

Index Flash Report

October 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	(2.10)	(8.25)	10.69	10.14	10.36	11.01	12.19	11.18
Russell:3000 Index	(2.65)	(9.08)	9.41	8.38	9.19	10.23	11.56	10.52
NASDAQ	(2.78)	(10.27)	23.57	17.95	6.41	12.93	14.90	13.75
DJ:30 Industrials	(1.26)	(6.55)	1.44	3.17	9.84	7.96	11.39	10.34
Russell:1000 Value	(3.53)	(9.75)	(1.80)	0.13	10.21	6.60	7.60	7.60
Russell:1000 Growth	(1.42)	(7.62)	23.20	18.95	8.70	14.22	15.79	13.82
Russell:2000 Value	(5.97)	(15.15)	(6.46)	(9.93)	9.73	3.26	5.52	5.20
Russell:2000 Index	(6.82)	(16.69)	(4.45)	(8.56)	3.95	3.31	6.29	5.63
Russell:2000 Growth	(7.71)	(18.29)	(2.87)	(7.63)	(1.83)	2.68	6.53	5.67
MSCI:ACWI	(3.01)	(9.62)	6.75	10.50	6.68	7.47	8.39	6.81
MSCI:EAPE	(4.05)	(10.88)	2.74	14.40	5.73	4.10	4.98	3.05
MSCI:ACWI ex US	(4.13)	(11.35)	0.99	12.07	3.03	3.46	4.32	2.54
MSCI:ACWI ex US Value	(4.35)	(9.02)	3.47	15.07	8.90	2.84	3.82	1.72
MSCI:ACWI ex US Growth	(3.89)	(13.61)	(1.38)	9.19	(2.57)	3.75	4.58	3.18
MSCI:EM	(3.89)	(12.16)	(2.14)	10.80	(3.67)	1.60	2.61	1.19
Wishar:LiQ Alternative	(0.79)	(1.81)	1.66	2.06	1.76	1.67	1.57	1.19
FTSE:NAREIT Equity Index	(4.36)	(13.64)	(6.41)	(6.10)	5.12	2.47	2.81	5.03
Blmbg:Commdy Idx	0.27	(2.07)	(6.82)	(7.27)	13.53	4.79	3.10	(1.74)
Blmbg:Gbl Aggr Idx	(1.20)	(5.39)	(3.38)	1.72	(7.33)	(1.64)	(1.30)	(0.66)
Blmbg:High Yld Corp	(1.16)	(2.06)	4.63	6.23	1.19	3.05	3.57	3.86
Blmbg:US Universal Idx	(1.50)	(4.43)	(2.11)	1.19	(5.04)	0.21	0.11	1.17
Blmbg:Aggregate Index	(1.58)	(4.69)	(2.77)	0.36	(5.57)	(0.06)	(0.21)	0.88
Blmbg:US TIPS Index	(0.72)	(3.43)	(1.50)	(0.72)	(2.00)	2.27	1.42	1.61
Blmbg:Muni 1-10 (1-12)	(0.23)	(2.78)	(1.03)	2.32	(1.41)	1.21	1.03	1.58

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	(3.09)	(9.75)	6.86	9.59	7.40	8.24	9.42	8.14
80% Equity: 20% Fixed Income	(2.79)	(8.78)	4.91	7.68	4.83	6.86	7.69	6.86
60% Equity: 40% Fixed Income	(2.49)	(7.78)	2.98	5.84	2.25	5.34	5.86	5.49
40% Equity: 60% Fixed Income	(2.18)	(6.77)	1.06	4.01	(0.34)	3.68	3.92	4.03
20% Equity: 80% Fixed Income	(1.88)	(5.74)	(0.86)	2.18	(2.95)	1.87	1.90	2.49

Equity - 70% Russell 3000; 30% MSCI ACWI ex U.S.

