

## City of Pontiac General Employees' Retirement System

Performance Review September 2018

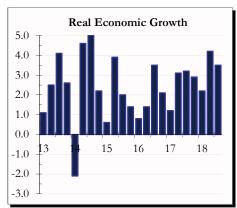




#### ECONOMIC ENVIRONMENT

### **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 ¼%, 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.

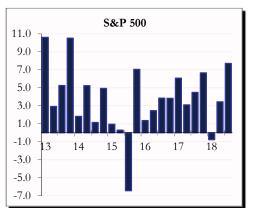
Commodity prices were down 2% for the quarter and down more than 5% excluding energy. While energy and livestock prices advanced, virtually every other sector declined. Reasons for the decline were the dollar's strength, trade issues and concern regarding future China demand. Chances are that a burgeoning 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.

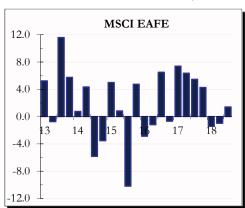
### INTERNATIONAL EQUITIES

### **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



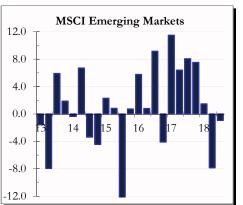
the issue of open borders with Ireland (-5.3%). The major European only countries to turn in positive were France numbers (+2.9%)and Norway (+6.8%).Emmanuel Macron's reform push provided a boost in French business sentiment. Norway's return was tied

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%

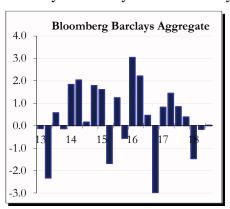
because of higher industrial productivity, strong exports and strong consumer spending. Taiwan moved up an unexpected 7.2% due to a boost in smart phone parts exports and a step up in government spending.

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	<b>3.5</b> %	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	
---------	--

VAL

**5.**7

3.3

1.6

LC

MC

SC

COR	GRO
7-4	9.2
5.0	7.4
3.6	<b>5.5</b>

**Trailing Year** 

	VAL	COR	GRO
LC	9.4	17.8	26.3
MC	8.8	14.0	21.1
SC	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 Pontiac General Employees' Retirement System was valued at \$510,986,531, representing an increase of \$11,003,950 from the June quarter's ending value of \$499,982,581. Last quarter, the Fund posted withdrawals totaling \$7,266,674, which offset the portfolio's net investment return of \$18,270,624. Income receipts totaling \$2,231,707 plus net realized and unrealized capital gains of \$16,038,917 combined to produce the portfolio's net investment return.

### RELATIVE PERFORMANCE

#### **Total Fund**

For the third quarter, the total portfolio gained 3.7%, which ranked in the 30th percentile of the Public Fund universe. Over the trailing twelvemonth period, this portfolio returned 9.9%, ranking in the 24th percentile. Since September 2008, the portfolio returned 9.3% on an annualized basis and ranked in the 4th percentile.

### **Domestic Equity**

Last quarter, the domestic equity portion of the portfolio gained 6.0%, which was 1.1% less than the Russell 3000 Index's return of 7.1% and ranked in the 47th percentile of the Domestic Equity universe. Over the trailing year, the domestic equity portfolio returned 15.3%, which was 2.3% below the benchmark's 17.6% return, ranking in the 52nd percentile. Since September 2008, this component returned 11.6% per annum and ranked in the 67th percentile. For comparison, the Russell 3000 returned an annualized 12.0% over the same time frame.

### **International Equity**

For the third quarter, the international equity segment returned 1.7%, which was 0.3% above the MSCI EAFE Index's return of 1.4% and ranked in the 20th percentile of the International Equity universe. Over the trailing year, this segment returned 7.3%, which was 4.1% greater than the benchmark's 3.2% return, and ranked in the 14th percentile. Since September 2008, this component returned 5.8% on an annualized basis

and ranked in the 78th percentile. The MSCI EAFE Index returned an annualized 5.9% over the same time frame.

### **Private Equity**

In the third quarter, the private equity component returned 0.8%, which was 0.8% greater than the Cambridge US Private Equity's return of 0.0%. Over the trailing twelve-month period, this component returned 8.4%, which was 5.8% less than the benchmark's 14.2% return. Since September 2008, this component returned -0.1% annualized, while the Cambridge US Private Equity returned an annualized 11.6% over the same time frame.

### **Real Estate**

During the third quarter, the real estate portion of the portfolio returned 2.6%, which was 0.5% above the NCREIF NFI-ODCE Index's return of 2.1%. Over the trailing year, this segment returned 10.2%, which was 1.5% above the benchmark's 8.7% return.

#### **Global Fixed Income**

In the third quarter, the global fixed income component lost 0.3%, which was 1.3% above the Bloomberg Barclays Global Government Bond's return of -1.6% and ranked in the 93rd percentile of the Broad Market Fixed Income universe. Over the trailing year, the global fixed income portfolio returned -2.8%, which was 1.4% below the benchmark's -1.4% return, ranking in the 98th percentile.

#### **Domestic Fixed Income**

During the third quarter, the domestic fixed income component returned -0.1%, which was 0.1% less than the Bloomberg Barclays Aggregate Index's return of 0.0% and ranked in the 89th percentile of the Broad Market Fixed Income universe. Over the trailing twelve months, this segment's return was -0.7%, which was 0.5% greater than the benchmark's -1.2% performance, and ranked in the 73rd percentile. Since September 2008, this component returned 4.3% on an annualized basis and ranked in the 56th percentile. The Bloomberg Barclays Aggregate Index returned an annualized 3.8% over the same period.

## **EXECUTIVE SUMMARY**

	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year
Total Portfolio - Gross	3.7	9.9	11.0	8.5	11.4	9.3
PUBLIC FUND RANK	(30)	(24)	(24)	(31)	(8)	(4)
FUBLIC FUND KANK	(30)	(24)	(24)	(31)	( 0)	(4)
Total Portfolio - Net	3.6	9.3	10.4	7.9	10.8	8.7
SHADOW INDEX	4.2	10.4	11.7	9.2	11.6	9.2
<b>Domestic Equity - Gross</b>	6.0	15.3	15.5	11.8	16.0	11.6
DOMESTIC EQUITY RANK	(47)	(52)	(59)	(60)	(67)	(67)
Russell 3000	7.1	17.6	17.1	13.5	16.9	12.0
<b>International Equity - Gross</b>	1.7	7.3	12.6	8.7	10.9	5.8
INTERNATIONAL EQUITY RANK	(20)	(14)	(35)	(15)	(26)	(78)
MSCI EAFE	1.4	3.2	9.8	4.9	8.8	5.9
<b>Private Equity - Gross</b>	0.8	8.4	4.1	9.0	9.5	-0.1
Cambridge PE	0.0	14.2	13.2	12.7	13.7	11.6
Real Estate - Gross	2.6	10.2				
NCREIF ODCE	2.1	8.7	8.8	10.7	11.2	5.6
Global Fixed Income - Gross	-0.3	-2.8				
BROAD MARKET FIXED RANK	(93)	(98)				
Global Gov Index	-1.6	-1.4	1.8	0.1	-0.1	2.2
<b>Domestic Fixed Income - Gross</b>	-0.1	-0.7	0.7	0.9	2.2	4.3
BROAD MARKET FIXED RANK	(89)	(73)	(98)	(95)	(66)	(56)
Aggregate Index	0.0	-1.2	1.3	2.2	2.0	3.8

ASSET ALLOCATION			
Domestic Equity	55.4%	\$ 283,204,391	
Int'l Equity	12.1%	61,982,236	
Private Equity	2.3%	11,552,268	
Real Estate	6.6%	33,828,259	
Global Fixed	0.5%	2,693,908	
Domestic Fixed	22.2%	113,330,422	
Cash	0.9%	4,395,047	
Total Portfolio	100.0%	\$ 510,986,531	

## INVESTMENT RETURN

Market Value 6/2018	\$ 499,982,581
Contribs / Withdrawals	- 7,266,674
Income	2,231,707
Capital Gains / Losses	16,038,917
Market Value 9/2018	\$ 510,986,531

PONTIAC - COMPOSITE SEPTEMBER 30TH, 2018

## EXECUTIVE SUMMARY - USING LAGGED PRIVATE EQUITY DATA

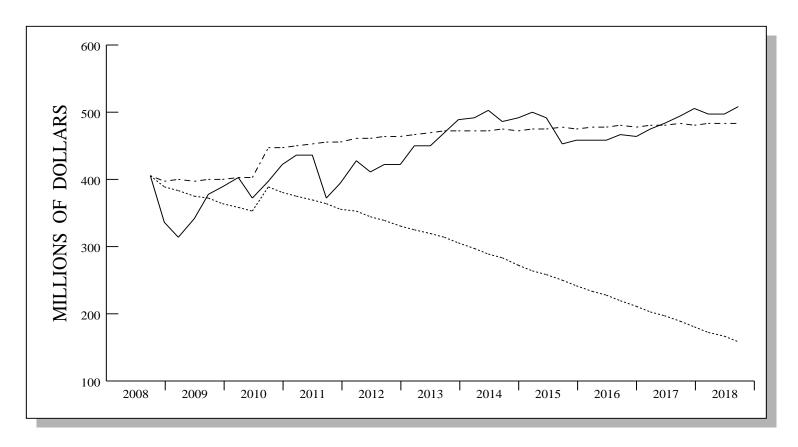
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year
Total Portfolio	3.8	10.0	10.9	8.5	11.4	9.3
PUBLIC FUND RANK	(27)	(23)	(26)	(30)	(8)	(4)
SHADOW INDEX	4.4	10.5	11.7	9.2	11.6	9.1
Domestic Equity	6.0	15.3	15.5	11.8	16.0	11.6
DOMESTIC EQUITY RANK	(47)	(52)	(59)	(60)	(67)	(67)
Russell 3000	7.1	17.6	17.1	13.5	16.9	12.0
International Equity	1.7	7.3	12.6	8.7	10.9	5.8
INTERNATIONAL EQUITY RANK	X (20)	(14)	(35)	(15)	(26)	(78)
MSCI EAFE	1.4	3.2	9.8	4.9	8.8	5.9
Private Equity	4.1	11.2	3.5	9.8	9.2	-0.1
Cambridge PE (Lag)	5.8	18.7	12.7	13.8	13.0	10.9
Real Estate	2.6	10.2				
NCREIF ODCE	2.1	8.7	8.8	10.7	11.2	5.6
Global Fixed Income	-0.3	-2.8				
BROAD MARKET FIXED RANK	(93)	(98)				
Global Gov Index	-1.6	-1.4	1.8	0.1	-0.1	2.2
Domestic Fixed Income	-0.1	-0.8	0.7	0.9	2.2	4.3
BROAD MARKET FIXED RANK	(89)	(78)	(98)	(95)	(66)	(56)
Aggregate Index	0.0	-1.2	1.3	2.2	2.0	3.8

ASSET ALLOCATION				
Domestic Equity	55.3%	\$ 283,204,391		
Int'l Equity	12.1%	61,982,236		
Private Equity	2.4%	12,288,549		
Real Estate	6.6%	33,828,259		
Global Fixed	0.5%	2,693,908		
Domestic Fixed	22.1%	113,330,422		
Cash	0.9%	4,395,047		
Total Portfolio	100.0%	\$ 511,722,812		

INVESTM	ENT R	ETURN
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Market Value 6/2018	\$ 499,632,930
Contribs / Withdrawals	- 6,576,550
Income	2,231,707
Capital Gains / Losses	16,434,725
Market Value 9/2018	\$ 511,722,812

## **INVESTMENT GROWTH**



----- ACTUAL RETURN
----- BLENDED RATE
----- 0.0%

VALUE ASSUMING
BLENDED RATE\$ 485,093,282

	LAST QUARTER	PERIOD 9/08 - 9/18
BEGINNING VALUE NET CONTRIBUTIONS INVESTMENT RETURN ENDING VALUE	\$ 499,982,581 -7,266,674 \frac{18,270,624}{510,986,531}	\$ 406,941,119 -246,903,338 350,948,751 \$ 510,986,531
INCOME CAPITAL GAINS (LOSSES) INVESTMENT RETURN	$ \begin{array}{r} 2,231,707 \\ 16,038,917 \\ \hline 18,270,624 \end{array} $	67,340,743 283,608,008 350,948,751

# PONTIAC GENERAL EMPLOYEES RETIREMENT SYSTEM ASSET ALLOCATIONS AND TARGETS AS OF SEPTEMBER 2018

Asset Class	Market Value	% of Total Portfoilo	Target	+/-	Range
Total Portfolio	\$ 510,986,531	100%			
Equity (Excluding PE)	\$ 345,186,627	67.6%	55%	12.6%	50 - 60%
Domestic Large Cap	\$ 127,507,123	25.0%	20%	5.0%	15 - 25%
Domestic Mid Cap	\$ 89,065,574	17.4%	15%	2.4%	10 - 20%
Domestic Small Cap	\$ 66,631,694	13.0%	10%	3.0%	8 - 12%
Developed International	\$ 61,982,236	12.1%	5%	7.1%	3 - 7%
Emerging Markets	\$ -	0.0%	5%	-5.0%	3 - 7%
Private Equity	\$ 11,552,268	2.3%	10%	-7.7%	7 - 12%
Real Estate	\$ 33,828,259	6.6%	10%	-3.4%	7 - 12%
Fixed Income	\$ 116,024,330	22.7%	25%	-2.3%	20 - 30%
Cash	\$ 4,395,047	0.9%	0%	0.9%	0 - 5%

# PONTIAC GENERAL EMPLOYEES RETIREMENT SYSTEM PA 314 COMPLIANCE AS OF SEPTEMBER 2018

Category	Market Value	% of Total Portfoilo	Allocation Limit	+/-	Compliance	Target
Stocks	\$ 345,186,627	67.6%	70%	-2.5%	YES	55%
Attucks Emerging Manager	\$ 59,599,540	11.7%				
Sawgrass	\$ 35,852,165	7.0%				
Attucks Michigan	\$ 32,055,418	6.3%				
Victory Capital Mid Cap	\$ 43,928,004	8.6%				
Systematic	\$ 45,137,570	8.8%				
Kennedy SCC	\$ 22,616,493	4.4%				
Kennedy SCG	\$ 16,745,098	3.3%				
Loomis Sayles	\$ 27,270,103	5.3%				
First Eagle	\$ 27,666,880	5.4%				
WCM	\$ 34,315,356	6.7%				
Global Equity	\$ 61,982,236	12.1%	20%	-7.9%	YES	10%
First Eagle	\$ 27,666,880	5.4%				
WCM	\$ 34,315,356	6.7%				
Real Estate	\$ 33,828,259	6.6%	10%	-3.4%	YES	10%
Intercontinental	\$ 5,318,249	1.0%				
Invesco Core RE	\$ 16,235,574	3.2%				
Principal	\$ 12,274,436	2.4%				
Basket Clause	\$ 14,246,176	2.8%	20%	-17.2%	YES	N/A
GrayCo	\$ 5,172,472	1.0%				
Invesco V	\$ 1,348,688	0.3%				
Mesirow IV	\$ 2,655,571	0.5%				
Mesirow VI	\$ 2,375,537	0.5%				
Brandywine	\$ 2,693,908	0.5%				
Holdings > 5% of Market Cap	\$ -	0.0%	0%	0.0%	YES	0%

# CITY OF PONTIAC GENERAL EMPLOYEES RETIREMENT SYSTEM TOP TWENTY STOCK HOLDINGS AS OF SEPTEMBER 30, 2018

	Name	Ticker	Sector	Market Cap	Market Value	%
1	Apple Inc	AAPL	Computer Technology	1,090,307	\$5,494,512	1.1%
2	Microsoft Corp	MSFT	Computer Technology	877,014	\$3,264,920	0.6%
3	Alphabet Inc-Cl A	GOOGL	Computer Technology	360,813	\$2,782,319	0.5%
4	Mastercard Inc - A	MA	Service	228,187	\$2,182,023	0.4%
5	Amgen Inc	AMGN	Non Dur Consumer Goods	134,173	\$2,151,048	0.4%
6	Berkshire Hathaway Inc-Cl B	BRK/B	Finance	292,440	\$2,115,835	0.4%
7	Verizon Communications Inc	VZ	Utilities	220,604	\$2,105,061	0.4%
8	Cisco Systems Inc	CSCO	Computer Technology	222,395	\$1,955,487	0.4%
9	Home Depot Inc	HD	Consumer Service	237,008	\$1,843,635	0.4%
10	Walt Disney Co/The	DIS	Service	173,918	\$1,771,056	0.3%
11	Pfizer Inc	PFE	Non Dur Consumer Goods	258,343	\$1,687,925	0.3%
12	Exelon Corp	EXC	Utilities	42,171	\$1,661,132	0.3%
13	Unitedhealth Group Inc	UNH	Consumer Service	256,056	\$1,648,118	0.3%
14	Ingersoll-Rand Plc	IR	Technology	25,095	\$1,561,098	0.3%
15	Allstate Corp	ALL	Finance	34,173	\$1,551,663	0.3%
16	Intel Corp	INTC	Computer Technology	218,054	\$1,527,609	0.3%
17	Verisk Analytics Inc	VRSK	Service	19,856	\$1,503,259	0.3%
18	Tjx Companies Inc	TJX	Consumer Service	69,538	\$1,489,642	0.3%
19	Cvs Health Corp	CVS	Consumer Service	80,142	\$1,470,883	0.3%
20	Oracle Corp	ORCL	Computer Technology	195,342	\$1,464,820	0.3%

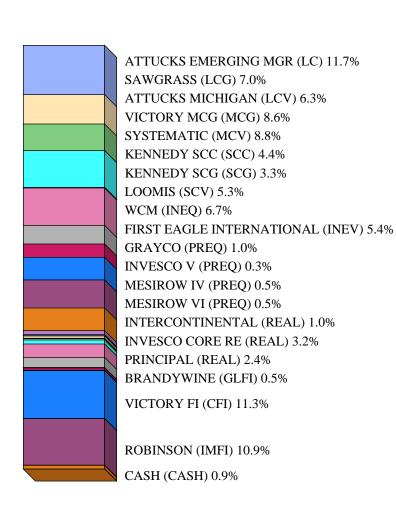
This list excludes ETFs. Percentages shown are out of the total portfolio. Market capitalization is expressed in millions.

# CITY OF PONTIAC GENERAL EMPLOYEES RETIREMENT SYSTEM TOP TWENTY FIXED INCOME HOLDINGS AS OF SEPTEMBER 30, 2018

	Name	Coupon	Maturity	Quality	Sector	Market Value	%
1	US TREASURY N/B	2.750	4.92	USG	Govt	\$9,092,736	1.8%
2	US TREASURY N/B	2.750	6.75	USG	Govt	\$4,919,750	1.0%
3	US TREASURY N/B	1.750	4.62	USG	Govt	\$3,841,344	0.8%
4	US TREASURY N/B	3.000	29.37	USG	Govt	\$3,098,864	0.6%
5	US TREASURY N/B	2.625	2.12	USG	Govt	\$2,488,475	0.5%
6	US TREASURY N/B	1.500	1.67	USG	Govt	\$2,306,665	0.5%
7	US TREASURY N/B	1.625	7.37	USG	Govt	\$2,268,650	0.4%
8	US TREASURY N/B	1.500	7.87	USG	Govt	\$2,232,225	0.4%
9	US TREASURY N/B	2.000	3.37	USG	Govt	\$1,942,120	0.4%
10	US TREASURY N/B	2.750	9.37	USG	Govt	\$1,547,262	0.3%
11	HARTLAND CONS SD-B	1.830	0.59	NR	Muni	\$1,493,850	0.3%
12	US TREASURY N/B	2.375	1.58	USG	Govt	\$1,490,565	0.3%
13	FREDDIE MAC	1.250	0.84	USG	Govt	\$1,483,605	0.3%
14	US TREASURY N/B	2.250	8.37	USG	Govt	\$1,411,935	0.3%
15	US TREASURY N/B	2.875	24.62	USG	Govt	\$1,202,536	0.2%
16	FNR 2016-32 EA	3.500	3.94	USG	Mtge	\$1,199,682	0.2%
17	FHR 4763 VC	4.000	5.62	USG	Mtge	\$1,185,979	0.2%
18	FN BD3667	3.500	8.59	USG	Mtge	\$1,156,363	0.2%
19	FNR 2017-15 KD	2.500	6.91	USG	Mtge	\$1,137,500	0.2%
20	FN AS8781	3.000	9.29	USG	Mtge	\$1,128,381	0.2%

Percentages shown are out of the total portfolio.

### MANAGER ALLOCATION SUMMARY



Name	Market Value	Percent
Attucks Emerging Mgr (LC)	\$59,599,540	11.7
Sawgrass (LCG)	\$35,852,165	7.0
Attucks Michigan (LCV)	\$32,055,418	6.3
☐ Victory MCG (MCG)	\$43,928,004	8.6
Systematic (MCV)	\$45,137,570	8.8
☐ Kennedy SCC (SCC)	\$22,616,493	4.4
Kennedy SCG (SCG)	\$16,745,098	3.3
Loomis (SCV)	\$27,270,103	5.3
WCM (INEQ)	\$34,315,356	6.7
First Eagle International (INEV)	\$27,666,880	5.4
GrayCo (PREQ)	\$5,172,472	1.0
Invesco V (PREQ)	\$1,348,688	0.3
Mesirow IV (PREQ)	\$2,655,571	0.5
Mesirow VI (PREQ)	\$2,375,537	0.5
Intercontinental (REAL)	\$5,318,249	1.0
☐ Invesco Core RE (REAL)	\$16,235,574	3.2
Principal (REAL)	\$12,274,436	2.4
Brandywine (GLFI)	\$2,693,908	0.5
☐ Victory FI (CFI)	\$57,545,829	11.3
Robinson (IMFI)	\$55,784,593	10.9
Cash (CASH)	\$4,395,047	0.9
Total	\$510,986,531	100.0

# PONTIAC GENERAL EMPLOYEES RETIREMENT SYSTEM MANAGER PERFORMANCE SUMMARY AS OF SEPTEMBER 2018

Portfolio	Universe	Qua	rter	1 Y	ear	3 Y	ears	5 Y	ears	7 Ye	ears	10 Y	ears
Total Portfolio Return Total Portfolio Returns net of fees	(Public Fund)	3.7 3.6	(30)	9.9 9.3	(24)	11.0 10.4	(24)	8.5 7.9	(31)	11.4 10.8	(8)	9.3 8.7	(4)
Total Portfolio Shadow Index		4.2		10.4		11.7		9.2		11.6		9.2	
Attucks Emerging Mgr	(Large Cap)	8.0	(27)	19.6	(30)	16.2	(53)	13.1	(56)	16.1	(67)		
Attucks Emerging Mgr net of fees		7.8		18.9		15.4		12.4		15.4			
S&P 500		7.7		17.9		17.3		13.9		16.9		<i>12.0</i>	
Sawgrass	(Large Cap Growth)	10.4	(9)	23.9	(57)	17.1	(75)	14.4	(70)	17.1	(68)	12.7	(70)
Sawgrass net of fees		10.3		23.2		16.5		13.8		16.5		12.2	
Russell 1000 Growth		9.2		<i>26.3</i>		20.6		16.6		<i>18.7</i>		<i>14.3</i>	
Attucks Michigan	(Large Cap Value)	6.9	(24)	11.9	(49)	14.4	(56)	11.8	(44)	15.8	(49)		
Attucks Michigan net of fees		6.8		11.2		13.7		11.0		15.0			
Russell 1000 Value		<i>5.7</i>		9.4		13.5		<i>10.7</i>		<i>15.0</i>		9.8	
Victory Mid Cap	(Mid Cap Growth)	4.2	(94)	12.0	(97)	13.4	(85)	10.9	(86)	15.3	(86)	12.0	(89)
Victory Mid Cap net of fees		4.2		11.6		13.0		10.5		14.9		11.7	
Russell Mid Cap Growth		<b>7.6</b>		21.1		16.6		<i>13.0</i>		16.9		13.5	
Systematic	(Mid Cap Value)	3.3	(61)	11.2	(39)	15.0	(36)	9.4	(83)	14.7	(83)	10.7	(92)
Systematic net of fees		3.1		10.7		14.4		8.8		14.2		10.3	
Russell Mid Cap Value		<i>3.3</i>		8.8		13.1		<i>10.7</i>		15.5		11.3	
Kennedy Small Cap Core	(Small Cap Core)	4.9	(37)	11.8	(79)	15.4	(68)	10.7	(85)	16.0	(87)	12.5	(50)
Kennedy Small Cap Core net of fees		4.6		10.7		14.3		9.6		14.9		11.7	
Russell 2000		3.6		15.2		<i>17.1</i>		11.1		16.4		11.1	
Kennedy Small Cap Growth	(Small Cap Growth)	9.2	(28)	24.8	(60)	20.5	(43)						
Kennedy Small Cap Growth net of fees		9.0		23.8		19.5							
Russell 2000 Growth		5.5		<i>21.0</i>		<i>18.0</i>		<i>12.1</i>		17.5		<i>12.6</i>	
Loomis	(Small Cap Value)	1.9	(48)	7.1	(74)	14.7	(54)	10.6	(53)	16.0	(57)	12.6	(37)
Loomis net of fees		1.7		6.4		13.9		9.9		15.2		12.0	
Russell 2000 Value		1.6		9.4		16.1		9.9		<i>15.3</i>		9.5	
First Eagle	(International Equity)	0.0	(53)										
First Eagle net of fees		-0.2											
MSCI All Country Ex US Value		1.8		1.0		9.9		3.5		<i>6.8</i>		5.1	

## PONTIAC GENERAL EMPLOYEES RETIREMENT SYSTEM MANAGER PERFORMANCE SUMMARY AS OF SEPTEMBER 2018

Portfolio	Universe	Quar	ter	1 Y	ear	3 Y	ears	5 Y	ears	7 Ye	ears	10 Y	ears
WCM	(International Equity)	3.2	(7)	13.3	(3)	15.9	(8)	11.0	(7)				
WCM net of fees		2.9		12.3		15.0		10.1					
MSCI All Country World Ex US Net		<i>0.7</i>		<i>1.8</i>		<i>10.0</i>		<i>4.1</i>		7.2		<i>5.2</i>	
GrayCo I		0.8		1.1		-4.9		3.1					
GrayCo I net of fees		0.5		0.1		-5.8		2.1					
Cambridge Private Equity				14.2		<i>13.2</i>		12.7		<i>13.7</i>		11.6	
Invesco V				15.6		12.2		14.3		14.3		15.1	
Invesco V net of fees		-0.2		14.5		11.2		13.3		13.2		13.4	
Cambridge Private Equity				<i>14.2</i>		<i>13.2</i>		<i>12.7</i>		<i>13.7</i>		11.6	
Mesirow IV		2.2		10.1		12.2		14.6		14.1		11.8	
Mesirow IV net of fees		1.9		9.0		9.3		12.5		12.2		8.4	
Cambridge Private Equity				14.2		<i>13.2</i>		<i>12.7</i>		<i>13.7</i>		11.6	
Mesirow VI				21.3		15.6		11.9					
Mesirow VI net of fees		-0.3		19.5		12.3		3.4					
Cambridge Private Equity				14.2		<i>13.2</i>		<i>12.7</i>		<i>13.7</i>		11.6	
Intercontinental US REIF		2.5											
Intercontinental US REIF net of fees		2.3											
NCREIF NFI-ODCE Index		2.1		<i>8.7</i>		8.8		<i>10.7</i>		11.2		5.6	
Invesco Core RE		2.6		9.5									
Invesco Core RE net of fees		2.3		8.3									
NCREIF NFI-ODCE Index		<i>2.1</i>		<i>8.7</i>		8.8		<i>10.7</i>		11.2		<i>5.6</i>	
Principal RE		2.7											
Principal RE net of fees		2.5											
NCREIF NFI-ODCE Index		2.1		<i>8.7</i>		8.8		<i>10.7</i>		11.2		<i>5.6</i>	
Brandywine	(Global Fixed Income)	-0.3	(68)	-2.0	(90)								
Brandywine net of fees		-0.4		-2.5									
Bloomberg Barclays Global Gov		-1.6		-1.4		<i>1.8</i>		0.1		-0.1		2.2	
Victory Fixed Income	(Core Fixed Income)	-0.2	(96)	-1.2	(86)	1.4	(81)	2.3	(74)	2.6	(57)	4.1	(80)
Victory Fixed Income net of fees		-0.3		-1.5		1.0		2.0		2.2		3.8	
Bloomberg Barclays Aggregate		0.0		-1.2		1.3		2.2		2.0		<i>3.8</i>	
Robinson	(Intermediate Fixed)	0.1	(97)	-0.1	(25)	1.1	(86)	1.9	(56)	2.1	(49)		
Robinson net of fees		0.0		-0.3		0.8		1.7		1.9			
Bloomberg Barclays Int. Gov/Cred		0.2		-1.0		0.9		1.5		1.6		<i>3.2</i>	

# PONTIAC GENERAL EMPLOYEES RETIREMENT SYSTEM ATTUCKS PERFORMANCE SUMMARY AS OF SEPTEMBER 2018

Portfolio	Universe	Qua	rter	1 Y	ear	3 Ye	ears	5 Ye	ears
Attucks Emerging Mgr Net of mgr fees & gross of Attucks fees Attucks Emerging Mgr net of all fees S&P 500	(Large Cap)	8.0 7.9 7.8 7.7	(27)	19.6 19.2 18.9 17.9	(30)	16.2 15.8 15.4 17.3	(53)	13.1 12.7 12.4 13.9	(56)
Ativo net of fees  S&P 500	(Large Cap Core)	5.1 5.0 7.7	(88)	13.6 13.3 17.9	(79)	14.9 14.5 17.3	(76)	12.9 12.5 13.9	(68)
Matarin Matarin net of fees S&P 500	(Large Cap Core)	8.4 8.4 <b>7.7</b>	(14)	22.5 22.2 17.9	(9)	 17.3		 13.9	
Oakbrook Oakbrook net of fees Russell 1000 Growth	(Large Cap Growth)	9.4 9.3 <b>9.2</b>	(21)	25.7 25.3 <b>26.3</b>	(42)	21.1 20.7 <b>20.6</b>	(16)	17.3 17.0 <b>16.6</b>	(18)
Attucks Michigan Net of mgr fees & gross of Attucks fees Attucks Michigan net of fees Russell 1000 Value	(Large Cap Value)	6.9 6.8 6.8 5.7	(24)	11.9 11.6 11.2 9.4	(49)	14.4 14.0 13.7 13.5	(56)	11.8 11.4 11.0 10.7	(44)
NorthPointe NorthPointe net of fees Russell 1000 Value	(Large Cap Value)	4.8 4.7 5.7	(70)	9.6 9.3 <b>9.4</b>	(74)	12.5 12.1 13.5	(84)	11.2 10.8 10.7	(63)
Seizert Seizert net of fees Russell 1000 Value	(Large Cap Value)	9.0 8.9 5.7	(4)	13.9 13.5 <b>9.4</b>	(34)	17.4 17.0 <i>13.5</i>	(9)	12.7 12.3 10.7	(23)

## MANAGER VALUE ADDED

1 Quarter	Portfolio	Benchmark	1 Year
0.3	Attucks Emerging Mgr	S&P 500	1.7
1.2	Sawgrass	Russell 1000G	-2.4
1.2	Attucks Michigan	Russell 1000V	2.5
-3.4	Victory MCG	Russ Mid Gro	-9.1
0.0	Systematic	Russ Mid Val	2.4
1.3	Kennedy SCC	Russell 2000	-3.4
3.7	Kennedy SCG	Russell 2000G	3.8
0.3	Loomis	Russell 2000V	-2.3
2.5	WCM	ACWI Ex US Net	11.5
-1.8	First Eagle International	ACWI Ex US Value	N/A
0.8	GrayCo	Cambridge PE	-13.1
0.0	Invesco V	Cambridge PE	1.4
2.2	Mesirow IV	Cambridge PE	-4.1
0.0	Mesirow VI	Cambridge PE	7.1
0.4	Intercontinental	NCREIF ODCE	N/A
0.5	Invesco Core RE	NCREIF ODCE	0.8
0.6	Principal	NCREIF ODCE	N/A
1.3	Brandywine	Global Gov Index	<b>-0.6</b>
▮ -0.2	Victory FI	Aggregate Index	0.0
▮-0.1	Robinson	Int Gov/Credit	0.9
<b>-0.5</b>	<b>Total Portfolio</b>	Shadow Index	<b>   -0.5</b>

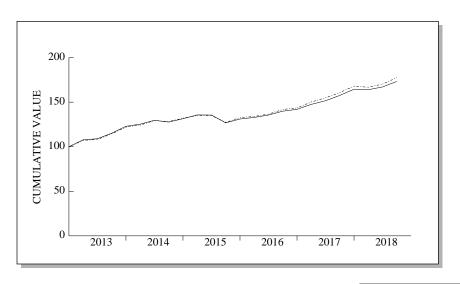
## INVESTMENT RETURN SUMMARY - ONE QUARTER

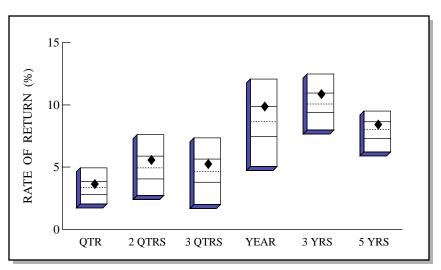
	Quarter Total	Market Value	Net	Net Investment	Market Value
Name	Return	June 30th, 2018	Cashflow	Return	September 30th, 2018
Attucks Emerging Mgr (LC)	8.0	55,200,085	-222	4,399,677	59,599,540
Sawgrass (LCG)	10.4	38,189,919	-6,000,426	3,662,672	35,852,165
Attucks Michigan (LCV)	6.9	29,993,140	-3,531	2,065,809	32,055,418
Victory MCG (MCG)	4.2	42,138,584	-171	1,789,591	43,928,004
Systematic (MCV)	3.3	43,712,942	-490	1,425,118	45,137,570
Kennedy SCC (SCC)	4.9	21,569,728	-243	1,047,008	22,616,493
Kennedy SCG (SCG)	9.2	15,332,775	-158	1,412,481	16,745,098
Loomis (SCV)	1.9	26,771,542	-367	498,928	27,270,103
WCM (INEQ)	3.2	38,099,739	-5,004,972	1,220,589	34,315,356
First Eagle International (INEV)	0.0	32,766,649	-5,000,000	-99,769	27,666,880
GrayCo (PREQ)	0.8	5,373,925	-242,815	41,362	5,172,472
Invesco V (PREQ)	0.0	1,968,516	-619,828	0	1,348,688
Mesirow IV (PREQ)	2.2	2,705,571	-107,380	57,380	2,655,571
Mesirow VI (PREQ)	0.0	2,240,537	150,000	-15,000	2,375,537
Intercontinental (REAL)	2.5	5,243,305	-55,803	130,747	5,318,249
Invesco Core RE (REAL)	2.6	15,962,478	-137,090	410,186	16,235,574
Principal (REAL)	2.7	11,976,995	0	297,441	12,274,436
Brandywine (GLFI)	-0.3	2,701,423	0	-7,515	2,693,908
Victory FI (CFI)	-0.2	52,665,698	4,999,828	-119,697	57,545,829
Robinson (IMFI)	0.1	50,765,876	4,999,232	19,485	55,784,593
Peritus (HIYL)		1,405	0	-1,405	0
Cash (CASH)		4,601,749	-242,238	35,536	4,395,047
Total Portfolio	3.7	499,982,581	-7,266,674	18,270,624	510,986,531

## INVESTMENT RETURN SUMMARY WITH LAGGED PRIVATE EQUITY - ONE QUARTER

Name	Quarter Total Return	Market Value June 30th, 2018	Net Cashflow	Net Investment Return	Market Value September 30th, 2018
Attucks Emerging Mgr (LC)	8.0	55,200,085	-222	4,399,677	59,599,540
Sawgrass (LCG)	10.4	38,189,919	-6,000,426	3,662,672	35,852,165
Attucks Michigan (LCV)	6.9	29,993,140	-3,531	2,065,809	32,055,418
Victory MCG (MCG)	4.2	42,138,584	-171	1,789,591	43,928,004
Systematic (MCV)	3.3	43,712,942	-490	1,425,118	45,137,570
Kennedy SCC (SCC)	4.9	21,569,728	-243	1,047,008	22,616,493
Kennedy SCG (SCG)	9.2	15,332,775	-158	1,412,481	16,745,098
Loomis (SCV)	1.9	26,771,542	-367	498,928	27,270,103
WCM (INEQ)	3.2	38,099,739	-5,004,972	1,220,589	34,315,356
First Eagle International (INEV)	0.0	32,766,649	-5,000,000	-99,769	27,666,880
GrayCo (Lag) (PREQ)	2.9	5,235,751	-12,547	150,721	5,373,925
Invesco V (Lag) (PREQ)	3.4	1,908,668	0	59,848	1,968,516
Mesirow IV (Lag) (PREQ)	4.9	2,779,659	-207,380	133,292	2,705,571
Mesirow VI (Lag) (PREQ)	6.7	2,014,820	90,028	135,689	2,240,537
Intercontinental (REAL)	2.5	5,243,305	-55,803	130,747	5,318,249
Invesco Core RE (REAL)	2.6	15,962,478	-137,090	410,186	16,235,574
Principal (REAL)	2.7	11,976,995	0	297,441	12,274,436
Brandywine (GLFI)	-0.3	2,701,423	0	-7,515	2,693,908
Victory FI (CFI)	-0.2	52,665,698	4,999,828	-119,697	57,545,829
Robinson (IMFI)	0.1	50,765,876	4,999,232	19,485	55,784,593
Peritus (HIYL)		1,405	0	-1,405	0
Cash (CASH)		4,601,749	-242,238	35,536	4,395,047
Total Portfolio	3.8	499,632,930	-6,576,550	18,666,432	511,722,812

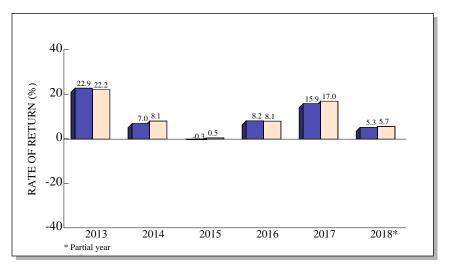
## TOTAL RETURN COMPARISONS





Public Fund Universe

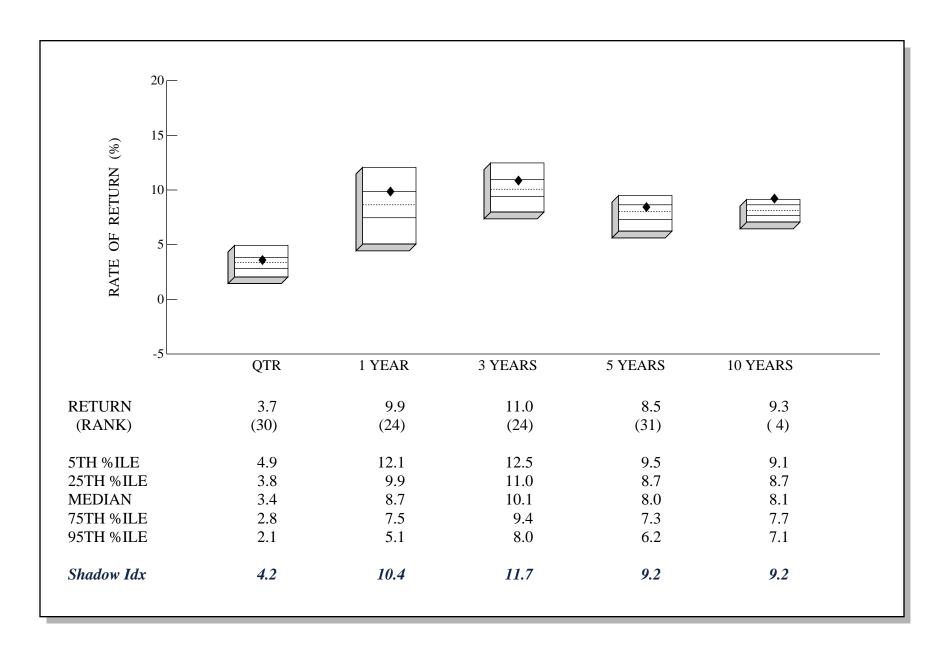




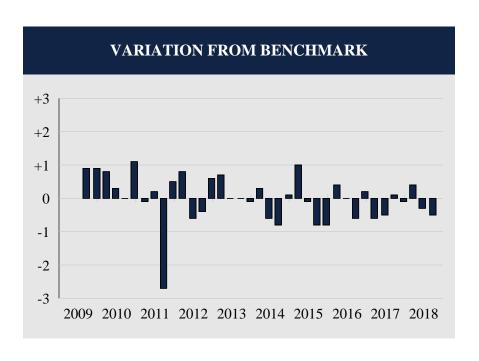
					ANNU <i>A</i>	ALIZED
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
RETURN	3.7	5.6	5.3	9.9	11.0	8.5
(RANK)	(30)	(29)	(31)	(24)	(24)	(31)
5TH %ILE	4.9	7.6	7.4	12.1	12.5	9.5
25TH %ILE	3.8	5.9	5.7	9.9	11.0	8.7
MEDIAN	3.4	4.9	4.6	8.7	10.1	8.0
75TH %ILE	2.8	4.1	3.8	7.5	9.4	7.3
95TH %ILE	2.1	2.7	2.0	5.1	8.0	6.2
Shadow Idx	4.2	6.5	5.7	10.4	11.7	9.2

Public Fund Universe

## TOTAL PORTFOLIO UNIVERSE RANKINGS - PUBLIC FUND UNIVERSE



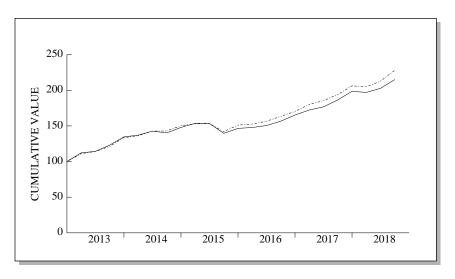
# TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY SINCE DECEMBER 2007 COMPARATIVE BENCHMARK: SHADOW INDEX

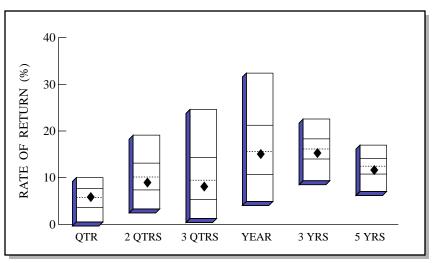


<b>Total Quarters Observed</b>	37
Quarters At or Above the Benchmark	21
Quarters Below the Benchmark	16
Batting Average	.568

RATES OF RETURN				
Date	Portfolio	Benchmark	Difference	
9/09	12.6	11.7	0.9	
12/09 3/10	4.6 5.0	3.7 4.2	0.9 0.8	
6/10	-6.5	-6.8	0.3	
9/10 12/10	8.8 8.3	8.8 7.2	0.0 1.1	
3/11	4.4	4.5	-0.1	
6/11	1.0	0.8	0.2	
9/11 12/11	-13.0 8.0	-10.3 7.5	-2.7 0.5	
3/12	9.5	8.7	0.8	
6/12	-2.6	-2.0	-0.6	
9/12 12/12	4.6 1.9	5.0 1.3	-0.4 0.6	
3/13	7.9	7.2	0.7	
6/13	1.0	1.0	0.0	
9/13 12/13	5.7 6.7	5.7 6.8	0.0 -0.1	
3/14	2.0	1.7	0.3	
6/14	3.5	4.1	-0.6	
9/14 12/14	-1.6 3.0	-0.8 2.9	-0.8 0.1	
3/15	3.2	2.2	1.0	
6/15 9/15	-0.1 -6.4	0.0 -5.6	-0.1 -0.8	
9/15 12/15	-6.4 3.4	-5.6 4.2	-0.8 -0.8	
3/16	1.3	0.9	0.4	
6/16 9/16	2.0 3.2	2.0 3.8	0.0 -0.6	
12/16	1.4	1.2	0.2	
3/17	4.0	4.6	-0.6	
6/17 9/17	2.7 3.9	3.2 3.8	-0.5 0.1	
12/17	4.4	4.5	-0.1	
3/18	-0.3	-0.7	0.4	
6/18 9/18	1.9 3.7	2.2 4.2	-0.3 -0.5	

