



## Memorandum

**TO:** Federated City Employees' Retirement System      **FROM:** Dhinesh Ganapathiappan

**SUBJECT:** Health Care Trust Asset Allocation Implementation      **DATE:** September 20, 2018

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### Recommendation

Approval to:

1. Terminate the Northern Trust Barclays US Agg, Vanguard ST Inflation-Protect, Vanguard Emerging Markets, and Rhumblin S&P Glb LgMid Cmd&NR funds
2. Authorize the Secretary to negotiate and execute an agreement with BlackRock for a 3-Month T-Bill separately managed account
3. Authorize the Secretary to negotiate and execute an amendment with Northern Trust to add the MSCI Emerging Markets index fund
4. Re-balance to the asset allocation policy targets as shown in Appendix A

### Analysis

The following recommendation is contingent on approval of the new Health Care Trust Asset Allocation ("AA") and illustrates the fund terminations, new fund investments, and estimated cash flows required to rebalance to the new asset allocation.

Appendix A on the following page summarizes the current plan exposures, estimated cash flows, and expected exposures after implementation.

The new AA eliminates targets to investment grade bonds, US TIPS, and natural resources which requires the termination of the Northern Trust Barclays US Agg, Vanguard ST Inflation-Protect, and Rhumblin S&P Glb LgMid Cmd&NR funds.

The inclusion of the short-term IG bonds asset class requires initiating a new investment. The proposed BlackRock 3-Month T-Bill fund is a separately managed account that will passively track the proposed asset class benchmark (ICE BofAML 3-Month T-Bill index) at a 2 bps management fee.

In order to align the emerging markets equity plan exposure with the proposed benchmark, the Vanguard Emerging Markets fund which tracks the FTSE Emerging Markets All Cap China A Inclusion Index at a management fee of 11 bps is proposed to be replaced by the Northern Trust MSCI Emerging Markets index fund at a management fee of 9.5 bps.

All funds offer daily liquidity terms so the changes are expected to be completed in conjunction with the effective date of the new asset allocation (October 1, 2018).

