TUCSON SUPPLEMENTAL RETIREMENT SYSTEM
BOARD OF TRUSTEES

Regular Meeting Minutes-Thursday, June 5th, 2014
Finance Department Conference Room, 5th floor East
City Hall, 255 West Alameda
Tucson, Arizona 85701

Members Present:	Robert Fleming, Chairman Kevin Larson, CM Appointee Silvia Amparano, Director of Finance Karen Tenace, Elected Representative Eric Kay, Elected Representative Tameron Collins, Designee for Human Resources Director John O'Hare, Elected Retiree Representative
Staff Present:	Amanda Celaya-Brown, Administrative Assistant Michael Hermanson, Pension Administrator Allan Bentkowski, Treasury Finance Manager Kelly Gottschalk, Assistant City Manager Silvia Navarro, Treasury Administrator
Guests Present:	Jay Kloepfer, Callan Associates Gordon Weightman, Callan Associates Paul Erlendson, Callan Associates Leslie Thompson, Gabriel Roeder Smith & Company Darren DaRanco, AZ Daily Star
Absent/Excused:	Michael Jesse, Lead Management Analyst Dave Deibel, Deputy City Attorney Jenefer Carlin, Retiree Representative Curry Hale, HR Director

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

B. **Consent Agenda Ratification for May 29th meeting**
   1. Approval of April 24th Board Meeting Minutes
   2. Retirement ratifications for the month of May 2014
   3. December 31, 2013 and March 31, 2014 TSRS Financial Statements
   4. May 2014 TSRS Expenses

Motion to approve Consent Agenda from May 29th Board Meeting made by Kevin Larson, 2nd by Eric Kay. Motion passed 7-0.

Introduction of items C & D*; Pension Administrator Michael Hermanson wanted to give board members and staff key points to keep in mind during the discussions of the five year Asset Liability and Actuarial Historical Experience studies being presented by Callan and GRS:*

- The majority of today's discussion will focus on the question of whether the assumed Investment return Rate for TSRS will remain at its current 7.75% rate, or move to a lower rate at 7.50% or 7.25%, or something in-between. (Remember, we have both short and long term views to consider from the Actuary and our Investment Consultant, as well as our own actual investment performance for perspective).
- The Actuary will ask the Board to confirm all other recommended assumption changes for the Plan's future valuations (beginning with June 30, 2014). By comparison, if the investment return assumption is excluded, the other assumption changes have a minimal effect on the Plan.

- Other than Plan design, the investment rate assumption is the most significant cost component to the Plan; due to its effect on benefit payments that extend far into the future, which in turn impacts the Plan's liabilities, contribution rates and ultimately the overall cost of the Plan to its members and taxpayers.
- Today's discussion considers the 10 year investment projections using current asset allocations and variations to the current investment policy, that have been determined from their Asset/Liability study, which will be presented by Callan (see **page 15** affects to our future investment policy allocation targets). These projections indicate a 6.8% 10 year geometric mean return, but that projection is only based on indexed, passive manager performance, which does not add anything for active management premium (alpha). The majority of TSRS investment managers are active managers, so the premium adds a range of 75-150 basis points to passive performance.
- A longer term perspective is shown in the Actuary's Historical Experience Study on page **14 and page 15** and incorporates anticipated volatility effects. In doing this, they are seeking to determine an average expected **real** return by surveying 8 different consultants about what they think the expected long-term real returns will be.
- Also, remember that the Actuary refers to investment returns net of inflation, so in their world; the Investment Consultant and the Actuary look at these two issues independently/separately to determine a "real" rate of return. The real return assumption used in our last valuation for June 30, 2013 used a 7.75% investment return, an inflation rate of 3.5%, or a real return of 4.25%. In contrast, the FY14 future valuations will use a 7.25% investment return, a 3.00% inflation rate, resulting in a real return of 4.25%.
- If the Board consensus indicates our investment return should be reduced to 7.5%, without a change to the inflation, the Plan's real return would increase to 4.5%. The Actuary advises on **page 17** that a 7.5% investment return would be the upper limit assumption, and further, the Actuary refers back to Callan's Asset Mix 4, which projects a real return of 4.55%, slightly higher than the Actuary's real return assumption of 4.25%.
- The Actuary has recommended a rate of 7.25%. In staff discussions prior to this meeting, Leslie indicated a rate of 7.5% would also be acceptable. The actuary has projected (based on last year's valuation dated 6/30/2013), this rate of return assumption will increase TSRS Unfunded Liabilities by $46.7 million, reduce the funded ratio from 63.3% to 60.4%, and increase the normal cost contribution rate by 1.2% and the amortization cost by 1.89%. All of which will add about $4m to the contribution requirements for the Plan compared to FY14. A rate change to 7.5% produces about ½ of those results. However, the plan is well positioned for this change, with deferred investment gains standing at about $41m from FY13 investment performance, and that gain will help lower the expected annual increase associated with changing the assumed earnings rate.
- Finally, for perspective, the TSRS portfolio produced a return of 14.25% (net) for FY13, and has so far clocked a 14.91% return (net of fees) through April 30 of this year. Over a 32.5 year period, Callan indicates the fund has returned 9.87% gross through 3/31/14.

