TUCSON SUPPLEMENTAL RETIREMENT SYSTEM
BOARD OF TRUSTEES
Meeting minutes from Thursday, August 27, 2015

Members Present:	Michael Coffey, Acting Chairman Curry Hale, HR Director Silvia Amparano, Director of Finance Jorge Hernández, Elected Representative John O'Hare, Elected Retiree Representative
Staff Present:	Dave Deibel, Deputy City Attorney Karen Tenace, Deputy Director of Finance Silvia Navarro, Treasury Administrator Art Cuaron, Treasury Finance Manager Michael Hermanson, Plan Administrator Dawn Davis, Administrative Assistant
Guests Present:	Jenefer Carlin, CTRA Representative Rebecca Hill, Human Resources Department Dennis Woodrich, Lead Pension Analyst Gordon Weightman, Callan Associates Judy O'Connell, Champlain Investment Partners Scott Brayman, Champlain Investment Partners Gina Callen, City of Tucson Employee Michael Callen, Spouse of Gina Callen
Absent/Excused:	Robert Fleming, Chairman Kevin Larson, City Manager Appointee

Acting Chairman Michael Coffey called the meeting to order at 8:30 AM.

A. **Consent Agenda**

1. Approval of July 30, 2015 TSRS Board Meeting Minutes
2. Retirement ratifications – August 2015
3. July 2015 TSRS expenses compared to budget

A motion to approve the Consent Agenda was made by Silvia Amparano, 2nd by Curry Hale, and passed by a vote of 4 – 0 (Chairman Fleming and Kevin Larson absent, Acting Chairman Coffey did not vote).

B. **Investment Activity Report**

1. Introduction to Art Cuaron

Silvia Navarro introduced Art Cuaron and advised he would be assuming Allan Bentkowski's responsibilities. He has worked with the City of Tucson for 3 years, prior to that he was a finance specialist for the Town of Oro Valley. He brings government finance, accounting, and budget experience to the position.

The Board formally welcomed Art Cuaron.

2. Champlain Investment Partners – Annual Manager Review – Judy O'Connell, Scott Brayman

Gordon Weightman provided a brief update on Champlain Investment Partners. They manage about $43M (as of 6/30/15) in mid-cap equity. Their performance since inception has been good, for 4.75 years there has been a bull equity market, and over that time the index has risen by 16.2% and Champlain returns were 17.4%, ranking in the 29th percentile vs. peers.

John O'Hare clarified that the Board was asking their active managers to outperform the benchmark by 2 points.

Mr. Weightman answered that was something they could ask; what their out-performance objective was. At a baseline level, it is to outperform the benchmark after fees. Champlain has recently added an emerging markets team through an acquisition, and they entered into a minority revenue share with another firm.

Judy O'Connell explained Champlain had expanded ownership from 8 partners to 12. In June, they purchased New Showman Advisors, an emerging markets team located in Irvine, CA; New Showman Advisors have sub advised for around $85M in emerging market assets for more than 5 years. The reason Champlain looked at this capability was primarily that it was a diversifying asset class to small and mid-cap US. It also provides an element of growth at the firm which is important for attracting and retaining resources and talent over time.

Mr. O'Hare asked if Champlain would keep their Orange County office open, and if so would any of the staff move to Irvine.

Ms. O'Connell answered that there were no plans to move staff to Irvine. The plan was to build out the team which will be located in Irvine.

Mr. Weightman asked if anyone from the mid-cap portfolio would be spending any time or resources on the emerging market side or would it be completely separate.

Ms. O'Connell answered it would be completely separate. The only resource commitment would be on the quantitative side, and they are adding resources there as well. Champlain is currently looking for a financial services analyst and a technology analyst.

Scott Brayman said they might make use of some of Champlain's frameworks and tools for slicing and dicing industries and sectors. This does not mean that Champlain is enthusiastic about emerging markets today; they think it is a very inefficient opportunity in the long term which means there will be opportunities for stock pickers. This was Champlain trying to anticipate the future.

Ms. O'Connell said they had also entered into a 10 year minority revenue share, which is a low teen percentage of their revenue, to create liquidity for the founding partners for estate and tax planning reasons. This revenue share does not have any management control over the firm. Champlain will continue to add assets in the mid-cap strategy, and remain closed in the small cap strategy.

Mr. O'Hare asked how many new clients they have brought in and how many have they lost.

Ms. O'Connell answered they had lost 1 client in mid cap when the State of Michigan removed all of their mid-cap allocations, and the State of Arizona reduced their small cap exposure. The firm added Edward Jones in the mid-cap space, Edward Jones is using Champlain in one of their fund of funds model as well as in their corporate pension plan, and they are looking for $1B in mid-cap capacity. The California Ironworkers pension trust fund added $45M in mid-cap and AstraZeneca just invested in mid-cap with Champlain.