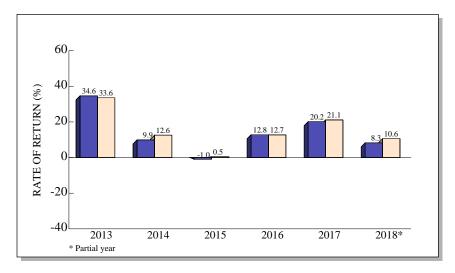
## DOMESTIC EQUITY RETURN COMPARISONS





Domestic Equity Universe



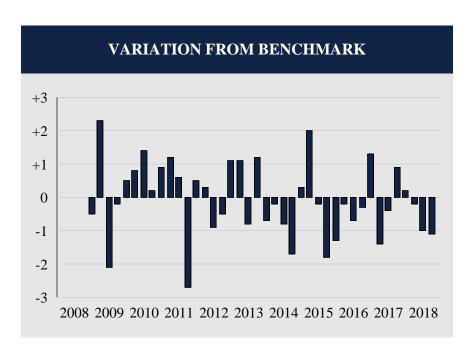


					ANNU	ALIZED
	_QTR	2 QTRS	3 QTRS	<u>YEAR</u>	3 YRS	5 YRS
RETURN	6.0	9.1	8.3	15.3	15.5	11.8
(RANK)	(47)	(59)	(58)	(52)	(59)	(60)
5TH %ILE	10.0	19.1	24.6	32.4	22.6	17.0
25TH %ILE	7.7	13.1	14.3	21.2	18.3	14.1
MEDIAN	5.8	10.1	9.5	15.6	16.1	12.5
75TH %ILE	3.6	7.4	5.3	10.7	14.0	10.8
95TH %ILE	0.5	3.3	1.2	4.9	9.4	7.0
Russ 3000	7.1	11.3	10.6	17.6	17.1	13.5

Domestic Equity Universe

## **DOMESTIC EQUITY QUARTERLY PERFORMANCE SUMMARY - 10 YEARS**

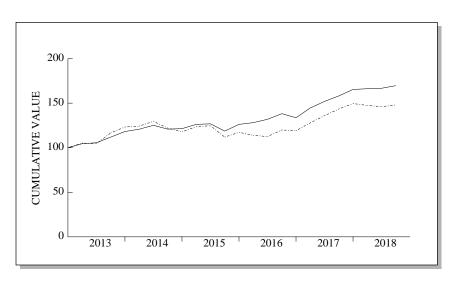
**COMPARATIVE BENCHMARK: RUSSELL 3000** 

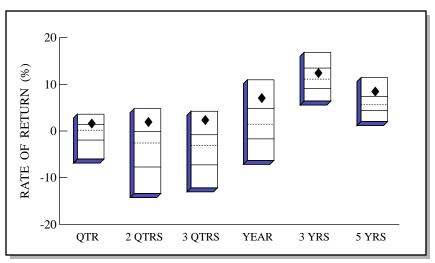


Total Quarters Observed	40
Quarters At or Above the Benchmark	18
Quarters Below the Benchmark	22
Batting Average	.450

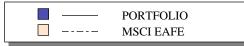
RATES OF RETURN				
Date	Portfolio	Benchmark	Difference	
12/08	-23.3	-22.8	-0.5	
3/09	-8.5	-10.8	2.3	
6/09 9/09	14.7 16.1	16.8 16.3	-2.1 -0.2	
12/09	6.4	5.9	0.5	
3/10 6/10	6.7 -9.9	5.9 -11.3	0.8 1.4	
9/10	11.7	11.5	0.2	
12/10	12.5 7.6	11.6	0.9 1.2	
3/11 6/11	0.6	6.4 0.0	0.6	
9/11 12/11	-18.0 12.6	-15.3 12.1	-2.7 0.5	
3/12	13.2	12.1	0.3	
6/12	-4.0	-3.1	-0.9	
9/12 12/12	5.7 1.4	6.2 0.3	-0.5 1.1	
3/13	12.2	11.1	1.1	
6/13 9/13	1.9 7.6	2.7 6.4	-0.8 1.2	
12/13	9.4	10.1	-0.7	
3/14 6/14	1.8 4.1	2.0 4.9	-0.2 -0.8	
9/14	-1.7	0.0	-1.7	
12/14	5.5	5.2	0.3	
3/15 6/15	3.8 -0.1	1.8 0.1	2.0 -0.2	
9/15	-9.0	-7.2	-1.8	
12/15 3/16	5.0 0.8	6.3 1.0	-1.3 -0.2	
6/16	1.9	2.6	-0.7	
9/16 12/16	4.1 5.5	4.4 4.2	-0.3 1.3	
3/17	4.3	5.7	-1.4	
6/17 9/17	2.6 5.5	3.0 4.6	-0.4 0.9	
12/17	6.5	6.3	0.9	
3/18	-0.8	-0.6	-0.2	
6/18 9/18	2.9 6.0	3.9 7.1	-1.0 -1.1	

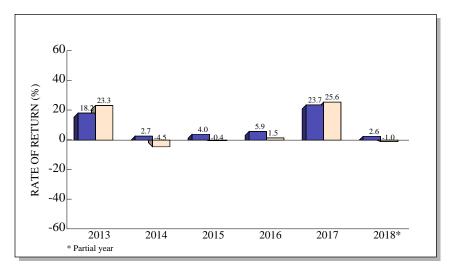
## INTERNATIONAL EQUITY RETURN COMPARISONS





International Equity Universe



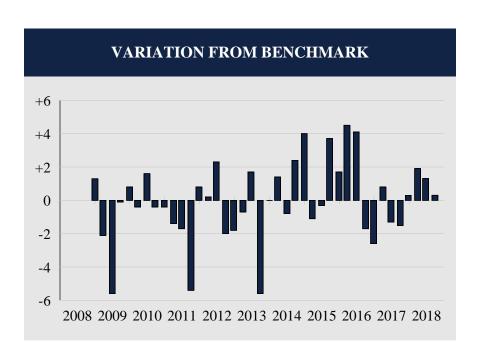


					ANNU <i>A</i>	ALIZED
	_QTR	2 QTRS	3 QTRS	YEAR_	3 YRS	5 YRS
RETURN	1.7	2.1	2.6	7.3	12.6	8.7
(RANK)	(20)	(12)	(9)	(14)	(35)	(15)
5TH %ILE	3.6	4.8	4.2	11.0	16.9	11.4
25TH %ILE	1.4	-0.1	-0.8	4.9	13.5	7.4
MEDIAN	0.2	-2.6	-3.1	1.5	11.1	5.6
75TH %ILE	-1.9	-7.7	-7.3	-1.7	9.1	4.4
95TH %ILE	-6.0	-13.4	-12.2	-6.3	6.4	2.0
MSCI EAFE	1.4	0.4	-1.0	3.2	9.8	4.9

International Equity Universe

## INTERNATIONAL EQUITY QUARTERLY PERFORMANCE SUMMARY - 10 YEARS

COMPARATIVE BENCHMARK: MSCI EAFE

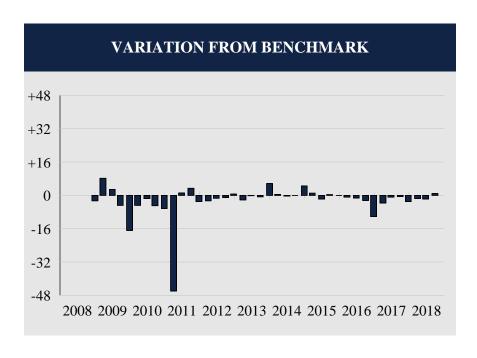


<b>Total Quarters Observed</b>	40
Quarters At or Above the Benchmark	20
<b>Quarters Below the Benchmark</b>	20
Batting Average	.500

	RATES	S OF RETURN	
Date	Portfolio	Benchmark	Difference
12/08	-18.6	-19.9	1.3
3/09	-16.0	-13.9	-2.1
6/09	20.2	25.8	-5.6
9/09	19.4	19.5	-0.1
12/09	3.0	2.2	0.8
3/10	0.5	0.9	-0.4
6/10	-12.1	-13.7	1.6
9/10	16.1	16.5	-0.4
12/10	6.3	6.7	-0.4
3/11	2.0	3.4	-1.4
6/11	0.1	1.8	-1.7
9/11	-24.4	-19.0	-5.4
12/11	4.2	3.4	0.8
3/12	11.2	11.0	0.2
6/12	-4.6	-6.9	2.3
9/12	5.0	7.0	-2.0
12/12	4.8	6.6	-1.8
3/13	4.5	5.2	-0.7
6/13	1.0	-0.7	1.7
9/13	6.0	11.6	-5.6
12/13	5.7	5.7	0.0
3/14	2.2	0.8	1.4
6/14	3.5	4.3	-0.8
9/14	-3.4	-5.8	2.4
12/14	0.5	-3.5	4.0
3/15	3.9	5.0	-1.1
6/15	0.5	0.8	-0.3
9/15	-6.5	-10.2	3.7
12/15	6.4	4.7	1.7
3/16	1.6	-2.9	4.5
6/16	2.9	-1.2	4.1
9/16	4.8	6.5	-1.7
12/16	-3.3	-0.7	-2.6
3/17	8.2	7.4	0.8
6/17	5.1	6.4	-1.3
9/17	4.0	5.5	-1.5
12/17	4.6	4.3	0.3
3/18	0.5	-1.4	1.9
6/18	0.3	-1.0	1.3
9/18	1.7	1.4	0.3

## PRIVATE EQUITY QUARTERLY PERFORMANCE SUMMARY

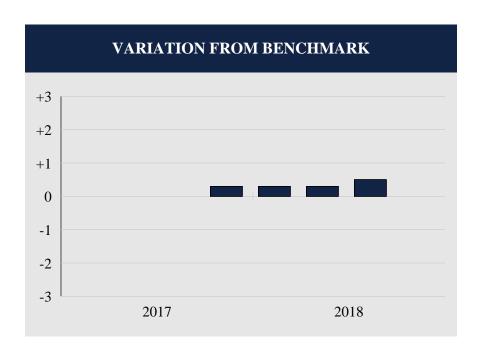
### COMPARATIVE BENCHMARK: CAMBRIDGE US PRIVATE EQUITY



<b>Total Quarters Observed</b>	40
Quarters At or Above the Benchmark	13
<b>Quarters Below the Benchmark</b>	27
Batting Average	.325

Date         Portfolio         Benchmark         Difference           12/08         -18.6         -16.0         -2.6           3/09         4.9         -3.3         8.2           6/09         7.4         4.5         2.9           9/09         1.0         5.8         -4.8           12/09         -10.8         6.0         -16.8           3/10         -0.4         4.4         -4.8           6/10         0.0         1.6         -1.6           9/10         0.1         5.1         -5.0           12/10         2.8         9.1         -6.3           3/11         -40.7         5.2         -45.9           6/11         5.7         4.6         1.1           9/11         -0.8         4.2         3.4           12/11         2.3         5.3         -3.0           3/12         2.8         5.4         -2.6           6/12         -1.5         -0.1         -1.4           9/12         2.7         3.7         -1.0           12/12         4.4         3.8         0.6           3/13         2.4         4.6         -2.2		RATES	S OF RETURN	
3/09         4.9         -3.3         8.2           6/09         7.4         4.5         2.9           9/09         1.0         5.8         -4.8           12/09         -10.8         6.0         -16.8           3/10         -0.4         4.4         -4.8           6/10         0.0         1.6         -1.6           9/10         0.1         5.1         -5.0           12/10         2.8         9.1         -6.3           3/11         -40.7         5.2         -45.9           6/11         5.7         4.6         1.1           9/11         -0.8         -4.2         3.4           12/11         2.3         5.3         -3.0           3/12         2.8         5.4         -2.6           6/12         -1.5         -0.1         -1.4           9/12         2.7         3.7         -1.0           12/12         4.4         3.8         0.6           3/13         2.4         4.6         -2.2           6/13         2.9         3.1         -0.2           9/13         4.4         5.1         -0.7           12/13	Date	Portfolio	Benchmark	Difference
6/09       7.4       4.5       2.9         9/09       1.0       5.8       -4.8         12/09       -10.8       6.0       -16.8         3/10       -0.4       4.4       -4.8         6/10       0.0       1.6       -1.6         9/10       0.1       5.1       -5.0         12/10       2.8       9.1       -6.3         3/11       -40.7       5.2       -45.9         6/11       5.7       4.6       1.1         9/11       -0.8       -4.2       3.4         12/11       2.3       5.3       -3.0         3/12       2.8       5.4       -2.6         6/12       -1.5       -0.1       -1.4         9/12       2.7       3.7       -1.0         12/12       4.4       3.8       0.6         3/13       2.4       4.6       -2.2         6/13       2.9       3.1       -0.2         9/13       4.4       5.1       -0.7         12/13       12.5       6.9       5.6         3/14       3.5       3.1       0.4         6/14       5.0       5.4       -0.4 </td <td>12/08</td> <td>-18.6</td> <td>-16.0</td> <td>-2.6</td>	12/08	-18.6	-16.0	-2.6
9/09       1.0       5.8       -4.8         12/09       -10.8       6.0       -16.8         3/10       -0.4       4.4       -4.8         6/10       0.0       1.6       -1.6         9/10       0.1       5.1       -5.0         12/10       2.8       9.1       -6.3         3/11       -40.7       5.2       -45.9         6/11       5.7       4.6       1.1         9/11       -0.8       -4.2       3.4         12/11       2.3       5.3       -3.0         3/12       2.8       5.4       -2.6         6/12       -1.5       -0.1       -1.4         9/12       2.7       3.7       -1.0         12/12       4.4       3.8       0.6         3/13       2.4       4.6       -2.2         6/13       2.9       3.1       -0.2         9/13       4.4       5.1       -0.7         12/13       12.5       6.9       5.6         3/14       3.5       3.1       0.4         6/14       5.0       5.4       -0.4         9/14       1.5       1.5       0.0 </td <td></td> <td></td> <td></td> <td></td>				
12/09       -10.8       6.0       -16.8         3/10       -0.4       4.4       -4.8         6/10       0.0       1.6       -1.6         9/10       0.1       5.1       -5.0         12/10       2.8       9.1       -6.3         3/11       -40.7       5.2       -45.9         6/11       5.7       4.6       1.1         9/11       -0.8       -4.2       3.4         12/11       2.3       5.3       -3.0         3/12       2.8       5.4       -2.6         6/12       -1.5       -0.1       -1.4         9/12       2.7       3.7       -1.0         12/12       4.4       3.8       0.6         3/13       2.4       4.6       -2.2         6/13       2.9       3.1       -0.2         9/13       4.4       5.1       -0.7         12/13       12.5       6.9       5.6         3/14       3.5       3.1       0.4         6/14       5.0       5.4       -0.4         9/14       1.5       1.5       0.0         12/14       5.4       0.9       4.5 </td <td></td> <td></td> <td></td> <td></td>				
6/10         0.0         1.6         -1.6         9/10         0.1         5.1         -5.0           12/10         2.8         9.1         -6.3         3/11         -40.7         5.2         -45.9         6/11         5.7         4.6         1.1         9/11         -0.8         -4.2         3.4         12/11         2.3         5.3         -3.0         3/4         12/11         2.3         5.3         -3.0         3/4         12/11         2.3         5.3         -3.0         3/4         12/11         2.3         5.3         -3.0         3/4         12/11         2.3         5.3         -3.0         3/4         12/11         2.3         5.3         -3.0         3/4         12/12         3.4         -2.6         6/12         -1.4         -2.6         6/12         -1.5         -0.1         -1.4         -9/12         2.7         3.7         -1.0         12/12         4.4         3.8         0.6         0.6         6/12         -1.4         3.8         0.6         6         3/13         2.4         4.6         -2.2         2.2         6/13         3.8         0.6         6         3.1         -0.2         3/14         5.1         -0.7         1.2 <t< td=""><td></td><td></td><td></td><td></td></t<>				
9/10       0.1       5.1       -5.0         12/10       2.8       9.1       -6.3         3/11       -40.7       5.2       -45.9         6/11       5.7       4.6       1.1         9/11       -0.8       -4.2       3.4         12/11       2.3       5.3       -3.0         3/12       2.8       5.4       -2.6         6/12       -1.5       -0.1       -1.4         9/12       2.7       3.7       -1.0         12/12       4.4       3.8       0.6         3/13       2.4       4.6       -2.2         6/13       2.9       3.1       -0.2         9/13       4.4       5.1       -0.7         12/13       12.5       6.9       5.6         3/14       3.5       3.1       0.4         6/14       5.0       5.4       -0.4         9/14       1.5       1.5       0.0         12/14       5.4       0.9       4.5         3/15       3.6       2.6       1.0         6/15       2.0       3.8       -1.8         9/15       -1.1       -1.4       0.3			4.4	
12/10       2.8       9.1       -6.3         3/11       -40.7       5.2       -45.9         6/11       5.7       4.6       1.1         9/11       -0.8       -4.2       3.4         12/11       2.3       5.3       -3.0         3/12       2.8       5.4       -2.6         6/12       -1.5       -0.1       -1.4         9/12       2.7       3.7       -1.0         12/12       4.4       3.8       0.6         3/13       2.4       4.6       -2.2         6/13       2.9       3.1       -0.2         9/13       4.4       5.1       -0.7         12/13       12.5       6.9       5.6         3/14       3.5       3.1       0.4         6/14       5.0       5.4       -0.4         9/14       1.5       1.5       0.0         12/14       5.4       0.9       4.5         3/15       3.6       2.6       1.0         6/15       2.0       3.8       -1.8         9/15       -1.1       -1.4       0.3         12/15       0.5       0.5       0.0				
6/11       5.7       4.6       1.1         9/11       -0.8       -4.2       3.4         12/11       2.3       5.3       -3.0         3/12       2.8       5.4       -2.6         6/12       -1.5       -0.1       -1.4         9/12       2.7       3.7       -1.0         12/12       4.4       3.8       0.6         3/13       2.4       4.6       -2.2         6/13       2.9       3.1       -0.2         9/13       4.4       5.1       -0.7         12/13       12.5       6.9       5.6         3/14       3.5       3.1       0.4         6/14       5.0       5.4       -0.4         9/14       1.5       1.5       0.0         12/14       5.4       0.9       4.5         3/15       3.6       2.6       1.0         6/15       2.0       3.8       -1.8         9/15       -1.1       -1.4       0.3         12/15       0.5       0.5       0.0         3/16       -0.9       0.0       -0.9         6/16       2.7       4.0       -1.3				
9/11         -0.8         -4.2         3.4           12/11         2.3         5.3         -3.0           3/12         2.8         5.4         -2.6           6/12         -1.5         -0.1         -1.4           9/12         2.7         3.7         -1.0           12/12         4.4         3.8         0.6           3/13         2.4         4.6         -2.2           6/13         2.9         3.1         -0.2           9/13         4.4         5.1         -0.7           12/13         12.5         6.9         5.6           3/14         3.5         3.1         0.4           6/14         5.0         5.4         -0.4           9/14         1.5         1.5         0.0           12/14         5.4         0.9         4.5           3/15         3.6         2.6         1.0           6/15         2.0         3.8         -1.8           9/15         -1.1         -1.4         0.3           12/15         0.5         0.5         0.0           3/16         -0.9         0.0         -0.9           6/16         2.				
12/11       2.3       5.3       -3.0         3/12       2.8       5.4       -2.6         6/12       -1.5       -0.1       -1.4         9/12       2.7       3.7       -1.0         12/12       4.4       3.8       0.6         3/13       2.4       4.6       -2.2         6/13       2.9       3.1       -0.2         9/13       4.4       5.1       -0.7         12/13       12.5       6.9       5.6         3/14       3.5       3.1       0.4         6/14       5.0       5.4       -0.4         9/14       1.5       1.5       0.0         12/14       5.4       0.9       4.5         3/15       3.6       2.6       1.0         6/15       2.0       3.8       -1.8         9/15       -1.1       -1.4       0.3         12/15       0.5       0.5       0.0         3/16       -0.9       0.0       -0.9         6/16       2.7       4.0       -1.3         9/16       1.5       3.9       -2.4         12/16       -5.6       4.6       -10.2				
3/12       2.8       5.4       -2.6         6/12       -1.5       -0.1       -1.4         9/12       2.7       3.7       -1.0         12/12       4.4       3.8       0.6         3/13       2.4       4.6       -2.2         6/13       2.9       3.1       -0.2         9/13       4.4       5.1       -0.7         12/13       12.5       6.9       5.6         3/14       3.5       3.1       0.4         6/14       5.0       5.4       -0.4         9/14       1.5       1.5       0.0         12/14       5.4       0.9       4.5         3/15       3.6       2.6       1.0         6/15       2.0       3.8       -1.8         9/15       -1.1       -1.4       0.3         12/15       0.5       0.5       0.0         3/16       -0.9       0.0       -0.9         6/16       2.7       4.0       -1.3         9/16       1.5       3.9       -2.4         12/16       -5.6       4.6       -10.2         3/17       0.2       3.9       -3.7				
9/12       2.7       3.7       -1.0         12/12       4.4       3.8       0.6         3/13       2.4       4.6       -2.2         6/13       2.9       3.1       -0.2         9/13       4.4       5.1       -0.7         12/13       12.5       6.9       5.6         3/14       3.5       3.1       0.4         6/14       5.0       5.4       -0.4         9/14       1.5       1.5       0.0         12/14       5.4       0.9       4.5         3/15       3.6       2.6       1.0         6/15       2.0       3.8       -1.8         9/15       -1.1       -1.4       0.3         12/15       0.5       0.5       0.0         3/16       -0.9       0.0       -0.9         6/16       2.7       4.0       -1.3         9/16       1.5       3.9       -2.4         12/16       -5.6       4.6       -10.2         3/17       0.2       3.5       -0.9         9/17       3.4       4.0       -0.6         12/17       2.1       5.1       -3.0	3/12		5.4	-2.6
12/12       4.4       3.8       0.6         3/13       2.4       4.6       -2.2         6/13       2.9       3.1       -0.2         9/13       4.4       5.1       -0.7         12/13       12.5       6.9       5.6         3/14       3.5       3.1       0.4         6/14       5.0       5.4       -0.4         9/14       1.5       1.5       0.0         12/14       5.4       0.9       4.5         3/15       3.6       2.6       1.0         6/15       2.0       3.8       -1.8         9/15       -1.1       -1.4       0.3         12/15       0.5       0.5       0.0         3/16       -0.9       0.0       -0.9         6/16       2.7       4.0       -1.3         9/16       1.5       3.9       -2.4         12/16       -5.6       4.6       -10.2         3/17       0.2       3.5       -0.9         9/17       3.4       4.0       -0.6         12/17       2.1       5.1       -3.0         3/18       1.1       2.7       -1.6				
3/13       2.4       4.6       -2.2         6/13       2.9       3.1       -0.2         9/13       4.4       5.1       -0.7         12/13       12.5       6.9       5.6         3/14       3.5       3.1       0.4         6/14       5.0       5.4       -0.4         9/14       1.5       1.5       0.0         12/14       5.4       0.9       4.5         3/15       3.6       2.6       1.0         6/15       2.0       3.8       -1.8         9/15       -1.1       -1.4       0.3         12/15       0.5       0.5       0.0         3/16       -0.9       0.0       -0.9         6/16       2.7       4.0       -1.3         9/16       1.5       3.9       -2.4         12/16       -5.6       4.6       -10.2         3/17       0.2       3.9       -3.7         6/17       2.6       3.5       -0.9         9/17       3.4       4.0       -0.6         12/17       2.1       5.1       -3.0         3/18       1.1       2.7       -1.6				
9/13       4.4       5.1       -0.7         12/13       12.5       6.9       5.6         3/14       3.5       3.1       0.4         6/14       5.0       5.4       -0.4         9/14       1.5       1.5       0.0         12/14       5.4       0.9       4.5         3/15       3.6       2.6       1.0         6/15       2.0       3.8       -1.8         9/15       -1.1       -1.4       0.3         12/15       0.5       0.5       0.0         3/16       -0.9       0.0       -0.9         6/16       2.7       4.0       -1.3         9/16       1.5       3.9       -2.4         12/16       -5.6       4.6       -10.2         3/17       0.2       3.9       -3.7         6/17       2.6       3.5       -0.9         9/17       3.4       4.0       -0.6         12/17       2.1       5.1       -3.0         3/18       1.1       2.7       -1.6         6/18       4.1       5.8       -1.7				
12/13     12.5     6.9     5.6       3/14     3.5     3.1     0.4       6/14     5.0     5.4     -0.4       9/14     1.5     1.5     0.0       12/14     5.4     0.9     4.5       3/15     3.6     2.6     1.0       6/15     2.0     3.8     -1.8       9/15     -1.1     -1.4     0.3       12/15     0.5     0.5     0.0       3/16     -0.9     0.0     -0.9       6/16     2.7     4.0     -1.3       9/16     1.5     3.9     -2.4       12/16     -5.6     4.6     -10.2       3/17     0.2     3.9     -3.7       6/17     2.6     3.5     -0.9       9/17     3.4     4.0     -0.6       12/17     2.1     5.1     -3.0       3/18     1.1     2.7     -1.6       6/18     4.1     5.8     -1.7				
3/14       3.5       3.1       0.4         6/14       5.0       5.4       -0.4         9/14       1.5       1.5       0.0         12/14       5.4       0.9       4.5         3/15       3.6       2.6       1.0         6/15       2.0       3.8       -1.8         9/15       -1.1       -1.4       0.3         12/15       0.5       0.5       0.0         3/16       -0.9       0.0       -0.9         6/16       2.7       4.0       -1.3         9/16       1.5       3.9       -2.4         12/16       -5.6       4.6       -10.2         3/17       0.2       3.9       -3.7         6/17       2.6       3.5       -0.9         9/17       3.4       4.0       -0.6         12/17       2.1       5.1       -3.0         3/18       1.1       2.7       -1.6         6/18       4.1       5.8       -1.7				
6/14       5.0       5.4       -0.4         9/14       1.5       1.5       0.0         12/14       5.4       0.9       4.5         3/15       3.6       2.6       1.0         6/15       2.0       3.8       -1.8         9/15       -1.1       -1.4       0.3         12/15       0.5       0.5       0.0         3/16       -0.9       0.0       -0.9         6/16       2.7       4.0       -1.3         9/16       1.5       3.9       -2.4         12/16       -5.6       4.6       -10.2         3/17       0.2       3.9       -3.7         6/17       2.6       3.5       -0.9         9/17       3.4       4.0       -0.6         12/17       2.1       5.1       -3.0         3/18       1.1       2.7       -1.6         6/18       4.1       5.8       -1.7				
12/14     5.4     0.9     4.5       3/15     3.6     2.6     1.0       6/15     2.0     3.8     -1.8       9/15     -1.1     -1.4     0.3       12/15     0.5     0.5     0.0       3/16     -0.9     0.0     -0.9       6/16     2.7     4.0     -1.3       9/16     1.5     3.9     -2.4       12/16     -5.6     4.6     -10.2       3/17     0.2     3.9     -3.7       6/17     2.6     3.5     -0.9       9/17     3.4     4.0     -0.6       12/17     2.1     5.1     -3.0       3/18     1.1     2.7     -1.6       6/18     4.1     5.8     -1.7	6/14	5.0	5.4	
3/15     3.6     2.6     1.0       6/15     2.0     3.8     -1.8       9/15     -1.1     -1.4     0.3       12/15     0.5     0.5     0.0       3/16     -0.9     0.0     -0.9       6/16     2.7     4.0     -1.3       9/16     1.5     3.9     -2.4       12/16     -5.6     4.6     -10.2       3/17     0.2     3.9     -3.7       6/17     2.6     3.5     -0.9       9/17     3.4     4.0     -0.6       12/17     2.1     5.1     -3.0       3/18     1.1     2.7     -1.6       6/18     4.1     5.8     -1.7				
6/15       2.0       3.8       -1.8         9/15       -1.1       -1.4       0.3         12/15       0.5       0.5       0.0         3/16       -0.9       0.0       -0.9         6/16       2.7       4.0       -1.3         9/16       1.5       3.9       -2.4         12/16       -5.6       4.6       -10.2         3/17       0.2       3.9       -3.7         6/17       2.6       3.5       -0.9         9/17       3.4       4.0       -0.6         12/17       2.1       5.1       -3.0         3/18       1.1       2.7       -1.6         6/18       4.1       5.8       -1.7				· ·
12/15     0.5     0.5     0.0       3/16     -0.9     0.0     -0.9       6/16     2.7     4.0     -1.3       9/16     1.5     3.9     -2.4       12/16     -5.6     4.6     -10.2       3/17     0.2     3.9     -3.7       6/17     2.6     3.5     -0.9       9/17     3.4     4.0     -0.6       12/17     2.1     5.1     -3.0       3/18     1.1     2.7     -1.6       6/18     4.1     5.8     -1.7	6/15	2.0	3.8	-1.8
3/16     -0.9     0.0     -0.9       6/16     2.7     4.0     -1.3       9/16     1.5     3.9     -2.4       12/16     -5.6     4.6     -10.2       3/17     0.2     3.9     -3.7       6/17     2.6     3.5     -0.9       9/17     3.4     4.0     -0.6       12/17     2.1     5.1     -3.0       3/18     1.1     2.7     -1.6       6/18     4.1     5.8     -1.7				
6/16     2.7     4.0     -1.3       9/16     1.5     3.9     -2.4       12/16     -5.6     4.6     -10.2       3/17     0.2     3.9     -3.7       6/17     2.6     3.5     -0.9       9/17     3.4     4.0     -0.6       12/17     2.1     5.1     -3.0       3/18     1.1     2.7     -1.6       6/18     4.1     5.8     -1.7				
12/16     -5.6     4.6     -10.2       3/17     0.2     3.9     -3.7       6/17     2.6     3.5     -0.9       9/17     3.4     4.0     -0.6       12/17     2.1     5.1     -3.0       3/18     1.1     2.7     -1.6       6/18     4.1     5.8     -1.7			4.0	
3/17     0.2     3.9     -3.7       6/17     2.6     3.5     -0.9       9/17     3.4     4.0     -0.6       12/17     2.1     5.1     -3.0       3/18     1.1     2.7     -1.6       6/18     4.1     5.8     -1.7				
6/17     2.6     3.5     -0.9       9/17     3.4     4.0     -0.6       12/17     2.1     5.1     -3.0       3/18     1.1     2.7     -1.6       6/18     4.1     5.8     -1.7				
12/17 2.1 5.1 -3.0 3/18 1.1 2.7 -1.6 6/18 4.1 5.8 -1.7				
3/18 1.1 2.7 -1.6 6/18 4.1 5.8 -1.7				
6/18 4.1 5.8 -1.7				

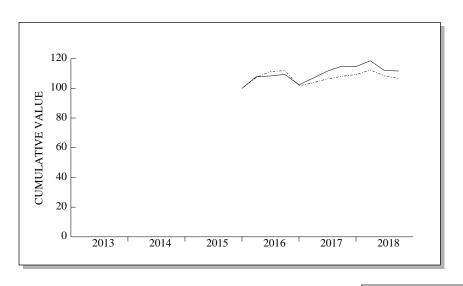
# REAL ESTATE QUARTERLY PERFORMANCE SUMMARY COMPARATIVE BENCHMARK: NCREIF NFI-ODCE INDEX

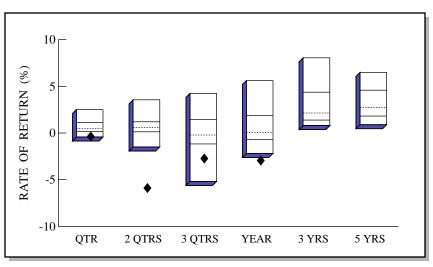


Total Quarters Observed	4
Quarters At or Above the Benchmark	4
<b>Quarters Below the Benchmark</b>	0
Batting Average	1.000

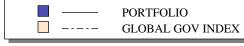
RATES OF RETURN							
Date	Portfolio	Benchmark	Difference				
12/17	2.4	2.1	0.3				
3/18	2.5	2.2	0.3				
6/18	2.3	2.0	0.3				
9/18	2.6	2.1	0.5				

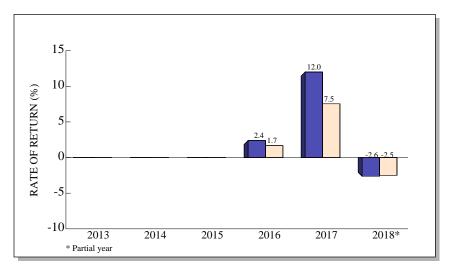
## GLOBAL FIXED INCOME RETURN COMPARISONS





Broad Market Fixed Universe

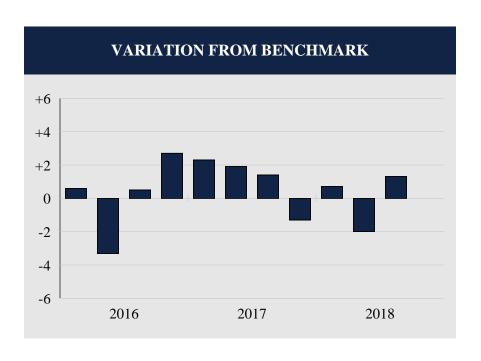




					ANNU <i>A</i>	ALIZED
	_QTR	2 QTRS	3 QTRS	YEAR_	3 YRS	5 YRS
RETURN	-0.3	-5.8	-2.6	-2.8		
(RANK)	(93)	(99)	(92)	(98)		
5TH %ILE	2.5	3.6	4.2	5.6	8.1	6.5
25TH %ILE	1.1	1.2	1.4	1.9	4.4	4.6
MEDIAN	0.5	0.6	-0.2	0.1	2.1	2.7
75TH %ILE	0.2	0.1	-1.2	-0.7	1.4	1.8
95TH %ILE	-0.5	-1.5	-5.2	-2.2	0.8	0.9
Global Gov	-1.6	-5.1	-2.5	-1.4	1.8	0.1

Broad Market Fixed Universe

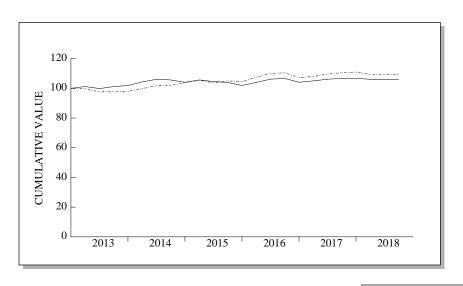
# GLOBAL FIXED INCOME QUARTERLY PERFORMANCE SUMMARY COMPARATIVE BENCHMARK: BLOOMBERG BARCLAYS GLOBAL GOVERNMENT BOND

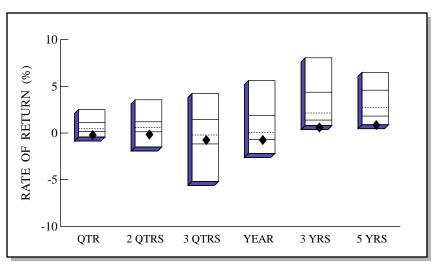


Total Quarters Observed	11
Quarters At or Above the Benchmark	8
<b>Quarters Below the Benchmark</b>	3
<b>Batting Average</b>	.727

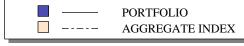
RATES OF RETURN						
Portfolio	Benchmark	Difference				
7.8	7.2	0.6				
0.5	3.8	-3.3				
1.0	0.5	0.5				
-6.4	-9.1	2.7				
4.4	2.1	2.3				
4.4	2.5	1.9				
3.0	1.6	1.4				
-0.2	1.1	-1.3				
3.4	2.7	0.7				
-5.5	-3.5	-2.0				
-0.3	-1.6	1.3				
	7.8 0.5 1.0 -6.4 4.4 4.4 3.0 -0.2 3.4 -5.5	Portfolio         Benchmark           7.8         7.2           0.5         3.8           1.0         0.5           -6.4         -9.1           4.4         2.1           4.4         2.5           3.0         1.6           -0.2         1.1           3.4         2.7           -5.5         -3.5				

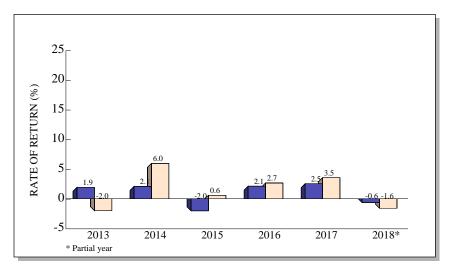
## DOMESTIC FIXED INCOME RETURN COMPARISONS





Broad Market Fixed Universe



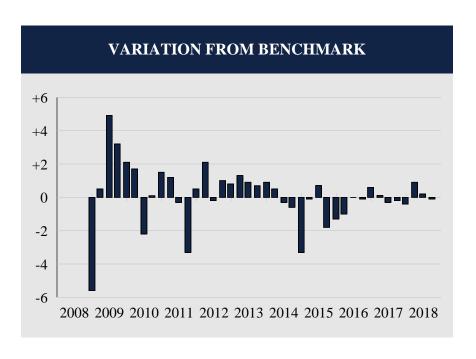


					ANNU <i>A</i>	LIZED
	_QTR_	2 QTRS	3 QTRS	YEAR_	3 YRS	5 YRS
RETURN	-0.1	-0.1	-0.6	-0.7	0.7	0.9
(RANK)	(89)	(85)	(62)	(73)	(98)	(95)
5TH %ILE	2.5	3.6	4.2	5.6	8.1	6.5
25TH %ILE	1.1	1.2	1.4	1.9	4.4	4.6
MEDIAN	0.5	0.6	-0.2	0.1	2.1	2.7
75TH %ILE	0.2	0.1	-1.2	-0.7	1.4	1.8
95TH %ILE	-0.5	-1.5	-5.2	-2.2	0.8	0.9
Agg	0.0	-0.1	-1.6	-1.2	1.3	2.2

Broad Market Fixed Universe

## DOMESTIC FIXED INCOME QUARTERLY PERFORMANCE SUMMARY - 10 YEARS

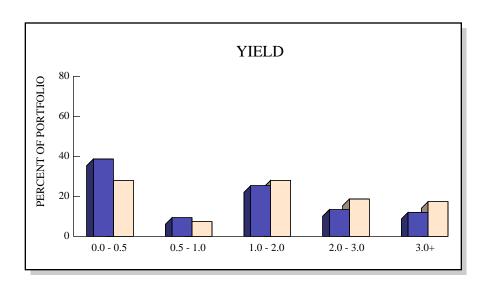
### COMPARATIVE BENCHMARK: BLOOMBERG BARCLAYS AGGREGATE INDEX

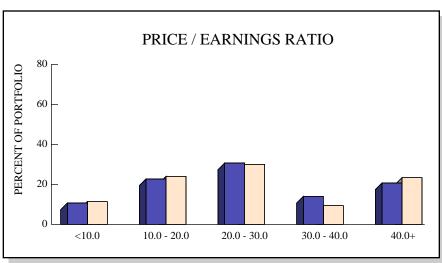


<b>Total Quarters Observed</b>	40
Quarters At or Above the Benchmark	23
<b>Quarters Below the Benchmark</b>	17
Batting Average	.575

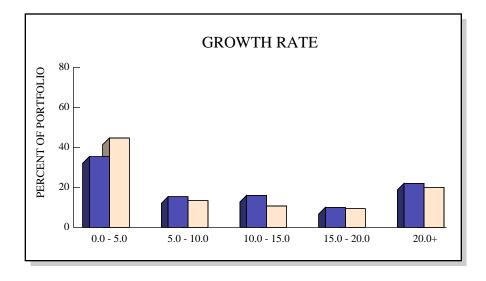
RATES OF RETURN							
Date	Portfolio	Benchmark	Difference				
12/08	-1.0	4.6	-5.6				
3/09	0.6	0.1	0.5				
6/09	6.7	1.8	4.9				
9/09	6.9	3.7	3.2				
12/09	2.3	0.2	2.1				
3/10	3.5	1.8	1.7				
6/10	1.3	3.5	-2.2				
9/10	2.6	2.5	0.1				
12/10	0.2	-1.3	1.5				
3/11	1.6	0.4	1.2				
6/11	2.0	2.3	-0.3				
9/11	0.5	3.8	-3.3				
12/11	1.6	1.1	0.5				
3/12	2.4	0.3	2.1				
6/12	1.9	2.1	-0.2				
9/12	2.6	1.6	1.0				
12/12	1.0	0.2	0.8				
3/13	1.2	-0.1	1.3				
6/13	-1.4	-2.3	0.9				
9/13	1.3	0.6	0.7				
12/13	0.8	-0.1	0.9				
3/14	2.3	1.8	0.5				
6/14	1.7	2.0	-0.3				
9/14	-0.4	0.2	-0.6				
12/14	-1.5	1.8	-3.3				
3/15	1.5	1.6	-0.1				
6/15	-1.0	-1.7	0.7				
9/15	-0.6	1.2	-1.8				
12/15	-1.9	-0.6	-1.3				
3/16	2.0	3.0	-1.0				
6/16	2.2	2.2	0.0				
9/16	0.4	0.5	-0.1				
12/16	-2.4	-3.0	0.6				
3/17	0.9	0.8	0.1				
6/17	1.1	1.4	-0.3				
9/17	0.6	0.8	-0.2				
12/17	0.0	0.4	-0.4				
3/18	-0.6	-1.5	0.9				
6/18	0.0	-0.2	0.2				
9/18	-0.1	0.0	-0.1				

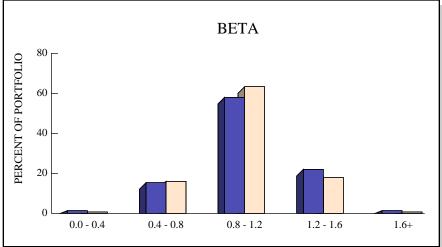
## STOCK CHARACTERISTICS





	# HOLDINGS	YIELD	GROWTH	P/E	BETA	
PORTFOLIO	796	1.3%	10.2%	27.8	1.02	
RUSSELL 3000	3,023	1.7%	8.9%	28.1	1.01	

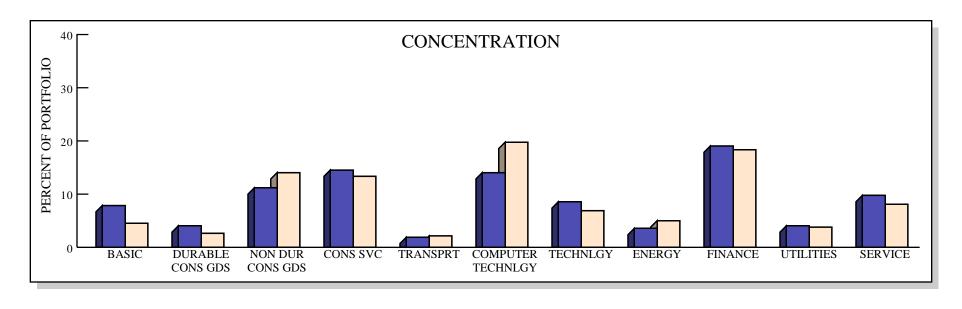


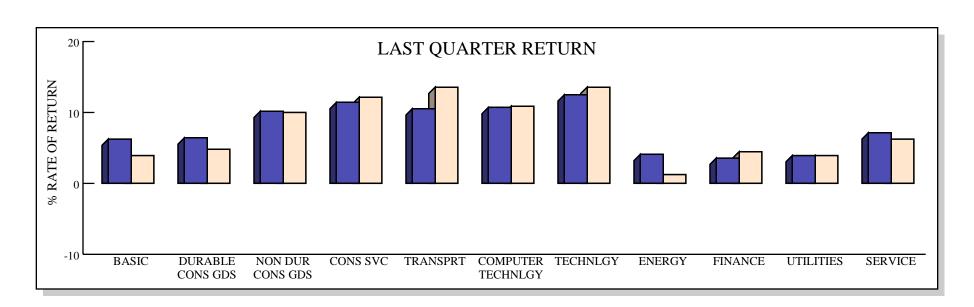


RUSSELL 3000

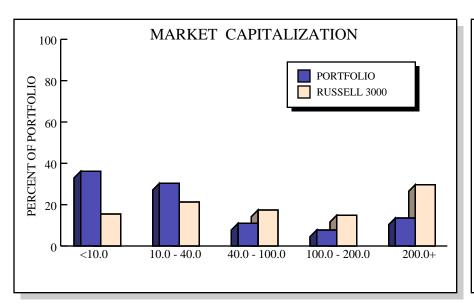
PORTFOLIO

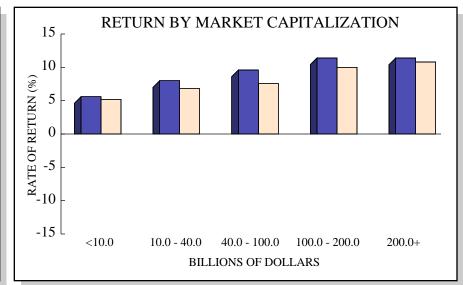
## STOCK INDUSTRY ANALYSIS





## **TOP TEN HOLDINGS**

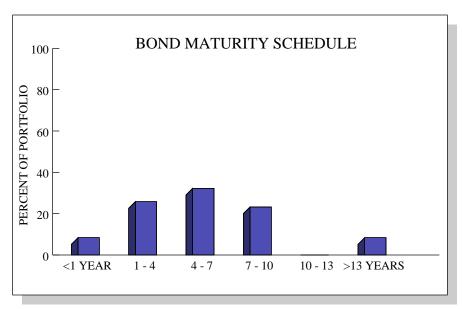


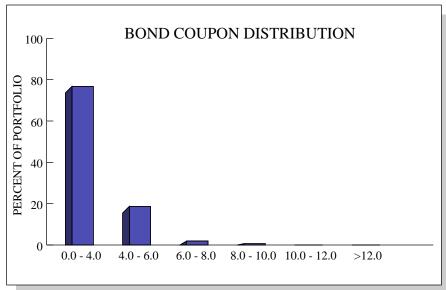


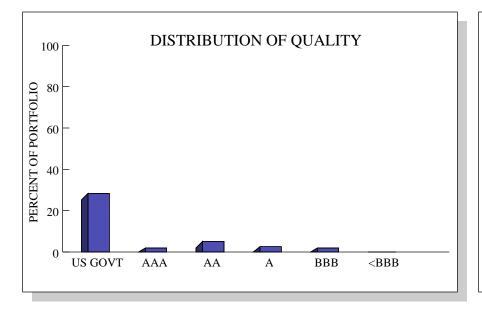
## TOP TEN EQUITY HOLDINGS

RANK	NAME	VALUE	% EQUITY	RETURN	INDUSTRY SECTOR	MKT CAP
1	APPLE INC	\$ 5,494,512	1.94%	22.4%	Computer Tech	\$ 1090.3 B
2	MICROSOFT CORP	3,264,920	1.15%	16.4%	Computer Tech	877.0 B
3	ALPHABET INC-CL A	2,782,319	.98%	6.9%	Computer Tech	360.8 B
4	MASTERCARD INC - A	2,182,023	.77%	13.4%	Finance	228.2 B
5	AMGEN INC	2,151,048	.76%	13.1%	NonDur Cons Goods	134.2 B
6	BERKSHIRE HATHAWAY INC-CL B	2,115,835	.75%	14.7%	Finance	292.4 B
7	VERIZON COMMUNICATIONS INC	2,105,061	.74%	7.4%	Utilities	220.6 B
8	CISCO SYSTEMS INC	1,955,487	.69%	13.9%	Computer Tech	222.4 B
9	HOME DEPOT INC	1,843,635	.65%	6.7%	Consumer Service	237.0 B
10	WALT DISNEY CO/THE	1,771,056	.63%	12.5%	Service	173.9 B

#### **BOND CHARACTERISTICS**







No. of Securities	PORTFOLIO 247	AGGREGATE IND
No. of Securities	247	10,133
Duration	3.62	6.03
YTM	3.17	3.46
Average Coupon	3.18	3.16
Avg Maturity / WAL	6.65	8.42
Average Quality	BBB	USG-AAA

# PONTIAC GENERAL EMPLOYEES RETIREMENT SYSTEM MANAGER FEE SCHEDULES

Manager	Annual Fee Schedule
Attucks Emerging Mgr Attucks Michigan	0.5% on all assets
Brandywine	0.45% on all assets
First Eagle	0.75% on all assets
GrayCo I	1% on invested capital
Intercontinental U.S. REIF	1.1% on first \$25 million; 1% on next \$25 million; 0.85% on next \$50 million.  Preferred Return: 8%; Carried Interest: 20%
Invesco V	0.7% on committed capital in year one; 0.8% in year two; 0.9% in years three through eight; reduced by 10% per year thereafter, but not below a rate of 0.5%
Invesco Core RE	Management Fee: 1.1%  Cash Management: 0.15% on cash in excess of 7.5% of aggregate NAV
Kennedy SCC	95 basis points on all assets
Kennedy SCG	0.85% on all assets
Loomis	0.8% on first \$10 million; 0.6% on remainder
Mesirow IV Mesirow VI	1% on committed capital for years one through seven; reduced by 10% per year thereafter
Principal	1% on all assets
Robinson	0.22% on all assets
Sawgrass	0.6% on first \$20 million; 0.5% on remainder
Systematic	0.5% on first \$75 million; 0.4% on remainder
Victory MCG Victory Fixed Income	0.45% on first \$25 million; 0.35% on next \$25 million; 0.30% on remiander of combined assets between both portfolios
WCM	0.75% on all assets

## **APPENDIX - MAJOR MARKET INDEX RETURNS**

Economic Data	Style	QTR	YTD	1 Year	3 years	5 Years
Consumer Price Index	Economic Data	0.2	2.4	2.3	2.0	1.5
Domestic Equity	Style	QTR	YTD	1 Year	3 years	5 Years
Russell 3000	Broad Equity	7.1	10.6	17.6	17.1	13.5
S&P 500	Large Cap Core	7.7	10.6	17.9	17.3	13.9
Russell 1000	Large Cap	7.4	10.5	17.8	17.1	13.7
Russell 1000 Growth	Large Cap Growth	9.2	17.1	26.3	20.6	16.6
Russell 1000 Value	Large Cap Value	5.7	3.9	9.4	13.5	10.7
Russell Mid Cap	Midcap	5.0	7.5	14.0	14.5	11.6
Russell Mid Cap Growth	Midcap Growth	7.6	13.4	21.1	16.6	13.0
Russell Mid Cap Value	Midcap Value	3.3	3.1	8.8	13.1	10.7
Russell 2000	Small Cap	3.6	11.5	15.2	17.1	11.1
Russell 2000 Growth	Small Cap Growth	5.5	15.7	21.0	18.0	12.1
Russell 2000 Value	Small Cap Value	1.6	7.2	9.4	16.1	9.9
International Equity	Style	QTR	YTD	1 Year	3 years	5 Years
MSCI All Country World Ex US	Foreign Equity	0.8	-2.7	2.3	10.5	4.6
MSCI EAFE	Developed Markets Equity	1.4	-1.0	3.2	9.8	4.9
MSCI EAFE Growth	Developed Markets Growth		0.9	6.3	10.7	6.0
MSCI EAFE Value	Developed Markets Value	1.3	-2.9	0.2	8.8	3.7
MSCI Emerging Markets	Emerging Markets Equity	-0.9	-7.4	-0.4	12.8	4.0
Domestic Fixed Income	Style	QTR	YTD	1 Year	3 years	5 Years
Bloomberg Barclays Aggregate Index	Core Fixed Income	0.0	-1.6	-1.2	1.3	2.2
Bloomberg Barclays Capital Gov't Bond	Treasuries	-0.6	-1.6	-1.6	0.3	1.3
Bloomberg Barclays Capital Credit Bond	Corporate Bonds	0.9	-2.1	-1.1	3.0	3.4
Intermediate Aggregate	Core Intermediate	0.1	-0.9	-0.9	0.9	1.7
ML/BoA 1-3 Year Treasury	Short Term Treasuries	0.2	0.3	0.0	0.4	0.6
Bloomberg Barclays Capital High Yield	High Yield Bonds	2.4	2.6	3.0	8.1	5.5
Alternative Assets	Style	QTR	YTD	1 Year	3 years	5 Years
Bloomberg Barclays Global Treasury Ex US	International Treasuries	-2.2	-2.8	-1.3	2.3	-0.2
		-4.4	-2.0	-1.5	4.5	-0.2
NCREIF NFI-ODCE Index	Real Estate	2.1	6.5	8.7	8.8	10.7

#### **APPENDIX - DISCLOSURES**

\* The shadow index is a customized index that matches your portfolio's asset allocation on a quarterly basis.

