

# Index Flash Report

July 31, 2023

## Market Returns

	Last Month	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
S&P:500	3.21	10.51	20.65	13.02	13.72	12.20	13.31	12.66
Russell:3000 Index	3.58	11.09	20.33	12.65	13.13	11.45	12.80	12.14
NASDAQ	4.05	17.55	37.68	16.78	10.95	14.34	16.82	15.93
DJ:30 Industrials	3.44	4.85	8.55	10.62	12.65	9.30	12.33	11.19
Russell:1000 Value	3.52	6.14	8.82	8.28	14.14	8.01	9.04	9.02
Russell:1000 Growth	3.37	15.47	33.36	17.31	12.19	15.23	16.69	15.53
Russell:2000 Value	7.55	13.81	10.24	3.94	17.46	4.69	8.01	7.40
Russell:2000 Index	6.12	13.68	14.70	7.91	12.01	5.09	8.78	8.17
Russell:2000 Growth	4.68	13.37	18.86	11.58	6.52	4.82	9.03	8.54
MSCI:ACWI	3.66	8.50	18.11	12.91	10.41	8.24	9.85	8.64
MSCI:EAFE	3.24	3.37	15.28	16.79	9.25	4.55	6.61	5.20
MSCI:ACWI ex US	4.07	4.78	13.92	13.41	7.09	3.85	6.19	4.72
MSCI:ACWI ex US Value	5.05	5.54	13.73	16.31	11.47	3.04	5.70	3.70
MSCI:ACWI ex US Growth	3.12	4.07	14.15	10.70	2.75	4.34	6.44	5.55
MSCI:EM	6.23	8.41	11.42	8.35	1.46	1.72	5.12	3.47
Wilshire:Liq Alternative	0.83	1.54	3.53	1.84	2.34	1.69	1.83	1.50
FTSE:NAREIT Equity Index	2.85	4.67	8.37	(5.82)	8.49	4.98	3.30	6.61
Blmbg:Commdty Idx	6.26	3.37	(4.41)	(11.49)	16.23	4.78	3.58	(1.56)
Blmbg:Gbl Aggr Idx	0.69	(1.28)	2.13	(2.70)	(5.74)	(0.92)	(0.91)	0.14
Blmbg:High Yld Corp	1.38	2.13	6.83	4.41	2.04	3.42	4.34	4.38
Blmbg:US Universal Idx	0.10	(1.09)	2.43	(2.39)	(3.95)	0.96	0.69	1.78
Blmbg:Aggregate Index	(0.07)	(1.51)	2.02	(3.37)	(4.46)	0.75	0.34	1.50
Blmbg:US TIPS Index	0.13	(1.41)	2.00	(5.39)	(0.84)	2.62	1.88	2.02
Blmbg:Muni 1-10 (1-12)	0.34	0.16	1.80	0.64	(0.59)	1.64	1.30	2.00

## Asset Allocation Returns

	Last Month	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
100% Equity	3.73	9.18	18.40	13.02	11.38	9.20	10.86	9.93
80% Equity; 20% Fixed Income	2.97	7.02	15.01	9.59	8.19	7.81	8.94	8.41
60% Equity; 40% Fixed Income	2.21	4.86	11.67	6.27	5.02	6.27	6.93	6.79
40% Equity; 60% Fixed Income	1.45	2.72	8.39	3.00	1.85	4.57	4.82	5.10
20% Equity; 80% Fixed Income	0.69	0.60	5.18	(0.21)	(1.31)	2.72	2.62	3.33

Equity - 70% Russell 3000; 30% MSCI ACWI ex U.S.  
Fixed Income - 100% Bloomberg Aggregate