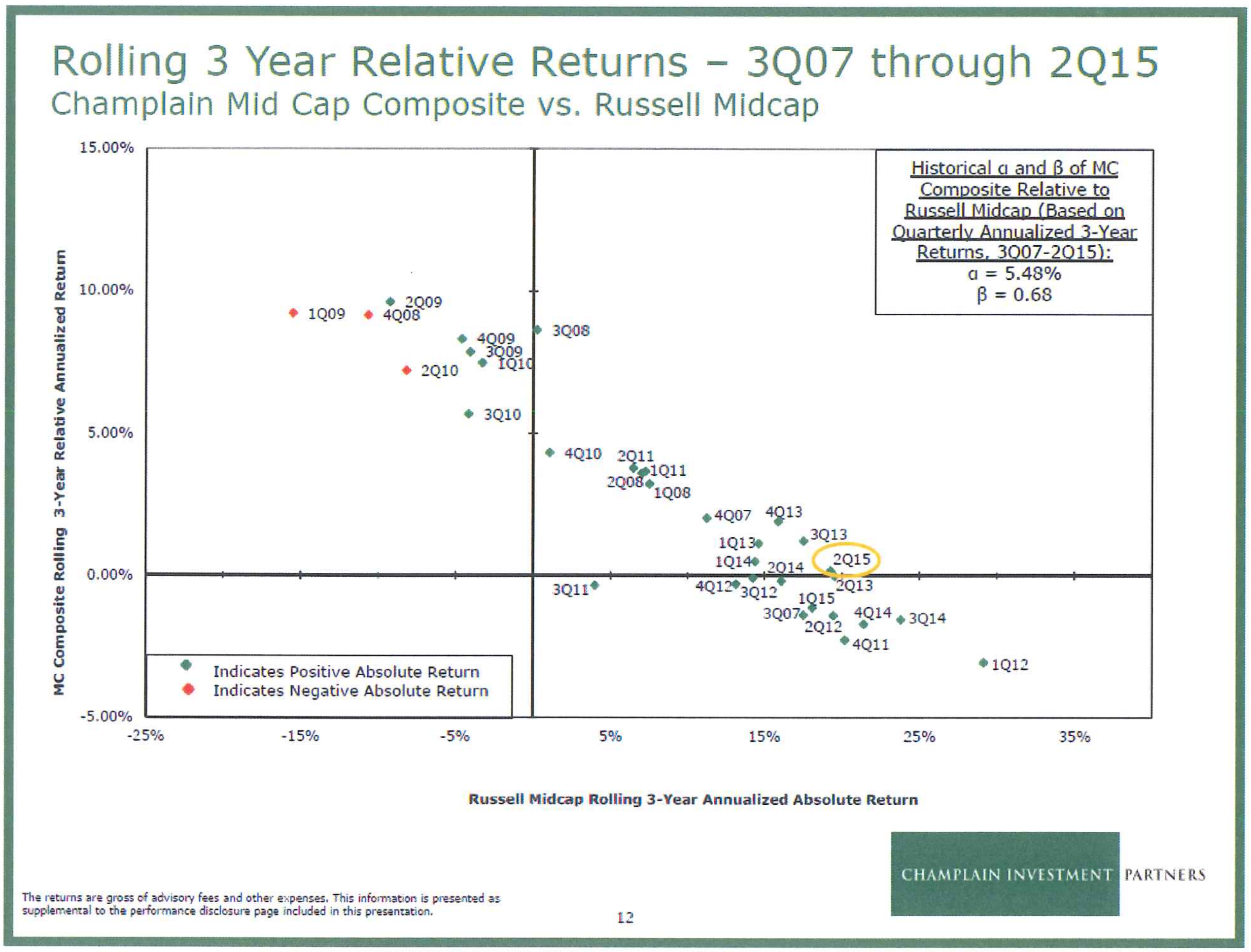
Mr. O'Hare asked if this meant there was growth in the assets under management.

Ms. O'Connell answered they manage $6.6B, compared to the last time they met with the TSRS Board; it was around $6.1B, but some of that increase is from market appreciation.

Mr. Weightman asked if the $6.6B was in mid-cap.

Ms. O'Connell answered that amount is total firm assets, mid-cap assets are around $2.6B and they intend to close it at $4.5B. They believe they have a clear path to closing the mid-cap strategy. For them to keep pace in the current environment; they would expect, to the extent markets and interest rates normalize, to outperform. They have not been in a full market cycle since the TSRS Board hired them, it has all been up, which is good for absolute returns but it is difficult for them to distinguish themselves on a relative basis during that period. As of 6/30/15, after fees, they have not outperformed the Russell mid-cap, they returned 18.64% vs. 19.28% for the benchmark.

Mr. Brayman encouraged the Board to turn to page 12 (shown below) of the presentation materials provided prior to the meeting.



This chart represents Champlain's value proposition, and shows why they are gaining market share with their mid-cap strategy. The benchmark's absolute returns on a rolling 3 year basis are on the horizontal axis, and Champlain's excess or deficit returns are on the vertical axis. The way to read this chart is that in very strong absolute return markets Champlain has historically lagged. Over the last 3 years they were in line with the benchmark, before fees.

Mr. O'Hare stated the Board hires active managers to outperform the benchmark by 2 points over a 3 year period.

Mr. Brayman answered their relevance to the market place was whether they could add value and provide a good return on their fees. Looking back over the last 3 years it might look like Champlain has not earned their fees. Looking back since inception a customer could ask where is the value-add for the fees. There are 2 thoughts on this; first Champlain is taking a lot less risk than the market, so the Board is getting market like returns with a strategy having less downside risk and volatility. Second, this has been an extremely unusual and unprecedented environment. They have never seen global central banks flood the markets with the liquidity and stimulus that they have in recent years. He would argue there is a degree is artificiality and a degree of contrived returns in the market as central banks have created a lot of activity that is probably unsustainable. A lot of valuations in some highly leveraged stock have moved up substantially. Highly leveraged companies have had a chance to refinance at very low interest rates and create a lot of earnings growth; they will not have that opportunity going forward.

Mr. Weightman asked for an example of an industry or stock doing this that Champlain would steer away from. He thought of some of the airlines or biotech names that have run up and may not fit into the criteria Champlain is looking for.

Mr. Brayman said biotech's have a less direct situation; they don't necessarily have highly leveraged balance sheets to refinance. There have been some aggressive companies in the pharmaceutical industry that have been using access to cheap credit market for acquisitions; those acquisitions have created big take outs in biotech resulting in others entering the biotech space to chase the strong returns. Airlines are more of a beneficiary of low oil prices, but certainly the ability to access cheap credit has helped them to refinance their balance sheets. Ford's management was in a position to run the table in the auto industry, but then the Government stepped in and eliminated their advantage, keeping all of Ford's competitors in business. The real estate industry has also benefitted tremendously from the zero interest rate policy and the ability to refinance their balance sheets at lower rates. Champlain believes when rates start to go up, the real estate investment trust industry will be challenged and there could be a lot of stranded capital in that industry. Champlain has avoided areas of the market that have been aided, abetted, or subsidized by the Fed's zero interest rate policy, they don't own companies that depend on cheap financing for customers to buy their products, so there is no exposure to housing and auto related industries.

Acting Chairman Coffey asked if they expected federal interest rates to rise this year.

Mr. Brayman answered everyone is expecting it to happen in September this year, but in recent weeks that has shifted to December 2015 or March 2016. Champlain does not spend a lot of time thinking about this because the vast majority of their time is spent trying to buy good companies that are reasonably priced or undervalued substantially.

Acting Chairman Coffey asked them to expand on the notion of Champlain protecting investors from downside risk and to go into their investment philosophy.

Mr. Brayman explained it was Champlain's belief there is a lot of risk in business from policy mistakes around trade, taxes, business cycles, certain industries get overbuilt and have trouble as they try to unwind the excesses, and currency wars. There is a lot of risk out there and it is an environment where central banks have substantially mitigated the risks. Now they are running out of room for further interest rate cuts because they are already at 0% around the world. Now there is talk that the US central bank may start to normalize interest rates which is creating stress and strain in the system as managers are starting to ask what kind of companies they own and what kinds of companies will do well in a more normalized market. The kinds of high quality companies Champlain likes to own tend to have more control of their destiny than the credit sensitive industries. He reiterated that the chart on page 12 of the presentation materials shows that historically Champlain's process has resulted in substantial value-add when they get into weak market environments on the order of between 5% and 10% value-add in difficult markets. When averaged out, Champlain expects to have 2% to 3% value-add over a full market cycle. Champlain has not been involved with TSRS over a full market cycle yet. Champlain is encouraged that they have been able to keep up as well as they have by taking a lot less risk; they are confident that they will see either normal or difficult environments return in the next 3 to 5 years.

