

Essex Regional Retirement System

Performance Review
December 2017



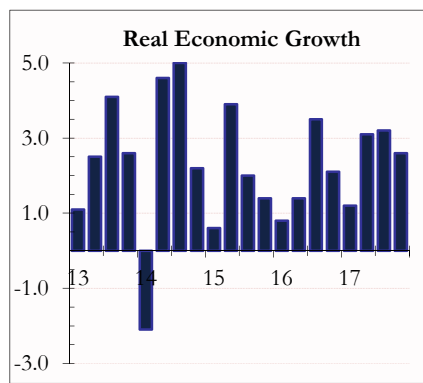
DAHAB ASSOCIATES
New York Massachusetts Pennsylvania Florida

ECONOMIC ENVIRONMENT

Pretty Darn Good

The fourth quarter brought a broad global economic expansion, most notably in China, Japan, Europe and the US. Domestic GDP rose 3.2% in the third quarter, followed by a 2.6% (advance estimate) expansion in the fourth quarter. The strengthening economic picture was also fueled by low inflation, slow and transparent Fed rate increases and investors' optimism regarding the new tax bill.

- Q3 GDP was the second consecutive quarter with gains above three percent, a high mark last reached in 2014. The BEA's advance estimate of 2.6% represents a deceleration of GDP growth in the fourth quarter. Third quarter gains were attributable to several factors: higher consumer spending and corporate inventory investment, as well as exports capitalizing on the cheaper dollar and government spending at all levels.



- While jobs growth slowed to 148,000 in December, the average monthly gain for Q4 was more than 200,000. As of year-end, unemployment stood at a near record low of 4.1%. December saw meaningful job gains in healthcare, construction and manufacturing. For the year, there were comparable sector job gains, namely: 300,000 in healthcare, 210,000 in construction and an unanticipated 196,000 in manufacturing. New jobs totaled 2.1 million in 2017. Average hourly wages rose 2.5%, suggesting a tighter labor market.
- Home prices were up 7%, year-over-year, through November (latest available), with a 1% increase in the month of November alone. For the first time in many years, all 50 states experienced yearly price appreciations. Once again, Washington State led the

way with a 12.2% yearly increase, followed closely by Utah, Idaho, and Nevada. On the low end, Alaska, Connecticut, Kansas, New Mexico, and Oklahoma saw yearly price hikes in the 2% range.

- Manufacturing activity expanded for the 16th straight month in December. New orders registered 69.4%, climbing more than 5% from November. Productivity was also up, as 16 of the 18 manufacturing sectors grew and only wood products and textiles contracted. Non-manufacturing sectors expanded for the 96th straight month, as this index registered 55.9% — slightly lower than in November, but well into the growth range. Fourteen of the 17 non-manufacturing sectors advanced while information, education services, and support services were the only three to contract.
- The Conference Board reported that the consumer confidence level reached 122.1% for December; this was down from November, but still close to a 17-year high! The Present Situation Index was up slightly, while the Expectation Index dropped to 99.1 from 111.1 the prior month. This drop indicated uncertainty over the sustainability of further job gains and some confusion concerning the new tax law's impact on workers' take-home pay.
- Bloomberg's Commodity Index was 4.7% higher in the fourth quarter, but rose just 1.7% for the year. Energy prices made the greatest impact on the index: an 8.9% energy gain in Q4 was offset by a 4.3% yearly loss. Bumper crops led the agricultural component down 2% for the quarter and down 11% for the year. Metals performed well, rising 6.8% for the fourth quarter and almost 21% for 2017. Industrial metals were the high flyers, gaining more than 29% for the year.
- In December, the Fed initiated its third rate hike to prevent inflation from growing too fast and core CPI rose only 1.8% for the year. However, the month of December's 0.3% CPI increase was the largest since January.
- For the third time in 2017, the Federal Reserve Board hiked the Fed funds rate to 1¼% – 1½%. The Federal Open Market Committee (FOMC) noted that job growth continued to expand as did household and business spending, despite a low inflation

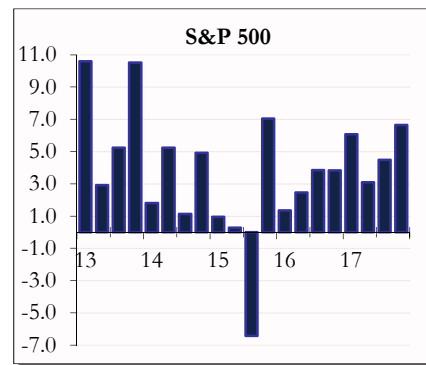
environment. It is noteworthy that the FOMC viewed the three hurricanes as only mildly impacting the national economy. Going forward, the Fed “expects that economic conditions will evolve in a manner that will warrant (further) gradual (rate) increases...”

- Fed Chair, Janet Yellen, is stepping down at the end of her term and Jerome Powell, a current Fed Board Governor, will replace her as Chair.

DOMESTIC EQUITIES

Up Big-Time

US stock indices posted strong advances during the quarter, thanks to a strengthening economy, corporate earnings and the new tax bill that lowered corporate taxes from 35% to 21%.



The DJIA led the way, gaining 11.0%, while the S&P 500 and NASDAQ each added 6.6%. Large caps beat smaller caps, and growth did better than value.

The three major indices scored double-digit returns for the year, as the NASDAQ, DJIA and S&P climbed 29.7%, 28.1% and 21.8%, respectively. The same size and style

pattern applied to the full year; larger-sized and growth style stock returns dwarfed the smaller/value style names. A tilt toward mega-cap growth stocks was one of the year’s smartest bets, as the Russell Top 200 Growth Index returned almost 32%!

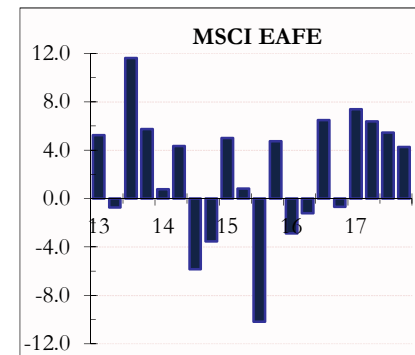
Every S&P sector was positive for the year. Computer tech names were in a league of their own, rocketing 42.1%. The star performers in this booming sector included: Apple (48%); Microsoft (40%); video game maker Activision (76%); and Cadence Design (66%). Consumer Services (34.9%) was another glowing sector, with Amazon (56%) and Wal-Mart (46%) just two of the brightest stars. At the opposite end of the ranking, basic industry stocks gained a relatively lower 15.1%; undoubtedly, GE’s whopping 42%

loss dragged down this sector’s results. Utilities (10.1%) proved to be the second worst sector, with many names in the red. Energy (1.3%) came in dead last. REITs, as a stand-alone category, earned only 4.3%. Almost one-third of the S&P companies have price/earnings ratios of 30 or above, as investors had very high 2018 earnings expectations for the market.

INTERNATIONAL EQUITIES

Developed Markets Advanced... But EM Stole the Show

The US was not the only economy to be humming lately. The GDPs of China, Japan and especially Europe were also faring well. Healthy economic



gains and strong earnings among global companies were typical, as were aggressive central bank measures and non-populist election outcomes in France, Germany and Japan.

In the fourth quarter, the EAFE Index gained 4.3%. The EAFE return was lower than that of the key US indices, but nonetheless a solid advance. Markets in the Pacific

region were the top performers, up 8% overall; in particular, Singapore advanced 10.1%, Japan grew 8.5% and Hong Kong climbed 6.6%. These healthy gains were mainly attributable to consumer spending in Singapore and a surge in Japanese electronics exports, as well as an upturn in Hong Kong tourism. The Australian market was also abuzz, moving up 6.9% due, in part, to rising metals’ commodity prices. In Europe, UK stocks added 5.7%, as investors warmed to the first phase of the Brexit Agreement and an expansionary federal budget.

For the full year, EAFE scored a stellar 25.6%. Returns for Singapore and Hong Kong were each in the 36% range. Denmark earned a comparable 35.6% due to Novo Nordisk’s 53% return, which made all the difference in that small market. Germany (28.5%) enjoyed record production and France (29.9%) had the best consumer confidence level in 10 years. The Italian

market soared 29.6%, reflecting a robust economy, with the exception of some problem banks. Spanish stocks (27.7%) soared, despite the political unrest in Catalonia. The UK jumped 22.4% and Australia climbed 20.2%. Canada, not part of EAFE, posted a 16.9% return.

If the US and EAFE markets were bullish, the emerging markets (EM) were the hottest ticket around. The MSCI Emerging Markets Index rose 7.5% for the quarter and 37.8% for the year! The growth stock component of the index rose even more for the year, up a spectacular 47.1%. Focusing on full-year results, Poland shot up 55.3%, on the strength of its low unemployment and solid GDP growth, as well as its production and consumer spending numbers.

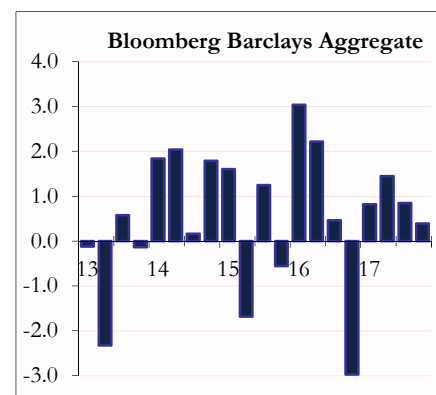
In the Pacific region, China was easily the year's market winner, galloping ahead 54.3%. China's exports, solidified political leadership and rapidly rising middle class consumption supported a 6+% GDP growth. In addition, Alibaba, Tencent and Baidu performances added measurably to market results. The South Korean market took the second-highest honors, returning 47.8%, amidst GDP growth of almost 4% and ballooning exports to China. India, now a prominent manufacturing and consumer spending powerhouse, saw its market climb 38.8%, as investors overcame doubts regarding the growing political difficulties of Prime Minister Modi. Russia, mired in UN sanctions and low oil prices for most of the year, trailed with a 6.1% return. South African shares jumped an unexpected 36.8%, in sync with higher commodity prices. In Latin America, country returns were mixed. Chilean (43.6%) and Peruvian (38.4%) corporations profited from higher commodity prices as did Brazil (24.5%), which also benefited from a better political environment.

BOND MARKET

Fed Funds Hike Set the Tone

In December, the Federal Reserve Board capped its 2017 activities by instituting a third hike in the Federal Funds rate. This action led to a further flattening of the yield curve, with higher rates at the short end and lower rates at the long end. For the quarter, short-to-intermediate maturity Treasury returns were fractionally negative. However, 20-year and longer issues earned 2.6% due to increased investor demand for whatever yield was

available. The investment grade Barclays Aggregate Bond Index, which includes a significant share of Treasuries, returned 0.4%. The Treasury and



mortgage components each earned just 0.1%, while corporate credit gained 1.0%. Commercial mortgage-backed securities (CMBS) provided 0.4% and asset-backed securities (ABS) returned essentially zero. Non-investment grade or high yield bonds earned 0.5%.

For the year, the Aggregate Index picked up 3.5%, with investors receiving modestly higher yield at

the short end and significant price appreciation at the long end. Corporate credit generated the best sector return (6.2%) and utility corporates (7.6%) were the top performers within the category. High yield corporates rated BA and below also turned in good numbers. The best high-yield performers featured the weakest credit quality, specifically CAA and CA-D, which earned 10.4% and 13.8%, respectively. EM bonds, including both corporate and sovereign, earned 7.5% (USD) for the year.

CASH EQUIVALENTS

Higher Fed Rate Proved Favorable

December marked the third Fed funds increase, which slightly boosted the yield on money market instruments. As a result, the 3-month T-Bill earned 0.3% for the quarter and 1.0% for the year. Still, it would take many more such increases or an inverted yield curve (i.e. higher yields at the short end and lower yields at the long end) to make cash equivalents a viable longer-term investment vehicle.

MARKET SUMMARY

ECONOMIC STATISTICS

	CURRENT QTR	LAST QTR
GDP	2.6	3.2
Unemployment	4.1	4.2
CPI All Items Year/Year	2.10	2.20
Fed Funds Rate	1.50	1.25
Industrial Capacity	77.9	76.1
US Dollars per Euro	1.20	1.18

MAJOR INDEX QUARTER RETURNS

INDEX		PERFORMANCE
Russell 3000	6.3	
S&P 500	6.6	
Russell Mid	6.1	
Russell 2000	3.3	
MSCI EAFE	4.3	
MSCI Emg Mkts	7.5	
NCREIF ODCE	2.1	
Aggregate Index	0.4	
90 Day Tbills	0.3	

EQUITY RETURN DISTRIBUTIONS

QUARTER				TRAILING YEAR			
	VAL	COR	GRO		VAL	COR	GRO
LC	5.3	6.6	7.9	LC	13.6	21.7	30.2
MC	5.5	6.1	6.8	MC	13.3	18.5	25.3
SC	2.0	3.3	4.6	SC	7.8	14.6	22.1

MARKET SUMMARY

- * The BEA's advance estimate places 4th quarter GDP growth at 2.6%, which marks a slowing down from the previous two quarters.
- * Unemployment was at a near record low of 4.1%.
- * Year over year CPI expanded at a 2.1% rate.
- * The dollar slightly weakened relative to the Euro.
- * Growth stocks continued to best value names. Large cap stocks out performed small caps.

INVESTMENT RETURN

On December 31st, 2017, the Essex Regional Retirement System's Essex Regional portfolio was valued at \$463,592,036, representing an increase of \$9,192,595 from the September quarter's ending value of \$454,399,441. Last quarter, the Fund posted withdrawals totaling \$8,748,223, which offset the portfolio's net investment return of \$17,940,818. Income receipts totaling \$12,574 plus net realized and unrealized capital gains of \$17,928,244 combined to produce the portfolio's net investment return.

RELATIVE PERFORMANCE

Total Fund

For the fourth quarter, the Essex Regional portfolio returned 4.0%, which was 0.5% above the Custom Core Index's return of 3.5% and ranked in the 31st percentile of the Public Fund universe. Over the trailing year, the portfolio returned 17.2%, which was 2.0% above the benchmark's 15.2% return, ranking in the 15th percentile. Since December 2012, the portfolio returned 10.0% annualized and ranked in the 18th percentile. The Custom Core Index returned an annualized 8.6% over the same period.

PRIT Core

The PRIT core portion of the portfolio returned 4.0% last quarter; that return was 0.5% greater than the Custom Core Index's return of 3.5% and ranked in the 29th percentile of the Public Fund universe. Over the trailing twelve-month period, this component returned 17.8%, 2.6% above the benchmark's 15.2% performance, ranking in the 10th percentile. Since December 2012, this component returned 9.9% on an annualized basis and ranked in the 21st percentile. The Custom Core Index returned an annualized 8.6% during the same period.

Private Equity

The Private Equity performance is based on the previous quarter's performance. As a result, a lagged version of the Cambridge Private Equity Index has been used to allow a more time-comparable comparison.

In the fourth quarter, the private equity component returned 4.8%, which was 0.9% greater than the Cambridge Private Equity (Lagged)'s return of 3.9%. Over the trailing year, this component returned 8.0%, which was 8.8% less than the benchmark's 16.8% return. Since December 2012, this component returned 7.9% annualized, while the Cambridge Private Equity (Lagged) returned an annualized 13.3% over the same period.

Real Estate

During the fourth quarter, the real estate portion of the portfolio returned 0.3%, which was 1.8% less than the NCREIF NFI-ODCE Index's return of 2.1%. Over the trailing year, this segment returned 0.1%, which was 7.5% less than the benchmark's 7.6% return. Since December 2012, this component returned 16.8% per annum, while the NCREIF NFI-ODCE Index returned an annualized 11.5% over the same time frame.

EXECUTIVE SUMMARY**PERFORMANCE SUMMARY**

	Quarter	YTD /1Y	3 Year	5 Year
Total Portfolio - Gross	4.0	17.2	8.7	10.0
<i>PUBLIC FUND RANK</i>	(31)	(15)	(9)	(18)
Total Portfolio - Net	3.9	16.6	8.1	9.4
Custom Core Idx	3.5	15.2	7.6	8.6
PRIT Core - Gross	4.0	17.8	8.8	9.9
<i>PUBLIC FUND RANK</i>	(29)	(10)	(8)	(21)
Custom Core Idx	3.5	15.2	7.6	8.6
Private Equity - Gross	4.8	8.0	3.3	7.9
Cambridge PE (Lag)	3.9	16.8	10.4	13.3
Real Estate - Gross	0.3	0.1	13.4	16.8
NCREIF ODCE	2.1	7.6	10.4	11.5

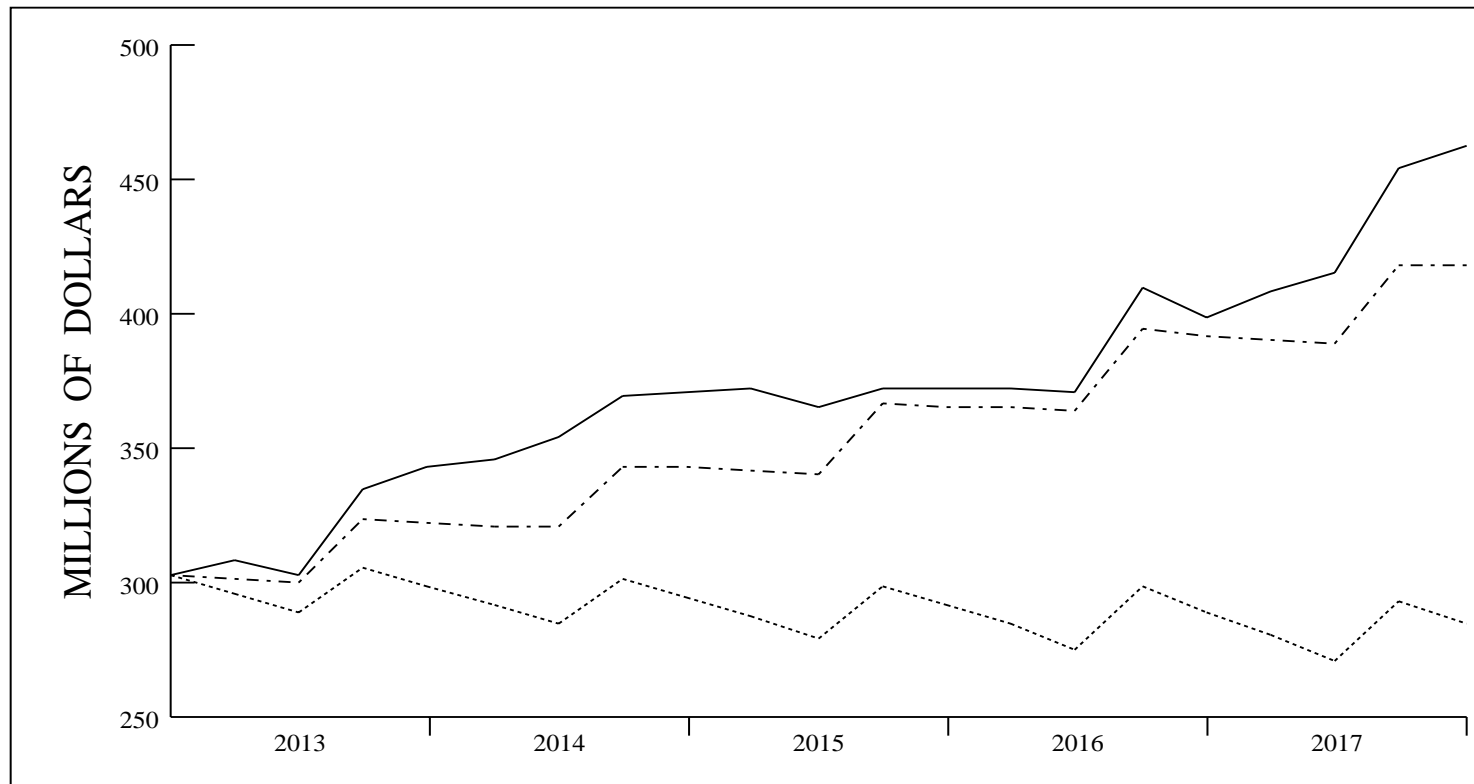
ASSET ALLOCATION

PRIT Core	97.1%	\$ 450,210,889
Private Equity	2.2%	10,299,641
Real Estate	0.0%	186,616
Cash	0.6%	2,894,890
Total Portfolio	100.0%	\$ 463,592,036

INVESTMENT RETURN

Market Value 9/2017	\$ 454,399,441
Contribs / Withdrawals	- 8,748,223
Income	12,574
Capital Gains / Losses	17,928,244
Market Value 12/2017	\$ 463,592,036

INVESTMENT GROWTH



— ACTUAL RETURN
 - - - 7.75%
 0.0%

VALUE ASSUMING
 7.75% RETURN \$ 418,270,654

	LAST QUARTER	FIVE YEARS
BEGINNING VALUE	\$ 454,399,441	\$ 303,117,435
NET CONTRIBUTIONS	- 8,748,223	- 17,844,899
INVESTMENT RETURN	17,940,818	178,319,500
ENDING VALUE	\$ 463,592,036	\$ 463,592,036
INCOME	12,574	22,154,521
CAPITAL GAINS (LOSSES)	17,928,244	156,164,979
INVESTMENT RETURN	17,940,818	178,319,500

Essex Regional Retirement System
Total Fund Asset Allocation Analysis

December 31, 2017

Total Fund Assets \$ 463,592,036

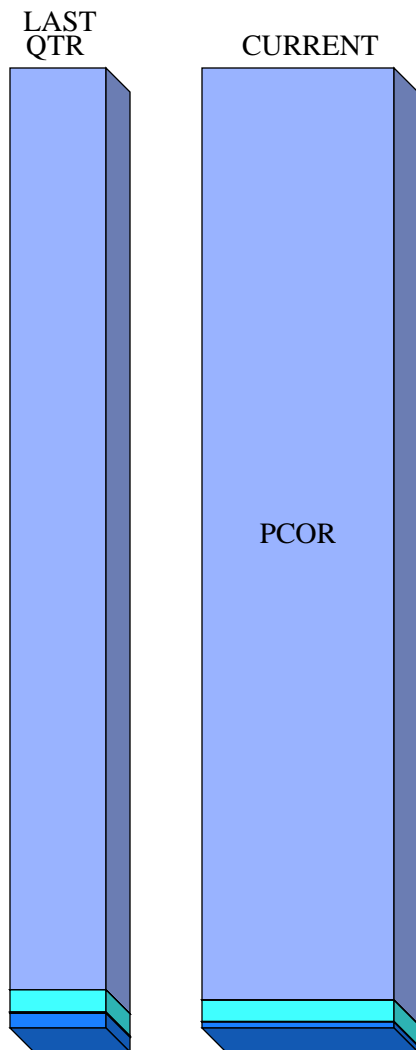
	PRIT Fund Allocation	Essex Allocation	Target Allocation	Target Dollars	Actual Dollars	+/- Dollars
PRIT Core Fund	100.0%	97.1%	90.0%	\$ 417,232,832	\$ 450,210,889	\$ 32,978,057
Domestic Equity	19.4%	18.8%			\$ 87,385,934	
Int'l Equity	18.3%	17.8%			\$ 82,568,677	
E.M. Int'l Equity	8.2%	7.9%			\$ 36,782,230	
Core Fixed	12.4%	12.0%			\$ 55,601,045	
Value Added	8.1%	7.9%			\$ 36,467,082	
Real Estate	8.5%	8.3%			\$ 38,357,968	
Timber	3.6%	3.5%			\$ 16,297,634	
Alternatives-Private Equity	10.2%	9.9%			\$ 45,876,490	
Hedge Funds	9.0%	8.7%			\$ 40,518,980	
Overlay	1.2%	1.1%			\$ 5,312,488	
Liquidating Portfolio	0.2%	0.2%			\$ 945,443	
Risk Premia	0.9%	0.9%			\$ 4,096,919	
Real Estate		0.0%	5.0%	\$ 23,179,602	\$ 186,616	\$ (22,992,986)
TA Realty Associates Fund IX		0.0%			\$ 186,616	
Private Equity		2.2%	5.0%	\$ 23,179,602	\$ 10,299,641	\$ (12,879,961)
Ascent Venture Partner III		0.0%			\$ 112,411	
Ascent Venture Partner IV		0.1%			\$ 322,093	
Ascent Venture Partner V		0.7%			\$ 3,306,967	
Boston Millennia Partners I		0.0%			\$ 33,090	
Boston Millennia Partners II		0.1%			\$ 485,855	
BlackRock PEP IV		1.0%			\$ 4,764,815	
Levine Leichtman III		0.0%			\$ 98,503	
Levine Leichtman IV		0.3%			\$ 1,173,990	
Mass Tech Development		0.0%			\$ 1,917	
Cash Accounts		0.6%	0.0%	\$ -	\$ 2,894,890	\$ 2,894,890
Depository Account		0.2%			\$ 1,083,025	
PRIT Cash		0.2%			\$ 1,004,099	
Pooled Funds Cash		0.2%			\$ 807,766	

