



Quarterly Investment Performance Analysis

Los Angeles Fire and Police Pension System

Period Ended: June 30, 2018



Los Angeles Fire and Police Pension System
Comparative Performance

As of June 30, 2018

	Quarter Ending Mar-2018	QTD	CYTD	FYTD/ 1 Year	3 Years	5 Years	7 Years	10 Years	2017	Since Incep.	Inception Date
Total Fund Composite	0.27	2.04	2.32	9.91	8.00	9.11	8.59	7.06	16.41	5.75	04/01/2000
Target Allocation Index	-0.45	1.46	1.00	9.66	7.85	8.45	7.83	6.90	16.76	5.85	
Difference	0.72	0.58	1.32	0.25	0.15	0.66	0.76	0.16	-0.35	-0.10	
All Public Plans-Total Fund Median	-0.27	1.24	0.99	8.56	6.92	8.17	7.66	6.87	15.50	5.89	
Rank	19	18	12	19	12	16	15	43	33	60	
Total Fund Composite Ex PE	-0.20	1.28	1.07	9.03	7.47	8.57	8.15	6.69	16.35	7.34	10/01/2004
Target Allocation Index Ex PE	-0.57	1.03	0.46	8.23	6.62	7.25	6.67	5.93	15.18	6.42	
Difference	0.37	0.25	0.61	0.80	0.85	1.32	1.48	0.76	1.17	0.92	
Domestic Equity Composite	-0.02	4.72	4.69	16.38	11.44	13.14	12.85	10.58	21.11	7.01	01/01/2001
Russell 3000 Index	-0.64	3.89	3.22	14.78	11.58	13.29	13.01	10.23	21.13	6.68	
Difference	0.62	0.83	1.47	1.60	-0.14	-0.15	-0.16	0.35	-0.02	0.33	
IM U.S. Equity (SA+CF) Median	-0.53	3.91	3.44	14.65	10.89	12.97	12.67	10.75	19.18	8.55	
Rank	42	41	41	38	42	48	47	54	41	76	
Domestic Large Cap Equity Composite	-0.33	3.87	3.53	15.80	12.13	13.65	13.45	10.58	22.59	7.70	04/01/2001
S&P 500 Index (Cap Wtd)	-0.76	3.43	2.65	14.37	11.93	13.42	13.23	10.17	21.83	7.17	
Difference	0.43	0.44	0.88	1.43	0.20	0.23	0.22	0.41	0.76	0.53	
IM U.S. Large Cap Equity (SA+CF) Median	-0.66	2.97	2.36	14.02	11.10	13.27	13.06	10.25	21.65	7.96	
Rank	42	30	33	35	31	39	36	40	41	62	
Domestic Small Cap Equity Composite	0.97	7.74	8.79	19.13	9.06	11.28	10.34	10.94	16.76	9.97	04/01/2001
Russell 2000 Index	-0.08	7.75	7.66	17.57	10.96	12.46	11.83	10.60	14.65	9.24	
Difference	1.05	-0.01	1.13	1.56	-1.90	-1.18	-1.49	0.34	2.11	0.73	
IM U.S. Small Cap Equity (SA+CF) Median	-0.26	6.95	6.50	16.89	11.38	13.18	12.66	11.56	15.13	11.06	
Rank	34	38	33	39	82	82	91	67	41	77	
Int'l Equity Composite	0.52	-3.19	-2.69	8.11	6.71	7.87	5.20	3.05	28.26	4.76	04/01/2000
MSCI ACW Ex US Index (USD) (Gross)	-1.08	-2.39	-3.44	7.79	5.56	6.48	4.28	3.01	27.77	4.15	
Difference	1.60	-0.80	0.75	0.32	1.15	1.39	0.92	0.04	0.49	0.61	
IM All ACWI Ex US (SA+CF) Median	-0.43	-1.93	-2.20	8.46	6.26	7.75	5.99	4.57	28.74	5.56	
Rank	24	79	60	55	41	49	70	88	54	74	
MSCI EAFE Index (USD) (Gross)	-1.41	-0.97	-2.37	7.37	5.41	6.93	5.37	3.33	25.62	3.65	04/01/2000
Int'l Developed Equity Composite	0.11	-1.76	-1.65	8.48	6.58	8.28	5.89	3.43	26.20	4.47	04/01/2000
MSCI ACW Ex US Index (USD) (Gross)	-1.08	-2.39	-3.44	7.79	5.56	6.48	4.28	3.01	27.77	4.15	
Difference	1.19	0.63	1.79	0.69	1.02	1.80	1.61	0.42	-1.57	0.32	
IM All ACWI Ex US (SA+CF) Median	-0.43	-1.93	-2.20	8.46	6.26	7.75	5.99	4.57	28.74	5.56	
Rank	34	46	39	50	43	41	53	76	68	81	

