TUCSON SUPPLEMENTAL RETIREMENT SYSTEM
BOARD OF TRUSTEES
Notice of Regular Meeting / Agenda

Meeting minutes from Thursday, February 26, 2015
Finance Department Conference Room, 5th floor
City Hall, 255 West Alameda, Tucson, Arizona 85701

Members Present: Robert Fleming, Chairman
Kevin Larson, City Manager Appointee
Curry Hale, Interim HR Director
Silvia Amparano, Director of Finance (arrived 8:31 am)
Michael Coffey, Elected Representative
Eric Kay, Elected Representative
John O'Hare, Elected Retiree Representative

Staff Present: Dave Deibel, Deputy City Attorney (arrived 8:35 am)
Karen Tenace, Finance Deputy Director (arrived 8:33 am, departed 9:00 am)
Silvia Navarro, Treasury Administrator (arrived 8:42 am)
Michael Hermanson, Plan Administrator
Allan Bentkowski, Treasury Finance Manager
Dawn Davis, Administrative Assistant

Guests Present: Gordon Weightman, Callan Associates
Sarah Van Ness, Causeway Capital Management LLC
Harry Hartford, Causeway Capital Management LLC

Absent/Excused: None

Call to order- Chairman Fleming called the meeting to order at 8:30 AM.

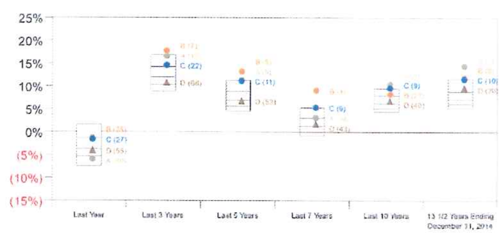
A. **Consent Agenda**
1. Approval of January 22, 2015 TSRS Board Meeting Minutes
2. Retirement ratifications for February 2015
3. January 2015 TSRS expenses and revenue compared to budget

A motion to approve the Consent Agenda was made by Eric Kay, 2nd by Kevin Larson, passed by a vote of 5-0 (Silvia Amparano absent, and Chairman Fleming did not vote).

B. **Investment Activity Report**
1. International Small Cap Manager Summary (compiled by Callan Associates)
   a. MFS Investment Management
   b. Brandes Investment Partners, L.P.
   c. American Century Investment Management

Gordon Weightman summarized the International Small Cap Manager Summary on the 3 management firms interviewed by the Board on January 22, 2015. The summary grid on page 2 of the summary lists stated the philosophy of each manager and some comments about their process. These managers have distinct characteristics that differentiate them from each other. American Century tends to look like the benchmark on a risk control basis. They like to have sector, country, and regional weights that are close to the benchmark, and they add value by picking stocks. They build a portfolio from the bottom up, so they are not an enhanced index manager, they have 100 to 140 holdings and the benchmark has 5,000. When they think about portfolio construction they want to have the same weights as the benchmark. Brandes does not think about the benchmark. This is an asset class where it is not unusual to see a 20% to 30% up or down year with the benchmark, and Brandes could be +/- 20% on top of that. Brandes is the type of manager where the investor would have to be comfortable, on a year to year basis, with handling a lot of volatility, even with an already volatile benchmark. MFS is characterized as the lowest risk of the three candidates and they have a sizeable portion of their portfolio holdings in mid cap. American Century has about 10% in mid cap while MFS is closer to 40% historically. Looking at the number of holdings, Brandes is the most concentrated, MFS has the lowest risk and they have the most names, having more securities is why they track closer to the benchmark. American Century has high turnover which causes concern over transaction cost but they have managed that cost well over time.

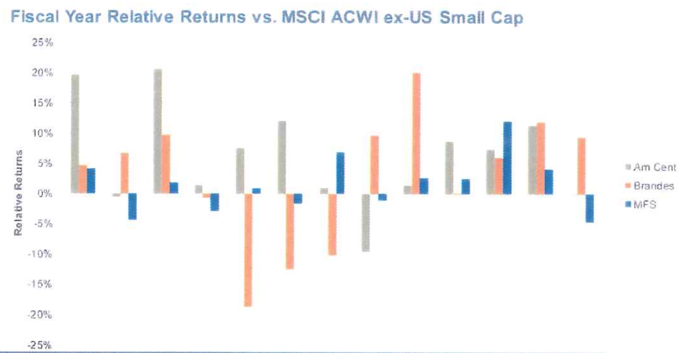
Gordon said that page 3 shows cumulative results over time. To define cumulative he gave an example of looking at the 10 year numbers for the Small Cap ex-Us benchmark it says 6.87%, that is per annum meaning that if the benchmark was held for 10 years investors received 6.87% on average each year.



	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years	13 1/2 Years Ending December 31, 2014
10th Percentile	1.63	16.87	11.29	5.32	9.52	11.61
25th Percentile	(1.33)	14.19	8.92	3.02	7.95	8.83
Median	(3.73)	11.96	6.97	1.20	6.28	7.20
75th Percentile	(5.38)	10.29	5.63	(0.03)	5.14	6.06
90th Percentile	(7.53)	8.89	4.56	(0.77)	4.37	5.21
AmCent:Amer Cent:Ill Opp ● A	(5.93)	16.63	11.40	3.13	10.50	14.46
Brandes:Intl Sm Cap Eq ● B	(1.34)	17.82	13.26	9.15	8.34	11.85
MFS:MFS Intl New Discv ● C	(1.55)	14.64	11.20	5.41	9.64	11.62
MSCI:ACWI SC ex US ▲ D	(4.03)	10.84	6.80	1.72	6.87	9.53

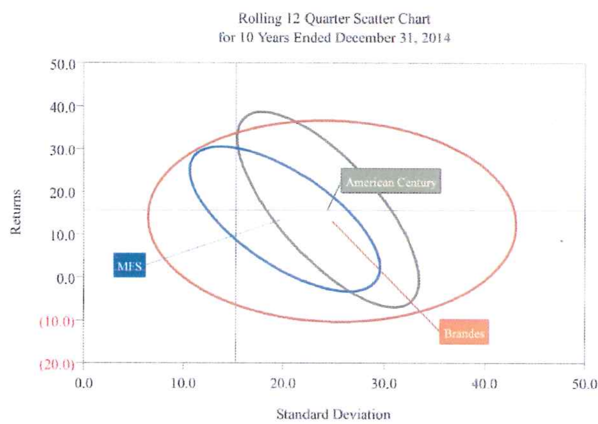
All three of the interviewed managers had better performance numbers than the benchmark over 10 years. American Century's 10 year number is the best though there were some calendar years at the beginning of that period when they did exceptionally well; since then their strategy has tracked more closely to the benchmark and their volatility has dropped. You can see the difference between 3.13% over 7 years and 10.5% over a 10 year period. Gordon explained the numbers in parenthesis next to the firms' icon on the graph was their ranking in a peer group, containing other international small cap managers, and the boxes reflect the 10^{th} to 90^{th} percentiles. He explained the median was the median observation within the peer group and the MSCI ACWI ex US Small Cap benchmark was an index, the numbers are different because the median is an actual manager from the peer group. The point of this graph and table was to show the Board the summary performance numbers over time for the managers. He then directed the board to turn to page 4 for the path to get to the numbers on page 3 by breaking up the managers' numbers by year.