Fixed Income - 100% Bloomberg Aggregate

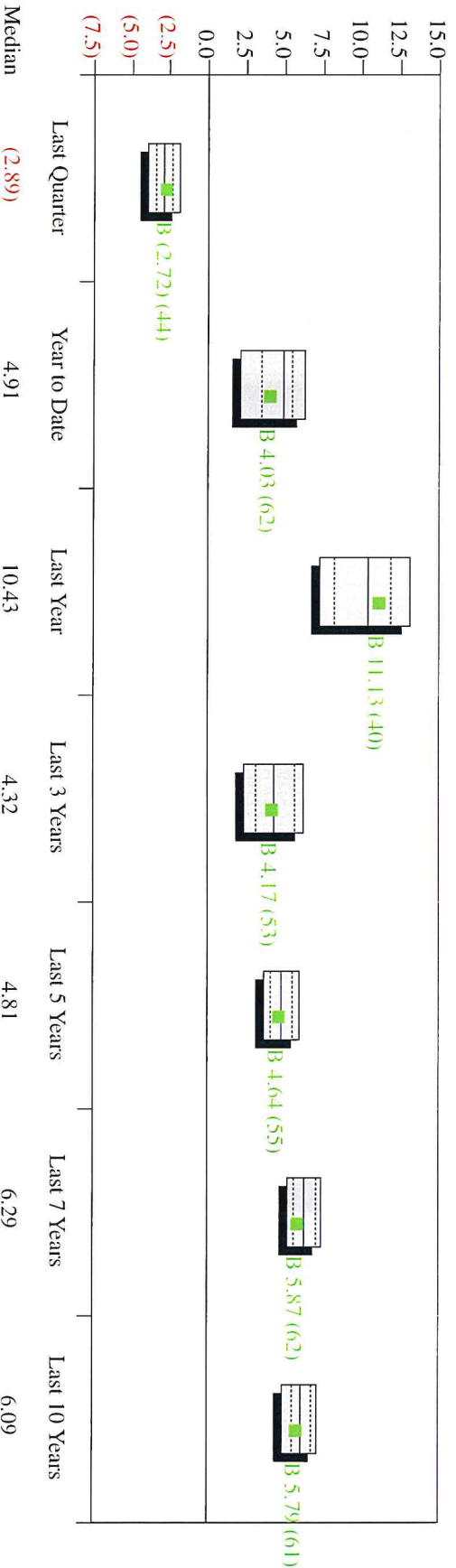
Performance quoted is past performance and is no guarantee of future results.

Lehigh County Retirement Fund Net Portfolio Performance

3 Months ending September 30, 2023

	Ending Weight	Returns	Beginning Market Value	Ending Market Value
Domestic Equity	42.1%	(3.49%)	\$245,585,492	\$227,538,691
International Equity	18.0%	(4.13%)	\$98,559,055	\$97,320,780
Domestic Fixed Income	20.8%	(2.54%)	\$114,980,762	\$112,048,160
Alternative	13.8%	(0.51%)	\$75,045,217	\$74,665,427
Cash & Equivalents	5.3%	1.22%	\$29,664,906	\$28,356,511
Total Portfolio	100.0%	(2.72%)	\$563,835,432	\$539,929,568

