Callan

Forest Preserve District Employees' Annuity and Benefit Fund of Cook County

Performance Summary

December 31, 2016

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General Market and Economic Conditions

The year 2016 turned out to be a tumultuous one, with essentially two non-economic events jolting the capital markets: the U.K. Brexit vote in June and the U.S presidential election in November. Markets rebounded quickly after the surprising outcome of the Brexit vote, and investors have embraced Trump's anticipated business-friendly ambitions on taxes, trade and regulations and have driven U.S. stocks to record highs. The S&P 500 Index gained 3.8% for the fourth quarter of 2016 and 12% for the year. Small stocks, as measured by the Russell 2000, roared 8.8% for the quarter and surged 21.3% for the year. The bond market did not fare as well, especially post-election. The prospect of increased fiscal spending sparked concerns over higher inflation and tighter monetary policy, leading to a sharp sell-off in U.S. Treasuries. The 10-year Treasury yield climbed 85 bps, the largest quarterly increase since 1994. The year was a volatile one for bonds; the 10-year Treasury yield started the year at 2.27%, hit an all-time low of 1.37% in July (post-Brexit) and ended the year sharply higher at 2.45%.

Fourth quarter real GDP growth in the U.S. came in at a modest 1.9%, down from the fourth quarter GDP that was revised up to 3.5% (1.7% year-over-year), the sharpest quarterly increase in two years. The U.S. dollar strengthened by approximately 7% against a basket of currencies, thus raising the cost of exports. The U.S. dollar hit a multi-year high versus the euro and the yen. Net exports detracted approximately 1.7% from GDP growth in the fourth quarter. Unemployment was near a nine-year low with a 4.7% in December and jobless claims remained relatively muted. Initial jobless claims fell to less than 300,000 in early 2015 and remained below this key level for more than 90 weeks, the longest streak since 1970. The Atlanta Fed's wage growth tracker index showed that wages advanced 3.9% in October, the fastest since November of 2008. Home prices hit a record high in October; the S&P CoreLogic Case-Shiller U.S. National Home Price Index rose 5.6% in October for the trailing 12-month period. Consumer confidence, as measured by the Conference Board Consumer Confidence Index, hit its highest level in 15 years in December. Even the manufacturing sector showed signs of improvement with the ISM Composite Index of factory sector activity showing consistent gains through the quarter.

Inflation, while still benign, is rising. For the trailing 12-month period, core CPI was up 2.2% year-over-year, in line with the GDP deflator. Oil prices surged to their highest level in 17 months to close the year at $54 per barrel.

The Fed, in a widely anticipated move, raised the Fed Funds rate 25 bps to a range of 0.50% – 0.75% in December. This turned out to be the Fed's only move for the year although at the end of 2015 it had projected four hikes in 2016. As communicated in its "dot plot," the Fed expects three additional hikes in 2017, though the markets expect fewer. Interest rates began to creep up early in the fourth quarter as investors gained confidence that the Fed would make a move in response to encouraging U.S. economic data. Trump's win propelled rates sharply higher fueled by expectations for escalating inflation in tandem with more debt. The 10-year U.S. Treasury closed the year at 2.45% but hit an intra-quarter high of 2.60%, the highest since September 2014.

During the fourth quarter, foreign developed and emerging markets floundered in U.S. dollar terms despite hearty local returns. The U.S. dollar hit a multi-year high versus the euro and yen, and appreciated roughly 7% compared to a basket of currencies. The European Central Bank announced that it would extend its asset purchase program beyond March, 2017 when it was set to expire, but purchases will be lower (€60 billion per month down from €80 billion per month). The unemployment rate in the euro zone declined to 9.8%, the lowest since July, 2009; it has been falling since reaching a record high of 12.1% in April, 2013. Consumer prices in the euro zone increased 0.6% year-over-year in November, the highest since April 2014, but well below the 2% target. GDP is expected to have picked up in the final months of the year from the 0.3% (1.6% year-over-year) pace registered in the fourth quarter to 0.4% – 0.5%.

In Asia, the Japanese economy advanced 0.3% (1.0% year-over-year) in the fourth quarter, below the preliminary estimate of 0.5%. The economy continues to struggle in spite of aggressive stimulus measures. The Bank of Japan made no changes to its monetary policy but upgraded the outlook for 2017 given the yen's weakness versus the U.S. dollar, which should provide a boost to exports. The dollar reached a 14-year high versus the yen.