The table on page 4 shows that in 2002 and 2004 American Century had large returns that factored into their 10 year number and that their long term numbers are skewed by 2 calendar years, without which their long term numbers would look more similar to those of the other managers.



Fiscal Year Returns	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
MSCI ACWI ex-US SC	-0.6%	4.3%	44.6%	21.1%	29.2%	34.7%	-15.9%	-27.0%	20.0%	34.2%	-16.4%	15.9%	26.1%

It also shows how the managers performed on a relative basis against the FY returns for the ACWI ex-US SC benchmark. The point Gordon wanted to make with this page was that Brandes has a lot of volatility and relative tracking error when compared to the benchmark, and MFS has the most modest deviations from the relative results over time.

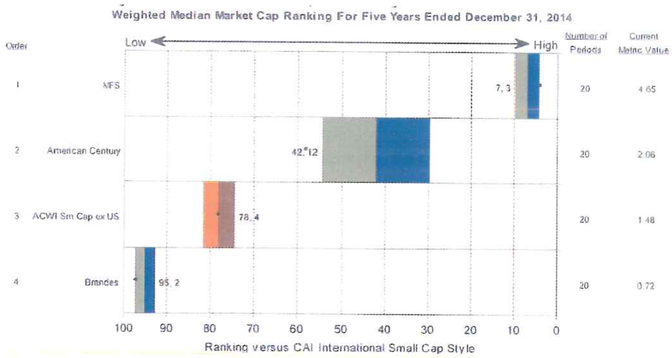


Page 5 illustrates risk and return for the managers and shows that sometimes Brandes is the most risky and other times they are the least risky because the ellipse captures all of the rolling 3 year periods over the last 10 years. Their risk adjusted returns have been strong over time but this just speaks to how volatile they are. MFS and American Century are less volatile than Brandes historically. The crosshair represents the median of the peer group. On average all three managers take more risk than the benchmark. Gordon said this chart gives the Board the information they needed to decide on a manager based on how much risk they wanted to take.

Michael Coffey clarified the wider the ellipse, the greater the variability in the managers' performance.

Gordon answered yes on risk and returns, and explained tracking error is the standard deviation of excess returns. MFS has relatively low tracking error compared to peers while Brandes' tracking error is high, at some points the highest in the peer group. American Century also has a reasonably high tracking error vs. the peer group, higher than MFS but lower than Brandes. If the Board does not want to take much risk MFS is the way to go, if they want to take a lot of risk Brandes is the way to go but there could be big up and down years.

Kevin Larson said based on the fact that MFS, with their higher percentage in mid cap is the closest to the benchmark when viewing the tracking error, it would seem that the index was also heavily weighted in mid cap. He asked if this was the case.



Gordon answered this was not the case, as illustrated on page 7 which shows weighted median market cap, gauging the size of the portfolios from a capitalization standpoint. This means that if the manager is on the right side of the chart, like MFS, the weighted median market capitalization is high vs. peers. American Century is close to median, the index is relatively small meaning most active managers are dipping into mid cap, and Brandes is very much on the small cap end and includes micro cap. The small cap index has 4,252 securities as of the end of December 2014. The market cap of those securities ranges from $18M of the underlying security to $6.8B. Mid cap takes another 950 securities on top of small cap with a range of $6.8B to $17B. Everything MFS holds is under $17B in market capitalization, they just have more in that $7B to $17B range than the others. This gets to one of the differentials between these managers, that MFS is larger cap. The Board's 2 existing managers, Causeway and Aberdeen, are very much large cap and this is why the Board was looking into international small cap because it is a gap in the Board's exposure. Mid cap is a gap too so if the Board hired MFS there would not be any overlap. American Century has the most exposure in emerging markets, followed by Brandes, and then MFS with the least emerging markets exposure. American Century and Brandes move around a little bit compared to the benchmark while MFS is fairly consistent. Gordon explained that there are some differences between the three managers but what it comes down to is how much risk the Board wants to take. Brandes is the most risky, MFS is the least, and American Century is in the middle.

Kevin asked if investors get paid for taking the extra risk.

Gordon answered that historically yes the investors did get paid for the extra risk.

John O'Hare asked about negotiating lower fees than those listed for each manager.

Gordon explained this was not possible because they are collective vehicles where they have favored nation clauses. MFS is actually a mutual fund so investors pay the expense ratio. American Century and Brandes are comingled funds and if they offered TSRS a lower fee they would have to offer it to the entire pool. Historically it has not been a negotiating topic.

Michael C. clarified that the basic issue was the amount of risk the Board was willing to take.

Chairman Fleming added capitalization was also an issue because each manager was very different in their capitalization.

Gordon explained that from a monitoring standpoint there had to be a certain level of comfort to hire a manager like Brandes who could have a year where they are 20% down on a relative basis and then they bounce back and could have a year where they are 20% up on a relative basis.

2. Board Discussion and selection of Non-US Equity Small Cap Managers

A motion to make a $35M (approximately 5% of the total portfolio) investment with Brandes Investment Partners was made by John O'Hare, 2nd by Eric Kay. The motion failed by a vote of 2-4 (Kevin Larson, Curry Hale, Silvia Amparano, and Michael Coffey dissenting, and Chairman Fleming did not vote).

A motion to make a $35M investment with American Century Investment Management was made by Curry Hale, 2nd by Silvia Amparano.

Eric Kay said he thought MFS was the most middle of the road of the three managers.

Gordon Weightman clarified that MFS was the lowest risk manager.

John O'Hare asked how much of the equity portfolio was already in the indexed funds which are middle of the road funds.

Gordon answered the S&P 500 index fund was 12% of total assets, and there was 11% in a Russell 1000 Value index fund for a total of about 23%. He argued PIMCO Stocks Plus was adding incremental value but they were middle of the road too. A large portion of the Board's large cap equity, about 29%, is in middle of the road index funds.