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



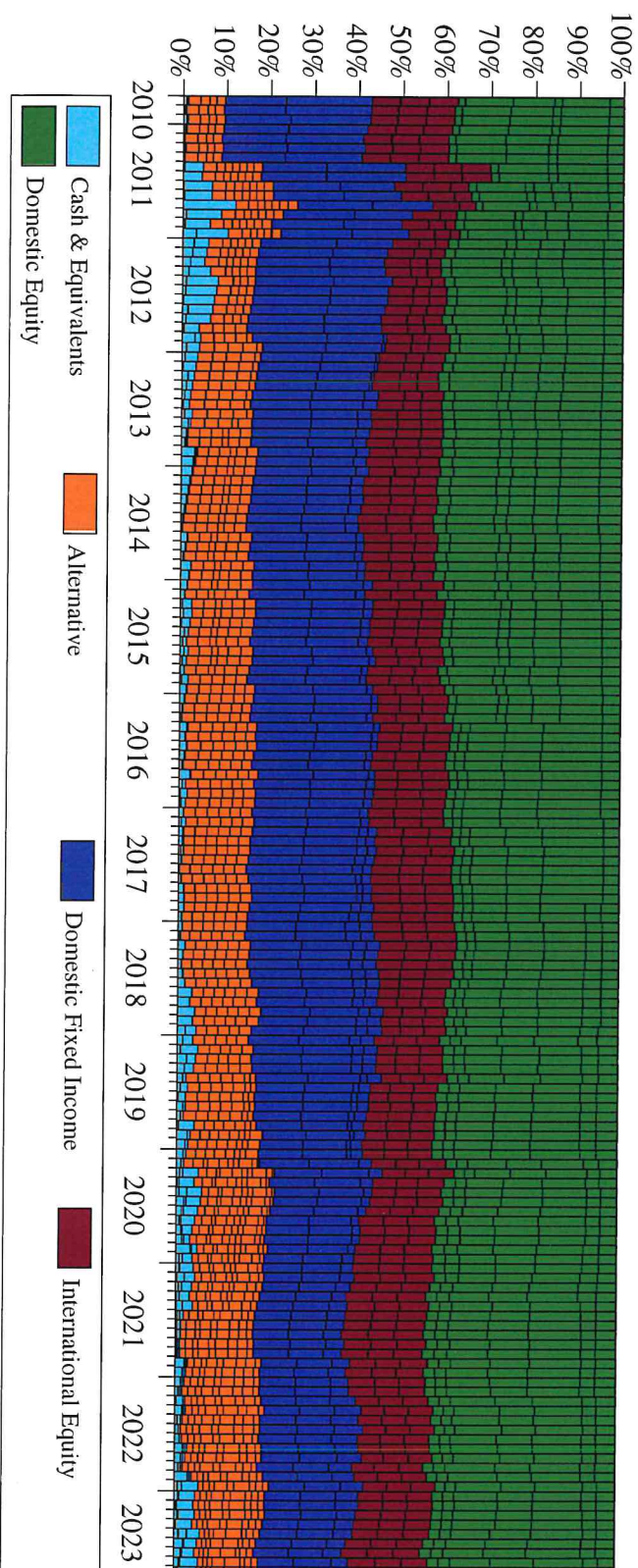
Lehigh County Retirement Fund Asset Allocation

1 Quarter Ending September 30, 2023

	Beginning Weight	Ending Weight	IPS Tgt Weight	Deviation
Domestic Equity	43.6%	42.1%	42.0%	0.1%
International Equity	17.5%	18.0%	18.0%	0.0%
Domestic Fixed Income	20.4%	20.8%	20.0%	0.8%
Alternative	13.3%	13.8%	15.0%	(1.2%)
Cash & Equivalents	5.3%	5.3%	5.0%	0.3%
Total Portfolio	100.0%	100.0%	100.0%	

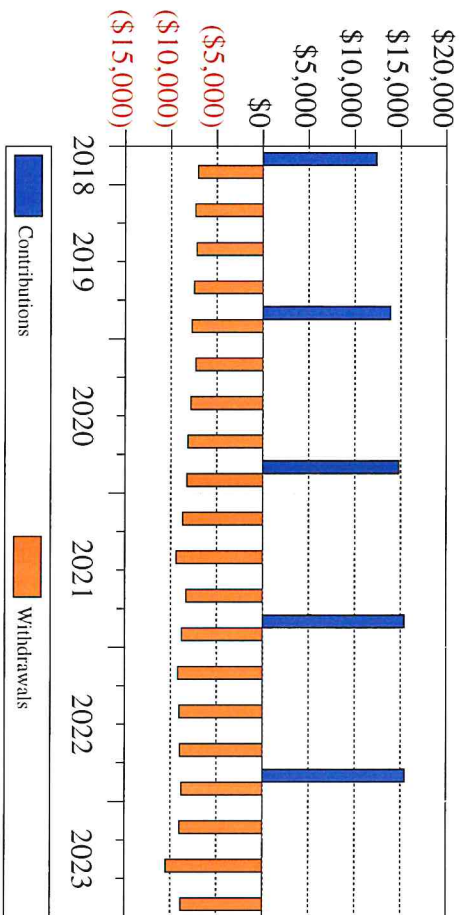
	Beginning Market Value	Ending Market Value	Transfers
Domestic Equity	\$245,585,492	\$227,538,691	(\$10,000,000)
International Equity	\$98,559,055	\$97,320,780	\$3,000,000
Domestic Fixed Income	\$114,980,762	\$112,048,160	(\$5,691)
Alternative	\$75,045,217	\$74,665,427	(\$180,516)
Cash & Equivalents	\$29,664,906	\$28,356,511	\$7,186,207
Total Portfolio	\$563,835,432	\$539,929,568	\$0

