

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

DATE: Thursday, April 28, 2016
TIME: 8:30 a.m.
PLACE: Finance Department Conference Room, 5th floor
City Hall, 255 West Alameda
Tucson, Arizona 85701

A. Consent Agenda

1. Approval of March 31st, 2016 TSRS Board Meeting Minutes
2. Retirement ratifications for April 2016
3. March 2016 TSRS Budget Vs Actual Expenses

B. Disability Applications *

1. Robyn A. Scott
2. Frank Yslas
3. Stephen J. Arnoldi
4. Gilberto Robles

C. Investment Activity Report

1. TSRS Portfolio Composition, Transactions and Performance Review for 03/31/2016
2. Review and Approval of New Portfolio Composition, Transaction, and Performance Reports

D. Administrative Discussions

1. Report from Board Member on 2015 Fall Public Funds Forum
2. 50/50 Split Employee/Employer Contributions for New Hires
3. Volkswagen Securities Litigation Update

E. Articles for Board Member Education / Discussion

1. Causeway Analysis -The Value Reversion

F. Call to Audience

G. Future Agenda Items

1. Education Plan for New Staff and Trustees
2. Duties and Selection of Advisory Board
3. Hiring an Intern to Free Staff for Education
4. TSRS Board Annual Evaluation of Staff and Consultants
5. Formal Evaluation of Active Managers – 1.5% over benchmark over a given period
6. RFQ for Actuarial Services
7. Action Plan for Black Swan Events
8. Would It Be Better to Index the Whole Fund

H. Adjournment

Please Note: Legal Action may be taken on any agenda item

*Pursuant to ARS 38-431.03(A)(3) and (4): the board may hold an executive session for the purposes of obtaining legal advice from an attorney or attorneys for the Board or to consider its position and instruct its attorney(s) in pending or contemplated litigation. The board may also hold an executive session pursuant to A.R.S. 38-431.03(A)(2) for purposes of discussion or consideration of records, information or testimony exempt by law from public inspection.

TUCSON SUPPLEMENTAL RETIREMENT SYSTEM BOARD OF TRUSTEES MEETING MINUTES

DATE: Thursday, March 31, 2016
TIME: 8:30 a.m.
PLACE: Finance Department Conference Room, 5th floor
City Hall, 255 West Alameda
Tucson, Arizona 85701

Members Present: Robert Fleming, Chairman
Betsey Conroy, Deputy HR Director
Silvia Amparano, Director of Finance
Michael Coffey, Elected Representative
John O'Hare, Elected Retiree Representative

Staff Present: Dave Deibel, Deputy City Attorney
Neil Galassi, Pension Administrator
Silvia Navarro, Treasury Administrator
Art Cuaron, Treasury Finance Manager
Dawn Davis, Administrative Assistant

Guests Present: Ronald Taylor, T. Rowe Price
Kenneth Brooks, T. Rowe Price
Ethan Hugo, Fidelity Investments
Sue Curran, Fidelity Investments

Absent/Excused: Kevin Larson, City Manager Appointee
Jorge Hernández, Elected Representative

Chairman Fleming called the meeting to order at 8:33 AM.

A. Consent Agenda

1. Approval of February 25th, 2016 TSRS Board Meeting Minutes
2. Retirement ratifications for February 2016
3. Retirement ratifications for March 2016
4. February 2016 TSRS Budget Vs Actual Expenses

Chairman Fleming asked for a vote on the approval of the Consent Agenda. The Consent Agenda was approved by a vote of 4-0 (Kevin Larson and Jorge Hernández absent/excused, Chairman Fleming did not vote).

B. Investment Activity Report

1. Annual Manager Review – Fidelity – Ethan Hugo, CFA & Sue Curran

Chairman Fleming asked Mr. Hugo and Ms. Curran to allow the questions provided by the Board to shape their presentation.

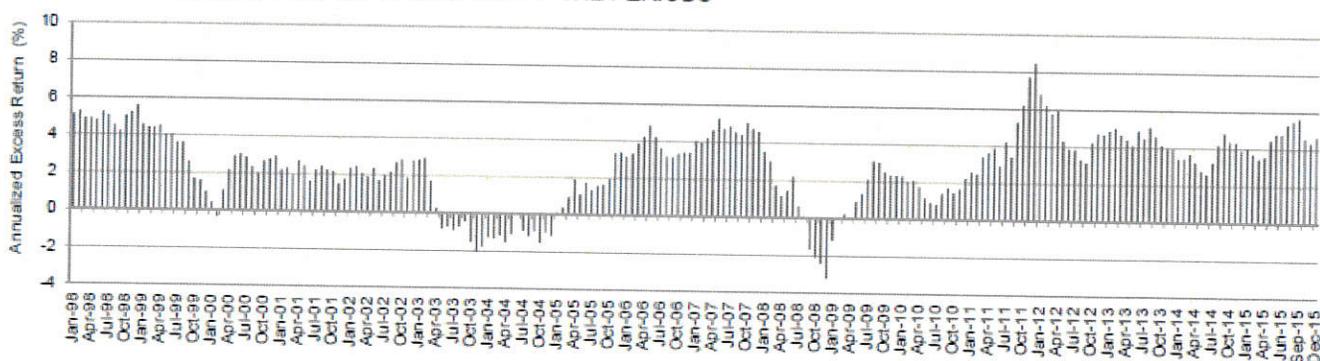
Ethan Hugo stated the firm had changed their name from Pyramis to Fidelity Institutional but there was no change to process or personnel. The Small Cap Core strategy was closed to new investors at just under \$3B in

It is fundamentally better to reevaluate each and every stock and ask whether that thesis still stands, and sometimes they end up selling down stocks.

To discuss the market environments in which Fidelity would outperform and underperform, the Board was directed to view the table on page 19 of the presentation booklet.

Small Cap Core Portfolio—Performance Consistency (Gross)

ROLLING 3 YEAR ANNUALIZED EXCESS RETURN VS. R2000
SMALL CAP CORE HAS OUTPERFORMED 88% OF THE PERIODS



Fidelity has generated positive returns relative to the benchmark generally over 3 year periods of time. There are 2 periods of time where the strategy underperformed and in each of those cases there were big inflections in the market; the financial crisis in 2008, and after the post technology, telecom, and media bubble bursting in 2002 and 2003 when it was best to be defensive in the market because it was trending down and high valuation stocks were out of favor. It is difficult to keep over performing when a manager has momentum and the market dynamics change. Fidelity has underperformed year to date mostly due to the fact the portfolio was not turned over aggressively and there was clearly a change in the market dynamics. When there are inflections in the market collateral events take place. For example when energy stocks dropped, high yield spreads widened dramatically because energy was about 15% to 20% of the high yield market. If the portfolio had stocks in consumer discretionary, an area that should benefit from lower energy prices, if there was a lot of leverage on the balance sheet those stocks underperformed. So, there was not a specific type of market environment where Fidelity would over or under perform, but they become concerned when there those types of inflections occur within the market.

The fund had \$2.8B in assets as of 12/31/15, 34 clients, and has been closed to new investors excluding some prospects already in process which will account for several hundred million dollars. They do not try to time the market because it does not add value.

Fidelity believes the outlook for US equity markets in 2016 will be more of the same because there continues to be a focus on global monetary policy. The issues in China are affected by the US because their currency is linked to the US Dollar. Since 2011, when Europe double dipped economically and China began decelerating, in isolation the US economy has been doing well. There has been a headwind in economic growth and corporate profitability from the rest of the world. The market will probably continue to exhibit the kind of volatility recently seen. Whether 2016 is an up or down year will depend largely on what happens in the international markets. The US economy is moving toward late cycle where profits have arguably peaked and unemployment is under 5%, this is difficult to sustain for a long period of time and becomes riskier after about 2 years. If there is not a positive contribution to growth from international economies, the US is fragile and the market could be more negative; on the other hand if the stimulus from Europe helps and China stabilizes the headwind could become a tailwind and the US could continue to have decent growth for a period of time. Over the short term stock prices will be driven by expectations for monetary policy which drives liquidity. The long term will be

Portfolio Manager and an Associate Portfolio Manager managing the assets. If it was that important they would find a way to connect the Board with the Portfolio Manager, using Skype or various technologies, but as a time saving measure T. Rowe Price sends the Portfolio Specialist to these meetings. T. Rowe Price believes it is more important to have the person managing the assets in the office managing those assets, and they believe their 4 and 10 year returns reflect this is a model that delivers value.

Chairman Fleming asked Mr. Taylor and Mr. Brooks to allow the questions provided by the Board to shape their presentation.

Mr. Taylor explained their philosophy was to manage an active large cap portfolio where there is a single decision maker leveraging a fundamental research team with 161 analysts performing fundamental analysis. The analysts make recommendations on stocks that have at least \$5B in market capitalization and can grow earnings at least 12% based on the analysts 3 year projection. Rob Sharps has been the Lead Portfolio Manager for this strategy since its inception in the fall of 2001. Rob Sharps will be promoted to run the Global Equity Group as of January 2017. Taymore Tamaddon will begin transitioning in July 2016 to learn from Rob Sharps and assume responsibility of the large cap portfolio at the beginning of 2017. Performance comparisons for T. Rowe Price US equity group portfolio manager transitions since 2005 shows that new managers manage the strategies as well as, if not better than their predecessors. T. Rowe Price generally promotes their managers from within the firm and the numbers show they manage succession well. The 65 to 75 stock portfolio seeking to outperform the Russell 1000 growth by 200 basis points gross over a full market cycle, 150 basis points net, and this will be consistent even with a new manager.

Chairman Fleming asked if there were any anticipated changes to the research process for the transition.

Mr. Taylor answered no; the process was based on fundamental research and has been in place for 30 years so it was not likely to change.

Mr. Brooks explained when there is a transition the firm calls it a change, but it is not really a change because the person stayed within the organization. While typically names will move it is only 1 or 2 a year which is well below the industry standard.

Mr. Taylor stated with regards to the positioning of the portfolio the emphasis is on stock selection. While the portfolio contains 73 stocks, the top 10 names account for 41.6% of the portfolio. Last year was a good year because the largest holding, Amazon.com, was up 120%. The portfolio had higher returns than normal because it owns a number of stocks that performed well. It is important to remember this is a very focused portfolio, with the 20 largest holdings accounting for 59.3% of the assets. T. Rowe Price is a long term investor with the goal to identify companies that are industry disrupters as a result of their business models and innovation. He gave the example of how Amazon.com was affecting brick and mortar businesses like Target and Walmart, and realizing that trend was long term even though e-commerce only accounted for about 12% of retail sales. Ultimately the focus is on stock selection.

Mr. Taylor discussed the portfolio's sector weightings.

10 LARGEST OVER/UNDERWEIGHTS

Tucson Supplemental Retirement System Relative to the Russell 1000 Growth Index

As of 31 December 2015

10 Largest Overweights	% of Portfolio	% of Index	Difference	10 Largest Underweights	% of Portfolio	% of Index	Difference
Amazon.com	7.6%	2.4%	5.1%	Apple	1.3%	5.7%	-4.4%
Danaher	3.7	0.1	3.6	Walt Disney	0.0	1.7	-1.7
Priceline	4.0	0.6	3.3	Verizon Communications	0.0	1.7	-1.7
Alexion Pharmaceuticals	3.4	0.4	3.0	Home Depot	0.0	1.6	-1.6
Boeing	3.9	1.0	3.0	Coca-Cola	0.0	1.6	-1.6
Visa	4.2	1.4	2.7	PepsiCo	0.0	1.4	-1.4
Allergan	3.1	0.5	2.5	Comcast	0.0	1.2	-1.2
Morgan Stanley	2.4	0.0	2.4	Amgen	0.0	1.2	-1.2
Alphabet	6.4	4.2	2.1	McDonald's	0.0	1.1	-1.1
Intuitive Surgical	2.2	0.2	2.0	Altria Group	0.0	1.0	-1.0

The companies on the left side of the table above are the stocks T. Rowe Price has conviction in, and they own more shares than the benchmark by a significant amount. On the right side of the table are names also in the Russell 1000 growth that T. Rowe Price does not consider growth companies because they were growing at single digit rates and distributing dividends. In the current market environment the names on the right side tend to perform better because they are stocks that perform well in a defensive market.

TOTAL RETURN PERFORMANCE

US Large-Cap Growth Equity Composite

Periods Ended 31 December 2015

Figures Shown in U.S. Dollars

	Three Months	One Year	Annualized			
			Three Years	Five Years	Seven Years	Ten Years
US Large-Cap Growth Equity Composite (Gross of Fees)	9.03%	10.74%	20.69%	15.54%	20.59%	9.97%
US Large-Cap Growth Equity Composite (Net of Fees) ¹	8.89	10.19	20.10	14.97	20.00	9.42
Russell 1000 Growth Index	7.32	5.67	16.83	13.53	17.11	8.53
Value Added (Gross of Fees) ²	1.71	5.07	3.86	2.01	3.48	1.44

Calendar Years	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
US Large-Cap Growth Equity Composite (Gross of Fees)	6.88%	9.41%	-40.39%	54.28%	16.77%	-1.19%	18.51%	45.31%	9.26%	10.74%
US Large-Cap Growth Equity Composite (Net of Fees) ¹	6.35	8.87	-40.7	53.54	16.19	-1.68	17.93	44.61	8.72	10.19
Russell 1000 Growth Index	9.07	11.81	-38.44	37.21	16.71	2.64	15.26	33.48	13.05	5.67
Value Added (Gross of Fees) ²	-2.19	-2.4	-1.95	17.07	0.06	-3.83	3.25	11.83	-3.79	5.07

The tables above show that though they do not always outperform the benchmark T. Rowe Price adds value in a time when investors question whether active managers add value. In markets when investors were risk adverse T. Rowe Price would underperform because investors tended to avoid the highest valued and rapidly

say when the market would be up again, but the environment in which they were operating was difficult due to macro and sector influences; however over a full market cycle T. Rowe Price can add value.

Neil Galassi asked how inflation would affect equity, given the Federal Reserve does not intend to raise interest rates in 2016 and the consumer economy weighting in the top 10 names in the portfolio.

Mr. Taylor answered no one foresaw the magnitude of the collapse in energy prices. They did not foresee much natural inflation given the drop in oil prices. Energy was not a growth sector though money could be made there. The real factor was what happened with global rates, which were trending down. They monitor inflation but the real value of a growth portfolio was that the companies were not necessarily reliant on strong economic growth.

Mr. O'Hare asked, since the positions were so large, did they move the market when buying new stocks, and how much that would hurt a fund this size.

Mr. Taylor answered they track the impact of their buying and selling. The typical position size and type of purchase was between 50 and 100 basis points at the time of purchase. They buy in increments because the T. Rowe Price portfolios, in aggregate, would all be buying or selling the same stock. They also trim stocks as they increase in value.

3. TSRS Portfolio Composition, Transactions and Performance Review for 02/29/16

Art Cuaron said an executive summary had been provided to the Board with the standard reports. The executive summary contained information from both the standard reports provided by staff and the reports from Callan.

Chairman Fleming asked if staff was considering providing both an executive summary and the reports the Board has received in the past.

Mr. Cuaron answered staff would provide any reports the Board requested.