Mr. Weightman said when viewing the last 3 years after fees as of 6/30/15, Champlain is up 18.6% vs. the benchmark at 19.3% per annum.

Mr. O'Hare stated he understood the expectation of the Board was that the target is 2 points over the benchmark for an active manager. He asked what would be the point of hiring an active manager that consistently underperforms the benchmark.

Mr. Brayman explained, through a full market cycle the Board would see at least 2 points over the benchmark but they had not seen a full market cycle.

Ms. O'Connell stated the last 3 and 6 years had not been a full market cycle. Champlain is not going to outperform in all environments. If there is a full market cycle where there is some volatility in the market they should outperform, as they have done historically.

Mr. O'Hare asked whether Champlain could expect to outperform if the next 6 years were in a down market, by 4% so that over 12 years they will have met the target of 2% over the benchmark.

Ms. O'Connell answered theoretically the answer was yes, but it does not necessarily need to be a down market for them to outperform the index. This has been and artificial free money type of market, and not normal for the last 6 years. It has been a positive 6 years because they were up 19% annually. If the current market environment continues for another 6 years Champlain will not outperform.

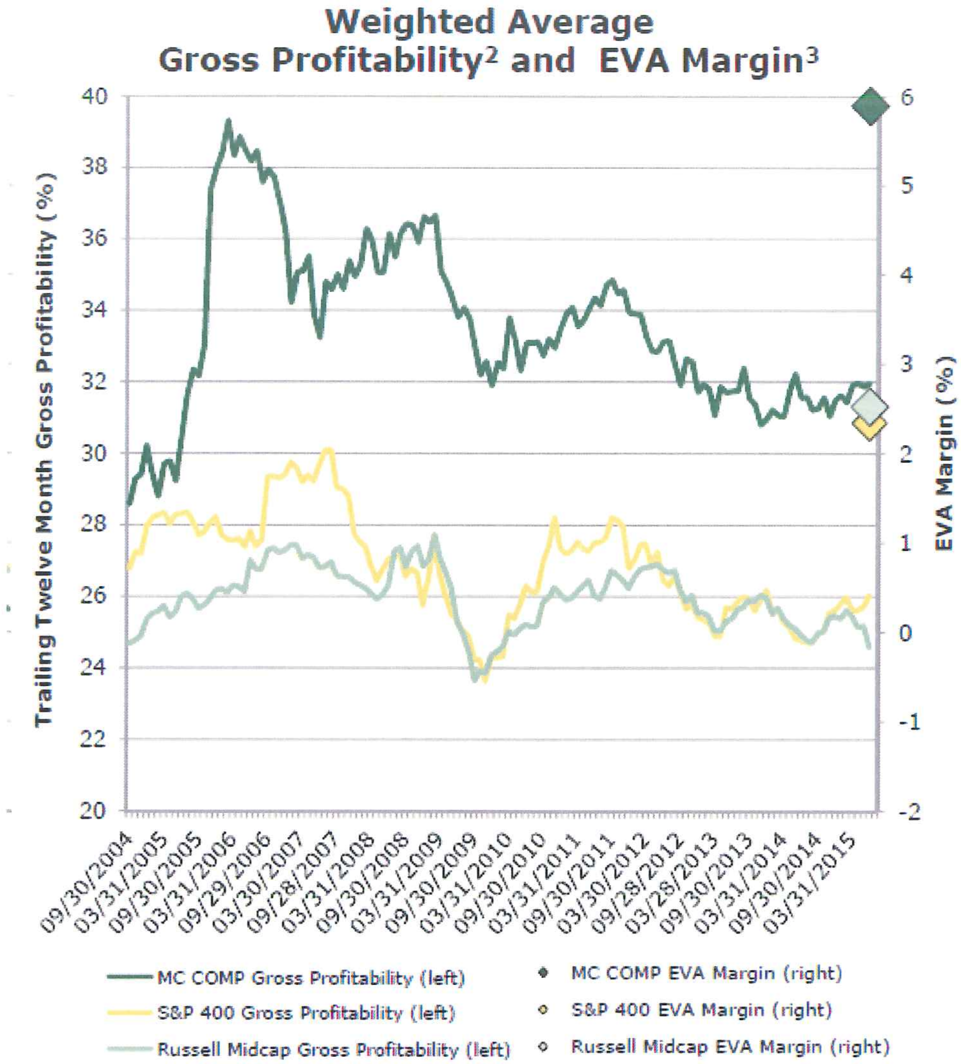
Mr. Weightman explained if Champlain had beat the benchmark, after fees, by 2% over the last 3 years, given that the benchmark is up almost 20%, that would worry him because it would mean they were doing something they had told the Board they were not intending to do within their investment philosophy. The numbers speak precisely to what the message to the Board has been since Champlain was hired. When you have a roaring bull equity market they will trail, that is the expectation. They were hired so that when there is a down market or a market that is up 2%, 3%, or 4% in a year they will outperform. Looking at upside and downside capture ratios, the upside is less than 100% and their downside is less than 100%.

Mr. O'Hare stated there was a lot of risk to the fund in waiting another 6 years to see if they can average out for a 12 year period.

Mr. Weightman answered that spoke to time horizon. The plan is open and being managed in perpetuity as a going concern. Every year the actuarial numbers are viewed to see the funded status of the plan.

Mr. Brayman stated that Champlain would much rather lag in a very strong, absolute return environment where the Board was well ahead of their assumptions in terms of plan expectations. It is in the difficult environments where the markets are not delivering on the Board's plan expectations that Champlain wants to add a lot of value. A good way to consider their fees is that they are an insurance policy for the tough cycles and unexpected events. Looking at history through markets, things happen and they go through tough periods, and it is difficult to expect the strong, absolute returns to continue for another 3 to 5 years. According to the prognosticators, the valuation suggests a return to a more normalized, if not negative, return environment in the near future. The Board cannot compound at 16% in perpetuity, the market is due for some reversion to the mean.

Mr. Brayman directed the Board to turn to page 18 (shown on following page) of the presentation materials.

