# Vermont Municipal Employees' Retirement System 

## Total Plan Asset Allocation - VMERS

Target Asset Allocation


## Current Asset Allocation by Manager



Current Asset Allocation by Asset Class


Numbers may not add up to $100 \%$ due to rounding.
New Target Asset Allocation is effective as of $10 / 1 / 2011$.

## Policy Asset Allocation and Risk Budgeting



## NEPC Plans by Type - Average Asset Allocation

 following criteria: 1) An allocation greater than $95 \%$ to one asset class and 2) Portfolios not providing an asset allocation.

## Asset Breakdown

|  | Domestic Large Core | Domestic Smid | Domestic Mid Core | Domestic Small Value | Domestic Small Growth | Core Fixed | High Yield | TIPS | Int'I Equity | EMD | Global Bonds | Real Estate | GAA | Other | Cash | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Composite | \$43,404 | \$7,975 | \$2,240 | \$8,186 | \$7,911 | \$73,011 | \$20,030 | \$11,996 | \$58,100 | \$11,670 | \$30,930 | \$16,467 | \$69,684 | \$25,620 | \$203 | \$387,427 |
| T. Rowe | 12,122 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$12,122 |
| PIMCO | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$45 |
| SSgA Equal Wgt | 11,931 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$11,931 |
| SSgA S\&P 500 | 19,306 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$19,306 |
| Champlain | 0 | 7,975 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$7,975 |
| SSgA Mid | 0 | 0 | 2,240 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$2,240 |
| Wellington | 0 | 0 | 0 | 8,186 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$8,186 |
| SSgA R-2000 Growth | 0 | 0 | 0 | 0 | 7,911 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$7,911 |
| Acadian | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14,283 | 0 | 0 | 0 | 0 | 0 | 0 | \$14,283 |
| Mondrian | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15,069 | 0 | 0 | 0 | 0 | 0 | 0 | \$15,069 |
| SSgA ACWI ex US | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,180 | 0 | 0 | 0 | 0 | 0 | 0 | \$7,180 |
| Aberdeen | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21,568 | 0 | 0 | 0 | 0 | 0 | 0 | \$21,568 |
| Allianz | 0 | 0 | 0 | 0 | 0 | 10,247 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$10,247 |
| Wellington DAS | 0 | 0 | 0 | 0 | 0 | 11,385 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$11,385 |
| PIMCO Core Plus | 0 | 0 | 0 | 0 | 0 | 25,743 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$25,743 |
| PIMCO Unconst. | 0 | 0 | 0 | 0 | 0 | 25,636 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$25,636 |
| Post Advisory | 0 | 0 | 0 | 0 | 0 | 0 | 16,987 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$16,987 |
| KDP | 0 | 0 | 0 | 0 | 0 | 0 | 3,043 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$3,043 |
| Welligton EMD | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11,670 | 0 | 0 | 0 | 0 | 0 | \$11,670 |
| Barclays | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11,996 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$11,996 |
| Mondrian | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15,577 | 0 | 0 | 0 | 0 | \$15,577 |
| Brandywine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15,353 | 0 | 0 | 0 | 0 | \$15,353 |
| Morgan Stanely | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,078 | 0 | 0 | 0 | \$7,078 |
| UBS Realty | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,595 | 0 | 0 | 0 | \$6,595 |
| RREEF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,704 | 0 | 0 | 0 | \$2,704 |
| Transwestern | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 0 | 0 | 0 | \$90 |
| Mellon GA 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,506 | 0 | 0 | \$5,506 |
| PIMCO AA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19,372 | 0 | 0 | \$19,372 |
| Wellington OIF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13,273 | 0 | 0 | \$13,273 |
| AQR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31,533 | 0 | 0 | \$31,533 |
| Alt. Assets | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0 |
| Grosvenor | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,047 | 0 | \$7,047 |
| GAM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,571 | 0 | \$3,571 |
| Permal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,087 | 0 | \$7,087 |
| Schroders | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,915 | 0 | \$7,915 |
| Vermont Cash | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 203 | \$203 |

