

Public Records Request #2257

The following materials have been gathered in response to public records request #2257. These materials include:

- Long-Term Investment Program Advisory Committee Meeting Minutes – September 6, 2018
- City of Charlotte Long-Term Investment Program Performance Review – September 2018
- Long-Term Investment Program Advisory Committee Meeting Minutes – October 18, 2018
- Long-Term Investment Program Advisory Committee Meeting Minutes – December 19, 2018
- City of Charlotte Long-Term Investment Program Performance Review – December 2018

This information was provided as a response to a public records request on 6/6/19 and is current to that date. There is a possibility of more current information and/or documents related to the stated subject matter.

Further Information

For further information about this request or the Citywide Records Program, please contact:

Cheyenne Flotree
Citywide Records Program Manager
City of Charlotte/City Clerk's Office
600 East 4th Street, 7th Floor
Charlotte, NC 28202
Cheyenne.Flotree@charlottenc.gov

Amelia Knight
Public Records Specialist
City of Charlotte/City Clerk's Office
600 East 4th Street, 7th Floor
Charlotte, NC 28202
Amelia.Knight@charlottenc.gov

Long-Term Investment Program Advisory Committee
MEETING MINUTES

September 6, 2018

1:30PM – 3:00PM

CMGC – 1001 Conference Room

Attendees: Board Members – Sheila Smith, Scott Greer, Teresa Smith, Sandy Ryland
Staff – Betty Mattos, Liza Steiner
Partners – Grant Kalson

A. Approve Meeting Minutes of May 31, 2018 Board Meeting – Board

Sandy Ryland called the meeting to order and asked if anyone had any changes or comments on the May 31st meeting minutes. Sheila Simpson moved to accept the minutes as is, and Scott Greer seconded. All were in favor.

B. FY2017-18 OPEB Fund Acceptance and Approval – Board

Sandy gave Sheila background information on how the Board accepts the June 30 balance in the OPEB Trust Fund on the general ledger into the Employee Benefit Trust so that it can be invested. The resolutions accept all distributions, investments and payments for the fiscal year. Sandy noted that in FY17, the amount in the fund had been cumulative since the Trust was created and had not actually been invested in the Long Term Investment Program (LTIP). The amount at that time was \$20,324,589.48. In FY17, the Governmental Accounting Standards Board (GASB) released a new rule, GASB 74, and based on that rule, the City's auditors instructed this cumulative amount in the OPEB Trust Fund to be invested immediately to protect it from creditors and earmarking. The auditors also advised the City to invest this money throughout the fiscal year for the same reasons. Scott explained the cash flow for FY19 to show how the fund can build up over time if claims are less than inflows. Sandy discussed the resolutions from prior years and how the language in these resolutions stated acceptance of the exact amount in the fund on June 30 of each fiscal year. Sandy noted that with the auditor recommended process of investing the money throughout the fiscal year, accepting the money more frequently would be better. Teresa Smith explained why it is easier to use language in the resolutions such as "the amount in the OPEB Trust Fund as of" a specific date instead of listing the exact amount in the fund at that time because the money is a moving target each day. The amount can change day-to-day, so showing an actual amount could lead to misinterpretation of how much is actually available at any given time. Teresa noted that using the date as the determinant instead of the dollar amount makes the process smoother and cleaner.

Scott explained that based on GASB 74, the new procedure for the Board would be to accept the funds in the OPEB Trust fund quarterly and accept a fiscal year-end, audited amount that is reported in the CAFR at the end of each fiscal year. Sheila commented that the City is also changing its process on budgeting for these funds, so everyone needs to make sure there is communication coming from all sides so nothing is in conflict. Scott made a motion to adopt the resolution to accept the cash balance in the depository account of the Trust as of July 31, 2018 as required to meet the obligation of the City's Employee Benefit Trust. Sheila seconded the motion, and all were in favor.

C. OPEB Cash Flow Management Procedure and Approval – All

Sandy distributed the updated cash flow monitoring procedure for review by the group which detailed moving the City's contribution for retirees to a short term investment and pulling money from this investment monthly to reimburse for retiree claim payments. Sandy explained that this process would serve for each quarter, and at fiscal year end, the amount for reimbursement would equal only the amount that would bring the OPEB Trust fund general ledger account to zero. Betty Mattos asked if the Treasury Accountant was the right person to book the transfers. Everyone agreed that the Treasury Accountant should book the transfers and then they would move into Munis workflow. Teresa asked about some of the language and suggested to rearrange some of the steps. Betty noted that Financial Reporting does a spreadsheet to monitor this cash flow and can provide this information to Treasury. Sandy agreed that we should not reinvent the wheel and that having the numbers come from Financial Reporting provides a better level of control. Scott asked if the other inflows, firefighter medical deductions and the retiree contributions, are reflected in the Financial Reporting spreadsheet, and Betty confirmed that they are. Sheila suggested that the language be clearer as to which fund the money is actually coming from or transferred to since we are dealing with multiple funds on the general ledger and actual bank accounts. It is important to detail the names for each in the procedure. Grant asked if all of the City contribution will be maintained in the short term investment. Scott explained that the Board would vote each year on how to invest any amount over the reserve amount that will be kept liquid to cover higher than expected claims.

Sandy noted all of the recommended changes and agreed to send out the revised version of the procedure once the changes had been made. Scott made a motion to accept the procedures as amended. Sandy seconded, and all were in favor.

D. 6/30/18 Investment Performance Analysis – Grant Kalson

Grant began the quarterly update by noting that the report shows the LTIP market value at \$91.4 million as of 8/31/18. He distributed a sheet that compared the LTIP to other OPEB funds and pointed out Fund E on the sheet as a good comparison since it has

targets close to the LTIP's (68% equities, 32% fixed income). Looking at five-year returns, the LTIP is somewhat in the middle of this limited sample. The First American Fund, in which the LTIP has approximately \$20M, is essentially a cash account and skews the results. Even with this large amount in cash, the LTIP return is beating the actuarial rate. Compared to other institutional funds, the LTIP is in the 29th percentile. Grant asked the Board if it wants to see the cost vs. market value comparison with or without the First American Fund on page 14 of the report, and Scott said we need to see both. Seeing the numbers without the cash shows performance while with the cash shows the actual portfolio. Also, since we will have cash in the account over time as we invest the City contributions and use the money to pay claims, seeing the account provides a more detailed picture of the portfolio.

Scott noted that Rothschild's performance is impressive. Grant stated that they do well even net of the higher fee of 1%. He also called attention to the risk-return summary on page 16 of the report. Rothschild takes less risk than its benchmark but has a higher return. For the quarter ending 6/30/18, Rothschild performed a little lower than its index but was still positive.

PIMCO and Mondrian also had higher returns and less risk than their benchmarks for the five year period. Emerging market exposure hurt PIMCO for this quarter while Mondrian lost less than its index for the quarter. Mondrian was underweighted in the US\$ which hurt them. Rhumblin has done well since inception nine months ago. Having exposure in the FANG (Facebook, Amazon, Netflix, Google) stocks and other similar stocks has helped them over time.

Brandywine is devoted to the US\$ reversing itself and is heavily weighted in emerging markets. As a result, they had a loss for the quarter. The LTIP did not invest in Brandywine until July 2018, so this quarter's performance was avoided. Brandywine believes that the US will be borrowing trillions of dollars and that emerging market currencies will strengthen. As a result, the firm's position on the dollar remains steady. Grant stated that the LTIP invested \$6.5M in Brandywine in July and it has lost \$100K since that time. Since Brandywine had a rough quarter and is maintaining its position, he recommends that we hold off on investing more with Brandywine until after the next quarter to see its performance.

Grant mentioned that Robert asked for a cash flow report for each manager and asked if Dahab could present this information annually at year end. The Board agreed that year end would be a good time to review the cash flow.

Sheila mentioned seeing results at the Charlotte Fire Fighter's Retirement pension committee meeting in a periodic table type of format. Scott showed an example to Grant on the computer, and Grant said he had never shown the results in that way but could create a report similar to what she had seen.

E. Allocation of Funds in First American Fund – Board and Grant Kalson

Grant provided the group with a revised pro forma recommending the following:

- \$2M to Rhumblin to true up to target for manager and move closer to overall equities target
- No change in the SSGA Russell 1000 Value Fund (on target for manager)
- \$2M to Rothschild to true up to target for manager and move closer to overall equities target
- \$4M to SSGA EAFE to move closer to target for manager and to overall equities target
- \$4M to Brandywine to move closer to target for manager and to overall fixed income target
- \$5M to PIMCO to true up to target for manager and reach the 32% fixed income target
- \$3M retained in the First American Fund as a reserve

Grant recommended these changes to move the LTIP closer to targets for each manager as well as the overall targets of 68% in equities and 32% in fixed income. He also noted that contributing to Rothschild is advised since this manager has performed well and that holding off on contributing more to Brandywine is advised to have more time to evaluate this new manager. Scott noted that the point of the LTIP is to invest the money long term and suggested the \$4M recommended for Brandywine be invested in PIMCO instead. It would make more sense to invest it longer term versus in a short-term bond fund since it would earn more and as a domestic fixed income investment, PIMCO is the closest thing available to Brandywine, a global fixed income investment. Sandy added that we can adjust the investments later as well. Grant commented that interest rates are likely to go up even with the political turmoil, so we would have less volatility with fixed income. Scott moved to place the \$17M from the First American Fund into longer term investments with \$2M to Rhumblin, \$0 to SSGA Large Cap Value, \$2M to Rothschild, \$4M to SSGA EAFE, and \$9M to PIMCO with the understanding that the LTIP would evaluate this PIMCO contribution quarterly to determine when to move \$4M into the global fixed income manager. Scott noted that this motion is based on a modified recommendation from the LTIP consultant with the goal to rebalance the portfolio. Sandy seconded the motion, and all were in favor.

Sandy made a motion to invest the full FY19 budget from the OPEB Trust fund in the First American Fund with US Bank. Scott seconded the motion, and all were in favor.

F. Other Business - All

The Board agreed that it should hold a special meeting to discuss short duration fund options in which to invest the annual OPEB Trust fund budget and to be used to reimburse the City for retiree claims on a monthly basis. Grant agreed to add the First American Fund and NCCMT to the options for short duration funds. Sandy agreed to send Grant the contact person for both of these investments. Sandy made a motion to adjourn the meeting, and Scott seconded. All were in favor.

Action Items:

1. Sandy to get the Employee Benefit Trust resolution signed and notarized.
2. Grant to add cash flow for each manager as part of the fiscal year end presentation.
3. Grant to create a periodic table style performance report and present it to the Board when ready.
4. Sandy to schedule a special meeting to discuss the short duration fund options.
5. Grant to add First American Fund and NCCMT to the short duration fund options for comparison.
6. Sandy to send Grant the contact person for First American Fund and NCCMT.

City of Charlotte Long-Term Investment Program

Performance Review
September 2018

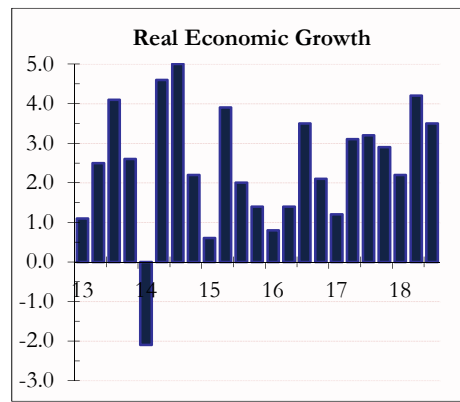


DAHAB ASSOCIATES
New York Massachusetts Pennsylvania Florida

ECONOMIC ENVIRONMENT

Onward and Upward

How much better can it get? The economy generated surprisingly strong GDP growth: 4.2% for Q2 and 3.5% for Q3 (advance estimate).



Part of the good news is based on both business and also consumer spending. Sustained job growth is also helping the consumer; the unemployment rate fell to a near record low of 3.7% in September.

Repatriation of billions and billions of dollars of US company off-shore profits (now at low tax rates) has fueled the business side. Home sales growth continued, but at a lower rate because of higher prices, higher mortgage rates and limited supply.

That's not all. Corporate manufacturing and services continued to show healthy growth; almost all the component industry sectors were in growth territory. Consumer sentiment was just as positive with some of the best readings in the last decade. Still, business execs and consumers remained concerned about the Administration's increasing tariff levies. In September, the Federal Reserve Board once more raised the Fed funds rate 1/4%, to a range of 2.0%-2.25%. Chairman Powell sees the economy, jobs and inflation to have reached a level where higher rates are appropriate. Additional modest increases are likely in the next several months. A potential qualifier is that, in an unusual step, President Trump has loudly declared his own preference to keep rates low.

Commodity prices were down 2% for the quarter and down more than 5% excluding energy. While energy and livestock prices

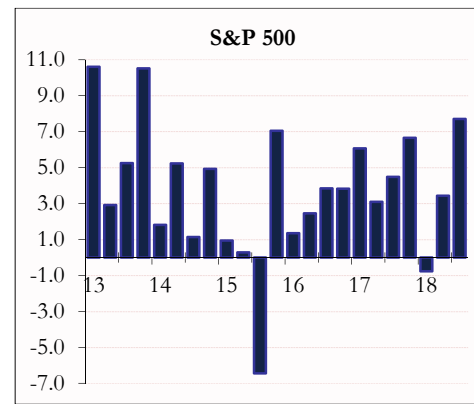
advanced, virtually every other sector declined. Reasons for the decline were the dollar's strength, trade issues and concern regarding future China demand. Chances are that a burgeoning trade war would further depress commodity prices. While commodities and the housing market were facing a yellow light, all the other key economic signals were decidedly green. As a result, equity investors were decidedly "risk on."

DOMESTIC EQUITIES

The Place to Be in Q3

Market volatility was relatively high, given the tariff uncertainty, the ongoing probe of Russian election interference, deteriorating relations with China and rapid increases in energy prices. In addition, Hurricane Florence and a Supreme Court nomination battle dominated the news during the end of the quarter. Yet all the major stock indices made striking gains as economic indicators and corporate profits were "full speed ahead."

Leading the pack was the Dow Jones Industrials, gaining a hefty 9.6% followed by the S&P 500 at 7.7%, and NASDAQ with 7.4%. In



every market capitalization category, growth stocks trounced their value counterparts. Among large-sized companies, the Russell 1000 Growth Index shot up 9.2% while the Russell 1000 Value side climbed a lesser 5.7%. The story was the same for small-caps; the Russell

2000 Growth Index rose 5.5% vs. only 1.6% for the Russell 2000 Value Index. Amazon (the first stock to reach \$1 Trillion in market

value), Apple (the second), Google, and Microsoft dominated the large-sized growth category. Facebook lost ground due to data breaches and slowing user growth.

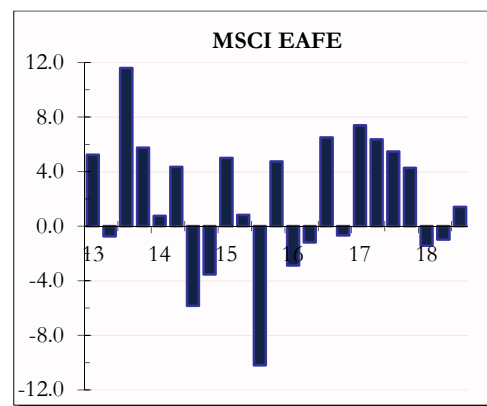
INTERNATIONAL EQUITIES

Developed Markets Weak

EM Weaker Still

European and Far Eastern economies were in positive territory for the quarter amid mostly solid corporate earnings and hints of inflation. European equities were dampened by US tariffs, and a lack of Brexit progress. Stocks in the Pacific region were impacted by a slowdown in the China economy. Investors, facing a somewhat questionable look ahead, were less than enthusiastic regarding the EAFE market.

The MSCI EAFE Index gained a modest 1.4% in Q3. The UK market retreated 1.7%, dominated by intransigent Brexit negotiations as



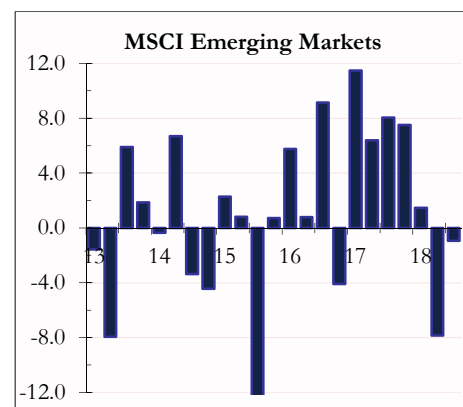
the issue of open borders with Ireland (-5.3%). The only major European countries to turn in positive numbers were France (+2.9%) and Norway (+6.8%). Emmanuel Macron's reform push provided a boost in French business sentiment. Norway's return was tied

directly to rising oil prices. Germany, the largest European market, lost 0.6%, Italy lost 4.3%, and Spain fell 2.3%.

In Australia, stocks fell 0.9% as political turbulence led to a Prime Minister change in August. The Japanese market made great strides, moving ahead 3.8%. Its market was favorably impacted by

a strong US economy since the US is Japan's major trading partner. Singapore stocks rose 2.2% due to an expanding manufacturing sector, increased government spending and higher wages. The Hong Kong Exchange dipped 1% due to an over-rich property market and falling Macau casino shares. Tech company sales growth drove the Israeli stock market (+5.2%). Canada was up 1%; the small gain reflected a full employment job market and hopes (later rewarded) that a new NAFTA Agreement would include Canada.

Emerging market (EM) returns, until recently the sweet spot for global investors, fell 1% for the quarter and 7.4% year-to-date. The



culprits are well-known: a growing tariff mentality, falling currencies, dampening China demand, growing populism and selective fiscal disasters — not a pretty picture.

Russia (+6.6%) surfaced as the best-performing BRIC country market on surging oil prices. The Brazilian market, in the midst of a national election, gained ground (+6.2%) from healthy oil and other commodity exports. India lost 2.3% as bank stocks were weak due to a spate of defaulted loans and costly oil imports. The big loser was China, which represents the largest part of the EM Index. Chinese stocks dropped 7.4% from a noticeable economic slowdown and the mounting tariff war with the US.

Turkey plummeted 20.5% as its economy nose-dived, its currency slumped and Prime Minister Erdogan moved ever closer to dictatorship. Korea gained 0.7%, as tech exports were healthy and North Korean military concerns had waned. Malaysia rose 3.8%

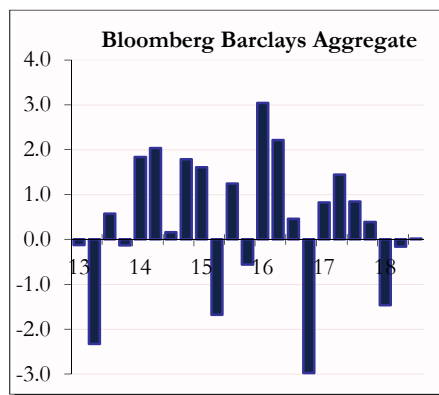
because of higher industrial productivity, strong exports and strong consumer spending. Taiwan moved up an unexpected 7.2% due to a boost in smart phone parts exports and a step up in government spending.

Mexico was the Latin American darling, with a 7% return. Investors were happy with the new NAFTA Agreement. In addition, oil sales climbed and public sentiment for newly elected President Obrador was high. By comparison, Argentina's market was in a deep slide (-9.1%) resulting from its treasury simply running out of money and having to borrow massively from the IMF.

BOND MARKET

Rising Rates Curbed Returns

In September, the Fed raised the Fed funds rate to a range of 2.0%-2.25%. The front-end of the Treasury yield curve rose accordingly, but rates rose along the rest of the yield curve as well. For example, the 10-year bond yield rose twenty basis points to 3.05% and the



30-year bond yield climbed 21 basis points to a near-term high of 3.20%. Aside from reacting to the latest Fed funds hike, investors dealt with a hint of US deficit-related inflation down the road and began to question the sustainability of 4% economic gains. Foreign buying of Treasuries wasn't enough to

hold down yields. The steep rise in interest rates curtailed performance in most bond sectors.

The Barclays Aggregate Index was flat for the quarter as falling prices totally offset the income from securities. The Treasury sector, representing almost 40% of the Index, did worse (-0.6%). On the other hand, investment grade US Credit returned +0.9% on the strength of corporate profits. Within this market, BBB issues gained a still higher 1.3%. Residential mortgage-backed debt was close to flat, while commercial mortgage paper and ABS (asset-backed securities) both earned 0.5%.

High yield bonds fared even better, garnering a 2.4% gain. Part of this advantage was that the high yield default rate was at a cyclical low. Major foreign bond markets fared poorly in US dollar terms, as the Euro, Japanese, UK and Australian exchange rates fell against the US dollar. Except for Canada and Switzerland, bond investors were better off staying "home." EM bond markets fared no better; the EM Global bond index retreated 1.8%.

CASH EQUIVALENTS

Another Fed Funds Hike - Beneficial for Savers

The 90-day T-bill earned 0.5% in Q3 and 1.3% so far this year. Risk-averse savers were at least earning enough to offset inflation and more than investment grade bond funds. Some banks were offering CDs for 1-year and longer maturities at more than 2% annualized return, suggesting that these same institutions could afford to accommodate such savers.

Economic Statistics

	Current Quarter	Previous Quarter
GDP	3.5%	4.2%
Unemployment	3.7%	4.0%
CPI All Items Year/Year	2.3%	2.9%
Fed Funds Rate	2.25%	2.0%
Industrial Capacity	78.1%	77.8%
US Dollars per Euro	1.16	1.17

Major Index Returns

Index	Quarter	12 Months
Russell 3000	7.1	17.6
S&P 500	7.7	17.9
Russell Midcap	5.0	14.0
Russell 2000	3.6	15.2
MSCI EAFE	1.4	3.2
MSCI Emg Markets	-0.9	-0.4
NCREIF ODCE	2.1	8.7
U.S. Aggregate	0.0	-1.2
90 Day T-bills	0.5	1.7

Domestic Equity Return Distributions

	Quarter			Trailing Year		
	VAL	COR	GRO	VAL	COR	GRO
LC	5.7	7.4	9.2	9.4	17.8	26.3
MC	3.3	5.0	7.4	8.8	14.0	21.1
SC	1.6	3.6	5.5	9.4	15.2	21.0

Market Summary

- The BEA's advance estimate of Q3 GDP is 3.5%.
- The unemployment rate dipped further to 3.7%.
- Inflation for all items was 2.3% over the last year.
- The US dollar continued to strengthen.
- The equity markets maintained a growth style bias across all capitalization sizes. Larger names outperformed mid- and small-sized stocks in Q3.

INVESTMENT RETURN

On September 30th, 2018, the City of Charlotte Long-Term Investment Program's Total Portfolio was valued at \$111,118,239, representing an increase of \$21,813,150 from the June quarter's ending value of \$89,305,089. Last quarter, the Fund posted net contributions equaling \$18,773,357 plus a net investment gain equaling \$3,039,793. Total net investment return was the result of income receipts, which totaled \$171,563 and net realized and unrealized capital gains of \$2,868,230.

RELATIVE PERFORMANCE

Total Fund

For the third quarter, the Total Portfolio portfolio returned 3.3%, which was equal to the Manager Shadow Index's return of 3.3% and ranked in the 54th percentile of the Public Fund universe. Over the trailing year, the portfolio returned 8.4%, which was 0.6% below the benchmark's 9.0% return, ranking in the 57th percentile. Since June 2011, the portfolio returned 8.4% annualized and ranked in the 32nd percentile. The Manager Shadow Index returned an annualized 9.0% over the same period.

Domestic Equity

The domestic equity portion of the portfolio returned 6.8% last quarter; that return was 0.3% less than the Russell 3000 Index's return of 7.1% and ranked in the 39th percentile of the Domestic Equity universe. Over the trailing twelve-month period, this component returned 16.5%, 1.1% below the benchmark's 17.6% performance, ranking in the 46th percentile. Since June 2011, this component returned 11.8% on an annualized basis and ranked in the 74th percentile. The Russell 3000 returned an annualized 13.6% during the same period.

Large Cap Equity

During the third quarter, the large cap equity component returned 7.3%, which was 0.4% less than the S&P 500 Index's return of 7.7% and ranked in the 44th percentile of the Large Cap universe. Over the trailing year, the large cap equity portfolio returned 16.6%, which was 1.3% less than the benchmark's 17.9% return, and ranked in the 53rd percentile. Since June 2011, this component returned 10.9% per annum and ranked in the 91st percentile. The S&P 500 returned an annualized 13.9% over the same time frame.

SMid Cap Equity

For the third quarter, the smid cap equity segment returned 5.9%, which was 1.2% greater than the Russell 2500 Index's return of 4.7% and ranked in the 30th percentile of the Smid Cap universe. Over the trailing twelve-month period, this segment's return was 16.3%, which was 0.1% above the benchmark's 16.2% return, ranking in the 40th percentile. Since June 2011, this component returned 13.9% annualized and ranked in the 20th percentile. The Russell 2500 returned an annualized 12.1% during the same period.

International Equity

The international equity segment returned 1.3% during the third quarter; that return was 0.1% below the MSCI EAFE Net Index's return of 1.4% and ranked in the 27th percentile of the International Equity universe. Over the trailing twelve months, the international equity portfolio returned 2.7%, equal to the benchmark's 2.7% performance, ranking in the 39th percentile. Since June 2011, this component returned 4.9% annualized and ranked in the 65th percentile. The MSCI EAFE Net Index returned an annualized 4.9% during the same time frame.

Global Fixed Income

During the third quarter, the global fixed income segment returned -1.6%, which was equal to the Bloomberg Barclays Global Government Bond's return of -1.6% and ranked in the 79th percentile of the International Fixed Income universe. Over the trailing year, this segment's return was -0.6%, which was 0.8% above the benchmark's -1.4% return, and ranked in the 25th percentile. Since June 2011, this component returned 0.0% annualized and ranked in the 77th percentile. The Bloomberg Barclays Global Government Bond returned an annualized 0.2% over the same period.

Domestic Fixed Income

Last quarter, the domestic fixed income component gained 0.2%, which was 0.2% greater than the Bloomberg Barclays Aggregate Index's return of 0.0% and ranked in the 54th percentile of the Core Fixed Income universe. Over the trailing twelve-month period, this segment's return was -1.1%, which was 0.1% greater than the benchmark's -1.2% performance, and ranked in the 76th percentile. Since June 2011, this component returned 3.3% on an annualized basis and ranked in the 24th percentile. For comparison, the Bloomberg Barclays Aggregate Index returned an annualized 2.5% during the same time frame.

ASSET ALLOCATION

On September 30th, 2018, large cap equities comprised 26.9% of the total portfolio (\$29.9 million), while mid cap equities totaled 15.3% (\$17.0 million). The account's international equity segment was valued at \$15.2 million, representing 13.7% of the portfolio, while the global fixed income component's \$6.2 million totaled 5.6%. The portfolio's domestic fixed income represented 16.6% and the remaining 22.0% was comprised of cash & equivalents (\$24.4 million).

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / FYTD	1 Year	3 Year	5 Year	Since 06/11
Total Portfolio - Gross	3.3	8.4	10.4	8.0	8.4
<i>PUBLIC FUND RANK</i>	(54)	(57)	(41)	(50)	(32)
Total Portfolio - Net	3.2	8.0	9.9	7.5	7.9
Manager Shadow	3.3	9.0	11.7	8.3	9.0
Policy Index	2.8	7.3	10.1	7.2	7.7
Domestic Equity - Gross	6.8	16.5	15.5	11.8	11.8
<i>DOMESTIC EQUITY RANK</i>	(39)	(46)	(59)	(60)	(74)
Russell 3000	7.1	17.6	17.1	13.5	13.6
Large Cap Equity - Gross	7.3	16.6	14.8	10.7	10.9
<i>LARGE CAP RANK</i>	(44)	(53)	(72)	(87)	(91)
S&P 500	7.7	17.9	17.3	13.9	13.9
SMid Cap Equity - Gross	5.9	16.3	16.2	13.4	13.9
<i>SMID CAP RANK</i>	(30)	(40)	(44)	(21)	(20)
Russell 2500	4.7	16.2	16.1	11.4	12.1
International Equity - Gross	1.3	2.7	9.2	4.4	4.9
<i>INTERNATIONAL EQUITY RANK</i>	(27)	(39)	(74)	(75)	(65)
MSCI EAFE Net	1.4	2.7	9.2	4.4	4.9
Global Fixed Income - Gross	-1.6	-0.6	2.3	0.7	0.0
<i>INT'L FIXED INCOME RANK</i>	(79)	(25)	(96)	(71)	(77)
Global Gov Index	-1.6	-1.4	1.8	0.1	0.2
Domestic Fixed Income - Gross	0.2	-1.1	2.6	2.7	3.3
<i>CORE FIXED INCOME RANK</i>	(54)	(76)	(11)	(35)	(24)
Aggregate Index	0.0	-1.2	1.3	2.2	2.5

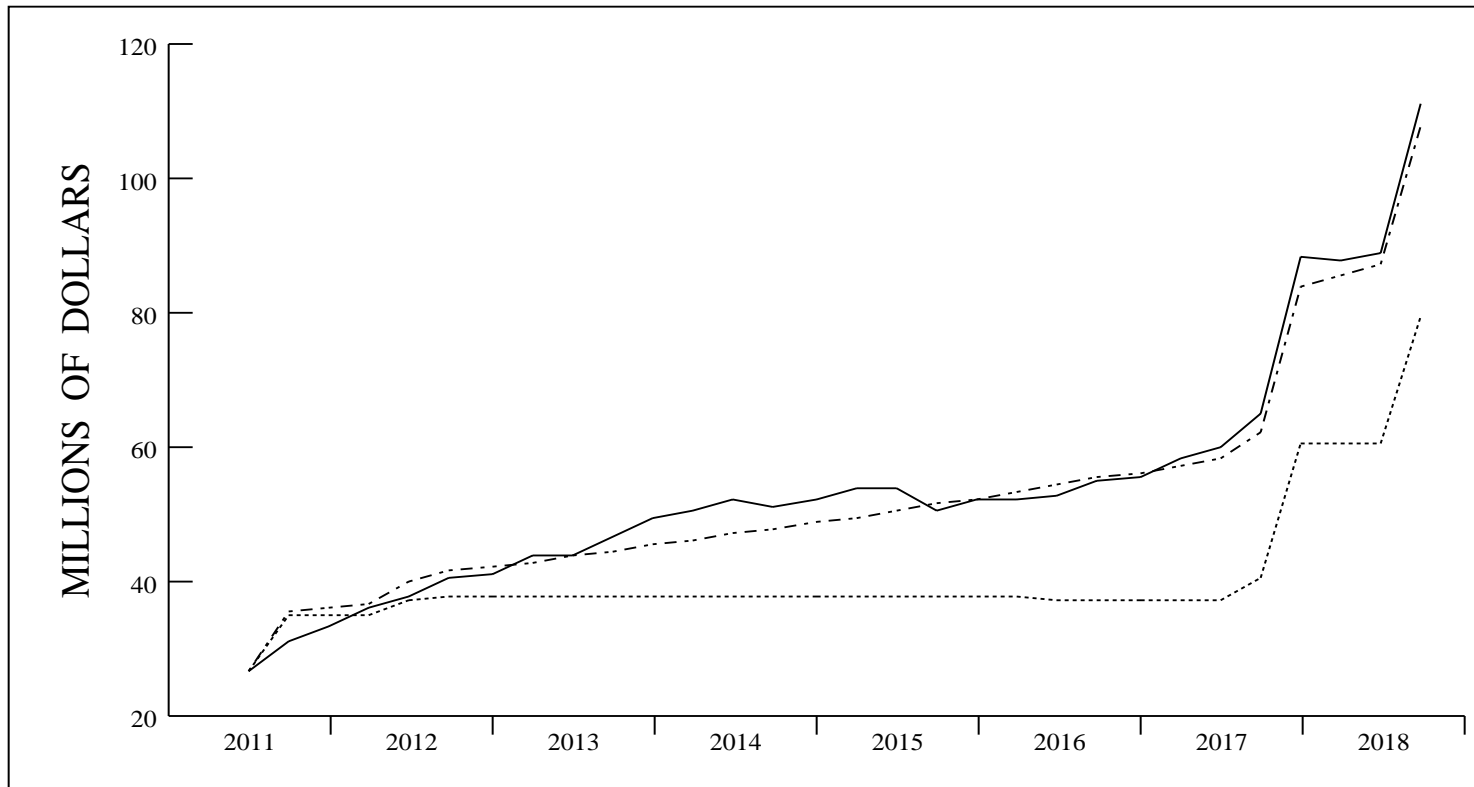
ASSET ALLOCATION

Large Cap Equity	26.9%	\$ 29,901,340
SMid Cap Equity	15.3%	16,990,302
Int'l Equity	13.7%	15,236,925
Global Fixed	5.6%	6,179,052
Domestic Fixed	16.6%	18,395,829
Cash	22.0%	24,414,791
Total Portfolio	100.0%	\$ 111,118,239

INVESTMENT RETURN

Market Value 6/2018	\$ 89,305,089
Contribs / Withdrawals	18,773,357
Income	171,563
Capital Gains / Losses	2,868,230
Market Value 9/2018	\$ 111,118,239

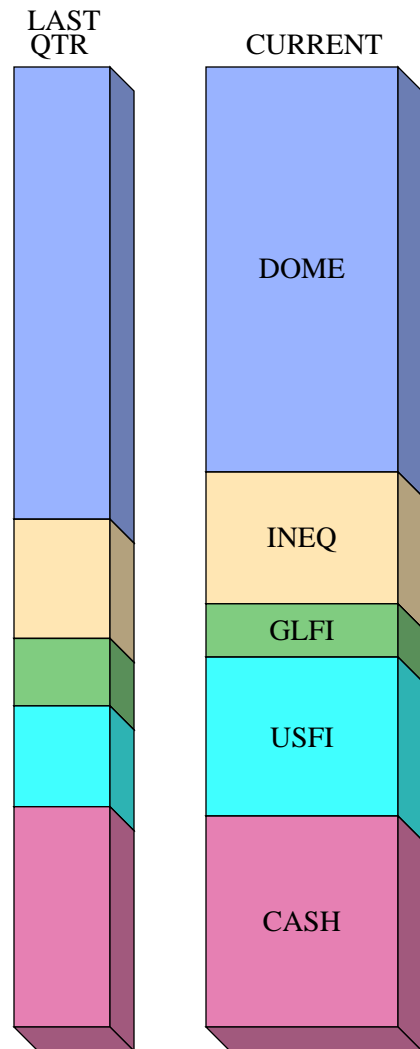
INVESTMENT GROWTH



— ACTUAL RETURN
 - - - 7.75%
 0.0%

VALUE ASSUMING
 7.75% RETURN \$ 107,931,479

	LAST QUARTER	PERIOD 6/11 - 9/18
BEGINNING VALUE	\$ 89,305,089	\$ 26,905,988
NET CONTRIBUTIONS	18,773,357	52,613,422
INVESTMENT RETURN	3,039,793	31,598,829
ENDING VALUE	\$ 111,118,239	\$ 111,118,239
INCOME	171,563	8,002,654
CAPITAL GAINS (LOSSES)	2,868,230	23,596,175
INVESTMENT RETURN	3,039,793	31,598,829



	<u>VALUE</u>	<u>PERCENT</u>	<u>TARGET</u>	<u>MIN</u>	<u>MAX</u>
■ DOMESTIC EQUITY	\$ 46,891,642	42.2%	50.0%	40.0%	60.0%
<i>LARGE CAP EQUITY</i>	29,901,340	26.9%	30.0%	25.0%	35.0%
<i>SMID CAP EQUITY</i>	16,990,302	15.3%	20.0%	10.0%	30.0%
■ INTERNATIONAL EQUITY	15,236,925	13.7%	18.0%	13.0%	23.0%
■ GLOBAL FIXED INCOME	6,179,052	5.6%	20.0%	10.0%	25.0%
■ DOMESTIC FIXED INCOME	18,395,829	16.6%	12.0%	10.0%	25.0%
■ CASH & EQUIVALENT	24,414,791	22.0%	0.0%	----	----
TOTAL FUND	\$ 111,118,239	100.0%			

MANAGER PERFORMANCE SUMMARY

Name	(Universe)	Quarter	FYTD	1 Year	3 Years	5 Years
Total Portfolio	(Public Fund)	3.3 (54)	3.3 (54)	8.4 (57)	10.4 (41)	8.0 (50)
<i>Manager Shadow Index</i>		<i>3.3 ----</i>	<i>3.3 ----</i>	<i>9.0 ----</i>	<i>11.7 ----</i>	<i>8.3 ----</i>
RhumbLine R1000G	(LC Growth)	9.2 (25)	9.2 (25)	26.2 (38)	---- ----	---- ----
<i>Russell 1000 Growth</i>		<i>9.2 ----</i>	<i>9.2 ----</i>	<i>26.3 ----</i>	<i>20.6 ----</i>	<i>16.6 ----</i>
SSgA R1000V	(LC Value)	5.7 (48)	5.7 (48)	9.5 (76)	13.6 (71)	10.7 (71)
<i>Russell 1000 Value</i>		<i>5.7 ----</i>	<i>5.7 ----</i>	<i>9.4 ----</i>	<i>13.5 ----</i>	<i>10.7 ----</i>
Rothschild	(Smid Cap)	5.9 (30)	5.9 (30)	16.3 (40)	16.2 (44)	13.4 (21)
<i>Russell 2500</i>		<i>4.7 ----</i>	<i>4.7 ----</i>	<i>16.2 ----</i>	<i>16.1 ----</i>	<i>11.4 ----</i>
SSgA EAFE	(Intl Eq)	1.3 (27)	1.3 (27)	2.7 (39)	9.2 (74)	4.4 (75)
<i>MSCI EAFE Net</i>		<i>1.4 ----</i>	<i>1.4 ----</i>	<i>2.7 ----</i>	<i>9.2 ----</i>	<i>4.4 ----</i>
PIMCO TR	(Core Fixed)	0.2 (54)	0.2 (54)	-1.1 (76)	2.6 (11)	2.7 (35)
<i>Bloomberg Barclays Aggregate Index</i>		<i>0.0 ----</i>	<i>0.0 ----</i>	<i>-1.2 ----</i>	<i>1.3 ----</i>	<i>2.2 ----</i>

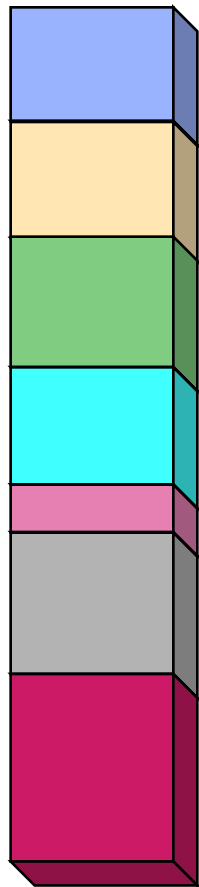
MANAGER PERFORMANCE SUMMARY - NET OF FEES

Name	Quarter	FYTD	1 Year	3 Years	5 Years
Total Portfolio	3.2	3.2	8.0	9.9	7.5
<i>Manager Shadow Index</i>	<i>3.3</i>	<i>3.3</i>	<i>9.0</i>	<i>11.7</i>	<i>8.3</i>
RhumbLine R1000G	9.1	9.1	26.1	----	----
<i>Russell 1000 Growth</i>	<i>9.2</i>	<i>9.2</i>	<i>26.3</i>	<i>20.6</i>	<i>16.6</i>
SSgA R1000V	5.7	5.7	9.4	13.5	10.6
<i>Russell 1000 Value</i>	<i>5.7</i>	<i>5.7</i>	<i>9.4</i>	<i>13.5</i>	<i>10.7</i>
Rothschild	5.7	5.7	15.2	15.0	12.3
<i>Russell 2500</i>	<i>4.7</i>	<i>4.7</i>	<i>16.2</i>	<i>16.1</i>	<i>11.4</i>
SSgA EAFE	1.3	1.3	2.6	9.1	4.3
<i>MSCI EAFE Net</i>	<i>1.4</i>	<i>1.4</i>	<i>2.7</i>	<i>9.2</i>	<i>4.4</i>
PIMCO TR	0.1	0.1	-1.5	2.2	2.3
<i>Bloomberg Barclays Aggregate Index</i>	<i>0.0</i>	<i>0.0</i>	<i>-1.2</i>	<i>1.3</i>	<i>2.2</i>

MANAGER VALUE ADDED

1 Quarter	Portfolio	Benchmark	1 Year
0.0	RhumbLine Russell 1000 Growth	Russell 1000G	-0.1
0.0	State Street Global Advisors Russell 1000 Value	Russell 1000V	0.1
1.2	Rothschild Small/Mid Cap	Russell 2500	0.1
-0.1	State Street Global Advisors EAFE	MSCI EAFE Net	0.0
0.2	PIMCO Total Return	Aggregate Index	0.1
0.0 	Total Portfolio	Manager Shadow	-0.6

MANAGER ALLOCATION AND TARGET SUMMARY



Name	Market Value	Percent	Target	Diff	Diff \$
RhumbLine R1000G (LCG)	\$14,804,134	13.3	15.0	-1.7	<\$1,863,602>
SSgA R1000V (LCV)	\$15,097,206	13.6	15.0	-1.4	<\$1,570,530>
Rothschild (SMID)	\$16,990,302	15.3	20.0	-4.7	<\$5,233,346>
SSgA EAFE (INEQ)	\$15,236,925	13.7	18.0	-4.3	<\$4,764,358>
Brandywine (GLFI)	\$6,179,052	5.6	20.0	-14.4	<\$16,044,596>
PIMCO TR (USFI)	\$18,395,829	16.6	12.0	4.6	\$5,061,640
Cash (CASH)	\$24,414,791	22.0	0.0	22.0	\$24,414,792
Total Portfolio	\$111,118,239	100.0	100.0	----	\$0

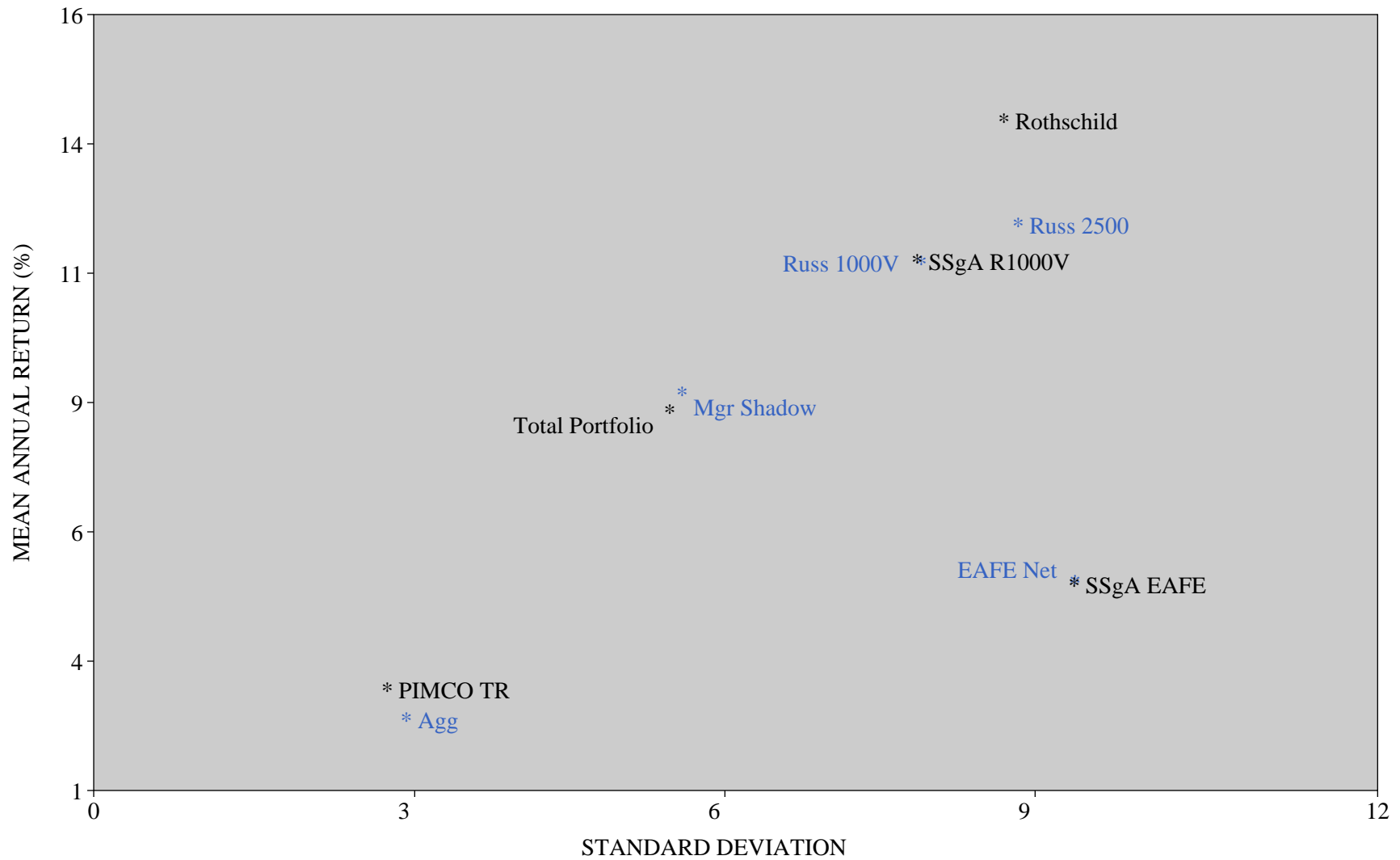
**CITY OF CHARLOTTE LONG-TERM INVESTMENT PROGRAM
COST vs. MARKET COMPARISON AS OF SEPTEMBER 30, 2018**

Manager	Cost*	Market Value	Dollar Change	% Change
Rhumblin R1000 Growth	\$ 11,996,056.57	\$ 14,804,134.00	\$ 2,808,077.43	23.4%
SSgA Russell 1000 Value	\$ 8,174,763.66	\$ 15,097,205.73	\$ 6,922,442.07	84.7%
Rothschild	\$ 5,689,310.00	\$ 16,990,302.00	\$ 11,300,992.00	198.6%
SSgA MSCI EAFE	\$ 11,844,723.60	\$ 15,236,925.48	\$ 3,392,201.88	28.6%
Brandywine	\$ 6,279,108.31	\$ 6,179,051.67	\$ (100,056.64)	-1.6%
PIMCO TR	\$ 19,332,789.61	\$ 18,395,829.27	\$ (936,960.34)	-4.8%
Cash & Equivalents	\$ 24,414,790.52	\$ 24,414,790.52	\$ -	0.0%
Total	\$ 87,731,542.27	\$ 111,118,238.67	\$ 23,386,696.40	26.7%

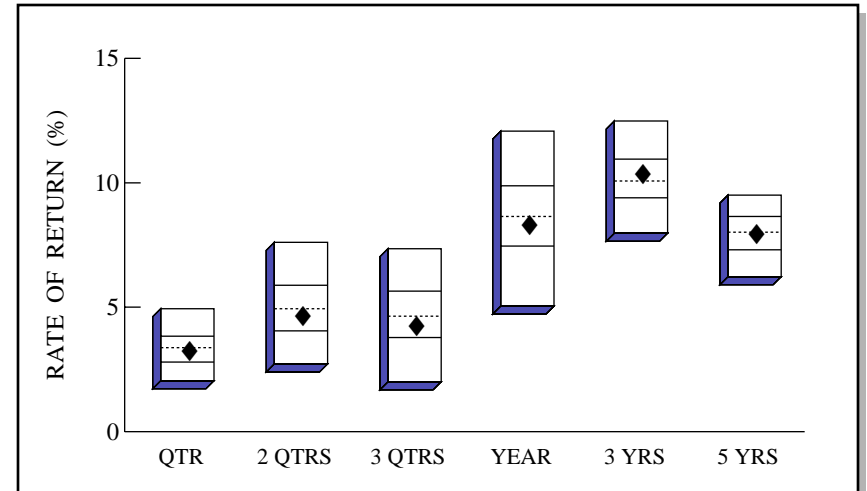
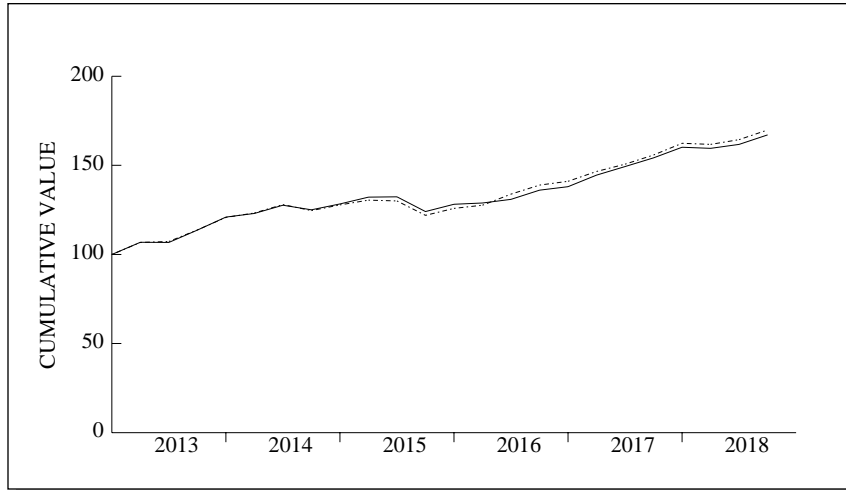
INVESTMENT RETURN SUMMARY - ONE QUARTER

Name	Quarter Total Return	Market Value June 30th, 2018	Net Cashflow	Net Investment Return	Market Value September 30th, 2018
RhumbLine R1000G (LCG)	9.2	11,708,266	1,998,422	1,097,446	14,804,134
SSgA R1000V (LCV)	5.7	14,284,295	-2,824	815,735	15,097,206
Rothschild (SMID)	5.9	16,077,959	-42,127	954,470	16,990,302
SSgA EAFE (INEQ)	1.3	11,091,476	3,997,212	148,237	15,236,925
Brandywine (GLFI)	---	0	6,279,108	-100,056	6,179,052
Mondrian (GLFI)	---	6,287,130	-6,287,130	0	0
PIMCO TR (USFI)	0.2	9,367,359	9,000,000	28,470	18,395,829
Cash (CASH)	---	20,488,604	3,830,696	95,491	24,414,791
Total Portfolio	3.3	89,305,089	18,773,357	3,039,793	111,118,239

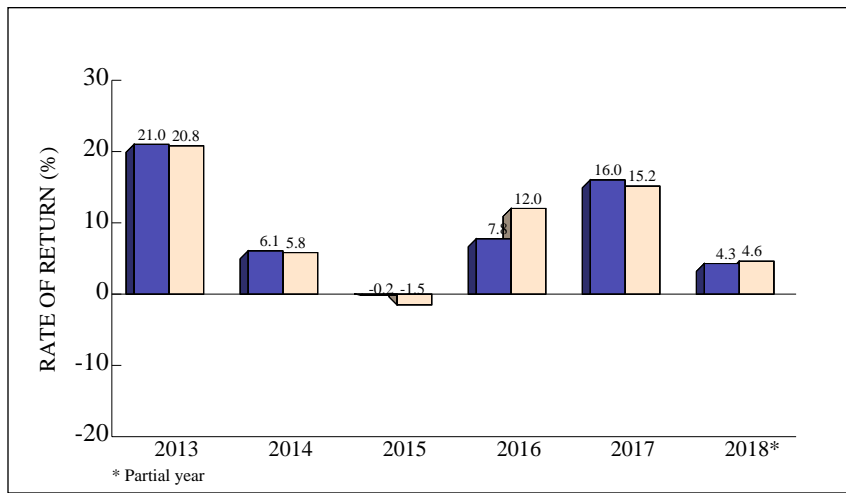
RISK-RETURN SUMMARY - 5 YEAR HISTORY



TOTAL RETURN COMPARISONS



Public Fund Universe



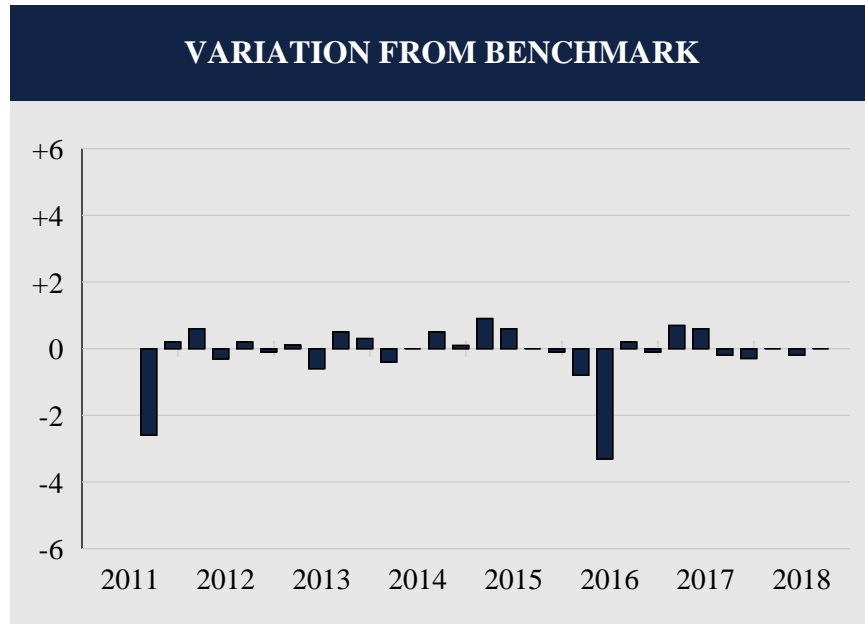
* Partial year

	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
RETURN	3.3	4.7	4.3	8.4	10.4	8.0
(RANK)	(54)	(58)	(58)	(57)	(41)	(50)
5TH %ILE	4.9	7.6	7.4	12.1	12.5	9.5
25TH %ILE	3.8	5.9	5.7	9.9	11.0	8.7
MEDIAN	3.4	4.9	4.6	8.7	10.1	8.0
75TH %ILE	2.8	4.1	3.8	7.5	9.4	7.3
95TH %ILE	2.1	2.7	2.0	5.1	8.0	6.2
<i>Mgr Shadow</i>	<i>3.3</i>	<i>5.0</i>	<i>4.6</i>	<i>9.0</i>	<i>11.7</i>	<i>8.3</i>

Public Fund Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

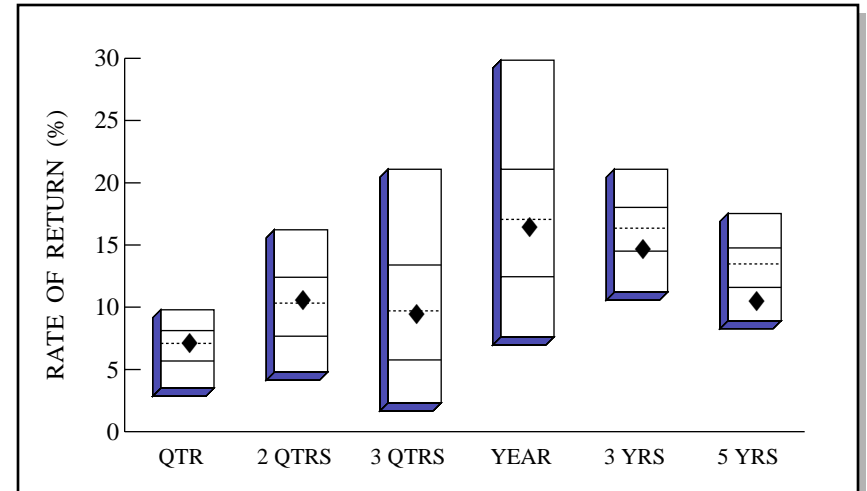
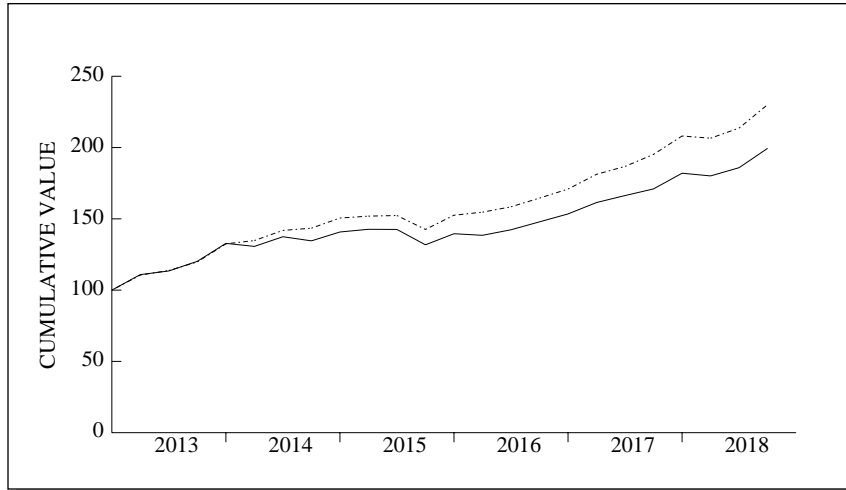
COMPARATIVE BENCHMARK: MANAGER SHADOW INDEX



