



**State of North Carolina
Retirement System
Select Equity
December 31, 2016**



North Carolina Retirement System Select Equity Portfolio Fourth Quarter, 2016 Report

During the fourth quarter, the Select Equity portfolio returned -0.23% before fees, trailing the 1.01% return of the Russell 1000 Growth Index. Since inception, April 30, 2016, the Select Equity portfolio has returned 6.37% before fees, trailing the 7.27% return of the Russell 1000 Growth Index.

Stocks struggled during much of October. Better than expected economic reports delivered during the first week of the month were viewed as increasing the probability that the Federal Reserve would increase the Fed Funds rate before year end. This pushed the Russell 1000 Growth to a cumulative loss of 0.9% by the close on October 7. On October 10, stocks recovered half of their first week losses with Energy shares leading the rally on reports that OPEC members appeared willing to cut crude oil exports. The gains were short lived. The Russell 1000 Growth dropped 1.2% on October 11 following a disappointing earnings report from **Alcoa**. Stocks continued to drift lower for several sessions, leaving the Russell 1000 Growth down 2.1% for the month overall at the October 17 close. Stocks began to rally back on October 18 after a report of a smaller than expected increase in consumer prices suggested the Federal Reserve would not need to raise interest rates aggressively. Stocks added additional gains on October 24 as better than expected European economic reports triggered a worldwide rally. By the close on the 24th, the Russell 1000 Growth was down less than 0.5% for the month to date. On October 25, stocks resumed their slide following weaker than expected forecasts from **3M** and **Caterpillar**. On October 26, investors were disappointed by **Apple's** forecast. Stocks maintained their negative momentum through the remainder of the month. The Russell 1000 Growth returned -2.36% for the month overall. Select Equity underperformed due to a combination of generally weak performance for stocks with stable returns and poor returns from specific holdings including **Amgen**, **Varian Medical**, **Grainger**, **Gilead**, and **Merck**.

US stocks struggled through the first four trading sessions of November as investors appeared reluctant to take positions ahead of a US Presidential election that appeared too close to call. At the November 4 close, the Russell 1000 Growth was down 2.0% for the month to date. After the close, the FBI indicated that it had completed its examination of a recently discovered laptop containing copies of numerous e-mails from Hillary Clinton's private server and found nothing that changed their position that Clinton should not be prosecuted for mishandling classified information. Most pundits believed that the FBI's finding would halt Donald Trump's recent momentum and lead to a clear victory for Clinton in the Presidential race. With the decline in uncertainty, the Russell 1000 Growth gained 2.2% on November 7 and added modest additional gains on Election Day, November 8. As the tallies began to be reported that evening, a much stronger than expected showing by Trump put the election result in doubt and US stock market futures plummeted. At their lowest point, US stock index futures were down 5%. As Trump emerged as a clear winner in the early morning hours of November 9, futures began to recover and were down less than 1% shortly before the stock market open. The Russell



1000 Growth continued to recover as the day progressed, eventually finishing with a gain of 0.7% relative to the prior close. After trending lower for several sessions, the Russell 1000 Growth gained 0.7% on November 15. Energy stocks led the rally as crude oil prices jumped more than 5% on reports that OPEC members were making progress on a deal to curb production. On November 21, the Russell 1000 Growth gained 0.7% and neared a record high. Energy stocks again led the way as crude oil prices rose nearly 4% on comments from Iranian and Iraqi oil ministers that suggested OPEC would reach an agreement to limit oil production. Tagging along with the upward trend of the broad market, the Russell 1000 Growth achieved a new all-time high on November 25. On November 28 concerns about an upcoming Italian voter referendum pressured financial stocks worldwide and led to decline of 0.4% in the Russell 1000 Growth. US stocks traded in a narrow range during the final two sessions of the month, leaving the Russell 1000 Growth with a gain of 2.18% for the month overall. Select Equity outperformed. The Strategy benefited from good stock selection, even though stable stocks were out of favor during the rally immediately following the US election.