4. Review and Approval of New Portfolio Composition, Transaction, and Performance Reports

Art Cuaron explained the Callan report was comprehensive and included much of the same data provided in the reports previously provided by staff.

Neil Galassi stated the information given in the executive summary was based on the report from Callan. The Callan report was very easy to understand and put into an executive summary format. He asked the Board to provide any input they thought would improve the executive summary.

Mr. Cuaron explained the thought was to place the report and executive summary on the Consent Agenda. Staff would be at the meeting if any board members felt the need to pull the item from the Consent Agenda for questions and discussion. Staff was also willing to put the reports on the website to make them available to the public.

Chairman Fleming asked staff to bring this item back for approval at the meeting scheduled for 4/28/2016.

C. Administrative Discussions

1. Annual TSRS Budget Approval for FY 2017

Silvia Navarro said greater detail had been provided on the budget items as requested by the Board. A breakdown of the Personnel Services budget item was distributed.

John O'Hare asked how the percentage of the 4 TSRS funded position costs had increased from last year.

Silvia Amparano asked if staff should be spending time preparing materials for these items and if so, should the items be scheduled to give staff the time needed.

Mr. O'Hare said since most of the items were his suggestion he could provide staff with more information about why the items were important.

Chairman Fleming asked Mr. O'Hare to select 1 item for the meeting on 4/28/2016 so the Board could see how the process would work out.

Mr. O'Hare requested items F1, F2, and F4.

Chairman Fleming asked whether Mr. O'Hare was proposing separate items to determine whether the Board wanted to discuss them further.

Mr. Coffey stated the Board needed to develop a 2 part process involving determining whether the Board wanted to pursue the item and then direction to staff to prepare the item for further discussion and possible action.

Mr. O'Hare said he thought item F1 was being discussed by Mayor and Council and the Chamber of Commerce which made it important.

Ms. Amparano explained Council Member Kozachik stated he was not willing to pursue it because it would cause recruiting issues. The City recently got away from it because they were having trouble retaining employees due to the policy. This future agenda item list was not meant for the Board to discuss whether they wanted to pursue each individual item; rather they were supposed to prioritize them for discussion at future meetings.

Mr. O'Hare suggested adding items F1 and F2 to the next agenda for full blown discussion and direction to staff.

Chairman Fleming confirmed Mr. O'Hare would submit information on these items to staff for distribution to the Board.

Mr. O'Hare answered yes.

Mr. Coffey asked if it would make a difference if the Board made a recommendation on item F1.

Ms. Amparano answered yes; they could present the Board's recommendation or stance on that item when asked by the Chamber of Commerce, or anyone else, whether they had looked at the information.

The Board decided to add items F1 and F2 to the agenda for 4/28/2016.

Chairman Fleming stated he would push to have the more philosophical items held until the retreat.

Ms. Amparano reminded him he had previously classified item F1 as philosophical.

Chairman Fleming answered he was fine with addressing the item as a response to the Chamber of Commerce.

Neil Galassi advised the Board that there would be between 3 and 5 disability applications on the 4/28/2016 agenda.

Service & Disability Retirements, End of Service Entrants for TSRS Board of Trustees Ratification											
03/10/16 - 04/09/16 - April 2016											
Name of Applicant	Department	Type	Effective Date	Date of Birth	Age	Credited Service	Present Value	Member's Accumulated Contributions	AFC	Option	Pension
Alberto Robles Jr.	Parks and Recreation	Normal Retirement	4/2/2016	5/26/1956	59.85	27.6700	294,938.96	96,329.83	3,610.54	J&S 50%	2,129.44
Cynthia A. Frank	Housing & Community Development	Normal Retirement	4/8/2016	4/6/1954	62.01	17.7700	287,342.97	91,549.94	5,429.23	5 Year Term	2,156.85
Christine M. Rincon	Police Department	Normal Retirement	4/8/2016	1/19/1955	61.22	18.7900	180,093.29	65,285.51	3,170.13	Single Life	1,339.92
Philip E. Damgar	Parks and Recreation	Normal Retirement	4/2/2016	11/23/1959	56.36	26.5300	323,921.68	105,313.59	3,906.15	J&S 100%	2,146.71
Kenneth Snyder	Housing & Community Development	Normal Retirement	3/12/2016	12/23/1961	54.22	25.8500	353,817.07	111,174.65	4,274.16	J&S 100%	2,322.49
Joanne L. Peacher	Library Department	Deferred Retirement	4/7/2016	3/7/1954	62.08	9.93	62,554.66	33,477.48	2,115.12	Single Life	472.61
Ruth Gavin	City Courts	Deferred Retirement	4/4/2016	4/4/1954	62.00	8.78	83,786.53	24,282.07	3,203.41	Single Life	633.02
					Averages	26.11	19.33	226,636.45	75,344.72	3,672.68	11,201.04
										1,600.15	

Comparison of Monthly Pension Payments - Beginning of FY 2016 to Current Monthly Pension Payments

	Plan Year beginning 07/01/2015 (*from GRS annual valuation)			March 2016 Pension Payroll		Annualized	Annual change since July 1, 2015	% change
	Monthly	Annual						
Service Pensions	2,305	5,007,097.17	60,085,166	2,425	5,304,301	63,651,615.12	3,566,449	5.94%
Disability Pensions	160	174,259	2,091,109	150	167,099	2,005,190.64	(85,918)	-4.11%
Survivor Pensions	344	298,979	3,587,750	338	328,630	3,943,558.08	355,808	9.92%
	2,809	5,480,335	65,764,025	2,913	5,800,030	69,600,364	3,836,339	5.83%
				2 \$	22,097			
				(net) change from previous month				

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City of Tucson
Budget vs Actual Expenses
Through: March, 2016
For Fiscal Year 2016

Department 900 - TUCSON SUPPL RETIREMENT SYSTEM

Fund 072 - TUCSON SUPP RETIREMENT SYSTEM

Unit 9001 - Normal Retiree Benefit

Object	Current Period Encumbrance	Current Period Expenditure	Current Total Obligations	YTD Encumbrance	YTD Expenditure	YTD Total Obligations	Current Budgeted Amount	Unobligated Budget Balance	Percent
105 - PAYROLL PENSION	0.00	5,319,873.52	5,319,873.52	0.00	46,024,724.53	46,024,724.53	63,300,000	17,275,275.47	27.29 %
Total for 100 - PAYROLL CHGS	0.00	5,319,873.52	5,319,873.52	0.00	46,024,724.53	46,024,724.53	63,300,000	17,275,275.47	27.29 %
Total for Unit 9001 - Normal Retiree Benefit	0.00	5,319,873.52	5,319,873.52	0.00	46,024,724.53	46,024,724.53	63,300,000	17,275,275.47	27.29 %

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City of Tucson
Budget vs Actual Expenses
Through: March, 2016
For Fiscal Year 2016

Department 900 - TUCSON SUPPL RETIREMENT SYSTEM
Fund 072 - TUCSON SUPP RETIREMENT SYSTEM
Unit 9020 - Disability Retiree Benefit

Object	Current Period Encumbrance	Current Period Expenditure	Current Total Obligations	YTD Encumbrance	YTD Expenditure	YTD Total Obligations	Current Budgeted Amount	Unobligated Budget Balance	Percent
105 - PAYROLL PENSION	0.00	167,099.22	167,099.22	0.00	1,528,838.15	1,528,838.15	1,975,000	446,161.85	22.59 %
Total for 100 - PAYROLL CHGS	0.00	167,099.22	167,099.22	0.00	1,528,838.15	1,528,838.15	1,975,000	446,161.85	22.59 %
Total for Unit 9020 - Disability Retiree Benefit	0.00	167,099.22	167,099.22	0.00	1,528,838.15	1,528,838.15	1,975,000	446,161.85	22.59 %

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**City of Tucson
Budget vs Actual Expenses
Through: March, 2016
For Fiscal Year 2016**

Department 900 - TUCSON SUPPL RETIREMENT SYSTEM

Fund 072 - TUCSON SUPP RETIREMENT SYSTEM

Unit 9021 - Pension Fund Administration

Object	Current Period Encumbrance	Current Period Expenditure	Current Total Obligations	YTD Encumbrance	YTD Expenditure	YTD Total Obligations	Current Budgeted Amount	Unobligated Budget Balance	Percent
213 - LEGAL	0.00	0.00	0.00	0.00	19,942.00	19,942.00	50,000	30,058.00	60.12 %
215 - AUDITING AND BANK SERVICES	0.00	0.00	0.00	0.00	23,845.00	23,845.00	0	(23,845.00)	0.00%
219 - MISCELLANEOUS PROFESSIONAL SERVICES	0.00	(9,250.00)	(9,250.00)	0.00	1,512,547.65	1,512,547.65	4,059,500	2,546,952.35	62.74 %
221 - INSUR-PUBLIC LIABILITY	0.00	189.57	189.57	0.00	1,460.62	1,460.62	29,160	27,699.38	94.99 %
228 - HAZARDOUS WASTE INSURANCE	0.00	33.85	33.85	0.00	293.75	293.75	560	266.25	47.54 %
232 - R&M MACHINERY & EQUIPMENT	0.00	0.00	0.00	0.00	0.00	0.00	1,200	1,200.00	100.00 %
245 - TELEPHONE	0.00	0.00	0.00	0.00	1,260.00	1,260.00	1,200	(60.00)	-5.00 %
252 - RENTS EQUIPMENT	0.00	72.04	72.04	0.00	719.23	719.23	0	(719.23)	0.00%
260 - COMPUTER SOFTWARE MAINTENANCE AGREEMENTS	0.00	0.00	0.00	0.00	0.00	0.00	41,000	41,000.00	100.00 %
263 - PUBLIC RELATIONS	0.00	0.00	0.00	0.00	2,043.09	2,043.09	2,560	516.91	20.19 %
266 - ADVERTISING	0.00	0.00	0.00	0.00	411.50	411.50	0	(411.50)	0.00%
284 - MEMBERSHIPS AND SUBSCRIPTIONS	0.00	0.00	0.00	0.00	810.00	810.00	1,500	690.00	46.00 %
286 - MISC OUTSIDE SERVICES	0.00	0.00	0.00	0.00	61.92	61.92	0	(61.92)	0.00%
Total for 200 - PROF CHARGES	0.00	(8,679.54)	(8,679.54)	0.00	1,608,489.44	1,608,489.44	4,269,880	2,661,390.56	62.33 %
311 - OFFICE SUPPLIES	0.00	228.74	228.74	0.00	1,489.55	1,489.55	7,500	6,010.45	80.14 %
312 - PRINTING,PHOTOGRAPHY,REPRODUCTION	0.00	115.71	115.71	0.00	5,775.76	5,775.76	7,500	1,724.24	22.99 %
314 - POSTAGE	0.00	0.00	0.00	0.00	1,811.24	1,811.24	10,000	8,188.76	81.89 %
341 - BOOK, PERIODICALS AND RECORDS	0.00	0.00	0.00	0.00	0.00	0.00	250	250.00	100.00 %

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Run Date : 04/12/2016

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City of Tucson
Budget vs Actual Expenses
Through: March, 2016
For Fiscal Year 2016

Department 900 - TUCSON SUPPL RETIREMENT SYSTEM

Fund 072 - TUCSON SUPP RETIREMENT SYSTEM

Unit 9022 - Disability Retiree Beneficiary Benefit

Object	Current Period Encumbrance	Current Period Expenditure	Current Total Obligations	YTD Encumbrance	YTD Expenditure	YTD Total Obligations	Current Budgeted Amount	Unobligated Budget Balance	Percent
105 - PAYROLL PENSION	0.00	30,418.52	30,418.52	0.00	275,072.04	275,072.04	350,000	74,927.96	21.41 %
Total for 100 - PAYROLL CHGS	0.00	30,418.52	30,418.52	0.00	275,072.04	275,072.04	350,000	74,927.96	21.41 %
Total for Unit 9022 - Disability Retiree Beneficiary Ben	0.00	30,418.52	30,418.52	0.00	275,072.04	275,072.04	350,000	74,927.96	21.41 %

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City of Tucson
Budget vs Actual Expenses
Through: March, 2016
For Fiscal Year 2016

Department 900 - TUCSON SUPPL RETIREMENT SYSTEM

Fund 072 - TUCSON SUPP RETIREMENT SYSTEM

Unit 9025 - INTEREST ON REFUNDS

Object	Current Period Encumbrance	Current Period Expenditure	Current Total Obligations	YTD Encumbrance	YTD Expenditure	YTD Total Obligations	Current Budgeted Amount	Unobligated Budget Balance	Percent
186 - TSRS REFUNDS	0.00	1,469.46	1,469.46	0.00	26,208.40	26,208.40	50,000	23,791.60	47.58 %
Total for 100 - PAYROLL CHGS	0.00	1,469.46	1,469.46	0.00	26,208.40	26,208.40	50,000	23,791.60	47.58 %
Total for Unit 9025 - INTEREST ON REFUNDS	0.00	1,469.46	1,469.46	0.00	26,208.40	26,208.40	50,000	23,791.60	47.58 %

Report ID : FIN-COT-BA-0001

Run Date : 04/12/2016

Run Time : 09:50 AM

**City of Tucson
Budget vs Actual Expenses
Through: March, 2016
For Fiscal Year 2016**

Department 900 - TUCSON SUPPL RETIREMENT SYSTEM
Fund 072 - TUCSON SUPP RETIREMENT SYSTEM
Unit 9027 - CREDITABLE SERVICE TRANS(ASRS)

Object	Current Period Encumbrance	Current Period Expenditure	Current Total Obligations	YTD Encumbrance	YTD Expenditure	YTD Total Obligations	Current Budgeted Amount	Unobligated Budget Balance	Percent
186 - TSRS REFUNDS	0.00	0.00	0.00	0.00	(8,811.37)	(8,811.37)	0	8,811.37	0.00%
Total for 100 - PAYROLL CHGS	0.00	0.00	0.00	0.00	(8,811.37)	(8,811.37)	0	8,811.37	0.00%
Total for Unit 9027 - CREDITABLE SERVICE TRANS(A:	0.00	0.00	0.00	0.00	(8,811.37)	(8,811.37)	0	8,811.37	0.00%
Total for Fund 072 - TUCSON SUPP RETIREMENT SYS	0.00	5,962,009.93	5,962,009.93	0.00	54,605,314.86	54,605,314.86	76,216,870	21,611,555.14	28.36 %
Total for Department 900 - TUCSON SUPPL RETIREME	0.00	5,962,009.93	5,962,009.93	0.00	54,605,314.86	54,605,314.86	76,216,870	21,611,555.14	28.36 %