*Includes Distressed Debt

Essex Total Fund	Actual Allocation	Target Allocation	+/- Percent	Actual Allocation (\$)	Target Allocation (\$)	+/- Dollars
Domestic Equity	18.8%	18.0%	0.8%	\$ 87,385,934	\$ 83,446,566	\$ 3,939,367
Int'l Equity	25.7%	23.0%	2.7%	\$ 119,350,907	\$ 106,626,168	\$ 12,724,738
Fixed Income	19.9%	22.0%	-2.1%	\$ 92,068,127	\$ 101,990,248	\$ (9,922,121)
Real Estate	8.3%	10.0%	-1.7%	\$ 38,544,584	\$ 46,359,204	\$ (7,814,620)
Timber	3.5%	4.0%	-0.5%	\$ 16,297,634	\$ 18,543,681	\$ (2,246,047)
Alternatives-Private Equity	12.1%	11.0%	1.1%	\$ 56,176,131	\$ 50,995,124	\$ 5,181,007
Hedge Funds	8.7%	12.0%	-3.3%	\$ 40,518,980	\$ 55,631,044	\$ (15,112,064)
Overlay	1.1%	0.0%	1.1%	\$ 5,312,488	\$ -	\$ 5,312,488
Liquidating Portfolio	0.2%	0.0%	0.2%	\$ 945,443	\$ -	\$ 945,443
Risk Premia	0.9%	0.0%	0.9%	\$ 4,096,919	\$ -	\$ 4,096,919
Cash	0.6%	0.0%	0.6%	\$ 2,894,890	\$ -	\$ 2,894,890
	100.0%	100.0%		\$ 463,592,036	\$ 463,592,036	

ESSEX REGIONAL RETIREMENT SYSTEM
ALTERNATIVE ASSETS
AS OF DECEMBER 31, 2017

Fund	Capital Balance	Capital Commitment	Paid-In Capital to Date	Distributions to Date	IRR Since Inception
Ascent Venture Partners III	\$112,411	\$2,000,000	\$1,860,000	\$2,262,543	4.0%
Ascent Venture Partners IV	\$322,093	\$2,000,000	\$2,000,000	\$311,176	-16.6%
Ascent Venture Partners V	\$3,306,967	\$3,500,000	\$3,080,000	\$1,994,242	10.4%
Boston Millennia Partners I	\$33,090	\$5,000,000	\$5,000,000	\$2,448,827	-8.0%
Boston Millennia Partners II	\$485,855	\$2,000,000	\$2,000,000	\$1,297,123	-1.3%
BlackRock PEP IV	\$4,764,815	\$8,000,000	\$7,040,000	\$5,949,859	8.4%
Levine Leichtman III	\$98,503	\$3,000,000	\$3,000,000	\$4,889,893	9.8%
Levine Leichtman IV	\$1,173,990	\$3,000,000	\$1,817,513	\$3,786,550	19.9%
Mass Tech	\$1,917	\$1,000,000	\$961,774	\$520,434	-13.6%
TA Realty Associates Fund IX	\$186,616	\$4,500,000	\$4,500,000	\$7,138,087	10.5%















	<u>VALUE</u>	<u>PERCENT</u>	<u>TARGET</u>	DIFFERENCE <u>+ / -</u>
PRIT CORE	\$ 450,210,889	97.1%	90.0%	7.1%
PRIVATE EQUITY	10,299,641	2.2%	5.0%	-2.8%
REAL ESTATE	186,616	0.0%	5.0%	-5.0%
CASH & EQUIVALENT	2,894,890	0.6%	0.0%	0.6%
<u>TOTAL FUND</u>	<u>\$ 463,592,036</u>	<u>100.0%</u>		

MANAGER PERFORMANCE SUMMARY - GROSS OF FEES













Portfolio	(Universe)	Quarter	YTD	1 Year	3 Years	5 Years	Market Value	Pct
Composite	(Public Fund)	4.0 (31)	17.2 (15)	17.2 (15)	8.7 (9)	10.0 (18)	\$463,592,036	100.0
PRIT Core	(Public Fund)	4.0 (29)	17.8 (10)	17.8 (10)	8.8 (8)	9.9 (21)	\$450,210,889	97.1
<i>Custom Core Idx</i>		<i>3.5 ----</i>	<i>15.2 ----</i>	<i>15.2 ----</i>	<i>7.6 ----</i>	<i>8.6 ----</i>	<i>----</i>	<i>----</i>
Ascent VP III		0.3 ----	-8.3 ----	-8.3 ----	-16.4 ----	-4.5 ----	\$112,411	0.0
Ascent VP IV		-0.7 ----	48.3 ----	48.3 ----	-42.2 ----	-23.7 ----	\$322,093	0.1
Ascent VP V		1.4 ----	5.1 ----	5.1 ----	6.5 ----	9.6 ----	\$3,306,967	0.7
BMP		0.0 ----	0.0 ----	0.0 ----	23.0 ----	50.3 ----	\$33,090	0.0
BMP II		-0.7 ----	-13.2 ----	-13.2 ----	-0.4 ----	5.2 ----	\$485,855	0.1
BlackRock IV		7.1 ----	12.3 ----	12.3 ----	7.7 ----	10.2 ----	\$4,764,815	1.0
Levine III		-4.8 ----	-12.3 ----	-12.3 ----	0.9 ----	3.5 ----	\$98,503	0.0
Levine IV		12.1 ----	12.5 ----	12.5 ----	13.7 ----	13.5 ----	\$1,173,990	0.3
Mass Tech		0.0 ----	-10.5 ----	-10.5 ----	7.6 ----	-27.5 ----	\$1,917	0.0
<i>Cambridge PE (Lag)</i>		<i>3.9 ----</i>	<i>16.8 ----</i>	<i>16.8 ----</i>	<i>10.4 ----</i>	<i>13.3 ----</i>	<i>----</i>	<i>----</i>
TA Realty		1.2 ----	0.6 ----	0.6 ----	9.2 ----	10.7 ----	\$186,616	0.0
<i>NCREIF ODCE</i>		<i>2.1 ----</i>	<i>7.6 ----</i>	<i>7.6 ----</i>	<i>10.4 ----</i>	<i>11.5 ----</i>	<i>----</i>	<i>----</i>
Depository Account		----	----	----	----	----	\$1,083,025	0.2
PRIT Cash		----	----	----	----	----	\$1,004,099	0.2
Pooled Funds Cash		----	----	----	----	----	\$807,766	0.2
<i>90 Day Tbills</i>		<i>0.3 ----</i>	<i>1.0 ----</i>	<i>1.0 ----</i>	<i>0.5 ----</i>	<i>0.3 ----</i>	<i>----</i>	<i>----</i>

MANAGER VALUE ADDED

Trailing Quarter

Manager	Benchmark	Value Added Vs. Benchmark
PRIT Core	Custom Core Idx	0.5 
Ascent VP III	Cambridge PE (Lag)	-3.6 
Ascent VP IV	Cambridge PE (Lag)	-4.6 
Ascent VP V	Cambridge PE (Lag)	-2.5 
BMP	Cambridge PE (Lag)	-3.9 
BMP II	Cambridge PE (Lag)	-4.6 
BlackRock IV	Cambridge PE (Lag)	3.2 
Levine III	Cambridge PE (Lag)	-8.7 
Levine IV	Cambridge PE (Lag)	8.2 
Mass Tech	Cambridge PE (Lag)	-3.9 
TA Realty	NCREIF ODCE	-0.9 
Total Portfolio	Custom Core Idx	0.5 

Trailing Year

Manager	Benchmark	Value Added Vs. Benchmark
PRIT Core	Custom Core Idx	2.6 
Ascent VP III	Cambridge PE (Lag)	-25.1 
Ascent VP IV	Cambridge PE (Lag)	31.5 
Ascent VP V	Cambridge PE (Lag)	-11.7 
BMP	Cambridge PE (Lag)	-16.8 
BMP II	Cambridge PE (Lag)	-30.0 
BlackRock IV	Cambridge PE (Lag)	-4.5 
Levine III	Cambridge PE (Lag)	-29.1 
Levine IV	Cambridge PE (Lag)	-4.3 
Mass Tech	Cambridge PE (Lag)	-27.3 
TA Realty	NCREIF ODCE	-7.0 
Total Portfolio	Custom Core Idx	2.0 

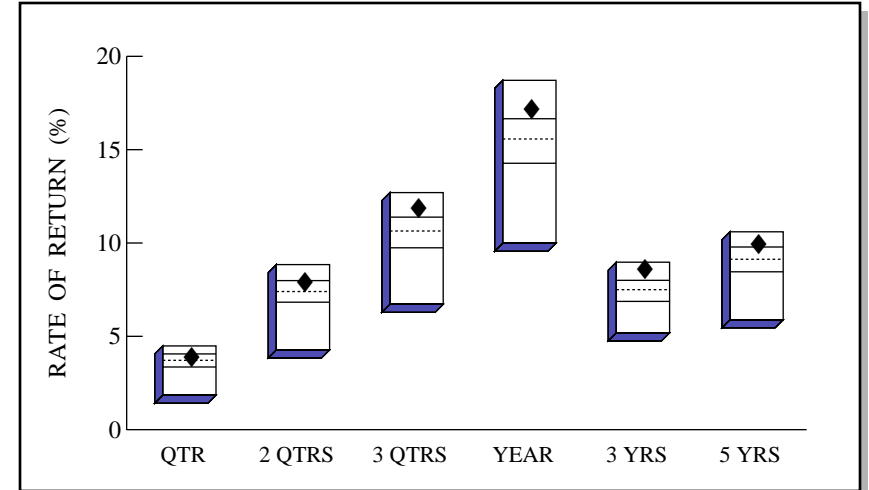
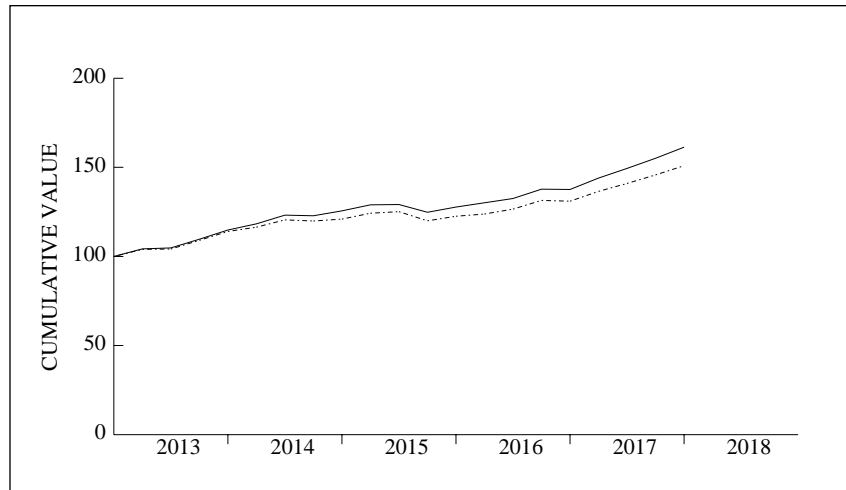
MANAGER ALLOCATION SUMMARY

Prior Quarter Market Value	%	Fund Name	Style	Current Quarter Market Value	%
\$436,306,519	96.0	PRIT Core	(PCOR)	\$450,210,889	97.1
\$112,120	0.0	Ascent VP III	(PREQ)	\$112,411	0.0
\$324,223	0.1	Ascent VP IV	(PREQ)	\$322,093	0.1
\$3,260,111	0.7	Ascent VP V	(PREQ)	\$3,306,967	0.7
\$33,090	0.0	BMP	(PREQ)	\$33,090	0.0
\$490,028	0.1	BMP II	(PREQ)	\$485,855	0.1
\$4,990,872	1.1	BlackRock IV	(PREQ)	\$4,764,815	1.0
\$501,358	0.1	Levine III	(PREQ)	\$98,503	0.0
\$895,000	0.2	Levine IV	(PREQ)	\$1,173,990	0.3
\$1,917	0.0	Mass Tech	(PREQ)	\$1,917	0.0
\$27,242	0.0	Intercontinental	(REAL)	\$0	0.0
\$518,003	0.1	TA Realty	(REAL)	\$186,616	0.0
\$1,422,723	0.3	Depository Account	(CASH)	\$1,083,025	0.2
\$4,004,995	0.9	PRIT Cash	(CASH)	\$1,004,099	0.2
\$1,511,240	0.3	Pooled Funds Cash	(CASH)	\$807,766	0.2
\$454,399,441	100.0	Composite	(TOTL)	\$463,592,036	100.0

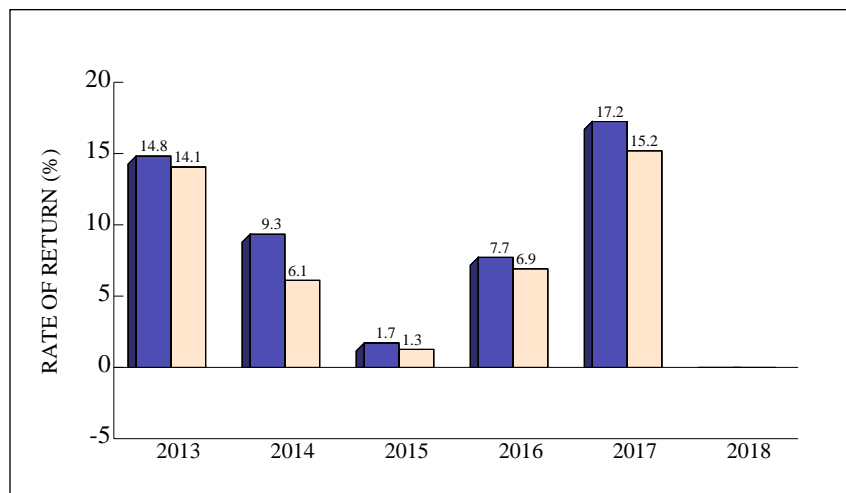
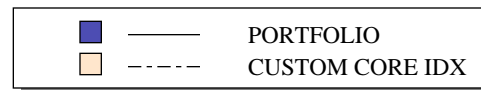
INVESTMENT RETURN SUMMARY - ONE QUARTER

Name	Quarter Total Return	Market Value September 30th, 2017	Net Cashflow	Net Investment Return	Market Value December 31st, 2017
PRIT Core (PCOR)	4.0	436,306,519	-3,531,820	17,436,190	450,210,889
Ascent VP III (PREQ)	0.3	112,120	0	291	112,411
Ascent VP IV (PREQ)	-0.7	324,223	0	-2,130	322,093
Ascent VP V (PREQ)	1.4	3,260,111	0	46,856	3,306,967
BMP (PREQ)	0.0	33,090	0	0	33,090
BMP II (PREQ)	-0.7	490,028	0	-4,173	485,855
BlackRock IV (PREQ)	7.1	4,990,872	-573,986	347,929	4,764,815
Levine III (PREQ)	-4.8	501,358	-394,677	-8,178	98,503
Levine IV (PREQ)	12.1	895,000	168,223	110,767	1,173,990
Mass Tech (PREQ)	0.0	1,917	0	0	1,917
Intercontinental (REAL)	---	27,242	-23,640	-3,602	0
TA Realty (REAL)	1.2	518,003	-335,682	4,295	186,616
Depository Account (CASH)	---	1,422,723	-339,697	-1	1,083,025
PRIT Cash (CASH)	---	4,004,995	-3,013,470	12,574	1,004,099
Pooled Funds Cash (CASH)	---	1,511,240	-703,474	0	807,766
Total Portfolio	4.0	454,399,441	-8,748,223	17,940,818	463,592,036

TOTAL RETURN COMPARISONS

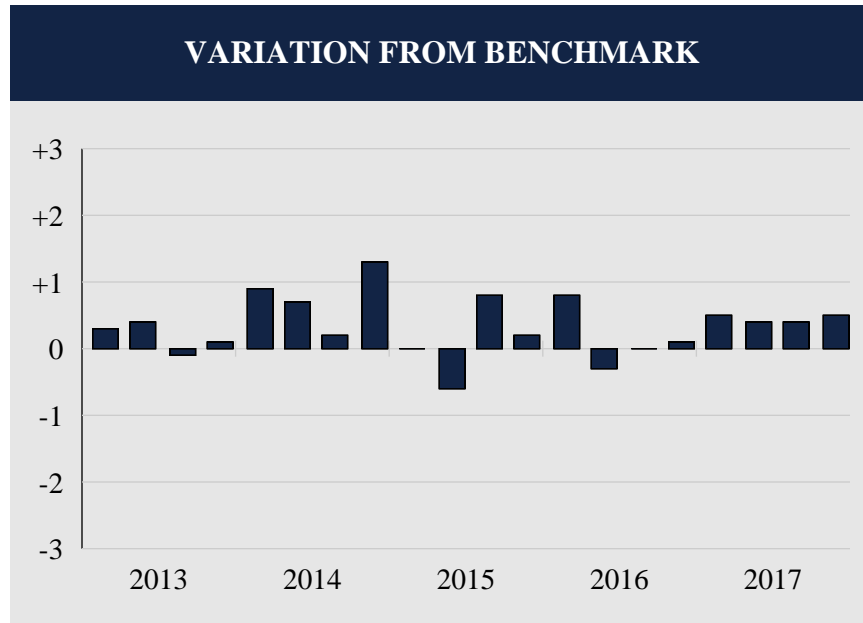


Public Fund Universe



	QTR	2 QTRS	3 QTRS	YEAR	-----ANNUALIZED-----	
					3 YRS	5 YRS
RETURN	4.0	8.0	12.0	17.2	8.7	10.0
(RANK)	(31)	(25)	(13)	(15)	(9)	(18)
5TH %ILE	4.5	8.8	12.7	18.7	9.0	10.6
25TH %ILE	4.1	8.0	11.4	16.7	8.0	9.8
MEDIAN	3.7	7.4	10.6	15.6	7.5	9.1
75TH %ILE	3.4	6.8	9.7	14.3	6.9	8.5
95TH %ILE	1.8	4.3	6.7	10.0	5.2	5.9
PRIT Index	3.5	7.1	10.6	15.2	7.6	8.6

Public Fund Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY**COMPARATIVE BENCHMARK: CUSTOM CORE INDEX**

Total Quarters Observed	20
Quarters At or Above the Benchmark	17
Quarters Below the Benchmark	3
Batting Average	.850

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
3/13	4.3	4.0	0.3
6/13	0.5	0.1	0.4
9/13	4.6	4.7	-0.1
12/13	4.7	4.6	0.1
3/14	3.0	2.1	0.9
6/14	4.2	3.5	0.7
9/14	-0.3	-0.5	0.2
12/14	2.2	0.9	1.3
3/15	2.7	2.7	0.0
6/15	0.1	0.7	-0.6
9/15	-3.4	-4.2	0.8
12/15	2.4	2.2	0.2
3/16	1.9	1.1	0.8
6/16	1.9	2.2	-0.3
9/16	3.9	3.9	0.0
12/16	-0.2	-0.3	0.1
3/17	4.7	4.2	0.5
6/17	3.7	3.3	0.4
9/17	3.8	3.4	0.4
12/17	4.0	3.5	0.5

PRIT MANAGER RETURNS AND ALLOCATIONS
AS OF DECEMBER 31, 2017

PORTFOLIO	QTR	ANNUALIZED			% Allocation
		1 YEAR	3 YEARS	5 YEARS	
Domestic Equity	6.3	20.9	11.0	15.4	19.1
SSgA S&P 500	6.7	21.9	11.4	15.8	14.8
Summit Creek	3.8	29.1	9.5	---	0.4
Frontier	3.2	6.7	11.5	---	0.5
Huber	4.7	13.1	5.1	---	0.4
RiverBridge	6.9	26.3	11.3	---	0.3
SSgA Russell 2500	5.3	16.8	10.1	14.2	2.7
<i>S&P 500</i>	<i>6.7</i>	<i>21.8</i>	<i>11.4</i>	<i>15.8</i>	---
<i>Russell 3000</i>	<i>6.3</i>	<i>21.1</i>	<i>11.1</i>	<i>15.6</i>	---
International Equity	4.5	26.7	9.3	9.4	18.1
SSgA World Ex-US Passive	4.4	25.8	8.5	8.5	7.2
Marathon Asset Management	3.7	24.4	9.4	10.2	4.3
Baillie Gifford	5.2	32.0	11.0	10.2	3.5
Mondrian	4.0	21.6	7.7	9.2	1.5
FIS	4.6	27.3	9.7	---	0.2
Timesquare	5.6	---	---	---	0.4
Strategic Global Advisors	5.9	---	---	---	0.2
Acadian Intl Small Cap	6.1	---	---	---	0.5
LMCG Small Cap	6.2	---	---	---	0.2
AQR Intl Small Cap	5.5	---	---	---	0.3
<i>MSCI EAFE</i>	<i>4.3</i>	<i>25.6</i>	<i>8.3</i>	<i>8.4</i>	---
<i>ACWI EX US</i>	<i>5.1</i>	<i>27.8</i>	<i>8.3</i>	<i>7.3</i>	---
Emerging Markets Equity	6.6	40.4	11.1	5.9	8.3
SSgA Emerging Markets	7.6	37.2	9.5	4.9	1.8
AQR Emerging	5.8	40.0	---	---	1.0
Baillie Gifford EMM	8.6	54.7	---	---	1.4
Driehaus Capital	7.0	46.5	---	---	1.2
Harding Loevner	6.1	36.4	---	---	0.9
Pzena	4.6	31.3	---	---	1.1
Acadian	6.6	45.8	13.9	13.9	0.3
Wasatch	8.0	40.1	8.4	5.5	0.2
Acadian Frontier	2.0	26.5	---	---	0.2
City of London	4.0	27.6	---	---	0.2
<i>MSCI Emerging Markets</i>	<i>7.5</i>	<i>37.8</i>	<i>9.5</i>	<i>4.7</i>	---