### Appendix A: Proposed Asset Allocation Implementation

	Current (7/31/18)		Target		Proposed (10/1/18)	
	MV	% of Plan *	Policy	+/-	MV	% of Plan *
<b>Total Health Care Trust</b>	<b>294,362,051</b>				<b>294,362,051</b>	
<b>Growth</b>	<b>165,652,795</b>	<b>56.3%</b>	<b>56%</b>	<b>(860,083)</b>	<b>164,792,712</b>	<b>56.0%</b>
<b>Public Equity</b>	<b>165,652,795</b>	<b>56.3%</b>	<b>56%</b>	<b>(860,083)</b>	<b>164,792,712</b>	<b>56.0%</b>
<b>Global Equity</b>	<b>36,844,566</b>	<b>12.5%</b>		<b>-</b>	<b>36,844,566</b>	<b>12.5%</b>
Artisan Global Value	36,844,566	12.5%			36,844,566	12.5%
<b>US Equity*</b>	<b>81,088,969</b>	<b>34.7%</b>	<b>28%</b>	<b>(17,800,000)</b>	<b>63,288,969</b>	<b>28.0%</b>
Northern Trust Russell 3000	78,930,439	26.8%		(17,800,000)	61,130,439	20.8%
Cove Street Small Cap Value	2,158,530	0.7%			2,158,530	0.7%
<b>International Equity*</b>	<b>31,559,176</b>	<b>15.3%</b>	<b>13%</b>	<b>(6,900,000)</b>	<b>24,659,176</b>	<b>13.0%</b>
Northern Trust MSCI EAFE	31,559,176	10.7%		(6,900,000)	24,659,176	8.4%
<b>Emerging Markets Equity*</b>	<b>16,160,083</b>	<b>6.9%</b>	<b>15%</b>	<b>23,839,917</b>	<b>40,000,000</b>	<b>15.0%</b>
Vanguard Emerging Markets	16,160,083	5.5%		(16,160,083)	-	0.0%
Northern Trust MSCI EM	-	0.0%		40,000,000	40,000,000	13.6%
<b>Zero Beta</b>	<b>523,128</b>	<b>0.2%</b>	<b>29%</b>	<b>84,817,186</b>	<b>85,340,313</b>	<b>29.0%</b>
<b>Short-term IG Bonds</b>	<b>-</b>	<b>0.0%</b>	<b>29%</b>	<b>85,000,000</b>	<b>85,000,000</b>	<b>28.9%</b>
BlackRock 3-Month T-Bill	-	0.0%		85,000,000	85,000,000	28.9%
<b>Cash</b>	<b>523,128</b>	<b>0.2%</b>	<b>0%</b>	<b>(182,814)</b>	<b>340,313</b>	<b>0.1%</b>
Cash Account	523,128	0.2%		(182,814)	340,313	0.1%
<b>Other</b>	<b>128,155,846</b>	<b>43.5%</b>	<b>15%</b>	<b>(83,957,103)</b>	<b>44,198,744</b>	<b>15.0%</b>
<b>Real Estate</b>	<b>21,047,743</b>	<b>7.2%</b>	<b>10%</b>	<b>8,500,000</b>	<b>29,547,743</b>	<b>10.0%</b>
American Core Realty Fund, LLC	12,424,195	4.2%			12,424,195	4.2%
Prudential PRISA, LP	8,623,548	2.9%		8,500,000	17,123,548	5.8%
<b>Commodities</b>	<b>14,051,001</b>	<b>4.8%</b>	<b>5%</b>	<b>600,000</b>	<b>14,651,001</b>	<b>5.0%</b>
Credit Suisse Risk Parity	11,064,696	3.8%		600,000	11,664,696	4.0%
Pinnacle Asset Management, LP	2,986,305	1.0%			2,986,305	1.0%
<b>Investment Grade Bonds</b>	<b>66,664,760</b>	<b>22.6%</b>	<b>0%</b>	<b>(66,664,760)</b>	<b>-</b>	<b>0.0%</b>
Northern Trust Barclays US Agg	66,664,760	22.6%		(66,664,760)	-	0.0%
<b>US TIPS</b>	<b>14,846,972</b>	<b>5.0%</b>	<b>0%</b>	<b>(14,846,972)</b>	<b>-</b>	<b>0.0%</b>
Vanguard ST Inflation - Protect	14,846,972	5.0%		(14,846,972)	-	0.0%
<b>Natural Resources</b>	<b>11,545,371</b>	<b>3.9%</b>	<b>0%</b>	<b>(11,545,371)</b>	<b>-</b>	<b>0.0%</b>
Rhumblin S&P Glb LgMid Cmd&NR	11,545,371	3.9%		(11,545,371)	-	0.0%

Source: State Street, ORS

\* Regional equity % of plan values include Artisan Global Value exposure allocation

# Northern Trust COMMON EMERGING MARKETS INDEX FUND - NON-LENDING

As Of June 30, 2018

EQUITIES

## Key Facts

Inception	02/08/2011
Fund Size (\$M)	490.93
Benchmark	MSCI Emerging Markets ND

## Portfolio Information

	Fund	Index
Number of Equity Securities	946	1,135
Weighted Avg. Cap. (\$B)	87.8	87.4
Price to Earnings	13.43	13.45
Price to Book	1.71	1.71
Dividend Yield (%)	2.57	2.57
3-Year EPS (%)	17.04	17.06
Return on Equity (%)	15.75	15.73

## Top Holdings (% of fund)

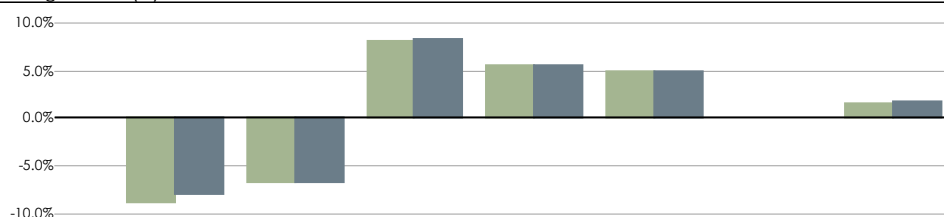
	Fund	Index
Tencent Holdings Ltd.	5.55	5.46
Alibaba Group Holding Ltd. Sponsored ADR	4.07	4.09
Samsung Electronics Co., Ltd.	3.82	3.84
Taiwan Semiconductor Manufacturing Co., Ltd.	3.32	3.34
Naspers Limited Class N	2.11	2.13
China Construction Bank Corporation Class H	1.72	1.70
Baidu, Inc. Sponsored ADR Class A	1.27	1.28
China Mobile Limited	1.06	1.04
Industrial and Commercial Bank of China Limited Class H	1.01	0.99
Ping An Insurance (Group) Company of China, Ltd.	0.93	0.92

## INVESTMENT OBJECTIVE

The primary objective of the Northern Trust Emerging Markets Equity Index Fund is to approximate the risk and return characteristics of the MSCI Emerging Markets (MSCI EM) Index. This Index is commonly used to represent the large and medium cap segment of the equity emerging markets.