This index was calculated using the following asset classes and corresponding benchmarks:

Domestic Equity Russell 3000 International Equity MSCI EAFE

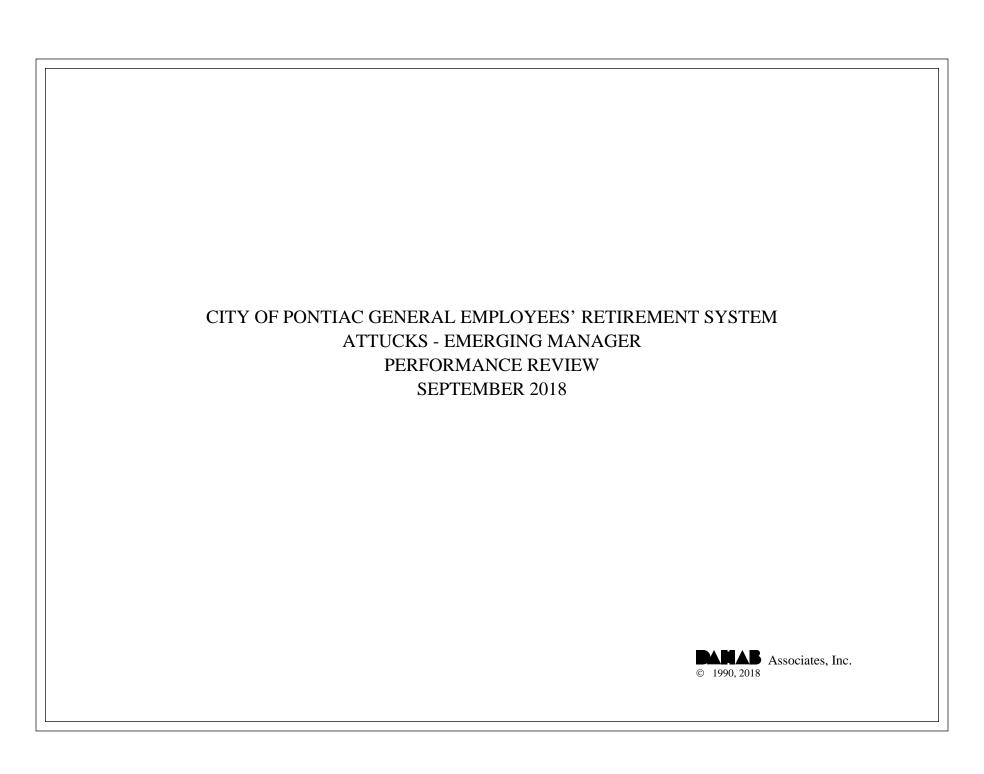
Private Equity
Real Estate
Cambridge US Private Equity
NCREIF NFI-ODCE Index

Global Fixed Income Bloomberg Barclays Global Government Bond

Domestic Fixed Income Bloomberg Barclays Aggregate Index

Cash & Equivalent 90 Day T Bill

- \* 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.
- \* The blended assumption rate is 7.5% through December 31, 2015 and 7.0% thereafter.



#### **INVESTMENT RETURN**

On September 30th, 2018, the City of Pontiac General Employees' Retirement System's Attucks Emerging Manager portfolio was valued at \$59,599,540, representing an increase of \$4,399,455 from the June quarter's ending value of \$55,200,085. Last quarter, the Fund posted withdrawals totaling \$222, which partially offset the portfolio's net investment return of \$4,399,677. Income receipts totaling \$270,046 plus net realized and unrealized capital gains of \$4,129,631 combined to produce the portfolio's net investment return.

#### RELATIVE PERFORMANCE

#### **Total Fund**

For the third quarter, the Attucks Emerging Manager portfolio returned 8.0%, which was 0.3% above the S&P 500 Index's return of 7.7% and ranked in the 27th percentile of the Large Cap universe. Over the trailing year, the portfolio returned 19.6%, which was 1.7% above the benchmark's 17.9% return, ranking in the 30th percentile. Since June 2011, the portfolio returned 12.8% annualized and ranked in the 66th percentile. The S&P 500 returned an annualized 13.9% over the same period.

#### **EXECUTIVE SUMMARY**

PERFORMANCE SUMMARY							
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year	Since 06/11
Total Portfolio - Gross	8.0	19.6	16.2	13.1	16.1		12.8
LARGE CAP RANK	(27)	(30)	(53)	(56)	(67)		(66)
Total Portfolio - Net	7.8	18.9	15.4	12.4	15.4		12.1
S&P 500	7.7	17.9	17.3	13.9	16.9	12.0	13.9
<b>Domestic Equity - Gross</b>	8.0	19.6	16.2	13.1	16.1		12.8
LARGE CAP RANK	(27)	(30)	(53)	(56)	(67)		(66)
S&P 500	7.7	17.9	17.3	13.9	16.9	12.0	13.9

ASSET ALLOCATION					
Domestic Equity	100.0%	\$ 59,599,540			
Total Portfolio	100.0%	\$ 59,599,540			

## INVESTMENT RETURN

 Market Value 6/2018
 \$ 55,200,085

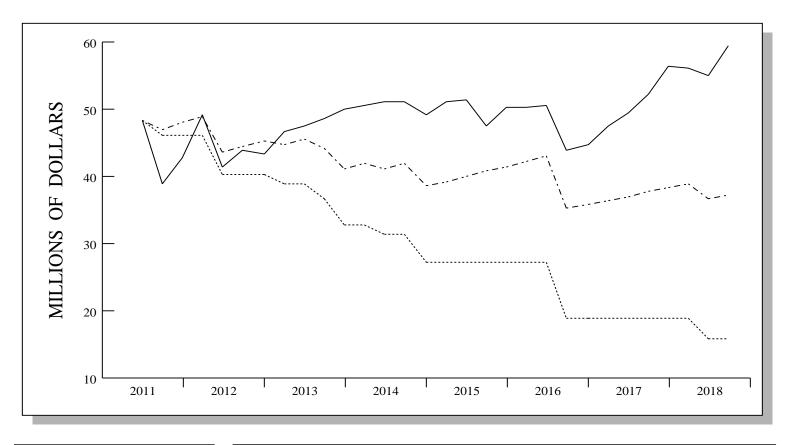
 Contribs / Withdrawals
 -222

 Income
 270,046

 Capital Gains / Losses
 4,129,631

 Market Value 9/2018
 \$ 59,599,540

## **INVESTMENT GROWTH**



----- ACTUAL RETURN
----- BLENDED RATE
----- 0.0%

VALUE ASSUMING BLENDED RATE \$ 37,408,324

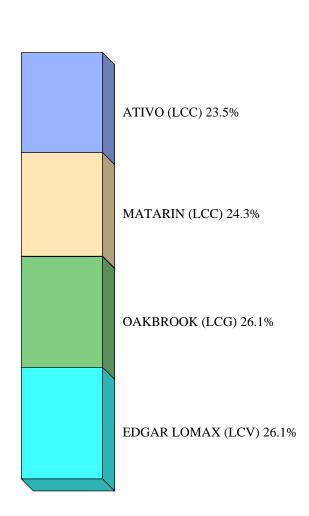
	LAST QUARTER	PERIOD 6/11 - 9/18
BEGINNING VALUE NET CONTRIBUTIONS INVESTMENT RETURN ENDING VALUE	\$ 55,200,085 -222 4,399,677 \$ 59,599,540	\$ 48,594,092 - 32,591,996 43,597,444 \$ 59,599,540
INCOME CAPITAL GAINS (LOSSES) INVESTMENT RETURN	$ \begin{array}{r} 270,046 \\ 4,129,631 \\ \hline 4,399,677 \end{array} $	6,618,440 36,979,005 43,597,444

# PONTIAC GENERAL EMPLOYEES RETIREMENT SYSTEM ATTUCKS EMERGING MANAGER SUMMARY AS OF SEPTEMBER 2018

Portfolio	Universe	Qua	rter	1 Y	ear	3 Ye	ears	5 Y e	ears
Attucks Emerging Mgr	(Large Cap)	8.0	(27)	19.6	(30)	16.2	(53)	13.1	(56)
Net of mgr fees & gross of Attucks fees		<b>7.9</b>		19.2		15.8		12.7	
Attucks Emerging Mgr net of all fees		<b>7.8</b>		18.9		15.4		12.4	
S&P 500		7.7		17.9		17.3		13.9	
Ativo	(Large Cap Core)	5.1	(88)	13.6	(79)	14.9	(76)	12.9	(68)
Ativo net of fees		5.0		13.3		14.5		12.5	
S&P 500		7.7		17.9		17.3		13.9	
Matarin	(Large Cap Core)	8.4	(14)	22.5	(9)				
Matarin net of fees		8.4		22.2					
S&P 500		7.7		17.9		<i>17.3</i>		13.9	
Oakbrook	(Large Cap Growth)	9.4	(21)	25.7	(42)	21.1	(16)	17.3	(18)
Oakbrook net of fees		9.3		25.3		20.7		17.0	
Russell 1000 Growth		9.2		26.3		20.6		16.6	

<sup>\*</sup>Actual fee schedule for historical manager Union Heritage could not be obtained. An expense ratio of 32.5 bps was assumed, putting it in line with the other managers.

## MANAGER ALLOCATION SUMMARY

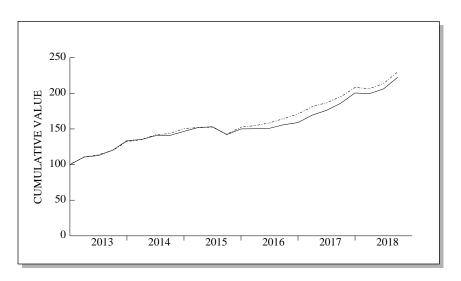


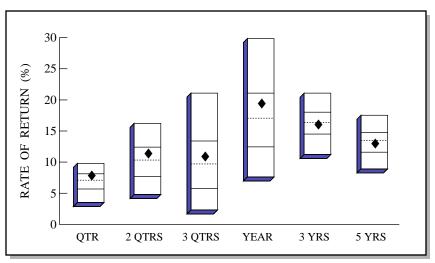
Name	Market Value	Percent
Ativo (LCC)	\$14,012,066	23.5
Matarin (LCC)	\$14,479,532	24.3
Oakbrook (LCG)	\$15,526,848	26.1
Edgar Lomax (LCV)	\$15,581,094	26.1
Total	\$59,599,540	100.0

# INVESTMENT RETURN SUMMARY - ONE QUARTER

Name	Quarter Total Return	Market Value June 30th, 2018	Net Cashflow	Net Investment Return	Market Value September 30th, 2018
Ativo (LCC)	5.1	13,332,831	-55	679,290	14,012,066
Matarin (LCC)	8.4	13,353,324	-24	1,126,232	14,479,532
Piedmont (LCC)		6,457	-6,462	5	0
Oakbrook (LCG)	9.4	14,197,254	-44	1,329,638	15,526,848
Edgar Lomax (LCV)	8.8	14,310,219	6,363	1,264,512	15,581,094
Total Portfolio	8.0	55,200,085	-222	4,399,677	59,599,540

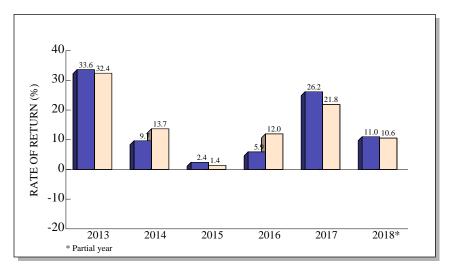
## TOTAL RETURN COMPARISONS





Large Cap Universe



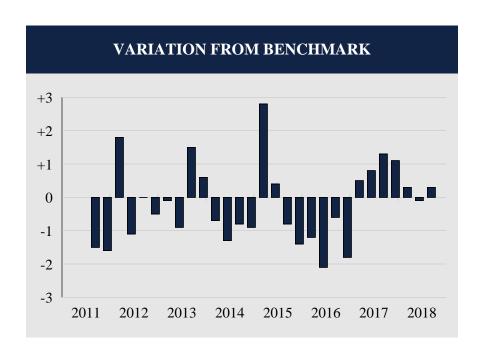


					ANNUA	ALIZED
	_QTR	2 QTRS	3 QTRS	YEAR_	3 YRS	5 YRS
RETURN	8.0	11.5	11.0	19.6	16.2	13.1
(RANK)	(27)	(33)	(37)	(30)	(53)	(56)
5TH %ILE	9.8	16.2	21.1	29.8	21.1	17.5
25TH %ILE	8.1	12.4	13.4	21.1	18.0	14.8
MEDIAN	7.1	10.3	9.7	17.1	16.3	13.5
75TH %ILE	5.7	7.7	5.8	12.5	14.5	11.6
95TH %ILE	3.5	4.8	2.3	7.6	11.2	8.9
S&P 500	7.7	11.4	10.6	17.9	17.3	13.9

Large Cap Universe

# TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

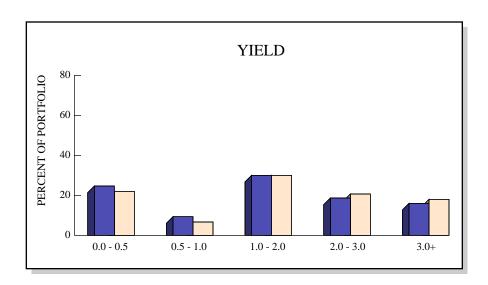
**COMPARATIVE BENCHMARK: S&P 500** 

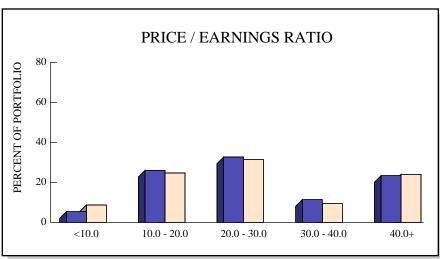


<b>Total Quarters Observed</b>	29
Quarters At or Above the Benchmark	12
Quarters Below the Benchmark	17
<b>Batting Average</b>	.414

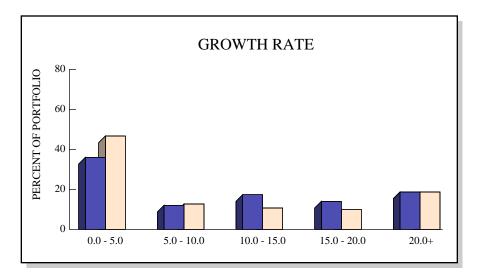
RATES OF RETURN					
Date	Portfolio	Benchmark	Difference		
9/11	-15.4	-13.9	-1.5		
12/11	10.2	11.8	-1.6		
3/12	14.4	12.6	1.8		
6/12	-3.9	-2.8	-1.1		
9/12	6.3	6.3	0.0		
12/12	-0.9	-0.4	-0.5		
3/13	10.5	10.6	-0.1		
6/13	2.0	2.9	-0.9		
9/13	6.7	5.2	1.5		
12/13	11.1	10.5	0.6		
3/14	1.1	1.8	-0.7		
6/14	3.9	5.2	-1.3		
9/14	0.3	1.1	-0.8		
12/14	4.0	4.9	-0.9		
3/15	3.7	0.9	2.8		
6/15	0.7	0.3	0.4		
9/15	-7.2	-6.4	-0.8		
12/15	5.6	7.0	-1.4		
3/16	0.1	1.3	-1.2		
6/16	0.4	2.5	-2.1		
9/16	3.3	3.9	-0.6		
12/16	2.0	3.8	-1.8		
3/17	6.6	6.1	0.5		
6/17 9/17 12/17	5.8 7.7	3.1 4.5 6.6	0.5 0.8 1.3 1.1		
3/18	-0.5	-0.8	0.3		
6/18	3.3	3.4	-0.1		
9/18	8.0	7.7	0.3		

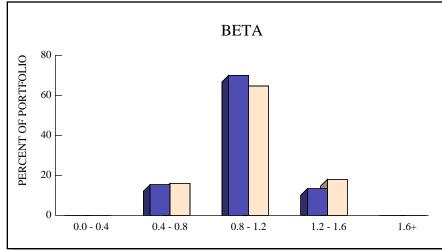
## STOCK CHARACTERISTICS



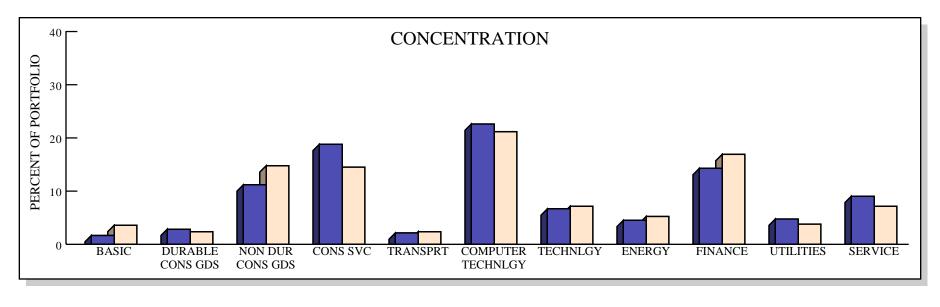


PORTFOLIO 416 1.6% 10.8% 30.2 0.99		# HOLDINGS	YIELD	GROWTH	P/E	BETA	
S.P.D. 500 505 1.90/ 9.20/ 20.2 1.00	PORTFOLIO	416	1.6%	10.8%	30.2	0.99	
S&F 300 303 1.8% 8.3% 29.2 1.00	S&P 500	505	1.8%	8.3%	29.2	1.00	

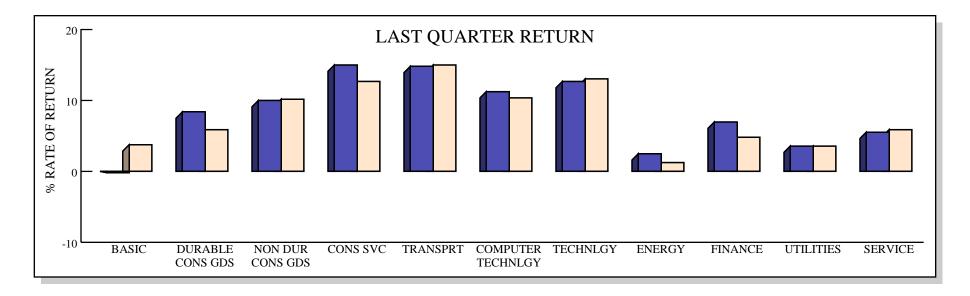




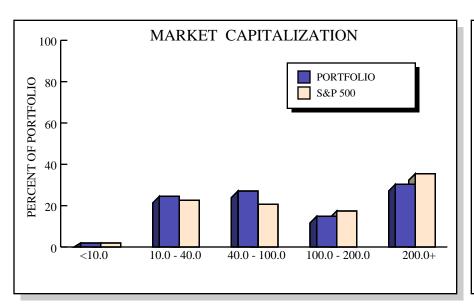
## STOCK INDUSTRY ANALYSIS

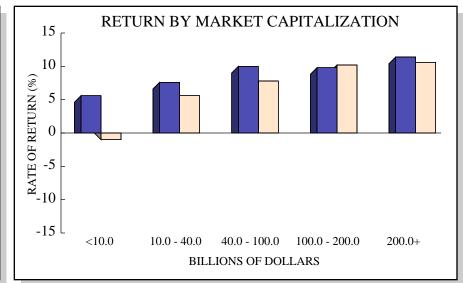






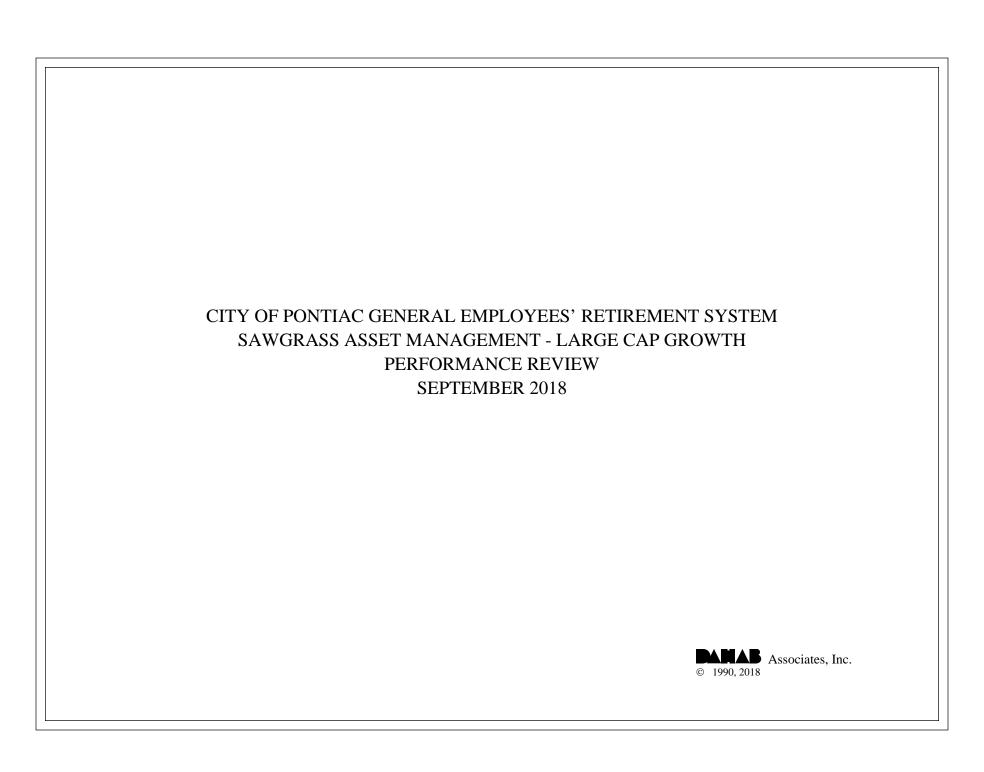
#### **TOP TEN HOLDINGS**





# TOP TEN EQUITY HOLDINGS

RANK	NAME	VALUE	% EQUITY	RETURN	INDUSTRY SECTOR	MKT CAP
1	APPLE INC	\$ 2,793,984	4.69%	22.4%	Computer Tech	\$ 1090.3 B
2	ALPHABET INC-CL A	1,418,319	2.38%	6.9%	Computer Tech	360.8 B
3	PFIZER INC	1,269,613	2.13%	22.5%	NonDur Cons Goods	258.3 B
4	MICROSOFT CORP	1,133,979	1.90%	16.4%	Computer Tech	877.0 B
5	MASTERCARD INC - A	1,117,947	1.88%	13.4%	Finance	228.2 B
6	EXELON CORP	1,097,962	1.84%	3.3%	Utilities	42.2 B
7	CISCO SYSTEMS INC	1,095,452	1.84%	13.9%	Computer Tech	222.4 B
8	AMAZON.COM INC	1,029,542	1.73%	17.8%	Consumer Service	976.9 B
9	ALLSTATE CORP	955,219	1.60%	8.6%	Finance	34.2 B
10	VERIZON COMMUNICATIONS INC	939,664	1.58%	7.4%	Utilities	220.6 B



#### **INVESTMENT RETURN**

On September 30th, 2018, the City of Pontiac General Employees' Retirement System's Sawgrass Asset Management Large Cap Growth portfolio was valued at \$35,852,165, a decrease of \$2,337,754 from the June ending value of \$38,189,919. Last quarter, the account recorded a net withdrawal of \$6,000,426, which overshadowed the fund's net investment return of \$3,662,672. Income receipts totaling \$378,057 and realized and unrealized capital gains of \$3,284,615 combined to produce the portfolio's net investment return.

#### **RELATIVE PERFORMANCE**

#### **Total Fund**

During the third quarter, the Sawgrass Asset Management Large Cap Growth portfolio gained 10.4%, which was 1.2% greater than the Russell 1000 Growth Index's return of 9.2% and ranked in the 9th percentile of the Large Cap Growth universe. Over the trailing year, the portfolio returned 23.9%, which was 2.4% less than the benchmark's 26.3% performance, and ranked in the 57th percentile. Since December 2007, the account returned 9.5% per annum. For comparison, the Russell 1000 Growth returned an annualized 10.9% over the same time frame.

#### **HOLDINGS ANALYSIS**

Last quarter, the Sawgrass portfolio was invested in ten of the eleven industry sectors. Relative to the Russell 1000 Growth index, the portfolio was overweight in the Non-Durable Consumer Goods sector and underweight in the Computer Technology sector.

The portfolio beat the benchmark in six of the ten invested sectors. Among those six were the Non-Durable Consumer Goods and Computer Technology sectors, which made up a combined 46% of the portfolio.

#### **EXECUTIVE SUMMARY**

PERFORMANCE SUMMARY							
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year	Since 12/07
Total Portfolio - Gross	10.4	23.9	17.1	14.4	17.1	12.7	9.5
LARGE CAP GROWTH RANK	(9)	(57)	(75)	(70)	(68)	(70)	
Total Portfolio - Net	10.3	23.2	16.5	13.8	16.5	12.2	9.1
Russell 1000G	9.2	26.3	20.6	16.6	18.7	14.3	10.9
<b>Domestic Equity - Gross</b>	10.4	23.9	17.1	14.4	17.1	12.7	9.5
LARGE CAP GROWTH RANK	(9)	(57)	(75)	(70)	(68)	(70)	
Russell 1000G	9.2	26.3	20.6	16.6	18.7	14.3	10.9

ASSET ALLOCATION						
Domestic Equity	100.0%	\$ 35,852,165				
Total Portfolio	100.0%	\$ 35,852,165				

## INVESTMENT RETURN

 Market Value 6/2018
 \$ 38,189,919

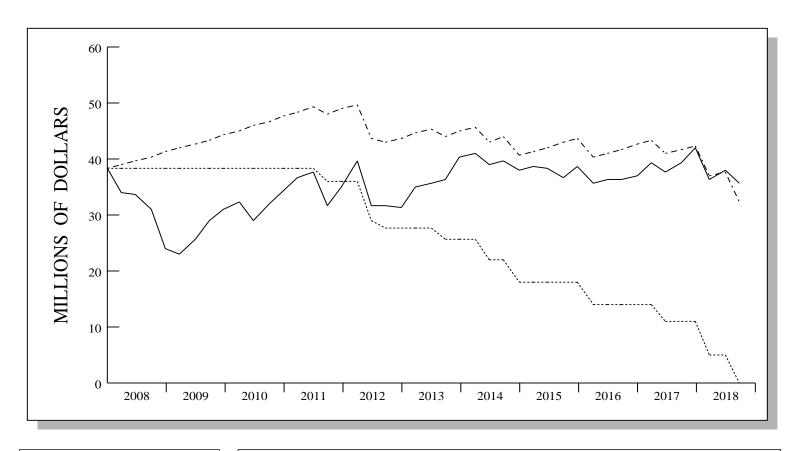
 Contribs / Withdrawals
 -6,000,426

 Income
 378,057

 Capital Gains / Losses
 3,284,615

 Market Value 9/2018
 \$ 35,852,165

## **INVESTMENT GROWTH**

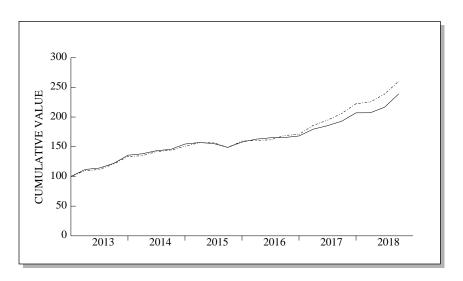


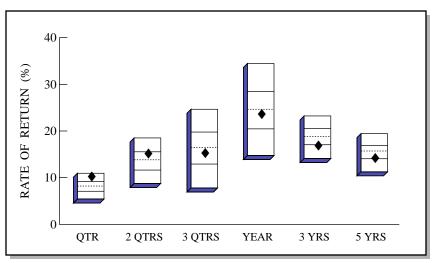
----- ACTUAL RETURN
----- BLENDED RATE
----- 0.0%

VALUE ASSUMING BLENDED RATE \$ 32,489,555

	LAST QUARTER	PERIOD 12/07 - 9/18
BEGINNING VALUE NET CONTRIBUTIONS INVESTMENT RETURN ENDING VALUE	$\begin{array}{r} \$\ 38,189,919 \\ -\ 6,000,426 \\ \hline 3,662,672 \\ \hline \$\ 35,852,165 \end{array}$	\$ 38,467,655 - 39,263,751 <u>36,648,261</u> \$ 35,852,165
INCOME CAPITAL GAINS (LOSSES) INVESTMENT RETURN	$ \begin{array}{r} 378,057 \\ 3,284,615 \\ \hline 3,662,672 \end{array} $	4,505,875 32,142,386 36,648,261

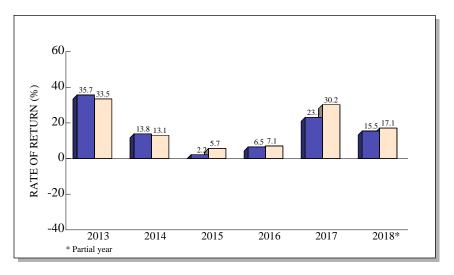
## TOTAL RETURN COMPARISONS





Large Cap Growth Universe



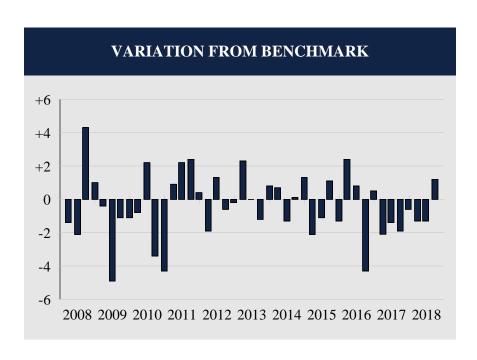


					ANNUA	
	<u>QTR</u>	2 QTRS	3 QTRS	<u>YEAR</u>	3 YRS	5 YRS
RETURN	10.4	15.4	15.5	23.9	17.1	14.4
(RANK)	(9)	(27)	(58)	(57)	(75)	(70)
5TH %ILE	10.9	18.5	24.7	34.5	23.2	19.4
25TH %ILE	9.1	15.5	19.8	28.5	20.5	16.9
MEDIAN	8.2	13.8	16.5	24.7	18.9	15.7
75TH %ILE	7.1	11.6	12.9	20.5	17.1	14.1
95TH %ILE	5.4	8.8	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

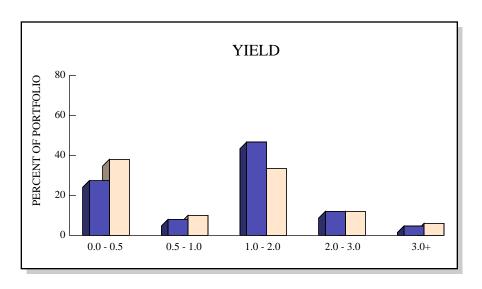
COMPARATIVE BENCHMARK: RUSSELL 1000 GROWTH

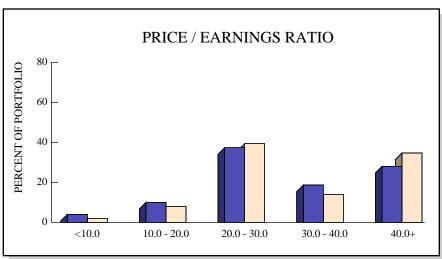


<b>Total Quarters Observed</b>	43
Quarters At or Above the Benchmark	19
<b>Quarters Below the Benchmark</b>	24
Batting Average	.442

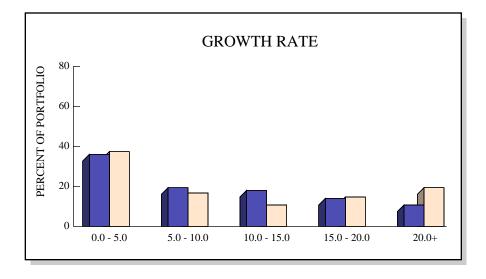
	RATES	S OF RETURN	
Date	Portfolio	Benchmark	Difference
3/08 6/08 9/08 12/08 3/09 6/09 9/09 12/09 3/10 6/10 9/10 12/10 3/11 6/11 9/11 12/11 3/12 6/12 9/12 12/12 3/13 6/13 9/13 12/13	-11.6 -0.8 -8.0 -21.8 -4.5 11.4 12.9 6.8 3.9 -9.6 9.6 7.5 6.9 3.0 -10.7 11.0 12.8 -2.7 5.5 -1.5 11.8 2.1 6.9 11.2 1.8 3.8	-10.2 1.3 -12.3 -22.8 -4.1 16.3 14.0 7.9 4.7 -11.8 13.0 11.8 6.0 0.8 -13.1 10.6 14.7 -4.0 6.1 -1.3 9.5 2.1 8.1 10.4 1.1 5.1	-1.4 -2.1 4.3 1.0 -0.4 -4.9 -1.1 -1.1 -0.8 2.2 -3.4 -4.3 0.9 2.2 2.4 0.4 -1.9 1.3 -0.6 -0.2 2.3 0.0 -1.2 0.8 0.7 -1.3
9/14 12/14 3/15 6/15 9/15 12/15 3/16 6/16 9/16 12/16 3/17 6/17 9/17 12/17 3/18 6/18 9/18	1.6 6.1 1.7 -1.0 -4.2 6.0 3.1 1.4 0.3 1.5 6.8 3.3 4.0 7.3 0.1 4.5	1.5 4.8 3.8 0.1 -5.3 7.3 0.7 0.6 4.6 1.0 8.9 4.7 5.9 7.9 1.4 5.8 9.2	0.1 1.3 -2.1 -1.1 1.1 -1.3 2.4 0.8 -4.3 0.5 -2.1 -1.4 -1.9 -0.6 -1.3 -1.3 1.2

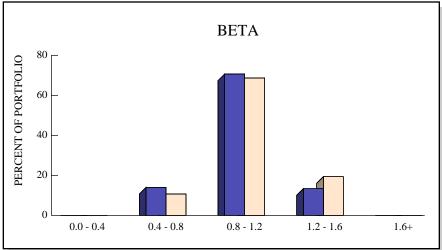
## STOCK CHARACTERISTICS



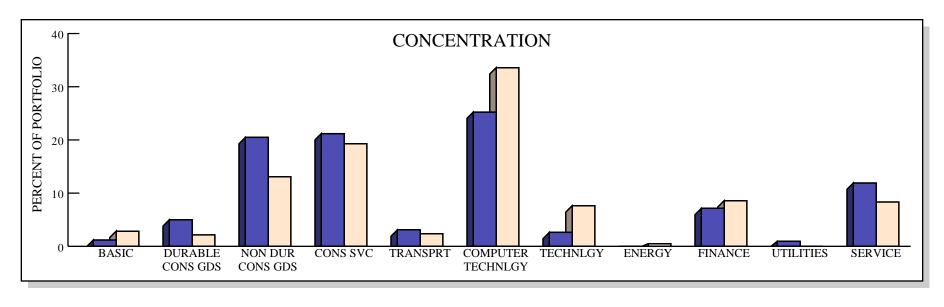


	# HOLDINGS	YIELD	GROWTH	P/E	BETA	
PORTFOLIO	49	1.3%	6.9%	35.7	0.97	
RUSSELL 1000G	542	1.1%	10.8%	36.4	1.04	

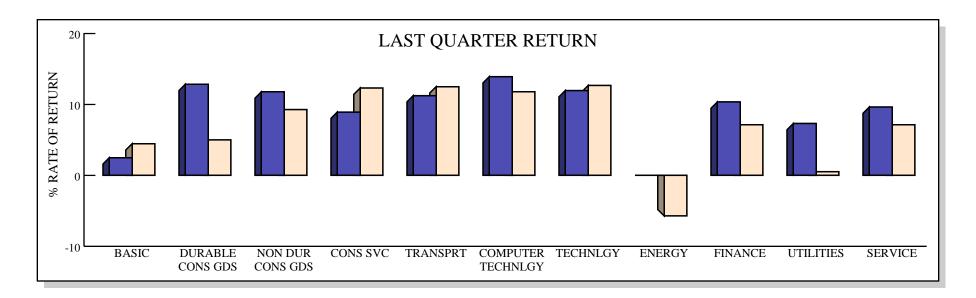




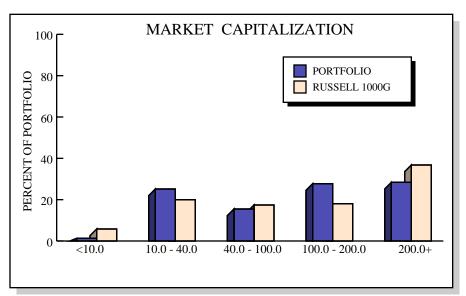
#### STOCK INDUSTRY ANALYSIS

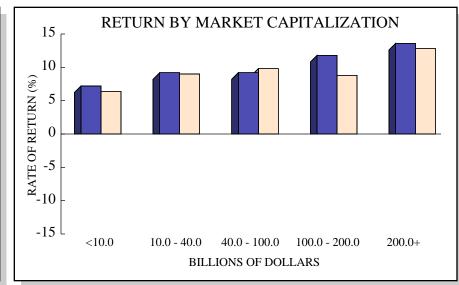






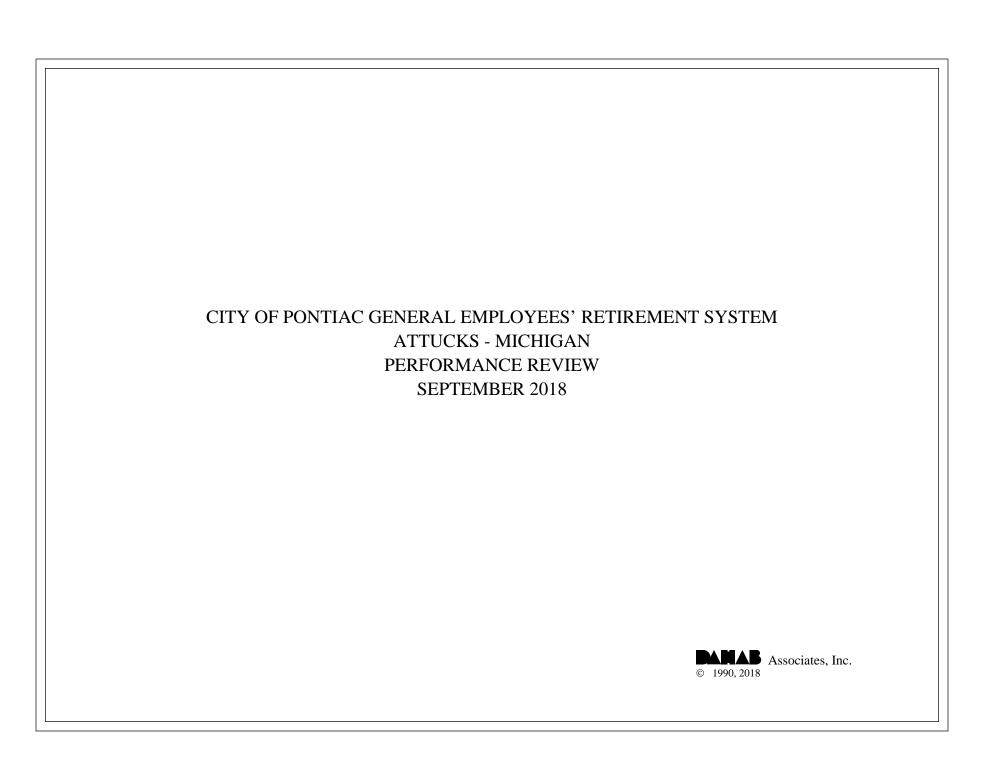
#### **TOP TEN HOLDINGS**





# TOP TEN EQUITY HOLDINGS

RANK	NAME	VALUE	% EQUITY	RETURN	INDUSTRY SECTOR	MKT CAP
1	APPLE INC	\$ 2,228,054	6.21%	22.4%	Computer Tech	\$ 1090.3 B
2	MICROSOFT CORP	1,672,089	4.66%	16.4%	Computer Tech	877.0 B
3	ALPHABET INC-CL A	1,364,000	3.80%	6.9%	Computer Tech	360.8 B
4	HOME DEPOT INC	1,201,470	3.35%	6.7%	Consumer Service	237.0 B
5	WALT DISNEY CO/THE	1,130,810	3.15%	12.5%	Service	173.9 B
6	AMGEN INC	1,090,345	3.04%	13.1%	NonDur Cons Goods	134.2 B
7	MASTERCARD INC - A	1,064,076	2.97%	13.4%	Finance	228.2 B
8	TJX COMPANIES INC	1,028,344	2.87%	18.2%	Consumer Service	69.5 B
9	LABORATORY CRP OF AMER HLDGS	1,000,397	2.79%	-3.3%	Consumer Service	17.7 B
10	ECOLAB INC	953,222	2.66%	12.0%	NonDur Cons Goods	45.3 B



#### **INVESTMENT RETURN**

On September 30th, 2018, the City of Pontiac General Employees' Retirement System's Attucks Michigan portfolio was valued at \$32,055,418, representing an increase of \$2,062,278 from the June quarter's ending value of \$29,993,140. Last quarter, the Fund posted withdrawals totaling \$3,531, which partially offset the portfolio's net investment return of \$2,065,809. Income receipts totaling \$164,025 plus net realized and unrealized capital gains of \$1,901,784 combined to produce the portfolio's net investment return.