## Total Fund Asset Growth Summary

## VERMONT MUNICIPAL EMPLOYEES

MUNICIPAL SYSTEM COMPOSITE
Periods Ending December 31, 2011

Total Fund Asset Growth Summary (\$000)

|  | One Quarter | Year to Date |
| :---: | :---: | :---: |
| MUNI COMPOSITE |  |  |
| Beginning Market Value | 369,308 | 373,312 |
| Net External Growth | 1,073 | 6,326 |
| Return on Investment | 17,046 | 7,788 |
| Income Received | 0 | 1 |
| Gain/Loss | 17,046 | 7,787 |
| Ending Market Value | 387,427 | 387,427 |
|  | 4.8\% | $2.3 \%$ |

## Fund Performance vs. Benchmark

## VERMONT MUNICIPAL EMPLOYEES

POLICY INDEX
Benchmark:
Periods Ending December 31, 2011
Fund Performance vs. Benchmark


| $\mathrm{N}=$ |
| :---: |
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## Total Public Funds Performance

## VERMONT MUNICIPAL EMPLOYEES

Total Fund - Universe: Public Funds (DB)
Periods Ending December 31, 2011

Total Fund Performance - Trailing Periods

$\stackrel{N}{\mathrm{~N}}$

| $\theta$ | MUNI COMPOSITE | 4.8 | 66 | -2.9 | 20 | -1.1 | 14 | 2.3 | 23 | 8.4 | 6 | 14.7 | 1 | 1.6 | 31 | 2.5 | 35 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| * | MUNI Allocation | 4.2 | 79 | -3.6 | 38 | -2.5 | 43 | 0.6 | 70 | 6.1 | 82 | 11.2 | 44 | 1.4 | 34 | 2.4 | 38 |
| * | POLICY INDEX | 4.4 | 74 | -3.3 | 31 | -2.1 | 36 | 0.6 | 69 | 6.0 | 82 | 10.3 | 65 | 1.2 | 42 | 2.4 | 39 |
|  | 5th Percentile | 7.8 |  | -1.3 |  | 0.7 |  | 4.0 |  | 8.5 |  | 13.9 |  | 4.2 |  | 4.6 |  |
|  | 25th Percentile | 6.3 |  | -3.1 |  | -1.6 |  | 2.2 |  | 7.8 |  | 12.1 |  | 1.7 |  | 3.0 |  |
|  | 50th Percentile | 5.3 |  | -4.0 |  | -2.8 |  | 1.1 |  | 7.0 |  | 11.0 |  | 0.9 |  | 2.1 |  |
|  | 75th Percentile | 4.4 |  | -4.9 |  | -3.6 |  | 0.2 |  | 6.2 |  | 9.6 |  | -0.1 |  | 1.6 |  |
|  | 95th Percentile | 2.9 |  | -6.2 |  | -5.9 |  | -2.0 |  | 5.4 |  | 7.9 |  | -1.8 |  | 0.3 |  |

## Total Public Funds Performance

VERMONT MUNICIPAL EMPLOYEES
Total Fund - Universe: Public Funds (DB)
Periods Ending December 31, 2011

Total Fund Performance - Trailing Periods

| $\mathrm{N}=$ |
| :---: |
| P |



## Total Public Funds Performance

## VERMONT MUNICIPAL EMPLOYEES

Total Fund - Universe: Public Funds (DB)
Period Ending December 31, 2011

Total Fund Performance - One Year Time Periods


## Risk vs. Return Analysis - 3 Years

## VERMONT MUNICIPAL EMPLOYEES

Total Fund - Universe: Public Funds (DB)
Period Ending December 31, 2011

Risk vs. Return - 3 Year


|  | NAME | Return |  | Standard Deviation |  | Sharpe Ratio |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| x | MUNI COMPOSITE | 14.7 | 1 | 14.5 | 72 | 1.0 | 15 |
| * | MUNI Allocation | 11.2 | 44 | 13.0 | 46 | 0.9 | 46 |
| + | Policy index | 10.3 | 65 | 12.4 | 37 | 0.8 | 59 |
| - | S\&P 500 | 14.1 | 4 | 21.3 | 100 | 0.7 | 92 |
| $\theta$ | BC AGGREGATE | 6.8 | 98 | 3.2 | 1 | 2.1 | 1 |
| $\otimes$ | MSCIEAFE (NET) | 7.6 | 96 | 27.2 | 100 | 0.3 | 100 |
| $\wedge$ | Citiaroup WGBI (All Maturities) | 4.7 | 100 | 7.3 | 3 | 0.6 | 97 |
|  | Median | 11.0 |  | 13.4 |  | 0.8 |  |

