



NEPC, LLC

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City of Hartford Municipal Employees' Retirement Fund

September Flash Report - Net

September, 2016

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Index Performance Summary as of 09/30/2016

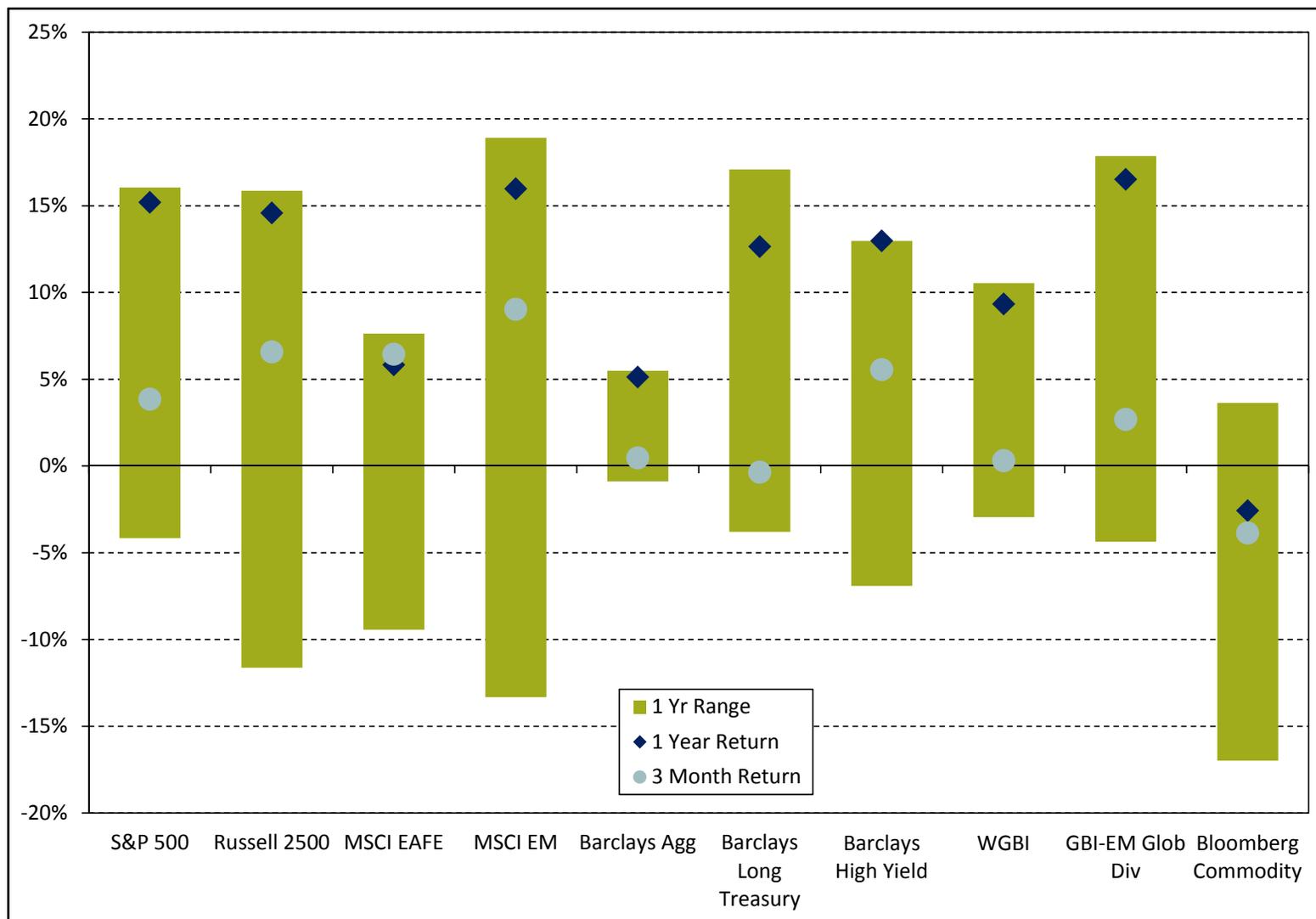
	2009	2010	2011	2012	2013	2014	2015	Q1	Q2	Q3	Sept	YTD
Barclays US STRIPS 20+ Yr	-36.0%	10.9%	58.5%	3.0%	-21.0%	46.4%	-3.7%	11.4%	9.6%	-0.2%	-2.8%	21.8%
JPM GBI-EM Global Div	22.0%	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	11.0%	2.7%	2.7%	2.0%	17.1%
Barclays US Long Credit	16.8%	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	6.8%	6.7%	2.3%	-1.1%	16.5%
MSCI EM	78.5%	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	5.7%	0.7%	9.0%	1.3%	16.0%
Alerian MLP	76.4%	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	-4.2%	19.7%	1.1%	1.9%	15.9%
Barclays US Govt/Credit Long	1.9%	10.2%	22.5%	8.8%	-8.8%	19.3%	-3.3%	7.3%	6.5%	1.2%	-1.3%	15.7%
Barclays US Corporate HY	58.2%	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	3.4%	5.5%	5.6%	0.7%	15.1%
JPM EMBI Global Diversified	29.8%	12.2%	7.3%	17.4%	-5.3%	7.4%	1.2%	5.0%	5.0%	4.0%	0.4%	14.8%
FTSE NAREIT Equity REITs	28.0%	28.0%	8.3%	18.1%	2.5%	30.1%	3.2%	6.0%	7.0%	-1.4%	-1.8%	11.8%