Despite the decline in the fourth quarter, emerging market equities enjoyed a significant rebound from 2015, and experienced a robust 11.2% return for the year, buttressed by strengthening commodity prices and as well as accommodative monetary policies.

Fourth Quarter 2016 Market Performance

Equities posted strong returns in the fourth quarter, cheered by relatively good economic data, a rebound in corporate earnings, and speculation that Trump's presidency will bring lower taxes, lighter regulation and increased spending. The S&P 500 climbed to an all-time high of 2,239 on December 30 and closed up 3.8% for the quarter. However, there were stark differences in sector returns. Financials (+21.1%) were beneficiaries of “Trumponomics,” riding expectations for a more lenient regulatory environment and higher interest rates while Health Care (-4.0%) was one of the worst performing sectors. While smaller cap bio tech stocks performed well, uncertainty over the future of Obamacare hurt hospitals. The newly established REIT sector (-4.4%) was punished by rising interest rates. Small capitalization stocks outperformed large by a wide margin; the Russell 2000 rose 8.8% in the quarter and is up 21.3% for the year while the Russell 1000 gained 3.8% and 12.1% for the same periods. Value gained favor after prolonged underperformance. While this trend was in place before the election, Trump's win boosted Financials and Energy stocks, which make up a significant portion of the value indices. The largest difference between growth and value was in small caps. The Russell 2000 Value outperformed its Growth counterpart by 10.5% (+14.1% versus +3.6%) in the quarter and by double that amount, 20.4%, over the year (+31.7% versus +11.3%).

Foreign developed and emerging market indices trailed the S&P 500. The MSCI ACWI ex-US Index (a non-U.S. equity market index) fell 1.3% during the fourth quarter. Dollar strength was broad-based and thus detracted from returns for U.S. investors. In developed markets, Italy (+11%) was the top performer in the fourth quarter, although it remains at the bottom of the pack for the year (-11%). The MSCI Emerging Markets Index dropped 4.2% for the quarter. Among emerging markets, Russia posted the best return (+19%) while Turkey (-14%) sank. Turkey's economy shrank 1.8% in the third quarter, its first year-over-year decline since 2009. Mexico, hurt by Trumponomic concerns, was down 8%.

Interest rates in the U.S. rose sharply in the fourth quarter, driven both by encouraging economic data and worries that the pro-growth agenda put forth by President-elect Donald Trump will have an inflationary effect. The 10-year U.S. Treasury yield rose 85 bps and returned -6.8% for the quarter in the sharpest quarterly selloff in more than two decades. TIPS outperformed nominal Treasuries, bolstered by rising expectations for inflation. The

Bloomberg Barclays TIPS Index returned -2.4% for the quarter but ended the year up 4.7%. The 10-year inflation breakeven rate was 1.95% as of December 30th.

The Bloomberg Barclays U.S. Aggregate returned -3.0% for the quarter, but was up 2.6% for the year. The Corporate sector returned -2.8% and +6.1% for the same periods. Issuance by U.S. corporations hit another record high in 2016 at roughly $1.3 trillion. Long-maturity bonds performed the best, in relative terms, with long corporates outperforming like-duration Treasuries by 436 bps. Mortgages underperformed Treasuries as durations extended with the increase in interest rates. The Bloomberg Barclays High Yield Index gained 1.8% in the quarter and more than 17% for the year.

Overseas, yields were also higher though dollar strength was the primary driver of sharply negative returns for unhedged indices. The Bloomberg Barclays Global Aggregate ex-US Index fell 10.3% for the quarter (-1.9% on a hedged basis). The U.S. dollar benefited from higher interest rates as well as prospects for growth. The yen lost more than 13% versus the dollar over the course of the quarter and the euro depreciated by more than 6%. Emerging markets debt underperformed developed markets. The JP Morgan EMBI Global Diversified Index dropped 4.0% for the quarter and the local currency GBI-EM Global Diversified lost 6.1%.