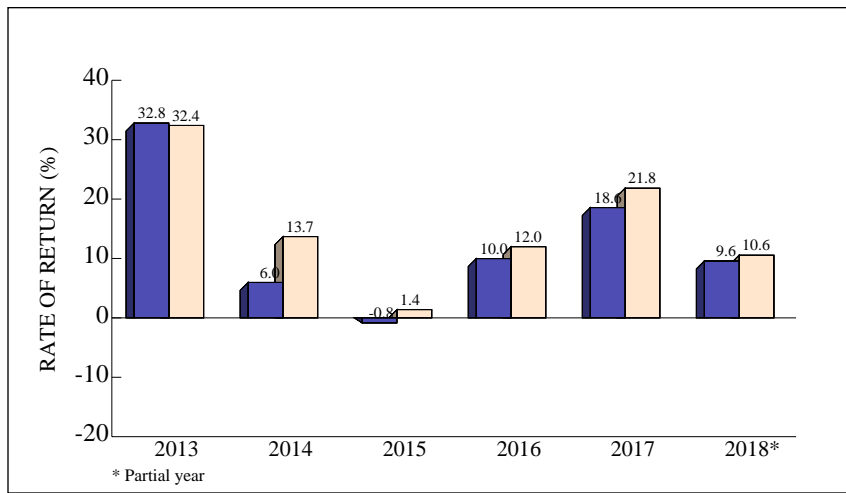
Total Quarters Observed	29
Quarters At or Above the Benchmark	17
Quarters Below the Benchmark	12
Batting Average	.586

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
9/11	-11.3	-8.7	-2.6
12/11	7.3	7.1	0.2
3/12	8.6	8.0	0.6
6/12	-2.6	-2.3	-0.3
9/12	5.1	4.9	0.2
12/12	1.7	1.8	-0.1
3/13	6.8	6.7	0.1
6/13	0.0	0.6	-0.6
9/13	6.5	6.0	0.5
12/13	6.5	6.2	0.3
3/14	1.7	2.1	-0.4
6/14	3.8	3.8	0.0
9/14	-2.1	-2.6	0.5
12/14	2.6	2.5	0.1
3/15	3.0	2.1	0.9
6/15	0.2	-0.4	0.6
9/15	-6.2	-6.2	0.0
12/15	3.2	3.3	-0.1
3/16	0.6	1.4	-0.8
6/16	1.6	4.9	-3.3
9/16	4.0	3.8	0.2
12/16	1.4	1.5	-0.1
3/17	4.7	4.0	0.7
6/17	3.3	2.7	0.6
9/17	3.3	3.5	-0.2
12/17	3.9	4.2	-0.3
3/18	-0.4	-0.4	0.0
6/18	1.4	1.6	-0.2
9/18	3.3	3.3	0.0

LARGE CAP EQUITY RETURN COMPARISONS



Large Cap Universe

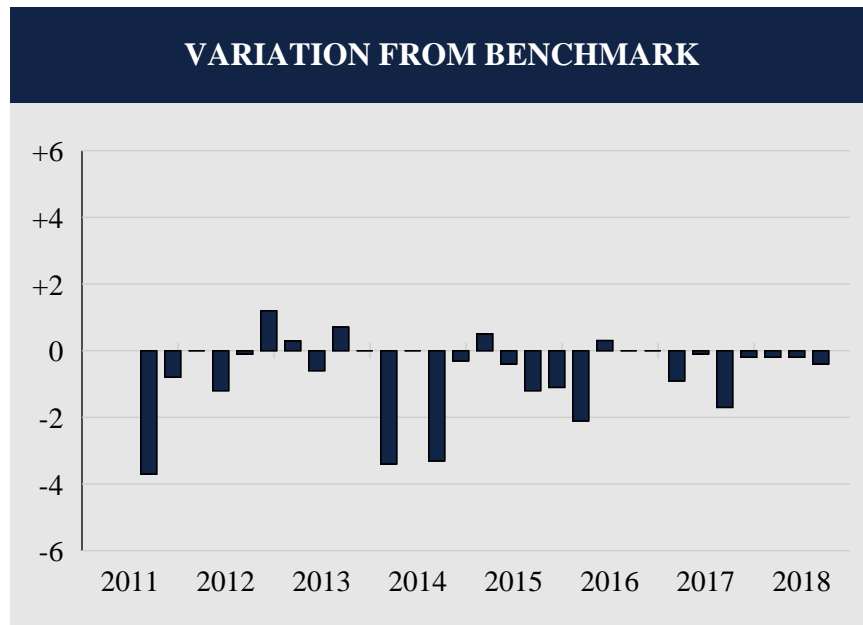


	QTR	2 QTRS	3 QTRS	YEAR	-----ANNUALIZED-----	
					3 YRS	5 YRS
RETURN	7.3	10.7	9.6	16.6	14.8	10.7
(RANK)	(44)	(47)	(51)	(53)	(72)	(87)
5TH %ILE	9.8	16.2	21.1	29.8	21.1	17.5
25TH %ILE	8.1	12.4	13.4	21.1	18.0	14.8
MEDIAN	7.1	10.3	9.7	17.1	16.3	13.5
75TH %ILE	5.7	7.7	5.8	12.5	14.5	11.6
95TH %ILE	3.5	4.8	2.3	7.6	11.2	8.9
S&P 500	7.7	11.4	10.6	17.9	17.3	13.9

Large Cap Universe

LARGE CAP EQUITY QUARTERLY PERFORMANCE SUMMARY

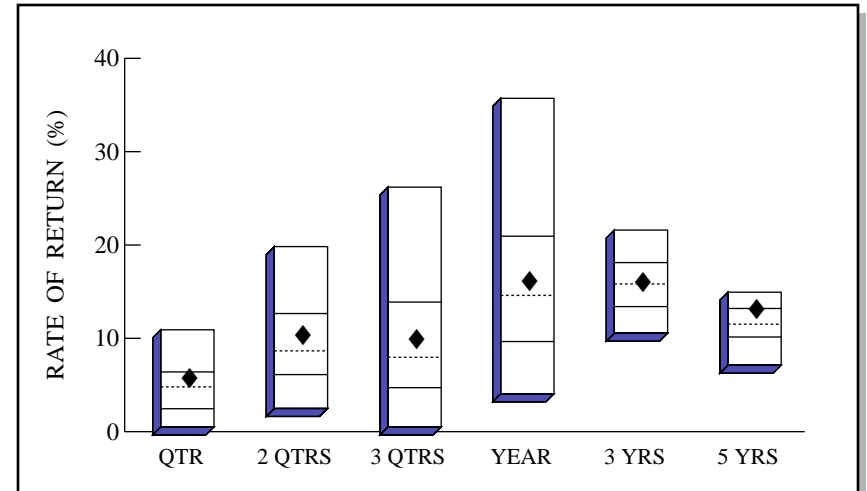
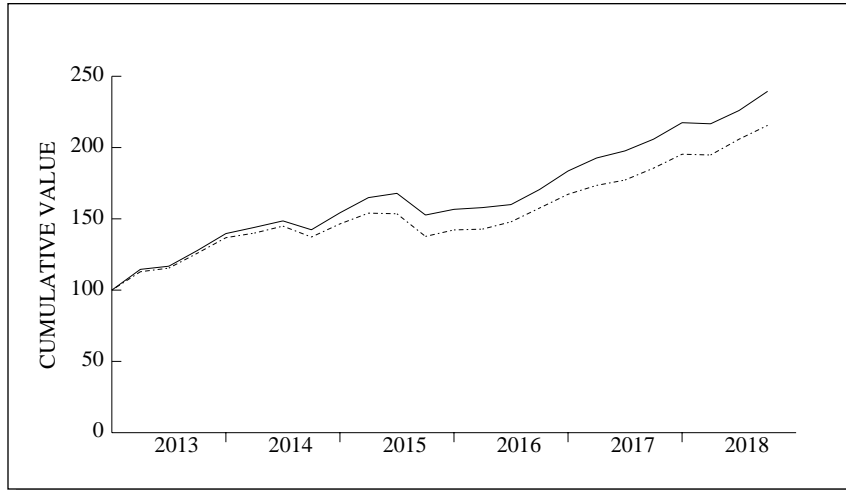
COMPARATIVE BENCHMARK: S&P 500



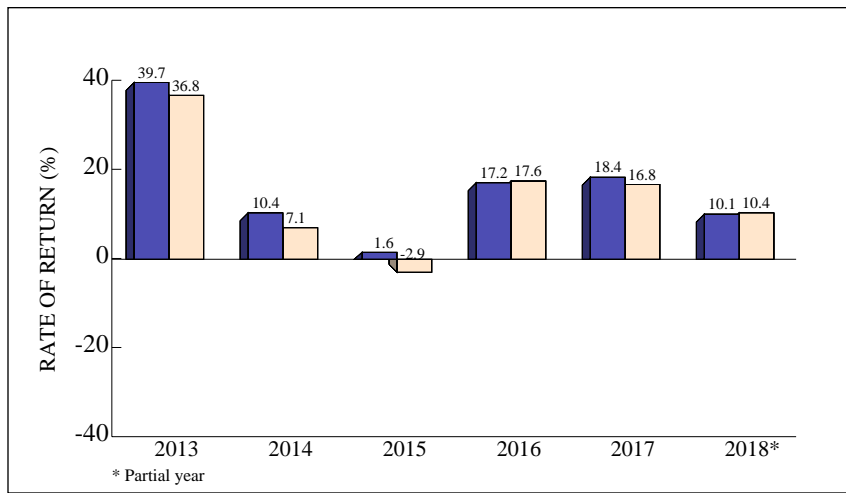
Total Quarters Observed	29
Quarters At or Above the Benchmark	10
Quarters Below the Benchmark	19
Batting Average	.345

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
9/11	-17.6	-13.9	-3.7
12/11	11.0	11.8	-0.8
3/12	12.6	12.6	0.0
6/12	-4.0	-2.8	-1.2
9/12	6.2	6.3	-0.1
12/12	0.8	-0.4	1.2
3/13	10.9	10.6	0.3
6/13	2.3	2.9	-0.6
9/13	5.9	5.2	0.7
12/13	10.5	10.5	0.0
3/14	-1.6	1.8	-3.4
6/14	5.2	5.2	0.0
9/14	-2.2	1.1	-3.3
12/14	4.6	4.9	-0.3
3/15	1.4	0.9	0.5
6/15	-0.1	0.3	-0.4
9/15	-7.6	-6.4	-1.2
12/15	5.9	7.0	-1.1
3/16	-0.8	1.3	-2.1
6/16	2.8	2.5	0.3
9/16	3.9	3.9	0.0
12/16	3.8	3.8	0.0
3/17	5.2	6.1	-0.9
6/17	3.0	3.1	-0.1
9/17	2.8	4.5	-1.7
12/17	6.4	6.6	-0.2
3/18	-1.0	-0.8	-0.2
6/18	3.2	3.4	-0.2
9/18	7.3	7.7	-0.4

SMID CAP EQUITY RETURN COMPARISONS



Smid Cap Universe

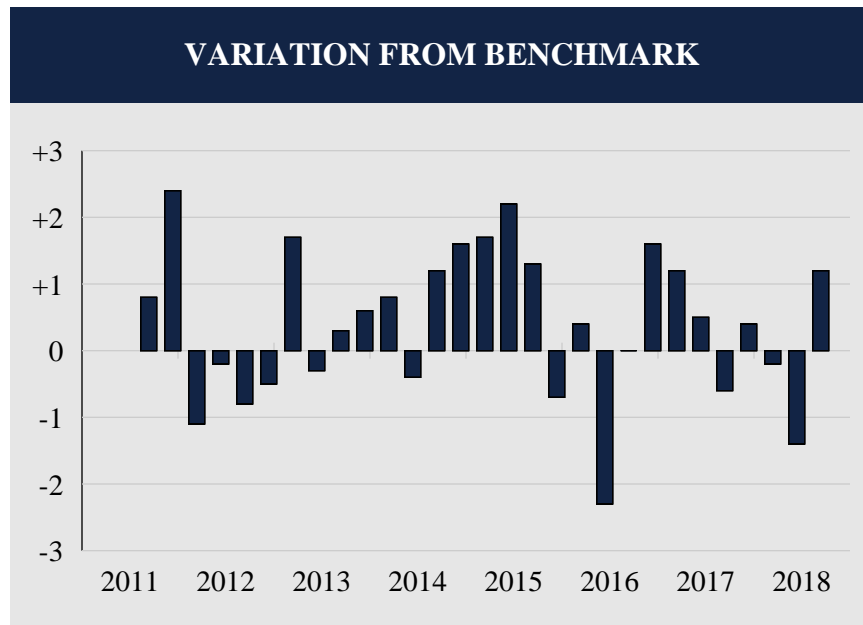


	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
RETURN	5.9	10.5	10.1	16.3	16.2	13.4
(RANK)	(30)	(38)	(43)	(40)	(44)	(21)
5TH %ILE	10.9	19.8	26.2	35.7	21.6	15.0
25TH %ILE	6.4	12.7	13.9	20.9	18.1	13.2
MEDIAN	4.8	8.7	8.0	14.6	15.8	11.5
75TH %ILE	2.5	6.1	4.7	9.7	13.4	10.2
95TH %ILE	0.5	2.5	0.5	4.1	10.5	7.1
Russ 2500	4.7	10.7	10.4	16.2	16.1	11.4

Smid Cap Universe

SMID CAP EQUITY QUARTERLY PERFORMANCE SUMMARY

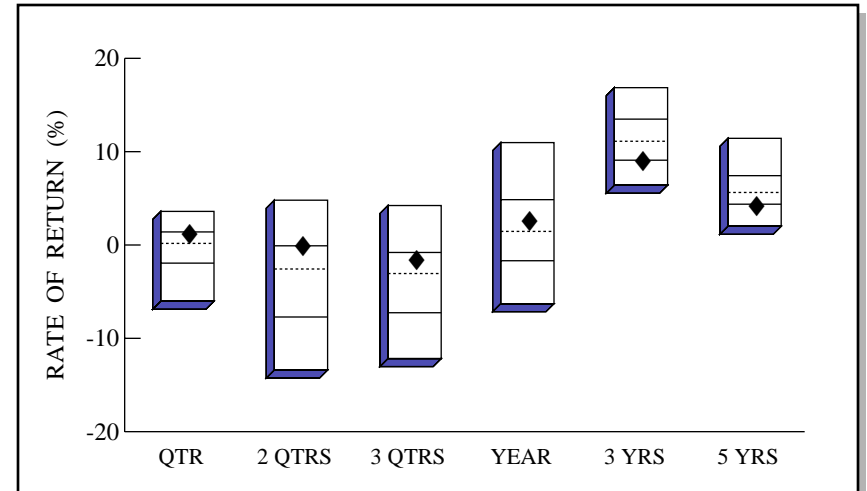
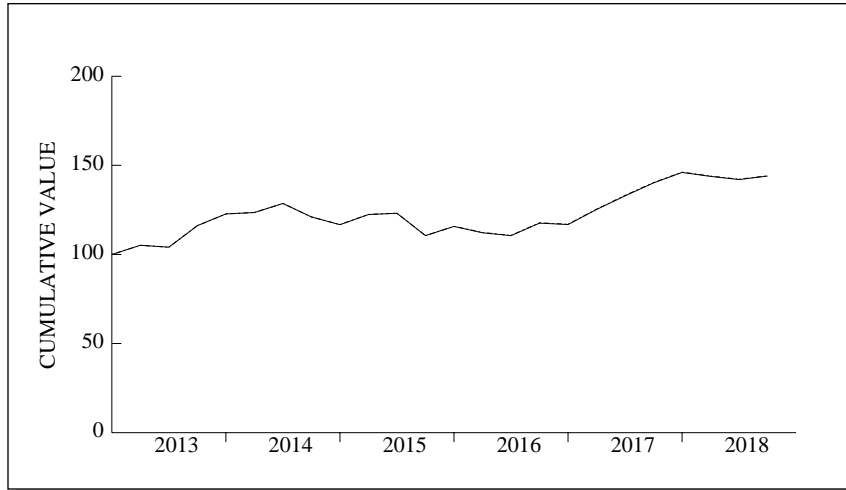
COMPARATIVE BENCHMARK: RUSSELL 2500



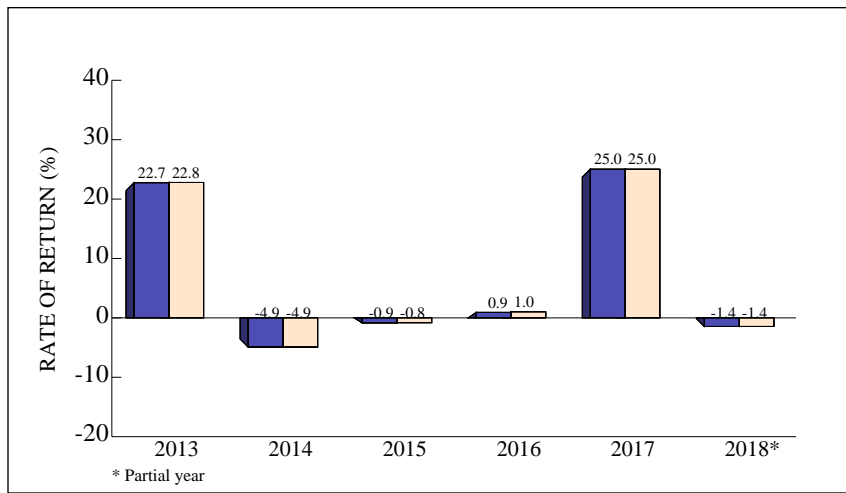
Total Quarters Observed	29
Quarters At or Above the Benchmark	18
Quarters Below the Benchmark	11
Batting Average	.621

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
9/11	-20.4	-21.2	0.8
12/11	16.9	14.5	2.4
3/12	11.9	13.0	-1.1
6/12	-4.3	-4.1	-0.2
9/12	4.8	5.6	-0.8
12/12	2.6	3.1	-0.5
3/13	14.6	12.9	1.7
6/13	2.0	2.3	-0.3
9/13	9.4	9.1	0.3
12/13	9.3	8.7	0.6
3/14	3.1	2.3	0.8
6/14	3.2	3.6	-0.4
9/14	-4.2	-5.4	1.2
12/14	8.4	6.8	1.6
3/15	6.9	5.2	1.7
6/15	1.9	-0.3	2.2
9/15	-9.0	-10.3	1.3
12/15	2.6	3.3	-0.7
3/16	0.8	0.4	0.4
6/16	1.3	3.6	-2.3
9/16	6.6	6.6	0.0
12/16	7.7	6.1	1.6
3/17	4.9	3.7	1.2
6/17	2.6	2.1	0.5
9/17	4.1	4.7	-0.6
12/17	5.6	5.2	0.4
3/18	-0.4	-0.2	-0.2
6/18	4.3	5.7	-1.4
9/18	5.9	4.7	1.2

INTERNATIONAL EQUITY RETURN COMPARISONS



International Equity Universe

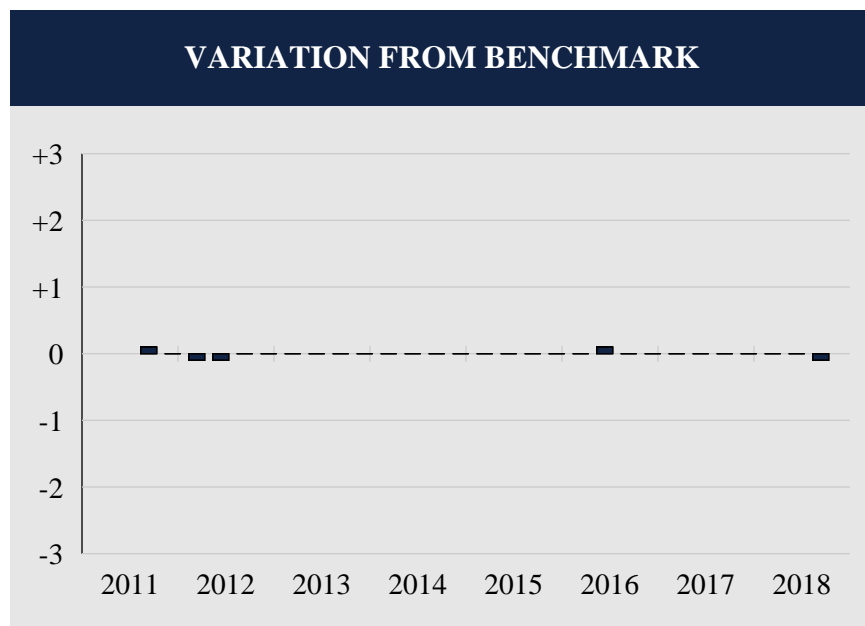


	QTR	2 QTRS	3 QTRS	YEAR	-----ANNUALIZED-----	
					3 YRS	5 YRS
RETURN	1.3	0.1	-1.4	2.7	9.2	4.4
(RANK)	(27)	(24)	(34)	(39)	(74)	(75)
5TH %ILE	3.6	4.8	4.2	11.0	16.9	11.4
25TH %ILE	1.4	-0.1	-0.8	4.9	13.5	7.4
MEDIAN	0.2	-2.6	-3.1	1.5	11.1	5.6
75TH %ILE	-1.9	-7.7	-7.3	-1.7	9.1	4.4
95TH %ILE	-6.0	-13.4	-12.2	-6.3	6.4	2.0
EAFE Net	1.4	0.1	-1.4	2.7	9.2	4.4

International Equity Universe

INTERNATIONAL EQUITY QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: MSCI EAFE NET

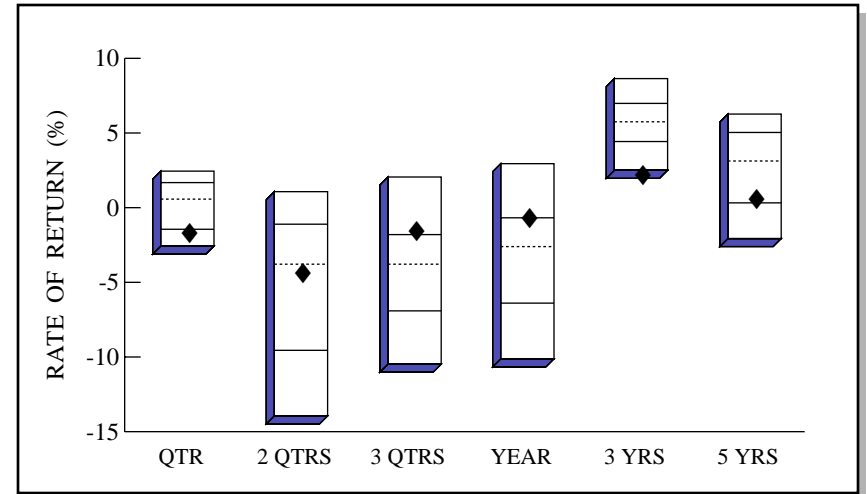
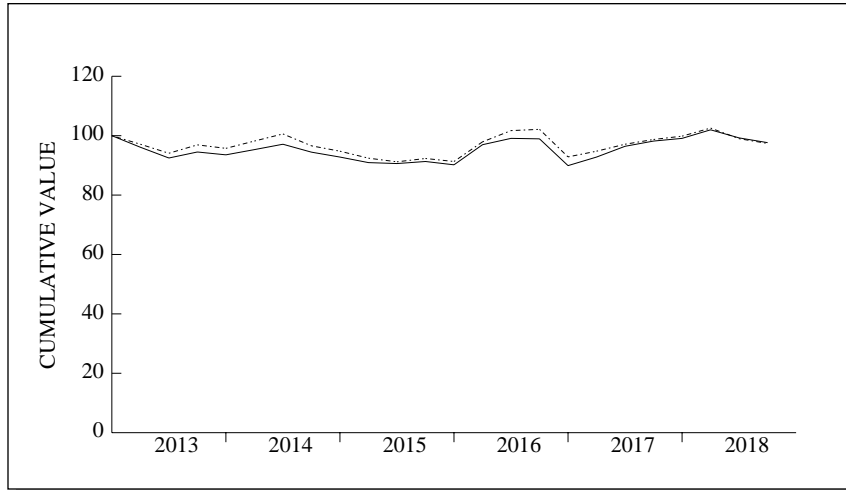


Total Quarters Observed	29
Quarters At or Above the Benchmark	26
Quarters Below the Benchmark	3
Batting Average	.897

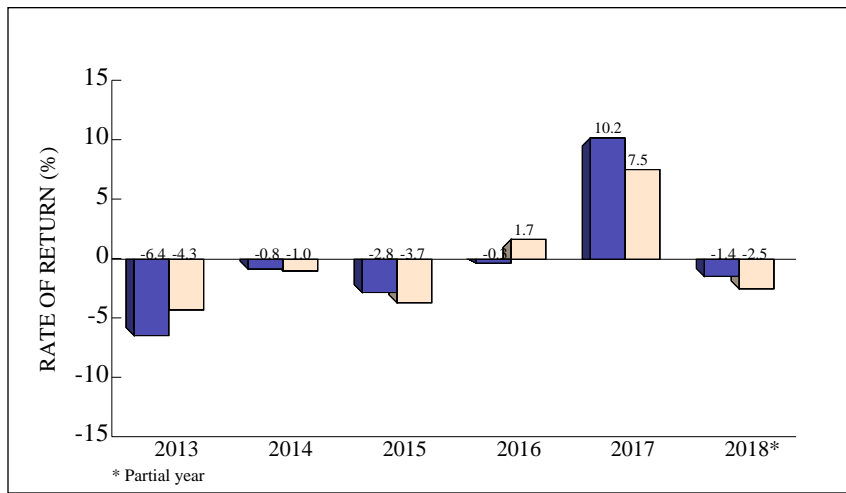
RATES OF RETURN

Date	Portfolio	Benchmark	Difference
9/11	-18.9	-19.0	0.1
12/11	3.3	3.3	0.0
3/12	10.8	10.9	-0.1
6/12	-7.2	-7.1	-0.1
9/12	6.9	6.9	0.0
12/12	6.6	6.6	0.0
3/13	5.1	5.1	0.0
6/13	-1.0	-1.0	0.0
9/13	11.6	11.6	0.0
12/13	5.7	5.7	0.0
3/14	0.7	0.7	0.0
6/14	4.1	4.1	0.0
9/14	-5.9	-5.9	0.0
12/14	-3.6	-3.6	0.0
3/15	4.9	4.9	0.0
6/15	0.6	0.6	0.0
9/15	-10.2	-10.2	0.0
12/15	4.7	4.7	0.0
3/16	-3.0	-3.0	0.0
6/16	-1.4	-1.5	0.1
9/16	6.4	6.4	0.0
12/16	-0.7	-0.7	0.0
3/17	7.2	7.2	0.0
6/17	6.1	6.1	0.0
9/17	5.4	5.4	0.0
12/17	4.2	4.2	0.0
3/18	-1.5	-1.5	0.0
6/18	-1.2	-1.2	0.0
9/18	1.3	1.4	-0.1

GLOBAL FIXED INCOME RETURN COMPARISONS



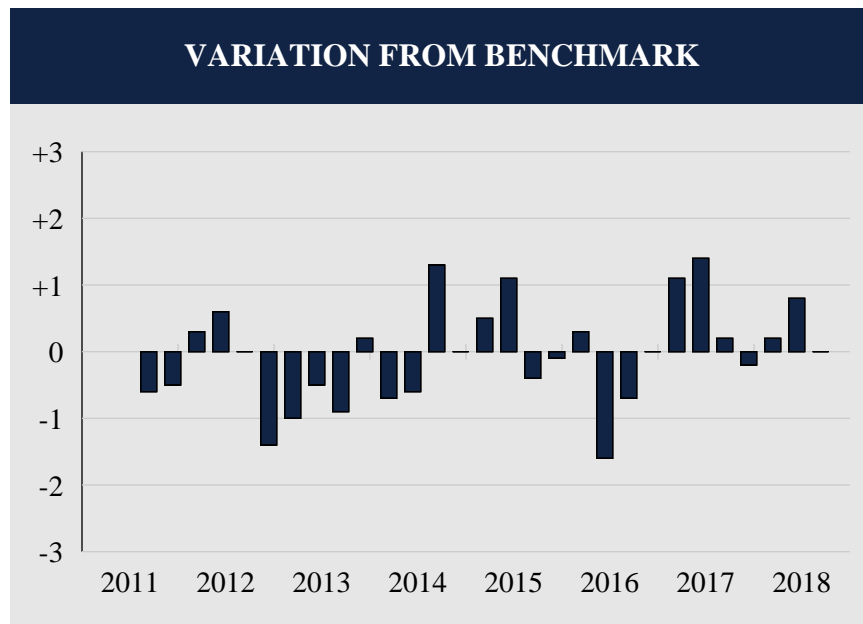
Int'l Fixed Income Universe



	QTR	2 QTRS	3 QTRS	YEAR	-----ANNUALIZED-----	
					3 YRS	5 YRS
RETURN	-1.6	-4.2	-1.4	-0.6	2.3	0.7
(RANK)	(79)	(52)	(24)	(25)	(96)	(71)
5TH %ILE	2.5	1.1	2.1	2.9	8.7	6.3
25TH %ILE	1.7	-1.1	-1.8	-0.7	7.0	5.0
MEDIAN	0.6	-3.8	-3.8	-2.6	5.8	3.1
75TH %ILE	-1.4	-9.6	-6.9	-6.4	4.4	0.3
95TH %ILE	-2.6	-14.0	-10.5	-10.1	2.5	-2.1
Global Gov	-1.6	-5.1	-2.5	-1.4	1.8	0.1

Int'l Fixed Income Universe

GLOBAL FIXED INCOME QUARTERLY PERFORMANCE SUMMARY
COMPARATIVE BENCHMARK: BLOOMBERG BARCLAYS GLOBAL GOVERNMENT BOND

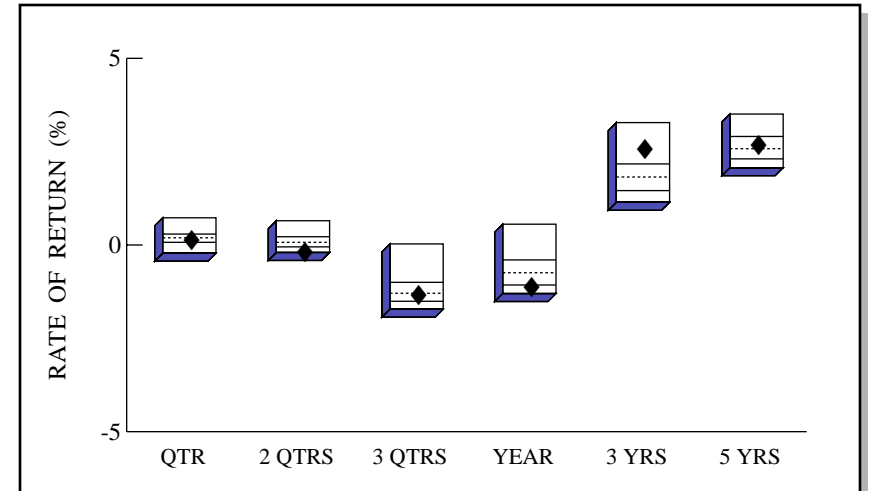
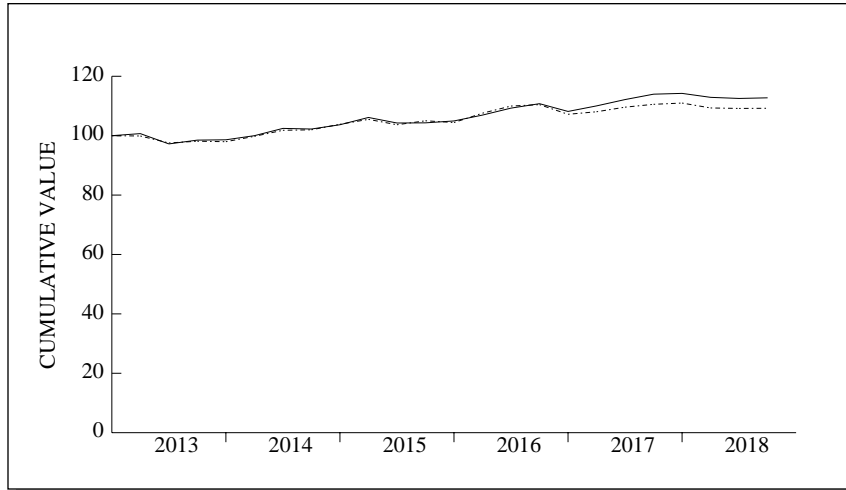


Total Quarters Observed	29
Quarters At or Above the Benchmark	16
Quarters Below the Benchmark	13
Batting Average	.552

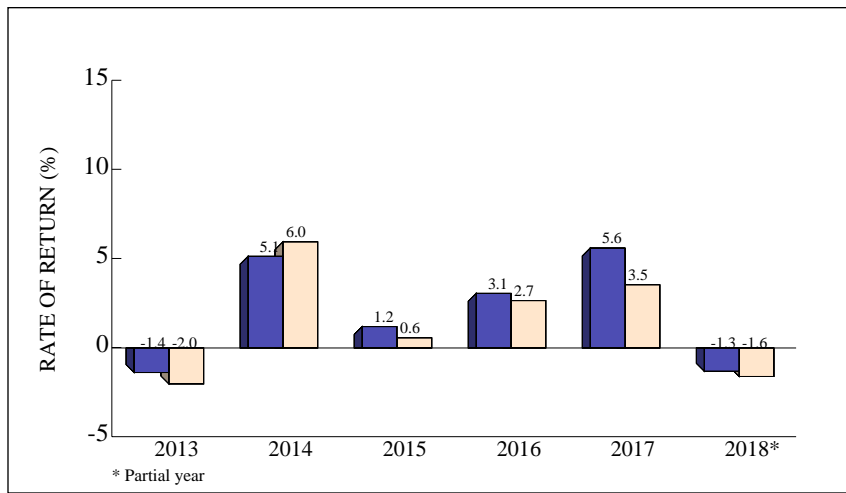
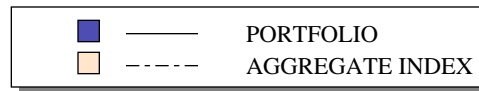
RATES OF RETURN

Date	Portfolio	Benchmark	Difference
9/11	1.3	1.9	-0.6
12/11	-0.4	0.1	-0.5
3/12	-0.1	-0.4	0.3
6/12	1.5	0.9	0.6
9/12	3.1	3.1	0.0
12/12	-3.1	-1.7	-1.4
3/13	-3.9	-2.9	-1.0
6/13	-3.7	-3.2	-0.5
9/13	2.1	3.0	-0.9
12/13	-1.0	-1.2	0.2
3/14	1.8	2.5	-0.7
6/14	1.9	2.5	-0.6
9/14	-2.7	-4.0	1.3
12/14	-1.8	-1.8	0.0
3/15	-2.0	-2.5	0.5
6/15	-0.3	-1.4	1.1
9/15	0.8	1.2	-0.4
12/15	-1.2	-1.1	-0.1
3/16	7.5	7.2	0.3
6/16	2.2	3.8	-1.6
9/16	-0.2	0.5	-0.7
12/16	-9.1	-9.1	0.0
3/17	3.2	2.1	1.1
6/17	3.9	2.5	1.4
9/17	1.8	1.6	0.2
12/17	0.9	1.1	-0.2
3/18	2.9	2.7	0.2
6/18	-2.7	-3.5	0.8
9/18	-1.6	-1.6	0.0

DOMESTIC FIXED INCOME RETURN COMPARISONS



Core Fixed Income Universe

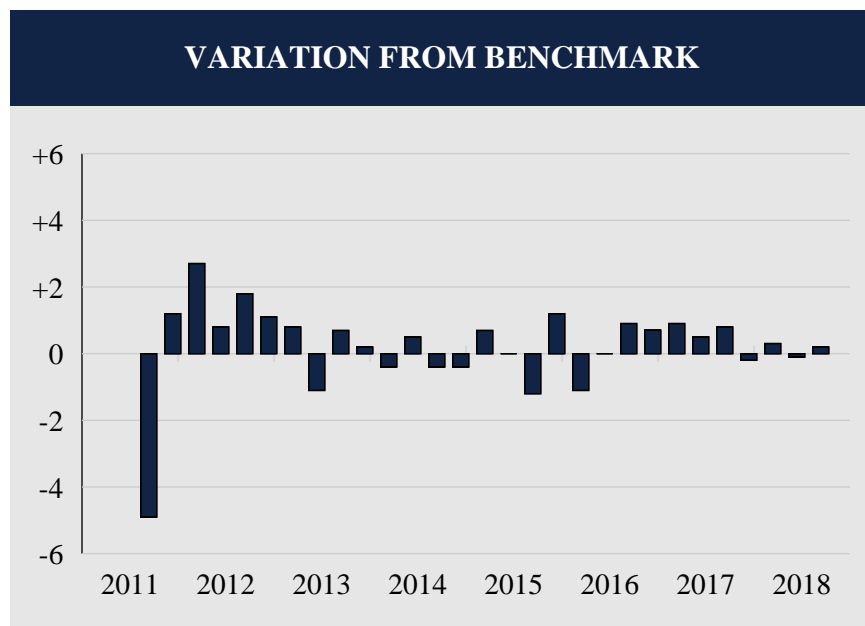


	QTR	2 QTRS	3 QTRS	YEAR	-----ANNUALIZED-----	
					3 YRS	5 YRS
RETURN	0.2	-0.1	-1.3	-1.1	2.6	2.7
(RANK)	(54)	(89)	(52)	(76)	(11)	(35)
5TH %ILE	0.7	0.7	0.0	0.6	3.3	3.5
25TH %ILE	0.3	0.2	-1.0	-0.4	2.2	2.9
MEDIAN	0.2	0.1	-1.3	-0.7	1.8	2.6
75TH %ILE	0.1	-0.1	-1.5	-1.1	1.5	2.3
95TH %ILE	-0.2	-0.2	-1.7	-1.3	1.1	2.1
Agg	0.0	-0.1	-1.6	-1.2	1.3	2.2

Core Fixed Income Universe

DOMESTIC FIXED INCOME QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: BLOOMBERG BARCLAYS AGGREGATE INDEX



Total Quarters Observed	29
Quarters At or Above the Benchmark	20
Quarters Below the Benchmark	9
Batting Average	.690

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
9/11	-1.1	3.8	-4.9
12/11	2.3	1.1	1.2
3/12	3.0	0.3	2.7
6/12	2.9	2.1	0.8
9/12	3.4	1.6	1.8
12/12	1.3	0.2	1.1
3/13	0.7	-0.1	0.8
6/13	-3.4	-2.3	-1.1
9/13	1.3	0.6	0.7
12/13	0.1	-0.1	0.2
3/14	1.4	1.8	-0.4
6/14	2.5	2.0	0.5
9/14	-0.2	0.2	-0.4
12/14	1.4	1.8	-0.4
3/15	2.3	1.6	0.7
6/15	-1.7	-1.7	0.0
9/15	0.0	1.2	-1.2
12/15	0.6	-0.6	1.2
3/16	1.9	3.0	-1.1
6/16	2.2	2.2	0.0
9/16	1.4	0.5	0.9
12/16	-2.3	-3.0	0.7
3/17	1.7	0.8	0.9
6/17	1.9	1.4	0.5
9/17	1.6	0.8	0.8
12/17	0.2	0.4	-0.2
3/18	-1.2	-1.5	0.3
6/18	-0.3	-0.2	-0.1
9/18	0.2	0.0	0.2

COMPLIANCE REPORT**Short Term Performance**

Rothschild Portfolio rank exceeds the Smid Cap Rank median for the three year period:	PASS
Rothschild Portfolio return exceeds the Russell 2500 Index for the three year period	PASS
Rothschild Portfolio performs better than the 75th percentile in the Smid Cap Core Rank for four consecutive quarters:	PASS
Brandywine Portfolio rank exceeds the International Fixed Income Rank median for the three year period:	NA
Brandywine Portfolio return exceeds the Global Gov index for the three year period:	NA
Brandywine Portfolio performs better than the 75th percentile in the International Fixed Income Rank for four consecutive quarters	NA
PIMCO Total Return Portfolio rank exceeds Core Fixed Rank median for the three year period:	PASS
PIMCO Total Return Portfolio return exceeds the Barclays Aggregate index for the three year period:	PASS
PIMCO Total Return Portfolio performs better than the 75th percentile in the Core Fixed rank for four consecutive quarters	FAIL

Long-Term Performance

Rothschild Portfolio return exceeds the Russell 2500 Index since June 2011:	PASS
Brandywine Portfolio return exceeds the Global Gov Index since June 2011:	NA
PIMCO Total Return Portfolio return exceeds the Barclays Aggregate Index since June 2011:	PASS

APPENDIX - MAJOR MARKET INDEX RETURNS

Economic Data	Style	QTR	FYTD	1 Year	3 years	5 Years
Consumer Price Index	Economic Data	0.2	0.2	2.3	2.0	1.5
Domestic Equity	Style	QTR	FYTD	1 Year	3 years	5 Years
Russell 3000	Broad Equity	7.1	7.1	17.6	17.1	13.5
S&P 500	Large Cap Core	7.7	7.7	17.9	17.3	13.9
Russell 1000	Large Cap	7.4	7.4	17.8	17.1	13.7
Russell 1000 Growth	Large Cap Growth	9.2	9.2	26.3	20.6	16.6
Russell 1000 Value	Large Cap Value	5.7	5.7	9.4	13.5	10.7
Russell Mid Cap	Midcap	5.0	5.0	14.0	14.5	11.6
Russell Mid Cap Growth	Midcap Growth	7.6	7.6	21.1	16.6	13.0
Russell Mid Cap Value	Midcap Value	3.3	3.3	8.8	13.1	10.7
Russell 2000	Small Cap	3.6	3.6	15.2	17.1	11.1
Russell 2000 Growth	Small Cap Growth	5.5	5.5	21.0	18.0	12.1
Russell 2000 Value	Small Cap Value	1.6	1.6	9.4	16.1	9.9
International Equity	Style	QTR	FYTD	1 Year	3 years	5 Years
MSCI All Country World Ex US	Foreign Equity	0.8	0.8	2.3	10.5	4.6
MSCI EAFE	Developed Markets Equity	1.4	1.4	3.2	9.8	4.9
MSCI EAFE Growth	Developed Markets Growth	1.6	1.6	6.3	10.7	6.0
MSCI EAFE Value	Developed Markets Value	1.3	1.3	0.2	8.8	3.7
MSCI Emerging Markets	Emerging Markets Equity	-0.9	-0.9	-0.4	12.8	4.0
Domestic Fixed Income	Style	QTR	FYTD	1 Year	3 years	5 Years
Bloomberg Barclays Aggregate Index	Core Fixed Income	0.0	0.0	-1.2	1.3	2.2
Bloomberg Barclays Capital Gov't Bond	Treasuries	-0.6	-0.6	-1.6	0.3	1.3
Bloomberg Barclays Capital Credit Bond	Corporate Bonds	0.9	0.9	-1.1	3.0	3.4
Intermediate Aggregate	Core Intermediate	0.1	0.1	-0.9	0.9	1.7
ML/BoA 1-3 Year Treasury	Short Term Treasuries	0.2	0.2	0.0	0.4	0.6
Bloomberg Barclays Capital High Yield	High Yield Bonds	2.4	2.4	3.0	8.1	5.5
Alternative Assets	Style	QTR	FYTD	1 Year	3 years	5 Years
Bloomberg Barclays Global Treasury Ex US	International Treasuries	-2.2	-2.2	-1.3	2.3	-0.2
NCREIF NFI-ODCE Index	Real Estate	2.1	2.1	8.7	8.8	10.7
HFRI FOF Composite	Hedge Funds	0.3	0.3	3.1	3.3	3.2

APPENDIX - DISCLOSURES

- * The Manager Shadow index is the weighted average of each manager portfolio's beginning value multiplied by its current quarter benchmark return.
- * The policy index was constructed as follows:

15% Russell 1000	15% Russell 1000 Value	20% Russell 2500
18% MSCI EAFE	20% Citi WGBI	12% Barclays Aggregate
- * Dahab Associates utilizes data provided by a custodian and other vendors it believes are reliable. However, it cannot assume responsibility for errors and omissions therefrom.
- * All returns were calculated on a time-weighted basis, and are gross of fees unless otherwise noted.
- * All returns for periods greater than one year are annualized.
- * Dahab Associates uses the modified duration measure to present average duration.
- * All values are in US dollars.

CITY OF CHARLOTTE LONG-TERM INVESTMENT PROGRAM
RHUMBLINE - RUSSELL 1000 GROWTH
PERFORMANCE REVIEW
SEPTEMBER 2018

INVESTMENT RETURN

On September 30th, 2018, the City of Charlotte Long-Term Investment Program's RhumbLine Russell 1000 Growth portfolio was valued at \$14,804,134, representing an increase of \$3,095,868 from the June quarter's ending value of \$11,708,266. Last quarter, the Fund posted net contributions equaling \$1,998,422 plus a net investment gain equaling \$1,097,446. Since there were no income receipts during the quarter, the portfolio's net investment return was the result of net realized and unrealized capital gains totaling \$1,097,446.

RELATIVE PERFORMANCE

Total Fund

In the third quarter, the RhumbLine Russell 1000 Growth portfolio gained 9.2%, which was equal to the Russell 1000 Growth Index's return of 9.2% and ranked in the 25th percentile of the Large Cap Growth universe. Over the trailing twelve-month period, the portfolio returned 26.2%, which was 0.1% below the benchmark's 26.3% performance, ranking in the 38th percentile.

ASSET ALLOCATION

The portfolio was fully invested in the RhumbLine Russell 1000 Growth Fund at the end of the quarter.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / FYTD	1 Year	3 Year	5 Year
Total Portfolio - Gross	9.2	26.2	----	----
<i>LARGE CAP GROWTH RANK</i>	(25)	(38)	----	----
Total Portfolio - Net	9.1	26.1	----	----
Russell 1000G	9.2	26.3	20.6	16.6
Large Cap Equity - Gross	9.2	26.2	----	----
<i>LARGE CAP GROWTH RANK</i>	(25)	(38)	----	----
Russell 1000G	9.2	26.3	20.6	16.6

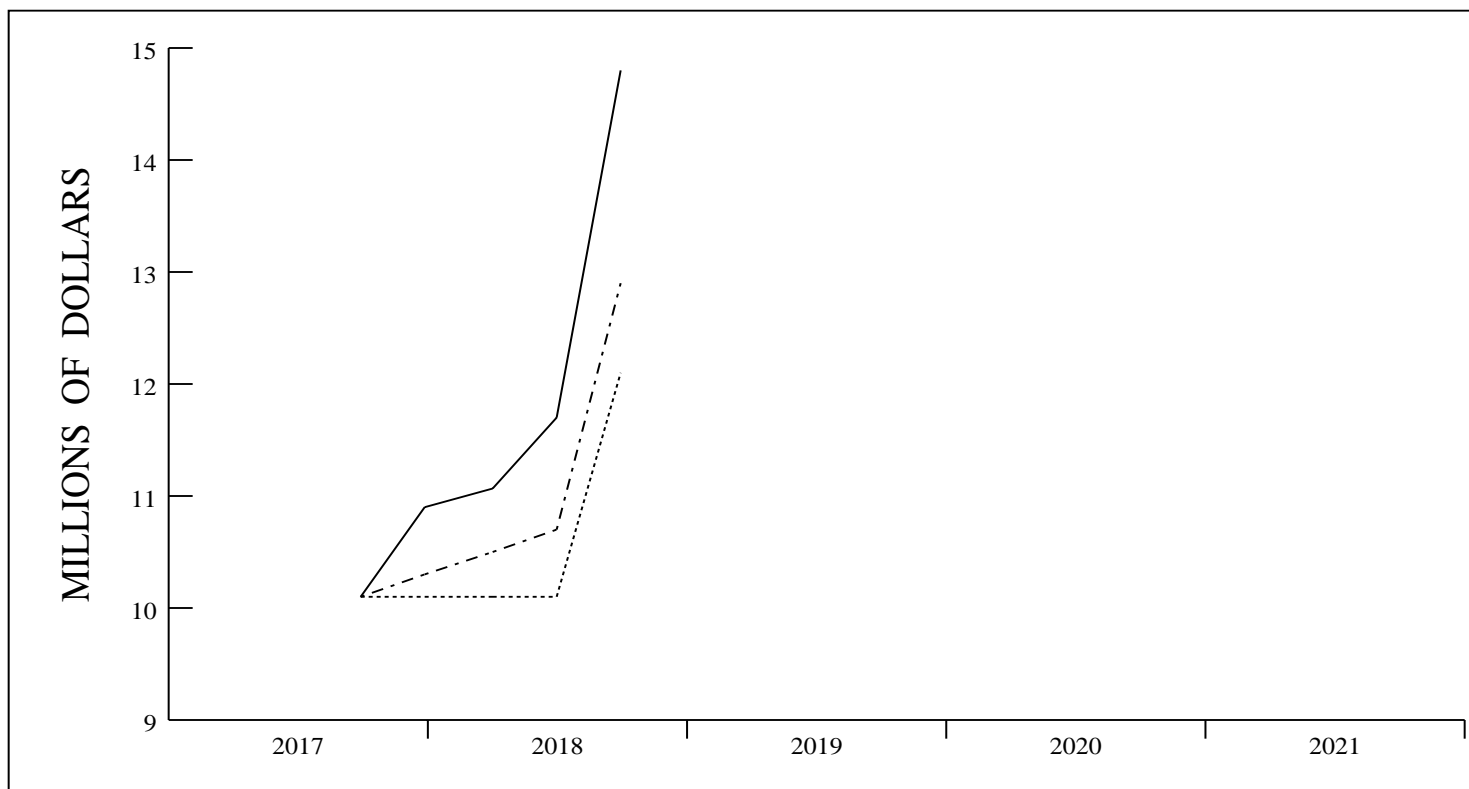
ASSET ALLOCATION

Large Cap Equity	100.0%	\$ 14,804,134
Total Portfolio	100.0%	\$ 14,804,134

INVESTMENT RETURN

Market Value 6/2018	\$ 11,708,266
Contribs / Withdrawals	1,998,422
Income	0
Capital Gains / Losses	1,097,446
Market Value 9/2018	\$ 14,804,134

INVESTMENT GROWTH

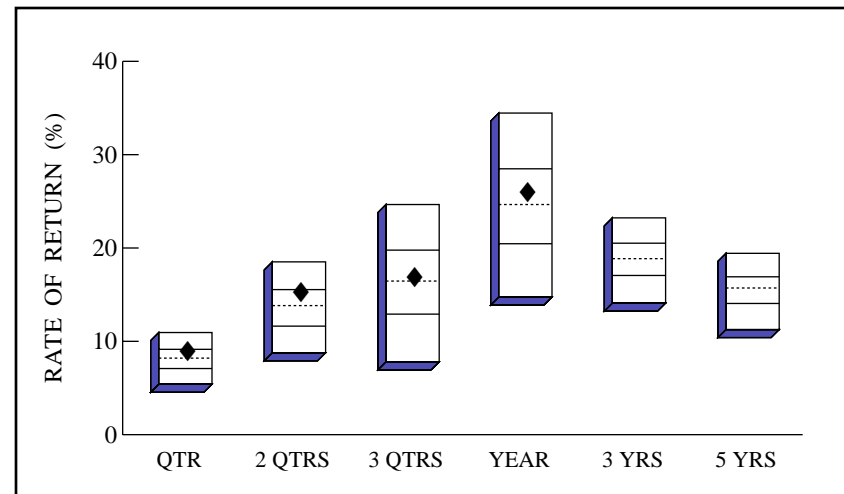
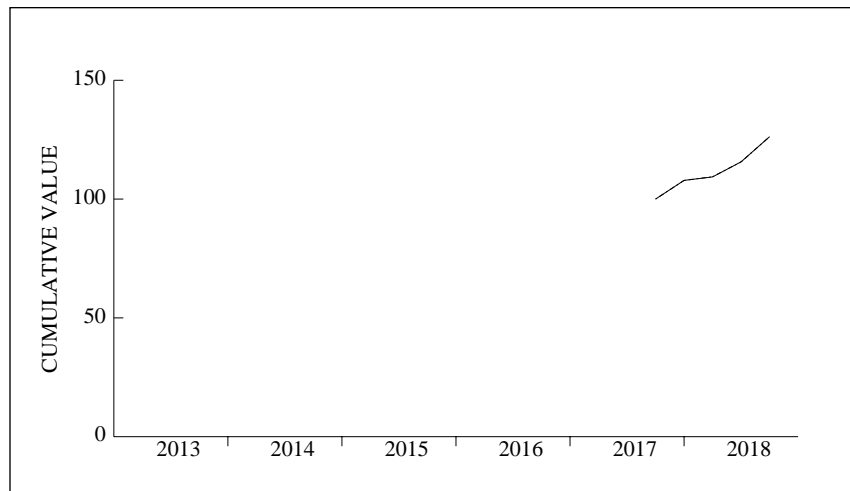


——— ACTUAL RETURN
 - - - - - 7.75%
 0.0%

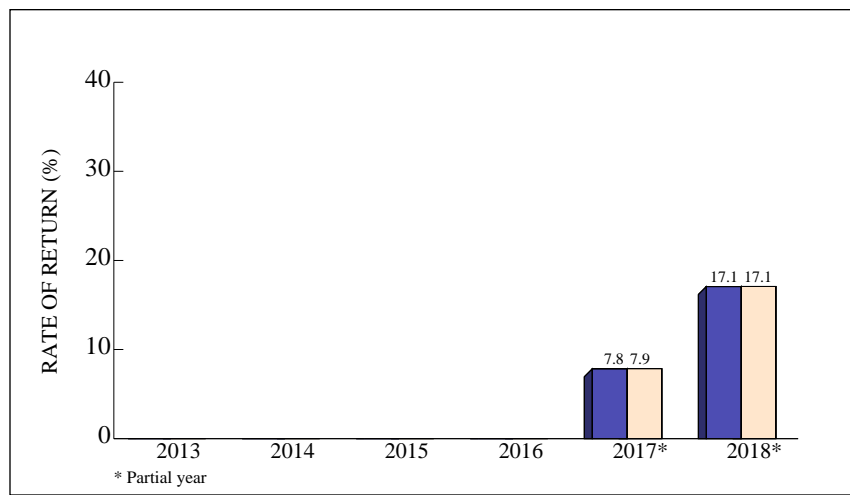
VALUE ASSUMING
 7.75% RETURN \$ 12,913,869

	LAST QUARTER	ONE YEAR
BEGINNING VALUE	\$ 11,708,266	\$ 10,126,280
NET CONTRIBUTIONS	1,998,422	1,996,661
<u>INVESTMENT RETURN</u>	<u>1,097,446</u>	<u>2,681,193</u>
ENDING VALUE	\$ 14,804,134	\$ 14,804,134
INCOME	0	0
<u>CAPITAL GAINS (LOSSES)</u>	<u>1,097,446</u>	<u>2,681,193</u>
INVESTMENT RETURN	1,097,446	2,681,193

TOTAL RETURN COMPARISONS



Large Cap Growth Universe



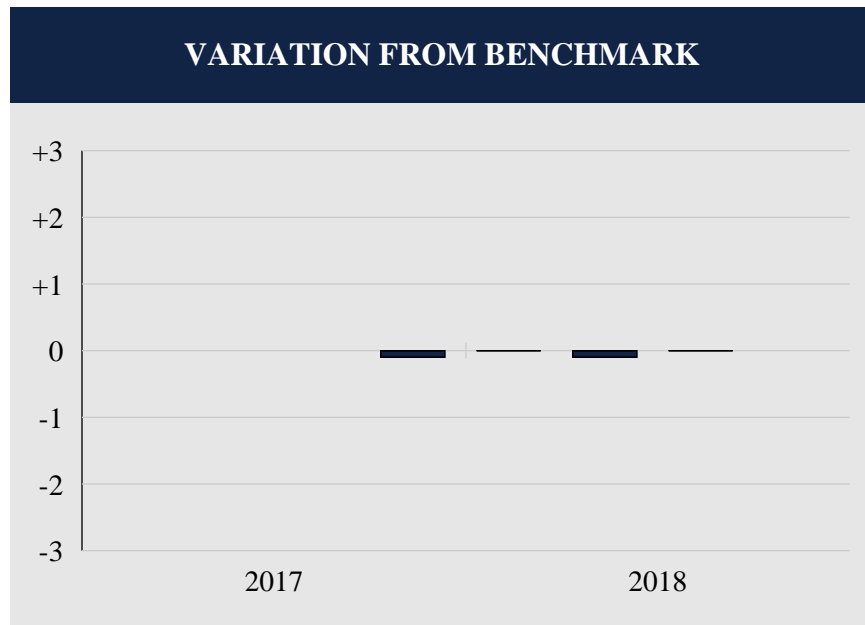
* Partial year

	<u>QTR</u>	<u>2 QTRS</u>	<u>3 QTRS</u>	<u>YEAR</u>	<u>-----ANNUALIZED-----</u>	
					<u>3 YRS</u>	<u>5 YRS</u>
RETURN	9.2	15.4	17.1	26.2	----	----
(RANK)	(25)	(26)	(46)	(38)	----	----
5TH %ILE	10.9	18.5	24.7	34.5	23.2	19.4
25TH %ILE	9.1	15.5	19.8	28.5	20.5	16.9
MEDIAN	8.2	13.8	16.5	24.7	18.9	15.7
75TH %ILE	7.1	11.6	12.9	20.5	17.1	14.1
95TH %ILE	5.4	8.8	7.8	14.7	14.1	11.3
Russ 1000G	9.2	15.5	17.1	26.3	20.6	16.6