Manager Allocations Compared with Policy Levels

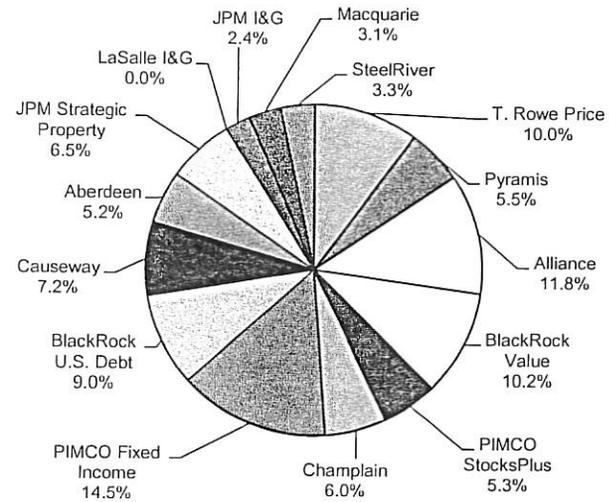
Monthly Report as of: 03/31/16

Managers and Asset Class	Actual		Target		Differences		Range		Outside Range
	(000s)	%	(000s)	%	From Target		Min	Max	
T. Rowe Price	\$ 71,105	10.0%	\$ 70,992	10.0%	0.0%	\$ 113	8.0%	12.0%	0.0%
Alliance (S&P 500)	83,142	11.7%	78,091	11.0%	0.7%	5,051	8.0%	14.0%	0.0%
BlackRock Value	72,442	10.2%	70,992	10.0%	0.2%	1,450	8.0%	12.0%	0.0%
PIMCO StocksPlus	37,841	5.3%	35,496	5.0%	0.3%	2,345	3.0%	7.0%	0.0%
Large Cap U.S. Equity	264,530	37.2%	255,569	36.0%	1.2%	8,960	31.0%	41.0%	0.0%
Pyramis	38,692	5.5%	35,496	5.0%	0.5%	3,196	3.0%	7.0%	0.0%
Champlain	42,210	5.9%	35,496	5.0%	0.9%	6,715	3.0%	7.0%	0.0%
Small/Mid Cap U.S. Equity	80,902	11.4%	70,992	10.0%	1.4%	9,910	6.0%	14.0%	0.0%
Causeway Capital Mgmt	50,918	7.2%	53,244	7.5%	-0.3%	(2,325)	5.5%	9.5%	0.0%
Aberdeen Asset Mgmt	36,530	5.1%	53,244	7.5%	-2.4%	(16,713)	5.5%	9.5%	-0.4%
International Equity	87,449	12.3%	106,487	15.0%	-2.7%	(19,038)	13.0%	17.0%	-0.7%
Total Stocks	432,881	60.9%	433,048	61.0%	-0.1%	(168)	56.0%	66.0%	0.0%
PIMCO Fixed Income	102,886	14.5%	113,586	16.0%	-1.5%	(10,700)	13.0%	19.0%	0.0%
BlackRock U.S. Debt	63,750	9.0%	70,992	10.0%	-1.0%	(7,242)	8.0%	12.0%	0.0%
Total Bonds	166,636	23.5%	184,578	26.0%	-2.5%	(17,942)	21.0%	31.0%	0.0%
JPM Strategic Property	45,701	6.4%	35,496	5.0%	1.4%	10,205	3.0%	7.0%	0.0%
LaSalle Income & Growth IV	-	0.0%	10,649	1.5%	-1.5%	(10,649)	0.0%	3.0%	0.0%
JPM Income & Growth	17,321	2.4%	10,649	1.5%	0.9%	6,673	0.0%	3.0%	0.0%
Total Real Estate	63,022	8.8%	56,793	8.0%	0.8%	6,229	6.0%	10.0%	0.0%
Macquarie	21,727	3.1%	17,748	2.5%	0.6%	3,979	1.5%	3.5%	0.0%
SteelRiver	23,319	3.3%	17,748	2.5%	0.8%	5,571	1.5%	3.5%	0.0%
Total Infrastructure	45,046	6.4%	35,496	5.0%	1.4%	9,550	3.0%	7.0%	0.0%
Liquidity Fund	2,331	0.3%	-						
Total Fund	\$ 709,915	100%	\$ 709,915	100%					

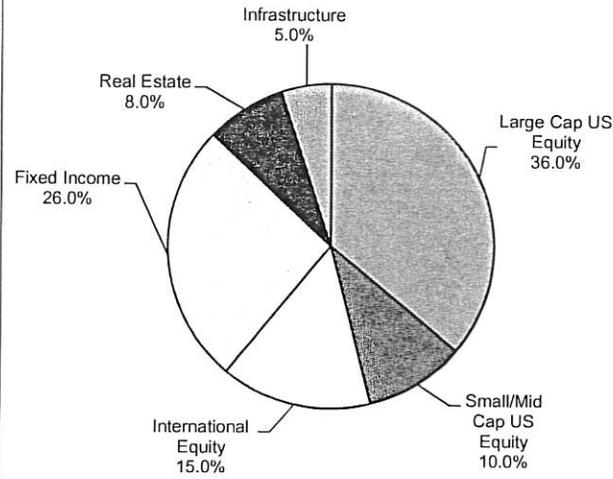
Allocation Summaries

as of: 03/31/16

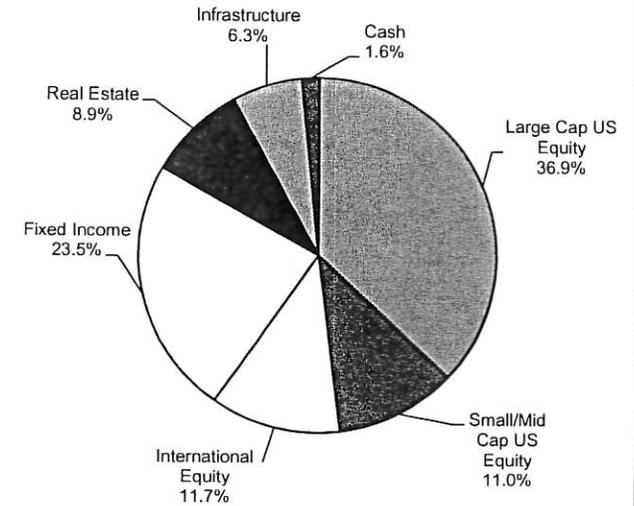
Manager Allocations



Target Asset Allocation



Actual Asset Allocation



Investment Manager Allocation:

<u>Investment Account</u>	<u>(000s)</u>
1 T. Rowe Price	\$ 71,105
2 Pyramis	38,692
3 Alliance	83,142
4 BlackRock Value	72,442
5 PIMCO StocksPlus	37,841
6 Champlain	42,210
7 PIMCO Fixed Income	102,886
8 BlackRock U.S. Debt	63,750
9 Causeway	50,918
10 Aberdeen	36,530
11 JPM Strategic Property	45,701
12 LaSalle I&G	-
13 JPM I&G	17,321
14 Macquarie	21,727
15 SteelRiver	23,319
Liquidity Account	2,331
Total Assets	\$ 709,915

Target Asset Allocation:

<u>Asset Class</u>	<u>(000s)</u>
Large Cap US Equity	255,569
Small/Mid Cap US Equity	70,992
International Equity	106,487
Fixed Income	184,578
Real Estate	56,793
Infrastructure	35,496
Total Assets	\$ 709,915

Actual Asset Allocation:

<u>Asset Class</u>	<u>(000s)</u>
Large Cap US Equity	262,274
Small/Mid Cap US Equity	78,417
International Equity	83,246
Fixed Income	166,636
Real Estate	63,022
Infrastructure	45,046
Cash	11,274
Total Assets	\$ 709,915

**TUCSON SUPPLEMENTAL RETIREMENT SYSTEM
ONE YEAR TO DATE PERFORMANCE BY MANAGER
NET OF FEES AND CUSTODIAL CHARGES**

	Total Fund	BlackRock U.S. Debt	PIMCO PIMCO	Total Fixed	Alliance S&P 500	BlackRock Value	PIMCO StocksPlus	T.RowePrice	Pyramis	Champlain	Aberdeen	Causeway Capital	Total Equities	JP Morgan Strat Prop	LaSalle I & G	JP Morgan I & G	Total Real Estate	SteelRiver	Macquarie Capital	Total Infrastructure
APR '15	1.14%	-0.29%	0.20%	0.02%	0.95%	0.94%	0.77%	0.09%	-1.32%	1.02%	4.82%	4.89%	1.39%	0.90%	0.00%	3.36%	1.55%	0.00%	4.33%	2.22%
MAY '15	0.70%	-0.29%	0.12%	-0.03%	1.29%	1.21%	1.38%	2.03%	3.79%	1.47%	-2.01%	-1.14%	1.05%	1.02%	0.00%	0.00%	0.73%	1.47%	-2.16%	-0.43%
JUN '15	-1.08%	-1.10%	-1.77%	-1.52%	-1.92%	-1.93%	-2.11%	-1.20%	1.19%	0.06%	-4.19%	-2.71%	-1.66%	1.49%	24.40%	4.95%	2.45%	1.66%	3.61%	2.66%
JUL '15	1.16%	0.68%	0.57%	0.61%	2.12%	0.48%	2.15%	5.03%	1.16%	-1.52%	-1.48%	1.73%	1.55%	0.85%	0.00%	0.00%	0.61%	0.00%	-0.84%	-0.44%
AUG '15	-3.97%	-0.13%	-1.06%	-0.71%	-5.99%	-5.96%	-6.64%	-5.75%	-5.24%	-4.69%	-8.19%	-6.46%	-6.07%	-0.97%	0.00%	0.00%	0.70%	0.00%	1.42%	0.74%
SEP '15	-3.20%	7.10%	-1.70%	-0.79%	-2.46%	-3.01%	-3.27%	-10.49%	-4.20%	-3.67%	-5.86%	-5.93%	-4.99%	1.30%	0.00%	0.00%	0.94%	-0.22%	1.41%	0.64%
OCT '15	4.38%	0.00%	2.26%	1.39%	2.29%	7.57%	8.68%	8.67%	3.97%	7.02%	7.51%	7.12%	6.41%	0.57%	0.00%	3.50%	1.37%	0.00%	-1.05%	-0.55%
NOV '15	0.50%	-0.26%	-0.54%	-0.43%	0.28%	0.41%	0.18%	0.35%	3.33%	1.53%	-2.78%	-2.04%	0.15%	1.52%	0.00%	0.00%	1.10%	19.98%	-6.30%	6.19%
DEC '15	-1.84%	-0.34%	-1.26%	-0.91%	-1.56%	-8.43%	-1.36%	-0.18%	-4.27%	-2.84%	-3.09%	-1.16%	-2.93%	1.00%	-95.71%	0.00%	0.63%	-3.93%	5.19%	0.29%
JAN '16	-4.76%	1.45%	-0.16%	0.46%	-4.98%	-5.16%	-16.66%	-9.95%	-8.73%	-6.73%	-5.93%	-7.91%	-7.92%	0.49%	0.00%	1.88%	0.87%	-0.11%	-0.39%	-0.25%
FEB '16	0.16%	0.67%	0.56%	0.60%	-0.12%	-0.01%	-0.51%	-1.26%	-0.44%	0.85%	1.02%	-1.84%	-0.38%	0.19%	0.00%	0.00%	0.14%	6.79%	0.37%	3.68%
MAR '16	4.80%	0.91%	2.79%	2.06%	6.73%	7.18%	7.38%	5.19%	7.58%	8.97%	8.00%	5.34%	6.83%	0.95%	-100.00%	0.00%	0.68%	-0.39%	4.88%	2.08%
1-YTD	-2.47%	8.47%	-0.10%	0.69%	-3.94%	-7.69%	-11.79%	-8.98%	-4.31%	0.35%	-12.89%	-10.81%	-7.44%	9.69%	-100.00%	14.38%	12.40%	26.06%	10.31%	17.93%

Benchmark Returns:																				
Latest Month	4.95%	0.92%	2.65%	0.92%	6.78%	7.20%	6.78%	6.74%	7.98%	8.19%	8.13%	6.51%	7.19%	2.21%	2.21%	2.21%	2.21%	0.76%	0.76%	0.76%
One Yr to Date	1.41%	1.62%	1.66%	1.62%	2.78%	-0.65%	2.78%	3.04%	-12.06%	-4.93%	-4.59%	-4.53%	-1.40%	13.69%	13.69%	13.69%	13.69%	5.46%	5.46%	5.46%
Index	Custom Plan Index	Barclays Aggregate	Fixed Inc Custom	Barclays Aggregate	S & P 500	Russell 1000 Value	S & P 500	Russell 1000 Growth	Russell 2000	Russell Midcap	MSCI All Country Wld x-US N	MSCI EAFE Net Divd	Equity Composite	NCREIF - ODCE (1)	CPI + 4% (2)	CPI + 4% (2)	CPI + 4% (2)			

(1) One Yr Index returns thru: 12/31/15

(2) One Yr Index returns thru: 2/29/16

**TUCSON SUPPLEMENTAL RETIREMENT SYSTEM
CALENDAR YEAR 2016 PERFORMANCE BY QUARTER
NET OF FEES AND CUSTODIAL CHARGES**

ACCOUNT & BENCHMARK	1st Quarter Ending 3/31/16	2nd Quarter Ending 6/30/16	3rd Quarter Ending 9/30/16	4th Quarter Ending 12/31/16	TOTAL TO DATE
TOTAL FUND	-0.03%	0.00%	0.00%	0.00%	-0.03%
CUSTOM PLAN INDEX	1.63%	0.00%	0.00%	0.00%	1.63%
BLACKROCK U.S. DEBT INDEX	3.06%	0.00%	0.00%	0.00%	3.06%
BARCLAYS CAPITAL AGGREGATE	3.04%	0.00%	0.00%	0.00%	3.04%
PIMCO FIXED INCOME	3.20%	0.00%	0.00%	0.00%	3.20%
FIXED INCOME CUSTOM INDEX	3.63%	0.00%	0.00%	0.00%	3.63%
TOTAL FIXED	3.14%	0.00%	0.00%	0.00%	3.14%
BARCLAYS CAPITAL AGGREGATE	3.04%	0.00%	0.00%	0.00%	3.04%
ALLIANCE S&P INDEX	1.29%	0.00%	0.00%	0.00%	1.29%
S&P 500	1.35%	0.00%	0.00%	0.00%	1.35%
BLACKROCK VALUE	1.64%	0.00%	0.00%	0.00%	1.64%
RUSSELL 1000 VALUE	1.63%	0.00%	0.00%	0.00%	1.63%
PIMCO STOCKS PLUS	-10.97%	0.00%	0.00%	0.00%	-10.97%
S&P 500	1.35%	0.00%	0.00%	0.00%	1.35%
T. ROWE PRICE	-6.47%	0.00%	0.00%	0.00%	-6.47%
RUSSELL 1000 GROWTH	0.74%	0.00%	0.00%	0.00%	0.74%
PYRAMIS (FIDELITY)	-2.24%	0.00%	0.00%	0.00%	-2.24%
RUSSELL 2000	-1.51%	0.00%	0.00%	0.00%	-1.51%
CHAMPLAIN	2.50%	0.00%	0.00%	0.00%	2.50%
RUSSELL MIDCAP	2.25%	0.00%	0.00%	0.00%	2.25%
ABERDEEN	2.63%	0.00%	0.00%	0.00%	2.63%
MSCI AC WORLD EX U.S. - Net Divd	-0.37%	0.00%	0.00%	0.00%	-0.37%
CAUSEWAY	-4.78%	0.00%	0.00%	0.00%	-4.78%
MSCI EAFE - Net Divd	-3.00%	0.00%	0.00%	0.00%	-3.00%
TOTAL EQUITIES	-2.00%	0.00%	0.00%	0.00%	-2.00%
EQUITY COMPOSITE	0.39%	0.00%	0.00%	0.00%	0.39%
JP MORGAN STRAT PROP	1.64%	0.00%	0.00%	0.00%	1.64%
NCREIF PROP-ODCE (Est.)	2.21%	0.00%	0.00%	0.00%	2.21%
LASALLE I & G	-100.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
NCREIF PROP-ODCE (Est.)	2.21%	0.00%	0.00%	0.00%	2.21%
JP MORGAN I & G	1.88%	0.00%	0.00%	0.00%	1.88%
NCREIF PROP-ODCE (Est.)	2.21%	0.00%	0.00%	0.00%	2.21%
TOTAL REAL ESTATE	1.70%	0.00%	0.00%	0.00%	1.70%
NCREIF PROP-ODCE (Est.)	2.21%	0.00%	0.00%	0.00%	2.21%
STEELRIVER	6.26%	0.00%	0.00%	0.00%	6.26%
CPI + 4%	1.68%	0.00%	0.00%	0.00%	1.68%
MACQUARIE CAPITAL	4.86%	0.00%	0.00%	0.00%	4.86%
CPI + 4%	1.68%	0.00%	0.00%	0.00%	1.68%
TOTAL INFRASTRUCTURE	5.57%	0.00%	0.00%	0.00%	5.57%
CPI + 4%	1.68%	0.00%	0.00%	0.00%	1.68%