Kevin Larson said MFS had a higher percentage in the mid cap and the Board's objective was to find more small cap investments. He said MFS also have $6B and more than 300 shares in their portfolio and was very well diversified. He thought the Board could gain by having a more focused portfolio in the international market and historically MFS returns have been lower than those of Brandes and American Century. MFS was lower risk, but historically investors get paid for taking the higher risk. Brandes seemed to focus on extreme investments. He said he was not worried about volatility because over time, given the size of the Board's overall portfolio, they could absorb it. American Century seemed to fit into the spot the Board was looking for and they have 100 different securities and about $1B worth of investments.

Curry Hale agreed and said he was torn between American Century and Brandes but leaning toward American Century.

Michael Coffey asked for further explanation of the significance of American Century's high turnover rate.

Gordon answered American Century's philosophy provided for more of a growth orientation when purchasing stocks, as opportunities come up they invest in them, so they are buying and selling securities more frequently resulting in higher transaction cost. They are not just buying and selling positions they are also trimming and adding to existing positions within the portfolios. This is an area of the market where there are liquidity constraints sometimes because small cap companies that are about $50M dollars, overseas, and sometimes in emerging markets, so it can be expensive to purchase those types of securities but American Century has managed it well and their costs are not exorbitantly high from their transactions and Callan was comfortable with that. Their turnover is so high because as they see opportunities they act on them whereas Brandes will take a longer term view with their holdings.

John asked how much was given up by having a higher turnover considering the slippage between the bid, ask, and the commissions.

Gordon said it was hard to quantify though it was an added hurdle. He said it was minimal and they were just talking about basis points.

The motion passed by a vote of 5-1 (John O'Hare dissenting and Chairman Fleming did not vote).

3. Callan Transition Management Pool Due Diligence Search and Evaluation Proposal

Allan Bentkowski said the Board has used BNY Mellon transition management services for many years but they have made a decision to get out of this type of business, so now the Plan needs to find another transition manager or managers depending on the type of transaction. Callan would like to perform that search and provide the due diligence to suggest appropriate transition managers.

Gordon Weightman said they had done a lot of work for the Board recently including the asset allocation analysis where 10% more was going to be invested in non-US equity, and they did some structure work to look at Causeway and their strategy and possibly moving to an ACWI ex-US mandate rather than EAFE, and adding the international small cap resulting in a lot of money movement. At Callan they think it is best practice to hire someone as a fiduciary who is a professional in moving and transitioning funds/assets. The proposal is to provide the Board with a suite of transition managers who are specialists in different areas so that whenever the Board has a specific transition they could just use a specialized manager because they already have a contract (retainer) with them. The transition managers are paid per transition as opposed to annual fees which will save money because of the managers' abilities to cross trades internally and basically eliminate or mitigate transaction costs for a portion of the funds moved. A motion was made to approve the proposed contract by Kevin Larson, 2nd by Curry Hale.

John O'Hare asked if Callan's fee was negotiable

Gordon answered this was outside the scope of their contract and they brought their best pricing with the proposal.

John asked what hourly rates were used in the $45K proposal.

Gordon stated it varies, typically from $300 to $500 per hour. He said one transition could save TSRS more than the amount of the Callan search fee.

Kevin Larson said the transition managers pay off and are beneficial. He expressed concern over possible conflict because it is Callan. He asked if staff was supportive of this approach as opposed to an alternative firm that does the same thing.

Allan Bentkowski explained having worked with BNY Mellon he thought it was money well spent. Callan would look at due diligence and find an appropriate manager. Once the managers have been identified the decision of which manager to use would be made at the staff level when the transitions were to be made. He agreed with Gordon that they needed a suite of transition managers to choose from.

The motion passed by a vote of 6-0 (Chairman Fleming did not vote).

4. Causeway - Annual Manager Review
5. Causeway - Due Diligence Interview for International Opportunity Strategy Fund

Gordon Weightman said Causeway has been a manager for the pension plan since January 2005 and they have done a good job. Callan did not have any concerns over what they are doing or how they are doing it. One of the things the Board is looking to address is that they are currently in a developed market only strategy with no exposure to emerging markets. Callan did an international equity structure evaluation and the decision was made to increase the amount of emerging markets exposure within non-US equity. The way to do that was through managers that work with both developed and emerging markets, one of whom is Causeway. Causeway is going to talk about their strategy for investing in developed and emerging markets. Callan did some work to evaluate the Causeway International Opportunities product, they put together criteria and took it to the manager search committee and asked if the TSRS Board was to do a search would this candidate make it through the process and the answer was yes. He thought the Board should address whether they wanted to move to Causeway's international opportunities strategy.

Chairman Fleming asked if they would move the entire investment or split it.

Gordon answered the Board currently has a separate account with Causeway. The Board could go into the collective fund by selling all their separate account securities and move into the collective fund. The Board could also keep the separate account and Causeway would build a mutual fund, as a holding, into the separate account. He said this would work out well because the Board had increased the non-US equity exposure from

15% to 25%, so some of that money would be going to Causeway and would fund the emerging markets piece. Causeway has made it fee neutral so the fee the Board pays now would carry over into this product.

Chairman Fleming asked why they would choose not to participate in Causeway's strategy.

Gordon answered if they were not comfortable with Causeway's capabilities. If the Board was not comfortable Callan would do a search for another ACWI ex-US manager.

Allan Bentkowski said Causeway had been the Board's manager on the international value equity strategy since January 2005, so they were a known quantity. It was not that unusual to have a manager who has a mutual fund as an investment within a strategy, for example the fixed income account with PIMCO has a couple of mutual funds imbedded in the strategy in order to diversify.

Gordon said the Board has had Causeway for 9.75 years and they have returned 6.54% when the index is up 4.5%, almost 200 basis points above index per annum and they have been in the 33rd percentile of their peer group.

John O'Hare asked how they complement or differ from American Century.

Gordon answered they differ very distinctively. Causeway is paired with the Aberdeen EAFE Plus Fund and that is a nice growth/value pairing, they are both rooted in large cap. The small cap void is being filled and they are not holding the same securities. Callan thought it would be a diversified approach.

Sarah Van Ness said Causeway had been managing assets for TSRS since January 2005. They have a two part presentation. The first part would be a review of the current portfolio with Causeway, the international value strategy, and secondly a presentation of their international opportunities strategy which would add emerging markets exposure to the portfolio. It keeps, on the developed market side, the same portfolio, same investment philosophy and process, they use a distinct investment strategy for emerging markets that they have customized to take advantage of the opportunities in emerging markets and to control the risks specific to them.