#### RELATIVE PERFORMANCE

#### **Total Fund**

For the third quarter, the Attucks Michigan portfolio returned 6.9%, which was 1.2% above the Russell 1000 Value Index's return of 5.7% and ranked in the 24th percentile of the Large Cap Value universe. Over the trailing year, the portfolio returned 11.9%, which was 2.5% above the benchmark's 9.4% return, ranking in the 49th percentile. Since June 2011, the portfolio returned 12.4% annualized and ranked in the 49th percentile. The Russell 1000 Value returned an annualized 11.7% over the same period.

PONTIAC - ATTUCKS MICHIGAN SEPTEMBER 30TH, 2018

#### **EXECUTIVE SUMMARY**

PERFORMANCE SUMMARY							
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year	Since 06/11
Total Portfolio - Gross	6.9	11.9	14.4	11.8	15.8		12.4
LARGE CAP VALUE RANK	(24)	(49)	(56)	(44)	(49)		(49)
Total Portfolio - Net	6.8	11.2	13.7	11.0	15.0		11.7
Russell 1000V	5.7	9.4	13.5	10.7	15.0	9.8	11.7
<b>Domestic Equity - Gross</b>	6.9	11.9	14.4	11.8	15.8		12.4
LARGE CAP VALUE RANK	(24)	(49)	(56)	(44)	(49)		(49)
Russell 1000V	5.7	9.4	13.5	10.7	15.0	9.8	11.7

ASSET A	ALLOCA	ATION
Domestic Equity	100.0%	\$ 32,055,418
Total Portfolio	100.0%	\$ 32,055,418

## INVESTMENT RETURN

 Market Value 6/2018
 \$ 29,993,140

 Contribs / Withdrawals
 - 3,531

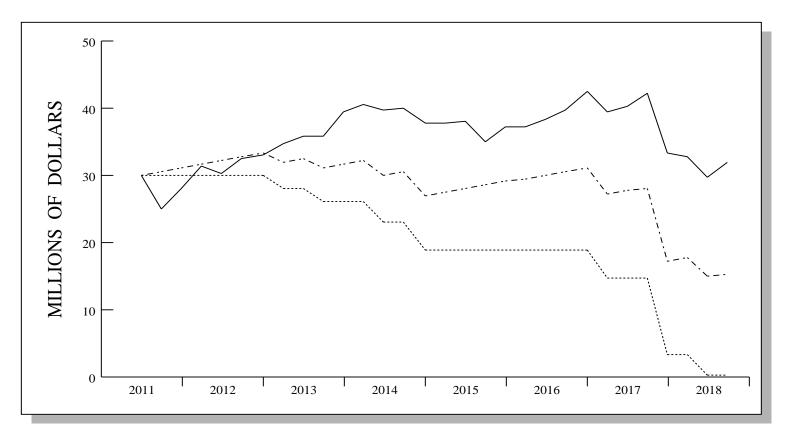
 Income
 164,025

 Capital Gains / Losses
 1,901,784

 Market Value 9/2018
 \$ 32,055,418

PONTIAC - ATTUCKS MICHIGAN SEPTEMBER 30TH, 2018

## **INVESTMENT GROWTH**



----- ACTUAL RETURN
----- BLENDED RATE
----- 0.0%

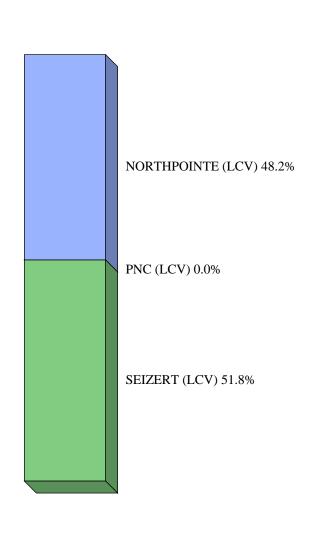
VALUE ASSUMING
BLENDED RATE \$ 15,339,219

	LAST QUARTER	PERIOD 6/11 - 9/18
BEGINNING VALUE NET CONTRIBUTIONS INVESTMENT RETURN ENDING VALUE	\$ 29,993,140 - 3,531 2,065,809 \$ 32,055,418	\$ 30,133,108 - 29,591,926 31,514,236 \$ 32,055,418
INCOME CAPITAL GAINS (LOSSES) INVESTMENT RETURN	$ \begin{array}{r} 164,025 \\ 1,901,784 \\ \hline 2,065,809 \end{array} $	5,798,697 25,715,539 31,514,236

# PONTIAC GENERAL EMPLOYEES RETIREMENT SYSTEM ATTUCKS MICHIGAN SUMMARY AS OF SEPTEMBER 2018

Portfolio	Universe	Universe Quarter		1 Year 3 Year		ears 5 Years		ears	
Attucks Michigan	(Large Cap Value)	6.9	(24)	11.9	<b>(49)</b>	14.4	<b>(56)</b>	11.8	(44)
Net of mgr fees & gross of Attucks fees		6.8		11.6		14.0		11.4	
Attucks Michigan net of fees		6.8		11.2		13.7		11.0	
Russell 1000 Value		5.7		9.4		13.5		10.7	
NorthPointe	(Large Cap Value)	4.8	(70)	9.6	(74)	12.5	(84)	11.2	(63)
NorthPointe net of fees		4.7		9.3		12.1		10.8	
Russell 1000 Value		5.7		9.4		13.5		10.7	
Seizert	(Large Cap Value)	9.0	(4)	13.9	(34)	17.4	(9)	12.7	(23)
Seizert net of fees		8.9		13.5		17.0		12.3	
Russell 1000 Value		5.7		9.4		13.5		10.7	

## MANAGER ALLOCATION SUMMARY



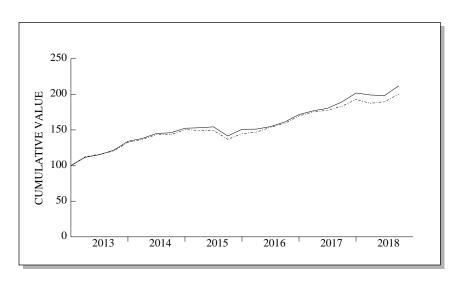
Name	Market Value	Percent
NorthPointe (LCV)	\$15,442,733	48.2
PNC (LCV)	\$5	0.0
Seizert (LCV)	\$16,612,680	51.8
Total	\$32,055,418	100.0

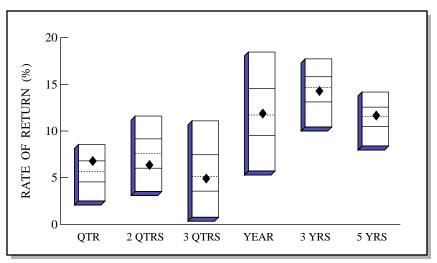
# INVESTMENT RETURN SUMMARY - ONE QUARTER

Name	Quarter Total Return	Market Value June 30th, 2018	Net Cashflow	Net Investment Return	Market Value September 30th, 2018
NorthPointe (LCV)	4.8	14,742,043	-24	700,714	15,442,733
PNC (LCV)		3,098	-3,274	181	5
Seizert (LCV)	9.0	15,247,999	-233	1,364,914	16,612,680
Total Portfolio	6.9	29,993,140	-3,531	2,065,809	32,055,418

PONTIAC - ATTUCKS MICHIGAN SEPTEMBER 30TH, 2018

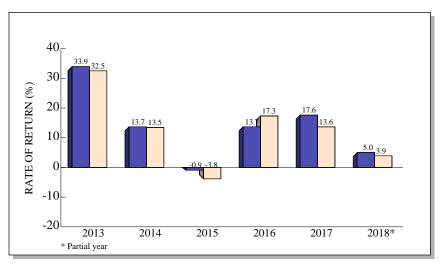
## TOTAL RETURN COMPARISONS





Large Cap Value Universe





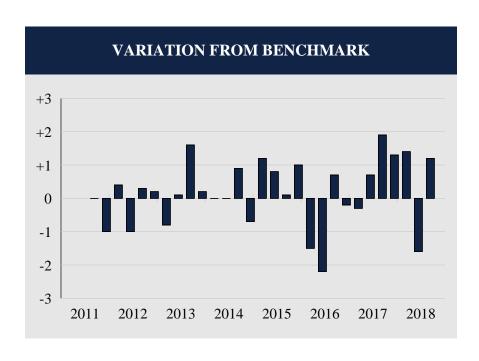
					ANNU <i>A</i>	LIZED
	_QTR	2 QTRS	3 QTRS	YEAR_	3 YRS	5 YRS
RETURN	6.9	6.5	5.0	11.9	14.4	11.8
(RANK)	(24)	(69)	(52)	(49)	(56)	(44)
5TH %ILE	8.6	11.6	11.1	18.5	17.7	14.2
25TH %ILE	6.8	9.2	7.5	14.5	15.8	12.6
MEDIAN	5.6	7.6	5.1	11.7	14.6	11.6
75TH %ILE	4.5	6.0	3.6	9.5	13.1	10.5
95TH %ILE	2.5	3.5	0.8	5.7	10.4	8.4
Russ 1000V	5.7	6.9	3.9	9.4	13.5	10.7

Large Cap Value Universe

PONTIAC - ATTUCKS MICHIGAN SEPTEMBER 30TH, 2018

# TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

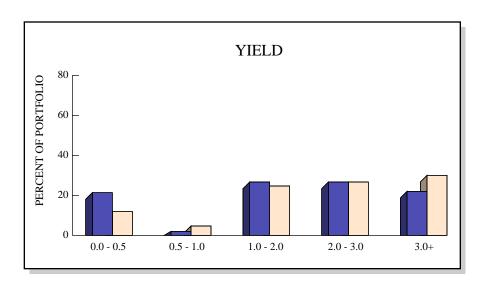
COMPARATIVE BENCHMARK: RUSSELL 1000 VALUE

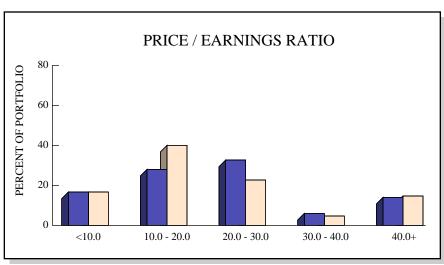


Total Quarters Observed	29
Quarters At or Above the Benchmark	20
<b>Quarters Below the Benchmark</b>	9
Batting Average	.690

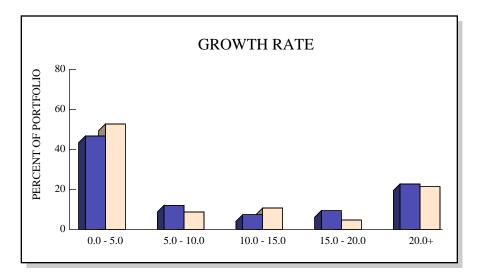
RATES OF RETURN						
Date	Portfolio	Benchmark	Difference			
Date  9/11 12/11 3/12 6/12 9/12 12/12 3/13 6/13 9/13 12/13 3/14 6/14 9/14 12/14 3/15 6/15 9/15 12/15 3/16 6/16 9/16 12/16			Difference  0.0 -1.0 0.4 -1.0 0.3 0.2 -0.8 0.1 1.6 0.2 0.0 0.0 0.9 -0.7 1.2 0.8 0.1 1.0 -1.5 -2.2 0.7 -0.2			
3/17 6/17 9/17 12/17 3/18 6/18 9/18	3.0 2.0 5.0 6.6 -1.4 -0.4 6.9	3.3 1.3 3.1 5.3 -2.8 1.2 5.7	-0.2 -0.3 0.7 1.9 1.3 1.4 -1.6			

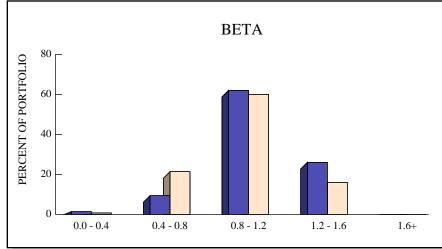
## STOCK CHARACTERISTICS





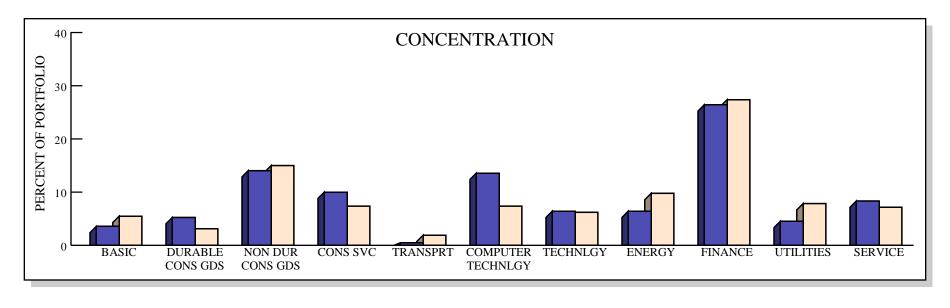
	# HOLDINGS	YIELD	GROWTH	P/E	BETA	
PORTFOLIO	96	2.0%	9.3%	23.4	1.05	
RUSSELL 1000V	727	2.4%	7.1%	21.6	0.97	



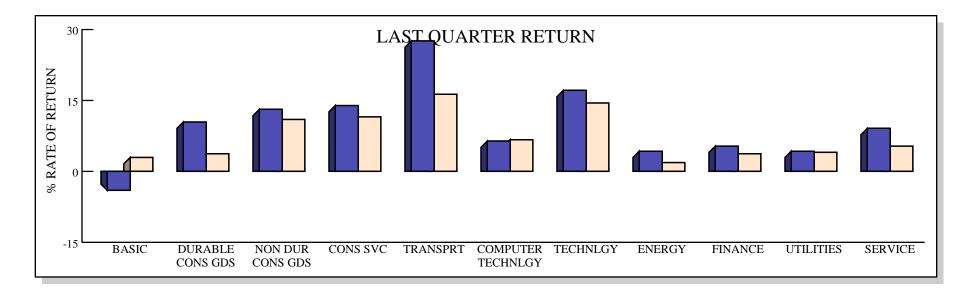


PONTIAC - ATTUCKS MICHIGAN SEPTEMBER 30TH, 2018

## STOCK INDUSTRY ANALYSIS

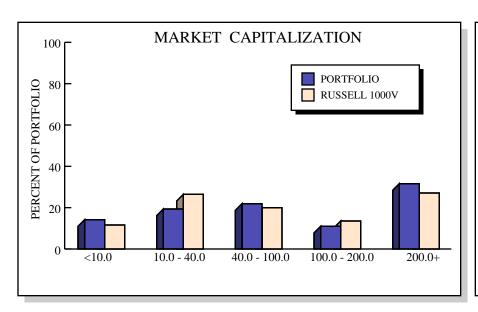


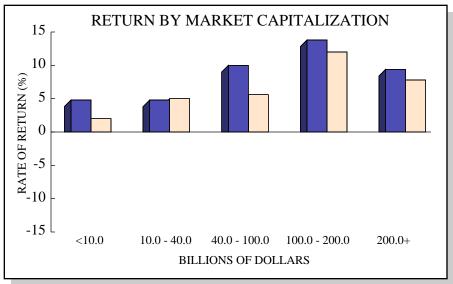




PONTIAC - ATTUCKS MICHIGAN SEPTEMBER 30TH, 2018

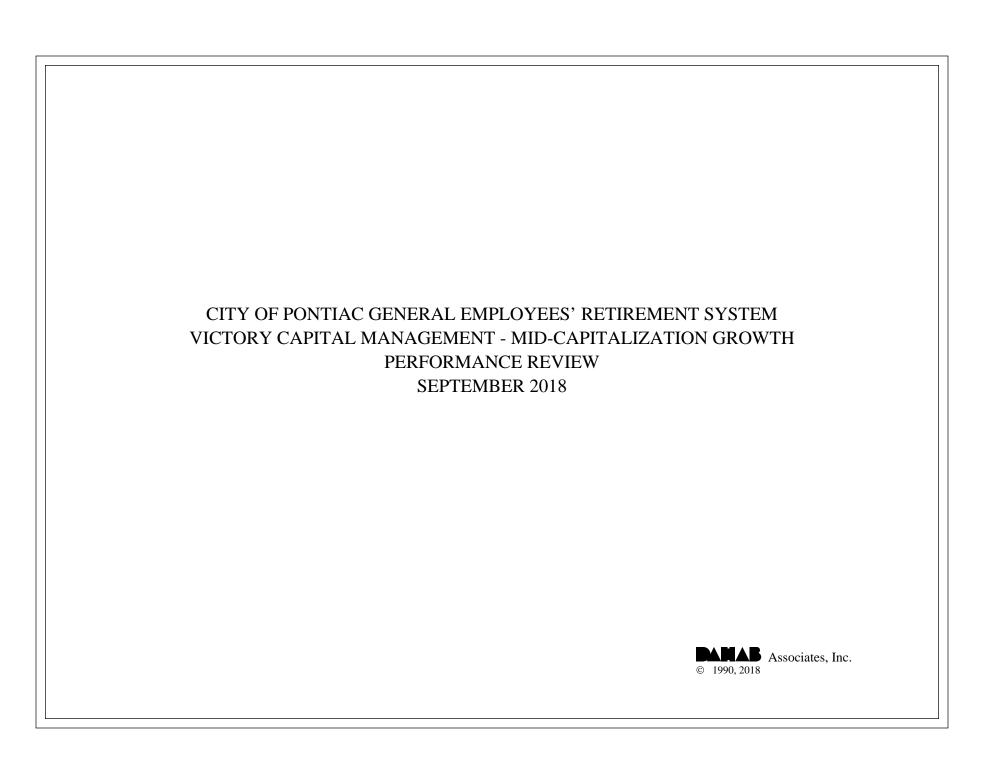
### **TOP TEN HOLDINGS**





# TOP TEN EQUITY HOLDINGS

RANK	NAME	VALUE	% EQUITY	RETURN	INDUSTRY SECTOR	MKT CAP
1	JPMORGAN CHASE & CO	\$ 1,103,462	3.44%	8.9%	Finance	\$ 379.2 B
2	BERKSHIRE HATHAWAY INC-CL B	1,088,535	3.40%	14.7%	Finance	292.4 B
3	CISCO SYSTEMS INC	860,035	2.68%	13.9%	Computer Tech	222.4 B
4	BANK OF AMERICA CORP	830,242	2.59%	5.0%	Finance	294.3 B
5	GOLDMAN SACHS GROUP INC	813,318	2.54%	2.0%	Finance	84.7 B
6	VERIZON COMMUNICATIONS INC	762,302	2.38%	7.4%	Utilities	220.6 B
7	INTEL CORP	746,662	2.33%	-4.3%	Computer Tech	218.1 B
8	CVS HEALTH CORP	730,915	2.28%	23.3%	Consumer Service	80.1 B
9	EXXON MOBIL CORP	727,006	2.27%	3.8%	Energy	360.0 B
10	PRUDENTIAL FINANCIAL INC	646,219	2.02%	9.4%	Finance	42.3 B



### **INVESTMENT RETURN**

On September 30th, 2018, the City of Pontiac General Employees' Retirement System's Victory Capital Management Mid-Capitalization Growth portfolio was valued at \$43,928,004, representing an increase of \$1,789,420 from the June quarter's ending value of \$42,138,584. Last quarter, the Fund posted withdrawals totaling \$171, which partially offset the portfolio's net investment return of \$1,789,591. Income receipts totaling \$104,993 plus net realized and unrealized capital gains of \$1,684,598 combined to produce the portfolio's net investment return.

#### **RELATIVE PERFORMANCE**

#### **Total Fund**

For the third quarter, the Victory Capital Management Mid-Capitalization Growth portfolio returned 4.2%, which was 3.4% below the Russell Mid Cap Growth Index's return of 7.6% and ranked in the 94th percentile of the Mid Cap Growth universe. Over the trailing year, the portfolio returned 12.0%, which was 9.1% below the benchmark's 21.1% return, ranking in the 97th percentile. Since March 2006, the portfolio returned 8.9% annualized. The Russell Mid Cap Growth returned an annualized 9.5% over the same period.

### **HOLDINGS ANALYSIS**

Last quarter the Victory Mid Cap portfolio was invested across ten of the eleven industry sectors in our analysis. Relative to the Russell Mid Cap Growth index, portfolio was notably overweight in the Finance sector, while the Non-Durable Consumer Goods, Computer Technology, and Service sectors were underweight. The Transportation sector was left vacant.

Although the portfolio gained some ground in the Finance sector as the index walked back on the same space, it was still not a very strong source of return next to the other sectors. Since the portfolio placed about a fifth of its weight in the Finance sector, middling performance there had outsized impact. The reduced weight in the Computer Technology sector also hurt, since that was a strong source of return in the mid cap growth market.

### **EXECUTIVE SUMMARY**

PERFORMANCE SUMMARY							
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year	Since 03/06
Total Portfolio - Gross	4.2	12.0	13.4	10.9	15.3	12.0	8.9
MID CAP GROWTH RANK	(94)	(97)	(85)	(86)	(86)	(89)	
Total Portfolio - Net	4.2	11.6	13.0	10.5	14.9	11.7	8.7
Russ Mid Gro	7.6	21.1	16.6	13.0	16.9	13.5	9.5
<b>Domestic Equity - Gross</b>	4.2	12.0	13.4	10.9	15.3	12.0	8.9
MID CAP GROWTH RANK	(94)	(97)	(85)	(86)	(86)	(89)	
Russ Mid Gro	7.6	21.1	16.6	13.0	16.9	13.5	9.5

ASSET ALLOCATION						
Domestic Equity	100.0%	\$ 43,928,004				
Total Portfolio	100.0%	\$ 43,928,004				

## INVESTMENT RETURN

 Market Value 6/2018
 \$ 42,138,584

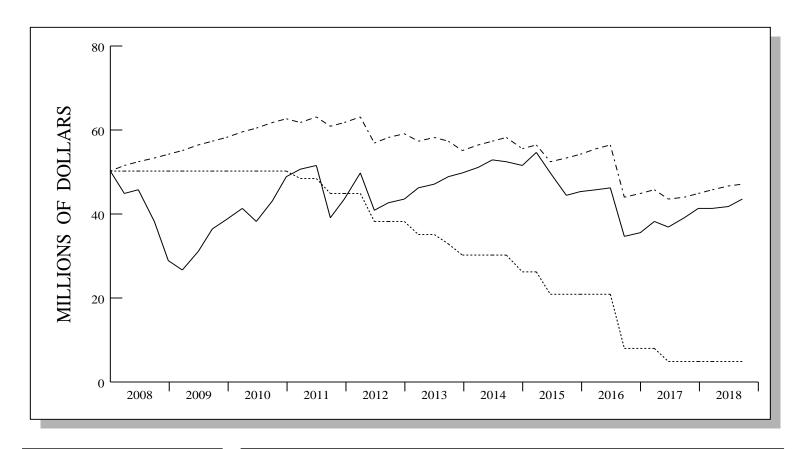
 Contribs / Withdrawals
 -171

 Income
 104,993

 Capital Gains / Losses
 1,684,598

 Market Value 9/2018
 \$ 43,928,004

### **INVESTMENT GROWTH**

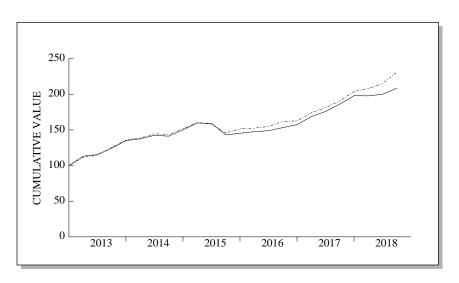


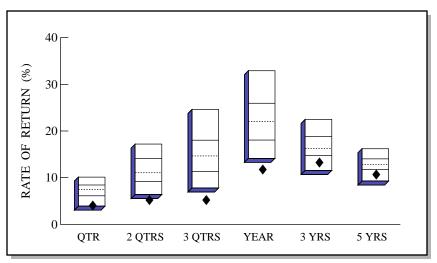
----- ACTUAL RETURN
----- BLENDED RATE
----- 0.0%

VALUE ASSUMING BLENDED RATE\$ 47,544,161

	LAST QUARTER	PERIOD 12/07 - 9/18
BEGINNING VALUE NET CONTRIBUTIONS INVESTMENT RETURN ENDING VALUE	\$ 42,138,584 -171 1,789,591 \$ 43,928,004	\$ 50,647,301 - 45,404,800 <u>38,685,503</u> \$ 43,928,004
INCOME CAPITAL GAINS (LOSSES) INVESTMENT RETURN	$ \begin{array}{r} 104,993 \\ 1,684,598 \\ \hline 1,789,591 \end{array} $	3,845,779 34,839,724 38,685,503

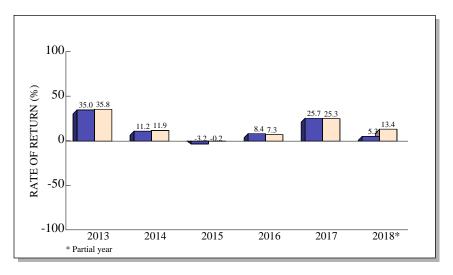
# TOTAL RETURN COMPARISONS





Mid Cap Growth Universe



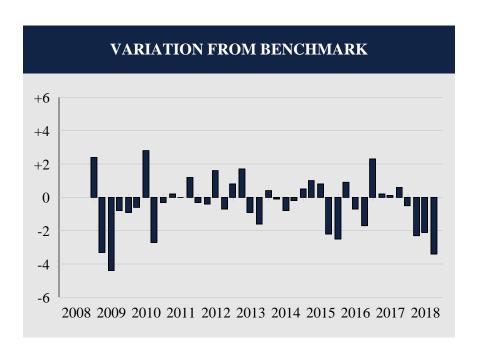


					ANNU <i>A</i>	ALIZED
	_QTR	2 QTRS	3 QTRS	YEAR_	3 YRS	5 YRS
RETURN	4.2	5.4	5.3	12.0	13.4	10.9
(RANK)	(94)	(97)	(96)	(97)	(85)	(86)
5TH %ILE	10.1	17.2	24.6	32.9	22.5	16.2
25TH %ILE	8.4	14.1	18.0	25.9	18.9	14.0
MEDIAN	7.5	11.1	14.7	22.0	16.2	12.9
75TH %ILE	6.1	9.2	11.3	18.1	14.7	11.8
95TH %ILE	3.9	6.4	7.8	14.1	11.5	9.3
Russ MCG	7.6	11.0	13.4	21.1	16.6	13.0

Mid Cap Growth Universe

# TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY - 10 YEARS

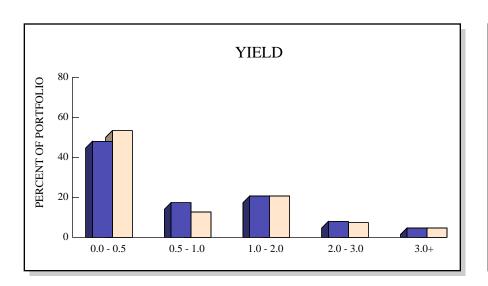
### COMPARATIVE BENCHMARK: RUSSELL MID CAP GROWTH

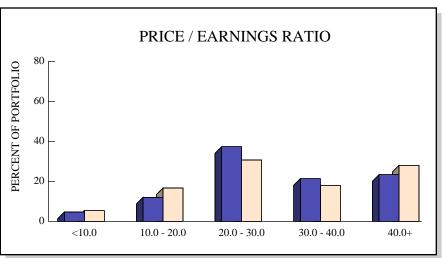


Total Quarters Observed	40
Quarters At or Above the Benchmark	17
<b>Quarters Below the Benchmark</b>	23
Batting Average	.425

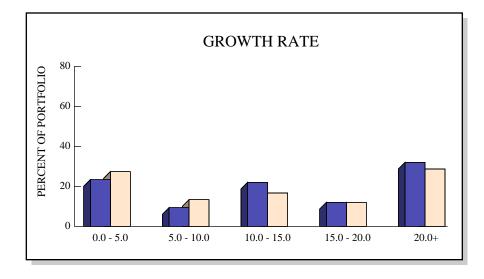
RATES OF RETURN							
Date	Portfolio	Benchmark	Difference				
12/08	-25.0	-27.4	2.4				
3/09	-6.7	-3.4	-3.3				
6/09	16.3	20.7	-4.4				
9/09	16.8	17.6	-0.8				
12/09	5.8	6.7	-0.9				
3/10	7.1	7.7	-0.6				
6/10	-7.4	-10.2	2.8				
9/10	12.0	14.7	-2.7				
12/10	13.7	14.0	-0.3				
3/11	8.1	7.9	0.2				
6/11	1.6	1.6	0.0				
9/11	-18.1	-19.3	1.2				
12/11	10.9	11.2	-0.3				
3/12	14.1	14.5	-0.4				
6/12	-4.0	-5.6	1.6				
9/12	4.6	5.3	-0.7				
12/12	2.5	1.7	0.8				
3/13	13.2	11.5	1.7				
6/13	2.0	2.9	-0.9				
9/13	7.7	9.3	-1.6				
12/13	8.6	8.2	0.4				
3/14	1.9	2.0	-0.1				
6/14	3.6	4.4	-0.8				
9/14	-0.9	-0.7	-0.2				
12/14	6.3	5.8	0.5				
3/15	6.4	5.4	1.0				
6/15	-0.3	-1.1	0.8				
9/15	-10.2	-8.0	-2.2				
12/15	1.6	4.1	-2.5				
3/16	1.5	0.6	0.9				
6/16	0.9	1.6	-0.7				
9/16	2.9	4.6	-1.7				
12/16	2.8	0.5	2.3				
3/17	7.1	6.9	0.2				
6/17	4.3	4.2	0.1				
9/17	5.9	5.3	0.6				
12/17	6.3	6.8	-0.5				
3/18	-0.1	2.2	-2.3				
6/18	1.1	3.2	-2.1				
9/18	4.2	7.6	-3.4				

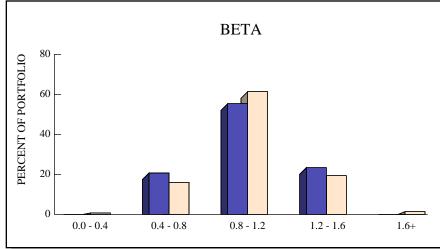
## STOCK CHARACTERISTICS



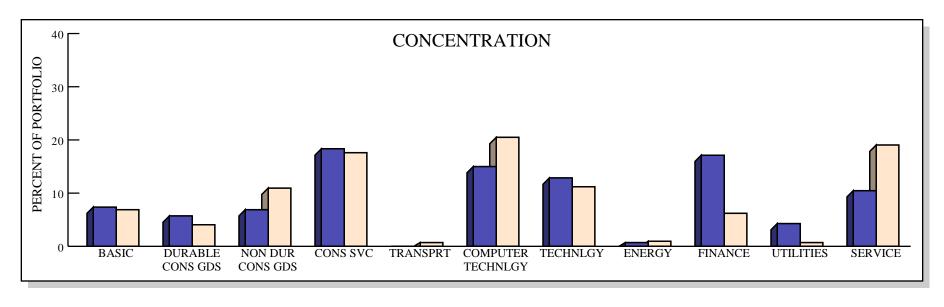


	# HOLDINGS	YIELD	GROWTH	P/E	BETA	
PORTFOLIO	76	0.8%	13.9%	30.2	1.00	
RUSS MID GRO	415	0.8%	14.7%	32.3	1.03	

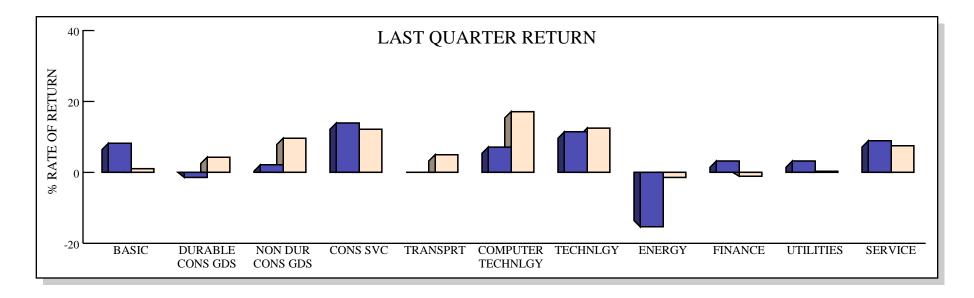




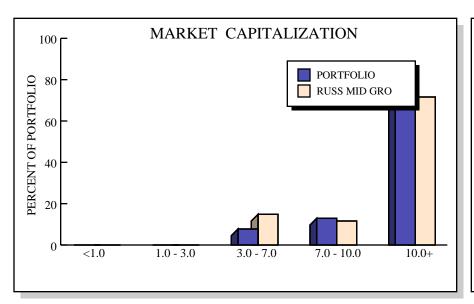
### STOCK INDUSTRY ANALYSIS

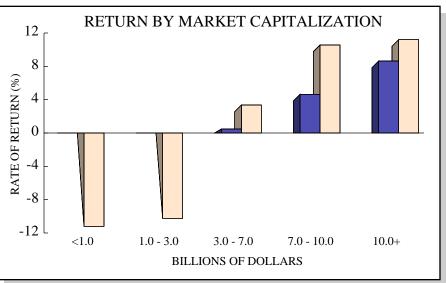






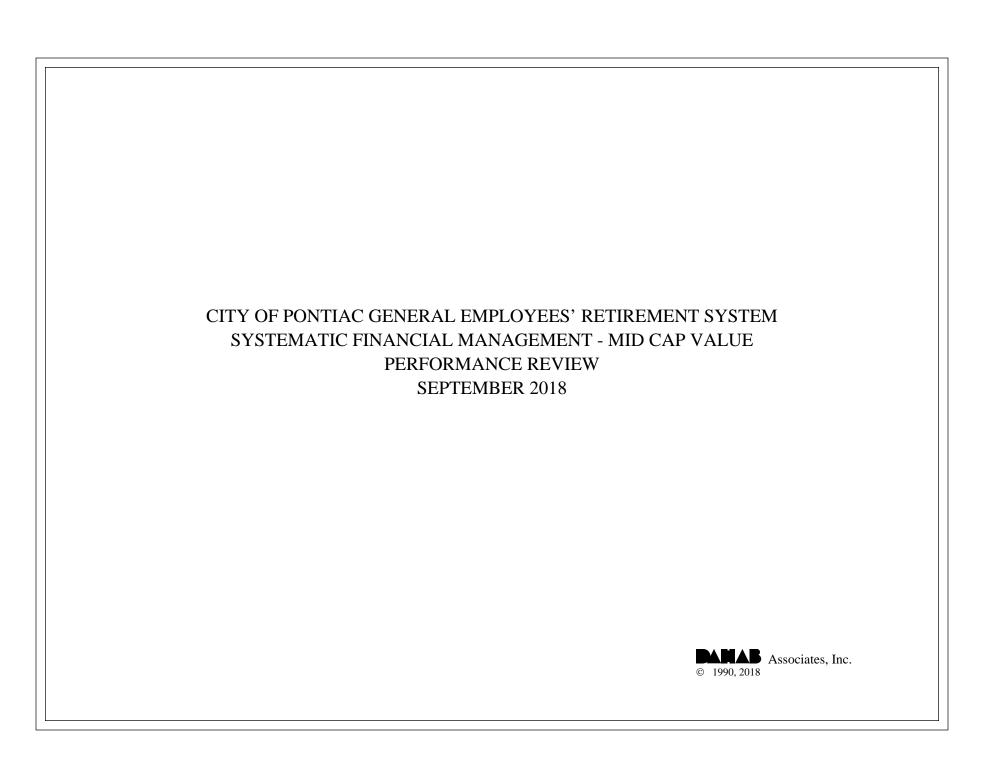
### **TOP TEN HOLDINGS**





# TOP TEN EQUITY HOLDINGS

RANK	NAME	VALUE	% EQUITY	RETURN	INDUSTRY SECTOR	MKT CAP
1	ROSS STORES INC	\$ 1,298,210	2.96%	17.2%	Consumer Service	\$ 37.0 B
2	SVB FINANCIAL GROUP	1,212,237	2.76%	7.6%	Finance	16.5 B
3	XPO LOGISTICS INC	1,118,866	2.55%	14.0%	Service	14.5 B
4	CENTENE CORP	1,114,806	2.54%	17.5%	Consumer Service	29.7 B
5	FIDELITY NATIONAL INFO SERV	1,057,979	2.41%	3.2%	Service	35.9 B
6	PTC INC	1,051,281	2.39%	13.2%	Computer Tech	12.5 B
7	SBA COMMUNICATIONS CORP	907,560	2.07%	-2.7%	Service	18.4 B
8	BAXTER INTERNATIONAL INC	871,117	1.98%	4.7%	Technology	41.2 B
9	ENCOMPASS HEALTH CORP	849,655	1.93%	15.5%	Consumer Service	7.7 B
10	ALIGN TECHNOLOGY INC	821,562	1.87%	14.4%	Technology	31.4 B



### **INVESTMENT RETURN**

On September 30th, 2018, the City of Pontiac General Employees' Retirement System's Systematic Financial Management Mid Cap Value portfolio was valued at \$45,137,570, representing an increase of \$1,424,628 from the June quarter's ending value of \$43,712,942. Last quarter, the Fund posted withdrawals totaling \$490, which partially offset the portfolio's net investment return of \$1,425,118. Income receipts totaling \$204,892 plus net realized and unrealized capital gains of \$1,220,226 combined to produce the portfolio's net investment return.

#### **RELATIVE PERFORMANCE**

### **Total Fund**

For the third quarter, the Systematic Financial Management Mid Cap Value portfolio returned 3.3%, which was equal to the Russell Mid Cap Value Index's return of 3.3% and ranked in the 61st percentile of the Mid Cap Value universe. Over the trailing year, the portfolio returned 11.2%, which was 2.4% above the benchmark's 8.8% return, ranking in the 39th percentile. Since March 2006, the portfolio returned 8.9% annualized. The Russell Mid Cap Value returned an annualized 8.3% over the same period.

### **HOLDINGS ANALYSIS**

Last quarter, the Systematic portfolio was invested in all eleven industry sectors shown in our analysis. Relative to the Russell Mid Cap Value index, the portfolio was overweight in the Basic sector. The Finance and Utilities sectors were slightly underweight.

Despite a few notable differences in sector allocation and stock selection, the portfolio landed in the same spot as its benchmark at quarter end. Durable Consumer Goods incurred a loss and Transportation underperformed, while Computer Technology, Technology, and Energy earned surplus numbers.