PRIT MANAGER RETURNS AND ALLOCATIONS
AS OF DECEMBER 31, 2017

PORTFOLIO	QTR	ANNUALIZED			% Allocation
		1 YEAR	3 YEARS	5 YEARS	
Core Fixed Income	1.7	5.4	2.5	3.8	12.3
Blackrock Passive	0.3	3.4	2.1	2.0	1.8
PIMCO Core	0.5	4.7	2.7	2.3	1.4
Loomis Sayles Core	0.7	4.7	3.4	3.3	1.6
Community Capital Management	0.2	2.8	2.1	2.2	0.0
AFL - CIO Housing Investment	0.3	3.3	2.2	2.1	0.2
Access Capital - ETI	0.1	2.1	2.1	2.3	0.1
Progress Mgr of Mgrs	0.7	4.5	---	---	0.2
BlackRock STRIPS	4.5	13.8	3.7	---	2.0
Blackrock TIPS	1.3	3.1	2.1	0.1	2.9
Blackrock ILBs	2.7	3.2	3.9	3.0	2.0
<i>Barclays Aggregate</i>	<i>0.4</i>	<i>3.5</i>	<i>2.3</i>	<i>2.1</i>	<i>---</i>
<i>Barclays STRIPS 20+Yrs</i>	<i>4.5</i>	<i>13.7</i>	<i>3.5</i>	<i>---</i>	<i>---</i>
<i>Barclays US TIPS</i>	<i>1.3</i>	<i>3.0</i>	<i>2.1</i>	<i>0.1</i>	<i>---</i>
<i>Barclays ILB US Hedged</i>	<i>2.5</i>	<i>3.3</i>	<i>4.0</i>	<i>3.0</i>	<i>---</i>
Value-Added Fixed Income	1.4	10.3	5.2	4.4	7.8
Fidelity	0.7	6.3	6.2	6.0	0.5
Loomis Sayles High Yield	0.7	8.7	5.9	6.0	0.5
Shenkman	0.6	6.9	5.6	5.1	0.5
Eaton Vance	1.1	4.6	4.9	4.2	1.2
Voya	1.2	3.7	4.5	4.5	1.1
Ashmore	0.4	11.9	10.5	5.1	0.7
PIMCO EMD	0.7	10.3	7.7	3.8	0.5
Investec	1.3	17.9	2.6	-1.3	0.3
Pictet	0.6	13.5	2.2	-2.0	0.4
Stone Harbor	0.6	16.6	3.1	-2.2	0.2
Distressed Debt	3.5	15.8	6.1	9.7	1.6
<i>ML Master High Yield</i>	<i>0.4</i>	<i>7.5</i>	<i>6.4</i>	<i>5.8</i>	<i>---</i>
<i>JPM EMBI</i>	<i>1.2</i>	<i>10.2</i>	<i>7.1</i>	<i>4.6</i>	<i>---</i>

PRIT MANAGER RETURNS AND ALLOCATIONS
AS OF DECEMBER 31, 2017

PORTFOLIO	QTR	ANNUALIZED			% Allocation
		1 YEAR	3 YEARS	5 YEARS	
Private Equity	4.4	24.3	18.1	19.1	10.2
Total Special Equity	3.8	27.7	19.2	19.5	7.5
Total Venture Capital	6.6	17.2	17.0	20.2	2.4
<i>Cambridge Private Equity (Lagged)</i>	<i>3.9</i>	<i>16.8</i>	<i>10.4</i>	<i>13.3</i>	---
Private Real Estate	2.1	8.1	10.3	11.9	6.3
Invesco Core	1.4	8.5	10.4	12.1	1.4
Lasalle	2.7	7.6	9.8	11.2	2.5
AEW	1.7	7.1	10.4	11.8	2.1
JP Morgan	-0.4	4.4	5.4	6.7	0.8
AEW Core Transition	1.4	7.8	---	---	0.3
PRIM - Core Real estate	4.4	6.6	---	---	0.1
Non-Core	0.3	6.3	16.9	13.2	0.8
New Boston Urban I	16.0	15.3	4.8	4.9	0.0
Portfolio Debt	---	---	---	---	-1.7
<i>NCREIF ODCE</i>	<i>2.1</i>	<i>7.6</i>	<i>10.4</i>	<i>11.5</i>	---
REITS	4.3	11.8	5.9	7.3	2.2
Centersquare Global REIT	4.3	12.6	6.3	7.9	1.3
Presima	4.2	10.4	---	---	0.2
Brookfield	4.2	11.4	---	---	0.8
<i>NAREIT</i>	<i>2.5</i>	<i>8.7</i>	<i>6.7</i>	<i>9.8</i>	---
<i>FTSE EPRA NAREIT</i>	<i>3.8</i>	<i>15.0</i>	<i>6.2</i>	<i>7.1</i>	---

PRIT MANAGER RETURNS AND ALLOCATIONS
AS OF DECEMBER 31, 2017

PORTFOLIO	QTR	ANNUALIZED			% Allocation
		1 YEAR	3 YEARS	5 YEARS	
Timber	2.4	8.3	4.9	6.8	3.5
Forest Investments	1.1	4.7	4.0	6.1	1.8
The Campbell Group	3.6	12.3	5.8	7.7	1.8
<i>NCREIF Timber</i>	<i>1.5</i>	<i>3.6</i>	<i>3.7</i>	<i>6.2</i>	---
Hedge Funds (Net)	2.7	8.3	3.5	5.7	8.2
Direct Hedge Funds	3.0	8.7	3.9	6.0	6.9
PAAMCO	1.1	5.9	1.2	4.7	1.3
<i>HFRI FOF</i>	<i>2.0</i>	<i>7.7</i>	<i>2.6</i>	<i>4.0</i>	---
Risk Premia	5.8	6.4	1.6	---	0.9
Real Assets	1.2	11.7	---	---	0.4
Equity Hedge	4.4	---	---	---	1.1
Overlay	2.3	10.4	4.6	---	1.2
Clifton	3.6	16.7	6.4	---	0.5
Overlay Cash	---	---	---	---	0.7
Portable Alpha Wind Down (Net)	0.3	15.6	1.0	-0.1	0.0
Austin Capital	-0.2	0.3	20.2	3.6	0.0
Crestline	-0.7	90.4	15.0	8.5	0.0
Strategic	0.6	-5.6	-5.5	-3.0	0.0
<i>HFRI FOF</i>	<i>2.0</i>	<i>7.7</i>	<i>2.6</i>	<i>4.0</i>	---
Natural Resources - Private	3.6	11.7	---	---	0.3

All sleeve-level returns include cash allocations; the sum of the manager allocations may not add up to the total.

Source: PRIM Board

APPENDIX - MAJOR MARKET INDEX RETURNS

Economic Data	Style	QTR	YTD	1 Year	3 years	5 Years
Consumer Price Index	Economic Data	-0.1	2.1	2.1	1.6	1.4
Domestic Equity	Style	QTR	YTD	1 Year	3 years	5 Years
Russell 3000	Broad Equity	6.3	21.1	21.1	11.1	15.6
S&P 500	Large Cap Core	6.6	21.8	21.8	11.4	15.8
Russell 1000	Large Cap	6.6	21.7	21.7	11.2	15.7
Russell 1000 Growth	Large Cap Growth	7.9	30.2	30.2	13.8	17.3
Russell 1000 Value	Large Cap Value	5.3	13.6	13.6	8.6	14.0
Russell Mid Cap	Midcap	6.1	18.5	18.5	9.6	15.0
Russell Mid Cap Growth	Midcap Growth	6.8	25.3	25.3	10.3	15.3
Russell Mid Cap Value	Midcap Value	5.5	13.3	13.3	9.0	14.7
Russell 2000	Small Cap	3.3	14.6	14.6	9.9	14.1
Russell 2000 Growth	Small Cap Growth	4.6	22.1	22.1	10.3	15.2
Russell 2000 Value	Small Cap Value	2.0	7.8	7.8	9.5	13.0
International Equity	Style	QTR	YTD	1 Year	3 years	5 Years
MSCI All Country World Ex US	Foreign Equity	5.1	27.8	27.8	8.3	7.3
MSCI EAFE	Developed Markets Equity	4.3	25.6	25.6	8.3	8.4
MSCI EAFE Growth	Developed Markets Growth	5.3	29.4	29.4	9.6	9.2
MSCI EAFE Value	Developed Markets Value	3.3	22.1	22.1	7.0	7.5
MSCI Emerging Markets	Emerging Markets Equity	7.5	37.8	37.8	9.5	4.7
Domestic Fixed Income	Style	QTR	YTD	1 Year	3 years	5 Years
Bloomberg Barclays Aggregate Index	Core Fixed Income	0.4	3.5	3.5	2.3	2.1
Bloomberg Barclays Capital Gov't Bond	Treasuries	0.0	2.3	2.3	1.4	1.3
Bloomberg Barclays Capital Credit Bond	Corporate Bonds	1.0	6.2	6.2	3.6	3.2
Intermediate Aggregate	Core Intermediate	-0.1	2.3	2.3	1.8	1.7
ML/BoA 1-3 Year Treasury	Short Term Treasuries	-0.3	0.4	0.4	0.6	0.6
Bloomberg Barclays Capital High Yield	High Yield Bonds	0.5	7.5	7.5	6.4	5.8
Alternative Assets	Style	QTR	YTD	1 Year	3 years	5 Years
Bloomberg Barclays Global Treasury Ex US	International Treasuries	1.5	9.3	9.3	2.0	-0.4
NCREIF NFI-ODCE Index	Real Estate	2.1	7.6	7.6	10.4	11.5
HFRI FOF Composite	Hedge Funds	2.0	7.7	7.7	2.6	4.0

APPENDIX - DISCLOSURES

* The Custom PRIT Core Policy Index is a policy-weighted passive index and was constructed as follows:

For all periods through December 2010:

26.0% Russell 3000	20.0% MSCI EAFE	5.0% MSCI Emerging Markets
15.0% Barclays Aggregate	5.0% CSFB Hi Yield	10.0% Cambridge Private Equity (Lagged)
10.0% NCREIF NFI-ODCE	4.0% NCREIF Timber	5.0% HFRI Fund of Funds Composite

For all periods Since December 2010:

24.0% Russell 3000	20.0% MSCI EAFE	5.0% MSCI Emerging Markets
13.0% Barclays Aggregate	6.0% CSFB Hi Yield	10.0% Cambridge Private Equity (Lagged)
10.0% NCREIF NFI-ODCE	4.0% NCREIF Timber	8.0% HFRI Fund of Funds Composite

For all periods from August 2011 through January 2014:

19.0% Russell 3000	17.0% MSCI EAFE	7.0% MSCI Emerging Markets
14.0% Barclays Aggregate	6.0% CSFB Hi Yield	10.0% Cambridge Private Equity
10.0% NCREIF NFI-ODCE	4.0% NCREIF Timber	10.0% HFRI Fund of Funds Composite
3.0% Barclays US TIPS		

For all periods since February 2014:

18.0% Russell 3000	16.0% MSCI EAFE	6.0% MSCI Emerging Markets
4.0% Barclays Aggregate	6.0% CSFB Hi Yield	10.0% Cambridge Private Equity
10.0% NCREIF NFI-ODCE	4.0% NCREIF Timber	9.0% HFRI Fund of Funds Composite
3.0% Barclays US TIPS	10.0% Barclays 5-10 Year Bond	4.0% MSCI All Country Ex-US

APPENDIX - DISCLOSURES

- * 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.
- * Returns for periods greater than one quarter incorporate performance figures sourced from Segal Rogerscasey. These figures have not been independently verified by Dahab Associates.

ESSEX REGIONAL RETIREMENT SYSTEM
PRIT - CORE FUND
PERFORMANCE REVIEW
DECEMBER 2017

INVESTMENT RETURN

On December 31st, 2017, the Essex Regional Retirement System's PRIT Core Fund was valued at \$450,210,889, representing an increase of \$13,904,370 from the September quarter's ending value of \$436,306,519. Last quarter, the Fund posted withdrawals totaling \$3,531,820, which offset the portfolio's net investment return of \$17,436,190. Since there were no income receipts for the fourth quarter, the portfolio's net investment return figure was the product of net realized and unrealized capital gains totaling \$17,436,190.

RELATIVE PERFORMANCE

Total Portfolio

During the fourth quarter, the PRIT Core Fund returned 4.0%, which was 0.5% above the Custom Core Index's return of 3.5% and ranked in the 29th percentile of the Public Fund universe. Over the trailing twelve-month period, this portfolio returned 17.8%, which was 2.6% above the benchmark's 15.2% performance, and ranked in the 10th percentile. Since December 2012, the account returned 9.9% per annum and ranked in the 21st percentile. For comparison, the Custom Core Index returned an annualized 8.6% over the same time frame.

PRIT Core

The PRIT Core portfolio outperformed the benchmark across most of the invested sleeves in the fourth quarter. Real Estate managers outgained the benchmark by 50 basis points, and comprised 8.5% of the portfolio, while the Hedge Funds piece (8.2% allocation) outperformed as well, returning 2.7% relative to the index's 2.2% gain. Domestic Equity (19.1% weight) beat slightly (+6.3% vs. benchmark's +6.2%), as did International Equity (+4.5% vs. +4.4%). Core Fixed Income managers altogether (12.3% allocation) matched the benchmark return, gaining 1.7%. Their Value-added counterparts were slightly better (+1.4% vs. +1.3%). Private Equity managers (10.2% allocation) outperformed as well.

PRIT Domestic Equity

The SSgA S&P 500 index fund (14.8% allocation) comprised more than three-quarters of the Domestic Equity sleeve, and returned 6.7%, predictably mirroring the performance of the benchmark on which it is based.

Total Small/Smid Cap Equity managers outperformed the benchmark by 30 basis points. Small cap value managers Frontier and Huber were areas of strength, returning 3.2% and 4.7%, respectively, compared to the Russell 2000 Value index's return of 2.0%. Smid cap growth manager Riverbridge also beat, returning 6.9% compared to the Russell 2500 Growth index's 6.4% gain. Summit Creek underperformed by 80 basis points.

PRIT International Equity

The International Equity sleeve (18.1%) narrowly outpaced the benchmark in the fourth quarter, gaining 4.5% against the custom index's 4.4% return. The sleeve returned 26.7%, 9.3%, and 9.4% for the one, three, and five-year periods. For comparison, the index returned 25.6%, 8.0%, and 8.0% over the same ranges.

The SSgA World Ex-US index fund – which comprised 39.8% of the sleeve – returned 4.4%, which was 20 basis points above the benchmark's return of 4.2%. Performance across International Equity Core managers was more mixed. Marathon-London returned 3.7%, or 50 basis points below the custom index gain. Mondrian also underperformed (+4.0%), while Baillie Gifford and FIS beat.

PRIT Emerging Markets Equity

The Emerging Markets sleeve was an area of weakness for the portfolio, returning 6.6% compared to the benchmark's 7.6% gain. Core managers were the main drivers of underperformance, collectively falling short of the benchmark by 80 basis points, while their 66.2% sleeve weight magnified the effects of the deficit. Pzena Investments led on the downside, returning just 4.6% compared to the custom index's 7.4% gain.

Emerging Markets Small Cap managers underperformed as well, gaining 7.1% compared to the benchmark's 9.2% gain. The Frontier Markets piece was especially weak, returning 2.9%, or 300 basis points short of the index.

PRIT Private Equity

The Private Equity sleeve gained 4.4% in the fourth quarter, 70 basis points better than the blended benchmark's 3.7% return. Special Equity funds collectively gained 3.8% for the three month period, and represented nearly three-quarters of the sleeve's allocation. Venture Capital managers fared even better, gaining 6.6%. For the one-, three-, and five-year periods, the sleeve returned 24.3%, 18.1%, 19.1%, respectively.

PRIT Hedge Funds

The HFRI Fund of Funds benchmark continued to offer a low performance hurdle in the fourth quarter, returning just 2.2%; the sleeve returned 2.7%. Direct Hedge Funds (6.9% portfolio weight, or 84.1% of the sleeve) gained 3.0%, beating the benchmark by 80 basis points. PAAMCO decidedly underperformed, returning just 1.1%, but its light allocation only slightly offset the positive effect of the Direct Hedge Funds' return.

PRIT Real Estate

The PRIT Real Estate sleeve represented 8.5% of the PRIT portfolio (including 1.7% in debt), and returned 2.6% for the quarter, outperforming the benchmark by 50 basis points. The Private Real Estate component – representing 74.1% of the sleeve – beat the NCREIF Property index (One quarter lag) by 40 basis points, thanks to 2.7% gain from Core manager Lasalle, which represented nearly 30% of the sleeve allocation. Other Core managers were weaker, including JP Morgan, which return -0.4% for the three month period, and Invesco Core, which gained just 1.4%.

The sleeve's REIT component (2.2% combined allocation) outperformed the FTSE EPRA NAREIT Developed Net Total Return index (4.3% vs. 3.8%). Centersquare Global REIT gained 4.3%, or 50 basis points over the benchmark, while Presima and Brookfield beat as well.

PRIT Fixed Income

In the fourth quarter, the PRIT Core Fixed Income sleeve posted a 1.7% return, which mirrored the return of the custom benchmark. Inflation-linked Bonds tracked the custom index's 1.8% gain, and comprised 39.8% of the sleeve allocation.

Aggregate elements returned 0.5%, or 10 basis points higher than the Barclays Aggregate Index. The BlackRock STRIPS account, which represented 16.2% of the Core Fixed Income allocation, returned 4.5%, expectedly matching the Barclays US Treasury STRIPS 20+ Year Index for the quarter.

The Value-Added Fixed Income sleeve (7.8% portfolio allocation) performed slightly better relative to its benchmark, gaining 1.4% compared to the benchmark's 1.3% return. Distressed Debt was a major tailwind to outperformance: While the NYU Salomon Center Combined Defaulted Public Bond & Bank Loan index returned -0.3% in the fourth quarter, the portfolio's Distressed Debt position gained 3.5%, and its 20.5% sleeve weight enlarged the substantial performance surplus.

EXECUTIVE SUMMARY**PERFORMANCE SUMMARY**

	Quarter	YTD /1Y	3 Year	5 Year
Total Portfolio - Gross	4.0	17.8	8.8	9.9
<i>PUBLIC FUND RANK</i>	(29)	(10)	(8)	(21)
Total Portfolio - Net	3.9	17.2	8.2	9.4
Custom Core Idx	3.5	15.2	7.6	8.6
PRIT Core - Gross	4.0	17.8	8.8	9.9
<i>PUBLIC FUND RANK</i>	(29)	(10)	(8)	(21)
Custom Core Idx	3.5	15.2	7.6	8.6

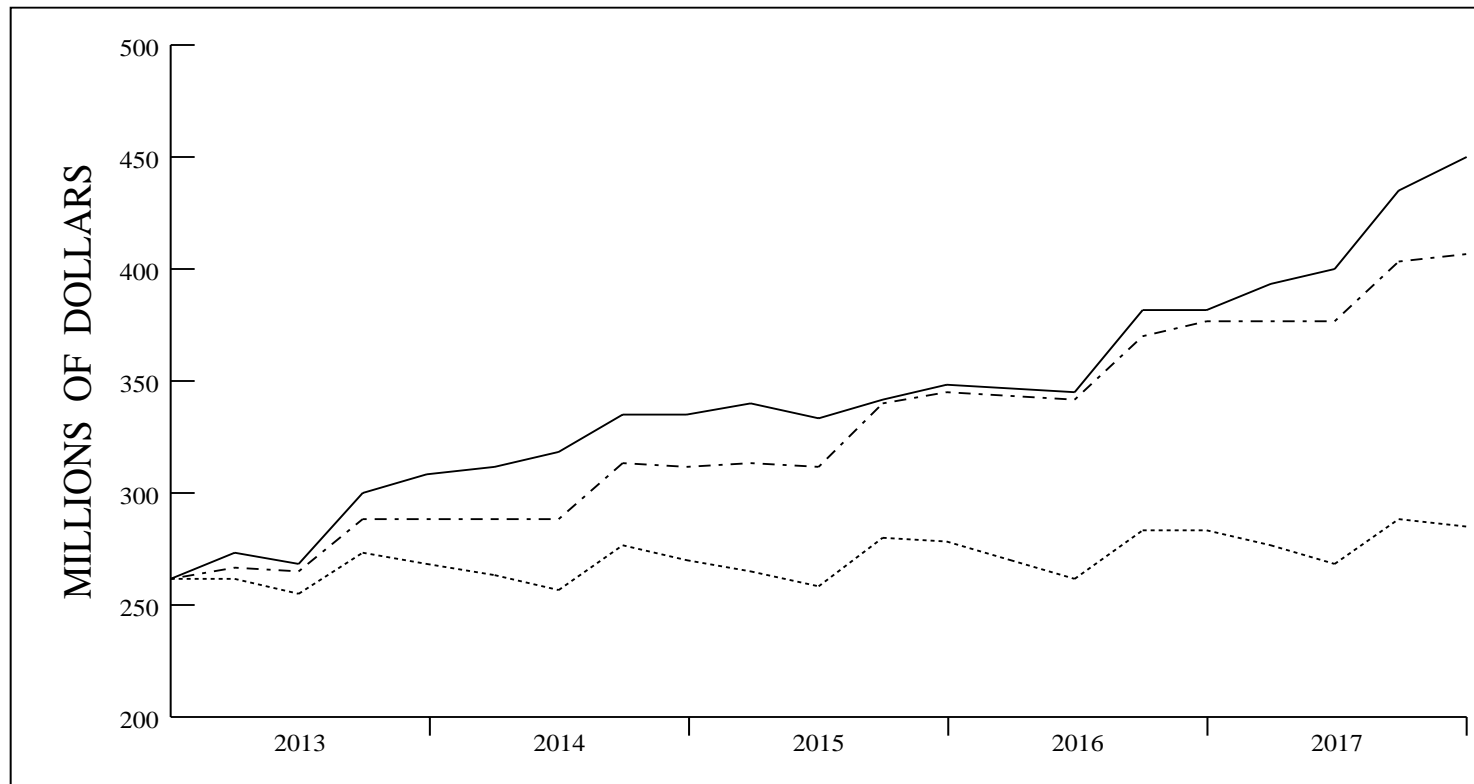
ASSET ALLOCATION

PRIT Core	100.0%	\$ 450,210,889
Total Portfolio	100.0%	\$ 450,210,889

INVESTMENT RETURN

Market Value 9/2017	\$ 436,306,519
Contribs / Withdrawals	- 3,531,820
Income	0
Capital Gains / Losses	17,436,190
Market Value 12/2017	\$ 450,210,889

INVESTMENT GROWTH

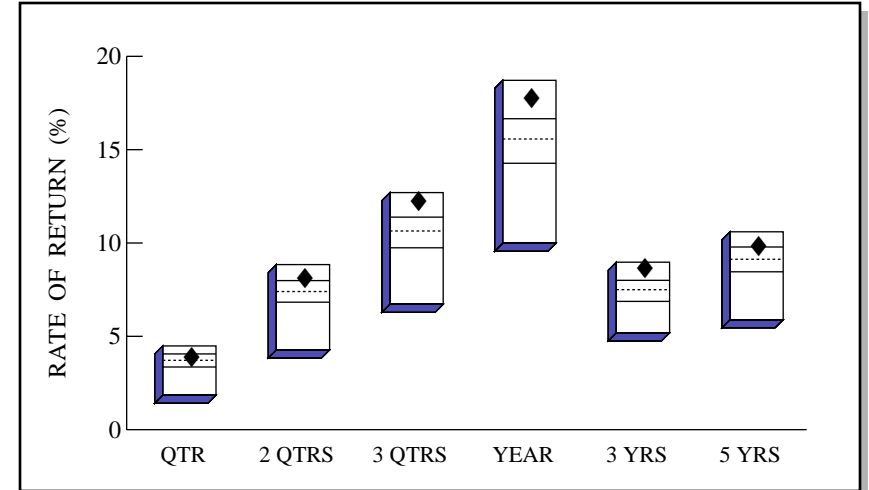
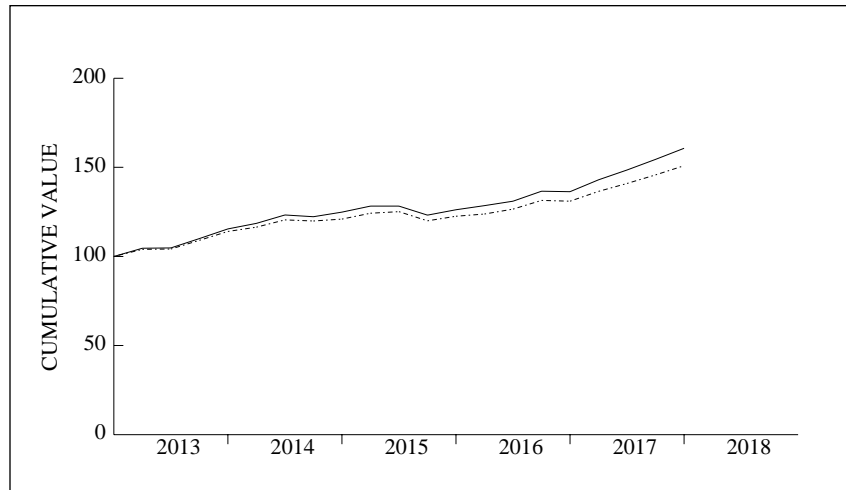