**TUCSON SUPPLEMENTAL RETIREMENT SYSTEM
FISCAL YEAR 2016 PERFORMANCE BY MANAGER
NET OF FEES AND CUSTODIAL CHARGES**

	Total Fund	BlackRock U.S. Debt	PIMCO	Total Fixed	Alliance S&P 500	BlackRock Value	PIMCO StocksPlus	T.RowePrice	Pyramis	Champlain	Aberdeen	Causeway Capital	Total Equities	JP Morgan Strat Prop	LaSalle I & G	JP Morgan I & G	Total Real Estate	SteelRiver	Macquarie Capital	Total Infrastructure
JUL	1.16%	0.68%	0.57%	0.61%	2.12%	0.48%	2.15%	5.03%	1.16%	-1.52%	-1.48%	1.73%	1.55%	0.85%	0.00%	0.00%	0.61%	0.00%	-0.84%	-0.44%
AUG	-3.97%	-0.13%	-1.06%	-0.71%	-5.99%	-5.96%	-6.64%	-5.75%	-5.24%	-4.69%	-8.19%	-6.46%	-6.07%	0.97%	0.00%	0.00%	0.70%	0.00%	1.42%	0.74%
SEP	-3.20%	0.71%	-1.70%	-0.79%	-2.46%	-3.01%	-3.27%	-10.49%	-4.20%	-3.67%	-5.86%	-5.93%	-4.99%	1.30%	0.00%	0.00%	0.94%	-0.22%	1.41%	0.64%
OCT	4.38%	0.00%	2.26%	1.39%	2.29%	7.57%	8.68%	8.67%	3.97%	7.02%	7.51%	7.12%	6.41%	0.57%	0.00%	3.50%	1.37%	0.00%	-1.05%	-0.55%
NOV	0.50%	-0.26%	-0.54%	-0.43%	0.28%	0.41%	0.18%	0.35%	3.33%	1.53%	-2.78%	-2.04%	0.15%	1.52%	0.00%	0.00%	1.10%	19.98%	-6.30%	6.19%
DEC	-1.84%	-0.34%	-1.26%	-0.91%	-1.56%	-8.43%	-1.36%	-0.18%	-4.27%	-2.84%	-3.09%	-1.16%	-2.93%	1.00%	-95.71%	0.00%	0.63%	-3.93%	5.19%	0.29%
JAN	-4.76%	1.45%	-0.16%	0.46%	-4.98%	-5.16%	-16.66%	-9.95%	-8.73%	-6.73%	-5.93%	-7.91%	-7.92%	0.49%	0.00%	1.88%	0.87%	-0.11%	-0.39%	-0.25%
FEB	0.16%	0.67%	0.56%	0.60%	-0.12%	-0.01%	-0.51%	-1.26%	-0.44%	0.85%	1.02%	-1.84%	-0.38%	0.19%	0.00%	0.00%	0.14%	6.79%	0.37%	3.68%
MAR	4.80%	0.91%	2.79%	2.06%	6.73%	7.18%	7.38%	5.19%	7.58%	8.97%	8.00%	5.34%	6.83%	0.95%	-100.00%	0.00%	0.68%	-0.39%	4.88%	2.08%
APR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MAY	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
JUN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
FYTD	-3.20%	3.74%	1.37%	2.26%	-4.22%	-7.87%	-11.79%	-9.79%	-7.67%	-2.16%	-11.48%	-11.59%	-8.13%	8.11%	-100.00%	5.45%	7.26%	22.21%	4.30%	12.86%

Benchmark Returns:																				
Latest Month	4.95%	0.92%	2.65%	0.92%	6.78%	7.20%	6.78%	6.74%	7.98%	8.19%	8.13%	6.51%	7.19%	2.21%	2.21%	2.21%	2.21%	0.76%	0.76%	0.76%
Fiscal Yr to Date	0.40%	3.74%	2.01%	3.74%	1.52%	-1.66%	1.52%	2.40%	-10.13%	-2.55%	-9.66%	-8.83%	-2.87%	9.51%	9.51%	9.51%	9.51%	2.79%	2.79%	2.79%
Index	Custom Plan Index	Barclays Aggregate	Fixed Inc Custom	Barclays Aggregate	S & P 500	Russell 1000 Value	S & P 500	Russell 1000 Growth	Russell 2000	Russell Midcap	MSCI All Country Wld x-US N	MSCI EAFE Net Divd	Equity Composite	NCREIF - ODCE (1)	CPI + 4% (2)	CPI + 4% (2)	CPI + 4% (2)			

(1) FYTD Index returns thru: 12/31/15

(2) FYTD Index returns thru: 2/29/16

**TUCSON SUPPLEMENTAL RETIREMENT SYSTEM
ONE YEAR TO DATE PERFORMANCE BY MANAGER
NET OF FEES AND CUSTODIAL CHARGES**

	Total Fund	BlackRock U.S. Debt	PIMCO	Total Fixed	Alliance S&P 500	BlackRock Value	PIMCO StocksPlus	T.RowePrice	Pyramis	Champlain	Aberdeen	Causeway Capital	Total Equities	JP Morgan Strat Prop	LaSalle I & G	JP Morgan I & G	Total Real Estate	SteelRiver	Macquarie Capital	Total Infrastructure
APR '15	1.14%	-0.29%	0.20%	0.02%	0.95%	0.94%	0.77%	0.09%	-1.32%	1.02%	4.82%	4.89%	1.39%	0.90%	0.00%	3.36%	1.55%	0.00%	4.33%	2.22%
MAY '15	0.70%	-0.29%	0.12%	-0.03%	1.29%	1.21%	1.38%	2.03%	3.79%	1.47%	-2.01%	-1.14%	1.05%	1.02%	0.00%	0.00%	0.73%	1.47%	-2.16%	-0.43%
JUN '15	-1.08%	-1.10%	-1.77%	-1.52%	-1.92%	-1.93%	-2.11%	-1.20%	1.19%	0.06%	-4.19%	-2.71%	-1.66%	1.49%	24.40%	4.95%	2.45%	1.66%	3.61%	2.66%
JUL '15	1.16%	0.68%	0.57%	0.61%	2.12%	0.48%	2.15%	5.03%	1.16%	-1.52%	-1.48%	1.73%	1.55%	0.85%	0.00%	0.00%	0.61%	0.00%	-0.84%	-0.44%
AUG '15	-3.97%	-0.13%	-1.06%	-0.71%	-5.99%	-5.96%	-6.64%	-5.75%	-5.24%	-4.69%	-8.19%	-6.46%	-6.07%	-0.97%	0.00%	0.00%	0.70%	0.00%	1.42%	0.74%
SEP '15	-3.20%	7.10%	-1.70%	-0.79%	-2.46%	-3.01%	-3.27%	-10.49%	-4.20%	-3.67%	-5.86%	-5.93%	-4.99%	1.30%	0.00%	0.00%	0.94%	-0.22%	1.41%	0.64%
OCT '15	4.38%	0.00%	2.26%	1.39%	2.29%	7.57%	8.68%	8.67%	3.97%	7.02%	7.51%	7.12%	6.41%	0.57%	0.00%	3.50%	1.37%	0.00%	-1.05%	-0.55%
NOV '15	0.50%	-0.26%	-0.54%	-0.43%	0.28%	0.41%	0.18%	0.35%	3.33%	1.53%	-2.78%	-2.04%	0.15%	1.52%	0.00%	0.00%	1.10%	19.98%	-6.30%	6.19%
DEC '15	-1.84%	-0.34%	-1.26%	-0.91%	-1.56%	-8.43%	-1.36%	-0.18%	-4.27%	-2.84%	-3.09%	-1.16%	-2.93%	1.00%	-95.71%	0.00%	0.63%	-3.93%	5.19%	0.29%
JAN '16	-4.76%	1.45%	-0.16%	0.46%	-4.98%	-5.16%	-16.66%	-9.95%	-8.73%	-6.73%	-5.93%	-7.91%	-7.92%	0.49%	0.00%	1.88%	0.87%	-0.11%	-0.39%	-0.25%
FEB '16	0.16%	0.67%	0.56%	0.60%	-0.12%	-0.01%	-0.51%	-1.26%	-0.44%	0.85%	1.02%	-1.84%	-0.38%	0.19%	0.00%	0.00%	0.14%	6.79%	0.37%	3.68%
MAR '16	4.80%	0.91%	2.79%	2.06%	6.73%	7.18%	7.38%	5.19%	7.58%	8.97%	8.00%	5.34%	6.83%	0.95%	-100.00%	0.00%	0.68%	-0.39%	4.88%	2.08%
1-YTD	-2.47%	8.47%	-0.10%	0.69%	-3.94%	-7.69%	-11.79%	-8.98%	-4.31%	0.35%	-12.89%	-10.81%	-7.44%	9.69%	-100.00%	14.38%	12.40%	26.06%	10.31%	17.93%

Benchmark Returns:																				
Latest Month	4.95%	0.92%	2.65%	0.92%	6.78%	7.20%	6.78%	6.74%	7.98%	8.19%	8.13%	6.51%	7.19%	2.21%	2.21%	2.21%	2.21%	0.76%	0.76%	0.76%
One Yr to Date	1.41%	1.62%	1.66%	1.62%	2.78%	-0.65%	2.78%	3.04%	-12.06%	-4.93%	-4.59%	-4.53%	-1.40%	13.69%	13.69%	13.69%	13.69%	5.46%	5.46%	5.46%
Index	Custom Plan Index	Barclays Aggregate	Fixed Inc Custom	Barclays Aggregate	S & P 500	Russell 1000 Value	S & P 500	Russell 1000 Growth	Russell 2000	Russell Midcap	MSCI All Country Wild x-US N	MSCI EAFE Net Divd	Equity Composite	NCREIF - ODCE (1)	CPI + 4% (2)	CPI + 4% (2)	CPI + 4% (2)			

(1) One Yr Index returns thru: 12/31/15

(2) One Yr Index returns thru: 2/29/16

**Tucson Supplemental Retirement System (TSRS)
 BNY Mellon - Securities Lending & Custodial Fee Summary
 FY16**

July 1, 2015 - June 30, 2016

	<i>Gross Earnings</i>	<i>Rebate Paid</i>	<i>Bank Fees</i>	<i>Gross Client Earnings</i>	<i>Administration Fee</i>	<i>FY16 Net Client Earnings</i>	<i>FY15 Net Client Earnings</i>	<i>FY16 Custodian Fees</i>	<i>FY15 Custodian Fees</i>
July	\$ 2,924	\$ (7,613)	\$ 4,214	\$ 6,323	\$ -	\$ 6,323	\$ 6,816	\$ -	\$ -
August	2,712	(7,968)	4,271	6,410	-	6,410	5,775	-	-
September	2,016	(10,251)	4,905	7,362	-	7,362	6,239	74,053	73,879
October	2,230	(10,678)	5,162	7,746	-	7,746	6,970	-	-
November	2,563	(6,447)	3,603	5,407	-	5,407	6,002	-	-
December	4,516	(8,780)	5,316	7,979	-	7,979	6,655	-	71,675
January	5,571	(5,972)	4,615	6,928	-	6,928	7,214	-	-
February	5,290	(5,588)	4,349	6,529	-	6,529	8,612	-	-
March	6,881	(9,430)	6,522	9,789	-	9,789	11,248	-	75,962
April	-	-	-	-	-	-	11,082	-	-
May	-	-	-	-	-	-	13,175	-	-
June	-	-	-	-	-	-	8,769	-	-
Totals	\$ 34,703	\$ (72,726)	\$ 42,958	\$ 64,472	\$ -	\$ 64,472	\$ 98,557	\$ 74,053	\$ 221,516

cross check: 64,472



TSRS Portfolio Performance Review

DATE: April 22, 2016

TO: The Board of Trustees
Tucson Supplemental Retirement System

FROM: Neil S. Galassi, CPA
Pension Administrator

SUBJECT: March 2016 Summary Performance Report

SUMMARY:

This report presents the Tucson Supplemental Retirement System's investment portfolio as of March 31, 2016. Attached to this summary are the detailed reports which the Board has been accustomed to reviewing at monthly Board meetings.

As of February 29, 2016 and March 31, 2016, the Total Fund balance was \$677.4 million and \$709.9 million, respectively. This represents a \$42.5 million increase from the prior month. There were no withdrawals from the Total Fund to support pension payments totaled during the recent month, and \$22 million has been withdrawn during fiscal year 2016.

For the month of March, the Total Fund performance was a positive 4.80% which was slightly worse than the custom benchmark return of positive 4.86% by 6 basis points. Total Fund performance was impacted by large increases in all three of the equity markets; the S&P 500 Index rose 6.65% during the month.

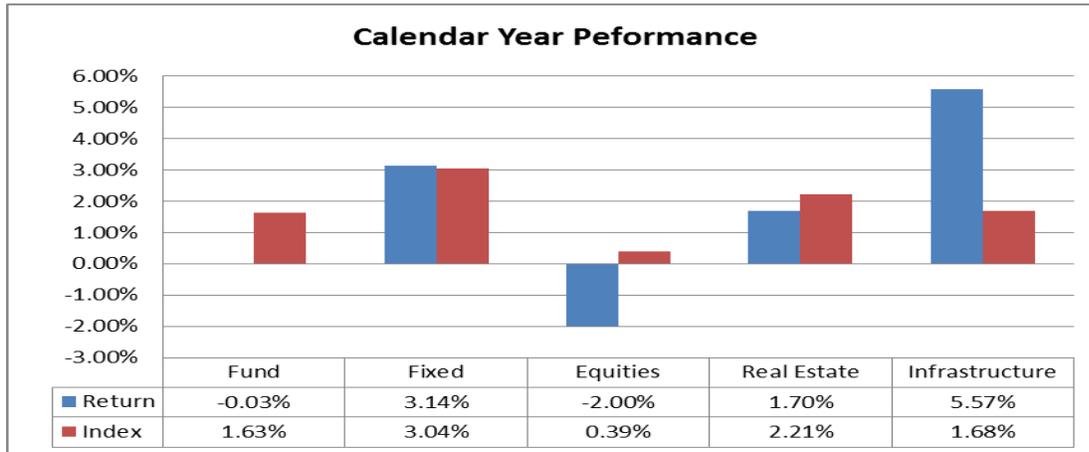
For the last twelve months the Total Fund performance was a negative .43% which was behind the custom benchmark of .59%. The Total Fund performance was impacted by large increases for asset balances in the equity markets with the large Cap Equity showing a negative .51%, the Small/Mid Cap Equity showing a negative 1.94%, and the International Equity coming in at negative 11.66%. These returns were all significantly more positive than the month of February 2016. The equity market returns appear consistent with the benchmarks for the same 12 month period with the exception of Small/Mid Cap Equity which outperformed the benchmark by 5.37%. The negative equity returns were somewhat counterbalanced by 12 month positive return on the Real Estate and infrastructure of 11.52% and 10.44% respectively.