Large Cap Growth Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

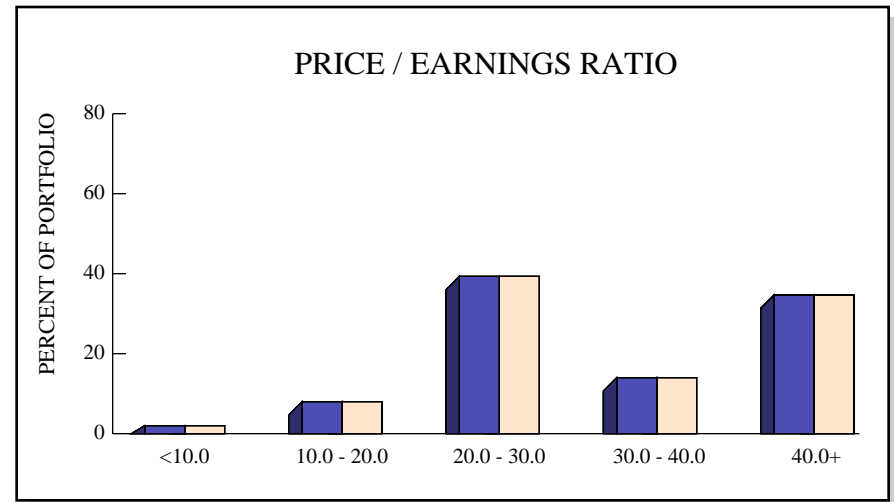
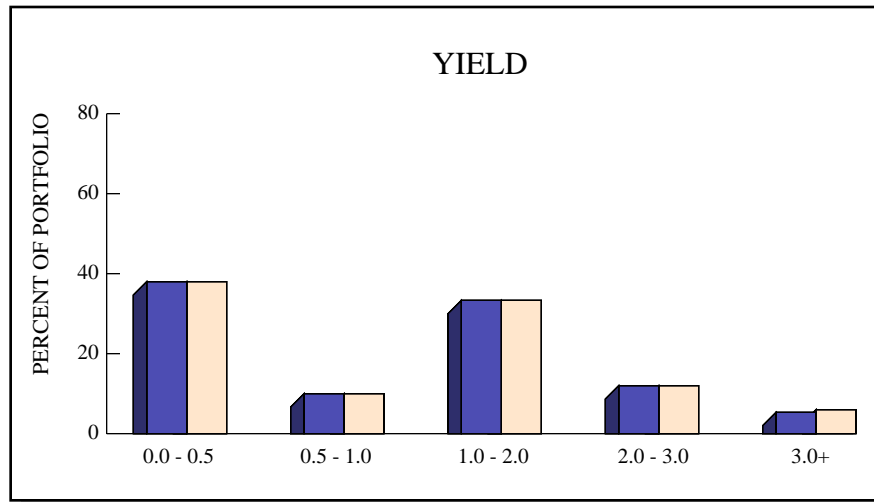
COMPARATIVE BENCHMARK: RUSSELL 1000 GROWTH



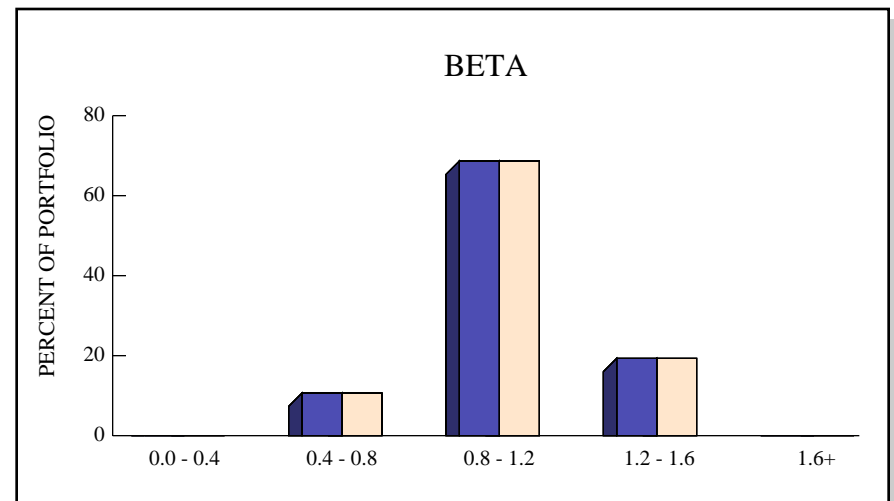
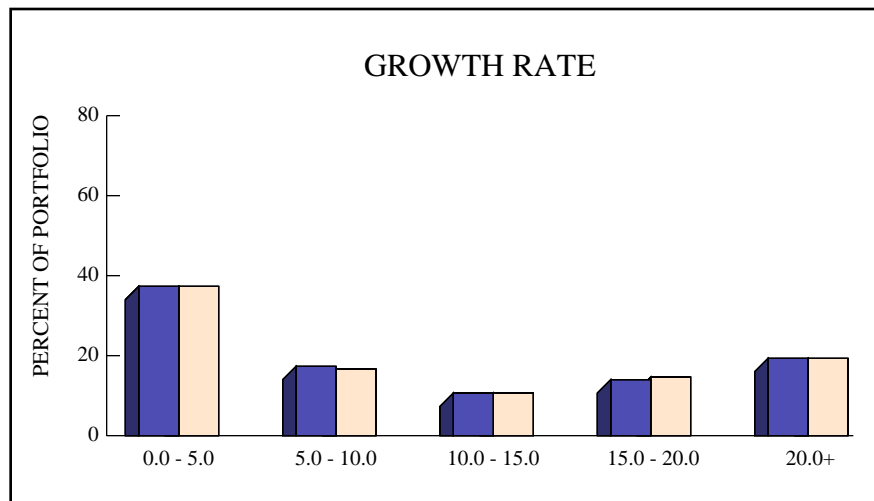
RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
12/17	7.8	7.9	-0.1
3/18	1.4	1.4	0.0
6/18	5.7	5.8	-0.1
9/18	9.2	9.2	0.0

Total Quarters Observed	4
Quarters At or Above the Benchmark	2
Quarters Below the Benchmark	2
Batting Average	.500

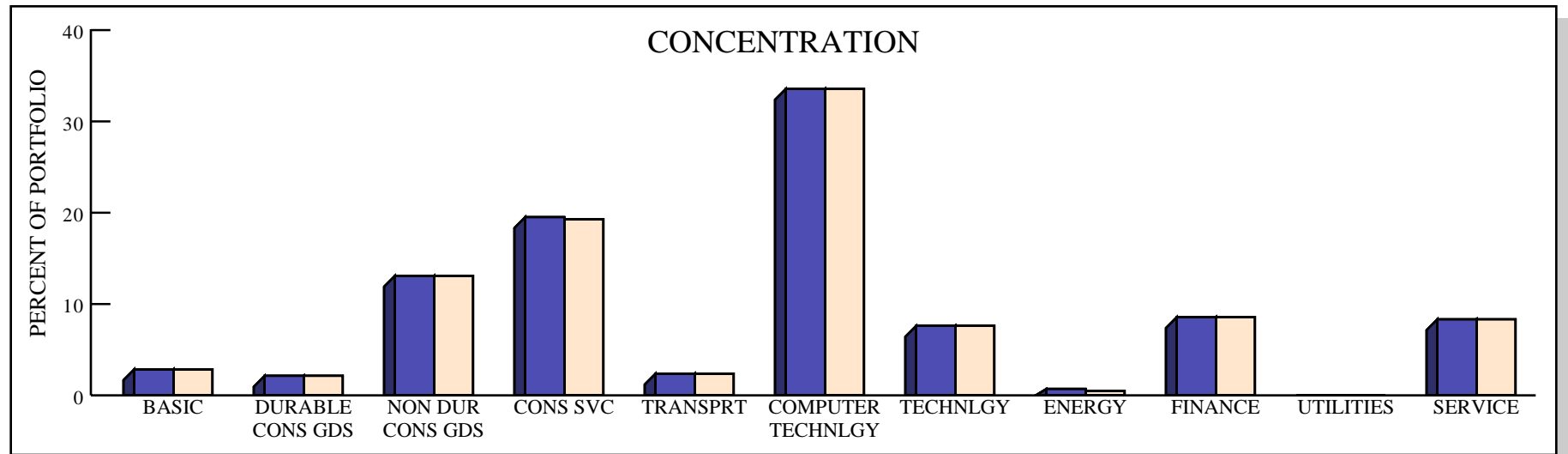
STOCK CHARACTERISTICS



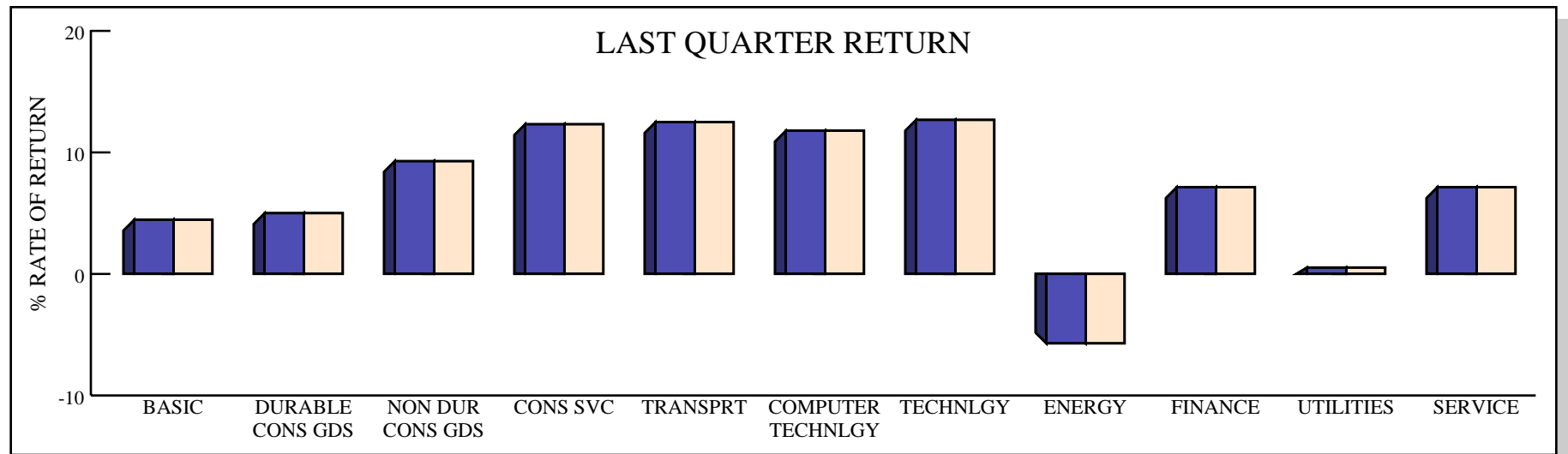
	# HOLDINGS	YIELD	GROWTH	P/E	BETA
PORTFOLIO	542	1.1%	10.8%	36.4	1.04
RUSSELL 1000G	542	1.1%	10.8%	36.4	1.04



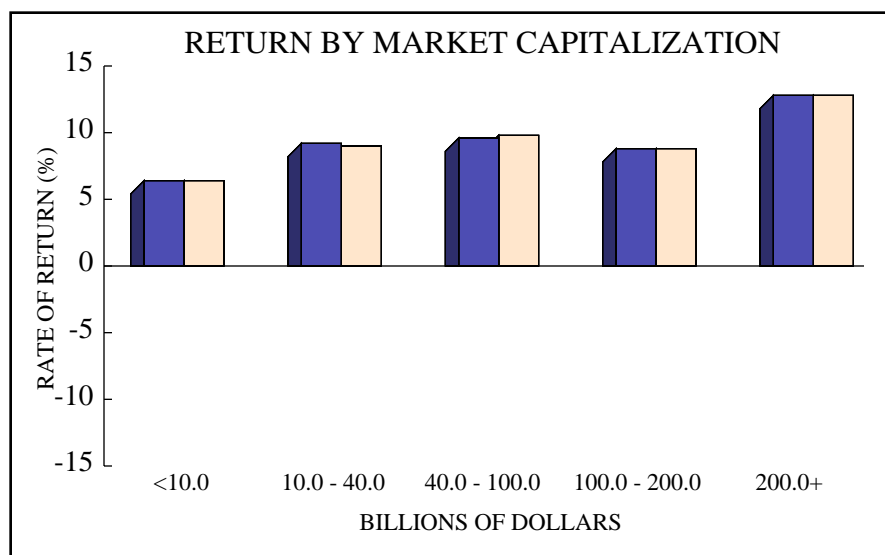
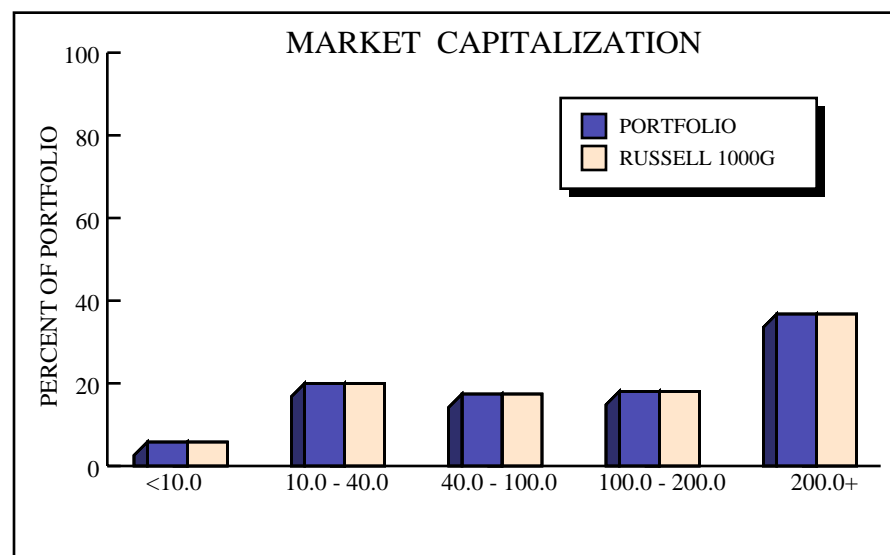
STOCK INDUSTRY ANALYSIS



■ PORTFOLIO ■ RUSSELL 1000G



TOP TEN HOLDINGS



TOP TEN EQUITY HOLDINGS

RANK	NAME	VALUE	% EQUITY	RETURN	INDUSTRY SECTOR	MKT CAP
1	APPLE INC	\$ 1,166,624	7.88%	22.4%	Computer Tech	\$ 1090.3 B
2	MICROSOFT CORP	877,561	5.93%	16.4%	Computer Tech	877.0 B
3	AMAZON.COM INC	871,305	5.89%	17.8%	Consumer Service	976.9 B
4	FACEBOOK INC-A	418,057	2.82%	-15.4%	Computer Tech	396.6 B
5	ALPHABET INC-CL C	389,071	2.63%	7.0%	Computer Tech	417.6 B
6	ALPHABET INC-CL A	385,059	2.60%	6.9%	Computer Tech	360.8 B
7	VISA INC-CLASS A SHARES	286,822	1.94%	13.5%	Finance	266.7 B
8	UNITEDHEALTH GROUP INC	271,893	1.84%	8.8%	Consumer Service	256.1 B
9	HOME DEPOT INC	255,209	1.72%	6.7%	Consumer Service	237.0 B
10	MASTERCARD INC - A	218,603	1.48%	13.4%	Finance	228.2 B

CITY OF CHARLOTTE LONG-TERM INVESTMENT PROGRAM
STATE STREET GLOBAL ADVISORS - RUSSELL 1000 VALUE
PERFORMANCE REVIEW
SEPTEMBER 2018

INVESTMENT RETURN

On September 30th, 2018, the City of Charlotte Long-Term Investment Program's State Street Global Advisors Russell 1000 Value portfolio was valued at \$15,097,206, representing an increase of \$812,911 from the June quarter's ending value of \$14,284,295. Last quarter, the Fund posted withdrawals totaling \$2,824, which partially offset the portfolio's net investment return of \$815,735. Since there were no income receipts for the third quarter, the portfolio's net investment return figure was the product of net realized and unrealized capital gains totaling \$815,735.

RELATIVE PERFORMANCE

Total Fund

During the third quarter, the State Street Global Advisors Russell 1000 Value portfolio returned 5.7%, which was equal to the Russell 1000 Value's return of 5.7% and ranked in the 48th percentile of the Large Cap Value universe. Over the trailing twelve-month period, this portfolio returned 9.5%, which was 0.1% above the benchmark's 9.4% performance, and ranked in the 76th percentile. Since June 2011, the account returned 11.7% per annum and ranked in the 70th percentile. For comparison, the Russell 1000 Value returned an annualized 11.7% over the same time frame.

ASSET ALLOCATION

The portfolio was fully invested in the SSGA Russell 1000 Value Index NL Fund at the end of the quarter.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / FYTD	1 Year	3 Year	5 Year	Since 06/11
Total Portfolio - Gross	5.7	9.5	13.6	10.7	11.7
<i>LARGE CAP VALUE RANK</i>	(48)	(76)	(71)	(71)	(70)
Total Portfolio - Net	5.7	9.4	13.5	10.6	11.5
Russell 1000V	5.7	9.4	13.5	10.7	11.7
Large Cap Equity - Gross	5.7	9.5	13.6	10.7	11.7
<i>LARGE CAP VALUE RANK</i>	(48)	(76)	(71)	(71)	(70)
Russell 1000V	5.7	9.4	13.5	10.7	11.7

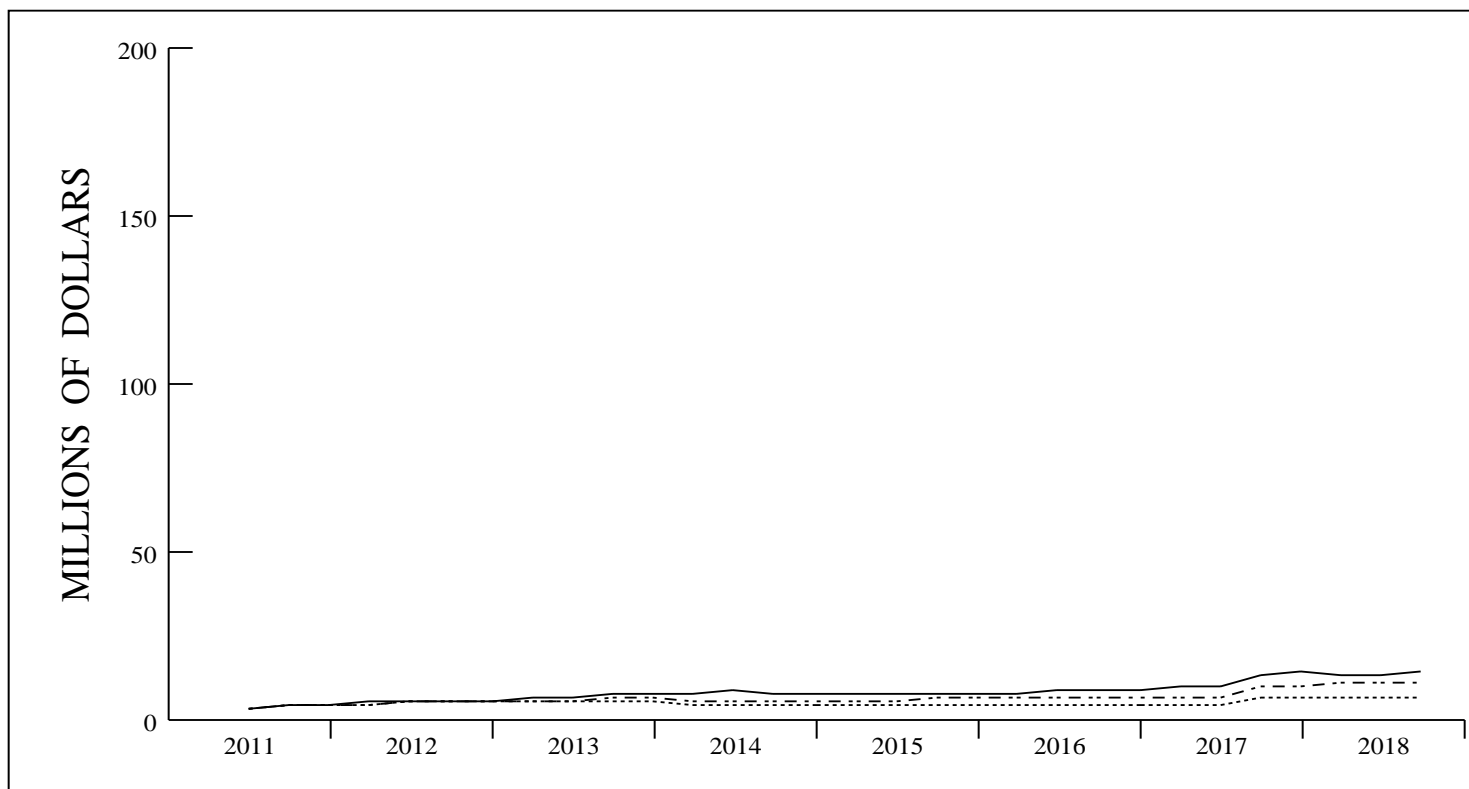
ASSET ALLOCATION

Large Cap Equity	100.0%	\$ 15,097,206
Total Portfolio	100.0%	\$ 15,097,206

INVESTMENT RETURN

Market Value 6/2018	\$ 14,284,295
Contribs / Withdrawals	- 2,824
Income	0
Capital Gains / Losses	815,735
Market Value 9/2018	\$ 15,097,206

INVESTMENT GROWTH

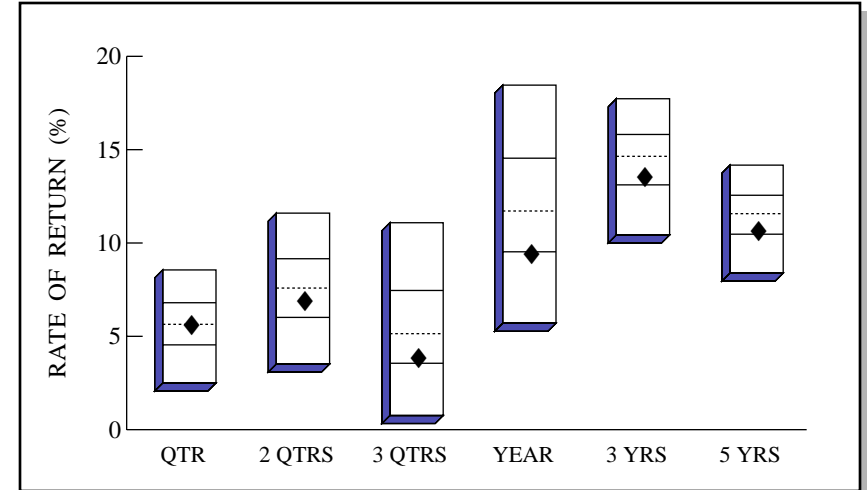
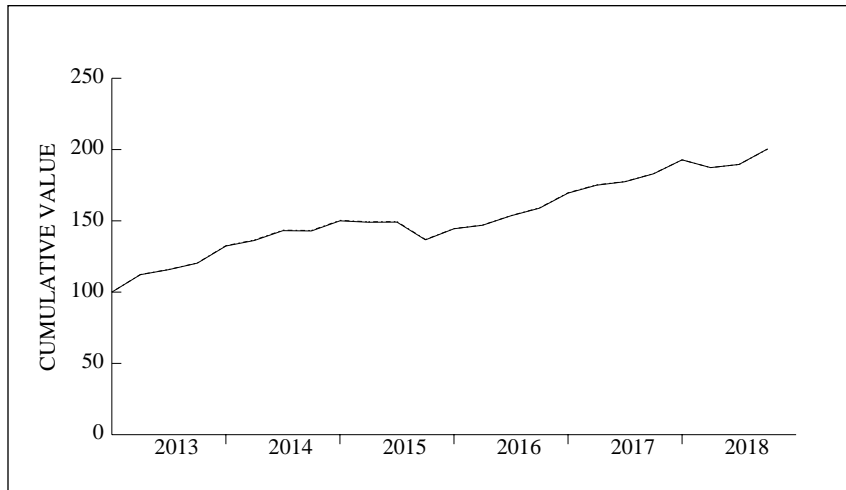


—	ACTUAL RETURN
- - - -	7.75%
.....	0.0%

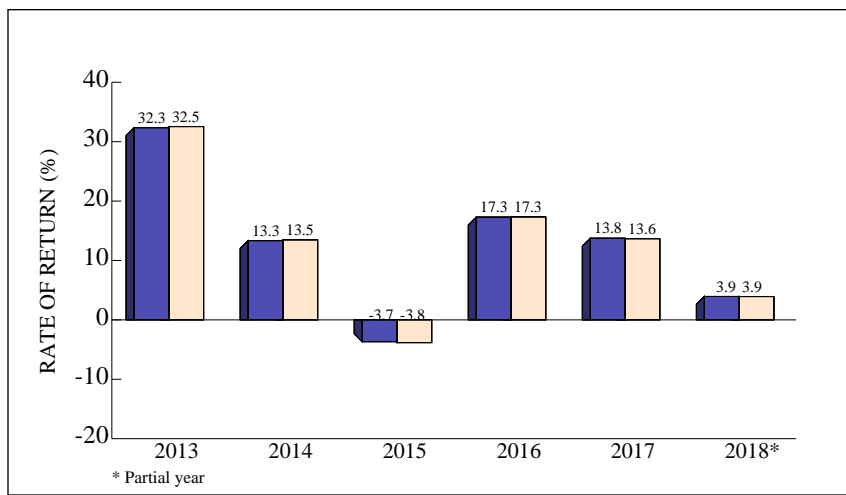
VALUE ASSUMING	
7.75% RETURN	\$ 11,620,431

	LAST QUARTER	PERIOD 6/11 - 9/18
BEGINNING VALUE	\$ 14,284,295	\$ 3,505,860
NET CONTRIBUTIONS	- 2,824	4,236,210
<u>INVESTMENT RETURN</u>	<u>815,735</u>	<u>7,355,136</u>
ENDING VALUE	\$ 15,097,206	\$ 15,097,206
INCOME	0	0
<u>CAPITAL GAINS (LOSSES)</u>	<u>815,735</u>	<u>7,355,136</u>
INVESTMENT RETURN	815,735	7,355,136

TOTAL RETURN COMPARISONS



Large Cap Value Universe

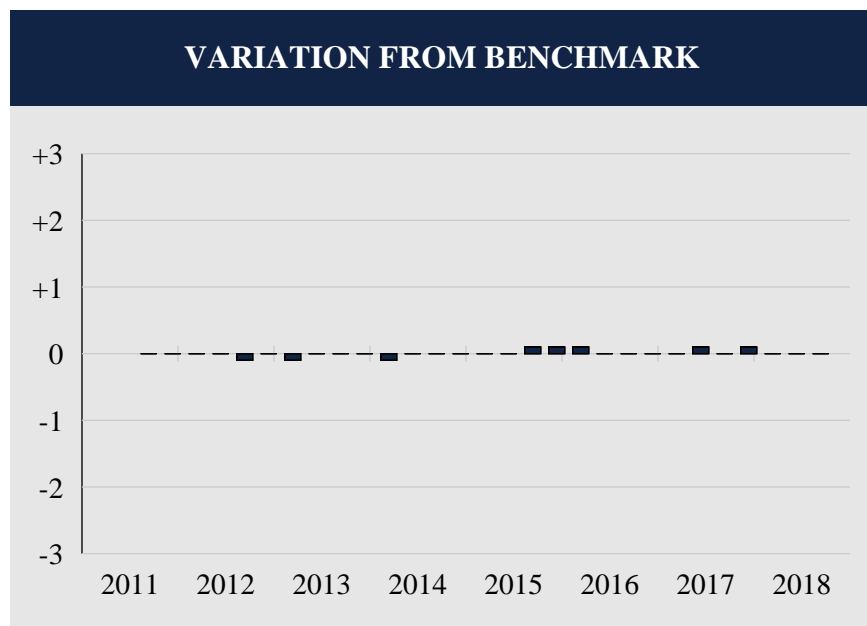


	QTR	2 QTRS	3 QTRS	YEAR	-----ANNUALIZED-----	
					3 YRS	5 YRS
RETURN	5.7	7.0	3.9	9.5	13.6	10.7
(RANK)	(48)	(60)	(70)	(76)	(71)	(71)
5TH %ILE	8.6	11.6	11.1	18.5	17.7	14.2
25TH %ILE	6.8	9.2	7.5	14.5	15.8	12.6
MEDIAN	5.6	7.6	5.1	11.7	14.6	11.6
75TH %ILE	4.5	6.0	3.6	9.5	13.1	10.5
95TH %ILE	2.5	3.5	0.8	5.7	10.4	8.4
Russ 1000V	5.7	6.9	3.9	9.4	13.5	10.7

Large Cap Value Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

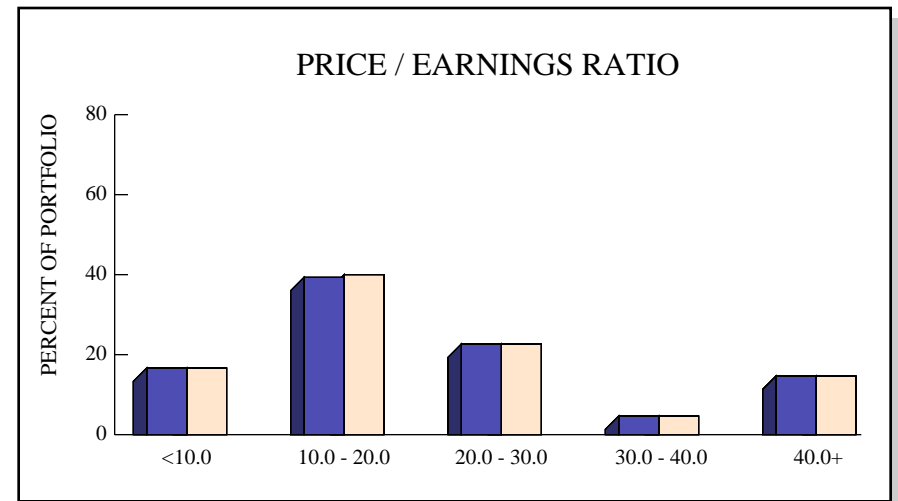
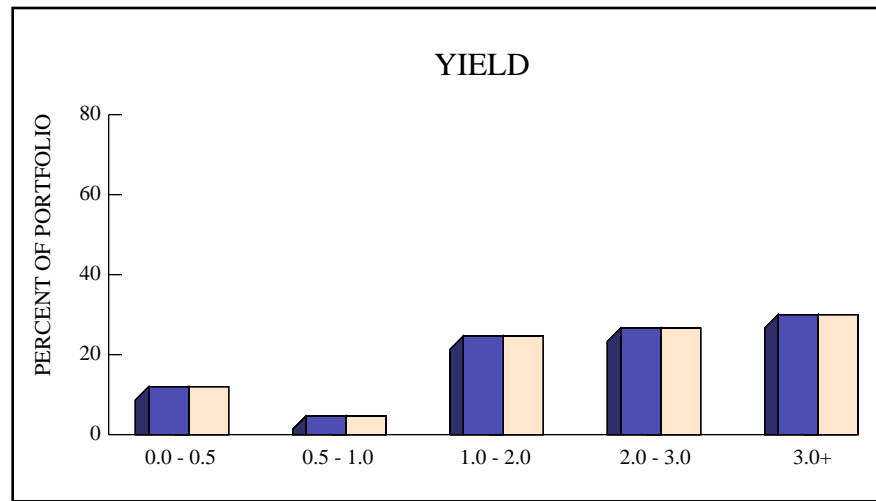
COMPARATIVE BENCHMARK: RUSSELL 1000 VALUE



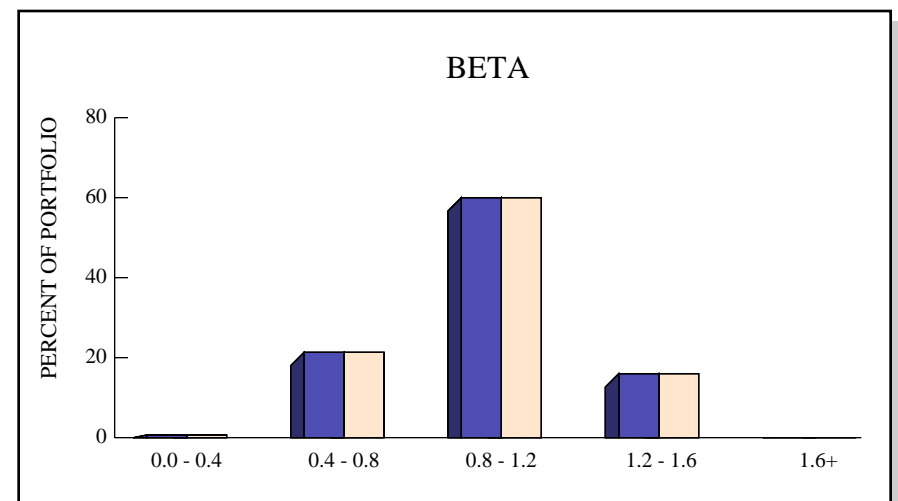
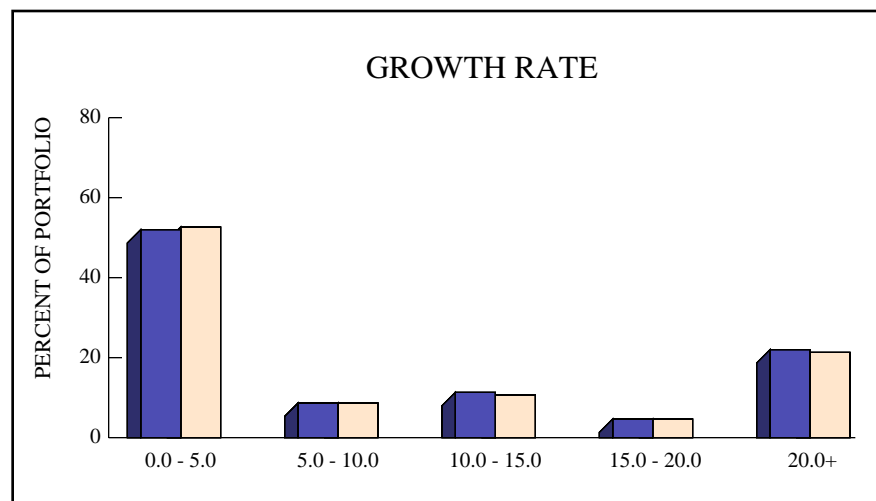
Total Quarters Observed	29
Quarters At or Above the Benchmark	26
Quarters Below the Benchmark	3
Batting Average	.897

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
9/11	-16.2	-16.2	0.0
12/11	13.1	13.1	0.0
3/12	11.1	11.1	0.0
6/12	-2.2	-2.2	0.0
9/12	6.4	6.5	-0.1
12/12	1.5	1.5	0.0
3/13	12.2	12.3	-0.1
6/13	3.2	3.2	0.0
9/13	3.9	3.9	0.0
12/13	10.0	10.0	0.0
3/14	2.9	3.0	-0.1
6/14	5.1	5.1	0.0
9/14	-0.2	-0.2	0.0
12/14	5.0	5.0	0.0
3/15	-0.7	-0.7	0.0
6/15	0.1	0.1	0.0
9/15	-8.3	-8.4	0.1
12/15	5.7	5.6	0.1
3/16	1.7	1.6	0.1
6/16	4.6	4.6	0.0
9/16	3.5	3.5	0.0
12/16	6.7	6.7	0.0
3/17	3.3	3.3	0.0
6/17	1.4	1.3	0.1
9/17	3.1	3.1	0.0
12/17	5.4	5.3	0.1
3/18	-2.8	-2.8	0.0
6/18	1.2	1.2	0.0
9/18	5.7	5.7	0.0

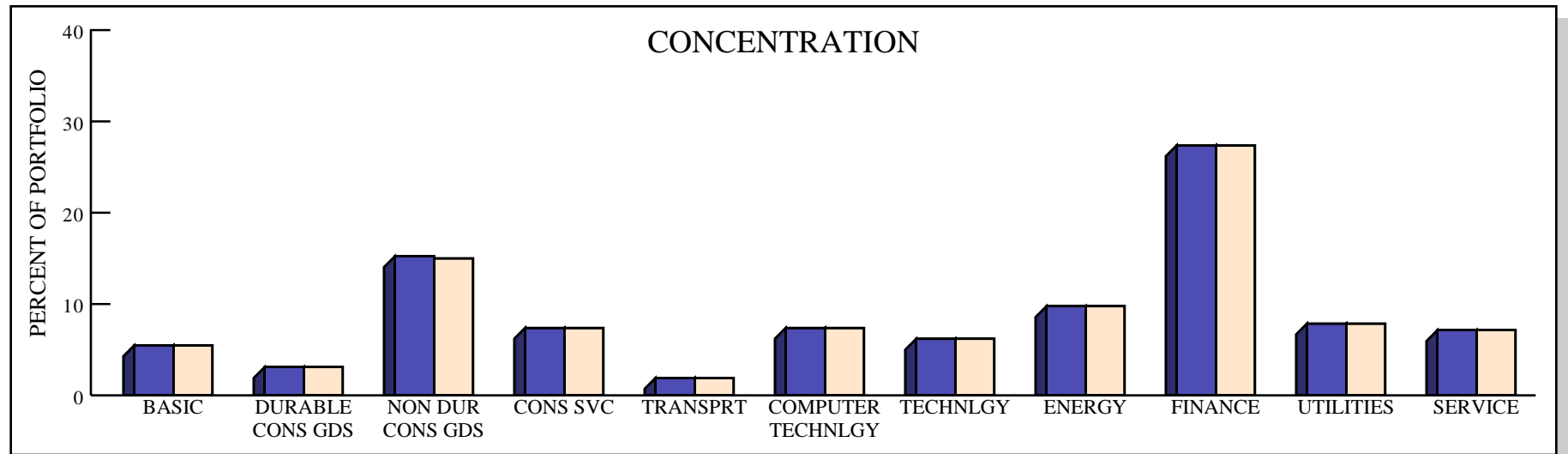
STOCK CHARACTERISTICS



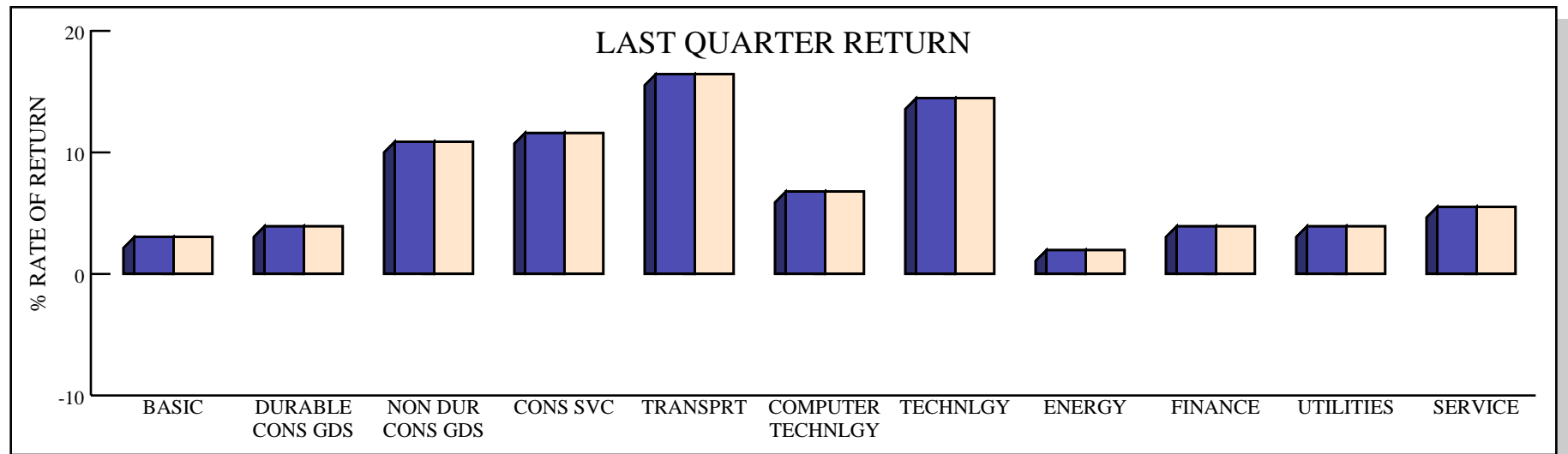
	# HOLDINGS	YIELD	GROWTH	P/E	BETA
PORTFOLIO	727	2.4%	7.1%	21.6	0.97
RUSSELL 1000V	727	2.4%	7.1%	21.6	0.97



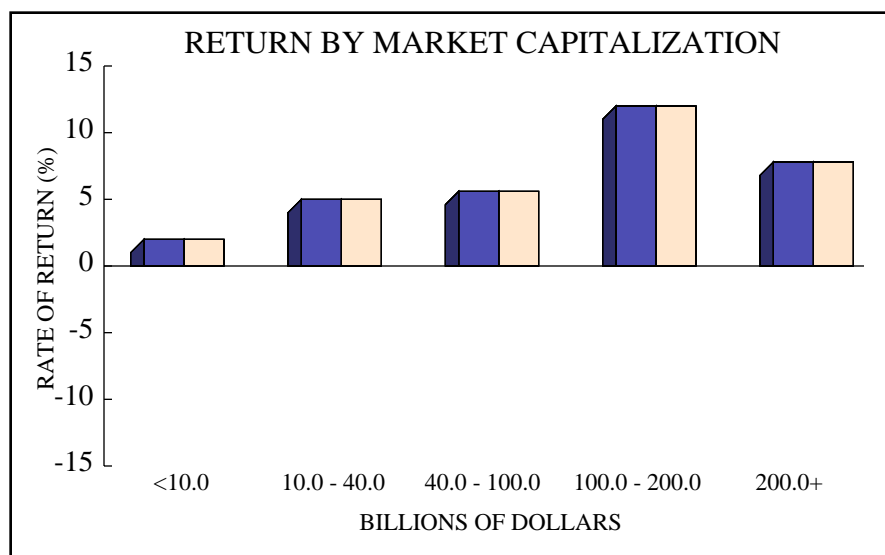
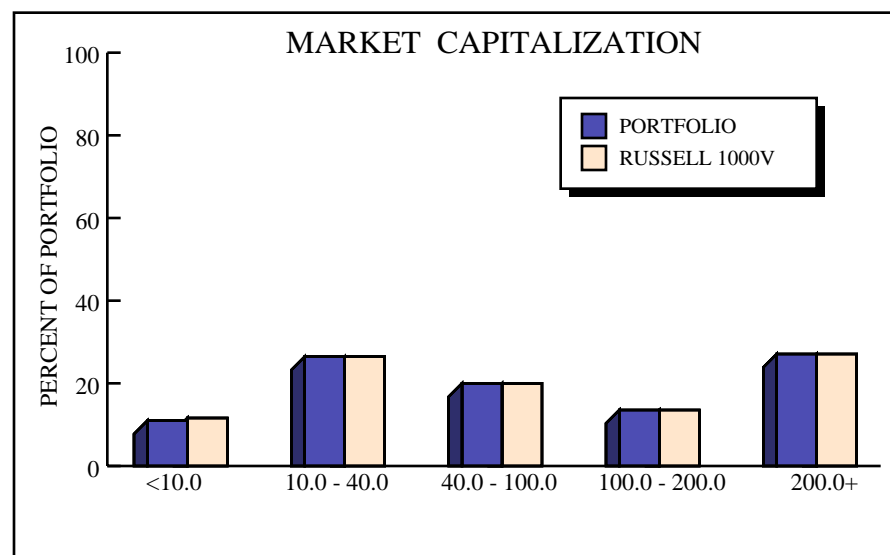
STOCK INDUSTRY ANALYSIS



■ PORTFOLIO ■ RUSSELL 1000V



TOP TEN HOLDINGS



TOP TEN EQUITY HOLDINGS

RANK	NAME	VALUE	% EQUITY	RETURN	INDUSTRY SECTOR	MKT CAP
1	JPMORGAN CHASE & CO	\$ 418,185	2.77%	8.9%	Finance	\$ 379.2 B
2	BERKSHIRE HATHAWAY INC-CL B	401,670	2.66%	14.7%	Finance	292.4 B
3	EXXON MOBIL CORP	399,169	2.64%	3.8%	Energy	360.0 B
4	JOHNSON & JOHNSON	337,135	2.23%	14.6%	NonDur Cons Goods	370.7 B
5	BANK OF AMERICA CORP	303,939	2.01%	5.0%	Finance	294.3 B
6	PFIZER INC	283,370	1.88%	22.5%	NonDur Cons Goods	258.3 B
7	AT&T INC	270,487	1.79%	6.2%	Service	243.9 B
8	CHEVRON CORP	258,133	1.71%	-2.4%	Energy	234.3 B
9	CISCO SYSTEMS INC	253,807	1.68%	13.9%	Computer Tech	222.4 B
10	WELLS FARGO & CO	252,866	1.67%	-4.5%	Finance	253.1 B

CITY OF CHARLOTTE LONG-TERM INVESTMENT PROGRAM
ROTHSCHILD - SMALL/MID CAP
PERFORMANCE REVIEW
SEPTEMBER 2018

INVESTMENT RETURN

On September 30th, 2018, the City of Charlotte Long-Term Investment Program's Rothschild Small/Mid Cap portfolio was valued at \$16,990,302, representing an increase of \$912,343 from the June quarter's ending value of \$16,077,959. Last quarter, the Fund posted withdrawals totaling \$42,127, which partially offset the portfolio's net investment return of \$954,470. Since there were no income receipts for the third quarter, the portfolio's net investment return figure was the product of net realized and unrealized capital gains totaling \$954,470.

RELATIVE PERFORMANCE

During the third quarter, the Rothschild Small/Mid Cap portfolio returned 5.9%, which was 1.2% above the Russell 2500 Index's return of 4.7% and ranked in the 30th percentile of the Smid Cap universe. Over the trailing twelve-month period, this portfolio returned 16.3%, which was 0.1% above the benchmark's 16.2% performance, and ranked in the 40th percentile. Since June 2011, the account returned 13.9% per annum and ranked in the 20th percentile. For comparison, the Russell 2500 returned an annualized 12.1% over the same time frame.

ASSET ALLOCATION

The portfolio was fully invested in the Rothschild Smid Cap Fund.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / FYTD	1 Year	3 Year	5 Year	Since 06/11
Total Portfolio - Gross	5.9	16.3	16.2	13.4	13.9
<i>SMID CAP RANK</i>	(30)	(40)	(44)	(21)	(20)
Total Portfolio - Net	5.7	15.2	15.0	12.3	12.7
Russell 2500	4.7	16.2	16.1	11.4	12.1
SMid Cap Equity - Gross	5.9	16.3	16.2	13.4	13.9
<i>SMID CAP RANK</i>	(30)	(40)	(44)	(21)	(20)
Russell 2500	4.7	16.2	16.1	11.4	12.1

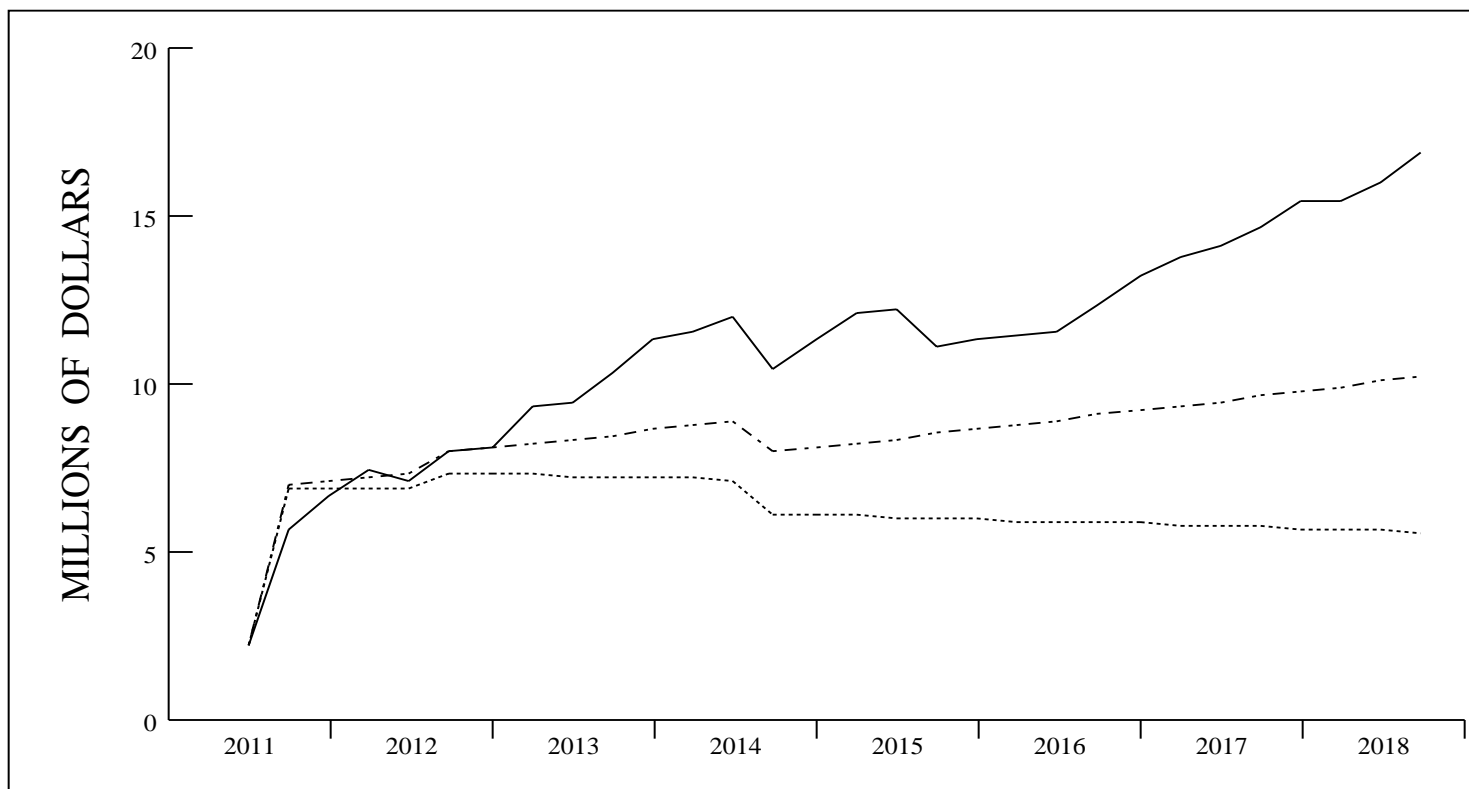
ASSET ALLOCATION

SMid Cap Equity	100.0%	\$ 16,990,302
Total Portfolio	100.0%	\$ 16,990,302

INVESTMENT RETURN

Market Value 6/2018	\$ 16,077,959
Contribs / Withdrawals	- 42,127
Income	0
Capital Gains / Losses	954,470
Market Value 9/2018	\$ 16,990,302

INVESTMENT GROWTH

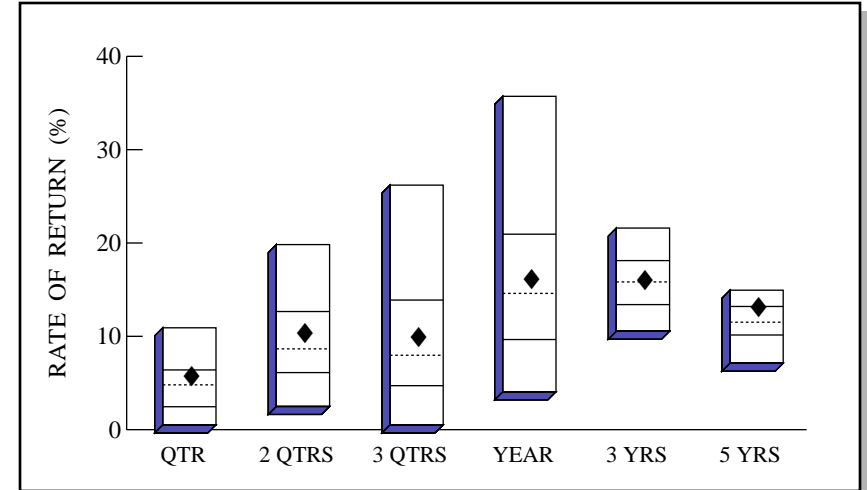
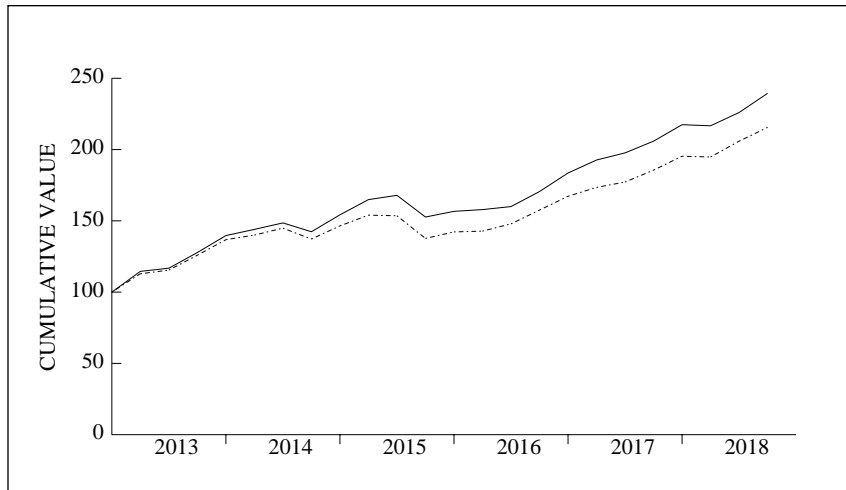


— ACTUAL RETURN
 - - - 7.75%
 0.0%

VALUE ASSUMING
 7.75% RETURN \$ 10,261,398

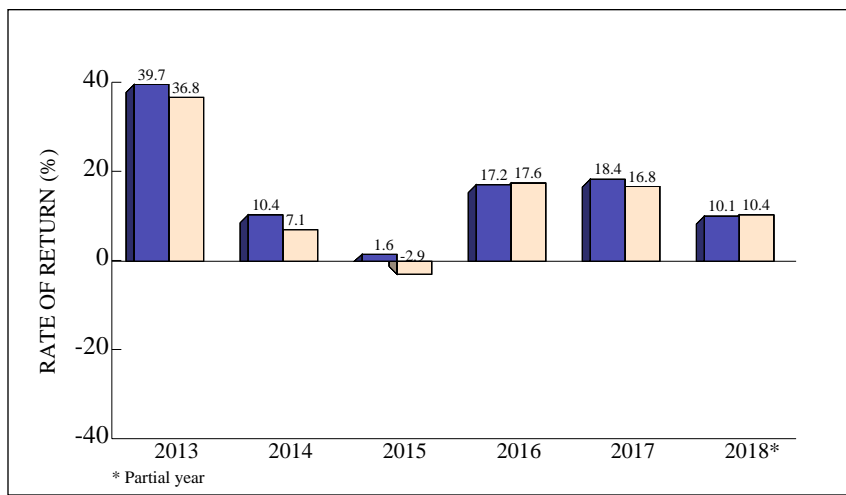
	LAST QUARTER	PERIOD 6/11 - 9/18
BEGINNING VALUE	\$ 16,077,959	\$ 2,294,451
NET CONTRIBUTIONS	- 42,127	3,348,070
<u>INVESTMENT RETURN</u>	<u>954,470</u>	<u>11,347,781</u>
ENDING VALUE	\$ 16,990,302	\$ 16,990,302
INCOME	0	0
<u>CAPITAL GAINS (LOSSES)</u>	<u>954,470</u>	<u>11,347,781</u>
INVESTMENT RETURN	954,470	11,347,781

