

**TEACHERS' RETIREMENT SYSTEM OF OKLAHOMA  
Investment Committee Meeting  
Tuesday, November 18, 2014 – 3:00 PM  
TRS Administration Board Room  
2500 N. Lincoln Blvd., 5<sup>th</sup> Floor, Oklahoma City, OK**

**AGENDA**

- 1. CALL TO ORDER**
- 2. DISCUSSION AND POSSIBLE ACTION ON INVESTMENT CONSULTANT MONTHLY REPORT**
- 3. DISCUSSION AND POSSIBLE ACTION INVESTMENT CONSULTANT QUARTERLY REPORT**
- 4. DISCUSSION AND POSSIBLE ACTION ON TRANSITION POST-TRADE ANALYSIS**
- 5. DISCUSSION AND POSSIBLE ACTION ON LORD ABBETT EXCEPTION REQUEST**
- 6. DISCUSSION AND POSSIBLE ACTION INVESTMENT POLICY STATEMENT REVIEW**
- 7. DISCUSSION AND CONSIDERATION OF EXTENDING CONTRACT WITH GREGORY W. GROUP BEYOND DECEMBER 31, 2014**
- 8. QUESTIONS AND COMMENTS FROM TRUSTEES**
- 9. ADJOURNMENT**

***ALL BOARD MEMBERS ARE ENCOURAGED TO ATTEND INVESTMENT COMMITTEE MEETINGS***

**INVESTMENT COMMITTEE:**

*Chair: Vernon Florence*

*Members: James Dickson, Roger Gaddis, Jill Geiger, Gary Trennepohl*

# October 2014 - Market Performance Update

US Equities Recover

| Equity Total Returns         |            |           |              |              |
|------------------------------|------------|-----------|--------------|--------------|
| Index                        | Last Month | Last Year | Last 3 Years | Last 5 Years |
| Dow Jones Industrial Average | 2.2        | 14.5      | 16.2         | 15.3         |
| NASDAQ (prc chg only)        | 3.1        | 18.1      | 19.9         | 17.8         |
| S&P 500 cap weighted         | 2.4        | 17.3      | 19.8         | 16.7         |
| S&P 500 equal weighted       | 3.0        | 17.1      | 21.0         | 19.1         |
| S&P Mid Cap                  | 3.6        | 11.7      | 18.7         | 18.3         |
| S&P Small Cap                | 7.1        | 9.3       | 20.0         | 19.2         |
| S&P REIT                     | 10.0       | 19.1      | 15.1         | 19.3         |
| Alerian MLP                  | -4.6       | 16.9      | 17.2         | 21.7         |
| Russell 1000 Growth          | 2.6        | 17.1      | 19.3         | 17.4         |
| Russell 1000 Value           | 2.3        | 16.5      | 20.4         | 16.5         |
| Russell Mid Cap Growth       | 2.8        | 14.6      | 18.7         | 18.7         |
| Russell Mid Cap Value        | 3.4        | 16.2      | 21.3         | 19.2         |
| Russell 2000 Growth          | 6.2        | 8.3       | 18.4         | 18.6         |
| Russell 2000 Value           | 7.0        | 7.9       | 17.9         | 16.2         |
| Russell Top 200              | 2.2        | 17.4      | 19.8         | 16.2         |
| Russell 1000                 | 2.4        | 16.8      | 19.9         | 17.0         |
| Russell Mid Cap              | 3.1        | 15.3      | 20.1         | 19.0         |
| Russell 2500                 | 4.4        | 10.2      | 19.0         | 18.4         |
| Russell 2000                 | 6.6        | 8.1       | 18.2         | 17.4         |
| MSCI World Ex US             | -1.6       | -0.2      | 9.1          | 6.5          |
| MSCI World Ex US Growth      | -1.0       | 0.3       | 8.7          | 7.1          |
| MSCI World Ex US Value       | -2.2       | -0.6      | 9.5          | 5.9          |
| MSCI EAFE                    | -1.5       | -0.6      | 9.7          | 6.5          |
| MSCI Emerging Markets        | 1.2        | 0.6       | 3.2          | 4.6          |

Markets posted diverse returns during October. The U.S. equity market staged a remarkable recovery while most foreign equity markets continued to move lower. Bonds ended the month slightly positive.

All major diversified domestic equity indexes finished the month higher. Small stocks outperformed large ones while style indexes showed mixed results. Developed international markets declined during October. Emerging markets posted a modest gain. REITs posed remarkable returns while MLPs were down on oil price fears.

The aggregate bond market earned a modest October return. Long Treasuries rose almost 3% while Treasury bills remained flat.

| Bond Total Returns |            |           |              |              |
|--------------------|------------|-----------|--------------|--------------|
| Index              | Last Month | Last Year | Last 3 Years | Last 5 Years |
| BC T-Bills         | 0.0        | 0.0       | 0.1          | 0.1          |
| BC Long Treasury   | 2.8        | 13.2      | 4.3          | 7.9          |
| BC US Agg          | 1.0        | 4.1       | 2.7          | 4.2          |



# Manager Profile - Hoisington Investment Management



|                            |  |
|----------------------------|--|
| Asset Class:               | Active Duration Fixed Income   |
| Status:                    | In Compliance  |
| Portfolio Size:            | \$304,422,083  |
| Inception Date:            | 11/1/2004  |
| Current Allocation:        | 2.2%   |
| Annual Management Fee:     | 0.15%  |
| Location:                  | Austin, Texas  |
| Structure:                 | Privately Held   |
| Portfolio Management Team: | Van Hoisington<br>Dr. Lacy Hunt<br>Janice Bright<br>David Hoisington<br>Van Hoisington, Jr.<br>John Dahlheim |
| Represented by:            | David Hoisington<br>Janice Bright  |

## Notes:

Hoisington employs a unique investment process to manage active duration bond portfolios. The firm invests only in U.S. Treasury issues. Their investment process focuses completely on managing portfolio duration to maximize total return. The portfolio's returns can be volatile. However, returns have shown negative correlation to equities and equity market volatility.

The firm has provided exceptionally strong results since inception. Performance could be subdued in the future should interest rates rise.

Hoisington is a stable organization. The firm was founded in 1981 and currently has approximately \$6 billion in client assets under management. There have been no major changes in the management team since the firm was hired.

|              |               |
|--------------|---------------|
| Firm AUM:    | \$5.6 Billion |
| Product AUM: | \$3.7 Billion |

| Return Profile             | Since Inception | Last 5 Years | Last 3 Years | Last Year | Last Quarter | Last Month |
|----------------------------|-----------------|--------------|--------------|-----------|--------------|------------|
| Hoisington Active Duration | 8.4%            | 9.4%         | 5.0%         | 17.5%     | 6.2%         | 3.3%       |
| BC Aggregate Bond Index    | 4.6%            | 4.2%         | 2.7%         | 4.1%      | 1.4%         | 1.0%       |
| BC Long Treasury Index     | 6.9%            | 7.9%         | 4.3%         | 13.2%     | 4.9%         | 2.8%       |
| 91 Day T-bills             | 1.5%            | 0.1%         | 0.1%         | 0.0%      | 0.0%         | 0.0%       |

| Risk Characteristics    | 3 Year Std Deviation | Sharpe Ratio | Duration | Credit Quality | Yield to Maturity | Number of Holdings |
|-------------------------|----------------------|--------------|----------|----------------|-------------------|--------------------|
| Hoisington              | 12.74                | 0.31         | 19.99    | AAA            | 3.01              | 12                 |
| BC Aggregate Bond Index | 2.7                  | 0.89         | 5.6      | AA             | 3.14              | 8958               |

# Manager Profile - Causeway Capital Management



|                            |  |
|----------------------------|--|
| Asset Class:               | International Large Cap Equity         |
| Status:                    | In Compliance                          |
| Portfolio Size:            | \$529,321,903                          |
| Inception Date:            | 5/1/2003                               |
| Current Allocation:        | 3.8%                                   |
| Annual Management Fee:     | 0.37%                                  |
| Location:                  | Los Angeles, CA                        |
| Structure:                 | Privately Held                         |
| Portfolio Management Team: | Sarah H. Ketterer<br>Harry W. Hartford |

|                 |                                    |
|-----------------|------------------------------------|
| Represented by: | Harry W. Hartford<br>Eric Crabtree |
|-----------------|------------------------------------|

## Notes:

Causeway employs a team of fundamental analysis to develop expected returns for undervalued securities. Portfolios are constructed using quantitative measures to control risk and optimize performance characteristics.

|              |                |
|--------------|----------------|
| Founded:     | 2001           |
| Firm AUM:    | \$36.6 Billion |
| Product AUM: | \$2.6 Billion  |

| Return Profile |                 | Since Inception |     | Last 10 Years |     | Last 5 Years |     | Last 3 Years |     | Last Year |     | Last Quarter |      | Last Month |      |
|----------------|-----------------|-----------------|-----|---------------|-----|--------------|-----|--------------|-----|-----------|-----|--------------|------|------------|------|
| Causeway       |                 | 10.3            |     | 7.1           |     | 9.5          |     | 12.1         |     | 0.3       |     | -3.1         |      | -1.2       |      |
|                | MSCI ACWI Ex US |                 | 9.7 |               | 6.6 |              | 6.1 |              | 7.8 |           | 0.1 |              | -5.2 |            | -1.0 |

| Risk Characteristics |                 | Number of Holdings |       | Average Mkt Cap |          | Dividend Yield |   | P/E Ratio |  | P/B Ratio |  |
|----------------------|-----------------|--------------------|-------|-----------------|----------|----------------|---|-----------|--|-----------|--|
| Causeway             |                 | 168                |       | \$23,122        |          | 3.0%           |   | 13.9      |  | 1.6       |  |
|                      | MSCI ACWI Ex US |                    | 1,829 |                 | \$30,770 |                | - | 15.0      |  | 1.6       |  |

# Monthly Asset Allocation Review

| Asset Class                       | Total Market Value    | Current Percentage | New Target Percentage | Difference   | Notes  |
|-----------------------------------|-----------------------|--------------------|-----------------------|--------------|--|
| All Cap/Large Cap                 | 2,934,729,949         | 21.1%              | 17.0%                 | 4.1%         | Excess allocation bound for Private Equity and Real Estate |
| Mid Cap                           | 2,048,078,462         | 14.7%              | 13.0%                 | 1.7%         |  |
| Small Cap                         | 1,435,523,052         | 10.3%              | 10.0%                 | 0.3%         |  |
| <b>Total Domestic Equity</b>      | <b>6,418,331,462</b>  | <b>46.1%</b>       | <b>40.0%</b>          | <b>6.1%</b>  |  |
| Large Cap International Equity    | 1,410,297,089         | 10.1%              | 11.5%                 | -1.4%        |  |
| Small Cap International Equity    | 787,908,431           | 5.7%               | 6.0%                  | -0.3%        |  |
| International Transition Account  | 65,204                |                    |                       |              |  |
| <b>Total International Equity</b> | <b>2,198,270,723</b>  | <b>15.8%</b>       | <b>17.5%</b>          | <b>-1.7%</b> |  |
| <b>Core Fixed Income</b>          | <b>2,145,751,923</b>  | <b>15.4%</b>       | <b>17.5%</b>          | <b>-2.1%</b> |  |
| High Yield Bonds                  | 779,191,818           | 5.6%               | 6.0%                  | -0.4%        |  |
| MLPs                              | 1,148,309,623         | 8.2%               | 7.0%                  | 1.2%         |  |
| Private Equity                    | 423,020,891           | 3.0%               | 5.0%                  | -2.0%        |  |
| Real Estate                       | 635,098,413           | 4.6%               | 7.0%                  | -2.4%        |  |
| Opportunistic Assets              | 168,342,419           | 1.2%               | 0.0%                  | 1.2%         |  |
| <b>Total Non-Core Assets</b>      | <b>3,153,963,165</b>  | <b>22.6%</b>       | <b>25.0%</b>          | <b>-2.4%</b> |  |
| <b>Cash</b>                       | <b>10,475,907</b>     | <b>0.1%</b>        | <b>0.0%</b>           | <b>0.1%</b>  |  |
| <b>Composite</b>                  | <b>13,926,857,969</b> | <b>100.0%</b>      | <b>100.0%</b>         | <b>0.0%</b>  |  |

# Total Fund + Class Composite Summary

As of October 31, 2014

|                                    | Market Value           | Inception Date   | Time Since Inception<br>(Years) | Since Inception | 10 Years   | 5 Years     | 3 Years     | 1 Year      | Fiscal YTD  | Calendar YTD | Last Quarter | Last Month |
|------------------------------------|------------------------|------------------|---------------------------------|-----------------|------------|-------------|-------------|-------------|-------------|--------------|--------------|------------|
| <b>Total Fund (Gross of Fees)</b>  | <b>13,926,857,969</b>  | <b>12/1/1991</b> | <b>22.9</b>                     | <b>9.8</b>      | <b>8.8</b> | <b>13.3</b> | <b>15.1</b> | <b>11.4</b> | <b>-0.4</b> | <b>7.4</b>   | <b>1.8</b>   | <b>1.2</b> |
| <b>Total Fund (Net of Fees)</b>    |                        |                  |                                 | <b>9.4</b>      | <b>8.4</b> | <b>13.0</b> | <b>14.7</b> | <b>11.0</b> | <b>-0.5</b> | <b>7.2</b>   | <b>1.7</b>   | <b>1.2</b> |
| Allocation Index                   |                        |                  |                                 | 9.5             | 7.6        | 12.1        | 12.9        | 9.6         | 0.2         | 6.7          | 2.1          | 1.5        |
| Actuarial Assumption               |                        |                  |                                 | 8.0             | 8.0        | 8.0         | 8.0         | 8.0         | 2.4         | 6.2          | 1.9          | 0.6        |
| Total Domestic Equity              | 6,418,331,462<br>46.1% | 4/1/1990         | 24.6                            | 11.0            | 9.2        | 17.5        | 20.6        | 14.3        | 0.6         | 7.9          | 4.1          | 3.0        |
| S&P 500                            |                        |                  |                                 | 9.8             | 8.2        | 16.7        | 19.8        | 17.3        | 3.6         | 11.0         | 5.0          | 2.4        |
| Total All Cap Equity               | 956,230,959<br>6.9%    | 9/1/2006         | 8.2                             | 7.8             | -          | 16.5        | 18.6        | 14.8        | 2.8         | 8.3          | 4.7          | 2.8        |
| Russell 3000                       |                        |                  |                                 | 8.0             | 8.6        | 17.0        | 19.8        | 16.1        | 2.8         | 9.9          | 4.8          | 2.8        |
| Total Large Cap Active Equity      | 1,145,893,087<br>8.2%  | 1/1/1995         | 19.8                            | 10.7            | 8.2        | 17.5        | 21.9        | 17.4        | 2.8         | 10.6         | 4.6          | 2.2        |
| S&P 500                            |                        |                  |                                 | 9.8             | 8.2        | 16.7        | 19.8        | 17.3        | 3.6         | 11.0         | 5.0          | 2.4        |
| Total Mid Cap Equity               | 2,048,078,462<br>14.7% | 11/1/1998        | 16.0                            | 10.6            | 11.4       | 19.2        | 21.6        | 14.8        | -0.2        | 7.8          | 3.5          | 2.9        |
| Russell Mid Cap                    |                        |                  |                                 | 10.0            | 10.4       | 19.0        | 20.1        | 15.3        | 1.4         | 10.2         | 4.5          | 3.1        |
| Total Small Cap Equity             | 1,435,523,052<br>10.3% | 2/1/1998         | 16.8                            | 9.6             | 9.5        | 16.5        | 19.8        | 9.8         | -2.6        | 3.5          | 3.7          | 4.2        |
| Russell 2000                       |                        |                  |                                 | 7.6             | 8.7        | 17.4        | 18.2        | 8.1         | -1.3        | 1.9          | 5.1          | 6.6        |
| Total International Equity         | 2,198,270,723<br>15.8% | 2/1/1998         | 16.8                            | 8.8             | 6.7        | 7.4         | 10.2        | -2.7        | -7.3        | -5.3         | -5.0         | -2.5       |
| MSCI ACWI ex-US                    |                        |                  |                                 | -               | 7.1        | 6.6         | 8.2         | 0.5         | -6.1        | -0.6         | -5.2         | -1.0       |
| Core Fixed Income (ex- High Yield) | 2,145,751,923<br>15.4% | 4/1/1990         | 24.6                            | 6.6             | 6.7        | 7.0         | 5.8         | 6.0         | 0.7         | 6.3          | 1.1          | 0.9        |
| Barclays Aggregate                 |                        |                  |                                 | 6.6             | 4.6        | 4.2         | 2.7         | 4.1         | 1.2         | 5.1          | 1.4          | 1.0        |
| Master Limited Partnerships        | 1,148,309,623<br>8.2%  | 2/28/2011        | 3.7                             | 21.8            | -          | -           | 25.9        | 31.0        | -4.2        | 23.7         | 1.3          | -3.7       |
| Alerian MLP Index                  |                        |                  |                                 | 14.9            | 15.6       | 21.7        | 17.2        | 16.9        | -2.0        | 14.0         | 1.6          | -4.6       |
| High Yield Bonds                   | 779,191,818<br>5.6%    | 2/1/2009         | 5.7                             | 14.8            | -          | 10.5        | 10.0        | 6.8         | -0.8        | 5.7          | 0.4          | 1.0        |
| ML High Yield II                   |                        |                  |                                 | 15.9            | 8.1        | 10.3        | 9.2         | 5.9         | -0.8        | 4.8          | 0.5          | 1.1        |
| Core Real Estate                   | 636,061,439<br>4.6%    | 4/1/2011         | 3.6                             | -               | -          | -           | -           | -           | -           | -            | -            | -          |
| NCREIF                             |                        |                  |                                 | 12.7            | -          | -           | 12.3        | 12.4        | 3.2         | 8.9          | 3.2          | 0.0        |
| Cash                               | 10,475,907<br>0.1%     | 4/1/1990         | 24.6                            | -               | -          | -           | -           | -           | -           | -            | -            | -          |
| 91 Day T-bill                      |                        |                  |                                 | -               | 1.6        | 0.1         | 0.1         | 0.1         | 0.0         | 0.0          | 0.0          | 0.0        |