— ACTUAL RETURN
 - - - 7.75%
 . . . 0.0%

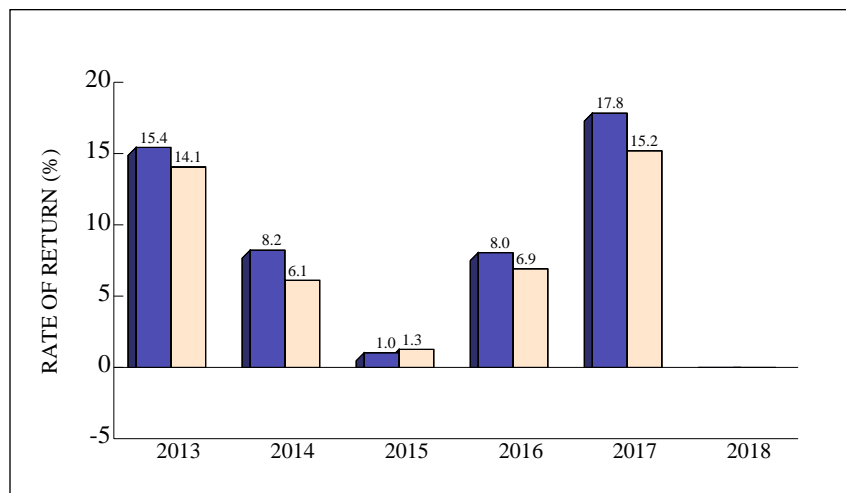
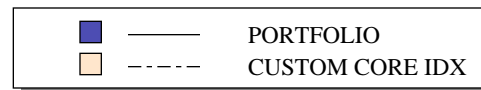
VALUE ASSUMING
 7.75% RETURN \$ 407,535,069

	LAST QUARTER	FIVE YEARS
BEGINNING VALUE	\$ 436,306,519	\$ 262,714,186
NET CONTRIBUTIONS	- 3,531,820	22,458,821
INVESTMENT RETURN	17,436,190	165,037,882
ENDING VALUE	\$ 450,210,889	\$ 450,210,889
INCOME	0	20,268,598
CAPITAL GAINS (LOSSES)	17,436,190	144,769,284
INVESTMENT RETURN	17,436,190	165,037,882

TOTAL RETURN COMPARISONS

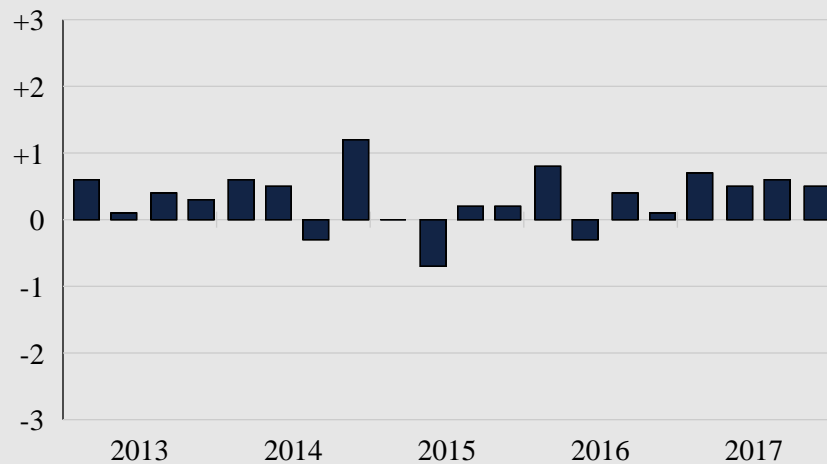


Public Fund Universe



	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
RETURN	4.0	8.2	12.3	17.8	8.8	9.9
(RANK)	(29)	(17)	(9)	(10)	(8)	(21)
5TH %ILE	4.5	8.8	12.7	18.7	9.0	10.6
25TH %ILE	4.1	8.0	11.4	16.7	8.0	9.8
MEDIAN	3.7	7.4	10.6	15.6	7.5	9.1
75TH %ILE	3.4	6.8	9.7	14.3	6.9	8.5
95TH %ILE	1.8	4.3	6.7	10.0	5.2	5.9
PRIT Index	3.5	7.1	10.6	15.2	7.6	8.6

Public Fund Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY**COMPARATIVE BENCHMARK: CUSTOM CORE INDEX****VARIATION FROM BENCHMARK**

Total Quarters Observed	20
Quarters At or Above the Benchmark	17
Quarters Below the Benchmark	3
Batting Average	.850

RATES OF RETURN

Date	Portfolio	Benchmark	Difference
3/13	4.6	4.0	0.6
6/13	0.2	0.1	0.1
9/13	5.1	4.7	0.4
12/13	4.9	4.6	0.3
3/14	2.7	2.1	0.6
6/14	4.0	3.5	0.5
9/14	-0.8	-0.5	-0.3
12/14	2.1	0.9	1.2
3/15	2.7	2.7	0.0
6/15	0.0	0.7	-0.7
9/15	-4.0	-4.2	0.2
12/15	2.4	2.2	0.2
3/16	1.9	1.1	0.8
6/16	1.9	2.2	-0.3
9/16	4.3	3.9	0.4
12/16	-0.2	-0.3	0.1
3/17	4.9	4.2	0.7
6/17	3.8	3.3	0.5
9/17	4.0	3.4	0.6
12/17	4.0	3.5	0.5

APPENDIX - DISCLOSURES

* The Custom PRIT Core Policy Index is a policy-weighted passive index and was constructed as follows:

For all periods through December 2010:

26.0% Russell 3000	20.0% MSCI EAFE	5.0% MSCI Emerging Markets
15.0% Barclays Aggregate	5.0% CSFB Hi Yield	10.0% Cambridge Private Equity
10.0% NCREIF NFI-ODCE	4.0% NCREIF Timber	5.0% HFRI Fund of Funds Composite

For all periods Since December 2010 through July 2011:

24.0% Russell 3000	20.0% MSCI EAFE	5.0% MSCI Emerging Markets
13.0% Barclays Aggregate	6.0% CSFB Hi Yield	10.0% Cambridge Private Equity
10.0% NCREIF NFI-ODCE	4.0% NCREIF Timber	8.0% HFRI Fund of Funds Composite

For all periods from August 2011 through January 2014:

19.0% Russell 3000	17.0% MSCI EAFE	7.0% MSCI Emerging Markets
14.0% Barclays Aggregate	6.0% CSFB Hi Yield	10.0% Cambridge Private Equity
10.0% NCREIF NFI-ODCE	4.0% NCREIF Timber	10.0% HFRI Fund of Funds Composite
3.0% Barclays US TIPS		

For all periods since February 2014:

18.0% Russell 3000	16.0% MSCI EAFE	6.0% MSCI Emerging Markets
4.0% Barclays Aggregate	6.0% CSFB Hi Yield	10.0% Cambridge Private Equity
10.0% NCREIF NFI-ODCE	4.0% NCREIF Timber	9.0% HFRI Fund of Funds Composite
3.0% Barclays US TIPS	10.0% Barclays 5-10 Year Bond	4.0% MSCI All Country Ex-US

For all periods since October 2015:

18.0% Russell 3000	16.0% MSCI EAFE	6.0% MSCI Emerging Markets
4.0% Barclays Aggregate	6.0% Citi BB & B Hi Yield	10.0% Cambridge Private Equity
10.0% NCREIF NFI-ODCE	4.0% NCREIF Timber	9.0% HFRI Fund of Funds Composite
3.0% Barclays US TIPS	10.0% Barclays 5-10 Year Bond	4.0% MSCI All Country Ex-US

ESSEX REGIONAL RETIREMENT SYSTEM
ASCENT VENTURE PARTNERS III
PERFORMANCE REVIEW
DECEMBER 2017

INVESTMENT RETURN

On December 31st, 2017, the Essex Regional Retirement System's Ascent Venture Partners III portfolio was valued at \$112,411, representing a \$291 increase over the September ending value of \$112,120. During the last three months, the Fund posted no net contributions or withdrawals, making the entire increase in value the result of \$291 in net investment returns. In the absence of income receipts for the quarter, the portfolio's net investment return figure was the result of net realized and unrealized capital gains totaling \$291.

RELATIVE PERFORMANCE

Total Fund

Performance was based on an Ascent Venture Partners statement that was unaudited and subject to revision. All stated returns carry a one-quarter lag.

During the fourth quarter, the Ascent Venture Partners III account returned 0.3%, which was 3.6% less than the Cambridge Private Equity (Lagged)'s return of 3.9%. Over the trailing twelve-month period, the portfolio returned -8.3%, which was 25.1% below the benchmark's 16.8% return. Since December 2012, the portfolio returned -4.5% on an annualized basis, while the Cambridge Private Equity (Lagged) returned an annualized 13.3% over the same time frame.

ASSET ALLOCATION

The portfolio was fully invested in the Ascent Venture Partners' Fund III at the end of the quarter.

Private Equity Investor Report
Ascent Venture Partners III
As of December 31, 2017

Market Value¹	\$	112,411	Last Appraisal Date: 9/30/2017
Initial Commitment	\$	2,000,000	
Paid-in Capital	\$	1,860,000	93.00%
Remaining Commitment	\$	140,000	7.00%
Net Gain/(Loss) ²	\$	514,954	
Net IRR Since Inception ²		4.0%	

Date	Paid-in Capital	% of Commitment	Distributions
1999	\$ -	0.00%	\$ -
2000	\$ 760,000	38.00%	\$ -
2001	\$ 360,000	18.00%	\$ -
2002	\$ 220,000	11.00%	\$ -
2003	\$ 200,000	10.00%	\$ (86,774)
2004	\$ 60,000	3.00%	\$ (178,187)
2005	\$ 140,000	7.00%	\$ (37,229)
2006	\$ 100,000	5.00%	\$ (404,954)
2007	\$ 20,000	1.00%	\$ (373,401)
2008	\$ -	0.00%	\$ (282,592)
1Q2009	\$ -	0.00%	\$ -
2Q2009	\$ -	0.00%	\$ -
3Q2009	\$ -	0.00%	\$ -
4Q2009	\$ -	0.00%	\$ (165,133)
1Q2010	\$ -	0.00%	\$ (580,334)
2Q2010	\$ -	0.00%	\$ -
3Q2010	\$ -	0.00%	\$ -
4Q2010	\$ -	0.00%	\$ (90,882)
1Q2011	\$ -	0.00%	\$ -
2Q2011	\$ -	0.00%	\$ -
3Q2011	\$ -	0.00%	\$ (21,009)
4Q2011	\$ -	0.00%	\$ -
1Q2012	\$ -	0.00%	\$ -
2Q2012	\$ -	0.00%	\$ (42,048)
Total	\$ 1,860,000	93.00%	\$ (2,262,543)

1. Market Value as of last appraisal date, adjusted for any contributions and distributions since that time.

2. Values as of last appraisal date

EXECUTIVE SUMMARY**PERFORMANCE SUMMARY**

	Quarter	YTD /1Y	3 Year	5 Year
Total Portfolio - Gross	0.3	-8.3	-16.4	-4.5
Total Portfolio - Net	0.3	-8.3	-16.4	-4.5
Cambridge PE (Lag)	3.9	16.8	10.4	13.3
Private Equity - Gross	0.3	-8.3	-16.4	-4.5
Cambridge PE (Lag)	3.9	16.8	10.4	13.3

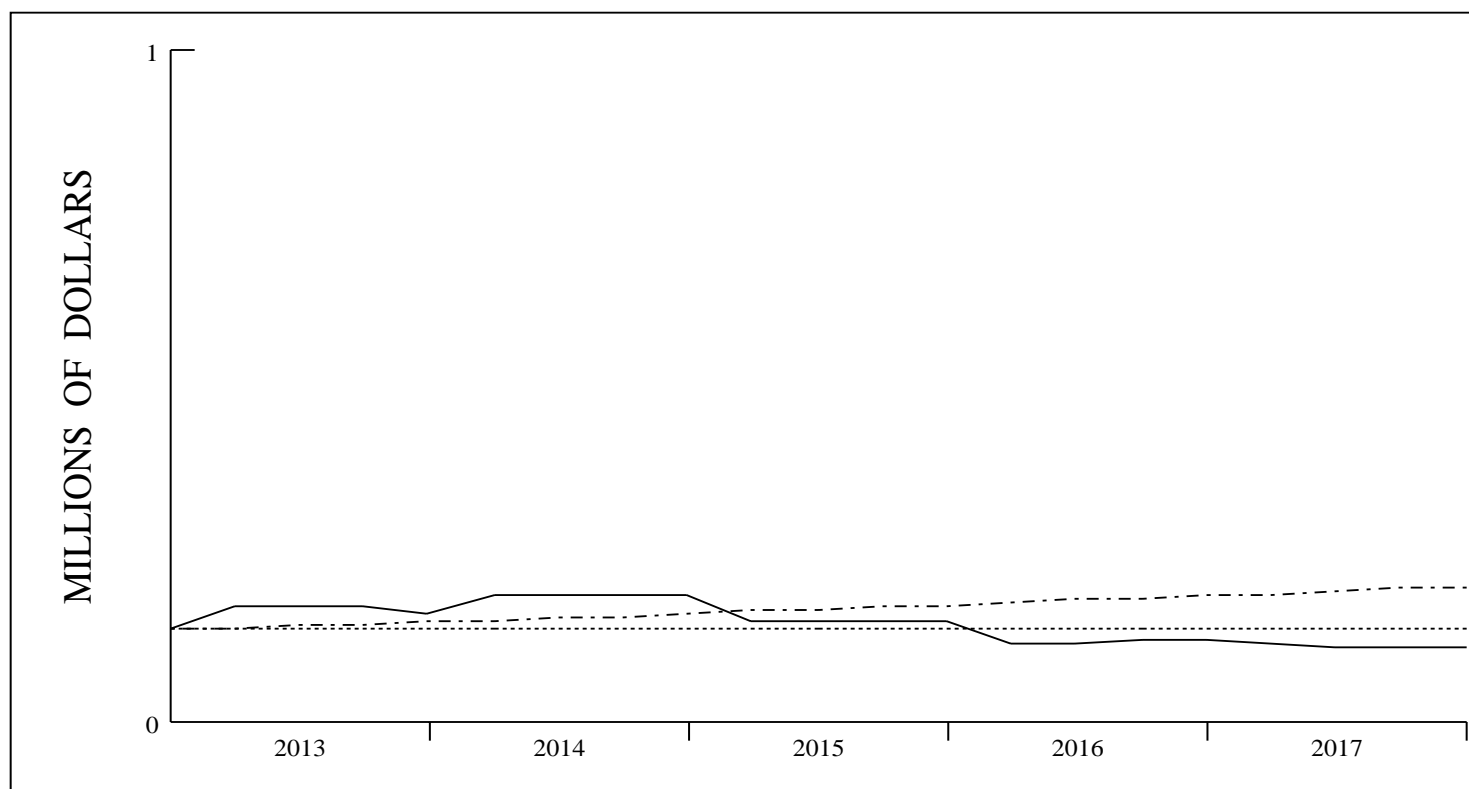
ASSET ALLOCATION

Private Equity	100.0%	\$ 112,411
Total Portfolio	100.0%	\$ 112,411

INVESTMENT RETURN

Market Value 9/2017	\$ 112,120
Contribs / Withdrawals	0
Income	0
Capital Gains / Losses	291
Market Value 12/2017	\$ 112,411

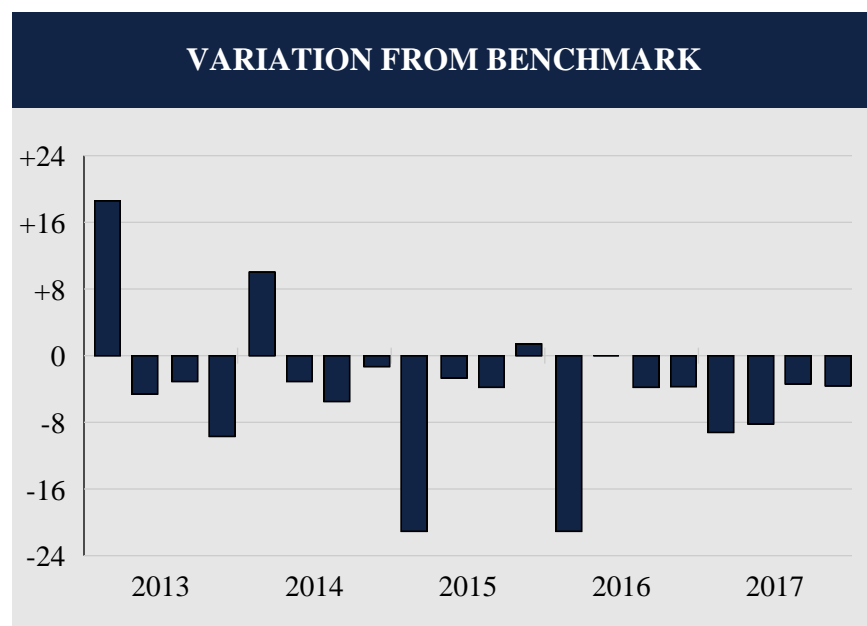
INVESTMENT GROWTH



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

VALUE ASSUMING
 7.75% RETURN \$ 205,057

	LAST QUARTER	FIVE YEARS
BEGINNING VALUE	\$ 112,120	\$ 141,185
NET CONTRIBUTIONS	0	0
INVESTMENT RETURN	291	- 28,774
ENDING VALUE	\$ 112,411	\$ 112,411
INCOME	0	0
CAPITAL GAINS (LOSSES)	291	- 28,774
INVESTMENT RETURN	291	- 28,774

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY**COMPARATIVE BENCHMARK: CAMBRIDGE PRIVATE EQUITY (LAGGED)**

Total Quarters Observed	20
Quarters At or Above the Benchmark	4
Quarters Below the Benchmark	16
Batting Average	.200

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
3/13	22.3	3.7	18.6
6/13	0.0	4.6	-4.6
9/13	0.0	3.1	-3.1
12/13	-4.7	5.0	-9.7
3/14	17.0	7.0	10.0
6/14	0.0	3.1	-3.1
9/14	0.0	5.5	-5.5
12/14	0.0	1.3	-1.3
3/15	-20.2	0.9	-21.1
6/15	0.0	2.7	-2.7
9/15	0.1	3.9	-3.8
12/15	-0.1	-1.5	1.4
3/16	-20.6	0.5	-21.1
6/16	0.1	0.1	0.0
9/16	0.2	4.0	-3.8
12/16	0.2	3.9	-3.7
3/17	-4.7	4.5	-9.2
6/17	-4.3	3.9	-8.2
9/17	0.2	3.6	-3.4
12/17	0.3	3.9	-3.6

ESSEX REGIONAL RETIREMENT SYSTEM
ASCENT VENTURE PARTNERS IV
PERFORMANCE REVIEW
DECEMBER 2017

INVESTMENT RETURN

On December 31st, 2017, the Essex Regional Retirement System's Ascent Venture Partners IV portfolio was valued at \$322,093, a decrease of \$2,130 from the September ending value of \$324,223. Last quarter, the account recorded no net contributions or withdrawals, while recording a net investment loss for the quarter of \$2,130. Since there were no income receipts for the fourth quarter, net investment losses were the result of capital losses (realized and unrealized).

RELATIVE PERFORMANCE

Total Fund

Performance was based on an Ascent Venture Partners statement that was unaudited and subject to revision. All stated returns carry a one-quarter lag.

During the fourth quarter, the Ascent Venture Partners IV portfolio lost 0.7%, which was 4.6% below the Cambridge Private Equity (Lagged)'s return of 3.9%. Over the trailing twelve-month period, the portfolio returned 48.3%, which was 31.5% greater than the benchmark's 16.8% return. Since December 2012, the Ascent Venture Partners IV portfolio returned -23.7% on an annualized basis, while the Cambridge Private Equity (Lagged) returned an annualized 13.3% over the same time frame.

ASSET ALLOCATION

The portfolio was fully invested in the Ascent Venture Partners' Fund IV at the end of the quarter.