TOTAL RETURN COMPARISONS



■ ——— PORTFOLIO
■ - - - - RUSSELL 2500

Smid Cap Universe

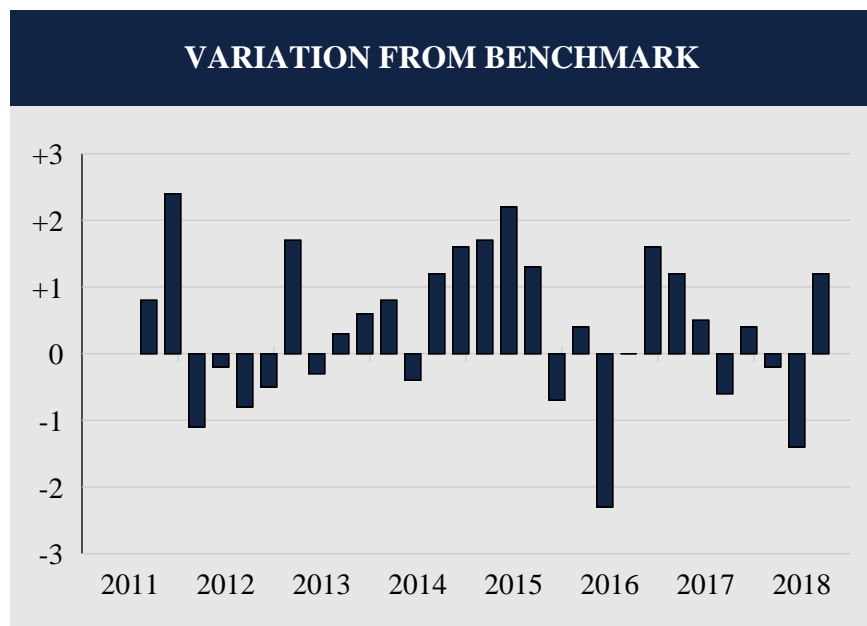


	QTR	2 QTRS	3 QTRS	YEAR	-----ANNUALIZED-----	
					3 YRS	5 YRS
RETURN	5.9	10.5	10.1	16.3	16.2	13.4
(RANK)	(30)	(38)	(43)	(40)	(44)	(21)
5TH %ILE	10.9	19.8	26.2	35.7	21.6	15.0
25TH %ILE	6.4	12.7	13.9	20.9	18.1	13.2
MEDIAN	4.8	8.7	8.0	14.6	15.8	11.5
75TH %ILE	2.5	6.1	4.7	9.7	13.4	10.2
95TH %ILE	0.5	2.5	0.5	4.1	10.5	7.1
Russ 2500	4.7	10.7	10.4	16.2	16.1	11.4

Smid Cap Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

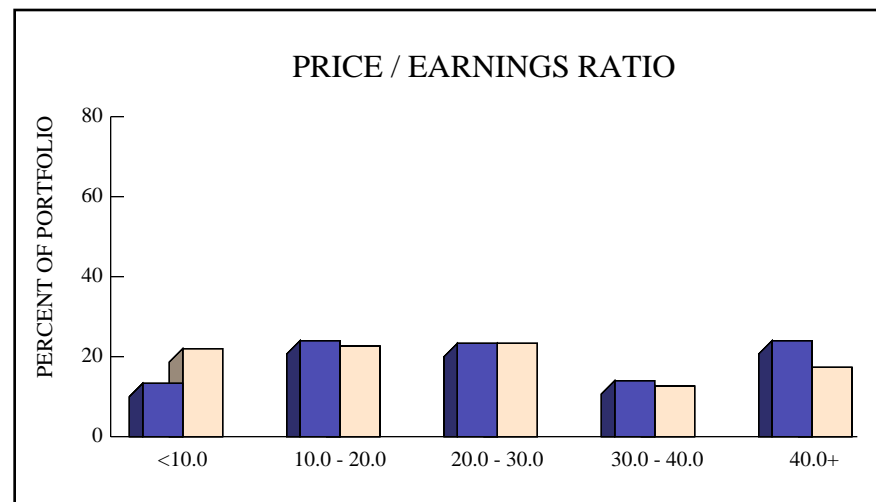
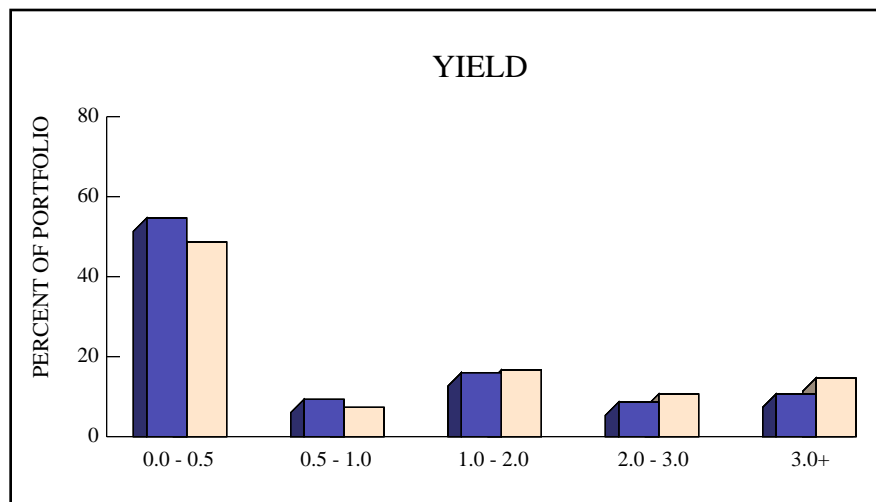
COMPARATIVE BENCHMARK: RUSSELL 2500



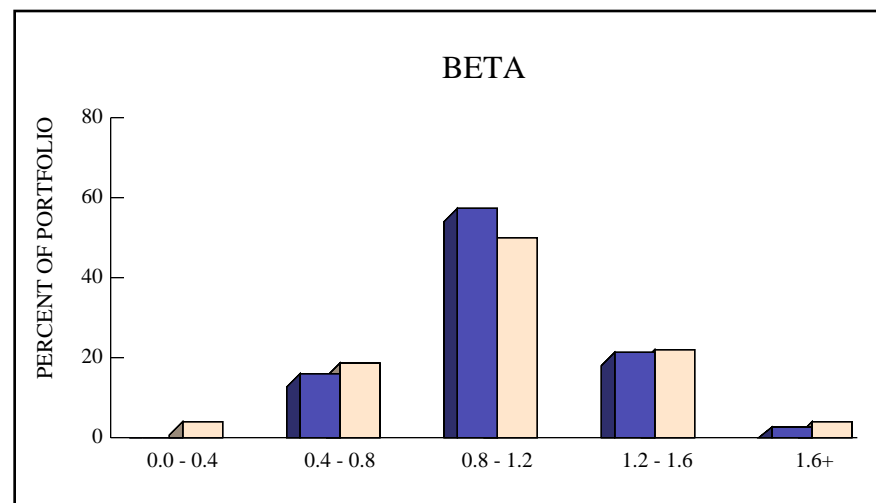
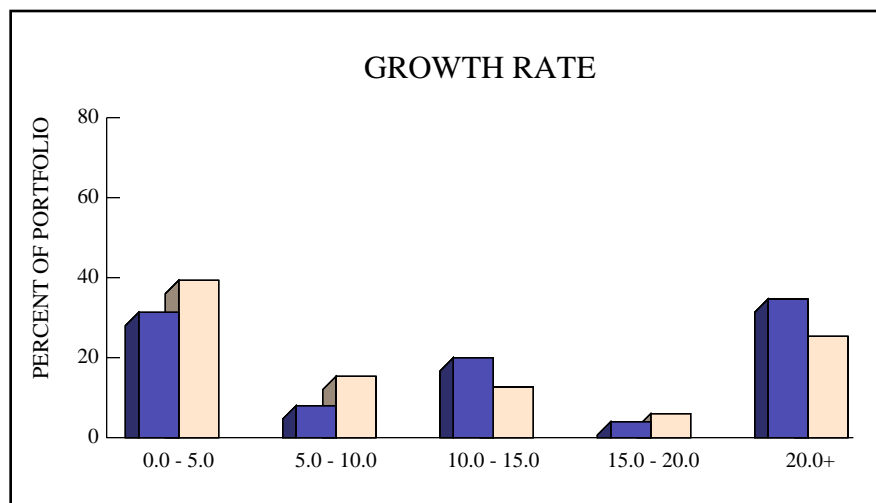
Total Quarters Observed	29
Quarters At or Above the Benchmark	18
Quarters Below the Benchmark	11
Batting Average	.621

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
9/11	-20.4	-21.2	0.8
12/11	16.9	14.5	2.4
3/12	11.9	13.0	-1.1
6/12	-4.3	-4.1	-0.2
9/12	4.8	5.6	-0.8
12/12	2.6	3.1	-0.5
3/13	14.6	12.9	1.7
6/13	2.0	2.3	-0.3
9/13	9.4	9.1	0.3
12/13	9.3	8.7	0.6
3/14	3.1	2.3	0.8
6/14	3.2	3.6	-0.4
9/14	-4.2	-5.4	1.2
12/14	8.4	6.8	1.6
3/15	6.9	5.2	1.7
6/15	1.9	-0.3	2.2
9/15	-9.0	-10.3	1.3
12/15	2.6	3.3	-0.7
3/16	0.8	0.4	0.4
6/16	1.3	3.6	-2.3
9/16	6.6	6.6	0.0
12/16	7.7	6.1	1.6
3/17	4.9	3.7	1.2
6/17	2.6	2.1	0.5
9/17	4.1	4.7	-0.6
12/17	5.6	5.2	0.4
3/18	-0.4	-0.2	-0.2
6/18	4.3	5.7	-1.4
9/18	5.9	4.7	1.2

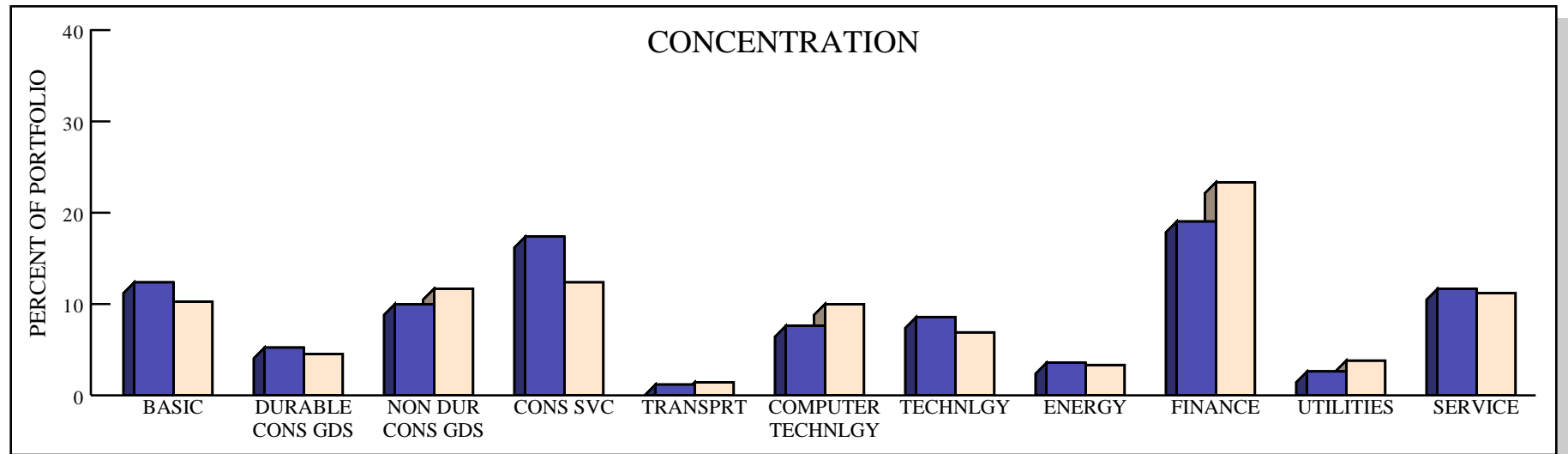
STOCK CHARACTERISTICS



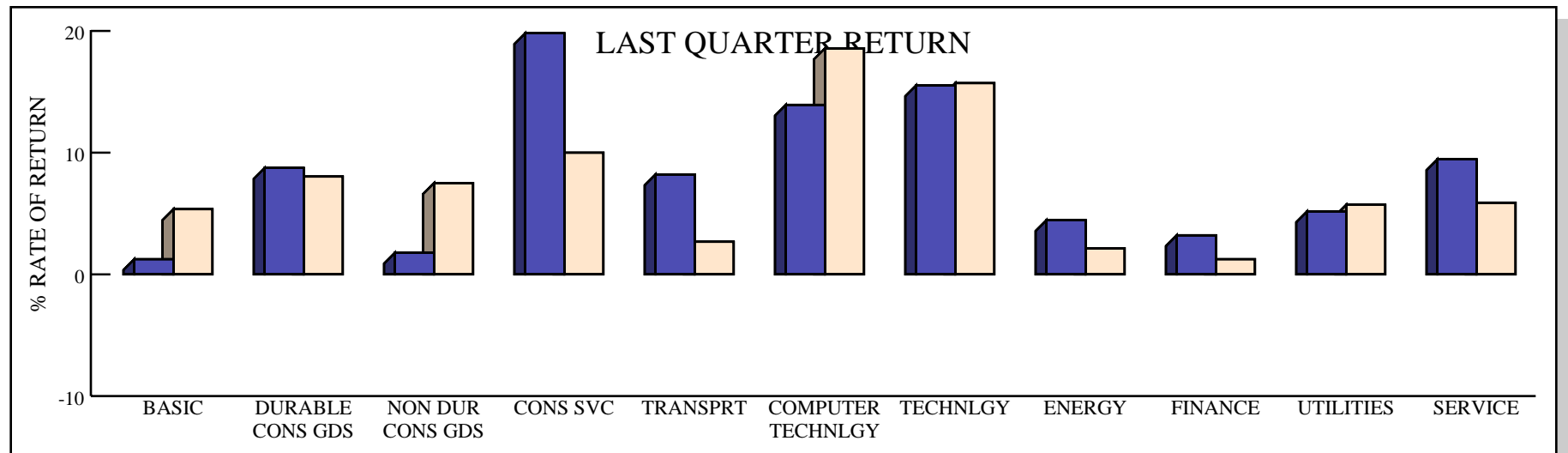
	# HOLDINGS	YIELD	GROWTH	P/E	BETA
PORTFOLIO	149	1.0%	15.1%	29.5	1.03
RUSSELL 2500	2,521	1.4%	10.6%	22.5	1.01



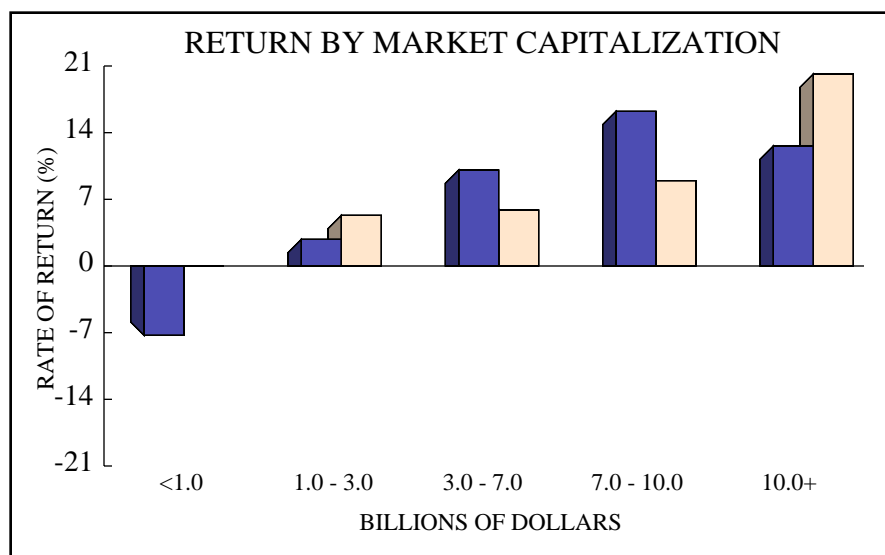
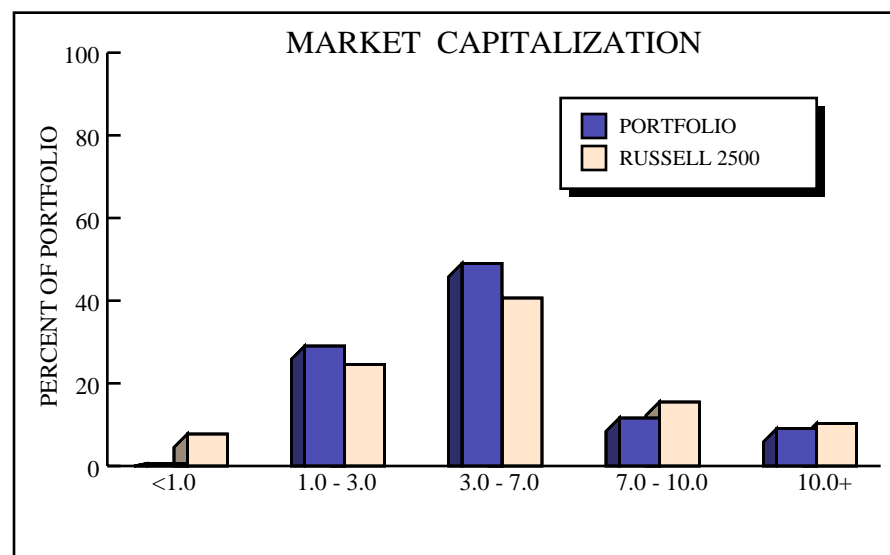
STOCK INDUSTRY ANALYSIS



■ PORTFOLIO ■ RUSSELL 2500



TOP TEN HOLDINGS



TOP TEN EQUITY HOLDINGS

RANK	NAME	VALUE	% EQUITY	RETURN	INDUSTRY SECTOR	MKT CAP
1	GREEN DOT CORP-CLASS A	\$ 237,327	1.40%	21.0%	Finance	\$ 4.7 B
2	INSPERITY INC	237,197	1.40%	24.0%	Service	4.9 B
3	MOLINA HEALTHCARE INC	228,552	1.35%	51.8%	Consumer Service	9.2 B
4	BOTTOMLINE TECHNOLOGIES (DE)	220,457	1.30%	45.9%	Computer Tech	3.1 B
5	AMEDISYS INC	205,434	1.21%	46.2%	Consumer Service	4.0 B
6	HILL-ROM HOLDINGS INC	205,037	1.21%	8.3%	Technology	6.3 B
7	INC.	200,703	1.18%	65.0%	Service	3.6 B
8	REALPAGE INC	194,537	1.14%	19.6%	Computer Tech	6.2 B
9	ENERGEN CORP	192,504	1.13%	18.3%	Energy	8.4 B
10	LIVANOVA PLC	190,046	1.12%	24.2%	Technology	6.0 B

CITY OF CHARLOTTE LONG-TERM INVESTMENT PROGRAM
STATE STREET GLOBAL ADVISORS - EAFE
PERFORMANCE REVIEW
SEPTEMBER 2018

INVESTMENT RETURN

On September 30th, 2018, the City of Charlotte Long-Term Investment Program's State Street Global Advisors EAFE portfolio was valued at \$15,236,925, representing an increase of \$4,145,449 from the June quarter's ending value of \$11,091,476. Last quarter, the Fund posted net contributions equaling \$3,997,212 plus a net investment gain equaling \$148,237. Since there were no income receipts during the quarter, the portfolio's net investment return was the result of net realized and unrealized capital gains totaling \$148,237.

RELATIVE PERFORMANCE

During the third quarter, the State Street Global Advisors EAFE portfolio gained 1.3%, which was 0.1% less than the MSCI EAFE Net Index's return of 1.4% and ranked in the 27th percentile of the International Equity universe. Over the trailing twelve-month period, the portfolio returned 2.7%, which was equal to the benchmark's 2.7% performance, and ranked in the 39th percentile. Since June 2011, the portfolio returned 4.9% per annum and ranked in the 65th percentile. For comparison, the MSCI EAFE Net Index returned an annualized 4.9% over the same time frame.

ASSET ALLOCATION

Last quarter, the portfolio was fully invested in the SSgA MSCI EAFE Index NL Fund.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / FYTD	1 Year	3 Year	5 Year	Since 06/11
Total Portfolio - Gross	1.3	2.7	9.2	4.4	4.9
<i>INTERNATIONAL EQUITY RANK</i>	(27)	(39)	(74)	(75)	(65)
Total Portfolio - Net	1.3	2.6	9.1	4.3	4.8
MSCI EAFE Net	1.4	2.7	9.2	4.4	4.9
International Equity - Gross	1.3	2.7	9.2	4.4	4.9
<i>INTERNATIONAL EQUITY RANK</i>	(27)	(39)	(74)	(75)	(65)
MSCI EAFE Net	1.4	2.7	9.2	4.4	4.9

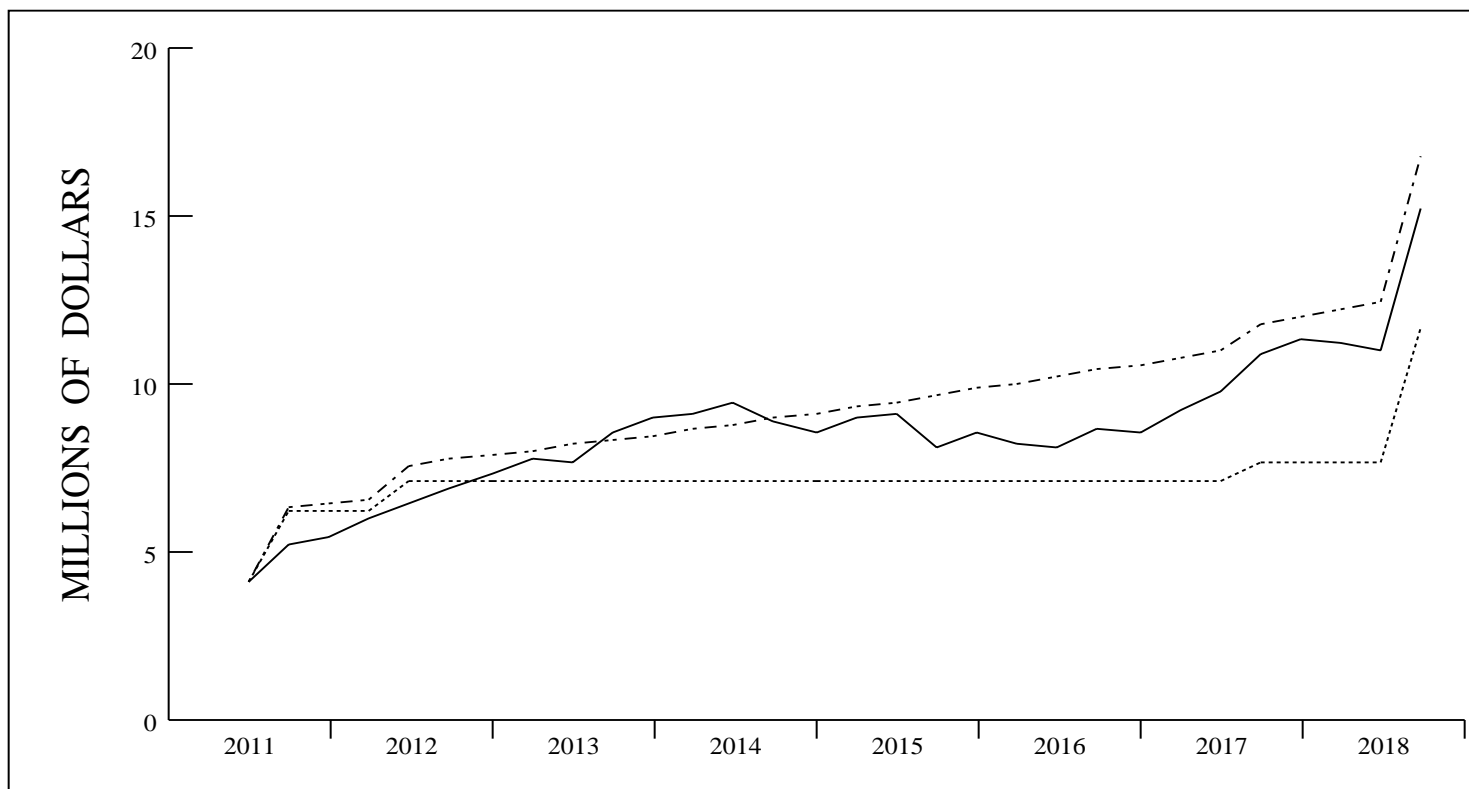
ASSET ALLOCATION

Int'l Equity	100.0%	\$ 15,236,925
Total Portfolio	100.0%	\$ 15,236,925

INVESTMENT RETURN

Market Value 6/2018	\$ 11,091,476
Contribs / Withdrawals	3,997,212
Income	0
Capital Gains / Losses	148,237
Market Value 9/2018	\$ 15,236,925

INVESTMENT GROWTH

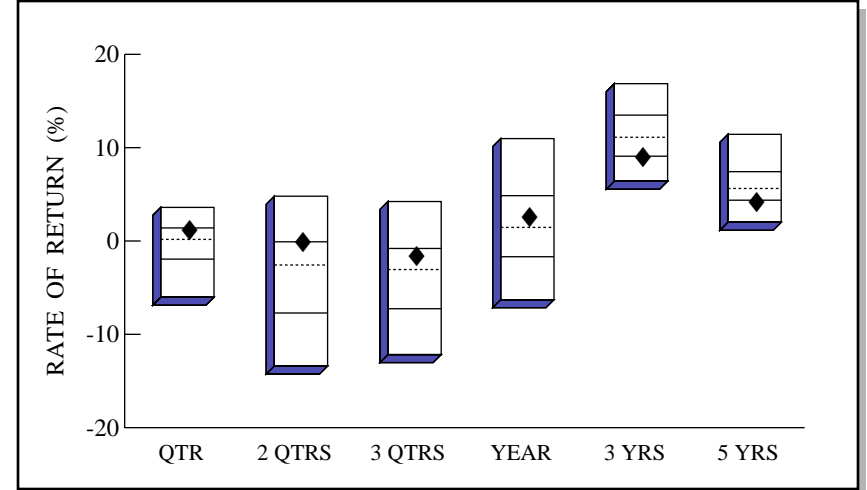
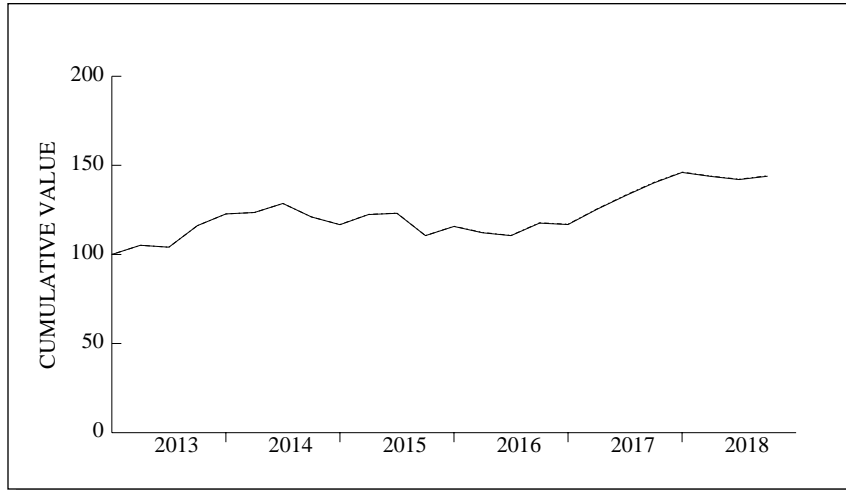


—	ACTUAL RETURN
- - -	7.75%
.....	0.0%

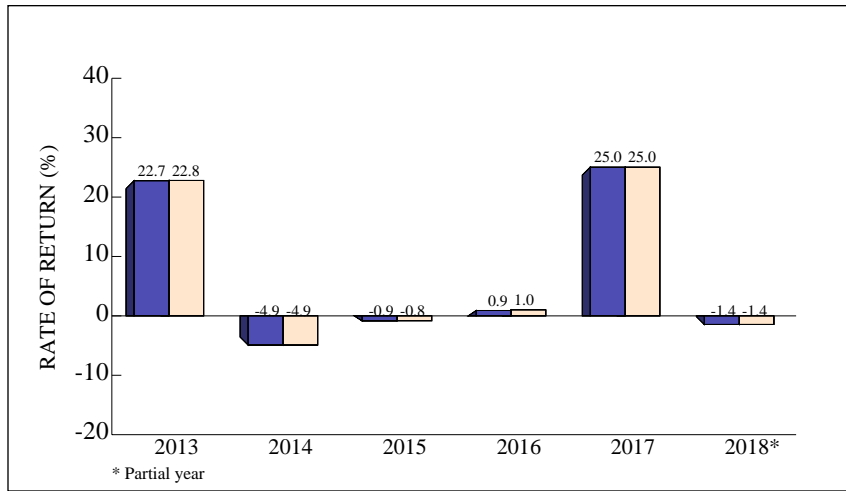
VALUE ASSUMING	
7.75% RETURN	\$ 16,778,294

	LAST QUARTER	PERIOD 6/11 - 9/18
BEGINNING VALUE	\$ 11,091,476	\$ 4,174,153
NET CONTRIBUTIONS	3,997,212	7,544,635
<u>INVESTMENT RETURN</u>	<u>148,237</u>	<u>3,518,137</u>
ENDING VALUE	\$ 15,236,925	\$ 15,236,925
INCOME	0	0
<u>CAPITAL GAINS (LOSSES)</u>	<u>148,237</u>	<u>3,518,137</u>
INVESTMENT RETURN	148,237	3,518,137

TOTAL RETURN COMPARISONS



International Equity Universe

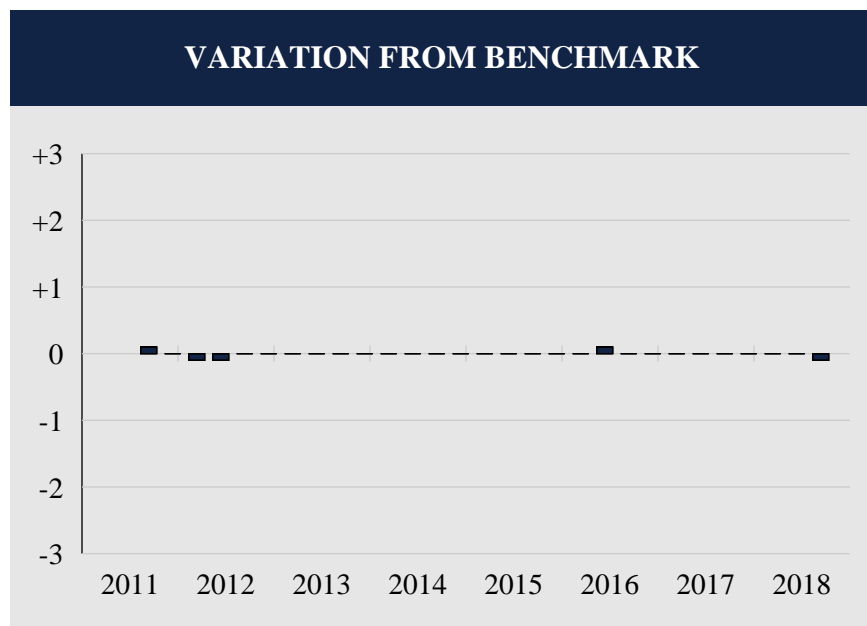


	QTR	2 QTRS	3 QTRS	YEAR	-----ANNUALIZED----- 3 YRS	5 YRS
RETURN	1.3	0.1	-1.4	2.7	9.2	4.4
(RANK)	(27)	(24)	(34)	(39)	(74)	(75)
5TH %ILE	3.6	4.8	4.2	11.0	16.9	11.4
25TH %ILE	1.4	-0.1	-0.8	4.9	13.5	7.4
MEDIAN	0.2	-2.6	-3.1	1.5	11.1	5.6
75TH %ILE	-1.9	-7.7	-7.3	-1.7	9.1	4.4
95TH %ILE	-6.0	-13.4	-12.2	-6.3	6.4	2.0
EAFE Net	1.4	0.1	-1.4	2.7	9.2	4.4

International Equity Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: MSCI EAFE NET



Total Quarters Observed	29
Quarters At or Above the Benchmark	26
Quarters Below the Benchmark	3
Batting Average	.897

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
9/11	-18.9	-19.0	0.1
12/11	3.3	3.3	0.0
3/12	10.8	10.9	-0.1
6/12	-7.2	-7.1	-0.1
9/12	6.9	6.9	0.0
12/12	6.6	6.6	0.0
3/13	5.1	5.1	0.0
6/13	-1.0	-1.0	0.0
9/13	11.6	11.6	0.0
12/13	5.7	5.7	0.0
3/14	0.7	0.7	0.0
6/14	4.1	4.1	0.0
9/14	-5.9	-5.9	0.0
12/14	-3.6	-3.6	0.0
3/15	4.9	4.9	0.0
6/15	0.6	0.6	0.0
9/15	-10.2	-10.2	0.0
12/15	4.7	4.7	0.0
3/16	-3.0	-3.0	0.0
6/16	-1.4	-1.5	0.1
9/16	6.4	6.4	0.0
12/16	-0.7	-0.7	0.0
3/17	7.2	7.2	0.0
6/17	6.1	6.1	0.0
9/17	5.4	5.4	0.0
12/17	4.2	4.2	0.0
3/18	-1.5	-1.5	0.0
6/18	-1.2	-1.2	0.0
9/18	1.3	1.4	-0.1

CITY OF CHARLOTTE LONG-TERM INVESTMENT PROGRAM
PIMCO - TOTAL RETURN
PERFORMANCE REVIEW
SEPTEMBER 2018

INVESTMENT RETURN

On September 30th, 2018, the City of Charlotte Long-Term Investment Program's PIMCO Total Return portfolio was valued at \$18,395,829, representing an increase of \$9,028,470 from the June quarter's ending value of \$9,367,359. Last quarter, the Fund posted net contributions equaling \$9,000,000 plus a net investment gain equaling \$28,470. Net investment return was a result of \$76,072 in income receipts and \$47,602 in net realized and unrealized capital losses.

RELATIVE PERFORMANCE

During the third quarter, the PIMCO Total Return portfolio gained 0.2%, which was 0.2% greater than the Bloomberg Barclays Aggregate Index's return of 0.0% and ranked in the 54th percentile of the Core Fixed Income universe. Over the trailing twelve-month period, this portfolio returned -1.1%, which was 0.1% above the benchmark's -1.2% return, and ranked in the 76th percentile. Since June 2011, the portfolio returned 3.3% per annum and ranked in the 24th percentile. For comparison, the Bloomberg Barclays Aggregate Index returned an annualized 2.5% over the same period.

ASSET ALLOCATION

The portfolio was fully invested in the PIMCO Total Return Instl Fund (PTTRX) at the end of the quarter.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / FYTD	1 Year	3 Year	5 Year	Since 06/11
Total Portfolio - Gross	0.2	-1.1	2.6	2.7	3.3
<i>CORE FIXED INCOME RANK</i>	(54)	(76)	(11)	(35)	(24)
Total Portfolio - Net	0.1	-1.5	2.2	2.3	2.8
Aggregate Index	0.0	-1.2	1.3	2.2	2.5
Domestic Fixed Income - Gross	0.2	-1.1	2.6	2.7	3.3
<i>CORE FIXED INCOME RANK</i>	(54)	(76)	(11)	(35)	(24)
Aggregate Index	0.0	-1.2	1.3	2.2	2.5

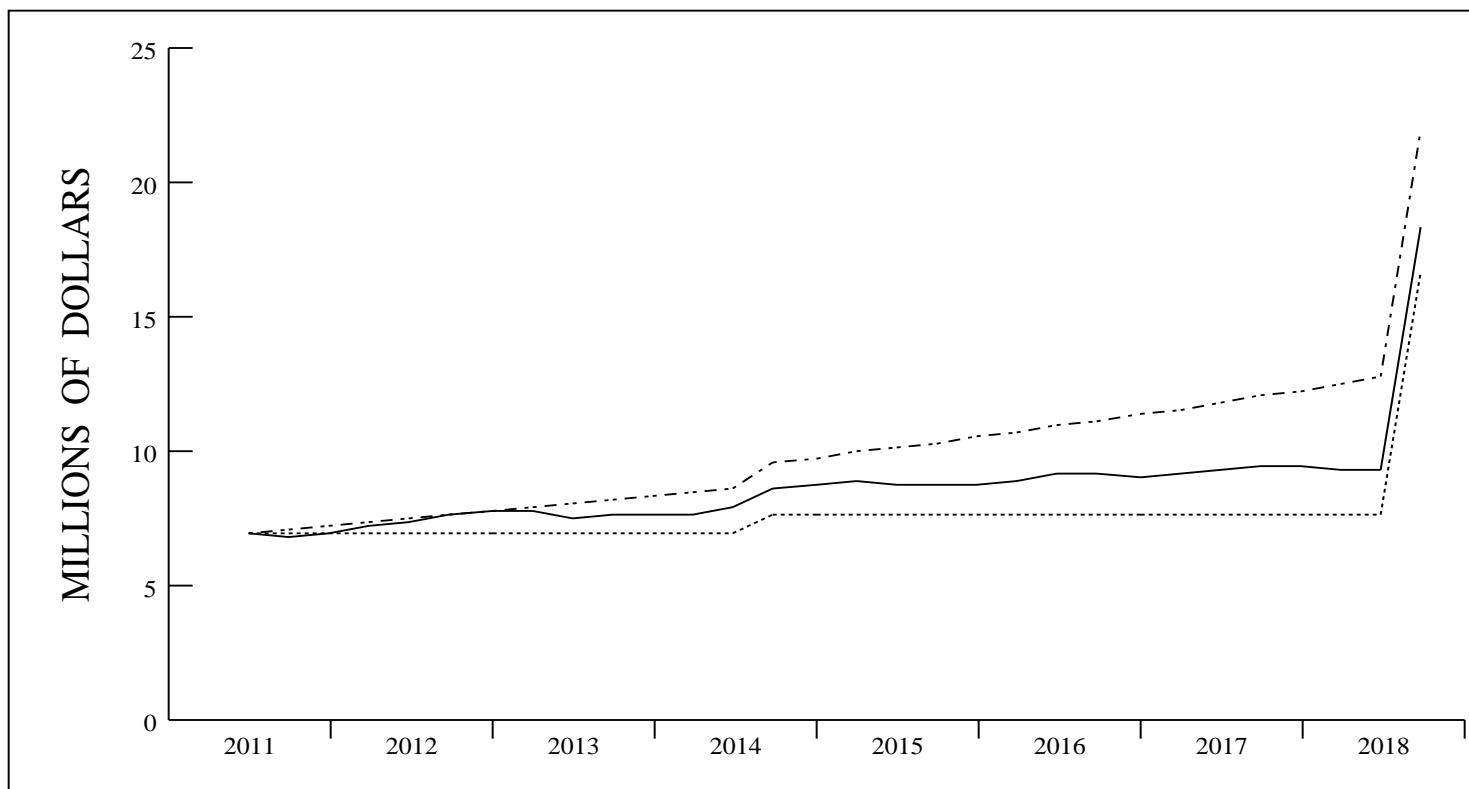
ASSET ALLOCATION

Domestic Fixed	100.0%	\$ 18,395,829
Total Portfolio	100.0%	\$ 18,395,829

INVESTMENT RETURN

Market Value 6/2018	\$ 9,367,359
Contribs / Withdrawals	9,000,000
Income	76,072
Capital Gains / Losses	-47,602
Market Value 9/2018	\$ 18,395,829

INVESTMENT GROWTH

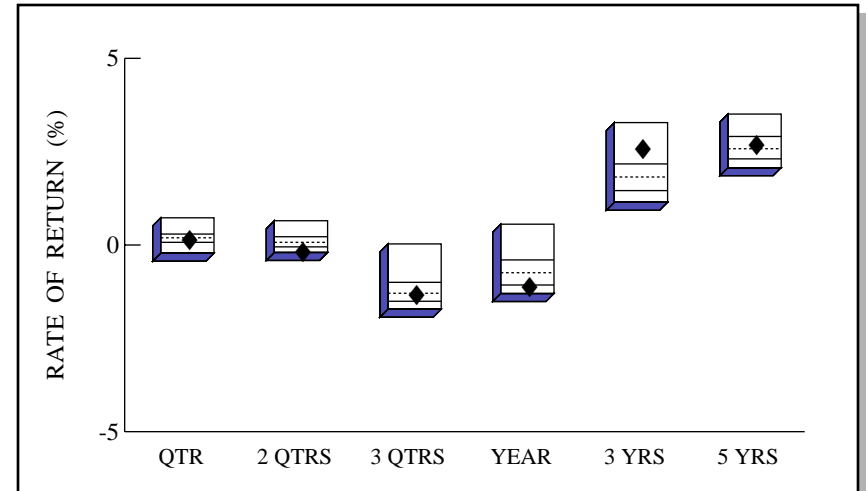
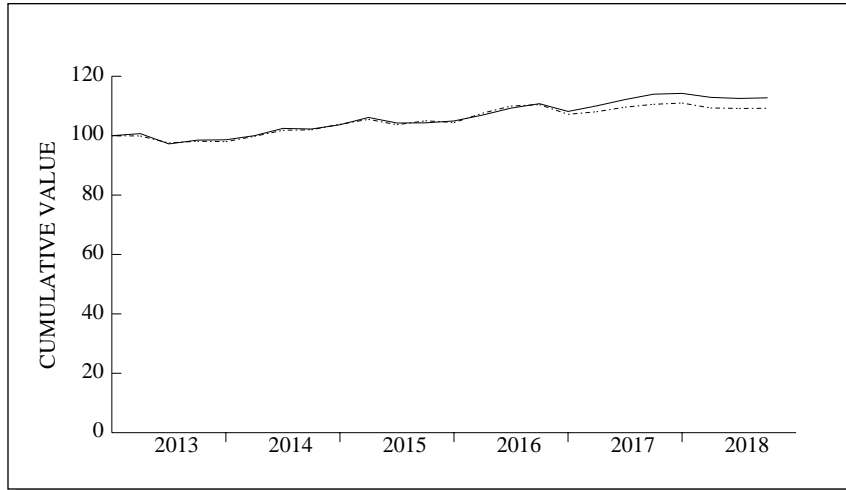


— ACTUAL RETURN
 - - - 7.75%
 . . . 0.0%

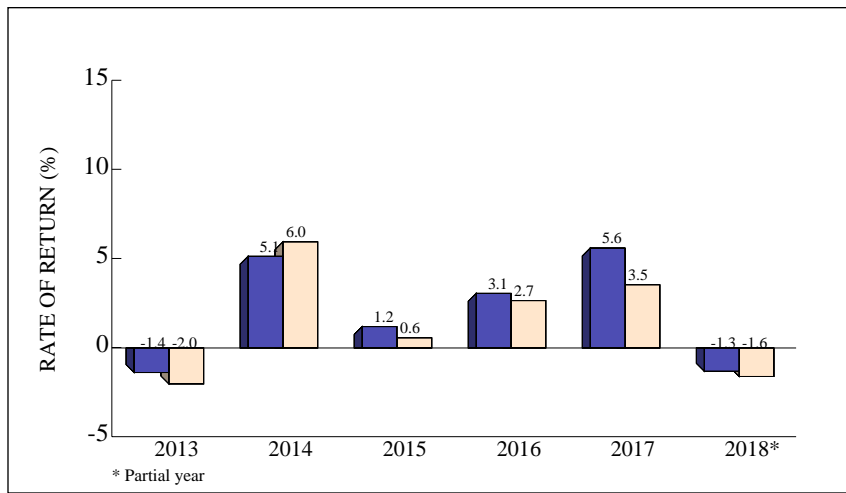
VALUE ASSUMING
 7.75% RETURN \$ 22,049,065

	LAST QUARTER	PERIOD 6/11 - 9/18
BEGINNING VALUE	\$ 9,367,359	\$ 6,981,036
NET CONTRIBUTIONS	9,000,000	9,750,597
INVESTMENT RETURN	28,470	1,664,196
ENDING VALUE	\$ 18,395,829	\$ 18,395,829
INCOME	76,072	2,563,639
CAPITAL GAINS (LOSSES)	- 47,602	- 899,443
INVESTMENT RETURN	28,470	1,664,196

TOTAL RETURN COMPARISONS



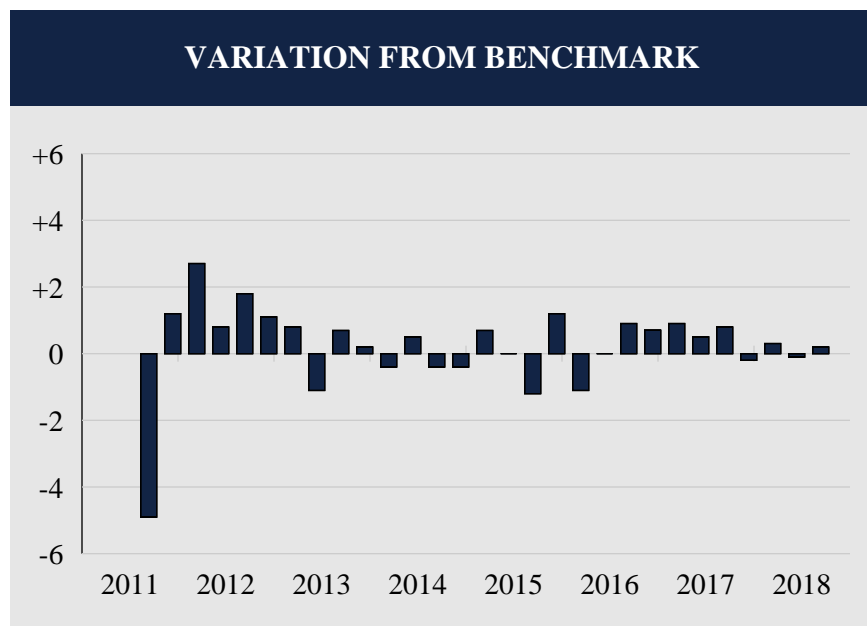
Core Fixed Income Universe



	QTR	2 QTRS	3 QTRS	YEAR	-----ANNUALIZED-----	
					3 YRS	5 YRS
RETURN	0.2	-0.1	-1.3	-1.1	2.6	2.7
(RANK)	(54)	(89)	(52)	(76)	(11)	(35)
5TH %ILE	0.7	0.7	0.0	0.6	3.3	3.5
25TH %ILE	0.3	0.2	-1.0	-0.4	2.2	2.9
MEDIAN	0.2	0.1	-1.3	-0.7	1.8	2.6
75TH %ILE	0.1	-0.1	-1.5	-1.1	1.5	2.3
95TH %ILE	-0.2	-0.2	-1.7	-1.3	1.1	2.1
Agg	0.0	-0.1	-1.6	-1.2	1.3	2.2

Core Fixed Income Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY
COMPARATIVE BENCHMARK: BLOOMBERG BARCLAYS AGGREGATE INDEX



RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
9/11	-1.1	3.8	-4.9
12/11	2.3	1.1	1.2
3/12	3.0	0.3	2.7
6/12	2.9	2.1	0.8
9/12	3.4	1.6	1.8
12/12	1.3	0.2	1.1
3/13	0.7	-0.1	0.8
6/13	-3.4	-2.3	-1.1
9/13	1.3	0.6	0.7
12/13	0.1	-0.1	0.2
3/14	1.4	1.8	-0.4
6/14	2.5	2.0	0.5
9/14	-0.2	0.2	-0.4
12/14	1.4	1.8	-0.4
3/15	2.3	1.6	0.7
6/15	-1.7	-1.7	0.0
9/15	0.0	1.2	-1.2
12/15	0.6	-0.6	1.2
3/16	1.9	3.0	-1.1
6/16	2.2	2.2	0.0
9/16	1.4	0.5	0.9
12/16	-2.3	-3.0	0.7
3/17	1.7	0.8	0.9
6/17	1.9	1.4	0.5
9/17	1.6	0.8	0.8
12/17	0.2	0.4	-0.2
3/18	-1.2	-1.5	0.3
6/18	-0.3	-0.2	-0.1
9/18	0.2	0.0	0.2

Total Quarters Observed	29
Quarters At or Above the Benchmark	20
Quarters Below the Benchmark	9
Batting Average	.690

Long-Term Investment Program Advisory Committee
SPECIAL MEETING MINUTES

October 18, 2018

1:00PM – 2:00PM

Room 986, 9th Floor Large Conference Room

Attendees: Board Members – Robert Campbell, Teresa Smith, Scott Greer, Sheila Simpson, Sandy Ryland
Staff – Liza Steiner
Partners – Grant Kalson by phone
Visitors – Antoine Gibson

A. Short-Term Funds for OPEB Cash Flow

Sandy Ryland called the meeting to order and asked the visitor to the meeting to introduce himself. Antoine Gibson works for Edward Jones and is interested in learning more about the City and the investment world as he is new to Edward Jones.

Sandy handed out the Investment Grade Short Duration Fixed Income Options packet prepared by Dahab that outlined the consultant's recommended options for the OPEB cash flow. Grant then began describing each of the funds. Scott Greer asked what the difference in risk was between pages one and two of the handout. Grant said it is basically no risk on page two and a little on page one. He stated that he recommends page one options because he knows the cash flow needs of the fund and since the funds are low risk, the City could earn more interest with any of those options. The performance would justify the amount of risk. Robert Campbell asked how the options on page one compare on liquidity. Grant said there is a remote chance of a liquidity issue with Shroders but none with Vanguard or Johnson Institutional Management (Johnson).

Scott asked if the returns were correlated to the federal funds rate, and Grant said yes. It is difficult to compare short investments to money markets. Scott noted that this money is our cash fund and he feels more comfortable with using a money market instead of a short investment fund. Sandy agreed. He also mentioned that the size of the Shroders fund is a concern since it is smaller, and Sandy and Teresa Smith agreed. Sheila suggested that we move that one off the table and everyone agreed.

Robert asked if we considered the government fund at NCCMT along with the term fund. Grant said he did not separate those out. Scott commented that the Vanguard size is better and Sandy added that the size helps with the extra risk from duration on the Vanguard option from page one. Robert noted that he did not like any high yield, which

the Vanguard short investment fund has, and Grant said that leaves Johnson as the only candidate from page one.

Grant stated that expectations are that the federal funds rate will go up over the next year, so if the Board chose a money market fund, it would be getting in at the right time. It is a good time to choose this type. Sandy mentioned that the concerns with Johnson are cost and having a separate account. Scott asked if they would be using our estimated cash flow and investing according to it, and Grant said yes. Grant noted that by the 2nd or 3rd year, there would be an established pattern and the value of this approach would be clearer at that time.

Robert asked if we could recap the discussion. He stated that the goal is to have cash flow, not to earn interest. Sandy noted that the funds are the City's actual budget, not long term investment monies. Robert asked if there is a compelling reason to use a fund other than NCCMT. Sheila stated that she thinks Vanguard is the best option. Sandy agreed. Teresa stated that her choices are NCCMT and Vanguard. Scott noted that since the City has money at NCCMT already, Vanguard would be a diversification. He asked if we want to diversify or stay local with NCCMT with whom we are very familiar. Sheila and Robert agreed they were comfortable with either choice. Teresa stated that she was leaning toward Vanguard, so Sheila moved that the Board use the Vanguard mutual fund as the LTIP vehicle in which to invest current cash in a short term liquid fund. Scott seconded, and all were in favor. Grant noted that it was a good decision especially in the current market environment. He also mentioned that in a year or so, we can revisit the decision to see if there are any changes the Board would like to make. Everyone agreed. Teresa noted that in a year, we will have more experience and will be able to see if this vehicle is a good fit.

Sandy asked Grant what the next steps to set up the account are. He said he would initiate the set up and have Vanguard contact Sandy to begin the process. Sandy made a motion to adjourn the meeting and Scott seconded. All were in favor.

Action Items:

1. Grant will contact Vanguard to initiate the account set up process.
2. Sandy will complete the set up and invest the total budget less any claim reimbursements made before the date of investment.

Attachment

Investment Grade Short Duration Fixed Income Options

**Long-Term Investment Program Advisory Committee
MEETING MINUTES**

December 19, 2018

1:30PM – 3:00PM

CMGC – 1001 Conference Room

Attendees: Board Members – Robert Campbell, Sheila Smith, Scott Greer, Teresa Smith, Sandy Ryland
Partners – Grant Kalson, Mary Jane Cullinan
By Phone – Wayne Owen, Denise D’Entremont, Jeff Kusmierz

A. Approve Meeting Minutes of 5/31/18 Board Meeting – Board

Sandy Ryland called the meeting to order and asked if anyone had any changes to or comments on the 9/6/18 meeting minutes. Teresa Smith recommended a change to page two of the minutes, changing “Treasury Account” to “Treasury Accountant”. Scott Greer made a motion to accept the minutes with the change from Teresa, and Teresa seconded. All were in favor.

B. 9/30/18 Investment Performance Analysis – Grant Kalson

Grant began with the market commentary and LTIP performance. Since 9/30/18, the portfolio has gone from \$111.1 M to \$108.9 M. Although a loss of \$5 M is significant, the portfolio is down less than it could have been because of the amount held in cash. The two bond funds also provided a cushion although they did not perform great. Value stocks have done better than growth, and the LTIP’s exposure there also helped temper the loss. The LTIP’s strategy is conservative, and Grant recommends no change. He does recommend an asset/liability study to look at different scenarios, namely if the current conservative targets can fund the liability. Robert Campbell noted that we do not want a knee-jerk reaction regarding rebalancing or remaining conservative since this investment is a long-term one. He stated that the market is probably just following the normal cycle with this downturn. Grant agreed stating that through September, the portfolio has met the 7.75% target rate.

C. Rothschild Presentation – Mary Jane Cullinan

Mary Jane Cullinan began the presentation asking the group how we wanted her to approach the presentation, and Robert asked that she start with performance. Mary Jane noted that Rothschild manages the small and mid-cap class (SMID-cap) space for the LTIP and has been in partnership with the LTIP for seven years. The initial investment was \$2 million, and as of 11/30/18, the total was \$17.5 M. The November/December downturn caused a loss of \$2.25 M in the fund, which was less of a loss than in other spaces. The LTIP’s SMID-cap fund is comprised of stocks that are “under the radar” or

not as high profile, which offers some protection against the downside. Mary Jane stated that if things go south, Rothschild looks at history. Each year since 2011, the fund has beaten the Russell 2500 benchmark except for two years. They believe that the downturn is just “noise”, and while December has been volatile, the fund is beating the index for the month.

Mary Jane then turned the conversation to the economy. She stated that for next year, we should expect less growth earnings rates because it is hard to duplicate year after year. Rothschild does not expect a recession in 2019 and views the potential downturn simply as investors who are not considered long-run investors pulling back. She also noted that stocks will follow the progress of underlying earnings, so aside from sectors, trade talk, etc. companies will still focus on earnings. In terms of bonds, Rothschild’s view is that bond yields will be de minimis even with fed rate hikes. Overall, Rothschild is optimistic for 2019 because as emotionalism gets played out, there will be opportunities and earnings growth potential.

Mary Jane called attention to pages 27 and 28 in the Rothschild report which shows the SMID-cap price to earnings ratio (P/E) trendline since 1996 when the Russell 2500 began. She stated that the question to ask ourselves when looking at this data is “are we overvalued”? Rothschild does not think so, and Mary Jane noted that investors should be concerned more when prices are high, not when they are correcting. Robert commented that it depends on where you start the trendline.

At this point of the meeting, Robert Campbell and Teresa Smith had to leave for an interview panel.

Mary Jane continued noting that the economy is very different from the 1990s. Intel was the hot technology then, and now the chip is just a commodity. Even Microsoft is basically a commodity now. Sandy noted that even if you look at just a 10-year trendline, the average is still the same. Mary Jane called attention to page 16 which shows that in the City’s fund, healthcare and technology have been the biggest contributors. She also noted that homebuilding is down, and it affects so many sectors. Grant asked if things do go south, is there a time Rothschild would say we need to make some changes? Mary Jane said that they would reduce on the stocks with high growth rates. We should take some of the price value we have earned and start to pull back there. When companies start talking about reductions and changes, Rothschild takes note and listens to the companies. They do not try to guess where the trade war will be so to speak; instead, they consider themselves bottom-up. They will find value in company selection. Grant added that in this approach, the only way you lose is if the whole market goes down.

Mary Jane agreed and commented that this is what happened in December.

Sandy asked if there have or will be any changes in management at Rothschild in the coming year. Mary Jane stated that the investment team is the same and they have a new structure without a CEO. The former CEO had been there for three years and had a strategy of asset gathering. He wanted to continue that strategy and continue to grow, so he left the company. There is no real organization change, but they are operating with no CEO. Mary Jane then mentioned that we are currently in a commingled account but wanted to know if we are interested in moving into a separate account. She noted that there are price savings opportunities in a separate account. Grant asked if a separate account would cause more accounting. Sandy stated that the Board would have to look into that and asked what would be the reason for the change. Mary Jane noted fees, daily liquidity and we can always know exactly how much the account is worth.

D. Rhumblin Presentation & Discussion by Phone – Wayne Owen, Denise D’Entremont, Jeff Kusmierz

The call began with everyone introducing themselves and then the Rhumblin staff began the presentation. The fund follows the Russell Growth 1000 index and the LTIP’s initial investment was in August 2017. Since then, the fund has increased in value by \$1.6 M. The best sectors have been consumer discretionary and healthcare, while the worst have been energy and utilities. Rhumblin owns every stock at its weight in the index, meaning if the index has 4% of its portfolio in a company, Rhumblin has that percentage as well. Grant asked what the difference is between Rhumblin and a company such as Vanguard which might jump on index changes mid-year. He asked if there is anything Rhumblin does to work around the list of securities held. Jeff Kusmierz answered saying they do not respond that way because of risk in tracking errors. Grant asked about the trend of 0% fees. Jeff stated that it has not impacted Rhumblin. Fidelity started it, and some places push other higher cost items to recoup that cost, but Rhumblin does not. They consider passive management as their only source of revenue. Jeff noted that they know all their clients, and clients can call to talk directly to their portfolio managers. He stated that Rhumblin has won business from larger providers because of its customer service. Denise commented that Rhumblin still has its first client who started with them in 1990. They currently have 225 clients including many public funds. About 1/3 of their business is customization as they have many clients with restrictions, such as religious organizations.