# Equity Portfolios Summary

As of October 31, 2014

|                                       | Market Value | Inception Date | Time Since Inception (Years) | Since Inception | 10 Years | 5 Years | 3 Years | 1 Year | Fiscal YTD | Calendar YTD | Last Quarter | Last Month |
|---------------------------------------|--------------|----------------|------------------------------|-----------------|----------|---------|---------|--------|------------|--------------|--------------|------------|
| <b>All Cap / Large Cap Domestic</b>   |              |                |                              |                 |          |         |         |        |            |              |              |            |
| Hotchkis & Wiley Large Cap            | 594,638,161  | 4/1/1990       | 24.6                         | 11.2            | 7.5      | 18.2    | 23.2    | 17.6   | 1.1        | 10.7         | 3.5          | 1.4        |
| Russell 1000 Value                    | 4.3%         |                |                              | 10.3            | 7.9      | 16.5    | 20.4    | 16.5   | 2.0        | 10.5         | 3.8          | 2.2        |
| Sawgrass                              | 551,254,926  | 7/1/2006       | 8.3                          | 9.2             | -        | 17.4    | 20.4    | 17.2   | 4.7        | 10.6         | 5.8          | 3.1        |
| Russell 1000 Growth                   | 4.0%         |                |                              | 9.4             | 9.1      | 17.4    | 19.3    | 17.1   | 4.2        | 10.7         | 5.8          | 2.6        |
| ARI All Cap                           | 470,108,264  | 9/1/2006       | 8.2                          | 6.8             | -        | 16.1    | 17.6    | 12.7   | 0.7        | 6.8          | 3.9          | 2.9        |
| Russell 3000                          | 3.4%         |                |                              | 8.0             | 8.6      | 17.0    | 19.8    | 16.1   | 2.8        | 9.9          | 4.8          | 2.8        |
| EPOCH All Cap                         | 486,122,695  | 9/1/2006       | 8.2                          | 8.7             | -        | 16.8    | 19.5    | 16.8   | 4.8        | 9.8          | 5.6          | 2.7        |
| Russell 3000                          | 3.5%         |                |                              | 8.0             | 8.6      | 17.0    | 19.8    | 16.1   | 2.8        | 9.9          | 4.8          | 2.8        |
| <b>Passive Domestic Equity</b>        |              |                |                              |                 |          |         |         |        |            |              |              |            |
| NT Cap Weighted Passive               | 416,201,874  | 4/1/2012       | 2.6                          | 17.7            | -        | -       | -       | 17.0   | 3.5        | 11.0         | 5.0          | 2.4        |
| S&P 500 Cap Weighted                  | 3.0%         |                |                              | 17.4            | 8.2      | 16.7    | 19.8    | 17.3   | 3.6        | 11.0         | 5.0          | 2.4        |
| SSGA Eq Weighted Passive              | 416,404,029  | 4/1/2012       | 2.6                          | 20.0            | -        | -       | -       | 17.0   | 2.4        | 11.2         | 4.8          | 3.0        |
| S&P 500 Equal Weighted                | 3.0%         |                |                              | 11.4            | 10.3     | 19.1    | 21.0    | 17.1   | 2.3        | 11.2         | 4.7          | 3.0        |
| <b>Mid Cap Domestic Equity</b>        |              |                |                              |                 |          |         |         |        |            |              |              |            |
| Frontier Capital                      | 521,887,105  | 6/1/2002       | 12.4                         | 10.6            | 12.2     | 17.6    | 19.1    | 14.2   | -0.2       | 8.6          | 4.0          | 3.7        |
| Russell Mid Cap Growth                | 3.7%         |                |                              | 9.7             | 10.2     | 18.7    | 18.7    | 14.6   | 2.0        | 8.6          | 5.2          | 2.8        |
| Wellington Management                 | 464,438,143  | 9/1/1998       | 16.2                         | 10.7            | 10.5     | 16.0    | 16.6    | 11.3   | -0.9       | 2.5          | 3.6          | 4.8        |
| Russell Mid Cap Growth                | 3.3%         |                |                              | 9.2             | 10.2     | 18.7    | 18.7    | 14.6   | 2.0        | 8.6          | 5.2          | 2.8        |
| AJO Partners                          | 550,119,500  | 8/1/1998       | 16.3                         | 11.5            | 11.1     | 20.4    | 22.5    | 18.7   | 2.9        | 11.3         | 5.2          | 2.9        |
| Russell MidCap                        | 4.0%         |                |                              | 9.6             | 10.4     | 19.0    | 20.1    | 15.3   | 1.4        | 10.2         | 4.5          | 3.1        |
| Hotchkis & Wiley Mid Cap              | 511,633,714  | 8/1/2002       | 12.3                         | 14.5            | 11.5     | 22.8    | 28.0    | 14.4   | -2.8       | 8.5          | 1.1          | 0.7        |
| Russell MidCap Value                  | 3.7%         |                |                              | 12.0            | 10.3     | 19.2    | 21.3    | 16.2   | 0.7        | 11.9         | 3.7          | 3.4        |
| <b>Small Cap Domestic Equity</b>      |              |                |                              |                 |          |         |         |        |            |              |              |            |
| Shapiro Capital Management            | 673,581,469  | 2/1/1998       | 16.8                         | 10.9            | 12.4     | 20.2    | 22.2    | 15.0   | -5.2       | 6.4          | 2.3          | 3.2        |
| Russell 2000                          | 4.8%         |                |                              | 8.6             | 7.8      | 16.1    | 17.9    | 7.9    | -1.3       | 1.9          | 4.1          | 7.0        |
| Geneva Capital                        | 190,443,145  | 6/1/2013       | 1.4                          | 12.7            | -        | -       | -       | -0.2   | 1.9        | -3.2         | 6.9          | 5.3        |
| Russell 2000 Growth                   | 1.4%         |                |                              | 16.1            | 18.6     | 18.4    | 23.0    | 8.3    | -0.3       | 1.9          | 6.1          | 6.2        |
| Wasatch Advisors                      | 189,273,397  | 6/1/2013       | 1.4                          | 11.2            | -        | -       | -       | 6.6    | 2.5        | 2.2          | 7.0          | 7.9        |
| Russell 2000 Growth                   | 1.4%         |                |                              | 16.1            | 18.6     | 18.4    | 23.0    | 8.3    | -0.3       | 1.9          | 6.1          | 6.2        |
| Cove Street Capital                   | 104,820,611  | 6/1/2013       | 1.4                          | 10.2            | -        | -       | -       | 1.0    | -5.0       | -2.7         | 0.2          | 1.2        |
| Russell 2000 Value                    | 0.8%         |                |                              | 13.3            | 7.8      | 16.2    | 17.9    | 7.9    | -2.2       | 1.9          | 4.1          | 7.0        |
| Frontier Capital                      | 158,385,137  | 6/1/2013       | 1.4                          | 12.0            | -        | -       | -       | 9.3    | -4.7       | 3.4          | 2.1          | 4.4        |
| Russell 2000 Value                    | 1.1%         |                |                              | 13.3            | 7.8      | 16.2    | 17.9    | 7.9    | -2.2       | 1.9          | 4.1          | 7.0        |
| Neumeier Poma                         | 119,019,293  | 6/1/2013       | 1.4                          | 19.6            | -        | -       | -       | 13.2   | 2.7        | 7.3          | 7.5          | 5.3        |
| Russell 2000 Value                    | 0.9%         |                |                              | 13.3            | 7.8      | 16.2    | 17.9    | 7.9    | -2.2       | 1.9          | 4.1          | 7.0        |
| <b>International Large Cap Equity</b> |              |                |                              |                 |          |         |         |        |            |              |              |            |
| Causeway Capital                      | 529,321,903  | 5/1/2003       | 11.5                         | 10.3            | 7.1      | 9.4     | 12.1    | 0.3    | -5.0       | -2.2         | -3.1         | -1.2       |
| MSCI ACWI Ex US                       | 3.8%         |                |                              | 9.7             | 6.6      | 6.1     | 7.8     | 0.1    | -6.1       | -0.6         | -5.2         | -1.0       |
| Northern Trust Passive                | 879,443,628  | 9/1/2013       | 1.2                          | 4.1             | -        | -       | -       | 0.9    | -6.2       | -1.3         | -4.3         | -0.4       |
| MSCI EAFE                             | 6.3%         |                |                              | -               | 6.3      | 6.6     | 13.7    | 4.3    | -5.9       | -            | -5.9         | -3.8       |
| Transition Account - Northern         | 65,204       | 9/1/2014       | 0.2                          | -               | -        | -       | -       | -      | -          | -            | -            | -          |
| -                                     | 0.0%         |                |                              | -               | -        | -       | -       | -      | -          | -            | -            | -          |
| Thornburg - Terminated                | 1,529,164    | 1/1/2006       | 8.8                          | -               | -        | -       | -       | -      | -          | -            | -            | -          |
| MSCI ACWI Ex US                       | 0.0%         |                |                              | 4.4             | 6.6      | 6.1     | 7.8     | 0.1    | -6.1       | -0.6         | -5.2         | -1.0       |
| <b>International Small Cap Equity</b> |              |                |                              |                 |          |         |         |        |            |              |              |            |
| ARI Small Cap International           | 208,242,578  | 12/1/2011      | 2.9                          | 16.0            | -        | -       | -       | 3.2    | -7.6       | 1.1          | -5.3         | -2.9       |
| MSCI EAFE Small Cap                   | 1.5%         |                |                              | 13.6            | 7.4      | 8.9     | 11.1    | -2.0   | -7.2       | -4.7         | -7.5         | -2.0       |
| Epoch Small Cap International         | 191,454,373  | 12/1/2011      | 2.9                          | 12.1            | -        | -       | -       | -5.3   | -11.9      | -7.9         | -8.0         | -3.4       |
| MSCI EAFE Small Cap                   | 1.4%         |                |                              | 13.6            | 7.4      | 8.9     | 11.1    | -2.0   | -7.2       | -4.7         | -7.5         | -2.0       |
| Wasatch Small Cap International       | 191,837,841  | 12/1/2011      | 2.9                          | 18.4            | -        | -       | -       | -3.6   | -4.7       | -5.0         | -3.3         | 1.1        |
| MSCI EAFE Small Cap                   | 1.4%         |                |                              | 13.6            | 7.4      | 8.9     | 11.1    | -2.0   | -7.2       | -4.7         | -7.5         | -2.0       |
| Wellington Small Cap International    | 196,373,639  | 12/1/2011      | 2.9                          | 17.5            | -        | -       | -       | -3.0   | -11.2      | -7.2         | -8.6         | -3.1       |
| MSCI EAFE Small Cap                   | 1.4%         |                |                              | 13.6            | 7.4      | 8.9     | 11.1    | -2.0   | -7.2       | -4.7         | -7.5         | -2.0       |



# Fixed Income Portfolios Summary

As of October 31, 2014

|                                     | Market Value | Inception Date | Time Since Inception<br>(Years) | Since Inception | 10 Years | 5 Years | 3 Years | 1 Year | Fiscal YTD | Calendar YTD | Last Quarter | Last Month |
|-------------------------------------|--------------|----------------|---------------------------------|-----------------|----------|---------|---------|--------|------------|--------------|--------------|------------|
| <b>Core Fixed Income</b>            |              |                |                                 |                 |          |         |         |        |            |              |              |            |
| Loomis Sayles                       | 619,465,470  | 8/1/1999       | 15.2                            | 7.2             | 7.6      | 7.9     | 6.6     | 7.0    | 0.6        | 7.5          | 1.0          | 1.0        |
| Barclays Aggregate                  | 4.4%         |                |                                 | 5.6             | 4.6      | 4.2     | 2.7     | 4.1    | 1.2        | 5.1          | 1.4          | 1.0        |
| Lord Abbett                         | 610,985,650  | 11/1/2004      | 9.9                             | 6.2             | 6.2      | 6.2     | 5.1     | 6.0    | 1.2        | 6.5          | 1.3          | 1.0        |
| Barclays Aggregate                  | 4.4%         |                |                                 | 4.6             | 4.6      | 4.2     | 2.7     | 4.1    | 1.2        | 5.1          | 1.4          | 1.0        |
| Mackay Shields                      | 610,878,719  | 11/1/2004      | 9.9                             | 6.4             | 6.4      | 6.9     | 5.6     | 5.1    | 0.4        | 4.9          | 0.9          | 0.7        |
| Barclays Aggregate                  | 4.4%         |                |                                 | 4.6             | 4.6      | 4.2     | 2.7     | 4.1    | 1.2        | 5.1          | 1.4          | 1.0        |
| <b>Active Duration Fixed Income</b> |              |                |                                 |                 |          |         |         |        |            |              |              |            |
| Hoisington                          | 304,422,083  | 11/1/2004      | 9.9                             | 8.4             | 8.4      | 9.4     | 5.0     | 17.5   | 7.1        | 24.0         | 6.2          | 3.3        |
| Barclays Aggregate                  | 2.2%         |                |                                 | 4.6             | 4.6      | 4.2     | 2.7     | 4.1    | 1.2        | 5.1          | 1.4          | 1.0        |
| <b>High Yield Fixed Income</b>      |              |                |                                 |                 |          |         |         |        |            |              |              |            |
| Loomis Sayles High Yield            | 259,625,198  | 2/1/2009       | 5.7                             | 14.9            | -        | 10.1    | 10.2    | 7.0    | -0.9       | 6.3          | 0.6          | 1.1        |
| Merrill Lynch High Yield II         | 1.9%         |                |                                 | 15.9            | 8.1      | 10.3    | 9.2     | 5.9    | -0.8       | 4.8          | 0.5          | 1.1        |
| Lord Abbett High Yield              | 261,092,253  | 2/1/2009       | 5.7                             | 15.8            | -        | 11.7    | 11.1    | 7.7    | -0.8       | 6.1          | 0.5          | 0.9        |
| Merrill Lynch High Yield II         | 1.9%         |                |                                 | 15.9            | 8.1      | 10.3    | 9.2     | 5.9    | -0.8       | 4.8          | 0.5          | 1.1        |
| MacKay Shields High Yield           | 258,474,368  | 2/1/2009       | 5.7                             | 13.8            | -        | 9.8     | 8.7     | 5.6    | -0.7       | 4.7          | 0.3          | 1.0        |
| Merrill Lynch High Yield II         | 1.9%         |                |                                 | 15.9            | 8.1      | 10.3    | 9.2     | 5.9    | -0.8       | 4.8          | 0.5          | 1.1        |



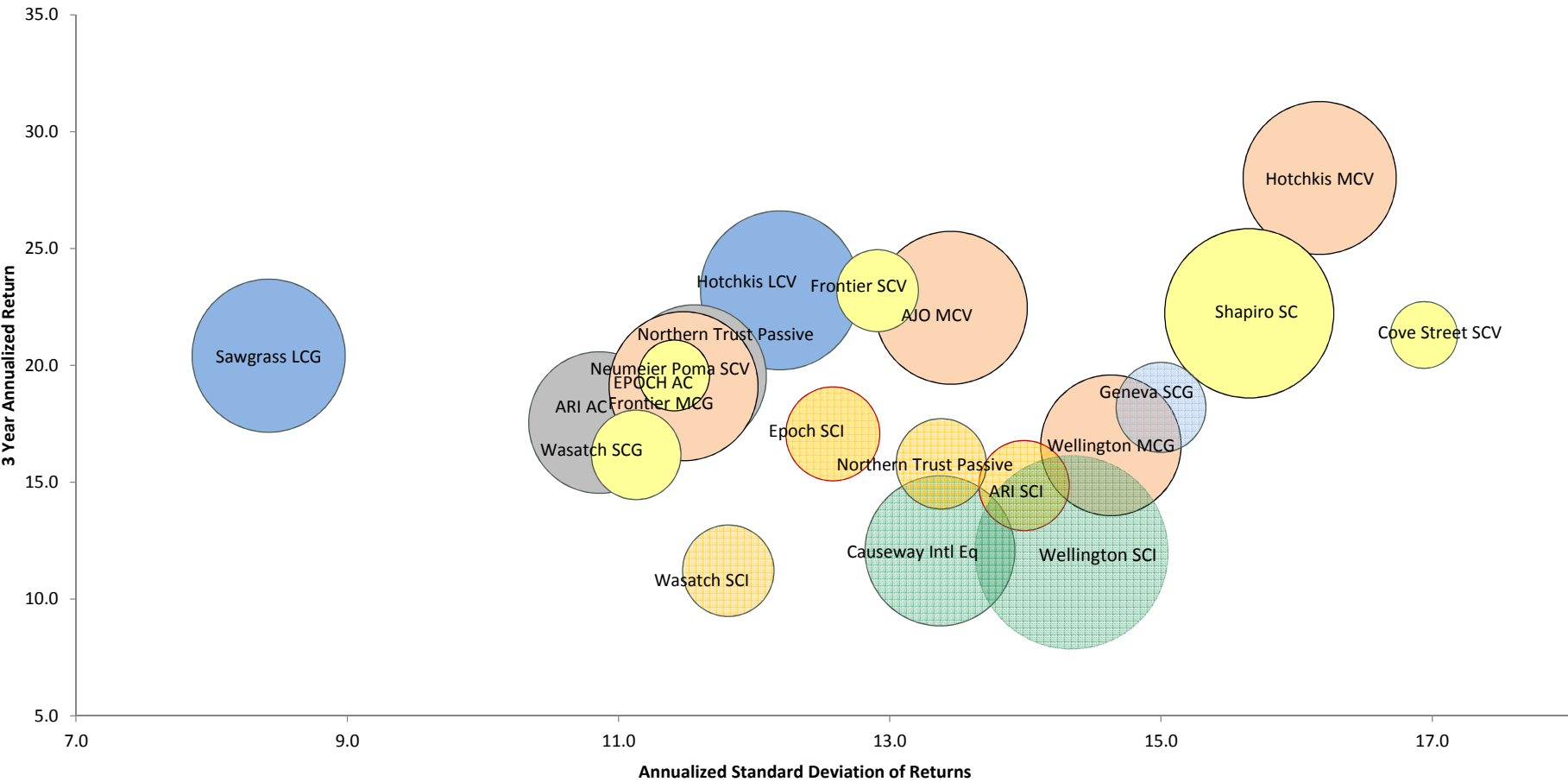
# Non-Traditional Portfolios Summary

As of October 31, 2014

|                                    | Market Value | Inception Date | Time Since Inception (Years) | Since Inception | 10 Years | 5 Years | 3 Years | 1 Year | Fiscal YTD | Calendar YTD | Last Quarter | Last Month |
|------------------------------------|--------------|----------------|------------------------------|-----------------|----------|---------|---------|--------|------------|--------------|--------------|------------|
| <b>Master Limited Partnerships</b> |              |                |                              |                 |          |         |         |        |            |              |              |            |
| Chickasaw Capital MLP              | 408,693,873  | 2/28/2011      | 3.7                          | 29.1            | -        | -       | 34.4    | 37.2   | -4.8       | 27.2         | 1.5          | -3.8       |
| Alerian MLP Index                  | 2.9%         |                |                              | 14.9            | 15.6     | 21.7    | 17.2    | 16.9   | -2.0       | 14.0         | 1.6          | -4.6       |
| Cushing MLP Management             | 401,633,943  | 2/28/2011      | 3.7                          | 23.1            | -        | -       | 27.7    | 34.9   | -3.5       | 25.5         | 2.0          | -3.1       |
| Alerian MLP Index                  | 2.9%         |                |                              | 14.9            | 15.6     | 21.7    | 17.2    | 16.9   | -2.0       | 14.0         | 1.6          | -4.6       |
| ARI MLP                            | 337,981,807  | 2/28/2011      | 3.7                          | 16.0            | -        | -       | 19.2    | 22.5   | -4.5       | 18.2         | 0.2          | -4.2       |
| Alerian MLP Index                  | 2.4%         |                |                              | 14.9            | 15.6     | 21.7    | 17.2    | 16.9   | -2.0       | 14.0         | 1.6          | -4.6       |
| <b>Private Equity</b>              |              |                |                              |                 |          |         |         |        |            |              |              |            |
| Legacy Private Equity Portfolio    | 61,021,778   | 10/1/2008      | 6.1                          | -               | -        | -       | -       | -      | -          | -            | -            | -          |
| Franklin Park Private Equity       | 361,999,113  | 4/1/2010       | 4.6                          | -               | -        | -       | -       | -      | -          | -            | -            | -          |
|                                    | 3.0%         |                |                              | -               | -        | -       | -       | -      | -          | -            | -            | -          |
| <b>Real Estate</b>                 |              |                |                              |                 |          |         |         |        |            |              |              |            |
| AEW Real Estate                    | 217,202,202  | 5/1/2011       | 3.5                          | -               | -        | -       | -       | -      | -          | -            | -            | -          |
| NCREIF - OEDCE                     | 1.6%         |                |                              | -               | -        | -       | -       | -      | -          | -            | -            | -          |
| Heitman Real Estate                | 215,360,082  | 5/1/2011       | 3.5                          | -               | -        | -       | -       | -      | -          | -            | -            | -          |
| NCREIF - OEDCE                     | 1.5%         |                |                              | -               | -        | -       | -       | -      | -          | -            | -            | -          |
| L&B Real Estate                    | 193,249,745  | 4/1/2011       | 3.6                          | -               | -        | -       | -       | -      | -          | -            | -            | -          |
| NCREIF - OEDCE                     | 1.4%         |                |                              | -               | -        | -       | -       | -      | -          | -            | -            | -          |
| L&B Golden Driller                 | 963,026      | 7/1/2014       | 0.3                          | -               | -        | -       | -       | -      | -          | -            | -            | -          |
| NCREIF - OEDCE                     | 0.0%         |                |                              | -               | -        | -       | -       | -      | -          | -            | -            | -          |
| Greenoak Real Estate               | 8,323,358    | 10/1/2014      | 0.1                          | -               | -        | -       | -       | -      | -          | -            | -            | -          |
| NCREIF - OEDCE                     | 0.1%         |                |                              | -               | -        | -       | -       | -      | -          | -            | -            | -          |
| <b>Opportunistic Fixed Income</b>  |              |                |                              |                 |          |         |         |        |            |              |              |            |
| PIMCO BRAVO                        | 70,318,081   | 3/31/2011      | 3.6                          | -               | -        | -       | -       | -      | -          | -            | -            | -          |
| Barclays Aggregate                 | 0.5%         |                |                              | -               | -        | -       | -       | -      | -          | -            | -            | -          |
| PIMCO BRAVO II                     | 98,024,338   | 3/31/2013      | 1.6                          | -               | -        | -       | -       | -      | -          | -            | -            | -          |
| Barclays Aggregate                 | 0.7%         |                |                              | -               | -        | -       | -       | -      | -          | -            | -            | -          |

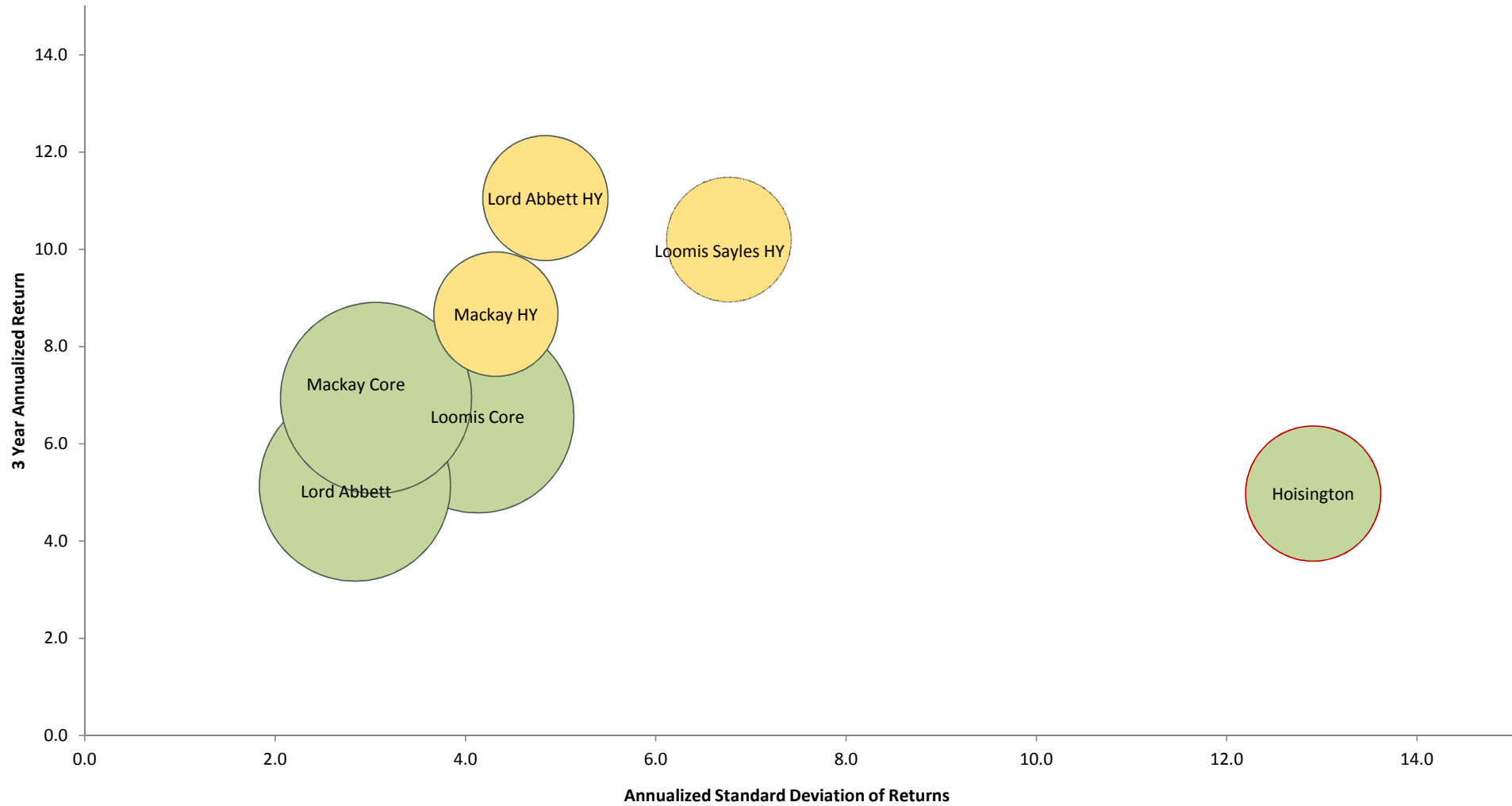


Three Year Risk/Return Review - Equity Portfolios



<sup>1</sup>Actual OTRS results used when available, composite when necessary.

Three Year Risk/Return Review - Fixed Income Portfolios



<sup>1</sup>Actual OTRS results used when available, composite when necessary.