Private Equity Investor Report
Ascent Venture Partners IV
As of December 31, 2017

Market Value¹	\$	322,093	Last Appraisal Date: 9/30/2017
Initial Commitment	\$	2,000,000	
Paid-in Capital	\$	2,000,000	100.00%
Remaining Commitment	\$	-	0.00%
Net Gain/(Loss) ²	\$	(1,366,731)	
Net IRR Since Inception ²		-16.6%	

Date	Paid-in Capital	% of Commitment	Distributions
1Q2008	\$ 1,200,000	60.00%	\$ (95,927)
2Q2008	\$ 200,000	10.00%	\$ -
2Q2009	\$ 100,000	5.00%	\$ -
3Q2009	\$ 100,000	5.00%	\$ -
1Q2010	\$ -	-	\$ (60,961)
3Q2010	\$ 140,000	7.00%	\$ -
1Q2011	\$ 60,000	3.00%	\$ -
4Q2011	\$ 100,000	5.00%	\$ -
4Q2012	\$ -	-	\$ (33,333)
4Q2014	\$ -	-	\$ (120,955)
3Q2015	\$ 100,000	5.00%	\$ -
Total	\$ 2,000,000	100.00%	\$ (311,176)

1. The Market Value reflects the last appraisal value adjusted for any contributions and distributions since that time.

2. Values as of last appraisal date

EXECUTIVE SUMMARY**PERFORMANCE SUMMARY**

	Quarter	YTD /1Y	3 Year	5 Year
Total Portfolio - Gross	-0.7	48.3	-42.2	-23.7
Total Portfolio - Net	-2.0	40.7	-47.3	-30.2
Cambridge PE (Lag)	3.9	16.8	10.4	13.3
Private Equity - Gross	-0.7	48.3	-42.2	-23.7
Cambridge PE (Lag)	3.9	16.8	10.4	13.3

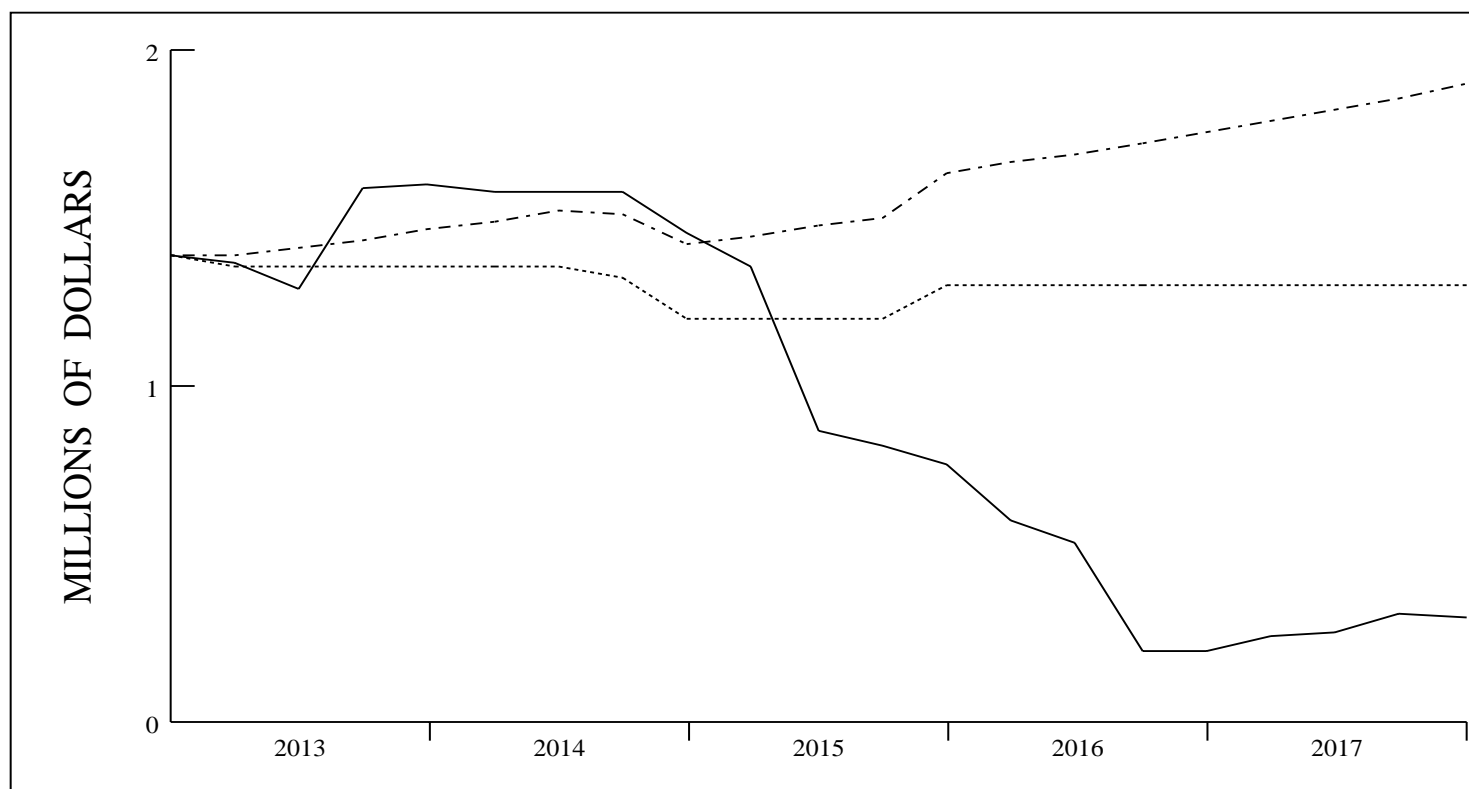
ASSET ALLOCATION

Private Equity	100.0%	\$ 322,093
Total Portfolio	100.0%	\$ 322,093

INVESTMENT RETURN

Market Value 9/2017	\$ 324,223
Contribs / Withdrawals	0
Income	0
Capital Gains / Losses	- 2,130
Market Value 12/2017	\$ 322,093

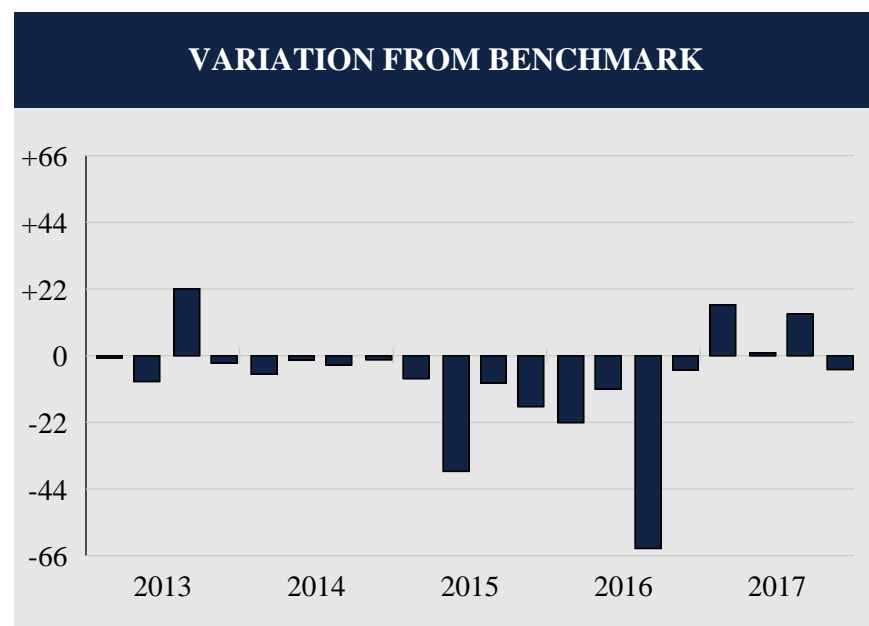
INVESTMENT GROWTH



— ACTUAL RETURN
 - - - 7.75%
 0.0%

VALUE ASSUMING
 7.75% RETURN \$ 1,901,281

	LAST QUARTER	FIVE YEARS
BEGINNING VALUE	\$ 324,223	\$ 1,398,351
NET CONTRIBUTIONS	0	- 90,812
INVESTMENT RETURN	- 2,130	-985,446
ENDING VALUE	\$ 322,093	\$ 322,093
INCOME	0	0
CAPITAL GAINS (LOSSES)	- 2,130	-985,446
INVESTMENT RETURN	- 2,130	-985,446

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY**COMPARATIVE BENCHMARK: CAMBRIDGE PRIVATE EQUITY (LAGGED)**

Total Quarters Observed	20
Quarters At or Above the Benchmark	4
Quarters Below the Benchmark	16
Batting Average	.200

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
3/13	3.0	3.7	-0.7
6/13	-3.9	4.6	-8.5
9/13	25.2	3.1	22.1
12/13	2.5	5.0	-2.5
3/14	0.8	7.0	-6.2
6/14	1.7	3.1	-1.4
9/14	2.4	5.5	-3.1
12/14	0.0	1.3	-1.3
3/15	-6.7	0.9	-7.6
6/15	-35.5	2.7	-38.2
9/15	-5.2	3.9	-9.1
12/15	-18.3	-1.5	-16.8
3/16	-21.6	0.5	-22.1
6/16	-11.0	0.1	-11.1
9/16	-59.6	4.0	-63.6
12/16	-0.9	3.9	-4.8
3/17	21.3	4.5	16.8
6/17	4.9	3.9	1.0
9/17	17.3	3.6	13.7
12/17	-0.7	3.9	-4.6

ESSEX REGIONAL RETIREMENT SYSTEM
ASCENT VENTURE PARTNERS V
PERFORMANCE REVIEW
DECEMBER 2017

INVESTMENT RETURN

On December 31st, 2017, the Essex Regional Retirement System's Ascent Venture Partners V portfolio was valued at \$3,306,967, representing an increase of \$46,856 from the September quarter's ending value of \$3,260,111. Last quarter, the Fund posted no net contributions or withdrawals, while posting \$46,856 in net investment returns. Since there were no income receipts for the fourth quarter, the portfolio's net investment return was the result of net realized and unrealized capital gains totaling \$46,856.

RELATIVE PERFORMANCE

Total Fund

Performance was based on an Ascent Venture Partners statement that was unaudited and subject to revision. All stated returns carry a one-quarter lag.

During the fourth quarter, the Ascent Venture Partners V portfolio returned 1.4%, which was 2.5% less than the Cambridge Private Equity (Lagged)'s return of 3.9%. Over the trailing year, the account returned 5.1%, which was 11.7% less than the benchmark's 16.8% return. Since December 2012, the portfolio returned 9.6% per annum, while the Cambridge Private Equity (Lagged) returned an annualized 13.3% over the same time frame.

ASSET ALLOCATION

The portfolio was fully invested in the Ascent Venture Partners' Fund V at the end of the quarter.

Private Equity Investor Report
Ascent Venture Partners V
As of December 31, 2017

Market Value¹	\$	3,306,967	Last Appraisal Date: 9/30/2017
Initial Commitment	\$	3,500,000	
Paid-in Capital	\$	3,080,000	88.00%
Remaining Commitment	\$	420,000	12.00%
Net Gain/(Loss) ²	\$	2,221,209	
Net IRR Since Inception ²		10.4%	

Date	Paid-in Capital	% of Commitment	Distributions
2008	\$ 350,000	10.00%	\$ -
2009	\$ 980,000	28.00%	\$ -
2010	\$ 280,000	8.00%	\$ -
2Q2011	\$ (210,000)	-6.00%	\$ (44,147)
4Q2011	\$ 350,000	10.00%	\$ -
1Q2012	\$ 175,000	5.00%	\$ -
2Q2012	\$ (175,000)	-5.00%	\$ (32,183)
3Q2012	\$ 245,000	7.00%	\$ -
2Q2013	\$ 210,000	6.00%	\$ -
4Q2013	\$ 210,000	6.00%	\$ -
4Q2014	\$ 140,000	4.00%	\$ -
1Q2015	\$ -	0.00%	\$ (316,041)
2Q2015	\$ 140,000	4.00%	\$ -
3Q2015	\$ 245,000	7.00%	\$ (231,889)
1Q2016	\$ 70,000	2.00%	\$ -
4Q2016	\$ -	0.00%	\$ (1,369,982)
1Q2017	\$ 70,000	2.00%	\$ -
Total	\$ 3,080,000	88.00%	\$ (1,994,242)

1. The Market Value reflects the last appraisal value adjusted for any contributions and distributions since that time.

2. Values as of last appraisal date.

EXECUTIVE SUMMARY**PERFORMANCE SUMMARY**

	Quarter	YTD /1Y	3 Year	5 Year
Total Portfolio - Gross	1.4	5.1	6.5	9.6
Total Portfolio - Net	1.0	3.1	4.4	7.1
Cambridge PE (Lag)	3.9	16.8	10.4	13.3
Private Equity - Gross	1.4	5.1	6.5	9.6
Cambridge PE (Lag)	3.9	16.8	10.4	13.3

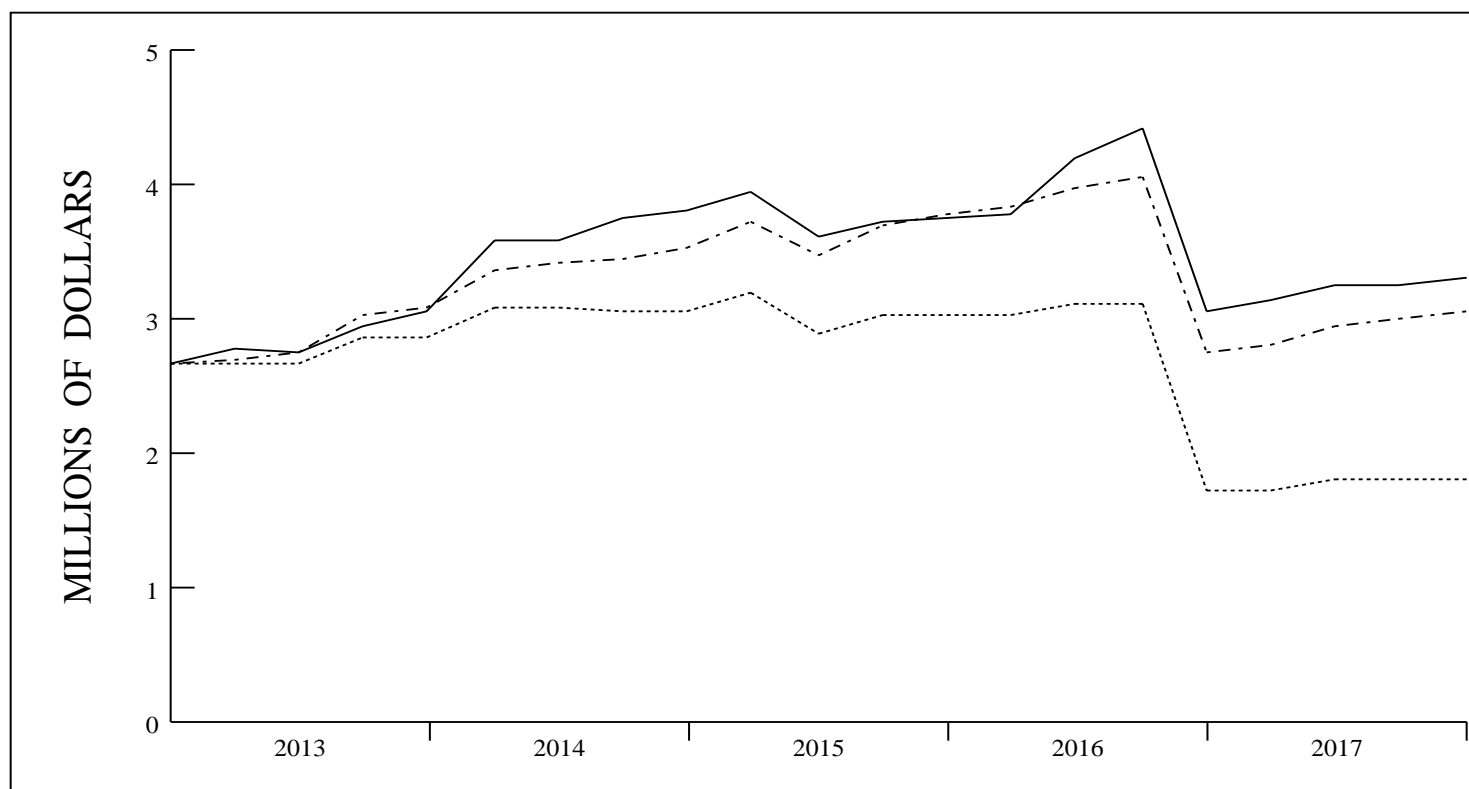
ASSET ALLOCATION

Private Equity	100.0%	\$ 3,306,967
Total Portfolio	100.0%	\$ 3,306,967

INVESTMENT RETURN

Market Value 9/2017	\$ 3,260,111
Contribs / Withdrawals	0
Income	0
Capital Gains / Losses	46,856
Market Value 12/2017	\$ 3,306,967

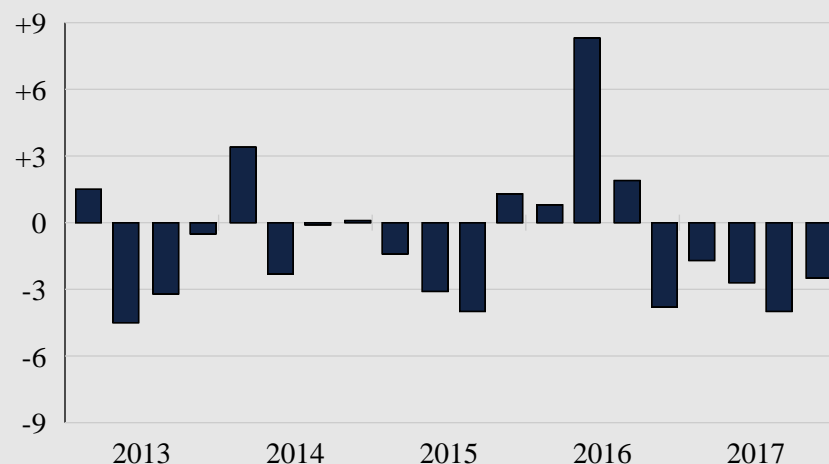
INVESTMENT GROWTH



— ACTUAL RETURN
 - - - 7.75%
 0.0%

VALUE ASSUMING
 7.75% RETURN \$ 3,063,959

	LAST QUARTER	FIVE YEARS
BEGINNING VALUE	\$ 3,260,111	\$ 2,670,600
NET CONTRIBUTIONS	0	-855,428
INVESTMENT RETURN	46,856	1,491,795
ENDING VALUE	\$ 3,306,967	\$ 3,306,967
INCOME	0	0
CAPITAL GAINS (LOSSES)	46,856	1,491,795
INVESTMENT RETURN	46,856	1,491,795

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY**COMPARATIVE BENCHMARK: CAMBRIDGE PRIVATE EQUITY (LAGGED)****VARIATION FROM BENCHMARK**

Total Quarters Observed	20
Quarters At or Above the Benchmark	7
Quarters Below the Benchmark	13
Batting Average	.350

RATES OF RETURN

Date	Portfolio	Benchmark	Difference
3/13	5.2	3.7	1.5
6/13	0.1	4.6	-4.5
9/13	-0.1	3.1	-3.2
12/13	4.5	5.0	-0.5
3/14	10.4	7.0	3.4
6/14	0.8	3.1	-2.3
9/14	5.4	5.5	-0.1
12/14	1.4	1.3	0.1
3/15	-0.5	0.9	-1.4
6/15	-0.4	2.7	-3.1
9/15	-0.1	3.9	-4.0
12/15	-0.2	-1.5	1.3
3/16	1.3	0.5	0.8
6/16	8.4	0.1	8.3
9/16	5.9	4.0	1.9
12/16	0.1	3.9	-3.8
3/17	2.8	4.5	-1.7
6/17	1.2	3.9	-2.7
9/17	-0.4	3.6	-4.0
12/17	1.4	3.9	-2.5

ESSEX REGIONAL RETIREMENT SYSTEM
BOSTON MILLENNIA PARTNERS
PERFORMANCE REVIEW
DECEMBER 2017

INVESTMENT RETURN

On December 31st, 2017, the Essex Regional Retirement System's Boston Millennium Partners portfolio was valued at \$33,090.

RELATIVE PERFORMANCE

Total Fund

The remaining funds in this account are being held for escrow to be released after an arbitration settlement has been reached with the buyer of PHT Corporation, the final underlying asset in the fund.

Since December 2012, the Boston Millennium Partners portfolio returned 50.3% annualized, while the Cambridge Private Equity (Lagged) returned an annualized 13.3% over the same time frame.

ASSET ALLOCATION

The portfolio was fully invested in the Boston Millennium Partners Fund I at the end of the quarter.

Private Equity Investor Report
Boston Millennia Partners I
As of December 31, 2017

Market Value¹	\$	33,090	Last Appraisal Date: 12/31/2015
Initial Commitment	\$	5,000,000	
Paid-in Capital	\$	5,000,000	100.00%
Remaining Commitment	\$	-	0.00%
Net Gains/(Loss) ²	\$	(2,518,083)	
Net IRR Since Inception ²		-8.0%	

Date	Paid-in Capital	% of		Distributions
		Commitment		
2Q1998 - 4Q2006	\$ 5,000,000	100.00%	\$	(1,630,519)
2007	\$ -	0.00%	\$	(39,528)
2008	\$ -	0.00%	\$	-
4Q2009	\$ -	0.00%	\$	(63,712)
2Q2013	\$ -	0.00%	\$	(55,043)
2Q2015	\$ -	0.00%	\$	(660,025)
Total	\$ 5,000,000	100.00%	\$	(2,448,827)

1. Market value as of last appraisal date, adjusted for any contributions and distributions since that time.

2. Values as of last appraisal date

EXECUTIVE SUMMARY**PERFORMANCE SUMMARY**

	Quarter	YTD /1Y	3 Year	5 Year
Total Portfolio	0.0	0.0	23.0	50.3
Cambridge PE (Lag)	3.9	16.8	10.4	13.3
Private Equity	0.0	0.0	23.0	50.3
Cambridge PE (Lag)	3.9	16.8	10.4	13.3

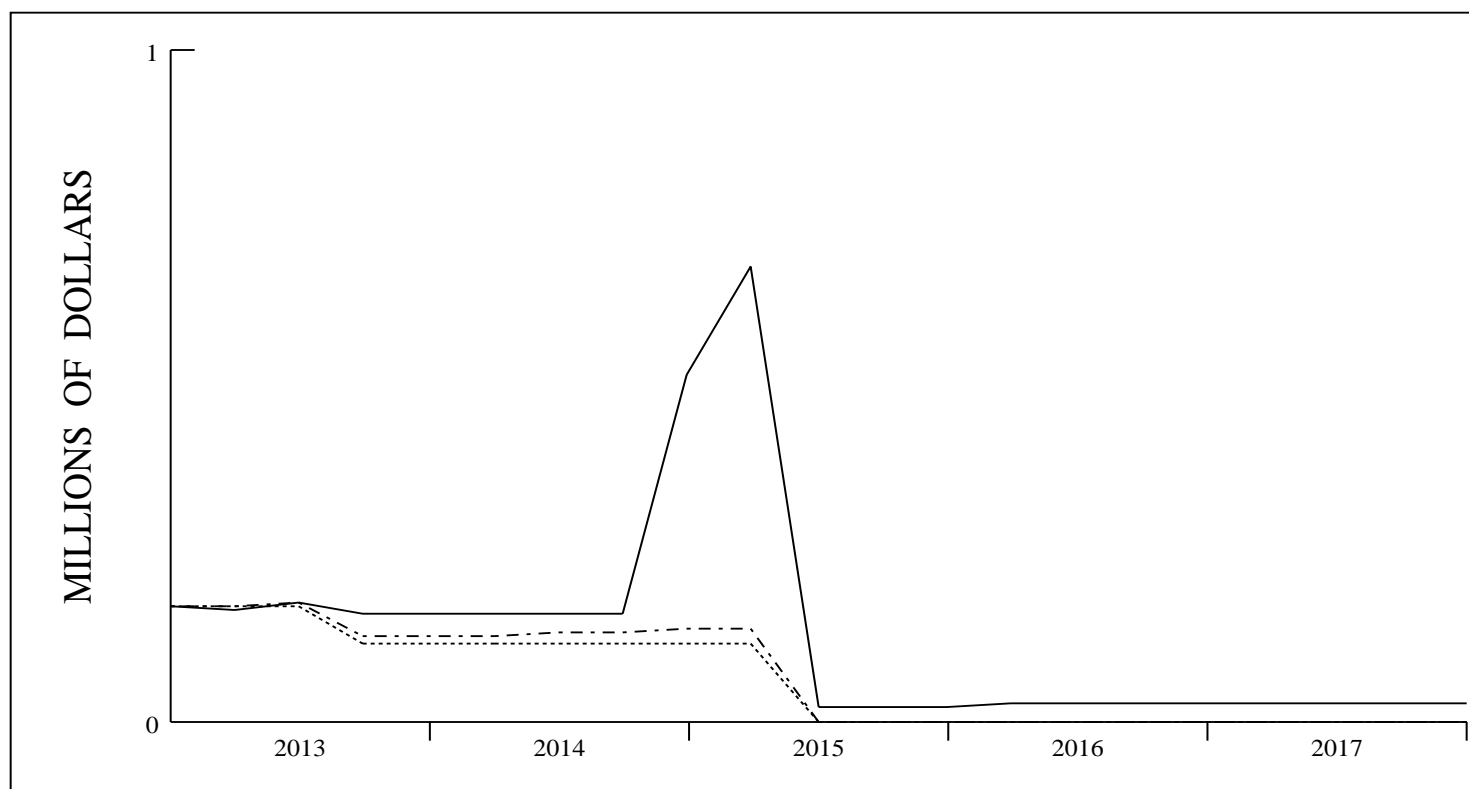
ASSET ALLOCATION

Private Equity	100.0%	\$ 33,090
Total Portfolio	100.0%	\$ 33,090

INVESTMENT RETURN

Market Value 9/2017	\$ 33,090
Contribs / Withdrawals	0
Income	0
Capital Gains / Losses	0
Market Value 12/2017	\$ 33,090

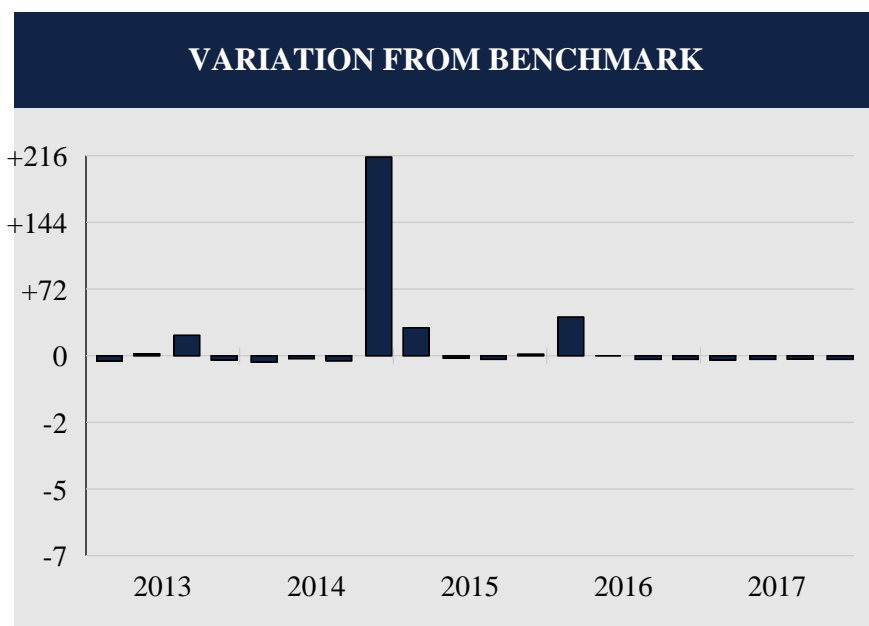
INVESTMENT GROWTH



— ACTUAL RETURN
 - - - 7.75%
 0.0%

VALUE ASSUMING
 7.75% RETURN \$ -626,899

	LAST QUARTER	FIVE YEARS
BEGINNING VALUE	\$ 33,090	\$ 173,996
NET CONTRIBUTIONS	0	-715,382
INVESTMENT RETURN	0	574,476
ENDING VALUE	\$ 33,090	\$ 33,090
INCOME	0	0
CAPITAL GAINS (LOSSES)	0	574,476
INVESTMENT RETURN	0	574,476

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY**COMPARATIVE BENCHMARK: CAMBRIDGE PRIVATE EQUITY (LAGGED)**

Total Quarters Observed	20
Quarters At or Above the Benchmark	6
Quarters Below the Benchmark	14
Batting Average	.300

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
3/13	-2.0	3.7	-5.7
6/13	6.6	4.6	2.0
9/13	24.9	3.1	21.8
12/13	0.0	5.0	-5.0
3/14	0.0	7.0	-7.0
6/14	0.0	3.1	-3.1
9/14	0.0	5.5	-5.5
12/14	215.6	1.3	214.3
3/15	31.2	0.9	30.3
6/15	0.0	2.7	-2.7
9/15	0.0	3.9	-3.9
12/15	0.0	-1.5	1.5
3/16	42.0	0.5	41.5
6/16	0.0	0.1	-0.1
9/16	0.0	4.0	-4.0
12/16	0.0	3.9	-3.9
3/17	0.0	4.5	-4.5
6/17	0.0	3.9	-3.9
9/17	0.0	3.6	-3.6
12/17	0.0	3.9	-3.9

ESSEX REGIONAL RETIREMENT SYSTEM
BOSTON MILLENNIA PARTNERS II
PERFORMANCE REVIEW
DECEMBER 2017

INVESTMENT RETURN

On December 31st, 2017, the Essex Regional Retirement System's Boston Millennia Partners II portfolio was valued at \$485,855, a decrease of \$4,173 from the September ending value of \$490,028. Last quarter, the account recorded no net contributions or withdrawals, while recording a net investment loss for the quarter of \$4,173. Since there were no income receipts for the fourth quarter, net investment losses were the result of capital losses (realized and unrealized).