Grant asked if they see a growing appetite for environmental, sustainable, and governance (ESG) investing, and Jeff responded not yet. The question does come up but there does not seem to be a huge interest yet.

Sandy asked about their outlook for 2019 and if they have any staffing changes. Jeff stated that it will probably be volatile, but because economic data is still good, it is hard to see a recession. Since they are passive management, there are no real trends, but they will stay the course and provide as much customization and flexibility as possible. As far as the company goes, Denise noted that they may be adding some senior staff in the next six to eight months.

Action Items:

1. Sandy to ask Financial Reporting about additional accounting associated with a separate Rothschild account vs. the current commingled account.

City of Charlotte Long-Term Investment Program

Performance Review
December 2018

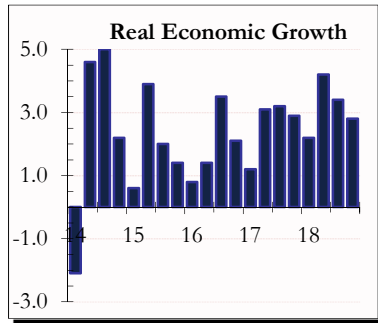


DAHAB ASSOCIATES
New York Massachusetts Pennsylvania Florida

ECONOMIC ENVIRONMENT

Staying Power

The US economy chugged along despite a trade war with China, entrenched beltway politics, higher short-term interest rates, and falling market prices. Third quarter GDP growth was 3.4% and the latest Q4 estimate is 2.8%. Why so healthy? Several factors contributed: government spending, corporate capital investment, inventory buildup, and consumer buying. Job growth was impressive in 2018, with 2.6 million more workers added to the rolls, and 312,000 new jobs added in December alone. While new and existing home sales fell during the quarter, existing home sales (*annualized as of November*) remained a robust 5.3 million. Importantly, inflation remained tame for both the quarter and the year.



Corporate manufacturing and services industries continued to expand, but the rate of growth diminished. Yet virtually all the individual industry sectors reported some growth. Consumer sentiment was off its recent high, but solidly above neutral. Consumers were happy with their current situation, but less so regarding the short-term future. In December, the Federal Reserve followed through on a final rate hike. Arguably, four increases in 2018 put a brake on the economy. However, Fed Chairman Jerome Powell also stated that additional increases may not occur because rates have already climbed to “the lower end of the neutral rate range.” Translation: expect no rate increases for a while!

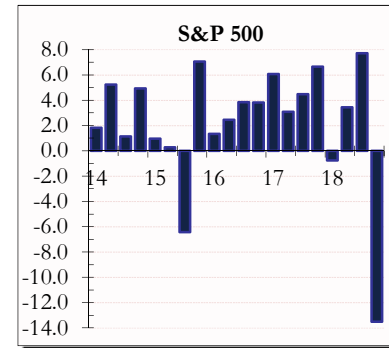
Commodity prices fell more than 9% for the quarter, mostly due to collapsing oil prices (-36%). The dollar’s strength and a slower Chinese economy also stymied the price of metals. Among commodities, the only bright lights were cocoa (+16.5%) and gold (+7.2%). While the economy accelerated during the quarter, the stock markets fell back. Brexit uncertainty and a simmering trade war were just two factors that contributed to an equities meltdown. Other contributors included a partial Government shutdown late in the year, lower anticipated corporate earnings, the huge and growing

Federal deficit, and very high stock prices at the beginning of October. Spoiler alert: cash became king.

DOMESTIC EQUITIES

Volatility and a Downward Slide

All of the major stock indices lost ground for the quarter. The NASDAQ’s tech stocks tumbled 17.3%. The S&P 500 lost 13.5%, and the DJIA, which is more defensive in nature, dropped 11.3%. Growth stocks, which had soared through September, fell more than value stocks. Among large companies, the Russell 1000 Growth Index lost 15.9% vs. the Russell 1000 Value Index, which was off 11.7%. The same pattern held true for smaller names, although declines were steeper. For example, the Russell Microcap Growth Index was pummeled 25% vs. a 19.5% drop for the Microcap Value Index. The growth–value disparity existed because growth stocks were already priced to “perfection,” but, this was not the case for value names.



With the exception of utilities, stocks in every other S&P sector ended in negative territory. Given the plunge in oil prices, the energy sector was the worst performer, down 23.8%. The IT sector, including the so-called FAANG (Apple added to the old FANG) stocks, gave back 17.3%. Industrials, consumer discretionary and telecom names weren’t far behind. Healthcare performed somewhat better (-8.7%) on the strength of new products and mergers. Consumer staples (-5.2%) benefited from sizable job growth. Finally, the “run for cover” utilities sector eked out a 1.4% gain. Even there, stocks of some utilities such as NextEra were in the black while others like PG&E were hemorrhaging. Overall, it was a tough quarter for stocks.

The market’s run-up through September partially offset the fourth quarter rout. For the full year, NASDAQ fell 2.8%, the S&P 500 dropped 4.4% and the DJIA lost 3.5%. Large-caps lost less than

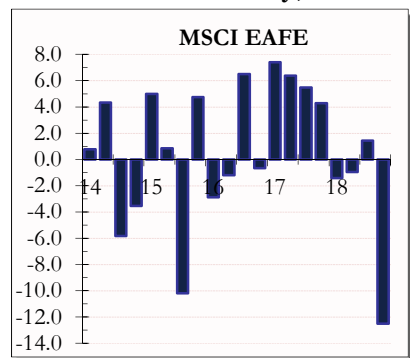
small-caps and growth fell a lot less than value. The Russell 1000 Growth was down 1.5% vs. an 8.3% loss for its value counterpart. The Russell 2000 Growth dropped 9.3% compared to the Russell 2000 Value, which lost 12.9%. Bottom line, the fourth quarter declines put a big dent in 2018 performance. But an unmitigated disaster it was not!

INTERNATIONAL EQUITIES

Falling Prices Far and Wide

A tightening US monetary policy and the trade impasse between the US and China have squeezed international developed stock markets. In addition, European economies have slumped and populist politicians have ascended to top positions. Australian shares weakened due to historic drought conditions and Japan suffered from lower exports and reduced tourism. The net effect: a 12.5% decline in the EAFE Index.

The Euro market fell 13.1% with Europe's two largest economies, France and Germany, each declining an average of 15%. France



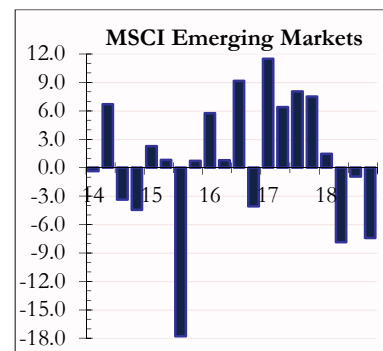
experienced civil unrest over a new green tax on fuel and Germany saw sinking auto sales. Italy, the third largest Euro economy, fell 11.8%, but mitigated its losses by adhering to a low annual projected deficit and making serious efforts to turn around its problem banks. Spain (-8.5%) enjoyed a more robust economy fueled by rising tourism and consumer spending. The UK

struggled with a slowing economy amid the ongoing Brexit crisis, but also employed many new workers. The net effect was a market loss of 11.8%. Ireland fell almost 18%, in anticipation of a possible closed UK border, post Brexit.

Australia, besieged by continued drought and reduced demand for its raw material, lost 10%. Japan shares dived 14%, reflecting a 2.5% GDP decline in the third quarter and natural disasters that dampened both exports and tourism. Singapore (-6.7%) suffered

from slow growth in its manufacturing and services sectors, but saw exports tick up. Hong Kong (-4.5%) was impacted both by China's slower growth and its own slumping property markets. It was surprising that shares didn't fall further. Israel (-14.3%) had healthy domestic growth and high consumer confidence; however, these positives were offset by corruption allegations against its long-time Prime Minister. Finally, Canada (not part of the EAFE Index) dealt with much lower oil export prices and slowing economic momentum, as well as its ties to the slumping US stock market. As a result, Canada's shares dropped more than 15%. For the full year, EAFE lost 12.5%, most of which occurred in the fourth quarter. For the larger countries, it was a particularly tough quarter and tough year.

Emerging market (EM) returns fell 7.4% for the quarter, continuing to fall far from its glory days through 2017. The reasons were obvious: the US tariff dispute with China, falling currencies, moderating China demand, new populist political leaders, and unique country issues. For full year 2018, the EM Index was 14.3% in the red. Excluding China, the loss was 12%, which was no worse than that of the EAFE. In the past, emerging market stocks have rebounded from worse situations to become top performers.



Brazil shined in an otherwise dismal EM performance array. Brazil is part of the BRIC country group that also includes Russia, India and China. This South American powerhouse made a dramatic turnaround for the quarter (+13.6%), due in part to the recent election of populist President Jair Bolsonaro, who is pro-business and has already begun to privatize some state-owned enterprises. In addition, oil giant Petrobras is under new leadership, with less state involvement. Russia (-8.8%), still mired in Ukraine-related sanctions, managed to gain some economic steam. A reduction in US sanctions against some major Russian companies helped, but the plunge in oil prices put a lid on any good news from the Russian economy. India was another positive performer (+2.5%), where lower oil prices proved a boon to its oil-importing economy. Still, weak agricultural output and bad banking loans acted as a brake on

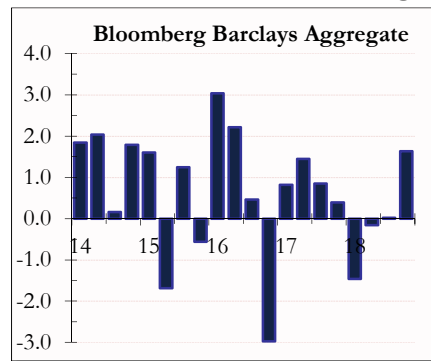
India's performance. China's economic story is familiar. Investors became net sellers as growth moderated from a very high base and investors feared potential disaster from the trade impasse with the US. Softening consumer demand for such items as autos and smart phones added to China's woes, sending its shares down 10.7%.

Among other emerging markets, Korean shares dropped 12.8% due to reduced electronics parts shipments and other issues. Taiwan's economy lost ground, by comparison (-13.7%), as China's renewed threats toward that island nation rattled investor confidence. Indonesian shares were surprisingly positive (+9.8%). Turkish shares turned positive (+4.8%) after a devastating drop earlier in the year. Still, the country's economy remains dismal. Finally, Mexico was down almost 19%. Compared to Brazil's new populist leader, Mexico's President Obrador is far to the political left, which has not helped the Mexican market. Not only has he threatened the role of private oil companies, but he has done so as oil prices were falling.

BOND MARKET

Modest Positive Returns in Some Sectors

In December, the Fed funds rate was raised for the fourth time in 2018; it now stands in the range of 2.25%–2.50%. In anticipation of the increase, rates all along the yield curve rose through November. Then, almost miraculously, rates dropped significantly. The 10-year Treasury bond fell almost 30 basis points in December and 36 basis points for the quarter. This was attributable to several events: a flight to safety, acknowledgement of the global economic slowdown, the steep decline in oil prices, and continued low inflation.



economic slowdown, the steep decline in oil prices, and continued low inflation.

While Treasury securities benefited from the 'risk off' sentiment, corporate credit spreads widened as investors began to question the strength of corporate earnings for the near-term. As a result, credits of BAA and below turned in negative returns. Even so, Treasuries

and higher-rated corporate credits performed decidedly better than most equities, incurring smaller losses or making modest gains.

The Barclays Aggregate Index returned 1.6% for the quarter, driven mainly by the heavy Treasury component. The Treasury sector alone rose 2.6%. 10-year and longer Treasuries added over 4%! Other positive performers were: residential mortgage paper (+2.1%), commercial mortgage instruments (+1.7%), and asset-backed securities (+1.3%). The highly leveraged 'junk' bond sector lost 4.5% due to investor concerns regarding future economic performance. The lowest-rated CA-D credits plunged 24.1%! Even BAA credits, a step above junk, lost 0.9%.

Major foreign bond markets again fared poorly in US dollar terms, as the Euro, UK pound, Canadian and Australian dollars lost value against the US dollar. However, the Japanese Yen rose 3.5%. Non-US investment-grade global bonds managed a 1.6% gain (unhedged), helped both by the stronger Yen and an anticipated ECB slowdown in raising its interest rates. The US dollar's strength and China trade issues dampened EM bond returns for an average 0.2% loss.

The Barclays Aggregate Index returned zero for the full year, while the High Yield Index was down 2.1%. Non-US investment grade bonds (unhedged) lost 1.7% and EM bonds gave back 2.5%. While bond returns were nothing to celebrate, they were an excellent counterweight to the more volatile equity markets.

CASH EQUIVALENTS

Cash Ruled

The three-month T-Bill returned 0.6% for the fourth quarter and 1.9% for the year. Six-month and one-year Treasuries had comparable results. By year-end, a few banks were offering one-year CDs at close to 3% annualized rate. Bottom line: cash equivalents were THE best-performing asset class in 2018.

Economic Statistics

	Current Quarter	Previous Quarter
GDP	2.8%	3.4%
Unemployment	3.9%	3.7%
CPI All Items Year/Year	1.9%	2.3%
Fed Funds Rate	2.50%	2.25%
Industrial Capacity	78.7%	78.4%
US Dollars per Euro	1.15	1.16

Major Index Returns

Index	Quarter	12 Months
Russell 3000	-14.3	-5.2
S&P 500	-13.5	-4.4
Russell Midcap	-15.4	-9.1
Russell 2000	-20.2	-11.0
MSCI EAFE	-12.5	-13.4
MSCI Emg Markets	-7.4	-14.3
NCREIF ODCE	1.8	8.3
U.S. Aggregate	1.6	0.0
90 Day T-bills	0.6	2.0

Domestic Equity Return Distributions

	Quarter			Trailing Year		
	VAL	COR	GRO	VAL	COR	GRO
LC	-11.7	-13.8	-15.9	-8.3	-4.8	-1.5
MC	-15.0	-15.4	-16.0	-12.3	-9.1	-4.8
SC	-18.7	-20.2	-21.7	-12.9	-11.0	-9.3

Market Summary

- The Atlanta Fed estimates a 2.8% GDP for Q4.
- Unemployment ticked up to 3.9%.
- Inflation during the calendar year was 1.9%.
- The US dollar continued to strengthen.
- Growth stocks, which had outpaced value for the first three quarters of the year, took a deeper dive as markets contracted in Q4, but were still ahead of their value counterparts for the full year.

INVESTMENT RETURN

On December 31st, 2018, the City of Charlotte Long-Term Investment Program's Total Portfolio was valued at \$104,646,349, a decrease of \$6,471,890 from the September ending value of \$111,118,239. Last quarter, the account recorded total net contributions of \$2,826,841, which partially offset the account's \$9,298,731 net investment loss for the period. The fund's net investment loss was a result of income receipts totaling \$323,577 and realized and unrealized capital losses totaling \$9,622,308.

RELATIVE PERFORMANCE

Total Fund

During the fourth quarter, the Total Portfolio lost 8.2%, which was 1.3% less than the Manager Shadow Index's return of -6.9% and ranked in the 43rd percentile of the Public Fund universe. Over the trailing year, the portfolio returned -4.2%, which was 1.6% less than the benchmark's -2.6% performance, and ranked in the 46th percentile. Since June 2011, the account returned 6.9% per annum and ranked in the 24th percentile. For comparison, the Manager Shadow Index returned an annualized 6.0% over the same time frame.

Domestic Equity

The domestic equity segment lost 15.6% last quarter, 1.3% below the Russell 3000 Index's return of -14.3% and ranked in the 47th percentile of the Domestic Equity universe. Over the trailing twelve months, the domestic equity portfolio returned -7.3%, 2.1% less than the benchmark's -5.2% performance, and ranked in the 51st percentile. Since June 2011, this component returned 8.9% on an annualized basis and ranked in the 71st percentile. For comparison,

the Russell 3000 returned an annualized 10.8% during the same period.

Large Cap Equity

The large cap equity portfolio returned -13.8% in the fourth quarter, 0.3% less than the S&P 500 Index's return of -13.5% and ranked in the 46th percentile of the Large Cap universe. Over the trailing twelve-month period, the large cap equity portfolio returned -5.5%; that return was 1.1% less than the benchmark's -4.4% return, and ranked in the 55th percentile. Since June 2011, this component returned 8.3% per annum and ranked in the 92nd percentile. The S&P 500 returned an annualized 11.2% over the same time frame.

SMid Cap Equity

For the fourth quarter, the SMid cap equity segment returned -18.7%, which was 0.2% less than the Russell 2500 Index's return of -18.5% and ranked in the 60th percentile of the SMid Cap universe. Over the trailing twelve-month period, this segment's return was -10.5%, which was 0.5% below the benchmark's -10.0% return, ranking in the 52nd percentile. Since June 2011, this component returned 10.3% annualized and ranked in the 22nd percentile. The Russell 2500 returned an annualized 8.7% during the same period.

International Equity

The international equity segment returned -12.5% during the fourth quarter; that return was equal to the MSCI EAFE Net Index's return of -12.5% and ranked in the 55th percentile of the International Equity universe. Over the trailing twelve months, the international equity portfolio returned -13.8%, equal to the benchmarks -13.8% performance, ranking in the 37th percentile. Since June 2011, this component returned 2.9% annualized and ranked in the 68th

percentile. The MSCI EAFE Net Index returned an annualized 2.9% during the same time frame.

Global Fixed Income

During the fourth quarter, the global fixed income segment returned -1.1%, which was 3.0% less than the Bloomberg Barclays Global Government Bond's return of 1.9% and ranked in the 69th percentile of the International Fixed Income universe. Over the trailing year, this segment's return was -2.6%, which was 1.9% below the benchmarks -0.7% return, and ranked in the 26th percentile. Since June 2011, this component returned -0.2% annualized and ranked in the 82nd percentile. The Bloomberg Barclays Global Government Bond returned an annualized 0.4% over the same period.

Domestic Fixed Income

Last quarter, the domestic fixed income component gained 1.5%, which was 0.1% less than the Bloomberg Barclays Aggregate Index's return of 1.6% and ranked in the 41st percentile of the Core Fixed Income universe. Over the trailing twelve-month period, this segment's return was 0.2%, which was 0.2% greater than the benchmark's 0.0% performance, and ranked in the 41st percentile. Since June 2011, this component returned 3.4% on an annualized basis and ranked in the 22nd percentile. For comparison, the Bloomberg Barclays Aggregate Index returned an annualized 2.6% during the same time frame.

ASSET ALLOCATION

On December 31st, 2018, large cap equities comprised 24.6% of the total portfolio (\$25.8 million), while SMid cap equities totaled 14.7% (\$15.4 million). The account's international equity segment was valued at \$13.3 million, representing 12.7% of the portfolio, while the global fixed income component's \$6.1 million totaled 5.8%. The portfolio's domestic fixed income represented 17.8% and the remaining 24.3% was comprised of cash & equivalents (\$25.4 million).

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Quarter	FYTD	YTD /1Y	3 Year	5 Year	Since 06/11
Total Portfolio - Gross	-8.2	-5.1	-4.2	6.2	4.9	6.9
<i>PUBLIC FUND RANK</i>	(43)	(39)	(46)	(34)	(45)	(24)
Total Portfolio - Net	-8.2	-5.3	-4.5	5.7	4.4	6.4
Manager Shadow	-6.9	-3.8	-2.6	3.7	3.1	6.0
Policy Index	-9.3	-6.8	-6.3	5.5	4.0	6.0
Domestic Equity - Gross	-15.6	-9.9	-7.3	7.5	6.0	8.9
<i>DOMESTIC EQUITY RANK</i>	(47)	(45)	(51)	(59)	(58)	(71)
Russell 3000	-14.3	-8.2	-5.2	9.0	7.9	10.8
Large Cap Equity - Gross	-13.8	-7.5	-5.5	7.2	5.3	8.3
<i>LARGE CAP RANK</i>	(46)	(44)	(55)	(75)	(88)	(92)
S&P 500	-13.5	-6.9	-4.4	9.3	8.5	11.2
SMid Cap Equity - Gross	-18.7	-13.9	-10.5	7.5	6.9	10.3
<i>SMID CAP RANK</i>	(60)	(50)	(52)	(50)	(28)	(22)
Russell 2500	-18.5	-14.7	-10.0	7.3	5.1	8.7
International Equity - Gross	-12.5	-11.4	-13.8	2.9	0.5	2.9
<i>INTERNATIONAL EQUITY RANK</i>	(55)	(44)	(37)	(75)	(83)	(68)
MSCI EAFE Net	-12.5	-11.4	-13.8	2.9	0.5	2.9
Global Fixed Income - Gross	-1.1	-2.7	-2.6	2.3	0.6	-0.2
<i>INT'L FIXED INCOME RANK</i>	(69)	(97)	(26)	(97)	(74)	(82)
Global Gov Index	1.9	0.2	-0.7	2.8	0.7	0.4
Domestic Fixed Income - Gross	1.5	1.7	0.2	2.9	3.0	3.4
<i>CORE FIXED INCOME RANK</i>	(41)	(35)	(41)	(18)	(38)	(22)
Aggregate Index	1.6	1.7	0.0	2.1	2.5	2.6

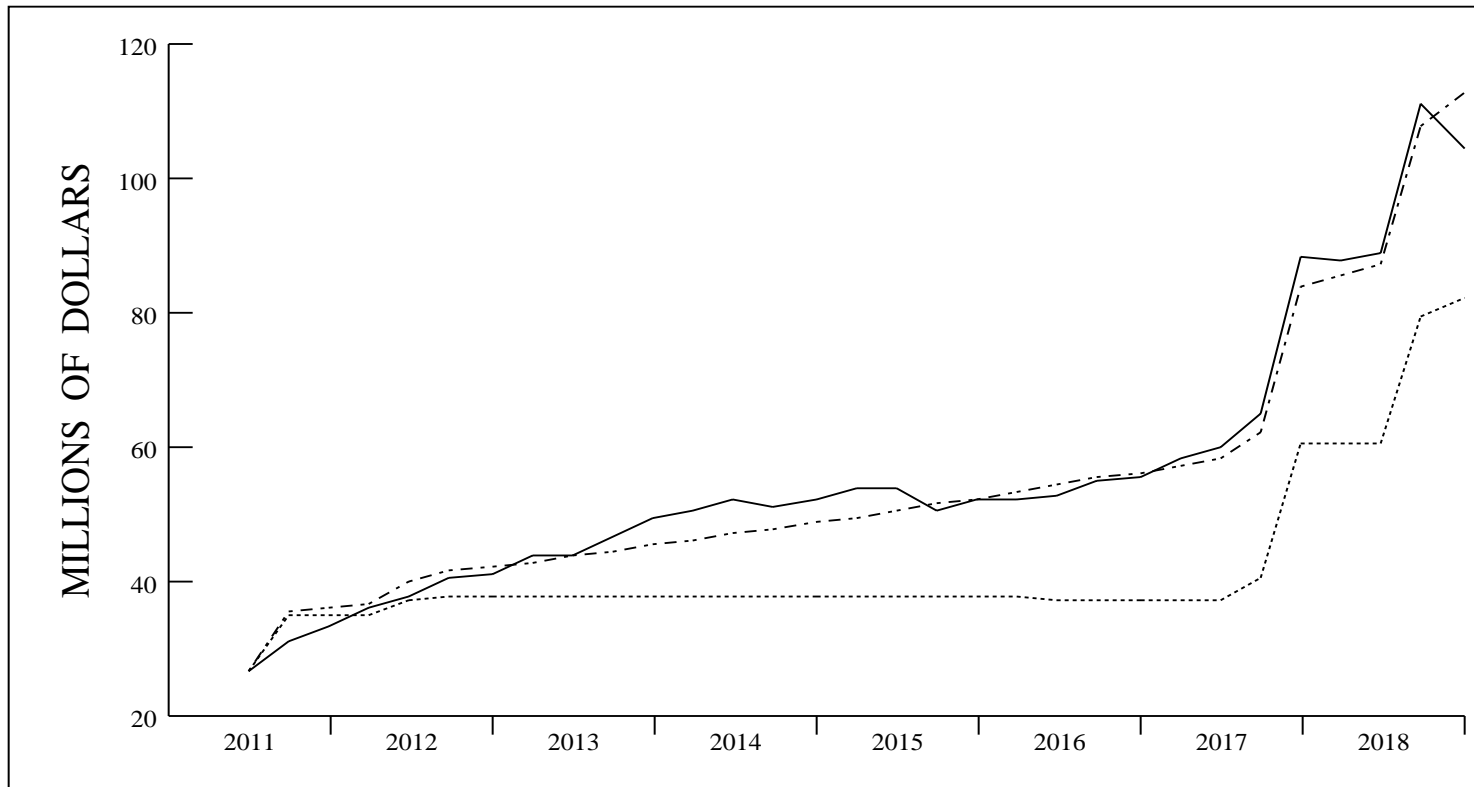
ASSET ALLOCATION

Large Cap Equity	24.6%	\$ 25,776,661
SMid Cap Equity	14.7%	15,389,348
Int'l Equity	12.7%	13,322,566
Global Fixed	5.8%	6,103,413
Domestic Fixed	17.8%	18,650,919
Cash	24.3%	25,403,442
Total Portfolio	100.0%	\$ 104,646,349

INVESTMENT RETURN

Market Value 9/2018	\$ 111,118,239
Contribs / Withdrawals	2,826,841
Income	323,577
Capital Gains / Losses	-9,622,308
Market Value 12/2018	\$ 104,646,349

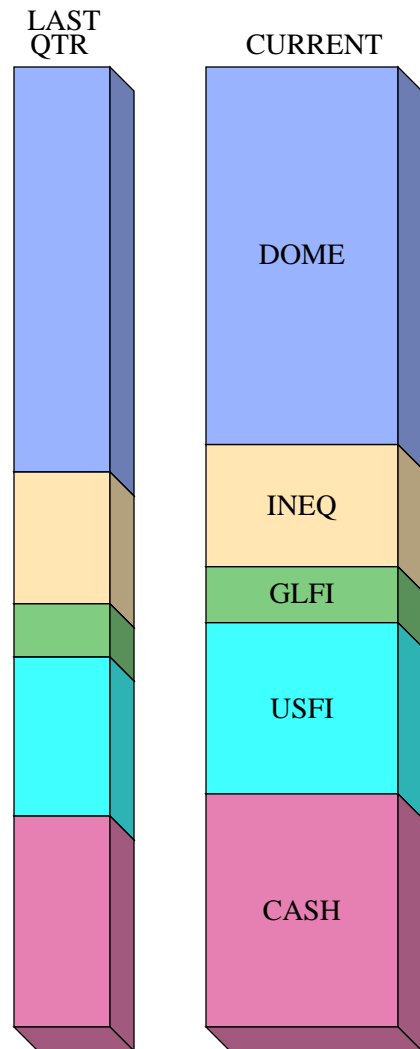
INVESTMENT GROWTH



—	ACTUAL RETURN
- - -	7.75%
.....	0.0%

VALUE ASSUMING	
7.75% RETURN	\$ 112,835,830

	LAST QUARTER	PERIOD 6/11 - 12/18
BEGINNING VALUE	\$ 111,118,239	\$ 26,905,988
NET CONTRIBUTIONS	2,826,841	55,440,263
<u>INVESTMENT RETURN</u>	<u>- 9,298,731</u>	<u>22,300,098</u>
ENDING VALUE	\$ 104,646,349	\$ 104,646,349
INCOME	323,577	8,326,231
<u>CAPITAL GAINS (LOSSES)</u>	<u>- 9,622,308</u>	<u>13,973,867</u>
INVESTMENT RETURN	- 9,298,731	22,300,098



	<u>VALUE</u>	<u>PERCENT</u>	<u>TARGET</u>	<u>MIN</u>	<u>MAX</u>
■ DOMESTIC EQUITY	\$ 41,166,009	39.3%	50.0%	40.0%	60.0%
<i>LARGE CAP EQUITY</i>	25,776,661	24.6%	30.0%	25.0%	35.0%
<i>SMID CAP EQUITY</i>	15,389,348	14.7%	20.0%	10.0%	30.0%
■ INTERNATIONAL EQUITY	13,322,566	12.7%	18.0%	13.0%	23.0%
■ GLOBAL FIXED INCOME	6,103,413	5.8%	20.0%	10.0%	25.0%
■ DOMESTIC FIXED INCOME	18,650,919	17.8%	12.0%	10.0%	25.0%
■ CASH & EQUIVALENT	25,403,442	24.3%	0.0%	----	----
TOTAL FUND	\$ 104,646,349	100.0%			

MANAGER PERFORMANCE SUMMARY

Name	(Universe)	Quarter	FYTD	1 Year	3 Years	5 Years
Total Portfolio	(Public Fund)	-8.2 (43)	-5.1 (39)	-4.2 (46)	6.2 (34)	4.9 (45)
<i>Manager Shadow Index</i>		<i>-6.9 ----</i>	<i>-3.8 ----</i>	<i>-2.6 ----</i>	<i>3.7 ----</i>	<i>3.1 ----</i>
RhumbLine R1000G	(LC Growth)	-15.9 (61)	-8.2 (48)	-1.5 (55)	---- ----	---- ----
<i>Russell 1000 Growth</i>		<i>-15.9 ----</i>	<i>-8.2 ----</i>	<i>-1.5 ----</i>	<i>11.1 ----</i>	<i>10.4 ----</i>
SSgA R1000V	(LC Value)	-11.7 (29)	-6.7 (35)	-8.2 (48)	7.0 (55)	6.0 (61)
<i>Russell 1000 Value</i>		<i>-11.7 ----</i>	<i>-6.7 ----</i>	<i>-8.3 ----</i>	<i>6.9 ----</i>	<i>5.9 ----</i>
Rothschild	(Smid Cap)	-18.7 (60)	-13.9 (50)	-10.5 (52)	7.5 (50)	6.9 (28)
<i>Russell 2500</i>		<i>-18.5 ----</i>	<i>-14.7 ----</i>	<i>-10.0 ----</i>	<i>7.3 ----</i>	<i>5.1 ----</i>
SSgA EAFE	(Intl Eq)	-12.5 (55)	-11.4 (44)	-13.8 (37)	2.8 (75)	0.5 (83)
<i>MSCI EAFE Net</i>		<i>-12.5 ----</i>	<i>-11.4 ----</i>	<i>-13.8 ----</i>	<i>2.9 ----</i>	<i>0.5 ----</i>
Brandywine	(Global Fixed)	-1.1 (53)	---- ----	---- ----	---- ----	---- ----
<i>Bloomberg Barclays Global Government Bond</i>		<i>1.9 ----</i>	<i>0.2 ----</i>	<i>-0.7 ----</i>	<i>2.8 ----</i>	<i>0.7 ----</i>
PIMCO TR	(Core Fixed)	1.5 (41)	1.7 (35)	0.2 (41)	2.9 (18)	3.0 (38)
<i>Bloomberg Barclays Aggregate Index</i>		<i>1.6 ----</i>	<i>1.7 ----</i>	<i>0.0 ----</i>	<i>2.1 ----</i>	<i>2.5 ----</i>

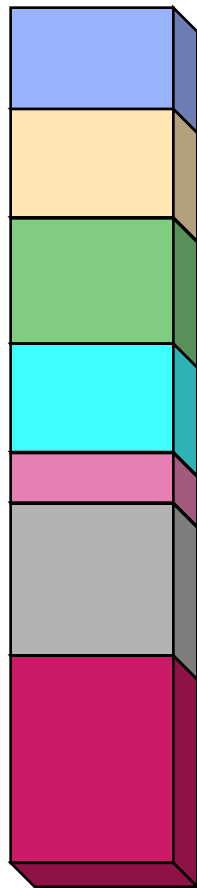
MANAGER PERFORMANCE SUMMARY - NET OF FEES

Name	Quarter	FYTD	1 Year	3 Years	5 Years
Total Portfolio	-8.2	-5.3	-4.5	5.7	4.4
<i>Manager Shadow Index</i>	<i>-6.9</i>	<i>-3.8</i>	<i>-2.6</i>	<i>3.7</i>	<i>3.1</i>
RhumbLine R1000G	-15.9	-8.2	-1.6	---	---
<i>Russell 1000 Growth</i>	<i>-15.9</i>	<i>-8.2</i>	<i>-1.5</i>	<i>11.1</i>	<i>10.4</i>
SSgA R1000V	-11.7	-6.7	-8.3	6.9	5.9
<i>Russell 1000 Value</i>	<i>-11.7</i>	<i>-6.7</i>	<i>-8.3</i>	<i>6.9</i>	<i>5.9</i>
Rothschild	-19.0	-14.4	-11.4	6.4	5.8
<i>Russell 2500</i>	<i>-18.5</i>	<i>-14.7</i>	<i>-10.0</i>	<i>7.3</i>	<i>5.1</i>
SSgA EAFE	-12.6	-11.4	-13.9	2.8	0.4
<i>MSCI EAFE Net</i>	<i>-12.5</i>	<i>-11.4</i>	<i>-13.8</i>	<i>2.9</i>	<i>0.5</i>
Brandywine	-1.2	---	---	---	---
<i>Bloomberg Barclays Global Government Bond</i>	<i>1.9</i>	<i>0.2</i>	<i>-0.7</i>	<i>2.8</i>	<i>0.7</i>
PIMCO TR	1.4	1.5	-0.3	2.5	2.5
<i>Bloomberg Barclays Aggregate Index</i>	<i>1.6</i>	<i>1.7</i>	<i>0.0</i>	<i>2.1</i>	<i>2.5</i>

MANAGER VALUE ADDED

1 Quarter	Portfolio	Benchmark	1 Year
0.0	RhumbLine Russell 1000 Growth	Russell 1000G	0.0
0.0	State Street Global Advisors Russell 1000 Value	Russell 1000V	0.1
-0.2	Rothschild Small/Mid Cap	Russell 2500	-0.5
0.0	State Street Global Advisors EAFE	MSCI EAFE Net	0.0
-3.0	Brandywine Global Investment Management	Global Gov Index	N/A
-0.1	PIMCO Total Return	Aggregate Index	0.2
-1.3	Total Portfolio	Manager Shadow	-1.6

MANAGER ALLOCATION AND TARGET SUMMARY

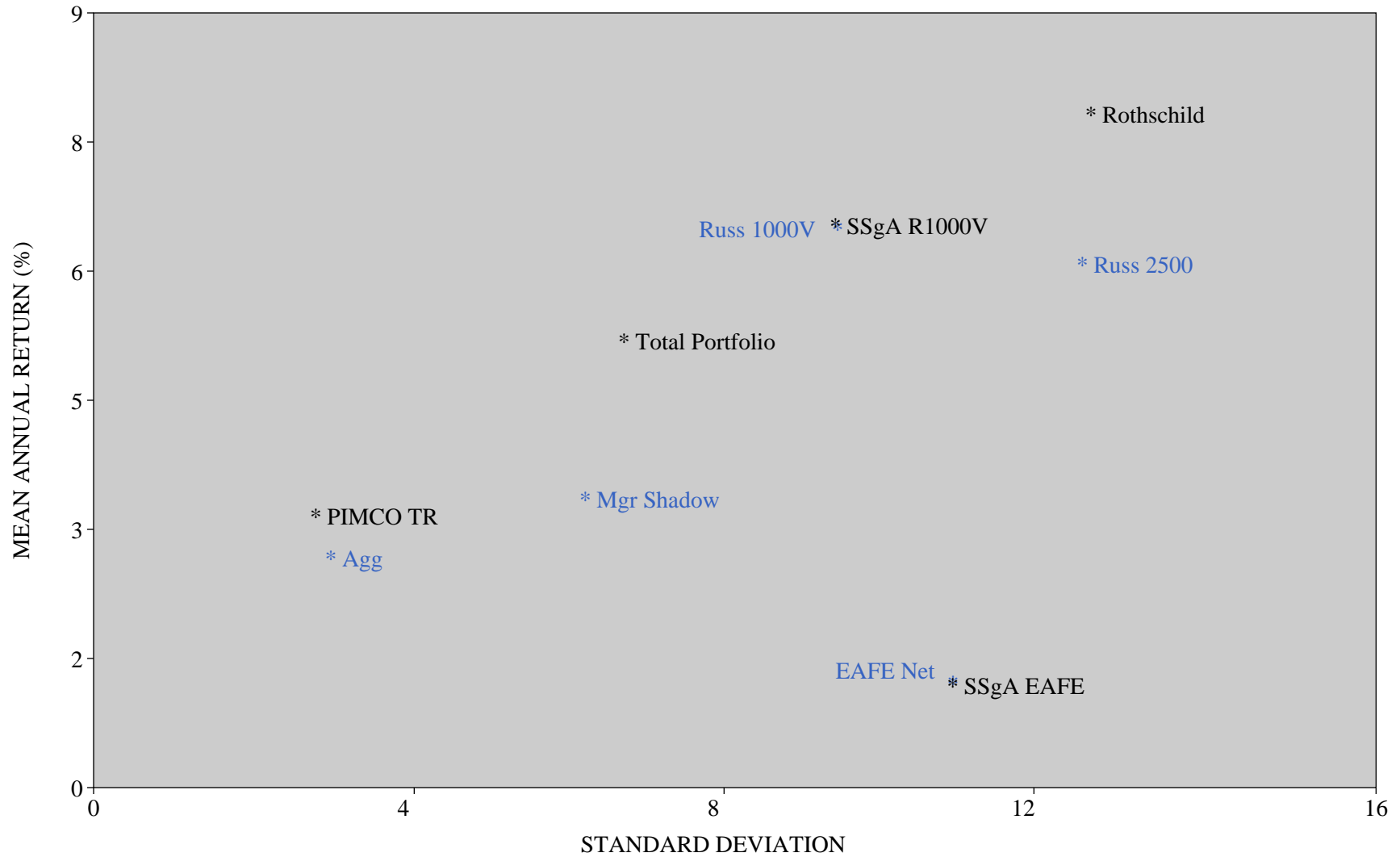


Name	Market Value	Percent	Target	Diff	Diff \$
RhumbLine R1000G (LCG)	\$12,452,851	11.9	15.0	-3.1	<\$3,244,101>
SSgA R1000V (LCV)	\$13,323,810	12.7	15.0	-2.3	<\$2,373,142>
Rothschild (SMID)	\$15,389,348	14.7	20.0	-5.3	<\$5,539,921>
SSgA EAFE (INEQ)	\$13,322,566	12.7	18.0	-5.3	<\$5,513,777>
Brandywine (GLFI)	\$6,103,413	5.8	20.0	-14.2	<\$14,825,857>
PIMCO TR (USFI)	\$18,650,919	17.8	12.0	5.8	\$6,093,357
Cash (CASH)	\$25,403,442	24.3	0.0	24.3	\$25,403,442
Total Portfolio	\$104,646,349	100.0	100.0	----	\$0

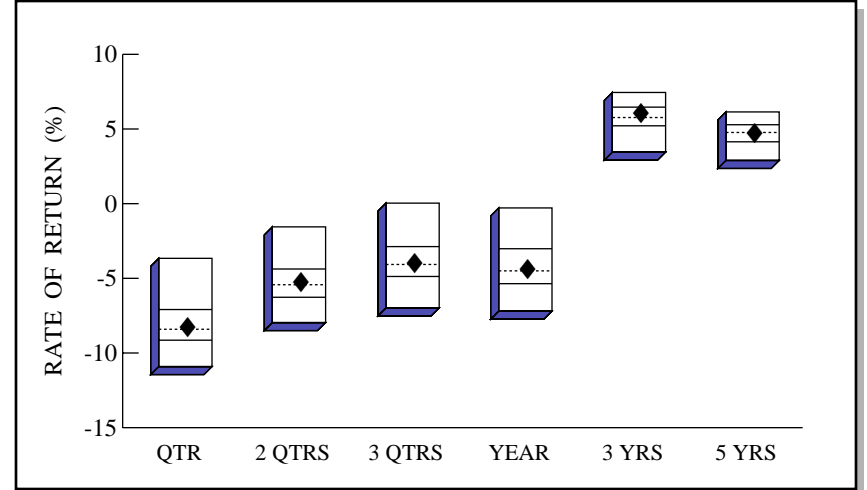
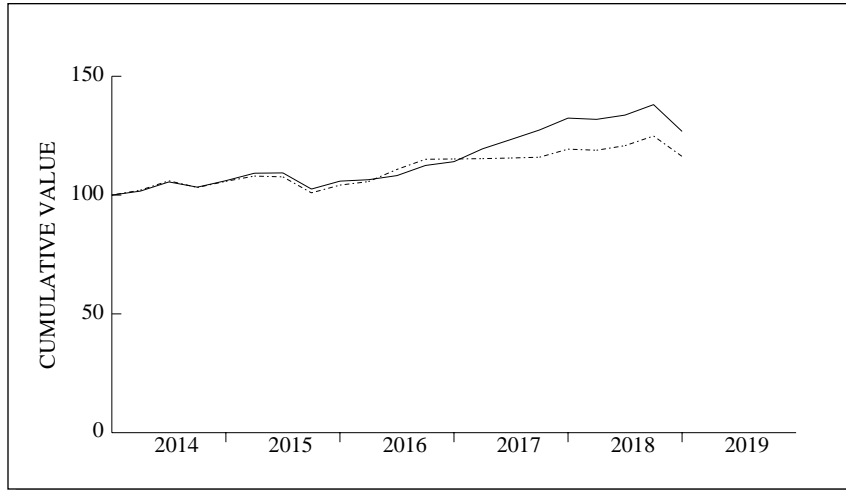
INVESTMENT RETURN SUMMARY - ONE QUARTER

Name	Quarter Total Return	Market Value September 30th, 2018	Net Cashflow	Net Investment Return	Market Value December 31st, 2018
RhumbLine R1000G (LCG)	-15.9	14,804,134	-1,649	-2,349,634	12,452,851
SSgA R1000V (LCV)	-11.7	15,097,206	-2,976	-1,770,420	13,323,810
Rothschild (SMID)	-18.7	16,990,302	1,958,325	-3,559,279	15,389,348
SSgA EAFE (INEQ)	-12.5	15,236,925	-3,114	-1,911,245	13,322,566
Brandywine (GLFI)	-1.1	6,179,052	-5,790	-69,849	6,103,413
PIMCO TR (USFI)	1.5	18,395,829	0	255,090	18,650,919
Cash (CASH)	---	24,414,791	882,045	106,606	25,403,442
Total Portfolio	-8.2	111,118,239	2,826,841	-9,298,731	104,646,349

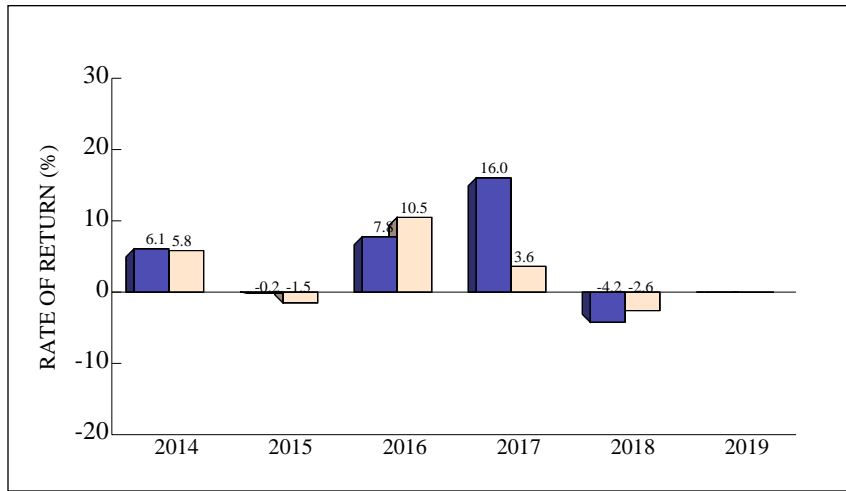
RISK-RETURN SUMMARY - 5 YEAR HISTORY



TOTAL RETURN COMPARISONS



Public Fund Universe



	QTR	2 QTRS	3 QTRS	YEAR	-----ANNUALIZED-----	
					3 YRS	5 YRS
RETURN	-8.2	-5.1	-3.8	-4.2	6.2	4.9
(RANK)	(43)	(39)	(46)	(46)	(34)	(45)
5TH %ILE	-3.7	-1.6	0.0	-0.3	7.5	6.1
25TH %ILE	-7.1	-4.4	-2.9	-3.0	6.5	5.3
MEDIAN	-8.4	-5.4	-4.1	-4.5	5.8	4.8
75TH %ILE	-9.2	-6.3	-4.9	-5.4	5.2	4.1
95TH %ILE	-10.9	-8.0	-7.0	-7.2	3.5	2.9
Mgr Shadow	-6.9	-3.8	-2.2	-2.6	3.7	3.1

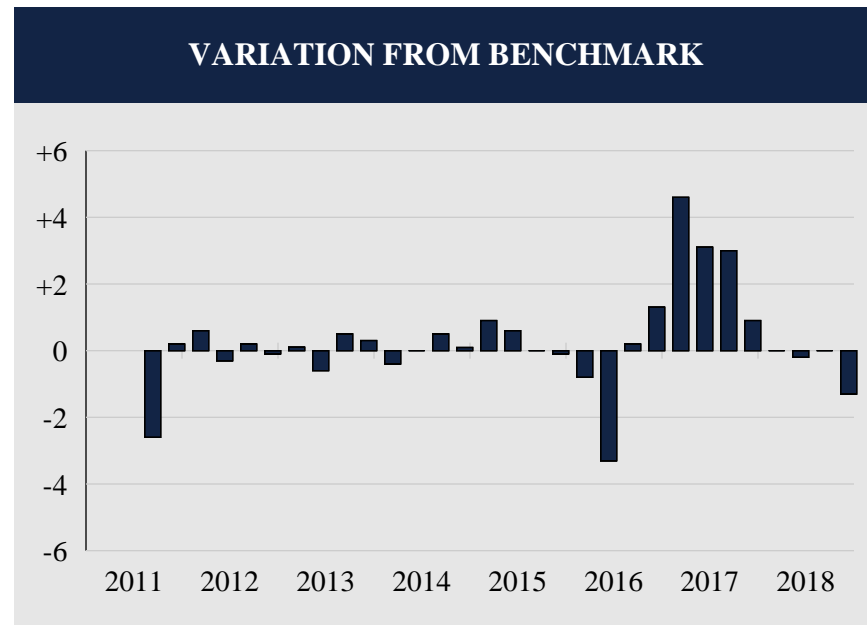
Public Fund Universe

**CITY OF CHARLOTTE LONG-TERM INVESTMENT PROGRAM
COST vs. MARKET COMPARISON AS OF DECEMBER 31, 2018**

Manager	Cost*	Market Value	Dollar Change	% Change
Rhumblin R1000 Growth	\$ 11,994,645.57	\$ 12,452,851.47	\$ 458,205.90	3.8%
SSgA Russell 1000 Value	\$ 8,173,052.56	\$ 13,323,810.25	\$ 5,150,757.69	63.0%
Rothschild	\$ 7,647,635.00	\$ 15,389,351.21	\$ 7,741,716.21	101.2%
SSgA MSCI EAFE	\$ 11,842,090.02	\$ 13,322,566.67	\$ 1,480,475.65	12.5%
Brandywine	\$ 6,273,003.09	\$ 6,103,412.91	\$ (169,590.18)	-2.7%
PIMCO TR	\$ 19,549,790.35	\$ 18,650,918.73	\$ (898,871.62)	-4.6%
Cash & Equivalents	\$ 25,403,411.93	\$ 25,403,411.93	\$ -	0.0%
Total	\$ 90,883,629.52	\$ 104,646,323.17	\$ 13,762,693.65	15.1%

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

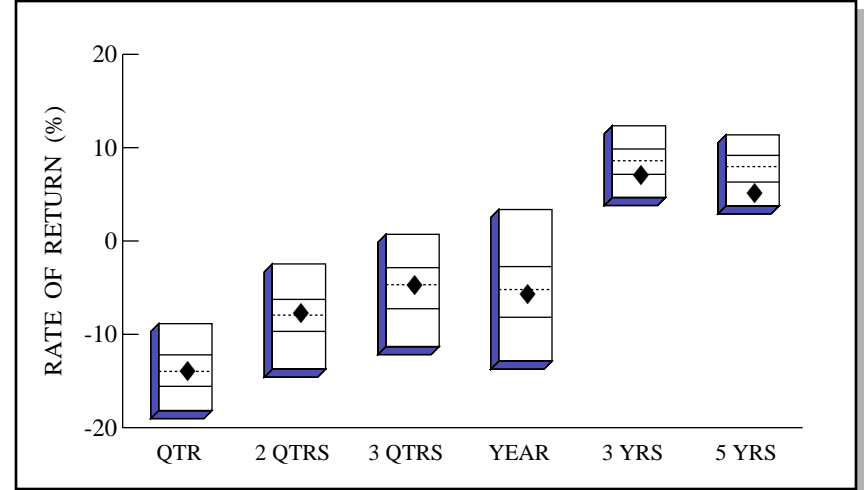
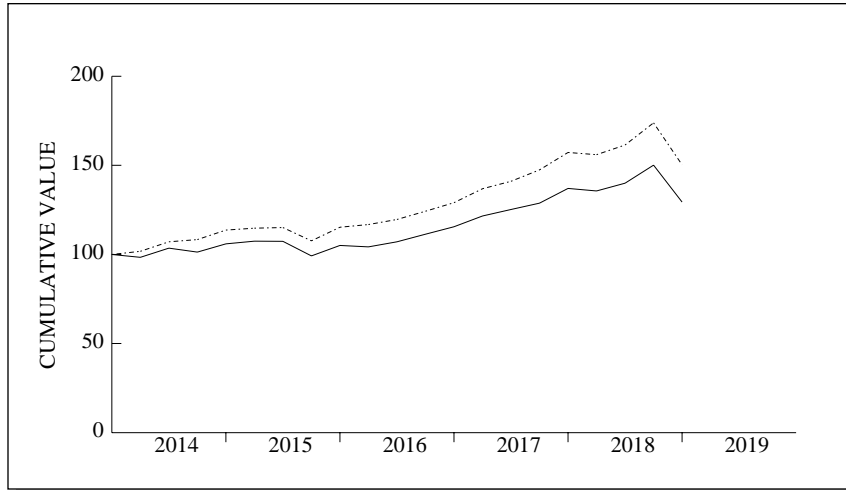
COMPARATIVE BENCHMARK: MANAGER SHADOW INDEX



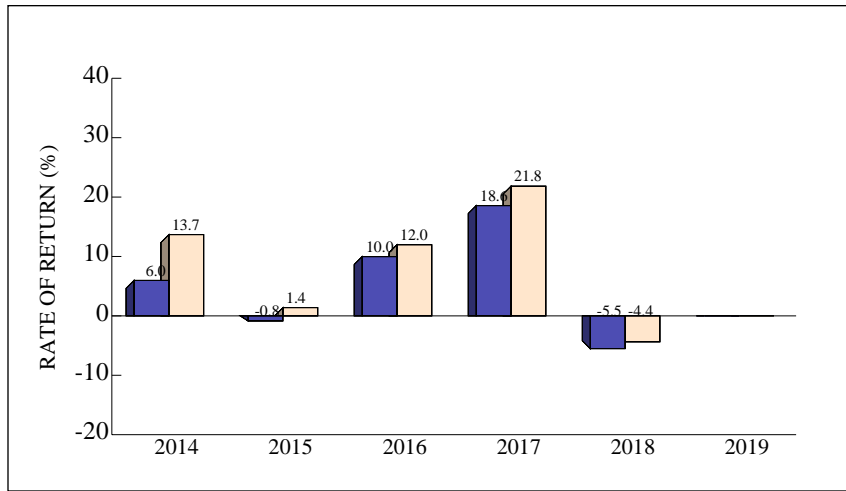
Total Quarters Observed	30
Quarters At or Above the Benchmark	20
Quarters Below the Benchmark	10
Batting Average	.667

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
9/11	-11.3	-8.7	-2.6
12/11	7.3	7.1	0.2
3/12	8.6	8.0	0.6
6/12	-2.6	-2.3	-0.3
9/12	5.1	4.9	0.2
12/12	1.7	1.8	-0.1
3/13	6.8	6.7	0.1
6/13	0.0	0.6	-0.6
9/13	6.5	6.0	0.5
12/13	6.5	6.2	0.3
3/14	1.7	2.1	-0.4
6/14	3.8	3.8	0.0
9/14	-2.1	-2.6	0.5
12/14	2.6	2.5	0.1
3/15	3.0	2.1	0.9
6/15	0.2	-0.4	0.6
9/15	-6.2	-6.2	0.0
12/15	3.2	3.3	-0.1
3/16	0.6	1.4	-0.8
6/16	1.6	4.9	-3.3
9/16	4.0	3.8	0.2
12/16	1.4	0.1	1.3
3/17	4.7	0.1	4.6
6/17	3.3	0.2	3.1
9/17	3.3	0.3	3.0
12/17	3.9	3.0	0.9
3/18	-0.4	-0.4	0.0
6/18	1.4	1.6	-0.2
9/18	3.3	3.3	0.0
12/18	-8.2	-6.9	-1.3

LARGE CAP EQUITY RETURN COMPARISONS



Large Cap Universe

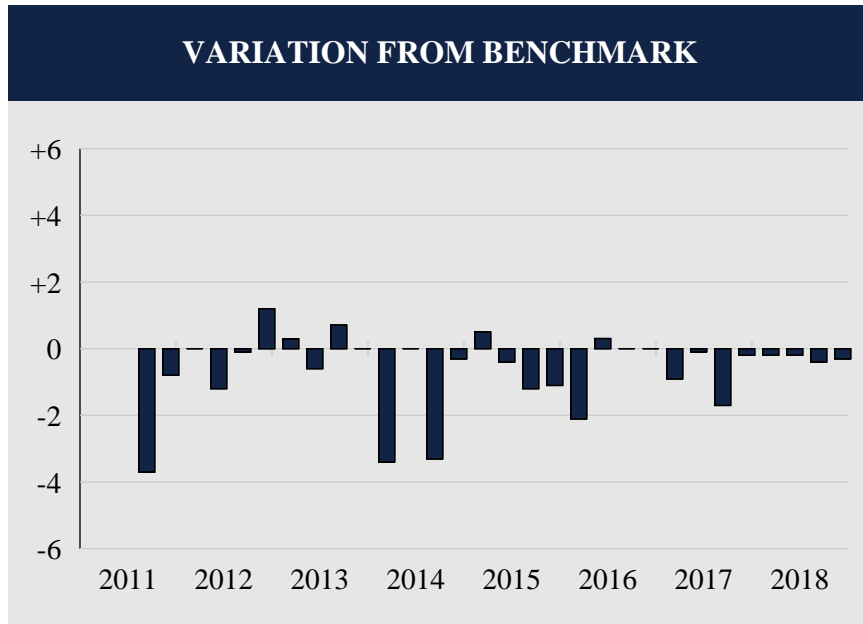


	QTR	2 QTRS	3 QTRS	YEAR	-----ANNUALIZED-----	
					3 YRS	5 YRS
RETURN	-13.8	-7.5	-4.6	-5.5	7.2	5.3
(RANK)	(46)	(44)	(48)	(55)	(75)	(88)
5TH %ILE	-8.9	-2.5	0.7	3.4	12.4	11.4
25TH %ILE	-12.2	-6.3	-2.9	-2.7	9.9	9.2
MEDIAN	-14.0	-8.0	-4.7	-5.2	8.6	8.0
75TH %ILE	-15.6	-9.7	-7.3	-8.2	7.1	6.3
95TH %ILE	-18.2	-13.8	-11.3	-12.9	4.7	3.8
S&P 500	-13.5	-6.9	-3.7	-4.4	9.3	8.5