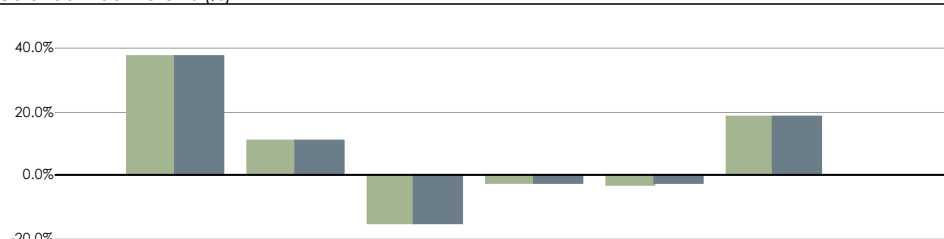
## Fund Performance

Trailing Returns (%)



as of 06/30/2018	3 Month	Year-to-Date	1-Year	3-Year	5-Year	10-Year	Since Inception
<b>Fund</b>	-8.65	-6.70	8.01	5.50	4.94	--	1.67
<b>Benchmark</b>	-7.96	-6.66	8.20	5.60	5.01	--	1.75

Calendar Year Returns (%)



## INVESTOR STRATEGY

To achieve its objective, the Fund employs a replication technique which generally seeks to hold each index constituent in its proportional index weight. The Fund may make limited use of futures and/or options for the purpose of maintaining equity exposure. This Fund may not participate in securities lending.

## INVESTMENT MANAGER

Northern Trust is a global multi-asset class investment manager serving clients worldwide. Through the combined resources of the Northern Trust Company, Northern Trust Investments, Inc., Northern Trust Global Investments Limited, and its subsidiaries, a broad range of investment products and services are offered to personal and institutional markets around the globe.



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## COMMON EMERGING MARKETS INDEX FUND - NON-LENDING

### Sector Breakdown (% of fund)

	Fund	Index	
Information Technology	27.88	27.90	<div><div></div><div></div></div>
Financials	22.86	22.81	<div><div></div><div></div></div>
Consumer Discretionary	9.76	9.79	<div><div></div><div></div></div>
Materials	7.60	7.63	<div><div></div><div></div></div>
Energy	7.16	7.16	<div><div></div><div></div></div>
Consumer Staples	6.65	6.68	<div><div></div><div></div></div>
Industrials	5.18	5.18	<div><div></div><div></div></div>
Telecommunication Services	4.27	4.27	<div><div></div><div></div></div>
Health Care	3.21	3.20	<div><div></div><div></div></div>
Real Estate	3.02	3.00	<div><div></div><div></div></div>
Utilities	2.41	2.40	<div><div></div><div></div></div>

### Top Country Breakdown (% of fund)

	Fund	Index	
China	33.03	32.68	<div><div></div><div></div></div>
Korea	14.50	14.58	<div><div></div><div></div></div>
Taiwan	11.55	11.63	<div><div></div><div></div></div>
India	8.56	8.61	<div><div></div><div></div></div>
South Africa	6.51	6.55	<div><div></div><div></div></div>
Brazil	5.80	5.83	<div><div></div><div></div></div>
Russia	3.46	3.49	<div><div></div><div></div></div>
Mexico	2.91	2.93	<div><div></div><div></div></div>
Malaysia	2.31	2.33	<div><div></div><div></div></div>
Thailand	2.15	2.17	<div><div></div><div></div></div>

### 3-Year Risk Statistics

Tracking Error*	1.15	Tracking error is a measure of the volatility of the differences in the return between a fund and its benchmark. The smaller the tracking error, the more the fund resembles the benchmark regarding risk and return characteristics.
Beta*	1.00	Beta is a measure of the volatility, or systematic risk, of a security or a portfolio in comparison to the market as a whole.
Annualized Standard Deviation	15.84	Standard deviation is a measure of risk. In this case risk is represented by the fund's price movements up or down over time.
*Measured against the Fund's benchmark		

### For More Information

Please contact Northern Trust at 877-651-9156.