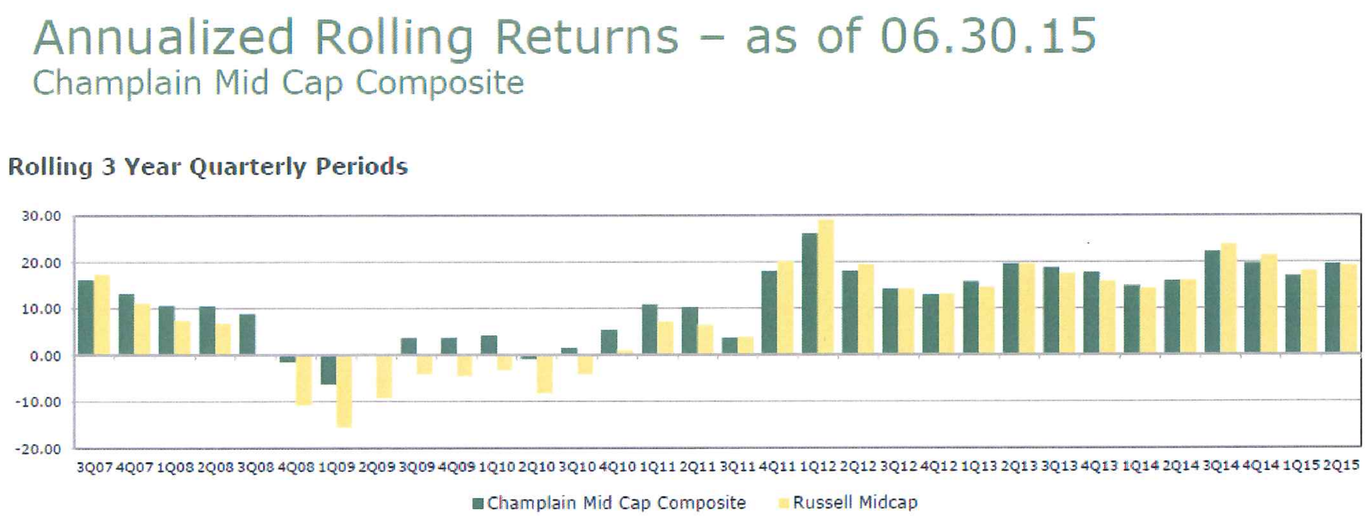


This graph reflects two credible proxies for high quality, one is gross profitability which is represented by the solid lines, second is the EVA Margin, which is basically the profit minus the cost of capital. In business there is an implied cost of capital for equity and a known cost of capital for debt. What does the company do with that capital, how much of a spread do they earn over that capital? That is a reflection of the business model and of management prowess or acumen; it shows how good they are at investing shareholder capital and capital they borrowed from banks or debt markets. The Board's portfolio has a 600 basis point spread over the cost of capital; the benchmarks are less than 3%. Once the artificiality of free money is removed from the equation, if money is compounded at a 6% spread vs. a 3% spread, given time the difference will be profound. Champlain has done well as they have because they own higher quality companies, but it has been masked by all the artificiality. Given time and better profitability on the gross profitability level, the EVA margin will compound beautifully.

There is a lot of obfuscation with P/E ratios in the industry. Various constituents and benchmark services present the data on their benchmarks, excluding the companies that do not earn money from the calculated P/E ratio. Champlain adds those companies that are not earning back into the ratio to get the weighted harmonic average. If there are 3 companies, one earning \$5 in profits, another earning \$5 in profits, and the 3rd losing \$5 in profits, the total profits would be \$5. Take the market cap of all 3 companies and divide it by the \$5 profit. In other words, the losses are deducted from the profits.

Mr. O'Hare expressed confusion over this explanation.

Ms. O'Connell directed the Board to view the bar chart on page 26 (shown below) of the presentation materials.



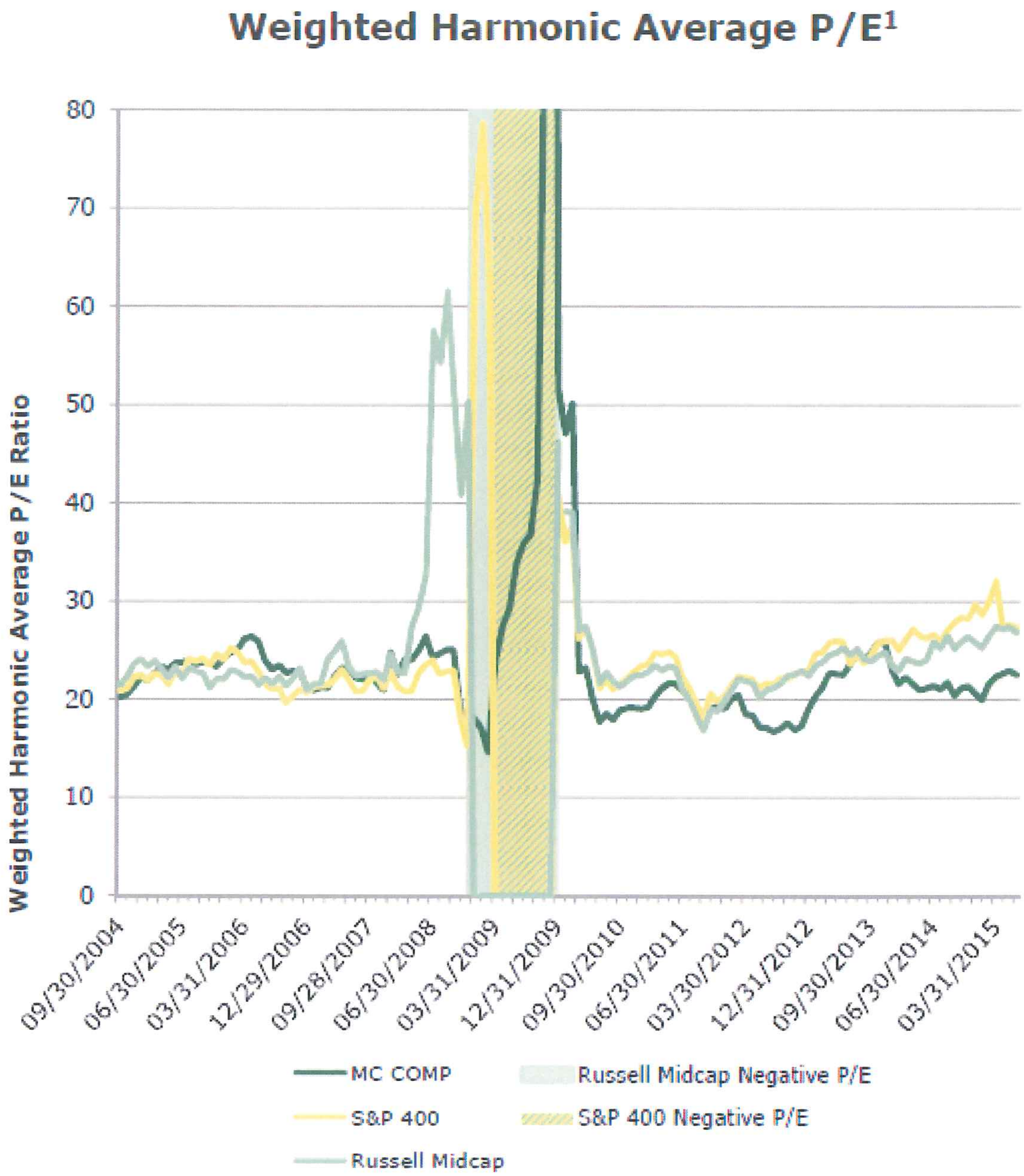
The chart shows that during periods of normal returns Champlain has outperformed over 3 years. In markets with strong absolute returns Champlain has kept pace but not outperformed.

