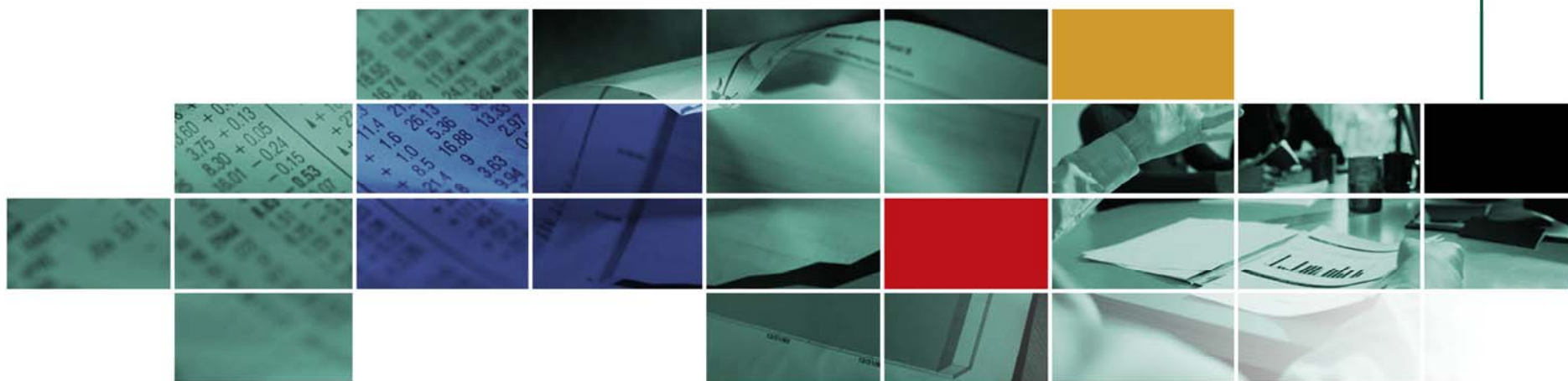


# RVKuhns

▶▶▶ & ASSOCIATES, INC.

## *TMRS Quarterly Summary*



## Capital Markets Review As of December 31, 2013

### Fourth Quarter Economic Environment

In spite of a sixteen-day federal shutdown in early October and the accompanying fiscal uncertainty, stock markets and the greater U.S. economy improved during Q4 after Congress reached agreement on appropriations and postponed the debt ceiling until February 2014. The headline unemployment rate decreased from 7.2% to 6.7% during the quarter, a positive sign tempered by a persistently low participation rate that suggests the job market has yet to fully recover. Additionally, final GDP figures for Q3 were revised upward from an initial reading of 2.8% to 4.1%, in part due to stronger consumer spending and increased private inventory growth. In light of positive economic news, the Federal Reserve decided to modestly reduce its quantitative easing (QE) purchases from \$85 to \$75 billion per month, to begin in January 2014. Domestic equity markets delivered relatively higher returns on the quarter, while international markets also posted gains. Yields continued to increase, as the Fed's stated intent to taper QE purchases had investors looking to exit the bond markets before bond purchases are wound down; the steepening yield curve suggests the market has already priced in the substantial rate increases expected in 2014.

Internationally, the majority of top-performing developed market sectors were cyclical in nature, indicating continued improvement in global investor confidence. The European Central Bank announced its "Single Resolution Mechanism" policy, which will ensure consistent supervision among Eurozone members and provide guidelines for dissolving failed banks. In Japan, stocks delivered positive returns, but concerns surrounding the efficacy of Shinzo Abe's economic policies slowed the Nikkei's gains. Meanwhile, Europe experienced limited growth, as its economy remains stunted by pervasive unemployment.