US stocks rallied strongly during the first half of December, then drifted lower as concerns about the negative impact of rising interest rates began to emerge. The month began with stocks under pressure during the first two trading sessions due in part to concerns about the outcome of an Italian referendum scheduled to take place on Sunday, December 4. Although the referendum result led Italy's Prime Minister to resign and left a financial rescue package for a prominent Italian bank in doubt, European markets took the result in stride helping the US stock market post solid gains on December 5 and 6. US stocks surged to record highs on December 7, pushed along by exceptionally large orders to buy stock index futures. Health Care stocks, particularly bio-technology shares, were noticeably absent from the rally. They fell sharply after President-elect Trump stated that he opposed high drug prices. Financial stocks led the US market to fresh record highs on December 8 after news that the European Central Bank would extend the length of its asset purchase program. US stocks achieved further record highs on December 9 and 13 in rallies led by Consumer Staples and Energy shares, respectively. By the close on December 13, the Russell 1000 Growth was up 2.6% for the month overall. On December 14, the Russell 1000 Growth declined 0.5% as the US Federal Reserve announced an increase in the Fed Funds rate. Although the increase in the rate was widely expected, the forecast of a steeper tightening path for rates during 2017 that accompanied it was not. The US stock market recovered gradually and by the close on December 27 the Russell 1000 Growth was back to a gain of 2.6% for the month overall. On December 28, the Russell 1000 Growth declined 0.8%. Cyclical stocks were pressured by a report of a drop in pending home sales and the value of the US dollar reaching a ten year high. Equities posted additional losses during the final two trading sessions of the year. The Russell 1000 Growth Index returned 1.24% for the month overall. Select Equity was able to outperform modestly.

During the quarter, the Select Equity portfolio received shares of **Adient** that were distributed by portfolio holding **Johnson Controls**. Adient is a new publically traded company created by Johnson Controls to spin off its automotive seating and interiors business. Later in the quarter, the Adient shares were sold and the sale proceeds were



reinvested in Johnson Controls. OakBrook also used available cash to purchase additional shares of **Stericycle**. During December, OakBrook eliminated the portfolio's **UPS** position and used the sale proceeds to initiate a new position in **Visa**. The UPS position was eliminated due to the potential for higher holiday shipping costs to negatively impact earnings. The shares were viewed as particularly vulnerable to a potential correction due to their significant appreciation during 2016. Visa operates the world's largest electronic payment network, processing approximately half of all credit card transactions and three fourths of debit card transactions. The firm benefits from a strong network effect as well as its trusted brand name.

Looking ahead, we expect the US economy will continue to grow. The pace of growth may accelerate if the incoming Congress succeeds in reducing regulatory burdens and reforming the tax code. However, any stimulus resulting from legislative changes may face headwinds from rising interest rates and oil prices. The Federal Reserve has signaled that it may accelerate the pace of its increases in the Fed Funds rate during 2017. It remains to be seen how effective OPEC will be in enforcing the production quotas for crude oil that were put in place late in 2016. US stock market returns are likely to be volatile given continued uncertainty about the above factors as well as efforts by the incoming Trump administration to alter US trade and foreign policy.



OakBrook Investments, LLC
PORTFOLIO ACTIVITY SUMMARY
State of North Carolina Retirement System
From 11-30-16 to 12-31-16

Portfolio Value on 11-30-16	22,618,990.50
Contributions	0.00
Withdrawals	0.00
Realized Gains	-108.01
Unrealized Gains	183,151.75
Interest	50.70
Dividends	106,357.05
Portfolio Value on 12-31-16	22,908,441.99

OakBrook Investments, LLC
TWR FOR SELECTED PERIODS
ANNUALIZED
State of North Carolina Retirement System
December 31, 2016

	<u>Month To Date</u>	<u>Quarter To Date</u>	<u>Inception To Date</u>
Portfolio Gross of fees	1.28	-0.23	6.37
Portfolio Net of fees	1.25	-0.30	6.18
Russell 1000 Growth	1.24	1.01	7.27
S&P 500 Index	1.98	3.82	10.04



OakBrook Investments, LLC
PERFORMANCE HISTORY
State of North Carolina Retirement System
From 04-30-16 to 12-31-16

Time Period		Percent Return Per Period				Cumulative TWR Basis = 100			
		Portfolio Gross of Fees	Portfolio Net of Fees	Russell 1000 Growth	S&P 500 Index	Portfolio Gross of Fees	Portfolio Net of Fees	Russell 1000 Growth	S&P 500 Index
	04-30-2016					100.00	100.00	100.00	100.00
04-30-2016	to 05-31-2016	0.46	0.44	1.94	1.80	100.46	100.44	101.94	101.80
05-31-2016	to 06-30-2016	1.43	1.41	-0.39	0.26	101.90	101.86	101.54	102.06
06-30-2016	to 07-31-2016	2.87	2.85	4.72	3.69	104.83	104.76	106.33	105.82
07-31-2016	to 08-31-2016	1.54	1.52	-0.50	0.14	106.44	106.35	105.81	105.97
08-31-2016	to 09-30-2016	0.17	0.15	0.37	0.02	106.62	106.51	106.19	105.99
09-30-2016	to 10-31-2016	-3.84	-3.86	-2.36	-1.82	102.53	102.39	103.69	104.06
10-31-2016	to 11-30-2016	2.44	2.42	2.18	3.70	105.03	104.87	105.96	107.91
11-30-2016	to 12-31-2016	1.28	1.25	1.24	1.98	106.37	106.18	107.27	110.04