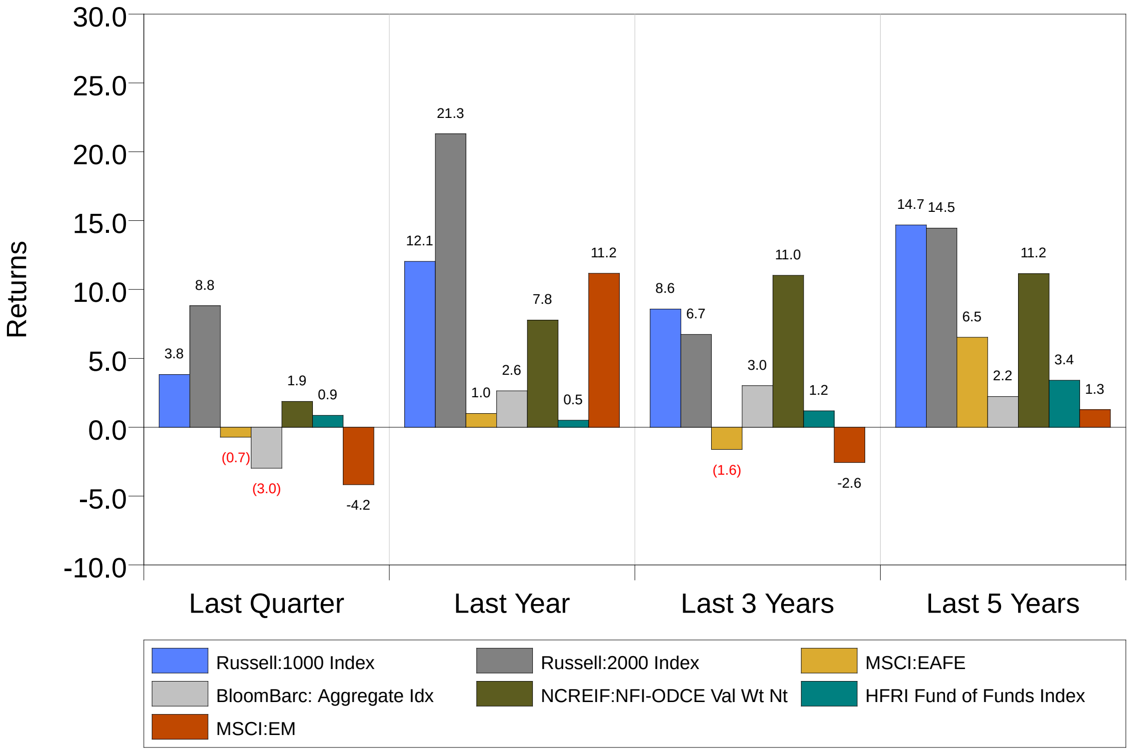
In the wake of the U.S. presidential elections, the reflation trade exploded as U.S. stocks jumped and Treasuries were dumped. During this rapid paradigm shift, the average hedge fund appeared to gain little over embedded betas, as most conservatively positioned their gross exposures going into the election. The Credit Suisse Hedge Fund Index (CS HFI) gained 1.15% while the median manager in the Callan Hedge Fund-of-Funds Database edged ahead at 1.64%, net of fees. As measured by the CS Hedge Fund Indices, returns across the underlying strategies were varied. The strongest performing strategy was Global Macro (+4.59%) aided by a stronger dollar while Managed Futures (-5.65%) appeared to have been hurt by the sharp reversal in markets due to U.S. election results.

Private real estate investments posted another steady return for the quarter. As measured by the NFI-ODCE Index, real estate gained 1.88% (0.84% from income and 1.04% from appreciation). This represented a .05% increase over last quarter. Publicly traded U.S. REITS as measured by the FTSE NAREIT Equity Index lost 2.89% during the quarter due to the sharp increase in interest rates.

Closing Thoughts

We enter 2017 with U.S. stock markets at new highs, rising interest rates and historically low volatility. The U.S. economy continues to gain traction and there are glimmers of hope that a bottom has been reached overseas. However, a whole host of geopolitical challenges continue to cause angst. Further, the election of Donald Trump has resulted in widespread speculation as to the impact his policies will have on markets, but much uncertainty remains with respect to the scope, implementation and timing of these policies.

Investment Returns for Periods Ended December 31, 2016



Domestic equities were positive, and small cap equities as measured by the Russell 2000 Index surged in the fourth quarter. Non-U.S. equities floundered for U.S. investors as a strengthening dollar hurt returns for U.S. investors. Fixed income returns were negative as interest rates rose. Real estate and hedge funds were positive as measured by the representative market indices.