#### Domestic Equities

- U.S. equity markets exhibited strong performance for the fourth quarter. The S&P 500 returned 10.51% on the quarter and 32.39% for the year ended 2013, its highest annual return since 1997.
- Growth again outperformed value stocks, as the Russell 3000 Growth returned 10.25%, while the Russell 3000 Value earned 9.95% for the quarter.
- Large cap outperformed small cap stocks for the first time in four quarters, with the Russell 1000 returning 10.23% and the Russell 2000 returning 8.72%.
- All sectors recorded gains for the quarter, though defensive sectors such as telecom services and utilities trailed, with returns of 5.47% and 2.79%, respectively.

#### International Equities

- International markets were positive for the quarter, though developed and emerging markets trailed domestic markets for both the quarter and calendar year.
- Developed markets outperformed emerging markets for the fifth quarter in a row, with the MSCI EAFE returning 5.71% and the MSCI Emerging Markets returning 1.83%.

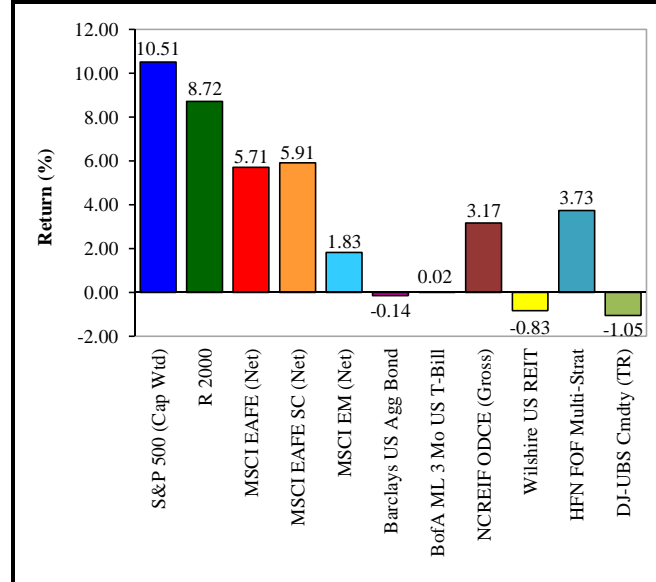
#### Fixed Income

- Fixed income markets ended the year on a subdued note, with the Barclays US Aggregate Bond Index returning -0.14% on the quarter and -2.02% for the year.
- Investor demand for higher-yielding sectors made it difficult for investment grade credit to keep up with high yield bonds and bank loans, though all posted gains.