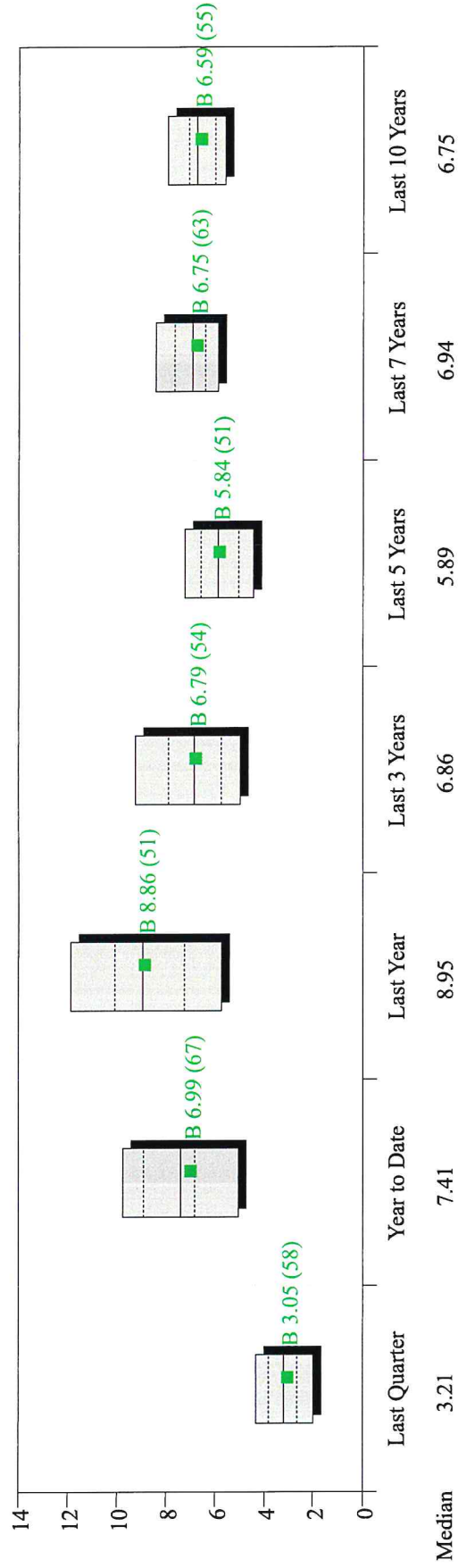
Performance quoted is past performance and is no guarantee of future results.

## Lehigh County Retirement Fund Net Portfolio Performance

3 Months ending June 30, 2023

	Ending Weight	Returns	Beginning Market Value	Ending Market Value
Domestic Equity	43.5%	5.82%	\$232,080,988	\$245,585,492
International Equity	17.5%	3.03%	\$95,664,743	\$98,559,055
Domestic Fixed Income	20.4%	(0.38%)	\$115,411,229	\$114,980,762
Alternative	13.4%	1.06%	\$88,011,605	\$75,370,658
Cash & Equivalents	5.3%	1.26%	\$26,499,298	\$29,664,906
<b>Total Portfolio</b>	<b>100.0%</b>	<b>3.05%</b>	<b>\$557,667,863</b>	<b>\$564,160,873</b>

Net of Fee Returns for Period Ending June 30, 2023  
Group: Callan Public Fund Spons- Mid (100M-1B)