That ends my preliminary comments on today's discussions, thank you.

C. **Administrative Discussions**

1. **Callan's 2014 Asset Allocation and Liability Study: Phase 1**
   a. General Overview of the Study
   b. Callan's Capital Market Return Expectations during the next 5 -10 years
   c. Impact of Maintaining Current Contribution Rates for Extended Period
   d. Discussion of Current Asset Classes and Policy Targets
   e. Discussion of New Asset Classes, Targets, Opportunities

Jay Kloepfer, Callan Associates Director of Capital Markets Research, began discussing the five year Asset Liability Study results, briefly explaining that Callan's process projects earnings over a short term period, using a 10-year outlook because that period represents a medium term capital market cycle. Callan utilizes the rate assumption recommended from the Actuary's historical experience study and completes multiple cash flow analyses to see if the sustainability of the fund is affected, and to determine the degree of volatility, because that can affect how the plan assets are invested. One of the major challenges in this study requires an analysis of the investment policy and allocation targets, keeping an eye on how much is invested in "risky assets"; or investments with managers that have liquidity restrictions (i.e., in our current structure, the Real Estate & Infrastructure allocations). A principal goal in the Asset/Liability study determines the range of possibilities for current asset allocations and whether any changes to the asset allocation targets would be beneficial or appropriate to the Plan's funded status.

Referring to **page 4** of the study, Jay points to the importance of understanding the Plan's funding and contribution rate policy because that can help determine the optimum asset allocation to achieve the desired match between absolute investment returns and acceptable levels of risk. On **page 12,** Jay refers to a chart showing capital market return projections on asset classes over the next 10 years for equities, fixed income and other alternative investments. Callan also determines an inflation assumption over the next 10 years, at 2.25% with a 95% confidence (the Actuary assumes 4.25% over a longer, 30 year period, but also acknowledges they can be adjusted over a shorter five year time period, when the next historical experience is scheduled for the plan year ending June 30, 2018).

Page 15 shows Callan's 10 year capital markets forecast for TSRS at 6.8% annually using our current policy allocation targets, but that does not include any assumed returns for active management premium, which would add an average of 75 basis points annually. Adding the active manager premium would put these projections at 7.55% annually. Subtracting future inflation expectations from the 10 year geometric mean return projections provides a projected real return at 4.55% (6.8% - 2.25%).

Pointing to asset mixes 1-5, Jay reminds us that asset allocations are important as the primary determinant of investment return and asset volatility. In general, as you move from the Mix 1 to 5 asset models, you can see how the geometric mean returns and volatility changes from less to more aggressive asset allocations. Our current policy lies congruent with Mix 4, matching the TSRS real return from our current allocation policy exactly, and producing a 4.55% real return, net of inflation. Contrasting Callan's forecasts to the Actuary's economic assumptions from the Historical Experience Study **page 5**, shows a real return at 4.25% (7.25% - 3.00% inflation). Final note: it's difficult to get to a Mix that shows 7.5% over the next 10 years, given Callan's expectations for stocks, bonds and the other asset classes and, it's noteworthy that they add nothing in their projections for active management premium.

While return expectations are lower for the next five to ten year horizon, Callan does not believe the risk/return posture of the Plan should be radically changed. TSRS will need to retain a strong orientation toward risk assets (equity) in pursuit of returns to achieve its funding goals. A couple of highlights comparing current asset policy to the Mix 4 alternative suggested in the optimization models: current TSRS investment policy target shows 15% allocated to non-US equity and 46% to US equity. Optimizing with Mix 4 suggests reducing US equity exposure by 12%, allocating a 10% increase to non-US equity up to 25% and increasing Real Estate by 1% and US fixed income by 1%.

