



Memorandum

TO: Police and Fire Department Retirement Plan
Board of Administration

FROM: Dhinesh Ganapathiappan

SUBJECT: Report on Investing the Annual Prefunding City
Retirement Contribution

DATE: August 3, 2017

Approved

Date

7/24/17

Background

The following recommendation to invest the annual prefunding retirement contribution by the City was approved unanimously by the Police and Fire Department Retirement Plan Investment Committee on June 27, 2017 and is being provided for informational purposes only.

As requested by the Investment Committee, updated market values as of June 30, 2017 and actual pre-funding investments are provided in the tables below. The market values are subject to change as manager account statements are received and updated in custodian accounting records.

Police & Fire Department Retirement Plan | Asset Allocation

Market values as of June 30, 2017 are preliminary

Asset Class	June 30, 2017		Policy		July 3, 2017 Post-Prefunding		
	Market Value (mm)	% of Total Plan	Policy Target	Policy Range	Funding (mm)	Market Value (mm)	% of Total Plan
Global Equity	965.9	29.1%	31.0%	0.00%	+49	1,015.1	29.2%
Global Equity	259.0	7.8%				259.0	7.4%
US Equity	129.8	3.9%			+28	157.8	4.5%
International Equity	349.4	10.5%			-1	348.3	10.0%
Emerging Markets Equity	133.4	4.0%			+22	155.8	4.5%
Marketable Alternative Equity	94.2	2.8%				94.2	2.7%
Private Equity	269.2	8.1%	8.0%	0		269.2	7.7%
Global Fixed Income	530.8	16.0%	16.0%	0	+92	623.1	17.9%
Global Core	205.5	6.2%	12.8%	4-16%	+92	297.7	8.6%
Non-Investment Grade Credit	162.5	4.9%	1.6%	0-8%		162.5	4.7%
Emerging Markets Debt	162.9	4.9%	1.6%	0-8%		162.9	4.7%
Private Debt	225.8	6.8%	11.0%	0		225.8	6.5%
Real Assets	527.7	15.9%	17.0%	0		527.7	15.2%
Real Estate	240.3	7.2%	7.0%			240.3	6.9%
Commodities	209.9	6.3%	7.0%			209.9	6.0%
Infrastructure	77.5	2.3%	3.0%			77.5	2.2%
Absolute Return	256.6	7.7%	6.0%	0	+18	274.8	7.9%
Macro	139.2	4.2%			+4	143.1	4.1%
Relative Value	117.4	3.5%			+14	131.8	3.8%
GTAA	305.4	9.2%	10.0%	0		305.4	8.8%
Cash	240.5	7.2%	0.0%	0	-3	237.7	6.8%
Total Plan	3,321.9	100.0%			+157	3,478.8	100.0%

Source: ORS

Police & Fire Department Retirement Plan | Pro Forma Global Fixed Income Asset Allocation

Market values as of June 30, 2017 are preliminary

Asset Class	June 30, 2017		Policy		July 3, 2017 Post-Prefunding			
	Value (mm)	% of Total Plan	Policy Target	Policy Range	Funding (mm)	Value (mm)	% of Total Plan	% of Total Funding
Global Core	205.5	6.2%	12.8%	4-16%	+92	297.7	8.6%	100.0%
Colchester Global Bond Fund	40.1	1.2%				40.1	1.2%	
Franklin Templeton Glob Multi	53.4	1.6%				53.4	1.5%	
Voya Securitized Credit	67.6	2.0%			+15	82.8	2.4%	16.5%
BlackRock Long Government	48.7	1.5%				48.7	1.4%	
Russell Overlay	(16.1)	-0.5%			+16	0.2	0.0%	17.6%
BlackRock Global Agg ex US	-	0.0%			+27	26.6	0.8%	28.8%
BlackRock US Debt	-	0.0%			+34	34.2	1.0%	37.1%
Non-Investment Grade Credit	162.5	4.9%	1.6%	0-8%		162.5	4.7%	0.0%
Davidson Kempner Inst Partners	25.5	0.8%				25.5	0.7%	
Claren Road Credit Fund	2.1	0.1%				2.1	0.1%	
Beach Point Total Ret Fund II	65.6	2.0%				65.6	1.9%	
Symphony Long Short Credit LP	69.3	2.1%				69.3	2.0%	
Emerging Markets Debt	162.9	4.9%	1.6%	0-8%		162.9	4.7%	0.0%
BlueBay EM Select Bond	99.4	3.0%				99.4	2.9%	
Iguazu Partners LP Fund	63.5	1.9%				63.5	1.8%	