She gave a brief update on Causeway as an organization. Causeway has been managing their international value equity strategy for 25 years, as an independent firm since 2001. Since operating as Causeway they have expanded the equity strategies offered to their clients, most notably the addition of the emerging markets capability in 2007, which allowed them to offer their clients the ACWI ex-US opportunities mandate. Of the $36B they are managing about $30B is invested in their fundamental international and global value strategies, about $3.5B is invested in emerging markets, and about $2.5B invested in international opportunities. In addition to a mutual fund in the international opportunities strategy many of the assets come from clients who started with a developed only mandate and expanded their mandate to include emerging markets.

She said the international equity strategy would continue to be the strategy Causeway would apply to an international opportunities portfolio. It is the same strategy they have managed for 25 years using the same philosophy and process. Their fundamental team includes both research analysts and portfolio managers who have research responsibilities and are organized by sector coverage. The stock valuation work happens within the sector clusters. There is a quantitative component to the research team that contributes to the international value portfolio by providing risk management and portfolio construction tools. This is an actively managed portfolio where Causeway selects stocks for the portfolio on a company by company basis. They are comfortable with the company specific approach because of the tools incorporated into the process to manage portfolio risk. This is where the role of the members of the quantitative team comes into play, in the front end providing some screens for the universe, and importantly on the back end helping the portfolio managers rank the stocks by their most attractive opportunities and also understand some of the risks that have been embedded into the portfolio.

Gordon said they had been talking about capitalization and asked if they could give a sense of how Causeway thinks about capitalization within a 1,500 stock universe.

Harry Hartford answered the threshold is $750M and above so if a company is above that minimum it falls within the universe and gets screened. They own a number of companies that are below $5B in market cap a byproduct of that is in a number of cases they own somewhere between 5% and 10% of the underlying equity.

Sarah explained they did not want to be more than a third of the daily trading volume which is the liquidity restriction Causeway has put on the portfolio.

Gordon said when he looks at the portfolio's capitalization in aggregate it looks very much like it is large cap. When you have a larger market capitalization it will influence the smaller names and make them seem larger when viewed in aggregate. He asked how many small cap stocks they held of the 50 to 80 historically.

Harry answered below $5B, today it was probably a handful. He said in January of 2005 TSRS was one of the last clients to fund the international value strategy before they closed it. Causeway's fundamental belief is the Achilles heel for an active manager is asset growth. By definition, if a portfolio is run that is somewhere between 50 and 80 securities, as the assets grow and the portfolio is limited to a maximum of 80 stocks, at some point they will be forced to buy only large cap stocks. Causeway's experience in the early 2000's was that the valuation framework was way down in the market cap spectrum, and they limited asset growth as a consequence. Causeway peaked in 2007 at $19B but that was essentially in their international value strategy. Currently the global strategy is circa $5B, and the international value strategy is circa $25B vs. the previous peak of $19B in 2007. As a consequence of asset growth they have raised the separate account minimum from $50M to $250M, raised the international global group trust minimum from $10M to $50M, and the fees are nonnegotiable. They have essentially tempered the asset growth and will continue to do so going forward. The fact that the portfolio today has a greater distribution amongst larger cap stocks is predominantly a reflection of the fact that the valuation framework is unbiased between small, mid, and large cap stocks.

Sarah said in terms of the investment process for the developed market portion of the portfolio, they start by narrowing the investable universe of 1,500 stocks across Europe and the Pacific to a more manageable list of 400 using quantitative screening to determine if the companies trade below their peers by country or industry. The analysts then determine whether the companies deserve to trade below their peers or if they are undervalued. The undervalued companies become portfolio candidates on which the fundamental research for the strategy is performed. Then the analysts build an evaluation model and establish a target price for each company. That work is refined and vetted until everyone is comfortable with the target price, then the stocks and target prices are ranked from most attractive to least. To do that, they consider the expected return of the stock and the risk or volatility it would add to the portfolio. The portfolio managers construct and maintain a portfolio of 50 to 80 stocks fully invested, using the ranking list. They have a long-term perspective in terms of holding on the international side, with an average of 2 to 3 years.

Portfolio Snapshot

as of December 31, 2014

ASSETS

Total Assets (USD)	54,796,006
Equity	96.60%
Cash	3.21%
Accrued Income	0.18%

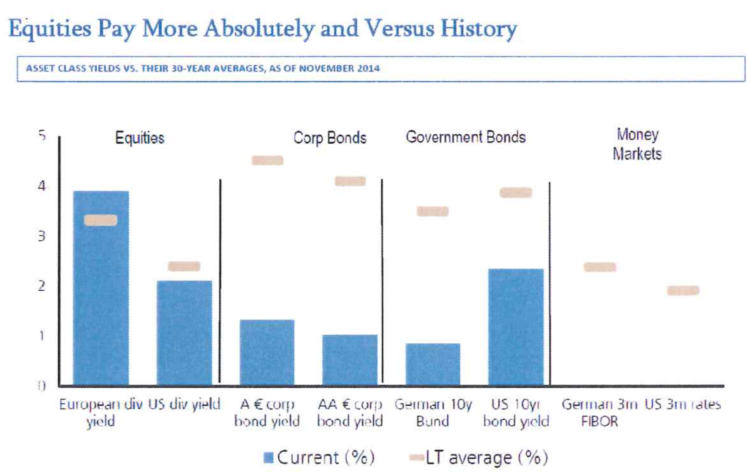
CHARACTERISTICS

	Tucson	MSCI EAFE
No. of Holdings	61	910
Wtd Avg Mkt Cap (Mn)	55,368	50,319
FY2 P/E	12.3x	14.0x
P/B Value	1.7x	1.6x
Dividend Yield	3.0%	3.2%
Return on Equity	17.3%	15.6%

Harry briefly summarized the data in the Portfolio Snapshot on page 8 of the distributed material. He said about 3% of the portfolio was in cash which was slightly higher than average, they never have more than 5% cash in a portfolio. They always keep some cash in the portfolio, around 2%, to avail of any opportunity that presents itself. They consider 95%+ to be fully invested, and they average around 98%. When stocks are cheap they will focus the portfolio into fewer names which increases the volatility and risk because the expected return is higher. When stocks are less cheap a portfolio can be diversified in two ways, buy lower risk securities or buy different securities that are less correlated from a risk perspective to lower volatility. Diversification is what will bring the number of holdings closer to the 80 stock maximum. Despite the fact that in 2014 returns were negative for EAFE and the developed universe, in local currency terms they were at a high vs. the most recent history. He directed the Board to turn to page 23 for a graph illustrating valuation as it relates to more defensive securities. Harry gave examples of consumer staples and healthcare as defensive names, and said at 19 times respective earnings vs the median of almost 17 times, they are not cheap. The dynamic are cyclical securities that will demonstrate greater volatility in their earnings stream and vs. history they are very cheap. The challenge over the last 12 months has been to bring down portfolio risk because stocks are not that cheap. Causeway has not been able to purchase defensive securities because they are very expensive and Causeway is a value manager. A byproduct of the monetary intervention experienced today is that many investors have focused on a relatively narrow range of defensive securities. The cheaper cyclical names have been subject to extraordinary volatility; they may appear to be cheap but they can disappoint on earnings. In buying more securities, Causeway found they were imbedding more idiosyncratic risk into the portfolio. They would have liked to include more than 70 names in the portfolio but in order to reduce the imbedded risk they added to the securities already in the portfolio at lower risk scores.

