

PORTFOLIO PERFORMANCE REVIEW

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM



Quarter Ending December 31, 2020



BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

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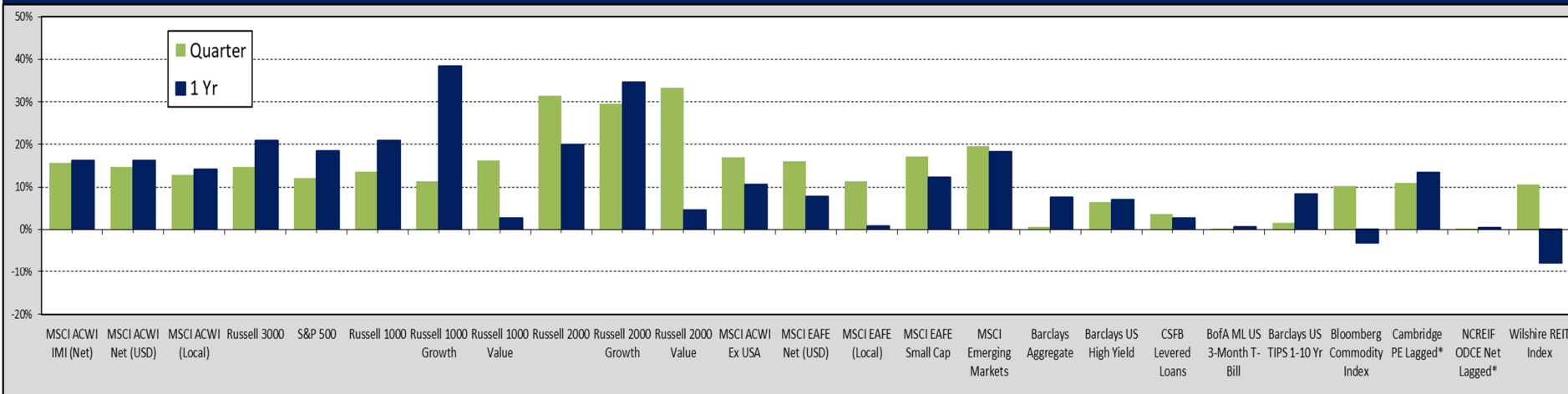


EXECUTIVE SUMMARY

NEPC, LLC

PERFORMANCE OVERVIEW

Q4 Market Summary – Risk Assets Rallied Significantly



	Market Value	3 Mo	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank	15 Yrs	Rank	Inception	Inception Date
LACERS Master Trust	\$20,959,422,719	10.32%	52	12.05%	43	12.05%	43	8.35%	38	9.93%	37	8.82%	26	7.34%	30	8.44%	Oct-94
Policy Index		10.84%	36	14.06%	21	14.06%	21	9.40%	21	10.74%	14	9.01%	20	7.45%	23	8.50%	Oct-94
InvMetrics Public DB \$1-50B Gross Median		10.41%		11.41%		11.41%		7.85%		9.41%		8.26%		6.91%		8.09%	Oct-94

Note: Performance is gross of fees

Risk assets rallied significantly as global fiscal and monetary stimulus buoys markets and investors cheered vaccination projections

- The U.S. Equity composite outperformed due to manager selection and the Non-U.S. Equity composite outperformed due to manager selection.

Credit spreads of investment-grade and high-yield debt tightened in the fourth quarter with some segments of the market reaching pre-pandemic levels

- The Core Fixed Income composite outperformed due to manager performance.

Private Equity and Private Real Estate underperformed their benchmark and detracted from relative returns versus Policy Index



MARKET OUTLOOK

NEPC, LLC

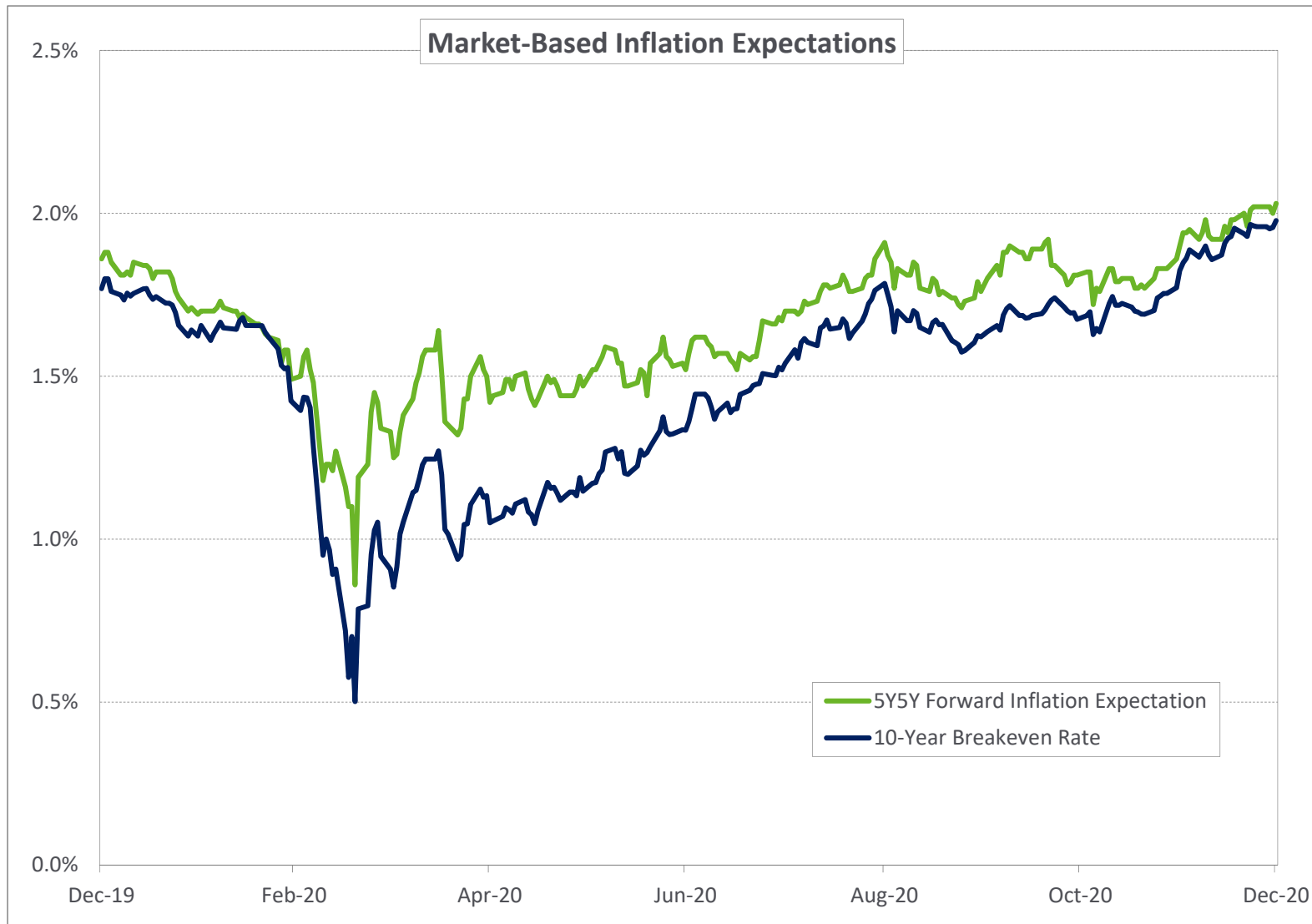
THE WORLD ECONOMY SHRANK IN 2020



Q4 2020 real GDP figure represents IMF forecast for 2020
GDP figures are seasonally adjusted and chained to 2005 dollars
Source: IMF, FactSet