In regards to equity funds over the past 12 month period, the Small/Mid Cap Equity funds for Champlain Mid Cap and Pyramis Small Cap performed well above their benchmark by 4.39% and 5.39% respectively while the Large Cap Equity fund managers were relatively consistent with their benchmark. The international equity funds of Causeway and Aberdeen trailed their benchmark by 2.48% and 3.70% respectively. For fixed income funds, the PIMCO Fixed Income Fund underperformed the benchmark by 2.80%, while the Barclay's U.S. Debt Fund was consistent with the benchmark. For Real Estate fund managers, the JPM Strategic Property Fund and the JPM Income and Growth Funds trailed the benchmark by 3.12% and 4.30%. The Macquarie European Infrastructure Fund was 5.86% above the benchmark, and the Steel River Infrastructure fund also outperformed the benchmark by 5.51%.

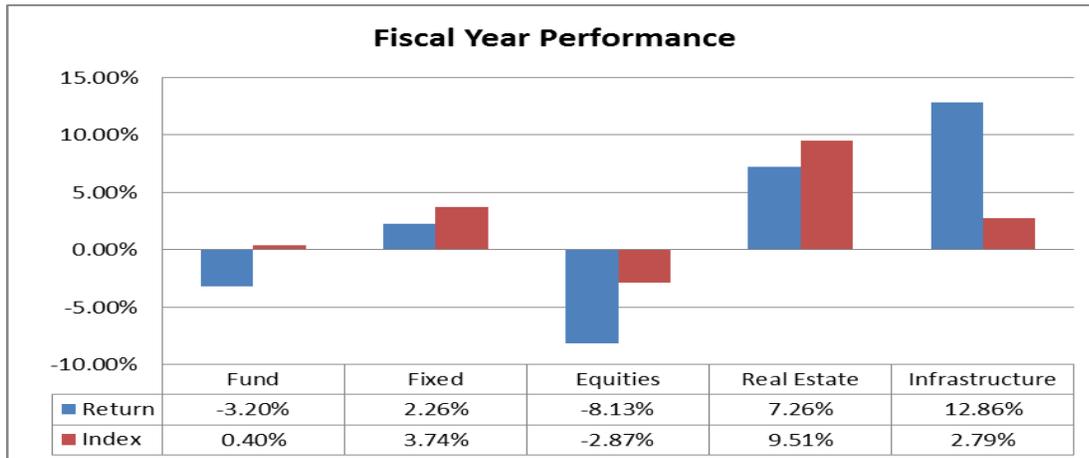
The Total Fund total as of today, April 22, 2016 was \$718.5 million. This represents an increase of \$8.6 million (1.20%), over the balance as of March 31, 2016. The increase was primarily a result of a 1.6% increase in asset balances for all equity asset classes.

Summary graphs are as follows:

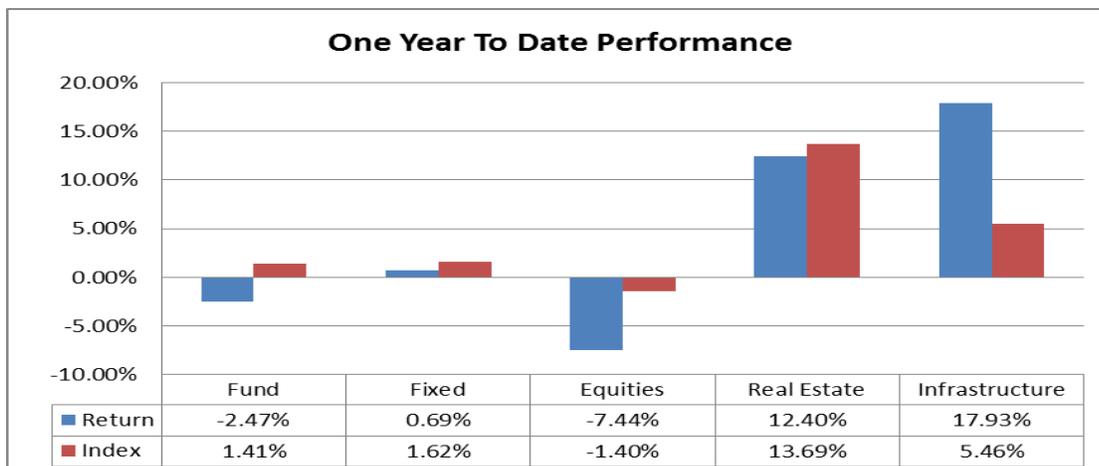
Calendar Year Metrics:



Fiscal Year Metrics:



One Year to Date Performance Metrics:



March 31, 2016



Tucson Supplemental Retirement System

Investment Measurement Service
Monthly Review

The following report was prepared by Callan Associates Inc. ("CAI") using information from sources that include the following: fund trustee(s); fund custodian(s); investment manager(s); CAI computer software; CAI investment manager and fund sponsor database; third party data vendors; and other outside sources as directed by the client. CAI assumes no responsibility for the accuracy or completeness of the information provided, or methodologies employed, by any information providers external to CAI. Reasonable care has been taken to assure the accuracy of the CAI database and computer software. Callan does not provide advice regarding, nor shall Callan be responsible for, the purchase, sale, hedge or holding of individual securities, including, without limitation securities of the client (i.e., company stock) or derivatives in the client's accounts. In preparing the following report, CAI has not reviewed the risks of individual security holdings or the conformity of individual security holdings with the client's investment policies and guidelines, nor has it assumed any responsibility to do so. Advice pertaining to the merits of individual securities and derivatives should be discussed with a third party securities expert. Copyright 2016 by Callan Associates Inc.

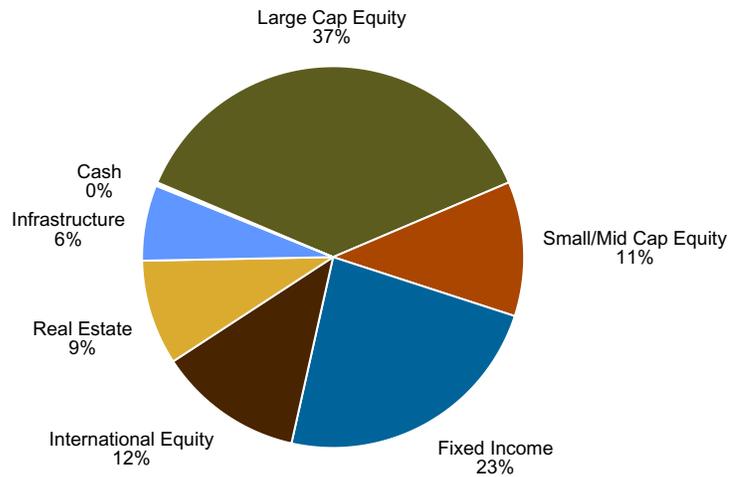
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March 31, 2016

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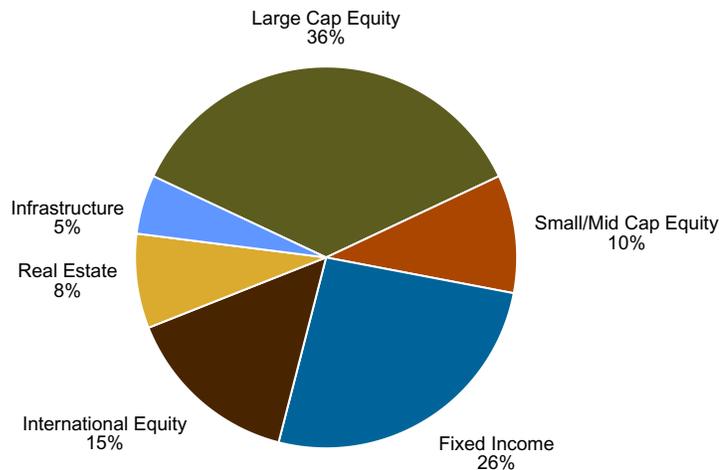
Actual vs Target Asset Allocation

The first chart below shows the Fund's asset allocation as of March 31, 2016. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

Actual Asset Allocation



Target Asset Allocation



Asset Class	\$000s Actual	Percent Actual	Percent Target	Percent Difference	\$000s Difference
Large Cap Equity	264,527	37.3%	36.0%	1.3%	8,917
Small/Mid Cap Equity	80,901	11.4%	10.0%	1.4%	9,898
Fixed Income	166,636	23.5%	26.0%	(2.5%)	(17,971)
International Equity	87,449	12.3%	15.0%	(2.7%)	(19,055)
Real Estate	63,022	8.9%	8.0%	0.9%	6,220
Infrastructure	45,161	6.4%	5.0%	1.4%	9,660
Cash	2,331	0.3%	0.0%	0.3%	2,331
Total	710,027	100.0%	100.0%		

*Current Month Target Performance is calculated using monthly rebalancing.

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of March 31, 2016, with the distribution as of February 29, 2016. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

Asset Distribution Across Investment Managers

	March 31, 2016		Net New Inv.	Inv. Return	February 29, 2016	
	Market Value	Percent			Market Value	Percent
Domestic Equity	\$345,427,916	48.65%	\$(2,303)	\$22,409,502	\$323,020,717	47.68%
Large Cap Equity	\$264,527,088	37.26%	\$(5,251)	\$16,213,441	\$248,318,899	36.66%
Alliance S&P Index	83,139,473	11.71%	475	5,247,538	77,891,461	11.50%
PIMCO StocksPLUS	37,841,114	5.33%	0	2,601,303	35,239,811	5.20%
BlackRock Russell 1000 Value	72,441,932	10.20%	(7,387)	4,858,595	67,590,724	9.98%
T. Rowe Price Large Cap Growth	71,104,569	10.01%	1,661	3,506,006	67,596,903	9.98%
Small/Mid Cap Equity	\$80,900,828	11.39%	\$2,948	\$6,196,061	\$74,701,818	11.03%
Champlain Mid Cap	42,210,368	5.94%	1,195	3,473,018	38,736,155	5.72%
Pyramis Small Cap	38,690,460	5.45%	1,753	2,723,044	35,965,663	5.31%
International Equity	\$87,448,834	12.32%	\$(68,802)	\$5,356,473	\$82,161,164	12.13%
Causeway International Value Eq	50,918,483	7.17%	468	2,580,684	48,337,330	7.14%
Aberdeen EAFE Plus	36,530,351	5.14%	(69,271)	2,775,789	33,823,833	4.99%
Fixed Income	\$166,635,889	23.47%	\$(7,623)	\$3,375,180	\$163,268,332	24.10%
BlackRock U.S. Debt Fund	63,749,833	8.98%	(8,532)	583,019	63,175,346	9.33%
PIMCO Fixed Income	102,886,056	14.49%	909	2,792,161	100,092,986	14.78%
Real Estate	\$63,022,151	8.88%	\$0	\$429,274	\$62,592,877	9.24%
JPM Strategic Property Fund	45,700,763	6.44%	0	429,274	45,271,489	6.68%
JPM Income and Growth Fund	17,321,388	2.44%	0	0	17,321,388	2.56%
Infrastructure	\$45,161,490	6.36%	\$0	\$1,010,506	\$44,150,984	6.52%
Macquarie European	21,726,832	3.06%	0	1,010,506	20,716,326	3.06%
SteelRiver Infrastructure	23,434,658	3.30%	0	0	23,434,658	3.46%
Total Cash	\$2,330,534	0.33%	\$87,907	\$443	\$2,242,184	0.33%
Cash	2,330,534	0.33%	87,907	443	2,242,184	0.33%
Total Fund	\$710,026,815	100.0%	\$9,179	\$32,581,378	\$677,436,258	100.0%

Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended March 31, 2016. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended March 31, 2016

	Last Month	Quarter to Date	Last 12 Months	Last 36 Months	Last 60 Months
Gross of Fees					
Domestic Equity	6.94%	(0.57%)	(0.56%)	11.87%	11.46%
Total Domestic Equity Target (1)	7.21%	1.08%	(0.82%)	10.83%	10.78%
Large Cap Equity	6.53%	(0.83%)	(0.36%)	12.06%	11.41%
S&P 500 Index	6.78%	1.35%	1.78%	11.82%	11.58%
Alliance S&P Index	6.74%	1.32%	1.85%	11.82%	11.57%
S&P 500 Index	6.78%	1.35%	1.78%	11.82%	11.58%
PIMCO StocksPLUS	7.38%	0.91%	(0.25%)	11.76%	12.62%
S&P 500 Index	6.78%	1.35%	1.78%	11.82%	11.58%
BlackRock Russell 1000 Value	7.19%	1.65%	(1.36%)	9.51%	10.36%
Russell 1000 Value Index	7.20%	1.64%	(1.54%)	9.38%	10.25%
T. Rowe Price Large Cap Growth	5.19%	(6.34%)	(1.85%)	14.92%	12.68%
Russell 1000 Growth Index	6.74%	0.74%	2.52%	13.61%	12.38%
Small/Mid Cap Equity	8.29%	0.30%	(1.26%)	11.19%	11.47%
Russell 2500 Index	8.33%	0.39%	(7.31%)	8.16%	8.58%
Champlain Mid Cap	8.97%	2.75%	1.21%	11.77%	11.42%
Russell MidCap Index	8.19%	2.24%	(4.04%)	10.45%	10.30%
Pyramis Small Cap	7.57%	(2.24%)	(3.86%)	10.47%	11.37%
Russell 2000 Index	7.98%	(1.52%)	(9.76%)	6.84%	7.20%
International Equity	6.52%	(1.62%)	(11.02%)	0.53%	0.52%
MSCI ACWI x US (Net)	8.13%	(0.38%)	(9.19%)	0.32%	0.31%
Causeway International Value Eq	5.34%	(4.59%)	(10.17%)	3.41%	3.57%
MSCI EAFE Index	6.51%	(3.01%)	(8.27%)	2.23%	2.29%
Aberdeen EAFE Plus	8.21%	2.83%	(12.17%)	(3.00%)	0.83%
MSCI ACWI x US (Net)	8.13%	(0.38%)	(9.19%)	0.32%	0.31%
Fixed Income	2.07%	3.23%	0.79%	2.49%	4.65%
Barclays Aggregate Index	0.92%	3.03%	1.96%	2.50%	3.78%
BlackRock U.S. Debt Fund	0.92%	3.07%	2.06%	2.62%	3.90%
Barclays Aggregate Index	0.92%	3.03%	1.96%	2.50%	3.78%
PIMCO Fixed Income	2.79%	3.34%	0.01%	2.41%	5.26%
Custom Index (2)	2.39%	3.94%	2.33%	3.04%	4.97%

(1) The Total Domestic Equity target is currently composed of 72% S&P 500 and 28% Russell 2500 index.

