56% and they are expected an increase by the end of a 20 year period to 88%. She stated the reason they are not to 100% is as of the date of the new assumptions they took that initial UAL amount and they are amortizing it over 25 years so they still have five more years to go. She stated you are on a path to 100% funded. Mr. Naimark stated COPERS' funded ratio as of July 2013 was 64.2% so this was applying the new assumptions and going back.

Ms. Wiley stated take the 9% load on retirement benefits away and make it zero percent. She stated there have already been actions to reduce that expected amount so the valuation would not be 9% any more. She stated she does not know what it is and they do not want to speculate on it so they are showing the full impact but in reality part of this savings has already occurred.

Mr. Naimark stated it was what Segal had projected to be approximately \$169 million in savings.

Ms. Wiley stated with that change you drop down to \$196 million so you have about \$14 million expected savings. She stated they are going to leave that change and the compensation definition in place and they are also going to change the period of final average compensation (FAC) to be five years. She stated they are going to leave both of these in place because they are going to model what the initiative says.

Mr. Naimark stated the initiative says you cannot contribute to another plan, but the City is contributing to another plan.

Ms. Wiley stated one of the things Cheiron normally does when there are these types of initiatives is to create a model called the horse race which shows several different people and their benefit levels. She stated she can say the DC plan in almost all cases is less valuable.

Mr. Naimark stated there have been some people who have said they would not want to do anything to hurt Public Safety employees and the intent section it says they do not intend to include Public Safety employees but the provision might. Ms. Wiley stated in the intent section it has that language explicitly that it was not supposed to change anything for them but also the intent says for current employees it will only change those things under 2.2.

Ms. Wiley modeled several scenarios for the Board.

Ms. Gleason stated there was no savings from closing the plan. Mr. Kalwarski stated it was closing the plan and putting in place this DC plan. Ms. Wiley stated if the City had \$2 billion they could pay off the UAL then there would be some savings.

Mr. Hedblom stated if you did not use the flat 7.5% year over year return but had two major fluctuations for example like they had in 2009. He asked is it still the same impact under their scenario in other words is the cost still the same. Ms. Gleason stated which is what happened to COPERS because they had that big correction in 2001 and 2008 and if either one of those had not happened they would not be where they are today.

Ms. Wiley stated the total cost expected would be \$385 million, without having the DC it would be \$261 million. She stated the future loss that has not been incurred yet your future Tier II people are going to pay half of it and they are now gone.

Ms. Gleason stated so in terms of the risk it was a lot better for the City's cost to keep what they have then it is to close the plan and go to a DC plan. She stated even the DC plan can only go from 0% to 8% but losses can be any number. Ms. Wiley stated focusing on the cost with the introduction of Tier II half of the investment risk has been transferred to the employees. She stated in the DC plan a 100% of the investment risk for the benefit is transferred to the employees but there was no change in the cost.

Chairperson Bissa stated this was the message that has to get out. Ms. Gleason stated the idea was they are eliminating risk by capping contributions on the DC plan and if you only had a DC plan they would be right, but they have all these liabilities for existing DB people that do not go away just because you voted in a DC plan.

Mr. Kalwarski asked who was really driving this initiative. He stated the Arnold Foundation was trying to get into legislatures from all the states. He stated Mr. John Arnold is the former Enron executive who got his stock value before it went belly up and created a billion dollar hedge fund. Mr. Naimark stated there is some indication there was some out of state money behind it. Ms. Gleason stated there is more money to be made in the investment world if all of us have our own individual DC account than if the City has one big account. She stated all these people behind it are going to make a lot more money off us.

Mr. Naimark stated so going back to the argument about saving taxpayer dollars, the answer is it does not. Ms. Wiley stated it does not within the next 25 years for sure.

Chairperson Bissa asked what have they seen already with the small changes that they have already made with the Tier II in terms of contributions. Mr. Naimark stated it is a challenge for hiring and in some cases people look at the total picture and they have to think about it.

Ms. Gleason stated it was \$337 million more to do what they have proposed assuming the City put in 8%, and if the City put in 4% you save \$50 million over 20 years.

Ms. Strohl asked if the City Council chooses to change the contribution amount every year they would not be able to do a 401(a) it would have to be a 457 which maxes out at \$17,500 and for the higher paid employees they possibly would not be able to get a full 8% match of the employer. Mr. Williams stated once an executive maxes out instead of going in deferred comp it goes into regular pay.

Ms. Wiley stated the focus is on getting the Board a series of tables which will show year by year and then have the total of the City contributions, which means the City's payments to COPERS and to this new plan. She stated they also want to look at it under a variety of DC assumptions. She stated Cheiron could do 8%, 6%, 4% and 2%.

Mr. Kalwarski stated Cheiron could include a couple down markets too. Ms. Gleason stated if you do a couple down markets you have to show a couple up markets.

Mr. Naimark stated he does not think Segal made any different assumptions in the plan about market. Ms. Gleason stated that was a good point for apple to apples maybe you just leave it at the actuarial assumed rate.