2. **2014 Actuarial Historical Experience Study**
   a. Highlights of Recommended Assumptions
   b. Adoption of Demographic Assumptions for Valuations dated July 1, 2014
   c. Projected Effect of Change in Investment Return Assumption on Unfunded Liabilities, Contribution Rates, Funded Ratio
   d. Adoption of Investment Return Assumption for Valuations dated July 1, 2014

Leslie Thompson our Actuary from GRS, directs board members to **page 5** of the DRAFT Actuarial Experience Study for the five year period ended June 30, 2013. The recommended changes from the current actuarial assumptions are shown on this page, starting with inflation. The Actuary's recommendations from this study indicate the inflation assumption be reduced from 3.5% to 3.00% as inflation expectations are lower in the near term, and the nominal investment return assumption is recommended to be reduced from 7.75% to 7.25%. These two adjustments produce a net "real" return of 4.25% after subtracting inflation. Salary growth is reduced from 3.50% to 3.00%. This change decreases average future pay increases and assumed total payroll growth. In addition, upgrading mortality tables from the 1994 GAM table to the RP 2000 scale are recommended; Leslie pointed out this is an area that continues to change, and a new table will be out and change again in 5 years with the next experience study. Leslie states that her 1st and clearest conclusion is that we need to move off of the 7.75% investment return assumption to something lower. Although her study indicates a recommendation at 7.25% she indicated that she would not be distressed if the board chose to move it to 7.5%. Although the investment return is a long-term assumption, it does not mean we have to live with these numbers for the next 80 years, because the Board's practice is to review the Plan's actual experience every five years and consider changes to the assumptions at that time.

Leslie also indicated other possible alternatives to the investment return assumption change, including "phasing" in the adjustment to 7.25% over a 1-5 year period, if everyone agrees on that rate. Plan Administrator, Michael Hermanson, wanted to interject a couple of reminders to the Board; in 2003, when the historical experience recommendations were reviewed, the Board voted to move the investment return rate from 8.0% to 7.75%. At that time, the Board was ahead of the curve from other plans across the nation. In 2008, no changes were recommended, but that study occurred before the full effect of the credit market crash became known. To which Leslie commented that it is completely directionally proper to step down; but the question remains, how far down should we step?

Assistant City Manager, Kelly Gottschalk, posed the question if we can adopt a 7.5% now and then do a step-down to the 7.25% in the next year or two, to which the Actuary answers that it can be done, but she did not recommend it. Kevin Larson asks the Actuary what the difference between 7.5% and 7.25%, from a practical standpoint. Leslie points to the chart on **page 35** of the Actuarial Experience Study. The chart compares total calculated contribution's using the current 7.75%, 7.5% and the recommended 7.25% discount rate. However, remember these results use last year's valuation (June 30, 2013), so this gives you a sense of direction, but precise results won't be known until the new assumptions are incorporated with actual investment results from the June 30, 2014 valuation. The chart indicates total plan contributions would rise from $41.48M to $45.55M (employee and employer contributions combined).

Leslie's final comments to the Board on this subject: If I were a Board member making this decision, I would want an Asset Mix that would keep the expected rate of return the same and would not want to do anything that raises the standard deviation for the portfolio. Also she would not reach for more risk at the moment and that the big difference between the Actuarial real return and Callan's projections can be found in the inflation rate, because the Actuarial study looks at a longer term than Callan's 10-year outlook. One other comment: anytime you can lower the investment risk and keep returns the same, you are getting more for your money because risk is what you spend in order to get return, and Portfolio Mix 4 provides the same estimated returns with lower risk (**page 15** of the A/L Study).

Kelly Gottschalk asks the actuary what the projected City contribution is on the 7.25%. Referring to handout (from the June 30, 2013 valuation baseline), the current 27.5% rate would rise to 30% for the Employer.

Chairman Fleming suggests we start by entertaining a motion based on the Actuarial Assumptions. **Kevin Larson made a motion to accept all of Actuary's recommendations, including the 7.25% return, 2nd by Karen Tenace**. Karen Tenace comments that she is comfortable with all the assumptions but is leaning more to the 7.5% rate, rather than the 7.25% because of the Board's rounding policies put in place for FY15, and the rounding policy is already providing a modest increase in funding to the plan. Silvia Amparano also mentions she would prefer to phase in the change and then consider moving it down to 7.25% in a couple of years. Kevin Larson states that he chose 7.25% because it is a more conservative assumption and will provide an incremental funding increase to help address the unfunded liabilities that are currently at about $350 million (**page 34** - Actuarial Experience Study). **Motion passed 4-3 (Karen Tenace, Silvia Amparano and Tameron Collins opposed. Split vote, Chairman Fleming voted aye).**