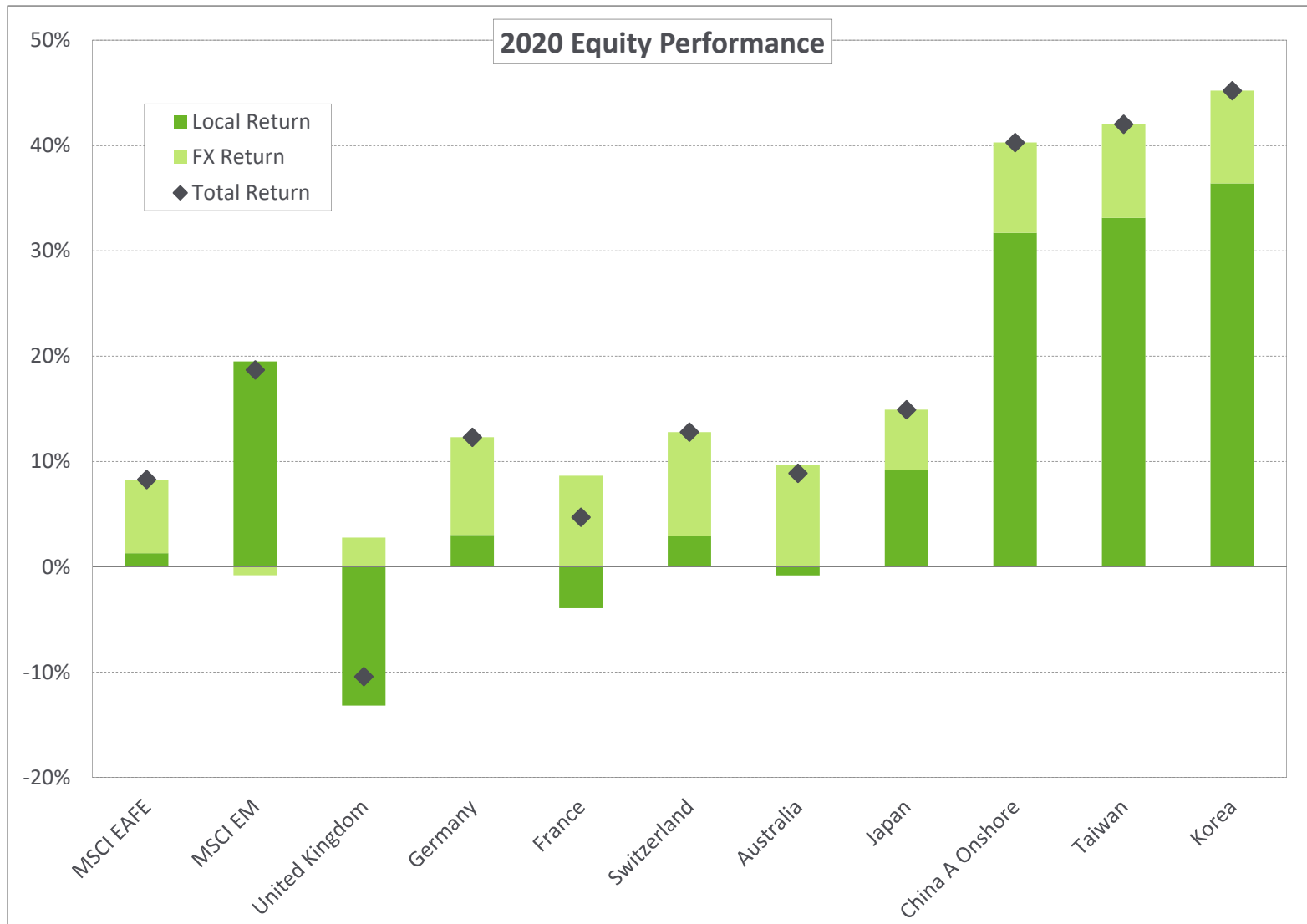
INFLATION EXPECTATIONS RECOVERED



Source: FactSet



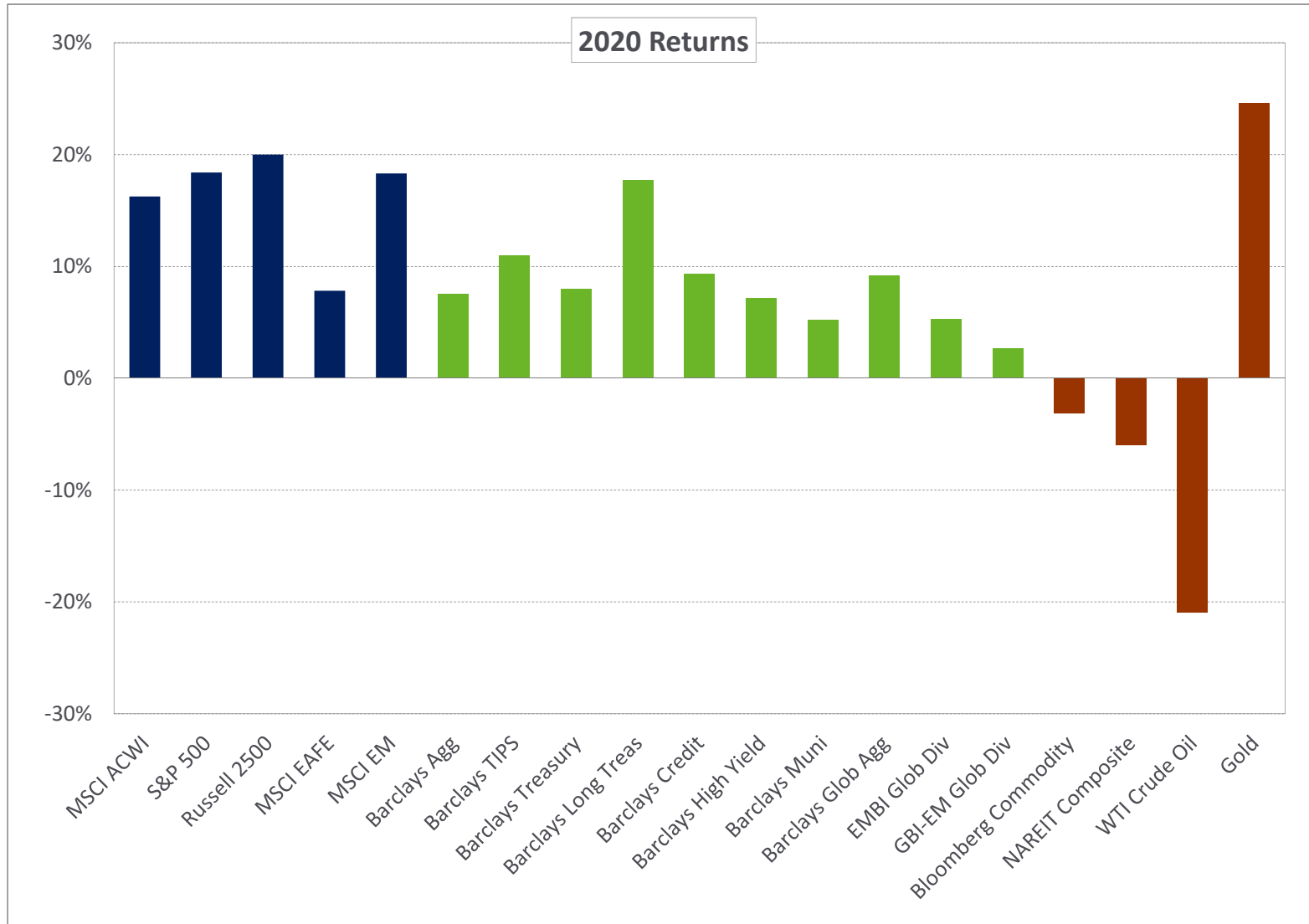
DOLLAR WEAKNESS SUPPORTED NON-US EQUITY



Source: MSCI, FactSet



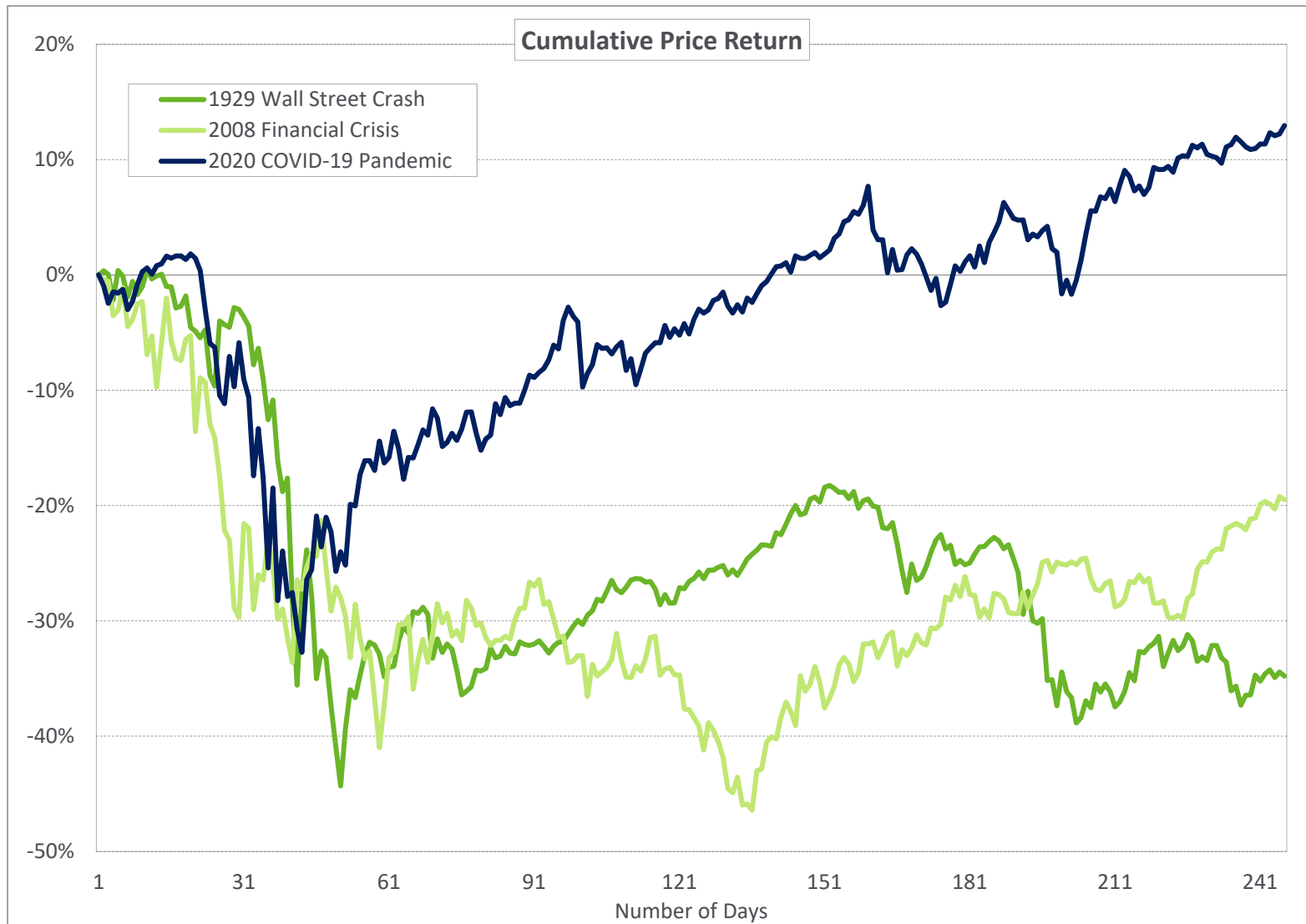
US AND EMERGING EQUITIES OUTPERFORMED



Source: S&P, Russell, MSCI, JPM, Bloomberg, FactSet



THE SHORTEST BEAR MARKET IN HISTORY

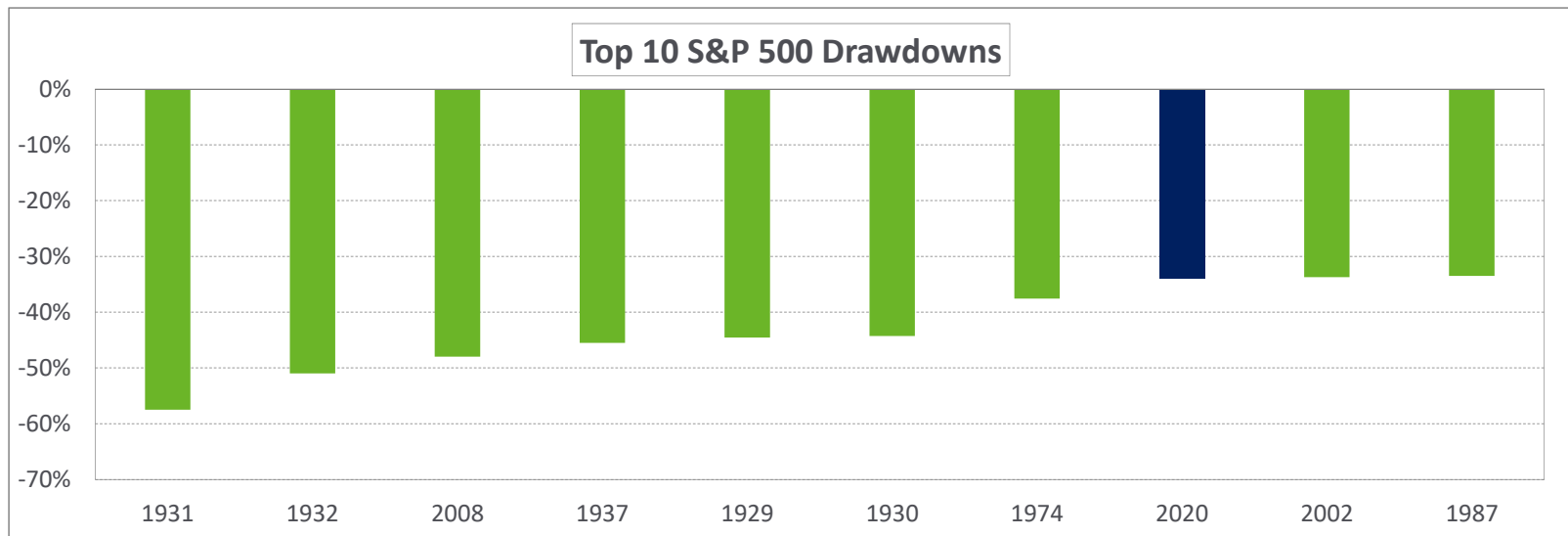
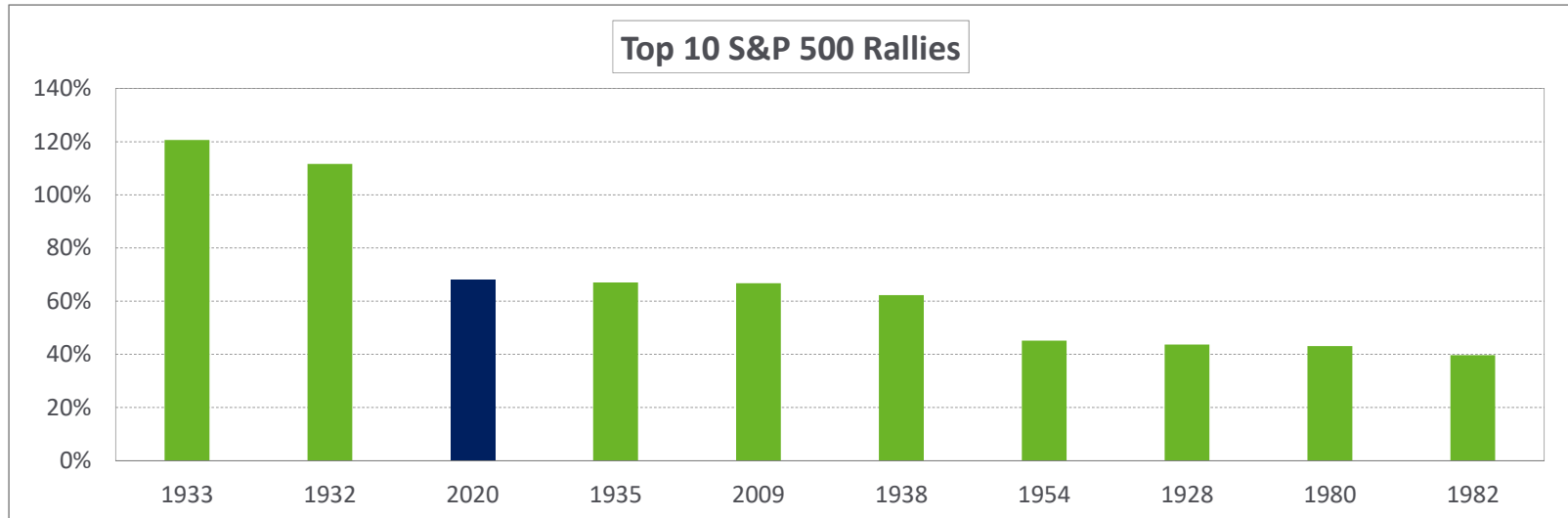


Source: S&P, FactSet

Financial Crisis represents S&P returns from 9/1/2008 – 8/10/2009; Wall Street Crash represents Dow Jones returns from 8/30/1929 – 8/25/1930; COVID-19 represents S&P returns from 1/23/2020 (representing the start of the Wuhan, China lockdown) – 12/31/2020



THE LARGEST EQUITY SWINGS SINCE 1932

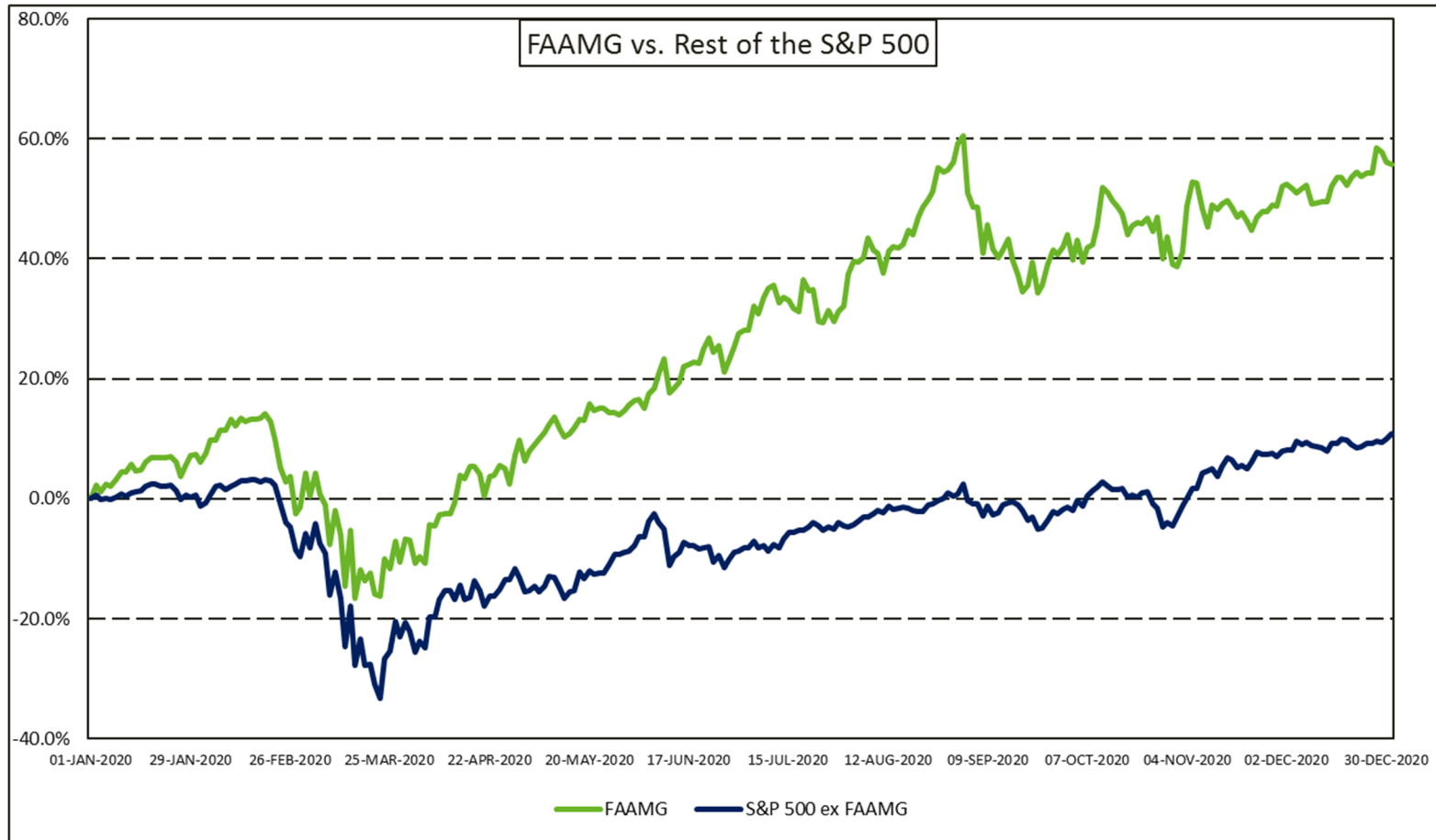


Source: S&P, FactSet

Rallies and drawdowns represent the largest trough-to-peak and peak-to-trough within a calendar year