(2) The custom index is currently composed of 25% Barclays Mortgage, 25% Barclays Credit, 25% Barclays High Yield, and 25% JP Morgan EMBI Global. Prior to 2/1/2012, the custom index was composed of 70% Barclays Mortgage, 15% Barclays Credit, and 15% Barclays High Yield.

Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended March 31, 2016. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended March 31, 2016

	Last Month	Quarter to Date	Last 12 Months	Last 36 Months	Last 60 Months
Gross of Fees					
Real Estate	0.69%	1.36%	12.59%	13.57%	13.67%
NFI-ODCE Value Weight Gr*	1.10%	3.34%	14.96%	14.07%	13.52%
JPM Strategic Property Fund	0.95%	1.88%	12.93%	13.51%	13.64%
JPM Income and Growth Fund**	0.00%	(0.00%)	11.71%	14.50%	17.05%
NFI-ODCE Value Weight Gr*	1.10%	3.34%	14.96%	14.07%	13.52%
Infrastructure	2.29%	2.30%	11.41%	6.95%	5.91%
CPI + 4%	0.84%	1.58%	4.50%	4.42%	5.09%
Macquarie European Infrastructure Fund	4.88%	4.90%	11.35%	3.78%	5.04%
SteelRiver Infrastructure North Amer.**	0.00%	0.00%	10.95%	10.53%	6.95%
CPI + 4%	0.84%	1.58%	4.50%	4.42%	5.09%
Total Fund	4.81%	0.52%	0.00%	7.92%	8.09%
Total Fund Target	4.86%	1.71%	0.59%	7.23%	7.59%

* Current Month Target = 36.0% S&P 500 Index, 26.0% Barclays Aggregate Index, 15.0% MSCI ACWI ex US, 10.0% Russell 2500 Index, 8.0% NFI-ODCE Value Weight Gr and 5.0% CPI-W+4.0%.

*The NFI-ODCE Value Weight benchmark current quarter return is preliminary.

**JPM Income & Growth and SteelRiver Infrastructure reflect zero returns, as 3/31/16 finalized market values are not yet available.

Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended March 31, 2016. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended March 31, 2016

	Last Month	Quarter to Date	Last 12 Months	Last 36 Months	Last 60 Months
Net of Fees					
Domestic Equity	6.94%	(0.63%)	(0.83%)	11.56%	11.09%
Total Domestic Equity Target (1)	7.21%	1.08%	(0.82%)	10.83%	10.78%
Large Cap Equity	6.53%	(0.87%)	(0.51%)	11.90%	11.21%
S&P 500 Index	6.78%	1.35%	1.78%	11.82%	11.58%
Alliance S&P Index	6.74%	1.31%	1.81%	11.77%	11.52%
S&P 500 Index	6.78%	1.35%	1.78%	11.82%	11.58%
PIMCO StocksPLUS	7.38%	0.91%	(0.25%)	11.76%	12.44%
S&P 500 Index	6.78%	1.35%	1.78%	11.82%	11.58%
BlackRock Russell 1000 Value	7.18%	1.64%	(1.39%)	9.47%	10.33%
Russell 1000 Value Index	7.20%	1.64%	(1.54%)	9.38%	10.25%
T. Rowe Price Large Cap Growth	5.19%	(6.47%)	(2.34%)	14.40%	12.15%
Russell 1000 Growth Index	6.74%	0.74%	2.52%	13.61%	12.38%
Small/Mid Cap Equity	8.29%	0.18%	(1.94%)	10.35%	10.61%
Russell 2500 Index	8.33%	0.39%	(7.31%)	8.16%	8.58%
Champlain Mid Cap	8.97%	2.50%	0.35%	10.83%	10.48%
Russell MidCap Index	8.19%	2.24%	(4.04%)	10.45%	10.30%
Pyramis Small Cap	7.57%	(2.24%)	(4.37%)	9.74%	10.60%
Russell 2000 Index	7.98%	(1.52%)	(9.76%)	6.84%	7.20%
International Equity	6.44%	(1.81%)	(11.66%)	(0.19%)	(0.22%)
MSCI ACWI x US (Net)	8.13%	(0.38%)	(9.19%)	0.32%	0.31%
Causeway International Value Eq	5.34%	(4.76%)	(10.75%)	2.74%	2.89%
MSCI EAFE Index	6.51%	(3.01%)	(8.27%)	2.23%	2.29%
Aberdeen EAFE Plus	8.00%	2.63%	(12.89%)	(3.78%)	0.02%
MSCI ACWI x US (Net)	8.13%	(0.38%)	(9.19%)	0.32%	0.31%
Fixed Income	2.06%	3.15%	0.47%	2.17%	4.33%
Barclays Aggregate Index	0.92%	3.03%	1.96%	2.50%	3.78%
BlackRock U.S. Debt Fund	0.91%	3.06%	2.04%	2.57%	3.88%
Barclays Aggregate Index	0.92%	3.03%	1.96%	2.50%	3.78%
PIMCO Fixed Income	2.79%	3.21%	(0.47%)	1.92%	4.78%
Custom Index (2)	2.39%	3.94%	2.33%	3.04%	4.97%

(1) The Total Domestic Equity target is currently composed of 72% S&P 500 and 28% Russell 2500 index.

(2) The custom index is currently composed of 25% Barclays Mortgage, 25% Barclays Credit, 25% Barclays High Yield, and 25% JP Morgan EMBI Global. Prior to 2/1/2012, the custom index was composed of 70% Barclays Mortgage, 15% Barclays Credit, and 15% Barclays High Yield.

Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended March 31, 2016. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended March 31, 2016

	Last Month	Quarter to Date	Last 12 Months	Last 36 Months	Last 60 Months
Net of Fees					
Real Estate	0.69%	1.18%	11.52%	12.37%	12.44%
NFI-ODCE Value Weight Gr*	1.10%	3.34%	14.96%	14.07%	13.52%
JPM Strategic Property Fund	0.95%	1.63%	11.84%	12.42%	12.54%
JPM Income and Growth Fund**	0.00%	(0.00%)	10.66%	12.96%	15.46%
NFI-ODCE Value Weight Gr*	1.10%	3.34%	14.96%	14.07%	13.52%
Infrastructure	2.29%	2.30%	10.44%	6.08%	4.57%
CPI + 4%	0.84%	1.58%	4.50%	4.42%	5.09%
Macquarie European Infrastructure Fund	4.88%	4.90%	10.36%	3.28%	3.90%
SteelRiver Infrastructure North Amer.**	0.00%	0.00%	10.01%	9.19%	5.34%
CPI + 4%	0.84%	1.58%	4.50%	4.42%	5.09%
Total Fund	4.80%	0.44%	(0.43%)	7.45%	7.56%
Total Fund Target	4.86%	1.71%	0.59%	7.23%	7.59%

* Current Month Target = 36.0% S&P 500 Index, 26.0% Barclays Aggregate Index, 15.0% MSCI ACWI ex US, 10.0% Russell 2500 Index, 8.0% NFI-ODCE Value Weight Gr and 5.0% CPI-W+4.0%.

*The NFI-ODCE Value Weight benchmark current quarter return is preliminary.

**JPM Income & Growth and SteelRiver Infrastructure reflect zero returns, as 3/31/16 finalized market values are not available.



MAYOR & COUNCIL COMMUNICATION

March 27, 2013

Subject: Adoption of Fiscal Year 2014 TSRS Employee Contribution Rates for Members Hired After July 1, 2006 (City Wide) Page: 1 of 2

Issue – The Tucson Supplemental Retirement System (TSRS) Board has recommended changes that include modifying the present system of setting the employer/employee contribution rates for members hired after July 1, 2006. TSRS is the City's retirement plan for non-public safety employees.

This item came before Mayor and Council at the Study Session of February 26, 2013. Time was taken at that session and in subsequent meetings with elected officials and with the TSRS Board to respond to questions and to clarify the different elements and impacts of this proposal. Based on the positive outcomes of those discussions, the item is brought forward again today with a recommendation for approval.

City Manager's Office Recommendation – The City Manager supports the recommendations made by the TSRS Board of Trustees and recommends that the Mayor and Council adopt the attached Ordinance with an effective date of July 1, 2013.

Background – As discussed during the Study Session of February 26, 2013, the TSRS Board has studied this issue extensively and is making recommendations intended to reduce the annual contribution requirements for the TSRS Pension Plan (the Plan), while continuing to improve the Plan's funded status. The goals associated with these recommendations address the Plan's funding requirements and support the long term sustainability of the Plan.

The current funding definition for TSRS employees hired after July 1, 2006 requires them to contribute 13.976% of their gross pay to the Plan for FY13, and these employees would be required to pay 14.82% of gross pay to the Plan for FY14. The TSRS Board understands that although City of Tucson pension benefits remain competitive in the market place, the contribution rate required for those hired after July 1, 2006 is discouraging recruitment and retention. The Board has also indicated an interest in developing methods to improve the Plan's funded ratio and contribution requirements for the employer.

As a result, the TSRS Board supports the following changes to the current funding methodology:

1. Lengthen the plan's period of amortization for unfunded liabilities to match our retiring employee's historical average career duration of approximately 20 years.
2. Modify the current definition of the variable member contribution rate (applies to all members hired after July 1, 2006), from 40% of the Plan's Actuarially Recommended Contribution Rate (ARC), to a definition that sets the contribution rate on the basis of the Normal Cost determined for those members. TSRS rates applicable for FY14 will be as follows:

MAYOR AND COUNCIL COMMUNICATION
Adoption of Fiscal Year 2014 TSRS Employee Contribution Rates
for Members Hired After July 1, 2006 (City Wide)

Page: 2 of 2

FY14 Rates	Member Contribution	City Contribution
Hired prior to July 1, 2006	5.00%	27.32%
Hired between July 1, 2006 and June 30, 2011 (Tier 1 benefit plan)	6.715%	25.605%
Hired after July 1, 2011 (Tier 2 benefit plan)	5.06%	27.26%

Present Consideration – The recommendations affect member contributions for those hired after July 1, 2006, with a recommended implementation date of July 1, 2013.

Financial Considerations – The Plan's overall objective and ability to provide a supplemental retirement benefit to its members and beneficiaries is unchanged. Annual earnings on trust assets and amounts received from portfolio activity will continue. Over the long term, City contributions are projected to stabilize, provided that the Plan's assumed investment earnings of 7.75% can be earned on the trust assets. Under the recommended funding methodology the immediate impact on the cash flow to TSRS for FY14 is an approximate decrease of \$6 million (\$3 million employer and \$3 million employee), which will have the impact of reducing the funded level of the Plan unless the employer savings are reinvested into the Plan. Staff and the Actuary continue to evaluate strategies to improve the Plan for the benefit of current and future members, retirees and the City.

Legal Considerations – The attached Ordinance has been prepared by the City Attorney's Office. The Mayor and City Council have the authority to adopt or reject the attached Ordinance with an effective date of July 1, 2013.

Respectfully submitted,



Liz R. Miller
Deputy City Manager

LM:MH:Lani Simmons:als
Human Resources Department
032713

Attachments: Proposed Ordinance
Ordinance

MAR27-13-107

If the intent is to create savings to the City through increased employee contributions, it may be necessary to consider a smaller increase in contributions for a bigger portion of the active population, potentially all active members. Many plans around the country have implemented employee contribution increases for current active members. It may require an ordinance change, but may be a legally permissible option. You should consult legal counsel if this is a desirable option.

CLOSING

The analysis shown in this report is based on the June 30, 2015, actuarial valuation and assumptions. The projections assume a constant active member population. Prospective new employees are assumed to contribute 15.35 percent in 2016. This rate will grade down until an ultimate rate of 5.25 percent is reached in year 2030.

The projection results are considered to be for purposes of making funding decisions. The results presented herein may not be applicable for other purposes.

The actuarial assumptions represent estimates of future experience and are not market measures. The results of any actuarial valuation and projection are dependent upon the actuarial assumptions used. Actual results (and future measures) can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates and funding periods. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future actuarial measurements. The actuarial calculations presented in this Report are intended to provide information for rational decision making.

The undersigned are independent actuaries and consultants. Leslie Thompson, Dana Woolfrey, and Paul Wood are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Sincerely,

Gabriel, Roeder, Smith & Company



Leslie L. Thompson, FSA, FCA, MAAA, EA
Senior Consultant



Dana Woolfrey, FSA, FCA, EA, MAAA
Consultant

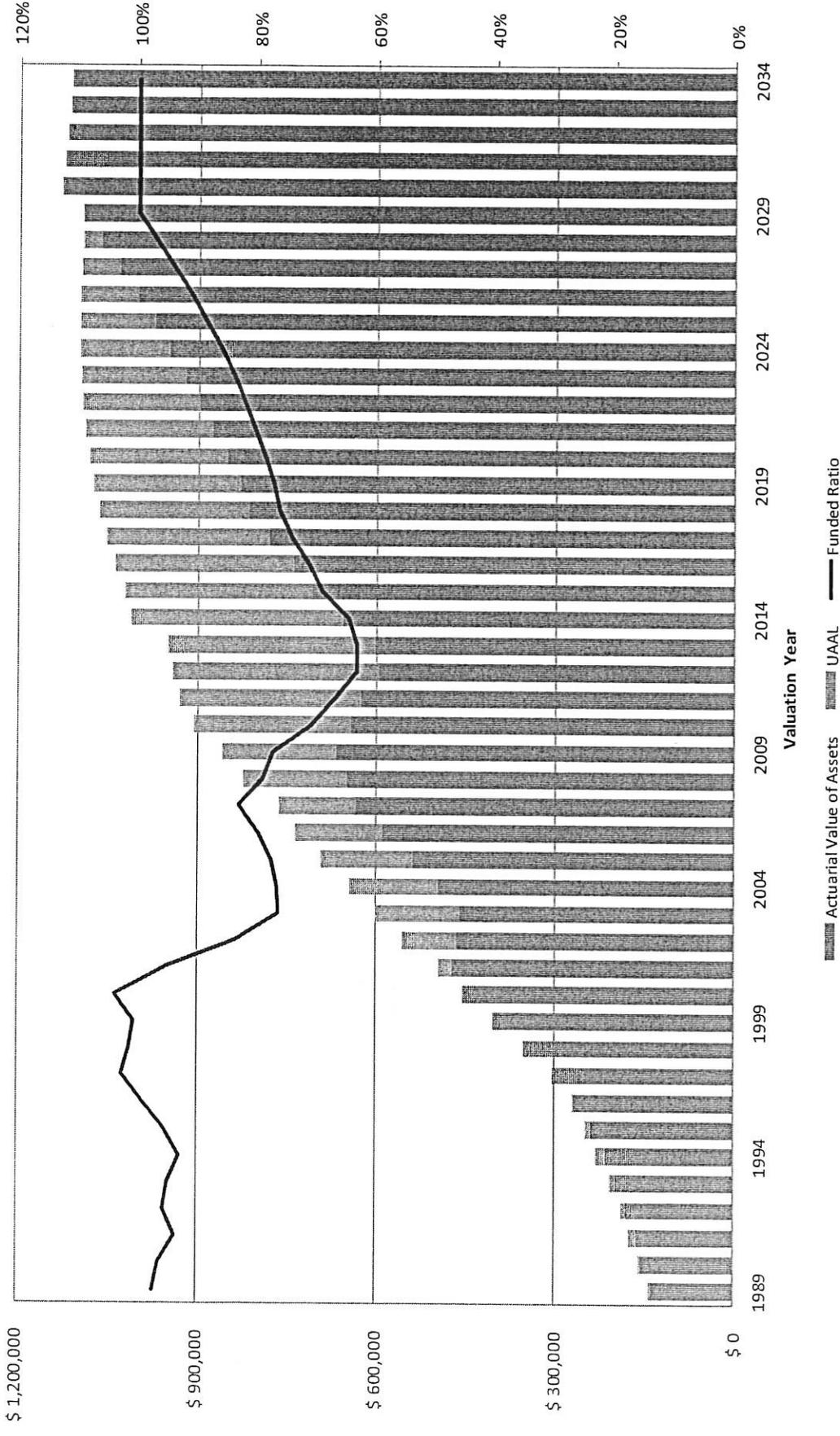


Paul T. Wood, ASA, FCA, MAAA
Consultant

Gabriel Roeder Smith & Company

Tucson Supplemental Retirement System Historical and Projected Funding Results

(shows trend and projection of future funded ratios for a contribution rate of 27.50% and an increase in Prospective Employee Contributions)