Next, the Board discussed adopting the recommended investment policy change recommended from Callan's Asset/Liability study. **John O'Hare moved** to direct Callan to proceed with exploring "Mix 4" shown in the Asset Liability study just completed, which has the effect of reducing the Domestic (US) Equity Manager allocations (in total) by 12%, reallocating that by increasing the International (Non-US) Equity Managers by 10%, Fixed Income managers by 1% and Real Estate managers by 1%, **2nd by Kevin Larson. Vote was unanimous. Motion passed 7-0.**

D. **Investment Activity Report**

1. 03/31/13 Investment Performance – Executive Summary Review – Callan Associates

Gordon Weightman indicated that if any Board members have a specific concern on one of the managers requiring further review or discussion, there is a more detailed report Callan provides, but for this conversation, please refer to the Executive Summary Review provided. Aberdeen has bounced back, they had underperformed during the 7 quarters we have had them, but their long-term track record is outstanding. They had a great quarter and are starting to make up some of that underperformance gap. LaSalle, one of our Real Estate managers, is projecting a net IRR (Internal Rate of Return) over the lifetime of the fund of -5.7%. They are currently liquidating and selling properties aggressively to close out by the end of 2014 and final distributions will occur. TSRS has about $2.5M remaining with LaSalle.

Page 25 indicates 3/31/2014 TSRS total fund performance vs. a public fund sponsor database, showing that TSRS has outperformed other sponsors over various periods. Over the past year, we were 2nd in a group of approximately 200 plan sponsors, returning 16.56%. Paul Ehrlendson indicated that although TSRS investment absolute performance has been quite good over the past 3 years, (30th percentile) it is unlikely that those high rates will continue, as discussed in the Asset Liability Study results. You can argue that now is the time to diversify that equity exposure even further. Gordie refers to page 14 to look at fiscal year gross performance at 15.19% through March 31. With the exception of FY 2012, TSRS far exceeded the return expectations for the past five years following 2008. Overall, active management has been solid.

2. TSRS Portfolio composition, transactions and performance review for April, 2014

Allan Bentkowski reported Plan assets under management at 4/30/14 were at $711.8M. This compares to a net asset value of $713.1M on 3/31/14 and $719.3M as of 6/4/14. On 5/29/14 the Plan hit an all-time high of $720.1M. All investment managers and asset classes are within their investment policy range percentages.
Activity: On 4/29/14 we moved $2.2M out of the BlackRock Value account to the investment pool account for Fund 072 to meet the monthly short fall between pension contributions and retirement benefit payments. A total of $20.7M has been transferred out this FY through April 30th. Preliminary cash flow projections indicate another $2.2M will be transferred for May (transferred 5/30) and for June, bringing the total to $25.1M for FY 2014.

Performance: total returns for the month of April were fairly flat, returning just 0.13% vs. 0.48% for the Custom Plan Index. T. Rowe Price had its second consecutive month of underperformance of -3.09% vs. 0.0% for Russell 1000 Growth Index benchmark (mostly due to Tech. stock holdings).

Calendar YTD – (Through April, 30 2014) Total Fund returned 1.96% vs. 2.30% for the Custom Plan Index. Total Fixed Income returned 3.24% vs. 2.70% for the Barclays Aggregate. Total Equities returned 1.23% vs. 2.01% for the Equity Composite. Real Estate returned 3.24% vs. 2.47% for the NCREIF-ODCE Index (through 3/31/14) and Infrastructure returned 3.75% vs. 3.06% for the CPI+4% Index.

Fiscal YTD – Returns remained strong through 4/30/14 with the Total Fund returning 14.91% net of fees vs. 13.18% for the Custom Plan Index, due in large part to the Plan's Equity Managers which returned 19.84% vs. 19.27% for the Equity Composite, plus the positive returns from the Fixed Income Real Estate and Infrastructure managers.

E. **Call to Audience** – None heard.

F. **Future Agenda Items**
1. Philosophy of contribution rates discussion – Board retreat item

G. **Adjournment – Kevin Larson moved to adjourn meeting, 2nd by John O'Hare. Motion passed 7-0. Meeting adjourned at 10:38 AM.**

Approved:

[signature] 6/26/14 [signature] 06-26-14

Robert Fleming | Date | Michael Hermanson | Date
Chairman of the Board | | Plan Administrator |