RELATIVE PERFORMANCE

Total Fund

Performance was based on a Boston Millenia Partners statement that was unaudited and subject to revision. All stated returns carry a one-quarter lag.

During the fourth quarter, the Boston Millennia Partners II portfolio lost 0.7%, which was 4.6% below the Cambridge Private Equity (Lagged)'s return of 3.9%. Over the trailing twelve-month period, the portfolio returned -13.2%, which was 30.0% less than the benchmark's 16.8% return. Since December 2012, the Boston Millennia Partners II portfolio returned 5.2% on an annualized basis, while the Cambridge Private Equity (Lagged) returned an annualized 13.3% over the same time frame.

ASSET ALLOCATION

The portfolio was fully invested in the Boston Millennia Partners Fund II at the end of the quarter.

Private Equity Investor Report
Boston Millennia Partners II
As of December 31, 2017

Market Value¹	\$ 485,855	Last Appraisal Date: 9/30/2017	
Initial Commitment	\$ 2,000,000		
Paid-in Capital	\$ 2,000,000	100.00%	
Remaining Commitment	\$ -	0.00%	
Net Gain/(Loss) ²	\$ (217,022)		
Net IRR Since Inception ²	-1.3%		

Date	Paid-in Capital	% of Commitment	Recallable Distributions	Distributions
1Q2000 - 4Q2006	\$ 1,680,000	84.00%	\$ -	\$ (502,054)
2007	\$ 160,000	8.00%	\$ -	\$ (8,023)
2008	\$ 60,000	3.00%	\$ -	\$ -
2009	\$ 30,000	1.50%	\$ -	\$ (230,259)
4Q2010	\$ 30,000	1.50%	\$ -	\$ (30,000)
2Q2012	\$ 40,000	2.00%	\$ -	\$ -
3Q2014	\$ -	0.00%	\$ -	\$ (257,808)
4Q2014	\$ -	0.00%	\$ -	\$ (147,603)
3Q2015	\$ -	0.00%	\$ -	\$ (54,784)
1Q2016	\$ -	0.00%	\$ -	\$ (59,231)
3Q2016	\$ -	0.00%	\$ -	\$ (7,361)
Total	\$ 2,000,000	100.00%	\$ -	\$ (1,297,123)

1. Market value as of last appraisal date, adjusted for any contributions and distributions since that time.

2. Values as of last appraisal date

EXECUTIVE SUMMARY**PERFORMANCE SUMMARY**

	Quarter	YTD /1Y	3 Year	5 Year
Total Portfolio - Gross	-0.7	-13.2	-0.4	5.2
Total Portfolio - Net	-0.9	-13.9	-1.4	3.8
Cambridge PE (Lag)	3.9	16.8	10.4	13.3
Private Equity - Gross	-0.7	-13.2	-0.4	5.2
Cambridge PE (Lag)	3.9	16.8	10.4	13.3

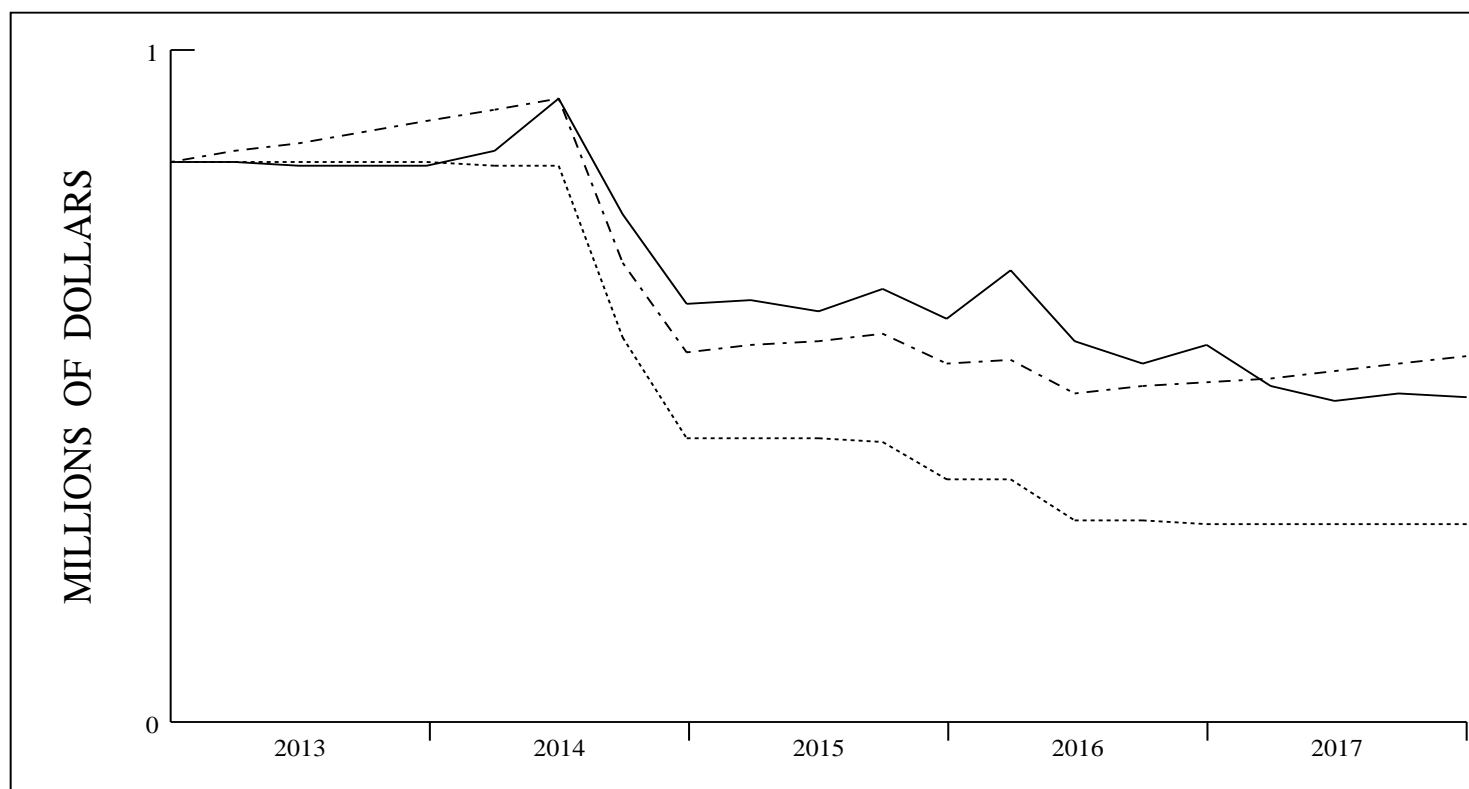
ASSET ALLOCATION

Private Equity	100.0%	\$ 485,855
Total Portfolio	100.0%	\$ 485,855

INVESTMENT RETURN

Market Value 9/2017	\$ 490,028
Contribs / Withdrawals	0
Income	0
Capital Gains / Losses	- 4,173
Market Value 12/2017	\$ 485,855

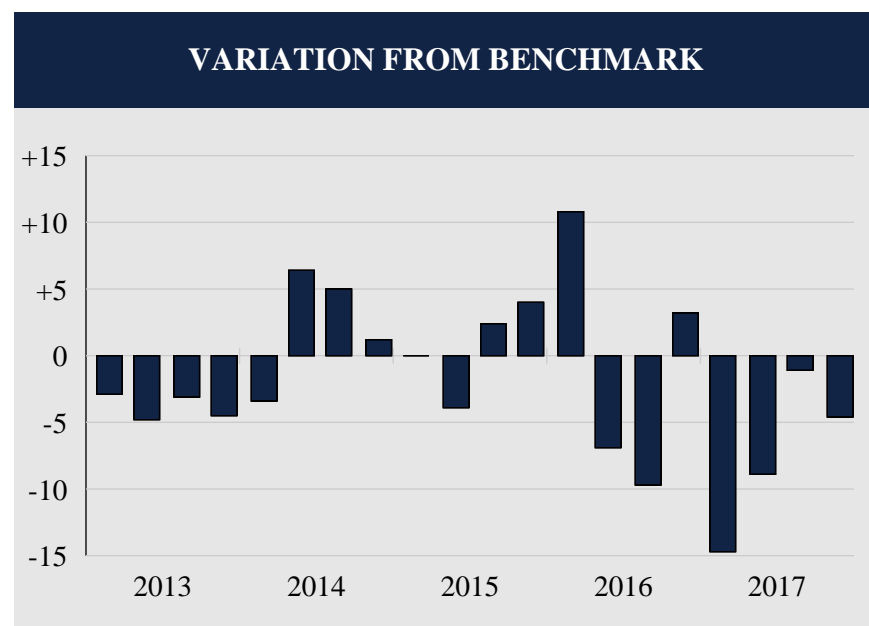
INVESTMENT GROWTH



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

VALUE ASSUMING
 7.75% RETURN \$ 544,924

	LAST QUARTER	FIVE YEARS
BEGINNING VALUE	\$ 490,028	\$ 834,841
NET CONTRIBUTIONS	0	-538,582
INVESTMENT RETURN	- 4,173	189,596
ENDING VALUE	\$ 485,855	\$ 485,855
INCOME	0	0
CAPITAL GAINS (LOSSES)	- 4,173	189,596
INVESTMENT RETURN	- 4,173	189,596

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY**COMPARATIVE BENCHMARK: CAMBRIDGE PRIVATE EQUITY (LAGGED)**

Total Quarters Observed	20
Quarters At or Above the Benchmark	8
Quarters Below the Benchmark	12
Batting Average	.400

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
3/13	0.8	3.7	-2.9
6/13	-0.2	4.6	-4.8
9/13	0.0	3.1	-3.1
12/13	0.5	5.0	-4.5
3/14	3.6	7.0	-3.4
6/14	9.5	3.1	6.4
9/14	10.5	5.5	5.0
12/14	2.5	1.3	1.2
3/15	0.9	0.9	0.0
6/15	-1.2	2.7	-3.9
9/15	6.3	3.9	2.4
12/15	2.5	-1.5	4.0
3/16	11.3	0.5	10.8
6/16	-6.8	0.1	-6.9
9/16	-5.7	4.0	-9.7
12/16	7.1	3.9	3.2
3/17	-10.2	4.5	-14.7
6/17	-5.0	3.9	-8.9
9/17	2.5	3.6	-1.1
12/17	-0.7	3.9	-4.6

ESSEX REGIONAL RETIREMENT SYSTEM
BLACKROCK PEP IV
PERFORMANCE REVIEW
DECEMBER 2017

INVESTMENT RETURN

On December 31st, 2017, the Essex Regional Retirement System's BlackRock PEP IV portfolio was valued at \$4,764,815, a decrease of \$226,057 from the September ending value of \$4,990,872. Last quarter, the account recorded a net withdrawal of \$573,986, which overshadowed the fund's net investment return of \$347,929. Barring income receipts during the fourth quarter, the portfolio's net investment return figure was the product of \$347,929 in realized and unrealized capital gains.

RELATIVE PERFORMANCE

Total Fund

Performance was based on a BlackRock PEP IV statement that was unaudited and subject to revision. All stated returns carry a one-quarter lag.

For the fourth quarter, the BlackRock PEP IV account gained 7.1%, which was 3.2% greater than the Cambridge Private Equity (Lagged)'s return of 3.9%. Over the trailing twelve-month period, the account returned 12.3%, which was 4.5% below the benchmark's 16.8% performance. Since December 2012, the portfolio returned 10.2% per annum, while the Cambridge Private Equity (Lagged) returned an annualized 13.3% over the same period.

ASSET ALLOCATION

The portfolio was fully invested in the BlackRock Vesey Street Fund IV at the end of the quarter.

Private Equity Investor Report
BlackRock PEP IV
As of December 31, 2017

Market Value*	\$ 4,764,815	Last Appraisal Date: 9/30/2017
Initial Commitment	\$ 8,000,000	
Paid-in Capital	\$ 7,040,000	88.00%
Remaining Commitment	\$ 960,000	12.00%
Net Gain (Loss)	\$ 3,674,674	
IRR Since Inception*	8.4%	

Date	Paid-in Capital	% of Commitment	Recallable Distributions	Distributions
4Q2007 - 4Q2008	\$ 2,320,000	29.00%	\$ -	\$ -
4Q2009	\$ 280,000	3.50%	\$ -	\$ -
1Q2010	\$ 280,000	3.50%	\$ -	\$ -
2Q2010	\$ 560,000	7.00%	\$ -	\$ -
3Q2010	\$ 320,000	4.00%	\$ -	\$ -
4Q2010	\$ 480,000	6.00%	\$ -	\$ -
1Q2011	\$ 400,000	5.00%	\$ -	\$ -
2Q2011	\$ 400,000	5.00%	\$ -	\$ -
4Q2011	\$ 640,000	8.00%	\$ -	\$ -
2Q2012	\$ 240,000	3.00%	\$ -	\$ -
3Q2013	\$ 80,000	1.00%	\$ -	\$ (329,859)
1Q2014	\$ 160,000	2.00%	\$ -	\$ (520,000)
2Q2014	\$ 320,000	4.00%	\$ -	\$ (560,000)
4Q2014	\$ 400,000	5.00%	\$ -	\$ (540,000)
1Q2015	\$ 160,000	2.00%	\$ -	\$ (500,000)
2Q2015	\$ -	0.00%	\$ -	\$ (340,000)
3Q2015	\$ -	0.00%	\$ -	\$ (580,000)
4Q2015	\$ -	0.00%	\$ -	\$ (300,000)
1Q2016	\$ -	0.00%	\$ -	\$ (460,000)
2Q2016	\$ -	0.00%	\$ -	\$ (280,000)
3Q2016	\$ -	0.00%	\$ -	\$ (240,000)
4Q2016	\$ -	0.00%	\$ -	\$ (200,000)
1Q2017	\$ -	0.00%	\$ -	\$ (200,000)
2Q2017	\$ -	0.00%	\$ -	\$ (340,000)
4Q2017	\$ -	0.00%	\$ -	\$ (560,000)
Total	\$ 7,040,000	88.00%	\$ -	\$ (5,949,859)

* Values as of last appraisal date

EXECUTIVE SUMMARY**PERFORMANCE SUMMARY**

	Quarter	YTD /1Y	3 Year	5 Year
Total Portfolio - Gross	7.1	12.3	7.7	10.2
Total Portfolio - Net	6.8	11.1	6.7	9.1
Cambridge PE (Lag)	3.9	16.8	10.4	13.3
Private Equity - Gross	7.1	12.3	7.7	10.2
Cambridge PE (Lag)	3.9	16.8	10.4	13.3

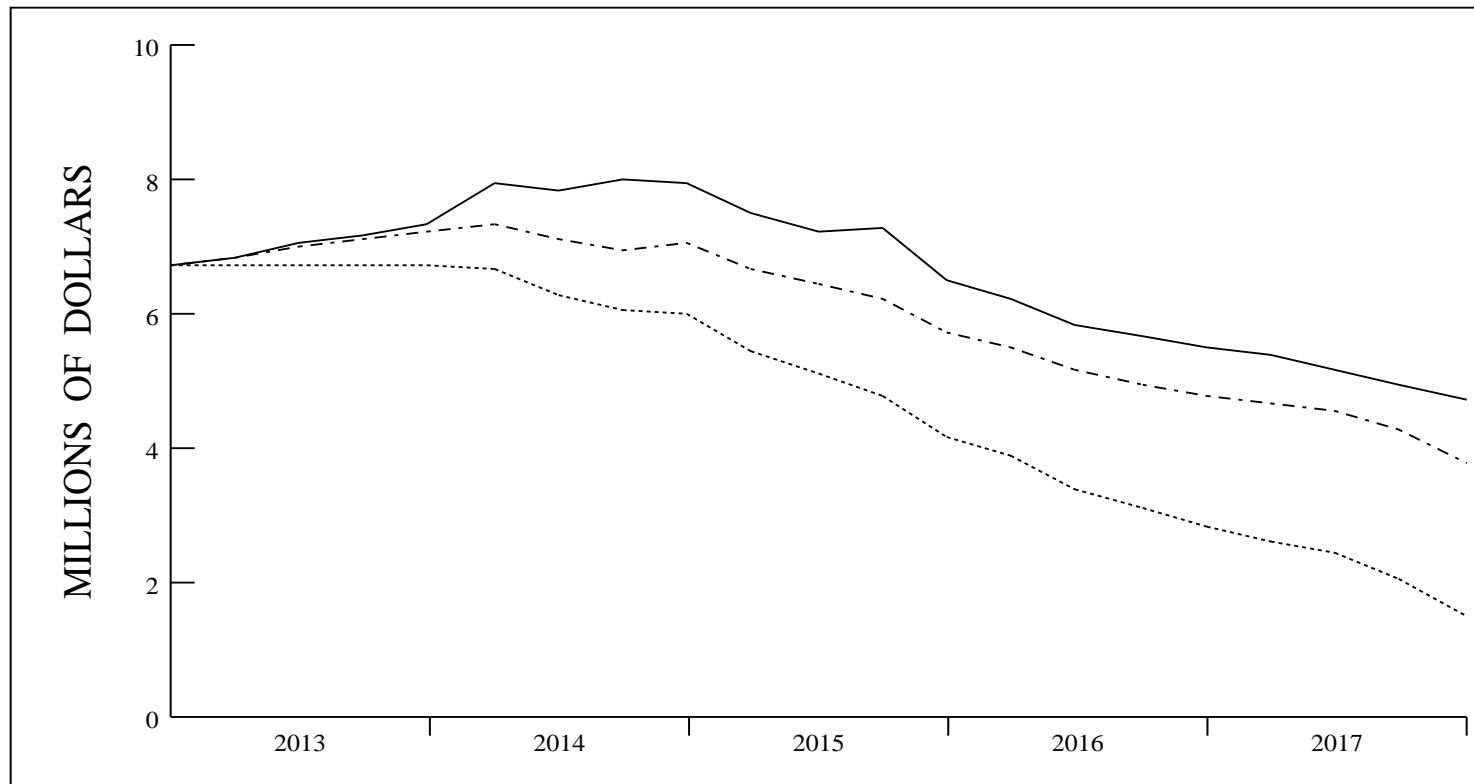
ASSET ALLOCATION

Private Equity	100.0%	\$ 4,764,815
Total Portfolio	100.0%	\$ 4,764,815

INVESTMENT RETURN

Market Value 9/2017	\$ 4,990,872
Contribs / Withdrawals	-573,986
Income	0
Capital Gains / Losses	347,929
Market Value 12/2017	\$ 4,764,815

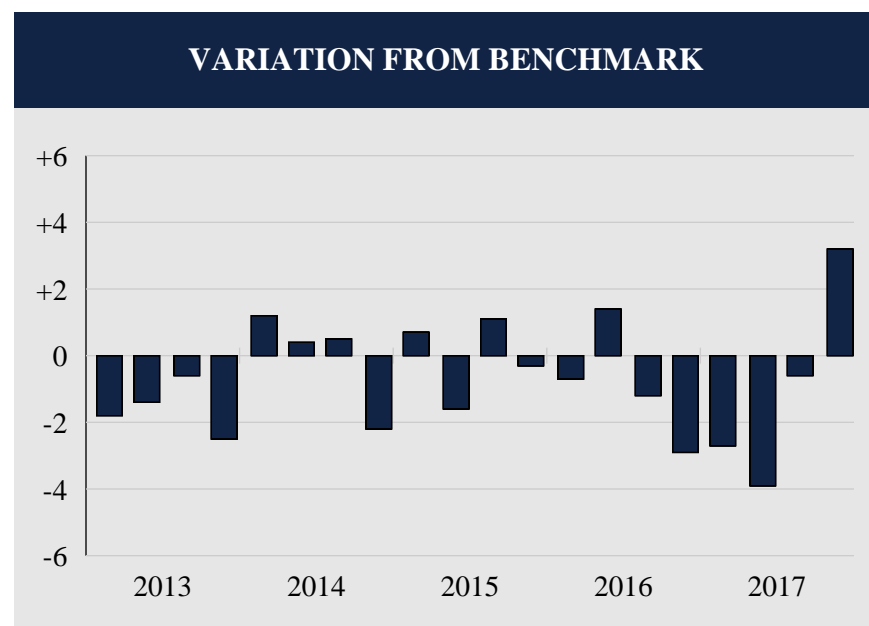
INVESTMENT GROWTH



— ACTUAL RETURN
 - - - 7.75%
 0.0%

VALUE ASSUMING
 7.75% RETURN \$ 3,810,050

	LAST QUARTER	FIVE YEARS
BEGINNING VALUE	\$ 4,990,872	\$ 6,753,587
NET CONTRIBUTIONS	-573,986	- 5,227,904
INVESTMENT RETURN	347,929	3,239,132
ENDING VALUE	\$ 4,764,815	\$ 4,764,815
INCOME	0	360
CAPITAL GAINS (LOSSES)	347,929	3,238,772
INVESTMENT RETURN	347,929	3,239,132

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY**COMPARATIVE BENCHMARK: CAMBRIDGE PRIVATE EQUITY (LAGGED)**

Total Quarters Observed	20
Quarters At or Above the Benchmark	7
Quarters Below the Benchmark	13
Batting Average	.350

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
3/13	1.9	3.7	-1.8
6/13	3.2	4.6	-1.4
9/13	2.5	3.1	-0.6
12/13	2.5	5.0	-2.5
3/14	8.2	7.0	1.2
6/14	3.5	3.1	0.4
9/14	6.0	5.5	0.5
12/14	-0.9	1.3	-2.2
3/15	1.6	0.9	0.7
6/15	1.1	2.7	-1.6
9/15	5.0	3.9	1.1
12/15	-1.8	-1.5	-0.3
3/16	-0.2	0.5	-0.7
6/16	1.5	0.1	1.4
9/16	2.8	4.0	-1.2
12/16	1.0	3.9	-2.9
3/17	1.8	4.5	-2.7
6/17	0.0	3.9	-3.9
9/17	3.0	3.6	-0.6
12/17	7.1	3.9	3.2

ESSEX REGIONAL RETIREMENT SYSTEM
LEVINE LEICHTMAN III
PERFORMANCE REVIEW
DECEMBER 2017

INVESTMENT RETURN

On December 31st, 2017, the Essex Regional Retirement System's Levine Leichtman III portfolio was valued at \$98,503, a decrease of \$402,855 from the September ending value of \$501,358. Last quarter, the account recorded total net withdrawals of \$394,677 in addition to \$8,178 in net investment losses. Because there were no income receipts during the fourth quarter, the portfolio's net investment losses were entirely made up of capital losses (realized and unrealized).