Russell 2000	27.2%	26.9%	-4.2%	16.3%	38.8%	4.9%	-4.4%	-1.5%	3.8%	9.0%	1.1%	11.5%
Citi WGBI	2.6%	5.2%	6.4%	1.6%	-4.0%	-0.5%	-3.6%	7.1%	3.4%	0.3%	0.7%	11.1%
Russell 2500	34.4%	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	0.4%	3.6%	6.6%	0.5%	10.8%
Bloomberg Commodity	18.9%	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	0.4%	12.8%	-3.9%	3.1%	8.9%
Russell 1000	28.4%	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	1.2%	2.5%	4.0%	0.1%	7.9%
S&P 500	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	1.3%	2.5%	3.9%	0.0%	7.8%
Credit Suisse Leveraged Loan	44.9%	10.0%	1.8%	9.4%	6.2%	2.1%	-0.4%	1.3%	2.9%	3.1%	0.9%	7.5%
MSCI ACWI	34.6%	12.7%	-7.3%	16.1%	22.8%	4.2%	-2.4%	0.2%	1.0%	5.3%	0.6%	6.6%
Barclays US Agg Bond	5.9%	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	3.0%	2.2%	0.5%	-0.1%	5.8%
Barclays US Agg Interm	6.5%	6.1%	6.0%	3.6%	-1.0%	4.1%	1.2%	2.3%	1.4%	0.3%	0.2%	4.1%
Barclays Municipal	12.9%	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	1.7%	2.6%	-0.3%	-0.5%	4.0%
MSCI EAFE	31.8%	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	-3.0%	-1.5%	6.4%	1.2%	1.7%
BC US Govt/Credit 1-3 Yr	3.8%	2.8%	1.6%	1.3%	0.6%	0.8%	0.7%	1.0%	0.7%	0.0%	0.1%	1.7%
Credit Suisse Hedge Fund	18.6%	10.9%	-2.5%	7.7%	9.7%	4.1%	-0.7%	-2.2%	0.6%	1.6%	-	0.0%