Source: ORS

Police & Fire Department Retirement Plan | Pro Forma Absolute Return Asset Allocation

Market values as of June 30, 2017 are preliminary

Asset Class	June 30, 2017		Policy		July 3, 2017 Post-Prefunding			
	Market Value (mm)	% of Total Plan	Policy Target	Policy Range	Funding (mm)	Market Value (mm)	% of Total Plan	% of Total Funding
Macro	139.2	4.2%			+4	143.1	4.1%	21.4%
Kepos Alpha Fund, Ltd	16.6	0.5%				16.6	0.5%	0.0%
BlueTrend Fund, Ltd	16.1	0.5%			-16	-	0.0%	-88.0%
Brevan Howard Master Fund, Ltd	13.3	0.4%				13.3	0.4%	0.0%
Dymon Asia Macro Fund, Ltd	25.9	0.8%				25.9	0.7%	0.0%
Keynes Lev Quant Strat, Ltd	18.4	0.6%				18.4	0.5%	0.0%
Pharo Management, Ltd	35.2	1.1%				35.2	1.0%	0.0%
AHL Partners LLP	13.6	0.4%				13.6	0.4%	0.0%
Systematica	-	0.0%			+20	20.0	0.6%	109.4%
Relative Value	117.4	3.5%			+14	131.8	3.8%	78.6%
Arrowgrass Intl Fund, Ltd	10.2	0.3%			-10	-	0.0%	-55.8%
Pine River Fund, Ltd	22.5	0.7%			-5	17.1	0.5%	-29.8%
DE Shaw Composite Fund, LLC	39.6	1.2%				39.6	1.1%	0.0%
JD Capital	20.6	0.6%				20.6	0.6%	0.0%
Pine River Volatility Arb	24.6	0.7%				24.6	0.7%	0.0%
Hudson Bay	-	0.0%			+30	30.0	0.9%	164.2%

Source: ORS

Note: Some fundings/redemptions occurred after July 3, 2017



Dhinesh Ganapathiappan, CIPM
Investment Analyst

TO: Police and Fire Department Retirement Plan and Federated City Employees' Retirement System Investment Committees

FROM: Daryn Miller, CFA

SUBJECT: Preliminary view on investing the annual prefunding contribution

DATE: June 27, 2017

Approved /Roberto Peña/

Date 6/20/17

Background

The City will make its annual prefunding contribution for FY 2017-2018 on July 3, 2017. The amounts are significant fractions of both Plans' current total value:

Federated	Prefunding	% of Current Plan Assets
Pension	\$ 152.8	8%
Health Care Trust	\$ 15.6	7%

Police and Fire	Prefunding	% of Current Plan Assets
Pension	\$ 156.9	5%
Health Care Trust	\$ 17.1	17%

Source: ORS. (\$Millions; market values as of April 30, 2017)

At the May 23, 2016 Investment Committee meeting, staff presenting a preliminary prefunding plan, which received agreement from the Investment Committee. As the prefunding will be received prior to final approval of a new asset allocation, Staff recommends allocating the prefunding contributions in a generally conservative and liquid fashion until Board approved allocations determine a more permanent allocation.

Current Views and Prefunding Contributions Overview

Staff's current return expectations remain muted across most asset classes, with near-term expected returns significantly below long-term averages. Staff projects a low growth / low inflation economic scenario as the base case, and assumes that high growth environments are unlikely. Accordingly, staff's proposed strategic asset allocation features defensive characteristics.

For the Pensions, staff's recommended prefunding plans maintains equity allocation weights, and adds to cash, fixed income, and absolute return (although the latter two will be dependent upon investment committee approval of new investment recommendations).

For the Health Care Trusts (HCT), staff's recommended prefunding plans increases fixed income. The current cash allocations are elevated as compared of the Pension cash allocations, this a function of Measure F and the potential implications for the VEBA, where the HCTs will need a higher level of liquidity to meet potential payouts.

Timing

May 23, 2017	Staff presented preliminary prefunding views to the IC meeting for discussion.
June 27, 2017	Staff recommends a final prefunding plan to the IC.
July 3, 2017	Prefunding contribution will be received and the prefunding plan implemented.
August 3 & 15, 2017	Prefunding report out to the Police & Fire and Federated Boards.

Federated Pension

The Federated Pension Plan will receive \$152.8mm from the plan sponsor on July 3, 2017. Those funds will be allocated as follows:

- \$46mm Global Equities (including US, International, and Emerging Markets)
- \$80mm Global Core Fixed Income
- \$23mm Absolute Return
- \$4mm Cash.