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	Quarter Ending Mar-2018	QTD	CYTD	FYTD/ 1 Year	3 Years	5 Years	7 Years	10 Years	2017	Since Incep.	Inception Date
Int'l Emerging Equity Composite	2.09	-8.19	-6.28	7.42	7.39	6.14	2.22	1.35	36.98	6.70	04/01/2000
MSCI Emg Mkts Index (USD) (Gross)	1.47	-7.86	-6.51	8.59	5.98	5.39	1.78	2.60	37.75	7.08	
Difference	0.62	-0.33	0.23	-1.17	1.41	0.75	0.44	-1.25	-0.77	-0.38	
IM Emerging Markets Equity (SA+CF) Median	1.86	-8.35	-6.68	7.25	6.30	5.91	3.20	3.61	36.91	8.52	
Rank	46	48	43	49	36	47	70	93	50	92	
Fixed Income Composite	-1.20	0.03	-1.17	1.18	3.20	3.50	4.23	5.56	5.21	5.30	04/01/2000
Bloomberg US Unv Bond Index	-1.41	-0.27	-1.67	-0.28	2.12	2.63	2.94	4.07	4.09	5.08	
Difference	0.21	0.30	0.50	1.46	1.08	0.87	1.29	1.49	1.12	0.22	
IM U.S. Broad Market Fixed Income (SA+CF) Median	-1.32	-0.12	-1.45	0.13	2.29	2.83	3.34	4.68	4.30	5.42	
Rank	35	21	23	10	12	21	14	14	20	60	
Domestic Core Fixed Income Composite	-1.87	-0.35	-2.22	0.04	2.87	3.39	4.24	5.40	5.56	5.60	04/01/2001
Bloomberg US Agg Bond Index	-1.46	-0.16	-1.62	-0.40	1.72	2.27	2.57	3.72	3.54	4.39	
Difference	-0.41	-0.19	-0.60	0.44	1.15	1.12	1.67	1.68	2.02	1.21	
IM U.S. Brd Mkt Core Fixed Income (SA+CF)	-1.38	-0.09	-1.46	-0.02	2.08	2.66	3.06	4.38	4.04	4.82	
Rank	99	96	99	45	9	10	3	5	5	2	
High Yield Fixed Income Composite	-0.14	0.34	0.20	3.47	6.34	6.29	7.08	8.13	7.55	6.58	04/01/2001
High Yield Custom Index	-0.91	1.00	0.08	2.54	5.56	5.51	6.39	7.87	7.48	7.86	
Difference	0.77	-0.66	0.12	0.93	0.78	0.78	0.69	0.26	0.07	-1.28	
IM U.S. High Yield Bonds (SA+CF) Median	-0.56	0.80	0.17	2.77	5.07	5.38	6.19	7.78	7.54	7.82	
Rank	29	86	49	30	13	15	11	33	50	93	
Unconstrained Fixed Income Composite	0.11	0.07	0.18	1.50	2.87	N/A	N/A	N/A	3.57	2.35	08/01/2014
3 Month LIBOR Index+3%	1.07	1.33	2.42	4.58	3.96	3.68	3.60	3.75	4.15	3.79	
Difference	-0.96	-1.26	-2.24	-3.08	-1.09	N/A	N/A	N/A	-0.58	-1.44	
Bloomberg US Agg Bond Index	-1.46	-0.16	-1.62	-0.40	1.72	2.27	2.57	3.72	3.54	1.86	
Difference	1.57	0.23	1.80	1.90	1.15	N/A	N/A	N/A	0.03	0.49	
Real Estate Composite	-1.20	2.81	1.58	5.50	8.09	9.70	10.26	4.75	8.69	8.16	04/01/2000
Real Estate Custom Index	-0.30	3.65	3.34	7.34	8.55	10.01	10.57	6.77	7.35	9.71	
Difference	-0.90	-0.84	-1.76	-1.84	-0.46	-0.31	-0.31	-2.02	1.34	-1.55	
NCREIF ODCE Index (AWA) (Net)+0.50%	2.10	1.94	4.08	8.01	8.92	10.58	10.91	4.86	7.20	7.82	04/01/2000
NCREIF Property Index+1%	1.95	2.06	4.06	8.26	9.33	10.87	11.33	7.29	8.03	10.00	04/01/2000
REITS Composite	-3.98	6.04	1.83	7.71	8.49	8.36	9.00	7.93	11.37	6.49	06/01/2006
REITS Custom Index	-5.86	7.71	1.40	5.51	7.22	6.96	7.87	6.89	7.54	5.66	
Difference	1.88	-1.67	0.43	2.20	1.27	1.40	1.13	1.04	3.83	0.83	
IM Global REIT (SA+CF) Median	-3.41	4.34	0.71	7.56	6.77	7.61	7.87	6.64	12.80	5.75	
Rank	63	11	19	41	17	22	17	7	74	12	