### **EXECUTIVE SUMMARY**

PERFORMANCE SUMMARY							
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year	Since 03/06
Total Portfolio - Gross	3.3	11.2	15.0	9.4	14.7	10.7	8.9
MID CAP VALUE RANK	(61)	(39)	(36)	(83)	(83)	(92)	
Total Portfolio - Net	3.1	10.7	14.4	8.8	14.2	10.3	8.6
Russ Mid Val	3.3	8.8	13.1	10.7	15.5	11.3	8.3
<b>Domestic Equity - Gross</b>	3.3	11.2	15.0	9.4	14.7	10.7	8.9
MID CAP VALUE RANK	(61)	(39)	(36)	(83)	(83)	(92)	
Russ Mid Val	3.3	8.8	13.1	10.7	15.5	11.3	8.3

ASSET ALLOCATION					
Domestic Equity	100.0%	\$ 45,137,570			
Total Portfolio	100.0%	\$ 45,137,570			

## INVESTMENT RETURN

 Market Value 6/2018
 \$ 43,712,942

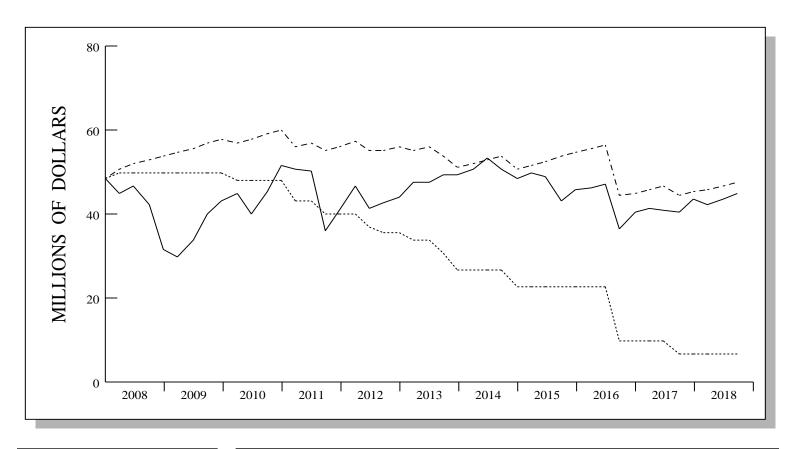
 Contribs / Withdrawals
 -490

 Income
 204,892

 Capital Gains / Losses
 1,220,226

 Market Value 9/2018
 \$ 45,137,570

### **INVESTMENT GROWTH**

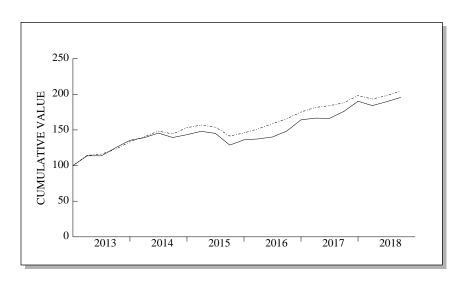


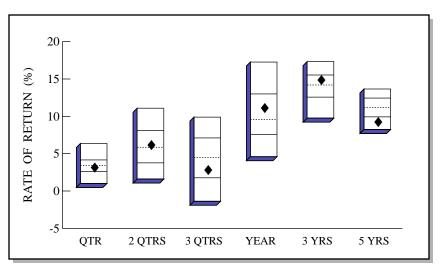
----- ACTUAL RETURN
----- BLENDED RATE
----- 0.0%

VALUE ASSUMING BLENDED RATE\$ 47,768,798

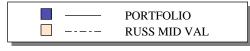
	LAST QUARTER	PERIOD 12/07 - 9/18
BEGINNING VALUE NET CONTRIBUTIONS INVESTMENT RETURN ENDING VALUE	\$ 43,712,942 -490 1,425,118 \$ 45,137,570	\$ 48,865,376 -41,879,032 38,151,226 \$ 45,137,570
INCOME CAPITAL GAINS (LOSSES) INVESTMENT RETURN	$ \begin{array}{r} 204,892 \\ 1,220,226 \\ \hline 1,425,118 \end{array} $	5,794,199 32,357,027 38,151,226

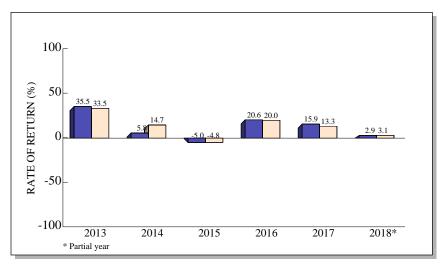
# TOTAL RETURN COMPARISONS





Mid Cap Value Universe



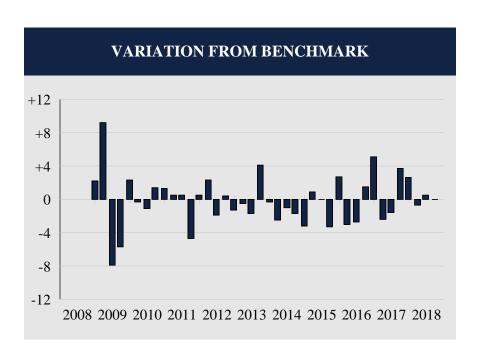


					ANNU	ALIZED
	_QTR	2 QTRS	3 QTRS	YEAR_	3 YRS	5 YRS
RETURN	3.3	6.3	2.9	11.2	15.0	9.4
(RANK)	(61)	(45)	(70)	(39)	(36)	(83)
5TH %ILE	6.4	11.1	9.9	17.3	17.3	13.7
25TH %ILE	4.2	8.1	7.1	13.0	15.5	12.4
MEDIAN	3.4	5.9	4.5	9.6	14.2	11.2
75TH %ILE	2.6	3.8	1.8	7.6	12.6	9.9
95TH %ILE	1.0	1.6	-1.4	4.6	9.8	8.2
Russ MCV	3.3	5.8	3.1	8.8	13.1	10.7

Mid Cap Value Universe

# TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY - 10 YEARS

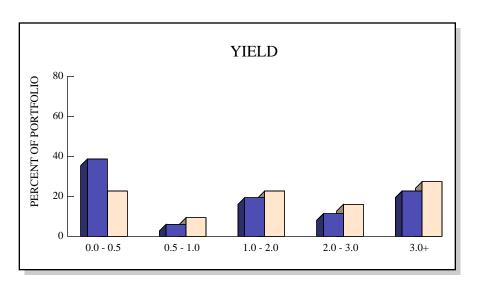
### COMPARATIVE BENCHMARK: RUSSELL MID CAP VALUE

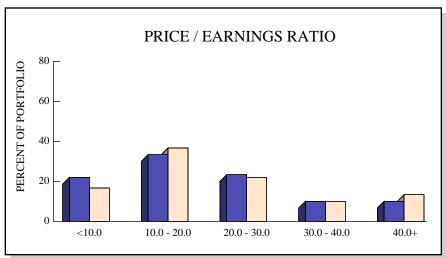


Total Quarters Observed	40
Quarters At or Above the Benchmark	20
Quarters Below the Benchmark	20
Batting Average	.500

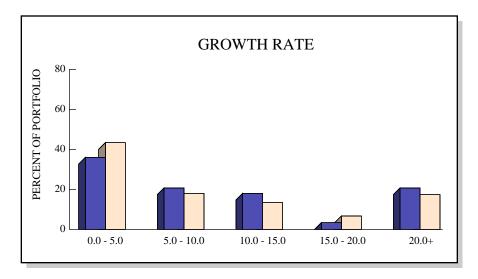
	RATE	S OF RETURN	
Date	Portfolio	Benchmark	Difference
Date  12/08 3/09 6/09 9/09 12/09 3/10 6/10 9/10 12/10 3/11 6/11 9/11 12/11 3/12 6/12 9/12 12/12 3/13 6/13 9/13 12/13 3/14 6/14 9/14 12/14 3/15 6/15 9/15 12/15	Portfolio  -25.0  -5.5 13.0 17.9 7.5 9.3 -10.7 13.5 13.5 7.9 -0.2 -23.2 13.9 13.7 -5.2 6.2 2.6 13.7 0.0 10.0 8.3 2.7 4.6 -4.3 2.9 3.3 -2.0 -11.3 5.8	Penchmark  -27.2 -14.7 -20.9 -23.6 -5.2 -9.6 -9.6 -12.1 -12.2 -7.4 -0.7 -18.5 -13.4 -11.4 -3.3 -5.8 -3.9 -14.2 -1.7 -5.9 -8.6 -5.6 -2.6 -6.1 -2.4 -2.0 -8.0 -3.1	Difference  2.2  9.2  -7.9  -5.7  2.3  -0.3  -1.1  1.4  1.3  0.5  0.5  -4.7  0.5  2.3  -1.9  0.4  -1.3  -0.5  -1.7  4.1  -0.3  -2.5  -1.0  -1.7  -3.2  0.9  0.0  -3.3  2.7
3/16 6/16 9/16 12/16 3/17 6/17 9/17 12/17 3/18 6/18 9/18	0.9 2.1 5.9 10.6 1.4 -0.2 5.8 8.1 -3.2 2.9 3.3	3.9 4.8 4.4 5.5 3.8 1.4 2.1 5.5 -2.5 2.4 3.3	-3.0 -2.7 1.5 5.1 -2.4 -1.6 3.7 2.6 -0.7 0.5 0.0

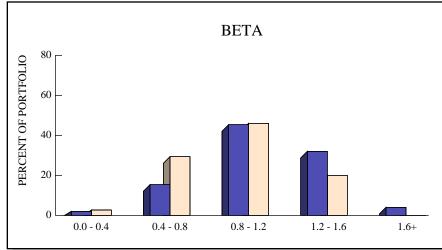
## STOCK CHARACTERISTICS



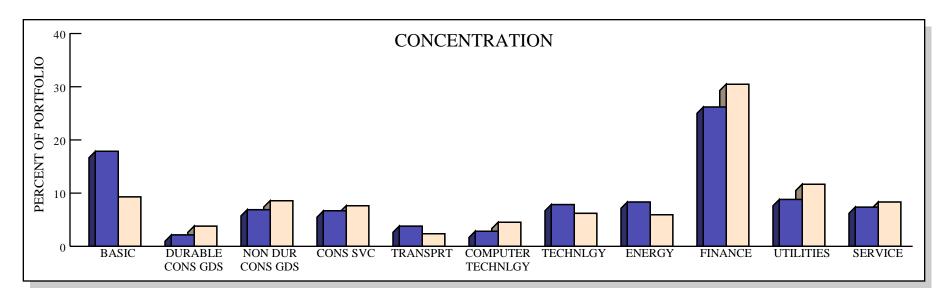


	# HOLDINGS	YIELD	GROWTH	P/E	BETA	
PORTFOLIO	91	1.8%	8.3%	20.1	1.04	
RUSS MID VAL	594	2.1%	7.6%	22.3	0.92	

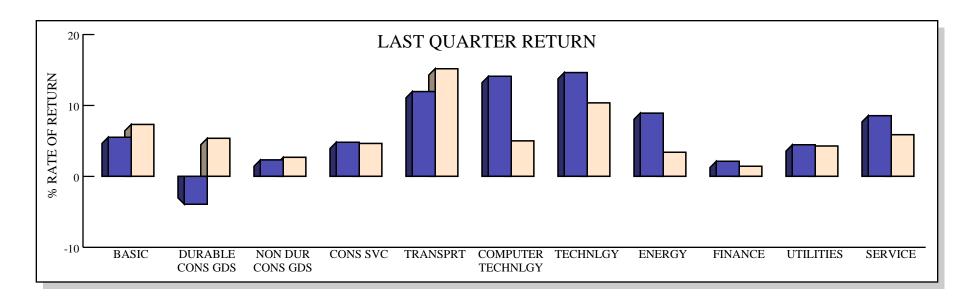




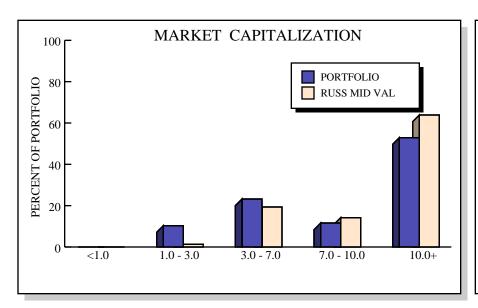
## STOCK INDUSTRY ANALYSIS

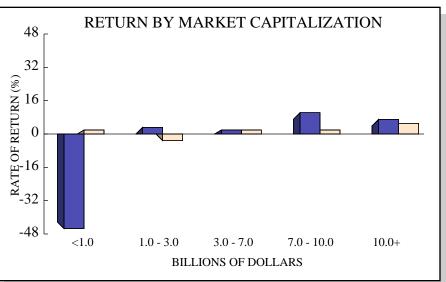






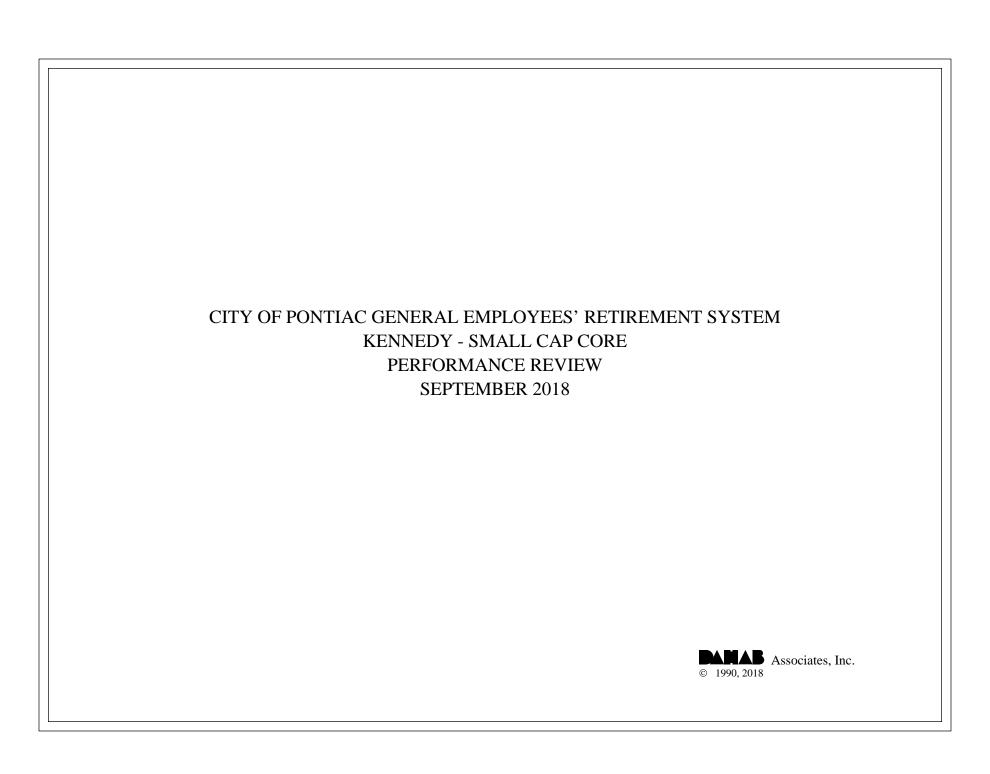
### **TOP TEN HOLDINGS**





# TOP TEN EQUITY HOLDINGS

RANK	NAME	VALUE	% EQUITY	RETURN	INDUSTRY SECTOR	MKT CAP
1	CITIZENS FINANCIAL GROUP	\$ 1,279,174	2.83%	-0.2%	Finance	\$ 18.4 B
2	ENTERGY CORP	1,199,101	2.66%	1.5%	Utilities	14.7 B
3	ZEBRA TECHNOLOGIES CORP-CL A	944,272	2.09%	23.4%	Basic	9.5 B
4	MARATHON OIL CORP	884,524	1.96%	11.9%	Energy	19.9 B
5	TRINITY INDUSTRIES INC	884,123	1.96%	7.4%	Basic	5.4 B
6	LIBERTY PROPERTY TRUST	850,281	1.88%	-3.8%	Finance	6.2 B
7	KBR INC	750,221	1.66%	18.4%	Service	3.0 B
8	COMERICA INC	744,150	1.65%	-0.2%	Finance	15.5 B
9	ALEXION PHARMACEUTICALS INC	736,753	1.63%	12.0%	NonDur Cons Goods	31.0 B
10	DICK'S SPORTING GOODS INC	724,679	1.61%	1.3%	Consumer Service	2.7 B



### **INVESTMENT RETURN**

On September 30th, 2018, the City of Pontiac General Employees' Retirement System's Kennedy Small Cap Core portfolio was valued at \$22,616,493, representing an increase of \$1,046,765 from the June quarter's ending value of \$21,569,728. Last quarter, the Fund posted withdrawals totaling \$243, which partially offset the portfolio's net investment return of \$1,047,008. Income receipts totaling \$64,145 plus net realized and unrealized capital gains of \$982,863 combined to produce the portfolio's net investment return.

### **RELATIVE PERFORMANCE**

### **Total Fund**

For the third quarter, the Kennedy Small Cap Core portfolio returned 4.9%, which was 1.3% above the Russell 2000 Index's return of 3.6% and ranked in the 37th percentile of the Small Cap Core universe. Over the trailing year, the portfolio returned 11.8%, which was 3.4% below the benchmark's 15.2% return, ranking in the 79th percentile. Since December 1994, the portfolio returned 14.9% annualized. The Russell 2000 returned an annualized 9.9% over the same period.

### **HOLDINGS ANALYSIS**

The Kennedy Small Cap Core portfolio was invested at the end of the third quarter in all eleven industry sectors in our analysis. Relative to the Russell 2000 index, the portfolio was overweight in the Basic and Technology sectors, while underweight in the Non-Durable Consumer Goods sector.

The portfolio outpaced the benchmark through a combination of selection and allocation factors. Increased weight in the well performing Technology sector positioned the portfolio advantageously. Superior selection in the Basic and Non-Durable Consumer Goods widened the lead over the index.

### **EXECUTIVE SUMMARY**

PERFORMANCE SUMMARY							
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year	Since 12/94
Total Portfolio - Gross	4.9	11.8	15.4	10.7	16.0	12.5	14.9
SMALL CAP CORE RANK	(37)	(79)	(68)	(85)	(87)	(50)	
Total Portfolio - Net	4.6	10.7	14.3	9.6	14.9	11.7	14.6
Russell 2000	3.6	15.2	17.1	11.1	16.4	11.1	9.9
<b>Domestic Equity - Gross</b>	4.9	11.8	15.4	10.7	16.0	12.5	14.9
SMALL CAP CORE RANK	(37)	(79)	(68)	(85)	(87)	(50)	
Russell 2000	3.6	15.2	17.1	11.1	16.4	11.1	9.9

ASSET ALLOCATION				
Domestic Equity	100.0%	\$ 22,616,493		
Total Portfolio	100.0%	\$ 22,616,493		

## INVESTMENT RETURN

 Market Value 6/2018
 \$ 21,569,728

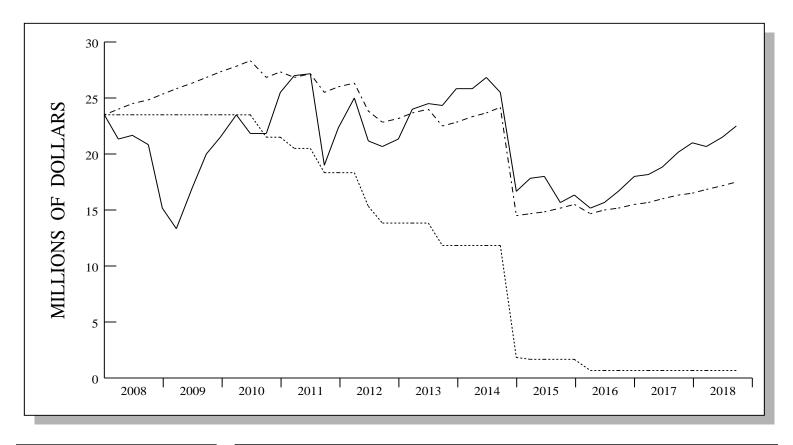
 Contribs / Withdrawals
 -243

 Income
 64,145

 Capital Gains / Losses
 982,863

 Market Value 9/2018
 \$ 22,616,493

## **INVESTMENT GROWTH**

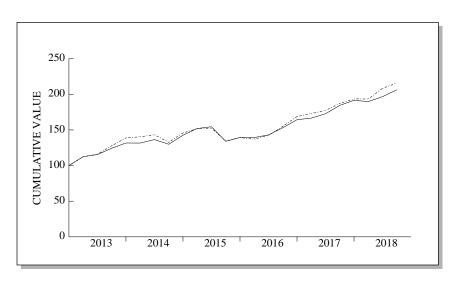


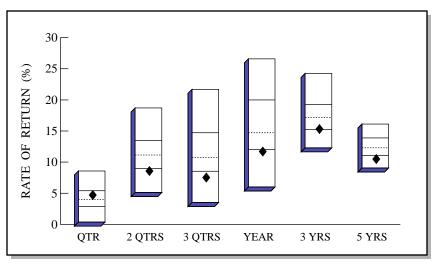
----- ACTUAL RETURN
----- BLENDED RATE
----- 0.0%

VALUE ASSUMING BLENDED RATE\$ 17,516,565

	LAST QUARTER	PERIOD 12/07 - 9/18
BEGINNING VALUE NET CONTRIBUTIONS INVESTMENT RETURN ENDING VALUE	$\begin{array}{r} \$\ 21,569,728 \\ -243 \\ \hline 1,047,008 \\ \$\ 22,616,493 \end{array}$	\$ 23,664,669 - 22,852,670 21,804,494 \$ 22,616,493
INCOME CAPITAL GAINS (LOSSES) INVESTMENT RETURN	$\frac{64,145}{982,863}$ $1,047,008$	1,686,663 20,117,831 21,804,494

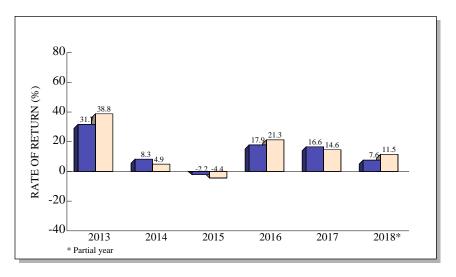
# TOTAL RETURN COMPARISONS





Small Cap Core Universe



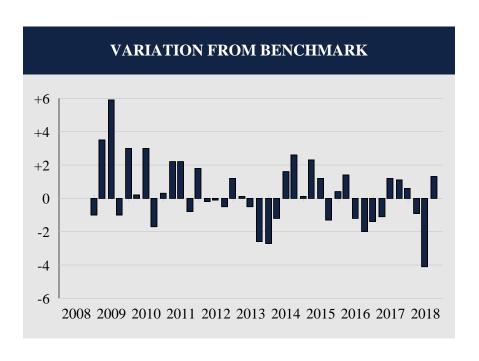


					ANNU <i>A</i>	ALIZED
	_QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
RETURN	4.9	8.7	7.6	11.8	15.4	10.7
(RANK)	(37)	(79)	(83)	(79)	(68)	(85)
5TH %ILE	8.6	18.7	21.7	26.6	24.3	16.1
25TH %ILE	5.4	13.5	14.7	20.0	19.3	13.9
MEDIAN	4.0	11.2	10.7	14.7	17.2	12.3
75TH %ILE	2.9	9.0	8.5	12.0	15.2	11.1
95TH %ILE	0.3	5.1	3.5	6.0	12.3	9.1
Russ 2000	3.6	11.6	11.5	15.2	17.1	11.1

Small Cap Core Universe

# TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY - 10 YEARS

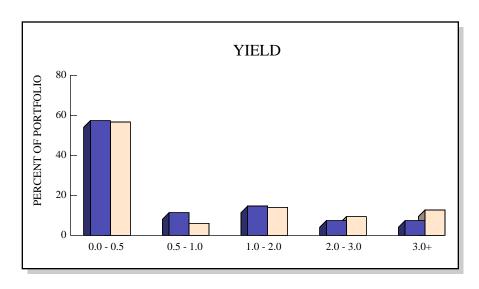
**COMPARATIVE BENCHMARK: RUSSELL 2000** 

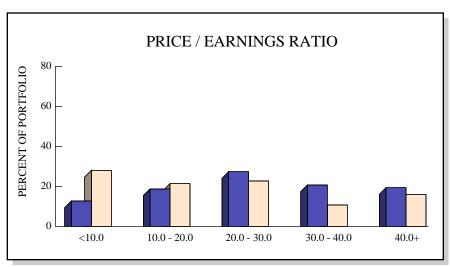


Total Quarters Observed	40
Quarters At or Above the Benchmark	22
Quarters Below the Benchmark	18
Batting Average	.550

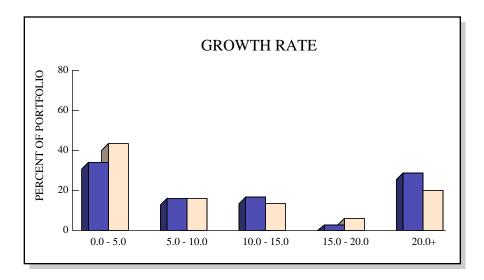
	RATES OF RETURN							
Date	Portfolio	Benchmark	Difference					
Date  12/08 3/09 6/09 9/09 12/09 3/10 6/10 9/10 12/10 3/11 6/11 9/11 12/11 3/12 6/12 9/12 12/12 3/13 6/13 9/13 12/13 3/14 6/14 9/14 12/14 3/15	Portfolio  -27.1 -11.5 -26.6 18.3 -6.9 9.1 -6.9 9.6 16.6 10.1 0.6 -22.7 17.3 12.2 -3.6 4.7 3.0 12.5 -2.6 7.6 6.0 -0.1 3.6 -4.8 9.8 6.6	-26.1 -15.0 20.7 19.3 3.9 8.9 -9.9 11.3 16.3 7.9 -1.6 -21.9 15.5 12.4 -3.5 5.2 1.8 12.4 3.1 10.2 8.7 1.1 2.0 -7.4 9.7 4.3	Difference  -1.0 3.5 5.9 -1.0 3.0 0.2 3.0 -1.7 0.3 2.2 2.2 2.0.8 1.8 -0.2 -0.1 -0.5 1.2 0.1 -0.5 -2.6 -2.7 -1.2 1.6 2.6 0.1 2.3					
6/15 9/15 12/15 3/16 6/16 9/16 12/16 3/17 6/17 9/17 12/17 3/18 6/18 9/18	1.6 -13.2 4.0 -0.1 2.6 7.0 7.4 1.4 3.7 6.8 3.9 -1.0 3.7 4.9	0.4 -11.9 3.6 -1.5 3.8 9.0 8.8 2.5 2.5 5.7 3.3 -0.1 7.8 3.6	1.2 -1.3 0.4 1.4 -1.2 -2.0 -1.4 -1.1 1.2 1.1 0.6 -0.9 -4.1 1.3					

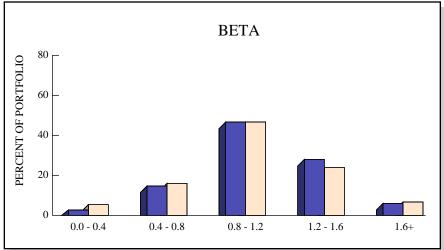
## STOCK CHARACTERISTICS



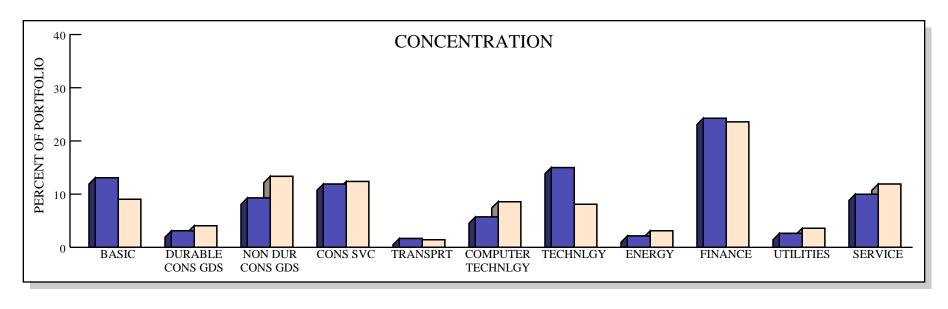


	# HOLDINGS	YIELD	GROWTH	P/E	BETA	
PORTFOLIO	99	0.9%	12.5%	28.4	1.07	
RUSSELL 2000	2,040	1.2%	9.0%	19.4	1.04	

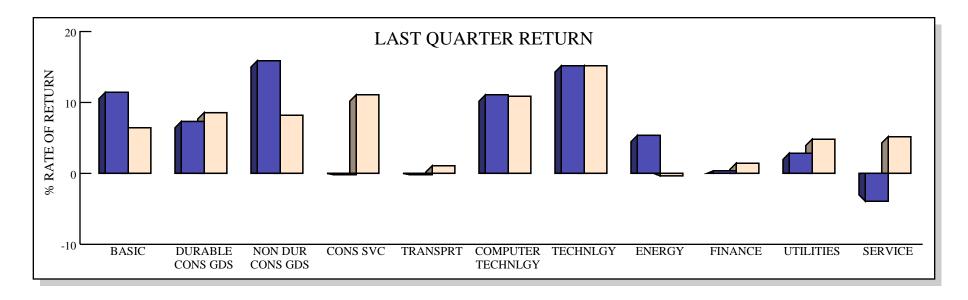




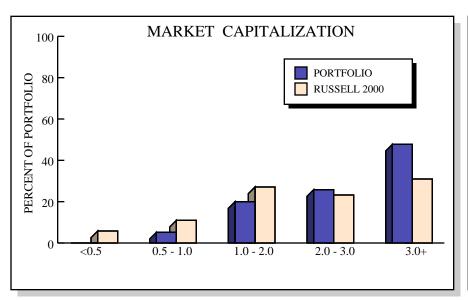
## STOCK INDUSTRY ANALYSIS

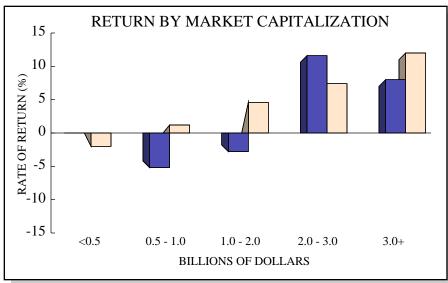






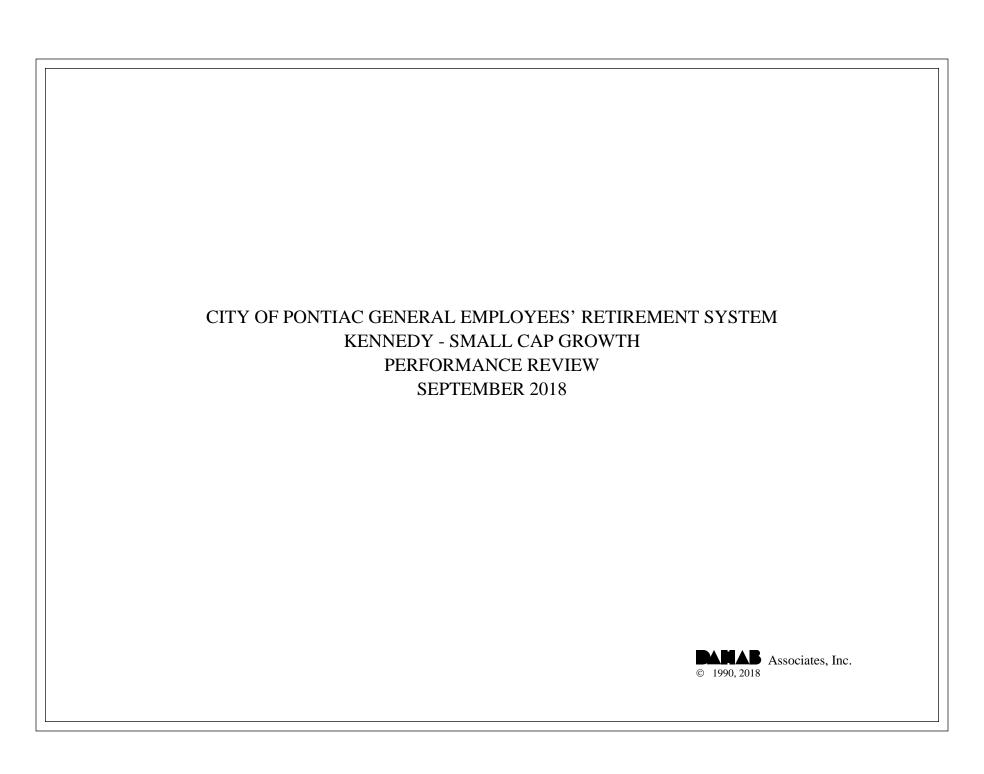
## **TOP TEN HOLDINGS**





# TOP TEN EQUITY HOLDINGS

RANK	NAME	VALUE	% EQUITY	RETURN	INDUSTRY SECTOR	MKT CAP
1	WALKER & DUNLOP INC	\$ 462,118	2.04%	-4.5%	Finance	\$ 1.7 B
2	INGEVITY CORP	455,505	2.01%	26.0%	Basic	4.3 B
3	EMERGENT BIOSOLUTIONS INC	433,886	1.92%	30.4%	NonDur Cons Goods	3.3 B
4	LHC GROUP INC	394,761	1.75%	20.3%	Consumer Service	3.2 B
5	OMNICELL INC	393,437	1.74%	37.1%	Computer Tech	2.8 B
6	BRINK'S CO/THE	392,065	1.73%	-12.4%	Service	3.6 B
7	BELDEN INC	382,186	1.69%	16.9%	Basic	2.9 B
8	PRESTIGE CONSUMER HEALTHCARE	340,214	1.50%	-1.3%	NonDur Cons Goods	2.0 B
9	CHILDREN'S PLACE INC/THE	338,287	1.50%	6.2%	Consumer Service	2.1 B
10	INTERFACE INC	336,427	1.49%	2.0%	NonDur Cons Goods	1.4 B



### **INVESTMENT RETURN**

On September 30th, 2018, the City of Pontiac General Employees' Retirement System's Kennedy Small Cap Growth portfolio was valued at \$16,745,098, representing an increase of \$1,412,323 from the June quarter's ending value of \$15,332,775. Last quarter, the Fund posted withdrawals totaling \$158, which partially offset the portfolio's net investment return of \$1,412,481. Income receipts totaling \$30,274 plus net realized and unrealized capital gains of \$1,382,207 combined to produce the portfolio's net investment return.

### **RELATIVE PERFORMANCE**

### **Total Fund**

For the third quarter, the Kennedy Small Cap Growth portfolio returned 9.2%, which was 3.7% above the Russell 2000 Growth Index's return of 5.5% and ranked in the 28th percentile of the Small Cap Growth universe. Over the trailing year, the portfolio returned 24.8%, which was 3.8% above the benchmark's 21.0% return, ranking in the 60th percentile. Since December 2014, the portfolio returned 14.8% annualized and ranked in the 46th percentile. The Russell 2000 Growth returned an annualized 12.4% over the same period.

### **HOLDINGS ANALYSIS**

Last quarter, the Kennedy Small Cap Growth portfolio was invested in ten of the eleven industry sectors in our analysis. The Technology and Consumer Service sectors were overweight, compared to the Russell 2000 Growth index weightings. The Non-Durable Consumer Goods and Service sectors were underweight, while the Utilities sector was vacant.

Benchmark-beating returns earned in the Basic, Non-Durable Consumer Goods, and Computer Technology sectors helped generate the portfolio's excess return last quarter.

### **EXECUTIVE SUMMARY**

PERFORMANCE SUMMARY								
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year	Since 12/14	
Total Portfolio - Gross	9.2	24.8	20.5				14.8	
SMALL CAP GROWTH RANK	(28)	(60)	(43)				(46)	
Total Portfolio - Net	9.0	23.8	19.5				13.9	
Russell 2000G	5.5	21.0	18.0	12.1	17.5	12.6	12.4	
<b>Domestic Equity - Gross</b>	9.2	24.8	20.5				14.8	
SMALL CAP GROWTH RANK	(28)	(60)	(43)				(46)	
Russell 2000G	5.5	21.0	18.0	12.1	17.5	12.6	12.4	

ASSET ALLOCATION						
Domestic Equity	100.0%	\$ 16,745,098				
Total Portfolio	100.0%	\$ 16,745,098				

## INVESTMENT RETURN

 Market Value 6/2018
 \$ 15,332,775

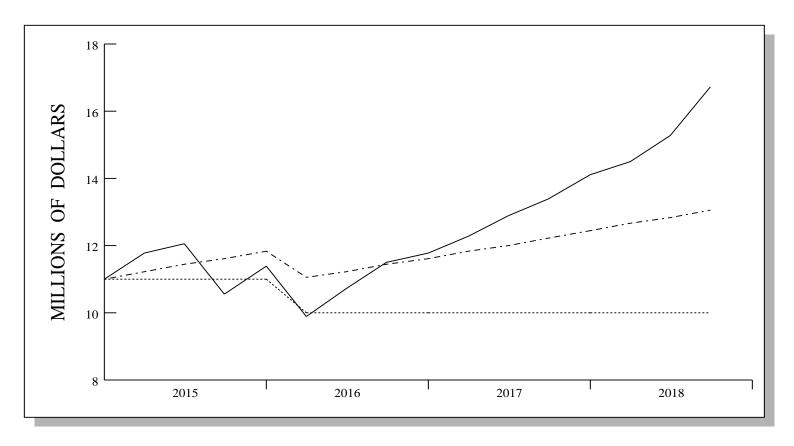
 Contribs / Withdrawals
 -158

 Income
 30,274

 Capital Gains / Losses
 1,382,207

 Market Value 9/2018
 \$ 16,745,098

## **INVESTMENT GROWTH**

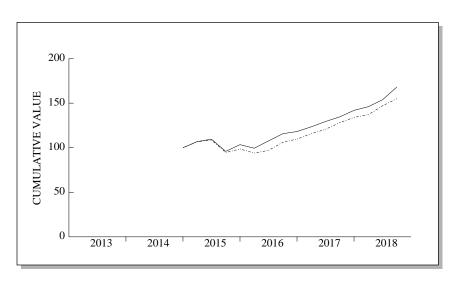


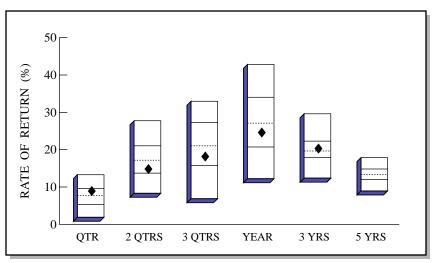
----- ACTUAL RETURN
----- BLENDED RATE
----- 0.0%

VALUE ASSUMING BLENDED RATE\$ 13,107,855

	LAST QUARTER	PERIOD 12/14 - 9/18
BEGINNING VALUE NET CONTRIBUTIONS INVESTMENT RETURN ENDING VALUE	\$ 15,332,775 -158 1,412,481 \$ 16,745,098	\$ 11,047,276 - 1,001,870 6,699,692 \$ 16,745,098
INCOME CAPITAL GAINS (LOSSES) INVESTMENT RETURN	$ \begin{array}{r} 30,274 \\ 1,382,207 \\ \hline 1,412,481 \end{array} $	$ \begin{array}{r} 229,817 \\ 6,469,875 \\ \hline 6,699,692 \end{array} $

# TOTAL RETURN COMPARISONS

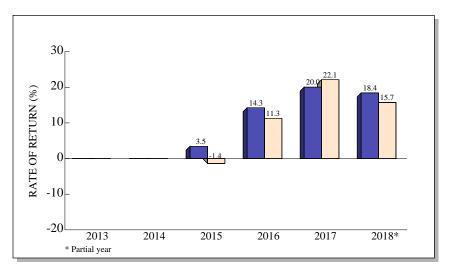




Small Cap Growth Universe



4

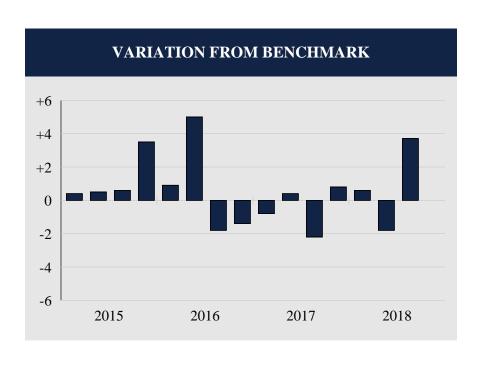


		ANNUALIZED				
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
RETURN	9.2	15.1	18.4	24.8	20.5	
(RANK)	(28)	(69)	(64)	(60)	(43)	
5TH %ILE	13.3	27.8	33.0	42.8	29.6	17.8
25TH %ILE	9.6	21.0	27.3	34.0	22.3	14.8
MEDIAN	7.7	17.2	21.0	27.1	19.6	13.4
75TH %ILE	5.3	13.7	15.7	20.7	17.9	12.0
95TH %ILE	1.9	8.3	6.9	12.2	12.4	9.0
Russ 2000G	5.5	13.1	15.7	21.0	18.0	12.1

Small Cap Growth Universe

# TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

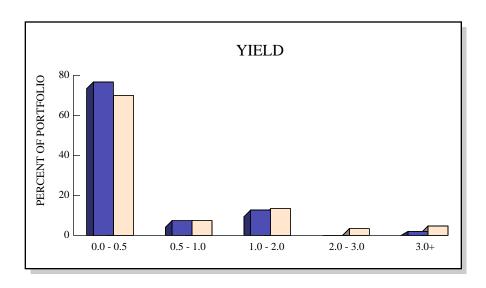
COMPARATIVE BENCHMARK: RUSSELL 2000 GROWTH

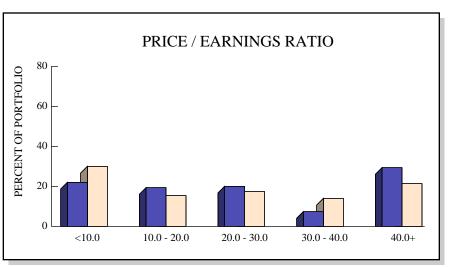


Total Quarters Observed	15
Quarters At or Above the Benchmark	10
<b>Quarters Below the Benchmark</b>	5
<b>Batting Average</b>	.667

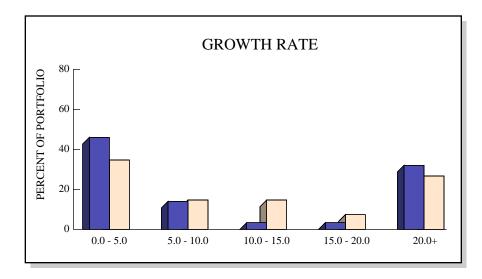
RATES OF RETURN							
Date	Portfolio	Benchmark	Difference				
3/15	7.0	6.6	0.4				
6/15	2.5	2.0	0.5				
9/15	-12.5	-13.1	0.6				
12/15	7.8	4.3	3.5				
3/16	-3.8	-4.7	0.9				
6/16	8.2	3.2	5.0				
9/16	7.4	9.2	-1.8				
12/16	2.2	3.6	-1.4				
3/17	4.5	5.3	-0.8				
6/17	4.8	4.4	0.4				
9/17	4.0	6.2	-2.2				
12/17	5.4	4.6	0.8				
3/18	2.9	2.3	0.6				
6/18	5.4	7.2	-1.8				
9/18	9.2	5.5	3.7				

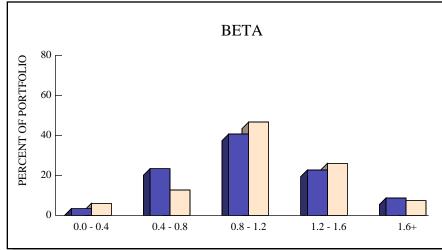
## STOCK CHARACTERISTICS



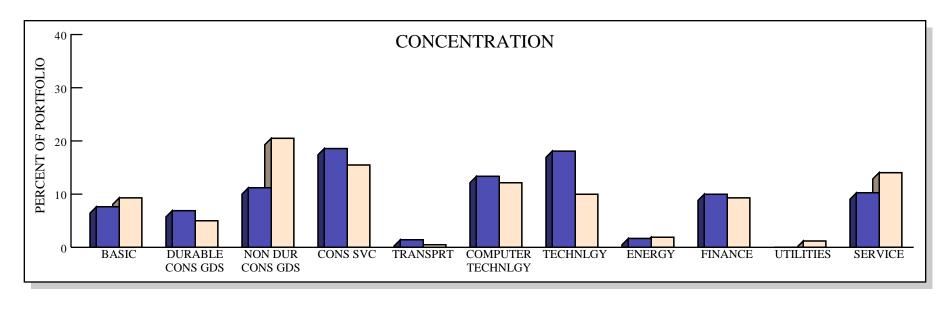


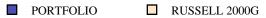
	# HOLDINGS	YIELD	GROWTH	P/E	BETA	
PORTFOLIO	72	0.4%	10.2%	25.1	1.05	
RUSSELL 2000G	1,253	0.6%	12.5%	20.7	1.06	

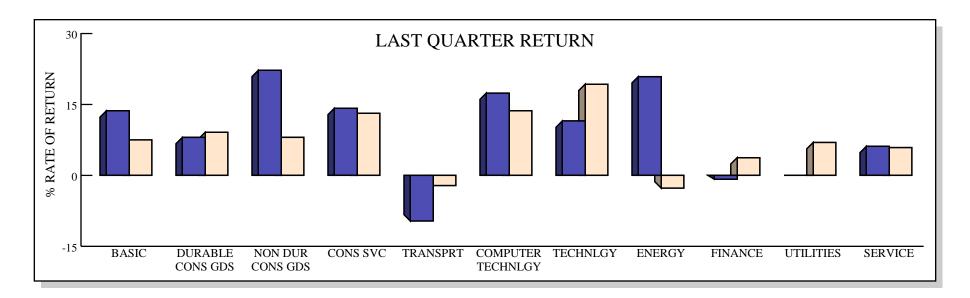




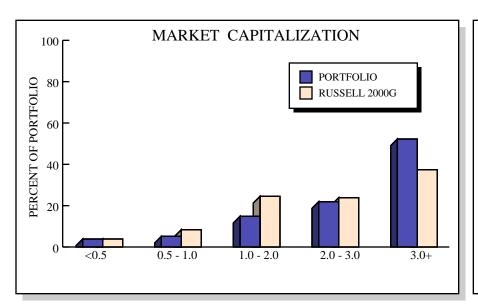
## STOCK INDUSTRY ANALYSIS

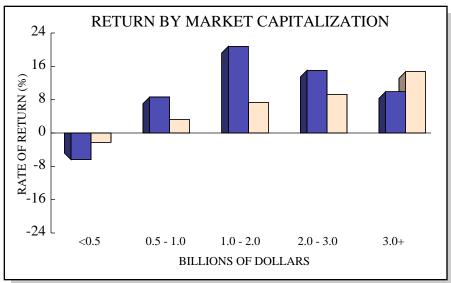






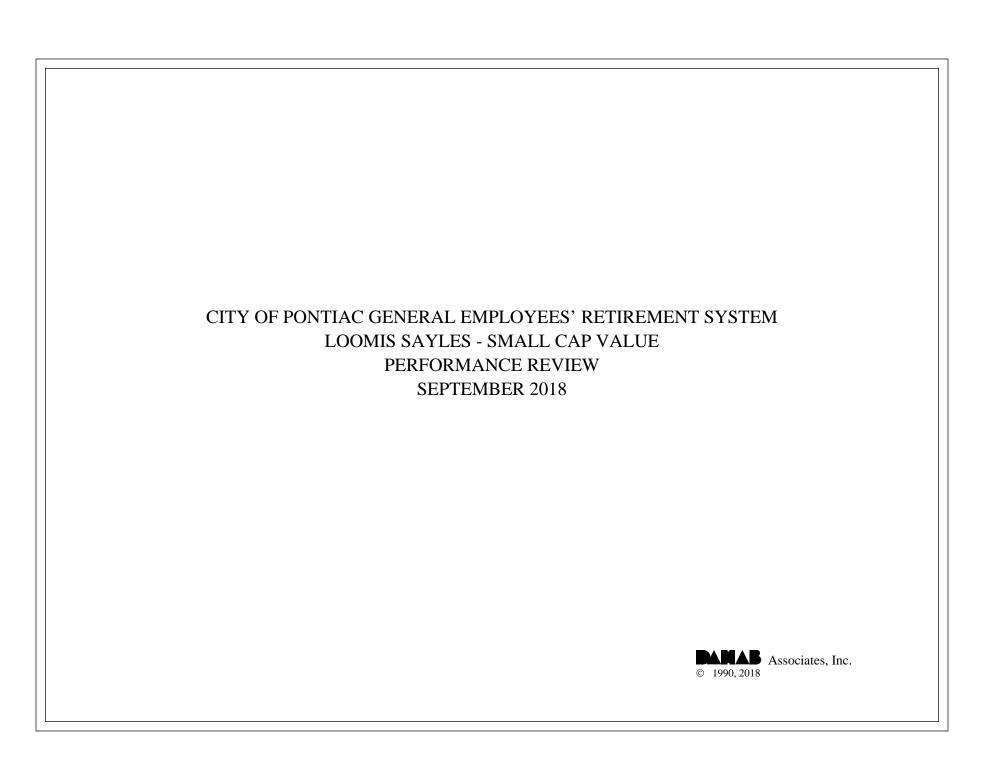
### **TOP TEN HOLDINGS**





# TOP TEN EQUITY HOLDINGS

RANK	NAME	VALUE	% EQUITY	RETURN	INDUSTRY SECTOR	MKT CAP
1	FIREEYE INC	\$ 358,122	2.14%	10.5%	Computer Tech	\$ 3.3 B
2	WINGSTOP INC	339,575	2.03%	31.2%	Consumer Service	2.0 B
3	BIOTELEMETRY INC	330,886	1.98%	43.2%	Technology	2.1 B
4	CHARLES RIVER LABORATORIES	328,412	1.96%	19.9%	Consumer Service	6.5 B
5	BRIGHT HORIZONS FAMILY SOLUT	313,337	1.87%	14.9%	Consumer Service	6.8 B
6	INPHI CORP	299,130	1.79%	16.5%	Computer Tech	1.7 B
7	MERIT MEDICAL SYSTEMS INC	296,742	1.77%	20.0%	Technology	3.4 B
8	PROS HOLDINGS INC	293,433	1.75%	-4.2%	Computer Tech	1.3 B
9	CENTENNIAL RESOURCE DEVELO-A	291,982	1.74%	21.0%	Energy	5.8 B
10	LIVANOVA PLC	291,206	1.74%	24.2%	Technology	6.0 B



#### **INVESTMENT RETURN**

On September 30th, 2018, the City of Pontiac General Employees' Retirement System's Loomis Sayles Small Cap Value portfolio was valued at \$27,270,103, representing an increase of \$498,561 from the June quarter's ending value of \$26,771,542. Last quarter, the Fund posted withdrawals totaling \$367, which partially offset the portfolio's net investment return of \$498,928. Income receipts totaling \$82,538 plus net realized and unrealized capital gains of \$416,390 combined to produce the portfolio's net investment return.