Following implementation of the prefunding plan, Global Equity will maintain a 28.9% weight as a percent of plan assets, while Global Fixed Income and Absolute Return increase by 2.4% and 0.1%. Private Equity, Private Debt, and Real Assets, will not receive a portion of the prefunding allocation, and their corresponding weights will decrease by 0.2%, 0.3%, and 1.6%. Cash will receive \$4mm and the cash allocation will decline from 9.0% to 8.5%.

Federated City Employees' Retirement System | Asset Allocation
Market values as of April 30, 2017

Asset Class	Current		Policy		Proposed		
	Market Value (mm)	% of Total Plan	Policy Target	Policy Range	Funding (mm)	Market Value (mm)	% of Total Plan
Global Equity	581.3	28.9%	28.0%	20-36%	+46	626.8	28.9%
Global Equity	159.8	7.9%				159.8	7.4%
US Equity	76.6	3.8%			+15	91.6	4.2%
International Equity	194.1	9.6%			+23	217.3	10.0%
Emerging Markets Equity	63.2	3.1%			+7	70.6	3.3%
Marketable Alternative Equity	87.6	4.3%				87.6	4.0%
Private Equity	58.7	2.9%	9.0%	4-14%		58.7	2.7%
Global Fixed Income	375.5	18.6%	19.0%	9-29%	+80	455.8	21.0%
Global Core	281.3	14.0%	15.2%	5-29%	+80	361.6	16.7%
Non-Investment Grade Credit	41.0	2.0%	1.9%	0-10%		41.0	1.9%
Emerging Markets Debt	53.2	2.6%	1.9%	0-10%		53.2	2.5%
Private Debt	84.8	4.2%	5.0%	0-10%		84.8	3.9%
Real Assets	461.4	22.9%	23.0%	15-30%		461.4	21.3%
Real Estate	116.5	5.8%	7.0%			116.5	5.4%
Commodities	129.2	6.4%	6.0%			129.2	6.0%
Infrastructure	104.2	5.2%	5.0%			104.2	4.8%
Natural Resources	111.6	5.5%	5.0%			111.6	5.1%
Absolute Return	271.8	13.5%	11.0%	6-16%	+23	294.8	13.6%
Macro	154.2	7.7%			+8	162.2	7.5%
Relative Value *	117.7	5.8%			+15	132.7	6.1%
GTAA/Oppportunistic	0.0	0.0%	5.0%	0-8%		0.0	0.0%
Cash	180.5	9.0%	0.0%	0-10%	+4	184.4	8.5%
Total Plan	2,014.0	100.0%			+153	2,166.8	100.0%

** Pending approval of new funds*
Source: ORS

Global Equity exposure will be implemented synthetically with futures via Russell Investments, while the increase to Global Fixed Income will be accomplished through two new BlackRock Passive Index Funds, two existing managers, as well as synthetically. Absolute Return will be implemented through two new investments in the macro and relative value strategy groups, partially offset by previously approved redemptions from two existing funds in the relative value strategy group.

Federated City Employees' Retirement System | Pro Forma Global Fixed Income Asset Allocation
Market values as of April 30, 2017

Asset Class	Current		Policy		Proposed			
	Market Value (mm)	% of Total Plan	Policy Target	Policy Range	Funding (mm)	Market Value (mm)	% of Total Plan	% of Total Funding
Global Core	281.3	14.0%	15.2%	5-29%	+80	361.6	16.7%	100.0%
Northern Trust Int Gov 1-10 Yr	93.3	4.6%			+11	104.2	4.8%	13.6%
Northern Trust 0-5 Year TIPS	97.1	4.8%				97.1	4.5%	
Voya Securitized Credit	60.6	3.0%			+7	67.9	3.1%	9.1%
BlackRock Long Government	37.7	1.9%				37.7	1.7%	
Russell Overlay	(7.6)	-0.4%			+8	-	0.0%	9.4%
BlackRock Global Agg ex US *	-	0.0%			+29	29.1	1.3%	36.2%
BlackRock US Debt *	-	0.0%			+25	25.5	1.2%	31.7%
Non-Investment Grade Credit	41.0	2.0%	1.9%	0-10%		41.0	1.9%	0.0%
Davidson Kempner Inst Partners	37.6	1.9%				37.6	1.7%	
Claren Road Credit Fund	3.4	0.2%				3.4	0.2%	
Emerging Markets Debt	53.2	2.6%	1.9%	0-10%		53.2	2.5%	0.0%
BlueBay EM Select Bond	53.2	2.6%				53.2	2.5%	

Source: ORS
** Pending approval of new fund*

Federated Healthcare Trust

The Federated Healthcare Trust will receive \$15.6mm from the plan sponsor on July 3, 2017. Those funds will be allocated 100% to fixed income; specifically, the Northern Trust Barclays Aggregate fund. As a reminder, the HCT has an elevated cash allocation as implications from Measure F and the VEBA will likely require an elevated level of liquidity.