FAAMG DROVE US EQUITY RETURNS HIGHER



FAAMG is an acronym for Facebook, Apple, Amazon, Microsoft, Google



QE PUSHED YIELDS INTO NEGATIVE TERRITORY

Government Bond Yields	6M	1Y	2Y	3Y	5Y	7Y	10Y	15Y	30Y
Germany	-0.7%	-0.7%	-0.7%	-0.8%	-0.7%	-0.7%	-0.6%	-0.4%	-
Netherlands	-	-0.7%	-0.7%	-0.7%	-0.7%	-0.6%	-0.5%	-0.4%	-0.1%
France	-0.7%	-0.7%	-0.7%	-0.7%	-0.7%	-0.6%	-0.3%	-0.2%	0.4%
Austria	-0.6%	-0.7%	-0.7%	-0.7%	-0.7%	-0.6%	-0.4%	-	0.1%
Switzerland	-	-0.8%	-0.8%	-0.8%	-0.7%	-0.6%	-0.5%	-	-0.3%
Belgium	-	-0.7%	-0.7%	-0.7%	-0.7%	-0.6%	-0.4%	-0.2%	0.3%
Japan	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	0.0%	0.2%	0.6%
Finland	-0.7%	-0.7%	-0.7%	-0.7%	-	-0.6%	-	-	0.0%
Portugal	-0.9%	-0.8%	-0.7%	-0.5%	-0.4%	-0.2%	0.0%	-	-
Italy	-0.6%	-0.6%	-0.4%	-0.3%	-0.0%	0.2%	0.5%	0.9%	1.4%
United Kingdom	-0.0%	-0.2%	-0.2%	-0.1%	-0.1%	0.0%	0.2%	0.4%	0.7%
Sweden	-0.2%	-	-0.4%	-	-0.2%	-0.2%	0.0%	-	-
Denmark	-	-	-0.6%	-0.6%	-0.6%	-	-0.5%	-	-
Spain	-	-	-0.6%	-0.6%	-0.4%	-0.3%	0.0%	-	0.9%
Australia	-	0.0%	0.1%	0.1%	0.3%	0.6%	1.0%	1.3%	2.0%
Canada	0.1%	0.2%	0.2%	0.3%	0.4%	0.5%	0.7%	-	1.2%
Hong Kong	0.0%	0.1%	0.1%	0.2%	0.3%	0.5%	0.8%	-	-
New Zealand	0.3%	-	0.3%	0.3%	0.4%	0.7%	1.0%	-	-
Norway	0.0%	-	0.3%	-	0.7%	0.7%	0.9%	-	-
Singapore	0.3%	0.4%	0.3%	0.3%	0.5%	0.8%	0.8%	-	1.1%
United States	0.1%	0.1%	0.1%	0.2%	0.4%	0.6%	0.9%	-	1.6%

Source: FactSet

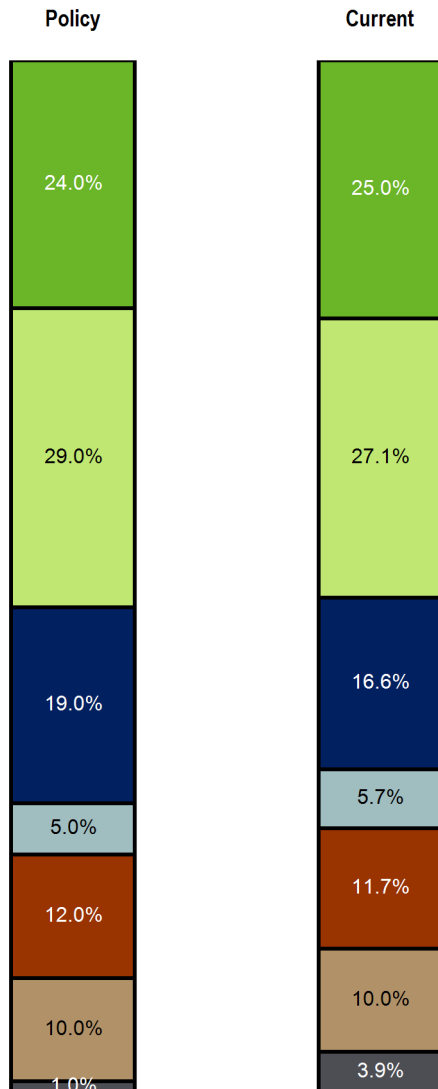


ASSET CLASS POLICY OVERVIEW

NEPC, LLC

Los Angeles City Employees' Retirement System

TOTAL FUND ASSET ALLOCATION VS. POLICY



Asset Allocation vs. Target						
	Current	Policy	Current Difference*	Policy Range	Within Range	
U.S. Equity	\$5,232,935,095	24.00%	24.97%	0.97%	19.00% - 29.00%	Yes
Non-US Equity	\$5,678,696,863	29.00%	27.09%	-1.91%	24.00% - 34.00%	Yes
Core Fixed Income	\$3,486,448,653	19.00%	16.63%	-2.37%	15.00% - 22.00%	Yes
Credit Opportunities	\$1,198,630,373	5.00%	5.72%	0.72%	0.00% - 10.00%	Yes
Private Equity Real	\$2,449,519,629	12.00%	11.69%	-0.31%	0.00% - 100.00%	Yes
Assets	\$2,105,856,735	10.00%	10.05%	0.05%	7.00% - 13.00%	Yes
Cash ¹	\$807,335,371	1.00%	3.85%	2.85%	0.00% - 2.00%	No
Total	\$20,959,422,719	100.00%	100.00%			

*Difference between Policy and Current Allocation

1 - LACERS has a temporary policy of being able to hold cash outside of the stated bound

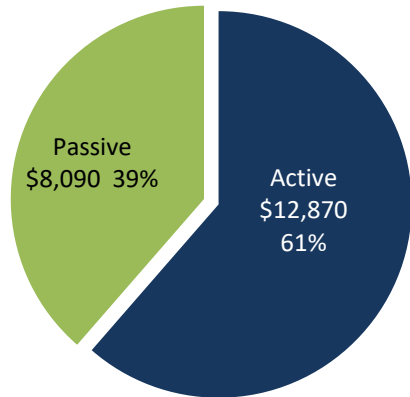
Note: Policy Target Asset Allocation does not reflect the new target asset allocation adopted on April 10, 2018. Implementation of the new asset allocation is currently in progress.



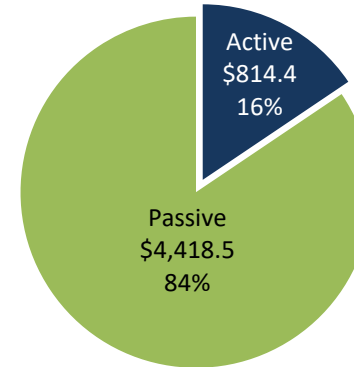
ACTIVE VS. PASSIVE MANAGER BREAKDOWN

Note: Market values shown in millions \$(000).

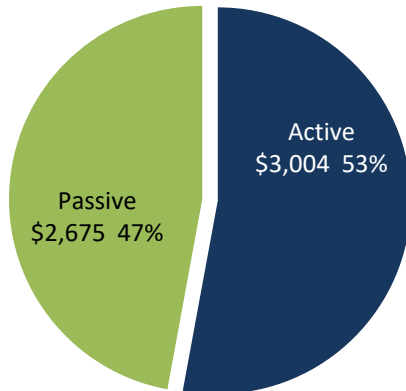
Total Fund



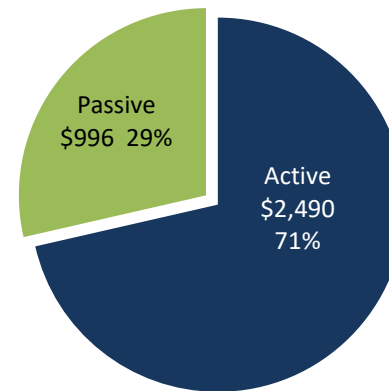
U.S. Equity



Non-U.S. Equity



Core Fixed Income



- LACERS allocated 61% to active managers and 39% to passive managers.
- Credit Opportunities, Private Equity, and Real Assets programs are active and therefore are not shown.



PERFORMANCE OVERVIEW

NEPC, LLC

TOTAL FUND PERFORMANCE SUMMARY (GROSS OF FEES)

	Market Value	3 Mo	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank	15 Yrs	Rank	Inception	Inception Date
LACERS Master Trust	\$20,959,422,719	10.32%	52	12.05%	43	12.05%	43	8.35%	38	9.93%	37	8.82%	26	7.34%	30	8.44%	Oct-94
Policy Index		10.84%	36	14.06%	21	14.06%	21	9.40%	21	10.74%	14	9.01%	20	7.45%	23	8.50%	Oct-94
InvMetrics Public DB \$1-50B Gross Median		10.41%		11.41%		11.41%		7.85%		9.41%		8.26%		6.91%		8.09%	Oct-94

Over the past five years, the Fund returned 9.93% and outperformed the actuarial rate of return but underperformed the policy index by 0.81%. This return ranks in the 37th percentile within the Public Funds \$1 Billion- \$50 Billion universe. The Fund's volatility of 8.98% ranked in the 52nd percentile over this period. The Fund's risk-adjusted performance, as measured by the Sharpe Ratio, ranks in the 45th percentile and the Sortino Ratio ranks in the 33rd percentile; indicating that active management benefited the Plan.

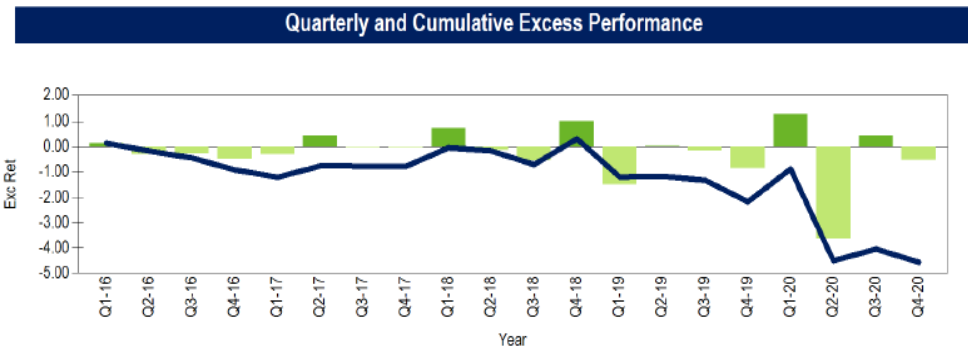
Over the past three years, the Fund return of 8.35% underperformed the policy index by 1.05% and ranked in the 38th percentile in its peer group. The Fund's volatility ranks in the 55th percentile, the Sharpe Ratio of 0.63 ranks in the 45th percentile and the Sortino Ratio of 0.80 ranks in the 34th percentile.

In the one-year ended December 31, 2020, assets increased from \$18.87 billion twelve months ago to \$20.96 billion. The Fund returned 12.05% and underperformed the policy index by 2.01%. The Fund's return ranks in the 43rd percentile in its peer group.

All asset classes were within policy range as of December 31, 2020.

The InvMetrics Public Funds \$1 Billion- \$50 Billion Universe contains 89 observations for the period ending December 31, 2020.

Please refer to page 64 in the appendix for a comparison versus InvMetrics Public Funds DB \$5-\$50B universe.



5 Years Ending December 31, 2020								
	Annualized Return (%)	Rank	Annualized Standard Deviation	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
LACERS Master Trust	9.93%	37	8.98%	52	0.98	45	1.08	33
Policy Index	10.74%	14	10.30%	86	0.93	54	1.06	37
InvMetrics Public DB \$1-50B Gross Median	9.41%	--	8.95%	--	0.96	--	0.99	--

3 Years Ending December 31, 2020								
	Annualized Return (%)	Rank	Annualized Standard Deviation	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
LACERS Master Trust	8.35%	38	10.92%	55	0.63	45	0.80	34
Policy Index	9.40%	21	12.58%	86	0.63	45	0.83	31
InvMetrics Public DB \$1-50B Gross Median	7.85%	--	10.78%	--	0.61	--	0.73	--



Los Angeles City Employees' Retirement System

TOTAL FUND PERFORMANCE DETAIL (GROSS)

	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	20 Yrs (%)	Inception (%)	Inception Date
LACERS Master Trust	20,959,422,719	100.00	10.32	12.05	12.05	8.35	9.93	8.82	7.14	8.44	Oct-94
Policy Index			<u>10.84</u>	<u>14.06</u>	<u>14.06</u>	<u>9.40</u>	<u>10.74</u>	<u>9.01</u>	<u>6.96</u>	<u>8.50</u>	Oct-94
Over/Under			-0.52	-2.01	-2.01	-1.05	-0.81	-0.19	0.18	-0.06	
U.S. Equity	5,232,935,095	24.97	15.29	19.07	19.07	13.74	14.92	13.42	8.28	11.00	Oct-94
U.S. Equity Blend			<u>14.68</u>	<u>20.89</u>	<u>20.89</u>	<u>14.49</u>	<u>15.43</u>	<u>13.79</u>	<u>7.82</u>	<u>10.06</u>	Oct-94
Over/Under			0.61	-1.82	-1.82	-0.75	-0.51	-0.37	0.46	0.94	
Non-U.S. Equity	5,678,696,863	27.09	18.44	14.93	14.93	6.55	10.35	6.38	6.24	5.77	Nov-94
MSCI ACWI ex USA			<u>17.01</u>	<u>10.65</u>	<u>10.65</u>	<u>4.88</u>	<u>8.93</u>	<u>4.92</u>	<u>5.23</u>	<u>5.43</u>	Nov-94
Over/Under			1.43	4.28	4.28	1.67	1.42	1.46	1.01	0.34	
Core Fixed Income	3,486,448,653	16.63	1.17	9.09	9.09	5.93	5.08			4.13	Jul-12
Core Fixed Income Blend			<u>0.67</u>	<u>7.51</u>	<u>7.51</u>	<u>5.34</u>	<u>4.44</u>			<u>3.44</u>	Jul-12
Over/Under			0.50	1.58	1.58	0.59	0.64			0.69	
Credit Opportunities	1,198,630,373	5.72	6.01	4.99	4.99	5.45	7.69			5.88	Jun-13
Credit Opportunities Blend			<u>6.22</u>	<u>6.45</u>	<u>6.45</u>	<u>5.83</u>	<u>8.07</u>			<u>6.20</u>	Jun-13
Over/Under			-0.21	-1.46	-1.46	-0.38	-0.38			-0.32	
Real Assets	2,105,856,735	10.05	2.94	2.75	2.75	4.58	5.59	7.69	5.16	6.18	Nov-94
CPI + 5% (Unadjusted)			<u>1.30</u>	<u>6.42</u>	<u>6.42</u>	<u>6.94</u>	<u>7.04</u>	<u>6.82</u>	<u>7.13</u>	<u>7.25</u>	Nov-94
Over/Under			1.64	-3.67	-3.67	-2.36	-1.45	0.87	-1.97	-1.07	
Public Real Assets	1,296,377,277	6.19	4.30	7.04	7.04	4.88	5.11			2.90	Jun-14
Public Real Assets Blend			<u>6.95</u>	<u>4.74</u>	<u>4.74</u>	<u>3.31</u>	<u>4.07</u>			<u>0.63</u>	Jun-14
Over/Under			-2.65	2.30	2.30	1.57	1.04			2.27	
Private Real Estate	791,188,233	3.77	0.89	-3.59	-3.59	3.50	5.53	8.49	5.54	6.47	Oct-94
Real Estate Blend			<u>1.49</u>	<u>1.98</u>	<u>1.98</u>	<u>5.75</u>	<u>7.06</u>	<u>10.16</u>	<u>8.76</u>	<u>9.49</u>	Oct-94
Over/Under			-0.60	-5.57	-5.57	-2.25	-1.53	-1.67	-3.22	-3.02	
Private Equity	2,449,519,629	11.69	9.39	13.71	13.71	12.63	11.79	12.43	9.57	10.54	Nov-95
Private Equity Blend			<u>15.50</u>	<u>24.47</u>	<u>24.47</u>	<u>17.89</u>	<u>18.86</u>	<u>17.34</u>	<u>11.65</u>	<u>13.70</u>	Nov-95
Over/Under			-6.11	-10.76	-10.76	-5.26	-7.07	-4.91	-2.08	-3.16	
Cash	807,335,371	3.85									