Ms. Wiley stated so they might show one historical period that was negative and one was positive.

Mr. Naimark asked is there a reasonable scenario where there was savings over the time period of 25 years was it the 3% or 2%. Ms. Wiley stated the 2%. Mr. Kalwarski stated 2% or even no percent.

Ms. Wiley stated the experience study does not have to be on a certain schedule and they went through the economic assumptions in detail prior to the 2013 valuation. She stated if there was desire from the Board to have the most accurate numbers possible, Cheiron would need to look at the demographic assumptions. She stated if Cheiron started soon on an experience study of all demographic changes including looking at the salary, the impact of the load and what was appropriate in time to present at the August meeting and then assuming they elected the new assumptions as a Board they could reflect it in the 2014 valuation. She stated five years after that Cheiron would then do an experience study. She stated the thought for why the Board might be interested is there was an election date in November and having the most realistic number as possible. She stated she did not know if the combined effect is going to make it go up or down but the numbers would be more realistic.

Mr. Kalwarski stated whether Cheiron used 7% or 9% he does not think the conclusions in their analysis would be that different.

Ms. Wiley stated if Cheiron shows it to be like five columns of different scenarios in each one you can choose which one to compare to. She asked if there were any other metrics the Board would want prepared across the 20 years, like do you want contribution, do you want AAL amounts, do you want contribution amounts for Tier II, Tier I, do you want funded ratios. Mr. Naimark stated eventually the Board will want those things but this analysis is more about understanding the impact on the fund. He stated they have a responsibility to their members and they want to understand what the Tier II contribution rate would look like for example. He stated funded ratio they would want to know.

Mr. Kalwarski, Mr. McKevitt and Ms. Wiley left the room.

7. Fiduciary Training – Presentation by Atty. Stephanie Hart

Chairperson Bissa stated this item will be heard at the next meeting.

20. Treasurer's Report as of March 31, 2014

Chairperson Bissa stated this item was informational.

Chairperson Bissa stated the Fund has now had seven months of being over \$2 billion.

6. Presentation by Cheiron Regarding Potential COPERS Plan Changes

Chairperson Bissa stated based on the conversation they just had with Cheiron and the discussion about maybe doing their experience study on the demographics early. She stated they would like to have a motion and take action on that.

Ms. Gleason asked do they want to do the demographics part of the experience study early. She stated they normally would do a full experience study next year would be the normal timing.

Mr. Hedblom asked what would be the advantage of doing it early. Ms. Gleason stated you would have better actual numbers so much of what was in their analysis is assumptions so you would look at the past five years and see how their assumptions match up with reality and then you might make changes to the assumptions which then would change all the calculations.

Mr. Naimark stated he does not know what the reason is. Ms. Gleason stated it would give you more accurate numbers to be basing your estimates from.

Mr. Naimark stated he was not sure he would do it just for analyzing the initiative. Ms. Gleason stated then they wait until the regular schedule.

Mr. Naimark asked Ms. Strohl if she thought there was substantial value to that. Ms. Strohl stated she could go either way she does not know that there is a real need to do a demographic. She stated there is some concern about some of the demographic assumptions being used by Cheiron.

Ms. Gleason stated it may have a positive impact on the cost to the City for the next evaluation period if it turns out that their assumptions are too high, but it could go the other way also.

Mr. Naimark asked what are the assumptions that are most questionable. Ms. Strohl stated the mortality table which they use RP2000 which is common for a lot of actuaries. She stated Cheiron had some thoughts that maybe the experience although they have not studied it they thought they should be using something else for that assumption.

Ms. Strohl stated on a stand alone basis she does not know if there was a lot of justification to necessarily break up the experience study. Mr. Naimark stated the only reason being Cheiron being a newer actuary and having a different look at some of these things. He stated that might be a reason to accelerate and if they have serious questions about some of the assumptions that would be a reason. He stated maybe on the other hand maybe it would be better for them to have another year under their belt as our actuary.

Ms. Gleason asked has Cheiron expressed to staff that they have serious concerns. Ms. Strohl stated she does not know about really out of whack but enough that they would really like to do the demographic study whether they do it in July or January. She stated in labor negotiations if there ends up being a vacation snapshot for everyone else the 9% load it should be analyzed. She stated she did not know if she would want to do that in isolation or she would want to do it as part of the total demographic study.

Mr. Naimark stated with regard to the initiative if for instance this Board thinks it was its duty to put forward a statement for the ballot that addresses some of these issues it was already being printed. He stated if the ballot was in November he does not know that getting new information maybe in August is going to be helpful.

It was a consensus of the Board to wait until the normal time for the experience study and do it all then.

8. Consideration of Contract Renewal – Baillie Gifford (expires 05/31/2014)

9. <u>Consideration of Contract Renewal – Cramer Rosenthal McGlynn</u> (expires 05/31/2014)

11. Consideration of Contract Renewal – The Boston Company (expires 05/31/2014)

12. Consideration of Contract Renewal – Western Asset (expires 05/31/2014)

Chairperson Bissa stated RVK has no concerns with the investment managers of Baillie Gifford, Cramer Rosenthal, Boston or Western.