Actual Allocation for Since Inception Ended September 30, 2023

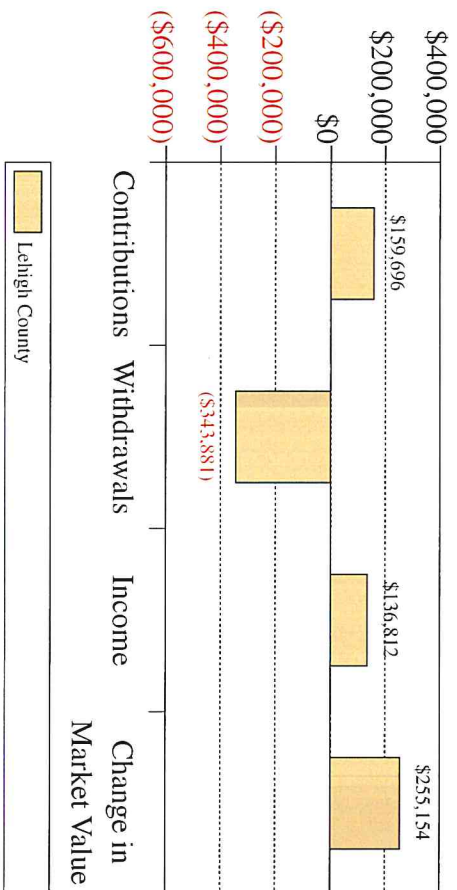


Lehigh County Retirement Fund Historical Cash Flow

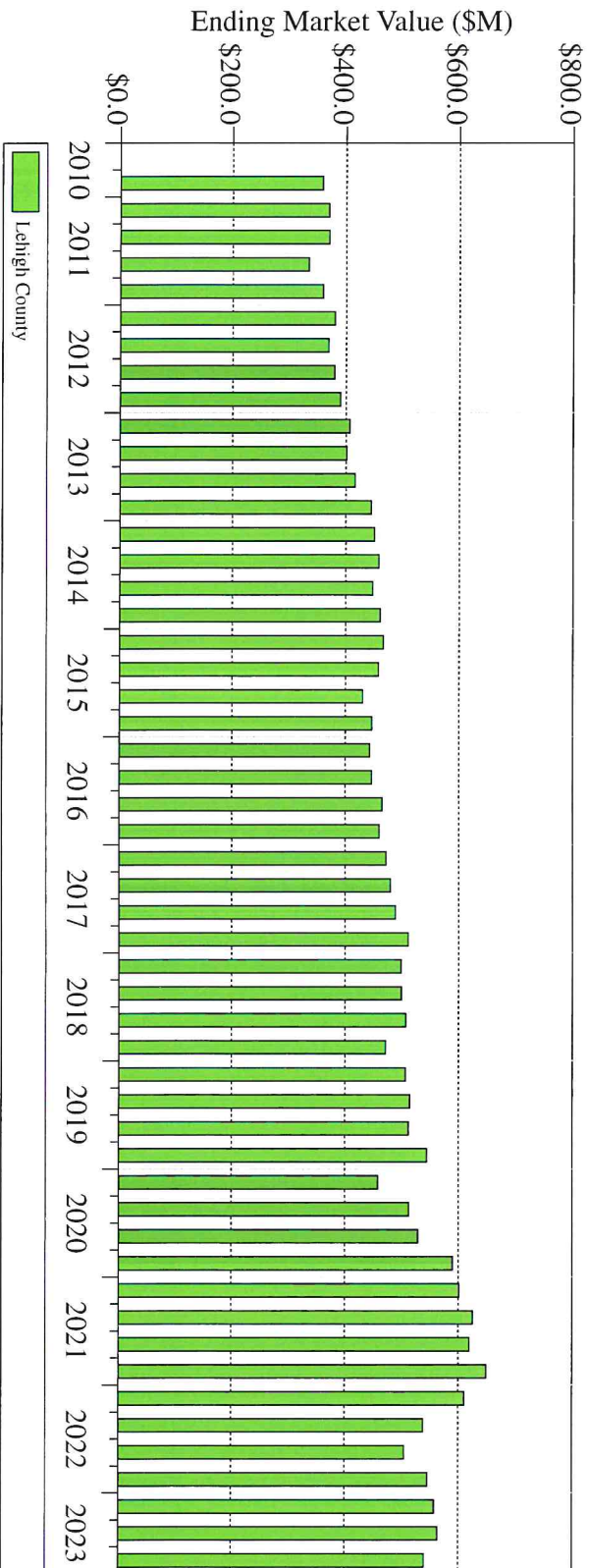
Quarterly Cash Flows for 5 Years (\$K)