Gordon asked if they were seeing the same type of pattern with valuations in the emerging markets, or are they cheaper on a relative basis, and is now a good time for the Board to expand the opportunity set.

Harry answered it was always a good time to expand the opportunity set. He suggested that buying emerging market stocks at this point would be beneficial on a 3 to 5 year basis. This does not imply that emerging market stocks relative to the developed world are cheap; historically they are fairly valued relative to the developed market, and Causeway was relatively underweight in emerging markets vs. the benchmark. He said the conundrum of today is that there are no attractive alternatives at this time and referenced the graph on page 20 to illustrate his point.



Harry explained that the portfolio's dividend yield was currently at 3%, he would clip that if he can get 5% earnings growth, without any need for multiple expansion, he would get an 8% return for the next 5 to 10 years. He doubted anyone would be able to get 8% annualized in bonds on a 5 year perspective. Bonds are very expensive, equities are not cheap, the portfolio is currently trading at about 12.5 times perspective earnings, and the index is currently about 14 times perspective earnings; excluding the TMT bubble 14 has been the median over the last 30 years. The geographic and industry distributions in the portfolio are a byproduct of the securities they own and will differ materially from the benchmark; then he summarized the information presented on page 10.

Geographic Exposure and Index Performance

WEIGHTS *as of December 31, 2014*

	PORTFOLIO (%)	MSCI EAFE (%)
Africa / Mideast		
Israel	0.0	0.6
	0.0	0.6
Euro		
Austria	0.0	0.2
Belgium	1.1	1.3
Finland	0.0	0.9
France	14.5	9.7
Germany	6.0	9.2
Ireland	0.7	0.3
Italy	0.0	2.3
Netherlands	9.9	2.8
Portugal	0.0	0.1
Spain	0.8	3.5
	31.9	30.2
Europe - Other		
Denmark	0.0	1.5
Norway	0.0	0.7
Sweden	0.0	3.1
Switzerland	13.8	9.3
United Kingdom	24.2	21.1
	37.9	35.6
North America		
Canada	1.0	0.0
	1.0	0.0
Pacific		
Australia	0.0	7.5
Hong Kong	4.6	3.1
Japan	14.8	21.2
New Zealand	0.0	0.2
Singapore	1.0	1.6
South Korea	5.6	0.0
	25.9	33.6
DEVELOPED SUBTOTAL	96.8	100.0
CASH	3.2	0.0
TOTAL	100.0	100.0

INDEX RETURNS* *for the twelve months ended December 31, 2014*

	BASE (%)	LOCAL (%)
Africa / Mideast		
Israel	23.7	38.7
Euro		
Austria	-29.4	19.6
Belgium	4.9	19.4
Finland	0.8	14.5
France	-9.0	3.6
Germany	-9.8	2.8
Ireland	2.6	16.9
Italy	-9.0	3.6
Netherlands	-3.7	10.2
Portugal	37.2	29.1
Spain	4.3	8.9
Europe - Other		
Denmark	6.8	21.3
Norway	-21.2	2.6
Sweden	6.6	13.9
Switzerland	0.7	12.5
United Kingdom	5.4	0.5
North America		
Canada	2.2	11.4
Pacific		
Australia	3.2	5.8
Hong Kong	5.1	5.1
Japan	3.7	9.5
New Zealand	5.2	13.9
Singapore	3.1	8.1
South Korea	-10.7	-7.0

*Source: MSCI

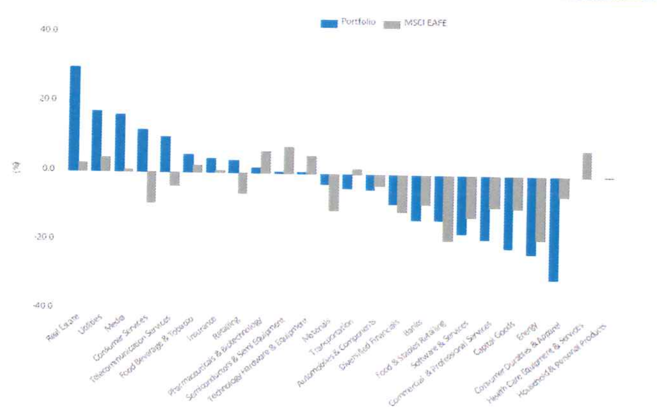
International Value Equity
December 31, 2014

Performance Analysis and Highlights 10

He explained the table shows there was large variability of returns by geography, and the left hand columns show the returns were materially affected by the appreciation of the Dollar. The big challenges developed market investors faced in 2014 were large variability and the appreciation of the Dollar. The upside is that 60% of the revenues in the Causeway portfolio are in currencies outside of Europe and while the Yen depreciated and affected the 21% invested in Asia Pacific, 16% was invested in emerging markets, and 23% of the portfolio revenues were derived from activities in North America. For the companies operating in Europe, most of them are exporters and benefited from the decline in the currency. As a result he anticipated positive earnings revisions in Europe for the first time in 4 years in the second half of 2015 which will afford them some support to equities regardless of what happens with interest rates. Page 13 shows that variability was wide in industry performance during 2014.

Industry Performance

RETURNS *for the twelve months ended December 31, 2014*



Page 15 shows the companies that did well were the more stable names like pharmaceuticals, telco services, and utilities. The number of securities added by Causeway slightly outweighs the number of securities they sold. He then discussed the portfolio position as of 12/31/14. He said materials are not just companies pulling something out of the ground and processing it for construction because the classification includes a wide array of companies in a variety of industries and is not a large number of highly cyclical and commodity oriented businesses. Banks are the single largest industry in the portfolio. Causeway has gradually been increasing their exposure to banks over the last 12 to 18 months because they are less risky now than they have been for many years and Harry anticipated they will be materially less risky going forward due to increased capital and regulatory oversight. Exposure to banks remains below the benchmark. 3.5% of the benchmark exposure is to