## Lehigh County Retirement Fund

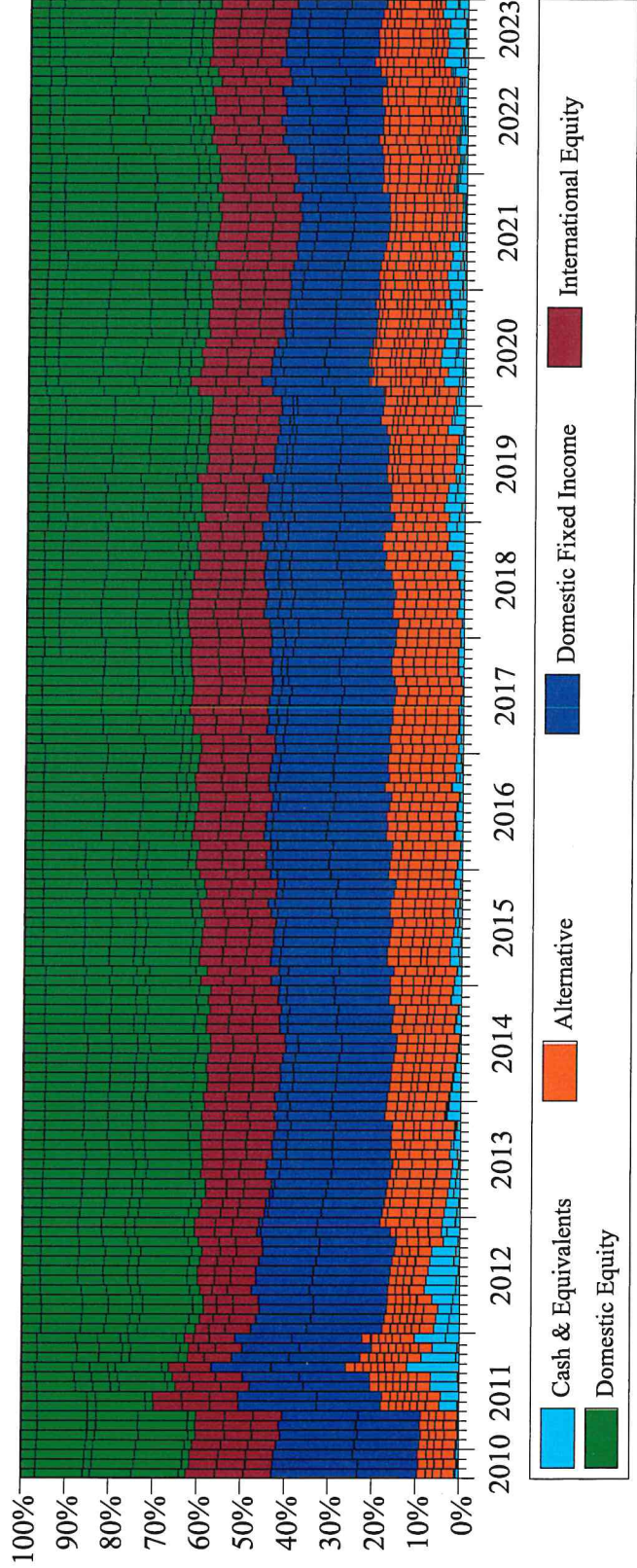
### Asset Allocation

1 Quarter Ending June 30, 2023

	Beginning Weight	Ending Weight	IPS Tgt Weight	Deviation
Domestic Equity	41.6%	43.5%	42.0%	1.5%
International Equity	17.2%	17.5%	18.0%	(0.5%)
Domestic Fixed Income	20.7%	20.4%	20.0%	0.4%
Alternative	15.8%	13.4%	15.0%	(1.6%)
Cash & Equivalents	4.8%	5.3%	5.0%	0.3%
<b>Total Portfolio</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	

	Beginning Market Value	Ending Market Value	Transfers
Domestic Equity	\$232,080,988	\$245,585,492	\$0
International Equity	\$95,664,743	\$98,559,055	\$0
Domestic Fixed Income	\$115,411,229	\$114,980,762	\$9,848
Alternative	\$88,011,605	\$75,370,658	(\$13,355,269)
Cash & Equivalents	\$26,499,298	\$29,664,906	\$13,345,421
<b>Total Portfolio</b>	<b>\$557,667,863</b>	<b>\$564,160,873</b>	<b>\$0</b>

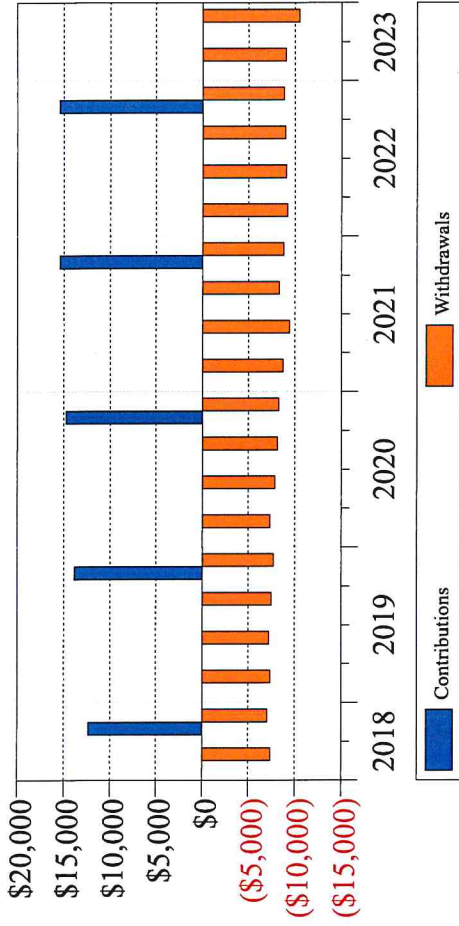
Actual Allocation for Since Inception Ended June 30, 2023



