

# STARKE POLICE OFFICERS' RETIREMENT SYSTEM

# December 31, 2014 PERFORMANCE EVALUATION REPORT



**Richard A. Campbell, CFA**President and Senior Consultant
January 28, 2015



#### PERFORMANCE COMPARISONS

**Morningstar Category Averages** - Morningstar has developed fund category averages on several data points to enable investors to <u>compare the performance of their</u> individual fund holdings with that of a universe of comparable funds.

Morningstar classifies funds into categories according to their actual holdings rather than the objectives stated by the fund management company. They then calculate category average data for several metrics, including performance, expenses, portfolio exposures, and more. Investors can use these category average data points to see how any individual fund stacks up against the category as a whole.

As in the Plan's revised IPS, the **CATEGORY AVERAGES** and the **MARKET INDICES** (below) are the **DUAL BENCHMARK COMPARISONS** for Plan Performance. Benchmarks (below) are retained primarily for information and asset allocation purposes.

#### Disclaimer

The information contained in this report is based upon sources Dover Consulting Group (a division of Dover Partners, Inc.) believes to be reliable, but is not guaranteed by Dover Consulting Group and does not purport to be a complete statement or summary of all the available data.

The portfolio performance calculation does not include checking account assets and is net of investment management fees for the periods beginning September 31, 2003. All performance prior to that date was reproduced from reports of the previous vendor(s) of investment services to the System. All fund return data supplied by: Morningstar, Inc.

### The **PLAN'S POLICY BENCHMARK** is a composite of the following:

Start On:	Re-Balance Frequency	S&P 500	Russell 2000	MSCIEAFE	Barclays Capital US Aggregate Bond Index	Barclays Capital US Government/ Credit Intermediate	Citigroup 3 month T-bill	MSCI Emerging Markets	FTSE Emerging Markets
10/1/03	Quarterly	58.0%	0.0%	0.0%	0.0%	38.0%	4.0%		
1/1/07	Quarterly	60.0%	0.0%	0.0%	35.0%	0.0%	5.0%		
10/1/09	Quarterly	35.0%	15.0%	10.0%	39.0%	0.0%	1.0%		
10/1/10	Quarterly	30.0%	15.0%	10.0%	43.0%	0.0%	2.0%		
1/1/11	Quarterly	25.0%	15.0%	10.0%	43.0%	0.0%	2.0%	5.0%	
4/1/13	Quarterly	25.0%	15.0%	10.0%	43.0%	0.0%	2.0%	0.0%	5.0%
		S&P 500	CRSP Small Cap	FTSE Dev Mkts ex US	FTSE Emerging Markets	Barclays Capital US Aggregate Bond Index	Citigroup 3 month T-bill	MSCI US REIT ldx.	
10/1/2013	Quarterly	25.0%	25.0%	5.0%	5.0%	30.0%	5.0%	5.0%	_

# Pension Trust Performance Summary 12/31/2014

The **Starke Police Officers' Retirement System** investment returns for the period ending December 31, 2014 were as follows:

