Minutes of the Lehigh County Retirement Board Meeting

Lehigh County Government Center Public Hearing Room

Thursday, August 10, 2017

9:30 A.M.

A meeting of the Lehigh County Employees' Retirement Board was held at 9:30 A.M. in Lehigh County Government Center Public Hearing Room. Members present were Percy Dougherty, Glenn Eckhart, Judy Johnston, Tom Muller, Tim Reeves and Ed Sweeney.

Chris Lakatosh from Cornerstone Advisors Asset Management also attended.

Tom Muller, County Executive, called the meeting to order at 9:31 A.M.

Tom Muller opened the meeting by announcing Ed Sweeney was elected as the Retiree Representative on the Retirement Board. Welcome Ed!!!

David Bausch was not present but Tom publically and formally thanked David for his great efforts and great work he did on behalf of the retirees for many, many years. Thank you for your many years of dedication David!!!!

OLD BUSINESS

Meeting minutes for approval from May 4, 2017 meeting.

Tom Muller asked if there were any questions or corrections to the May 4, 2017 meeting minutes.

Tom Muller called for a motion for approval.

Judy Johnston made a motion to approve the May 4, 2017 Retirement Board minutes.

Tim Reeves seconded the motion.

Tom Muller called for a voice vote.

All were in favor. 6-0 vote. Motion passed unanimously.

NEW BUSINESS

Chris Lakatosh from Cornerstone gave the Second Quarter pension update.

Page 1 (Net Portfolio Performance) – The market continues to be incredibly strong and everybody continues to make a significant amount of money. The pension is no different. For the second quarter of 2017 ending June 30, the pension plan was up \$2.9 million. We started the beginning of the second quarter with \$472 million. We ended the third quarter with \$479 million. If you look at the bottom, for the last quarter -2.9% return represents a top 45^{th} percentile ranking. Over the last three years we were in the 52^{nd} percentile and over the last five years in the top 49^{th} percentile. The pension plan continues to do incredibly well in this rising market.

Page 2 (Asset Allocation) – We've been a little more conservative in our approach with our equity portfolio. We are at about 55% equity, 37-38% domestic equities, 18% international, 29% fixed income 15% alternatives and a little bit in cash.

Page 3 (Historical Cash Flow) – The top right corner is probably most important to everybody. This "Portfolio Appreciation Since Inception" number is comprised of two components: income that was derived from investments in the portfolio and change in market value from market appreciation. How much the pension plan has appreciated since inception, is since Cornerstone has been engaged with the County - which is a little shy of seven years. We made collectively, \$210 million in the pension plan in that 7-year period of time.

Page 4 (Manager Performance) – These are the returns of the investments in the portfolio. You can see in the middle of that graph the return stream from top to bottom that every single position within the pension plan has made money in the second quarter with the exception of commodities. Oil pulled back in the second quarter, so commodities dropped a little bit. By and large, every other single investment component of the pension plan was up. Some were up more significantly than the others – international did a little better than domestic equities but every part of the portfolio made money.

Page 5 (Monthly Flash Report) – This is a monthly flash report as of July. You'll see all of the investments relative to their benchmarks on the left side of the page. For the month of July, that 30-day period of time, the portfolio is up 1.6% relative to the index which was up 1.54%. The cumulative total on the bottom, the net portfolio return in the first 7 months of the year was a little shy of 9%. The pension plan was up 8.81% net of all fees. The index was up 8.44%. Almost 40 basis points of outperformance. You can see that the total portfolio value as of July is \$482 million. Actually as of two days ago it was about \$483 million. Another \$1 million in appreciation in a continuously upward trending marketplace.

No questions or motions.

No citizen input.

Glenn Eckhart thanked Judy Johnston and her staff and Tim Benyo and his staff for their help with the election of the Retiree Representative. Great job by both offices. For the next meeting, we have a few tweaks on some of the policies we passed last August pertaining to the election process. Judy and I will get that changed for the next meeting.

No further business.

Tom Muller called for a motion to adjourn.

Glenn Eckhart made the motion to adjourn.

Tom Muller called for a voice vote. All in favor. 6-0 vote. Motion passed unanimously.

Meeting adjourned at 9:37 A.M.