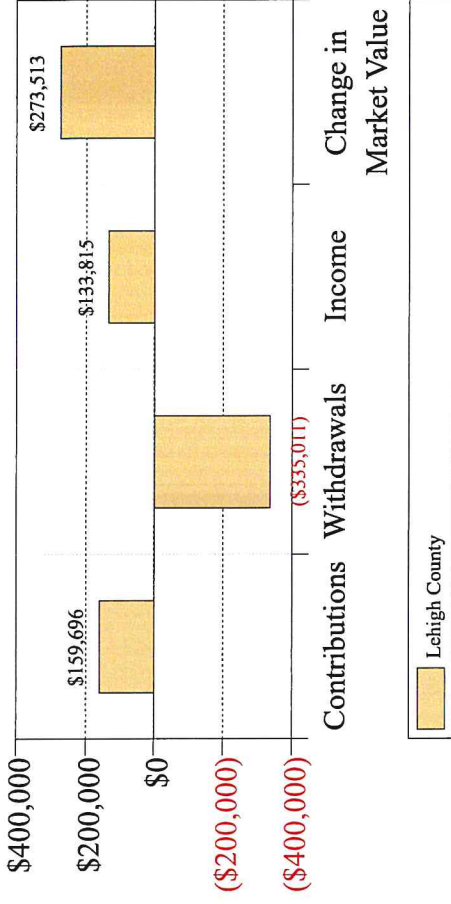
# Lehigh County Retirement Fund

## Historical Cash Flow

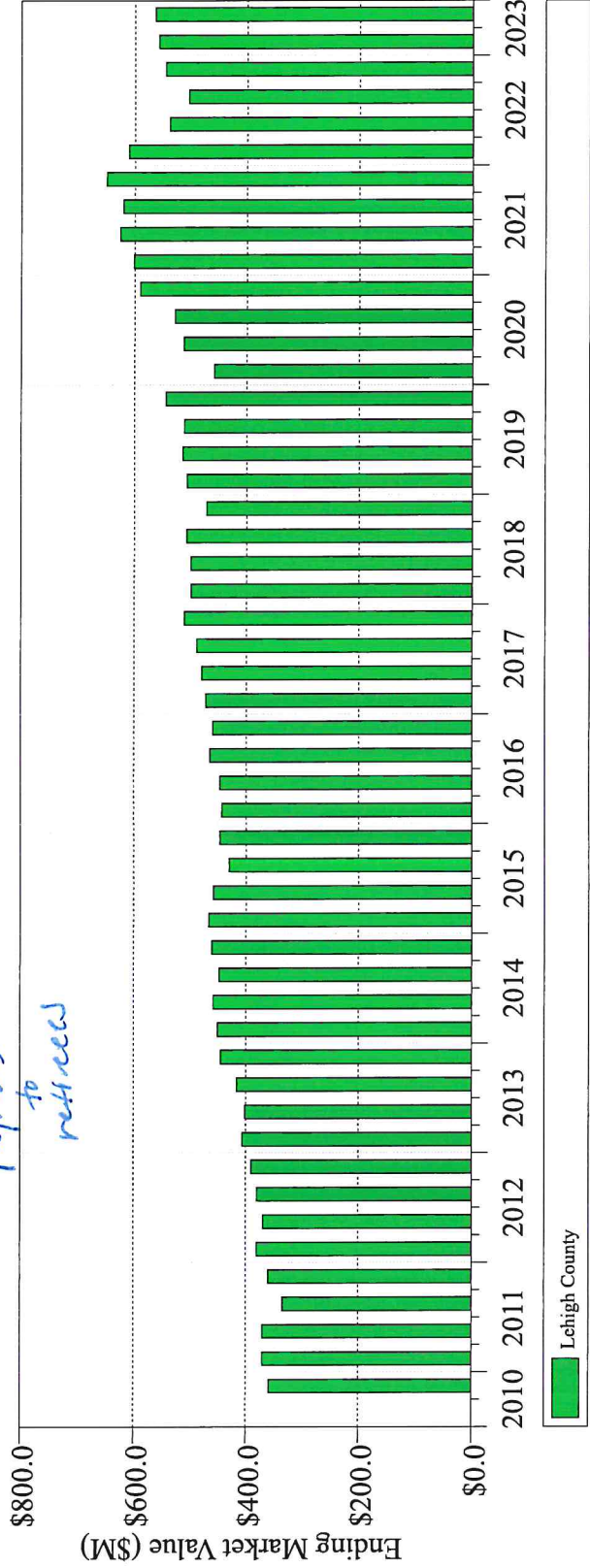
Quarterly Cash Flows for 5 Years (\$K)



Portfolio Appreciation (\$K) Since Inception



Ending Market Value Since Inception (July 1, 2010)