Large Cap Universe

LARGE CAP EQUITY QUARTERLY PERFORMANCE SUMMARY

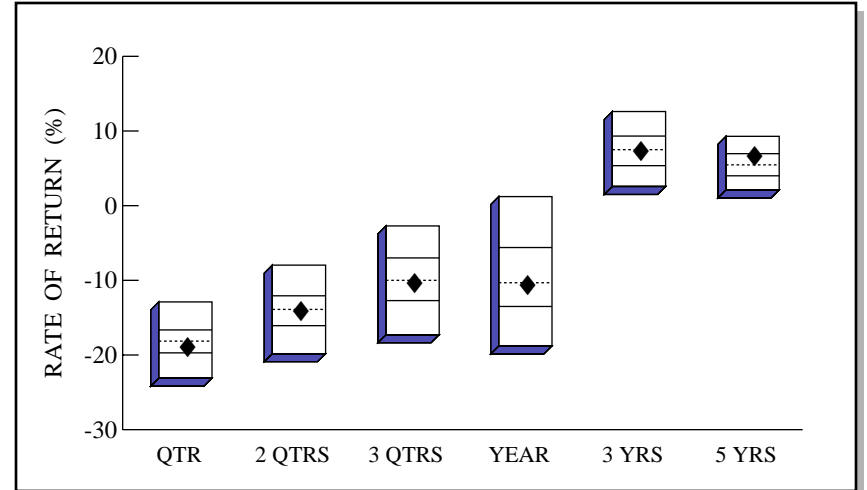
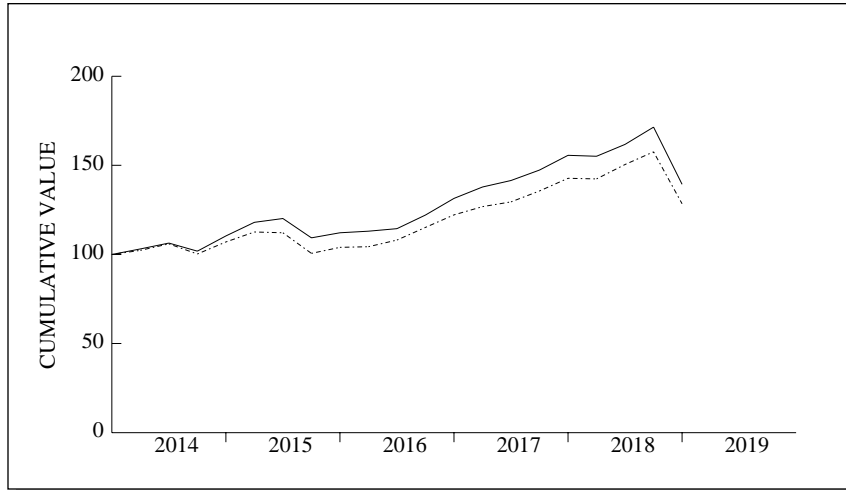
COMPARATIVE BENCHMARK: S&P 500



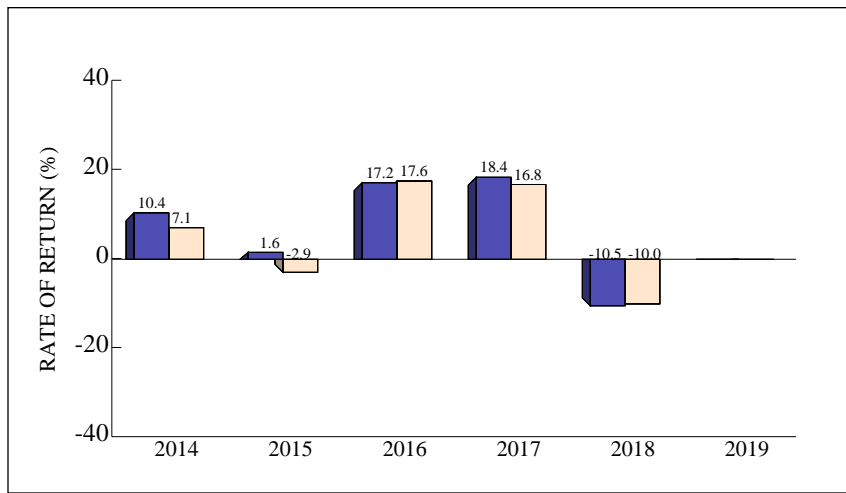
Total Quarters Observed	30
Quarters At or Above the Benchmark	10
Quarters Below the Benchmark	20
Batting Average	.333

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
9/11	-17.6	-13.9	-3.7
12/11	11.0	11.8	-0.8
3/12	12.6	12.6	0.0
6/12	-4.0	-2.8	-1.2
9/12	6.2	6.3	-0.1
12/12	0.8	-0.4	1.2
3/13	10.9	10.6	0.3
6/13	2.3	2.9	-0.6
9/13	5.9	5.2	0.7
12/13	10.5	10.5	0.0
3/14	-1.6	1.8	-3.4
6/14	5.2	5.2	0.0
9/14	-2.2	1.1	-3.3
12/14	4.6	4.9	-0.3
3/15	1.4	0.9	0.5
6/15	-0.1	0.3	-0.4
9/15	-7.6	-6.4	-1.2
12/15	5.9	7.0	-1.1
3/16	-0.8	1.3	-2.1
6/16	2.8	2.5	0.3
9/16	3.9	3.9	0.0
12/16	3.8	3.8	0.0
3/17	5.2	6.1	-0.9
6/17	3.0	3.1	-0.1
9/17	2.8	4.5	-1.7
12/17	6.4	6.6	-0.2
3/18	-1.0	-0.8	-0.2
6/18	3.2	3.4	-0.2
9/18	7.3	7.7	-0.4
12/18	-13.8	-13.5	-0.3

SMID CAP EQUITY RETURN COMPARISONS



Smid Cap Universe

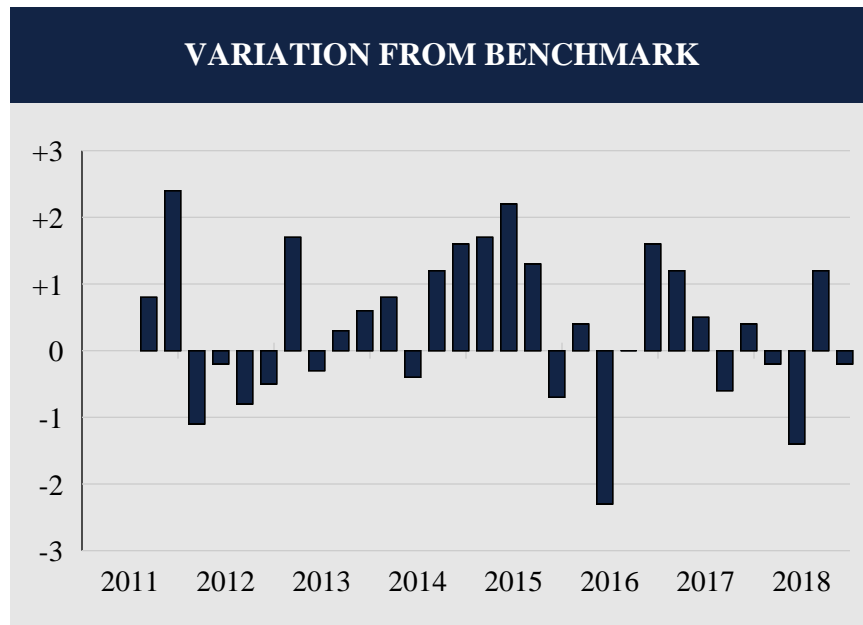


	QTR	2 QTRS	3 QTRS	YEAR	-----ANNUALIZED----- 3 YRS	5 YRS
RETURN	-18.7	-13.9	-10.2	-10.5	7.5	6.9
(RANK)	(60)	(50)	(51)	(52)	(50)	(28)
5TH %ILE	-12.9	-8.0	-2.7	1.2	12.6	9.3
25TH %ILE	-16.6	-12.1	-7.0	-5.6	9.3	7.0
MEDIAN	-18.1	-13.9	-10.0	-10.3	7.5	5.5
75TH %ILE	-19.7	-16.1	-12.7	-13.5	5.4	4.0
95TH %ILE	-23.1	-19.8	-17.3	-18.8	2.6	2.1
Russ 2500	-18.5	-14.7	-9.8	-10.0	7.3	5.1

Smid Cap Universe

SMID CAP EQUITY QUARTERLY PERFORMANCE SUMMARY

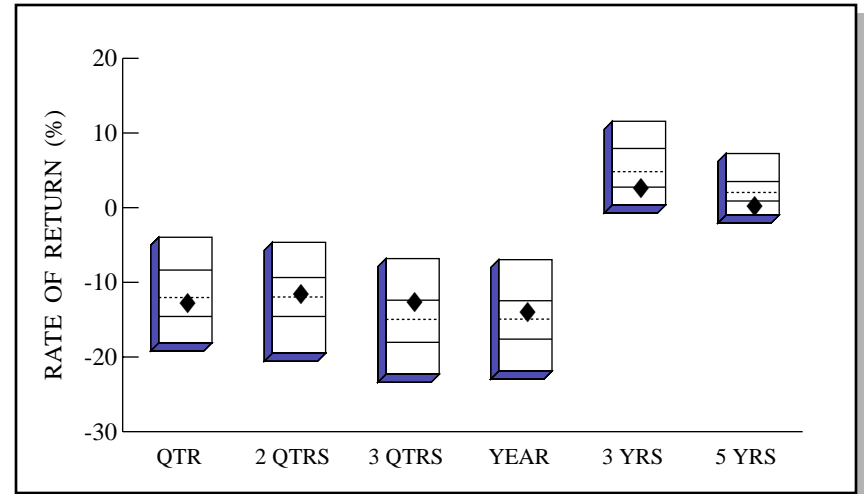
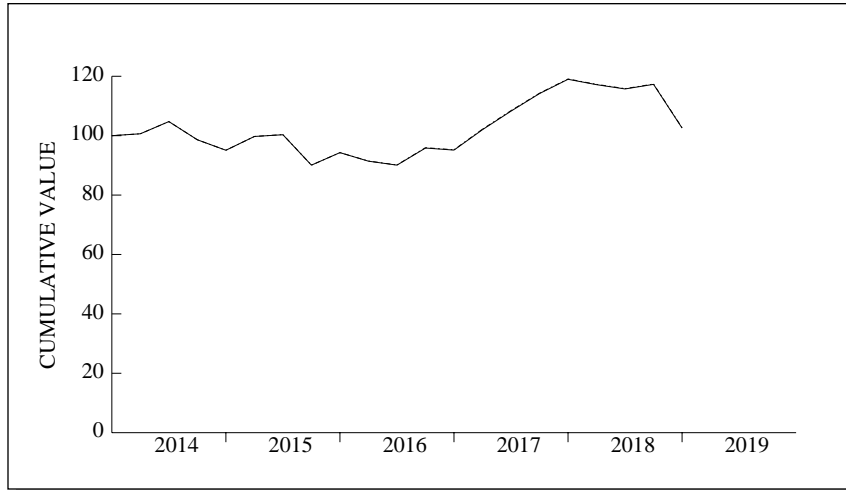
COMPARATIVE BENCHMARK: RUSSELL 2500



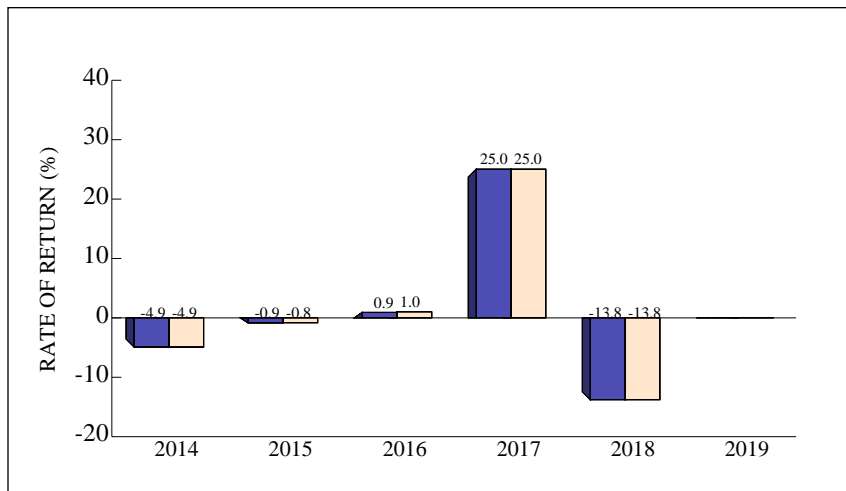
Total Quarters Observed	30
Quarters At or Above the Benchmark	18
Quarters Below the Benchmark	12
Batting Average	.600

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
9/11	-20.4	-21.2	0.8
12/11	16.9	14.5	2.4
3/12	11.9	13.0	-1.1
6/12	-4.3	-4.1	-0.2
9/12	4.8	5.6	-0.8
12/12	2.6	3.1	-0.5
3/13	14.6	12.9	1.7
6/13	2.0	2.3	-0.3
9/13	9.4	9.1	0.3
12/13	9.3	8.7	0.6
3/14	3.1	2.3	0.8
6/14	3.2	3.6	-0.4
9/14	-4.2	-5.4	1.2
12/14	8.4	6.8	1.6
3/15	6.9	5.2	1.7
6/15	1.9	-0.3	2.2
9/15	-9.0	-10.3	1.3
12/15	2.6	3.3	-0.7
3/16	0.8	0.4	0.4
6/16	1.3	3.6	-2.3
9/16	6.6	6.6	0.0
12/16	7.7	6.1	1.6
3/17	4.9	3.7	1.2
6/17	2.6	2.1	0.5
9/17	4.1	4.7	-0.6
12/17	5.6	5.2	0.4
3/18	-0.4	-0.2	-0.2
6/18	4.3	5.7	-1.4
9/18	5.9	4.7	1.2
12/18	-18.7	-18.5	-0.2

INTERNATIONAL EQUITY RETURN COMPARISONS



International Equity Universe

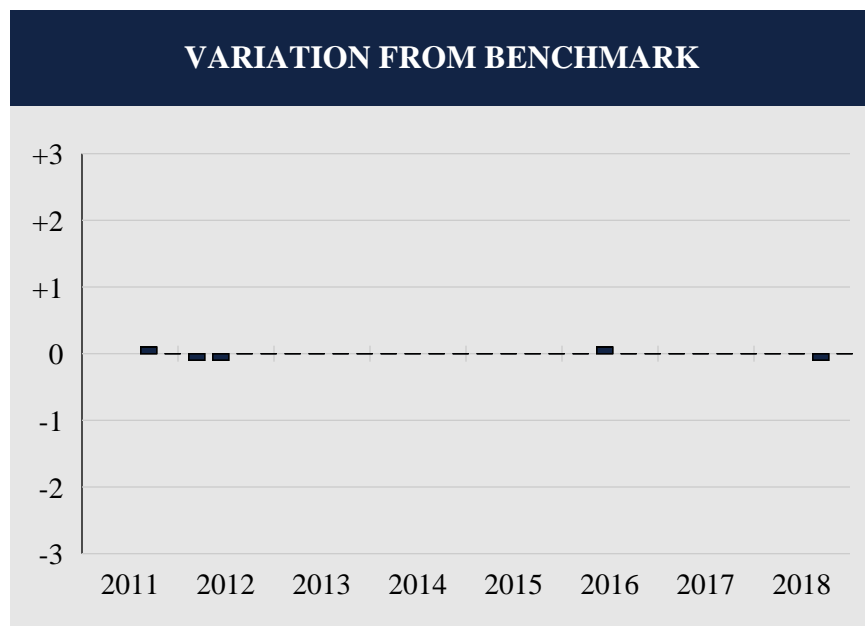


	QTR	2 QTRS	3 QTRS	YEAR	-----ANNUALIZED-----	
					3 YRS	5 YRS
RETURN	-12.5	-11.4	-12.5	-13.8	2.9	0.5
(RANK)	(55)	(44)	(26)	(37)	(75)	(83)
5TH %ILE	-4.0	-4.7	-6.8	-7.0	11.6	7.3
25TH %ILE	-8.3	-9.3	-12.4	-12.5	7.9	3.5
MEDIAN	-12.0	-12.0	-15.0	-14.9	4.8	2.1
75TH %ILE	-14.6	-14.6	-18.0	-17.6	2.8	0.9
95TH %ILE	-18.1	-19.5	-22.3	-21.9	0.4	-1.0
EAFE Net	-12.5	-11.4	-12.4	-13.8	2.9	0.5

International Equity Universe

INTERNATIONAL EQUITY QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: MSCI EAFE NET

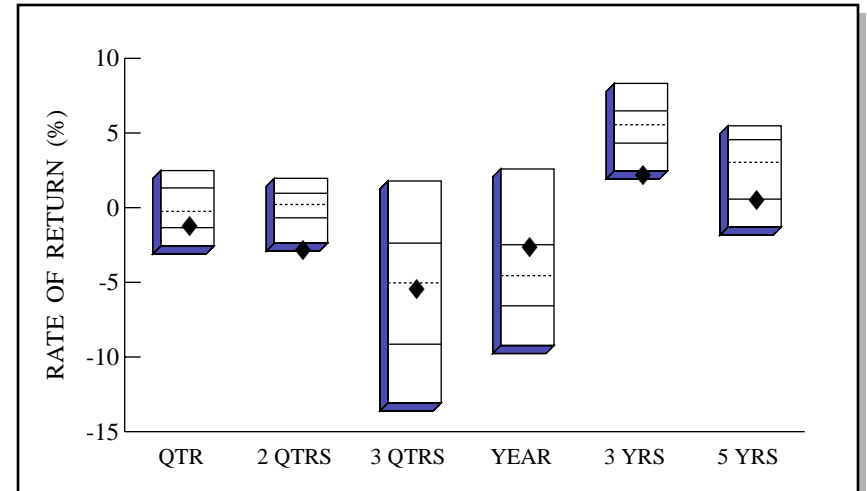
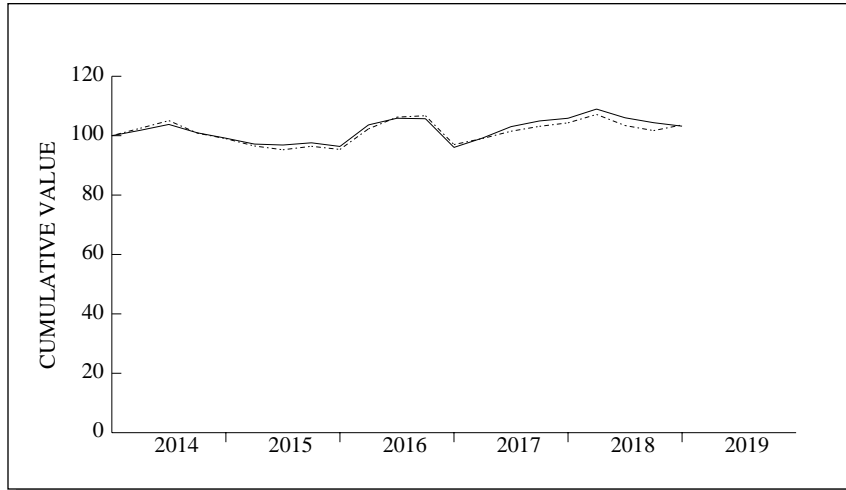


Total Quarters Observed	30
Quarters At or Above the Benchmark	27
Quarters Below the Benchmark	3
Batting Average	.900

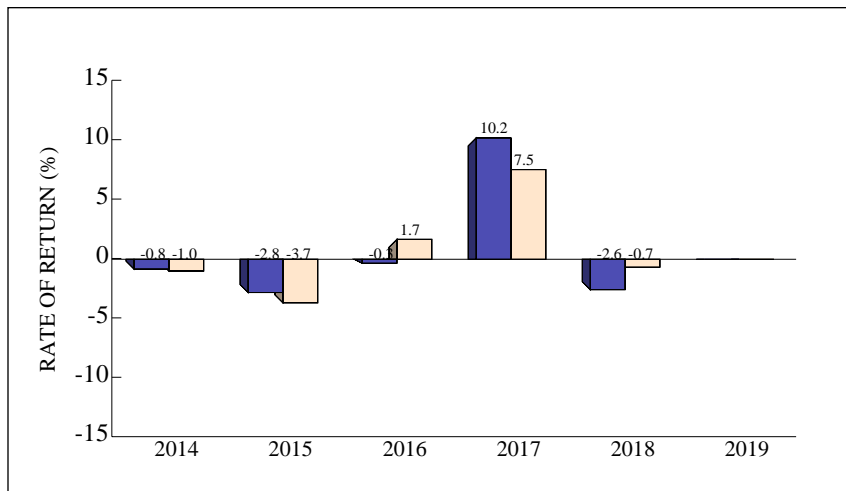
RATES OF RETURN

Date	Portfolio	Benchmark	Difference
9/11	-18.9	-19.0	0.1
12/11	3.3	3.3	0.0
3/12	10.8	10.9	-0.1
6/12	-7.2	-7.1	-0.1
9/12	6.9	6.9	0.0
12/12	6.6	6.6	0.0
3/13	5.1	5.1	0.0
6/13	-1.0	-1.0	0.0
9/13	11.6	11.6	0.0
12/13	5.7	5.7	0.0
3/14	0.7	0.7	0.0
6/14	4.1	4.1	0.0
9/14	-5.9	-5.9	0.0
12/14	-3.6	-3.6	0.0
3/15	4.9	4.9	0.0
6/15	0.6	0.6	0.0
9/15	-10.2	-10.2	0.0
12/15	4.7	4.7	0.0
3/16	-3.0	-3.0	0.0
6/16	-1.4	-1.5	0.1
9/16	6.4	6.4	0.0
12/16	-0.7	-0.7	0.0
3/17	7.2	7.2	0.0
6/17	6.1	6.1	0.0
9/17	5.4	5.4	0.0
12/17	4.2	4.2	0.0
3/18	-1.5	-1.5	0.0
6/18	-1.2	-1.2	0.0
9/18	1.3	1.4	-0.1
12/18	-12.5	-12.5	0.0

GLOBAL FIXED INCOME RETURN COMPARISONS



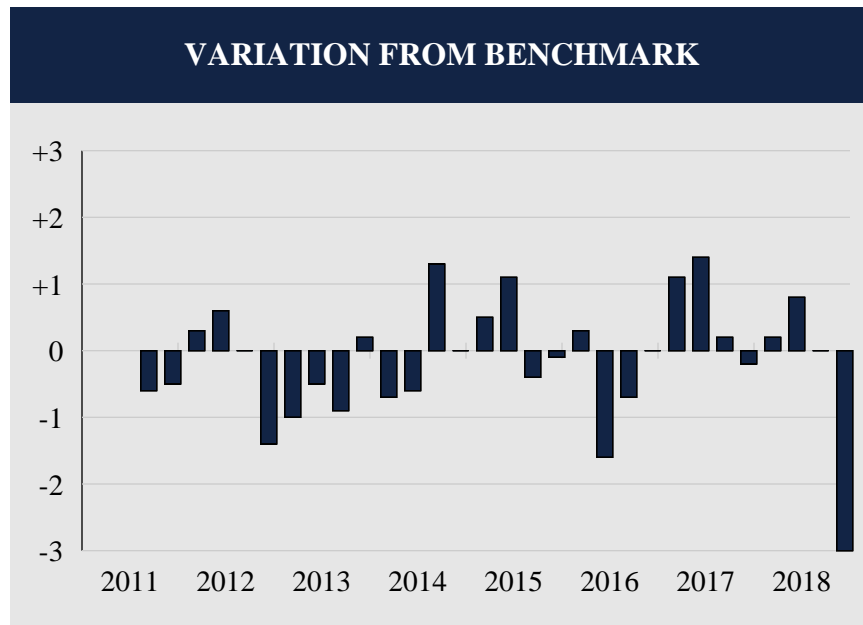
Int'l Fixed Income Universe



	QTR	2 QTRS	3 QTRS	YEAR	-----ANNUALIZED-----	
					3 YRS	5 YRS
RETURN	-1.1	-2.7	-5.3	-2.6	2.3	0.6
(RANK)	(69)	(97)	(52)	(26)	(97)	(74)
5TH %ILE	2.5	2.0	1.8	2.6	8.3	5.5
25TH %ILE	1.3	1.0	-2.4	-2.5	6.5	4.6
MEDIAN	-0.3	0.2	-5.0	-4.6	5.6	3.0
75TH %ILE	-1.3	-0.7	-9.1	-6.6	4.3	0.6
95TH %ILE	-2.6	-2.4	-13.1	-9.2	2.5	-1.3
<i>Global Gov</i>	<i>1.9</i>	<i>0.2</i>	<i>-3.3</i>	<i>-0.7</i>	<i>2.8</i>	<i>0.7</i>

Int'l Fixed Income Universe

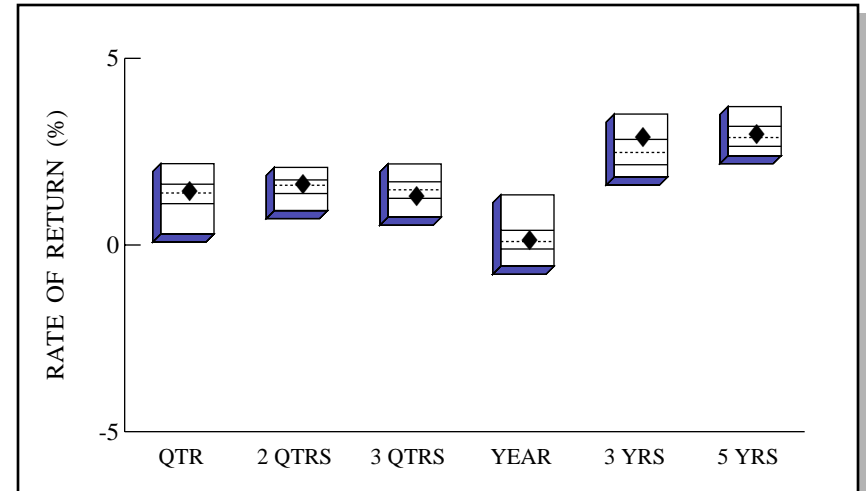
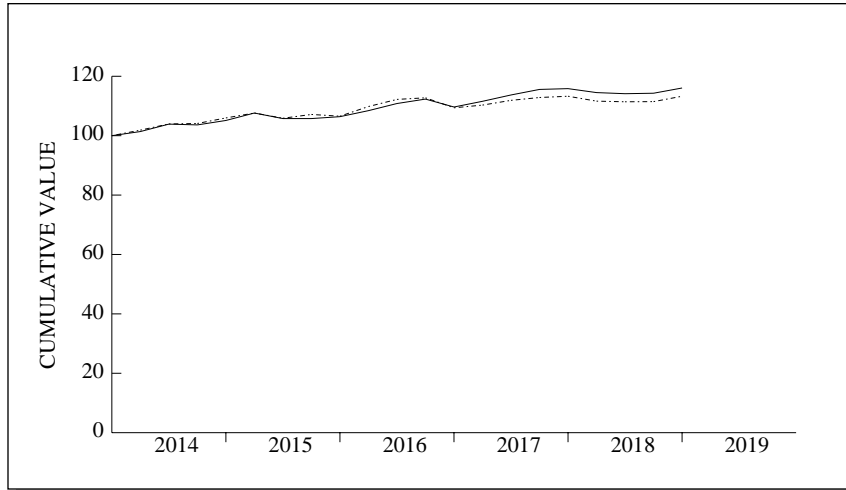
GLOBAL FIXED INCOME QUARTERLY PERFORMANCE SUMMARY
COMPARATIVE BENCHMARK: BLOOMBERG BARCLAYS GLOBAL GOVERNMENT BOND



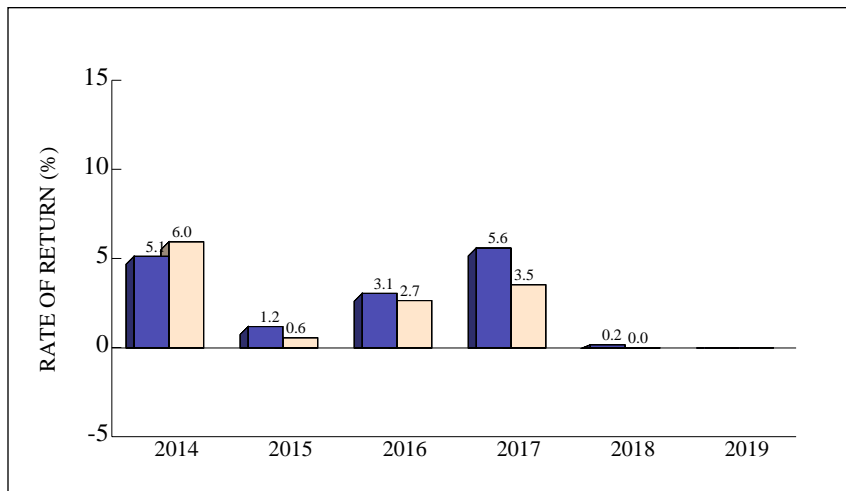
Total Quarters Observed	30
Quarters At or Above the Benchmark	16
Quarters Below the Benchmark	14
Batting Average	.533

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
9/11	1.3	1.9	-0.6
12/11	-0.4	0.1	-0.5
3/12	-0.1	-0.4	0.3
6/12	1.5	0.9	0.6
9/12	3.1	3.1	0.0
12/12	-3.1	-1.7	-1.4
3/13	-3.9	-2.9	-1.0
6/13	-3.7	-3.2	-0.5
9/13	2.1	3.0	-0.9
12/13	-1.0	-1.2	0.2
3/14	1.8	2.5	-0.7
6/14	1.9	2.5	-0.6
9/14	-2.7	-4.0	1.3
12/14	-1.8	-1.8	0.0
3/15	-2.0	-2.5	0.5
6/15	-0.3	-1.4	1.1
9/15	0.8	1.2	-0.4
12/15	-1.2	-1.1	-0.1
3/16	7.5	7.2	0.3
6/16	2.2	3.8	-1.6
9/16	-0.2	0.5	-0.7
12/16	-9.1	-9.1	0.0
3/17	3.2	2.1	1.1
6/17	3.9	2.5	1.4
9/17	1.8	1.6	0.2
12/17	0.9	1.1	-0.2
3/18	2.9	2.7	0.2
6/18	-2.7	-3.5	0.8
9/18	-1.6	-1.6	0.0
12/18	-1.1	1.9	-3.0

DOMESTIC FIXED INCOME RETURN COMPARISONS



Core Fixed Income Universe

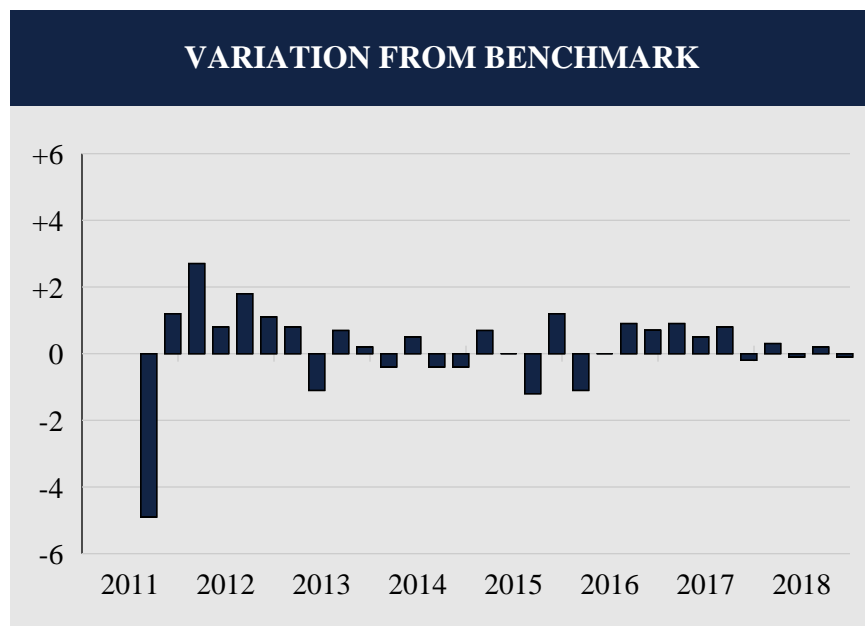


	QTR	2 QTRS	3 QTRS	YEAR	-----ANNUALIZED-----	
					3 YRS	5 YRS
RETURN	1.5	1.7	1.4	0.2	2.9	3.0
(RANK)	(41)	(35)	(67)	(41)	(18)	(38)
5TH %ILE	2.2	2.1	2.2	1.3	3.5	3.7
25TH %ILE	1.6	1.7	1.7	0.4	2.8	3.2
MEDIAN	1.4	1.6	1.5	0.1	2.5	2.9
75TH %ILE	1.1	1.4	1.3	-0.1	2.2	2.6
95TH %ILE	0.3	0.9	0.7	-0.6	1.8	2.4
Agg	1.6	1.7	1.5	0.0	2.1	2.5

Core Fixed Income Universe

DOMESTIC FIXED INCOME QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: BLOOMBERG BARCLAYS AGGREGATE INDEX



Total Quarters Observed	30
Quarters At or Above the Benchmark	20
Quarters Below the Benchmark	10
Batting Average	.667

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
9/11	-1.1	3.8	-4.9
12/11	2.3	1.1	1.2
3/12	3.0	0.3	2.7
6/12	2.9	2.1	0.8
9/12	3.4	1.6	1.8
12/12	1.3	0.2	1.1
3/13	0.7	-0.1	0.8
6/13	-3.4	-2.3	-1.1
9/13	1.3	0.6	0.7
12/13	0.1	-0.1	0.2
3/14	1.4	1.8	-0.4
6/14	2.5	2.0	0.5
9/14	-0.2	0.2	-0.4
12/14	1.4	1.8	-0.4
3/15	2.3	1.6	0.7
6/15	-1.7	-1.7	0.0
9/15	0.0	1.2	-1.2
12/15	0.6	-0.6	1.2
3/16	1.9	3.0	-1.1
6/16	2.2	2.2	0.0
9/16	1.4	0.5	0.9
12/16	-2.3	-3.0	0.7
3/17	1.7	0.8	0.9
6/17	1.9	1.4	0.5
9/17	1.6	0.8	0.8
12/17	0.2	0.4	-0.2
3/18	-1.2	-1.5	0.3
6/18	-0.3	-0.2	-0.1
9/18	0.2	0.0	0.2
12/18	1.5	1.6	-0.1

COMPLIANCE REPORT**Short Term Performance**

Rothschild Portfolio rank exceeds the Smid Cap Rank median for the three year period:	PASS
Rothschild Portfolio return exceeds the Russell 2500 Index for the three year period	PASS
Rothschild Portfolio performs better than the 75th percentile in the Smid Cap Core Rank for four consecutive quarters:	PASS
Brandywine Portfolio rank exceeds the International Fixed Income Rank median for the three year period:	NA
Brandywine Portfolio return exceeds the Global Gov index for the three year period:	NA
Brandywine Portfolio performs better than the 75th percentile in the International Fixed Income Rank for four consecutive quarters	NA
PIMCO Total Return Portfolio rank exceeds Core Fixed Rank median for the three year period:	PASS
PIMCO Total Return Portfolio return exceeds the Barclays Aggregate index for the three year period:	PASS
PIMCO Total Return Portfolio performs better than the 75th percentile in the Core Fixed rank for four consecutive quarters	FAIL

Long-Term Performance

Rothschild Portfolio return exceeds the Russell 2500 Index since June 2011:	PASS
Brandywine Portfolio return exceeds the Global Gov Index since June 2011:	NA
PIMCO Total Return Portfolio return exceeds the Barclays Aggregate Index since June 2011:	PASS

APPENDIX - MAJOR MARKET INDEX RETURNS

Economic Data	Style	QTR	FYTD	1 Year	3 years	5 Years
Consumer Price Index	Economic Data	-0.5	-0.3	1.9	2.0	1.5
Domestic Equity	Style	QTR	FYTD	1 Year	3 years	5 Years
Russell 3000	Broad Equity	-14.3	-8.2	-5.2	9.0	7.9
S&P 500	Large Cap Core	-13.5	-6.9	-4.4	9.3	8.5
Russell 1000	Large Cap	-13.8	-7.4	-4.8	9.1	8.2
Russell 1000 Growth	Large Cap Growth	-15.9	-8.2	-1.5	11.1	10.4
Russell 1000 Value	Large Cap Value	-11.7	-6.7	-8.3	6.9	5.9
Russell Mid Cap	Midcap	-15.4	-11.2	-9.1	7.0	6.3
Russell Mid Cap Growth	Midcap Growth	-16.0	-9.6	-4.8	8.6	7.4
Russell Mid Cap Value	Midcap Value	-15.0	-12.2	-12.3	6.0	5.4
Russell 2000	Small Cap	-20.2	-17.4	-11.0	7.3	4.4
Russell 2000 Growth	Small Cap Growth	-21.7	-17.3	-9.3	7.2	5.1
Russell 2000 Value	Small Cap Value	-18.7	-17.4	-12.9	7.4	3.6
International Equity	Style	QTR	FYTD	1 Year	3 years	5 Years
MSCI All Country World Ex US	Foreign Equity	-11.4	-10.7	-13.8	5.0	1.1
MSCI EAFE	Developed Markets Equity	-12.5	-11.3	-13.4	3.4	1.0
MSCI EAFE Growth	Developed Markets Growth	-13.3	-11.9	-12.5	3.3	2.0
MSCI EAFE Value	Developed Markets Value	-11.6	-10.5	-14.3	3.4	-0.1
MSCI Emerging Markets	Emerging Markets Equity	-7.4	-8.3	-14.2	9.7	2.0
Domestic Fixed Income	Style	QTR	FYTD	1 Year	3 years	5 Years
Bloomberg Barclays Aggregate Index	Core Fixed Income	1.6	1.7	0.0	2.1	2.5
Bloomberg Barclays Capital Gov't Bond	Treasuries	2.5	2.0	0.9	1.4	2.0
Bloomberg Barclays Capital Credit Bond	Corporate Bonds	0.0	0.9	-2.1	3.2	3.2
Intermediate Aggregate	Core Intermediate	1.8	1.9	0.9	1.7	2.1
ML/BoA 1-3 Year Treasury	Short Term Treasuries	1.3	1.5	1.6	1.0	0.8
Bloomberg Barclays Capital High Yield	High Yield Bonds	-4.5	-2.2	-2.1	7.2	3.8
Alternative Assets	Style	QTR	FYTD	1 Year	3 years	5 Years
Bloomberg Barclays Global Treasury Ex US	International Treasuries	1.9	-0.3	-0.9	3.3	0.4
NCREIF NFI-ODCE Index	Real Estate	1.8	3.9	8.3	8.2	10.4
HFRI FOF Composite	Hedge Funds	-4.8	-4.6	-3.9	1.3	1.4

APPENDIX - DISCLOSURES

- * The Manager Shadow index is the weighted average of each manager portfolio's beginning value multiplied by its current quarter benchmark return.
- * The policy index was constructed as follows:

15% Russell 1000	15% Russell 1000 Value	20% Russell 2500
18% MSCI EAFE	20% Bloomberg Barclays Global Gov	12% Bloomberg Barclays Aggregate
- * Dahab Associates utilizes data provided by a custodian and other vendors it believes are reliable. However, it cannot assume responsibility for errors and omissions therefrom.
- * All returns were calculated on a time-weighted basis, and are gross of fees unless otherwise noted.
- * All returns for periods greater than one year are annualized.
- * Dahab Associates uses the modified duration measure to present average duration.
- * All values are in US dollars.

A note on our industry sector classifications:

Beginning with our December 2018 reports, we have changed the classification of industry sectors in our equity analysis. We believe the current system better reflects the segments of the equity market at this time. The current system differs from our previous system in a few distinct ways. Previously, Health Care had been disaggregated by its various components such as medical devices, health services, and pharmaceuticals into other sectors. Real Estate had been part of the Financials sector, but is now a standalone category. Durable Goods and Non-Durable goods were replaced by Discretionary and Staples. As always, we calculate sector returns for equity portfolios and their benchmarks using the same methodology in order to present a fair comparison.

CITY OF CHARLOTTE LONG-TERM INVESTMENT PROGRAM
RHUMBLINE - RUSSELL 1000 GROWTH
PERFORMANCE REVIEW
DECEMBER 2018

INVESTMENT RETURN

On December 31st, 2018, the City of Charlotte Long-Term Investment Program's RhumbLine Russell 1000 Growth portfolio was valued at \$12,452,851, a decrease of \$2,351,283 from the September ending value of \$14,804,134. Last quarter, the account recorded total net withdrawals of \$1,649 in addition to \$2,349,634 in net investment losses. Because there were no income receipts during the fourth quarter, the portfolio's net investment losses were entirely made up of capital losses (realized and unrealized).

RELATIVE PERFORMANCE

Total Fund

During the fourth quarter, the RhumbLine Russell 1000 Growth portfolio lost 15.9%, which was equal to the Russell 1000 Growth Index's return of -15.9% and ranked in the 61st percentile of the Large Cap Growth universe. Over the trailing twelve-month period, this portfolio returned -1.5%, which was equal to the benchmark's -1.5% return, and ranked in the 55th percentile. Since September 2017, the portfolio returned 4.9% per annum and ranked in the 45th percentile. For comparison, the Russell 1000 Growth returned an annualized 5.0% over the same period.

ASSET ALLOCATION

The portfolio was fully invested in the RhumbLine Russell 1000 Growth Fund at the end of the quarter.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Quarter	FYTD	YTD /1Y	3 Year	5 Year	Since 09/17
Total Portfolio - Gross	-15.9	-8.2	-1.5	----	----	4.9
<i>LARGE CAP GROWTH RANK</i>	(61)	(48)	(55)	----	----	(45)
Total Portfolio - Net	-15.9	-8.2	-1.6	----	----	4.8
Russell 1000G	-15.9	-8.2	-1.5	11.1	10.4	5.0
Large Cap Equity - Gross	-15.9	-8.2	-1.5	----	----	4.9
<i>LARGE CAP GROWTH RANK</i>	(61)	(48)	(55)	----	----	(45)
Russell 1000G	-15.9	-8.2	-1.5	11.1	10.4	5.0

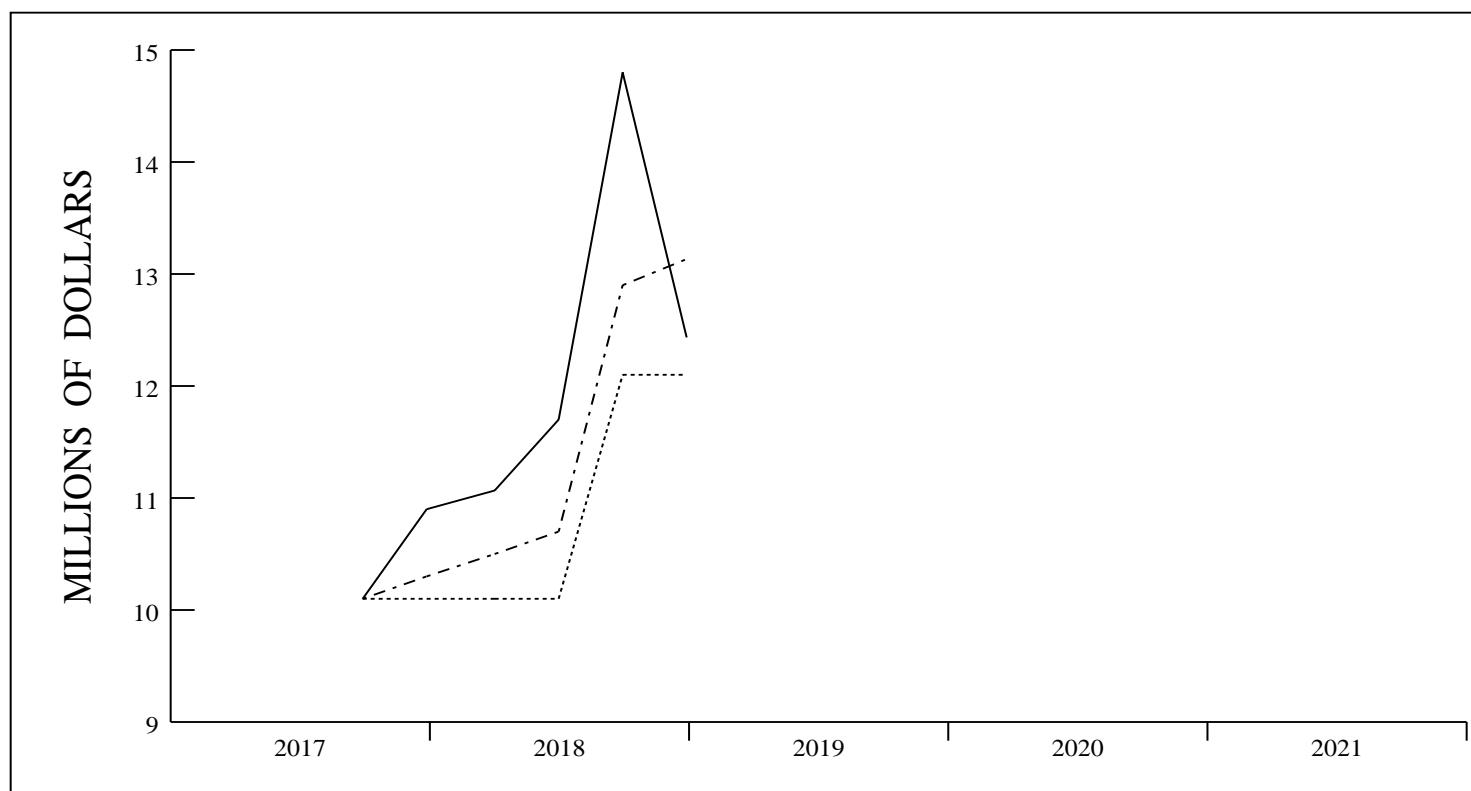
ASSET ALLOCATION

Large Cap Equity	100.0%	\$ 12,452,851
Total Portfolio	100.0%	\$ 12,452,851

INVESTMENT RETURN

Market Value 9/2018	\$ 14,804,134
Contribs / Withdrawals	- 1,649
Income	0
Capital Gains / Losses	- 2,349,634
Market Value 12/2018	\$ 12,452,851

INVESTMENT GROWTH

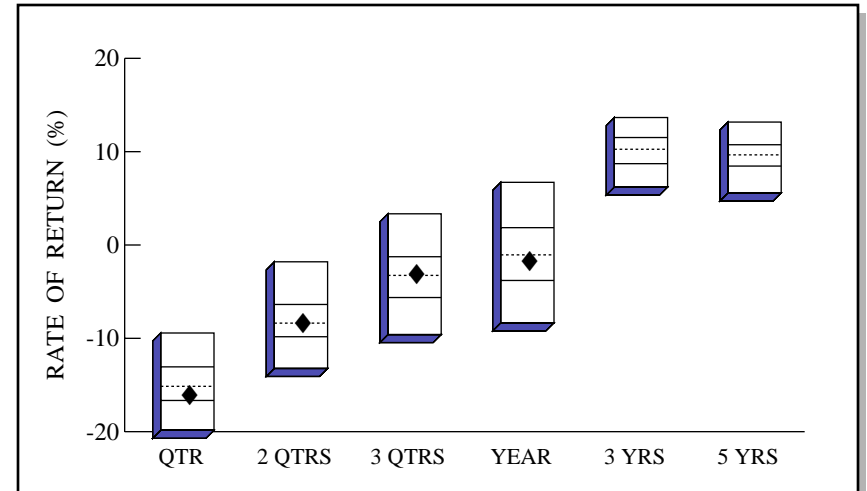
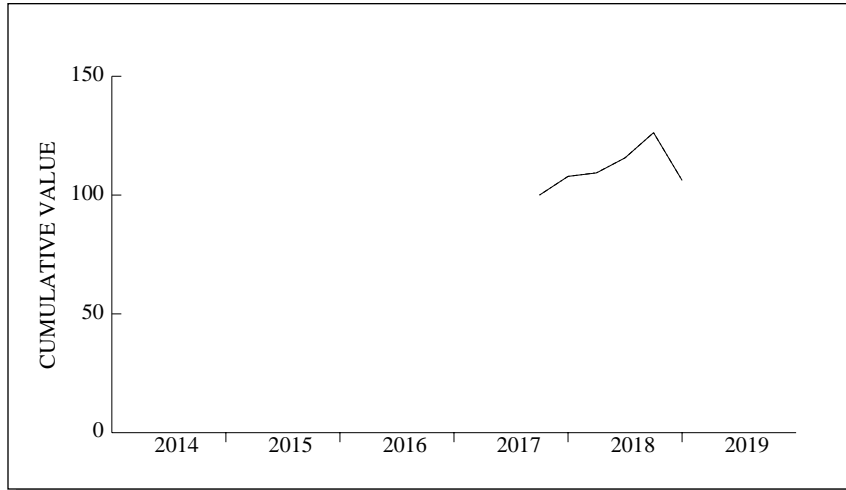


— ACTUAL RETURN
 - - - 7.75%
 0.0%

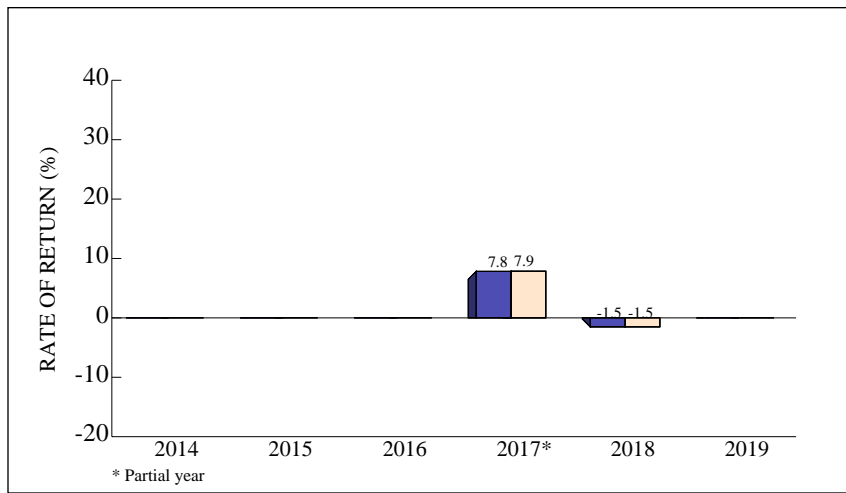
VALUE ASSUMING
 7.75% RETURN \$ 13,155,452

	LAST QUARTER	PERIOD 9/17 - 12/18
BEGINNING VALUE	\$ 14,804,134	\$ 10,126,280
NET CONTRIBUTIONS	- 1,649	1,995,012
INVESTMENT RETURN	- 2,349,634	331,559
ENDING VALUE	\$ 12,452,851	\$ 12,452,851
INCOME	0	0
CAPITAL GAINS (LOSSES)	- 2,349,634	331,559
INVESTMENT RETURN	- 2,349,634	331,559

TOTAL RETURN COMPARISONS



Large Cap Growth Universe



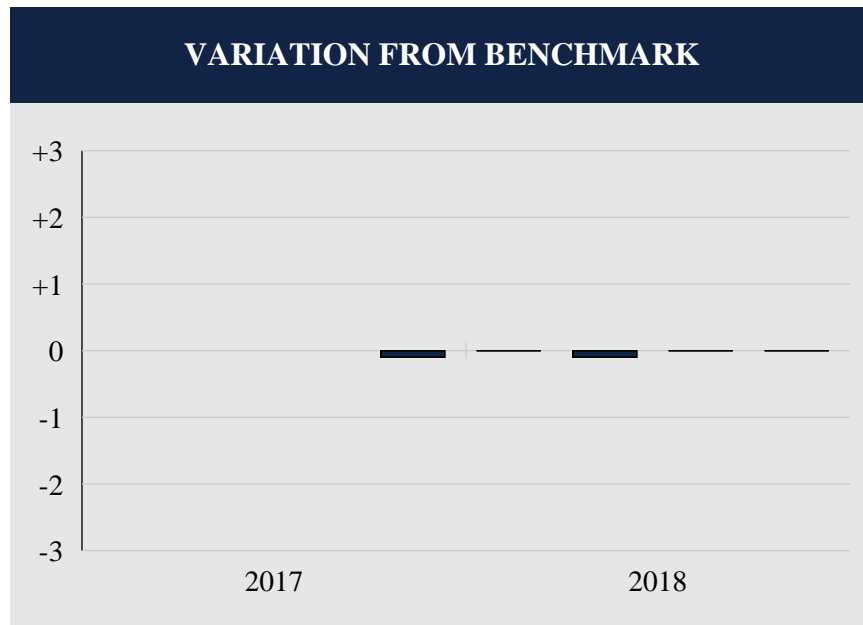
* Partial year

	QTR	2 QTRS	3 QTRS	YEAR	-----ANNUALIZED-----	
					3 YRS	5 YRS
RETURN	-15.9	-8.2	-2.9	-1.5	---	---
(RANK)	(61)	(48)	(46)	(55)	---	---
5TH %ILE	-9.4	-1.8	3.3	6.7	13.7	13.2
25TH %ILE	-13.1	-6.4	-1.3	1.9	11.5	10.7
MEDIAN	-15.1	-8.4	-3.3	-1.1	10.3	9.7
75TH %ILE	-16.7	-9.8	-5.6	-3.8	8.7	8.5
95TH %ILE	-19.9	-13.2	-9.6	-8.4	6.2	5.6
Russ 1000G	-15.9	-8.2	-2.9	-1.5	11.1	10.4

Large Cap Growth Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

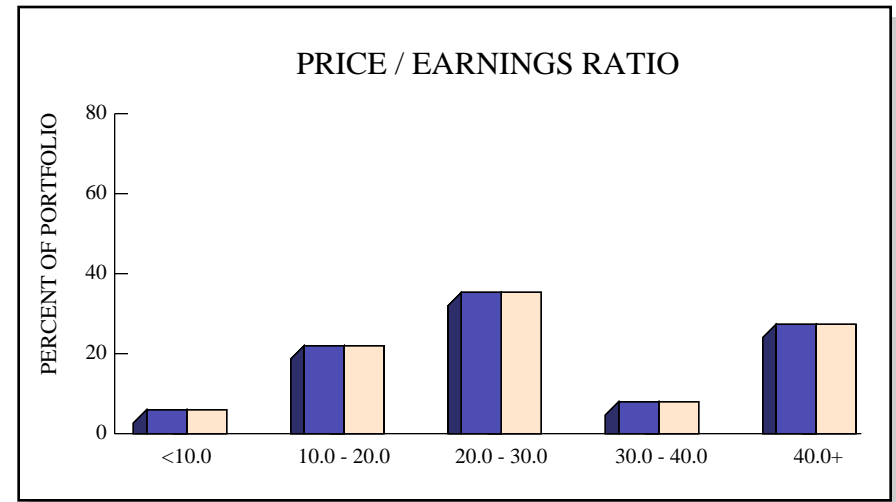
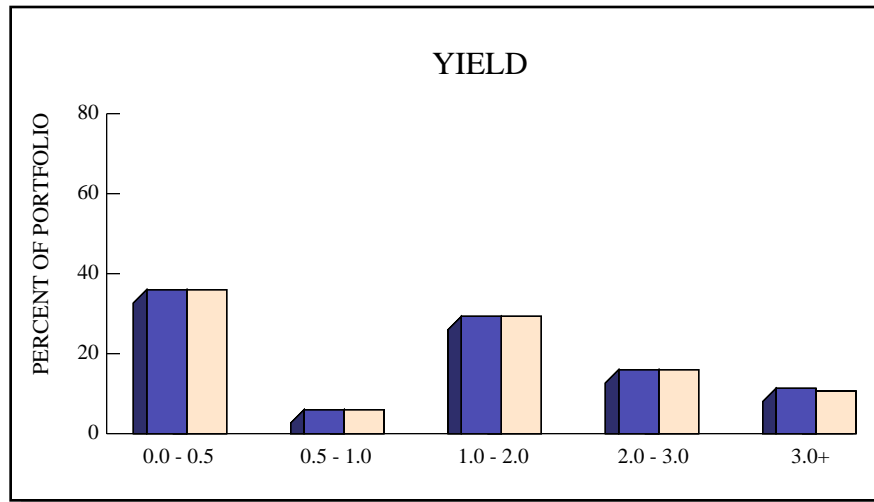
COMPARATIVE BENCHMARK: RUSSELL 1000 GROWTH



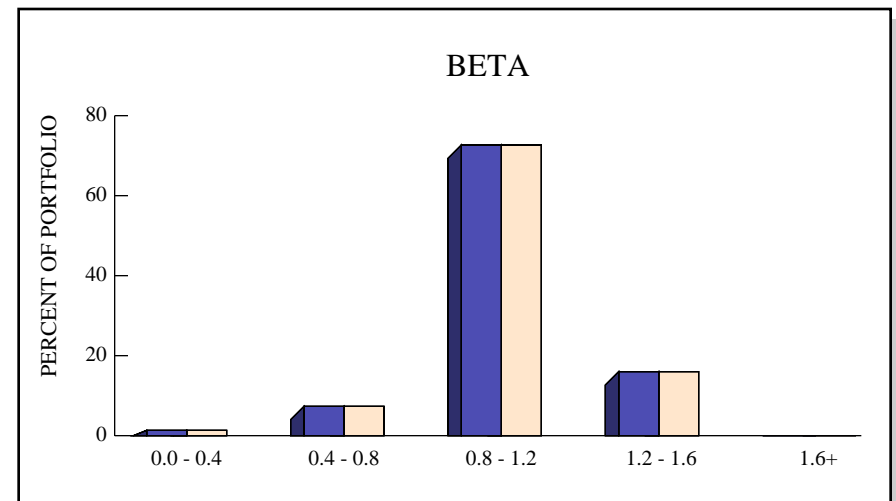
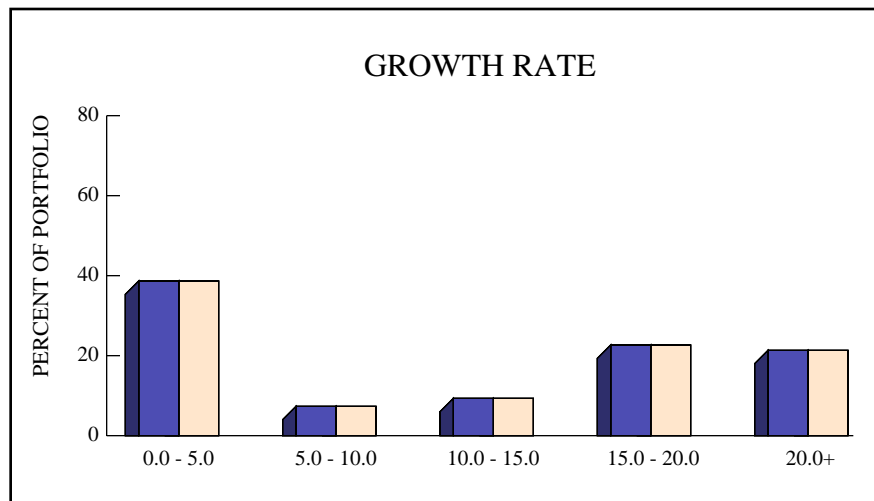
RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
12/17	7.8	7.9	-0.1
3/18	1.4	1.4	0.0
6/18	5.7	5.8	-0.1
9/18	9.2	9.2	0.0
12/18	-15.9	-15.9	0.0