Source: Bloomberg, Barclays, Alerian, Nareit, MSCI, JP Morgan, Credit Suisse



NEPC, LLC

Near Term Broad Market Performance Summary as of 09/30/2016



Source: Bloomberg, Standard and Poors, Russell, MSCI, Barclays, Citigroup, JP Morgan
 *1 Yr Range: Represents range of cumulative high/low daily index returns for an investment made one year ago

City of Hartford Municipal Employees Retirement Fund

Net of Fees (Preliminary)

	Market Value (\$)	% of Portfolio	Ending September 30, 2016						Inception	
			1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Return (%)	Since
Composite	1,007,226,366	100.0	0.4	3.4	7.4	9.5	5.3	7.4	8.1	Jan-86
Policy Index			0.6	3.4	8.0	10.3	5.0	7.7	--	Jan-86
Allocation Index			0.6	3.8	8.0	10.7	5.7	8.3	--	Jan-86
Total Equity Composite	360,667,215	35.8	0.6	5.0	8.6	13.1	4.2	9.7	9.1	Sep-10
Equity Custom Benchmark			0.8	5.6	5.6	10.4	3.9	10.4	9.3	Sep-10
Global Equity Composite	767,187	0.1	1.2	5.0	20.9	14.9	-1.8	6.6	8.5	May-09
MSCI ACWI			0.6	5.3	6.6	12.0	5.2	10.6	11.1	May-09
Domestic Equity Composite	183,508,930	18.2	0.2	4.7	6.4	11.5	7.7	14.6	7.8	Aug-96
Russell 3000			0.2	4.4	8.2	15.0	10.4	16.4	8.4	Aug-96
Atlanta Capital Large Growth	73,389	0.0	-2.0	1.4	2.5	8.7	9.1	13.7	4.7	May-99
Russell 1000 Growth			0.4	4.6	6.0	13.8	11.8	16.6	3.9	May-99
Eagle Capital Large Value	57,587,594	5.7	0.7	5.2	2.9	9.1	8.4	14.9	10.0	Oct-03
Russell 1000 Value			-0.2	3.5	10.0	16.2	9.7	16.2	8.4	Oct-03
Holland Capital	25,110,673	2.5	--	--	--	--	--	--	--	Oct-16
Russell 1000 Growth			0.4	4.6	6.0	13.8	11.8	16.6	--	Oct-16
SSgA Russell 3000 Index	18,486,505	1.8	0.1	4.4	8.5	15.3	--	--	7.4	Aug-14
Russell 3000			0.2	4.4	8.2	15.0	10.4	16.4	7.4	Aug-14
Edgewood	24,974,661	2.5	--	--	--	--	--	--	--	Oct-16
Russell 1000 Growth			0.4	4.6	6.0	13.8	11.8	16.6	--	Oct-16
Southern Sun SMID Value	32,426,825	3.2	-0.9	3.0	13.6	11.8	2.0	15.1	13.5	Sep-10
Russell 2500 Value			0.7	6.2	14.5	17.7	8.1	16.3	14.1	Sep-10
Voya	24,849,282	2.5	1.1	9.5	10.2	16.3	7.0	--	12.8	Sep-12
Russell 2000 Growth			1.4	9.2	7.5	12.1	6.6	16.1	13.2	Sep-12

Returns are net of manager fees.

Allocation Index: Weighted average calculation using actual asset allocation percentages and benchmark index returns.

Policy Index: NEPC Allocation effective July 1, 2015 - December 31, 2015: 15% Russell 3000, 11% Russell Global ex-US Equity, 5% Barclays Capital Aggregate, 6% MSCI Emerging Markets, 3% 3-Month Libor +300 BPS, 6.5% BC Gov/Credit Long, 6% JPM EMBI Global, 4% Citigroup HY, 4% BC Global Inflation Linked: US TIPS, 8% NCREIF Property Index, 5% Russell 3000 + 300 BPS, 3% Credit Suisse Leveraged Loan Index, 10% HFRI Fund of Funds, 7% 60 MSCI World/40 Citi WGBI, 3% S&P GSCI Total Return Index, 1.5% 91 T-Bill.

Policy Index: December 31, 2015 - Present: The allocation to 3% the S&P GSCI Total Return Index was replaced by a 3% allocation to the CPI +400 BPS (Seasonally Adjusted).

City of Hartford Municipal Employees Retirement Fund

Net of Fees (Preliminary)