The Value Reversion

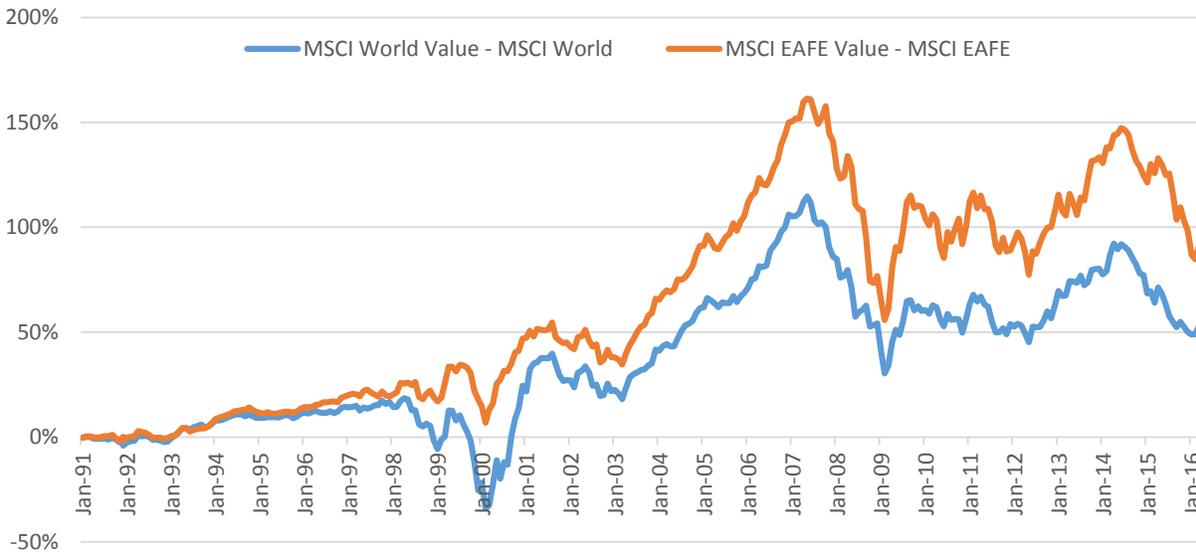
In the past two years, value stocks, along with cyclicals and higher-volatility equities, have underperformed broader markets while higher-momentum stocks have outperformed. When will these trends change? In this note, we use a quantitative approach to examine these style factors relative to history from three different perspectives. First, we observe that the current valuation dispersion in these factors (e.g., the discount of value stocks relative to their expensive peers, and the premium attached to high-momentum stocks) is much greater than historical averages, creating a potentially heightened probability for mean reversion. Next, we find that the current spreads in valuation multiples are not explained by spreads in earnings growth and returns on equity (ROE) expectations - the key drivers of price-to-earnings (P/E) and price-to-book value (P/B) ratios. Finally, by examining past drawdowns in value and momentum factors, the analysis indicates that when the mean reversion comes, the “snap-back” will likely happen quickly.

Value investing has always been an inherently unpopular and lonely road to travel. Cheap stocks tend to trade at discounts to peers for a reason, though the academic debate continues as to whether that reason is more risk-based or behavioral in nature. Risk-based proponents argue that value stocks price in a higher probability of financial distress. More generally, those stocks may reflect greater perceived uncertainty around future earnings created from cyclical, structural, or competitive forces. Behavioral explanations focus instead on the practical limitations facing market participants. Many investors simply do not have the mandate, liquidity, patience, or conviction to maintain these unpopular positions for extended periods of time. Value stocks can take years to “re-rate” upward, and holding these out-of-favor stocks will likely cause short-term pain. As with any consistent investing strategy, a value style *will* underperform the broader market from time to time. This is simply the price of being contrarian.

So why invest in value at all? Its track record is perhaps value’s strongest advocate. Over longer periods, value stocks have outperformed the markets fairly consistently. As Exhibit 1 illustrates, despite short periods of weakness, value indices have outperformed benchmark indices over the past 25 years. Additionally, buying inexpensive or “cheap,” unloved stocks makes intuitive sense. If a stock trades lower but fundamentals remain unchanged, the upside to downside ratio improves and the increasingly asymmetric return profile becomes more attractive. At Causeway, we like to add to positions on these price declines. It may be difficult to do at the time, but this discipline is why you hire an active value manager. Although timing cannot be predicted, eventually value works, the pendulum swings the other way, and cheap stocks ultimately outperform. Contrarian investors who can “stomach” value drawdowns are rewarded for their patience by the subsequent snap-back and re-rating.

Though value stocks have underperformed the broader market recently, they have been a reliable source of outperformance over the last 25 years.

Exhibit 1. Cumulative Excess Performance of MSCI Value Indices vs. MSCI Standard Indices (World/EAFE)



Note: Lines represent the cumulative performance of the MSCI World Value Index and MSCI EAFE Value Index less the cumulative performance of the MSCI World Index and the MSCI EAFE Index, respectively, from January 1991 to March 2016. Source: MSCI, FactSet

Despite a small bounce in March 2016, however, value stocks have underperformed broader market indices since the summer of 2014. The questions that follow are, how long can this underperformance persist, and at what point might value resume its historical leadership? While identifying the precise turning point is not possible, we can search for indications by examining past valuation spreads, disconnects between market multiples and their respective drivers, and the structure of previous drawdowns. Though our primary style factor focus is value, we also analyze momentum, cyclical, and volatility^a given recent trends.

I. Dispersion in the Valuation Ratios of Style Factors Is Elevated Relative to History

We begin by measuring how cheaply or expensively each of these four styles is trading relative to the last 25 years.^b At the end of each month, we distribute the constituents of the MSCI World Index into quintiles based on each stock’s relative exposure to a specific style. For each factor, we use Causeway’s risk model definitions which combine multiple measures of each style exposure. Next, we observe the median price-to-book value and forward price-to-earnings multiple for those stocks sorted into the extreme quintiles (the top quintile, or “Q1” and the bottom quintile, or “Q5”). Finally, we track the ratio of the median valuation multiple of Q1 relative to the median valuation multiple of Q5. Comparing the most recent measure of this dispersion ratio to its range over the past 25 years will give us a sense of how far away the current ratio is from norms over the period.

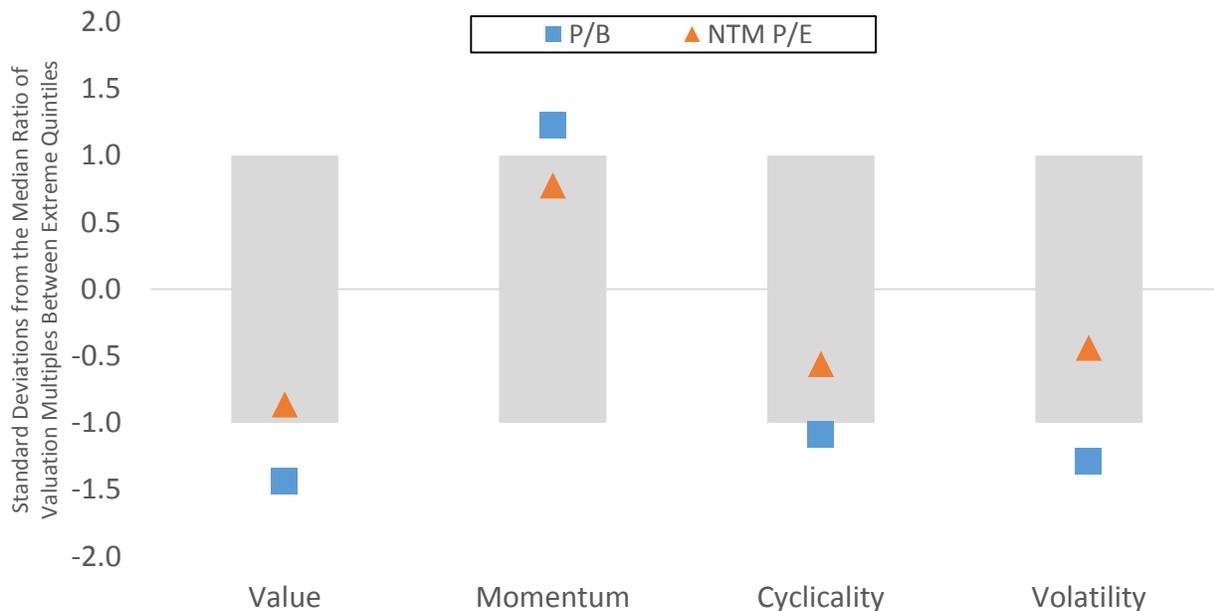
^a “Value” measures a stock’s relative cheapness, “momentum” measures a stock’s relative price performance, “cyclical” measures a stock’s sensitivity to economic cycles, and “volatility” measures a stock’s historical variability.

^b We use 25 years based on the availability of constituent-level data for the MSCI World Index.

Exhibit 2 plots the most recent data point for each style factor standardized relative to its 25-year history. Current points are plotted in terms of standard deviations from the 25-year median (to diminish the impact of historical outliers). If a particular factor’s dispersion is either well above or well below its 25-year norm, we would argue that it is overvalued or undervalued, respectively. The gray bars reference a +/- 1 standard deviation difference from the median of the respective valuation ratio between extreme quintiles.

Value stocks, Cyclical stocks, and Volatile stocks are cheap relative to history, while Momentum stocks are more expensive.

Exhibit 2. As of March 2016, Standard Deviations from the Median Ratio of Valuation Multiple (both next-twelve-months “NTM” P/E and P/B) Between Extreme Quintiles over the past 25 years (January 1991 – March 2016)



Note: As of March 31, 2016, measures the standard deviations from the median of the valuation ratio (NTM P/E and P/B) between first and fifth quintiles from January 1991 – March 2016. Source: Causeway Analytics

We see from Exhibit 2 that the valuation ratio of cheap stocks relative to expensive stocks is roughly a 1 standard deviation discount to 25-year historical norms on a P/E basis and even greater on a P/B basis. Stated differently, cheap stocks usually do not trade so cheaply, and value as a factor appears oversold. Momentum exhibits the opposite characteristic. High momentum stocks are trading at a much larger premium to low momentum stocks relative to their 25-year history. Additionally, we observe that cyclical stocks are trading at a larger discount to less cyclical (or “defensive”) stocks compared to their 25-year history, and higher-volatility stocks are also trading at a greater discount to lower-volatility stocks. These findings are consistent with recent relative performance: Value has underperformed, while momentum, defensive, and “low-vol” stocks all have outperformed.

Why do we care about the current valuation dispersion of each style factor relative to history? All of these factors have a tendency toward mean reversion. And we believe Causeway value equity strategies are well-positioned for such a turn. In our international and global value portfolios, we currently have positive active exposure (exposure relative to that of the benchmark index) to value and cyclical, and we have negative active exposure to momentum. Mean reversion in these factors should benefit Causeway

portfolios. It is important to emphasize that these active positions do not represent attempts to “time” factors. Rather, as value investors, we will generally have positive active exposure to undervalued factors and negative active exposure to overvalued factors.

II. Spreads in Fundamental Drivers Do Not Explain Spreads in Current Valuation Multiples

Another way to gauge the degree of disconnect in factor valuations is to investigate the drivers behind the specific metrics that we have been using: price-to-earnings and price-to-book value multiples. Using the Gordon Growth Model framework, we know that a stock price (P) should reflect the growing stream of future earnings per share (E_{t+1} growing by g), assuming all earnings are paid as dividends, discounted by the cost of equity (r_e):

$$P = \frac{E_{t+1}}{r_e - g} \quad \text{OR} \quad \frac{P}{E_{t+1}} = \frac{1}{r_e - g}$$

P/E is primarily a function of expected earnings growth

If the market is efficient, a stock’s price should adjust to equal future earnings per share (EPS) divided by the difference between the cost of equity and the EPS growth rate. Rearranging the terms, the P/E multiple should equal the reciprocal of the difference between the cost of equity and the growth rate. As the equation indicates, investors should be willing to pay a higher P/E multiple for stocks exhibiting higher earnings growth. Although the cost of equity is admittedly an important determinant of a P/E multiple, we find that the relationship between market beta (a key input in CAPM-derived r_e) and valuation quintile is not stable historically. Expected earnings growth (g), on the other hand, has consistently been positively correlated with P/E, and we will therefore focus on growth differentials in this analysis.

If we reframe the first equation from above in terms of the dividend discount model and relax the assumption of a 100% payout ratio, we are able to see what drives the price-to-book value (BV_0) multiple:

$$P = \frac{\text{Dividend/Share}_1}{r_e - g} \quad \text{OR} \quad P = \frac{BV_0 * ROE * \text{Payout Ratio}^c}{r_e - g} \quad \text{OR} \quad \frac{P}{BV_0} = \frac{ROE - g}{r_e - g}$$

P/B is primarily a function of expected future ROE

Since P/E multiples are driven by expected earnings growth, and P/B multiples are driven by expected future Return on Equity (ROE), we will compare current P/E multiples to growth rates and current P/B multiples to ROEs. Exhibit 3 shows these comparisons for the four style factors that we have been examining. We compare the median P/E multiple of extreme quintiles with the respective median rolling FY3/FY1 growth rate.^d We also compare the median P/B multiple with the respective median ROE. With these data, we can observe whether the current inter-quintile spread in growth rates explains the spread in P/E multiples, and whether the current spread in ROE explains the spread in P/B multiples. As the formulas above indicate, these relationships are not linear and our analysis does not mean to suggest that they are, however the drivers nevertheless share a direct relationship to the market multiples.