Total Quarters Observed	5
Quarters At or Above the Benchmark	3
Quarters Below the Benchmark	2
Batting Average	.600

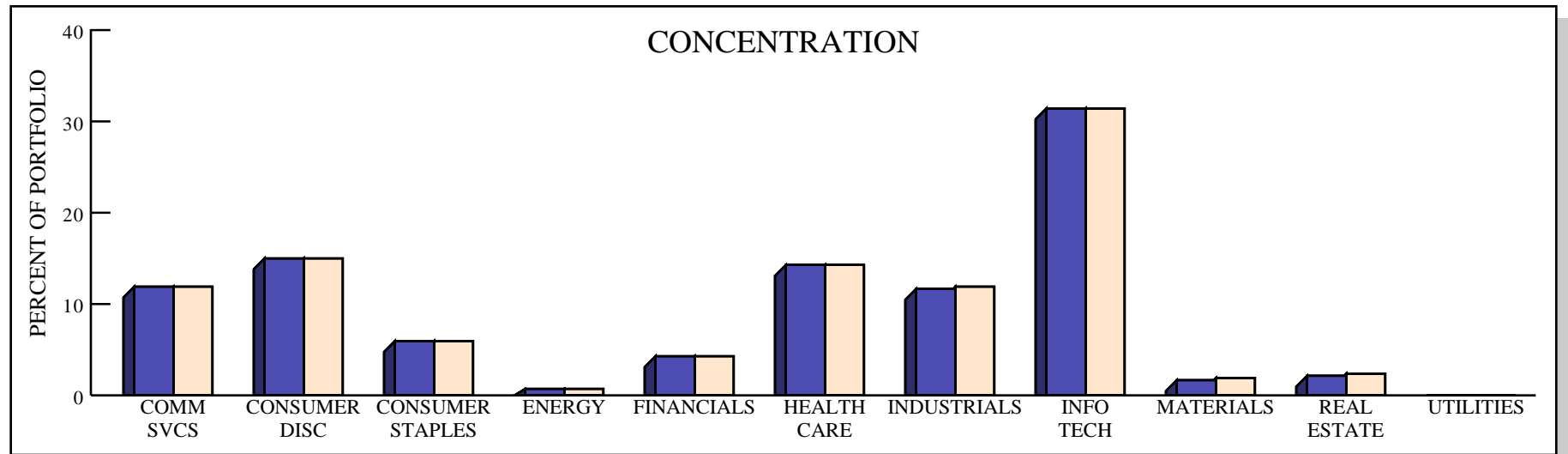
STOCK CHARACTERISTICS



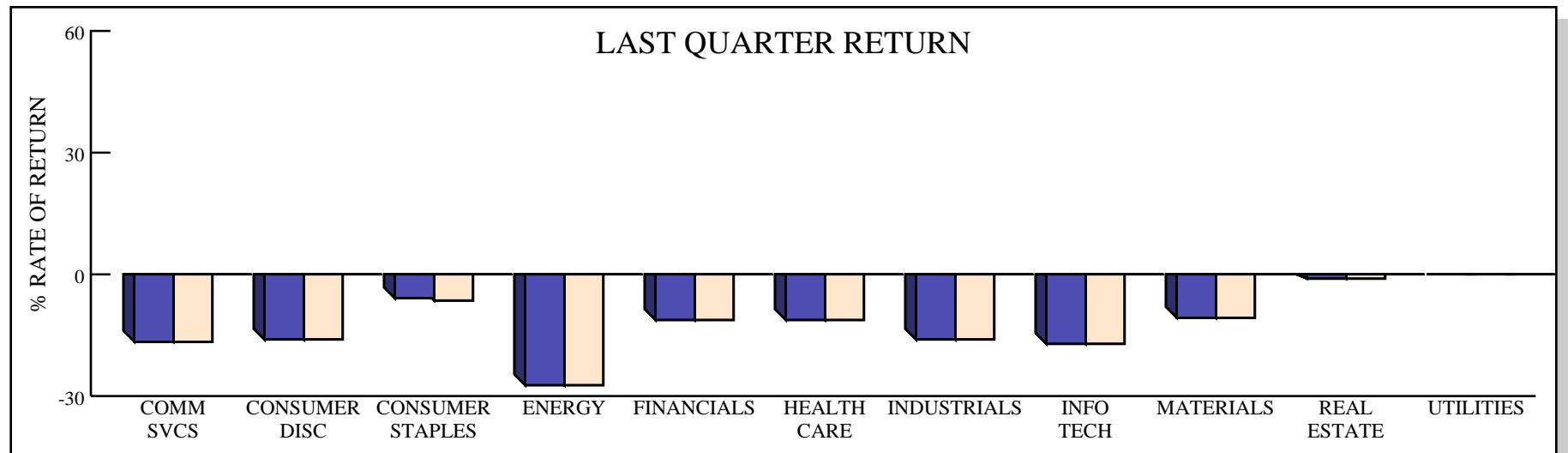
	# HOLDINGS	YIELD	GROWTH	P/E	BETA
PORTFOLIO	546	1.3%	11.8%	29.8	1.04
RUSSELL 1000G	546	1.3%	11.8%	29.8	1.04



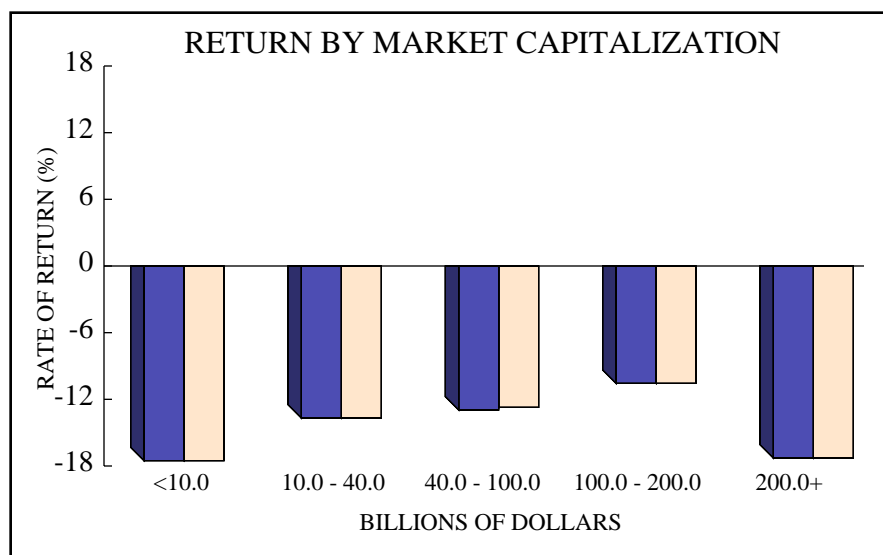
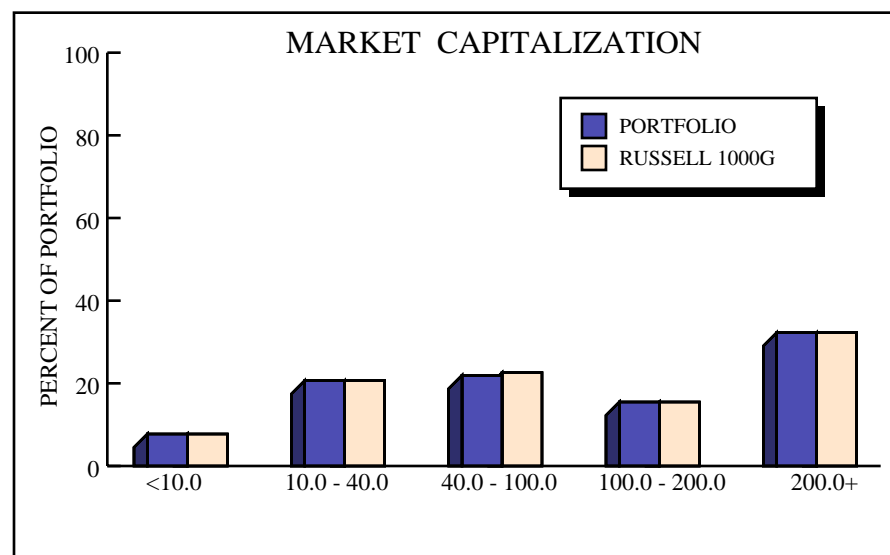
STOCK INDUSTRY ANALYSIS



■ PORTFOLIO ■ RUSSELL 1000G



TOP TEN HOLDINGS



TOP TEN EQUITY HOLDINGS

RANK	NAME	VALUE	% EQUITY	RETURN	INDUSTRY SECTOR	MKT CAP
1	APPLE INC	\$ 806,998	6.48%	-29.9%	Information Technology	\$ 748.5 B
2	MICROSOFT CORP	785,238	6.31%	-10.8%	Information Technology	785.0 B
3	AMAZON.COM INC	657,863	5.28%	-25.0%	Consumer Discretionary	734.4 B
4	ALPHABET INC-CL C	339,680	2.73%	-13.2%	Communication Services	362.1 B
5	ALPHABET INC-CL A	336,477	2.70%	-13.4%	Communication Services	312.4 B
6	FACEBOOK INC-CLASS A	335,721	2.70%	-20.3%	Communication Services	314.9 B
7	UNITEDHEALTH GROUP INC	256,594	2.06%	-6.1%	Health Care	239.7 B
8	VISA INC-CLASS A SHARES	250,290	2.01%	-11.9%	Information Technology	231.9 B
9	HOME DEPOT INC	213,400	1.71%	-16.6%	Consumer Discretionary	194.1 B
10	MASTERCARD INC - A	186,763	1.50%	-15.2%	Information Technology	192.6 B

CITY OF CHARLOTTE LONG-TERM INVESTMENT PROGRAM
STATE STREET GLOBAL ADVISORS - RUSSELL 1000 VALUE
PERFORMANCE REVIEW
DECEMBER 2018

INVESTMENT RETURN

On December 31st, 2018, the City of Charlotte Long-Term Investment Program's State Street Global Advisors Russell 1000 Value portfolio was valued at \$13,323,810, a decrease of \$1,773,396 from the September ending value of \$15,097,206. Last quarter, the account recorded total net withdrawals of \$2,976 in addition to \$1,770,420 in net investment losses. Because there were no income receipts during the fourth quarter, the portfolio's net investment losses were entirely made up of capital losses (realized and unrealized).

RELATIVE PERFORMANCE

Total Fund

During the fourth quarter, the State Street Global Advisors Russell 1000 Value portfolio lost 11.7%, which was equal to the Russell 1000 Value Index's return of -11.7% and ranked in the 29th percentile of the Large Cap Value universe. Over the trailing twelve-month period, this portfolio returned -8.2%, which was 0.1% above the benchmark's -8.3% return, and ranked in the 48th percentile. Since June 2011, the portfolio returned 9.4% per annum and ranked in the 64th percentile. For comparison, the Russell 1000 Value returned an annualized 9.5% over the same period.

ASSET ALLOCATION

The portfolio was fully invested in the SSGA Russell 1000 Value Index NL Fund at the end of the quarter.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Quarter	FYTD	YTD /1Y	3 Year	5 Year	Since 06/11
Total Portfolio - Gross	-11.7	-6.7	-8.2	7.0	6.0	9.4
<i>LARGE CAP VALUE RANK</i>	(29)	(35)	(48)	(55)	(61)	(64)
Total Portfolio - Net	-11.7	-6.7	-8.3	6.9	5.9	9.3
Russell 1000V	-11.7	-6.7	-8.3	6.9	5.9	9.5
Large Cap Equity - Gross	-11.7	-6.7	-8.2	7.0	6.0	9.4
<i>LARGE CAP VALUE RANK</i>	(29)	(35)	(48)	(55)	(61)	(64)
Russell 1000V	-11.7	-6.7	-8.3	6.9	5.9	9.5

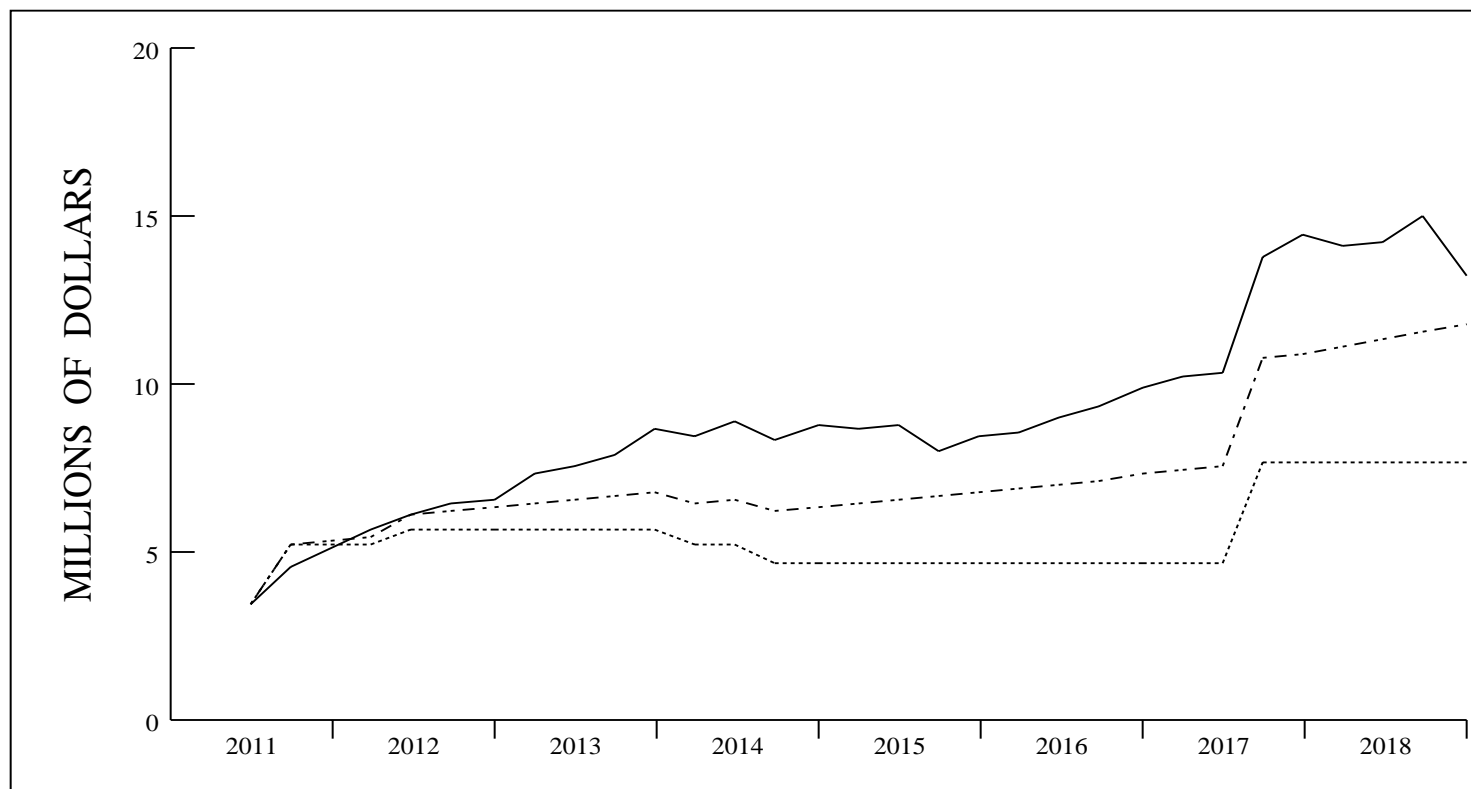
ASSET ALLOCATION

Large Cap Equity	100.0%	\$ 13,323,810
Total Portfolio	100.0%	\$ 13,323,810

INVESTMENT RETURN

Market Value 9/2018	\$ 15,097,206
Contribs / Withdrawals	-2,976
Income	0
Capital Gains / Losses	-1,770,420
Market Value 12/2018	\$ 13,323,810

INVESTMENT GROWTH

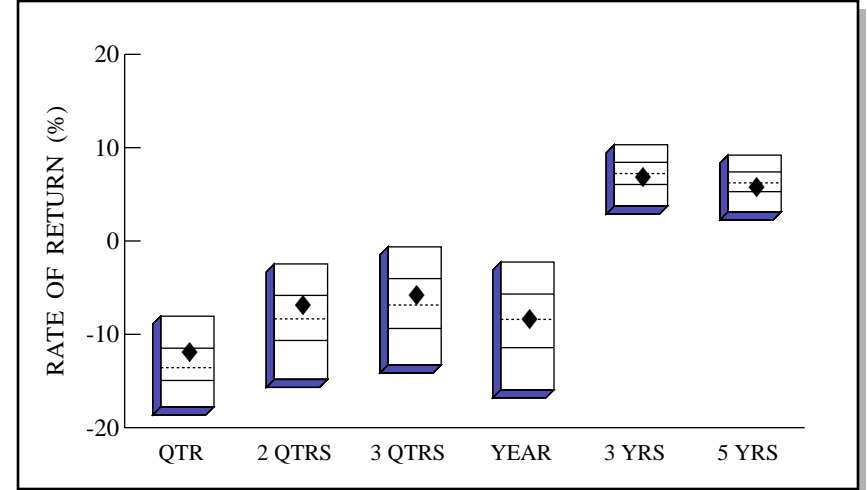
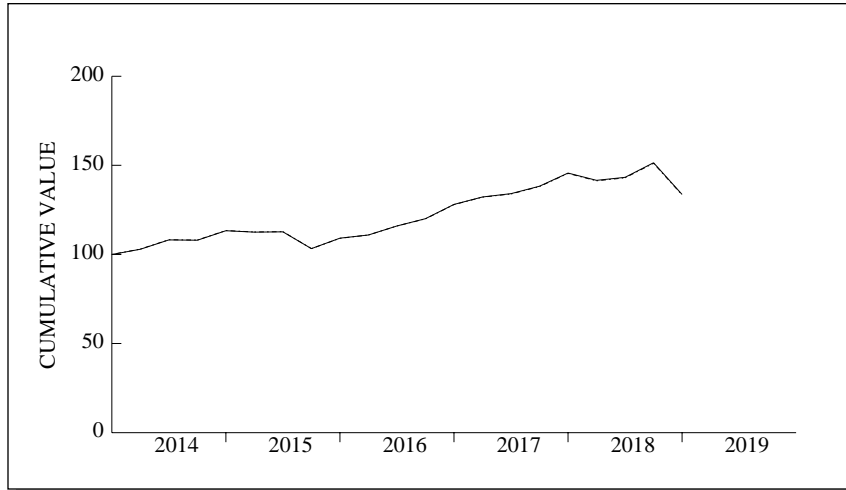


—	ACTUAL RETURN
- - -	7.75%
.....	0.0%

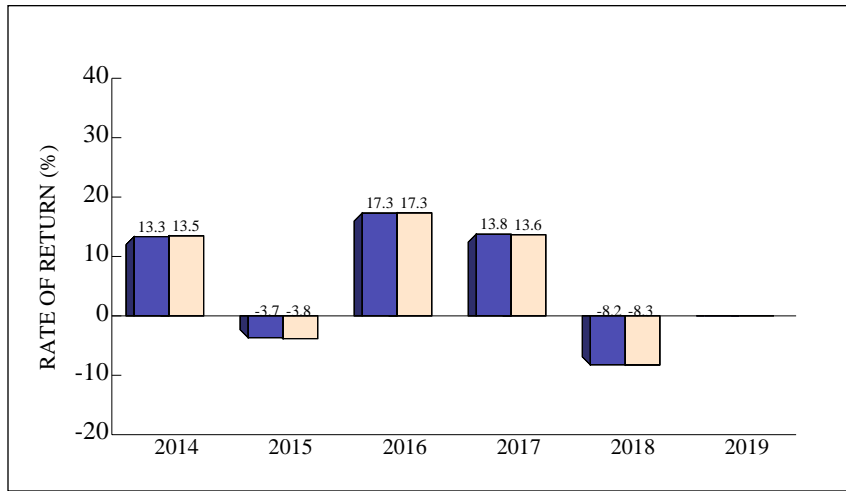
VALUE ASSUMING	
7.75% RETURN	\$ 11,836,311

	LAST QUARTER	PERIOD 6/11 - 12/18
BEGINNING VALUE	\$ 15,097,206	\$ 3,505,860
NET CONTRIBUTIONS	- 2,976	4,233,234
<u>INVESTMENT RETURN</u>	<u>- 1,770,420</u>	<u>5,584,716</u>
ENDING VALUE	\$ 13,323,810	\$ 13,323,810
INCOME	0	0
<u>CAPITAL GAINS (LOSSES)</u>	<u>- 1,770,420</u>	<u>5,584,716</u>
INVESTMENT RETURN	- 1,770,420	5,584,716

TOTAL RETURN COMPARISONS



Large Cap Value Universe

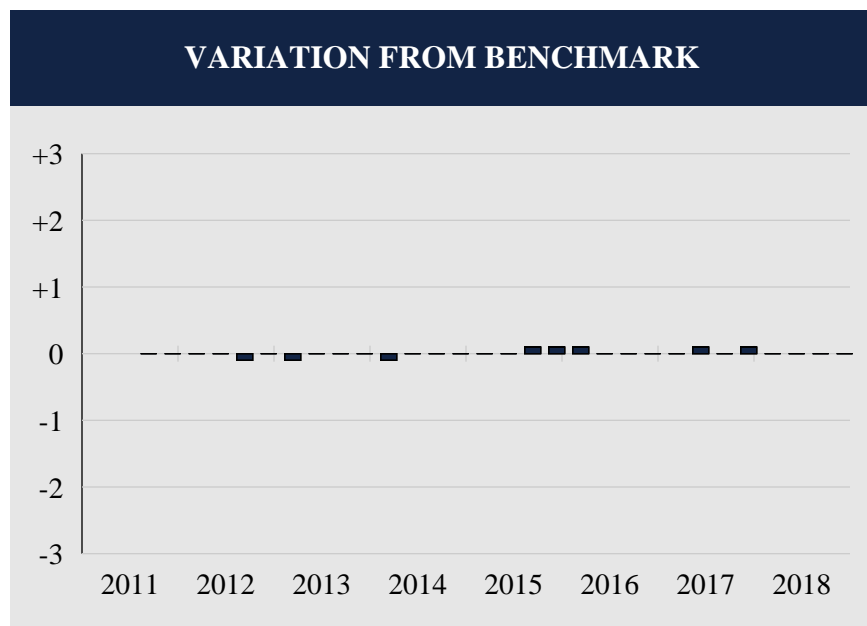


	QTR	2 QTRS	3 QTRS	YEAR	-----ANNUALIZED-----	
					3 YRS	5 YRS
RETURN	-11.7	-6.7	-5.6	-8.2	7.0	6.0
(RANK)	(29)	(35)	(41)	(48)	(55)	(61)
5TH %ILE	-8.1	-2.5	-0.6	-2.3	10.3	9.2
25TH %ILE	-11.5	-5.8	-4.0	-5.7	8.4	7.4
MEDIAN	-13.6	-8.4	-6.9	-8.4	7.2	6.2
75TH %ILE	-15.0	-10.7	-9.4	-11.4	6.1	5.3
95TH %ILE	-17.8	-14.8	-13.3	-16.0	3.7	3.1
Russ 1000V	-11.7	-6.7	-5.6	-8.3	6.9	5.9

Large Cap Value Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

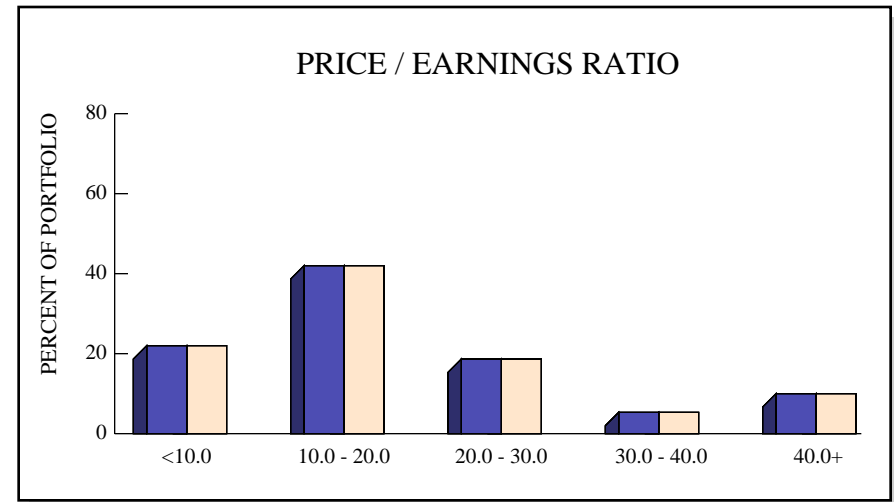
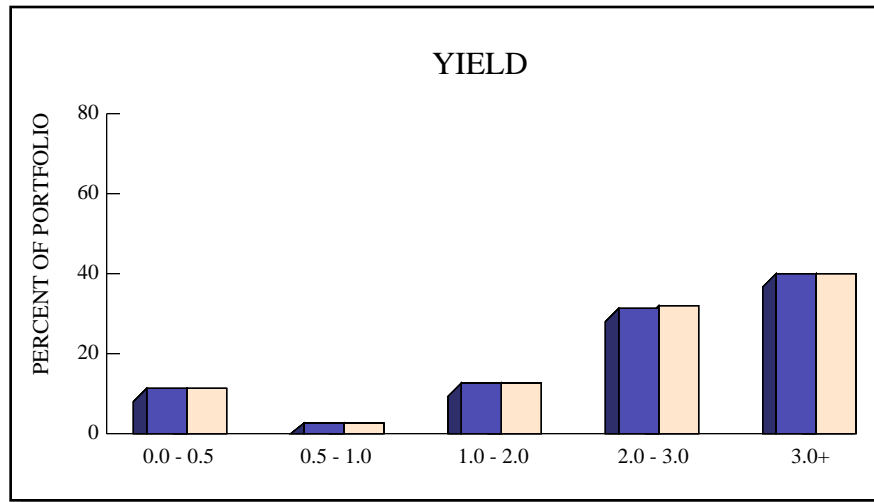
COMPARATIVE BENCHMARK: RUSSELL 1000 VALUE



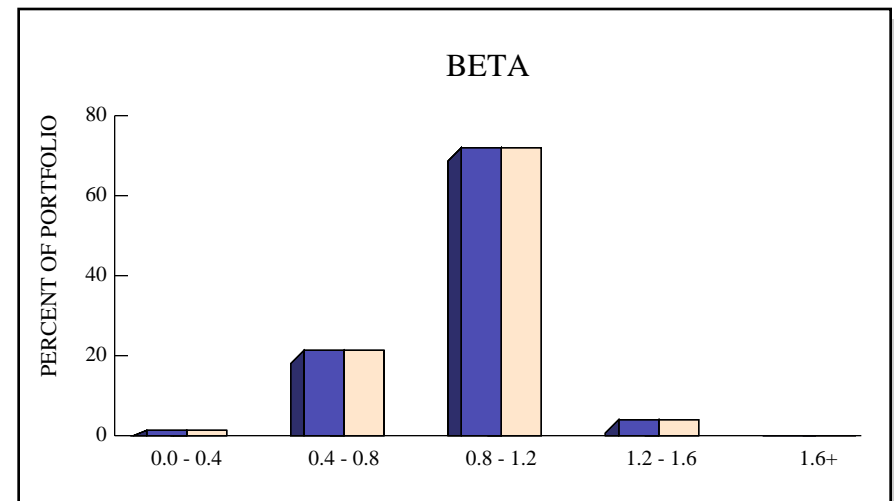
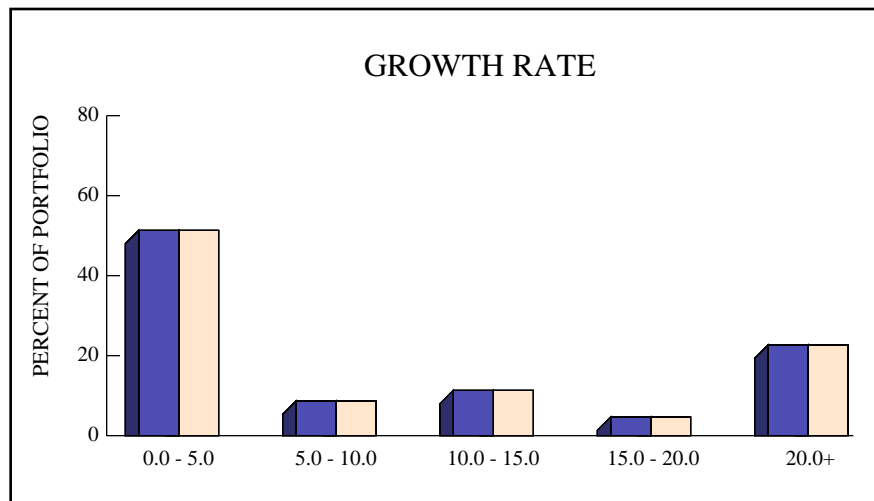
Total Quarters Observed	30
Quarters At or Above the Benchmark	27
Quarters Below the Benchmark	3
Batting Average	.900

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
9/11	-16.2	-16.2	0.0
12/11	13.1	13.1	0.0
3/12	11.1	11.1	0.0
6/12	-2.2	-2.2	0.0
9/12	6.4	6.5	-0.1
12/12	1.5	1.5	0.0
3/13	12.2	12.3	-0.1
6/13	3.2	3.2	0.0
9/13	3.9	3.9	0.0
12/13	10.0	10.0	0.0
3/14	2.9	3.0	-0.1
6/14	5.1	5.1	0.0
9/14	-0.2	-0.2	0.0
12/14	5.0	5.0	0.0
3/15	-0.7	-0.7	0.0
6/15	0.1	0.1	0.0
9/15	-8.3	-8.4	0.1
12/15	5.7	5.6	0.1
3/16	1.7	1.6	0.1
6/16	4.6	4.6	0.0
9/16	3.5	3.5	0.0
12/16	6.7	6.7	0.0
3/17	3.3	3.3	0.0
6/17	1.4	1.3	0.1
9/17	3.1	3.1	0.0
12/17	5.4	5.3	0.1
3/18	-2.8	-2.8	0.0
6/18	1.2	1.2	0.0
9/18	5.7	5.7	0.0
12/18	-11.7	-11.7	0.0

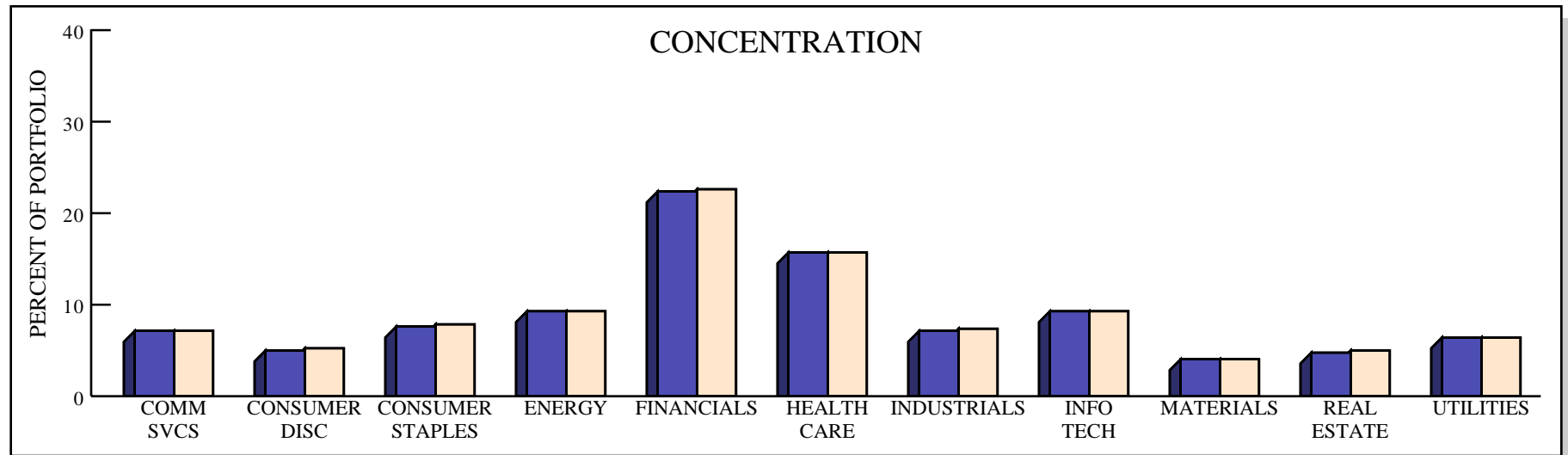
STOCK CHARACTERISTICS



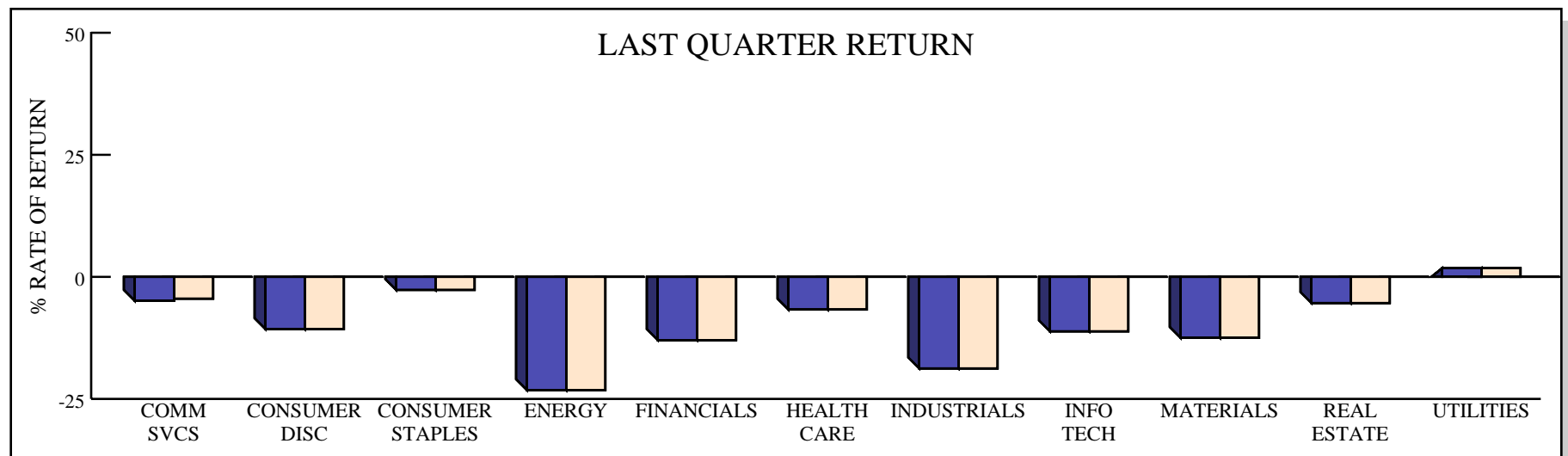
	# HOLDINGS	YIELD	GROWTH	P/E	BETA
PORTFOLIO	725	2.8%	7.4%	19.2	0.92
RUSSELL 1000V	725	2.8%	7.4%	19.2	0.92



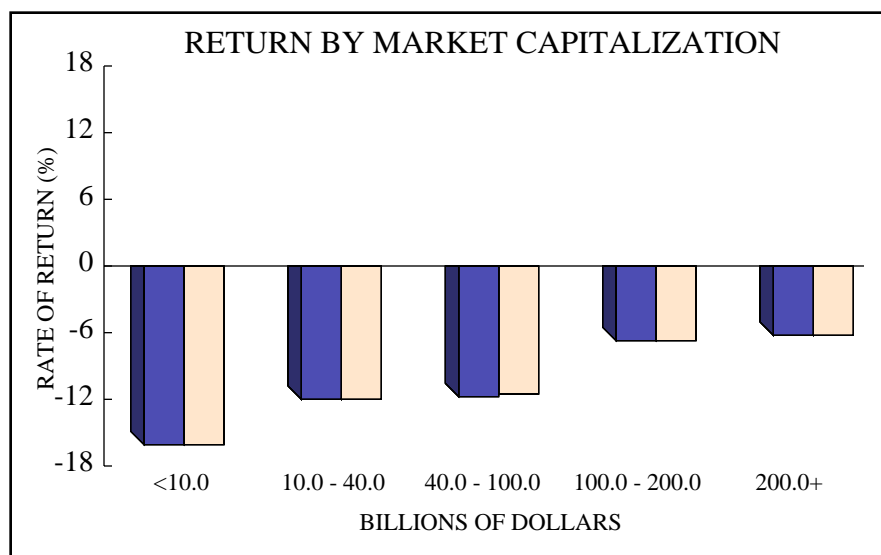
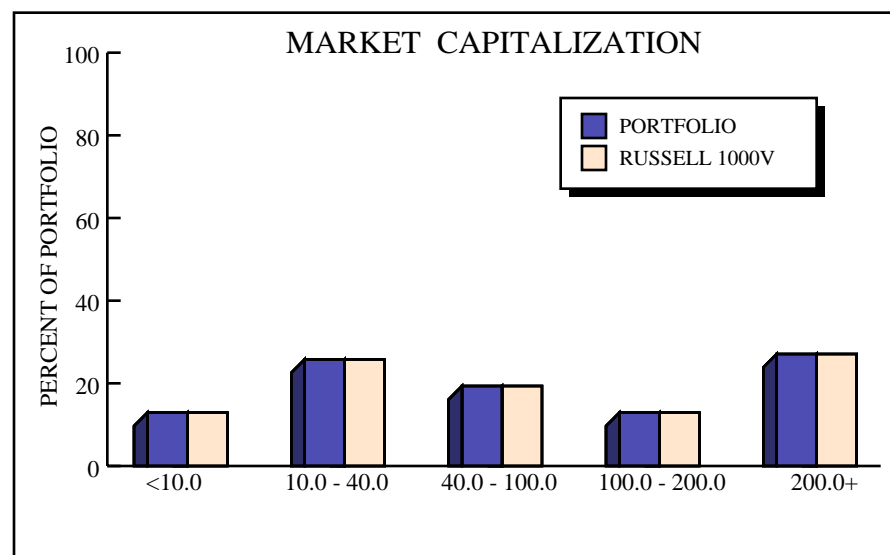
STOCK INDUSTRY ANALYSIS



■ PORTFOLIO ■ RUSSELL 1000V



TOP TEN HOLDINGS



TOP TEN EQUITY HOLDINGS

RANK	NAME	VALUE	% EQUITY	RETURN	INDUSTRY SECTOR	MKT CAP
1	BERKSHIRE HATHAWAY INC-CL B	\$ 390,596	2.93%	-4.6%	Financials	\$ 278.3 B
2	JPMORGAN CHASE & CO	365,001	2.74%	-12.9%	Financials	324.6 B
3	EXXON MOBIL CORP	326,426	2.45%	-19.0%	Energy	288.7 B
4	JOHNSON & JOHNSON	320,947	2.41%	-6.0%	Health Care	346.1 B
5	PFIZER INC	286,126	2.15%	-0.2%	Health Care	252.3 B
6	VERIZON COMMUNICATIONS INC	262,772	1.97%	6.5%	Communication Services	232.3 B
7	PROCTER & GAMBLE CO/THE	258,663	1.94%	11.4%	Consumer Staples	229.0 B
8	BANK OF AMERICA CORP	254,654	1.91%	-15.9%	Financials	241.8 B
9	INTEL CORP	242,253	1.82%	-0.1%	Information Technology	214.2 B
10	AT&T INC	234,399	1.76%	-13.7%	Communication Services	207.7 B

CITY OF CHARLOTTE LONG-TERM INVESTMENT PROGRAM
ROTHSCHILD - SMALL/MID CAP
PERFORMANCE REVIEW
DECEMBER 2018

INVESTMENT RETURN

On December 31st, 2018, the City of Charlotte Long-Term Investment Program's Rothschild Small/Mid Cap portfolio was valued at \$15,389,348, a decrease of \$1,600,954 from the September ending value of \$16,990,302. Last quarter, the account recorded total net contributions of \$1,958,325, which partially offset the account's \$3,559,279 net investment loss for the period. Because there were no income receipts during the fourth quarter, the portfolio's net investment losses were entirely made up of capital losses (realized and unrealized).

RELATIVE PERFORMANCE

During the fourth quarter, the Rothschild Small/Mid Cap portfolio lost 18.7%, which was 0.2% less than the Russell 2500 Index's return of -18.5% and ranked in the 60th percentile of the Smid Cap universe. Over the trailing twelve-month period, this portfolio returned -10.5%, which was 0.5% below the benchmark's -10.0% return, and ranked in the 52nd percentile. Since June 2011, the portfolio returned 10.3% per annum and ranked in the 22nd percentile. For comparison, the Russell 2500 returned an annualized 8.7% over the same period.

ASSET ALLOCATION

The portfolio was fully invested in the Rothschild Smid Cap Fund.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Quarter	FYTD	YTD /1Y	3 Year	5 Year	Since 06/11
Total Portfolio - Gross	-18.7	-13.9	-10.5	7.5	6.9	10.3
<i>SMID CAP RANK</i>	(60)	(50)	(52)	(50)	(28)	(22)
Total Portfolio - Net	-19.0	-14.4	-11.4	6.4	5.8	9.2
Russell 2500	-18.5	-14.7	-10.0	7.3	5.1	8.7
SMid Cap Equity - Gross	-18.7	-13.9	-10.5	7.5	6.9	10.3
<i>SMID CAP RANK</i>	(60)	(50)	(52)	(50)	(28)	(22)
Russell 2500	-18.5	-14.7	-10.0	7.3	5.1	8.7

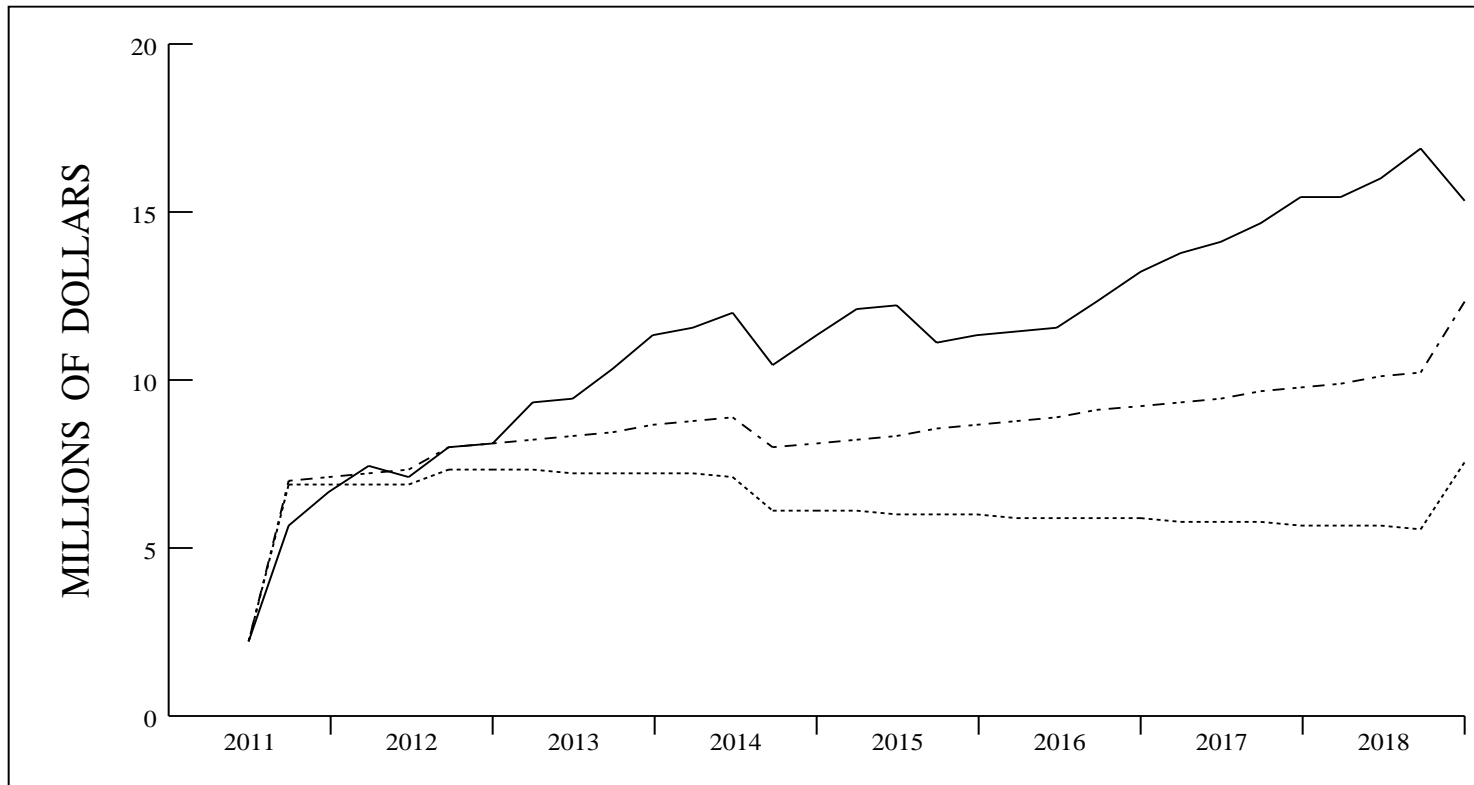
ASSET ALLOCATION

SMid Cap Equity	100.0%	\$ 15,389,348
Total Portfolio	100.0%	\$ 15,389,348

INVESTMENT RETURN

Market Value 9/2018	\$ 16,990,302
Contribs / Withdrawals	1,958,325
Income	0
Capital Gains / Losses	- 3,559,279
Market Value 12/2018	\$ 15,389,348

INVESTMENT GROWTH

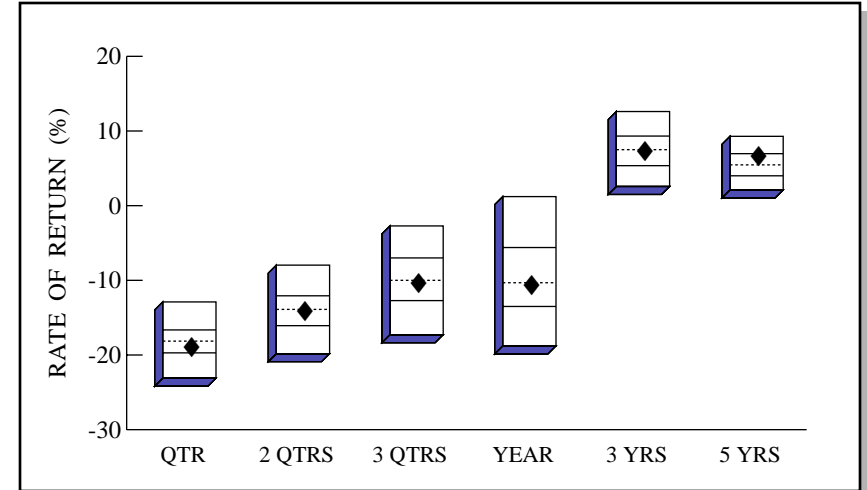
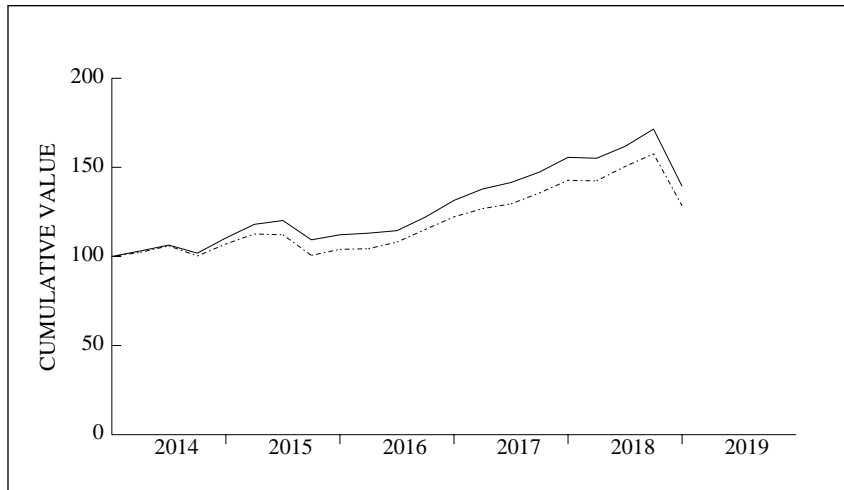


— ACTUAL RETURN
 - - - 7.75%
 0.0%

VALUE ASSUMING
 7.75% RETURN \$ 12,443,962

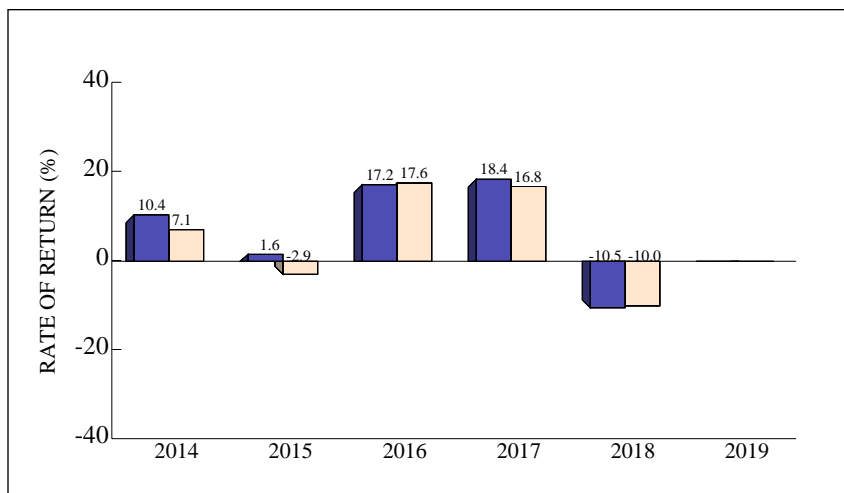
	LAST QUARTER	PERIOD 6/11 - 12/18
BEGINNING VALUE	\$ 16,990,302	\$ 2,294,451
NET CONTRIBUTIONS	1,958,325	5,306,395
INVESTMENT RETURN	<u>- 3,559,279</u>	<u>7,788,502</u>
ENDING VALUE	\$ 15,389,348	\$ 15,389,348
INCOME	0	0
CAPITAL GAINS (LOSSES)	<u>- 3,559,279</u>	<u>7,788,502</u>
INVESTMENT RETURN	- 3,559,279	7,788,502

TOTAL RETURN COMPARISONS



■ ——— PORTFOLIO
■ - - - - - RUSSELL 2500

Smid Cap Universe

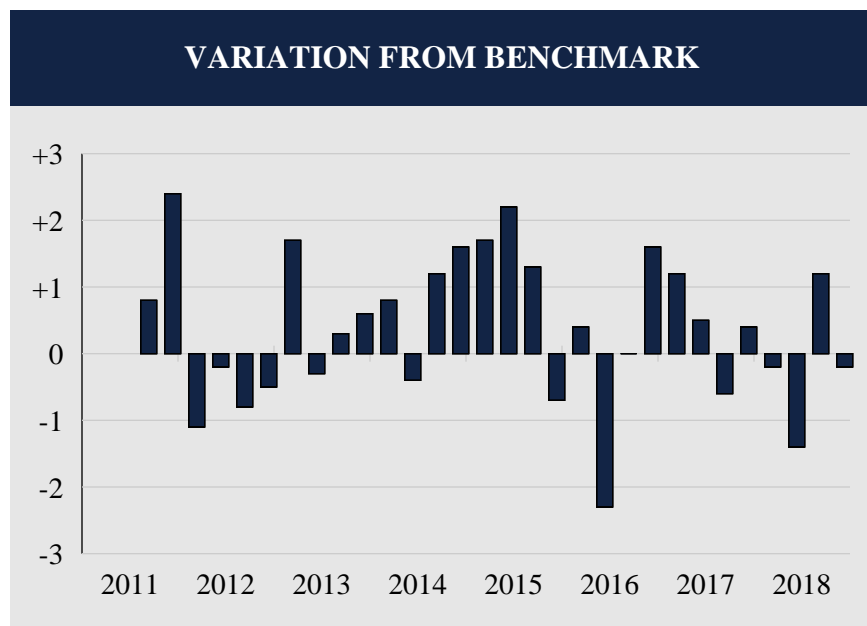


	QTR	2 QTRS	3 QTRS	YEAR	-----ANNUALIZED----- 3 YRS	5 YRS
RETURN	-18.7	-13.9	-10.2	-10.5	7.5	6.9
(RANK)	(60)	(50)	(51)	(52)	(50)	(28)
5TH %ILE	-12.9	-8.0	-2.7	1.2	12.6	9.3
25TH %ILE	-16.6	-12.1	-7.0	-5.6	9.3	7.0
MEDIAN	-18.1	-13.9	-10.0	-10.3	7.5	5.5
75TH %ILE	-19.7	-16.1	-12.7	-13.5	5.4	4.0
95TH %ILE	-23.1	-19.8	-17.3	-18.8	2.6	2.1
Russ 2500	-18.5	-14.7	-9.8	-10.0	7.3	5.1

Smid Cap Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

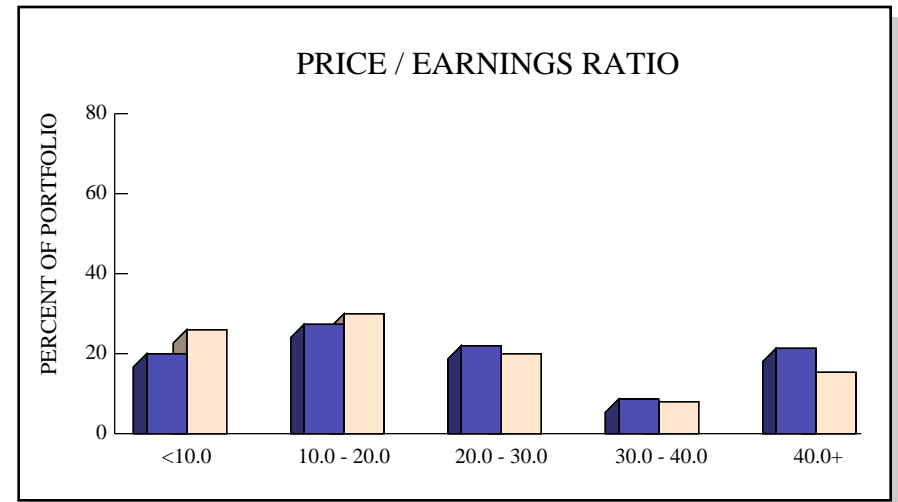
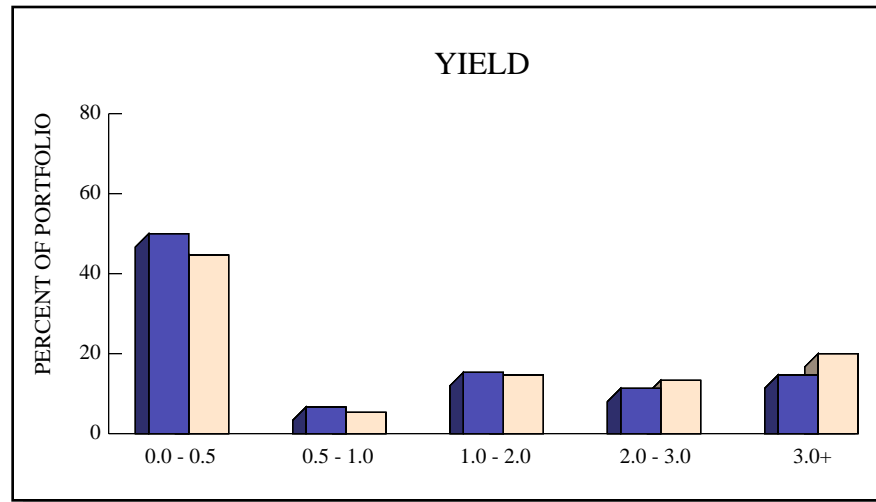
COMPARATIVE BENCHMARK: RUSSELL 2500