#### **RELATIVE PERFORMANCE**

#### **Total Fund**

For the third quarter, the Loomis Sayles Small Cap Value portfolio returned 1.9%, which was 0.3% above the Russell 2000 Value Index's return of 1.6% and ranked in the 48th percentile of the Small Cap Value universe. Over the trailing year, the portfolio returned 7.1%, which was 2.3% below the benchmark's 9.4% return, ranking in the 74th percentile. Since December 1994, the portfolio returned 13.5% annualized. The Russell 2000 Value returned an annualized 10.7% over the same period.

#### **HOLDINGS ANALYSIS**

At the close of the second quarter, the Loomis portfolio was invested across all eleven industry sectors. The Basic, Non-Durable Consumer Goods, and Service sectors were given more weight than their index counterparts, while the Consumer Service, Finance, and Utilities sectors were underweight.

The portfolio squeezed a little more juice out of the small cap value market by reducing its position in the generally flat Finance sector, which dominated the index with a roughly 40% allocation. By placing only a third of its weight in this sector, the portfolio freed up some weight to spread across better opportunities.

### **EXECUTIVE SUMMARY**

PERFORMANCE SUMMARY							
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year	Since 12/94
Total Portfolio - Gross	1.9	7.1	14.7	10.6	16.0	12.6	13.5
SMALL CAP VALUE RANK	(48)	(74)	(54)	(53)	(57)	(37)	
Total Portfolio - Net	1.7	6.4	13.9	9.9	15.2	12.0	13.2
Russell 2000V	1.6	9.4	16.1	9.9	15.3	9.5	10.7
<b>Domestic Equity - Gross</b>	1.9	7.1	14.7	10.6	16.0	12.6	13.5
SMALL CAP VALUE RANK	(48)	(74)	(54)	(53)	(57)	(37)	
Russell 2000V	1.6	9.4	16.1	9.9	15.3	9.5	10.7

ASSET ALLOCATION				
Domestic Equity	100.0%	\$ 27,270,103		
Total Portfolio	100.0%	\$ 27,270,103		

### INVESTMENT RETURN

 Market Value 6/2018
 \$ 26,771,542

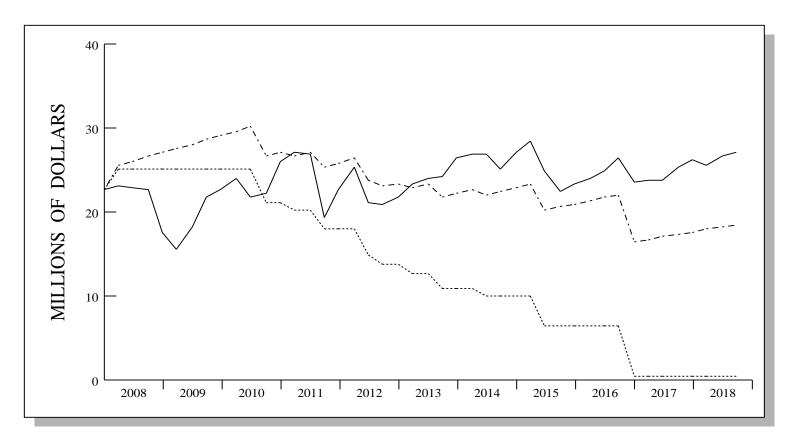
 Contribs / Withdrawals
 -367

 Income
 82,538

 Capital Gains / Losses
 416,390

 Market Value 9/2018
 \$ 27,270,103

### **INVESTMENT GROWTH**

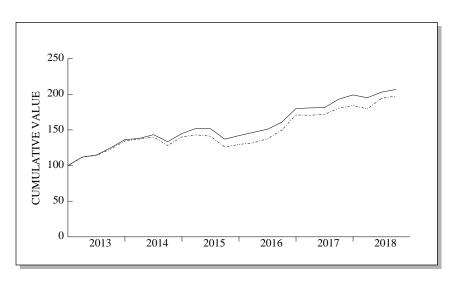


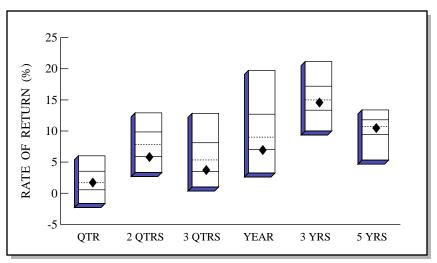
----- ACTUAL RETURN
----- BLENDED RATE
----- 0.0%

VALUE ASSUMING BLENDED RATE\$ 18,635,004

	LAST QUARTER	PERIOD 12/07 - 9/18
BEGINNING VALUE NET CONTRIBUTIONS INVESTMENT RETURN ENDING VALUE	$\begin{array}{c} \$\ 26,771,542\\ -367\\ 498,928\\ \hline \$\ 27,270,103 \end{array}$	\$ 22,726,519 - 22,207,150 26,750,734 \$ 27,270,103
INCOME CAPITAL GAINS (LOSSES) INVESTMENT RETURN	$ \begin{array}{r} 82,538 \\ 416,390 \\ \hline 498,928 \end{array} $	3,039,976 23,710,758 26,750,734

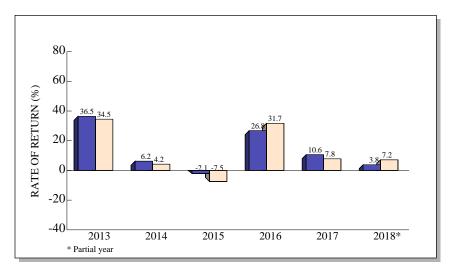
# TOTAL RETURN COMPARISONS





Small Cap Value Universe



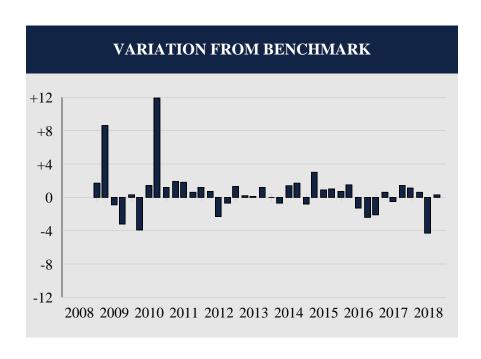


					ANNU <i>A</i>	ALIZED
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
RETURN	1.9	6.0	3.8	7.1	14.7	10.6
(RANK)	(48)	(75)	(71)	(74)	(54)	(53)
5TH %ILE	6.0	12.9	12.8	19.7	21.2	13.4
25TH %ILE	3.5	9.8	8.1	12.7	17.2	11.8
MEDIAN	1.7	7.8	5.4	9.0	15.0	10.8
75TH %ILE	0.5	5.9	3.5	7.0	13.4	9.4
95TH %ILE	-1.7	3.3	1.0	3.3	10.0	5.3
Russ 2000V	1.6	10.0	7.2	9.4	16.1	9.9

Small Cap Value Universe

# TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY - 10 YEARS

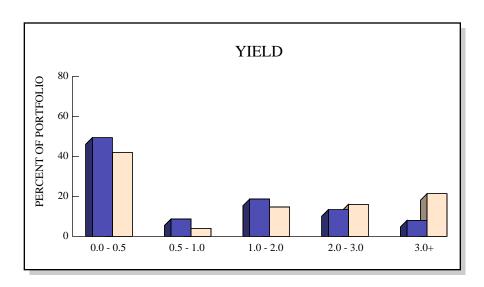
COMPARATIVE BENCHMARK: RUSSELL 2000 VALUE

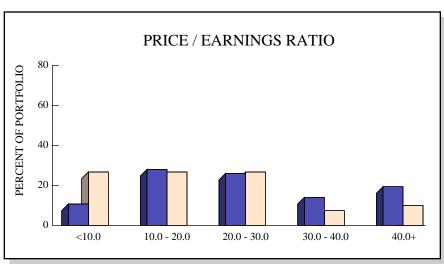


<b>Total Quarters Observed</b>	40
Quarters At or Above the Benchmark	28
<b>Quarters Below the Benchmark</b>	12
Batting Average	.700

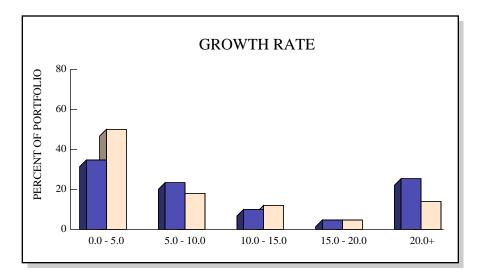
RATES OF RETURN						
Date	Portfolio	Benchmark	Difference			
Date  12/08 3/09 6/09 9/09 12/09 3/10 6/10 9/10 12/10 3/11 6/11 9/11 12/11 3/12 6/12 9/12 12/12 3/13 6/13 9/13 12/13 3/14 6/14 9/14 12/14	-23.2 -11.0 17.1 19.5 3.9 6.1 -9.2 21.6 16.6 8.5 -0.9 -20.9 17.2 12.3 -5.3 5.0 4.5 11.8 2.6 8.8 9.3 1.1 3.8 -6.9 8.6	-24.9 -19.6 18.0 22.7 3.6 10.0 -10.6 9.7 15.4 6.6 -2.7 -21.5 16.0 11.6 -3.0 5.7 3.2 11.6 2.5 7.6 9.3 1.8 2.4 -8.6 9.4	1.7 8.6 -0.9 -3.2 0.3 -3.9 1.4 11.9 1.2 1.9 1.8 0.6 1.2 0.7 -2.3 -0.7 1.3 0.2 0.1 1.2 0.0 -0.7 1.4 1.7 -0.8			
3/15 6/15 9/15 12/15 3/16 6/16 9/16 12/16 3/17 6/17 9/17 12/17 3/18 6/18 9/18	5.0 -0.3 -9.7 3.6 3.2 3.0 6.5 12.0 0.5 0.2 6.5 3.1 -2.0 4.0 1.9	2.0 -1.2 -10.7 2.9 1.7 4.3 8.9 14.1 -0.1 0.7 5.1 2.0 -2.6 8.3 1.6	3.0 0.9 1.0 0.7 1.5 -1.3 -2.4 -2.1 0.6 -0.5 1.4 1.1 0.6 -4.3 0.3			

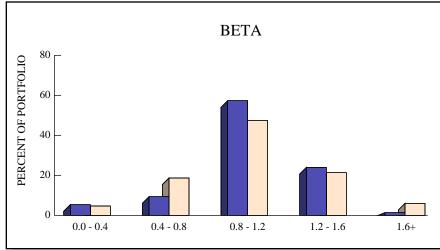
### STOCK CHARACTERISTICS



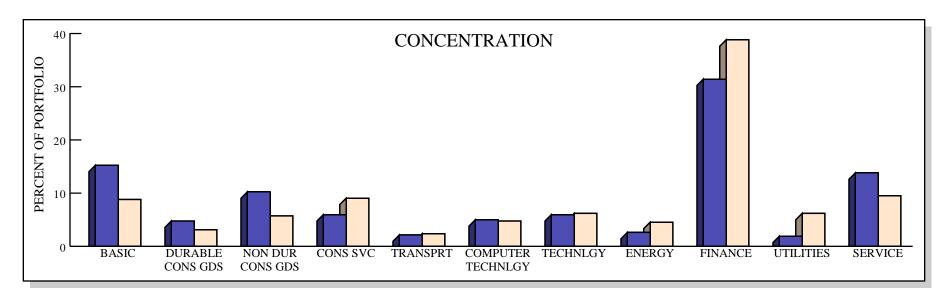


	# HOLDINGS	YIELD	GROWTH	P/E	BETA	
PORTFOLIO	151	1.2%	11.1%	25.7	1.01	
RUSSELL 2000	V 1,387	1.9%	6.2%	18.3	1.01	

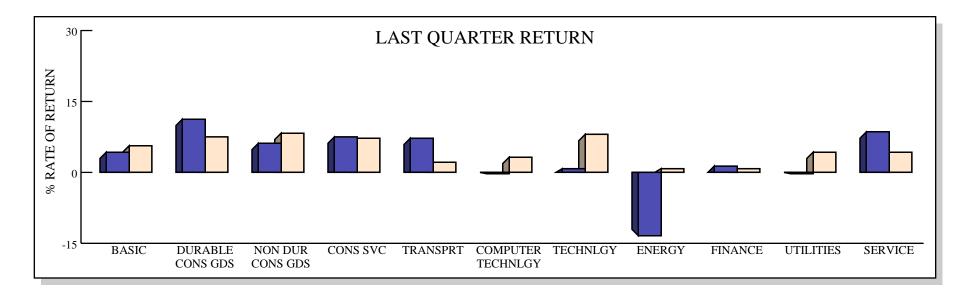




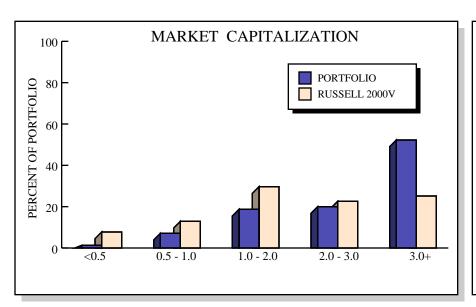
### STOCK INDUSTRY ANALYSIS

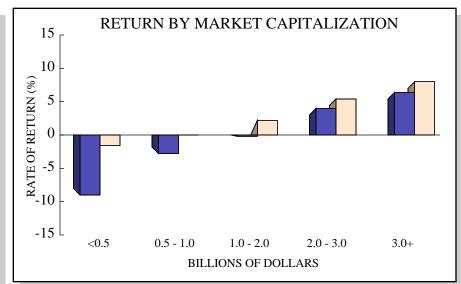






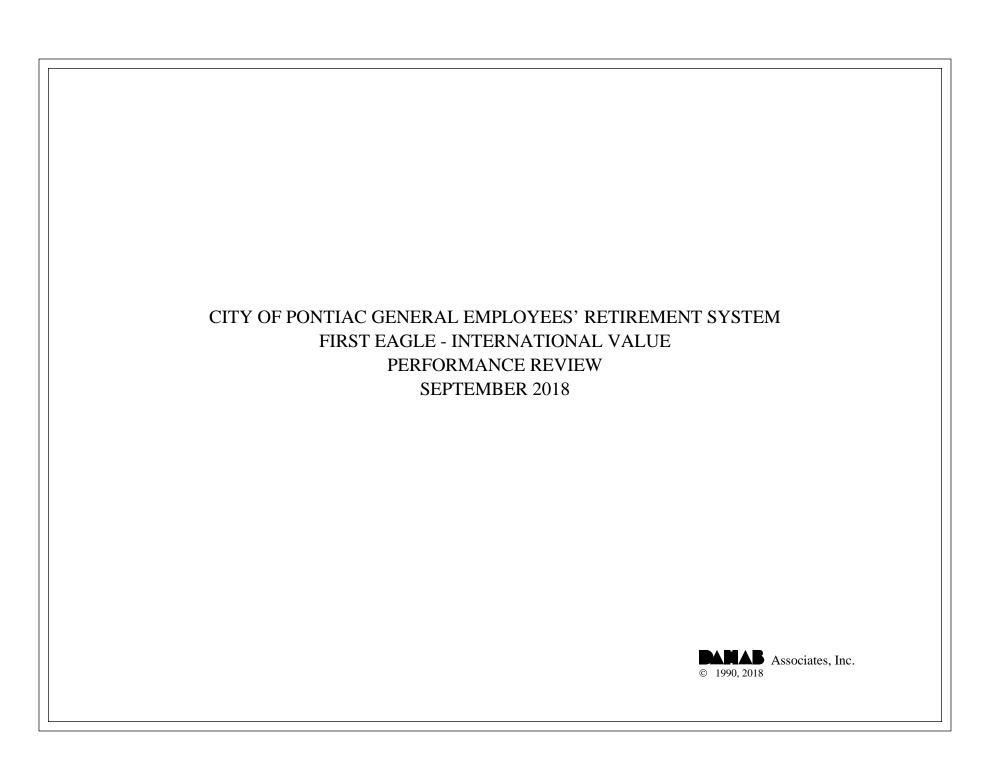
### **TOP TEN HOLDINGS**





# TOP TEN EQUITY HOLDINGS

RANK	NAME	VALUE	% EQUITY	RETURN	INDUSTRY SECTOR	MKT CAP
1	LITTELFUSE INC	\$ 390,041	1.43%	-13.1%	Basic	\$ 5.0 B
2	KAR AUCTION SERVICES INC	325,967	1.20%	9.5%	Consumer Service	8.0 B
3	ALLETE INC	310,016	1.14%	-2.4%	Utilities	3.9 B
4	EURONET WORLDWIDE INC	300,460	1.10%	19.6%	Finance	5.1 B
5	WEX INC	299,132	1.10%	5.4%	Service	8.7 B
6	POPULAR INC	294,226	1.08%	13.9%	Finance	5.2 B
7	EMPLOYERS HOLDINGS INC	291,913	1.07%	13.2%	Finance	1.5 B
8	RETAIL OPPORTUNITY INVESTMEN	288,246	1.06%	-1.6%	Finance	2.1 B
9	WINTRUST FINANCIAL CORP	287,522	1.05%	-2.2%	Finance	4.8 B
10	CHURCHILL DOWNS INC	287,420	1.05%	-6.3%	Consumer Service	3.8 B



#### **INVESTMENT RETURN**

On September 30th, 2018, the City of Pontiac General Employees' Retirement System's First Eagle International Value portfolio was valued at \$27,666,880, a decrease of \$5,099,769 from the June ending value of \$32,766,649. Last quarter, the account recorded total net withdrawals of \$5,000,000 in addition to \$99,769 in net investment losses. Because there were no income receipts during the third quarter, the portfolio's net investment losses were entirely made up of capital losses (realized and unrealized).

#### RELATIVE PERFORMANCE

#### **Total Fund**

During the third quarter, the First Eagle International Value portfolio returned 0.0%, which was 1.8% less than the MSCI AC World Ex US Value Index's return of 1.8% and ranked in the 53rd percentile of the International Equity universe.

### **EXECUTIVE SUMMARY**

PERFORMANCE SUMMARY						
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year
Total Portfolio - Gross	0.0					
INTERNATIONAL EQUITY RANK	(53)					
Total Portfolio - Net	-0.2					
ACWI Ex US Value	1.8	1.0	9.9	3.5	6.8	5.1
International Equity - Gross	0.0					
INTERNATIONAL EQUITY RANK	(53)					
ACWI Ex US Value	1.8	1.0	9.9	3.5	6.8	5.1

ASSET ALLOCATION					
Int'l Equity	100.0%	\$ 27,666,880			
Total Portfolio	100.0%	\$ 27,666,880			

### INVESTMENT RETURN

 Market Value 6/2018
 \$ 32,766,649

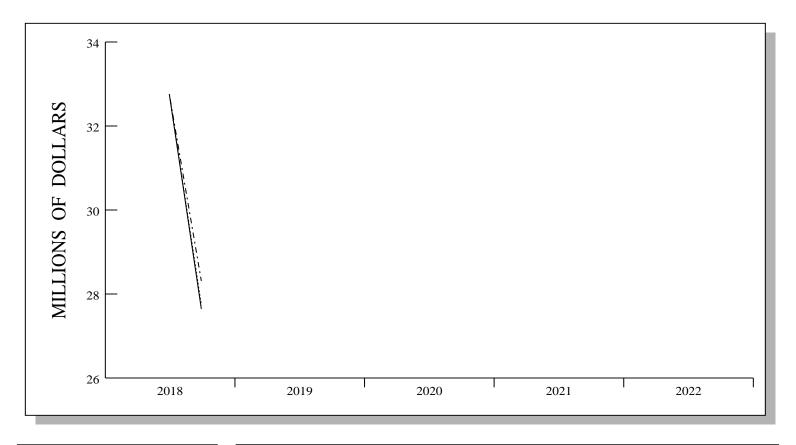
 Contribs / Withdrawals
 -5,000,000

 Income
 0

 Capital Gains / Losses
 -99,769

 Market Value 9/2018
 \$ 27,666,880

### **INVESTMENT GROWTH**

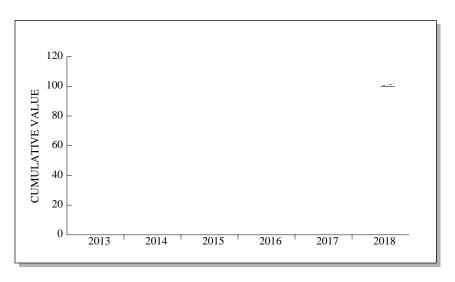


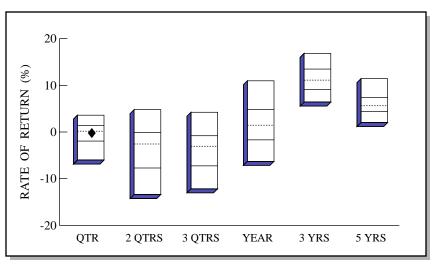
----- ACTUAL RETURN
----- BLENDED RATE
----- 0.0%

VALUE ASSUMING BLENDED RATE\$ 28,311,450

	LAST QUARTER	LAST QUARTER
BEGINNING VALUE NET CONTRIBUTIONS INVESTMENT RETURN ENDING VALUE	\$ 32,766,649 - 5,000,000 - 99,769 \$ 27,666,880	\$ 32,766,649 - 5,000,000 - 99,769 \$ 27,666,880
INCOME CAPITAL GAINS (LOSSES) INVESTMENT RETURN	0 - 99,769 - 99,769	- 99,769 - 99,769

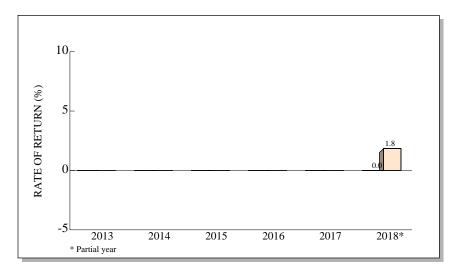
# TOTAL RETURN COMPARISONS





International Equity Universe



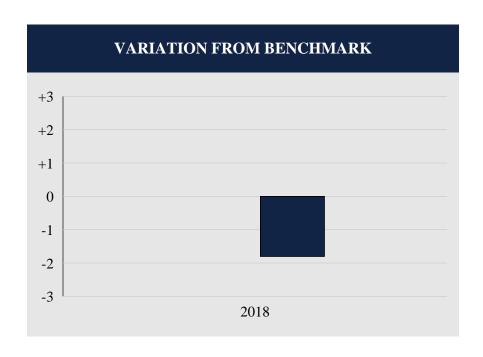


					ANNUA	LIZED
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
RETURN	0.0					
(RANK)	(53)					
5TH %ILE	3.6	4.8	4.2	11.0	16.9	11.4
25TH %ILE	1.4	-0.1	-0.8	4.9	13.5	7.4
MEDIAN	0.2	-2.6	-3.1	1.5	11.1	5.6
75TH %ILE	-1.9	-7.7	-7.3	-1.7	9.1	4.4
95TH %ILE	-6.0	-13.4	-12.2	-6.3	6.4	2.0
ACWI Ex US V	/al 1.8	-1.8	-3.1	1.0	9.9	3.5

International Equity Universe

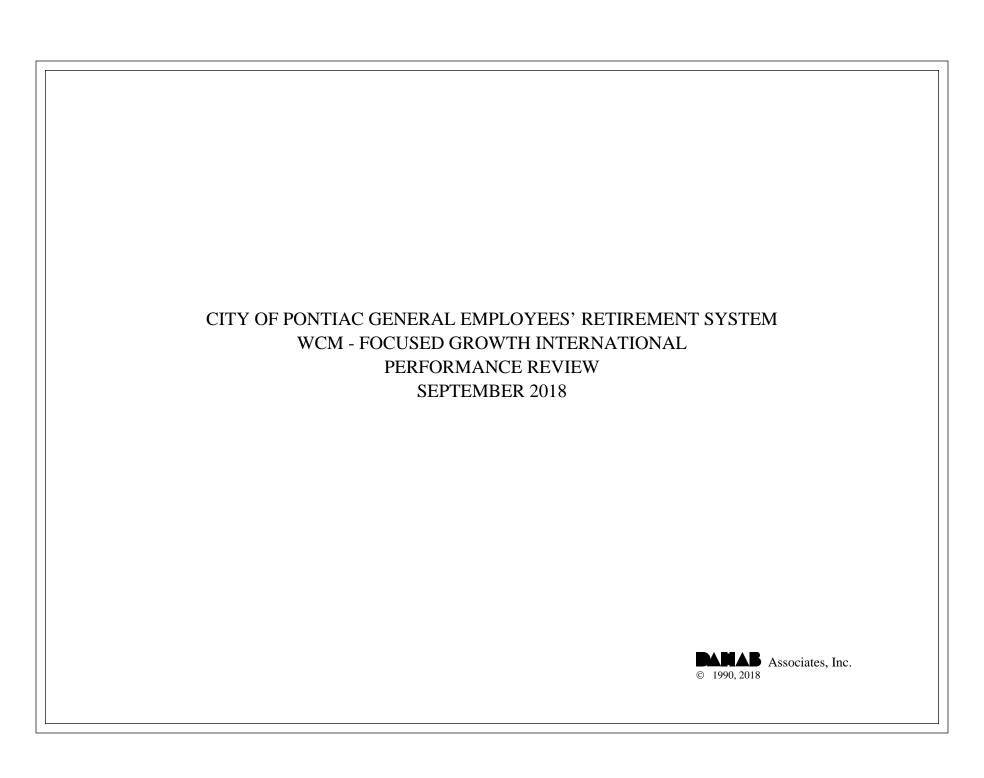
# TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

#### COMPARATIVE BENCHMARK: MSCI AC WORLD EX US VALUE



<b>Total Quarters Observed</b>	1
Quarters At or Above the Benchmark	0
<b>Quarters Below the Benchmark</b>	1
<b>Batting Average</b>	.000

	RATES OF RETURN							
Date	Portfolio	Benchmark	Difference					
9/18	0.0	1.8	-1.8					



#### **INVESTMENT RETURN**

On September 30th, 2018, the City of Pontiac General Employees' Retirement System's WCM Focused Growth International portfolio was valued at \$34,315,356, a decrease of \$3,784,383 from the June ending value of \$38,099,739. Last quarter, the account recorded a net withdrawal of \$5,004,972, which overshadowed the fund's net investment return of \$1,220,589. Income receipts totaling \$123,213 and realized and unrealized capital gains of \$1,097,376 combined to produce the portfolio's net investment return.

#### RELATIVE PERFORMANCE

#### **Total Fund**

During the third quarter, the WCM Focused Growth International portfolio gained 3.2%, which was 2.5% greater than the MSCI All Country World Ex US Net Index's return of 0.7% and ranked in the 7th percentile of the International Equity universe. Over the trailing year, the portfolio returned 13.3%, which was 11.5% greater than the benchmark's 1.8% performance, and ranked in the 3rd percentile. Since September 2013, the account returned 11.0% per annum and ranked in the 7th percentile. For comparison, the MSCI All Country World Ex US Net Index returned an annualized 4.1% over the same time frame.

### **EXECUTIVE SUMMARY**

PERFORMANCE SUMMARY							
Q	uarter	1 Year	3 Year	5 Year	7 Year	10 Year	
Total Portfolio - Gross	3.2	13.3	15.9	11.0			
INTERNATIONAL EQUITY RANK	(7)	(3)	(8)	(7)			
Total Portfolio - Net	2.9	12.3	15.0	10.1			
ACWI Ex US Net	0.7	1.8	10.0	4.1	7.2	5.2	
International Equity - Gross	3.2	13.3	15.9	11.0			
INTERNATIONAL EQUITY RANK	(7)	(3)	(8)	(7)			
ACWI Ex US Net	0.7	1.8	10.0	4.1	7.2	5.2	

ASSET ALLOCATION					
Int'l Equity	100.0%	\$ 34,315,356			
Total Portfolio	100.0%	\$ 34,315,356			

### INVESTMENT RETURN

 Market Value 6/2018
 \$ 38,099,739

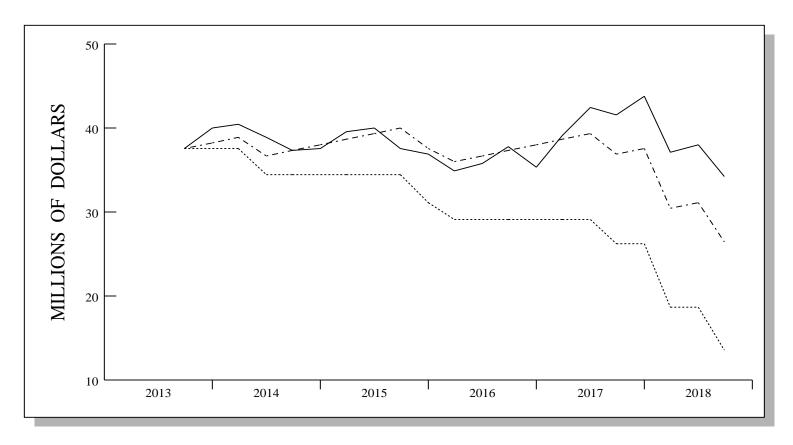
 Contribs / Withdrawals
 - 5,004,972

 Income
 123,213

 Capital Gains / Losses
 1,097,376

 Market Value 9/2018
 \$ 34,315,356

### **INVESTMENT GROWTH**

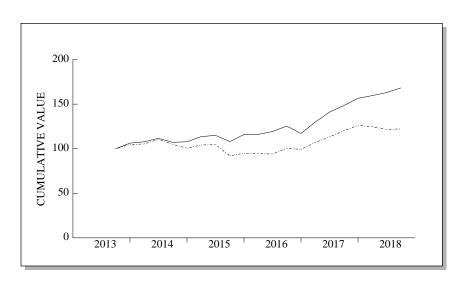


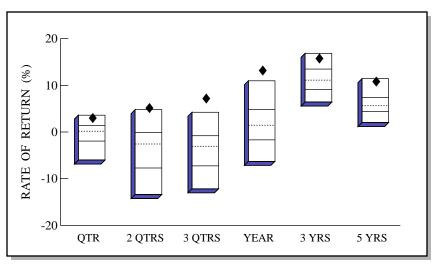
----- ACTUAL RETURN
----- BLENDED RATE
----- 0.0%

VALUE ASSUMING BLENDED RATE\$ 26,660,324

	LAST QUARTER	FIVE YEARS
BEGINNING VALUE NET CONTRIBUTIONS INVESTMENT RETURN ENDING VALUE	\$ 38,099,739 - 5,004,972 1,220,589 \$ 34,315,356	\$ 37,653,208 -23,880,280 20,542,428 \$ 34,315,356
INCOME CAPITAL GAINS (LOSSES) INVESTMENT RETURN	$ \begin{array}{r} 123,213 \\ 1,097,376 \\ \hline 1,220,589 \end{array} $	2,874,462 17,667,966 20,542,428

# TOTAL RETURN COMPARISONS

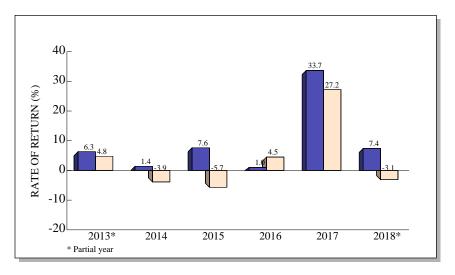




International Equity Universe



4

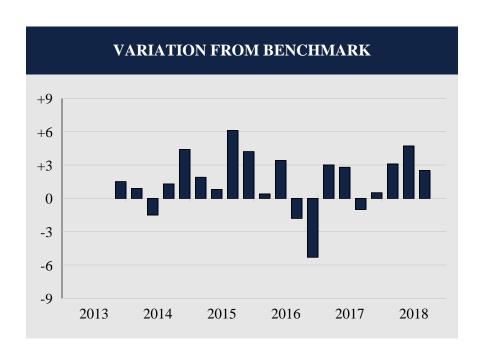


					ANNU	ALIZED
	_QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
RETURN	3.2	5.4	7.4	13.3	15.9	11.0
(RANK)	(7)	(5)	(2)	(3)	(8)	(7)
5TH %ILE	3.6	4.8	4.2	11.0	16.9	11.4
25TH %ILE	1.4	-0.1	-0.8	4.9	13.5	7.4
MEDIAN	0.2	-2.6	-3.1	1.5	11.1	5.6
75TH %ILE	-1.9	-7.7	-7.3	-1.7	9.1	4.4
95TH %ILE	-6.0	-13.4	-12.2	-6.3	6.4	2.0
ACWI Ex US N	Net 0.7	-1.9	-3.1	1.8	10.0	4.1

International Equity Universe

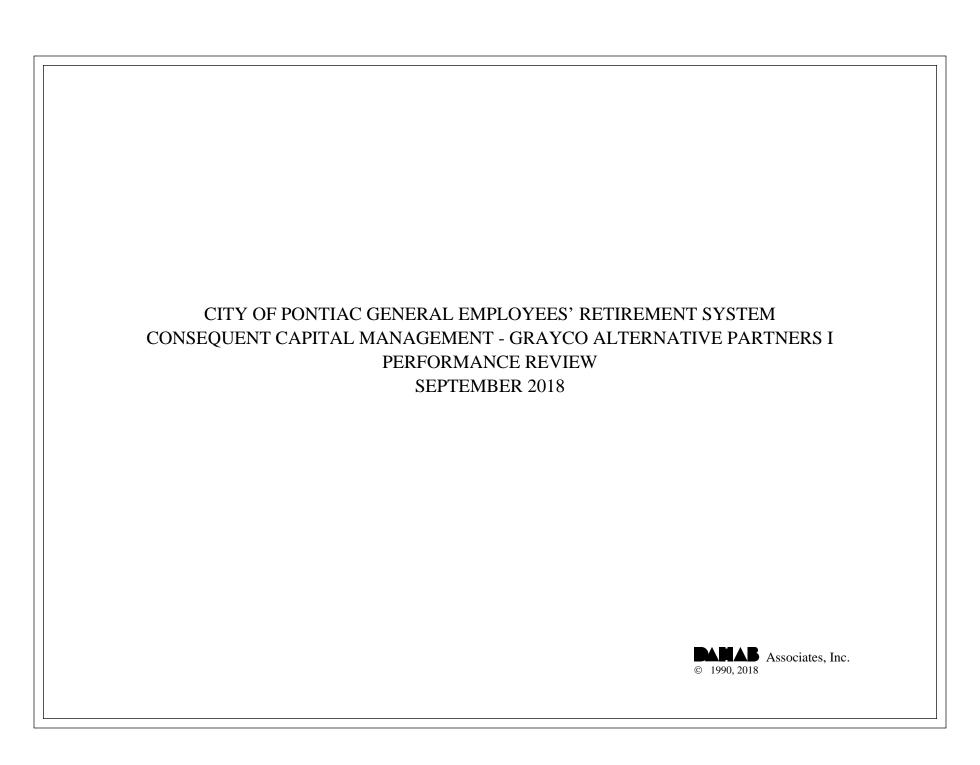
# TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: MSCI ALL COUNTRY WORLD EX US NET



<b>Total Quarters Observed</b>	20
Quarters At or Above the Benchmark	16
Quarters Below the Benchmark	4
Batting Average	.800

RATES OF RETURN							
Date	Portfolio	Benchmark	Difference				
12/13	6.3	4.8	1.5				
3/14	1.4	0.5	0.9				
6/14	3.5	5.0	-1.5				
9/14	-4.0	-5.3	1.3				
12/14	0.5	-3.9	4.4				
3/15	5.4	3.5	1.9				
6/15	1.3	0.5	0.8				
9/15	-6.1	-12.2	6.1				
12/15	7.4	3.2	4.2				
3/16	0.0	-0.4	0.4				
6/16	2.8	-0.6	3.4				
9/16	5.1	6.9	-1.8				
12/16	-6.6	-1.3	-5.3				
3/17	10.9	7.9	3.0				
6/17	8.6	5.8	2.8				
9/17	5.2	6.2	-1.0				
12/17	5.5	5.0	0.5				
3/18	1.9	-1.2	3.1				
6/18	2.1	-2.6	4.7				
9/18	3.2	0.7	2.5				



#### **INVESTMENT RETURN**

The most recent statement available at this time was June 30, 2018. The market value was carried forward and adjusted for distributions. The return shown is a function of distributions and estimated fees.

On September 30th, 2018, the City of Pontiac General Employees' Retirement System's Consequent Capital Management GrayCo Alternative Partners I account was valued at \$5,172,472, which represented a decrease of \$201,453 from the June quarter's ending value of \$5,373,925. Over the last three months, the fund posted \$242,815 in net withdrawals, which overshadowed the portfolio's net investment return of \$41,362. Since there were no income receipts for the third quarter, the portfolio's net investment return was the result of net realized and unrealized capital gains totaling \$41,362.

#### RELATIVE PERFORMANCE

#### **Total Fund**

The Cambridge US Private Equity Index return was not yet available for the quarter. A flat return of 0% was assumed for the index.

For the third quarter, the Consequent Capital Management GrayCo Alternative Partners I portfolio returned 0.8%. Over the trailing year, the account returned 1.1%, which was 13.1% less than the benchmark's 14.2% return. Since March 2012, the account returned 4.8% annualized, while the Cambridge US Private Equity returned an annualized 13.0% over the same period.

### **EXECUTIVE SUMMARY**

PERFORMANCE SUMMARY							
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year	Since 03/12
Total Portfolio - Gross	0.8	1.1	-4.9	3.1			4.8
Total Portfolio - Net	0.5	0.1	-5.8	2.1			3.4
Cambridge PE	0.0	14.2	13.2	12.7	13.7	11.6	13.0
Private Equity - Gross	0.8	1.1	-4.9	3.1			4.8
Cambridge PE	0.0	14.2	13.2	12.7	13.7	11.6	13.0

ASSET ALLOCATION					
Private Equity	100.0%	\$ 5,172,472			
Total Portfolio	100.0%	\$ 5,172,472			

### INVESTMENT RETURN

 Market Value 6/2018
 \$ 5,373,925

 Contribs / Withdrawals
 -242,815

 Income
 0

 Capital Gains / Losses
 41,362

 Market Value 9/2018
 \$ 5,172,472

# **EXECUTIVE SUMMARY - USING LAGGED DATA**

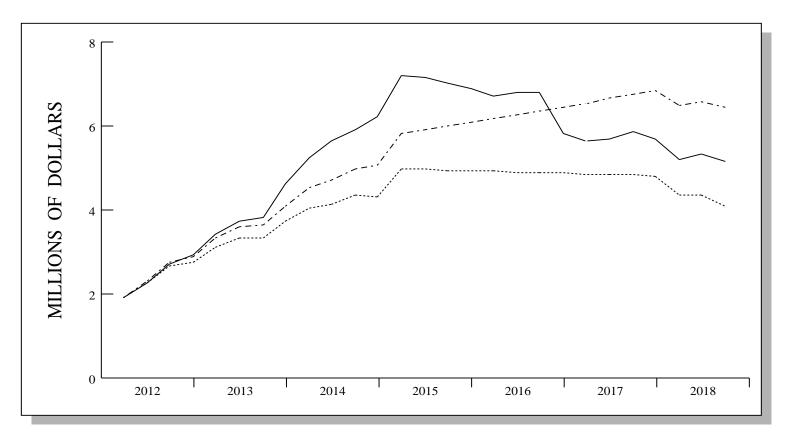
PERFORMANCE SUMMARY							
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year	Since 06/12
Total Portfolio - Gross	2.9	3.5	-5.7	3.5			4.8
Total Portfolio - Net	2.6	2.5	-6.6	2.5			3.5
Cambridge PE (Lag)	5.8	18.7	12.7	13.8	13.0	10.9	13.5
Private Equity - Gross	2.9	3.5	-5.7	3.5			4.8
Cambridge PE (Lag)	5.8	18.7	12.7	13.8	13.0	10.9	13.5

ASSET ALLOCATION						
Private Equity	100.0%	\$ 5,373,925				
Total Portfolio	100.0%	\$ 5,373,925				

### INVESTMENT RETURN

Market Value 6/2018	\$ 5,235,751
Contribs / Withdrawals	- 12,547
Income	0
Capital Gains / Losses	150,721
Market Value 9/2018	\$ 5,373,925

### **INVESTMENT GROWTH**



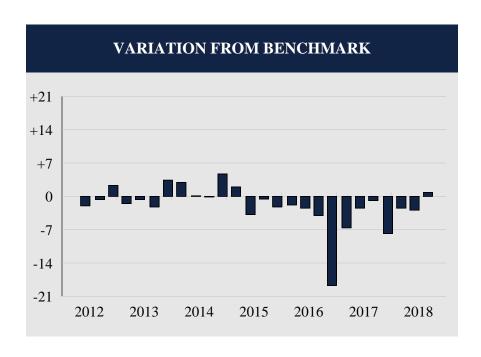
----- ACTUAL RETURN
----- BLENDED RATE
----- 0.0%

VALUE ASSUMING
BLENDED RATE \$ 6,484,462

	LAST QUARTER	PERIOD 3/12 - 9/18
BEGINNING VALUE NET CONTRIBUTIONS INVESTMENT RETURN ENDING VALUE	\$ 5,373,925 -242,815 41,362 \$ 5,172,472	\$ 1,931,469 2,183,419 1,057,584 \$ 5,172,472
INCOME CAPITAL GAINS (LOSSES) INVESTMENT RETURN	$ \begin{array}{r} 0 \\ 41,362 \\ \hline 41,362 \end{array} $	$ \begin{array}{r} 0 \\ 1,057,584 \\ \hline 1,057,584 \end{array} $

# TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: CAMBRIDGE US PRIVATE EQUITY



<b>Total Quarters Observed</b>	26
Quarters At or Above the Benchmark	7
<b>Quarters Below the Benchmark</b>	19
Batting Average	.269

RATES OF RETURN						
Date	Portfolio	Benchmark	Difference			
6/12	-2.1	-0.1	-2.0			
9/12	3.0	3.7	-0.7			
12/12	6.1	3.8	2.3			
3/13	3.1	4.6	-1.5			
6/13	2.4	3.1	-0.7			
9/13	2.9	5.1	-2.2			
12/13	10.3	6.9	3.4			
3/14	6.0	3.1	2.9			
6/14	5.5	5.4	0.1			
9/14	1.4	1.5	-0.1			
12/14	5.6	0.9	4.7			
3/15	4.6	2.6	2.0			
6/15	0.0	3.8	-3.8			
9/15	-2.0	-1.4	-0.6			
12/15	-1.7	0.5	-2.2			
3/16	-1.8	0.0	-1.8			
6/16	1.5	4.0	-2.5			
9/16	-0.1	3.9	-4.0			
12/16	-14.1	4.6	-18.7			
3/17	-2.7	3.9	-6.6			
6/17	1.0	3.5	-2.5			
9/17	3.1	4.0	-0.9			
12/17	-2.7	5.1	-7.8			
3/18	0.2	2.7	-2.5			
6/18	2.9	5.8	-2.9			
9/18	0.8	0.0	0.8			

# Private Equity Investor Report Consequent - GrayCo Alternative Partners I

 Net IRR Since Inception:
 2.08%
 Report as of:

 Market Value:
 \$ 5,172,472
 9/30/2018

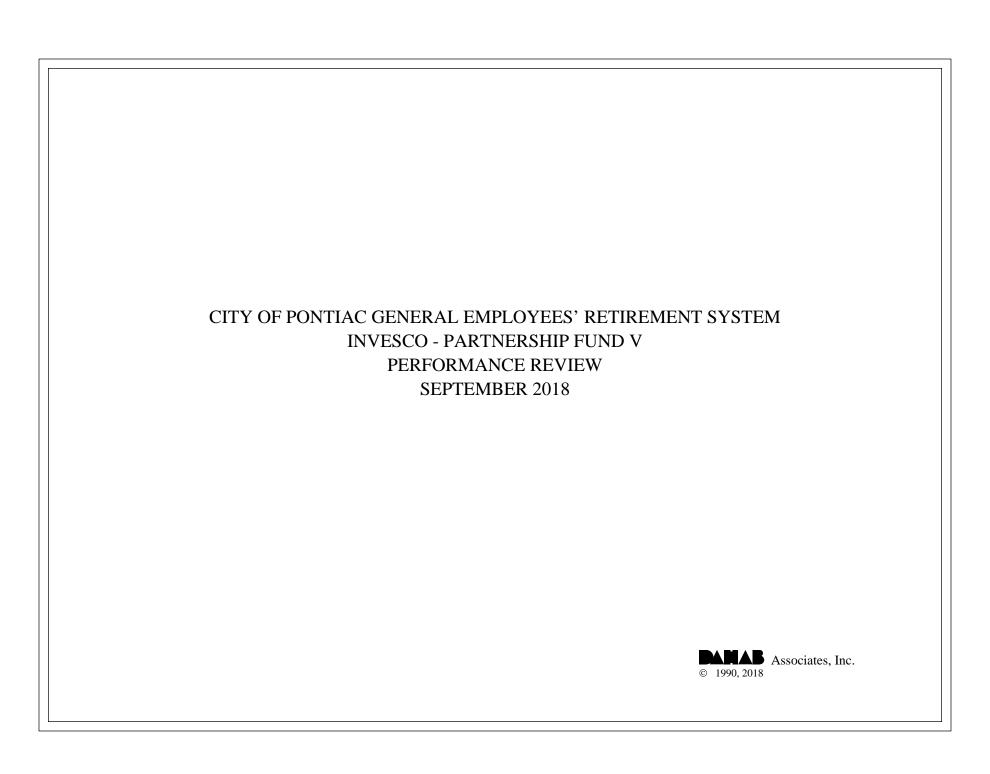
 Total Commitment:
 \$ 6,000,000
 Last Statement:

 Unfunded Commitment:
 \$ 746,557
 6/30/2018

The remaining committment will not be called.