The Callan Periodic Table of Investment Returns
Fourth Quarter 2016

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
MSCI:EM 39.4%	BC Aggregate 5.2%	MSCI:EM 78.5%	Russell:2000 Index 26.9%	NCREIF:NFI-ODCE Val Wt Nt 15.0%	MSCI:EM 18.2%	Russell:2000 Index 38.8%	Russell:1000 Index 13.2%	NCREIF:NFI-ODCE Val Wt Nt 14.0%	Russell:2000 Index 21.3%
NCREIF:NFI-ODCE Val Wt Nt 14.8%	NCREIF:NFI-ODCE Val Wt Nt (10.7%)	MSCI:EAFE 31.8%	MSCI:EM 18.9%	BC Aggregate 7.8%	MSCI:EAFE 17.3%	Russell:1000 Index 33.1%	NCREIF:NFI-ODCE Val Wt Nt 11.5%	Russell:1000 Index 0.9%	Russell:1000 Index 12.1%
MSCI:EAFE 11.2%	HFRI Fund of Funds Index (21.4%)	Russell:1000 Index 28.4%	Russell:1000 Index 16.1%	Russell:1000 Index 1.5%	Russell:1000 Index 16.4%	MSCI:EAFE 22.8%	BC Aggregate 6.0%	BC Aggregate 0.5%	MSCI:EM 11.2%
HFRI Fund of Funds Index 10.3%	Russell:2000 Index (33.8%)	Russell:2000 Index 27.2%	NCREIF:NFI-ODCE Val Wt Nt 15.3%	Russell:2000 Index (4.2%)	Russell:2000 Index 16.3%	NCREIF:NFI-ODCE Val Wt Nt 12.9%	Russell:2000 Index 4.9%	HFRI Fund of Funds Index (0.3%)	NCREIF:NFI-ODCE Val Wt Nt 7.8%
BC Aggregate 7.0%	Russell:1000 Index (37.6%)	HFRI Fund of Funds Index 11.5%	MSCI:EAFE 7.8%	HFRI Fund of Funds Index (5.7%)	NCREIF:NFI-ODCE Val Wt Nt 9.8%	HFRI Fund of Funds Index 9.0%	HFRI Fund of Funds Index 3.4%	MSCI:EAFE (0.8%)	BC Aggregate 2.6%
Russell:1000 Index 5.8%	MSCI:EAFE (43.4%)	BC Aggregate 5.9%	BC Aggregate 6.5%	MSCI:EAFE (12.1%)	HFRI Fund of Funds Index 4.8%	BC Aggregate (2.0%)	MSCI:EM (2.2%)	Russell:2000 Index (4.4%)	MSCI:EAFE 1.0%
Russell:2000 Index (1.6%)	MSCI:EM (53.3%)	NCREIF:NFI-ODCE Val Wt Nt (30.4%)	HFRI Fund of Funds Index 5.7%	MSCI:EM (18.4%)	BC Aggregate 4.2%	MSCI:EM (2.6%)	MSCI:EAFE (4.9%)	MSCI:EM (14.9%)	HFRI Fund of Funds Index 0.5%

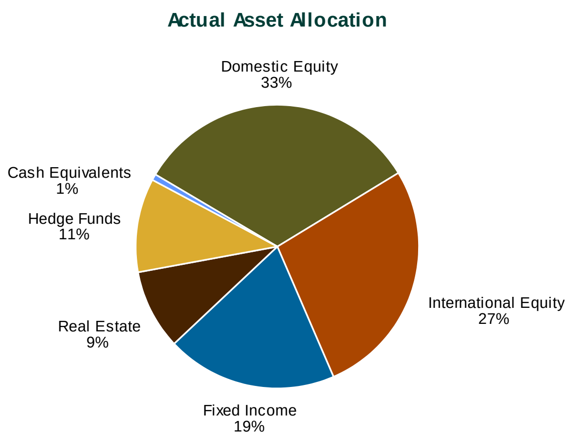
U.S. equities enjoyed strong returns in 2016. Assisted by a strong quarter where small caps surged by 8.8%, the U.S. Small Cap Index (Russell 2000) returned 21.3% in 2016. The U.S. Large Cap Index (Russell 1000) increased by 12.1% in 2016. Emerging Market equities (MSCI EM) have staged an impressive turnaround from a dismal 2013-2015 period with an 11.2% in 2016.