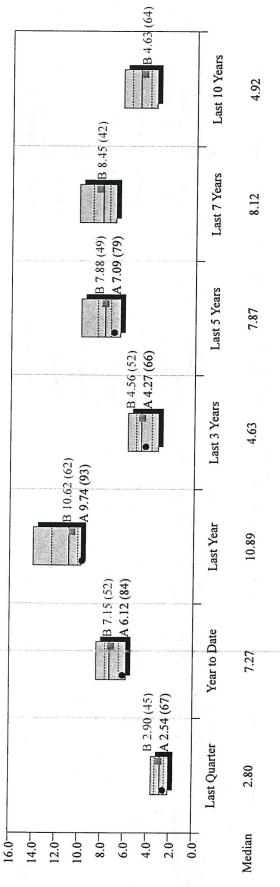
Glenn Eckhart, Secretary

Lehigh County Retirement Fund Net Portfolio Performance

3 Months ending June 30, 2017

| | | | Beginning Market | Ending Market |
|-----------------------|---------------|--|------------------------------------|---------------|
| | Ending Weight | Returns | Value | Value |
| Domestic Equity | 37.8% | 3.49% | \$179,506,194 | \$181,218,684 |
| International Equity | 17.8% | 6.37% | \$80,254,148 | \$85,362,524 |
| Domestic Fixed Income | 28.7% | 1.47% | \$133,586,854 | \$137,561,407 |
| Alternative | 15.1% | 0.76% | \$73,511,696 | \$72,519,102 |
| Cash & Equivalents | 0.7% | 0.31% | \$5,537,540 | \$3,320,079 |
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| Total Portfolio | 100.0% | 2.90% | \$472,396,431 | \$479,981,796 |

Net of Fee Returns for Period Ending June 30, 2017 Group: CAI Public Fund Sponsor - Mid (100M-1B)





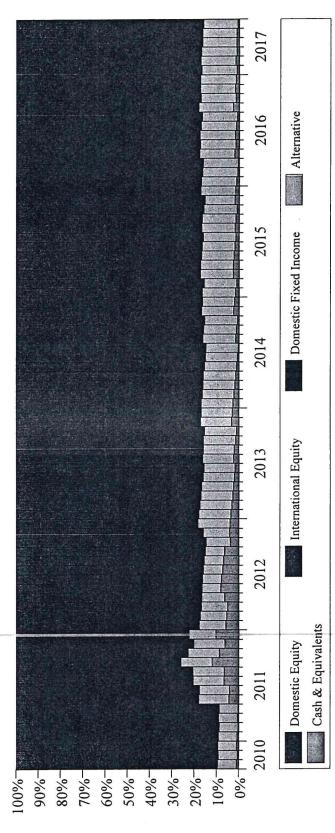
Lehigh County Retirement Fund Asset Allocation

April 1, 2017 to June 30, 2017

| | Beginning Weight | Ending Weight | IPS Tgt Weight | Deviation |
|-----------------------|---------------------|------------------|-------------------|-----------|
| Domestic Equity | 38.0% | 37.8% | 35.0% | 2.8% |
| International Equity | 17.0% | 17.8% | 15.0% | 2.8% |
| Domestic Fixed Income | 28.3% | 28.7% | 35.0% | (6.3%) |
| Alternative | 15.6% | 15.1% | 10.0% | 5.1% |
| Cash & Equivalents | 1.2% | 0.7% | 2.0% | (4.3%) |
| Total Portfolio | 100.0% | 100.0% | 100.0% | |