Mr. O'Hare stated these were gross figures rather than net of fees.

Ms. O'Connell answered the fees were 85 basis points, and even if they were to adjust for it they would still outperform for that period. The table on page 37 (shown below) lists the annual returns net of fees.

Annual Returns %			
	Gross	Net	Russell Midcap
YTD 2015	6.94	6.55	2.35
2014	9.19	8.43	13.22
2013	38.92	37.88	34.76
2012	13.05	12.23	17.28
2011	4.04	3.31	-1.55
2010	22.18	21.37	25.48
2009	28.91	28.04	40.48
2008	-25.71	-26.13	-41.46
2007	16.55	15.54	5.69
2006	10.30	9.21	15.58
2005	13.04	11.90	12.70

Mr. Brayman explained that the CFA Institute and Morning Star believe that the weighted harmonic average P/E ratio is a credible method to reflect valuation and the chart on page 18 (shown below) shows that Champlain's valuation is several points less than the benchmark.



This is an environment in which, since the 2009 lows, a lot of investors have been chasing risk and beta. Because of the actions of the central banks, there has been a lot of aggressive and bad behavior has been highly rewarded. This means the high quality companies, like those owned by Champlain, are not trading for as much as the other companies, and therein lies the opportunity: the Board is getting a much better set of companies in this portfolio at a lower valuation. There is a lot of valuation risk in the lower quality segment of the portfolio, but there is upside in the higher quality portfolio. Mr. Brayman believes the differential between the discount in the names and the over valuation in the lower quality names will manifest itself over the next 3 to 5 years creating a substantial advantage, which when averaged with the recent lack of advantage will leave the Board feeling very comfortable. The market does tend to be up more than it is down, but the point with Champlain is that they add substantial value in down markets and meaningful value in normal markets; it is the extremely strong markets, recent returns are at the extreme end of market returns, in which Champlain struggles.

Acting Chairman Coffey stated essentially, Champlain has delivered what they promised.

Mr. Brayman answered they delivered as they expected. It is hard to make promises in this business but they are confident they own high quality, and high quality is undervalued.

Mr. Weightman said if the Board thinks of a full market cycle, the market bottom was 03/09/09 for the S&P 500. If they go back a time period that covers 2008 maybe a full market cycle is around 10 years. Looking at Champlain's numbers after fees over 10 years, they returned 11.2% after fees when the Russell Midcap returned 9.4%. That is close to 2% per annum outperformance after fees. That 10 year number includes a disproportionate amount of bad and a great bull equity markets.

Mr. O'Hare confirmed they were approximately 65 basis points under.

Ms. O'Connell answered yes.

Acting Chairman Coffey asked Mr. Weightman to go over the questions presented to Champlain prior to the meeting.

Mr. Weightman said they had already addressed many of them. He asked if there were any questions the Board felt had not been addressed.

Silvia Amparano asked when Champlain would sell a security.

Mr. Brayman answered they like to sell stocks when they have a lot of confidence that they are overvalued. They also sell when new information comes to light showing they made a mistake in purchasing the stock. Sometimes they change their mind about stocks and have a gain in them. For every stock, there are at least 3 or 4 reasons why they should not buy it. Champlain makes a judgment call that the business model and the prowess of management will overcome these risks, and sometimes they are wrong and will sell as a result.

Ms. O'Connell went over the mid-cap strategy sale discipline. They sell stocks above their estimate of fair value, mistakes, and hold a maximum of 5% of portfolio in companies over $20B. They trim when position size at market is greater than 5%, and when sector weights exceed investment policy guidelines. They reevaluate holdings when 25% below cost. The benefits of this strategy is they are able to harvest gains, control losses, maintain mid cap exposure, and manage company specific risk.

Mr. O'Hare said he would like to thank Champlain for sending portfolio managers instead of sales staff.

3. Economic Update – Callan Associates

Gordon Weightman distributed a 2nd Quarter Market Update providing some background on what has been happening in the markets. It also looks at asset class returns where the Board has exposure within the portfolio. For the US Economy, overall the indicators are positive. Despite what has been seen in the markets in July/August, with the big correction, the economic indicators are strong. The first estimate of the 2nd quarter GDP was revised up from a negative number to a positive one at 0.6%; the 2nd estimate came out on 8/27/15 at 3.7%. A lot of that was from corporate spending, replenishing their inventories, and consumer spending. Inflation is up 1.8% if food and energy are stripped out. This is very close to the Fed's target of 2%. Unemployment is down, but so is the number of people in the workforce as a result of retirees and discouraged workers leaving the workforce. Even though indicators say that wage growth is picking up, it has been very modest. While unemployment is down, the Fed is not pleased with the total employment picture in the US. Oil is down 44% through 6/30/15 and the per barrel price is now below $40, mostly due to increased supply.

Mr. Weightman briefly went over the information on page 2 of the distributed material (chart on next page).

Asset Class Performance

Periods Ending June 30, 2015

Periodic Table of Investment Returns
for Periods Ended June 30, 2015

Last Quarter	Last 2 Quarters	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
MSCI:Emer Markets 0.8%	MSCI:EAFE US$ 5.5%	S&P:500 7.4%	S&P:600 Small Cap 18.8%	S&P:600 Small Cap 18.4%	S&P:600 Small Cap 9.3%
MSCI:EAFE US$ 0.6%	S&P:600 Small Cap 4.2%	S&P:600 Small Cap 6.7%	S&P:500 17.3%	S&P:500 17.3%	MSCI:Emer Markets 8.5%
S&P:500 0.3%	MSCI:Emer Markets 3.1%	Barclays:Aggregate Index 1.9%	MSCI:EAFE US$ 12.0%	MSCI:EAFE US$ 9.5%	S&P:500 7.9%
S&P:600 Small Cap 0.2%	S&P:500 1.2%	3 Month T-Bill 0.0%	MSCI:Emer Markets 4.1%	MSCI:Emer Markets 4.0%	MSCI:EAFE US$ 5.1%
3 Month T-Bill 0.0%	3 Month T-Bill 0.0%	MSCI:EAFE US$ (4.2%)	Barclays:Aggregate Index 1.8%	Barclays:Aggregate Index 3.3%	Barclays:Aggregate Index 4.4%
Barclays:Aggregate Index (1.7%)	Barclays:Aggregate Index (0.1%)	MSCI:Emer Markets (4.8%)	3 Month T-Bill 0.1%	3 Month T-Bill 0.1%	3 Month T-Bill 1.4%