Ms. Gleason moved for the four contracts Baillie Gifford, Cramer Rosenthal, Boston Company and Western Asset to have staff begin the renegotiation process to include fees. Mr. Lyons seconded the motion. The motion carried unanimously.

10. Consideration of Contract Renewal – RVK (expires 08/31/2014)

Ms. Strohl stated the Board had a couple of options. She stated if the Board wanted a request for proposal (RFP) done, but because of the timing a new firm could not be in place for September 1, 2014. She stated the Board could extend to December or for another year.

Ms. Gleason stated the Board would want to extend for a year because it gives them time to get through the custodian bank conversion before staff has to start this process.

Mr. Lyons asked even though the Board has had Kuhns for nine years are they pleased with their work. Ms. Gleason stated generally they are but you really do not know what else is out there. She stated it was like the custodian bank they had some issues with them and it was a big hassle to change, but periodically just for due diligence you should go out and get some quotes and see what other people are offering.

Mr. Naimark stated Kuhns has also had significant change in their organization and their personnel.

Ms. Gleason moved to extend RVK's contract for one year and during that time begin the RFP process. Mr. Scott seconded the motion. The motion carried unanimously.

13. Update on Pension Reform

Mr. Naimark stated the City Clerk had thrown out a certain number of signatures and the number left was about double what was needed to qualify the initiative to be on the ballots. He stated the City Clerk was going through the process of reviewing and validating signatures. He stated the process has to be done no later than April 30, 2014.

Mr. Naimark stated regardless of what was going on with the initiative there are other measures that could be taken which effect new employees only that would be constitutional, legal and would help improve the system.

14. <u>Consideration of Requests for Service Credit (Buyback) Forfeited Due to Refund of</u> Member Contributions

Ms. Gleason moved approval of the buyback requests. Mr. Williams seconded the motion. The motion carried unanimously.

- a) Paul Carlisle
- b) Kimberly Davidson

15. <u>Consideration of Transfer and Possible Purchase of Arizona State Retirement System (ASRS) Service</u>

Mr. Piotrowski moved approval of the transfer and possible purchase of ASRS service. Mr. Scott seconded the motion. The motion carried unanimously.

a) James Swanson

16. Consideration of Requests for Purchase of Service Credits Pursuant to Board Policy 180

Ms. Gleason moved approval of the service purchase requests. Mr. Piotrowski seconded the motion. The motion passed unanimously.

- a) In-State/Out-of-State/Military
 - 1) Chester Flaxmayer
- 2) Thomas Godbee
- b) City of Phoenix Full-Time Temporary
 - 1) Yang Pang

2) James Speros

17. Bills to be Paid

Mr. Scott moved approval of the payment of the bills. Mr. Hedblom seconded the motion. The motion carried unanimously.

Plan Expenses

a)	MFS
,	$ord \circ$

3 rd Quarter 2013 Fees	\$114,803.52
4 th Quarter 2013 Fees	\$116,813.90

b) RVK

1st Quarter 2014 Fees \$ 48,447.34

c) State Street

February 2014 Fees \$ 12,687.72

18. Refunds Through March 31, 2014

Chairperson Bissa stated this item was informational.

19. Report of March 2014 Retirees and April 1, 2014 Payroll

Chairperson Bissa stated this item was informational.

21. **Pending Legal Opinions**

Chairperson Bissa stated this item was informational.

22. Administrator's Report

a) Quarterly Attendance Report

Ms. Strohl stated the report was informational.

23. <u>Consideration and Possible Action Regarding Frank Piccioli, et al. v. City of Phoenix,</u> et al., CV 2012-010330

Mr. Naimark moved to convene in executive session at 5:56 p.m. for discussion of item 23. Ms. Gleason seconded the motion. The motion carried unanimously.

[Executive Session took place]

The Board convened in open session at 5:59 p.m.

No action was taken on this item.

24. Future Agenda Items

Mr. Naimark stated with the prospect of employee pay cuts being discussed his sense is the Retirement Office's activity has been affected. He stated there have been some changes to the 401(a).

Ms. Strohl stated there were a number of employees who were waiting to see what happens with negotiations. She stated staff has planned some group sessions which include Nationwide, Benefits and themselves. She stated these sessions were scheduled to begin in May 2014.

Ms. Strohl stated there was a new circular calculation for the 401(a). She stated you could end up with less taxable income based on this new calculation.

No new future agenda items were brought forward.

25. Call to the Public

There was no response to the call to the public.

26. Next Board Meeting: Thursday, May 15, 2014 at 2:30 p.m.

Chairperson Bissa stated this item was informational.

27. Close Session

The meeting adjourned at 6:04 p.m.

Cindy Bezaury Interim Retirement Program Administrator Paula Whisel Recording Secretary

APPROVED:

Ms. Elizabeth Bissa, Chairperson COPERS Retirement Board

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