	Market Value (\$)	% of Portfolio	Ending September 30, 2016						Inception	
			1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Return (%)	Since
International Equity Composite	176,391,099	17.5	1.0	5.4	11.0	14.9	0.9	5.2	5.1	Sep-97
<i>Russell Global ex US</i>			1.2	6.5	3.8	7.4	-0.7	5.6	3.6	Sep-97
International Developed Markets Equity	121,602,783	12.1	1.2	5.5	9.6	15.8	3.5	7.6	--	Sep-97
<i>Russell Global ex US</i>			1.2	6.5	3.8	7.4	-0.7	5.6	3.6	Sep-97
Walter Scott Large Growth	61,224,203	6.1	0.9	6.1	10.5	17.7	2.5	7.5	3.9	May-06
<i>MSCI EAFE</i>			1.2	6.4	1.7	6.5	0.5	7.4	1.7	May-06
First Eagle All Cap Value	52,363,510	5.2	1.6	4.7	9.9	14.9	5.2	8.1	12.5	Oct-02
<i>MSCI EAFE</i>			1.2	6.4	1.7	6.5	0.5	7.4	7.5	Oct-02
SSgA EAFE Index	8,015,070	0.8	1.3	6.5	2.0	6.8	--	--	-2.9	Jul-14
<i>MSCI EAFE</i>			1.2	6.4	1.7	6.5	0.5	7.4	-3.1	Jul-14
International Emerging Markets Equity	54,788,315	5.4	0.5	5.2	14.1	13.4	-2.3	--	--	Sep-97
<i>MSCI Emerging Markets</i>			1.3	9.0	16.0	16.8	-0.6	3.0	5.7	Sep-97
Parametric Emerging Markets	24,628,309	2.4	0.9	5.5	15.3	13.7	-2.1	--	1.0	Jun-12
<i>MSCI Emerging Markets</i>			1.3	9.0	16.0	16.8	-0.6	3.0	1.6	Jun-12
Mondrian Emerging Markets	27,065,169	2.7	0.1	4.5	13.2	12.8	-2.8	--	-1.1	Jun-12
<i>MSCI Emerging Markets</i>			1.3	9.0	16.0	16.8	-0.6	3.0	1.6	Jun-12
SSgA Daily MSCI EM Index	3,094,837	0.3	1.3	8.5	15.7	16.1	--	--	-5.0	Aug-14
<i>MSCI Emerging Markets</i>			1.3	9.0	16.0	16.8	-0.6	3.0	-5.1	Aug-14

Returns are net of manager fees.

City of Hartford Municipal Employees Retirement Fund

Net of Fees (Preliminary)

	Market Value (\$)	% of Portfolio	Ending September 30, 2016						Inception	
			1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Return (%)	Since
Total Fixed Income Composite	312,371,197	31.0	0.2	2.2	8.9	8.7	4.6	4.2	6.0	Jul-97
<i>Custom Fixed Benchmark</i>			0.0	2.1	10.6	10.4	5.5	4.5	--	Jul-97
Domestic Fixed Income Composite	245,055,775	24.3	-0.1	1.7	7.6	7.0	3.7	3.5	4.2	Sep-10
<i>Barclays Aggregate</i>			-0.1	0.5	5.8	5.2	4.0	3.1	3.4	Sep-10
Core Bonds Composite	48,296,989	4.8	0.0	0.9	6.5	6.0	4.5	3.9	4.5	Dec-10
Hartford Investment Core Plus Fixed	35,150,114	3.5	-0.1	1.0	6.9	6.3	4.6	4.1	5.0	Oct-02
<i>Barclays Aggregate</i>			-0.1	0.5	5.8	5.2	4.0	3.1	4.5	Oct-02
SSgA Barclays Aggregate Index	12,454,696	1.2	-0.1	0.4	5.6	5.0	3.9	2.9	3.4	May-11
<i>Barclays Aggregate</i>			-0.1	0.5	5.8	5.2	4.0	3.1	3.7	May-11
Unconstrained Fixed Income	45,910,263	4.6	0.0	1.7	4.2	3.4	--	--	1.6	Aug-15
LS Strategic Alpha	45,910,263	4.6	0.0	1.7	4.2	3.4	--	--	1.6	Aug-15
<i>3-Month LIBOR + 3%</i>			0.3	1.0	2.8	3.6	3.4	3.4	3.6	Aug-15
Long Gov/Credit Composite	64,569,005	6.4	-0.7	1.2	9.8	9.5	4.8	4.0	7.1	Dec-10
PIMCO Long Duration Fixed	60,156,778	6.0	-0.7	1.2	9.3	9.2	4.4	3.7	7.3	Jun-08
<i>Barclays LT Govt/Credit</i>			-1.3	1.2	15.7	14.7	10.1	6.3	8.7	Jun-08
SSgA Long US Gov't Credit	4,028,026	0.4	-1.3	1.2	15.7	14.7	--	--	8.4	Jul-14
<i>Barclays LT Govt/Credit</i>			-1.3	1.2	15.7	14.7	10.1	6.3	8.4	Jul-14
High Yield Composite	44,263,766	4.4	0.2	4.1	10.1	8.9	4.4	6.5	--	Jul-10
Shenkman Capital High Yield Fixed	41,755,702	4.1	0.2	4.0	10.0	8.9	4.4	6.5	5.9	Jul-10
<i>Citi High Yield Market Index</i>			0.6	5.5	15.6	12.7	4.8	7.9	7.7	Jul-10
SSgA High Yield Bond	2,508,064	0.2	0.5	4.7	11.7	9.5	--	--	2.4	Jul-14
<i>Barclays High Yield</i>			0.7	5.6	15.1	12.7	5.3	8.3	3.7	Jul-14

Returns are net of manager fees.