Funded status as of July $1^{\text {st }}, 2011=92.0 \%$

| $\mathrm{N}=$ |
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## Risk vs. Return Analysis - 5 Years

## VERMONT MUNICIPAL EMPLOYEES

Total Fund - Universe: Public Funds (DB)
Period Ending December 31, 2011

Risk vs. Return - 5 Year



|  | NAME | Return | Standard <br> Deviation | Sharpe <br> Ratio |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{X}$ | MUNI COMPOSITE | $\mathbf{2 . 5}$ | $\mathbf{3 5}$ | $\mathbf{1 5 . 6}$ | $\mathbf{8 7}$ | $\mathbf{0 . 1}$ | $\mathbf{4 5}$ |
| * | MUNI Allocation | 2.4 | 38 | 13.0 | 35 | 0.1 | 39 |
| $\mathbf{+}$ | POLICY INDEX | 2.4 | 39 | 12.3 | 26 | 0.1 | 39 |
|  | S\&P 500 | -0.3 | 98 | 21.1 | 100 | -0.1 | 95 |
| $\otimes$ | BC AGGREGATE | 6.5 | 1 | 3.5 | 1 | 1.4 | 1 |
| $\otimes$ | MSCI EAFE (NET) | -4.7 | 100 | 25.5 | 100 | -0.2 | 100 |
| $\mathbf{A}$ | Citiaroup WGBI (All Maturities) | 7.1 | 1 | 8.8 | 10 | 0.6 | 1 |
|  | Median | 2.1 |  | 13.7 |  | 0.1 |  |

Funded status as of July $1^{\text {st }}, 2011=92.0 \%$

## Risk vs. Return Analysis - 7 Years

## VERMONT MUNICIPAL EMPLOYEES

Total Fund - Universe: Public Funds (DB)
Period Ending December 31, 2011

Risk vs. Return - 7 Year



|  | NAME | Return |  | Standard Deviation |  | Sharpe Ratio |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\times$ | MUNI COMPOSITE | 4.9 | 25 | 13.4 | 86 | 0.2 | 50 |
| * | MUNI Allocation | 4.6 | 46 | 11.2 | 34 | 0.2 | 45 |
| + | POLICY INDEX | 4.6 | 39 | 10.7 | 27 | 0.2 | 33 |
| - | S\&P 500 | 2.6 | 99 | 18.1 | 100 | 0.0 | 100 |
| $\theta$ | BC AGGREGATE | 5.6 | 7 | 3.5 | 1 | 1.0 | 1 |
| * | MSCI EAFE (NET) | 1.7 | 100 | 22.4 | 100 | -0.0 | 100 |
| 4 | Citicroup WGBI (All Maturities) | 4.9 | 31 | 7.9 | 9 | 0.3 | 12 |
|  | Median | 4.5 |  | 11.9 |  | 0.2 |  |

Funded status as of July $1^{\text {st }}, 2011=92.0 \%$

## Risk vs. Return Analysis - 10 Years

## VERMONT MUNICIPAL EMPLOYEES

Total Fund - Universe: Public Funds (DB)
Period Ending December 31, 2011

Risk vs. Return - 10 Year


|  | NAME | Return |  | Standard Deviation |  | Sharpe Ratio |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\times$ | muni Composite | 5.6 | 34 | 12.6 | 71 | 0.3 | 58 |
| * | MUNI Allocation | 5.5 | 40 | 11.3 | 37 | 0.3 | 41 |
| + | Policy index | 5.6 | 34 | 11.0 | 26 | 0.3 | 31 |
| $\stackrel{\rightharpoonup}{*}$ | S\&P 500 | 2.9 | 100 | 18.2 | 100 | 0.1 | 99 |
| $\otimes$ | BC AGGREGATE | 5.8 | 28 | 3.5 | 1 | 1.1 | 2 |
| $\otimes$ | MSCI EAFE (NET) | 4.7 | 85 | 22.2 | 100 | 0.1 | 99 |
| $\wedge$ | Citiqroup WGBI (All Maturities) | 7.8 | 1 | 8.1 | 7 | 0.7 | 2 |
|  | Median | 5.3 |  | 11.8 |  | 0.3 |  |

Funded status as of July $1^{\text {st }}, 2011=92.0 \%$

| $\mathrm{N}=$ |
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