OakBrook Investments, LLC
PORTFOLIO SUMMARY
State of North Carolina Retirement System
December 31, 2016

<u>Security Type</u>	<u>Total Cost</u>	<u>Market Value</u>	<u>Pct. Assets</u>	<u>Cur. Yield</u>	<u>Est. Annual Income</u>
Equities					
COMMON STOCK					
Energy	834,188.02	881,475.00	3.8	2.4	21,000.00
Industrials	4,604,587.17	4,515,957.62	19.7	2.4	108,714.00
Consumer Discretionary	2,054,648.24	1,977,481.25	8.6	1.5	28,890.00
Consumer Staples	3,124,186.53	3,148,073.95	13.7	2.7	83,913.00
Health Care	5,491,819.42	5,101,978.00	22.3	2.2	113,552.00
Financials	901,247.48	1,118,895.00	4.9	2.1	23,280.00
Information Technology	5,220,309.78	5,969,084.20	26.1	1.4	86,333.60
COMMON STOCK	22,230,986.64	22,712,945.02	99.1	2.1	465,682.60
	22,230,986.64	22,712,945.02	99.1	2.1	465,682.60
Cash and Equiv.					
CASH AND EQUIVALENTS	195,496.97	195,496.97	0.9	0.0	0.00
	195,496.97	195,496.97	0.9	0.0	0.00
TOTAL PORTFOLIO	22,426,483.61	22,908,441.99	100.0	2.0	465,682.60



OakBrook Investments, LLC
PORTFOLIO APPRAISAL
State of North Carolina Retirement System
December 31, 2016

<u>Quantity</u>	<u>Security</u>	<u>Unit Cost</u>	<u>Total Cost</u>	<u>Price</u>	<u>Market Value</u>	<u>Pct. Assets</u>	<u>Cur. Yield</u>
COMMON STOCK							
1,100.0000	Alphabet Inc. Class C	689.95	758,946.00	771.82	849,002.00	3.7	0.0
7,700.0000	Amgen, Inc.	158.16	1,217,803.93	146.21	1,125,817.00	4.9	3.1
18,300.0000	Autodesk, Inc.	59.41	1,087,173.40	74.01	1,354,383.00	5.9	0.0
11,400.0000	Automatic Data Processing	89.08	1,015,479.87	102.78	1,171,692.00	5.1	2.2
9,700.0000	CME Group	92.91	901,247.48	115.35	1,118,895.00	4.9	2.1
10,100.0000	Caterpillar Inc.	76.87	776,435.00	92.74	936,674.00	4.1	3.3
40,300.0000	General Electric Company	30.80	1,241,351.50	31.60	1,273,480.00	5.6	3.0
13,700.0000	Gilead Sciences, Inc.	92.21	1,263,344.91	71.61	981,057.00	4.3	2.6
19,398.0000	Johnson Controls International	45.07	874,321.70	41.19	799,003.62	3.5	2.4
11,515.0000	McCormick & Company, Inc.	96.12	1,106,777.07	93.33	1,074,694.95	4.7	2.0
13,400.0000	Medtronic, Plc	80.91	1,084,178.98	71.23	954,482.00	4.2	2.4
15,600.0000	Merck & Co., Inc.	55.90	872,101.17	58.87	918,372.00	4.0	3.2
17,375.0000	NIKE, Inc.	56.37	979,476.98	50.83	883,171.25	3.9	1.4
11,700.0000	PepsiCo, Inc.	102.98	1,204,865.97	104.63	1,224,171.00	5.3	2.9
12,700.0000	QUALCOMM, Inc.	52.32	664,431.75	65.20	828,040.00	3.6	3.3
10,500.0000	Schlumberger Limited	79.45	834,188.02	83.95	881,475.00	3.8	2.4
7,500.0000	Stericycle, Inc.	104.48	783,608.49	77.04	577,800.00	2.5	0.0
10,100.0000	The Procter & Gamble Company	80.45	812,543.49	84.08	849,208.00	3.7	3.2
10,500.0000	The Walt Disney Company	102.40	1,075,171.26	104.22	1,094,310.00	4.8	1.5
40,500.0000	The Western Union Co.	19.83	803,011.78	21.72	879,660.00	3.8	2.9
12,500.0000	Varian Medical Systems, Inc.	84.35	1,054,390.43	89.78	1,122,250.00	4.9	0.0
11,360.0000	Visa Inc.	78.46	891,266.98	78.02	886,307.20	3.9	0.8
4,000.0000	W.W. Grainger, Inc.	232.22	928,870.48	232.25	929,000.00	4.1	2.1
			22,230,986.64		22,712,945.02	99.1	2.1
CASH AND EQUIVALENTS							
	Cash		99,023.97		99,023.97	0.4	0.0
	Dividends Receivable		96,473.00		96,473.00	0.4	0.0
			195,496.97		195,496.97	0.9	0.0
TOTAL PORTFOLIO			22,426,483.61		22,908,441.99	100.0	2.0