Portfolio Appreciation (\$K) Since Inception



Ending Market Value Since Inception (July 1, 2010)



Lehigh County Retirement Fund Manager Performance

3 Months ending September 30, 2023

	Benchmark Name	Ending Weight	Returns	Excess Return	Beginning Market Value	Ending Market Value
Lomax Large Value	Russell:1000 Value	9.3%	(0.46%)	2.71%	\$50,476,943	\$50,245,710
Vanguard Instl Indx:Inst	S&P:500	11.1%	(3.28%)	(0.01%)	\$69,076,919	\$60,151,079
Invesco Eq-Wld 500:R6	S&P 500 Eq Wt	3.8%	(4.94%)	(0.04%)	\$24,352,837	\$20,353,180
SGA Large Growth	Russell:1000 Growth	9.6%	(3.71%)	(0.58%)	\$53,566,259	\$51,577,933
Emerald Mid Growth	Russell:Midcap Growth	2.5%	(7.31%)	(2.09%)	\$14,483,180	\$13,423,857
Emerald Small Growth	Russell:2000 Growth	2.5%	(8.52%)	(1.20%)	\$14,922,788	\$13,651,346
Vanguard SC Val Idx:Ins	CRSP:U.S. Small Cap Value	3.4%	(3.05%)	0.04%	\$18,706,566	\$18,135,587
Vanguard Dev Mkt:Instl	FTSE:Dev AC ex US Idx	6.3%	(4.67%)	(0.67%)	\$32,711,768	\$34,019,993
American Funds EuPc:F-3	MSCI:ACWI ex US	5.8%	(6.32%)	(2.55%)	\$33,225,059	\$31,124,276
Victoria Long/Short Intl	MSCI:ACWI xUS	6.0%	(1.37%)	2.41%	\$32,622,229	\$32,176,511
Agincourt Core Fixed	Blmbg:Aggregate Index	8.7%	(3.31%)	(0.08%)	\$45,156,066	\$47,070,253
CSMcKee Core Fixed	Blmbg:Aggregate Index	8.3%	(3.12%)	0.11%	\$46,108,803	\$44,669,221
Vanguard Sh-Tm Inv:Adm	Blmbg:Credit 1-3 Yr Bd	3.8%	0.36%	(0.39%)	\$23,715,892	\$20,308,685
Gabelli Merger Arbitrage	CS:Risk Arb	3.0%	2.17%	(0.19%)	\$15,867,763	\$16,211,585
ALPS/CC Mgt CC S:I	Blmbg:Commdy Idx	1.1%	4.05%	0.74%	\$5,751,006	\$5,983,840
CBRE Clarion RE	FTSE:NAREIT All Eq Index	1.2%	(8.54%)	(0.21%)	\$6,837,668	\$6,253,756
Nuveen Pref Secs:I	S&P:US Pref Index	1.0%	1.88%	2.16%	\$5,523,162	\$5,626,856
Herzfeld CEF Debt Lending	Blmbg:Corp 1-3 Yr	3.6%	0.84%	0.07%	\$19,304,910	\$19,467,841
LEM Multifamily V	Pitchbook PE Real Estate Index	1.6%	0.00%	--	\$8,415,349	\$8,415,349
Citi Income Note	Citi Income Note Idx	1.4%	(6.36%)	(1.81%)	\$7,834,500	\$7,335,900
Vanguard Infl-Prot:Adm	Blmbg:TIPS	1.0%	(2.60%)	0.00%	\$5,510,859	\$5,370,301