# OKLAHOMA TEACHERS RETIREMENT SYSTEM

**executive summary report  
third quarter, 2014**



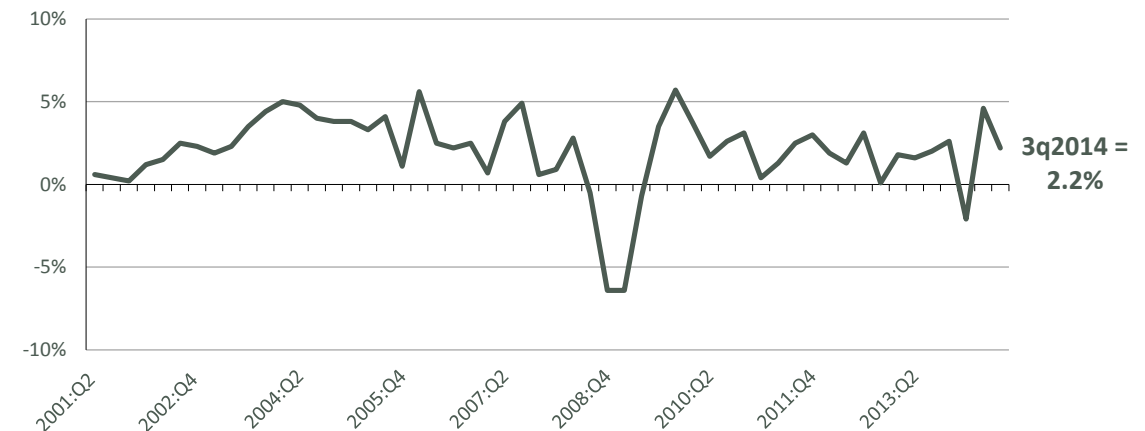
# Market Environment – Third Quarter, 2014

- Global economic growth continued at a below average pace during the third quarter. Equity markets surged during the early part of the quarter before pausing during September. Many markets finished the quarter lower. Performance favored lower risk equities as geopolitical uncertainty worried markets. Equity markets displayed low performance correlations. The bond market was challenged; the better parts posted modest gains. International investments were negative during the quarter.
- Domestic real GDP stabilized during the middle two quarters of 2014. Second quarter real GDP growth came in at 4.6% while the third quarter initial measure was 2.2%. A solid rebound from the very soft first quarter drove second quarter gains while military spending pushed the third quarter result higher than most expected.
- The U.S. unemployment rate improved to 5.9% from 6.1% during the quarter. Labor force participation trended slightly lower to 62.7%.
- The U.S. consumer price index rose 1.7% over the year ended September 30, 2014.
- Earlier this year, the Federal Reserve started to wind down its stimulative bond buying program (Quantitative Easing). The goal of the program was to hold interest rates low to encourage investment. Interest rates decreased at the conclusion of previous QE programs.
- Short term interest rates remain pegged at 0.0%, They have been fixed at this level for six years. Highly scrutinized comments from the Federal Reserve suggest that they will remain low for a considerable period.
- Market volatility changed dramatically during the quarter. After an extended period of low price movement, volatility showed two sharp spikes during the quarter, ending the period roughly 40% higher.

## Labor Force Participation Rate



## US Real GDP Growth - Annualized



# Equity Markets – Third Quarter, 2014

- The U.S. equity market saw volatility spike during the third quarter. Large caps, which earned modest returns, outperformed mid and small caps. Growth outperformed value. Trailing year returns remained quite high (+19.0%).
- Information Technology (+4.3% return), Health Care (+5.2%), and Financials (+1.5%) were the best performing sectors by contribution. Energy was the poorest returning sector, falling -8.5%. Utilities and Industrials also suffered third quarter losses.
- The market's top contributing performers were Apple (+9.0%), Gilead Sciences (+28.4%), and Microsoft (+11.9%). The bottom three contributors were Exxon Mobil (-5.9%), Schlumberger (-13.5%), and Chevron (-7.8%).
- Valuations remain reasonable. Based on historical measures, growth stocks are relatively cheaper than value stocks. The broad market forward P/E ratio was 15.6x at quarter end vs. 16.3x for its fifteen year average. The market's dividend yield was 2.0% vs. 1.7% for its long term average. The broad market is 47% higher than its previous high (October 2007) and 228% above the low set in March of 2009.
- Foreign equity markets stumbled as economic activity in Europe, Japan and China slowed. The MSCI All Country World index fell -5.7% during the quarter (\$USD). Emerging markets suffered a loss (-3.5% return) but outperformed developed markets (-5.9%) for the quarter.
- The top performing sectors in the MSCI ACWI ex-US index were Health Care (+0.9%) Telecommunications Services (-1.9%) and Information Technology (-5.7%). All other sectors posted third quarter losses. Energy was poorest, falling -10.0%.
- Top performance contributors were China Mobile (+20.9% return), Novartis (+4.2%), and Sanofi (+6.5%). Top detractors were BP (-15.5%), BASF (-21.2%), and Samsung (-14.4%).
- Developed non-US equity valuations remain above average. The forward P/E ratio for the EAFE index ended the quarter at 13.9x vs. 12.6x for its ten year average. Emerging markets valuations are slightly below average: the MSCI EM index forward P/E ratio was 10.8x vs. 11.0x for its ten year average.
- Equity returns have been strong over the past three years. The rise in volatility and decline in share prices seen during the third quarter was not unusual in the history of equity markets.

Current P/E Ratio as Percentage of Long Term Average

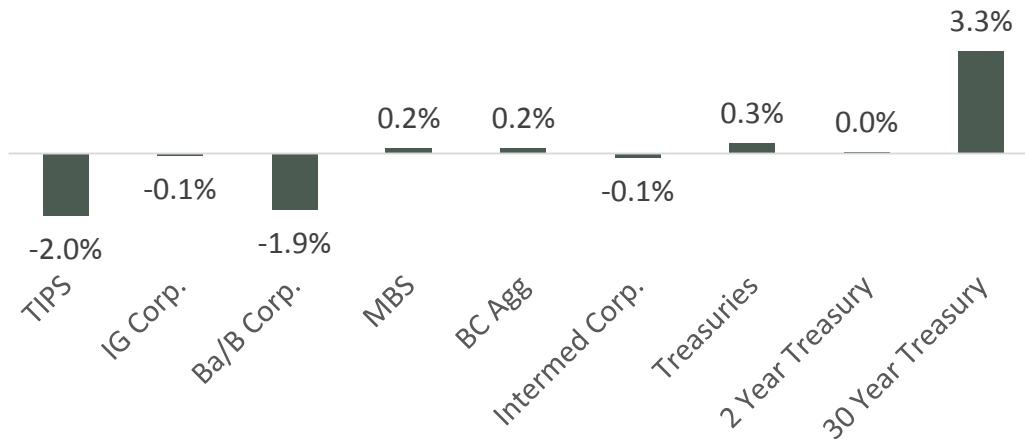
|       | Value | Blend | Growth |
|-------|-------|-------|--------|
| Large | 106%  | 89%   | 86%    |
| Mid   | 116%  | 110%  | 92%    |
| Small | 112%  | 103%  | 92%    |

| Russell 1000 Sector Analytics | Ending Weight | 3q 2014 Return | Contribution |
|-------------------------------|---------------|----------------|--------------|
| Consumer Discretionary        | 12.3%         | 0.1%           | 0.0%         |
| Consumer Staples              | 8.7%          | 1.6%           | 0.1%         |
| Energy                        | 9.2%          | -8.5%          | -0.8%        |
| Financials                    | 17.0%         | 1.5%           | 0.2%         |
| Health Care                   | 13.6%         | 5.2%           | 0.7%         |
| Industrials                   | 11.0%         | -2.1%          | -0.2%        |
| Information Technology        | 19.0%         | 4.3%           | 0.8%         |
| Materials                     | 3.8%          | -0.8%          | -0.0%        |
| Telecommunications            | 2.3%          | 2.4%           | 0.0%         |
| Utilities                     | 3.0%          | -4.4%          | -0.1%        |
| Total                         | 100.0%        | 0.7%           | 14.7%        |

# Fixed Income – Third Quarter, 2014

- Fixed income markets had a difficult quarter as economic uncertainty pushed interest rates around. The Treasury yield curve flattened as the intermediate segment of the curve rose in anticipation of a Fed rate increase while long term rates fell due to the still weak global economy. The long bond rally is still a major surprise to most fixed income investors. The long bond yield began 2014 at 3.9%, sank to 3.4% by mid-year and fell to 3.2% by September 30 and fell below 3% post quarter end.
- The U.S. dollar was very strong during the third quarter, which depressed foreign asset prices. This had a relatively large negative impact on foreign bond prices. The Global Treasury bond index fell almost 4% during the quarter.
- Investment Grade and High Yield bond spreads widened as investors looked for safety as global concerns increased and the stock market fell. Performance was choppy as higher quality bonds outperformed. However, defaults in high yield bonds remained low (1.7% vs. 4.4% historical rate).

Barclays Index Returns – 3q2014



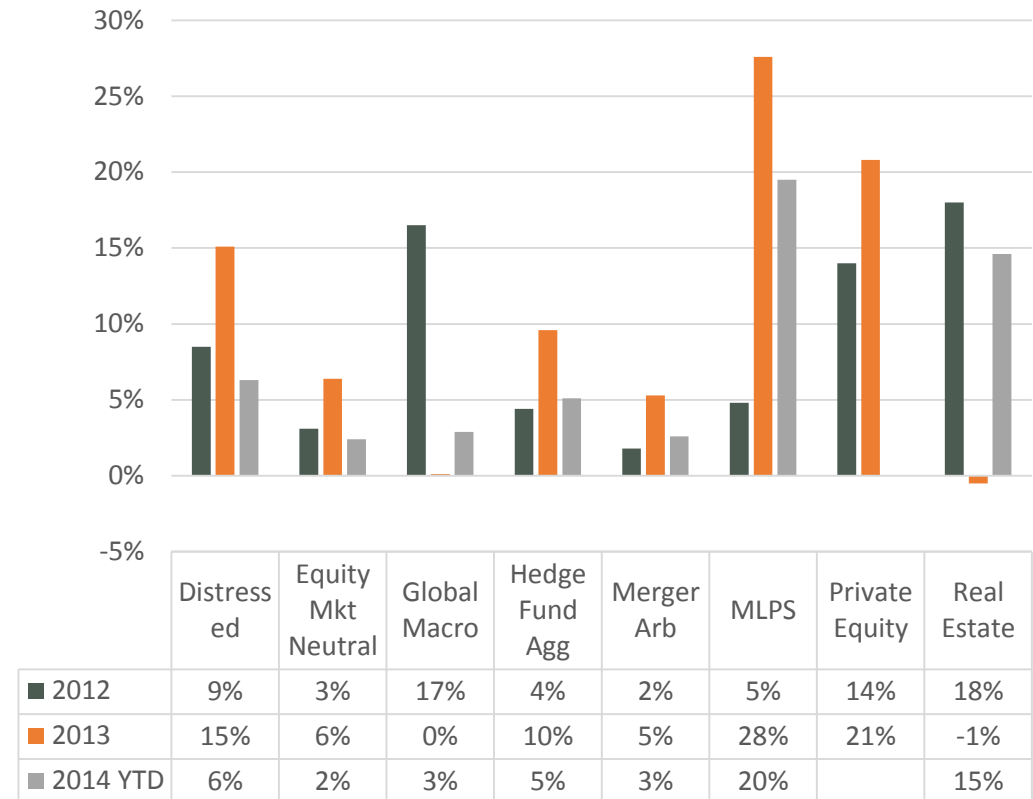
| Risk Level         | Interest Rate Forecast | Time Horizon   |              |                |              |
|--------------------|------------------------|----------------|--------------|----------------|--------------|
|                    |                        | 1 Year         |              | 3 Years        |              |
|                    |                        | Terminal Yield | Total Return | Terminal Yield | Total Return |
| Low Risk           | Pessimistic            | 2.5%           | -3.2%        | 4.0%           | -1.6%        |
| 2 Year Treasury    | Most Likely            | 1.3%           | -0.8%        | 3.0%           | -1.0%        |
| Present YTM: 0.46% | Optimistic             | 0.5%           | 0.7%         | 2.0%           | -0.4%        |
| Medium Risk        | Pessimistic            | 4.5%           | -13.5%       | 5.5%           | -5.4%        |
| 10 Year Treasury   | Most Likely            | 3.8%           | -7.9%        | 4.5%           | -2.9%        |
| Present YTM: 2.53% | Optimistic             | 2.5%           | 2.4%         | 3.5%           | -0.3%        |
| High Risk          | Pessimistic            | 5.5%           | -30.4%       | 6.0%           | -10.7%       |
| 30 Year Treasury   | Most Likely            | 4.5%           | -18.1%       | 5.0%           | -6.3%        |
| Present YTM: 3.36% | Optimistic             | 3.0%           | 7.2%         | 4.0%           | -1.3%        |

| Yields and Spreads    | 6/30/2014 | 9/30/2014    |
|-----------------------|-----------|--------------|
| 3 Month T-Bill        | 0.02%     | <b>0.02%</b> |
| 2 Year Treasury       | 0.46%     | <b>0.57%</b> |
| 10 Year Treasury      | 2.53%     | <b>2.49%</b> |
| 30 Year Treasury      | 3.36%     | <b>3.20%</b> |
| Yield Curve 2-10 Year | 207       | <b>192</b>   |
| Yield Curve 2-30 Year | 290       | <b>263</b>   |

# Alternative Investments – Third Quarter, 2014

- Alternative investments posted diverse returns during the third quarter. Year to date figures have also been widely divergent with MLPs and real estate posting strong returns while hedge fund returns trailed traditional asset categories.
- California Public Employees' Retirement System announced the end of its hedge fund program over the next year. While the report sent shock waves through the hedge fund community, the initial reaction was probably overblown.
- Hedge funds posted modest returns during the quarter. The HFRI weighted composite index gained 2.1% during the quarter. The top performing hedge fund categories were global macro and relative value arbitrage.
- Real estate investments suffered a setback as initial indications showed a loss on the quarter. Low-risk core real estate returns remained positive as investors continue to favor the asset class as fixed income alternative.
- Private equity returns have been positive but reasonable. The asset class gained just over 20% during 2013 and early indications are positive for 2014.
- Oil prices fell as U.S. production has increased dramatically while European demand has been weak. Saudi Arabia declined to decrease production to support prices. Natural gas prices declined while gold, silver, copper and beef prices moved higher.
- Master Limited Partnerships (energy infrastructure/transport entities) were the best category of alternative assets, gaining 2.7% during the third quarter. They were also best over the year to date period, gaining 19.5%. U.S. Domestic energy production is experiencing a renaissance that saw the U.S. eclipse Russia and Saudi Arabia in daily production over the past year.

## Alternative Asset Category Returns



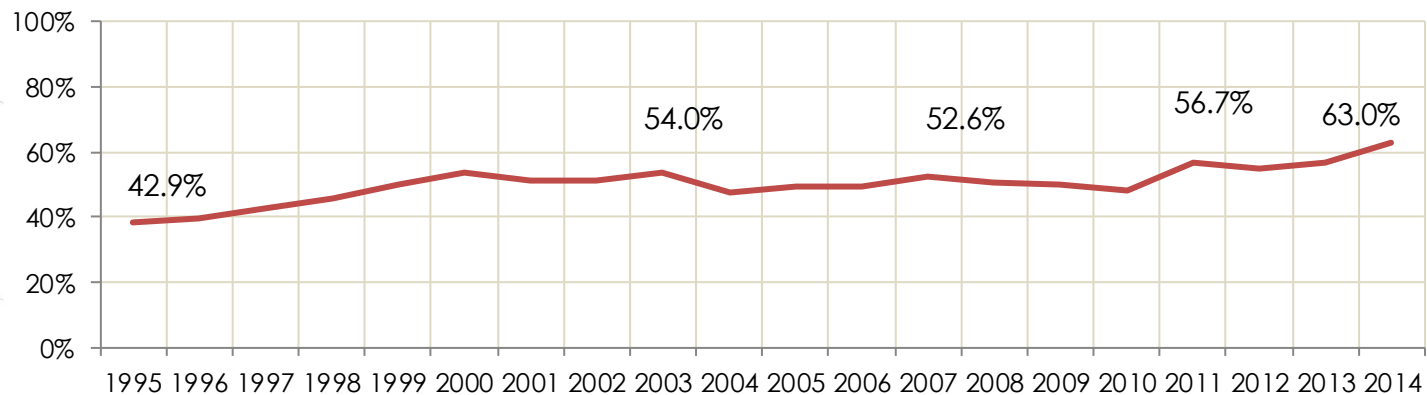
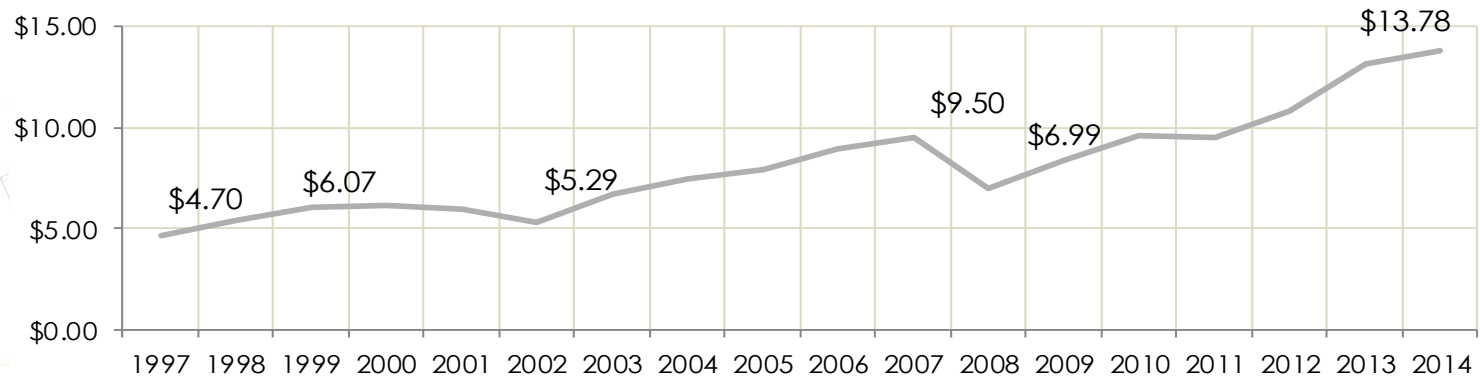
| Domestic Equity                          | Last Quarter | Last Year   | Last Three Years Annualized | Last Five Years Annualized | Last Ten Years Annualized |
|--|--------------|-------------|-----------------------------|----------------------------|---------------------------|
| <b>S&amp;P 500</b>                       | <b>1.1</b>   | <b>19.7</b> | <b>23.0</b>                 | <b>15.7</b>                | <b>8.1</b>                |
| Russell 1000                             | 0.7          | 19.0        | 23.2                        | 15.9                       | 8.5                       |
| <b>Russell 1000 Value</b>                | <b>-0.2</b>  | <b>18.9</b> | <b>23.9</b>                 | <b>15.3</b>                | <b>7.8</b>                |
| Russell 1000 Growth                      | 1.5          | 19.2        | 22.5                        | 16.5                       | 8.9                       |
| <b>Russell 3000</b>                      | <b>0.0</b>   | <b>17.8</b> | <b>23.1</b>                 | <b>15.8</b>                | <b>8.4</b>                |
| Russell Midcap                           | -1.7         | 15.8        | 23.8                        | 17.2                       | 10.3                      |
| <b>Russell Midcap Value</b>              | <b>-2.7</b>  | <b>17.5</b> | <b>24.7</b>                 | <b>17.2</b>                | <b>10.2</b>               |
| Russell Midcap Growth                    | -0.7         | 14.4        | 22.7                        | 17.1                       | 10.2                      |
| <b>Russell 2000</b>                      | <b>-7.4</b>  | <b>3.9</b>  | <b>21.3</b>                 | <b>14.3</b>                | <b>8.2</b>                |
| Russell 2000 Value                       | -8.6         | 4.1         | 20.6                        | 13.0                       | 7.3                       |
| <b>Russell 2000 Growth</b>               | <b>-6.1</b>  | <b>3.8</b>  | <b>21.9</b>                 | <b>15.5</b>                | <b>9.0</b>                |
| Alerian MLP                              | 2.7          | 25.8        | 23.0                        | 23.6                       | 16.2                      |
| Fixed Income                             | Last Quarter | Last Year   | Last Three Years Annualized | Last Five Years Annualized | Last Ten Years Annualized |
| <b>Barclays Capital Aggregate Bond</b>   | <b>0.2</b>   | <b>4.0</b>  | <b>2.4</b>                  | <b>4.1</b>                 | <b>4.6</b>                |
| Barclays Capital Credit                  | 0.0          | 6.6         | 4.8                         | 6.1                        | 5.4                       |
| <b>Barclays Capital Government</b>       | <b>0.3</b>   | <b>2.3</b>  | <b>1.1</b>                  | <b>3.1</b>                 | <b>4.2</b>                |
| Barclays Capital Govt/Credit             | 0.2          | 4.1         | 2.5                         | 4.3                        | 4.6                       |
| <b>Barclays Capital Interm Credit</b>    | <b>-0.1</b>  | <b>4.0</b>  | <b>4.1</b>                  | <b>5.2</b>                 | <b>4.9</b>                |
| Barclays Capital Interm Govt             | 0.0          | 1.1         | 0.9                         | 2.5                        | 3.7                       |
| <b>Barclays Capital Interm Govt/Cred</b> | <b>0.0</b>   | <b>2.2</b>  | <b>2.0</b>                  | <b>3.4</b>                 | <b>4.1</b>                |
| Barclays Capital Long Credit             | 0.2          | 13.6        | 6.7                         | 8.7                        | 7.0                       |
| <b>Barclays Capital Long Term Govt</b>   | <b>2.7</b>   | <b>11.6</b> | <b>2.0</b>                  | <b>7.0</b>                 | <b>6.8</b>                |
| Barclays Capital Long Govt/Credit        | 1.0          | 12.9        | 4.8                         | 8.0                        | 7.0                       |
| <b>Barclays Capital Fixed Rate MBS</b>   | <b>0.2</b>   | <b>3.8</b>  | <b>2.1</b>                  | <b>3.5</b>                 | <b>4.7</b>                |
| Merrill Lynch US High Yield Master II    | -1.9         | 7.2         | 11.0                        | 10.4                       | 8.2                       |
| <b>91 Day T-Bill</b>                     | <b>0.0</b>   | <b>0.0</b>  | <b>0.1</b>                  | <b>0.1</b>                 | <b>1.5</b>                |
| International                            | Last Quarter | Last Year   | Last Three Years Annualized | Last Five Years Annualized | Last Ten Years Annualized |
| <b>MSCI EAFE</b>                         | <b>-5.9</b>  | <b>4.3</b>  | <b>13.7</b>                 | <b>6.6</b>                 | <b>6.3</b>                |
| MSCI World ex US                         | -5.7         | 4.9         | 13.2                        | 6.5                        | 6.5                       |
| <b>MSCI Europe</b>                       | <b>-7.2</b>  | <b>4.9</b>  | <b>14.9</b>                 | <b>6.6</b>                 | <b>6.5</b>                |
| MSCI Japan                               | -2.3         | 0.6         | 9.2                         | 5.4                        | 3.8                       |
| <b>MSCI Pacific ex Japan</b>             | <b>-5.9</b>  | <b>1.4</b>  | <b>12.1</b>                 | <b>7.3</b>                 | <b>10.2</b>               |
| MSCI Emerging Markets                    | -3.5         | 4.3         | 7.2                         | 4.4                        | 10.7                      |
| <b>Citigroup Non-\$ World Gov</b>        | <b>2.0</b>   | <b>7.0</b>  | <b>4.7</b>                  | <b>4.0</b>                 | <b>4.6</b>                |