OakBrook Investments, LLC
DATE TO DATE GAINS AND LOSSES
State of North Carolina Retirement System
From 11-30-16 to 12-31-16

Security	11-30-16 Market Value	Additions Withdrawals	12-31-16 Market Value	12-31-16 Cost Basis	Realized Gain or Loss		Unrealized Gain or Loss	
					Cost	Market	Cost	Market
COMMON STOCK								
Alphabet Inc. Class C	833,844.00	0.00	849,002.00	758,946.00	0.00	0.00	90,056.00	15,158.00
Amgen, Inc.	1,109,339.00	0.00	1,125,817.00	1,217,803.93	0.00	0.00	-91,986.93	16,478.00
Autodesk, Inc.	1,328,763.00	0.00	1,354,383.00	1,087,173.40	0.00	0.00	267,209.60	25,620.00
Automatic Data Processing	1,094,628.00	-6,498.00	1,171,692.00	1,015,479.87	0.00	0.00	156,212.13	77,064.00
CME Group	1,095,227.00	-37,345.00	1,118,895.00	901,247.48	0.00	0.00	217,647.52	23,668.00
Caterpillar Inc.	965,156.00	0.00	936,674.00	776,435.00	0.00	0.00	160,239.00	-28,482.00
General Electric Company	1,239,628.00	-9,672.00	1,273,480.00	1,241,351.50	0.00	0.00	32,128.50	33,852.00
Gilead Sciences, Inc.	1,009,690.00	-6,439.00	981,057.00	1,263,344.91	0.00	0.00	-282,287.91	-28,633.00
Johnson Controls International	872,522.04	-4,849.50	799,003.62	874,321.70	0.00	0.00	-75,318.08	-73,518.42
McCormick & Company, Inc.	1,050,168.00	-5,412.05	1,074,694.95	1,106,777.07	0.00	0.00	-32,082.12	24,526.95
Medtronic, Plc	978,334.00	-5,762.00	954,482.00	1,084,178.98	0.00	0.00	-129,696.98	-23,852.00
Merck & Co., Inc.	954,564.00	-7,332.00	918,372.00	872,101.17	0.00	0.00	46,270.83	-36,192.00
NIKE, Inc.	869,966.25	-3,127.50	883,171.25	979,476.98	0.00	0.00	-96,305.73	13,205.00
PepsiCo, Inc.	1,171,170.00	0.00	1,224,171.00	1,204,865.97	0.00	0.00	19,305.03	53,001.00
QUALCOMM, Inc.	865,251.00	0.00	828,040.00	664,431.75	0.00	0.00	163,608.25	-37,211.00
Schlumberger Limited	882,525.00	-5,250.00	881,475.00	834,188.02	0.00	0.00	47,286.98	-1,050.00
Stericycle, Inc.	547,275.00	0.00	577,800.00	783,608.49	0.00	0.00	-205,808.49	30,525.00
The Procter & Gamble Company	832,846.00	0.00	849,208.00	812,543.49	0.00	0.00	36,664.51	16,362.00
The Walt Disney Company	1,040,760.00	-8,190.00	1,094,310.00	1,075,171.26	0.00	0.00	19,138.74	53,550.00
The Western Union Co.	851,715.00	-6,480.00	879,660.00	803,011.78	0.00	0.00	76,648.22	27,945.00
United Parcel Service, Inc.	892,584.00	-892,475.99	0.00	0.00	83,182.04	-108.01	0.00	0.00
Varian Medical Systems, Inc.	1,122,875.00	0.00	1,122,250.00	1,054,390.43	0.00	0.00	67,859.57	-625.00
Visa Inc.	0.00	891,266.98	886,307.20	891,266.98	0.00	0.00	-4,959.78	-4,959.78
W.W. Grainger, Inc.	922,280.00	0.00	929,000.00	928,870.48	0.00	0.00	129.52	6,720.00
	22,531,110.29		22,712,945.02	22,230,986.64	83,182.04	-108.01	481,958.38	183,151.75
CASH AND EQUIVALENTS								
Cash	59,650.49	39,322.78	99,023.97	99,023.97				
Dividends Receivable	28,229.72	68,243.28	96,473.00	96,473.00				
	87,880.21		195,496.97	195,496.97				
TOTAL PORTFOLIO	22,618,990.50		22,908,441.99	22,426,483.61	83,182.04	-108.01	481,958.38	183,151.75