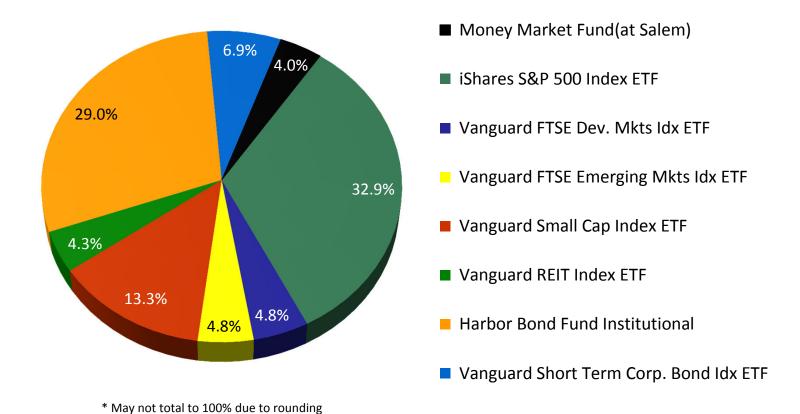
202 1 Welle do lollous.		Ret	urn			viation sk)
	Qtr.	<u>1 Yr.</u>	<u>3 Yr.</u>	<u>5 Yr.</u>	<u>3 Yr.</u>	<u>5 Yr.</u>
iShares - S&P 500 ldx ETF	4.92%	13.62%	20.34%	15.37%	9.32%	14.38%
S&P 500 Idx. Large Cap Blend*	4.93% 4.16%	13.69% 10.73%	20.41% 18.64%	15.45% 13.46%	9.33% 9.62%	14.41% 14.91%
Vang. Developed Mkts ETF	-4.14%	-5.71%	10.95%	5.31%	12.71%	17.70%
FTSE Developed Mkt Idx. Foreign Blend*	-3.65% -3.18%	-4.61% -5.16%	11.32% 10.21%	5.77% 4.91%	12.57% 11.99%	17.20% 17.31%
Vang. Small Cap ETF	6.83%	7.50%	20.54%	16.87%	11.43%	18.42%
CRSP Small Cap Idx. Small Cap Blend*	6.83% 7.29%	7.54% 3.82%	20.87% 18.09%	N/A 14.64%	11.73% 12.26%	N/A 18.62%
Vang. Emerging Mkts ETF	-3.68%	0.60%	4.33%	1.91%	13.66%	18.52%
FTSE Emerging Mkt. Idx. Diversified Emerg. Mkts.*	-3.46% -5.01%	1.55% -2.99%	4.95% 4.40%	2.34% 1.64%	13.42% 13.28%	17.38% 17.77%
Harbor Bond Instl.	1.63%	4.78%	4.12%	4.75%	3.44%	3.43%
Vang. ST Corp. Bond ETF	0.30%	1.96%	3.00%	3.49%	1.85%	1.98%
Barclays Aggregate Idx. Barclays US 1-5Yr Gov/Cred Float Adj.	1.79%	5.97% 1.43%	2.66% 1.32%	4.45% 3.73%	2.57%	3.03%
Intermediate-Term Bond*	1.11%	5.13%	3.47%	4.77%	2.73%	2.70%
Vang. REIT Idx ETF	14.29%	30.29%	16.23%	16.98%	11.82%	14.91%
MSCI US REIT Idx. Real Estate*	14.34% 13.13%	30.38% 27.92%	16.31% 15.21%	17.05% 15.76%	11.82% 10.94%	14.91% 14.43%
Total Account	3.13%	7.09%	10.74%	8.66%	5.45%	8.83%
Starke Policy Index Allocation *Morningstar Category Average Returns	3.84%	8.44%	11.48%	9.74%	5.42%	8.10%



# Asset Allocation 1/20/15

## ASSET ALLOCATION

55.8% Stocks/44.2% Bonds, REITs & Cash\*



#### **RECOMMENDATIONS:**

- 1. SELL all of Harbor Bond Fund manager departure charging 53 bps.
- 2. BUY Baird Core Plus Bond Fund fund replacement. (See handout actively managed fund charges 30 bps)
- 3. SELL all of iShares S&P 500 (approx. \$1.2 Mil charges 7 bps fee)
- 4. BUY \$700K Vanguard 500 Index Fund Admiral fund replacement. (See handout charges 5 bps fee)
- 5. BUY \$520k Vanguard Dividend Growth Fund Investor (See handout actively managed fund charges 31 bps)
- 6. CASH to be maintained at approximately 2% (i.e., \$80,000)