## Trailing Year Total Fund Return

+13.4%

# Plan History

**Market Value History (\$Billions)**



third quarter, 2014

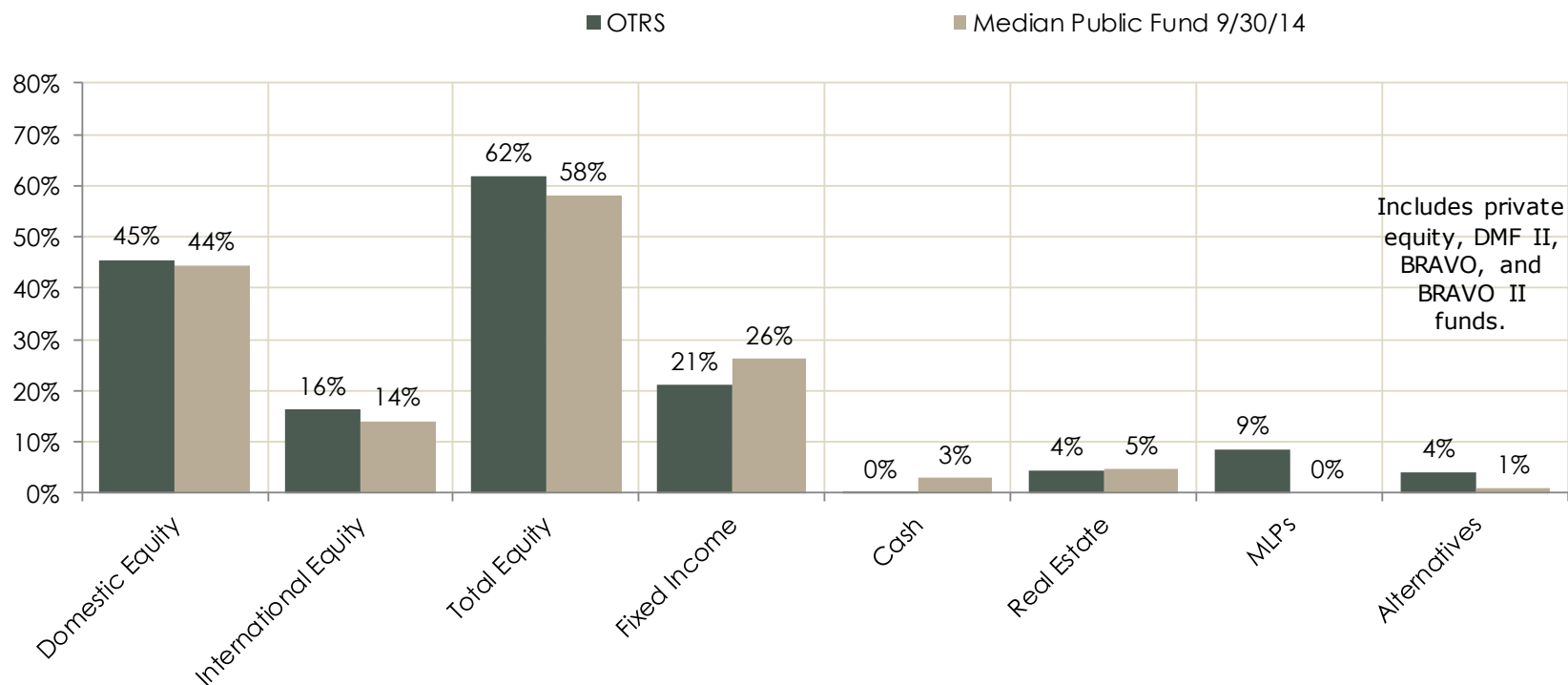
## Observations – third quarter, 2014

- **INVESTMENT PERFORMANCE:** Total fund return was negative during the quarter. The total fund posted a -1.6% return. Domestic equity results were negative. Core fixed income results were slightly positive while High Yield returns were negative. The total fund's trailing returns were strong. The trailing year return was well above the actuarial assumption, above the allocation index and ranked in the top one percent among peer Pension Funds. **The total fund ranked in the first percentile of public funds for the one, three, five, and ten year observation periods.**
- **INVESTMENT MANAGEMENT:** Two large cap index fund portfolios were added in 2012. The new international small cap equity allocation added returns during the quarter. The MLP allocation is performing well above expectation. Five new domestic small cap managers were funded during the second quarter of 2013. An international equity index fund was added during early 2013.
- **ASSET ALLOCATION:** The total fund's aggregate asset allocations are in the process of moving to new long-term targets. No additional allocations were made to the Opportunistic Portfolio although several investments are under consideration. The private equity portfolio called significantly more capital over the past year compared to previous years. The three core real estate managers are fully invested, at their previous target level. Six non-core real estate portfolios were recently selected.

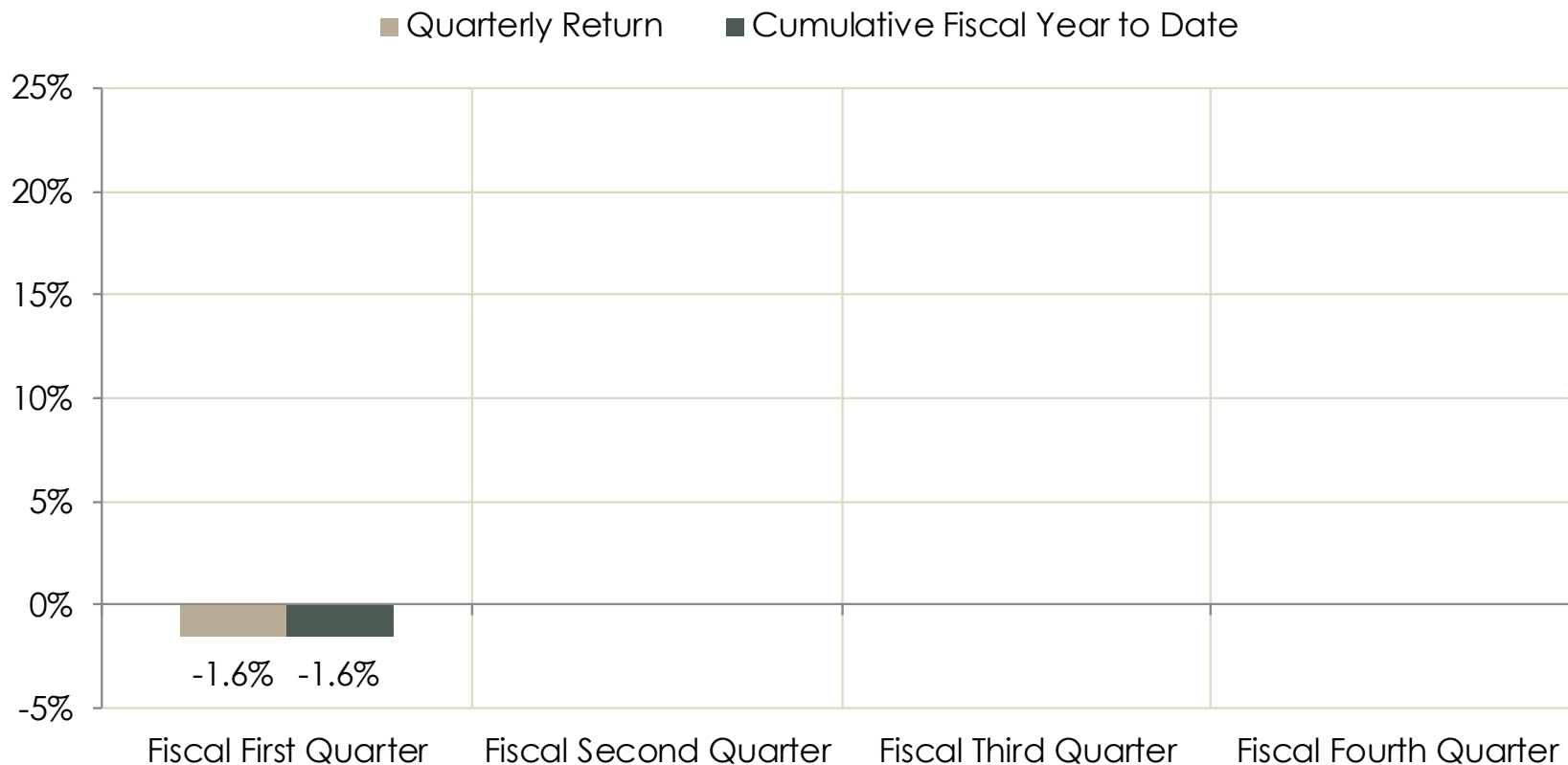
# Asset Allocation Summary – Total Fund

|                             | Current Allocation | New Target Allocation | Difference    |
|-----------------------------|--------------------|-----------------------|---------------|
| Domestic Equity             | 45.48%             | 40.00%                | 5.48%         |
| <b>International Equity</b> | <b>16.22%</b>      | <b>17.50%</b>         | <b>-1.28%</b> |
| Core Fixed Income           | 15.38%             | 17.50%                | -2.12%        |
| <b>Opportunistic Assets</b> | <b>1.07%</b>       | <b>0.00%</b>          | <b>1.07%</b>  |
| High Yield Fixed Income     | 5.59%              | 6.00%                 | -0.41%        |
| <b>Real Estate</b>          | <b>4.41%</b>       | <b>7.00%</b>          | <b>-2.59%</b> |
| Private Equity              | 3.08%              | 5.00%                 | -1.92%        |
| <b>MLPs</b>                 | <b>8.65%</b>       | <b>7.00%</b>          | <b>1.65%</b>  |
| Cash                        | 0.11%              | 0.00%                 | 0.11%         |
| <b>Total</b>                | <b>100.00%</b>     | <b>100.00%</b>        | <b>0.00%</b>  |

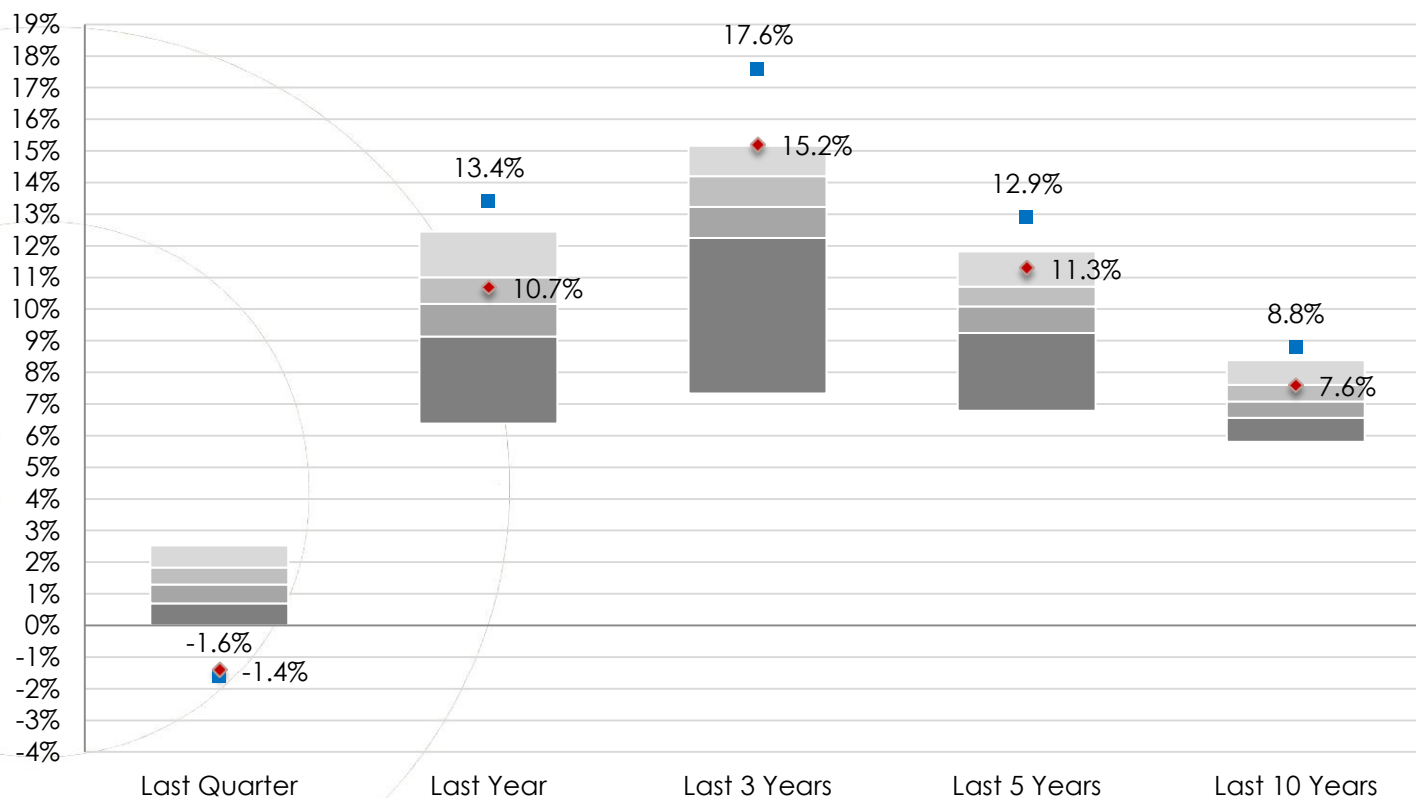
# Total Fund Allocation vs. Median Public Fund



# Composite Performance Summary as of **September 30, 2014**

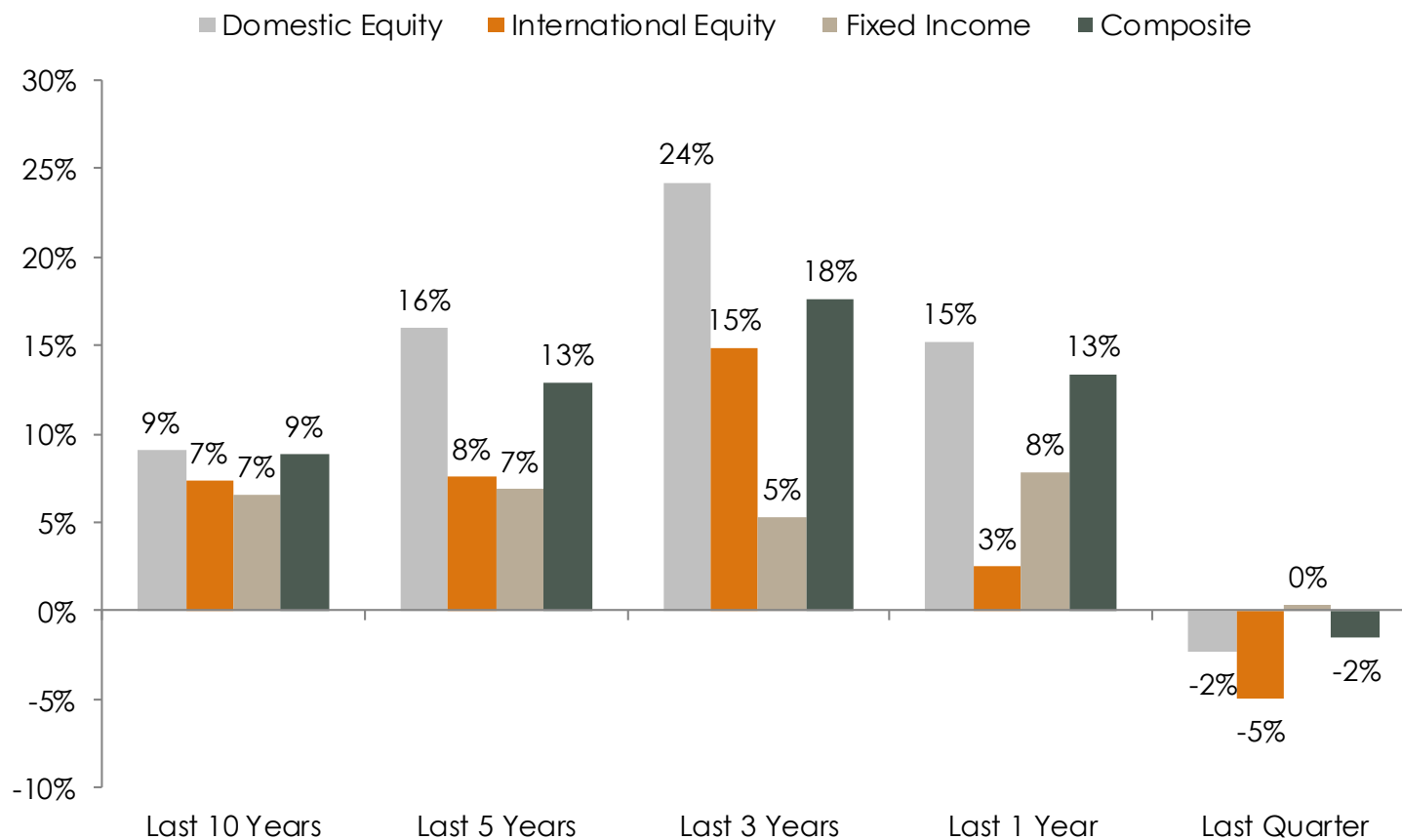


# Total Fund vs. Public Fund Peer Universe

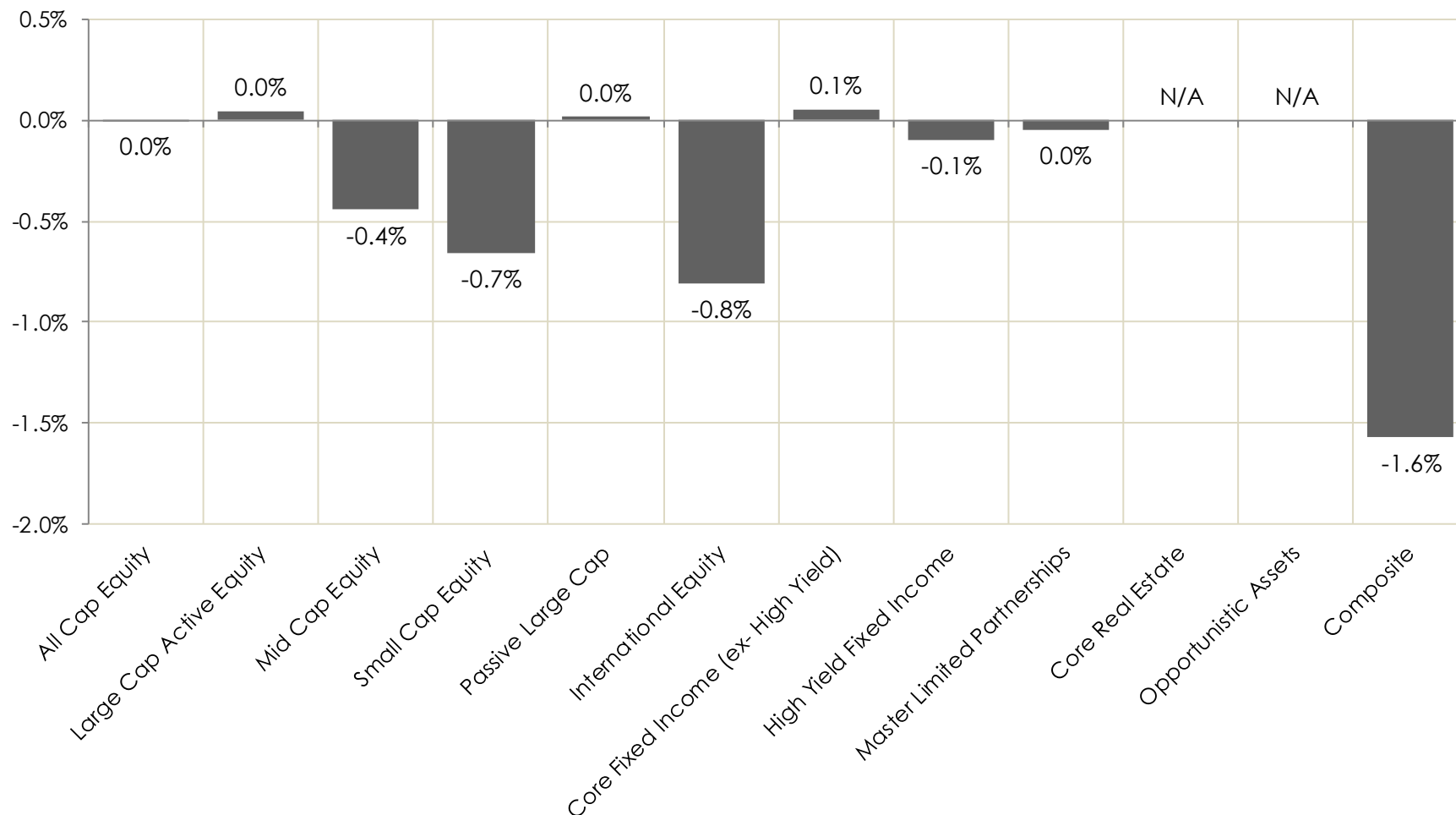


|  | Last Quarter | Last Year | Last 3 Years | Last 5 Years | Last 10 Years |
|--|--------------|-----------|--------------|--------------|---------------|
| <span style="color: blue;">■</span> <b>OTRS Composite</b>  | -1.6%        | 13.4%     | 17.6%        | 12.9%        | 8.8%          |
| <span style="color: red;">◆</span> <b>Allocation Index</b> | -1.4%        | 10.7%     | 15.2%        | 11.3%        | 7.6%          |