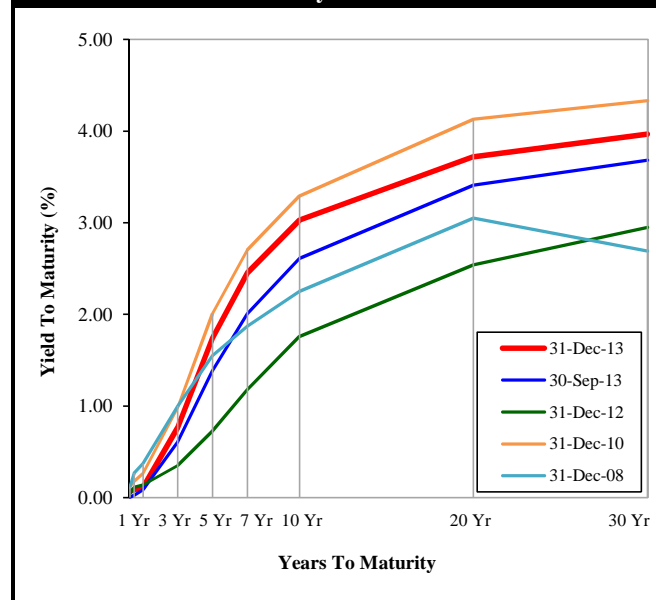
### Trailing-Period Performance

	Mth End Oct-2013	Mth End Nov-2013	MTD	QTD	CYTD	1 Year	2 Years	3 Years	5 Years	10 Years
S&P 500 (Cap Wtd)	4.60	3.05	2.53	10.51	32.39	32.39	23.93	16.18	17.94	7.41
R 2000	2.51	4.01	1.97	8.72	38.82	38.82	27.09	15.67	20.08	9.07
MSCI EAFE (Net)	3.36	0.77	1.50	5.71	22.78	22.78	20.02	8.17	12.44	6.91
MSCI EAFE SC (Net)	3.04	0.43	2.34	5.91	29.30	29.30	24.57	9.26	18.50	9.53
MSCI EM (Net)	4.86	-1.46	-1.45	1.83	-2.60	-2.60	7.31	-2.06	14.79	11.17
Barclays US Agg Bond	0.81	-0.37	-0.57	-0.14	-2.02	-2.02	1.05	3.26	4.44	4.55
BofA ML 3 Mo US T-Bill	0.00	0.01	0.01	0.02	0.07	0.07	0.09	0.10	0.12	1.68
NCREIF ODCE (Gross)	N/A	N/A	N/A	3.17	13.94	13.94	12.43	13.60	3.68	7.16
Wilshire US REIT	4.06	-5.27	0.61	-0.83	1.86	1.86	9.44	9.37	16.69	8.38
HFN FOF Multi-Strat	1.37	1.19	1.13	3.73	9.09	9.09	6.92	2.59	4.42	3.11
DJ-UBS Cmnty (TR)	-1.48	-0.80	1.24	-1.05	-9.52	-9.52	-5.38	-8.11	1.51	0.87