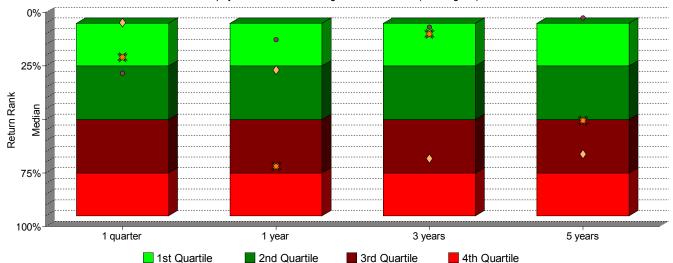


# Fixed Income - Harbor Bond Inst.

### **Return Rank Quartile Chart through December 2014**

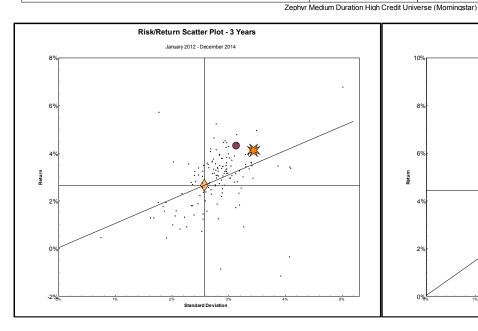
(not annualized if less than 1 year)

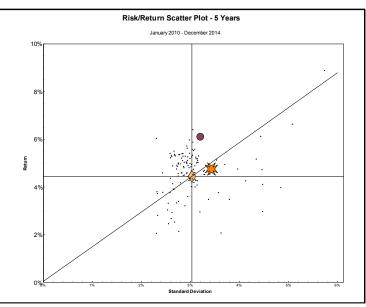
Zephyr Medium Duration High Credit Universe (Morningstar)



Return through December 2014 (not annualized it less than 1 year)

1 quarter 1 year 3 years 5 years 1 year Index = Barclays Capital U.S. Aggregate 151 mng 151 mng 143 mng 127 mng 1.79% 5th Percentile 6.96% 4.45% 5.84% 25th Percentile 6.07% 3.56% 5.21% 1.62% Median 1.35% 5.67% 3.15% 4.75% 75th Percentile 1.01% 4.59% 2.32% 4.19% 95th Percentile 0.21% 2.31% 0.92% 2.84% Harbor Bond Instl 1.63% 4.78% 4.12% 4.75% Baird Core Plus Bond Inst 1.58% 6.59% 4.32% 6.11% Barclays Capital U.S. Aggregate 1.79% 5.97% 2.66% 4.45%





- Baird Core Plus Bond Inst
- Market Benchmark:
  Barclays Capital U.S. Aggregate

- Zephyr Medium Duration High Credit Universe (Morningstar)
- Capital Market Line