# Composite Performance Summary as of September 30, 2014

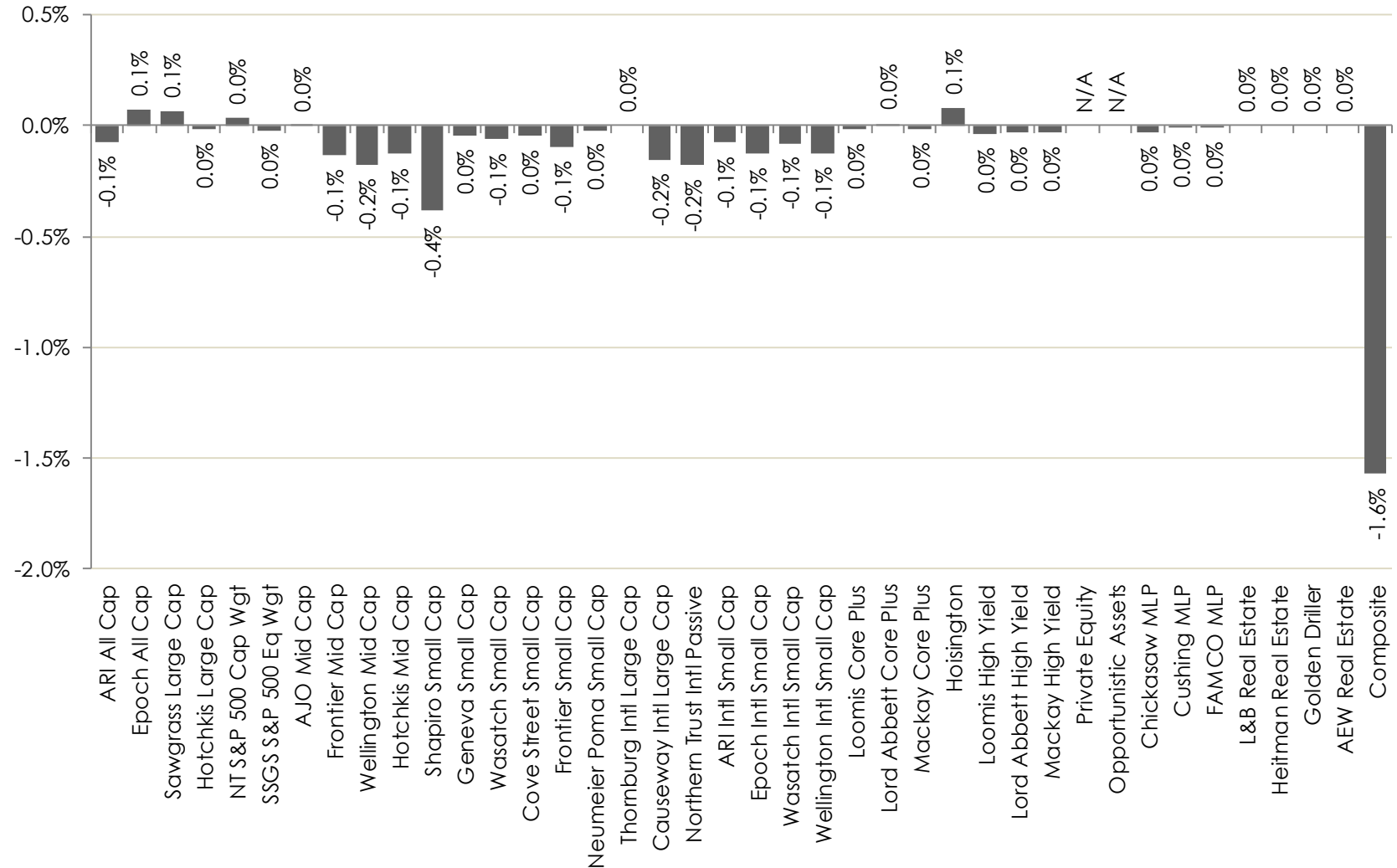


# Composition of Quarterly Return by Asset Class

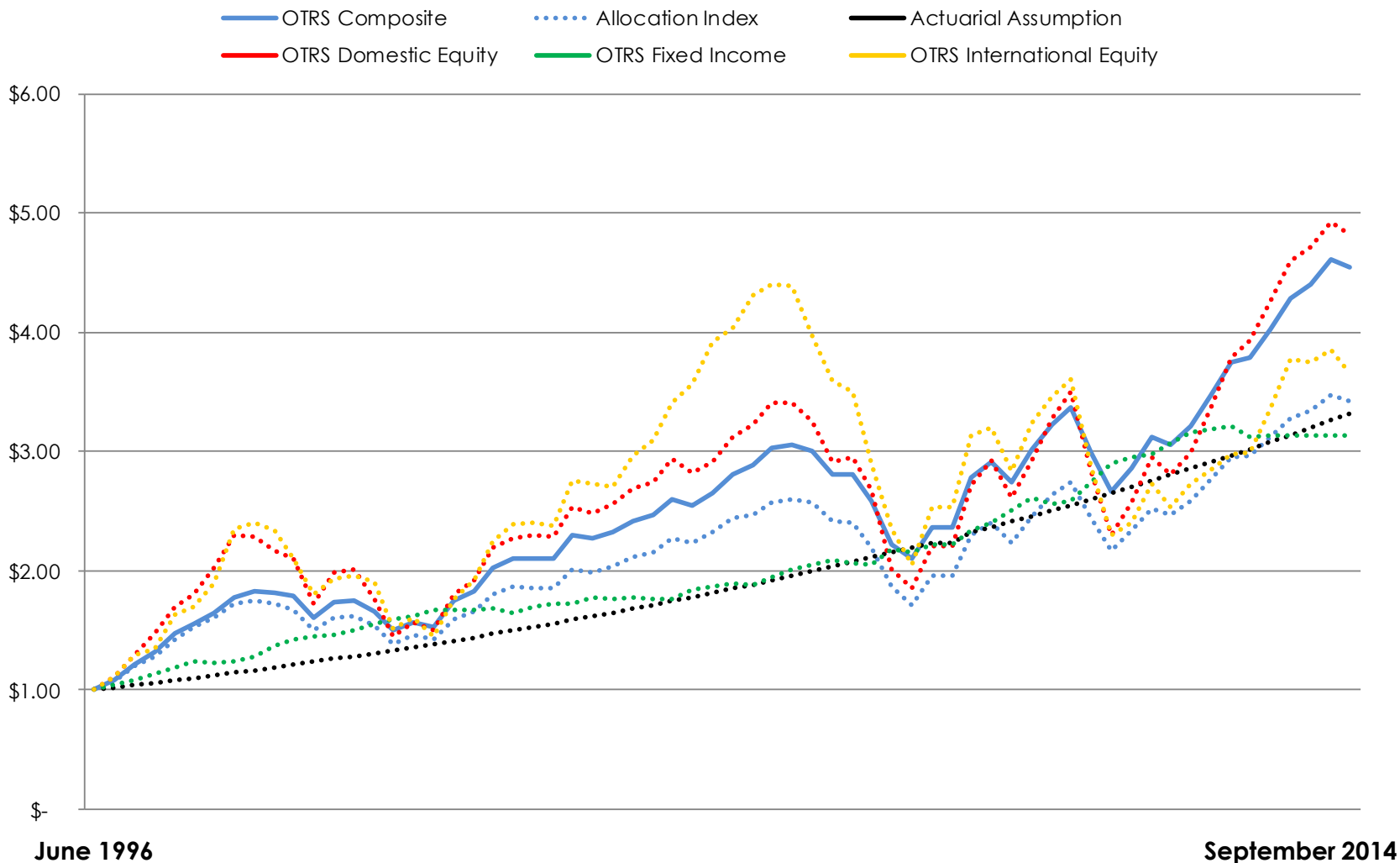


third quarter, 2014

# Composition of Quarterly Return by Portfolio



# Growth of a Dollar Over Time: Period Ended **September 30, 2014**



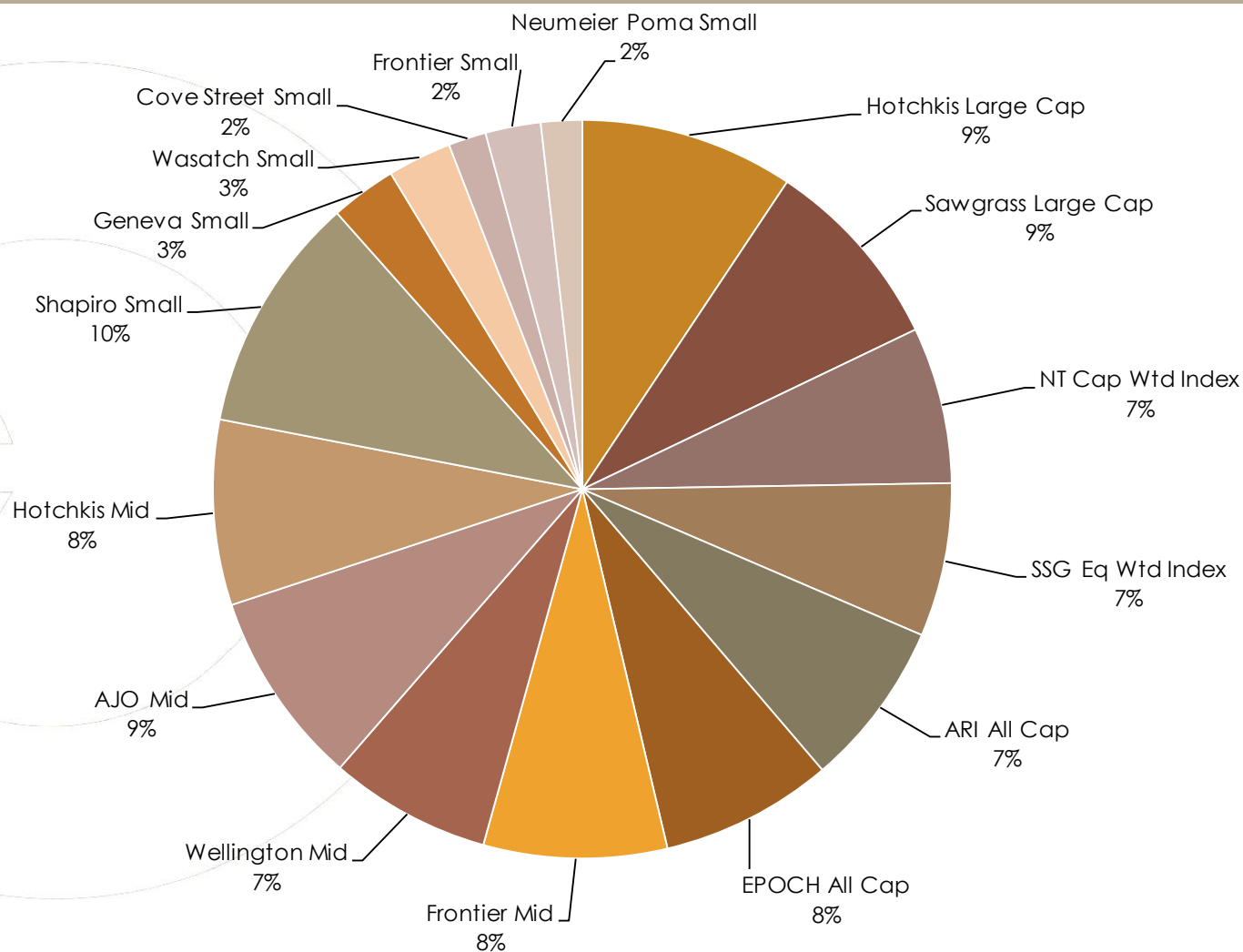
# Performance – Total Fund

|                                       | Last 10<br>Years | % Rank    | Last 5<br>Years | % Rank    | Last 3<br>Years | % Rank    | Last 1<br>Years | % Rank    | Last<br>Quarter | % Rank    |
|---------------------------------------|------------------|-----------|-----------------|-----------|-----------------|-----------|-----------------|-----------|-----------------|-----------|
| <b>Total Fund</b>                     | <b>8.8</b>       | <b>1</b>  | <b>12.9</b>     | <b>1</b>  | <b>17.6</b>     | <b>1</b>  | <b>13.4</b>     | <b>1</b>  | <b>-1.6</b>     | <b>75</b> |
| Allocation Index                      | 7.6              |           | 11.3            |           | 15.2            |           | 10.7            |           | -1.4            |           |
| Actuarial Assumption                  | 8.0              |           | 8.0             |           | 8.0             |           | 8.0             |           | 1.9             |           |
| <b>Total Domestic<br/>Equity</b>      | <b>9.1</b>       | <b>24</b> | <b>16.0</b>     | <b>24</b> | <b>24.2</b>     | <b>14</b> | <b>15.2</b>     | <b>49</b> | <b>-2.4</b>     | <b>83</b> |
| S&P 500                               | 8.1              |           | 15.7            |           | 23.0            |           | 19.7            |           | 1.1             |           |
| <b>Total International<br/>Equity</b> | <b>7.3</b>       | <b>50</b> | <b>7.5</b>      | <b>48</b> | <b>14.9</b>     | <b>28</b> | <b>2.5</b>      | <b>84</b> | <b>-5.0</b>     | <b>57</b> |
| MSCI ACWI ex-US                       | 7.5              |           | 6.5             |           | 12.3            |           | 5.2             |           | -5.2            |           |
| <b>Total Core Fixed<br/>Income</b>    | <b>6.5</b>       | <b>19</b> | <b>6.8</b>      | <b>21</b> | <b>5.3</b>      | <b>23</b> | <b>7.8</b>      | <b>19</b> | <b>0.4</b>      | <b>22</b> |
| Barclays Aggregate                    | 4.6              |           | 4.1             |           | 2.4             |           | 4.0             |           | 0.2             |           |

# Composite Peer Ranking History

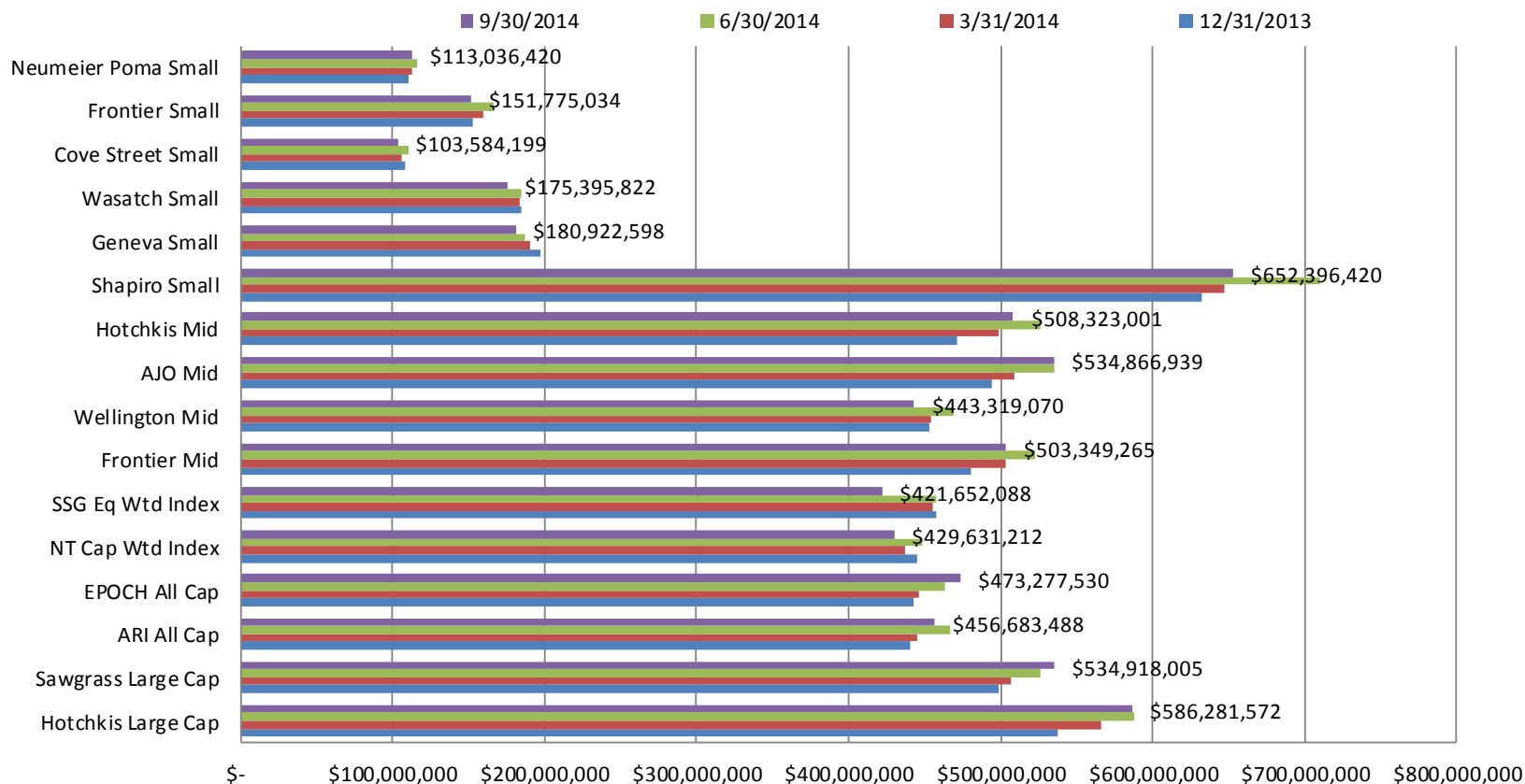
| Periods Ended                     | Trailing 5 Years | Trailing 3 Years | Trailing Year | Last Quarter |
|-----------------------------------|------------------|------------------|---------------|--------------|
| 3q2014                            | 1                | 1                | 4             | 75           |
| 2q2014                            | 1                | 1                | 1             | 1            |
| 1q2014                            | 3                | 1                | 1             | 7            |
| 4q2013                            | 1                | 1                | 1             | 2            |
| 3q2013                            | 2                | 3                | 1             | 14           |
| 2q2013                            | 1                | 3                | 1             | 11           |
| 1q2013                            | 3                | 4                | 4             | 3            |
| 4q2012                            | 15               | 3                | 11            | 24           |
| 3q2012                            | 21               | 13               | 8             | 10           |
| 2q2012                            | 24               | 4                | 33            | 75           |
| 1q2012                            | 22               | 13               | 25            | 14           |
| 4q2011                            | 36               | 14               | 52            | 8            |
| 3q2011                            | 31               | 23               | 95            | 89           |
| 2q2011                            | 20               | 13               | 23            | 93           |
| 1q2011                            | 9                | 21               | 5             | 17           |
| 4q2010                            | 21               | 29               | 15            | 29           |
| 3q2010                            | 30               | 38               | 10            | 18           |
| 2q2010                            | 35               | 46               | 11            | 62           |
| 1q2010                            | 24               | 25               | 70            | 44           |
| 4q2009                            | 36               | 43               | 15            | 25           |
| 3q2009                            | 26               | 42               | 32            | 13           |
| 2q2009                            | 46               | 50               | 44            | 28           |
| 1q2009                            | 23               | 24               | 18            | 28           |
| 4q2008                            | 47               | 61               | 62            | 64           |
| 3q2008                            | 24               | 59               | 67            | 48           |
| 2q2008                            | 25               | 52               | 83            | 17           |
| 1q2008                            | 19               | 49               | 83            | 79           |
| 4q2007                            | 19               | 46               | 62            | 78           |
| 3q2007                            | 18               | 36               | 37            | 87           |
| 2q 2007                           | 10               | 29               | 18            | 34           |
| 1q 2007                           | 15               | 27               | 38            | 19           |
| 4q 2006                           | 23               | 44               | 59            | 36           |
| 3q 2006                           | 15               | 24               | 69            | 57           |
| Average Rank                      | 20               | 26               | 32            | 37           |
| % of Observations in Top Quartile | 76%              | 55%              | 55%           | 48%          |
| % of Observations Above Median    | 100%             | 91%              | 70%           | 70%          |