Los Angeles City Employees' Retirement System

TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	20 Yrs (%)	Inception (%)	Inception Date
LACERS Master Trust	20,959,422,719	100.00	10.27	11.87	11.87	8.16	9.74	8.63			Oct-94
Policy Index			<u>10.84</u>	<u>14.06</u>	<u>14.06</u>	<u>9.40</u>	<u>10.74</u>	<u>9.01</u>			Oct-94
Over/Under			-0.57	-2.19	-2.19	-1.24	-1.00	-0.38			
U.S. Equity	5,232,935,095	24.97	15.27	19.02	19.02	13.68	14.85	13.28			Oct-94
U.S. Equity Blend			<u>14.68</u>	<u>20.89</u>	<u>20.89</u>	<u>14.49</u>	<u>15.43</u>	<u>13.79</u>			Oct-94
Over/Under			0.59	-1.87	-1.87	-0.81	-0.58	-0.51			
Non-U.S. Equity	5,678,696,863	27.09	18.34	14.54	14.54	6.16	9.96	6.02			Nov-94
MSCI ACWI ex USA			<u>17.01</u>	<u>10.65</u>	<u>10.65</u>	<u>4.88</u>	<u>8.93</u>	<u>4.92</u>			Nov-94
Over/Under			1.33	3.89	3.89	1.28	1.03	1.10			
Core Fixed Income	3,486,448,653	16.63	1.15	8.98	8.98	5.83	4.97		4.02		Jul-12
Core Fixed Income Blend			<u>0.67</u>	<u>7.51</u>	<u>7.51</u>	<u>5.34</u>	<u>4.44</u>		<u>3.44</u>		Jul-12
Over/Under			0.48	1.47	1.47	0.49	0.53		0.58		
Credit Opportunities	1,198,630,373	5.72	5.94	4.70	4.70	5.14	7.35		5.54		Jun-13
Credit Opportunities Blend			<u>6.22</u>	<u>6.45</u>	<u>6.45</u>	<u>5.83</u>	<u>8.07</u>		<u>6.20</u>		Jun-13
Over/Under			-0.28	-1.75	-1.75	-0.69	-0.72		-0.66		
Real Assets	2,105,856,735	10.05	2.90	2.60	2.60	4.42	5.42	7.55		--	Nov-94
CPI + 5% (Unadjusted)			<u>1.30</u>	<u>6.42</u>	<u>6.42</u>	<u>6.94</u>	<u>7.04</u>	<u>6.82</u>		<u>7.25</u>	Nov-94
Over/Under			1.60	-3.82	-3.82	-2.52	-1.62	0.73			
Public Real Assets	1,296,377,277	6.19	4.26	6.83	6.83	4.66	4.86		2.70		Jun-14
Public Real Assets Blend			<u>6.95</u>	<u>4.74</u>	<u>4.74</u>	<u>3.31</u>	<u>4.07</u>		<u>0.63</u>		Jun-14
Over/Under			-2.69	2.09	2.09	1.35	0.79		2.07		
Private Real Estate	791,188,233	3.77	0.86	-3.68	-3.68	3.41	5.45	8.38			Oct-94
Real Estate Blend			<u>1.49</u>	<u>1.98</u>	<u>1.98</u>	<u>5.75</u>	<u>7.06</u>	<u>10.16</u>			Oct-94
Over/Under			-0.63	-5.66	-5.66	-2.34	-1.61	-1.78			
Private Equity	2,449,519,629	11.69	9.39	13.71	13.71	12.64	11.81	12.44			Nov-95
Private Equity Blend			<u>15.50</u>	<u>24.47</u>	<u>24.47</u>	<u>17.89</u>	<u>18.86</u>	<u>17.34</u>			Nov-95
Over/Under			-6.11	-10.76	-10.76	-5.25	-7.05	-4.90			
Cash	807,335,371	3.85									



Los Angeles City Employees' Retirement System

TOTAL FUND RISK STATISTICS (NET)

3 Years Ending December 31, 2020

	% of Total MV (%)	Annualized Return (%)	Rank	Annualized Standard Deviation	Rank	Annualized Alpha Jensen (%)	Rank	Information Ratio	Rank	Sortino Ratio RF	Rank	Tracking Error	Rank
LACERS Master Trust	100.00%	8.16%	43	10.93%	56	-0.16%	54	-0.60	85	0.78	37	2.07%	67
Total Equity	52.06%	9.53%	46	18.87%	68	-0.18%	55	-0.20	53	0.56	51	0.93%	13
U.S. Equity	24.97%	13.68%	36	19.68%	46	-0.80%	40	-0.95	58	0.80	39	0.86%	16
Non-U.S. Equity	27.09%	6.16%	33	18.78%	60	1.18%	32	0.84	26	0.35	42	1.51%	17
Developed ex-U.S.	20.08%	6.04%	51	19.02%	73	1.65%	49	0.75	49	0.34	53	2.34%	34
Emerging Markets	7.01%	5.83%	32	20.22%	66	-0.41%	30	-0.18	36	0.33	28	1.89%	18
Core Fixed Income	16.63%	5.83%	36	3.41%	11	0.55%	27	0.79	5	3.02	9	0.62%	13
Credit Opportunities	5.72%	5.14%	--	10.74%	--	-1.14%	--	-0.41	--	0.29	--	1.70%	--
Real Assets	10.05%	4.42%	47	3.76%	11	1.22%	63	-0.66	92	0.91	30	3.80%	15
Public Real Assets	6.19%	4.66%	--	6.37%	--	2.02%	--	0.33	--	0.59	--	4.12%	--
Private Real Estate	3.77%	3.41%	85	2.78%	65	2.09%	14	-0.58	89	0.81	89	4.02%	89
Private Equity	11.69%	12.64%	52	9.15%	60	11.55%	24	-0.24	67	1.65	65	22.14%	86

5 Years Ending December 31, 2020

	% of Total MV (%)	Annualized Return (%)	Rank	Annualized Standard Deviation	Rank	Annualized Alpha Jensen (%)	Rank	Information Ratio	Rank	Sortino Ratio RF	Rank	Tracking Error	Rank
LACERS Master Trust	100.00%	9.74%	41	8.99%	52	0.27%	51	-0.60	88	1.06	37	1.68%	62
Total Equity	52.06%	12.17%	44	15.50%	59	0.02%	41	0.03	35	0.82	46	0.80%	8
U.S. Equity	24.97%	14.85%	44	16.08%	42	-0.62%	37	-0.74	66	0.95	32	0.79%	14
Non-U.S. Equity	27.09%	9.96%	35	15.82%	59	0.84%	32	0.77	16	0.73	47	1.34%	13
Developed ex-U.S.	20.08%	9.07%	52	15.93%	62	1.45%	46	0.81	33	0.66	55	2.00%	28
Emerging Markets	7.01%	12.68%	16	17.93%	73	-0.32%	16	-0.09	18	0.94	15	1.57%	13
Core Fixed Income	16.63%	4.97%	54	3.13%	12	0.62%	52	0.93	5	2.09	1	0.58%	17
Credit Opportunities	5.72%	7.35%	--	8.71%	--	-1.29%	--	-0.49	--	0.57	--	1.50%	--
Real Assets	10.05%	5.42%	32	3.18%	4	1.11%	72	-0.51	92	1.50	30	3.17%	6
Public Real Assets	6.19%	4.86%	--	5.56%	--	1.79%	--	0.24	--	0.85	--	3.35%	--
Private Real Estate	3.77%	5.45%	76	2.37%	34	4.62%	8	-0.41	86	1.80	74	3.97%	83
Private Equity	11.69%	11.81%	49	7.36%	48	10.94%	22	-0.40	66	1.87	73	17.85%	79

Sortino Ratio RF = Sortino Ratio Risk Free. The risk free rate is the Citi 91 Day T-Bill Index.

Peer universe: InvMetrics Public DB \$1-50B Gross (USD)

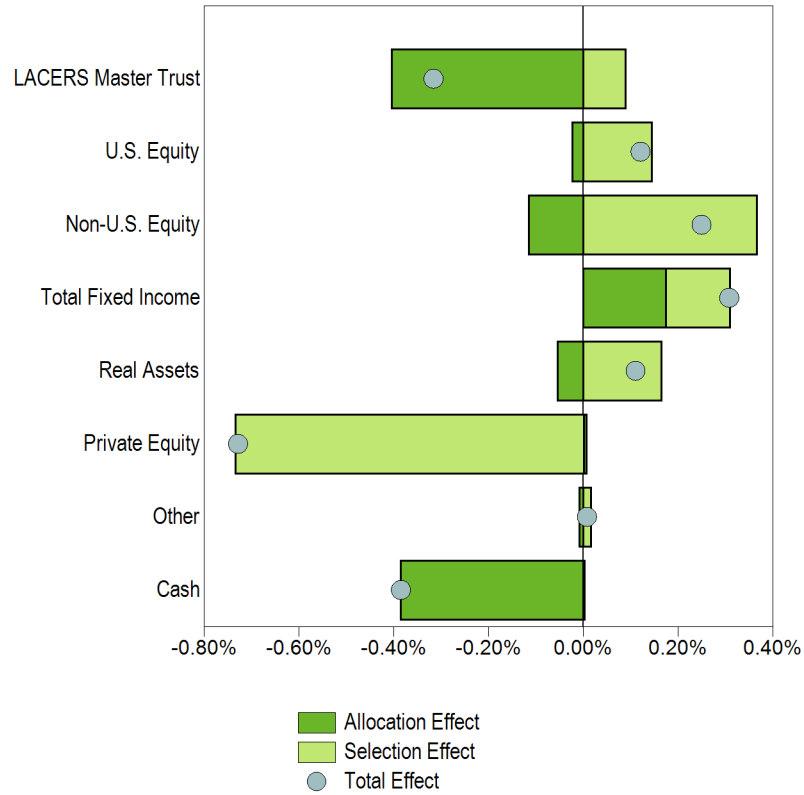
Note: Please refer to page 65 for a comparison against the InvMetrics Public Funds \$5-\$50B universe.



Los Angeles City Employees' Retirement System

TOTAL FUND ATTRIBUTION ANALYSIS (NET)

Attribution Effects 3 Months Ending December 31, 2020



Attribution Summary 3 Months Ending December 31, 2020							
	Policy Weight	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
U.S. Equity	24.00%	15.27%	14.68%	0.59%	0.14%	-0.03%	0.11%
Non-U.S. Equity	29.00%	18.34%	17.01%	1.32%	0.33%	-0.16%	0.17%
Total Fixed Income	24.00%	2.40%	1.81%	0.59%	0.14%	0.13%	0.27%
Real Assets	10.00%	2.90%	1.30%	1.60%	0.16%	-0.05%	0.11%
Private Equity	12.00%	9.39%	15.50%	-6.10%	-0.71%	0.00%	-0.71%
Other					-0.05%	-0.06%	-0.11%
Cash	1.00%	0.04%	0.02%	0.02%	0.00%	-0.38%	-0.38%
Total	100.00%	10.30%	10.84%	-0.54%	0.01%	-0.55%	-0.54%

Wtd. = Weighted

Note: Policy Target Asset Allocation does not reflect the new target asset allocation adopted on April 10, 2018. Implementation of the new asset allocation is currently in progress.

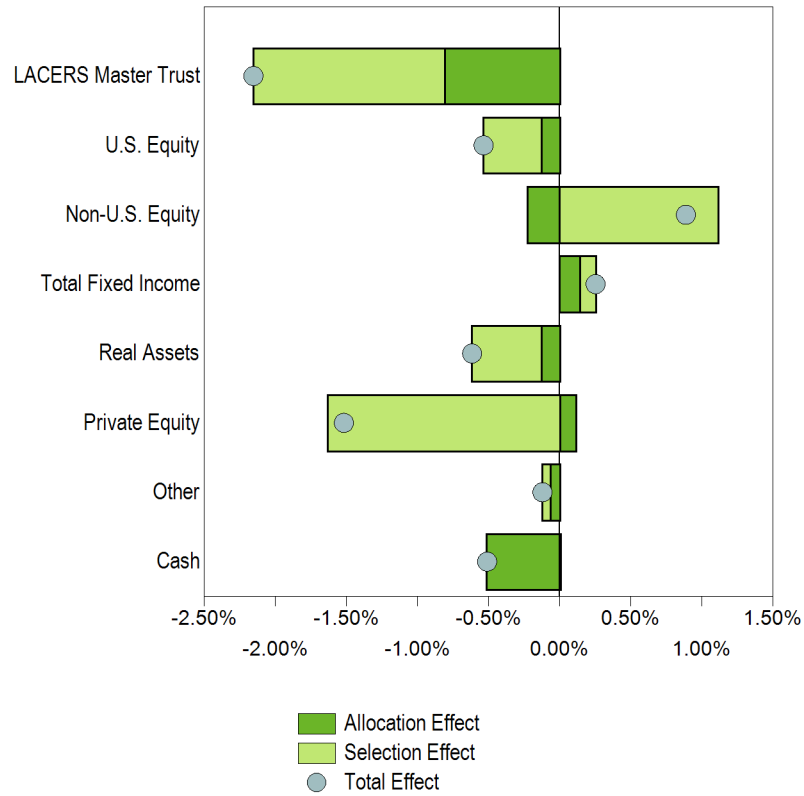
Other composite is comprised of securities lending income, tax reclaims and other miscellaneous transactions.



Los Angeles City Employees' Retirement System

TOTAL FUND ATTRIBUTION ANALYSIS (NET)

Attribution Effects 1 Year Ending December 31, 2020



Attribution Summary 1 Year Ending December 31, 2020							
	Policy Wtd. Weight	Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
U.S. Equity	24.00%	19.02%	20.89%	-1.86%	-0.40%	-0.13%	-0.53%
Non-U.S. Equity	29.00%	14.54%	10.65%	3.89%	1.11%	-0.22%	0.89%
Total Fixed Income	24.00%	8.11%	7.47%	0.63%	0.11%	0.14%	0.25%
Real Assets	10.00%	2.60%	6.42%	-3.83%	-0.48%	-0.13%	-0.62%
Private Equity	12.00%	13.71%	24.47%	-10.75%	-1.63%	0.11%	-1.52%
Other					-0.05%	-0.07%	-0.12%
Cash	1.00%	0.61%	0.45%	0.16%	0.00%	-0.51%	-0.51%
Total	100.00%	11.91%	14.06%	-2.15%	-1.34%	-0.81%	-2.15%

Wtd. = Weighted

Note: Policy Target Asset Allocation does not reflect the new target asset allocation adopted on April 10, 2018. Implementation of the new asset allocation is currently in progress.