## Lehigh County Retirement Fund

### Manager Performance

3 Months ending June 30, 2023

	Benchmark Name	Ending Weight	Returns	Excess Return	Beginning Market Value	Ending Market Value
Lomax Large Value	Russell:1000 Value	8.9%	0.07%	(4.01%)	\$54,644,883	\$50,476,943
Vanguard Instl Indx;Inst	S&P:500	12.2%	8.73%	(0.01%)	\$63,529,351	\$69,076,919
Invesco Eq-Wtd 500;R6	S&P 500 Eq Wt	4.3%	3.95%	(0.04%)	\$23,427,247	\$24,352,837
SGA Large Growth	Russell:1000 Growth	9.5%	8.46%	(4.35%)	\$45,488,484	\$53,566,259
Emerald Mid Growth	Russell:Midcap Growth	2.6%	8.05%	1.81%	\$13,404,714	\$14,483,180
Emerald Small Growth	Russell:2000 Growth	2.6%	8.85%	1.80%	\$13,709,051	\$14,922,788
Vanguard SC Val Idx;Ins	CRSP:U.S. Small Cap Value	3.3%	4.64%	0.02%	\$17,877,258	\$18,706,566
Vanguard Dev Mkt;Instl	FTSE:Dev AC ex US Idx	5.8%	3.15%	0.25%	\$31,713,961	\$32,711,768
American Funds EuPc;F-3	MSCI:ACWI ex US	5.9%	2.14%	(0.29%)	\$32,527,588	\$33,225,059
Vittoria Long/Short Intl	MSCI:ACWI xUS	5.8%	3.82%	1.38%	\$31,423,193	\$32,622,229
Agincourt Core Fixed	Blimb:Aggregate Index	8.0%	(0.55%)	0.29%	\$45,406,775	\$45,156,066
CSMcKee Core Fixed	Blimb:Aggregate Index	8.2%	(0.35%)	0.50%	\$46,270,415	\$46,108,803
Vanguard Sh-Tm Inv;Adm	Blimb:Credit 1-3 Yr Bd	4.2%	(0.12%)	(0.23%)	\$23,734,040	\$23,715,892
Gabelli Merger Arbitrage	CS:Risk Arb	2.8%	(0.62%)	(1.95%)	\$15,967,232	\$15,867,763
ALPS/CC Mgt CC S;I	Blimb:Commdty Idx	1.0%	(3.89%)	(0.07%)	\$5,983,840	\$5,751,006
CBRE Clarion RE	FTSE:NAREIT All Eq Index	1.2%	2.40%	1.20%	\$6,677,315	\$6,837,668
Nuveen Pref Secs;I	S&P:US Pref Index	1.0%	1.97%	0.24%	\$7,431,001	\$5,523,162
Herzfeld CEF Debt Lending	Blimb:Corp 1-3 Yr	3.4%	1.41%	1.14%	\$19,035,789	\$19,304,910
LEM Multifamily V	Pitchbook PE Real Estate Index	1.5%	7.92%	0.00%	\$8,845,431	\$8,740,790
Citi Income Note	Citi Income Note Idx	1.4%	7.92%	0.00%	\$7,397,100	\$7,834,500
Vanguard Inf-Prot;Adm	Blimb:TIPS	1.0%	(1.58%)	(0.16%)	\$8,055,813	\$5,510,859