The striking information here is that Barclays Aggregate Index had a return of -1.7% when interest rates went up. The 10 year treasury went up 43 basis points in the quarter which hurt the TSRS bond portfolios, including PIMCO, so returns were negative for fixed income in the quarter. Over the last year, Barclays Aggregate is at 1.9%, positive but in a low yielding environment. From a big picture perspective there is a lot of macro news behind these numbers. Greece is basically borrowing money to pay off existing debt and there is no clear view of how they will get out of this situation without defaulting. The real risk is not in the situation, they are only responsible for 2% of the Eurozone GDP; the real risk is that if Greece exits does that open the door for other countries to leave the Euro as well. The other big news was slower growth in China. China is a huge importer of goods, they import 25% of the world's gold, 33% of the world's oil, 25% of the world's cotton, and more than 50% of the concrete produced worldwide. They devalued their currency to grow by making their exported goods cheaper. The effect of China's one child per family policy in place for a very long time and now there are not enough young people in the economy to replace those leaving the labor force; explains why they are expecting lower growth. China's local markets fell around 30% on the back of a 150% increase over an 18 month period. The TSRS portfolio does not have any exposure to the Chinese local market, the exposure they do have is through ADRs traded in the US and on the Hong Kong exchange, which were down modestly in the last quarter.

Quarter to date the S&P 500 is down 5.6%. Year to date small cap stocks are down 9.6% from 6/30/15 through 8/26/15. ACWI Ex-US is down 10%; Bonds are up 0.6%.

4. June 30, 2015 TSRS Performance Summary - Callan Associates - Paul Erlendson, Gordon Weightman

Gordon Weightman said for fiscal year 2015, after fees, the TSRS portfolio was up 4.2%, below the 7.25% target, but it comes on the back of 19.1% and 14.2% in 2014 and 2013 respectively. PIMCO received a "Wells

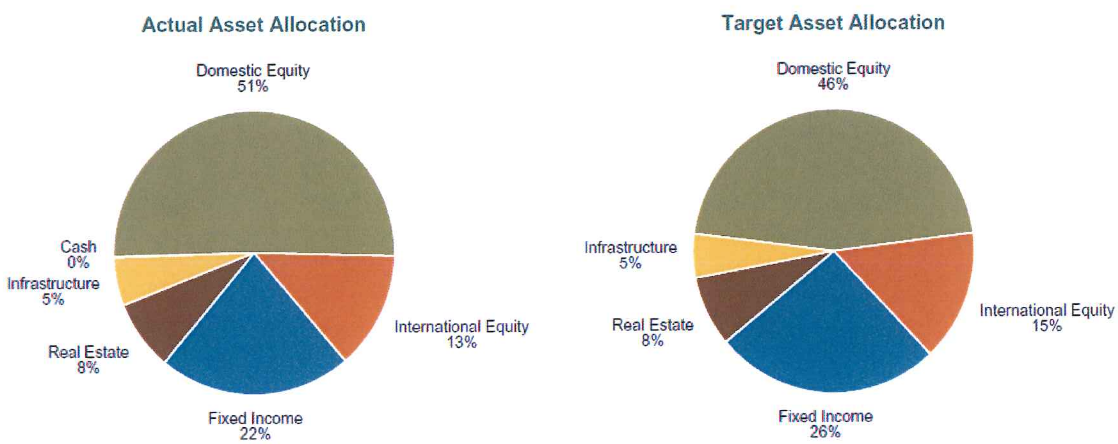
Notice" from the SEC regarding the valuation of securities in the actively managed ETF vehicle of the PIMCO Total Return strategy. This does not mean that they are guilty, only that the SEC is doing an evaluation and analysis. The potential concern is that PIMCO was buying difficult-to-value non-agency MBS in small sizes ("odd lots") at cheap prices and then valuing these securities at higher prices for the purposes of calculating a NAV for the ETF and calculating performance. In August 2015, Aberdeen Asset Management PLC announced the acquisition of Arden Asset Management LLC, a hedge fund manager. The acquisitions of Arden and FLAG are part of a larger effort to grow and broaden Aberdeen's global alternatives platform to better serve their clients.

Michael Hermanson commented, the activity in the private equity space has for been minimal, but the activity has picked up recently.

Mr. Weightman explained there have been a lot of institutions looking to invest in private equity; for TSRS to do this, the Board would need to be comfortable with the amount of liquidity needed in the fund to be able to do so. The main reason is clients are looking at expected returns from asset allocation modeling over the next 10 years and it does not seem like they will get 7.25% returns, so they think investing in private equity is a way to close that gap.

Actual vs Target Asset Allocation
As of June 30, 2015

The top left chart shows the Fund's asset allocation as of June 30, 2015. The top right chart shows the Fund's target asset allocation as outlined in the investment policy statement. The bottom chart ranks the fund's asset allocation and the target allocation versus the Public Fund Sponsor Database.



Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Domestic Equity	374,186	50.9%	46.0%	4.9%	35,871
International Equity	98,860	13.4%	15.0%	(1.6%)	(11,460)
Fixed Income	162,948	22.2%	26.0%	(3.8%)	(28,274)
Real Estate	58,760	8.0%	8.0%	0.0%	(77)
Infrastructure	40,220	5.5%	5.0%	0.5%	3,447
Cash	493	0.1%	0.0%	0.1%	493
Total	735,468	100.0%	100.0%		

Looking at the actual asset allocation vs. the target asset allocation for the Total Fund, all managers are within rebalancing ranges though domestic equity is high, fixed income is low, and international is about 2% low. Earlier this year the Board completed an asset allocation and liability study and decided to add money to non-US equity, hire an international small cap manager, and subsequently decided to hire transition managers to facilitate the whole process, which will occur soon. There is a new target asset allocation that has US equity at 34%, non-US equity at 25%, fixed income at 27%, real estate at 9%, and infrastructure at 5%.