### QTD

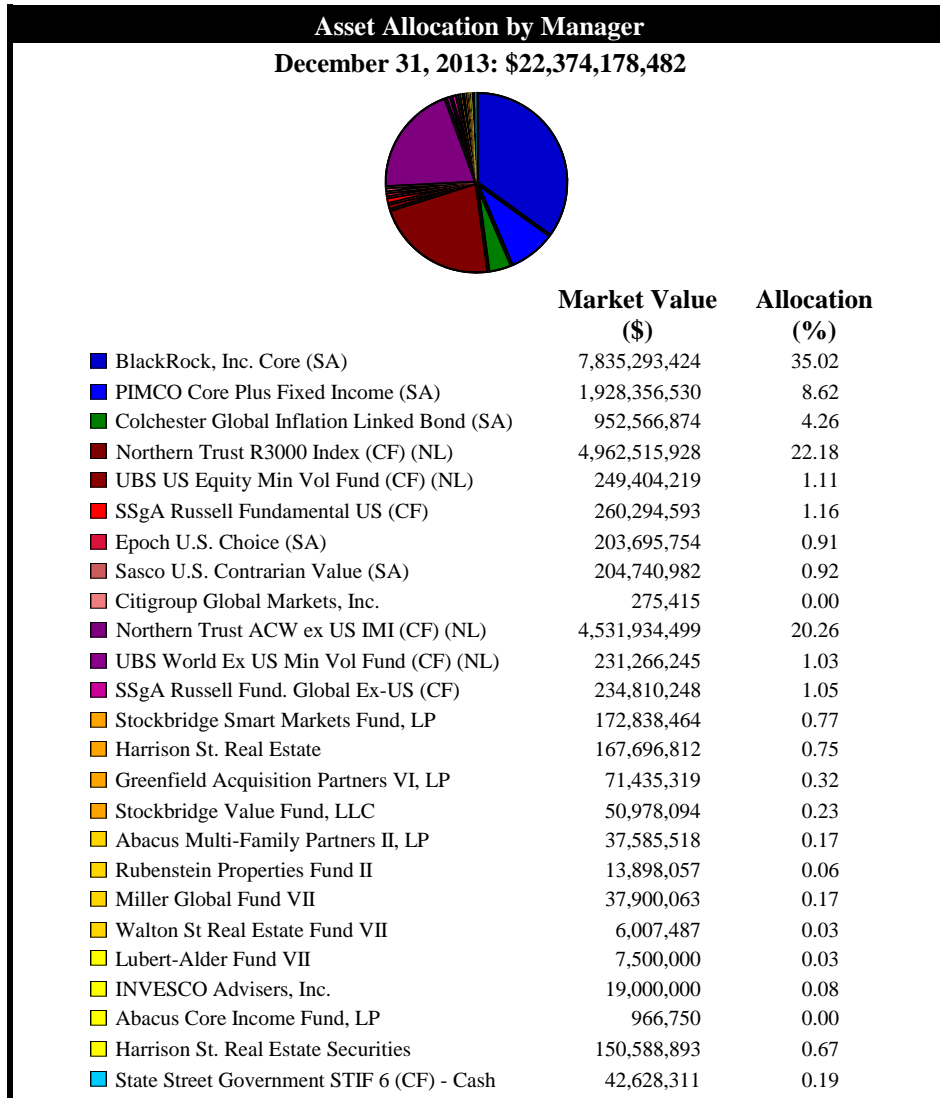


### Treasury Yield Curve



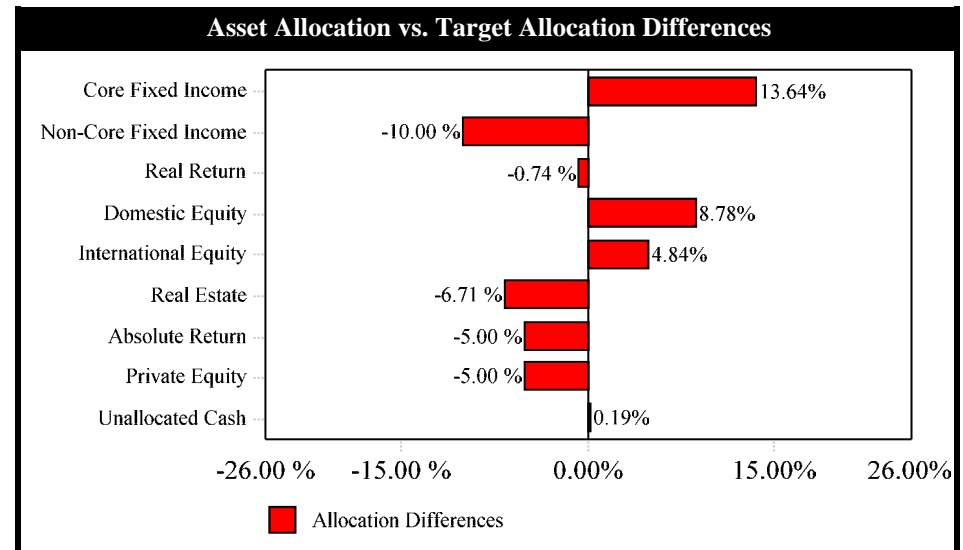
Treasury data courtesy of the U.S. Department of the Treasury.

**Texas Municipal Retirement System**  
**Total Fund Composite**  
**Asset Alloc. by Manager, Asset Alloc. vs. Target, and Schedule of Investable Assets**  
**As of December 31, 2013**



**Asset Allocation vs. Target Allocation**

	Market Value (\$)	Allocation (%)	Target (%)
Core Fixed Income	9,763,649,954	43.64	30.00
Non-Core Fixed Income	-	-	10.00
Real Return	952,566,874	4.26	5.00
Domestic Equity	5,880,926,892	26.28	17.50
International Equity	4,998,010,992	22.34	17.50
Real Estate	736,395,458	3.29	10.00
Absolute Return	-	-	5.00
Private Equity	-	-	5.00
Unallocated Cash	42,628,311	0.19	0.00
<b>Total Fund</b>	<b>22,374,178,482</b>	<b>100.00</b>	<b>100.00</b>