RELATIVE PERFORMANCE

Total Fund

Performance was based on a Levine Leichtman statement that was unaudited and subject to revision. All stated returns carry a one-quarter lag.

During the fourth quarter, the Levine Leichtman III portfolio returned -4.8%, which was 8.7% less than the Cambridge Private Equity (Lagged)'s return of 3.9%. Over the trailing year, the account returned -12.3%, which was 29.1% less than the benchmark's 16.8% return. Since December 2012, the portfolio returned 3.5% per annum, while the Cambridge Private Equity (Lagged) returned an annualized 13.3% over the same time frame.

ASSET ALLOCATION

The portfolio was fully invested in the Levine Leichtman Fund III at the end of the quarter.

Private Equity Investor Report
Levine Leichtman III
As of December 31, 2017

Market Value¹	\$ 98,503	Last Appraisal Date: 9/30/2017	
Initial Commitment	\$ 3,000,000		
Paid-in Capital	\$ 3,000,000	100.00%	
Remaining Commitment	\$ -	0.00%	
Net Gain/(Loss)	\$ 1,103,161		
IRR Since Inception ²	9.8%		

Date	Paid-in Capital	% of Commitment	Return of Contributed Capital	% of Commitment	Distributions
Inception - 4Q2007	\$ 3,429,764	114.33%	\$ (651,320)	-21.71%	\$ (1,084,871)
2008	\$ 149,048	4.97%	\$ (27,147)	-0.90%	\$ (696,889)
2009	\$ 176,318	5.88%	\$ (93,973)	-3.13%	\$ (134,511)
2010	\$ 75,513	2.52%	\$ (92,635)	-3.09%	\$ (316,676)
2011	\$ 27,337	0.91%	\$ (20,160)	-0.67%	\$ (78,500)
1Q2012	\$ 13,644	0.45%	\$ -	-	\$ (32,132)
2Q2012	\$ -	0.00%	\$ -	-	\$ (93,975)
3Q2012	\$ 13,611	0.45%	\$ -	-	\$ (32,776)
4Q2012	\$ -	0.00%	\$ -	-	\$ (14,554)
1Q2013	\$ -	0.00%	\$ -	-	\$ (21,013)
2Q2013	\$ -	0.00%	\$ -	-	\$ (24,310)
3Q2013	\$ -	0.00%	\$ -	-	\$ (85,486)
4Q2013	\$ -	0.00%	\$ -	-	\$ (62,738)
1Q2014	\$ -	0.00%	\$ -	-	\$ (45,379)
2Q2014	\$ -	0.00%	\$ -	-	\$ (29,830)
3Q2014	\$ -	0.00%	\$ -	-	\$ (25,370)
4Q2014	\$ -	0.00%	\$ -	-	\$ (24,238)
1Q2015	\$ -	0.00%	\$ -	-	\$ (616,509)
2Q2015	\$ -	0.00%	\$ -	-	\$ (17,919)
3Q2015	\$ -	0.00%	\$ -	-	\$ (58,116)
4Q2015	\$ -	0.00%	\$ -	-	\$ (15,911)
1Q2016	\$ -	0.00%	\$ -	-	\$ (61,882)
2Q2016	\$ -	0.00%	\$ -	-	\$ (94,397)
3Q2016	\$ -	0.00%	\$ -	-	\$ (522,056)
4Q2016	\$ -	0.00%	\$ -	-	\$ (146,787)
1Q2017	\$ -	0.00%	\$ -	-	\$ (32,827)
2Q2017	\$ -	0.00%	\$ -	-	\$ (125,564)
3Q2017	\$ -	0.00%	\$ -	-	\$ (394,677)
Total	\$ 3,885,235	129.51%	\$ (885,235)	-29.51%	\$ (4,889,893)

1. Market Value as of last appraisal date, adjusted for any contributions and distributions since that time.

2. IRR as of last appraisal date

EXECUTIVE SUMMARY**PERFORMANCE SUMMARY**

	Quarter	YTD /1Y	3 Year	5 Year
Total Portfolio - Gross	-4.8	-12.3	0.9	3.5
Total Portfolio - Net	-4.8	-12.3	0.9	3.4
Cambridge PE (Lag)	3.9	16.8	10.4	13.3
Private Equity - Gross	-4.8	-12.3	0.9	3.5
Cambridge PE (Lag)	3.9	16.8	10.4	13.3

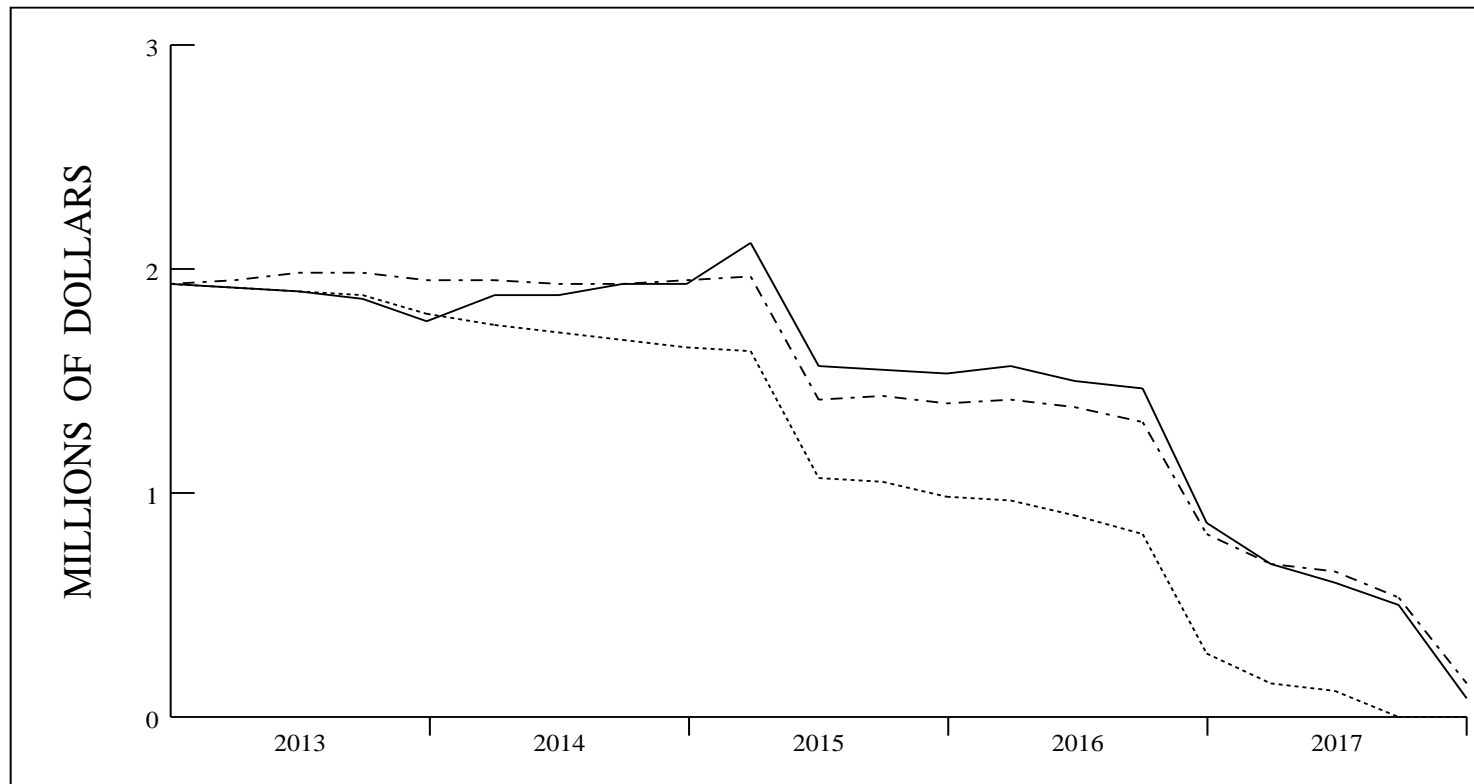
ASSET ALLOCATION

Private Equity	100.0%	\$ 98,503
Total Portfolio	100.0%	\$ 98,503

INVESTMENT RETURN

Market Value 9/2017	\$ 501,358
Contribs / Withdrawals	-394,677
Income	0
Capital Gains / Losses	- 8,178
Market Value 12/2017	\$ 98,503

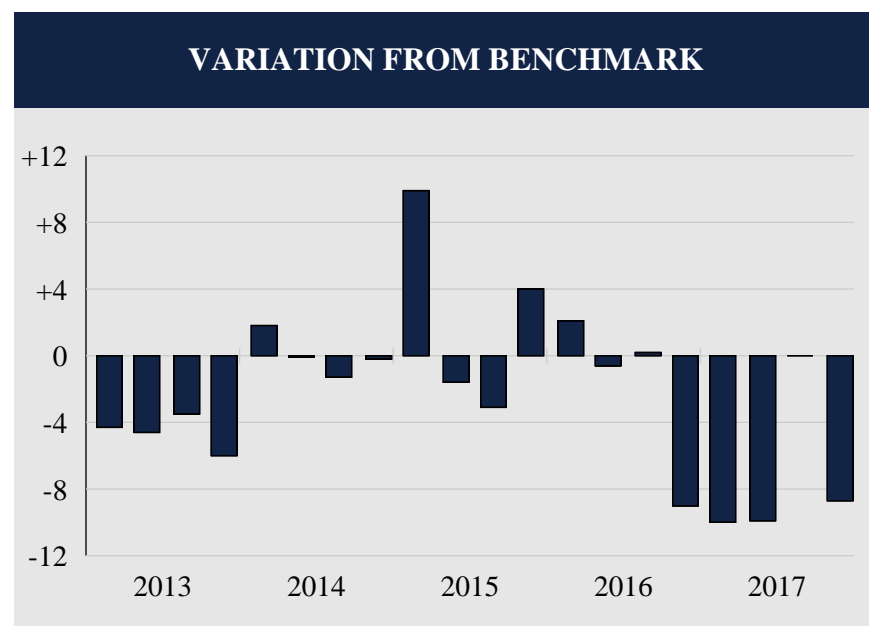
INVESTMENT GROWTH



— ACTUAL RETURN
 - - - 7.75%
 0.0%

VALUE ASSUMING
 7.75% RETURN \$ 154,686

	LAST QUARTER	FIVE YEARS
BEGINNING VALUE	\$ 501,358	\$ 1,942,356
NET CONTRIBUTIONS	-394,677	- 2,350,830
INVESTMENT RETURN	- 8,178	506,977
ENDING VALUE	\$ 98,503	\$ 98,503
INCOME	0	48,431
CAPITAL GAINS (LOSSES)	- 8,178	458,546
INVESTMENT RETURN	- 8,178	506,977

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY**COMPARATIVE BENCHMARK: CAMBRIDGE PRIVATE EQUITY (LAGGED)**

Total Quarters Observed	20
Quarters At or Above the Benchmark	6
Quarters Below the Benchmark	14
Batting Average	.300

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
3/13	-0.6	3.7	-4.3
6/13	0.0	4.6	-4.6
9/13	-0.4	3.1	-3.5
12/13	-1.0	5.0	-6.0
3/14	8.8	7.0	1.8
6/14	3.0	3.1	-0.1
9/14	4.2	5.5	-1.3
12/14	1.1	1.3	-0.2
3/15	10.8	0.9	9.9
6/15	1.1	2.7	-1.6
9/15	0.8	3.9	-3.1
12/15	2.5	-1.5	4.0
3/16	2.6	0.5	2.1
6/16	-0.5	0.1	-0.6
9/16	4.2	4.0	0.2
12/16	-5.1	3.9	-9.0
3/17	-5.5	4.5	-10.0
6/17	-6.0	3.9	-9.9
9/17	3.6	3.6	0.0
12/17	-4.8	3.9	-8.7

ESSEX REGIONAL RETIREMENT SYSTEM
LEVINE LEICHTMAN IV
PERFORMANCE REVIEW
DECEMBER 2017

INVESTMENT RETURN

On December 31st, 2017, the Essex Regional Retirement System's Levine Leichtman IV portfolio was valued at \$1,173,990, representing an increase of \$278,990 from the September quarter's ending value of \$895,000. Last quarter, the Fund posted net contributions equaling \$168,223 plus a net investment gain equaling \$110,767. Since there were no income receipts during the quarter, the portfolio's net investment return was the result of net realized and unrealized capital gains totaling \$110,767.

RELATIVE PERFORMANCE

Total Fund

Performance was based on a Levine Leichtman statement that was unaudited and subject to revision. All stated returns carry a one-quarter lag.

In the fourth quarter, the Levine Leichtman IV portfolio returned 12.1%, which was 8.2% above the Cambridge Private Equity (Lagged)'s return of 3.9%. Over the trailing twelve-month period, the portfolio returned 12.5%, which was 4.3% below the benchmark's 16.8% performance. Since December 2012, the Levine Leichtman IV portfolio returned 13.5% annualized, while the Cambridge Private Equity (Lagged) returned an annualized 13.3% over the same period.

ASSET ALLOCATION

The portfolio was fully invested in the Levine Leichtman Fund IV at the end of the quarter.

Private Equity Investor Report
Levine Leichtman IV
As of December 31, 2017

Market Value¹ \$ **1,173,990** Last Appraisal Date: 9/30/2017

Initial Commitment	\$	3,000,000	
Paid-in Capital	\$	1,817,513	60.58%
Remaining Commitment	\$	1,182,487	39.42%
Net Gain/(Loss)	\$	1,394,406	
IRR Since Inception ²		19.9%	

Date	Paid-in Capital	% of Commitment	Return of Contributed Capital	% of Commitment	Distributions
2008	\$ 486,806	16.23%	\$ (89,887)	-3.00%	\$ (17,791)
2009	\$ 231,775	7.73%	\$ (198,564)	-6.62%	\$ (4,785)
2010	\$ 945,729	31.52%	\$ (90,383)	-3.01%	\$ -
2011	\$ 391,581		\$ (323,587)		\$ (183,417)
2012	\$ 1,222,978		\$ (338,371)		\$ (205,416)
1Q2013	\$ 17,519	0.58%	\$ (8,566)	-0.29%	\$ (49,367)
2Q2013	\$ -	0.00%	\$ -	0.00%	\$ (97,390)
3Q2013	\$ 14,950	0.50%	\$ (14,950)	-0.50%	\$ (467,895)
4Q2013	\$ -	0.00%	\$ -	0.00%	\$ -
1Q2014	\$ 13,422	0.45%	\$ (22,355)	-0.75%	\$ (184,264)
2Q2014	\$ -	0.00%	\$ -	0.00%	\$ (449,501)
3Q2014	\$ 37,928	1.26%	\$ -	0.00%	\$ (211,897)
4Q2014	\$ -	0.00%	\$ -	0.00%	\$ (653,790)
1Q2015	\$ 8,148	0.27%	\$ -	0.00%	\$ (18,899)
2Q2015	\$ -	0.00%	\$ -	0.00%	\$ (57,791)
3Q2015	\$ 9,798	0.33%	\$ -	0.00%	\$ (55,092)
4Q2015	\$ -	0.00%	\$ -	0.00%	\$ (43,095)
1Q2016	\$ 9,403	0.31%	\$ -	0.00%	\$ (280,470)
2Q2016	\$ -	0.00%	\$ -	0.00%	\$ (94,396)
3Q2016	\$ -	0.00%	\$ -	0.00%	\$ (685,323)
4Q2016	\$ -	0.00%	\$ -	0.00%	\$ (7,459)
1Q2017	\$ -	0.00%	\$ -	0.00%	\$ (5,785)
2Q2017	\$ -	0.00%	\$ -	0.00%	\$ (4,853)
3Q2017	\$ 176,097	5.87%	\$ -	0.00%	\$ (7,874)
Total	\$ 3,566,134	118.87%	\$ (1,748,621)	-58.29%	\$ (3,786,550)

1. Market Value as of last appraisal date, adjusted for any contributions and distributions since that time.

2. IRR as of last appraisal date

EXECUTIVE SUMMARY**PERFORMANCE SUMMARY**

	Quarter	YTD /1Y	3 Year	5 Year
Total Portfolio - Gross	12.1	12.5	13.7	13.5
Total Portfolio - Net	11.9	11.8	12.5	12.3
Cambridge PE (Lag)	3.9	16.8	10.4	13.3
Private Equity - Gross	12.1	12.5	13.7	13.5
Cambridge PE (Lag)	3.9	16.8	10.4	13.3

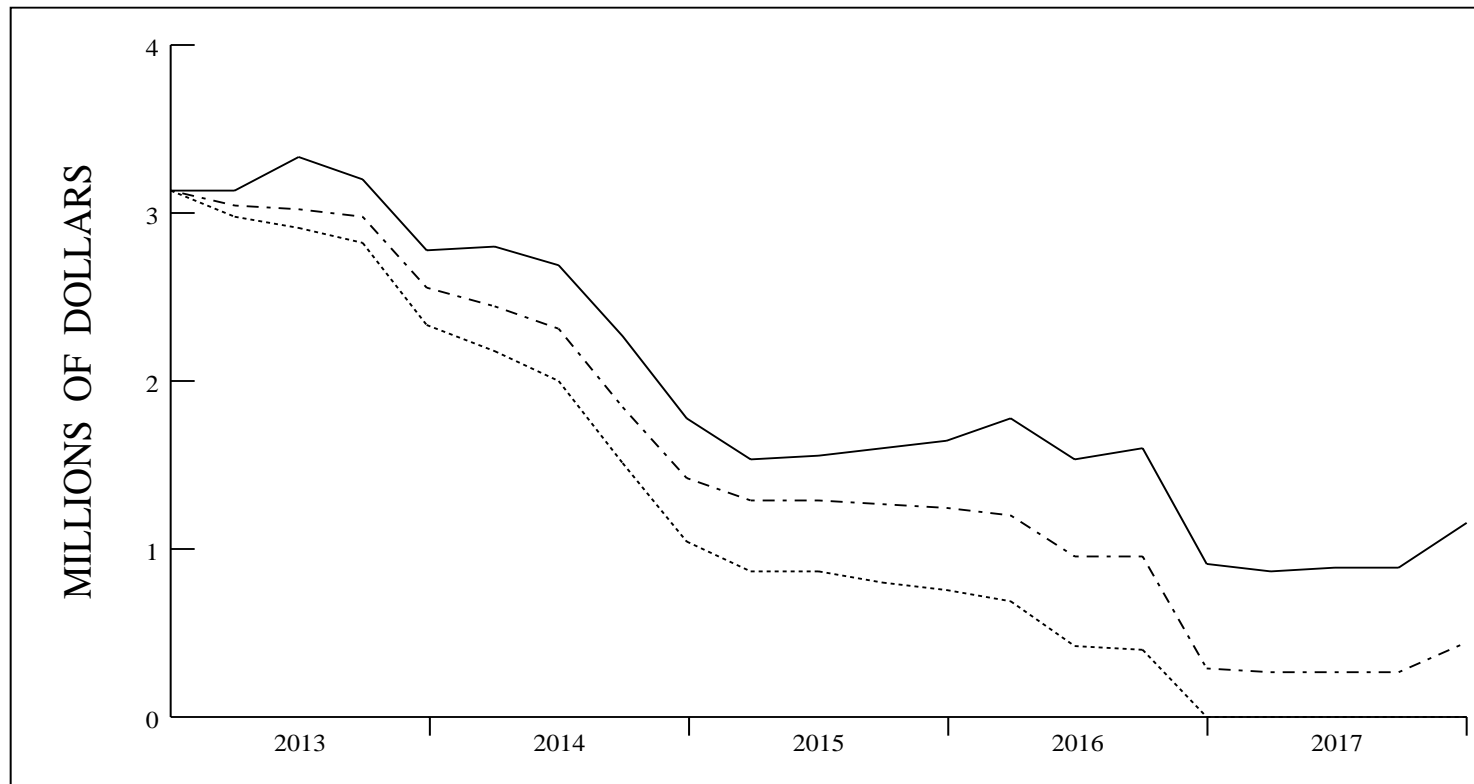
ASSET ALLOCATION

Private Equity	100.0%	\$ 1,173,990
Total Portfolio	100.0%	\$ 1,173,990

INVESTMENT RETURN

Market Value 9/2017	\$ 895,000
Contribs / Withdrawals	168,223
Income	0
Capital Gains / Losses	110,767
Market Value 12/2017	\$ 1,173,990

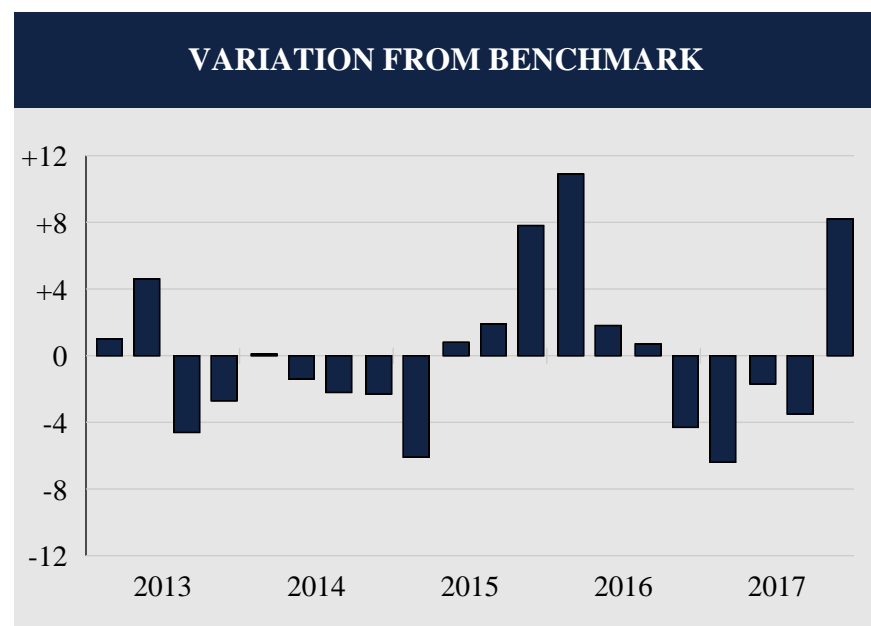
INVESTMENT GROWTH



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

VALUE ASSUMING
 7.75% RETURN \$ 459,864

	LAST QUARTER	FIVE YEARS
BEGINNING VALUE	\$ 895,000	\$ 3,134,298
NET CONTRIBUTIONS	168,223	- 3,250,640
INVESTMENT RETURN	110,767	1,290,332
ENDING VALUE	\$ 1,173,990	\$ 1,173,990
INCOME	0	200,772
CAPITAL GAINS (LOSSES)	110,767	1,089,560
INVESTMENT RETURN	110,767	1,290,332

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY**COMPARATIVE BENCHMARK: CAMBRIDGE PRIVATE EQUITY (LAGGED)**

Total Quarters Observed	20
Quarters At or Above the Benchmark	10
Quarters Below the Benchmark	10
Batting Average	.500

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
3/13	4.7	3.7	1.0
6/13	9.2	4.6	4.6
9/13	-1.5	3.1	-4.6
12/13	2.3	5.0	-2.7
3/14	7.1	7.0	0.1
6/14	1.7	3.1	-1.4
9/14	3.3	5.5	-2.2
12/14	-1.0	1.3	-2.3
3/15	-5.2	0.9	-6.1
6/15	3.5	2.7	0.8
9/15	5.8	3.9	1.9
12/15	6.3	-1.5	7.8
3/16	11.4	0.5	10.9
6/16	1.9	0.1	1.8
9/16	4.7	4.0	0.7
12/16	-0.4	3.9	-4.3
3/17	-1.9	4.5	-6.4
6/17	2.2	3.9	-1.7
9/17	0.1	3.6	-3.5
12/17	12.1	3.9	8.2

ESSEX REGIONAL RETIREMENT SYSTEM
MASS TECH DEVELOPMENT
PERFORMANCE REVIEW
DECEMBER 2017

INVESTMENT RETURN

On December 31st, 2017, the Essex Regional Retirement System's Mass Tech Development portfolio was valued at \$1,917, equal to the September ending value.