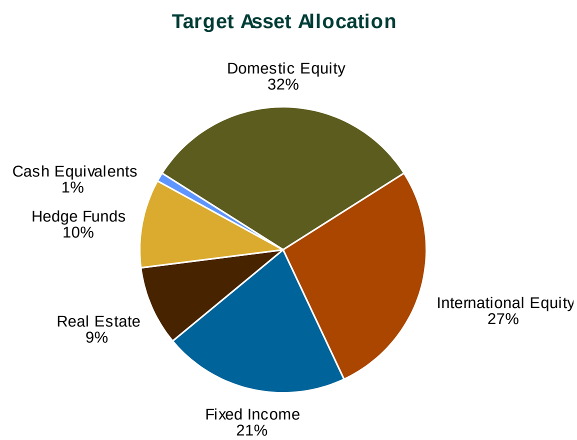
Forest Preserve Pension Fund Commentary

Asset Allocation

The Forest Preserve Pension Fund value at the end of December was $188.3 million; representing a net decrease of $4.0 million from the prior quarter end. Investments returned $0.6 million for the quarter while net cash outflows to fund benefit payments were $4.6 million.

The Fund assets are in line with the strategic target allocation.





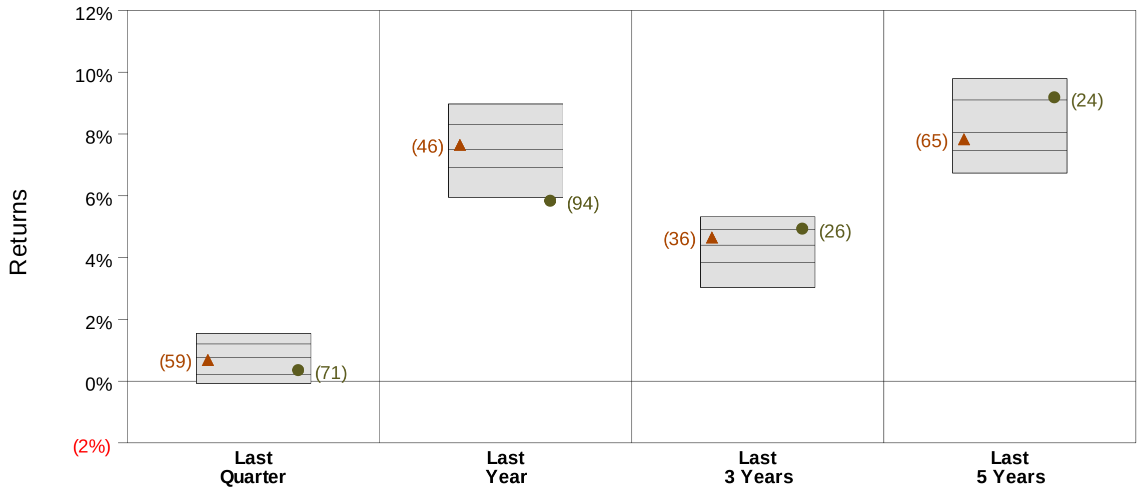
Asset Class	$000s Actual	Weight Actual	Min Target	Target	Max Target	Percent Difference	$000s Difference
Domestic Equity	61,780	32.8%	28.0%	32.0%	36.0%	0.8%	1,547
International Equity	51,228	27.2%	23.0%	27.0%	31.0%	0.2%	406
Fixed Income	36,659	19.5%	17.0%	21.0%	25.0%	(1.5%)	(2,869)
Real Estate	17,055	9.1%	5.0%	9.0%	13.0%	0.1%	114
Hedge Funds	20,103	10.7%	6.0%	10.0%	14.0%	0.7%	1,280
Cash Equivalents	1,404	0.7%	0.0%	1.0%	5.0%	(0.3%)	(478)
Total	188,228	100.0%		100.0%			

Forest Reserve Pension Fund Performance vs. Target

The Forest Preserve Pension Fund finished ahead of its benchmark return and placed near the top quartile of its peer universe over the last three- and five-year periods. Over these periods, the fund has generated annualized returns of 4.89% and 9.14%, respectively. These returns exceed those of its custom benchmark by 0.24% and 1.31%, respectively. Active management in the Domestic Equity and Fixed Income allocations have provided the largest contributions to the outperformance.