For the quarter ended 6/30/15 the market value of the portfolio declined by $5.7M, the investment return was positive, up 0.62% (net of fees), and there were outflows of $10.1M. PIMCO Stock Plus (0.00%) trailed the S&P 500 in the quarter (0.28%); they invest in future S&P 500 futures contracts, take the collateral from that and invest in short duration fixed income securities, interest rates went up which brought them down a little bit, but they have added value over the last 3 years. T. Rowe Price has been a very strong manager for the Board as the large cap growth manager. They hold 72 stocks, and last fiscal year and they were up 11.93%, after fees, vs. the index at 10.56%. For Champlain, the expectation as a full market cycle is seen they will outperform. Pyramis small cap is up 14.24% vs. the index at 6.49%. International equity is the weak spot within the Board's portfolio, over the last year the composite is down at -6.46% vs. the benchmark down at -5.26%, for an underperformance after fees of 1.2%. All of that is attributable to Aberdeen. Callen has looked deeply into Aberdeen's portfolio because of how poorly they have been performing. Earnings growth in the non-US equity market is a major driver of returns and Aberdeen is largely absent that factor. They look at things like price to book, price to earnings, and stocks that have been selected based on those metrics have tended to underperform. With the Board's new investment policy, more money will be added to Aberdeen. If the Board thinks that Aberdeen is still a good manager this is a rebalancing opportunity. But, it is also easy to lose confidence in the capabilities of Aberdeen. He recommended sticking with Aberdeen because nothing has changed from a philosophy or implementation perspective. Historically their process has worked and they are just in a period where it is not working. If they change their philosophy and implementation it could cause alarm because they could capitulate at the wrong time. PIMCO manages 2/3 of the Board's bond portfolio in a separate account structure with a specified benchmark, with a target of 25% mortgages, 25% credit, 25% high yield, and 25% emerging market debt. Their short duration helped them in the quarter, but what hurt them was that they had some exposure on the short end of the yield curve and exposure on the long end. The long end exposure hurt them as interest rates rose. They also have a long dollar bias, they hedge currency within this portfolio as they see fit, and hedged against the Euro which rose in the quarter. The Board now has to look back 5 years to see outperformance from PIMCO (5.10% vs. 4.99% index). Over the long term, PIMCO has been a very good manager for TSRS, so Mr. Weightman did not believe anything needed to be adjusted. The JP Morgan Strategic Property Fund has trailed after fees over the last year vs. the index, however they are more conservative than the peer group. They are leveraging at 26.5% of return and saw a return of 12.28%; more leverage will substantially improve the return. The role of real estate within the Board's portfolio is to act as a diversifier against equity and bond portfolios. The Incoming Growth Fund is more aggressive than the Strategic Property Fund, which has 40% leverage. They returned 14.7% over the last year and 15.9% over the last 3 years. Those are very strong returns for real estate after fees.

Acting Chairman Coffey asked about the mechanism to discuss and potentially remove Aberdeen from the Board's portfolio.

Mr. Weightman answered the mechanism was the Investment Policy Statement, recently reviewed and adopted by the Board. There are evaluation criteria for managers, qualitative and quantitative, but it is really left to the judgment and conviction of the Board. One thing the Board would have to be confident in, if they decided to make a switch with Aberdeen, is that they could select a manager that could then outperform. He has seen many times that if performance is used as an indicator to make that decision often times the manager is hired at the top of their cycle and the first 3 years performance is often negative.

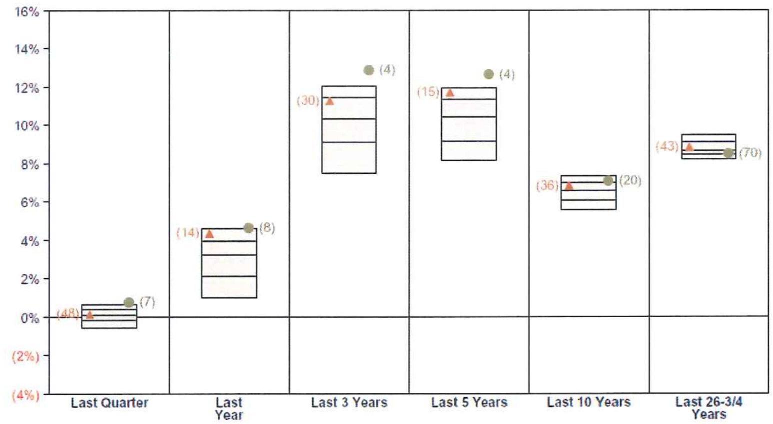
Michael Hermanson asked if Callan could provide a report on Aberdeen next quarter so that the Board could have more information on this manager.

Mr. Weightman answered this could be achieved in several ways. Aberdeen representatives could come in to present to the Board again, Callan international equity specialists could come and present to the Board regarding Aberdeen, or they could write up a detailed report and send it to the Board.

The Board asked for a detailed report from Callan.

Mr. Weightman moved on, directing the Board to look at the peer group ranking chart on page 40 of the presentation materials.

Performance vs Public Fund Sponsor Database (Gross)



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 26-3/4 Years
10th Percentile	0.64	4.57	12.03	11.93	7.35	9.47
25th Percentile	0.39	3.94	11.46	11.35	6.98	9.11
Median	0.10	3.21	10.30	10.42	6.57	8.63
75th Percentile	(0.18)	2.10	9.08	9.17	6.07	8.46
90th Percentile	(0.58)	1.01	7.46	8.13	5.53	8.18
Total Fund ●	0.76	4.63	12.86	12.64	7.07	8.48
Total Fund Benchmark ▲	0.14	4.34	11.27	11.70	6.82	8.82

Despite the struggles of Aberdeen and PIMCO, the Board's peer group rankings have been great over the last 5 and 10 years. The floating bar charts capture the 10th to 90th percentiles of distribution of returns for public funds. In the last year, the Board did not achieve the 7.25% target returns, but they were in the 8th percentile of all public fund sponsors at 4.6%. The median for the range of returns was 3.2%.

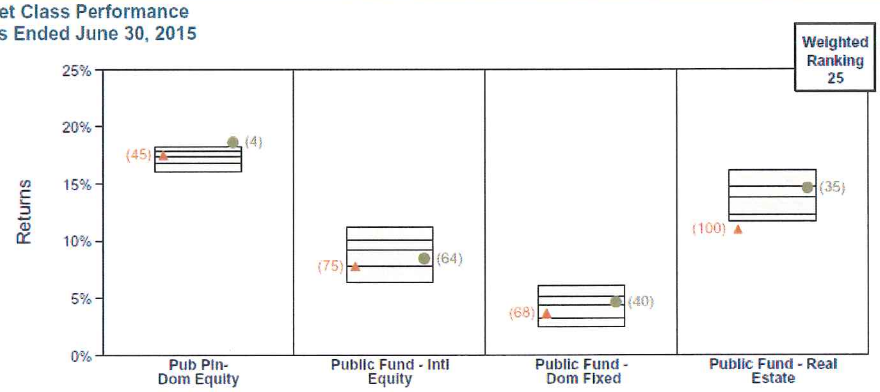
Mr. O'Hare asked how many public funds were in the population.