RELATIVE PERFORMANCE

Total Fund

Performance was based on a Mass Tech statement that was unaudited and subject to revision. All stated returns carry a one-quarter lag.

For the fourth quarter, the Mass Tech Development portfolio returned 0.0%, which was 3.9% below the Cambridge Private Equity (Lagged)'s return of 3.9%. Over the trailing year, the account returned -10.5%, which was 27.3% less than the benchmark's 16.8% performance. Since December 2012, the account returned -27.5% on an annualized basis, while the Cambridge Private Equity (Lagged) returned an annualized 13.3% over the same period.

ASSET ALLOCATION

The portfolio was fully invested in the Mass Tech Development Commonwealth Fund at the end of the quarter.

Private Equity Investor Report
Mass Ventures Commonwealth Fund II
As of December 31, 2017

Market Value*	\$ 1,917	Last Appraisal Date: 9/30/2017	
Initial Commitment	\$ 1,000,000		
Paid-in Capital	\$ 961,774	96.18%	
Remaining Commitment	\$ 38,226	3.82%	
Net Gain/(Loss)	\$ (439,423)		
Net IRR Since Inception*	-13.6%		

Date	Paid-in Capital	% of Commitment	Distributions
3Q2000 - 4Q2007	\$ 887,283	88.73%	\$ (263,067)
1Q2008	\$ 10,000	1.00%	\$ (58,241)
2Q2008	\$ -	0.00%	\$ (58,900)
3Q2008	\$ 22,275	2.23%	\$ -
4Q2008	\$ 17,056	1.71%	\$ -
1Q2009	\$ -	0.00%	\$ (42,161)
2Q2009	\$ 1,876	0.19%	\$ (4,448)
3Q2009	\$ 734	0.07%	\$ (438)
1Q2010	\$ 11,306	1.13%	\$ (5,434)
2Q2010	\$ -	0.00%	\$ (3,983)
3Q2010	\$ -	0.00%	\$ (17,972)
4Q2010	\$ 10,224	1.02%	\$ -
1Q2011	\$ -	0.00%	\$ (35,479)
2Q2011	\$ -	0.00%	\$ (1,652)
4Q2011	\$ -	0.00%	\$ (9,423)
1Q2012	\$ 1,020	0.10%	\$ (5,310)
3Q2012	\$ -	0.00%	\$ (59)
1Q2013	\$ -	0.00%	\$ (480)
3Q2014	\$ -	0.00%	\$ (1,438)
2Q2015	\$ -	0.00%	\$ (5,206)
4Q2016	\$ -	0.00%	\$ (6,743)
Total	\$ 961,774	96.18%	\$ (520,434)

**Values as of last appraisal date*

EXECUTIVE SUMMARY**PERFORMANCE SUMMARY**

	Quarter	YTD /1Y	3 Year	5 Year
Total Portfolio - Gross	0.0	-10.5	7.6	-27.5
Total Portfolio - Net	0.0	-10.5	7.6	-27.6
Cambridge PE (Lag)	3.9	16.8	10.4	13.3
Private Equity - Gross	0.0	-10.5	7.6	-27.5
Cambridge PE (Lag)	3.9	16.8	10.4	13.3

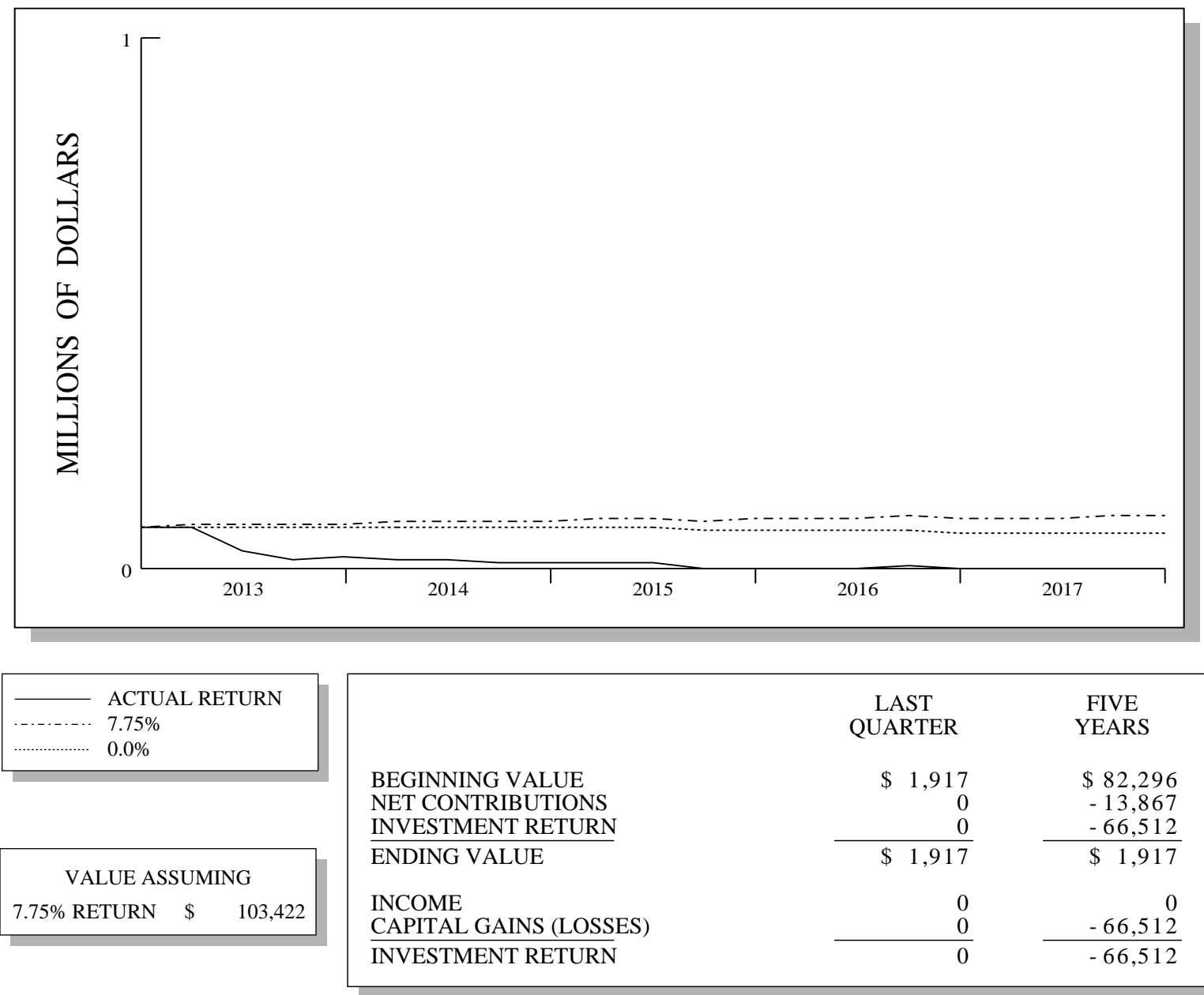
ASSET ALLOCATION

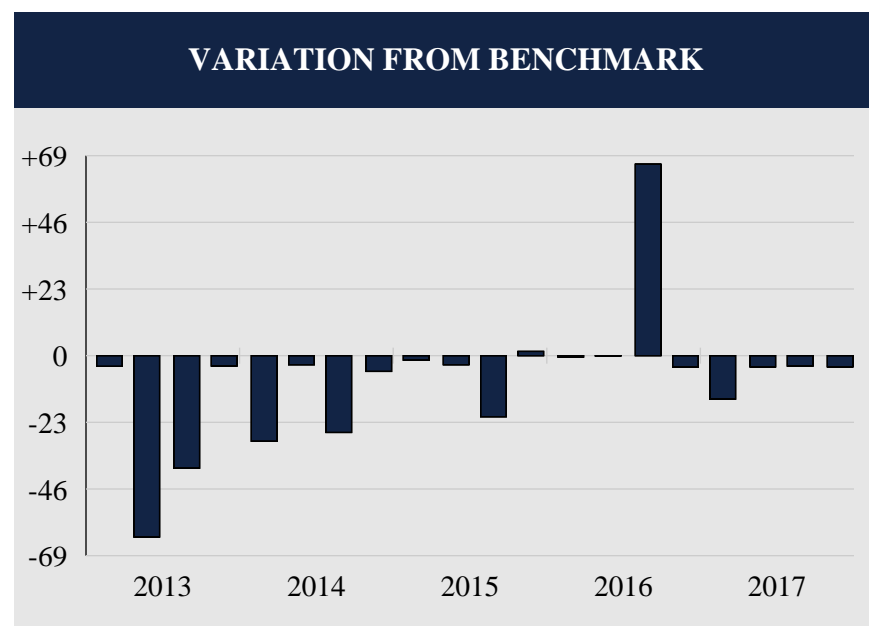
Private Equity	100.0%	\$ 1,917
Total Portfolio	100.0%	\$ 1,917

INVESTMENT RETURN

Market Value 9/2017	\$ 1,917
Contribs / Withdrawals	0
Income	0
Capital Gains / Losses	0
Market Value 12/2017	\$ 1,917

INVESTMENT GROWTH



TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY**COMPARATIVE BENCHMARK: CAMBRIDGE PRIVATE EQUITY (LAGGED)**

Total Quarters Observed	20
Quarters At or Above the Benchmark	2
Quarters Below the Benchmark	18
Batting Average	.100

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
3/13	0.0	3.7	-3.7
6/13	-58.0	4.6	-62.6
9/13	-35.7	3.1	-38.8
12/13	1.4	5.0	-3.6
3/14	-22.5	7.0	-29.5
6/14	0.0	3.1	-3.1
9/14	-21.0	5.5	-26.5
12/14	-4.1	1.3	-5.4
3/15	-0.7	0.9	-1.6
6/15	-0.4	2.7	-3.1
9/15	-17.2	3.9	-21.1
12/15	0.0	-1.5	1.5
3/16	0.0	0.5	-0.5
6/16	0.0	0.1	-0.1
9/16	70.1	4.0	66.1
12/16	0.0	3.9	-3.9
3/17	-10.5	4.5	-15.0
6/17	0.0	3.9	-3.9
9/17	0.0	3.6	-3.6
12/17	0.0	3.9	-3.9

ESSEX REGIONAL RETIREMENT SYSTEM
TA REALTY ASSOCIATES - FUND IX
PERFORMANCE REVIEW
DECEMBER 2017

INVESTMENT RETURN

On December 31st, 2017, the Essex Regional Retirement System's TA Realty Associates Fund IX portfolio was valued at \$186,616, a decrease of \$331,387 from the September ending value of \$518,003. Last quarter, the account recorded a net withdrawal of \$335,682, which overshadowed the fund's net investment return of \$4,295. Barring income receipts during the fourth quarter, the portfolio's net investment return figure was the product of \$4,295 in realized and unrealized capital gains.

RELATIVE PERFORMANCE

Total Fund

For the fourth quarter, the TA Realty Associates Fund IX account gained 1.2%, which was 0.9% less than the NCREIF NFI-ODCE Index's return of 2.1%. Over the trailing twelve-month period, the account returned 0.6%, which was 7.0% below the benchmark's 7.6% performance. Since December 2012, the portfolio returned 10.7% per annum, while the NCREIF NFI-ODCE Index returned an annualized 11.5% over the same period.

ASSET ALLOCATION

The portfolio was fully invested in the TA Realty Associates Fund IX at the end of the quarter.

Real Estate Investor Report
TA Realty Associates IX
As of December 31, 2017

Market Value	\$ 186,616	Last Appraisal Date: 12/31/2017	
Initial Commitment	\$ 4,500,000		
Paid-in Capital	\$ 4,500,000	100.00%	
Remaining Commitment	\$ -	0.00%	
Net Gain/(Loss)	\$ 2,824,703		
Net IRR Since Inception ²	10.5%		

Date	Paid-in Capital	% of Commitment	Distributions
2Q2010	\$ 1,800,000	40.00%	\$ -
3Q2010	\$ 675,000	15.00%	\$ (1,329)
4Q2010	\$ -	0.00%	\$ (1,441)
1Q2011	\$ 675,000	15.00%	\$ (1,290)
2Q2011	\$ 675,000	15.00%	\$ (34,518)
3Q2011	\$ 315,000	7.00%	\$ (30,143)
4Q2011	\$ -	0.00%	\$ (226,039)
1Q2012	\$ 180,000	4.00%	\$ (60,307)
2Q2012	\$ -	0.00%	\$ (60,052)
3Q2012	\$ -	0.00%	\$ (112,920)
4Q2012	\$ -	0.00%	\$ (286,299)
1Q2013	\$ -	0.00%	\$ (111,500)
2Q2013	\$ 180,000	4.00%	\$ (60,016)
3Q2013	\$ -	0.00%	\$ (112,944)
4Q2013	\$ -	0.00%	\$ (278,700)
1Q2014	\$ -	0.00%	\$ (131,116)
2Q2014	\$ -	0.00%	\$ (328,488)
3Q2014	\$ -	0.00%	\$ (418,913)
4Q2014	\$ -	0.00%	\$ (354,237)
1Q2015	\$ -	0.00%	\$ (78,359)
2Q2015	\$ -	0.00%	\$ (201,616)
3Q2015	\$ -	0.00%	\$ (60,040)
4Q2015	\$ -	0.00%	\$ (428,901)
1Q2016	\$ -	0.00%	\$ (135,594)
2Q2016	\$ -	0.00%	\$ (258,810)
3Q2016	\$ -	0.00%	\$ (388,861)
4Q2016	\$ -	0.00%	\$ (201,813)
1Q2017	\$ -	0.00%	\$ (15,027)
2Q2017	\$ -	0.00%	\$ (2,171,050)
3Q2017	\$ -	0.00%	\$ (252,082)
4Q2017	\$ -	0.00%	\$ (335,682)
Total	\$ 4,500,000	100.00%	\$ (7,138,087)

EXECUTIVE SUMMARY**PERFORMANCE SUMMARY**

	Quarter	YTD /1Y	3 Year	5 Year
Total Portfolio - Gross	1.2	0.6	9.2	10.7
Total Portfolio - Net	1.1	-0.1	6.8	8.0
NCREIF ODCE	2.1	7.6	10.4	11.5
Real Estate - Gross	1.2	0.6	9.2	10.7
NCREIF ODCE	2.1	7.6	10.4	11.5

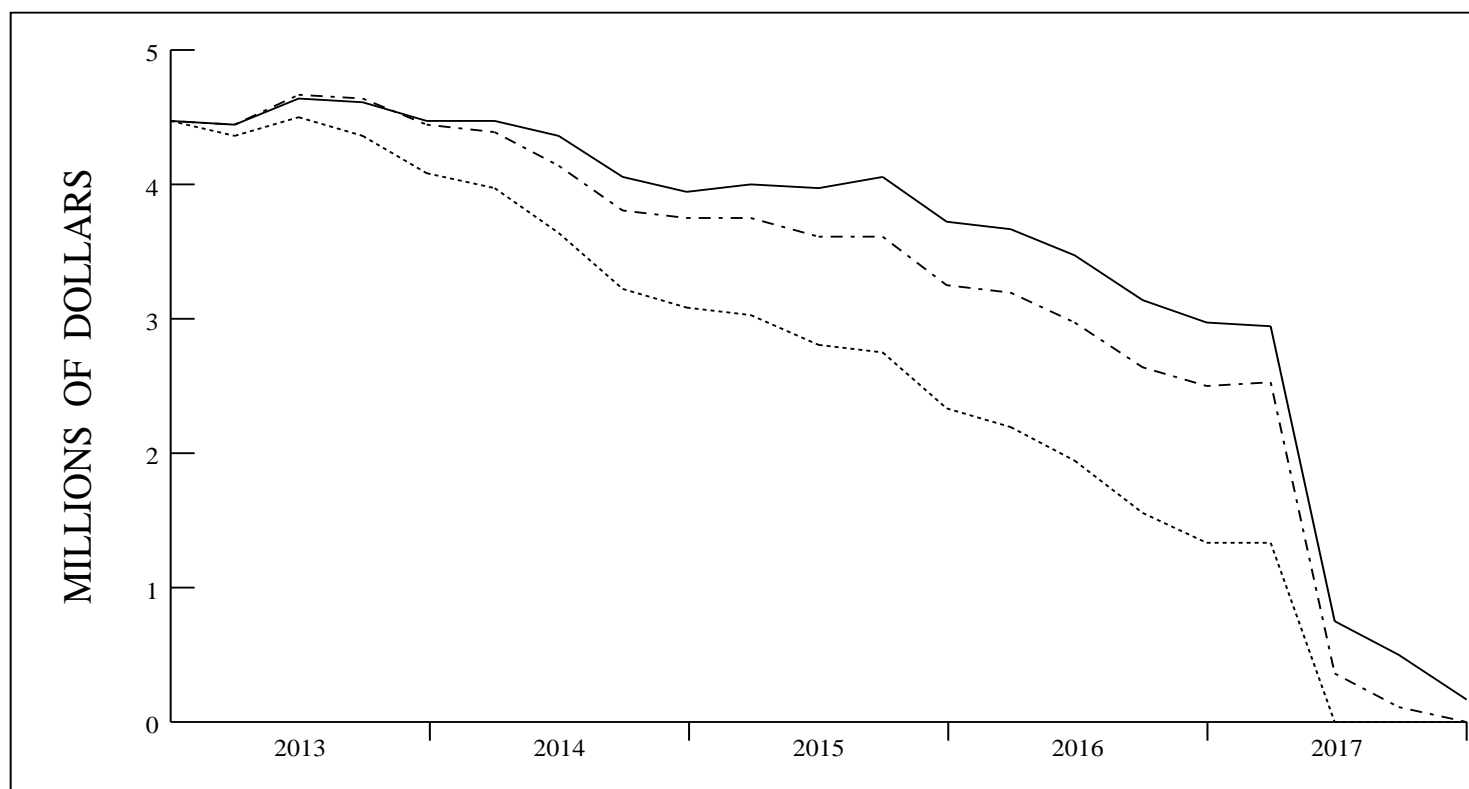
ASSET ALLOCATION

Real Estate	100.0%	\$ 186,616
Total Portfolio	100.0%	\$ 186,616

INVESTMENT RETURN

Market Value 9/2017	\$ 518,003
Contribs / Withdrawals	-335,682
Income	0
Capital Gains / Losses	4,295
Market Value 12/2017	\$ 186,616

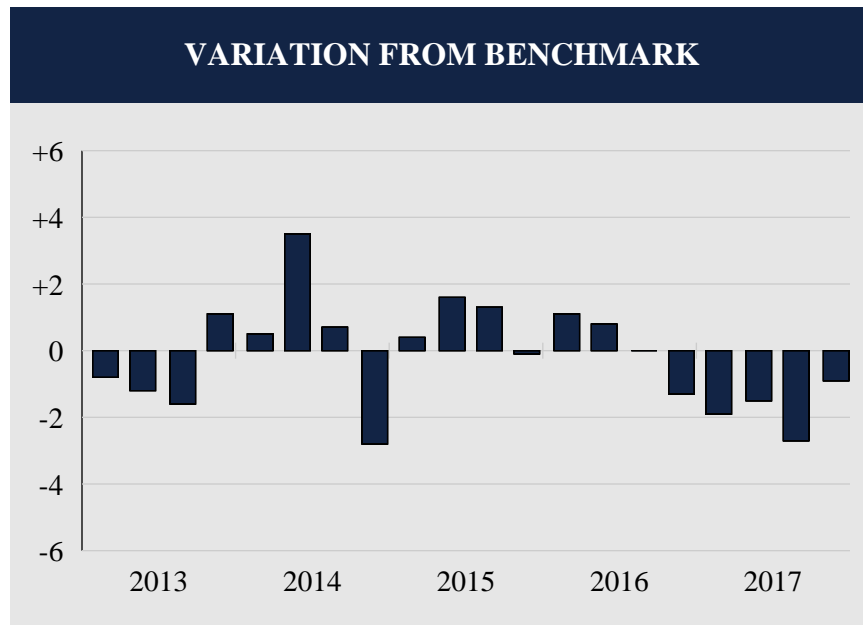
INVESTMENT GROWTH



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

VALUE ASSUMING
 7.75% RETURN \$ -200,181

	LAST QUARTER	FIVE YEARS
BEGINNING VALUE	\$ 518,003	\$ 4,491,939
NET CONTRIBUTIONS	-335,682	- 5,910,127
INVESTMENT RETURN	4,295	1,604,804
ENDING VALUE	\$ 186,616	\$ 186,616
INCOME	0	1,177,221
CAPITAL GAINS (LOSSES)	4,295	427,583
INVESTMENT RETURN	4,295	1,604,804

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY**COMPARATIVE BENCHMARK: NCREIF NFI-ODCE INDEX**

Total Quarters Observed	20
Quarters At or Above the Benchmark	10
Quarters Below the Benchmark	10
Batting Average	.500

RATES OF RETURN			
Date	Portfolio	Benchmark	Difference
3/13	1.9	2.7	-0.8
6/13	2.7	3.9	-1.2
9/13	2.0	3.6	-1.6
12/13	4.3	3.2	1.1
3/14	3.0	2.5	0.5
6/14	6.4	2.9	3.5
9/14	3.9	3.2	0.7
12/14	0.5	3.3	-2.8
3/15	3.8	3.4	0.4
6/15	5.4	3.8	1.6
9/15	5.0	3.7	1.3
12/15	3.2	3.3	-0.1
3/16	3.3	2.2	1.1
6/16	2.9	2.1	0.8
9/16	2.1	2.1	0.0
12/16	0.8	2.1	-1.3
3/17	-0.1	1.8	-1.9
6/17	0.2	1.7	-1.5
9/17	-0.8	1.9	-2.7
12/17	1.2	2.1	-0.9