OakBrook Investments, LLC
FUNDAMENTAL DATA
State of North Carolina Retirement System
 December 31, 2016

Security	Price	Annual Dividend	Yield	Latest 4 Qtr. PE	Latest 4 Qtr. EPS	Latest Annual Book Value	Latest Annual Price/Book	Beta
COMMON STOCK								
Alphabet Inc. Class C	771.82	0.000	0.0	27.8	27.79	194.60	4.0	1.21
Amgen, Inc.	146.21	4.600	3.1	14.5	10.07	41.32	3.5	1.27
Autodesk, Inc.	74.01	0.000	0.0	N M	-1.56	4.77	15.5	0.42
Automatic Data Processing	102.78	2.280	2.2	29.8	3.45	9.38	11.0	1.03
CME Group	115.35	2.400	2.1	28.0	4.12	62.92	1.8	0.98
Caterpillar Inc.	92.74	3.080	3.3	28.8	3.22	26.74	3.5	1.28
General Electric Company	31.60	0.960	3.0	33.5	0.94	9.26	3.4	1.10
Gilead Sciences, Inc.	71.61	1.880	2.6	6.4	11.23	12.76	5.6	1.00
Johnson Controls International	41.19	1.000	2.4	14.1	2.92	25.77	1.6	0.99
McCormick & Company, Inc.	93.33	1.880	2.0	25.2	3.70	13.94	6.7	0.74
Medtronic, Plc	71.23	1.720	2.4	20.8	3.42	36.55	1.9	0.88
Merck & Co., Inc.	58.87	1.880	3.2	22.5	2.61	15.84	3.7	0.84
NIKE, Inc.	50.83	0.720	1.4	22.4	2.27	7.40	6.9	1.03
PepsiCo, Inc.	104.63	3.010	2.9	22.1	4.74	8.75	12.0	0.74
QUALCOMM, Inc.	65.20	2.120	3.3	17.1	3.82	21.53	3.0	1.20
Schlumberger Limited	83.95	2.000	2.4	101.0	0.83	30.36	2.8	0.95
Stericycle, Inc.	77.04	0.000	0.0	20.8	3.70	24.81	3.1	0.76
The Procter & Gamble Company	84.08	2.678	3.2	22.7	3.71	21.39	3.9	0.74
The Walt Disney Company	104.22	1.560	1.5	18.2	5.71	27.04	3.9	1.06
The Western Union Co.	21.72	0.640	2.9	12.9	1.69	2.86	7.6	1.10
Varian Medical Systems, Inc.	89.78	0.000	0.0	19.4	4.64	18.58	4.8	0.78
Visa Inc.	78.02	0.660	0.8	27.1	2.88	11.61	6.7	0.94
W.W. Grainger, Inc.	232.25	4.880	2.1	20.5	11.35	34.29	6.8	0.87
COMMON STOCK Average			2.1	25.2	4.92	27.45	5.7	0.94
OVERALL AVERAGE			2.1	25.2	4.92	27.45	5.7	0.94

A NM in the PE column indicates that a PE is not meaningful.



OakBrook Investments, LLC
PURCHASE AND SALE
State of North Carolina Retirement System
From 12-01-16 To 12-31-16

<u>Trade Date</u>	<u>Settle Date</u>	<u>Quantity</u>	<u>Security</u>	<u>Unit Price</u>	<u>Amount</u>
PURCHASES					
12-16-2016	12-21-2016	11,360.0000	Visa Inc.	78.46	891,266.98
					<u>891,266.98</u>
SALES					
12-16-2016	12-21-2016	7,700.0000	United Parcel Service, Inc.	115.91	892,475.99
					<u>892,475.99</u>

OakBrook Investments, LLC
COMMISSION PURPOSE
State of North Carolina Retirement System
From 12-01-16 to 12-31-16

	<u>Commission Amount</u>	<u>Avg. Commission Per Share</u>	<u>Percent of Total Commission</u>
Liquidnet Quantitative Trading Services			
General Trading	<u>190.60</u>	<u>0.010</u>	<u>100.0 %</u>
Subtotal	190.60	0.010	100.0 %
TOTAL	190.60	0.010	100 %



OakBrook urges our clients to compare information provided in its statement with those from your custodian.
If you are not receiving a custodial statement, please notify OakBrook.