Federated City Employees' Retiree Health Care Trust | Asset Allocation
Market values as of April 30, 2017

Asset Class	Current		Policy		Proposed		
	Market Value (mm)	% of Total Plan	Policy Target	Policy Range	Funding (mm)	Market Value (mm)	% of Total Plan
Global Equity	85.6	40.2%	46.7%	40-54%		85.6	37.4%
Global Equity	32.7	15.4%				32.7	14.3%
US Equity	14.6	6.9%				14.6	6.4%
International Equity	27.6	13.0%				27.6	12.1%
Emerging Markets Equity	10.6	5.0%				10.6	4.6%
Global Fixed Income	53.0	24.9%	30.3%	20-40%	+16	68.6	30.0%
Global Core	53.0	24.9%			+16	68.6	30.0%
Real Assets	41.6	19.5%	23.0%	15-30%		41.6	18.2%
Real Estate	10.9	5.1%	7.0%	4-10%		10.9	4.8%
Commodities	11.1	5.2%	6.0%	2-10%		11.1	4.9%
Infrastructure	9.5	4.5%	5.0%	2-8%		9.5	4.2%
Natural Resources	10.0	4.7%	5.0%	2-8%		10.0	4.4%
Cash	32.8	15.4%	0.0%	0-5%		32.8	14.4%
Total Plan	213.0	100.0%			+16	228.6	100.0%

Source: ORS

Police & Fire Pension

The Police & Fire Pension Plan will receive \$156.9mm from the plan sponsor on July 3, 2017. Those funds will be allocated as follows:

- \$46mm Global Equities (including US, International, and Emerging Markets)
- \$63mm Global Core Fixed Income
- \$23mm Absolute Return
- \$24mm Cash.

Following the prefunding, Global Equity will maintain its 29.0% weight as a percent of plan assets, while Global Fixed Income, Absolute Return and Cash increase by 1.1%, 0.3%, and 0.4%. Private Equity, Private Debt, Real Assets, and GTAA will not receive a portion of the prefunding allocation, and their corresponding weights will decrease by 0.3%, 0.3%, 0.7%, and 0.4%.

Police & Fire Department Retirement Plan | Asset Allocation

Market values as of April 30, 2017

Asset Class	Current		Policy		Proposed		
	Market Value (mm)**	% of Total Plan	Policy Target	Policy Range	Funding (mm)	Market Value (mm)	% of Total Plan
Global Equity	960.2	29.0%	31.0%	25-50%	+46	1,006.7	29.0%
Global Equity	255.9	7.7%				255.9	7.4%
US Equity	141.0	4.3%			+17	157.9	4.5%
International Equity	346.3	10.4%			+3	348.8	10.0%
Emerging Markets Equity	124.0	3.7%			+27	151.0	4.3%
Marketable Alternative Equity	93.0	2.8%				93.0	2.7%
Private Equity	263.3	7.9%	8.0%	3-13%		263.3	7.6%
Global Fixed Income	543.1	16.4%	16.0%	10-30%	+63	606.6	17.5%
Global Core	219.4	6.6%	12.8%	4-16%	+63	282.8	8.1%
Non-Investment Grade Credit	161.6	4.9%	1.6%	0-8%		161.6	4.7%
Emerging Markets Debt	162.1	4.9%	1.6%	0-8%		162.1	4.7%
Private Debt	229.5	6.9%	11.0%	5-15%		229.5	6.6%
Real Assets	531.2	16.0%	17.0%	12-25%		531.2	15.3%
Real Estate	241.1	7.3%	7.0%			241.1	6.9%
Commodities	212.2	6.4%	7.0%			212.2	6.1%
Infrastructure	77.9	2.4%	3.0%			77.9	2.2%
Absolute Return	270.6	8.2%	6.0%	2-12%	+23	293.6	8.5%
Macro	154.5	4.7%			+8	162.5	4.7%
Relative Value *	116.1	3.5%			+15	131.1	3.8%
GTAA	302.3	9.1%	10.0%	0-10%		302.3	8.7%
Cash	215.3	6.5%	1.0%	0-10%	+24	239.3	6.9%
Total Plan	3,315.4	100.0%			+157	3,472.3	100.0%