<b>Quarter</b>	Capital Calls	<b>Distributions</b>	<u>Fees</u>
1Q 2012	\$ 1,997,816	\$ -	\$ 22,663
2Q 2012	\$ 392,928	\$ -	\$ 15,000
3Q 2012	\$ 410,345	\$ -	\$ 15,000
4Q 2012	\$ 76,384	\$ -	\$ 15,000
1Q 2013	\$ 401,449	\$ -	\$ 15,000
2Q 2013	\$ 218,391	\$ -	\$ 15,000
3Q 2013	\$ -	\$ -	\$ 15,000
4Q 2013	\$ 412,644	\$ -	\$ 15,000
1Q 2014	\$ 354,023	\$ -	\$ 15,000
2Q 2014	\$ 114,943	\$ -	\$ 15,000
3Q 2014	\$ 206,897	\$ -	\$ 15,000
4Q 2014	\$ -	\$ -	\$ 15,000
1Q 2015	\$ 667,623	\$ -	\$ 15,000
2Q 2015	\$ -	\$ -	\$ 15,000
3Q 2015	\$ -	\$ -	\$ 15,000
4Q 2015	\$ -	\$ -	\$ 15,000
Year 2016	\$ -	\$ -	\$ 60,000
Year 2017	\$ -	\$ -	\$ 59,310
2018 YTD	\$ -	\$ 689,655	\$ 38,243
Total	\$ 5,253,443	\$ 689,655	\$ 405,216

A current quarter fee was estimated.



#### **INVESTMENT RETURN**

The most recent statement available at this time was June 2018. That value was carried forward and adjusted for distributions.

On September 30th, 2018, the City of Pontiac General Employees' Retirement System's Invesco Partnership Fund V portfolio was valued at \$1,348,688, a decrease of \$619,828 from the June ending value of \$1,968,516. Last quarter, the account recorded total net withdrawals of \$619,828 in contrast to flat net investment returns.

#### **RELATIVE PERFORMANCE**

#### **Total Fund**

The Cambridge US Private Equity Index return was not yet available for the quarter. A flat return of 0% was assumed for the index.

Over the trailing year, the portfolio returned 15.6%, which was 1.4% above the benchmark's 14.2% return. Since March 2008, the portfolio returned 13.5% annualized, while the Cambridge US Private Equity returned an annualized 10.4% over the same period.

# **EXECUTIVE SUMMARY**

PERFORMANCE SUMMARY							
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year	Since 03/08
Total Portfolio - Gross	0.0	15.6	12.2	14.3	14.3	15.1	13.5
Total Portfolio - Net	-0.2	14.5	11.2	13.3	13.2	13.4	11.7
Cambridge PE	0.0	14.2	13.2	12.7	13.7	11.6	10.4
Private Equity - Gross	0.0	15.6	12.2	14.3	14.3	15.1	13.5
Cambridge PE	0.0	14.2	13.2	12.7	13.7	11.6	10.4

ASSET ALLOCATION						
Private Equity	100.0%	\$ 1,348,688				
Total Portfolio	100.0%	\$ 1,348,688				

# INVESTMENT RETURN

Market Value 6/2018	\$ 1,968,516
Contribs / Withdrawals	-619,828
Income	0
Capital Gains / Losses	0
Market Value 9/2018	\$ 1,348,688

### **EXECUTIVE SUMMARY - USING LAGGED DATA**

PERFORMANCE SUMMARY							
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year	Since 06/08
Total Portfolio - Gross	3.4	20.6	12.2	15.6	14.8	15.0	13.9
Total Portfolio - Net	3.1	19.6	11.2	14.5	13.7	13.2	12.0
Cambridge PE (Lag)	5.8	18.7	12.7	13.8	13.0	10.9	10.7
Private Equity - Gross	3.4	20.6	12.2	15.6	14.8	15.0	13.9
Cambridge PE (Lag)	5.8	18.7	12.7	13.8	13.0	10.9	10.7

ASSET ALLOCATION						
Private Equity	100.0%	\$ 1,968,516				
Total Portfolio	100.0%	\$ 1,968,516				

### INVESTMENT RETURN

 Market Value 6/2018
 \$ 1,908,668

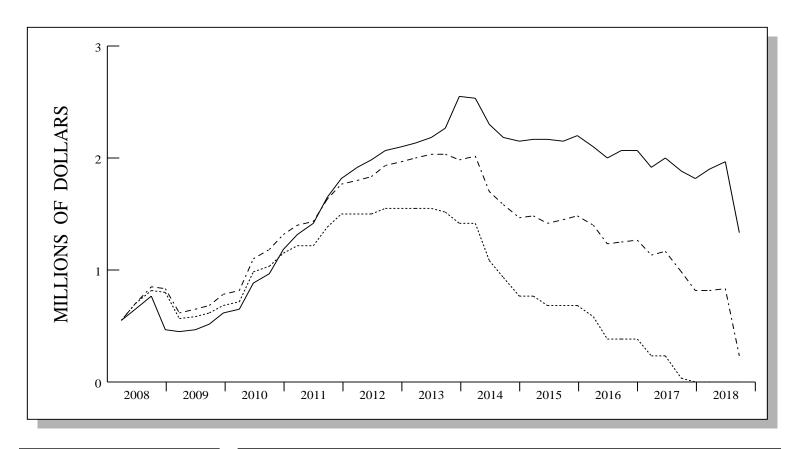
 Contribs / Withdrawals
 0

 Income
 0

 Capital Gains / Losses
 59,848

 Market Value 9/2018
 \$ 1,968,516

### **INVESTMENT GROWTH**



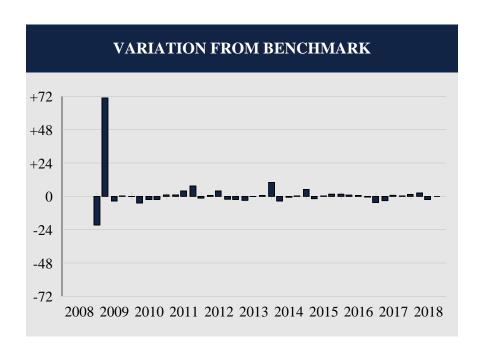
----- ACTUAL RETURN
----- BLENDED RATE
----- 0.0%

VALUE ASSUMING
BLENDED RATE \$ 239,111

	LAST QUARTER	PERIOD 3/08 - 9/18
BEGINNING VALUE NET CONTRIBUTIONS INVESTMENT RETURN ENDING VALUE	\$ 1,968,516 -619,828 0 \$ 1,348,688	\$ 553,119 -1,316,654 2,112,223 \$ 1,348,688
INCOME CAPITAL GAINS (LOSSES) INVESTMENT RETURN	0 0	$ \begin{array}{r} 15,714 \\ 2,096,509 \\ \hline 2,112,223 \end{array} $

# TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY - 10 YEARS

COMPARATIVE BENCHMARK: CAMBRIDGE US PRIVATE EQUITY



<b>Total Quarters Observed</b>	40
Quarters At or Above the Benchmark	22
Quarters Below the Benchmark	18
Batting Average	.550

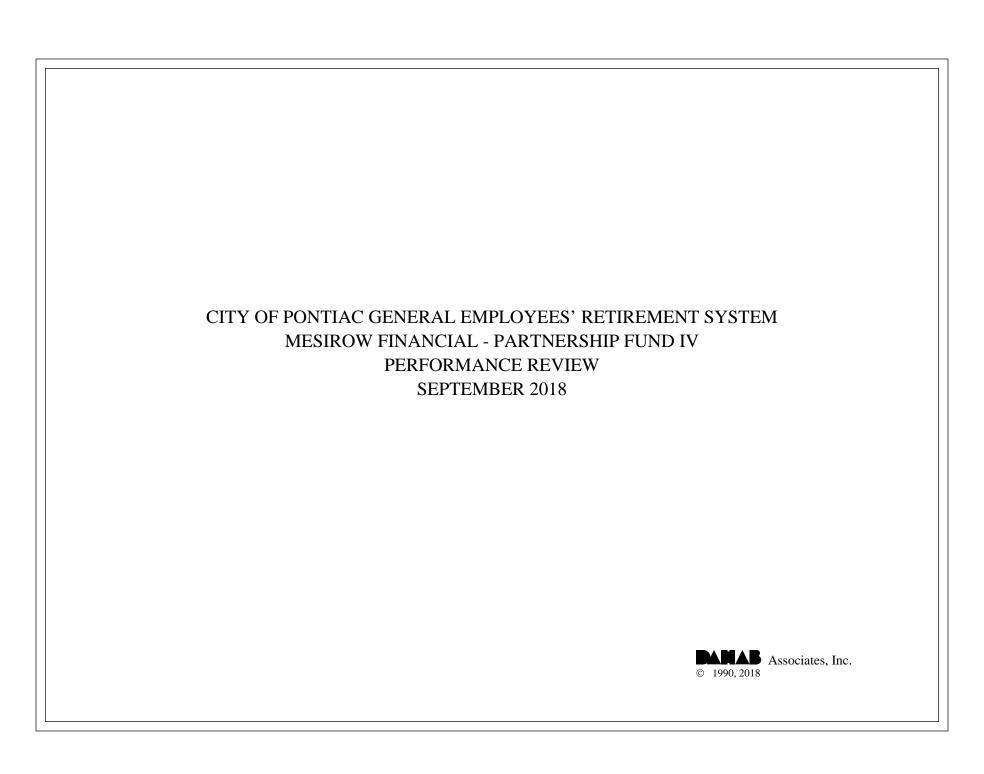
RATES OF RETURN								
Date	Portfolio	Benchmark	Difference					
Date  12/08 3/09 6/09 9/09 12/09 3/10 6/10 9/10 12/10 3/11 6/11 9/11 12/11 3/12 6/12 9/12 12/12 3/13 6/13 9/13 12/13 3/14 6/14 9/14 12/14 3/15 6/15 9/15 12/15 3/16	Portfolio  -36.6 67.5 1.1 6.0 5.8 -0.5 -0.8 2.9 10.2 6.3 8.5 3.3 4.0 6.1 3.7 1.6 1.6 1.7 3.0 5.7 17.0 -0.3 4.7 1.7 5.9 0.9 4.1 0.1 2.0 0.9	-16.0 -3.3 -4.5 5.8 6.0 4.4 1.6 5.1 9.1 5.2 4.6 -4.2 5.3 5.4 -0.1 3.7 3.8 4.6 3.1 5.1 6.9 3.1 5.4 1.5 0.9 2.6 3.8 -1.4 0.5 0.0	-20.6 70.8 -3.4 0.2 -0.2 -4.9 -2.4 -2.2 1.1 1.1 3.9 7.5 -1.3 0.7 3.8 -2.1 -2.2 -2.9 -0.1 0.6 10.1 -3.4 -0.7 0.2 5.0 -1.7 0.3 1.5 1.5					
6/16 9/16 12/16 3/17 6/17 9/17 12/17	4.7 3.3 0.1 0.7 4.3 4.3 6.4	4.0 3.9 4.6 3.9 3.5 4.0 5.1	0.7 -0.6 -4.5 -3.2 0.8 0.3 1.3					
3/18 6/18 9/18	5.1 3.4 0.0	2.7 5.8 0.0	2.4 -2.4 0.0					

# Private Equity Investor Report Invesco Partnership Fund V

Net IRR Since Inception:13.00%Report as of:Market Value:\$ 1,348,6889/30/2018Total Commitment:\$ 2,500,000Last Statement:

**Unfunded Commitment:** \$ **993,643** 6/30/2018

			R	<u>efunded</u>			<u>Ir</u>	terest	
<u>Year</u>	Ca	pital Calls	<u>Cap</u>	ital Calls	Dis	<u>stributions</u>	Receiv	ed / (Paid)	Fees
2008	\$	883,926	\$	143,530	\$	-	\$	5,964	\$ 17,640
2009	\$	136,479	\$	239,887	\$	-	\$	9,800	\$ 19,408
2010	\$	525,344	\$	60,968	\$	-	\$	36	\$ 21,590
2011	\$	342,835	\$	-	\$	-	\$	-	\$ 21,632
2012	\$	62,158	\$	-	\$	-	\$	-	\$ 21,632
2013	\$	-	\$	-	\$	136,226	\$	-	\$ 21,632
2014	\$	-	\$	-	\$	647,073	\$	-	\$ 21,632
2015	\$	-	\$	-	\$	90,817	\$	-	\$ 21,507
2016	\$	-	\$	-	\$	295,157	\$	-	\$ 19,468
2017	\$	-	\$	-	\$	538,936	\$	-	\$ 17,524
2018	\$	-	\$	-	\$	619,828	\$	-	\$ 12,303
Total	\$	1,950,742	\$	444,385	\$	2,328,037	\$	15,800	\$ 215,968



The most recent statement available at this time was June 30, 2018. The market value has been adjusted for the capital portion of the distribution. The return shown for the quarter results from the income portion of the distribution.

On September 30th, 2018, the City of Pontiac General Employees' Retirement System's Mesirow Financial Partnership Fund IV portfolio was valued at \$2,655,571, a decrease of \$50,000 from the June ending value of \$2,705,571. Last quarter, the account recorded a net withdrawal of \$107,380, which overshadowed the fund's net investment return of \$57,380. Barring income receipts during the third quarter, the portfolio's net investment return figure was the product of \$57,380 in realized and unrealized capital gains.

#### **RELATIVE PERFORMANCE**

#### **Total Fund**

The Cambridge US Private Equity Index return was not yet available for the quarter. A flat return of 0% was assumed for the index.

Over the trailing twelve-month period, the account returned 10.1%, which was 4.1% below the benchmark's 14.2% performance. Since March 2007, the portfolio returned 8.9% per annum, while the Cambridge US Private Equity returned an annualized 10.4% over the same period.

PERFORMANCE SUMMARY							
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year	Since 03/07
Total Portfolio - Gross	2.2	10.1	12.2	14.6	14.1	11.8	8.9
Total Portfolio - Net	1.9	9.0	9.3	12.5	12.2	8.4	4.8
Cambridge PE	0.0	14.2	13.2	12.7	13.7	11.6	10.4
Private Equity - Gross	2.2	10.1	12.2	14.6	14.1	11.8	8.9
Cambridge PE	0.0	14.2	13.2	12.7	13.7	11.6	10.4

ASSET ALLOCATION					
Private Equity	100.0%	\$ 2,655,571			
Total Portfolio	100.0%	\$ 2,655,571			

## INVESTMENT RETURN

 Market Value 6/2018
 \$ 2,705,571

 Contribs / Withdrawals
 -107,380

 Income
 0

 Capital Gains / Losses
 57,380

 Market Value 9/2018
 \$ 2,655,571

### **EXECUTIVE SUMMARY - USING LAGGED DATA**

PERFORMANCE SUMMARY							
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year	Since 06/07
Total Portfolio - Gross	4.9	11.8	11.3	15.2	13.5	10.9	8.9
Total Portfolio - Net	4.6	10.7	9.5	13.1	11.5	7.4	4.7
Cambridge PE (Lag)	5.8	18.7	12.7	13.8	13.0	10.9	10.6
<b>Private Equity - Gross</b>	4.9	11.8	11.3	15.2	13.5	10.9	8.9
Cambridge PE (Lag)	5.8	18.7	12.7	13.8	13.0	10.9	10.6

ASSET A	ALLOCA	TION
Private Equity	100.0%	\$ 2,705,571
Total Portfolio	100.0%	\$ 2,705,571

## INVESTMENT RETURN

 Market Value 6/2018
 \$ 2,779,659

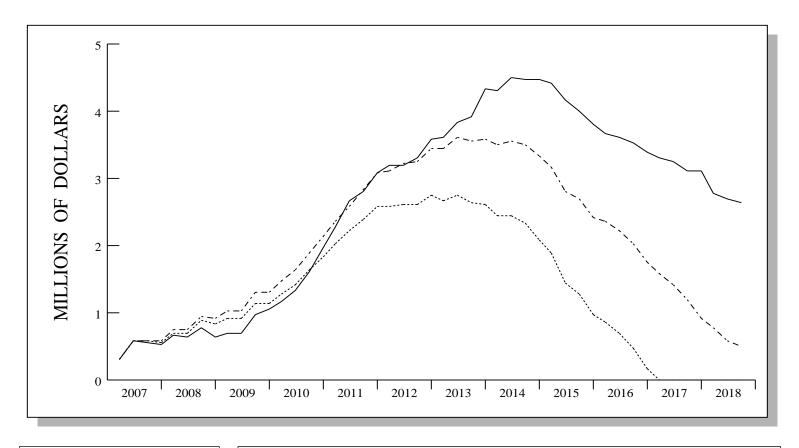
 Contribs / Withdrawals
 -207,380

 Income
 0

 Capital Gains / Losses
 133,292

 Market Value 9/2018
 \$ 2,705,571

## **INVESTMENT GROWTH**



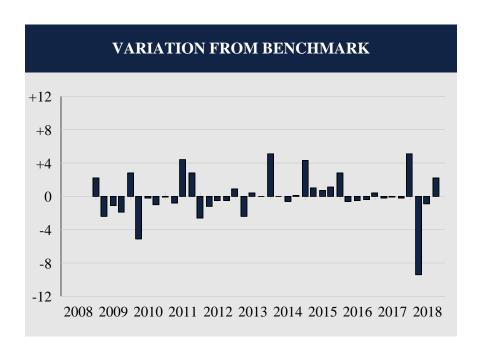
----- ACTUAL RETURN
----- BLENDED RATE
----- 0.0%

VALUE ASSUMING
BLENDED RATE \$ 506,837

	LAST QUARTER	PERIOD 3/07 - 9/18
BEGINNING VALUE NET CONTRIBUTIONS INVESTMENT RETURN ENDING VALUE	$\begin{array}{r} \$ \ 2,705,571 \\ -107,380 \\ \hline 57,380 \\ \$ \ 2,655,571 \end{array}$	$\begin{array}{c} \$\ 315,118 \\ -1,537,758 \\ \hline 3,878,211 \\ \$\ 2,655,571 \end{array}$
INCOME CAPITAL GAINS (LOSSES) INVESTMENT RETURN	$\frac{0}{57,380}$ 57,380	25,752 3,852,459 3,878,211

## TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY - 10 YEARS

COMPARATIVE BENCHMARK: CAMBRIDGE US PRIVATE EQUITY



Total Quarters Observed	40
Quarters At or Above the Benchmark	18
<b>Quarters Below the Benchmark</b>	22
<b>Batting Average</b>	.450

	RATES	S OF RETURN	
Date	Portfolio	Benchmark	Difference
12/08	-13.8	-16.0	2.2
3/09	-5.7	-3.3	-2.4
6/09	3.4	4.5	-1.1
9/09	3.9	5.8	-1.9
12/09	8.8	6.0	2.8
3/10	-0.7	4.4	-5.1
6/10	1.4	1.6	-0.2
9/10	4.1	5.1	-1.0
12/10	9.0	9.1	-0.1
3/11	4.4	5.2	-0.8
6/11	9.0	4.6	4.4
9/11	-1.4	-4.2	2.8
12/11	2.7	5.3	-2.6
3/12	4.2	5.4	-1.2
6/12	-0.6	-0.1	-0.5
9/12	3.2	3.7	-0.5
12/12	4.7	3.8	0.9
3/13	2.2	4.6	-2.4
6/13	3.5	3.1	0.4
9/13	5.1	5.1	0.0
12/13	12.0	6.9	5.1
3/14	3.1	3.1	0.0
6/14	4.8	5.4	-0.6
9/14	1.6	1.5	0.1
12/14	5.2	0.9	4.3
3/15	3.6	2.6	1.0
6/15	4.5	3.8	0.7
9/15	-0.3	-1.4	1.1
12/15	3.3	0.5	2.8
3/16	-0.6	0.0	-0.6
6/16	3.5	4.0	-0.5
9/16	3.5	3.9	-0.4
12/16	5.0	4.6	0.4
3/17	3.7	3.9	-0.2
6/17	3.4	3.5	-0.1
9/17	3.8	4.0	-0.2
12/17	10.2	5.1	5.1
3/18	-6.7	2.7	-9.4
6/18	4.9	5.8	-0.9
9/18	2.2	0.0	2.2

# Private Equity Investor Report Mesirow Partnership Fund IV

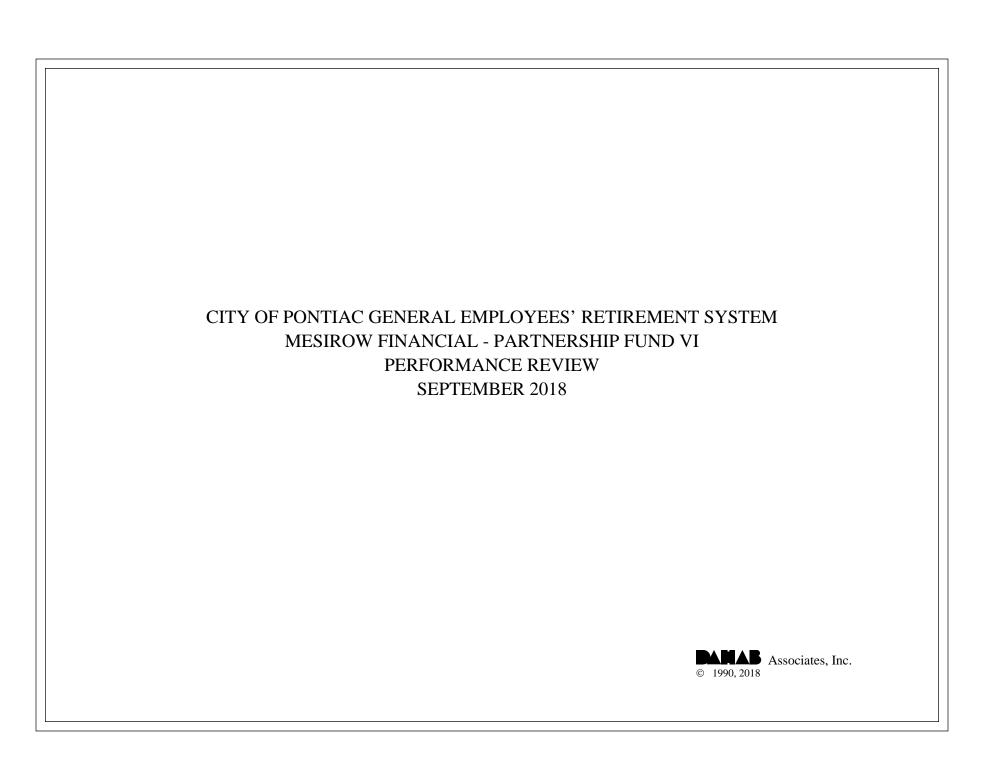
 Net IRR Since Inception:
 10.28%
 Report as of:

 Market Value:
 \$ 2,655,571
 9/30/2018

 Total Commitment:
 \$ 5,000,000
 Last Statement:

 Unfunded Commitment:
 \$ 275,000
 6/30/2018

				<u>I</u> 1	<u>nterest</u>	
<b>Year</b>	_(	Capital Calls	<b>Distributions</b>	Receiv	ved / (Paid)	<b>Fees</b>
2007	\$	650,000	\$ -	\$	(3,682)	\$ 55,753
2008	\$	350,000	\$ -	\$	25,752	\$ 50,000
2009	\$	350,000	\$ -	\$	-	\$ 50,000
2010	\$	750,000	\$ -	\$	-	\$ 50,000
2011	\$	800,000	\$ -	\$	-	\$ 50,000
2012	\$	400,000	\$ 200,000	\$	-	\$ 50,000
2013	\$	350,000	\$ 425,000	\$	-	\$ 50,000
2014	\$	650,000	\$ 1,125,000	\$	-	\$ 45,000
2015	\$	200,000	\$ 1,275,000	\$	-	\$ 40,500
2016	\$	125,000	\$ 898,720	\$	-	\$ 36,448
2017	\$	100,000	\$ 1,023,898	\$	-	\$ 32,800
2018	\$	-	\$ 425,000	\$	-	\$ 22,140
Total	\$	4,725,000	\$ 5,372,618	\$	22,070	\$ 532,641



The most recent statement available at this time was June 30, 2018. The market value has been adjusted for capital calls and a flat return was assumed for the quarter.

On September 30th, 2018, the City of Pontiac General Employees' Retirement System's Mesirow Financial Partnership Fund VI portfolio was valued at \$2,375,537, representing a \$135,000 increase over the June quarter's ending value of \$2,240,537. Over the last three months, the fund posted \$150,000 in total net contributions, which overshadowed the account's \$15,000 net investment loss that was sustained during the quarter. Since there were no income receipts during the period, net investment losses were entirely made up of capital losses (realized and unrealized).

#### **RELATIVE PERFORMANCE**

#### **Total Fund**

The Cambridge US Private Equity Index return was not yet available for the quarter. A flat return of 0% was assumed for the index.

Over the trailing year, the account returned 21.3%, which was 7.1% greater than the benchmark's 14.2% performance. Since June 2013, the Mesirow Financial Partnership Fund VI portfolio returned 12.2% on an annualized basis, while the Cambridge US Private Equity returned an annualized 13.1% over the same period.

PERFORMANCE SUMMARY							
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year	Since 06/13
Total Portfolio - Gross	0.0	21.3	15.6	11.9			12.2
Total Portfolio - Net	-0.3	19.5	12.3	3.4			2.8
Cambridge PE	0.0	14.2	13.2	12.7	13.7	11.6	13.1
Private Equity - Gross	0.0	21.3	15.6	11.9			12.2
Cambridge PE	0.0	14.2	13.2	12.7	13.7	11.6	13.1

ASSET ALLOCATION					
Private Equity	100.0%	\$ 2,375,537			
Total Portfolio	100.0%	\$ 2,375,537			

## INVESTMENT RETURN

 Market Value 6/2018
 \$ 2,240,537

 Contribs / Withdrawals
 150,000

 Income
 0

 Capital Gains / Losses
 -15,000

 Market Value 9/2018
 \$ 2,375,537

## **EXECUTIVE SUMMARY - USING LAGGED DATA**

PERFORMANCE SUMMARY						
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year
Total Portfolio - Gross	6.7	24.5	15.8	12.9		
Total Portfolio - Net	6.4	22.4	11.8	3.1		
Cambridge PE (Lag)	5.8	18.7	12.7	13.8	13.0	10.9
Private Equity - Gross	6.7	24.5	15.8	12.9		
Cambridge PE (Lag)	5.8	18.7	12.7	13.8	13.0	10.9

ASSET A	ALLOCA	TION
Private Equity	100.0%	\$ 2,240,537
Total Portfolio	100.0%	\$ 2,240,537

## INVESTMENT RETURN

 Market Value 6/2018
 \$ 2,014,820

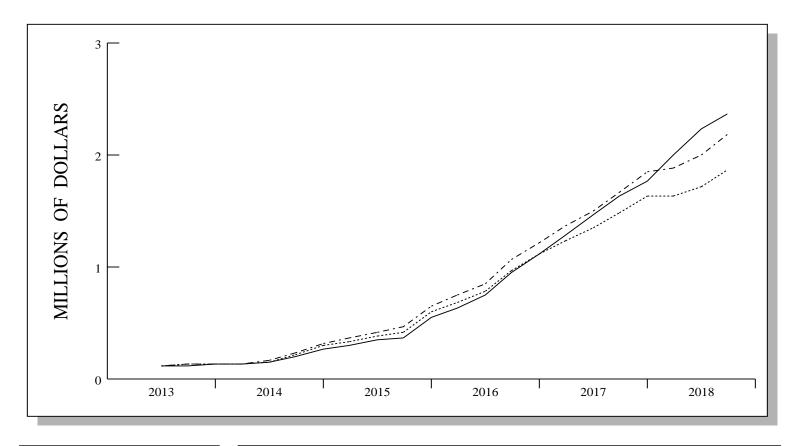
 Contribs / Withdrawals
 90,028

 Income
 0

 Capital Gains / Losses
 135,689

 Market Value 9/2018
 \$ 2,240,537

## **INVESTMENT GROWTH**



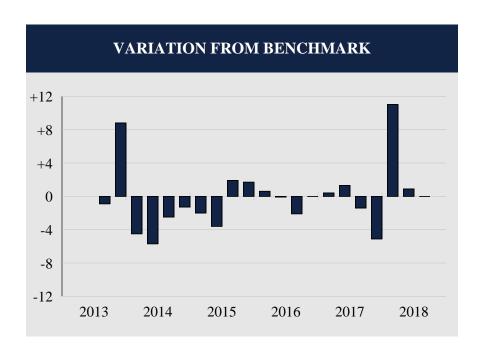
ACTUAL RETURN
BLENDED RATE
0.0%

VALUE ASSUMING
BLENDED RATE \$ 2,193,931

	LAST QUARTER	PERIOD 6/13 - 9/18
BEGINNING VALUE NET CONTRIBUTIONS INVESTMENT RETURN ENDING VALUE	$\begin{array}{c} \$ \ 2,240,537 \\ 150,000 \\ -15,000 \\ \hline \$ \ 2,375,537 \end{array}$	\$ 120,000 1,761,855 493,682 \$ 2,375,537
INCOME CAPITAL GAINS (LOSSES) INVESTMENT RETURN	- 15,000 - 15,000	493,682 493,682

# TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: CAMBRIDGE US PRIVATE EQUITY



<b>Total Quarters Observed</b>	21
Quarters At or Above the Benchmark	10
Quarters Below the Benchmark	11
Batting Average	.476

RATES OF RETURN					
Date	Portfolio	Benchmark	Difference		
9/13	4.2	5.1	-0.9		
12/13	15.7	6.9	8.8		
3/14	-1.4	3.1	-4.5		
6/14	-0.3	5.4	-5.7		
9/14	-1.0	1.5	-2.5		
12/14	-0.4	0.9	-1.3		
3/15	0.6	2.6	-2.0		
6/15	0.2	3.8	-3.6		
9/15	0.5	-1.4	1.9		
12/15	2.2	0.5	1.7		
3/16	0.6	0.0	0.6		
6/16	3.9	4.0	-0.1		
9/16	1.8	3.9	-2.1		
12/16	4.6	4.6	0.0		
3/17	4.3	3.9	0.4		
6/17	4.8	3.5	1.3		
9/17	2.6	4.0	-1.4		
12/17	0.0	5.1	-5.1		
3/18	13.7	2.7	11.0		
6/18	6.7	5.8	0.9		
9/18	0.0	0.0	0.0		

## Private Equity Investor Report Mesirow Partnership Fund VI

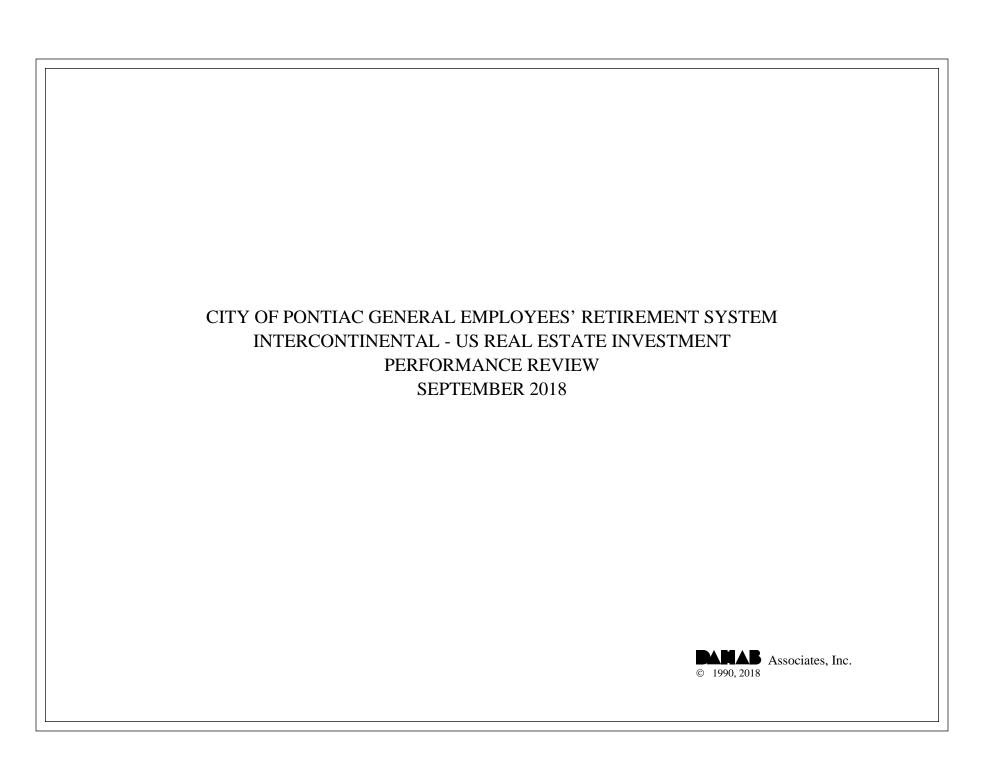
 Net IRR Since Inception:
 12.17%
 Report as of:

 Market Value:
 \$ 2,375,537
 9/30/2018

 Total Commitment:
 \$ 3,000,000
 Last Statement:

 Unfunded Commitment:
 \$ 1,050,000
 6/30/2018

**Distributions** Quarter **Capital Calls** Fees 2Q 2013 \$ 120,000 \$ \$ 3Q 2013 15,000 \$ 7,500 \$ \$ 4Q 2013 \$ \$ \$ 7,500 1Q 2014 7,500 \$ \$ \$ 2Q 2014 \$ 30,000 \$ \$ 7,500 3Q 2014 \$ 60,000 \$ \$ 7,500 7,500 4Q 2014 \$ 75,000 \$ \$ 1Q 2015 \$ 45,000 \$ \$ 7,500 2Q 2015 \$ 45,000 \$ \$ 7,500 3Q 2015 \$ 45,000 8,173 \$ 7,500 \$ 4Q 2015 180,000 7,500 \$ \$ \$ 1Q 2016 90,000 7,500 \$ \$ \$ 2Q 2016 \$ 90,000 \$ \$ 7,500 3Q 2016 \$ 195,000 \$ 7,500 \$ 4Q 2016 135,000 7,500 \$ \$ \$ 1Q 2017 \$ 120,000 \$ \$ 7,500 2Q 2017 7,500 \$ 120,000 \$ \$ 3Q 2017 \$ 135,000 \$ \$ 7,500 4Q 2017 \$ 7,500 \$ 150,000 \$ 1Q 2018 \$ \$ \$ 7,500 2Q 2018 150,000 7,500 \$ \$ 59,972 \$ 3Q 2018 \$ 150,000 \$ \$ 7,500 \$ \$ **Total** 1,950,000 \$ 68,145 157,500



On September 30th, 2018, the City of Pontiac General Employees' Retirement System's Intercontinental US Real Estate Investment portfolio was valued at \$5,318,249, representing an increase of \$74,944 from the June quarter's ending value of \$5,243,305. Last quarter, the Fund posted withdrawals totaling \$55,803, which offset the portfolio's net investment return of \$130,747. 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 \$130,747.

#### RELATIVE PERFORMANCE

#### **Total Fund**

During the third quarter, the Intercontinental US Real Estate Investment account returned 2.5%, which was 0.4% above the NCREIF NFI-ODCE Index's return of 2.1%.

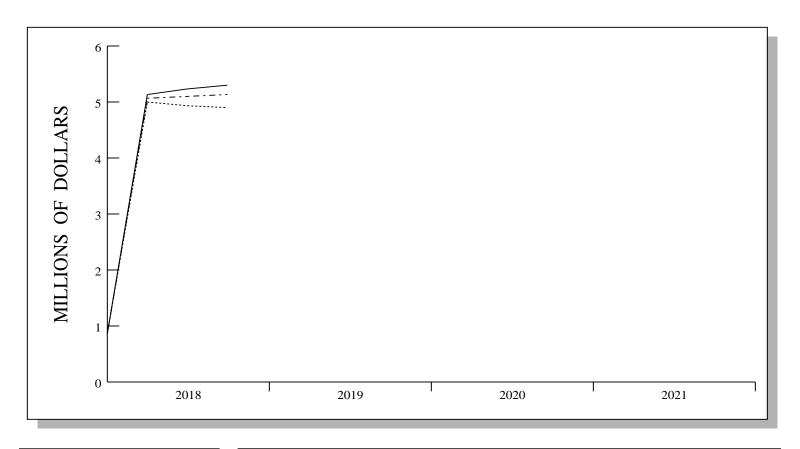
PERFORMANCE SUMMARY							
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year	Since 12/17
Total Portfolio - Gross	2.5						8.4
Total Portfolio - Net	2.3						7.5
NCREIF ODCE	2.1	8.7	8.8	10.7	11.2	5.6	6.5
Real Estate - Gross	2.5						8.4
NCREIF ODCE	2.1	8.7	8.8	10.7	11.2	5.6	6.5

ASSET ALLOCATION				
Real Estate	100.0%	\$ 5,318,249		
Total Portfolio	100.0%	\$ 5,318,249		

# INVESTMENT RETURN

Market Value 6/2018	\$ 5,243,305
Contribs / Withdrawals	- 55,803
Income	0
Capital Gains / Losses	130,747
Market Value 9/2018	\$ 5,318,249

## **INVESTMENT GROWTH**



3

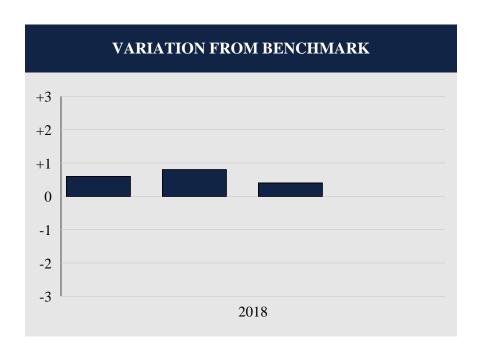
----- ACTUAL RETURN
----- BLENDED RATE
----- 0.0%

VALUE ASSUMING
BLENDED RATE \$ 5,154,343

	LAST QUARTER	PERIOD 12/17 - 9/18
BEGINNING VALUE NET CONTRIBUTIONS INVESTMENT RETURN ENDING VALUE	\$ 5,243,305 -55,803 130,747 \$ 5,318,249	\$ 881,489 4,026,170 410,590 \$ 5,318,249
INCOME CAPITAL GAINS (LOSSES) INVESTMENT RETURN	$ \begin{array}{r} 0 \\ 130,747 \\ \hline 130,747 \end{array} $	$ \begin{array}{r} 0 \\ 410,590 \\ \hline 410,590 \end{array} $

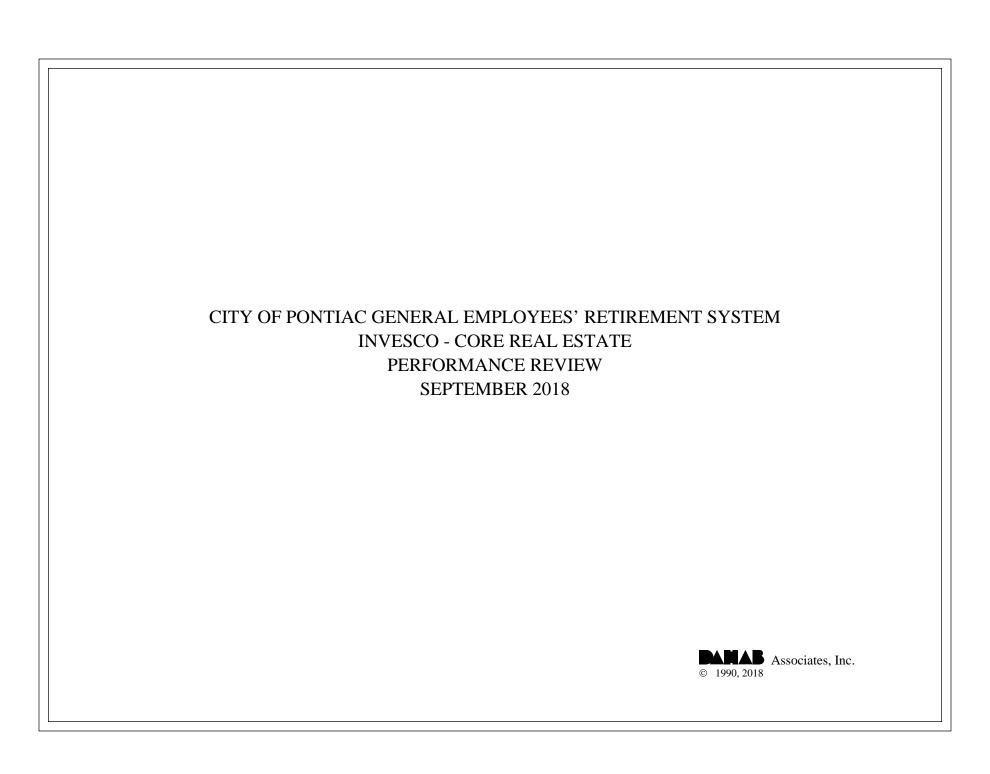
# TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

### COMPARATIVE BENCHMARK: NCREIF NFI-ODCE INDEX



Total Quarters Observed	3
Quarters At or Above the Benchmark	3
Quarters Below the Benchmark	0
Batting Average	1.000

RATES OF RETURN					
Date	Portfolio	Benchmark	Difference		
3/18	2.8	2.2	0.6		
6/18	2.8	2.0	0.8		
9/18	2.5	2.1	0.4		



On September 30th, 2018, the City of Pontiac General Employees' Retirement System's Invesco Core Real Estate portfolio was valued at \$16,235,574, representing an increase of \$273,096 from the June quarter's ending value of \$15,962,478. Last quarter, the Fund posted withdrawals totaling \$137,090, which offset the portfolio's net investment return of \$410,186. Income receipts totaling \$96,158 plus net realized and unrealized capital gains of \$314,028 combined to produce the portfolio's net investment return.

#### RELATIVE PERFORMANCE

#### **Total Fund**

For the third quarter, the Invesco Core Real Estate account gained 2.6%, which was 0.5% greater than the NCREIF NFI-ODCE Index's return of 2.1%. Over the trailing twelve-month period, the account returned 9.5%, which was 0.8% above the benchmark's 8.7% performance.