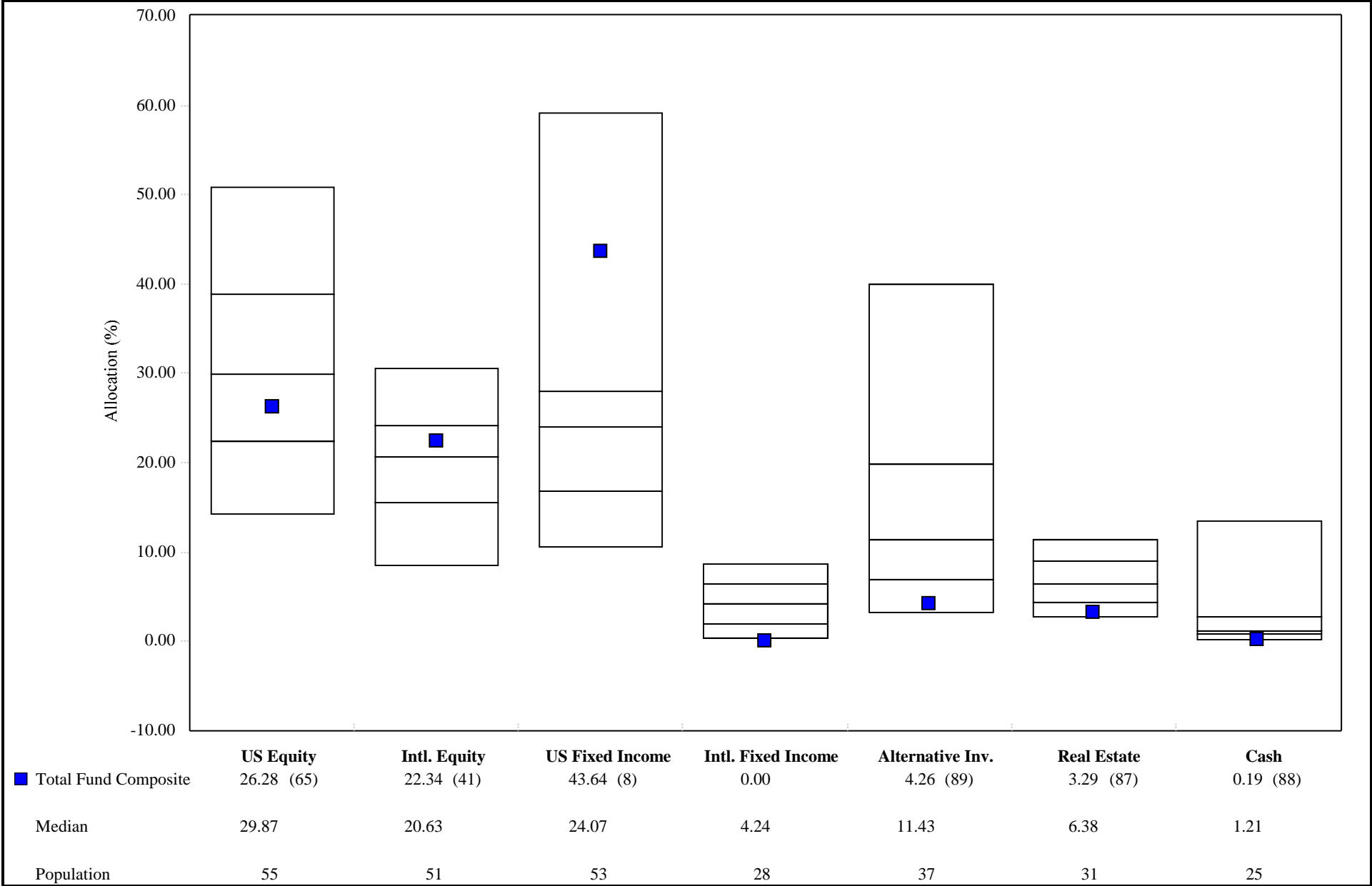


**Schedule of Investable Assets**

Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	%Return	Unit Value
<b>CYTD</b>	<b>20,429,828,390</b>	<b>-29,455,231</b>	<b>1,973,805,323</b>	<b>22,374,178,482</b>	<b>9.75</b>	<b>109.75</b>

Allocations shown may not sum up to 100% exactly due to rounding. Performance shown is gross of fees and provided by State Street. Gain/Loss figure includes both realized and unrealized gains and losses. Epoch U.S. Choice (SA), Sasco U.S. Contrarian Value (SA), Citigroup Global Markets, Inc., INVESCO Advisers, Inc. and Abacus Core Income Fund, LP were funded in December 2013.