^c We assume that $g = 1 - \text{Payout ratio}$, so $\text{Payout ratio} = 1 - g$.

^d We acknowledge that the “ g ” in the equations above is meant to represent growth in perpetuity, however due to data availability and reliability issues with long-term growth (“LTG”) estimates, we rely on FY3/FY1 EPS growth estimates as a proxy.

Fundamental drivers do not explain the current spreads in valuation multiples.

Exhibit 3. (Market Multiple Premium – Fundamental Driver Premium) vs. 25-year median spread

VALUE				
	Forward P/E	Earnings Growth (g)*	Price / Book	Return on Equity (ROE)
Cheap Stocks (Q1)	10.3x	7.1%	1.0x	9.4%
Expensive Stocks (Q5)	25.3x	12.3%	3.9x	11.8%
Q5/Q1 Premium (%)	144.6%	72.0%	294.9%	25.5%
Current Premium Spread		72.5%		269.3%
		vs.		vs.
25-yr Median Premium Spread		18.3%		211.2%
MOMENTUM				
	Forward P/E	Earnings Growth (g)*	Price / Book	Return on Equity (ROE)
High Momentum (Q1)	20.6x	9.2%	3.4x	13.4%
Low Momentum (Q5)	13.1x	9.0%	1.2x	7.8%
Q5/Q1 Premium (%)	-36.5%	-2.9%	-65.3%	-41.5%
Current Premium Spread		-33.6%		-23.8%
		vs.		vs.
25-yr Median Premium Spread		7.8%		-15.4%
CYCLICALITY				
	Forward P/E	Earnings Growth (g)*	Price / Book	Return on Equity (ROE)
Cyclical Stocks (Q1)	14.1x	10.1%	1.5x	9.5%
Defensive Stocks (Q5)	20.1x	7.9%	2.3x	10.3%
Q5/Q1 Premium (%)	42.6%	-21.8%	55.6%	8.3%
Current Premium Spread		64.4%		47.3%
		vs.		vs.
25-yr Median Premium Spread		10.7%		-7.7%
VOLATILITY				
	Forward P/E	Earnings Growth (g)*	Price / Book	Return on Equity (ROE)
Most Volatile (Q1)	14.0x	9.2%	1.2x	7.1%
Least Volatile (Q5)	18.5x	7.9%	2.6x	12.3%
Q5/Q1 Premium (%)	31.8%	-13.9%	116.7%	73.6%
Current Premium Spread		45.8%		43.1%
		vs.		vs.
25-yr Median Premium Spread		27.2%		-27.0%

* FY3/FY1 EPS compounded annual growth rate (CAGR).

Note: The "Forward P/E" of a stock is its price divided by the consensus EPS estimate for the next twelve months. The "FY3/FY1 EPS Growth (g)" of a stock represents the consensus FY3 EPS estimate divided by the consensus FY1 EPS estimate, less 100%. The "Price / Book" of a stock is its price divided by the most recent shareholders' equity per share. The "Return on Equity (ROE)" of a stock represents its net income divided by shareholders' equity. All values represent the quintile median. Universe consists of the constituents of the MSCI World Index. "25-yr Median Premium Spread" is the median monthly premium spread from January 1991 – March 2016. Source: FactSet, MSCI, Causeway Analytics

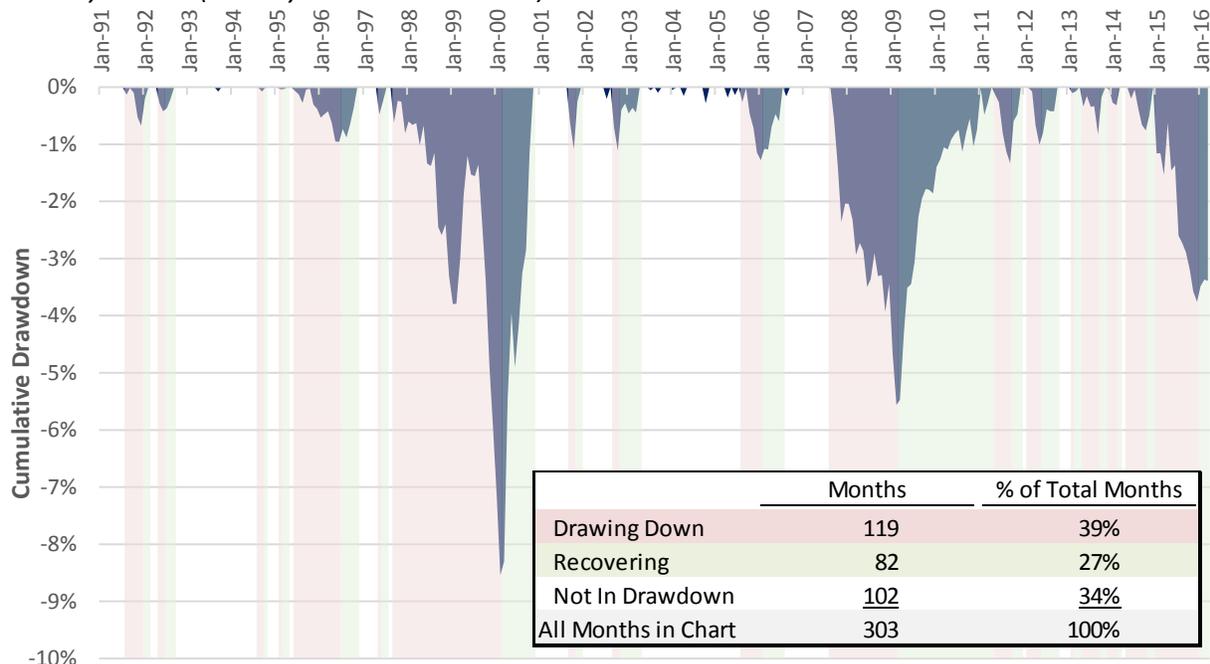
In the cases of value, cyclicality, and volatility, the spread in market multiples far outpaces the spread in the underlying driver. This shows yet again that value stocks, cyclical stocks, and higher-volatility stocks are trading at much bigger discounts to their opposing peers relative to the underlying driver. Admittedly, a valuation premium is probably warranted from more “stable” defensive and low-volatility stocks, but the current valuation spreads are also much greater than their 25-year median spreads (see the boxed comparison). In the case of momentum, high-momentum stocks trade at a larger premium than the underlying drivers or historical spreads would justify. This is consistent with our conclusions in Exhibit 2.

III. Value Has Recovered Quickly in Past Drawdowns While Momentum Has Drawn Down Quickly

Finally, in the case of value and momentum specifically, it is helpful to examine the characteristics of past drawdowns for insights into mean reversion trends. Using our proprietary risk model, which strips out the effects of individual styles from country, sector, currency, and idiosyncratic effects, we seek to isolate and link the historical returns attributable to value. These would be the theoretical returns that any portfolio with a pure exposure to value (holding all other factors constant) would have recognized. And as such, we believe they offer a good proxy for the effects impacting value portfolios such as Causeway’s international and global value strategies. Exhibit 4 analyzes the characteristics of previous value drawdowns over the past 25 years (1991 - March 2016) using a broad universe of global equities in the developed markets.

Value drawdowns tend to snap back quickly.

Exhibit 4. Drawdowns of Causeway Risk Model’s Value factor controlling for style, sector, country, and currency returns (January 1991 – March 2016)



Note: Drawdown is the peak-to-trough decline during a specific period, measured as the percentage change between the peak and the trough. The universe represented in the chart above consists of developed markets global equities, including securities from certain emerging markets in the investable universe of Causeway’s fundamental value strategies, subject to minimum liquidity thresholds, that are used in Causeway’s proprietary quantitative risk model. Cumulative return is calculated by compounding periodic returns to this risk factor. Source: Causeway Analytics

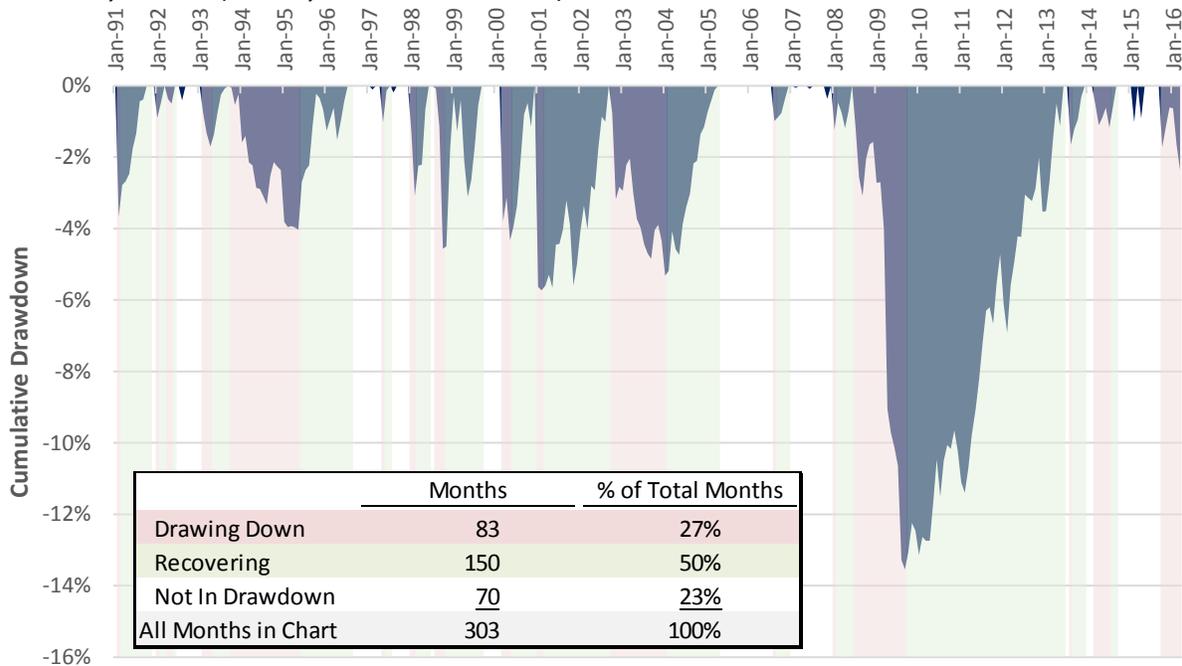
For this analysis, we define a drawdown as any decline lasting two or more months in order to avoid single down months. The average number of months to trough was 6.6 months, and average recovery period

was 4.6 months, equating to an average total drawdown period of approximately 11 months. Two observations can be drawn from these statistics. First, we are currently 15 months into a drawdown for value (12 months if the December trough holds), well above the typical trough period of 6.6 months. Second, the average recovery period from a trough is much shorter than the period to the trough. Returns to value recover quickly, which means that attempting to time the bottom may result in a missed recovery. In fact, looking at the table in Exhibit 4, we see that over the past 25+ years, 39% of months were spent drawing down, while only 27% were recovering. This is also consistent with the positive skew in returns to value, indicating that the magnitude of positive returns eclipses the more numerous, smaller declines. Out of the four factors we have discussed, value is the only one with a positive skew (meaning that the other factors experience larger-magnitude negative returns).

Unlike value, momentum has performed very well recently and as contrarian value managers, we have a negative exposure to momentum. However, it is interesting to note that the drawdown pattern is reversed for momentum. Momentum tends to draw down very quickly to its trough, but recovers over a relatively longer period of time. The typical period to trough is 4.9 months compared to the 8.8 month average recovery. Over the past 25+ years, we have witnessed nearly twice as many months in which momentum was recovering than drawing down. Since our value and momentum factors have a -.24 correlation, it is possible that momentum could experience a drawdown at a similar time that value snaps out of a drawdown (and indeed the past several months have witnessed the beginning of a drawdown for momentum). Both would likely be beneficial for Causeway’s developed equity portfolios.

Momentum tends to draw down quickly, but recovers over a relatively longer period of time.

Exhibit 5. Drawdowns of Causeway Risk Model’s Momentum factor controlling for style, sector, country, and currency returns (January 1991 – March 2016)



Note: Drawdown is the peak-to-trough decline during a specific period, measured as the percentage change between the peak and the trough. The universe represented in the chart above consists of developed markets global equities, including securities from certain emerging markets in the investable universe of Causeway’s fundamental value strategies, subject to minimum liquidity thresholds, that are used in Causeway’s proprietary quantitative risk model. Cumulative return is calculated by compounding periodic returns to this risk factor. Source: Causeway Analytics

Summary

The recent underperformance of value as an investment style has created a strong headwind for value managers, prompting the question, when will value resume its historical outperformance? We seek to answer this question by measuring the magnitude of the current dislocation from three perspectives. We find that value stocks are trading at a much larger discount to their more expensive peers relative to history. They are also much more disconnected from their underlying valuation drivers relative to history. And finally, the drawdown in value has already outpaced the average previous decline. Although recovery could still take longer given the depth of the current drawdown, each of these analyses argue in favor of mean reversion for value. We believe the time to emphasize value has arrived.

This paper expresses the portfolio managers' views as of April 2016 and should not be relied on as research or investment advice regarding any stock. These views and any portfolio holdings and characteristics are subject to change. There is no guarantee that any forecasts made will come to pass.

International investing may involve risk of capital loss from unfavorable fluctuations in currency values, from differences in generally accepted accounting principles, or from economic or political instability in other nations.

The MSCI EAFE Index is a free float adjusted market capitalization weighted index, designed to measure developed market equity performance excluding the U.S. and Canada, consisting of 21 stock markets in Europe, Australasia, and the Far East. The MSCI World Index is a free float-adjusted market capitalization index, designed to measure developed market equity performance, consisting of 23 developed country indices, including the U.S. The MSCI EAFE Value and MSCI World Value Indices are subsets of these indices, and target 50% coverage of the MSCI EAFE Index and MSCI World Index, respectively, with value investment style characteristics for index construction using three variables: book value to price, 12-month forward earnings to price, and dividend yield. The indices are gross of withholding taxes, assume reinvestment of dividends and capital gains, and assume no management, custody, transaction or other expenses. It is not possible to invest directly in an Index.

MSCI has not approved, reviewed or produced this report, makes no express or implied warranties or representations and is not liable whatsoever for any data in the report. You may not redistribute the MSCI data or use it as a basis for other indices or investment products.

"Beta" is a measure of the risk potential of a stock or an investment portfolio expressed as a ratio of the stock's or portfolio's volatility to the volatility of the market as a whole.

"CAPM" or the "Capital Asset Pricing Model" provides a formula that calculates the expected return on a security based on its level of risk. The formula for the capital asset pricing model is the risk free rate plus beta times the difference of the return on the market and the risk free rate.

"Gordon Growth Model" is used to determine the intrinsic value of a stock based on a future series of dividends that grow at a constant rate. Given a dividend per share that is payable in one year, and the assumption the dividend grows at a constant rate in perpetuity, the model solves for the present value of the infinite series of future dividends.

"Standard Deviation" is a measure that is used to quantify the amount of variation or dispersion of a set of data values. The more spread apart the data, the higher the deviation. Standard deviation is calculated as the square root of variance.