# Asset Allocation Summary – Domestic Equity Allocation

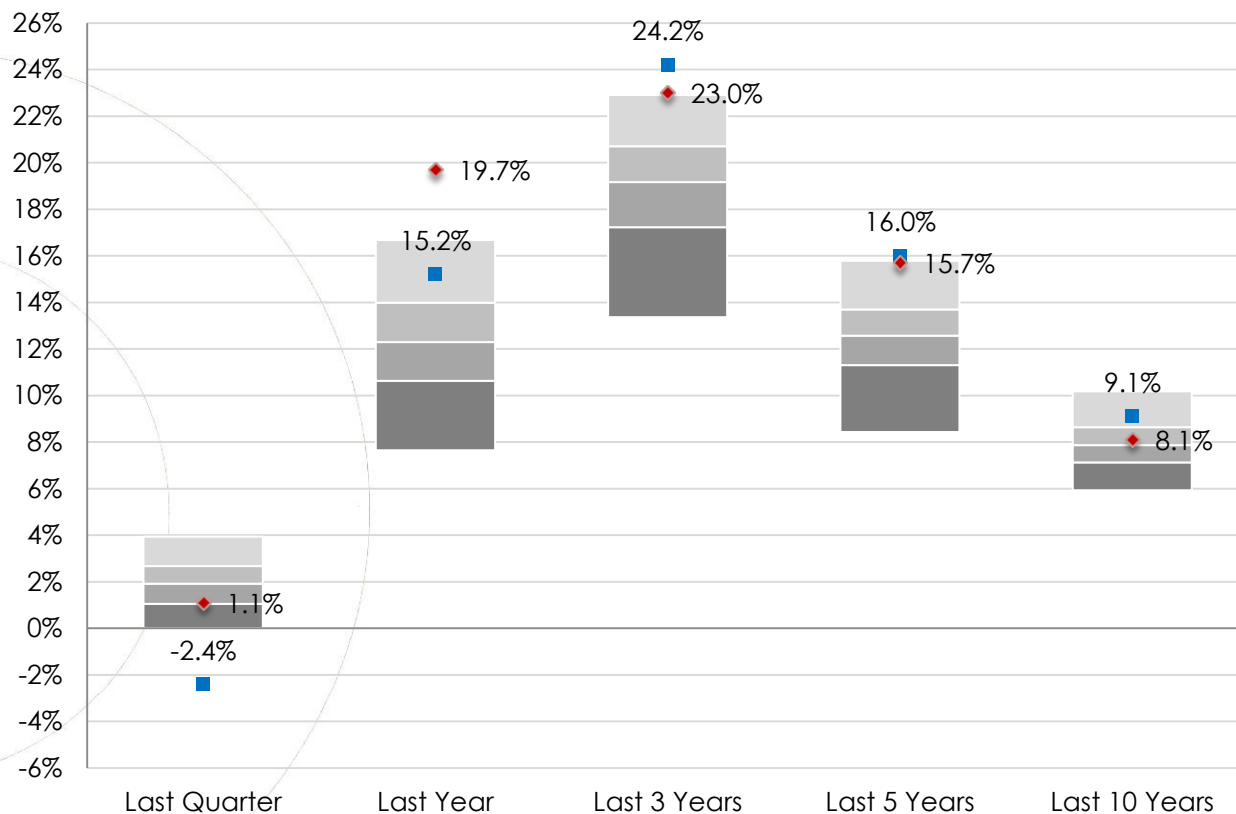


third quarter, 2014

# Asset Allocation Summary – Domestic Equity Allocation



## Domestic Equity Composite vs. U.S. Equity Allocation Peer Universe



■ OTRS Equity Composite

◆ S&P 500

-2.4%

1.1%

15.2%

19.7%

24.2%

23.0%

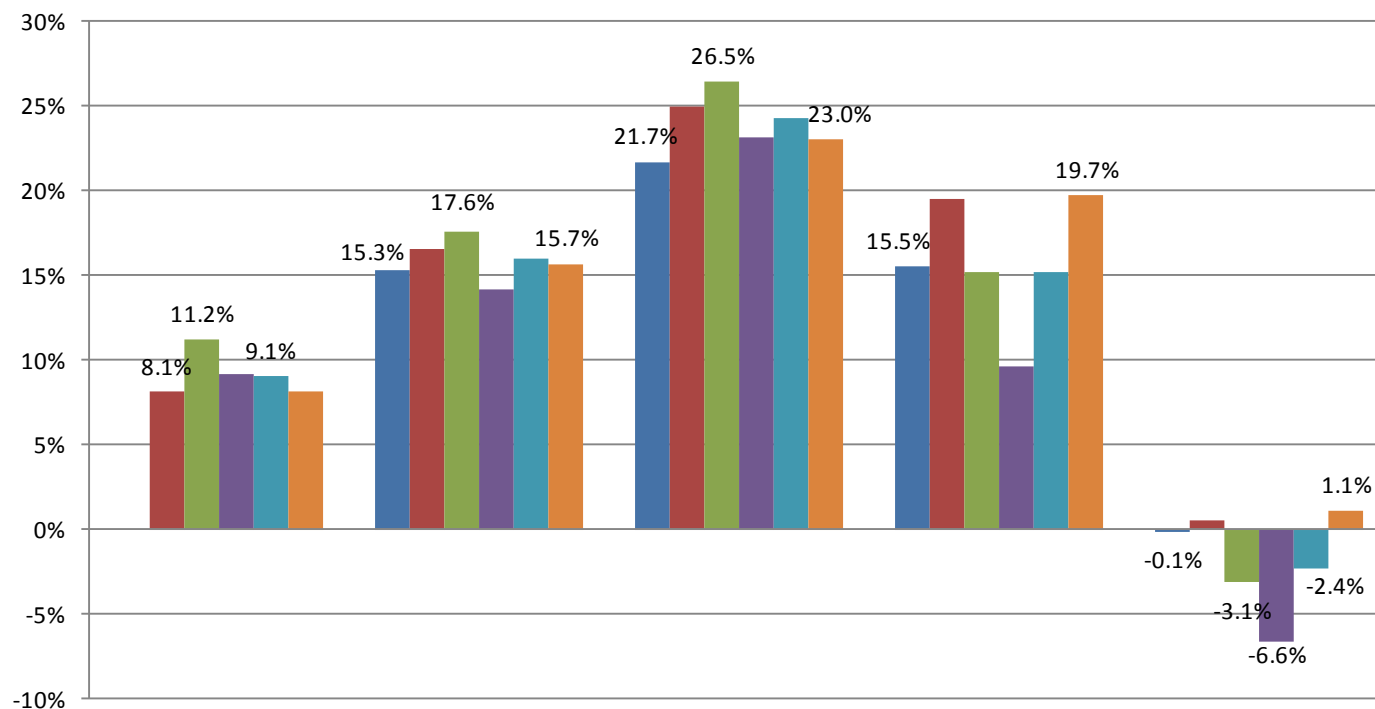
16.0%

15.7%

9.1%

8.1%

# Domestic Equity Performance: Capitalization Composites



|                          |       |       |       |       |       |
|--------------------------|-------|-------|-------|-------|-------|
| ■ All Cap                |       | 15.3% | 21.7% | 15.5% | -0.1% |
| ■ Large Cap Active       | 8.1%  | 16.5% | 25.0% | 19.5% | 0.6%  |
| ■ Mid Cap                | 11.2% | 17.6% | 26.5% | 15.1% | -3.1% |
| ■ Small Cap              | 9.2%  | 14.2% | 23.2% | 9.6%  | -6.6% |
| ■ All Domestic Equity    | 9.1%  | 16.0% | 24.2% | 15.2% | -2.4% |
| ■ S&P 500 (Cap Weighted) | 8.1%  | 15.7% | 23.0% | 19.7% | 1.1%  |

# Performance – All Cap and Large Cap Equity Managers

|                                   | Last 10<br>Years | %<br>Rank | Last 5<br>Year | %<br>Rank | Last 3<br>Years | %<br>Rank | Last 1<br>Year | % Rank | Last<br>Quarter | % Rank |
|-----------------------------------|------------------|-----------|----------------|-----------|-----------------|-----------|----------------|--------|-----------------|--------|
| <b>Advisory Research</b>          | -                | -         | 15.0           | 47        | 20.1            | 64        | 13.3           | 67     | -2.2            | 81     |
| <b>EPOCH</b>                      | -                | -         | 15.7           | 29        | 23.3            | 23        | 17.8           | 22     | 2.1             | 2      |
| <i>Russell 3000 Value</i>         | 7.8              |           | 15.1           |           | 23.7            |           | 17.7           |        | -0.9            |        |
| <i>Russell 3000</i>               | 8.4              |           | 15.8           |           | 23.0            |           | 17.8           |        | 0.0             |        |
| <b>Hotchkis LCV</b>               | 7.5              | N/A       | 17.1           | 7         | 27.4            | 10        | 19.7           | 23     | -0.4            | 59     |
| <b>Sawgrass LCG</b>               | -                |           | 16.6           | 34        | 22.6            | 44        | 19.4           | 24     | 1.6             | 32     |
| <i>S&amp;P 500</i>                | 8.1              |           | 15.7           |           | 23.0            |           | 19.7           |        | 1.1             |        |
| <i>Russell 1000 Value</i>         | 7.8              |           | 15.3           |           | 23.9            |           | 18.9           |        | -0.2            |        |
| <i>Russell 1000 Growth</i>        | 8.9              |           | 16.5           |           | 22.4            |           | 19.1           |        | 1.5             |        |
| <b>NT Cap Weighted</b>            | -                | -         | -              | -         | -               | -         | 19.5           | 40     | 1.1             | 26     |
| <b>SSGA Equal Weighted</b>        | -                | -         | -              | -         | -               | -         | 18.3           | 66     | -0.6            | 82     |
| <i>S&amp;P 500 Cap Weighted</i>   | 8.1              |           | 15.7           |           | 23.0            |           | 19.7           |        | 1.1             |        |
| <i>S&amp;P 500 Equal Weighted</i> | 10.2             |           | 17.5           |           | 24.8            |           | 18.5           |        | -0.7            |        |

third quarter, 2014

## Performance – Mid Cap and Small Cap Equity Managers

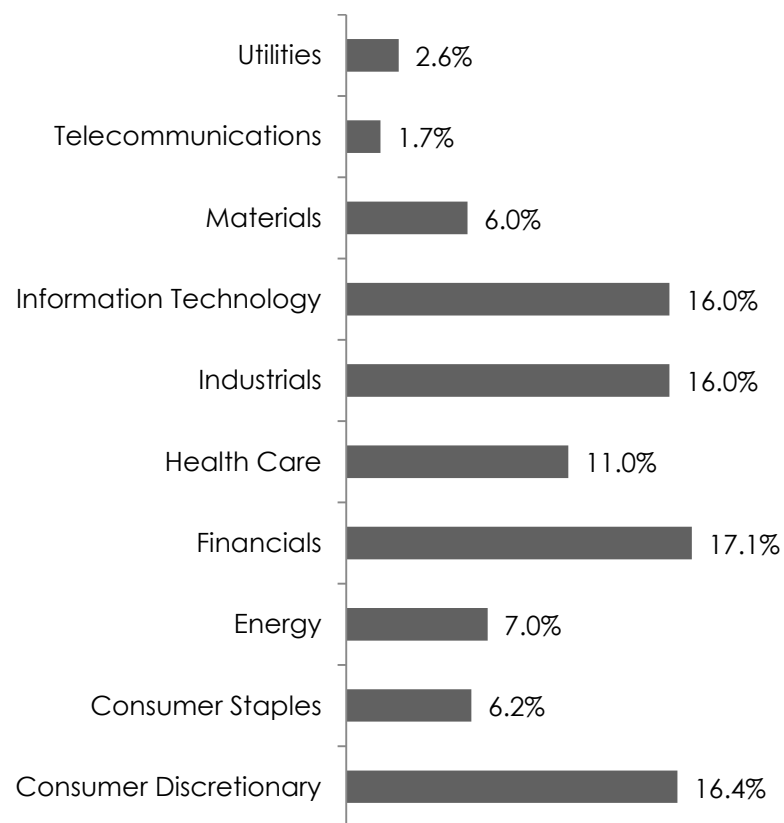
|                           | Last 10<br>Years | %<br>Rank  | Last 5<br>Years | %<br>Rank | Last 3<br>Years | %<br>Rank | Last 1<br>Year | %<br>Rank | Last<br>Quarter | %<br>Rank |
|---------------------------|------------------|------------|-----------------|-----------|-----------------|-----------|----------------|-----------|-----------------|-----------|
| <b>AJO MCC</b>            | <b>11.0</b>      | <b>39</b>  | <b>19.0</b>     | <b>9</b>  | <b>26.9</b>     | <b>14</b> | <b>21.0</b>    | <b>3</b>  | <b>0.0</b>      | <b>2</b>  |
| <b>Frontier MCG</b>       | <b>12.0</b>      | <b>49</b>  | <b>15.9</b>     | <b>78</b> | <b>21.8</b>     | <b>75</b> | <b>13.6</b>    | <b>57</b> | <b>-3.7</b>     | <b>84</b> |
| <b>Hotchkis MCV</b>       | <b>11.6</b>      | <b>N/A</b> | <b>21.3</b>     | <b>6</b>  | <b>35.2</b>     | <b>5</b>  | <b>15.2</b>    | <b>56</b> | <b>-3.5</b>     | <b>65</b> |
| <b>Wellington MCG</b>     | <b>9.9</b>       | <b>77</b>  | <b>13.9</b>     | <b>94</b> | <b>22.0</b>     | <b>74</b> | <b>10.4</b>    | <b>77</b> | <b>-5.4</b>     | <b>95</b> |
| <i>Russell MC</i>         | <i>10.3</i>      |            | <i>17.2</i>     |           | <i>23.8</i>     |           | <i>15.8</i>    |           | <i>-1.7</i>     |           |
| <i>Russell MC Growth</i>  | <i>10.2</i>      |            | <i>17.1</i>     |           | <i>22.7</i>     |           | <i>14.4</i>    |           | <i>-0.7</i>     |           |
| <i>Russell MC Value</i>   | <i>10.2</i>      |            | <i>17.2</i>     |           | <i>24.7</i>     |           | <i>17.5</i>    |           | <i>-2.6</i>     |           |
| <b>Shapiro SCC</b>        | <b>12.2</b>      | <b>10</b>  | <b>18.2</b>     | <b>8</b>  | <b>25.8</b>     | <b>14</b> | <b>16.2</b>    | <b>3</b>  | <b>-8.2</b>     | <b>81</b> |
| <b>Geneva SCG</b>         | <b>-</b>         | <b>-</b>   | <b>-</b>        | <b>-</b>  | <b>-</b>        | <b>-</b>  | <b>-0.8</b>    | <b>77</b> | <b>-3.2</b>     | <b>17</b> |
| <b>Wasatch SCG</b>        | <b>-</b>         | <b>-</b>   | <b>-</b>        | <b>-</b>  | <b>-</b>        | <b>-</b>  | <b>1.1</b>     | <b>67</b> | <b>-5.0</b>     | <b>37</b> |
| <b>Cove Street SCV</b>    | <b>-</b>         | <b>-</b>   | <b>-</b>        | <b>-</b>  | <b>-</b>        | <b>-</b>  | <b>6.0</b>     | <b>68</b> | <b>-6.2</b>     | <b>45</b> |
| <b>Frontier SCV</b>       | <b>-</b>         | <b>-</b>   | <b>-</b>        | <b>-</b>  | <b>-</b>        | <b>-</b>  | <b>8.9</b>     | <b>45</b> | <b>-8.7</b>     | <b>95</b> |
| <b>Neumeier Poma SCV</b>  | <b>-</b>         | <b>-</b>   | <b>-</b>        | <b>-</b>  | <b>-</b>        | <b>-</b>  | <b>11.3</b>    | <b>19</b> | <b>-2.5</b>     | <b>2</b>  |
| <i>Russell 2000</i>       | <i>8.2</i>       |            | <i>14.3</i>     |           | <i>21.3</i>     |           | <i>3.9</i>     |           | <i>-7.4</i>     |           |
| <i>Russell 2000 Value</i> | <i>7.3</i>       |            | <i>13.0</i>     |           | <i>20.6</i>     |           | <i>4.1</i>     |           | <i>-8.6</i>     |           |

# Total Equity Portfolio Holdings Review

## Largest Equity Positions

| Position                       | % of Total Equity Allocation |
|--------------------------------|------------------------------|
| ADT                            | 0.49%                        |
| CST Brands                     | 0.48%                        |
| Cablevision                    | 0.45%                        |
| USG                            | 0.44%                        |
| General Electric               | 0.43%                        |
| Lindsay                        | 0.43%                        |
| Entegris                       | 0.42%                        |
| Aaron's                        | 0.42%                        |
| Compass Minerals International | 0.42%                        |
| Axiall                         | 0.41%                        |
| <b>Top Ten Total Weight</b>    | <b>4.39%</b>                 |

## Sector Weightings



third quarter, 2014

## Composite Equity Portfolio Characteristics – Trailing Five Years

|                                       | Average<br>Market Cap  | Dividend<br>Yield | Tracking<br>Error | Alpha       | R <sup>2</sup> | Sharpe<br>Ratio | Standard<br>Deviation |
|---------------------------------------|------------------------|-------------------|-------------------|-------------|----------------|-----------------|-----------------------|
| Active All<br>Cap/Large Cap<br>Equity | \$109.57 billion       | 2.00%             | 3.67%             | 1.91        | 0.95           | 1.26            | 13.31                 |
| Mid Cap Equity                        | \$9.31 billion         | 1.06%             | 4.90%             | -1.40       | 0.94           | 1.02            | 17.71                 |
| Small Cap Equity                      | \$13.41 billion        | 1.01%             | 2.68%             | 2.95        | 0.43           | 0.36            | 8.27                  |
| International Equity                  | \$17.17 billion        | 2.27%             | 1.14%             | 0.46        | 0.28           | 0.17            | 5.33                  |
| <b>Total Equity</b>                   | <b>\$39.21 billion</b> | <b>1.66%</b>      | <b>3.07%</b>      | <b>0.81</b> | <b>0.66</b>    | <b>0.72</b>     | <b>11.22</b>          |

## Active Domestic Equity Characteristics – Trailing Five Years

|                   | Asset Class          | Upside Capture Ratio % | Downside Capture Ratio % | Trailing Five Year Return | Correlation vs. S&P 500 | Correlation vs. BC Aggregate |
|-------------------|----------------------|------------------------|--------------------------|---------------------------|-------------------------|------------------------------|
| Hotchkis & Wiley  | Large Cap Value      | 111.2                  | 113.5                    | 17.2%                     | 0.96                    | -0.53                        |
| Sawgrass          | Large Cap Growth     | 89.9                   | 72.3                     | 16.6%                     | 0.98                    | -0.48                        |
| Advisory Research | All Cap              | 98.3                   | 101.2                    | 15.0%                     | 0.98                    | -0.55                        |
| EPOCH             | All Cap              | 104.2                  | 109.6                    | 15.6%                     | 0.98                    | -0.56                        |
| AJO               | Mid Cap Core         | 118.9                  | 117.6                    | 18.9%                     | 0.96                    | -0.56                        |
| Frontier          | Mid Cap Growth       | 107.0                  | 112.9                    | 16.0%                     | 0.92                    | -0.54                        |
| Hotchkis & Wiley  | Mid Cap Value        | 136.6                  | 138.2                    | 21.4%                     | 0.92                    | -0.55                        |
| Wellington        | Mid Cap Growth       | 123.3                  | 161.3                    | 13.9%                     | 0.93                    | -0.55                        |
| Shapiro           | Small Cap Value/Core | 125.2                  | 133.0                    | 18.6%                     | 0.92                    | -0.55                        |
| Cove Street       | Small Cap Value      | 120.2                  | 112.4                    | 24.0%                     | 0.90                    | -0.49                        |
| Neumeier Poma     | Small Cap Value      | 111.3                  | 101.3                    | 19.0%                     | 0.89                    | -0.54                        |
| Frontier          | Small Cap Value      | 128.5                  | 129.2                    | 20.2%                     | 0.92                    | -0.57                        |
| Geneva            | Small Cap Growth     | 109.9                  | 118.8                    | 16.0%                     | 0.81                    | -0.54                        |
| Wasatch           | Small Cap Growth     | 101.9                  | 97.7                     | 16.6%                     | 0.85                    | -0.59                        |

Upside and downside capture ratios measured against the S&P 500 index.

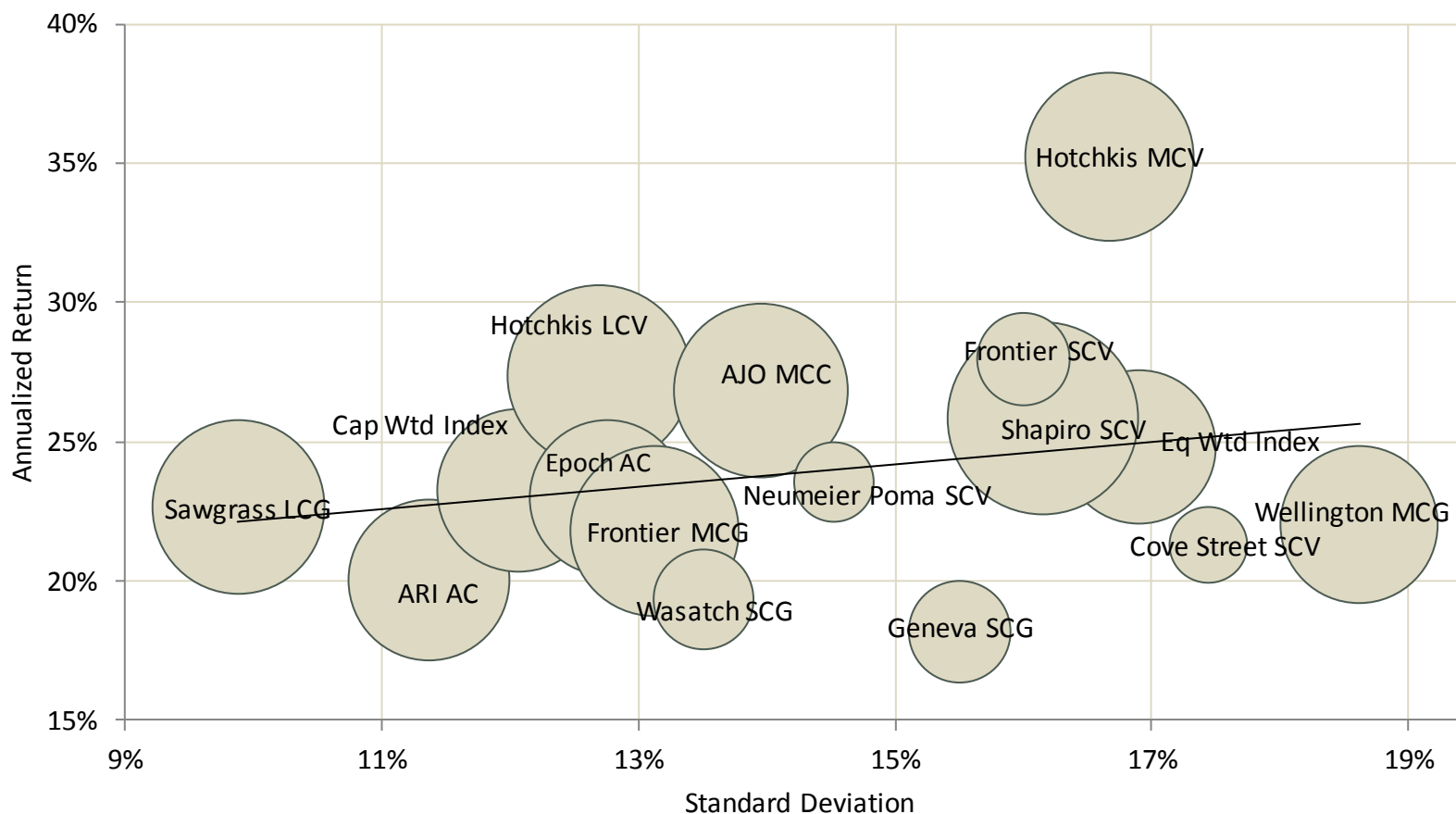
third quarter, 2014

# Domestic Equity Portfolios: 5 Year Correlation Matrix

| Trailing Five Years | AJO MCC | ARI AC | Cove Street SCV | Epoch AC | Frontier MCG | Frontier SCV | Geneva SCG | Hotchkis LCV | Hotchkis MCV | Neumeier Poma SCV | Sawgrass LCG | Shapiro SCC | Wasatch SCG | Wellington MCG |
|---------------------|---------|--------|-----------------|----------|--------------|--------------|------------|--------------|--------------|-------------------|--------------|-------------|-------------|----------------|
| AJO MCC             | -       |        |                 |          |              |              |            |              |              |                   |              |             |             |                |
| ARI AC              | 0.96    | -      |                 |          |              |              |            |              |              |                   |              |             |             |                |
| Cove Street SCV     | 0.91    | 0.91   | -               |          |              |              |            |              |              |                   |              |             |             |                |
| Epoch AC            | 0.97    | 0.97   | 0.90            | -        |              |              |            |              |              |                   |              |             |             |                |
| Frontier MCG        | 0.95    | 0.92   | 0.88            | 0.93     | -            |              |            |              |              |                   |              |             |             |                |
| Frontier SCV        | 0.96    | 0.93   | 0.93            | 0.92     | 0.93         | -            |            |              |              |                   |              |             |             |                |
| Geneva SCG          | 0.88    | 0.84   | 0.81            | 0.85     | 0.90         | 0.86         | -          |              |              |                   |              |             |             |                |
| Hotchkis LCV        | 0.93    | 0.95   | 0.89            | 0.94     | 0.87         | 0.91         | 0.74       | -            |              |                   |              |             |             |                |
| Hotchkis MCV        | 0.94    | 0.92   | 0.90            | 0.92     | 0.89         | 0.94         | 0.77       | 0.95         | -            |                   |              |             |             |                |
| Neumeier Poma SCV   | 0.94    | 0.92   | 0.90            | 0.92     | 0.91         | 0.95         | 0.87       | 0.86         | 0.89         | -                 |              |             |             |                |
| Sawgrass LCG        | 0.95    | 0.95   | 0.87            | 0.96     | 0.92         | 0.88         | 0.82       | 0.91         | 0.88         | 0.87              | -            |             |             |                |
| Shapiro SCC         | 0.95    | 0.94   | 0.91            | 0.92     | 0.93         | 0.93         | 0.86       | -            | -            | 0.93              | 0.89         | -           |             |                |
| Wasatch SCG         | 0.90    | 0.86   | 0.85            | 0.88     | 0.93         | 0.91         | 0.90       | 0.80         | 0.85         | 0.90              | 0.83         | 0.88        | -           |                |
| Wellington MCG      | 0.97    | 0.93   | 0.89            | 0.95     | 0.94         | 0.94         | 0.87       | 0.90         | 0.93         | 0.94              | 0.90         | 0.95        | 0.90        | -              |