**Texas Municipal Retirement System**  
**All Public Plans > \$1B-Total Fund**  
**Plan Sponsor TF Asset Allocation**  
**As of December 31, 2013**



Parentheses contain percentile ranks. Allocations shown may not sum up to 100% exactly due to rounding.

**Texas Municipal Retirement System**  
**Comparative Performance**  
**As of December 31, 2013**

	1 Quarter	Year To Date	1 Year	3 Years	5 Years	7 Years	10 Years	2012	Since Incep.	Inception Date
<b>Total Fund Composite</b>	<b>3.41</b>	<b>9.75</b>	<b>9.75</b>	<b>7.34</b>	<b>8.25</b>	<b>6.77</b>	<b>7.12</b>	<b>10.02</b>	<b>8.99</b>	<b>01/01/1989</b>
Actual Allocation Benchmark	3.57	9.70	9.70	7.14	6.88	6.49	6.20	9.48	8.36	
Difference	-0.16	0.05	0.05	0.20	1.37	0.28	0.92	0.54	0.63	
<b>Total Fixed Income Composite</b>	<b>-0.32</b>	<b>-1.94</b>	<b>-1.94</b>	<b>3.58</b>	<b>4.78</b>	<b>4.77</b>	<b>5.71</b>	<b>4.94</b>	<b>8.42</b>	<b>01/01/1989</b>
Fixed Income Benchmark	-0.14	-2.02	-2.02	3.26	3.30	4.49	4.79	4.21	7.79	
Difference	-0.18	0.08	0.08	0.32	1.48	0.28	0.92	0.73	0.63	
<b>Real Return Composite</b>	<b>-0.44</b>	<b>-4.06</b>	<b>-4.06</b>	N/A	N/A	N/A	N/A	<b>10.83</b>	<b>4.55</b>	<b>02/01/2011</b>
Barclays Wrld Gov Infl-Lnkd Index (Unhedged)	-0.69	-4.84	-4.84	4.04	5.79	4.64	5.20	6.95	3.94	
Difference	0.25	0.78	0.78	N/A	N/A	N/A	N/A	3.88	0.61	
<b>Global Equity Composite</b>	<b>7.51</b>	<b>24.87</b>	<b>24.87</b>	<b>10.97</b>	<b>14.93</b>	N/A	N/A	<b>16.77</b>	<b>4.50</b>	<b>02/01/2008</b>
Global Equity Benchmark	7.41	24.49	24.49	10.86	14.79	N/A	N/A	16.76	4.38	
Difference	0.10	0.38	0.38	0.11	0.14	N/A	N/A	0.01	0.12	
<b>Domestic Equity Composite</b>	<b>9.99</b>	<b>33.20</b>	<b>33.20</b>	<b>16.11</b>	<b>18.64</b>	N/A	N/A	<b>16.33</b>	<b>7.90</b>	<b>02/01/2008</b>
R 3000 Index	10.10	33.55	33.55	16.24	18.71	6.50	7.88	16.42	7.96	
Difference	-0.11	-0.35	-0.35	-0.13	-0.07	N/A	N/A	-0.09	-0.06	
<b>International Equity Composite</b>	<b>4.73</b>	<b>16.31</b>	<b>16.31</b>	<b>5.72</b>	<b>11.08</b>	N/A	N/A	<b>17.23</b>	<b>0.96</b>	<b>02/01/2008</b>
International Equity Benchmark	4.75	15.82	15.82	5.47	10.80	0.72	6.13	17.04	0.70	
Difference	-0.02	0.49	0.49	0.25	0.28	N/A	N/A	0.19	0.26	
<b>Real Estate Composite</b>	<b>2.17</b>	<b>11.69</b>	<b>11.69</b>	N/A	N/A	N/A	N/A	<b>6.79</b>	<b>9.21</b>	<b>01/01/2012</b>
NCREIF ODCE Index (Gross) (AWA) - 1 Quarter Lag	3.56	13.04	13.04	14.27	0.68	3.38	7.08	11.61	12.32	
Difference	-1.39	-1.35	-1.35	N/A	N/A	N/A	N/A	-4.82	-3.11	
<b>TMRS Unallocated Cash (SA)</b>	<b>0.00</b>	<b>0.12</b>	<b>0.12</b>	<b>0.08</b>	<b>0.11</b>	N/A	N/A	<b>0.08</b>	<b>0.26</b>	<b>06/01/2008</b>
BofA ML 3 Mo US T-Bill Index	0.02	0.07	0.07	0.10	0.12	1.08	1.68	0.11	0.29	
Difference	-0.02	0.05	0.05	-0.02	-0.01	N/A	N/A	-0.03	-0.03	