Custom Fixed Benchmark: 21.3% Barclays Gov/Credit Long, 16.4% Barclays Capital Aggregate Index, 13.1% Barclays Capital US TIPS Index, 16.4% 3-Month Libor +300 BPS, 19.7% JPMorgan EMBI Global Index, 13.1% Citigroup High Yield Index.

Domestic Fixed Income Allocation Index: Weighted average calculation using actual asset allocation percentages and benchmark index returns.

City of Hartford Municipal Employees Retirement Fund

Net of Fees (Preliminary)

	Market Value (\$)	% of Portfolio	Ending September 30, 2016						Inception	
			1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Return (%)	Since
TIPS Composite	42,015,752	4.2	0.6	1.0	7.4	6.7	2.5	2.1	3.9	Dec-10
Brown Bros-Harriman Global TIPS	39,519,143	3.9	0.6	1.0	7.4	6.8	2.5	2.1	4.4	Apr-05
<i>Barclays US TIPS</i>			0.5	1.0	7.3	6.6	2.4	1.9	4.3	Apr-05
SSgA US TIPS Index	2,496,609	0.2	0.6	0.9	7.2	6.4	--	--	1.5	Jul-14
<i>Barclays US TIPS</i>			0.5	1.0	7.3	6.6	2.4	1.9	1.6	Jul-14
International Fixed Income Composite	67,315,422	6.7	1.3	3.9	13.4	14.9	7.4	6.4	5.8	Sep-10
<i>Barclays Global Aggregate</i>			0.6	0.8	9.9	8.8	2.1	1.7	2.5	Sep-10
Prudential Emerging Mkt Debt	63,567,930	6.3	1.3	4.0	13.2	14.9	10.3	10.3	9.6	Aug-05
<i>50% JPM EMBI Global Diversified/ 50% JPM GBI-EM Global Diversified</i>			1.2	3.2	15.9	16.6	2.7	3.9	6.8	Aug-05
SSgA Passive EM Local Currency	3,739,128	0.4	2.0	2.6	16.4	16.2	--	--	-5.6	Aug-14
<i>JP Morgan GBI EM</i>			1.4	1.2	17.2	15.7	-3.6	0.4	-6.9	Aug-14
Global Asset Allocation Composite	71,324,338	7.1	0.8	4.8	4.9	7.4	3.2	--	4.5	Apr-12
<i>60% MSCI World (Net) / 40% CITI WGBI</i>			0.6	3.0	7.9	11.0	4.4	7.3	5.7	Apr-12
Blackrock Global Allocation	36,263,671	3.6	0.5	3.8	3.6	6.6	3.3	--	5.0	May-12
<i>BlackRock Custom Index</i>			0.5	3.0	7.5	10.8	5.4	8.4	6.7	May-12
Wellington Opportunistic	35,060,667	3.5	1.2	5.9	6.3	8.4	3.7	--	4.7	May-12
<i>65% MSCI ACWI (Net) / 35% BC Agg</i>			0.4	3.6	6.5	9.8	4.9	8.1	6.3	May-12
Real Assets	6,888,760	0.7	0.4	4.1	7.5	-10.4	--	--	-27.7	Jul-14
<i>CPI + 4% (Unadjusted)</i>			0.6	1.2	5.1	5.5	5.1	5.3	4.6	Jul-14
<i>S&P GSCI Total Return Index</i>			4.1	-4.2	5.3	-12.2	-22.2	-12.6	-30.0	Jul-14
Magnetar Energy Opps Fund II	2,268,462	0.2	0.0	2.5	--	--	--	--	2.5	May-16
<i>CPI + 4% (Unadjusted)</i>			0.6	1.2	5.1	5.5	5.1	5.3	2.6	May-16
SSgA Real Assets	1,889,623	0.2	1.4	0.8	--	--	--	--	14.0	Mar-16
<i>CPI + 4% (Unadjusted)</i>			0.6	1.2	5.1	5.5	5.1	5.3	4.2	Mar-16
Riverstone Credit Partners	2,730,675	0.3	0.0	8.9	--	--	--	--	8.9	Jun-16
<i>CPI + 4% (Unadjusted)</i>			0.6	1.2	5.1	5.5	5.1	5.3	1.8	Jun-16

Returns are net of manager fees.