Australian banks which are very expensive. Australian banks are a classified as a good crisis and have a superannuation system where money is taken from the paychecks of the labor force and placed into retirement accounts that convey a tax credit to Australian investors. Banks which traditionally have relatively high dividend yields, because of this credit actually have dividend yields north of 4% for Australian investors. They generally trade at about 2.5 to 3 times book, and are expensive. Causeway has increased their farm exposure in calendar year 2014; they had sizeable farm exposure over the last 4 and 5 years because they were very cheap in 2010, they are not so cheap now but Causeway found a stock that was largely left behind and they were able to gain exposure to it as a consequence of its improved valuation. Telco services was a good area for Causeway in 2014, they have 4 telco service stocks in the portfolio, 3 of which are domiciled in Asia. What is important regarding telco services, particularly in mobile services, is if there are only 3 players in the arena the returns and valuations are higher than when there are 4 or 5 players and 3 of the companies in the Causeway profile operate in markets where there are only 3 players. They entered the year with about 200 basis points above benchmark exposure to energy and that is pretty much where they were when the year ended. Energy is one of 2 industries (materials is the other) that have been derated over the last 3 years and as value managers Causeway will gravitate towards stock that others do not want. He said they expect moderate returns in 2015, the portfolio's volatility is in line with the index, and the portfolio beta is 0.99 reflecting their moderate return expectations.

Chairman Fleming asked what they thought about emerging markets.

Harry answered Causeway handles emerging markets differently. He said if they were hired for the international opportunities mandate the developed part of the Board's portfolio will remain the same except for one change, Korean stocks will be moved into the emerging market bucket so they would sell the Korean stocks and the Board would receive an allocation to Korea within the emerging market portfolio. He said Causeway's emerging market portfolio is quantitatively derived. When investing in emerging markets the securities have different risk characteristics and a lot of those risks cannot be analyzed using a bottom up fundamental perspective. Most investors buy in emerging markets for growth, Causeway is a value manager and value does not always work in emerging markets, so they have included a growth component in the model used to build a portfolio in emerging markets. Because the risk profile and characteristics are different Causeway wants to have a more benchmark oriented portfolio with lower tracking error than they have in the bottom up fundamental developed market portfolio. They think it is appropriate to have a lower tracking error product by putting constraints on the geographic, industry, and stock exposures. In their developed market portfolio they do things with a lot of depth before buying the security, in emerging markets they cover lots of stocks quantitatively with a lot of breadth. In the emerging markets portfolio they have between 100 and 140 stocks because the risk profiles in emerging markets are so different.

The way they approach emerging markets is, in what they call an allocation framework, if emerging markets are cheap relative to the developed world there should be more exposure and vice versa. Causeway uses a quantitatively derived methodology to determine how cheap or expensive emerging markets are relative to the developed world. They allocate dynamically relatively to the benchmark weight, so if emerging markets are cheap they will have above benchmark weight. They use five factors in their allocation model: valuation, financial strength, macro, earnings growth, and risk aversion. Valuation is essentially whether emerging market is cheap relative to developed markets, it is marginally positive at this time. Financial strength is operational and financial leverage, so because it is currently neutral emerging market stocks in aggregate are about as financially secure as developed market stocks. Macro is interest rates and inflation, if you have high real interest rates and low inflation then all other things being equal there might be prospects for interest rates to decline, this is currently negative because a lot of emerging markets have higher rates of inflation, and many have quasi Dollar related currencies and interest rates in the US are low creating an interest rate drag because inflation is high and bond yields are low. Earnings growth is negative and is the most volatile factor because earnings in emerging markets are very heavily skewed by a relatively small number of industries. Stocks in emerging markets are a riskier asset class so they should be bought when investors are nervous because they are risk averse. Risk aversion is marginally positive because investors are nervous about emerging markets due to political instability and corruption. Currently, considering all five of the allocation factors, Causeway's emerging markets allocation is underweight by 100 basis points on a gross basis vs. the ACWI ex-US index as of 12/31/14. That range, over the last 7 years has been about +/- 3%, so their objective is to generate alpha on the developed market part of the portfolio, generate alpha on the emerging market part of the portfolio, and add a small amount of additional return through the dynamic allocation process. Unless emerging markets become demonstrably cheap they will probably are not going go much beyond that +/- 3%. Emerging markets do provide the benefit of greater diversification and exposure to stocks and geographies with higher anticipated rates of growth. The valuations are okay but they are not cheap compared to any time over the last 15 years which is why Causeway has a marginally negative, close to neutral, position vs. the weight in the benchmark. The bottom up fundamental team and quantitative emerging market team meet once a week to run factor models and discuss them at a portfolio management meeting. They discuss the developed market portfolio from a fundamental perspective, and risk. They discuss the emerging market portfolio from a risk perspective and from a quantitative perspective, and they also discuss the allocation model. They have been doing this since 2007.

Michael Coffey asked for clarification on the positive measure for risk aversion.

Harry answered that they look at what the sentiment towards emerging markets has been over an extended period of time, and if it is below the baseline number the risk aversion will be positive meaning investors are more nervous about emerging markets than they are about developed markets relative to that historical trend. If it deteriorates, all other things being equal, the risk aversion score should increase implying that investors are becoming increasingly nervous about emerging markets as an asset class. The time to purchase a riskier asset class is when other investors do not want to own it or are more risk averse. Risk aversion has a relatively small weighting in the allocation model, the largest weight is in valuation.

Sarah said in terms of accessing the emerging markets portfolio there are two different alternatives. The first is to keep the existing separate account and purchase shares of the emerging markets fund. Causeway will manage the exposure to emerging markets through that mutual fund using that tactical allocation. The other option is the international opportunities group trust; they have about $170M in that trust currently across 4 participants. This option would involve closing the separate account portfolio and buying units of the trust, so instead of owning international stocks and a mutual fund the Board would simply own the stocks across developed and emerging markets through the trust vehicle. The trust is a nicely valued vehicle and has month end liquidity but in terms of the exposure to the underlying equities that would be comparable from one vehicle to the other.

Harry said the drawback from the Board's perspective with respect to the group trust would be the liquidation of all of the assets in the developed market portion of the portfolio because they could not do an in-kind transfer. In terms of exposure retaining the developed market separate account and the emerging market portfolio, in the fund it would be exactly the same as their existing clients. It would be done in a fee neutral manner vs. the existing developed market portfolio.

Gordon asked if it was fair to say that under the separate account scenario the mutual fund would be seen as a holding within the separate account.

Sarah answered it was fair to say that and they do provide some additional performance analysis from a reporting perspective which will show how the various markets and holdings perform within that mutual fund holding for a deeper picture of the emerging markets exposure. From an accounting perspective it would be another holding within the portfolio.

Harry explained it appears as a holding in the portfolio but the body of the report is a look through with respect to the overall total portfolio and you can see the industry weight in aggregate between developed and emerging, the geographical weight in aggregate between developed and emerging, etc.

Gordon said the mutual fund on a stand-alone basis has a 1% fee.