# Starke Police Officers' Retirement System Manager Asset Allocation 12/31/2014

As of	S&P 500 Index	International Equity	Vanguard Small-Cap ETF	Mid Cap Equity	Vanguard REIT Index	Vanguard Em. Mkts. Index	Harbor Bond Fund	Sht Corp Fixed Income	Core Fixed Income	Cash	Total
	EQ IDX	INT'L EQ	SC IDX	MID IDX	REIT	EM MKTS	MGDFX	SHT FX	CORE FX	CASH	
December '13	\$1,258,150	\$147,839	\$453,711	-	\$92,063	\$138,148	\$987,935	\$249,312	-	\$226,660	\$3,553,818
January	\$1,053,878	\$140,142	\$381,976	-	\$95,998	\$126,496	\$999,509	\$250,469	-	\$456,273	\$3,504,741
February	\$1,101,934	\$148,477	\$401,379	-	\$100,861	\$130,593	\$1,006,950	\$251,062	-	\$449,275	\$3,590,531
March	\$1,106,639	\$146,385	\$481,958	-	\$100,704	\$136,268	\$999,804	\$249,937	-	\$378,400	\$3,600,095
April	\$1,114,874	\$148,690	\$470,181	-	\$104,012	\$137,477	\$1,008,108	\$250,594	-	\$378,305	\$3,612,241
May	\$1,140,343	\$151,315	\$476,112	-	\$106,508	\$141,741	\$1,019,734	\$251,531	-	\$381,436	\$3,668,720
June	\$1,158,754	\$151,067	\$499,751	-	\$106,722	\$144,831	\$1,022,351	\$251,156	-	\$389,398	\$3,724,030
July	\$1,142,578	\$147,484	\$474,661	-	\$106,807	\$146,812	\$1,016,514	\$250,375	-	\$390,752	\$3,675,983
August	\$1,187,929	\$147,874	\$498,684	-	\$110,059	\$152,453	\$1,027,355	\$250,750	-	\$451,441	\$3,826,545
September	\$1,166,165	\$140,993	\$472,058	-	\$102,458	\$140,062	\$1,018,568	\$249,594	\$0	\$461,728	\$3,751,626
October	\$1,193,987	\$140,497	\$493,393	-	\$112,640	\$143,185	\$1,029,466	\$250,406	\$0	\$456,325	\$3,819,899
November	\$1,226,868	\$181,176	\$498,599	-	\$145,348	\$182,090	\$1,039,526	\$250,562	\$0	\$344,338	\$3,868,507
December	\$1,216,809	\$173,263	\$497,788	-	\$146,124	\$172,806	\$1,035,176	\$248,844	\$0	\$368,148	\$3,858,958

# Investment Related Fees as of 12/31/2014

MUTUAL FUND	EXPENSE RATIO	AVG. FUND*
Vanguard Developed Markets ETF	0.09%	0.37%
iShares S&P 500 ETF	0.07%	0.38%
Vanguard Small Cap ETF	0.09%	0.35%
Vanguard Emerging Markets ETF	0.15%	0.57%
Harbor Bond Institutional	0.53%	0.89%
Vanguard ST Corp Bond Market Index ETF	0.12%	0.21%
Vanguard REIT Index ETF	0.10%	0.41%
Dollar Weighted Plan Average	0.19%	

Current Investment Consulting & Custodial Fees: 0.31%

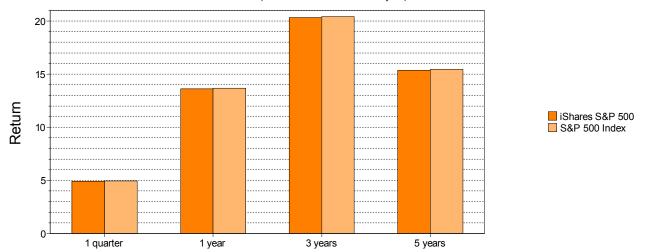
**TOTAL INVESTMENT- RELATED FEES** (Excludes legal, accounting & actuary) **0.50%** 

\*Category Average per Morningstar as of 2014

# **ETF Performance**

### Manager vs Benchmark: Return through December 2014

(not annualized if less than 1 year)

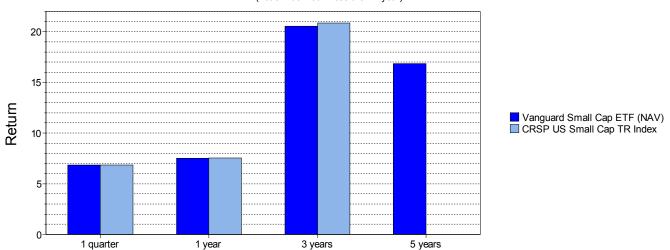


	1 quarter	1 year	3 years	5 years
iShares S&P 500	4.92%	13.62%	20.34%	15.37%
S&P 500 Index	4.93%	13.69%	20.41%	15.45%

as of December 2014

# Manager vs Benchmark: Return through December 2014

(not annualized if less than 1 year)



	1 quarter	1 year	3 years	5 years
Vanguard Small Cap ETF (NAV)	6.83%	7.50%	20.54%	16.87%
CRSP US Small Cap TR Index	6.83%	7.54%	20.87%	N/A