	Ending Weight	1 Month Returns	Beginning Market Value	Ending Market Value
<b>Domestic Equity</b>				
<b>Lomax Large Value</b> <i>Russell:1000 Value</i>	10.6%	3.63% 3.52%	\$50,476,943	\$52,265,512
<b>Vanguard Instl Indx;Inst</b> <i>S&amp;P:500</i>	14.4%	3.21% 3.21%	\$69,076,919	\$71,293,689
<b>Invesco Eq-Wtd 500;R6</b> <i>S&amp;P 500 Eq Wt</i>	5.1%	3.44% 3.46%	\$24,352,837	\$25,190,777
<b>SGA Large Growth</b> <i>Russell:1000 Growth</i>	11.1%	2.57% 3.37%	\$53,566,259	\$54,932,493
<b>Emerald Mid Growth</b> <i>Russell:Midcap Growth</i>	3.0%	2.31% 3.03%	\$14,483,180	\$14,815,896
<b>Emerald Small Growth</b> <i>Russell:2000 Growth</i>	3.2%	5.02% 4.68%	\$14,922,788	\$15,649,007
<b>Vanguard SC Val Idx;Ins</b> <i>CRSP:U.S. Small Cap Value</i>	4.0%	5.46% 5.46%	\$18,706,566	\$19,728,551
<b>Domestic Equity</b>	51.3%	3.41%	\$245,585,492	\$253,875,924
<b>International Equity</b>				
<b>Vanguard Dev Mkt;Instl</b> <i>FTSE:Dev AC ex US Idx</i>	6.8%	3.16% 3.60%	\$32,711,768	\$33,747,089
<b>American Funds EuPc;F-3</b> <i>MSCI:ACWI ex US</i>	6.9%	2.93% 4.07%	\$33,225,059	\$34,199,773
<b>International Equity</b>	13.7%	3.05%	\$65,936,826	\$67,946,863
<b>Domestic Fixed Income</b>				
<b>Agincourt Core Fixed</b> <i>Blmbg:Aggregate Index</i>	9.0%	(0.11%) (0.07%)	\$45,156,066	\$44,812,898
<b>CSMcKee Core Fixed</b> <i>Blmbg:Aggregate Index</i>	9.2%	(0.30%) (0.07%)	\$46,108,803	\$45,642,439
<b>Vanguard Sh-Tm Inv;Adm</b> <i>Blmbg:Credit 1-3 Yr Bd</i>	4.8%	0.68% 0.58%	\$23,715,892	\$23,745,744
<b>Domestic Fixed Income</b>	23.1%	(0.02%)	\$114,980,762	\$114,201,081
<b>Alternative</b>				
<b>CBRE Clarion RE</b> <i>FTSE:NAREIT Equity Index</i>	1.4%	2.59% 2.85%	\$6,837,668	\$6,983,182
<b>ALPS/CC Mgt CC S;I</b> <i>Blmbg:Commdty Idx</i>	1.2%	6.88% 6.26%	\$5,751,006	\$6,146,824
<b>Nuveen Pref Secs;I</b> <i>S&amp;P:US Pref Index</i>	1.1%	2.33% 1.58%	\$5,523,162	\$5,595,266
<b>Citi Income Note</b> <i>Citi Income Note Idx</i>	1.7%	5.43% 5.43%	\$7,834,500	\$8,264,700
<b>Vanguard Infl-Prot;Adm</b> <i>Blmbg:US TIPS Index</i>	1.1%	0.13% 0.13%	\$5,510,859	\$5,464,160
<b>Alternative</b>	6.6%	3.61%	\$31,457,195	\$32,454,132

	Ending Weight	1 Month Returns	Beginning Market Value	Ending Market Value
<b>Cash &amp; Equivalents</b>				
<b>Payden:Ltd Mat;SI</b>	<b>3.2%</b>	<b>0.51%</b>	<b>\$15,963,369</b>	<b>\$15,919,834</b>
<i>3 Month T-Bill</i>		<i>0.44%</i>		
<b>Principal Sweep Deposit:Misc</b>	<b>1.8%</b>	<b>0.23%</b>	<b>\$1,946,534</b>	<b>\$8,755,083</b>
<i>3 Month T-Bill</i>		<i>0.44%</i>		
<b>Principal Sweep Deposit</b>	<b>0.4%</b>	<b>0.23%</b>	<b>\$11,755,004</b>	<b>\$2,156,165</b>
<i>3 Month T-Bill</i>		<i>0.44%</i>		
<b>Cash &amp; Equivalents</b>	<b>5.4%</b>	<b>0.38%</b>	<b>\$29,664,906</b>	<b>\$26,831,082</b>
<b>Total Portfolio</b>	<b>100.0%</b>	<b>2.38%</b>	<b>\$487,625,181</b>	<b>\$495,309,082</b>
<i>Lehigh County Blended BM</i>		<i>2.67%</i>		

	Beginning Market Value	Ending Market Value
Assets not valued daily.		
<b>International Equity</b>		
<b>Vittoria Long/Short Intl</b>	<b>\$32,622,229</b>	<b>\$31,401,963</b>
<b>Alternative</b>		
<b>Gabelli Merger Arbitrage</b>	<b>\$15,867,763</b>	<b>\$15,867,763</b>
<b>Herzfeld CEF Debt Lending</b>	<b>\$19,304,910</b>	<b>\$19,304,910</b>
<b>LEM Multifamily V</b>	<b>\$8,740,790</b>	<b>\$8,740,790</b>
<b>Total Portfolio</b>	<b>\$564,160,873</b>	<b>\$570,624,507</b>

	Year to Date Returns
<b>Total Portfolio</b>	<b>10.24%</b>
<i>Lehigh County Blended BM</i>	<i>11.26%</i>