* Pending approval of new funds; ** April market value adjusted

Source: ORS

Global Equity exposure will be implemented synthetically with futures via Russell Investments, while the increase to Global Fixed Income will be accomplished through two new BlackRock Passive Index Funds, an existing manager, as well as synthetically. Absolute Return will be implemented through two new

investments in the macro and relative value strategy groups, partially offset by previously approved redemptions from two existing funds in the relative value strategy group.

Police & Fire Department Retirement Plan | Pro Forma Global Fixed Income Asset Allocation

Market values as of April 30, 2017

Asset Class	Current		Policy		Proposed			
	Market Value (mm)	% of Total Plan	Policy Target	Policy Range	Funding (mm)	Market Value (mm)	% of Total Plan	% of Total Funding
Global Core	219.4	6.6%	12.8%	4-16%	+63	282.8	8.1%	100.0%
Colchester Global Bond Fund	39.6	1.2%				39.6	1.1%	
Franklin Templeton Glob Multi	53.7	1.6%				53.7	1.5%	
Voya Securitized Credit	66.0	2.0%			+15	81.2	2.3%	24.0%
BlackRock Long Government	47.5	1.4%				47.5	1.4%	
Russell Overlay	12.6	0.4%			-13	-	0.0%	-19.8%
BlackRock Global Agg ex US *	-	0.0%			+27	26.6	0.8%	41.9%
BlackRock US Debt *	-	0.0%			+34	34.2	1.0%	53.9%
Non-Investment Grade Credit	161.6	4.9%	1.6%	0-8%		161.6	4.7%	0.0%
Davidson Kempner Inst Partners	25.1	0.8%				25.1	0.7%	
Claren Road Credit Fund	2.1	0.1%				2.1	0.1%	
Beach Point Total Ret Fund II	64.9	2.0%				64.9	1.9%	
Symphony Long Short Credit LP	69.5	2.1%				69.5	2.0%	
Emerging Markets Debt	162.1	4.9%	1.6%	0-8%		162.1	4.7%	0.0%
BlueBay EM Select Bond	98.1	3.0%				98.1	2.8%	
Iguazu Partners LP Fund	64.0	1.9%				64.0	1.8%	

Source: ORS

* Pending approval of new fund

Police & Fire Healthcare Trust

The Police & Fire Healthcare Trust will receive \$17.1mm from the plan sponsor on July 3, 2017. Those funds will be allocated 100% to fixed income; specifically, the Vanguard Total Bond Market fund. As a reminder, the HCT has an elevated cash allocation as implications from Measure F and the VEBA will likely require an elevated level of liquidity.

Police & Fire Department Retiree Health Care Trust | Asset Allocation

Market values as of April 30, 2017

Asset Class	Current		Policy		Proposed		
	Market Value (mm)	% of Total Plan	Policy Target	Policy Range	Funding (mm)	Market Value (mm)	% of Total Plan
Global Equity	32.8	32.4%	43.0%	25-50%		32.8	27.7%
Global Fixed Income	16.2	16.0%	15.0%	5-25%	+17	33.3	28.1%
Real Assets	15.5	15.3%	22.0%	12-25%		15.5	13.1%
Commodities	6.9	6.8%				6.9	5.8%
Infrastructure	7.4	7.3%				7.4	6.2%
Real Estate	1.3	1.3%				1.3	1.1%
GTAA	19.6	19.3%	20.0%	0-25%		19.6	16.5%
Cash	17.3	17.1%	0.0%	0-5%	+0	17.3	14.6%
Total Plan	101.4	100.0%			+17	118.5	100.0%

Source: ORS

Conclusion

Staff recommends and seeks approval for the 2017 annual prefunding plans for the Federated Pension and Healthcare Trust, and the Police & Fire Pension and Healthcare Trust, including approval on the cash allocations for the Healthcare Trusts, which exceed the top-end of the allocation ranges of 5%. In addition, staff seeks approval on the Federated Pension Private Equity allocation, which is below the bottom-end of the allocation range of 3%--which is a function of 1) the maturity of the Private Equity program, and 2) no new Private Equity investments being approved in several years.

/Daryn Miller/

Daryn Miller, CFA

Interim Chief Investment Officer