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	Quarter Ending Mar-2018	QTD	CYTD	FYTD/ 1 Year	3 Years	5 Years	7 Years	10 Years	2017	Since Incep.	Inception Date
US REITS Composite	-5.18	7.59	2.02	6.45	9.47	10.28	10.37	8.88	8.92	7.27	06/01/2006
DJ US Select RE Sec Index	-7.43	9.99	1.82	4.23	7.67	8.27	8.81	7.54	3.76	6.19	
Difference	2.25	-2.40	0.20	2.22	1.80	2.01	1.56	1.34	5.16	1.08	
IM U.S. REIT (SA+CF) Median	-6.74	8.40	1.36	4.49	8.50	9.02	9.72	8.87	6.35	7.48	
Rank	7	72	15	14	24	16	21	50	16	60	
Global REITS Composite	-2.57	4.30	1.61	9.00	7.31	N/A	N/A	N/A	14.13	7.86	02/01/2014
FTSE EPRA/NAREIT Dvl'd Index (\$) (Gross)	-4.30	5.45	0.91	6.70	6.70	6.89	7.25	5.73	11.42	7.43	
Difference	1.73	-1.15	0.70	2.30	0.61	N/A	N/A	N/A	2.71	0.43	
IM Global REIT (SA+CF) Median	-3.41	4.34	0.71	7.56	6.77	7.61	7.87	6.64	12.80	8.21	
Rank	23	51	21	19	38	N/A	N/A	N/A	40	61	
Passive Commodities Composite	-0.97	2.55	1.56	16.82	7.22	N/A	N/A	N/A	20.18	4.40	10/01/2013
Passive Commodities Custom Index	-0.96	2.69	1.70	16.32	7.15	N/A	N/A	N/A	19.65	4.43	
Difference	-0.01	-0.14	-0.14	0.50	0.07	N/A	N/A	N/A	0.53	-0.03	
Commodities Derivatives Composite	-0.41	1.17	0.76	9.20	N/A	N/A	N/A	N/A	3.92	0.59	08/01/2015
Bloomberg Cmdty Index (TR)	-0.40	0.40	0.00	7.35	-4.54	-6.40	-7.81	-9.04	1.70	-0.92	
Difference	-0.01	0.77	0.76	1.85	N/A	N/A	N/A	N/A	2.22	1.51	
Cash Equivalent Composite	0.41	0.51	0.92	1.62	0.95	0.64	0.52	0.55	1.23	1.92	04/01/2000
ICE BofAML 3 Mo US T-Bill Index	0.35	0.45	0.81	1.36	0.68	0.42	0.33	0.35	0.86	1.69	
Difference	0.06	0.06	0.11	0.26	0.27	0.22	0.19	0.20	0.37	0.23	

- Performance shown for the Cash Equivalent Composite is actual product performance provided by the manager.
- Please see the Alternative Investment Fund Performance Listing for Private Equity performance.
- Prior to Q1 2010, the Int'l Equity Composite and Int'l Developed Equity Composite were benchmarked to the MSCI EAFE Index (USD) (Gross).
- The High Yield Custom Index consists of the CS Hi Yld Index through 12/31/2011 and the BofA ML US Hi Yld Master II Cnst Index thereafter.
- The Real Estate Custom Index consists of 100% NCREIF Property Index + 1% through 3/31/2012, 85% NCREIF ODCE Index (AWA) (Net)+0.50% and 15% DJ US Select RE Sec Index through 12/31/2013, and 70% NCREIF ODCE Index (AWA) (Net)+0.50%, 15% DJ US Select RE Sec Index, and 15% FTSE EPRA/NAREIT Dvl'd Index thereafter.
- The REITS Custom Index consists of 100% DJ US Select RE Sec Index through 12/31/2013, and 50% DJ US Select RE Sec Index and 50% FTSE EPRA/NAREIT Dvl'd Index thereafter.
- Global REITS Composite was incepted on 1/13/2014. RVK, Inc. calculates performance beginning with the first full month following inception. Since Inception performance will differ from Northern Trust as a result.
- The Passive Commodities Custom Index is an active asset-weighted index that consists of the S&P Gbl Natural Res Sect Index (TR), S&P Gbl Water Index (TR), S&P MLP Index (TR), and S&P Gbl Timber & Forestry Index (TR).

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