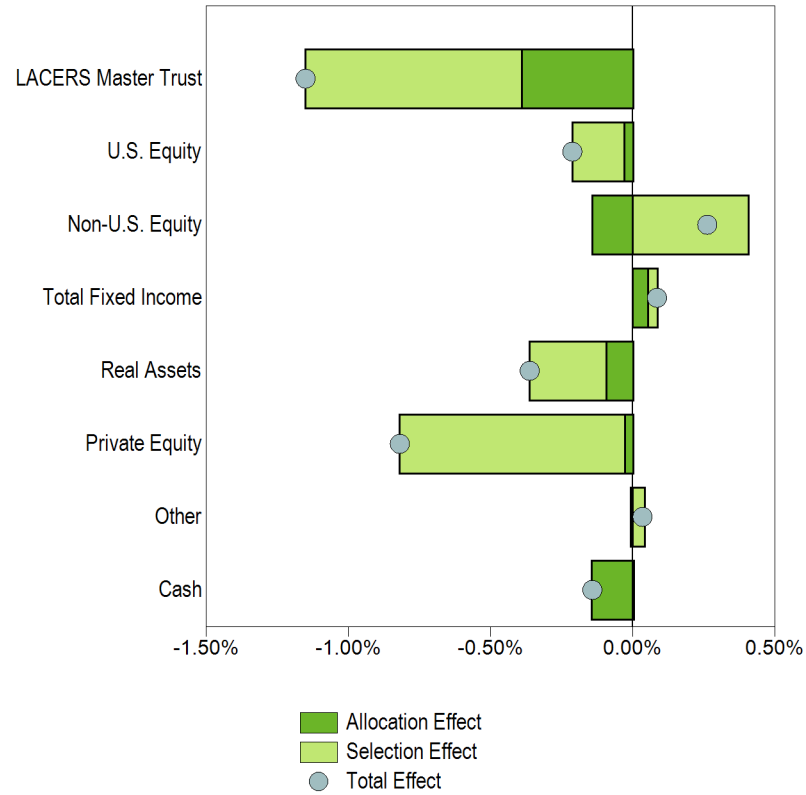
Other composite is comprised of securities lending income, tax reclaims and other miscellaneous transactions.



Los Angeles City Employees' Retirement System

TOTAL FUND ATTRIBUTION ANALYSIS (NET)

Attribution Effects 3 Years Ending December 31, 2020



Attribution Summary 3 Years Ending December 31, 2020							
	Policy Weight	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
U.S. Equity	24.00%	13.68%	14.49%	-0.82%	-0.18%	-0.02%	-0.21%
Non-U.S. Equity	29.00%	6.16%	4.88%	1.28%	0.40%	-0.16%	0.24%
Total Fixed Income	24.00%	5.73%	5.52%	0.21%	0.03%	0.05%	0.08%
Real Assets	10.00%	4.42%	6.94%	-2.52%	-0.27%	-0.09%	-0.36%
Private Equity	12.00%	12.64%	17.89%	-5.26%	-0.79%	-0.03%	-0.82%
Other					0.02%	-0.03%	-0.01%
Cash	1.00%	1.66%	1.48%	0.18%	0.00%	-0.14%	-0.14%
Total	100.00%	8.19%	9.40%	-1.21%	-0.79%	-0.42%	-1.21%

Wtd. = Weighted

Note: Policy Target Asset Allocation does not reflect the new target asset allocation adopted on April 10, 2018. Implementation of the new asset allocation is currently in progress.

Other composite is comprised of securities lending income, tax reclaims and other miscellaneous transactions.



PRIVATE MARKETS PERFORMANCE AS OF SEPTEMBER 30, 2020

Private Equity	10 Year IRR	Since Inception IRR	Since Inception Multiple
Aggregate Portfolio	12.5%	11.2%	1.57x
Core Portfolio	13.2%	11.8%	1.59x
Specialized Portfolio	3.9%	1.8%	1.12x
Russell 3000 + 300 bps	16.5%	12.2%	N/A

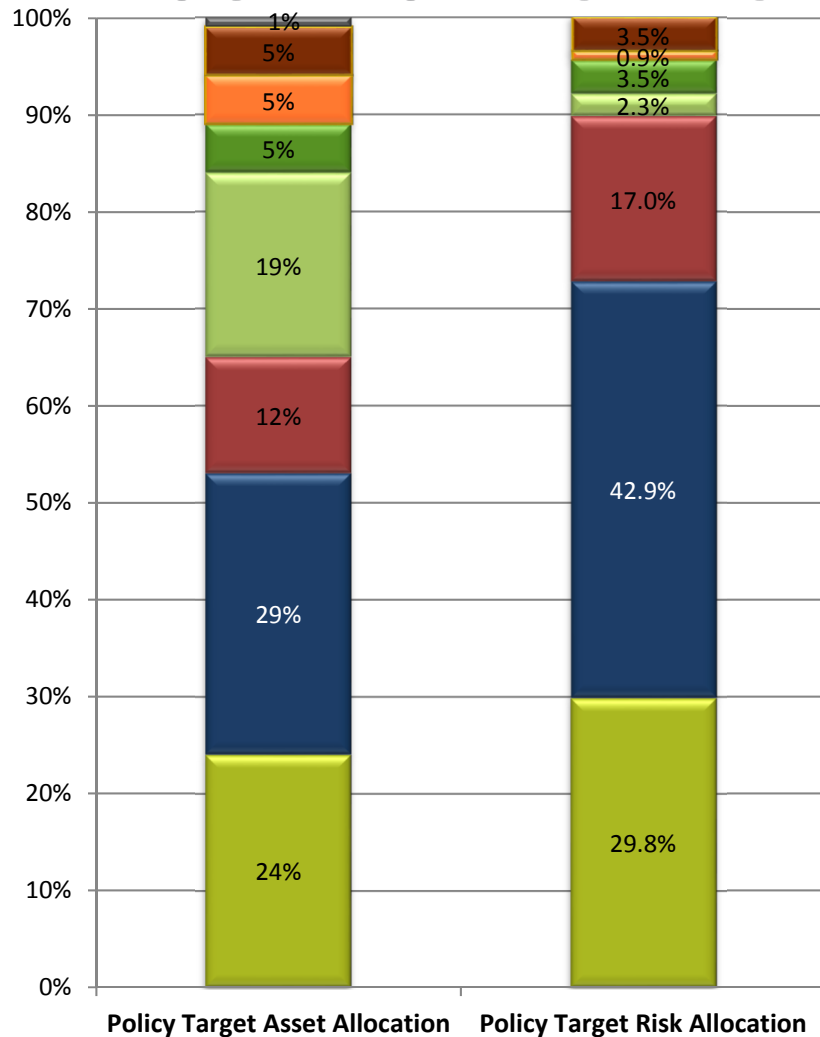
Real Estate	10 Year Return (Net)	Since Inception Return (Net)
Total Portfolio (TWR) ¹	8.4%	5.7%
NFI-ODCE + 80 basis points (TWR)	10.1%	6.9%

Note: The Total Value to Paid-In Ratio (TVPI) is a multiple that relates the current value of the private equity portfolio plus all distributions received to date with the total amount of capital contributed.

1 - IRR is not available for the Real Estate portfolio and therefore only time weighted returns (TWR) are reported.



TOTAL FUND RISK ALLOCATION – ASSET ALLOCATION VS. RISK ALLOCATION



- Cash
- Private Real Estate
- Public Real Assets
- Credit Opportunities
- Core Fixed Income
- Private Equity
- Non-U.S. Equity
- U.S. Equity

- Public and Private Equity policy target asset allocation is 65%; accounts for 89.7% of the policy target portfolio risk.
- Core Fixed Income and Credit Opportunities policy allocation is 24%, accounting for 5.8% of the policy target portfolio risk.
- Real Assets (Private Real Estate and Public Real Assets) policy allocation is 10%, accounting for 4.4% of policy target portfolio risk.

Note: Policy Target Asset Allocation does not reflect the new target asset allocation adopted on April 10, 2018. Implementation of the new asset allocation is currently in progress.



PUBLIC MARKETS RISK BUDGET COMPARISON AS OF DECEMBER 31, 2020

Public Markets Asset Class	Target Risk Budget	Actual 3 Yr Tracking Error
U.S. Equity	0.50%	0.86%
Non-U.S. Equity	1.20%	1.51%
Core Fixed Income	1.00%	0.62%
Credit Opportunities	1.50%	1.70%
Public Real Assets*	3.00%	4.12%

- Current public market asset class composite tracking error statistics are compared to asset class target risk budgets to ensure active risks are within expectations.
- Risk budgets are to be evaluated over three-year periods, at minimum, to reflect a full market cycle.
- All equity public markets asset classes are within an appropriately narrow range of their respective risk budgets.
- Both Core Fixed Income and Credit Opportunities have exhibited lower than expected active risk.
- The Public Real Assets composite is not at its target strategy allocation.
- Note: A new Target Risk Budget was approved by the Board on August 14, 2018, and is not reflected in the table above. Implementation of the new asset allocation is in progress.

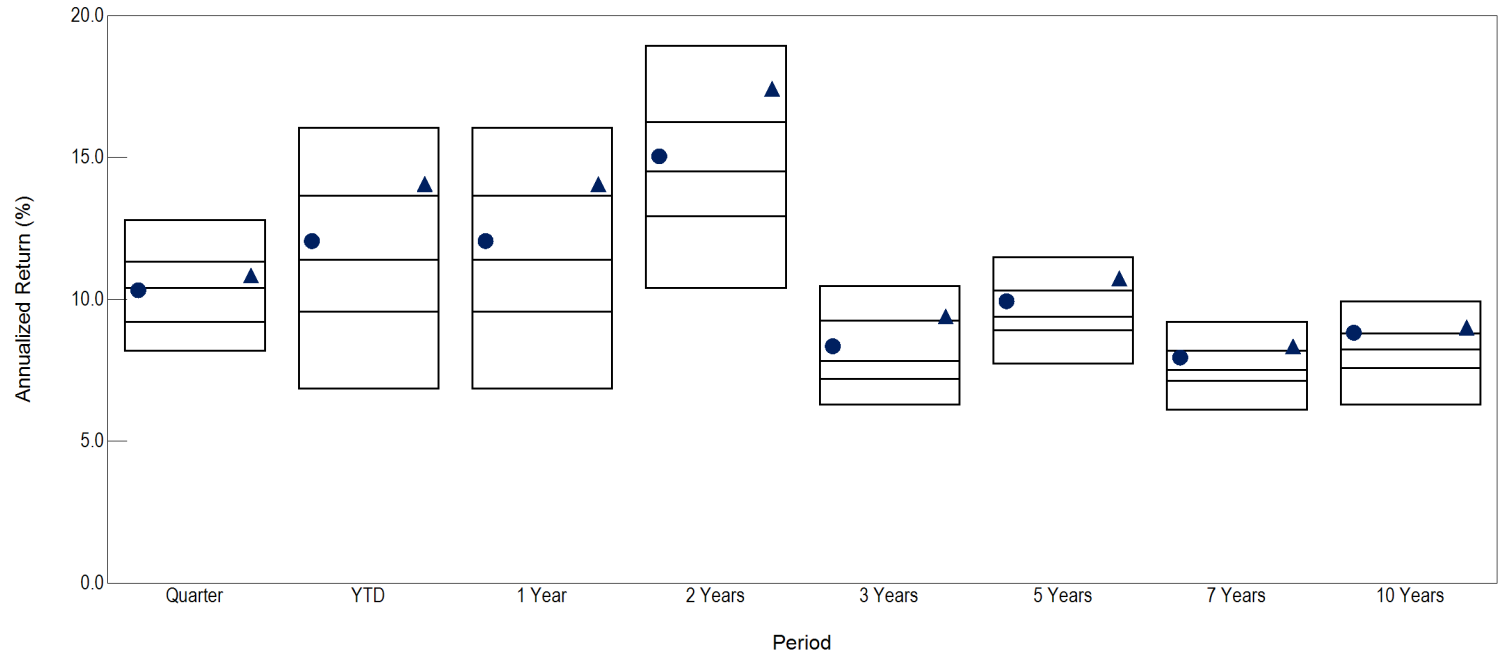
* The benchmark for the Public Real Assets composite is a custom policy benchmark that is comprised of the target weights of the public real asset components. The public real asset benchmark weights are 60% TIPS, 20% Commodities, 10% REITs, and 10% MLPs.