# Domestic Equity Risk Return Comparison

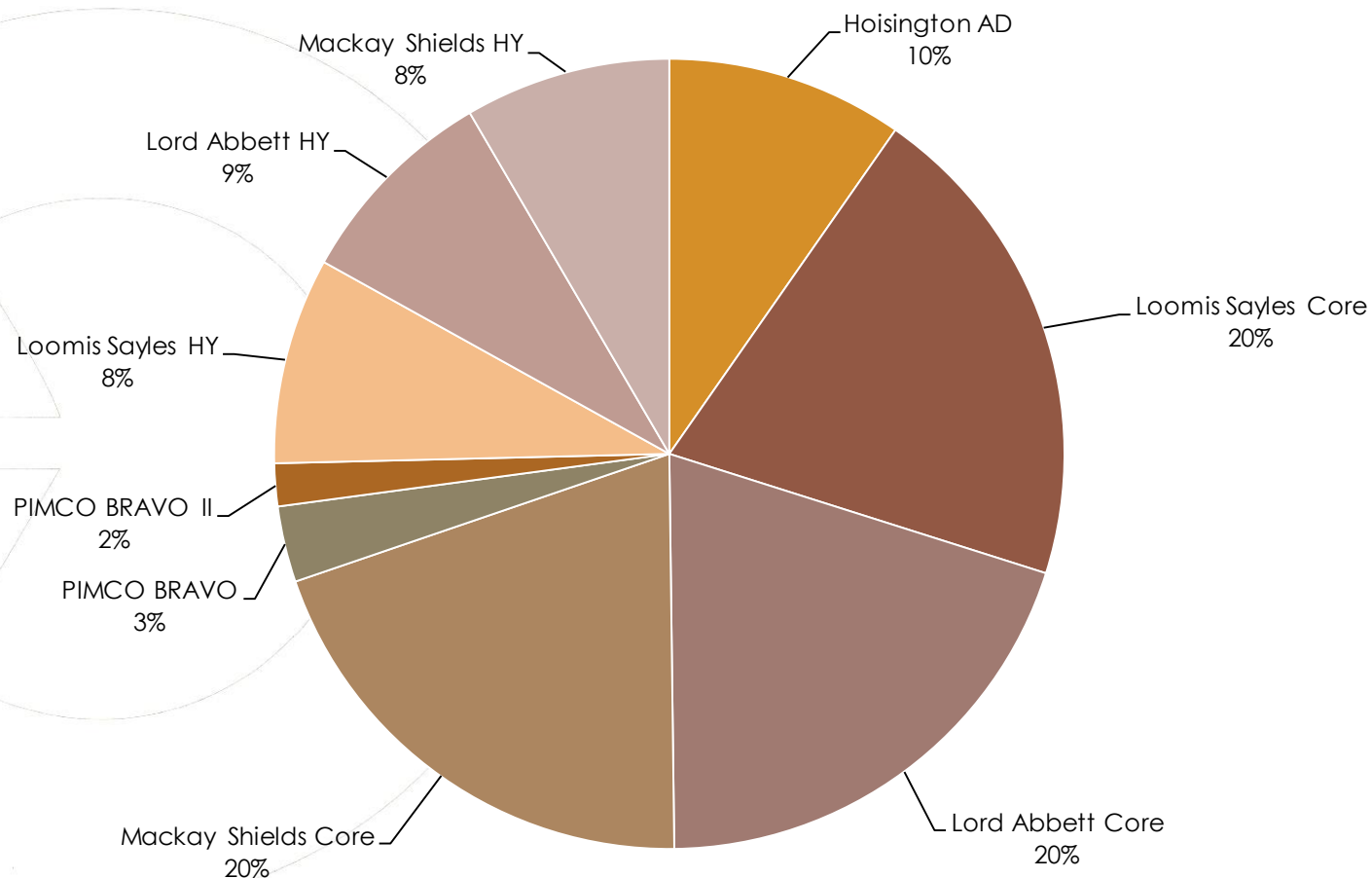
Composite Data Used – Three Years Ended September 30, 2014



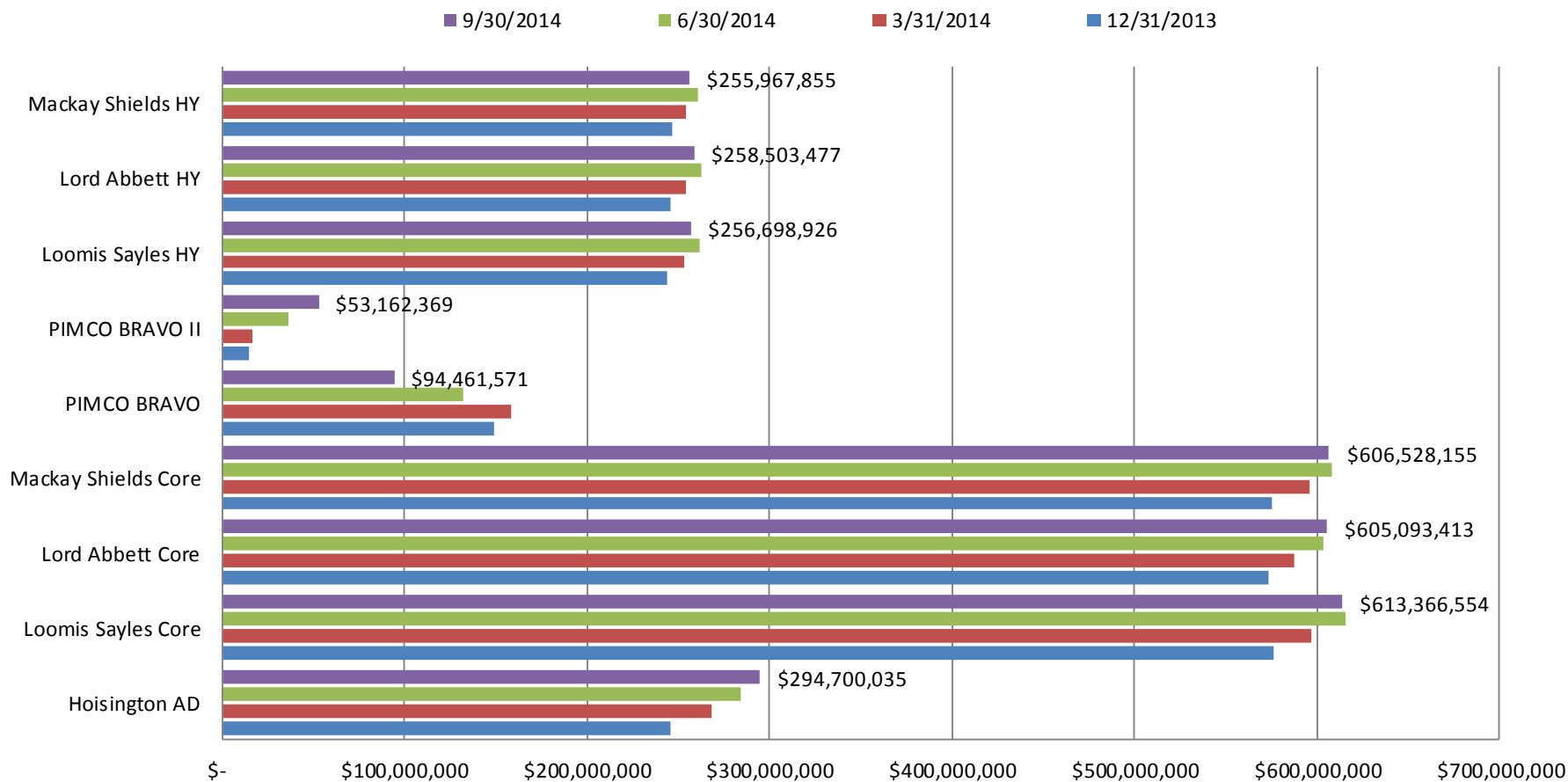
\*Composite performance used when necessary.

third quarter, 2014

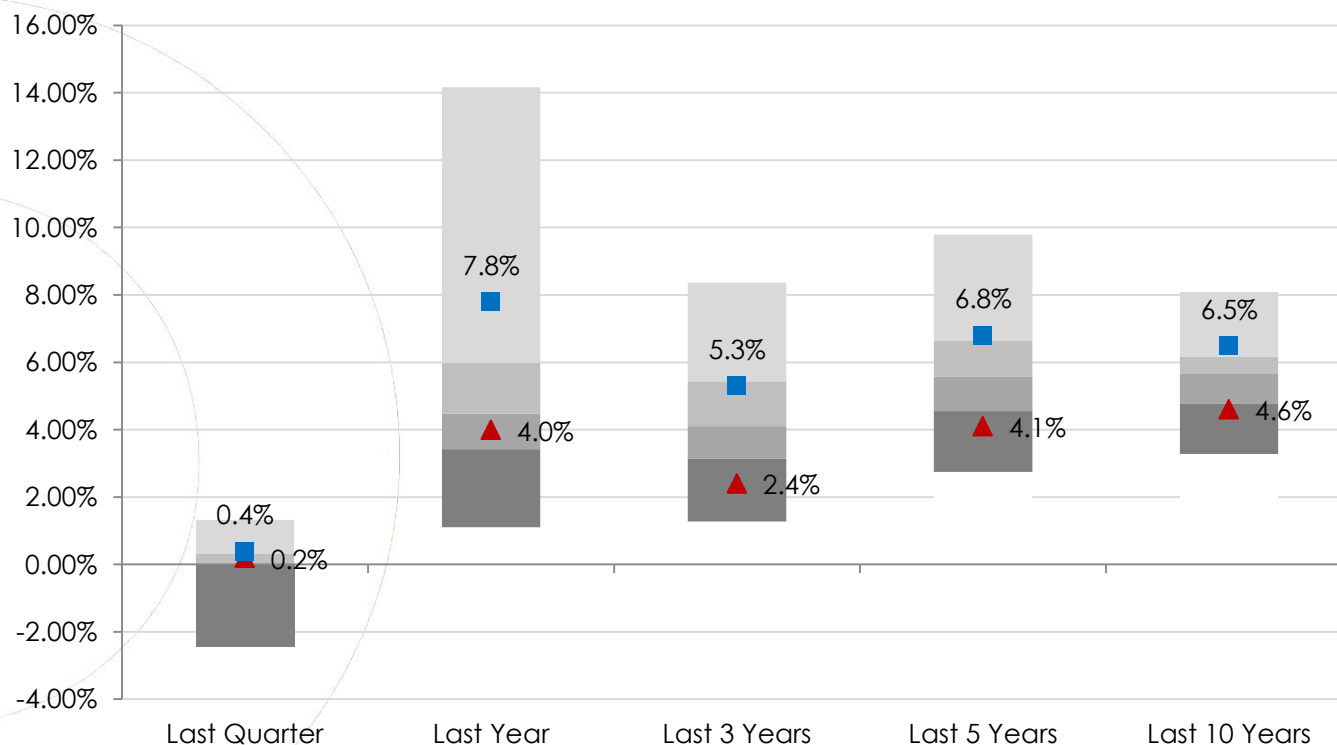
## Asset Allocation Summary – Fixed Income Allocation



# Asset Allocation Summary – Fixed Income Allocation



# Fixed Income Composite vs. Core Fixed Income Peer Universe



■ OTRS Fixed Income Composite  
◆ Barclays Capital Aggregate

|      |      |      |      |      |
|------|------|------|------|------|
| 0.4% | 7.8% | 5.3% | 6.8% | 6.5% |
| 0.2% | 4.0% | 2.4% | 4.1% | 4.6% |

## Performance – Fixed Income Managers

|                  | Last 10<br>Years | %<br>Rank | Last 5<br>Years | %<br>Rank | Last 3<br>Years | %<br>Rank | Last Year | %<br>Rank | Last<br>Quarter | %<br>Rank |
|------------------|------------------|-----------|-----------------|-----------|-----------------|-----------|-----------|-----------|-----------------|-----------|
| Loomis Sayles    | 7.6              | 4         | 7.9             | 12        | 6.9             | 2         | 8.1       | 18        | -0.4            | 78        |
| Lord Abbett      | -                | -         | 6.2             | 23        | 5.0             | 17        | 6.1       | 23        | 0.2             | 38        |
| Mackay Shields   | -                | -         | 6.9             | 18        | 6.1             | 3         | 5.8       | 25        | -0.3            | 77        |
| Hoisington       | -                | -         | 8.0             | 28        | 2.1             | 69        | 15.6      | 3         | 3.7             | 1         |
| BC Aggregate     | 4.6              |           | 4.1             |           | 2.4             |           | 4.0       |           | 0.2             |           |
| Loomis HY        | -                | -         | 10.3            | 59        | 12.1            | 25        | 8.3       | 38        | -2.0            | 65        |
| Lord Abbett HY   | -                | -         | 11.8            | 20        | 12.7            | 20        | 9.3       | 25        | -1.7            | 47        |
| Mackay HY        | -                | -         | 9.9             | 71        | 9.9             | 75        | 6.8       | 70        | -1.7            | 49        |
| ML High Yield II | -                |           | 10.4            |           | 11.0            |           | 7.2       |           | -1.9            |           |

## Fixed Income Portfolio Characteristics – Trailing Five Years

|                                    | Asset Class       | Credit Quality | Modified Duration | Maturity    | Yield to Maturity |
|------------------------------------|-------------------|----------------|-------------------|-------------|-------------------|
| Loomis Sayles                      | Core Plus         | AA-            | 5.4               | 7.8         | 3.8%              |
| Lord Abbett                        | Core Plus         | AA             | 5.2               | 7.4         | 3.2%              |
| Mackay Shields                     | Core Plus         | A+             | 3.5               | 8.7         | 3.2%              |
| Hoisington                         | Active Duration   | AAA            | 20.0              | 24.0        | 3.2%              |
| <b>Core Fixed Income Composite</b> | <b>Core Plus</b>  | <b>A+</b>      | <b>6.8</b>        | <b>10.2</b> | <b>3.4%</b>       |
| Loomis Sayles                      | High Yield        | BB             | 4.3               | 7.0         | 5.2%              |
| Lord Abbett                        | High Yield        | B+             | 5.3               | 6.7         | 6.6%              |
| Mackay Shields                     | High Yield        | BB-            | 3.8               | 6.1         | 6.0%              |
| <b>High Yield Composite</b>        | <b>High Yield</b> | <b>B</b>       | <b>4.5</b>        | <b>6.6</b>  | <b>5.9%</b>       |

## Fixed Income Performance Characteristics – Trailing Five Years

|                | Asset Class     | Upside Capture Ratio % | Downside Capture Ratio % | Trailing Five Year Return | Correlation vs. BC Aggregate | Correlation vs. S&P 500 |
|----------------|-----------------|------------------------|--------------------------|---------------------------|------------------------------|-------------------------|
| Loomis Sayles  | Core Plus       | 149.1%                 | 84.80%                   | 7.7%                      | 0.46                         | 0.29                    |
| Lord Abbett    | Core Plus       | 119.3%                 | 65.7%                    | 6.2%                      | 0.73                         | 0.00                    |
| Mackay Shields | Core Plus       | 123.1%                 | 71.6%                    | 6.3%                      | 0.59                         | 0.16                    |
| Hoisington     | Active Duration | 277.1%                 | 429.4%                   | 8.0%                      | 0.89                         | -0.63                   |
| Loomis Sayles  | High Yield      | 177.0%                 | -23.9%                   | 12.3%                     | -0.27                        | 0.76                    |
| Lord Abbett    | High Yield      | 155.9%                 | -67.1%                   | 11.6%                     | -0.32                        | 0.77                    |
| Mackay Shields | High Yield      | 143.7%                 | -27.0%                   | 10.0%                     | -0.17                        | 0.68                    |

Upside and downside capture ratios measured against the Barclays Capital Aggregate index.

\*Composite performance used when necessary.

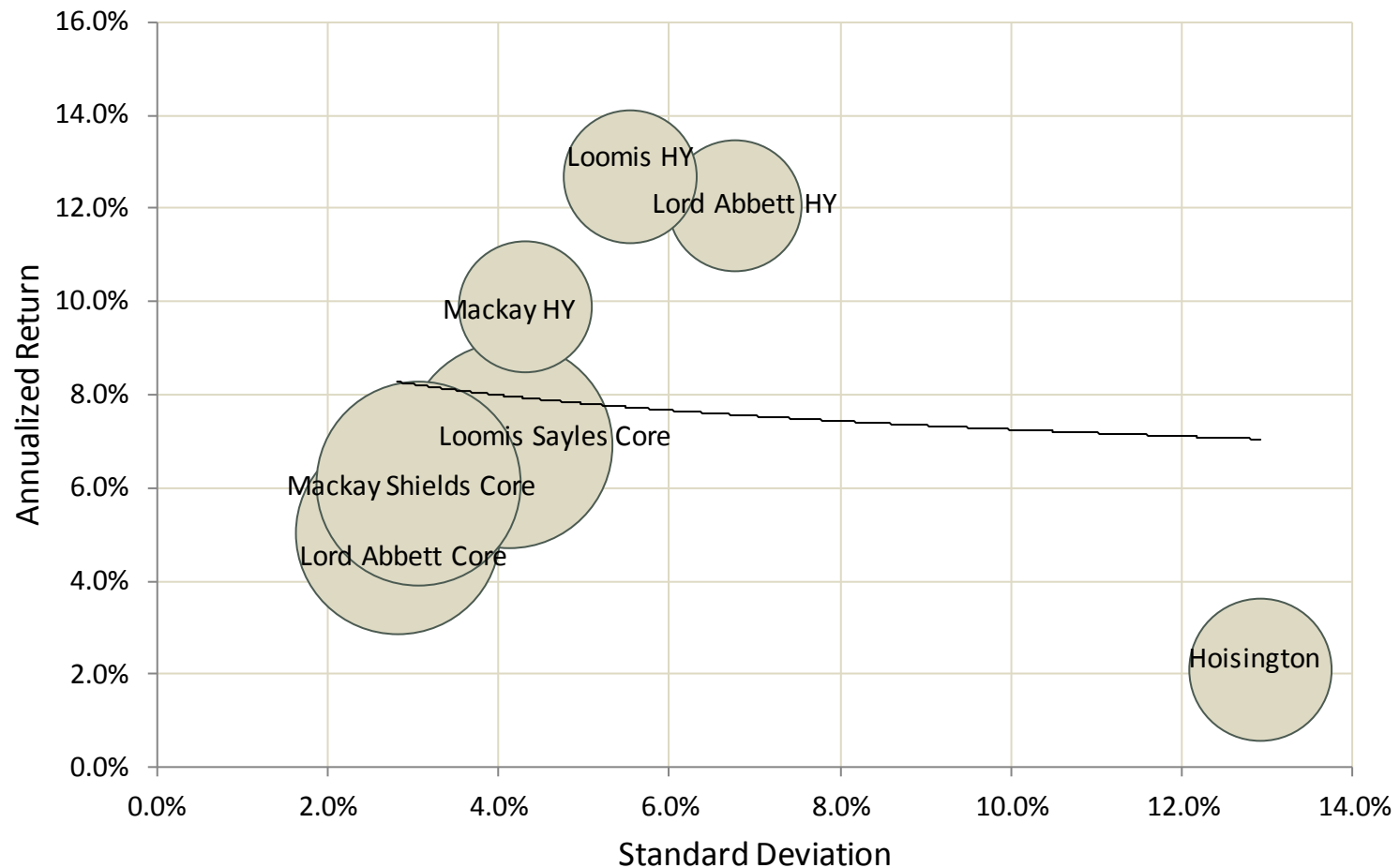
## Fixed Income Portfolios: 5 Year Correlation Matrix

| Trailing Five Years       | Hoisington | Loomis Core | Loomis High Yield | Lord Abbett Core | Lord Abbett High Yield | Mackay Shields Core | Mackay Shields High Yield |
|---------------------------|------------|-------------|-------------------|------------------|------------------------|---------------------|---------------------------|
| Hoisington                | -          |             |                   |                  |                        |                     |                           |
| Loomis Core               | 0.26       | -           |                   |                  |                        |                     |                           |
| Loomis High Yield         | -0.46      | 0.68        | -                 |                  |                        |                     |                           |
| Lord Abbett Core          | 0.53       | 0.91        | 0.41              | -                |                        |                     |                           |
| Lord Abbett High Yield    | -0.47      | 0.65        | 0.97              | 0.36             | -                      |                     |                           |
| Mackay Shields Core       | 0.40       | 0.95        | 0.56              | 0.96             | 0.53                   | -                   |                           |
| Mackay Shields High Yield | -0.34      | 0.73        | 0.94              | 0.48             | 0.97                   | 0.64                | -                         |

\*Composite performance used when necessary.