	Ending Market Value	Beginning Market Value	1 Month Returns	Ending Weight
Domestic Equity	\$48,668,504	\$50,201,923	(3.05%)	10.9%
Lomax Large Value Russell:1000 Value			(3.53%)	
Vanguard Instl Indx:Inst S&P:500	\$58,883,891	\$60,151,079	(2.11%)	13.2%
Invesco Eq-Wid 500;R6 S&P 500 Eq Wt	\$19,520,928	\$20,353,180	(4.09%)	4.4%
SGA Large Growth Russell:1000 Growth	\$50,546,758	\$51,565,197	(1.97%)	11.3%
Emerald Mid Growth Russell:Midcap Growth	\$12,559,272	\$13,422,001	(6.43%)	2.8%
Emerald Small Growth Russell:2000 Growth	\$12,766,388	\$13,629,754	(6.33%)	2.9%
Vanguard SC Val Idx;Ins CRSP:U.S. Small Cap Value	\$17,254,851	\$18,135,587	(4.86%)	3.9%
Domestic Equity	\$220,200,593	\$227,458,720	(3.19%)	49.2%
International Equity	\$32,810,178	\$34,019,993	(3.56%)	7.3%
Vanguard Dev Mkt;Instl FTSE:Dev AC ex US Idx			(4.49%)	
American Funds Eufc:F-3 MSCI:ACWI ex US	\$30,149,561	\$31,124,276	(4.13%)	6.7%
International Equity	\$62,959,739	\$65,144,269	(3.35%)	14.1%
Domestic Fixed Income	\$45,916,093	\$46,709,639	(1.70%)	10.3%
Agincourt Core Fixed Blmbg:Aggregate Index			(1.58%)	
CSMKeec Core Fixed Blmbg:Aggregate Index	\$43,596,967	\$44,384,294	(1.77%)	9.7%
Vanguard Sh-Tm Inv;Adm Blmbg:Credit 1-3 Yr Bd	\$20,167,873	\$20,190,198	(0.10%)	4.5%
Domestic Fixed Income	\$109,680,933	\$111,284,130	(1.44%)	24.5%
Alternative	\$5,975,986	\$6,223,219	(4.02%)	1.3%
CBRE Clarion RE FTSE:NAREIT Equity Index			(4.36%)	
ALPS/CC Mgt CC S;I Blmbg:Commdy Idx	\$5,937,273	\$5,983,840	(0.78%)	1.3%
Nuveen Pref Secs;I S&P:US Pref Index	\$5,481,271	\$5,570,100	(1.60%)	1.2%
Citi Income Note Citi Income Note Idx	\$6,844,500	\$7,378,200	(6.34%)	1.5%
Vanguard Intl-Prt;Adm Blmbg:US TIPS Index	\$5,277,362	\$5,260,220	(0.76%)	1.2%
Alternative	\$29,516,392	\$30,415,580	(2.94%)	6.6%

Performance quoted is past performance and is no guarantee of future results. This is not a statement of future results. This is not a statement and values shown are not audited; please confirm all values against your custodial account statement. Securities offered through M Holdings Securities, Inc., a Registered Broker/Dealer, Member FINRA/SIPC, Investment Advisory. Institutional Consulting



	Ending Market Value	Beginning Market Value	1 Month Returns	Ending Weight
Cash & Equivalents	\$21,195,614	\$23,098,741	0.43%	4.7%
Payden:Ltd Mat;SI 3 Month T-Bill			0.46%	
Principal Sweep Deposit:Misc	\$2,947,571	\$2,934,162	0.23%	0.7%
3 Month T-Bill			0.46%	
Principal Sweep Deposit	\$858,239	\$2,350,574	0.23%	0.2%
3 Month T-Bill			0.46%	
Cash & Equivalents	\$25,001,425	\$28,383,477	0.39%	5.6%
Total Portfolio	\$447,359,081	\$462,686,176	(2.56%) (2.75%)	100.0%

Assets not valued daily.

	Ending Market Value	Beginning Market Value
International Equity	\$32,571,184	\$31,401,963
Vittoria Long/Short Intl		

	Ending Market Value	Beginning Market Value
Alternative	\$16,211,585	\$16,214,971
Gabelli Merger Arbitrage		
Herzfeld CEF Debt Lending	\$19,467,841	\$19,452,575
LEM Multifamily V	\$8,415,349	\$8,415,349

	Ending Market Value	Beginning Market Value
Total Portfolio	\$524,025,040	\$538,171,034

	Year to Date Returns
Total Portfolio	1.32%
Lehigh County Blended BM	2.22%