- Historical performance shown for the Total Fixed Income, Global Equity, Domestic Equity, and International Equity composites is provided by State Street.
- RVK cautions that for private market investments like Commercial Real Estate, for which there are no market prices, as are available for public securities, and for which an appraised value is calculated only quarterly, daily time weighted return calculations (public market return methodology) are imperfect at best and usually misleading.

Performance shown is gross of fees and provided by State Street. Performance is annualized for periods greater than one year. Real Estate performance is available quarterly. Real Estate fund returns are calculated by Private Edge and are lagged 1 quarter. Inception date shown for the Real Estate Composite represents the first full quarter following initial funding. Inception dates for non-real estate composites represents the first full month following initial funding.

**Texas Municipal Retirement System**  
**Addendum**  
**As of December 31, 2013**

**Custom Benchmark Comments**

The **Actual Allocation Benchmark** is calculated monthly using beginning of month asset class weights applied to each corresponding benchmark return and currently consists of the following:

- Russell 3000 Index
- International Equity Benchmark
- Fixed Income Benchmark
- Barclays World Government Inflation-Linked Index (Unhedged)\*
- NCREIF Open-End Diversified Core Equity Index (Gross) (AWA)\*\*
- BofA Merrill Lynch 3 Month US Treasury Bill Index

\*As the Real Return asset class structure becomes diversified, the performance objective will be the Consumer Price Index + 4%.

\*\*Performance for the NCREIF Open-End Diversified Core Equity Index (Gross) (AWA) is available quarterly and lagged 1 quarter; interim months assume a 0.00% return.

The **Fixed Income Benchmark** is calculated monthly and consists of the Barclays Gov't/Credit Long Term Bond Index through June 30, 2009; Barclays US Aggregate Bond Index thereafter.

The **Global Equity Benchmark** is calculated monthly and consists of 50% Russell 3000 Index and 50% MSCI EAFE Index (Net) through July 31, 2010; a blend of the Russell 3000 Index, MSCI All Country World Excluding US Investable Market Index (Net) and MSCI EAFE Index (Net) at beginning of month investment weights through November 30, 2012; and 50% Russell 3000 Index and 50% MSCI All Country World Excluding US Investable Market Index (Net) thereafter.

The **International Equity Benchmark** is calculated monthly and consists of the MSCI EAFE Index (Net) through July 31, 2010; a blend of the MSCI All Country World Excluding US Investable Market Index (Net) and MSCI EAFE Index (Net) at beginning of month investment weights through January 31, 2012; and the MSCI All Country World Excluding US Investable Market Index (Net) thereafter.

**Real Estate Performance Comment**

"Privately held real estate fund returns are one-quarter lagged and are provided by Private Edge. Quarterly returns are incorporated in the last month of that particular quarter. The returns for the first two months are zero.

Market values are previous quarter-end values as reported, rolled forward with current cash flows. Returns and market values provided by Private Edge are rolled into their respective Real Estate composite and the Total Plan composite.

Publicly traded real estate fund performance is non-lagged, reflecting monthly fluctuations. Detailed information regarding methodology can be found in the internal TMRS Performance Reporting Policy statement" (State Street Performance Team).