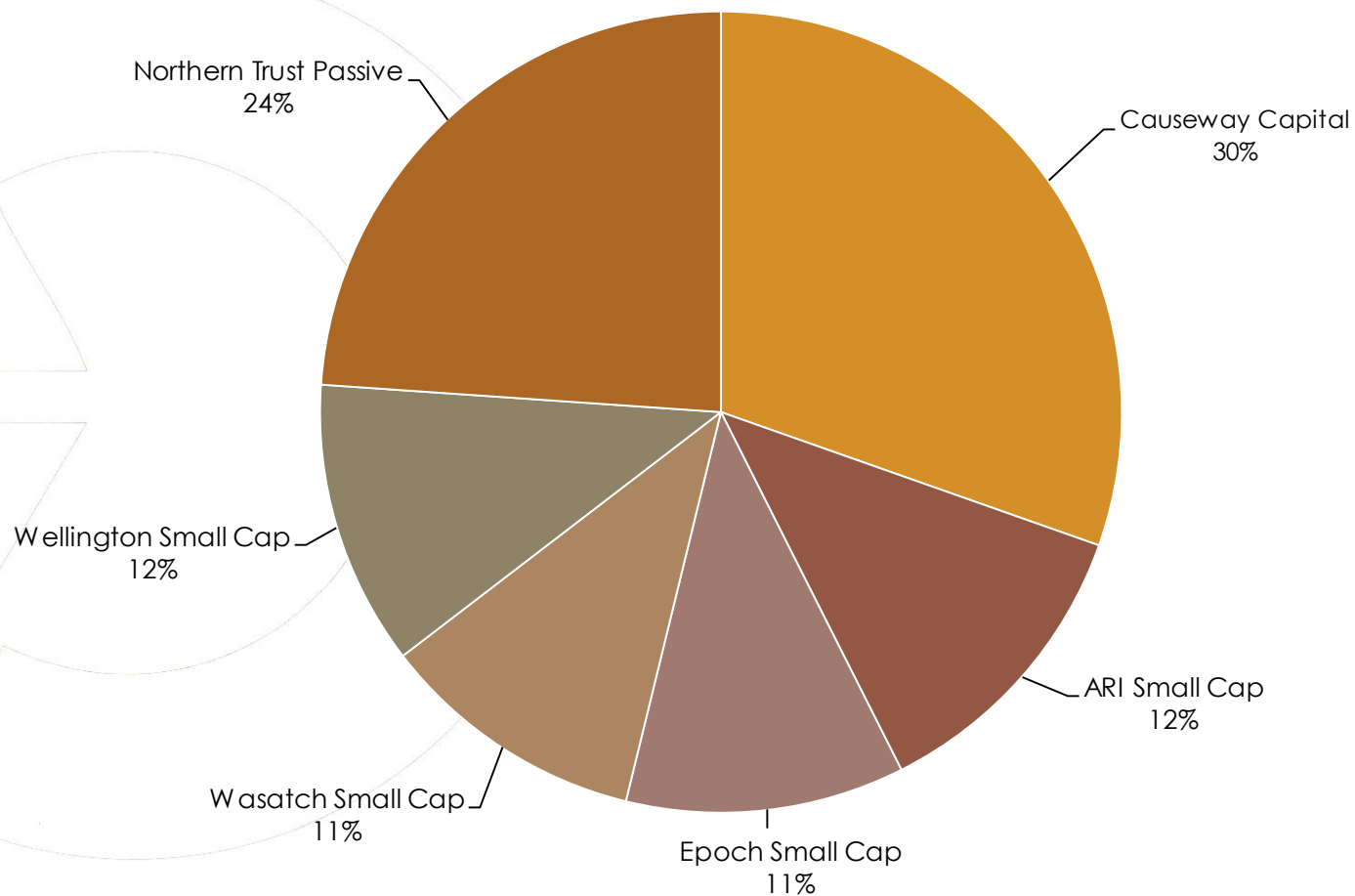
# Fixed Income Risk Return Comparison

Composite Data Used – Three Years Ended September 30, 2014



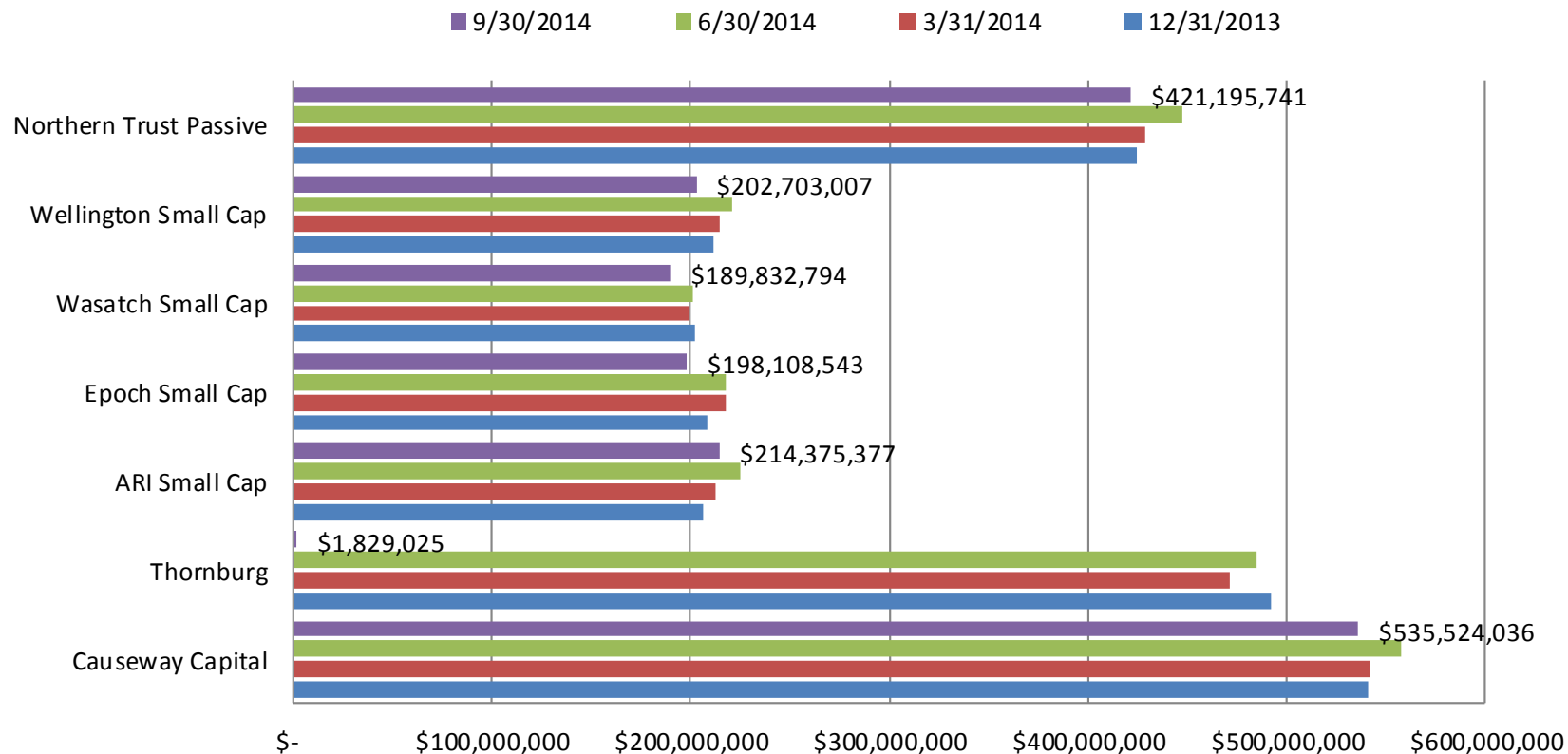
\*Composite performance used when necessary to calculate figures.

## Asset Allocation Summary – International Equity Allocation

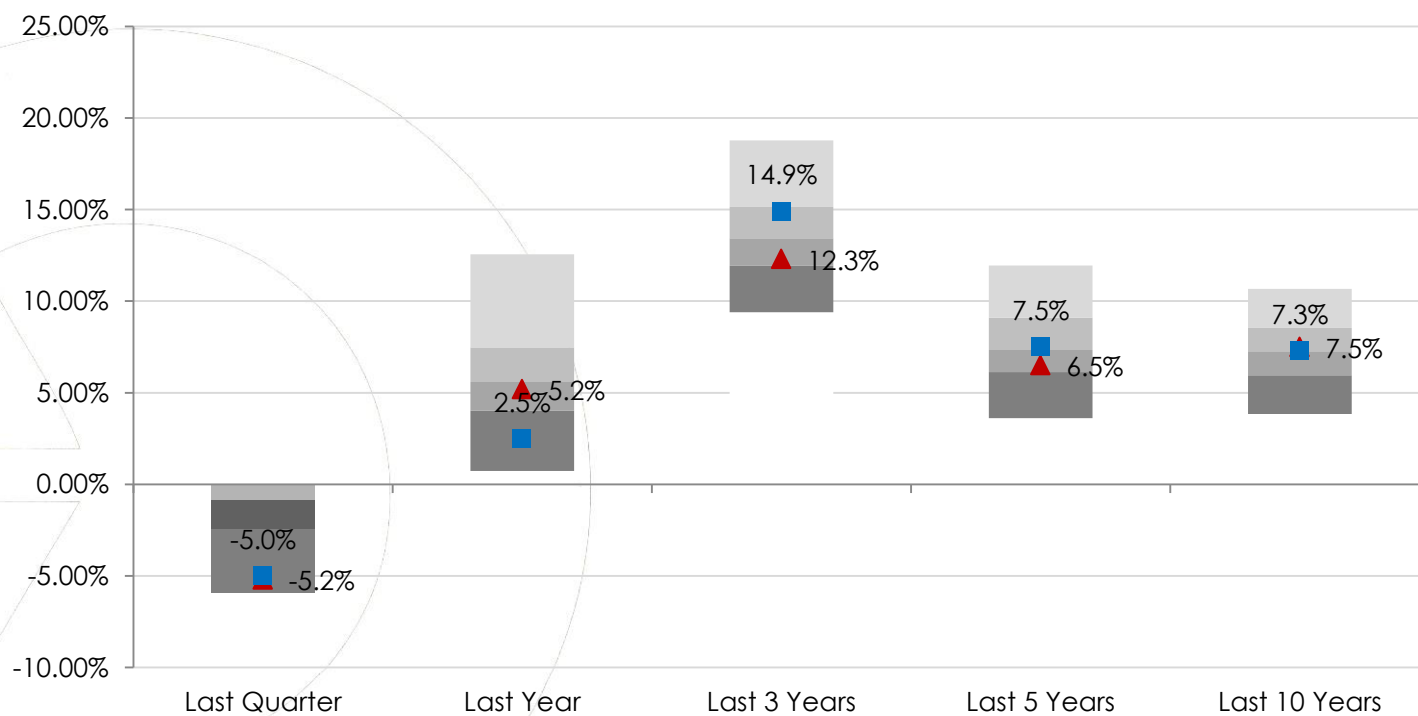


third quarter, 2014

## Asset Allocation Summary – International Equity Allocation



# International Equity Composite vs. Non-US Equity Allocation Peer Universe



■ OTRS International Equity Composite

◆ MSCI ACWI Ex-US

-5.0%

-5.2%

2.5%

5.2%

14.9%

12.3%

7.5%

6.5%

7.3%

7.5%

## Performance – International Equity Managers

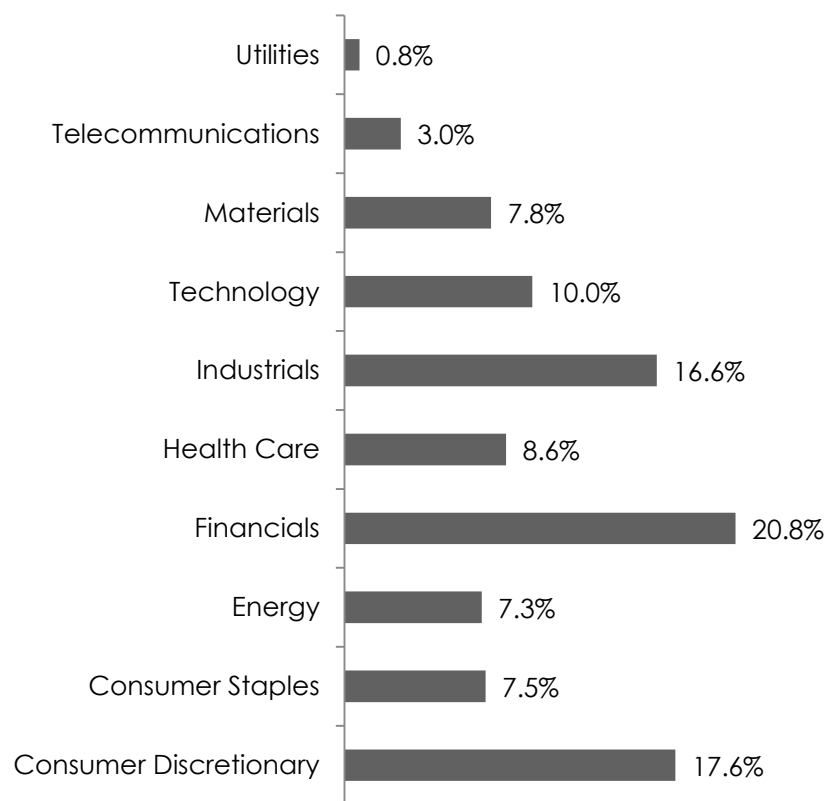
|                               | Last 10<br>Years | %<br>Rank | Last 5<br>Years | %<br>Rank | Last 3<br>Years | %<br>Rank | Last 1<br>Year | %<br>Rank | Last<br>Quarter | %<br>Rank |
|-------------------------------|------------------|-----------|-----------------|-----------|-----------------|-----------|----------------|-----------|-----------------|-----------|
| <b>Causeway</b>               | <b>7.5</b>       | <b>45</b> | <b>9.0</b>      | <b>26</b> | <b>16.8</b>     | <b>16</b> | <b>5.1</b>     | <b>58</b> | <b>-3.9</b>     | <b>36</b> |
| <b>Northern Trust Passive</b> | -                |           | -               |           | -               |           | <b>4.7</b>     | <b>64</b> | <b>-5.9</b>     | <b>78</b> |
| <i>MSCI ACWI Ex US</i>        | 6.3              |           | -               |           | -               |           | -              |           | -               |           |
| <b>ARI</b>                    | -                | -         | -               | -         | -               | -         | <b>10.4</b>    | <b>13</b> | <b>-4.9</b>     | <b>54</b> |
| <b>EPOCH</b>                  | -                | -         | -               | -         | -               | -         | <b>2.8</b>     | <b>83</b> | <b>-8.8</b>     | <b>96</b> |
| <b>Wasatch</b>                | -                | -         | -               | -         | -               | -         | <b>-3.0</b>    | <b>97</b> | <b>-5.7</b>     | <b>76</b> |
| <b>Wellington</b>             | -                | -         | -               | -         | -               | -         | <b>2.9</b>     | <b>82</b> | <b>-8.3</b>     | <b>96</b> |
| <i>MSCI EAFE Small Cap</i>    | 9.2              |           | 15.6            |           | 22.7            |           | 7.7            |           | -6.0            |           |

# Total International Equity Portfolio Holdings Review

## Largest Equity Positions

| Position                    | % of Total Equity Allocation |
|-----------------------------|------------------------------|
| Novartis AG                 | 0.90%                        |
| Reed Elsevier               | 0.88%                        |
| AKZO Nobel                  | 0.88%                        |
| KDDI                        | 0.85%                        |
| Novartis AG                 | 0.86%                        |
| Sanofi                      | 0.85%                        |
| Toyota                      | 0.83%                        |
| British American Tobacco    | 0.74%                        |
| Nestle                      | 0.71%                        |
| Technip                     | 0.69%                        |
| <b>Top Ten Total Weight</b> | <b>8.19%</b>                 |

## Sector Weightings



## Active International Equity Characteristics – Trailing Five Years

|                   | Asset Class      | Upside Capture Ratio % | Downside Capture Ratio % | Trailing Five Year Return | Correlation vs. S&P 500 | Correlation vs. MSCI ACWI ex US |
|-------------------|------------------|------------------------|--------------------------|---------------------------|-------------------------|---------------------------------|
| Causeway          | Large Cap Value  | 114.0%                 | 95.7%                    | 10.6%                     | 0.86                    | 0.95                            |
| Northern Trust    | Passive Index    | 100.0%                 | 99.9%                    | 15.7%                     | 1.00                    | 0.83                            |
| Advisory Research | Small Cap Value  | 94.5%                  | 70.2%                    | 10.7%                     | 0.81                    | 0.93                            |
| EPOCH             | Small Cal Value  | 102.1%                 | 85.2%                    | 9.6%                      | 0.86                    | 0.95                            |
| Wasatch           | Small Cap Growth | 104.8%                 | 57.3%                    | 16.4%                     | 0.80                    | 0.91                            |
| Wellington        | Small Cap Growth | 101.9%                 | 88.6%                    | 8.9%                      | 0.90                    | 0.98                            |

Upside and downside capture ratios measured against the MSCI ACWI ex-US index.

\*Composite performance used when necessary.

## International Equity Portfolios: 5 Year Correlation Matrix

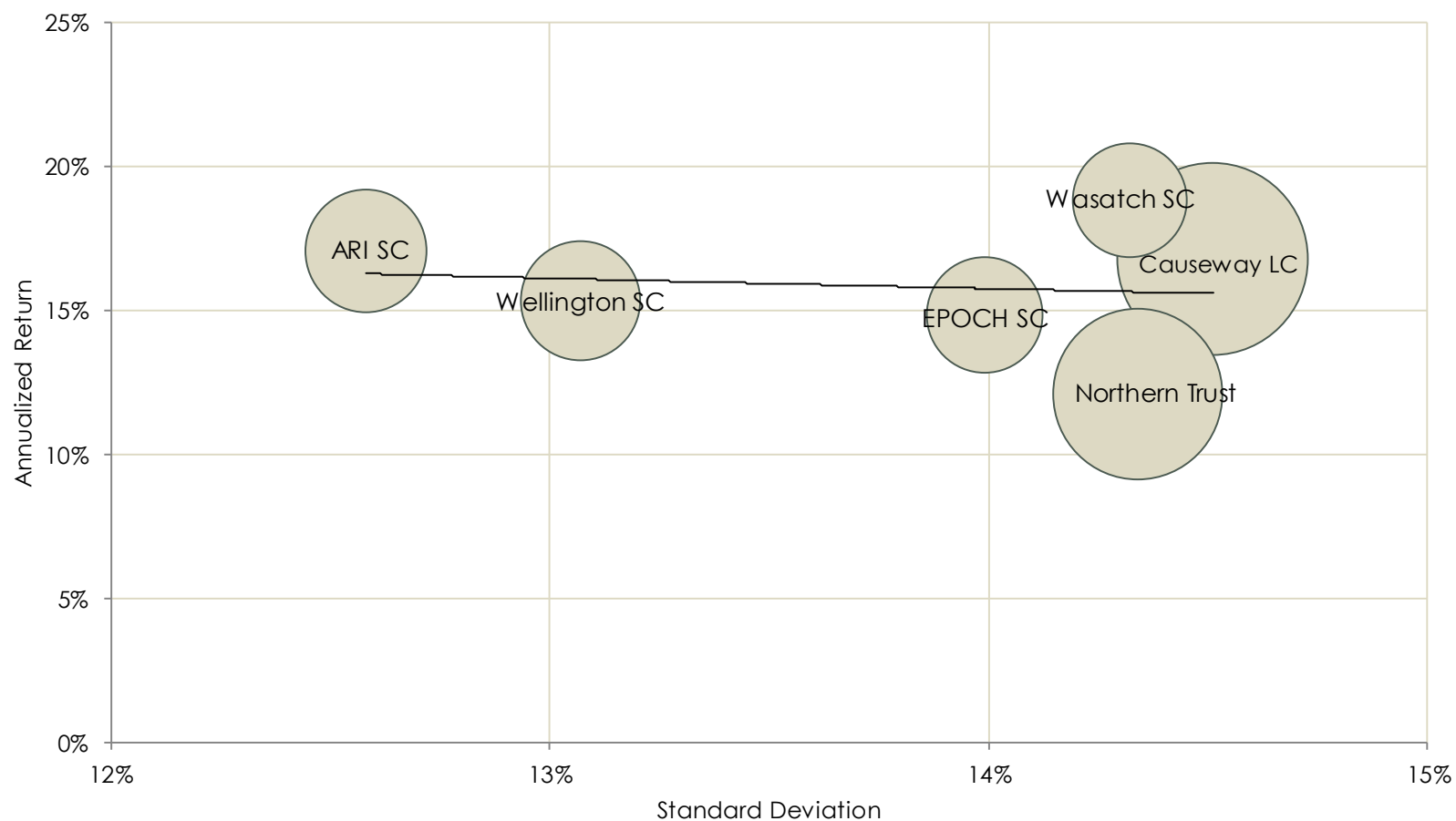
| Trailing Five Years    | ARI SCI | Causeway LCI | EPOCH SCI | Northern Trust | Wasatch SCI | Wellington SCI |
|------------------------|---------|--------------|-----------|----------------|-------------|----------------|
| ARI SCI                | -       |              |           |                |             |                |
| Causeway LCI           | 0.92    | -            |           |                |             |                |
| EPOCH SCI              | 0.92    | 0.93         | -         |                |             |                |
| Northern Trust Passive | 0.81    | 0.89         | 0.86      | -              |             |                |
| Wasatch SCI            | 0.85    | 0.86         | 0.94      | 0.80           | -           |                |
| Wellington SCI         | 0.91    | 0.97         | 0.95      | 0.90           | 0.91        | -              |

\*Composite performance used when necessary.

third quarter, 2014

# International Equity Risk Return Comparison

Composite Data Used – Three Years Ended September 30, 2014



## Performance – MLPs

|                    | Last 5<br>Years | %<br>Rank | Last 3<br>Years | %<br>Rank | Last 1<br>Year | %<br>Rank | Last<br>Quarter | %<br>Rank |
|--------------------|-----------------|-----------|-----------------|-----------|----------------|-----------|-----------------|-----------|
| <b>Chickasaw</b>   | -               | -         | <b>39.9</b>     | -         | <b>50.5</b>    | -         | <b>-1.0</b>     | -         |
| <b>FAMCO</b>       | -               | -         | <b>34.1</b>     | -         | <b>30.1</b>    | -         | <b>-0.4</b>     | -         |
| <b>Swank</b>       | -               | -         | <b>24.5</b>     | -         | <b>44.6</b>    | -         | <b>-0.4</b>     | -         |
| <i>Alerian MLP</i> | -               |           | 22.9            |           | 25.8           |           | 2.7             |           |



LORD ABBETT

October 27, 2014

Ms. Melissa Kempkes  
Oklahoma Teachers Retirement System  
P.O. Box 53524  
Oklahoma City, OK 73152-3524

Dear Melissa:

According to the Investment Policy Statement of Oklahoma Teachers Retirement System, we are required to submit this letter through you to the Board of Trustees requesting exception under the Policy to continue to hold a security whose credit rating has been downgraded to below 'CCC.' In the course of our quarterly compliance review of the Core Plus portfolio we manage for OTRS, we discovered that an issue of the Argentinian Province of Neuquén that is held in the portfolio, the 7.875% bonds due 4/26/2021 Cusip: 64126BAB6 in a face amount of \$123,000 had been downgraded by S&P from CCC+ to CCC-. As of September 30, 2014, the portfolio's exposure to this issue represented 0.02% (2 basis points) of the portfolio's market value.

Neuquén is one of Argentina's most prosperous provinces. Neuquén is rich in natural resources and also benefits from a vibrant tourist trade. The country has important mining and extractive industries and is a leading producer of gas and petroleum. Admittedly, the country of Argentina has been under pressure and the sovereign debt is in technical default because its attempt to meet its U.S. dollar foreign debt service has been enjoined by ruling of a federal judge that has prevented the country from paying interest on its restructured debt without also paying in full certain hedge funds holding previously defaulted bonds that had not been converted under a prior debt restructuring. We recognized that this has at least indirect implications for the Province of Neuquén even though it is a separate borrowing authority and the bonds are backed by provincial oil royalties.

Given current market conditions, we would prefer to hold the Neuquén position for now in the expectation that there will be some eventual resolution of Argentina's dispute with the hedge funds holding previously defaulted Argentine debt. We will keep this matter under close review and might of course at some point in the future decide that a disposition becomes the better course of action.

We appreciate your and the Board's consideration of this request.

Sincerely yours,

Thomas J. McDonald III  
Client Portfolio Manager

CC: Mr. Douglas Anderson, gregory.w.group