Sarah answered it had a 1% management fee and a 1.2% total expense ratio so Causeway would credit the Board with the difference between the management fee and what they pay on the current account.

Gordon said this was important because the emerging market allocation could change between periods and the fee will not change based upon the allocation between developed vs. emerging.

Harry explained it also means Causeway does not have any incentive to have more money in emerging markets just to clip the additional fee.

6. Board Discussion of Causeway's Presentation

Michael Coffey asked about the attraction of emerging markets because the presentation made them seem modest at best.

Gordon Weightman answered if looking at emerging markets vs. developed equities, they are more volatile, tend to be less liquid, and there is more uncertainty within the underlying economies of the emerging market countries. The world is becoming globalized so it depends on what is considered an emerging market company. From a revenue standpoint a developed only portfolio has 20% revenue coming from emerging markets so there is already some exposure. Expanding the opportunity base to include emerging market companies allows investors to pick stocks from a greater universe, expand current exposure, and it adds another layer that could enhance returns over time from an active management perspective.

Chairman Fleming said if the Board wanted to increase the Causeway investment target from 7.5% to 10% and place 2.5% of it into emerging markets, they are saying they will manage it dynamically sometimes moving more money into or out of emerging markets and he felt that did not satisfy the Board's goal to diversify. He also expressed concern over using a value manager to invest in emerging markets as Causeway advised that a growth strategy would be better.

Gordon clarified that Causeway advised the philosophy they use in developed markets is not the right way to invest in emerging markets and that is why they use a quantitative model. Callan likes Causeway's emerging market strategy as a stand-alone. Looking at the benchmark weight to ACWI ex-US in emerging markets which is around 20%, Causeway is saying they will go +/- 3% to the benchmark weight so there is not a lot of variability.

Chairman Fleming said if the Board decided to add Causeway's International Opportunities Fund 20% of their 7.5% is 1.5%.

Gordon answered the 7.5% would be increasing because the new target allocation to international equities is 25% of the total portfolio. He said to think of it as 10% to Causeway and roughly 20% of that would be emerging markets.

John O'Hare asked how much of the earnings of the S&P 500 are from emerging markets.

Gordon answered that S&P companies get 60% of their revenues abroad, which includes emerging markets.

John stated that the Board already had exposure to emerging markets in this way.

Gordon answered the non-US equity managers are also providing exposure to US companies as well as companies abroad, which speaks to the globalization within economies and equity markets.

Michael Hermanson explained the Board was lead into this decision from the asset liability study discussed on October 31, 2014. This was the result of that idea, at least in terms of Causeway as a choice because Callan evaluated the managers and they like what Causeway was doing.

Gordon said there have been 2 decisions made so far by the Board; one was to increase the non-US equity exposure through the asset liability study by 10% (from a 15% target to a 25% target), the second was to look at different alternative structures within that non-US equity piece to determine how they wanted to put that money to work in that new 25%, and that is where the Board decided 5% to international small-cap, at the total fund level, and then 10% each to 2 managers that have an ACWI ex-US mandate. Callan then looked at other structures to determine if the Board wanted a stand-alone emerging market manager or would they rather get the exposure through something like what Causeway is offering. Aberdeen already does that and the EAFE-plus strategy similar to what Causeway is doing with the developed piece and emerging markets. The question is does the Board feel comfortable moving to this product with Causeway or should Callan open it up and do a search for an ACWI ex-US manager. He also said if the Board did not currently have an account with Causeway and Callan did a search, Causeway's International Opportunities fund would have been one of the candidates Callan brought to the Board.

A motion to add Causeway's International Opportunities to TSRS investment manager allocations was made by Silvia Amparano, 2nd by Curry Hale, and passed by a vote of 6-0 (Chairman Fleming did not vote).

7. TSRS Quarterly Performance Review for 12/31/2014 – Callan Associates

Gordon summarized the Callan 4th quarter 2014 market review. Equity markets are still muddling along certainly better than non-US equity stocks in the last year, currency provided big headwinds. In local currency the non-US equity were up, when you factor in currency they were negative so there continues to be a dichotomy between US and non-US equity returns. From an economic standpoint the US is in pretty good shape with 5% GDP growth in the 3rd quarter and 2.6% in the 4th. The Fed stopped their bond buying program and there is talk of raising interest rates in the middle of this year. This is a completely different situation than the one Europe, Japan and China are in. They are trying to grow their economies when the US is on the fringe of tightening up monetary policy. The US has been a good place to invest and other countries have seen that with the treasuries where interest rates continue to fall as foreign investors are buying treasury bonds. Germany issued a 5 year note with a negative yield while the US interest rates are low but they are not negative. The international currencies coming into the US to buy fixed income investments is one of the reasons the Dollar has strengthened. Equities in the US over the last 5 cumulative years ending 12/31/14 have been on a great run. The Total Fund returns over the last five years were 11.4%, placing it in the 6th percentile vs. other public funds. This is mainly driven by asset allocation and the fact that TSRS has more US equity exposure than others. Over the last three years the Total Fund was in the 2nd percentile with 14.7% returns, so the Funds active managers have provided a lot of alpha across the board and exceeded their objectives for the most part. Last year the Total Fund was in the 12th percentile. The total number of peers, including both Callan clients and non-Callan clients, is over 100 public plans.

He said there are no concerns about any of the Boards existing managers. Champlain is behind the benchmark but still up 9.2% and the benchmark has been in the top quartile of active managers and is very difficult to beat. When the market is up 13% or 21% Champlain is not going to keep pace but if there is a year with a down market, Champlain will pay off because their goal is to be more defensive oriented than the benchmark.

Allan Bentkowski asked if the negatives on Macquarie European Infrastructure were a result of the fund being denominated in Euros.

Gordon answered currency was a player there and the bulk of the portfolio was that they owned two airports, one in Brussels and one in Copenhagen. They have been really good investments providing strong income. He said the numbers were time weighted rates of return to allow Callan to include infrastructure in the Total Fund number. He said they should be looking at them on an internal rate of return basis and Macquarie has done really well. The Board has very little money left with the LaSalle Income and Growth Fund; they were in full liquidation mode and hoping to finish up in the middle of this year. Aberdeen had a tough quarter but they are also a more defensive oriented manager which has played out this year when they were down less than the benchmark. TSRS has a relatively short history with them and they have been behind over the three years the Board has been invested with them but they are making it up and are currently pretty close to the benchmark. PIMCO Fixed Income had an overweight to Russia that hurt them, they also had some non-US Dollar denominated bonds and some emerging market debt which also hurt them during the period. The aggregate index was up 6% last year due to interest rates declining. Bonds were up 6% last year. Callan had no concerns with PIMCO and they continue to manage the TSRS portfolio well.