Mr. Weightman answered it was well over 100.

Mr. O'Hare asked if Public Funds were able to obtain the same managerial talent as the other funds competing with them.

Mr. Weightman explained the Board's domestic equity portfolio has attained 18.6% over 5 years, which is 4th percentile and the median is 17.4%. The benchmark has been in the 45th percentile while the Boards portfolio has been in the 4th, so the Board in aggregate has managers that outperform. Public funds have access to the best investment managers in the world and small cap is a place where there has been outperformance while large cap has not been, though that is not true for the Board's portfolio. He summarized the floating bar chart showing the Boards 5 year asset class performance.

Total Asset Class Performance
Five Years Ended June 30, 2015



	Pub Pln- Dom Equity	Public Fund - Intl Equity	Public Fund - Dom Fixed	Public Fund - Real Estate
10th Percentile	18.27	11.17	6.09	16.15
25th Percentile	17.84	10.09	5.07	14.74
Median	17.41	9.20	4.35	13.74
75th Percentile	16.84	7.81	3.16	12.21
90th Percentile	16.06	6.33	2.49	11.64
Asset Class Composite ●	18.62	8.43	4.61	14.58
Composite Benchmark ▲	17.49	7.76	3.62	10.94

Acting Chairman Coffey asked if the Public Fund Sponsor Database was a creation of Callan's.

Mr. Weightman answered yes; all the peer groups are maintained and controlled by Callan. They freeze them quarterly to eliminate any survivorship biases, and they buy data to supplement the data provided by Callan clients and make it a more robust peer group. Even though a lot of time was spent on the managers who have not been performing there was a lot of good news in the quarterly report. It is very rare to find a manager who outperforms in all markets.

5. TSRS Portfolio composition, transactions and performance review for 07/31/15

Silvia Navarro reported as of 7/31/15 the total portfolio value was $742M, as of 8/26/15, it was $717M.

Calendar YTD returns – thru the end of July, the Total Fund returned 4.07% vs. the Custom Plan Index at 2.96%; Total Fixed returned 1.38% vs. the Barclays Aggregate at 0.60%; Total Equities returned 4.88% vs. Equity Composite at 4.06%; Total Real Estate returned 9.13% (no index avail. yet); Total Infrastructure returned -0.92% vs. the CPI +4% at 3.98%.

Fiscal YTD returns – As of 7/31/15 the Total Fund returned 1.16% vs. the Custom Plan Index at 0.89%; Total Fixed returned 0.61% vs. the Barclays Aggregate at 0.70%; Total Equities returned 1.55% vs. the Equity Composite at 1.37%; Total Real Estate returned 0.61% (no index avail. yet); and Total Infrastructure returned -0.44% vs. the CPI +4% at 0.33%.

Trailing One Year Returns – As of 7/31/15 the Total Fund returned 6.90% vs. the Custom Plan Index at 6.77%; Total Fixed returned 2.07% vs. Barclays Aggregate at 2.82%; Total Equities returned 8.81% vs. the Equity Composite at 7.83%; Total Real Estate returned 13.22% vs. the NCREIF at 14.43% (as of 6/30/15); and Total Infrastructure returned -2.64% vs. the CPI +4% at 4.18%.

$2M was transferred into the pension fund to pay for retiree benefits for the month of July.

C. **Disability Retirement Application – Gina Callen***

A motion to enter executive session was made by Curry Hale, 2nd by Silvia Amparano, and passed by a vote of 4 – 0 (Chairman Fleming and Kevin Larson absent, Acting Chairman Coffey did not vote).

A motion to return to regular session was made by Curry Hale, 2nd by Jorge Hernández, and passed by a vote of 4 – 0 (Chairman Fleming and Kevin Larson absent, Acting Chairman Coffey did not vote).

A motion to approve the disability retirement application of Gina Callen was made by Curry Hale, 2nd by John O'Hare, and passed by a vote of 4 – 0 (Chairman Fleming and Kevin Larson absent, Acting Chairman Coffey did not vote).

D. **Administrative Discussions**

1. Discussion of treatment for non-trust related expenses

Michael Hermanson explained this was an informational item. On occasions, the retirement office is asked to support activities that are unrelated to the trust, for example administering the 457 defined benefit plan, but the plan is reimbursed for the expenditures related to those tasks. Currently, the PSPRS 401a program has requested the retirement office to provide support on implementing a new program for member of the Arizona PSPRS, and there are hard costs incurred for services provided by outside council in this endeavor. These services will be billed to PSPRS not TSRS.

Silvia Amparano clarified that the PSPRS Board voted to add a 401a deferred compensation option. Since the retirement office is responsible for making sure the City is in compliance with the IRS and other entities, Mr.

Hermanson reached out to Catherine Langford, the outside council utilized by the TSRS Board, for guidance on the 401a and any restrictions. Ms. Langford billed the City, Mr. Hermanson questioned who should be billed, and the decision was made that the bill should go to PSPRS not TSRS.

Dave Deibel explained that Ms. Langford has been retained by the City but has assisted in various areas like TSRS and HR. The City sends the bills to the specific departments so TSRS will not be paying the bill for PSPRS.

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

1. The Balance between Crude Oil Supply and Demand (Causeway Capital Management , August 14, 2015)
2. NIRS bites back on pensions report (Employee Benefit Adviser, August 20, 2015)

Michael Hermanson explained the article on oil supply around the world may be interesting for the Board members. The second article specifically refers to information flowing through the media about the advantages of a defined contribution plan over a defined benefits plan in terms of their cost effectiveness. This article demonstrates the significant cost advantages defined benefit plans have over defined contribution plans and refers to the article included in your packets last month entitled: *Still a Better Bang for the Buck*.

F. **Call to Audience**

Curry Hale formally introduced Rebecca Hill as the Interim Human Resources Director effective 9/2/15.

Rebecca Hill expressed excitement over participating and has some experience with 401k and other retirement fund administration.

A motion to thank Curry Hale for his service as a TSRS Board member was made by Silvia Amparano, 2nd by John O'Hare, and passed by a vote of 4 – 0 (Chairman Fleming and Kevin Larson absent, Acting Chairman Coffey did not vote).

G. **Future Agenda Items**

John O'Hare requested a future agenda item for the TSRS budget cycle report.

Adjournment

A motion to adjourn the meeting was made by John O'Hare, 2nd by Curry Hale, and passed by a vote of 4 – 0 (Chairman Fleming and Kevin Larson absent, Acting Chairman Coffey did not vote).

Meeting adjourned at 10:31 AM.

Approved:

Robert Fleming Chairman of the Board	9/24/15 Date	Michael Hermanson Plan Administrator	09-24-15 Date