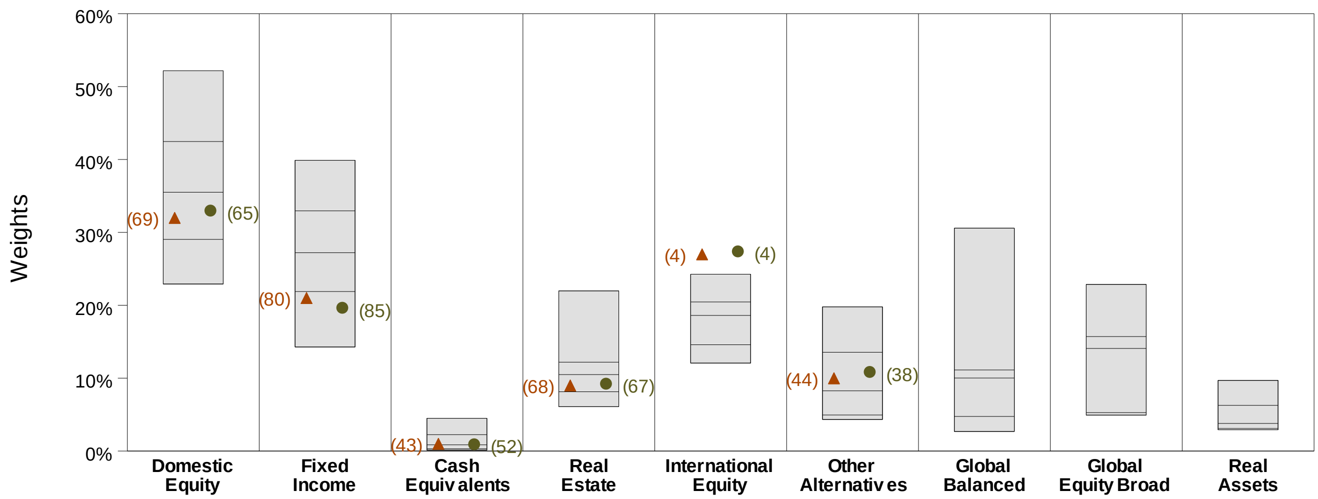
During the fourth quarter, the Forest Preserve Pension Fund posted a return of 0.32%, trailed its benchmark by 0.37% and ranked in the 71st percentile of its peer universe. In the last year, the Fund trailed its benchmark by 1.85%, and fell short of its plan sponsor peers. In the last three- and five-year periods, the Fund exceeded its benchmark and appeared near the top quartile of its peers.

CAI Public Fund Sponsor - Mid (100M-1B)



	Last Quarter	Last Year	Last 3 Years	Last 5 Years
10th Percentile	1.55	8.97	5.32	9.80
25th Percentile	1.20	8.31	4.91	9.10
Median	0.77	7.50	4.40	8.04
75th Percentile	0.21	6.92	3.84	7.46
90th Percentile	(0.07)	5.95	3.03	6.73
Total Fund ●	0.32	5.80	4.89	9.14
Policy Target ▲	0.69	7.65	4.65	7.83

Asset Class Weights vs CAI Public Fund Sponsor - Mid (100M-1B)



	Domestic Equity	Fixed Income	Cash Equivalents	Real Estate	International Equity	Other Alternatives	Global Balanced	Global Equity Broad	Real Assets
10th Percentile	52.18	39.90	4.49	21.98	24.26	19.79	30.58	22.88	9.70
25th Percentile	42.46	32.96	2.25	12.19	20.45	13.55	11.14	15.71	6.27
Median	35.51	27.23	0.86	10.50	18.62	8.28	10.02	14.08	3.79
75th Percentile	29.05	21.89	0.32	8.13	14.59	4.96	4.75	5.28	3.10
90th Percentile	22.92	14.29	0.14	6.09	12.08	4.33	2.69	4.93	2.92
Fund ●	32.82	19.48	0.75	9.06	27.22	10.68	-	-	-
Target ▲	32.00	21.00	1.00	9.00	27.00	10.00	-	-	-

Forest Preserve District Employees' Annuity & Benefit Fund of Cook County
Performance Evaluation Executive Summary
Fourth Quarter 2016