Los Angeles City Employees' Retirement System

TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

LACERS Master Trust vs. InvMetrics Public DB \$1-50B Gross



	Return (Rank)															
5th Percentile	12.79	16.05	16.05	18.94	10.46	11.49	9.20	9.92	89	89	89	89	89	89	87	83
25th Percentile	11.35	13.67	13.67	16.27	9.27	10.34	8.22	8.83	89	89	89	89	89	89	87	83
Median	10.41	11.41	11.41	14.53	7.85	9.41	7.52	8.26	89	89	89	89	89	89	87	83
75th Percentile	9.22	9.59	9.59	12.95	7.22	8.94	7.15	7.59	89	89	89	89	89	89	87	83
95th Percentile	8.21	6.87	6.87	10.41	6.32	7.76	6.13	6.31	89	89	89	89	89	89	87	83
# of Portfolios	89	89	89	89	89	89	87	83	89	89	89	89	89	89	87	83
● LACERS Master Trust	10.32	(52)	12.05	(43)	12.05	(43)	15.04	(39)	8.35	(38)	9.93	(37)	7.95	(37)	8.82	(26)
▲ Policy Index	10.84	(36)	14.06	(21)	14.06	(21)	17.42	(14)	9.40	(21)	10.74	(14)	8.34	(21)	9.01	(20)

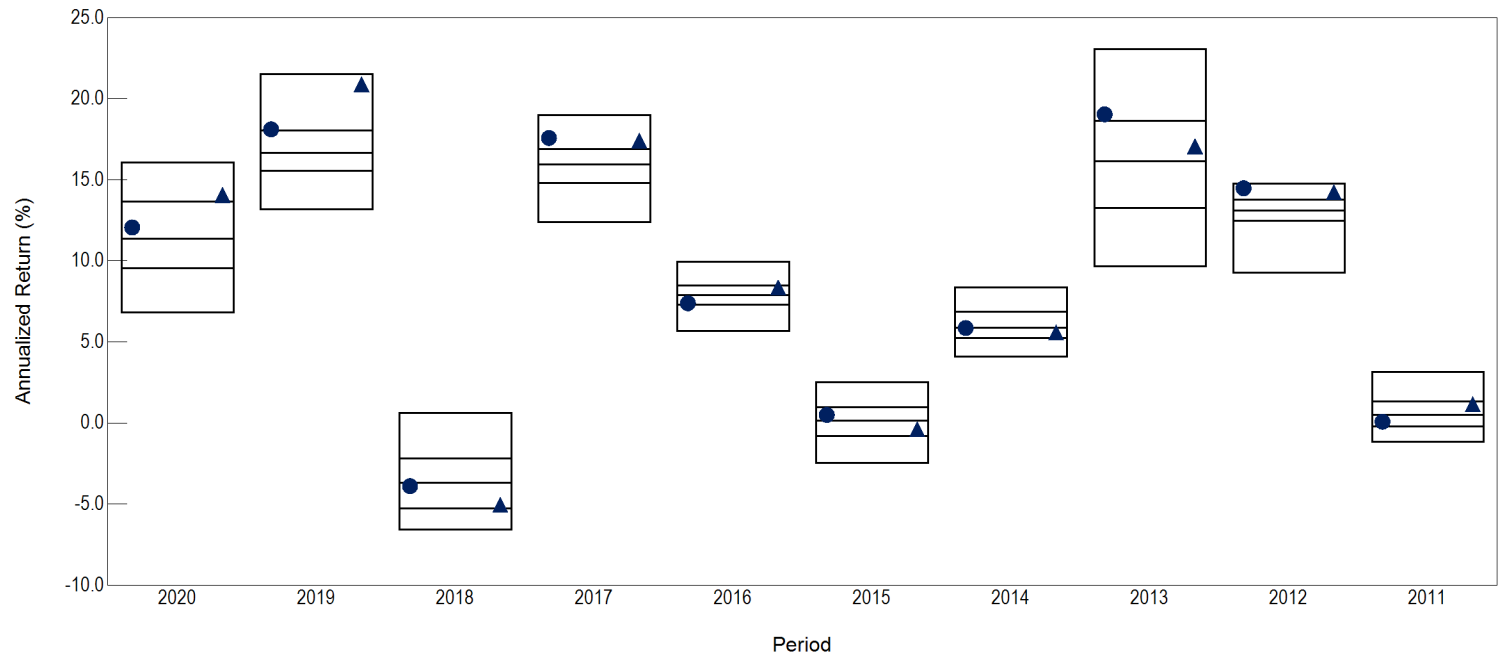


Please refer to page 66 in the appendix for a comparison versus InvMetrics Public DB \$5-50B universe.

Los Angeles City Employees' Retirement System

TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

LACERS Master Trust vs. InvMetrics Public DB \$1-50B Gross



	Return (Rank)																			
5th Percentile	16.05	21.49	0.60	19.00	9.95	2.50	8.38	23.05	14.75	3.13										
25th Percentile	13.67	18.08	-2.13	16.94	8.51	1.00	6.90	18.67	13.81	1.37										
Median	11.41	16.68	-3.64	15.99	7.91	0.20	5.93	16.17	13.15	0.53										
75th Percentile	9.59	15.61	-5.22	14.83	7.34	-0.77	5.28	13.30	12.50	-0.16										
95th Percentile	6.87	13.20	-6.53	12.43	5.71	-2.43	4.12	9.70	9.31	-1.14										
# of Portfolios	89	77	78	78	78	77	77	76	75	74										
● LACERS Master Trust	12.05	(43)	18.10	(25)	-3.89	(60)	17.57	(15)	7.38	(72)	0.49	(35)	5.85	(53)	19.03	(23)	14.47	(10)	0.08	(68)
▲ Policy Index	14.06	(21)	20.88	(9)	-5.04	(71)	17.41	(16)	8.35	(35)	-0.39	(68)	5.58	(61)	17.06	(35)	14.23	(18)	1.17	(32)

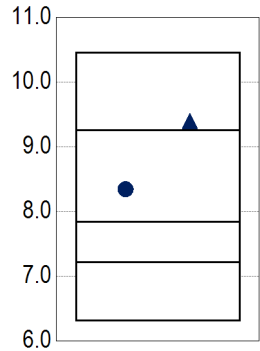


Please refer to page 67 in the appendix for a comparison versus InvMetrics Public DB \$5-50B universe.

TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

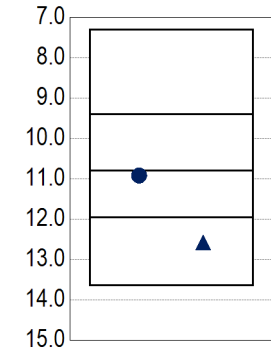
LACERS Master Trust vs. InvMetrics Public DB \$1-50B Gross 3 Years

Annualized Return (%)	Annualized Standard Deviation	Annualized Alpha (%)	Sharpe Ratio	Sortino Ratio Risk Free	Tracking Error
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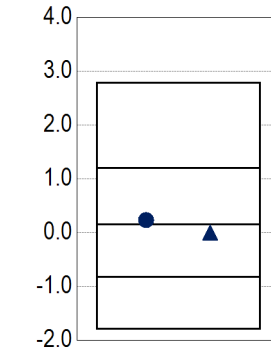
● LACERS Master Trust	Value	8.35
	Rank	38
▲ Policy Index	Value	9.40
	Rank	21

Universe	
5th %tile	10.46
25th %tile	9.27
Median	7.85
75th %tile	7.22
95th %tile	6.32



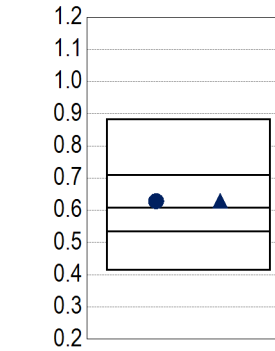
● LACERS Master Trust	Value	10.92
	Rank	55
▲ Policy Index	Value	12.58
	Rank	86

Universe	
5th %tile	7.31
25th %tile	9.38
Median	10.78
75th %tile	11.93
95th %tile	13.63



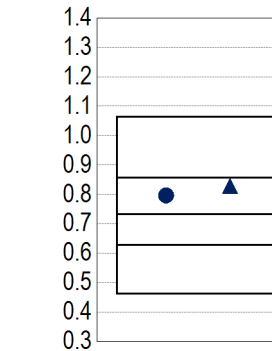
● LACERS Master Trust	Value	0.23
	Rank	46
▲ Policy Index	Value	0.00
	Rank	53

Universe	
5th %tile	2.78
25th %tile	1.22
Median	0.17
75th %tile	-0.82
95th %tile	-1.77



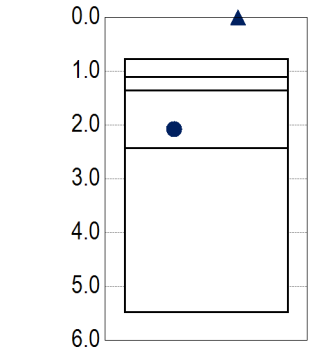
● LACERS Master Trust	Value	0.63
	Rank	45
▲ Policy Index	Value	0.63
	Rank	45

Universe	
5th %tile	0.88
25th %tile	0.71
Median	0.61
75th %tile	0.54
95th %tile	0.42



● LACERS Master Trust	Value	0.80
	Rank	34
▲ Policy Index	Value	0.83
	Rank	31

Universe	
5th %tile	1.06
25th %tile	0.86
Median	0.73
75th %tile	0.63
95th %tile	0.47



● LACERS Master Trust	Value	2.08
	Rank	68
▲ Policy Index	Value	0.00
	Rank	1

Universe	
5th %tile	0.78
25th %tile	1.10
Median	1.35
75th %tile	2.42
95th %tile	5.47

Sortino Ratio RF = Sortino Ratio Risk Free. The risk free rate is the Citi 91 Day T-Bill Index.

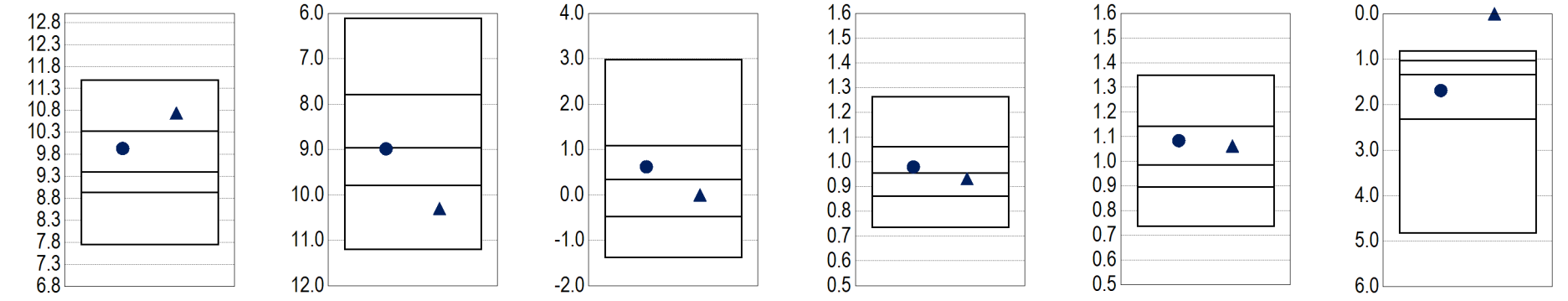
Please refer to page 68 in the appendix for a comparison versus InvMetrics Public DB \$5-50B universe.



TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

LACERS Master Trust vs. InvMetrics Public DB \$1-50B Gross 5 Years

Annualized Return (%)	Annualized Standard Deviation	Annualized Alpha (%)	Sharpe Ratio	Sortino Ratio Risk Free	Tracking Error
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	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank
● LACERS Master Trust	9.93	37	8.98	52	0.62	40	0.98	45	1.08	33	1.69	62
▲ Policy Index	10.74	14	10.30	86	0.00	56	0.93	54	1.06	37	0.00	1
Universe												
5th %tile	11.49		6.11		2.98		1.26		1.35		0.82	
25th %tile	10.34		7.77		1.10		1.06		1.14		1.02	
Median	9.41		8.95		0.35		0.96		0.99		1.32	
75th %tile	8.94		9.78		-0.46		0.86		0.90		2.31	
95th %tile	7.76		11.19		-1.36		0.74		0.74		4.80	

Sortino Ratio RF = Sortino Ratio Risk Free. The risk free rate is the Citi 91 Day T-Bill Index.

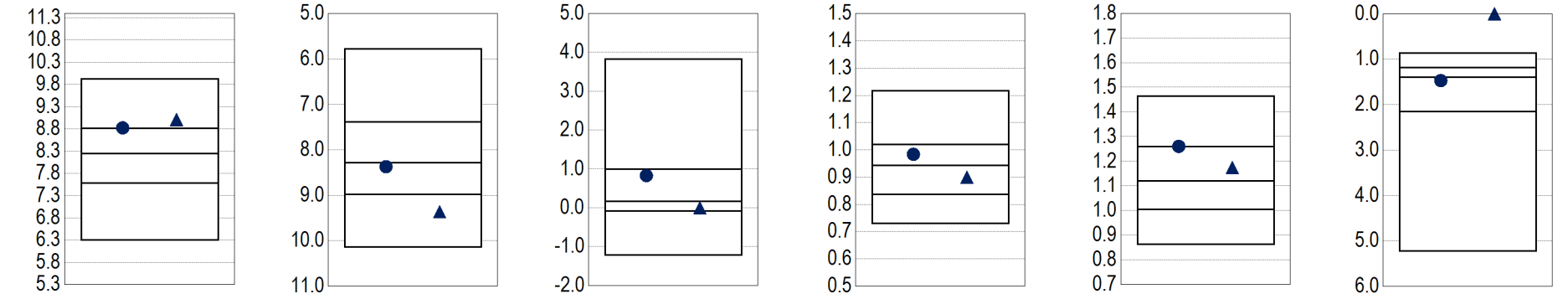
Please refer to page 69 in the appendix for a comparison versus InvMetrics Public DB \$5-50B universe.



TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

LACERS Master Trust vs. InvMetrics Public DB \$1-50B Gross 10 Years

Annualized Return (%)	Annualized Standard Deviation	Annualized Alpha (%)	Sharpe Ratio	Sortino Ratio Risk Free	Tracking Error
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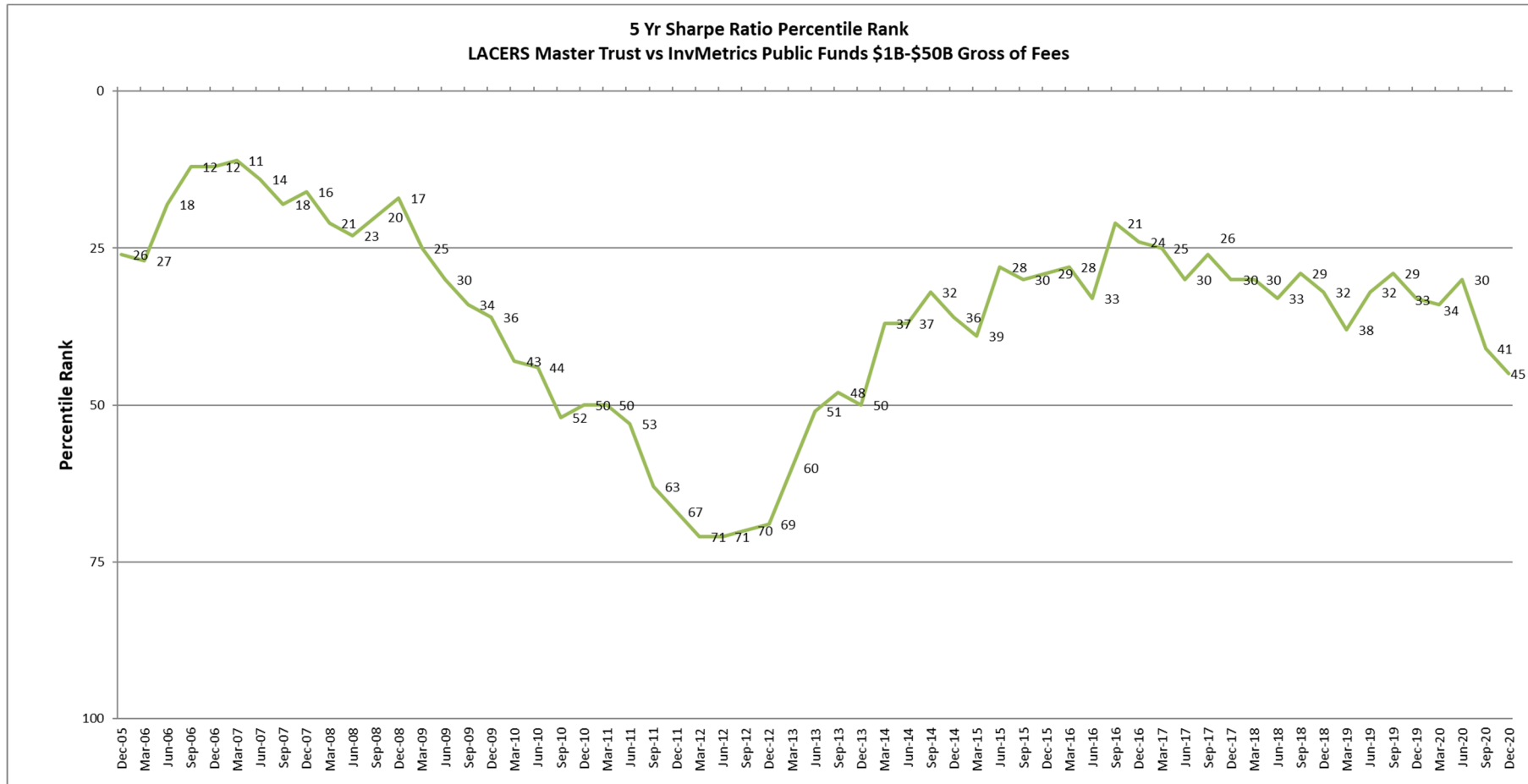