Callan had an onsite meeting at PIMCO and they were surprised to learn that everyone was optimistic and looking forward to continuing to service their clients despite all the recent changes that have occurred.

8. TSRS Portfolio composition, transactions and performance review for 01/31/15

Allan Bentkowski said all the managers are within their target ranges for asset allocation purposes. US equities are in the higher end and fixed income is on the lower end but that is to be expected based on what the US equity run has been. Volatility in the fund balance has been amazing, as of 1/31/15 the Total Fund balance was $719.5M vs $728.5M as of 12/31/15. Then the Total Fund balance hit an all-time high of $739.2M as of 2/25/15. This month they moved $2M per asset allocation policy out of Alliance (S&P 500) to fund retiree pensions.

In the fiscal YTD the Total Fund return was 0.28% vs. 1.2% for the Custom Plan Index. Total fixed was 1.73% vs. 4.09% for Barclays Aggregate. Total Equities were -0.16% vs. the Equity Composite of -0.52%. He said he did not have the CPI +4% numbers because they had not been published at the time he ran the report.

C. **Administrative Discussions**

1. Actuarial Projected Funding Results from TSRS Funding Policy

Michael Hermanson said he asked the actuary to project the TSRS funding ratio trajectory using the current fund policies approved by the Board on December 30, 2014. The results show a positive trajectory with TSRS being fully funded in 2029, incorporating all of the Board's current assumptions and an earnings rate of 7.25%.

He also advised that a copy of the Mayor & Council Communication and Ordinance had been included in the meeting materials so the Board could see the employer and employee contribution rates for 2016 were adopted by Mayor and Council.

2. Annual TSRS Budget Approval for FY 2016

Michael Hermanson asked for the Board's approval of the FY 2016 TSRS budget. The additions are projected member and employer contributions; he used the actuary's projection of payroll and applied the FY2016 funding rates. The additions are not changing much from the current budget, rounding up on the expectation of interest and dividend levels from the current budget and noting that the actuals from FY14 were about $6M each. The investment expenses are relatively flat except for the investment consulting services that indicate the incremental amount that is included in the contract with Callan. Estimated benefits paid to members in FY 2016 are $68.7M, and the estimated refunds from the plan are $2.65M. Salary levels of TSRS staff based on no changes in pay, estimated at $230K with associated fringe benefits of $124.8K. The only other change was the Treasury Services charge to the pension plan for support to the retirement plan, which rose to $108K because there were new allocations to administrative staff.

Allan Bentkowski explained this charge is a transfer between fund 001 (the General Fund) and fund 072 (TSRS). He advised that Silvia Navarro, his supervisor, has been allocated a higher percentage of time to TSRS, causing the increase.

A motion to approve the TSRS Budget for FY 2016 was made by Kevin Larson, 2nd by Silvia Amparano, and passed by a vote of 6-0 (Chairman Fleming did not vote).

3. Status report on request to add year to date income amounts to quarterly retiree statements

Michael Hermanson stated at the January 2015 Board meeting there was a request from a retiree representative to add the YTD income amounts on the quarterly statements sent to retirees. The YTD deduction amounts are already included in these statements, and there have been some problems with that report but they have since been fixed. The actual design of this report was originally discussed with the CTRA board and retiree representative, incorporating what they wanted. However, the report designer has indicated the income items requested to be added are not as simple as the deduction items, and it will be necessary to engage the services of CGI, an outside payroll software company, to do the work.

Silvia Amparano advised she received an early, not formal, quote that they anticipated it would take 40 hours at $185 an hour to revise the report for a total of around $8K to add the YTD income amount to the quarterly statement. She also advised that the YTD incomes are available on the Employee Self Service (ESS) website.

Michael Coffey asked what the information benefit would be to the retired members.

Michael Hermanson answered, approximately about 4 or 5 years ago every retiree received a monthly direct deposit statement indicating the amount of their deposit, if they were not receiving an actual check. He asked the Board's permission to stop sending these monthly statements monthly to save approximately $1,200 per month. When the City converted to the new payroll system, these statements were no longer produced. As a result, the quarterly report was developed to be mailed to retirees, primarily for the benefit of any retirees without internet access to utilize the City's ESS system. It costs around $1,500 per quarterly to mail these statements. Currently the quarterly report includes the monthly payment amount, the monthly deductions, and the YTD deductions for the retiree. He also advised that the $8K to add the YTD income to the quarterly report would be paid from the pension plan.

Silvia Amparano said she thought that City of Tucson Retirees Association (CTRA) made the request thinking that staff could easily add it. It turns out CGI will need to redesign the report as staff is unable to do it.

John O'Hare said he would notify CTRA Board of the cost to add the information to see what their opinion was.

Chairman Fleming asked to see a mock up quarterly statement so that the Board members who had never seen one would have a better idea of what the discussion was about.

Curry Hale asked if they would see a current example as well as the mock up quarterly report so that they could decide if there was $8K worth of information on the mock up.

Chairman Fleming answered yes.

4. TSRS Comprehensive Annual Financial Report for the Plan Year Ended June 30, 2014

Chairman Fleming advised that this item was an information item only.

5. Mayor & Council Communication - FY 2016 Employer and Employee Contribution Rates

D. **Articles for Board Member Education / Discussion**

1. PIMCO Onsite Meeting Notes (Callan Associates – 2/3/2015)
2. Ballooning Public Safety Pensions a Blow to the City (Arizona Daily Star 2/5/2015)

E. **Call to Audience** – None heard.

F. **Future Agenda Items**

1. March 26, 2015 - Annual Manager Reviews – T Rowe Price and Pyramis, Update on Transition Manager for Non-US Equity Small Cap, Securities Litigation Recovery Presentation

Chairman Fleming clarified this item was a law firm interested in contracting with the Board to recover funds from class action suits in which they could be involved.

John O'Hare stated his understanding was that they would perform a free audit to determine whether the Board was getting all of the money they could.

Chairman Fleming asked if they should talk to staff before coming before the board.

John answered the staff can call them but they wanted to come in and make a 20 minute presentation.

Chairman Fleming asked if staff would contact them to determine what they wanted to present and the Board could use that information to determine whether they wanted the law firm to come to a meeting.

2. April 30, 2015 meeting - Board Governance Policies and Fiduciary Training Refresher – Cassie Langford

Kevin Larson requested information on the mortality table currently used by staff. He said he thought there was a new one out and he would like to have a general understanding of the implications to the plan status.

G. **Adjournment** – 10:49 AM

Approved:

	3/26/15		03-26-15
Robert Fleming Chairman of the Board	Date	Michael Hermanson Plan Administrator	Date