Table 1.1
Asset Class Performance vs. Target

	Market Value $(Dollars)	Ending Weight	Last Quarter	Last Year	Last 3 Years	Last 5 Years
Domestic Equity	**$61,780,097**	**32.82%**	**4.93%**	**12.14%**	**8.52%**	**15.06%**
Domestic Equity Benchmark (2)	-	-	4.21%	13.03%	8.14%	14.50%
International Equity	**$51,227,791**	**27.22%**	**(3.26%)**	**1.39%**	**0.38%**	**9.24%**
MSCI ACWI ex US	-	-	(1.25%)	4.50%	(1.78%)	5.00%
Fixed Income	**$36,658,562**	**19.48%**	**(3.00%)**	**2.52%**	**3.08%**	**2.32%**
Fixed Income Benchmark (3)	-	-	(2.98%)	2.65%	3.03%	2.22%
****Real Estate**	**$17,054,536**	**9.06%**	**0.66%**	**8.39%**	**9.30%**	**10.02%**
NFI-ODCE Value Weight Net	-	-	1.88%	7.79%	11.04%	11.16%
****Hedge Funds**	**$20,102,804**	**10.68%**	**2.05%**	**2.61%**	**5.37%**	**-**
LIBOR + 4%	-	-	1.21%	4.75%	4.42%	-
HFRI Fund of Funds Index	-	-	0.87%	0.52%	1.19%	3.42%
Cash Equivalents	**$1,404,318**	**0.75%**	**0.16%**	**0.50%**	**0.25%**	**0.21%**
3-month Treasury Bill	-	-	0.09%	0.33%	0.14%	0.12%
Total Forest Preserve Fund	**$188,228,110**	**100.00%**	**0.32%**	**5.80%**	**4.89%**	**9.14%**
Total Fund Benchmark (1)	-	-	0.69%	7.65%	4.65%	7.83%

**Represents trailing data.

Definitions for custom benchmarks can be found on the back page

Table 1.1 illustrates the Forest Preserve Pension Fund's asset class performance versus associated benchmarks. The Fund's Domestic Equity allocation exceeded its benchmark in the last quarter, but trailed for the twelve month period due to the performance of its small cap allocation. However, for the three- and five-year periods active management in the small cap equities had a positive influence on the relative outperformance.

The Fund's International Equity allocation trailed during the quarter; however, during the last three- and five-year periods, this allocation has outperformed the benchmark by 2.2% and 4.2% annualized. In addition, this allocation has ranked near or above the top quartile of its peer universe in those periods.

For the quarter and other periods appearing above, the Fixed Income allocation posted similar returns to the Bloomberg Barclays Aggregate Index which is comprised of U.S. investment grade securities.

The Real Estate allocation has been one of the better performing asset classes over the last three and five years with annualized returns in excess of 9.30%. This allocation is comprised of investments in public real estate securities (REITS) and private real estate. REITS comprise approximately 30% of the Real Estate allocation and posted a negative return in the fourth quarter; however, longer term, this investment has been additive.

The Forest Preserve Pension Fund's Hedge Fund allocation outperformed its absolute return benchmark for the last quarter, and finished in line with the benchmark for the last three years. This Fund's Hedge Fund allocation has outperformed hedge fund peers as measured by the HFRI Fund-of-Funds Index for the quarter, year and three-year periods.

Notes and Observations

The Forest Preserve Pension Fund has posted 5.46% over the trailing year. In the last five years, the Fund has generated an excess return over its benchmark by 1.01% annualized, and outperformed 76% of its peers.

Notes

1. **Total Fund Benchmark:** Blend of asset class benchmarks at policy weights. Fourth Quarter 2016 benchmark: 32.0% Russell 3000 Index, 27.0% MSCI ACWI ex US, 21.0% BloomBarc Aggregate Index, 10.0% Libor-3 Month+4.0%, and 9.0% NFI-ODCE Value Weight Net, and 1.0% 3-Month Treasury Bill.

2. **Domestic Equity Benchmark:** Russell 3000 Index. Previously, blend of 25.0% S&P 500, 5.0% Russell 2000 Value, 7.5% Russell 1000 Growth, and 7.5% Russell 1000 Value through 12/31/12; then Blend of 21.0% S&P 500 and 9.0% Russell 2500 Index through 6/30/2016.

3. **Fixed Income Benchmark:** BloomBarc Aggregate Index; previously blend of 30.0% BloomBarc Aggregate Index, and 10% BloomBarc Gov/Credit Intermediate Index through 12/31/2012.