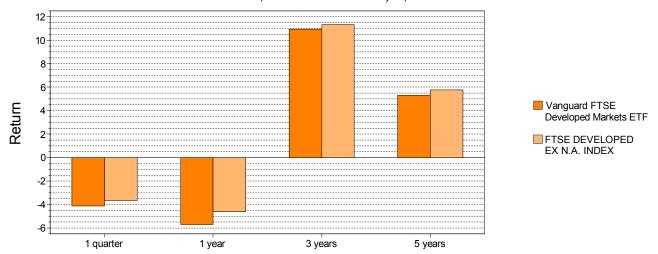


7

### **ETF Performance**

### Manager vs Benchmark: Return through December 2014

(not annualized if less than 1 year)

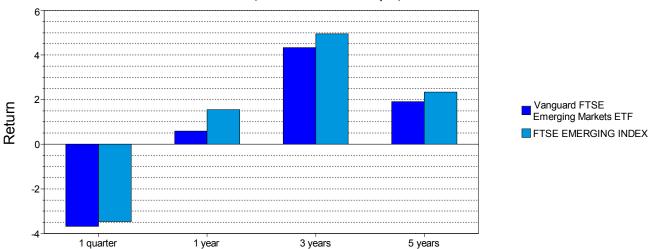


	1 quarter	1 year	3 years	5 years
Vanguard FTSE Developed Markets ETF	-4.14%	-5.71%	10.95%	5.31%
FTSE DEVELOPED EX N.A. INDEX	-3.65%	-4.61%	11.32%	5.77%

as of December 2014

### Manager vs Benchmark: Return through December 2014

(not annualized if less than 1 year)



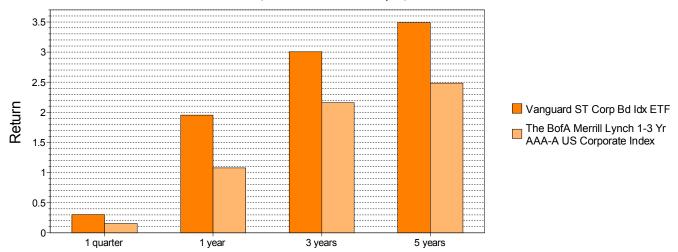
	1 quarter	1 year	3 years	5 years
Vanguard FTSE Emerging Markets ETF	-3.68%	0.60%	4.33%	1.91%
FTSE EMERGING INDEX	-3.46%	1.55%	4.95%	2.34%
	as of Decemb	per 2014		



### **ETF Performance**

### Manager vs Benchmark: Return through December 2014

(not annualized if less than 1 year)

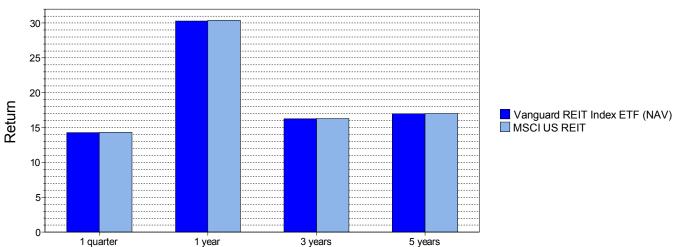


	1 quarter	1 year	3 years	5 years
Vanguard ST Corp Bd ldx ETF	0.30%	1.96%	3.00%	3.49%
The BofA Merrill Lynch 1-3 Yr AAA-A US Corporate ldx	0.15%	1.08%	2.16%	2.48%

as of December 2014

## Manager vs Benchmark: Return through December 2014

(not annualized if less than 1 year)



	1 quarter	1 year	3 years	5 years
Vanguard REIT Index ETF (NAV)	14.29%	30.29%	16.23%	16.98%
MSCI US REIT	14.34%	30.38%	16.31%	17.05%

as of December 2014