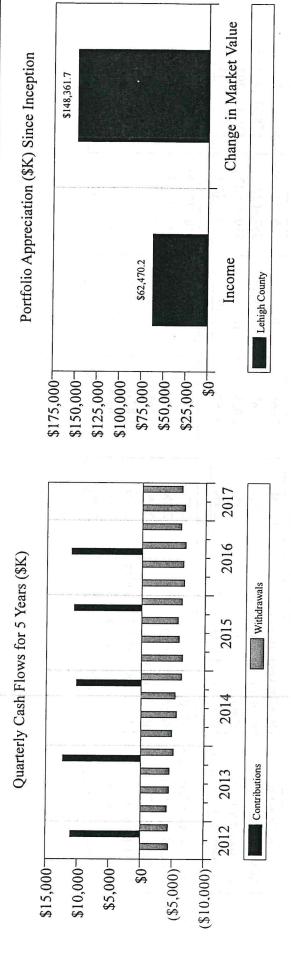
| | Beginning Market Value | Ending Market Value | Transfers |
|-----------------------|---------------------------|------------------------|---------------|
| Domestic Equity | \$179,506,194 | \$181,218,684 | (\$4,500,000) |
| International Equity | \$80,254,148 | \$85,362,524 | \$0 |
| Domestic Fixed Income | \$133,586,854 | \$137,561,407 | \$2,000,434 |
| Alternative | \$73,511,696 | \$72,519,102 | (\$1,547,482) |
| Cash & Equivalents | \$5,537,540 | \$3,320,079 | \$4,047,048 |
| Total Portfolio | \$472,396,431 | \$479,981,796 | 80 |

Actual Allocation for Since Inception Ended June 30, 2017

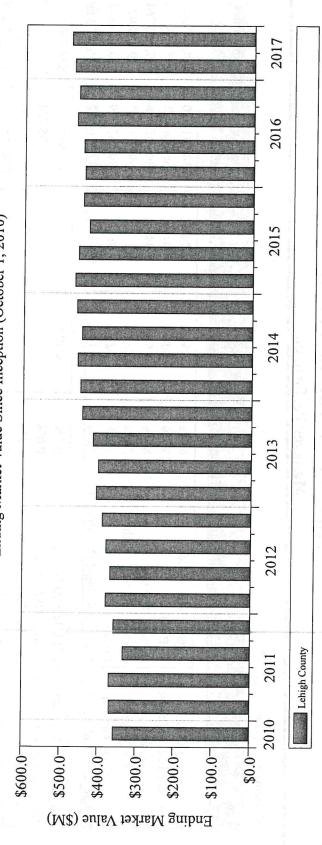




Lehigh County Retirement Fund Historical Cash Flow



Ending Market Value Since Inception (October 1, 2010)





Lehigh County Retirement Fund Manager Performance

3 Months ending June 30, 2017

| | Benchmark Name | Ending Weight | Returns | Excess Return | Beginning Market Value | Ending Market Value |
|--------------------------|---------------------------|---------------|---------|---------------|---------------------------|------------------------|
| Lomax Large Value | Russell:1000 Value | 8.1% | 1.54% | 0.20% | \$38,291,210 | \$38,881,561 |
| Vanguard Instl Indx;Inst | S&P:500 | 13.7% | 3.08% | . (0.01%) | \$65,754,833 | \$65,755,320 |
| SGA Large Growth | Russell:1000 Growth | 8.1% | 6.51% | 1.84% | \$39,005,086 | \$39,028,764 |
| Emerald Mid Growth | Russell:Midcap Growth | 2.1% | 3.35% | (0.87%) | \$9,661,542 | \$9,984,978 |
| Emerald Small Growth | Russell:2000 Growth | 2.2% | 7.25% | 2.86% | \$9,697,029 | \$10,400,381 |
| Vanguard SC Val Idx;Ins | CRSP:U.S. Small Cap Value | 3.6% | 0.42% | (0.03%) | \$17,096,495 | \$17,167,680 |
| Vanguard Dev Mkt;Adm | FTSE:Dev AC ex US Idx | 6.2% | 6.39% | 0.34% | \$27,980,070 | \$29,766,152 |
| American Funds EuPc;F-2 | MSCI:ACWI ex US | %0.0 | 1 | 1 | \$27,708,734 | \$0 |
| American Funds EuPc;F-3 | | 6.2% | . 1 | | \$0 | \$29,825,123 |
| Vittoria Long/Short Intl | MSCI:EAFE | 5.4% | 4.91% | (1.21%) | \$24,565,345 | \$25,771,249 |
| Agincourt Core Fixed | Blmbg:Aggregate Index | 12.1% | 1.66% | 0.21% | \$56,934,104 | \$57,877,679 |
| CSMcKee Core Fixed | Blmbg:Aggregate Index | 12.1% | 1.48% | 0.04% | \$57,462,633 | \$58,313,982 |
| BlackRock:Str Inc Opp;K | Blmbg:Aggregate Index | 2.1% | 1.02% | (0.43%) | \$10,015,173 | \$10,117,303 |
| Vanguard Sh-Tm Inv;Adm | Blmbg:Credit 1-3 Yr Bd | 2.3% | 0.74% | 0.20% | \$9,174,944 | \$11,252,443 |
| Gabelli Merger Arbitrage | CS:Risk Arb | 2.6% | 2.21% | (0.52%) | \$12,212,830 | \$12,482,538 |
| J Hancock II:G Ab Rt;I | CS:All Hedge Idx | 2.5% | 1.18% | (0.01%) | \$12,482,397 | \$12,095,248 |
| ALPS/CC Mgt CC S;I | Blmbg:Commdty Idx | 2.4% | (6.16%) | (2.94%) | \$12,331,979 | \$11,675,255 |
| CBRE Clarion RE | FTSE:NAREIT All Eq Index | 2.5% | 1.87% | (0.40%) | \$12,326,268 | \$12,149,072 |
| Nuveen Pref Secs;I | S&P:US Pref Index | 2.6% | 3.81% | 1.09% | \$12,738,222 | \$12,496,989 |
| JPM Structured Note | JPM Structured Note Idx | 2.4% | 1.75% | %00.0 | \$11,420,000 | \$11,620,000 |