International Fixed Income Allocation Index: Weighted average calculation using actual asset allocation percentages and benchmark index returns.

Prudential Emerging Mkt Debt was benchmarked against the JP Morgan EMBI Global Diversified Index from inception to 4/30/2016. Starting on 5/1/2016, the benchmark was changed to 50% JP Morgan EMBI Global Diversified Index/50% JP Morgan GBI-EM Global Diversified Index.

Blackrock Custom Index: 36% S&P 500, 24% FTSE Developed World ex-US, 24% BofA ML US 5-7 Yr Treasury, 16% Citi Non-US WGBI.

City of Hartford Municipal Employees Retirement Fund

Net of Fees (Preliminary)

	Market Value (\$)	% of Portfolio	Ending September 30, 2016						Inception	
			1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Return (%)	Since
Total Alternatives Composite	229,072,363	22.7	0.3	2.5	5.2	7.4	10.3	9.8	9.0	Feb-07
<i>Alternatives Custom Benchmark</i>			1.0	2.9	5.1	7.5	7.5	9.1	5.3	Feb-07
Private Equity Composite	76,633,375	7.6	0.8	1.8	3.9	5.5	14.4	12.6	13.1	Dec-02
<i>Russell 3000 + 3%</i>			0.4	5.2	10.6	18.4	13.7	19.8	12.1	Dec-02
Private Debt	32,319,703	3.2	0.0	4.2	9.1	11.7	8.6	--	10.2	Apr-13
<i>Credit Suisse Leveraged Loan</i>			0.8	3.1	7.4	5.3	3.6	5.4	3.6	Apr-13
Real Estate Composite	69,962,173	6.9	-0.1	2.5	8.7	13.5	9.9	8.6	-3.1	Jul-98
<i>NCREIF Property Index</i>			1.8	1.8	6.1	9.2	11.3	11.2	9.4	Jul-98
Hedge Funds	50,157,112	5.0	0.4	2.3	0.5	0.4	--	--	--	May-14
<i>HFRI Fund of Funds Composite Index</i>			0.4	2.4	-0.3	0.5	2.2	3.2	1.2	May-14
Cash & Cash Equivalents	26,902,466	2.7	0.3	0.5	1.1	1.2	0.9	0.6	0.6	Jul-11
<i>91 Day T-Bills</i>			0.0	0.1	0.2	0.2	0.1	0.1	0.1	Jul-11
Cash	8,312,581	0.8	0.7	1.0	2.2	2.4	2.5	1.7	2.1	Jul-96
<i>91 Day T-Bills</i>			0.0	0.1	0.2	0.2	0.1	0.1	2.2	Jul-96
Benefits Payment Fund	18,585,735	1.8	0.0	0.1	0.3	0.3	0.2	0.2	1.8	Oct-96
<i>91 Day T-Bills</i>			0.0	0.1	0.2	0.2	0.1	0.1	2.2	Oct-96
COH Transition Account - BP Fund	4,151	0.0								
<i>91 Day T-Bills</i>										
Passive Portfolios Composite	59,751,431	5.9	0.2	3.1	8.6	10.6	4.3	7.5	7.3	Apr-09
<i>50% MSCI All Country World IMI (gross) / 50% Citigroup WGBI ex US</i>			0.9	3.1	11.0	13.0	3.7	5.9	8.3	Apr-09

Returns are net of manager fees.

Total Alternatives Composite Allocation Index: 31% NCREIF index, 19% Russell 3000 + 3%, 12% Credit Suisse Leveraged Loan Index, 38% HFRI Fund of Funds.

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Information Disclaimer

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- NEPC's source for portfolio pricing, calculation of accruals, and transaction information is the plan's custodian bank. Information on market indices and security characteristics is received from other sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may be preliminary and subject to change.
- This report is provided as a management aid for the client's internal use only. Information contained in this report does not constitute a recommendation by NEPC.
- This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

Reporting Methodology

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.