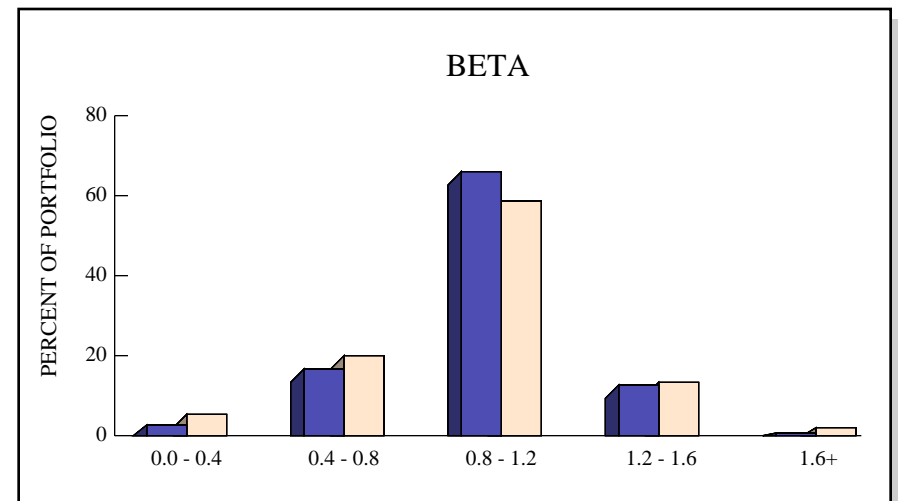
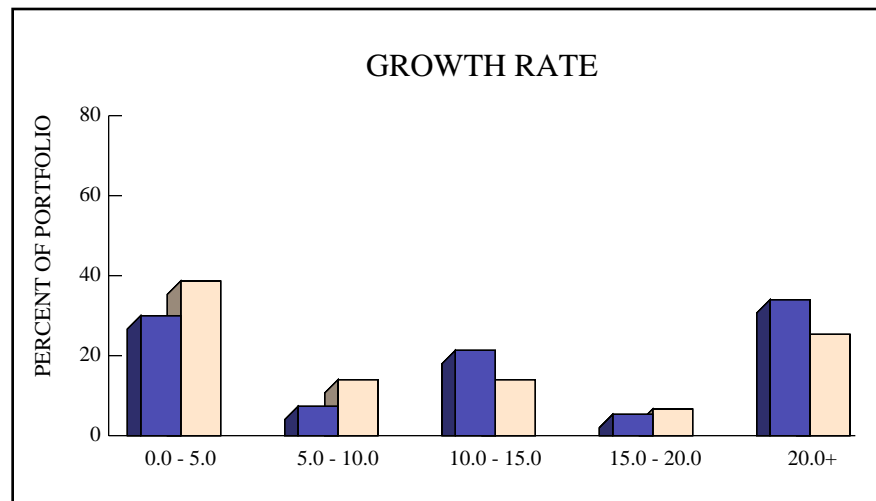
RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
9/11	-20.4	-21.2	0.8
12/11	16.9	14.5	2.4
3/12	11.9	13.0	-1.1
6/12	-4.3	-4.1	-0.2
9/12	4.8	5.6	-0.8
12/12	2.6	3.1	-0.5
3/13	14.6	12.9	1.7
6/13	2.0	2.3	-0.3
9/13	9.4	9.1	0.3
12/13	9.3	8.7	0.6
3/14	3.1	2.3	0.8
6/14	3.2	3.6	-0.4
9/14	-4.2	-5.4	1.2
12/14	8.4	6.8	1.6
3/15	6.9	5.2	1.7
6/15	1.9	-0.3	2.2
9/15	-9.0	-10.3	1.3
12/15	2.6	3.3	-0.7
3/16	0.8	0.4	0.4
6/16	1.3	3.6	-2.3
9/16	6.6	6.6	0.0
12/16	7.7	6.1	1.6
3/17	4.9	3.7	1.2
6/17	2.6	2.1	0.5
9/17	4.1	4.7	-0.6
12/17	5.6	5.2	0.4
3/18	-0.4	-0.2	-0.2
6/18	4.3	5.7	-1.4
9/18	5.9	4.7	1.2
12/18	-18.7	-18.5	-0.2

Total Quarters Observed	30
Quarters At or Above the Benchmark	18
Quarters Below the Benchmark	12
Batting Average	.600

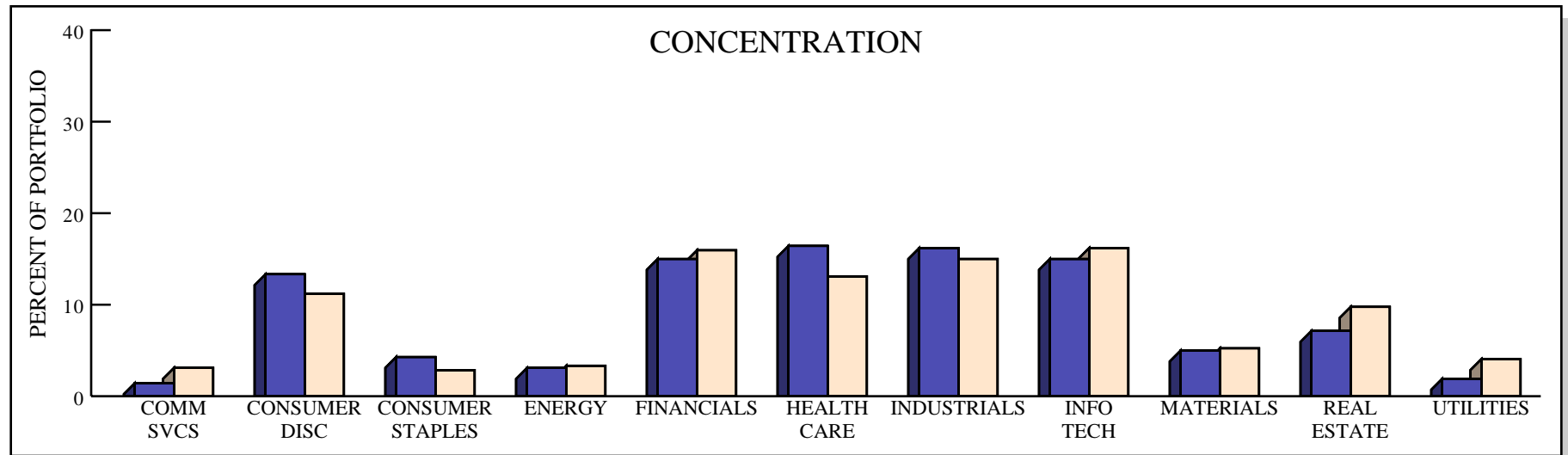
STOCK CHARACTERISTICS



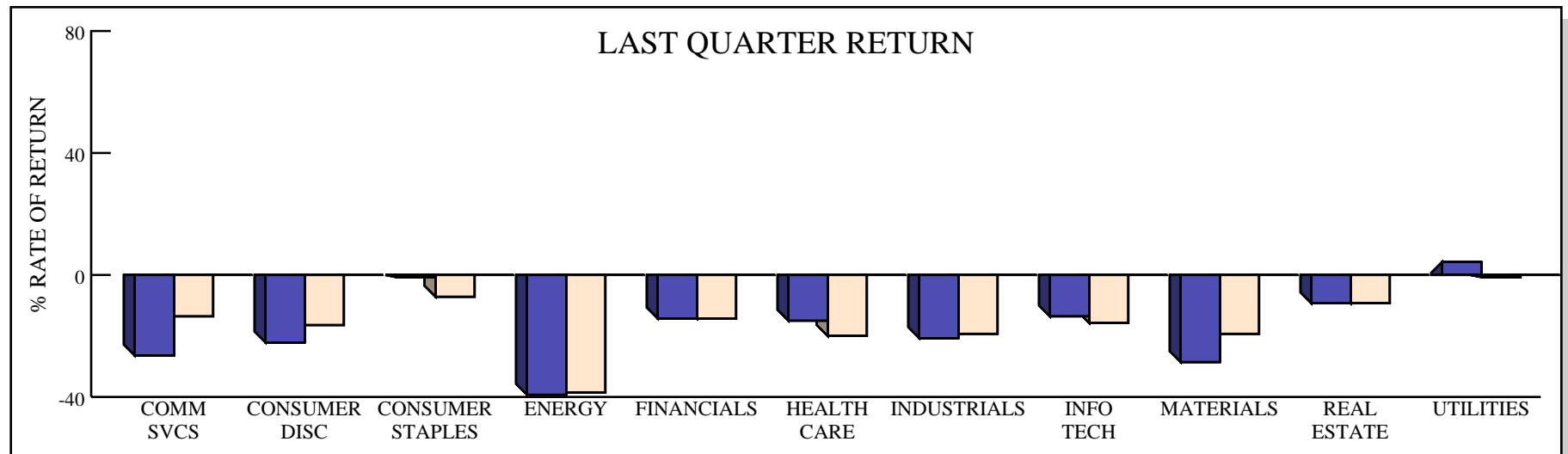
	# HOLDINGS	YIELD	GROWTH	P/E	BETA
PORTFOLIO	147	1.3%	15.1%	25.4	0.97
RUSSELL 2500	2,470	1.8%	10.4%	20.2	0.93



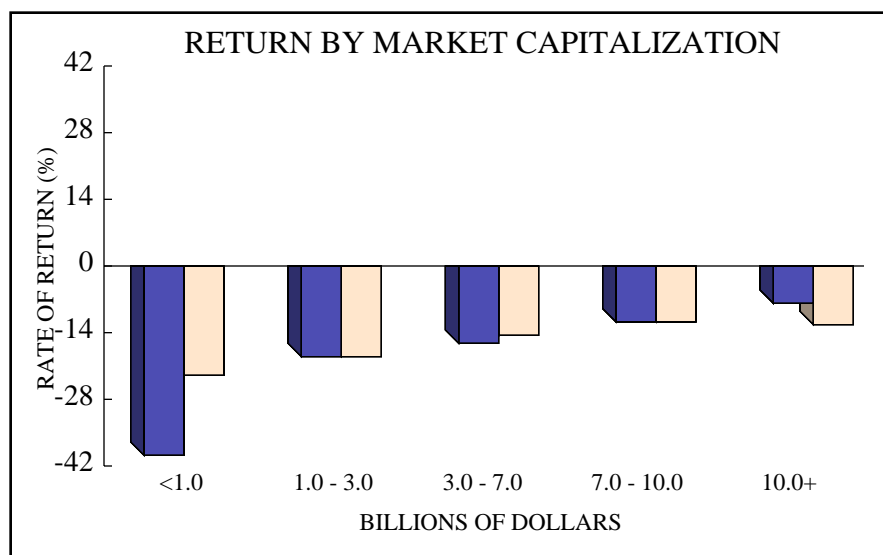
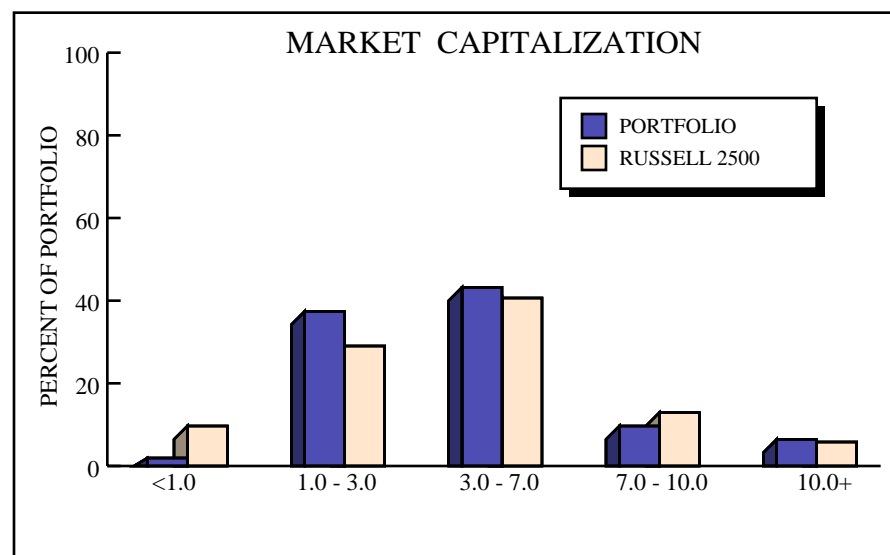
STOCK INDUSTRY ANALYSIS



■ PORTFOLIO ■ RUSSELL 2500



TOP TEN HOLDINGS



TOP TEN EQUITY HOLDINGS

RANK	NAME	VALUE	% EQUITY	RETURN	INDUSTRY SECTOR	MKT CAP
1	GREEN DOT CORP-CLASS A	\$ 216,851	1.41%	-10.5%	Financials	\$ 4.2 B
2	HILL-ROM HOLDINGS INC	216,328	1.41%	-6.0%	Health Care	6.0 B
3	INSPERITY INC	194,562	1.26%	-20.7%	Industrials	3.9 B
4	SERVICE CORP INTERNATIONAL	189,786	1.23%	-8.6%	Consumer Discretionary	7.3 B
5	COOPER COS INC/THE	184,004	1.20%	-8.2%	Health Care	12.5 B
6	LHC GROUP INC	183,442	1.19%	-8.9%	Health Care	2.9 B
7	CHARLES RIVER LABORATORIES	175,995	1.14%	-15.9%	Health Care	5.4 B
8	EVEREST RE GROUP LTD	173,990	1.13%	-4.1%	Financials	8.9 B
9	ALLEGHANY CORP	173,283	1.13%	-4.5%	Financials	9.2 B
10	PERFORMANCE FOOD GROUP CO	170,482	1.11%	-3.1%	Consumer Staples	3.4 B

CITY OF CHARLOTTE LONG-TERM INVESTMENT PROGRAM
STATE STREET GLOBAL ADVISORS - EAFE
PERFORMANCE REVIEW
DECEMBER 2018

INVESTMENT RETURN

On December 31st, 2018, the City of Charlotte Long-Term Investment Program's State Street Global Advisors EAFE portfolio was valued at \$13,322,566, a decrease of \$1,914,359 from the September ending value of \$15,236,925. Last quarter, the account recorded total net withdrawals of \$3,114 in addition to \$1,911,245 in net investment losses. Because there were no income receipts during the fourth quarter, the portfolio's net investment losses were entirely made up of capital losses (realized and unrealized).

RELATIVE PERFORMANCE

During the fourth quarter, the State Street Global Advisors EAFE portfolio lost 12.5%, which was equal to the MSCI EAFE Net Index's return of -12.5% and ranked in the 55th percentile of the International Equity universe. Over the trailing twelve-month period, this portfolio returned -13.8%, which was equal to the benchmark's -13.8% return, and ranked in the 37th percentile. Since June 2011, the portfolio returned 2.9% per annum and ranked in the 68th percentile. For comparison, the MSCI EAFE Net Index returned an annualized 2.9% over the same period.

ASSET ALLOCATION

Last quarter, the portfolio was fully invested in the SSgA MSCI EAFE Index NL Fund.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Quarter	FYTD	YTD /1Y	3 Year	5 Year	Since 06/11
Total Portfolio - Gross	-12.5	-11.4	-13.8	2.8	0.5	2.9
<i>INTERNATIONAL EQUITY RANK</i>	(55)	(44)	(37)	(75)	(83)	(68)
Total Portfolio - Net	-12.6	-11.4	-13.9	2.8	0.4	2.8
MSCI EAFE Net	-12.5	-11.4	-13.8	2.9	0.5	2.9
International Equity - Gross	-12.5	-11.4	-13.8	2.8	0.5	2.9
<i>INTERNATIONAL EQUITY RANK</i>	(55)	(44)	(37)	(75)	(83)	(68)
MSCI EAFE Net	-12.5	-11.4	-13.8	2.9	0.5	2.9

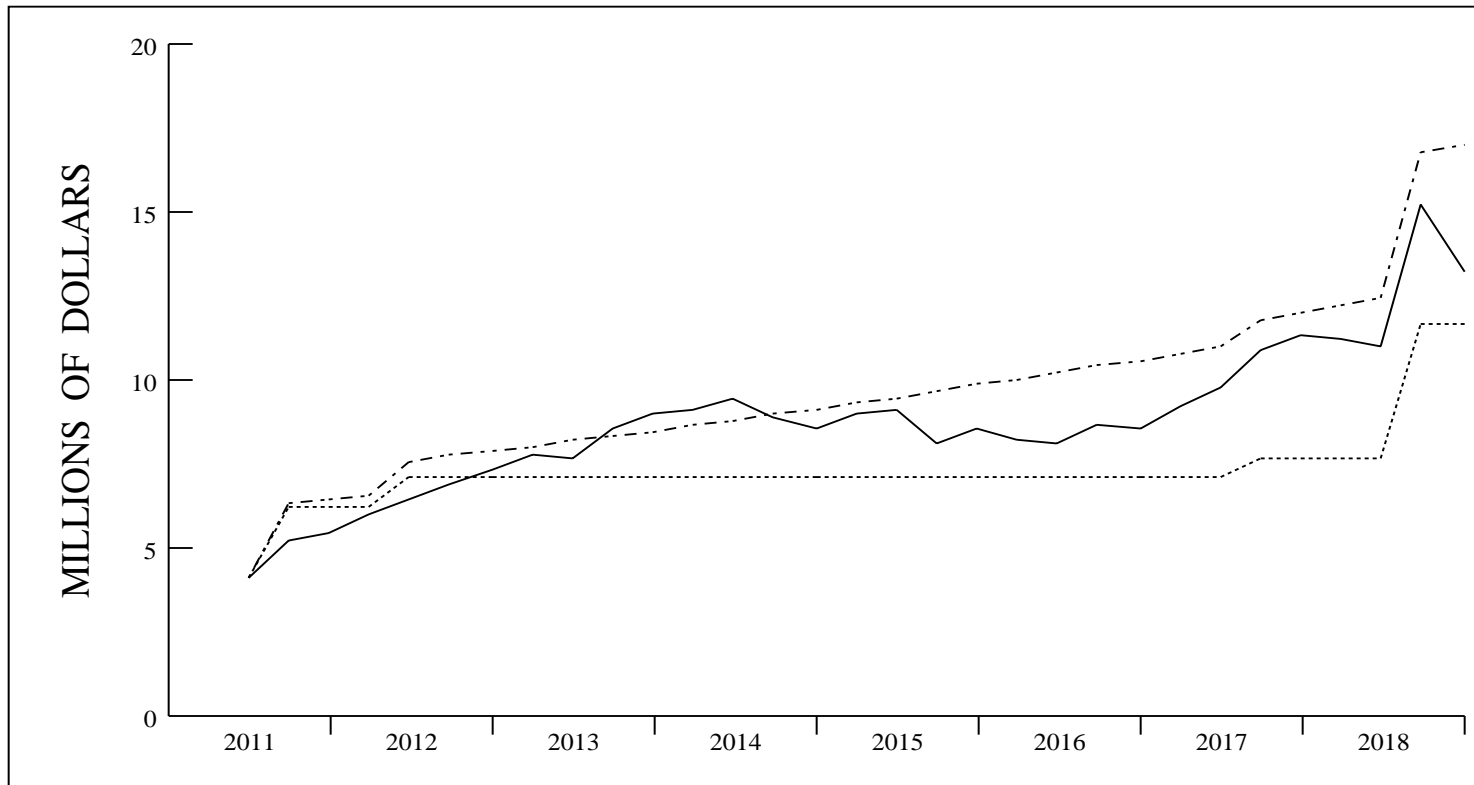
ASSET ALLOCATION

Int'l Equity	100.0%	\$ 13,322,566
Total Portfolio	100.0%	\$ 13,322,566

INVESTMENT RETURN

Market Value 9/2018	\$ 15,236,925
Contribs / Withdrawals	- 3,114
Income	0
Capital Gains / Losses	- 1,911,245
Market Value 12/2018	\$ 13,322,566

INVESTMENT GROWTH

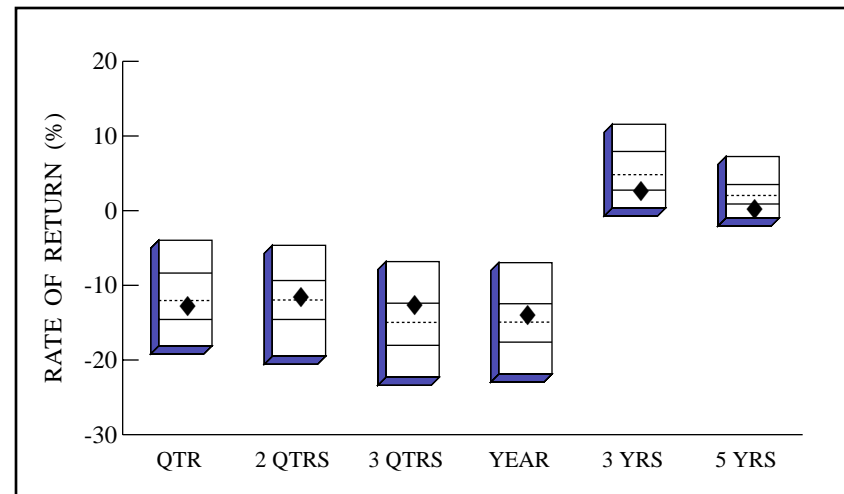
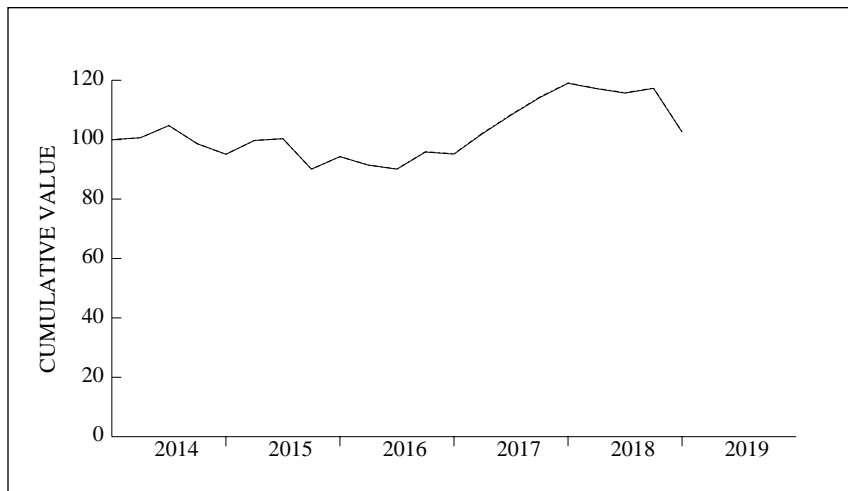


— ACTUAL RETURN
 - - - 7.75%
 . . . 0.0%

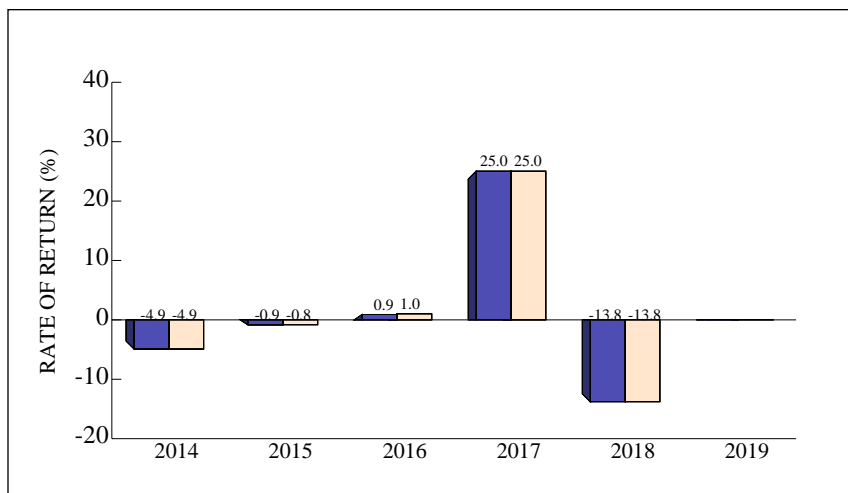
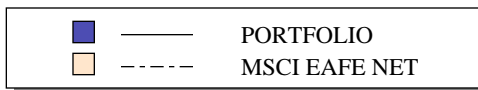
VALUE ASSUMING
 7.75% RETURN \$ 17,091,188

	LAST QUARTER	PERIOD 6/11 - 12/18
BEGINNING VALUE	\$ 15,236,925	\$ 4,174,153
NET CONTRIBUTIONS	- 3,114	7,541,521
<u>INVESTMENT RETURN</u>	<u>- 1,911,245</u>	<u>1,606,892</u>
ENDING VALUE	\$ 13,322,566	\$ 13,322,566
INCOME	0	0
<u>CAPITAL GAINS (LOSSES)</u>	<u>- 1,911,245</u>	<u>1,606,892</u>
INVESTMENT RETURN	- 1,911,245	1,606,892

TOTAL RETURN COMPARISONS



International Equity Universe

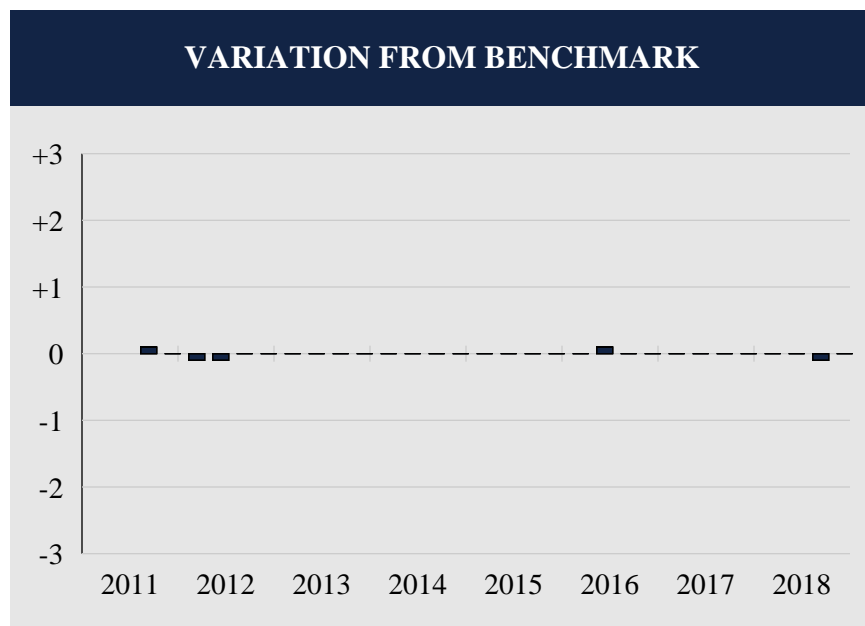


	<u>QTR</u>	<u>2 QTRS</u>	<u>3 QTRS</u>	<u>YEAR</u>	<u>-----ANNUALIZED-----</u> <u>3 YRS</u>	<u>5 YRS</u>
RETURN	-12.5	-11.4	-12.5	-13.8	2.8	0.5
(RANK)	(55)	(44)	(26)	(37)	(75)	(83)
5TH %ILE	-4.0	-4.7	-6.8	-7.0	11.6	7.3
25TH %ILE	-8.3	-9.3	-12.4	-12.5	7.9	3.5
MEDIAN	-12.0	-12.0	-15.0	-14.9	4.8	2.1
75TH %ILE	-14.6	-14.6	-18.0	-17.6	2.8	0.9
95TH %ILE	-18.1	-19.5	-22.3	-21.9	0.4	-1.0
EAFE Net	-12.5	-11.4	-12.4	-13.8	2.9	0.5

International Equity Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: MSCI EAFE NET



RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
9/11	-18.9	-19.0	0.1
12/11	3.3	3.3	0.0
3/12	10.8	10.9	-0.1
6/12	-7.2	-7.1	-0.1
9/12	6.9	6.9	0.0
12/12	6.6	6.6	0.0
3/13	5.1	5.1	0.0
6/13	-1.0	-1.0	0.0
9/13	11.6	11.6	0.0
12/13	5.7	5.7	0.0
3/14	0.7	0.7	0.0
6/14	4.1	4.1	0.0
9/14	-5.9	-5.9	0.0
12/14	-3.6	-3.6	0.0
3/15	4.9	4.9	0.0
6/15	0.6	0.6	0.0
9/15	-10.2	-10.2	0.0
12/15	4.7	4.7	0.0
3/16	-3.0	-3.0	0.0
6/16	-1.4	-1.5	0.1
9/16	6.4	6.4	0.0
12/16	-0.7	-0.7	0.0
3/17	7.2	7.2	0.0
6/17	6.1	6.1	0.0
9/17	5.4	5.4	0.0
12/17	4.2	4.2	0.0
3/18	-1.5	-1.5	0.0
6/18	-1.2	-1.2	0.0
9/18	1.3	1.4	-0.1
12/18	-12.5	-12.5	0.0

Total Quarters Observed	30
Quarters At or Above the Benchmark	27
Quarters Below the Benchmark	3
Batting Average	.900

CITY OF CHARLOTTE LONG-TERM INVESTMENT PROGRAM
BRANDYWINE GLOBAL INVESTMENT MANAGEMENT - GLOBAL OPPORTUNISTIC FIXED INCOME
PERFORMANCE REVIEW
DECEMBER 2018

INVESTMENT RETURN

On December 31st, 2018, the City of Charlotte Long-Term Investment Program's Brandywine Global Investment Management Global Opportunistic Fixed Income portfolio was valued at \$6,103,413, representing a decrease of \$75,639 relative to the September quarter's ending value of \$6,179,052. Over the last three months, the Fund posted net withdrawals of \$5,790 as well as \$69,849 in net investment losses. Since there were no income receipts during the period, net investment losses were entirely made up of capital losses (realized and unrealized).

RELATIVE PERFORMANCE

During the fourth quarter, the Brandywine Global Investment Management Global Opportunistic Fixed Income portfolio returned -1.1%, which was 3.0% less than the Bloomberg Barclays Global Government Bond's return of 1.9% and ranked in the 53rd percentile of the Global Fixed Income universe.

ASSET ALLOCATION

The portfolio was fully invested at the end of the quarter.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Quarter	FYTD	YTD /1Y	3 Year	5 Year
Total Portfolio - Gross	-1.1	----	----	----	----
<i>GLOBAL FIXED INCOME RANK</i>	(53)	----	----	----	----
Total Portfolio - Net	-1.2	----	----	----	----
Global Gov Index	1.9	0.2	-0.7	2.8	0.7
Global Fixed Income - Gross	-1.1	----	----	----	----
<i>GLOBAL FIXED INCOME RANK</i>	(53)	----	----	----	----
Global Gov Index	1.9	0.2	-0.7	2.8	0.7

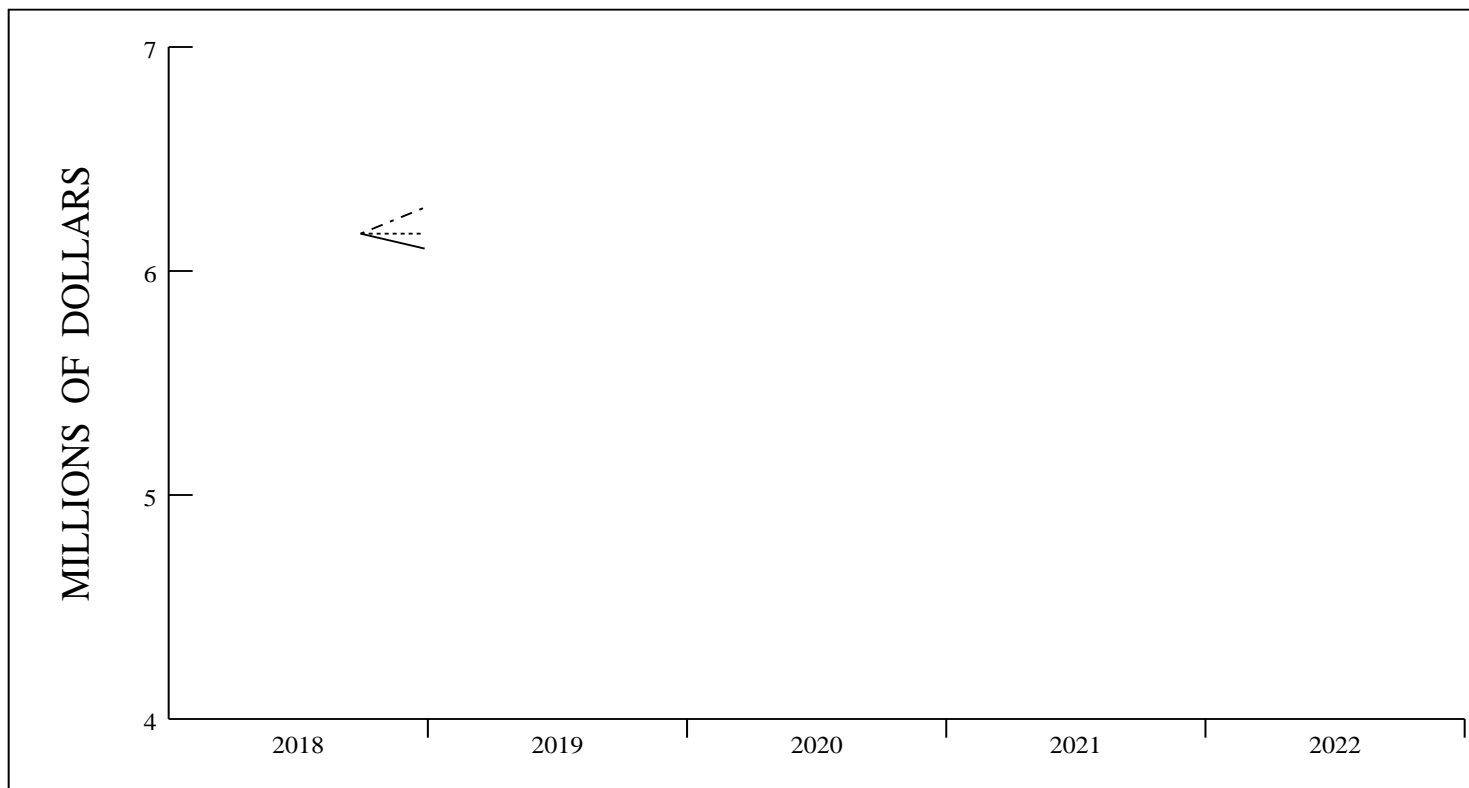
ASSET ALLOCATION

Global Fixed	100.0%	\$ 6,103,413
Total Portfolio	100.0%	\$ 6,103,413

INVESTMENT RETURN

Market Value 9/2018	\$ 6,179,052
Contribs / Withdrawals	- 5,790
Income	0
Capital Gains / Losses	- 69,849
Market Value 12/2018	\$ 6,103,413

INVESTMENT GROWTH

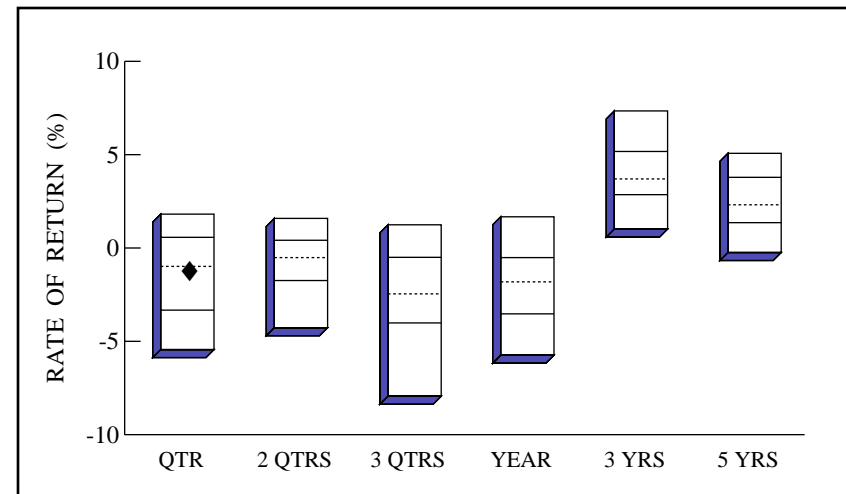
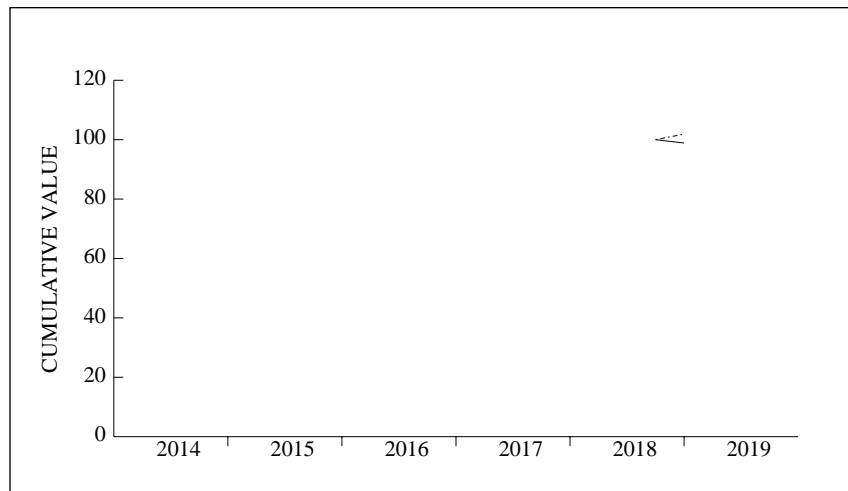


——	ACTUAL RETURN
-----	7.75%
.....	0.0%

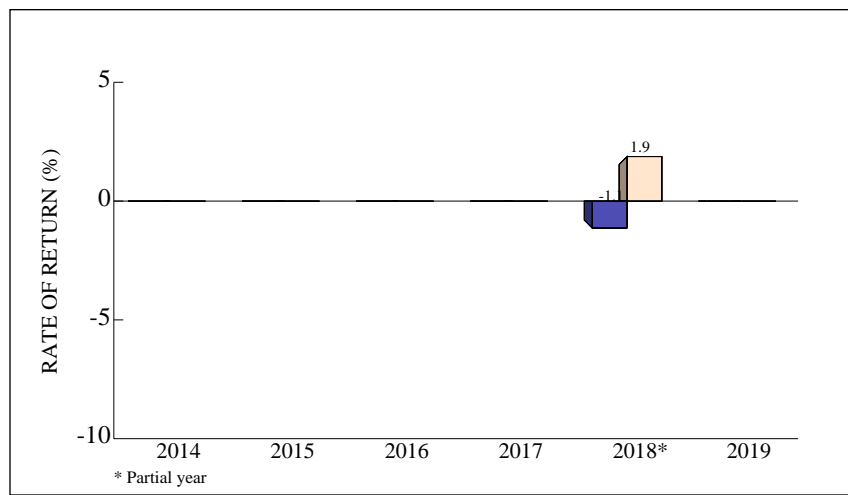
VALUE ASSUMING	
7.75% RETURN	\$ 6,289,597

	LAST QUARTER	LAST QUARTER
BEGINNING VALUE	\$ 6,179,052	\$ 6,179,052
NET CONTRIBUTIONS	- 5,790	- 5,790
INVESTMENT RETURN	- 69,849	- 69,849
ENDING VALUE	\$ 6,103,413	\$ 6,103,413
INCOME	0	0
CAPITAL GAINS (LOSSES)	- 69,849	- 69,849
INVESTMENT RETURN	- 69,849	- 69,849

TOTAL RETURN COMPARISONS



Global Fixed Income Universe

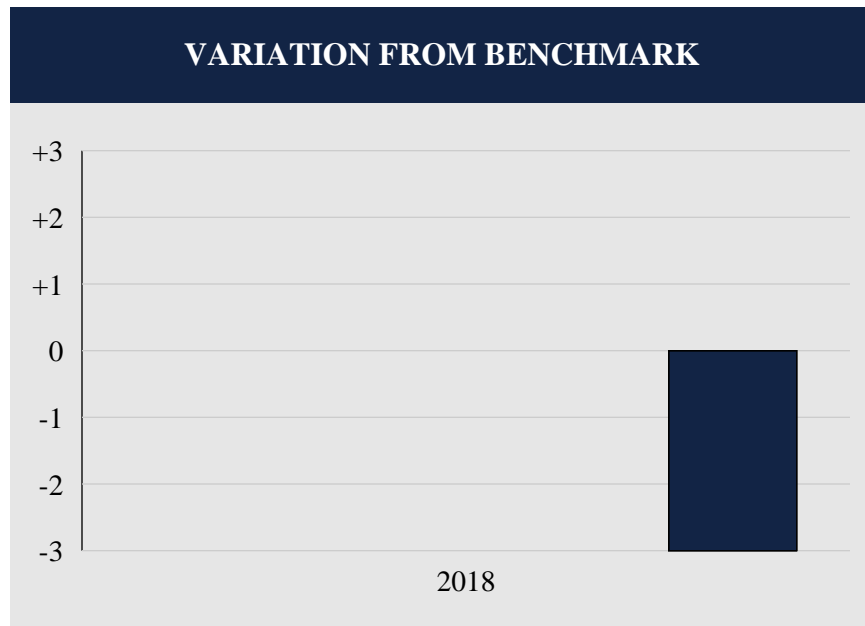


* Partial year

	QTR	2 QTRS	3 QTRS	YEAR	-----ANNUALIZED-----	
					3 YRS	5 YRS
RETURN	-1.1	---	---	---	---	---
(RANK)	(53)	---	---	---	---	---
5TH %ILE	1.8	1.6	1.2	1.7	7.3	5.1
25TH %ILE	0.6	0.4	-0.5	-0.5	5.2	3.8
MEDIAN	-1.0	-0.5	-2.5	-1.8	3.7	2.3
75TH %ILE	-3.3	-1.7	-4.0	-3.5	2.9	1.4
95TH %ILE	-5.5	-4.3	-7.9	-5.7	1.0	-0.3
Global Gov	1.9	0.2	-3.3	-0.7	2.8	0.7

Global Fixed Income Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY
COMPARATIVE BENCHMARK: BLOOMBERG BARCLAYS GLOBAL GOVERNMENT BOND



RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
12/18	-1.1	1.9	-3.0

Total Quarters Observed	1
Quarters At or Above the Benchmark	0
Quarters Below the Benchmark	1
Batting Average	.000

CITY OF CHARLOTTE LONG-TERM INVESTMENT PROGRAM
PIMCO - TOTAL RETURN
PERFORMANCE REVIEW
DECEMBER 2018

INVESTMENT RETURN

On December 31st, 2018, the City of Charlotte Long-Term Investment Program's PIMCO Total Return portfolio was valued at \$18,650,919, representing an increase of \$255,090 from the September quarter's ending value of \$18,395,829. Last quarter, the Fund posted no net contributions or withdrawals, while posting \$255,090 in net investment returns. Income receipts totaling \$217,001 plus net realized and unrealized capital gains of \$38,089 combined to produce the portfolio's net investment return figure.

RELATIVE PERFORMANCE

For the fourth quarter, the PIMCO Total Return portfolio returned 1.5%, which was 0.1% below the Bloomberg Barclays Aggregate Index's return of 1.6% and ranked in the 41st percentile of the Core Fixed Income universe. Over the trailing year, this portfolio returned 0.2%, which was 0.2% greater than the benchmark's 0.0% return, ranking in the 41st percentile. Since June 2011, the account returned 3.4% on an annualized basis and ranked in the 22nd percentile. The Bloomberg Barclays Aggregate Index returned an annualized 2.6% over the same time frame.

ASSET ALLOCATION

The portfolio was fully invested in the PIMCO Total Return Instl Fund (PTTRX) at the end of the quarter.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Quarter	FYTD	YTD /1Y	3 Year	5 Year	Since 06/11
Total Portfolio - Gross	1.5	1.7	0.2	2.9	3.0	3.4
<i>CORE FIXED INCOME RANK</i>	(41)	(35)	(41)	(18)	(38)	(22)
Total Portfolio - Net	1.4	1.5	-0.3	2.5	2.5	2.9
Aggregate Index	1.6	1.7	0.0	2.1	2.5	2.6
Domestic Fixed Income - Gross	1.5	1.7	0.2	2.9	3.0	3.4
<i>CORE FIXED INCOME RANK</i>	(41)	(35)	(41)	(18)	(38)	(22)
Aggregate Index	1.6	1.7	0.0	2.1	2.5	2.6

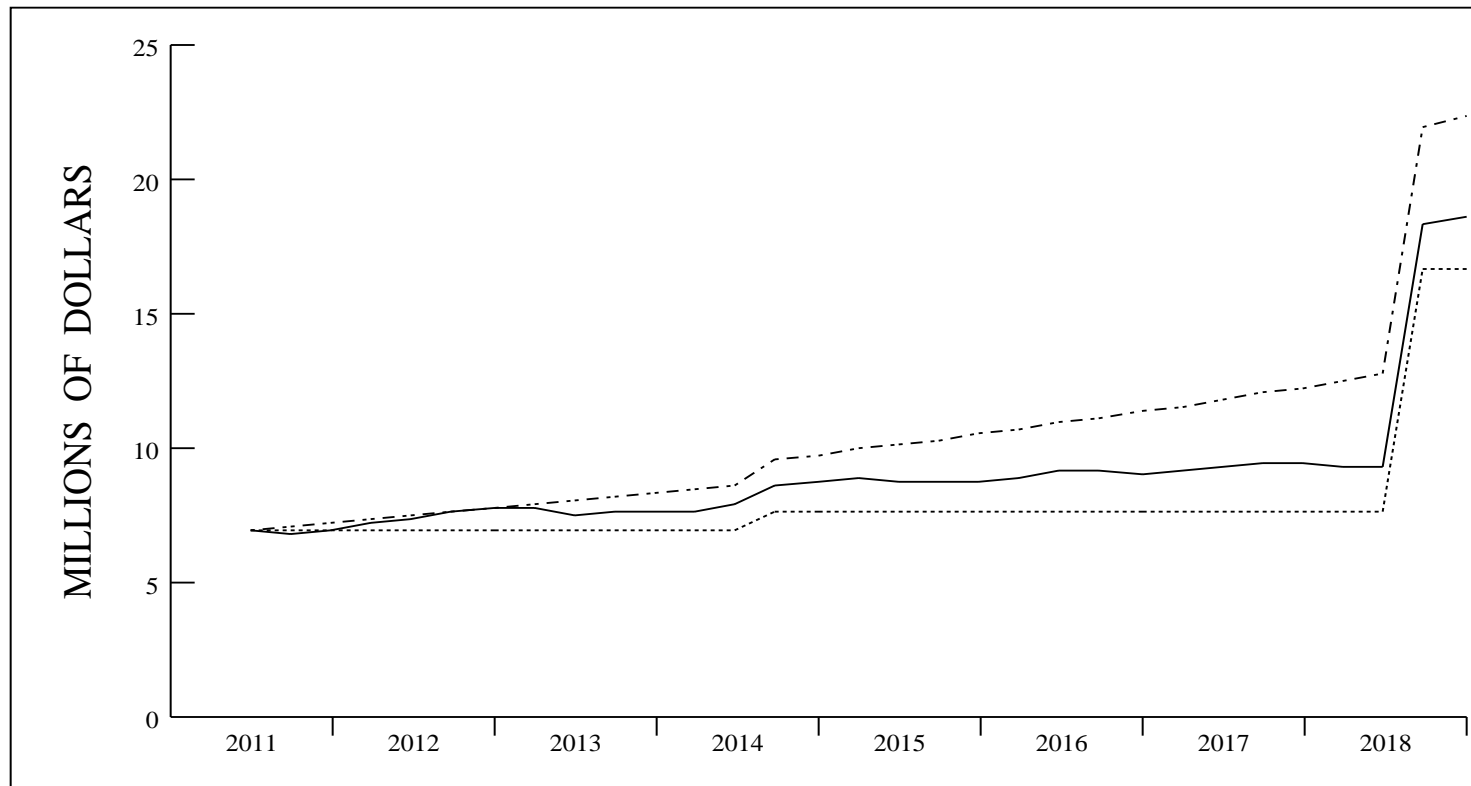
ASSET ALLOCATION

Domestic Fixed	100.0%	\$ 18,650,919
Total Portfolio	100.0%	\$ 18,650,919

INVESTMENT RETURN

Market Value 9/2018	\$ 18,395,829
Contribs / Withdrawals	0
Income	217,001
Capital Gains / Losses	38,089
Market Value 12/2018	\$ 18,650,919

INVESTMENT GROWTH

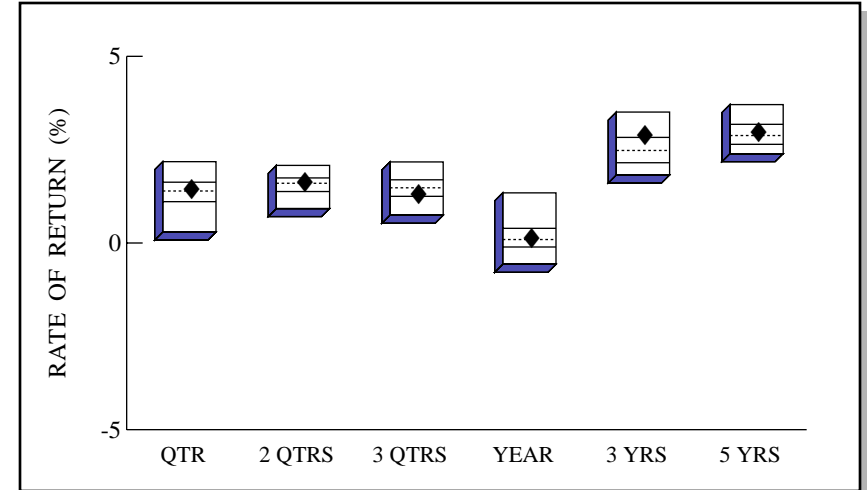
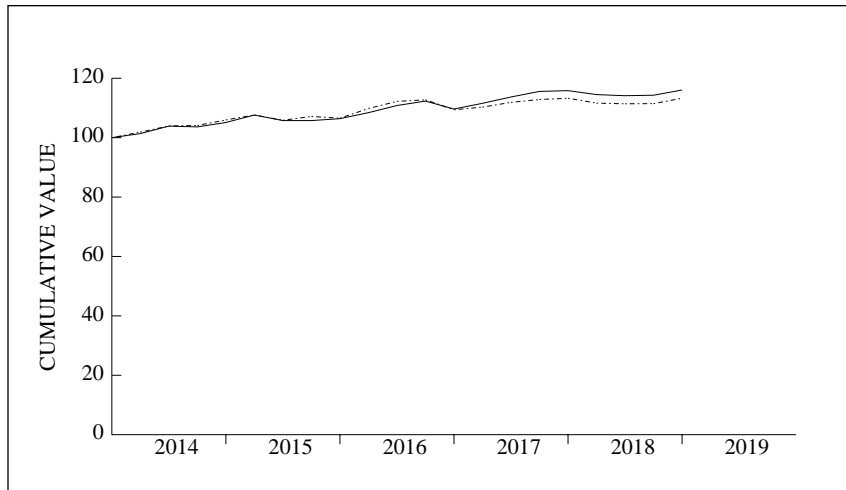


— ACTUAL RETURN
 - - - 7.75%
 . . . 0.0%

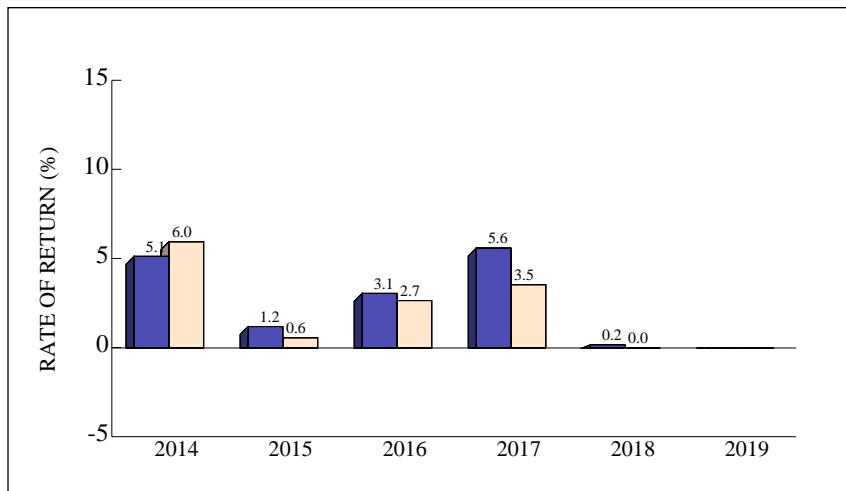
VALUE ASSUMING
 7.75% RETURN \$ 22,464,384

	LAST QUARTER	PERIOD 6/11 - 12/18
BEGINNING VALUE	\$ 18,395,829	\$ 6,981,036
NET CONTRIBUTIONS	0	9,750,597
INVESTMENT RETURN	255,090	1,919,286
ENDING VALUE	\$ 18,650,919	\$ 18,650,919
INCOME	217,001	2,780,640
CAPITAL GAINS (LOSSES)	38,089	-861,354
INVESTMENT RETURN	255,090	1,919,286

TOTAL RETURN COMPARISONS



Core Fixed Income Universe

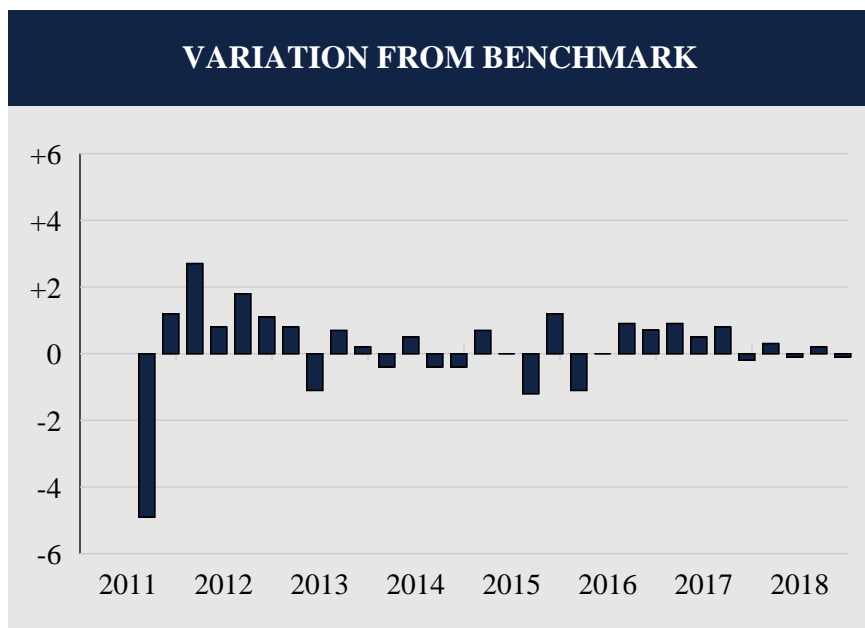


	QTR	2 QTRS	3 QTRS	YEAR	-----ANNUALIZED-----	
					3 YRS	5 YRS
RETURN	1.5	1.7	1.4	0.2	2.9	3.0
(RANK)	(41)	(35)	(67)	(41)	(18)	(38)
5TH %ILE	2.2	2.1	2.2	1.3	3.5	3.7
25TH %ILE	1.6	1.7	1.7	0.4	2.8	3.2
MEDIAN	1.4	1.6	1.5	0.1	2.5	2.9
75TH %ILE	1.1	1.4	1.3	-0.1	2.2	2.6
95TH %ILE	0.3	0.9	0.7	-0.6	1.8	2.4
Agg	1.6	1.7	1.5	0.0	2.1	2.5

Core Fixed Income Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: BLOOMBERG BARCLAYS AGGREGATE INDEX



RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
9/11	-1.1	3.8	-4.9
12/11	2.3	1.1	1.2
3/12	3.0	0.3	2.7
6/12	2.9	2.1	0.8
9/12	3.4	1.6	1.8
12/12	1.3	0.2	1.1
3/13	0.7	-0.1	0.8
6/13	-3.4	-2.3	-1.1
9/13	1.3	0.6	0.7
12/13	0.1	-0.1	0.2
3/14	1.4	1.8	-0.4
6/14	2.5	2.0	0.5
9/14	-0.2	0.2	-0.4
12/14	1.4	1.8	-0.4
3/15	2.3	1.6	0.7
6/15	-1.7	-1.7	0.0
9/15	0.0	1.2	-1.2
12/15	0.6	-0.6	1.2
3/16	1.9	3.0	-1.1
6/16	2.2	2.2	0.0
9/16	1.4	0.5	0.9
12/16	-2.3	-3.0	0.7
3/17	1.7	0.8	0.9
6/17	1.9	1.4	0.5
9/17	1.6	0.8	0.8
12/17	0.2	0.4	-0.2
3/18	-1.2	-1.5	0.3
6/18	-0.3	-0.2	-0.1
9/18	0.2	0.0	0.2
12/18	1.5	1.6	-0.1

Total Quarters Observed	30
Quarters At or Above the Benchmark	20
Quarters Below the Benchmark	10
Batting Average	.667