Fees and expenses are one of several factors that participants and beneficiaries should consider when making investment decisions. The cumulative effect of fees and expenses can substantially reduce the growth of a retirement account; beneficiaries can visit the Employee Benefit Security Administration's website for an example demonstrating the long term effect of fees and expenses.

The information provided in the Investment Profile and this disclosure statement should not be considered a recommendation to purchase or sell a particular security. The fund is a collective investment fund and is privately offered. Prospectuses are not required and prices are not available in local publications. To obtain pricing information, please contact your service representative. **Please note that the information provided in the Investment Profile and this disclosure statement may not meet all of the disclosure requirements for an ERISA "section 404(c) plan", as described in the Department of Labor regulations under section 404(c). In addition, the information disclosed in the Investment Profile and this disclosure statement may not meet the requirements of Department of Labor Rule 404a-5 of ERISA ("Rule 404a-5"). Plan Sponsors intending to comply with such regulations will need to provide Plan participants with additional information.** The performance information shown represents past performance and is not a guarantee of future results. Current performance may be lower or higher than the information shown. Performance is shown gross of investment management, but net of total administrative expenses (see additional disclosure information). Periods greater than one year are annualized except where indicated. Returns reflect the reinvestment of dividends and other earnings and are shown before the deduction of your investment management fees, unless indicated otherwise. Returns would be further reduced by investment management fees. Index performance returns do not reflect any management fees, transaction costs or expenses. It is not possible to invest directly in any index. There are risks involved in investing including possible loss of principal. There is no guarantee that the investment objectives of any fund or strategy will be met. Risk controls and models do not promise any level of performance or guarantee against loss of principal. The information provided herein does not constitute individual investment advice for a Plan participant or investor, is only informational in nature and should not be used by a Plan participant or investor as a primary basis for making an investment decision.

NOT FDIC INSURED

May lose value/No bank guarantee



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## COMMON EMERGING MARKETS INDEX FUND - NON-LENDING

### Additional Disclosure Information

**Total Administrative Expense** reflects the maximum level at which (i) the direct expenses as well as external audit fees for the Fund and (ii) the direct expenses and external audit fees of the underlying Funds in which it invests, will be assessed and indirectly impact the Fund. The trustee does not assess or charge any fee in connection with the purchase or redemption of units of the Fund. NTI may at any time modify or discontinue the above-described caps on Total Administrative Expenses. These expenses do not include additional amounts, if any, that may be charged to your account for plan administration. Please contact your Plan administrator or plan recordkeeper for further information regarding the total expense of investing in the Fund.

**Investment Risks-** The following Risks are for Common Emerging Markets Index Fund - Non-Lending.

- Capitalization Risk:** Concentrating assets in stocks of one or more capitalizations (small, mid, or large) may be subject to both the specific risks of those capitalizations as well as increased volatility because stocks of specific capitalizations tend to go through cycles of beating or lagging the market as a whole.
- Derivatives Risk:** Investments in derivatives may be subject to the risk that the advisor does not correctly predict the movement of the underlying security, interest rate, market index, or other financial asset, or that the value of the derivative does not correlate perfectly with either the overall market or the underlying asset from which the derivative's value is derived.
- Emerging Markets Risk:** Investments in emerging- and frontier-markets securities may be subject to greater market, credit, currency, liquidity, legal, political, and other risks compared with assets invested in developed foreign countries.
- Futures Risk:** Investments in futures contracts and options on futures contracts may increase volatility and be subject to additional market, active management, interest, currency, and other risks if the contract cannot be closed when desired.
- Issuer Risk:** A stake in any individual security is subject to the risk that the issuer of that security performs poorly, resulting in a decline in the security's value.
- Loss of Money Risk:** Because the investment's market value may fluctuate up and down, an investor may lose money, including part of the principal, when he or she buys or sells the investment.
- Suitability Risk:** Investors are expected to select investments whose investment strategies are consistent with their financial goals and risk tolerance.

### Comparative Benchmark Definitions

MSCI Emerging Markets® Index is a free float-adjusted, market capitalization index that is designed to measure equity market performance in the global emerging markets. It is not possible to invest directly in an index.