Lehigh County Employees' Retirement Plan Monthly Flash Report

| | | Monthly Return July-2017 | Market Value Beginning of Period | Market Value End of Period |
|--|--------------------|----------------------------------|--|--|
| Lomax Russell 1000 Value | | 2.42% | \$38,827,826 | \$39,765,597 |
| Vanguard Institutional Index S&P 500 | | 1.33% 2.05% 2.06% | \$65,755,320 | \$67,104,437 |
| Sustainable Growth Advisors Russell 1000 Growth | | 1.87% 2.66% | \$38,985,762 | \$39,715,785 |
| Vanguard SCV Index CRSP US Small Cap Value | | 0.98% 0.96% | \$17,167,680 | \$17,336,275 |
| Emerald Russell Mid-Cap Growth | | 0.27% 1.67% | \$9,980,557 | \$10,007,073 |
| Emerald Advisors Russell 2000 Growth | | 0.64% 0.85% | \$10,395,009 | \$10,462,013 |
| American Funds Europacific Growth F3 MSCI ACWI ex US | | 4.28% 3.69% | \$29,825,123 | \$31,104,900 |
| Vanguard Developed Mkt Idx I FTSE AW ex US | | 2.94% 3.54% | \$29,766,152 | \$30,640,968 |
| CSMcKee Agincourt BlackRock Strategic Income Opps K Barclays Capital Aggregate | | 0.40% 0.45% 0.49% 0.43% | \$57,987,026 \$57,407,630 \$10,084,991 | \$58,220,676 \$57,665,310 \$10,137,701 |
| CBRE Clarion FTSE NAREIT Equity REITs | | 1.48% 1.22% | \$12,102,831 | \$12,281,982 |
| Liquid Alternatives Blended Alternatives Benchmark | | 1.84% 1.17% | \$47,770,961 | \$48,650,002 |
| Vanguard ST Investment Grade BbgBarc US Corp 1-3 YR | | 0.36% 0.40% | \$11,220,422 | \$11,262,032 |
| Cash Account 30 Day MM Yield | | 0.09% 0.09% | \$3,395,492 | \$1,058,139 |
| Weighted Rate of Return | Portfolio Index | 1.61% 1.54% | \$440,672,782 | \$445,412,890 |

Assets Not Valued Daily

| | Market Value Beginning of Period | Market Value End of Period |
|--------------------------|-------------------------------------|-------------------------------|
| Vittoria Intl Long/Short | \$24,614,373 | \$24,614,373 |
| Gabelli Merger Arbitrage | \$12,393,333 | \$12,482,538 |

Grand Total \$477,680,488 \$482,509,801

2017 YTD Performance

| Net Portfolio | 8.81% |
|---------------|-------|
| Index | 8.44% |