PERFORMANCE SUMMARY						
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year
Total Portfolio - Gross	2.6	9.5				
Total Portfolio - Net	2.3	8.3				
NCREIF ODCE	2.1	8.7	8.8	10.7	11.2	5.6
Real Estate - Gross	2.6	9.5				
NCREIF ODCE	2.1	8.7	8.8	10.7	11.2	5.6

ASSET ALLOCATION					
Real Estate	100.0%	\$ 16,235,574			
Total Portfolio	100.0%	\$ 16,235,574			

## INVESTMENT RETURN

 Market Value 6/2018
 \$ 15,962,478

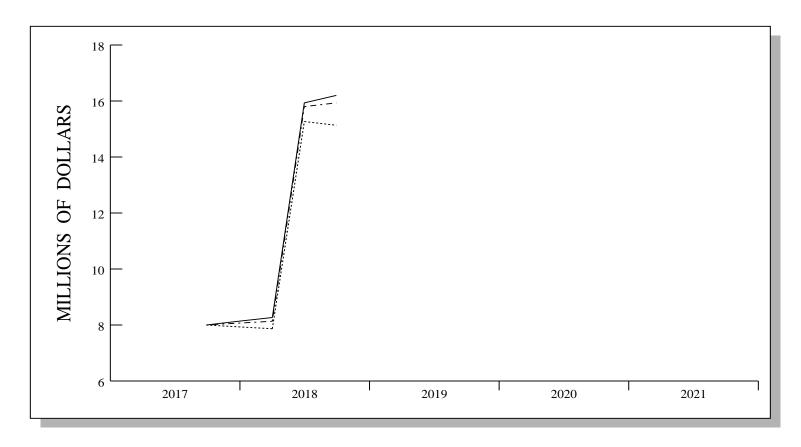
 Contribs / Withdrawals
 -137,090

 Income
 96,158

 Capital Gains / Losses
 314,028

 Market Value 9/2018
 \$ 16,235,574

## **INVESTMENT GROWTH**



----- ACTUAL RETURN
----- BLENDED RATE
----- 0.0%

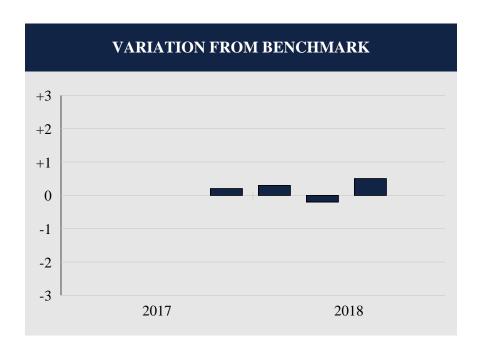
VALUE ASSUMING BLENDED RATE\$ 15,940,520

	LAST QUARTER	ONE YEAR
BEGINNING VALUE NET CONTRIBUTIONS INVESTMENT RETURN ENDING VALUE	\$ 15,962,478 -137,090 410,186 \$ 16,235,574	\$ 8,051,583 7,098,185 1,085,806 \$ 16,235,574
INCOME CAPITAL GAINS (LOSSES) INVESTMENT RETURN	$\frac{96,158}{314,028}\\ \hline 410,186$	277,076 808,730 1,085,806

3

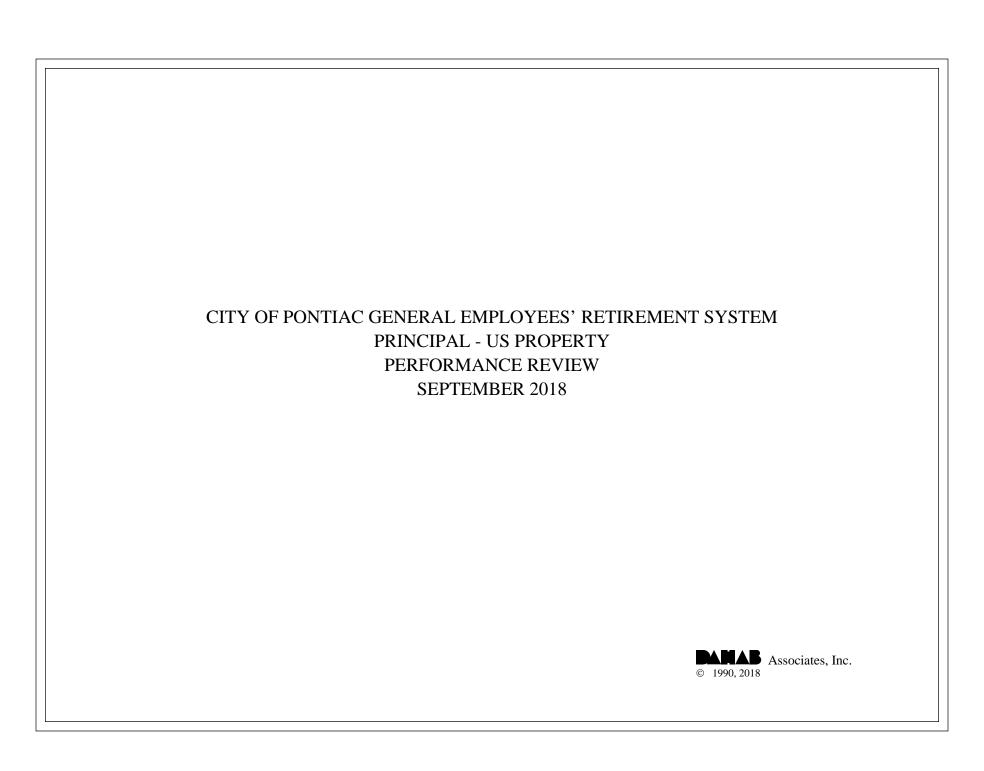
# TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

### COMPARATIVE BENCHMARK: NCREIF NFI-ODCE INDEX



Total Quarters Observed	4
Quarters At or Above the Benchmark	3
Quarters Below the Benchmark	1
Batting Average	.750

RATES OF RETURN					
Date	Portfolio	Benchmark	Difference		
12/17	2.3	2.1	0.2		
3/18	2.5	2.2	0.3		
6/18 9/18	1.8 2.6	2.0 2.1	-0.2 0.5		



On September 30th, 2018, the City of Pontiac General Employees' Retirement System's Principal US Property portfolio was valued at \$12,274,436, representing an increase of \$297,441 from the June quarter's ending value of \$11,976,995. Last quarter, the Fund posted no net contributions or withdrawals, while posting \$297,441 in net investment returns. Since there were no income receipts for the third quarter, the portfolio's net investment return was the result of net realized and unrealized capital gains totaling \$297,441.

### **RELATIVE PERFORMANCE**

#### **Total Fund**

During the third quarter, the Principal US Property portfolio returned 2.7%, which was 0.6% greater than the NCREIF NFI-ODCE Index's return of 2.1%.

PERFORMANCE SUMMARY							
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year	Since 12/17
Total Portfolio - Gross	2.7						7.6
Total Portfolio - Net	2.5						6.7
NCREIF ODCE	2.1	8.7	8.8	10.7	11.2	5.6	6.5
Real Estate - Gross	2.7						7.6
NCREIF ODCE	2.1	8.7	8.8	10.7	11.2	5.6	6.5

ASSET ALLOCATION				
Real Estate	100.0%	\$ 12,274,436		
Total Portfolio	100.0%	\$ 12,274,436		

## INVESTMENT RETURN

 Market Value 6/2018
 \$ 11,976,995

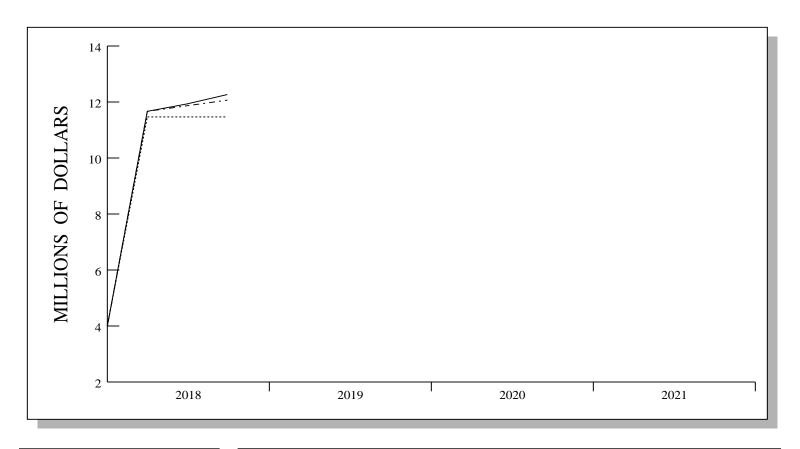
 Contribs / Withdrawals
 0

 Income
 0

 Capital Gains / Losses
 297,441

 Market Value 9/2018
 \$ 12,274,436

## **INVESTMENT GROWTH**



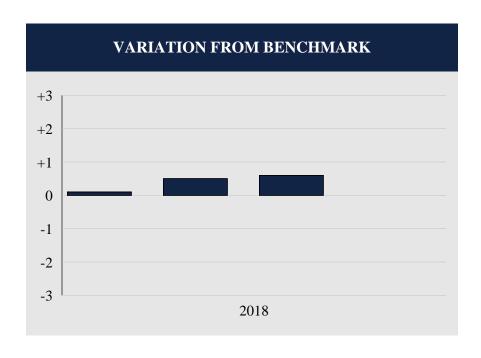
----- ACTUAL RETURN
----- BLENDED RATE
----- 0.0%

VALUE ASSUMING BLENDED RATE \$ 12,093,148

	LAST QUARTER	PERIOD 12/17 - 9/18
BEGINNING VALUE NET CONTRIBUTIONS INVESTMENT RETURN ENDING VALUE	\$ 11,976,995 0 297,441 \$ 12,274,436	\$ 4,015,901 7,500,000 758,535 \$ 12,274,436
INCOME CAPITAL GAINS (LOSSES) INVESTMENT RETURN	$ \begin{array}{r} 0 \\ 297,441 \\ \hline 297,441 \end{array} $	$ \begin{array}{r} 0 \\ 758,535 \\ \hline 758,535 \end{array} $

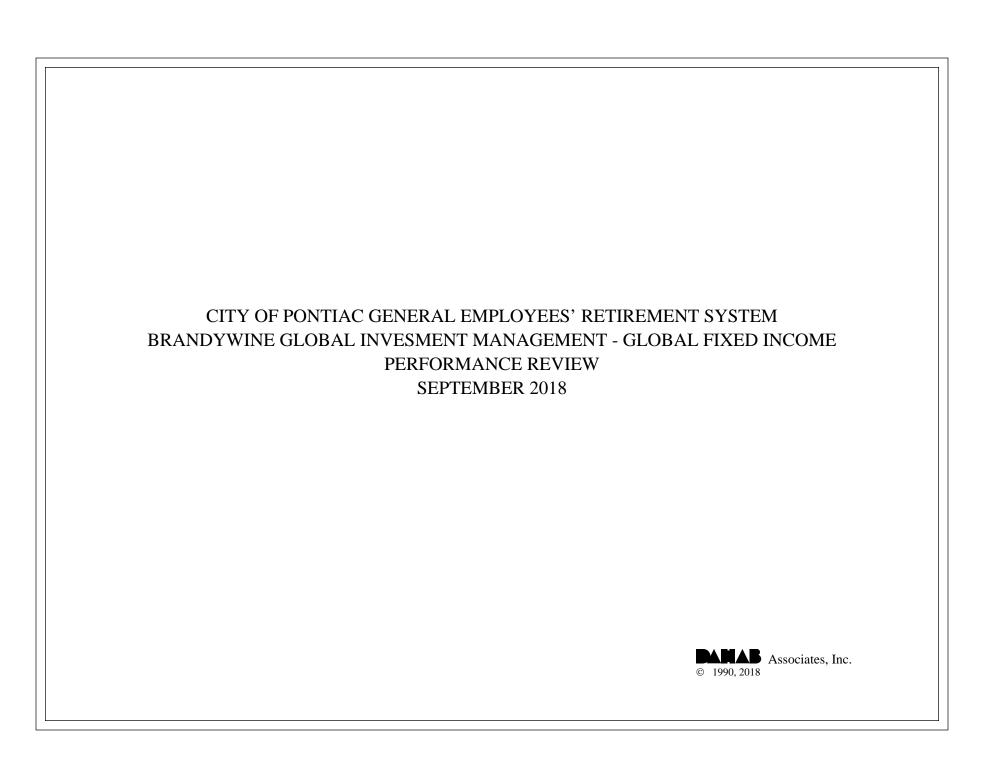
# TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

### COMPARATIVE BENCHMARK: NCREIF NFI-ODCE INDEX



<b>Total Quarters Observed</b>	3
Quarters At or Above the Benchmark	3
<b>Quarters Below the Benchmark</b>	0
<b>Batting Average</b>	1.000

RATES OF RETURN						
Date	Portfolio	Benchmark	Difference			
3/18	2.3	2.2	0.1			
6/18	2.5	2.0	0.5			
9/18	2.7	2.1	0.6			



On September 30th, 2018, the City of Pontiac General Employees' Retirement System's Brandywine Global Invesment Management Global Fixed Income portfolio was valued at \$2,693,908, a decrease of \$7,515 from the June ending value of \$2,701,423. Last quarter, the account recorded no net contributions or withdrawals, while recording a net investment loss for the quarter of \$7,515. Since there were no income receipts for the third quarter, net investment losses were the result of capital losses (realized and unrealized).

#### RELATIVE PERFORMANCE

#### **Total Fund**

During the third quarter, the Brandywine Global Invesment Management Global Fixed Income portfolio lost 0.3%, which was 1.3% greater than the Bloomberg Barclays Global Government Bond's return of -1.6% and ranked in the 68th percentile of the Global Fixed Income universe. Over the trailing year, the portfolio returned -2.0%, which was 0.6% less than the benchmark's -1.4% performance, and ranked in the 90th percentile. Since December 2015, the account returned 4.4% per annum and ranked in the 52nd percentile. For comparison, the Bloomberg Barclays Global Government Bond returned an annualized 2.4% over the same time frame.

PERFORMANCE SUMMARY							
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year	Since 12/15
Total Portfolio - Gross	-0.3	-2.0					4.4
GLOBAL FIXED INCOME RAN	K (68)	(90)					(52)
Total Portfolio - Net	-0.4	-2.5					3.9
Global Gov Index	-1.6	-1.4	1.8	0.1	-0.1	2.2	2.4
<b>Global Fixed Income - Gross</b>	-0.3	-2.0					4.4
GLOBAL FIXED INCOME RAN	K (68)	(90)					(52)
Global Gov Index	-1.6	-1.4	1.8	0.1	-0.1	2.2	2.4

ASSET ALLOCATION					
Global Fixed	100.0%	\$ 2,693,908			
Total Portfolio	100.0%	\$ 2,693,908			

## INVESTMENT RETURN

 Market Value 6/2018
 \$ 2,701,423

 Contribs / Withdrawals
 0

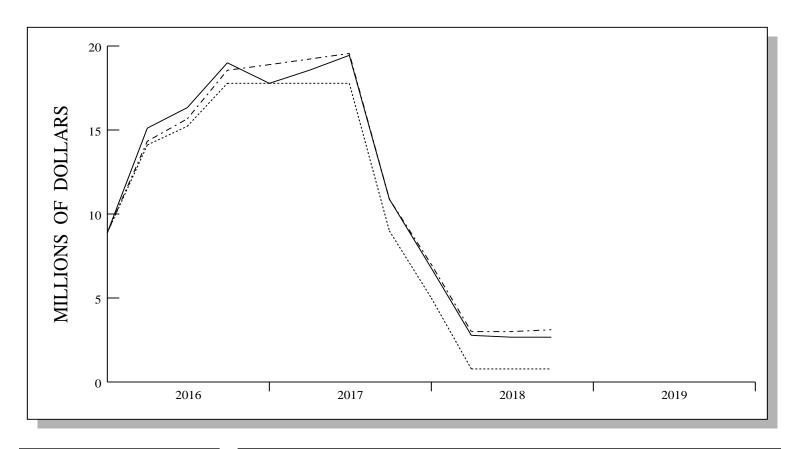
 Income
 0

 Capital Gains / Losses
 -7,515

 Market Value 9/2018
 \$ 2,693,908

DAHAB ASSOCIATES, INC.

### **INVESTMENT GROWTH**



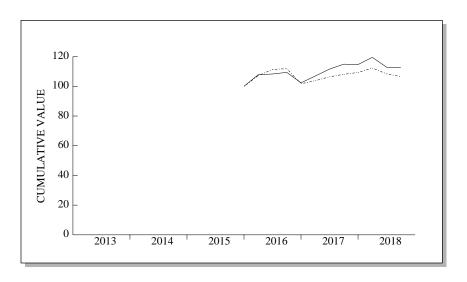
3

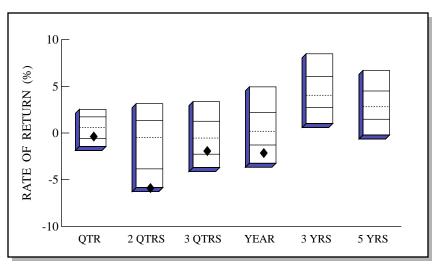
----- ACTUAL RETURN
----- BLENDED RATE
----- 0.0%

VALUE ASSUMING
BLENDED RATE \$ 3,131,104

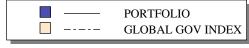
	LAST QUARTER	PERIOD 12/15 - 9/18
BEGINNING VALUE NET CONTRIBUTIONS INVESTMENT RETURN ENDING VALUE	$\begin{array}{c} \$ \ 2,701,423 \\ 0 \\ \hline -7,515 \\ \$ \ 2,693,908 \end{array}$	\$ 8,903,857 - 8,026,979 <u>1,817,030</u> \$ 2,693,908
INCOME CAPITAL GAINS (LOSSES) INVESTMENT RETURN	$ \begin{array}{r} 0 \\ -7,515 \\ -7,515 \end{array} $	$ \begin{array}{r} 0 \\ 1,817,030 \\ \hline 1,817,030 \end{array} $

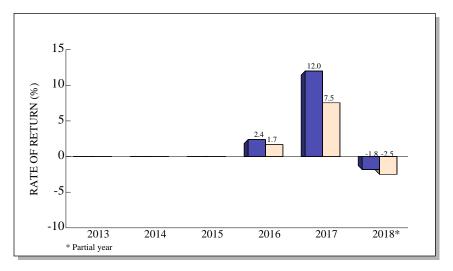
## TOTAL RETURN COMPARISONS





Global Fixed Income Universe



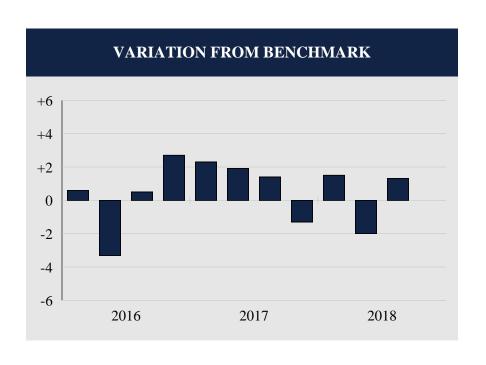


					ANNU <i>A</i>	LIZED
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
RETURN	-0.3	-5.8	-1.8	-2.0		
(RANK)	(68)	(94)	(70)	(90)		
5TH %ILE	2.5	3.1	3.4	4.9	8.5	6.7
25TH %ILE	1.7	1.3	1.3	2.2	6.0	4.5
MEDIAN	0.6	-0.5	-0.5	0.2	4.0	2.8
75TH %ILE	-0.6	-3.9	-2.3	-1.3	2.7	1.5
95TH %ILE	-1.4	-5.9	-3.7	-3.2	1.0	-0.2
Global Gov	-1.6	-5.1	-2.5	-1.4	1.8	0.1

Global Fixed Income Universe

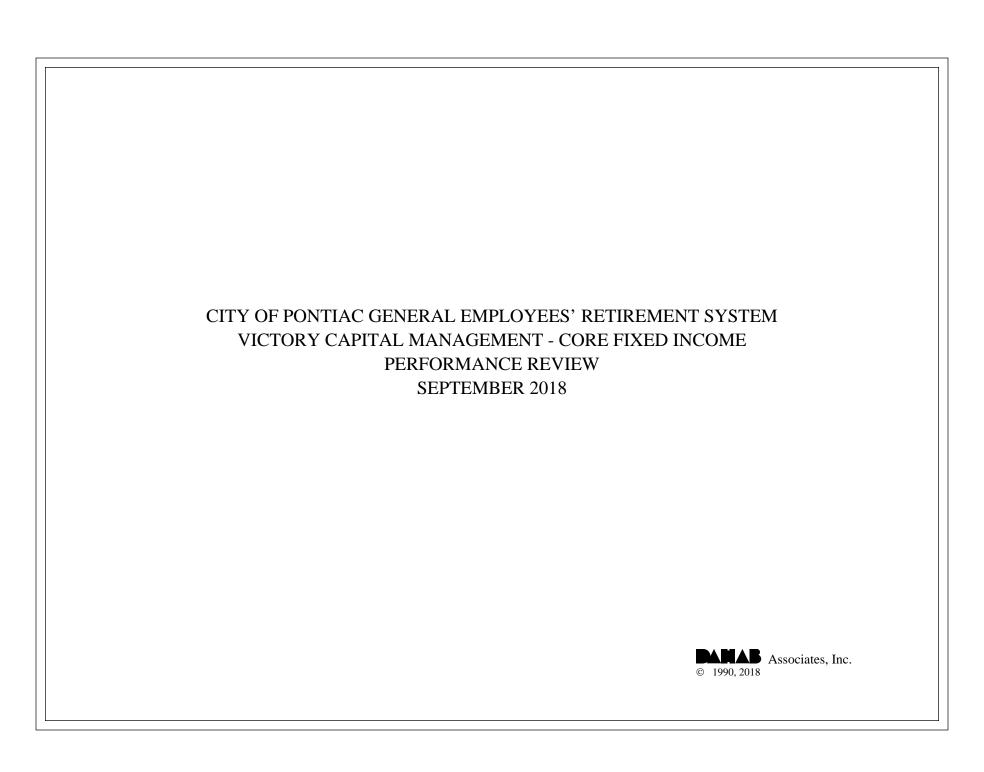
# TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

### COMPARATIVE BENCHMARK: BLOOMBERG BARCLAYS GLOBAL GOVERNMENT BOND



Total Quarters Observed	11
Quarters At or Above the Benchmark	8
<b>Quarters Below the Benchmark</b>	3
Batting Average	.727

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
3/16	7.8	7.2	0.6
6/16 9/16	0.5 1.0	3.8 0.5	-3.3 0.5
12/16	-6.4	-9.1	2.7
3/17	4.4	2.1	2.3
6/17 9/17	4.4 3.0	2.5 1.6	1.9 1.4
12/17	-0.2	1.1	-1.3
3/18 6/18	4.2 -5.5	2.7 -3.5	1.5 -2.0
9/18	-0.3	-1.6	1.3



#### **INVESTMENT RETURN**

On September 30th, 2018, the City of Pontiac General Employees' Retirement System's Victory Capital Management Core Fixed Income portfolio was valued at \$57,545,829, representing an increase of \$4,880,131 from the June quarter's ending value of \$52,665,698. Last quarter, the Fund posted net contributions totaling \$4,999,828, which overshadowed the account's \$119,697 net investment loss that was sustained during the quarter. The fund's net investment loss was a result of income receipts totaling \$456,648 and realized and unrealized capital losses totaling \$576,345.

#### **RELATIVE PERFORMANCE**

#### **Total Fund**

During the third quarter, the Victory Capital Management Core Fixed Income portfolio lost 0.2%, which was 0.2% less than the Bloomberg Barclays Aggregate Index's return of 0.0% and ranked in the 96th percentile of the Core Fixed Income universe. Over the trailing year, the portfolio returned -1.2%, which was equal to the benchmark's -1.2% performance, and ranked in the 86th percentile. Since December 1994, the account returned 5.5% per annum. For comparison, the Bloomberg Barclays Aggregate Index returned an annualized 5.4% over the same time frame.

#### **HOLDINGS ANALYSIS**

At the end of the quarter, USG rated securities comprised nearly 75% of the bond portfolio, helping to minimize default risk. Corporate securities, rated AA through BBB, made up the remainder, giving the portfolio an overall average quality rating of AAA. The average maturity of the portfolio was 9.08 years, longer than the Bloomberg Barclays Aggregate Index's 8.42-year maturity. The average coupon was 3.37%.

### **EXECUTIVE SUMMARY**

PERFORMANCE SUMMARY							
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year	Since 12/94
Total Portfolio - Gross	-0.2	-1.2	1.4	2.3	2.6	4.1	5.5
CORE FIXED INCOME RANK	(96)	(86)	(81)	(74)	(57)	(80)	
Total Portfolio - Net	-0.3	-1.5	1.0	2.0	2.2	3.8	5.4
Aggregate Index	0.0	-1.2	1.3	2.2	2.0	3.8	5.4
<b>Domestic Fixed Income - Gross</b>	-0.2	-1.2	1.4	2.3	2.6	4.1	5.5
CORE FIXED INCOME RANK	(96)	(86)	(81)	(74)	(57)	(80)	
Aggregate Index	0.0	-1.2	1.3	2.2	2.0	3.8	5.4

ASSET A	ALLOCA	ATION
Domestic Fixed	100.0%	\$ 57,545,829
Total Portfolio	100.0%	\$ 57,545,829

### INVESTMENT RETURN

 Market Value 6/2018
 \$ 52,665,698

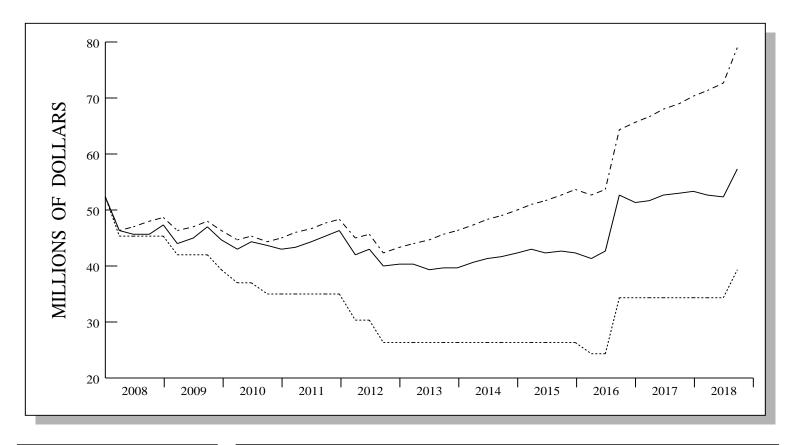
 Contribs / Withdrawals
 4,999,828

 Income
 456,648

 Capital Gains / Losses
 -576,345

 Market Value 9/2018
 \$ 57,545,829

### **INVESTMENT GROWTH**

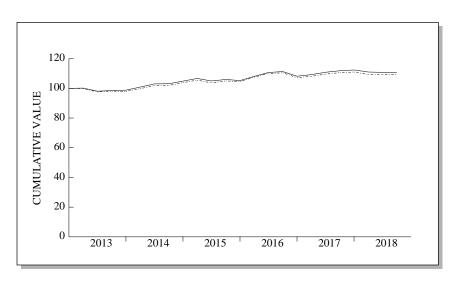


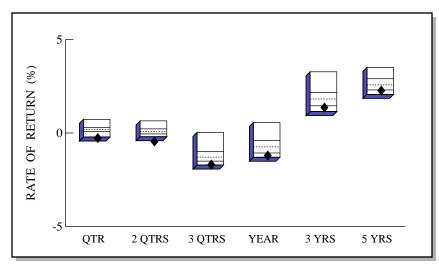
----- ACTUAL RETURN
----- BLENDED RATE
----- 0.0%

VALUE ASSUMING BLENDED RATE \$ 79,040,094

	LAST QUARTER	PERIOD 12/07 - 9/18
BEGINNING VALUE NET CONTRIBUTIONS INVESTMENT RETURN ENDING VALUE	\$ 52,665,698 4,999,828 -119,697 \$ 57,545,829	\$ 52,350,710 -12,757,798 17,952,918 \$ 57,545,829
INCOME CAPITAL GAINS (LOSSES) INVESTMENT RETURN	456,648 -576,345 -119,697	11,076,188 6,876,730 17,952,918

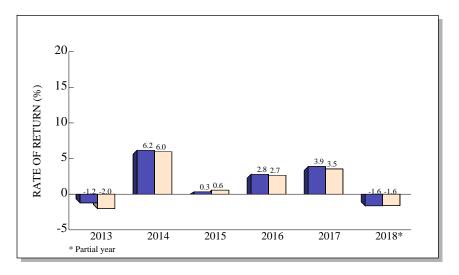
# TOTAL RETURN COMPARISONS





Core Fixed Income Universe



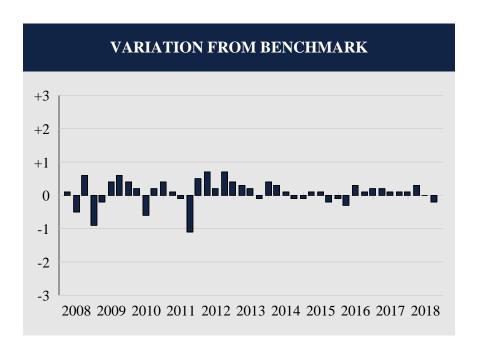


					ANNUA	ALIZED
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
RETURN	-0.2	-0.4	-1.6	-1.2	1.4	2.3
(RANK)	(96)	(99)	(87)	(86)	(81)	(74)
5TH %ILE	0.7	0.7	0.0	0.6	3.3	3.5
25TH %ILE	0.3	0.2	-1.0	-0.4	2.2	2.9
MEDIAN	0.2	0.1	-1.3	-0.7	1.8	2.6
75TH %ILE	0.1	-0.1	-1.5	-1.1	1.5	2.3
95TH %ILE	-0.2	-0.2	-1.7	-1.3	1.1	2.1
Agg	0.0	-0.1	-1.6	-1.2	1.3	2.2

Core Fixed Income Universe

# TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

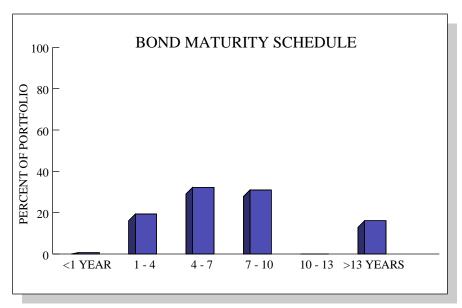
### COMPARATIVE BENCHMARK: BLOOMBERG BARCLAYS AGGREGATE INDEX

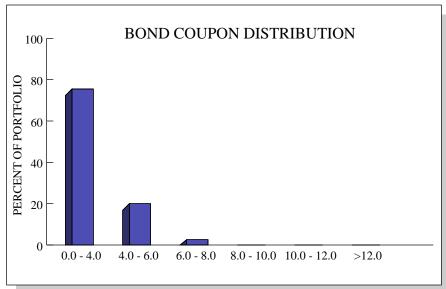


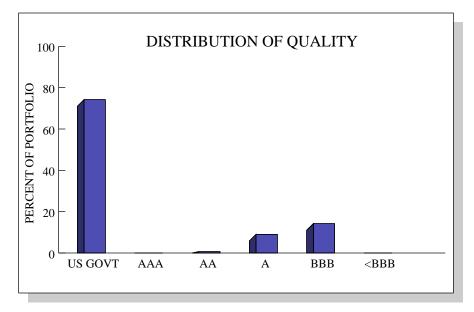
Total Quarters Observed	43
Quarters At or Above the Benchmark	30
Quarters Below the Benchmark	13
Batting Average	.698

	RATES OF RETURN						
Date	Portfolio	Benchmark	Difference				
3/08	2.3	2.2	0.1				
6/08	-1.5	-1.0	-0.5				
9/08	0.1	-0.5	0.6				
12/08	3.7	4.6	-0.9				
3/09	-0.1	0.1	-0.2				
6/09	2.2	1.8	0.4				
9/09	4.3	3.7	0.6				
12/09	0.6	0.2	0.4				
3/10	2.0	1.8	0.2				
6/10	2.9	3.5	-0.6				
9/10	2.7	2.5	0.2				
12/10	-0.9	-1.3	0.4				
3/11 6/11 9/11 12/11 3/12	0.5 2.2 2.7 1.6	0.4 2.3 3.8 1.1	0.1 -0.1 -1.1 0.5 0.7				
6/12	2.3	2.1	0.2				
9/12	2.3	1.6	0.7				
12/12	0.6	0.2	0.4				
3/13	0.2	-0.1	0.3				
6/13 9/13 12/13 3/14	-2.1 0.5 0.3 2.1	-2.3 0.6 -0.1	0.2 -0.1 0.4 0.3				
6/14 9/14 12/14 3/15	2.1 0.1 1.7	2.0 0.2 1.8 1.6	0.1 -0.1 -0.1 0.1				
6/15	-1.6	-1.7	0.1				
9/15	1.0	1.2	-0.2				
12/15	-0.7	-0.6	-0.1				
3/16	2.7	3.0	-0.3				
6/16	2.5	2.2	0.3				
9/16	0.6	0.5	0.1				
12/16	-2.8	-3.0	0.2				
3/17	1.0	0.8	0.2				
6/17	1.5	1.4	0.1				
9/17	0.9	0.8	0.1				
12/17	0.5	0.4	0.1				
3/18	-1.2	-1.5	0.3				
6/18	-0.2	-0.2	0.0				
9/18	-0.2	0.0	-0.2				

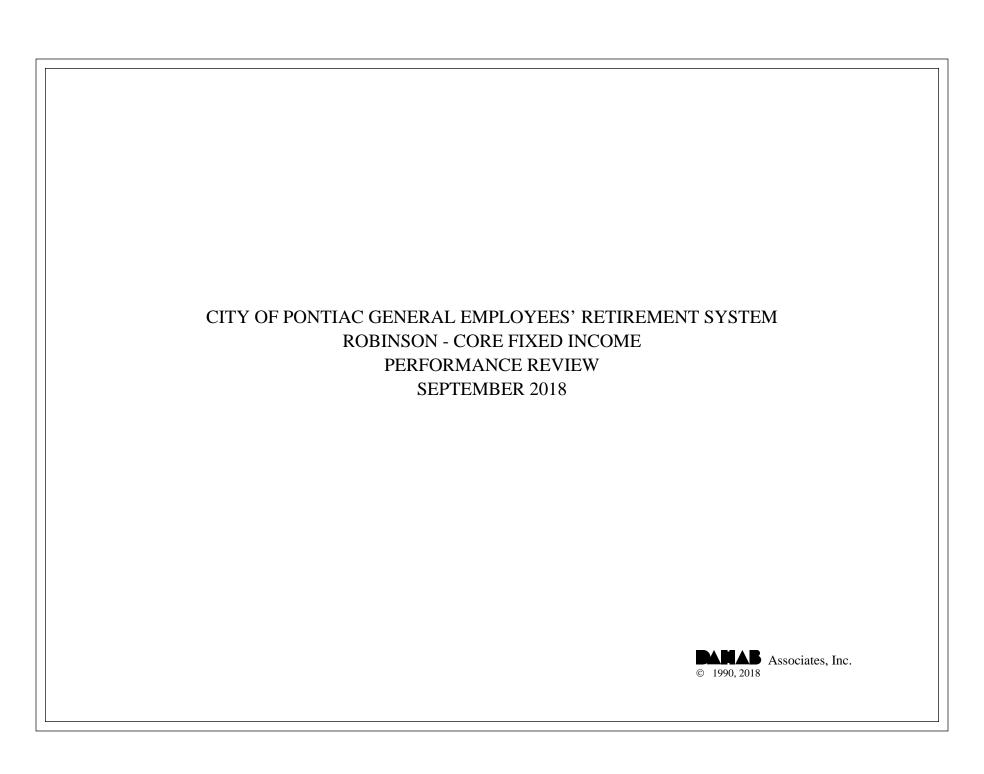
### **BOND CHARACTERISTICS**







	PORTFOLIO	AGGREGATE INI
No. of Securities	158	10,133
Duration	6.63	6.03
YTM	3.69	3.46
Average Coupon	3.37	3.16
Avg Maturity / WAL	9.08	8.42
Average Quality	AAA	<b>USG-AAA</b>



#### **INVESTMENT RETURN**

On September 30th, 2018, the City of Pontiac General Employees' Retirement System's Robinson Core Fixed Income portfolio was valued at \$55,784,593, representing an increase of \$5,018,717 from the June quarter's ending value of \$50,765,876. Last quarter, the Fund posted net contributions equaling \$4,999,232 plus a net investment gain equaling \$19,485. Net investment return was a result of \$234,988 in income receipts and \$215,503 in net realized and unrealized capital losses.

#### RELATIVE PERFORMANCE

#### **Total Fund**

During the third quarter, the Robinson Core Fixed Income portfolio gained 0.1%, which was 0.1% less than the Intermediate Gov/Credit Index's return of 0.2% and ranked in the 97th percentile of the Intermediate Fixed Income universe. Over the trailing twelve-month period, this portfolio returned -0.1%, which was 0.9% above the benchmark's -1.0% return, and ranked in the 25th percentile. Since September 2010, the portfolio returned 2.4% per annum and ranked in the 41st percentile. For comparison, the Intermediate Gov/Credit returned an annualized 1.8% over the same period.

#### **HOLDINGS ANALYSIS**

At the end of the quarter, about 60% of the total bond portfolio was comprised of USG quality securities. The remainder of the portfolio consisted of corporate securities, rated AAA through BBB, giving the portfolio an overall average quality rating of AAA-AA. The average maturity of the portfolio was 3.91 years, less than the Bloomberg Barclays Intermediate Gov/Credit Index's 4.31-year maturity. The average coupon was 2.96%.

### **EXECUTIVE SUMMARY**

PERFORMANCE SUMMARY							
	Quarter	1 Year	3 Year	5 Year	7 Year	10 Year	Since 09/10
Total Portfolio - Gross	0.1	-0.1	1.1	1.9	2.1		2.4
INTERMEDIATE FIXED RANK	(97)	(25)	(86)	(56)	(49)		(41)
Total Portfolio - Net	0.0	-0.3	0.8	1.7	1.9		2.2
Int Gov/Credit	0.2	-1.0	0.9	1.5	1.6	3.2	1.8
<b>Domestic Fixed Income - Gross</b>	0.1	-0.1	1.1	1.9	2.1		2.4
INTERMEDIATE FIXED RANK	(97)	(25)	(86)	(56)	(49)		(41)
Int Gov/Credit	0.2	-1.0	0.9	1.5	1.6	3.2	1.8

ASSET ALLOCATION							
Domestic Fixed	100.0%	\$ 55,784,593					
Total Portfolio	100.0%	\$ 55,784,593					

### INVESTMENT RETURN

 Market Value 6/2018
 \$ 50,765,876

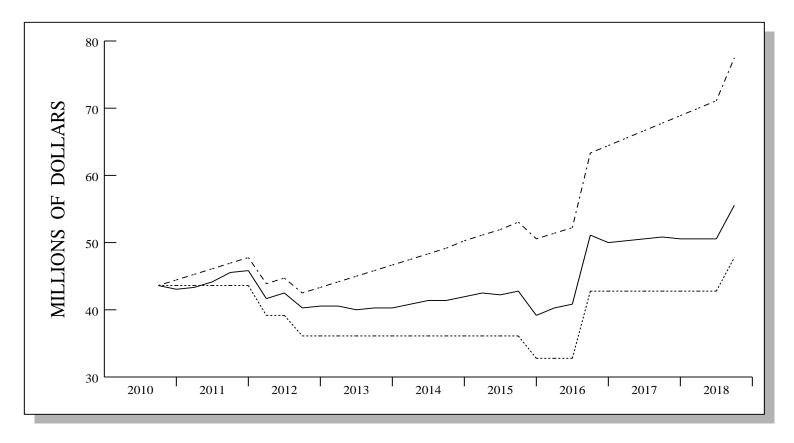
 Contribs / Withdrawals
 4,999,232

 Income
 234,988

 Capital Gains / Losses
 -215,503

 Market Value 9/2018
 \$ 55,784,593

### **INVESTMENT GROWTH**

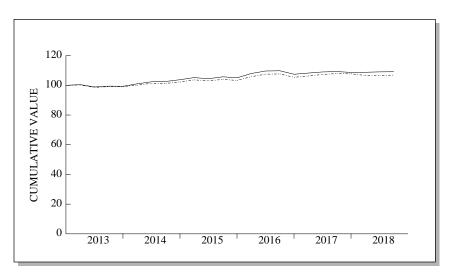


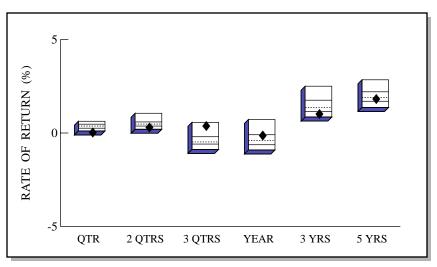
----- ACTUAL RETURN
----- BLENDED RATE
----- 0.0%

VALUE ASSUMING BLENDED RATE \$ 77,625,029

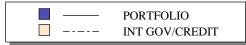
	LAST QUARTER	PERIOD 9/10 - 9/18
BEGINNING VALUE NET CONTRIBUTIONS INVESTMENT RETURN ENDING VALUE	\$ 50,765,876 4,999,232 19,485 \$ 55,784,593	\$ 43,698,759 4,184,097 7,901,737 \$ 55,784,593
INCOME CAPITAL GAINS (LOSSES) INVESTMENT RETURN	234,988 -215,503 19,485	10,826,808 -2,925,071 7,901,737

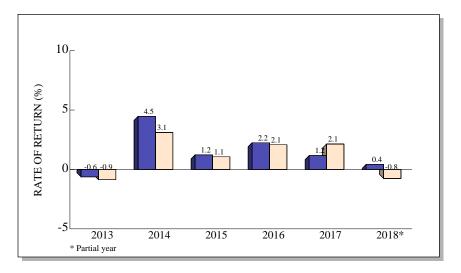
# TOTAL RETURN COMPARISONS





Intermediate Fixed Universe



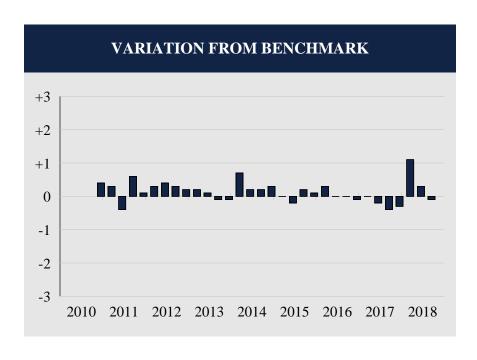


					ANNU <i>A</i>	ALIZED
	_QTR	2 QTRS	3 QTRS	<u>YEAR</u>	3 YRS	5 YRS
RETURN	0.1	0.3	0.4	-0.1	1.1	1.9
(RANK)	(97)	(77)	(8)	(25)	(86)	(56)
5TH %ILE	0.6	1.1	0.6	0.7	2.5	2.9
25TH %ILE	0.5	0.6	-0.2	-0.1	1.8	2.2
MEDIAN	0.4	0.5	-0.5	-0.4	1.4	1.9
75TH %ILE	0.3	0.4	-0.6	-0.6	1.1	1.7
95TH %ILE	0.1	0.2	-0.9	-0.9	0.9	1.4
Int G/C	0.2	0.2	-0.8	-1.0	0.9	1.5

Intermediate Fixed Universe

# TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

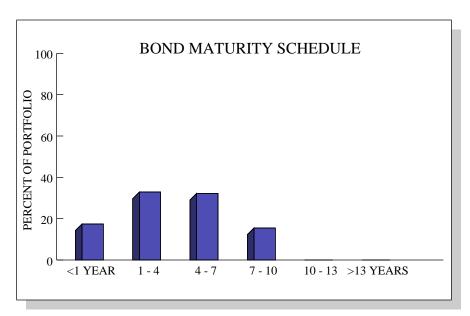
### COMPARATIVE BENCHMARK: INTERMEDIATE GOV/CREDIT

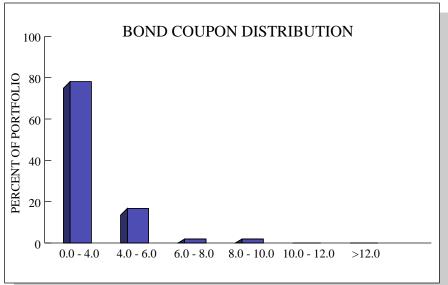


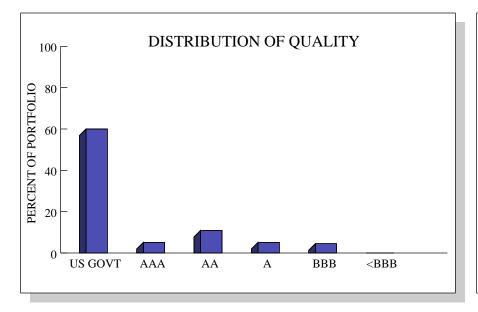
<b>Total Quarters Observed</b>	32
Quarters At or Above the Benchmark	23
<b>Quarters Below the Benchmark</b>	9
Batting Average	.719

	RATES	S OF RETURN	
Date	Portfolio	Benchmark	Difference
12/10	-1.0	-1.4	0.4
3/11	0.6	0.3	0.3
6/11	1.7	2.1	-0.4
9/11	3.0	2.4	0.6
12/11	0.9	0.8	0.1
3/12 6/12	0.9 1.9	0.6 1.5	0.3 0.4
9/12	1.7	1.4	0.4
12/12	0.5	0.3	0.2
3/13	0.5	0.3	0.2
6/13	-1.6	-1.7	0.1
9/13	0.5	0.6	-0.1
12/13	-0.1	0.0	-0.1
3/14	1.7	1.0	0.7
6/14 9/14	1.4 0.2	1.2 0.0	0.2 0.2
12/14	1.2	0.0	0.2
3/15	1.4	1.4	0.0
6/15	-0.8	-0.6	-0.2
9/15	1.2	1.0	0.2
12/15	-0.6	-0.7	0.1
3/16	2.7	2.4	0.3
6/16	1.6	1.6	0.0
9/16	0.1	0.1	0.0
12/16	-2.2	-2.1	-0.1
3/17 6/17	0.8 0.7	0.8 0.9	0.0 -0.2
9/17	0.7	0.6	-0.2 -0.4
12/17	-0.5	-0.2	-0.3
3/18	0.1	-1.0	1.1
6/18	0.3	0.0	0.3
9/18	0.1	0.2	-0.1

### **BOND CHARACTERISTICS**







	PORTFOLIO	INT GOV/CREDIT
No. of Securities	89	4,842
Duration	3.53	3.90
YTM	3.17	3.21
Average Coupon	2.96	2.61
Avg Maturity / WAL	3.91	4.31
Average Quality	AAA-AA	USG-AAA