Metric	LACERS Master Trust Value	LACERS Master Trust Rank	Policy Index Value	Policy Index Rank	Universe 5th %tile	Universe 25th %tile	Universe Median	Universe 75th %tile	Universe 95th %tile
Annualized Return (%)	8.82	26	9.01	20	9.92	8.83	8.26	7.59	6.31
Annualized Standard Deviation	8.37	59	9.36	84	5.78	7.37	8.27	8.97	10.12
Annualized Alpha (%)	0.83	28	0.00	67	3.82	1.01	0.17	-0.07	-1.20
Sharpe Ratio	0.98	39	0.90	59	1.22	1.02	0.94	0.84	0.73
Sortino Ratio Risk Free	1.26	26	1.18	45	1.46	1.26	1.12	1.01	0.87
Tracking Error	1.47	54	0.00	1	0.86	1.17	1.38	2.13	5.20

Sortino Ratio RF = Sortino Ratio Risk Free. The risk free rate is the Citi 91 Day T-Bill Index.
Please refer to page 70 in the appendix for a comparison versus InvMetrics Public DB \$5-50B universe.



HISTORICAL RISK ADJUSTED RETURN UNIVERSE COMPARISON

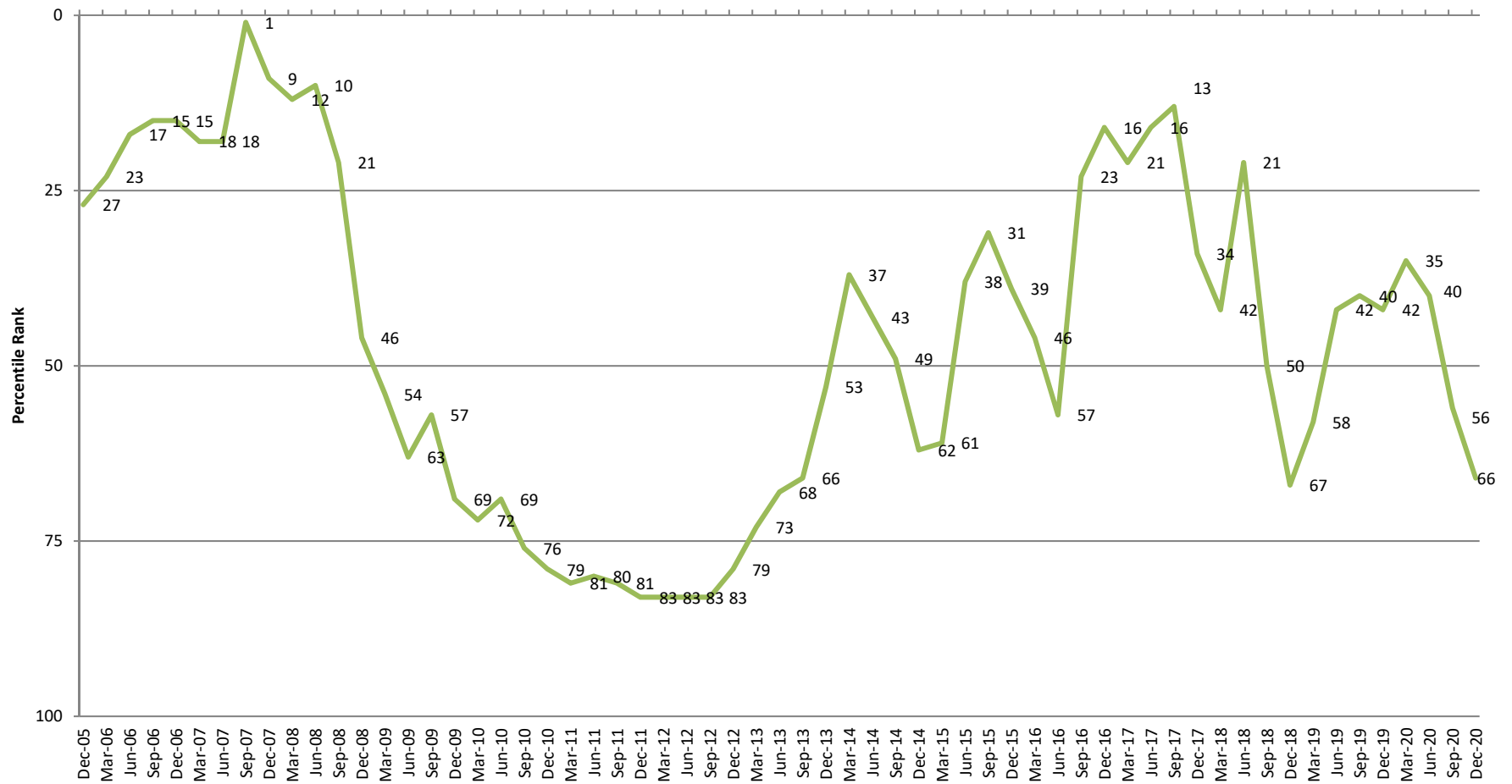


- Total Plan ranks in the 45th percentile versus other large public plans on a Sharpe Ratio basis.
 - Use of passive investment strategies within U.S. Equity has contributed to the overall Sharpe Ratio rank (38th percentile rank is higher than median).
 - Non-U.S. Equity contributed positively to Sharpe Ratio Rank on a relative basis.
 - Core Fixed Income detracted from Sharpe Ratio rank due to passive exposure.



HISTORICAL RISK ADJUSTED RETURN UNIVERSE COMPARISON

5 Yr Sharpe Ratio Percentile Rank
LACERS Master Trust vs InvMetrics Public Funds \$5B-\$50B Gross of Fees



U.S. EQUITY

NEPC, LLC

Los Angeles City Employees' Retirement System

U.S. EQUITY (GROSS)

	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
U.S. Equity	5,232,935,095	100.00	15.29	19.07	19.07	13.74	14.92	13.42	11.00	Oct-94
<i>U.S. Equity Blend¹</i>			<u>14.68</u>	<u>20.89</u>	<u>20.89</u>	<u>14.49</u>	<u>15.43</u>	<u>13.79</u>	<u>10.06</u>	<i>Oct-94</i>
Over/Under			0.61	-1.82	-1.82	-0.75	-0.51	-0.37	0.94	
RhumbLine Advisers Russell 2000 ²	240,094,713	4.59	31.32	20.06	20.06	10.31	13.27	--	9.70	Apr-15
<i>Russell 2000</i>			<u>31.37</u>	<u>19.96</u>	<u>19.96</u>	<u>10.25</u>	<u>13.26</u>	<u>11.20</u>	<u>9.75</u>	<i>Apr-15</i>
Over/Under			-0.05	0.10	0.10	0.06	0.01		-0.05	
Rhumblne Advisers Russell 2000 Value	164,134,783	3.14								Dec-20
<i>Russell 2000 Value</i>										<i>Dec-20</i>
Over/Under										
EAM Investors	141,577,006	2.71	28.17	45.07	45.07	24.29	20.16		19.48	Sep-15
<i>Russell 2000 Growth</i>			<u>29.61</u>	<u>34.63</u>	<u>34.63</u>	<u>16.19</u>	<u>16.36</u>		<u>16.46</u>	<i>Sep-15</i>
Over/Under			-1.44	10.44	10.44	8.10	3.80		3.02	
Principal Global Investors ²	250,696,022	4.79	15.50	19.06	19.06	17.70	18.03		15.76	Aug-14
<i>Russell MidCap</i>			<u>19.91</u>	<u>17.10</u>	<u>17.10</u>	<u>11.61</u>	<u>13.40</u>		<u>11.09</u>	<i>Aug-14</i>
Over/Under			-4.41	1.96	1.96	6.09	4.63		4.67	
RhumbLine Advisers S&P 500	4,014,289,320	76.71	12.24	18.23	18.23	14.05	15.10	13.84	10.28	Feb-93
<i>S&P 500</i>			<u>12.15</u>	<u>18.40</u>	<u>18.40</u>	<u>14.18</u>	<u>15.22</u>	<u>13.88</u>	<u>10.14</u>	<i>Feb-93</i>
Over/Under			0.09	-0.17	-0.17	-0.13	-0.12	-0.04	0.14	
Copeland Capital Management ²	217,656,704	4.16	21.12						21.12	Oct-20
<i>Russell 2000</i>			<u>31.37</u>						<u>31.37</u>	<i>Oct-20</i>
Over/Under			-10.25						-10.25	
Granahan Investment Management ²	111,279,479	2.13	37.35						37.35	Oct-20
<i>Russell 2000 Growth</i>			<u>29.61</u>						<u>29.61</u>	<i>Oct-20</i>
Over/Under			7.74						7.74	
Segall, Bryant & Hamill ²	92,983,586	1.78	28.20						28.20	Oct-20
<i>Russell 2000 Value</i>			<u>33.36</u>						<u>33.36</u>	<i>Oct-20</i>
Over/Under			-5.16						-5.16	

1 - U.S. Equity Blend = Russell 3000 from 1/1/2000 to present; 33.75% S&P 500/ 35% Russell 1000 Value/ 12.50% Russell 1000 Growth/ 12.50% Russell 2000 Value/ 6.25% Russell 2000 Growth prior to 1/1/2000.

2- Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.

eA = eVestment Alliance



Los Angeles City Employees' Retirement System

U.S. EQUITY (NET)

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
U.S. Equity	5,232,935,095	100.00	15.27	65	19.02	43	19.02	43	13.68	36	14.85	44	13.28	39		Oct-94
<i>U.S. Equity Blend¹</i>			<u>14.68</u>	81	<u>20.89</u>	19	<u>20.89</u>	19	<u>14.49</u>	16	<u>15.43</u>	19	<u>13.79</u>	12		Oct-94
Over/Under			0.59		-1.87		-1.87		-0.81		-0.58		-0.51			
<i>InvMetrics Public DB > \$1 Billion US Equity Net Median</i>			16.06		18.93		18.93		13.33		14.76		13.09			Oct-94
RhumblLine Advisers Russell 2000 ²	240,094,713	4.59	31.32	24	20.05	40	20.05	40	10.31	41	13.26	42			9.69	Apr-15
<i>Russell 2000</i>			<u>31.37</u>	24	<u>19.96</u>	40	<u>19.96</u>	40	<u>10.25</u>	41	<u>13.26</u>	42			<u>9.75</u>	Apr-15
Over/Under			-0.05		0.09		0.09		0.06		0.00				-0.06	
<i>eV US Small Cap Equity Net Median</i>			27.81		14.22		14.22		7.92		11.93				8.87	Apr-15
RhumblLine Advisers Russell 2000 Value	164,134,783	3.14														Dec-20
<i>Russell 2000 Value</i>																
Over/Under																
<i>eV US Small Cap Value Equity Net Median</i>																
EAM Investors	141,577,006	2.71	27.95	39	44.11	45	44.11	45	23.44	39	19.28	49			18.65	Sep-15
<i>Russell 2000 Growth</i>			<u>29.61</u>	24	<u>34.63</u>	66	<u>34.63</u>	66	<u>16.19</u>	73	<u>16.36</u>	73			<u>16.46</u>	Sep-15
Over/Under			-1.66		9.48		9.48		7.25		2.92				2.19	
<i>eV US Small Cap Growth Equity Net Median</i>			26.70		41.25		41.25		20.92		19.20				18.99	Sep-15
Principal Global Investors ²	250,696,022	4.79	15.41	87	18.68	47	18.68	47	17.29	34	17.59	28			15.35	Aug-14
<i>Russell MidCap</i>			<u>19.91</u>	49	<u>17.10</u>	49	<u>17.10</u>	49	<u>11.61</u>	50	<u>13.40</u>	48			<u>11.09</u>	Aug-14
Over/Under			-4.50		1.58		1.58		5.68		4.19				4.26	
<i>eV US Mid Cap Equity Net Median</i>			19.69		16.68		16.68		11.23		12.80		12.00		10.19	Aug-14
RhumblLine Advisers S&P 500	4,014,289,320	76.71	12.24	53	18.23	40	18.23	40	14.05	36	15.09	32	13.83	33		Feb-93
<i>S&P 500</i>			<u>12.15</u>	55	<u>18.40</u>	39	<u>18.40</u>	39	<u>14.18</u>	36	<u>15.22</u>	32	<u>13.88</u>	32		Feb-93
Over/Under			0.09		-0.17		-0.17		-0.13		-0.13		-0.05			
<i>eV US Large Cap Equity Net Median</i>			12.49		13.96		13.96		11.25		13.03		12.52			Feb-93

1 - U.S. Equity Blend = Russell 3000 from 1/1/2000 to present; 33.75% S&P 500/ 35% Russell 1000 Value/ 12.50% Russell 1000 Growth/ 12.50% Russell 2000 Value/ 6.25% Russell 2000 Growth prior to 1/1/2000.

2- Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.

eA = eVestment Alliance



Los Angeles City Employees' Retirement System

U.S. EQUITY (NET)

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Copeland Capital Management ¹	217,656,704	4.16	21.12	92											21.12	Oct-20
<i>Russell 2000</i>			<u>31.37</u>	24											<u>31.37</u>	Oct-20
Over/Under <i>eV US Small Cap Equity Net Median</i>			-10.25												-10.25	
27.81			27.81												27.81	Oct-20
Granahan Investment Management ¹	111,279,479	2.13	37.35	3											37.35	Oct-20
<i>Russell 2000 Growth</i>			<u>29.61</u>	24											<u>29.61</u>	Oct-20
Over/Under <i>eV US Small Cap Growth Equity Net Median</i>			7.74												7.74	
26.70			26.70												26.70	Oct-20
Segall, Bryant & Hamill ¹	92,983,586	1.78	28.20	60											28.20	Oct-20
<i>Russell 2000 Value</i>			<u>33.36</u>	25											<u>33.36</u>	Oct-20
Over/Under <i>eV US Small Cap Value Equity Net Median</i>			-5.16												-5.16	
29.79			29.79												29.79	Oct-20

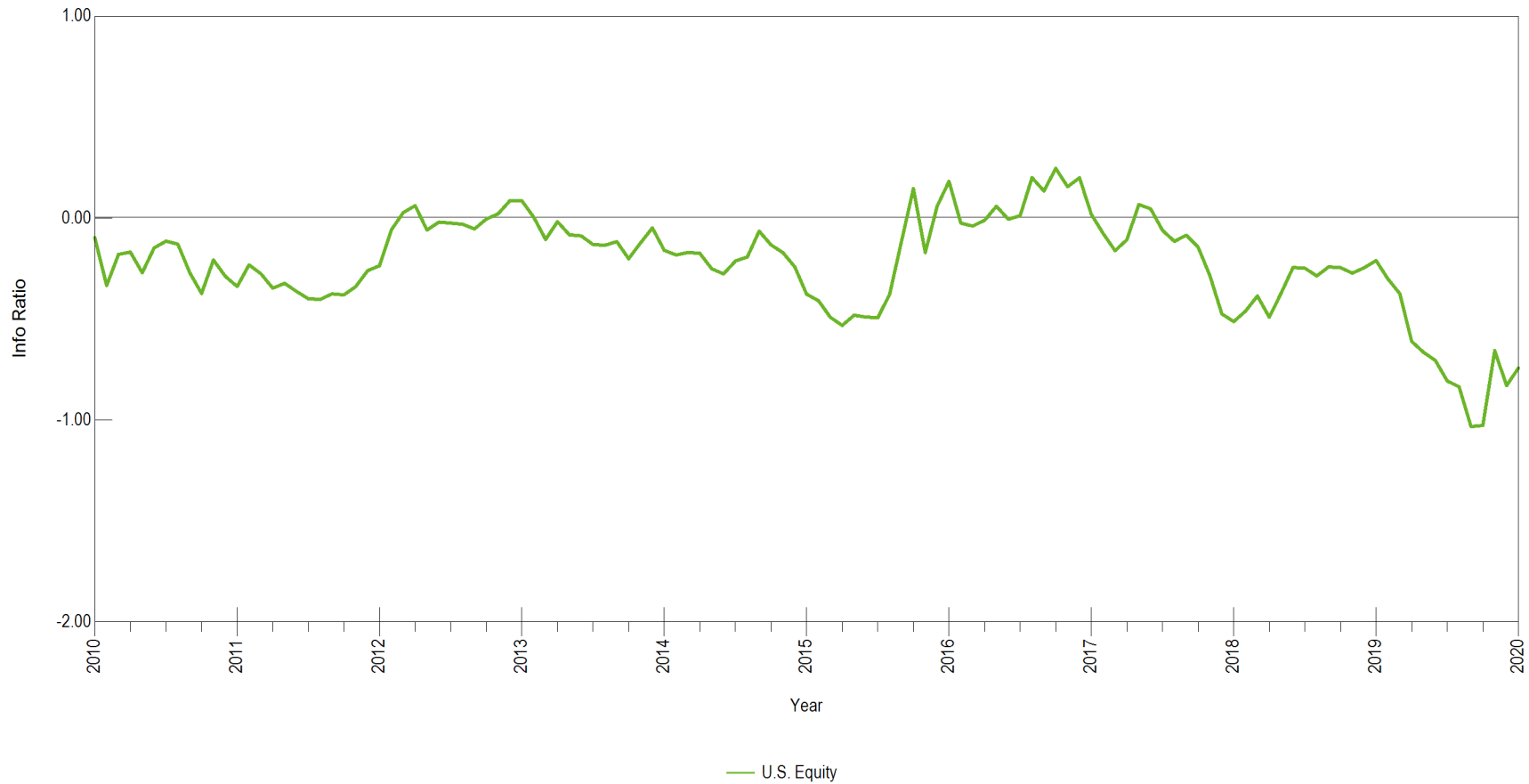
1- Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.

eA = eVestment Alliance



U.S. EQUITY ROLLING 5 YEAR INFORMATION RATIO

Rolling 5 Year Information Ratio



*Returns are net of fees.



MANAGER REPORT CARD

U.S. Equity Managers	Inception Date	Mandate	Current Quarter (Net)		One Year (Net)		Three Years (Net)		Five Years (Net)		Since Inception (Net)	Annual Mgt Fee Paid \$ (000)	Comments
			Index	Universe	Index	Universe	Index	Universe	Index	Universe			
Principal Global Investors	Jul-14	Mid Cap	* *	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓	703.0	Performance compliant with LACERS' Manager Monitoring Policy	
EAM Investors	Sep-15	Small Cap Growth	* ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓	908.5	Performance compliant with LACERS' Manager Monitoring Policy	
Copeland	Oct-20	Small Cap Core	* *	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A	N/A		
Granahan	Oct-20	Small Cap Growth	✓ ✓	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A	N/A		
Segall Byrant & Hamill	Oct-20	Small Cap Value	* ✓	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A	N/A		
Rhumblin (Passive)	Feb-93	S&P 500	✓ *	* ✓	* ✓	* ✓	* ✓	* ✓	* ✓	✓✓	186.9	Performance compliant with LACERS' Manager Monitoring Policy	
Rhumblin (Passive)	Jun-15	R2000	* ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	*	13.5	Performance compliant with LACERS' Manager Monitoring Policy	

Note: Managers are placed on Watch List for concerns with organization, process and performance. Managers are normally on the Watch List for 12 months though may be longer if manager issues remain but not severe enough to warrant termination recommendation.

- Annual Management Fee Paid as of fiscal year ending June 30, 2020.
- * Where net of fees performance is not available gross of fee returns are evaluated.

Legend	
✓	Outperformed
*	Underperformed
=	Equal to
✓✓	Gross Return



NON-U.S. EQUITY

NEPC, LLC

Los Angeles City Employees' Retirement System

NON-U.S. EQUITY (GROSS)

	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Non-U.S. Equity	5,678,696,863	100.00	18.44	14.93	14.93	6.55	10.35	6.38	5.77	Nov-94
MSCI ACWI ex USA			<u>17.01</u>	<u>10.65</u>	<u>10.65</u>	<u>4.88</u>	<u>8.93</u>	<u>4.92</u>	<u>5.43</u>	Nov-94
Over/Under			1.43	4.28	4.28	1.67	1.42	1.46	0.34	
Developed ex-U.S.	4,208,787,629	74.12	16.84	13.05	13.05	6.38	9.41		9.29	Jun-12
MSCI EAFE			<u>16.05</u>	<u>7.81</u>	<u>7.81</u>	<u>4.28</u>	<u>7.45</u>		<u>7.78</u>	Jun-12
Over/Under			0.79	5.24	5.24	2.10	1.96		1.51	
AQR Capital	2,275,492	0.04								
Barrow Hanley ¹	448,268,592	7.89	20.71	4.21	4.21	2.82	6.90		3.99	Nov-13
MSCI EAFE Value			<u>19.20</u>	<u>-2.63</u>	<u>-2.63</u>	<u>-1.24</u>	<u>4.20</u>		<u>1.50</u>	Nov-13
Over/Under			1.51	6.84	6.84	4.06	2.70		2.49	
Lazard Asset Management ¹	575,937,225	10.14	16.24	12.03	12.03	6.79	8.28		6.33	Nov-13
MSCI EAFE			<u>16.05</u>	<u>7.81</u>	<u>7.81</u>	<u>4.28</u>	<u>7.45</u>		<u>4.56</u>	Nov-13
Over/Under			0.19	4.22	4.22	2.51	0.83		1.77	
MFS Institutional Advisors	565,585,459	9.96	11.05	14.57	14.57	10.38	12.82		8.81	Oct-13
MSCI World ex USA Growth NR USD			<u>12.63</u>	<u>18.41</u>	<u>18.41</u>	<u>9.57</u>	<u>10.50</u>		<u>7.32</u>	Oct-13
Over/Under			-1.58	-3.84	-3.84	0.81	2.32		1.49	
Oberweis Asset Mgmt ¹	318,909,187	5.62	22.69	65.81	65.81	17.33	17.14		14.41	Jan-14
MSCI EAFE Small Cap			<u>17.27</u>	<u>12.34</u>	<u>12.34</u>	<u>4.85</u>	<u>9.40</u>		<u>7.58</u>	Jan-14
Over/Under			5.42	53.47	53.47	12.48	7.74		6.83	
SSgA World ex US IMI	1,986,807,450	34.99	16.96	9.46	9.46	5.04	8.51	5.94	6.02	Aug-93
MSCI World ex USA IMI NR USD ²			<u>16.10</u>	<u>8.32</u>	<u>8.32</u>	<u>4.34</u>	<u>7.92</u>	<u>5.43</u>	<u>5.71</u>	Aug-93
Over/Under			0.86	1.14	1.14	0.70	0.59	0.51	0.31	
State Street EAFE SC	311,004,224	5.48								Dec-20
MSCI EAFE Small Cap										Dec-20
Over/Under										

1 Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.

2 Since inception return sourced from SSgA



Los Angeles City Employees' Retirement System

NON-U.S. EQUITY (GROSS)

	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Emerging Markets	1,469,909,234	25.88	22.14	19.48	19.48	6.36	13.24		6.35	Jun-12
<i>MSCI Emerging Markets</i>			<u>19.70</u>	<u>18.31</u>	<u>18.31</u>	<u>6.17</u>	<u>12.81</u>		<u>6.33</u>	<i>Jun-12</i>
Over/Under			2.44	1.17	1.17	0.19	0.43		0.02	
Axiom Emerging Markets	412,043,196	7.26	21.33	33.20	33.20	11.52	16.47		9.95	May-14
<i>MSCI Emerging Markets</i>			<u>19.70</u>	<u>18.31</u>	<u>18.31</u>	<u>6.17</u>	<u>12.81</u>		<u>6.50</u>	<i>May-14</i>
Over/Under			1.63	14.89	14.89	5.35	3.66		3.45	
<i>MSCI Emerging Markets Growth NR USD</i>			16.83	31.33	31.33	10.33	16.23		9.88	<i>May-14</i>
DFA Emerging Markets ¹	409,844,102	7.22	22.80	4.98	4.98	0.74	10.01		2.10	Aug-14
<i>MSCI Emerging Markets Value NR USD</i>			<u>22.98</u>	<u>5.47</u>	<u>5.47</u>	<u>1.77</u>	<u>9.18</u>		<u>1.64</u>	<i>Aug-14</i>
Over/Under			-0.18	-0.49	-0.49	-1.03	0.83		0.46	
QMA Emerging Markets	750,071	0.01								
State Street Emerging Markets	377,356,152	6.65								Dec-20
<i>MSCI Emerging Markets</i>										<i>Dec-20</i>
Over/Under										
Wasatch Global Investors	269,915,713	4.75								Dec-20
<i>MSCI Emerging Markets Small Cap</i>										<i>Dec-20</i>
Over/Under										

1 Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.
eA = eVestment



Los Angeles City Employees' Retirement System

NON-U.S. EQUITY (NET)

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Non-U.S. Equity	5,678,696,863	100.00	18.34	22	14.54	26	14.54	26	6.16	33	9.96	35	6.02	38		Nov-94
MSCI ACWI ex USA			<u>17.01</u>	56	<u>10.65</u>	67	<u>10.65</u>	67	<u>4.88</u>	71	<u>8.93</u>	75	<u>4.92</u>	94		Nov-94
Over/Under			1.33		3.89		3.89		1.28		1.03		1.10			
Developed ex-U.S.	4,208,787,629	74.12	16.75	31	12.72	35	12.72	35	6.04	51	9.07	52			8.99	Jun-12
MSCI EAFE			<u>16.05</u>	72	<u>7.81</u>	88	<u>7.81</u>	88	<u>4.28</u>	80	<u>7.45</u>	85			<u>7.78</u>	Jun-12
Over/Under			0.70		4.91		4.91		1.76		1.62				1.21	
InvMetrics Public DB > \$1 Billion Dev Mkt ex-US Eq Net Median			16.38		11.98		11.98		6.05		9.18				9.61	Jun-12
AQR Capital	2,275,492	0.04														
eV EAFE Small Cap Equity Net Median															6.57	Feb-14
Barrow Hanley ¹	448,268,592	7.89	20.60	37	3.75	46	3.75	46	2.33	21	6.37	34			3.48	Nov-13
MSCI EAFE Value			<u>19.20</u>	49	<u>-2.63</u>	91	<u>-2.63</u>	91	<u>-1.24</u>	78	<u>4.20</u>	75			<u>1.50</u>	Nov-13
Over/Under			1.40		6.38		6.38		3.57		2.17				1.98	
eV EAFE Value Equity Net Median			19.15		3.47		3.47		0.77		5.57				3.18	Nov-13
Lazard Asset Management ¹	575,937,225	10.14	16.11	36	11.50	34	11.50	34	6.25	27	7.72	48			5.78	Nov-13
MSCI EAFE			<u>16.05</u>	37	<u>7.81</u>	53	<u>7.81</u>	53	<u>4.28</u>	52	<u>7.45</u>	54			<u>4.56</u>	Nov-13
Over/Under			0.06		3.69		3.69		1.97		0.27				1.22	
eV All EAFE Equity Net Median			14.95		8.02		8.02		4.40		7.60				5.28	Nov-13
MFS Institutional Advisors	565,585,459	9.96	10.96	96	14.13	87	14.13	87	9.90	57	12.30	41			8.31	Oct-13
MSCI World ex USA Growth NR USD			<u>12.63</u>	78	<u>18.41</u>	72	<u>18.41</u>	72	<u>9.57</u>	58	<u>10.50</u>	56			<u>7.32</u>	Oct-13
Over/Under			-1.67		-4.28		-4.28		0.33		1.80				0.99	
eV EAFE All Cap Growth Net Median			14.17		22.14		22.14		10.92		12.07				7.99	Oct-13

¹ Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.

eA = eVestment



Los Angeles City Employees' Retirement System

NON-U.S. EQUITY (NET)

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Oberweis Asset Mgmt ¹	318,909,187	5.62	22.47	9	64.55	1	64.55	1	16.37	1	16.21	4			13.47	Jan-14
MSCI EAFE Small Cap			<u>17.27</u>	34	<u>12.34</u>	40	<u>12.34</u>	40	<u>4.85</u>	40	<u>9.40</u>	43			<u>7.58</u>	Jan-14
Over/Under			5.20		52.21		52.21		11.52		6.81				5.89	
eV EAFE Small Cap Equity Net Median			15.19		9.28		9.28		3.31		8.75				7.20	Jan-14
SSgA World ex US IMI	1,986,807,450	34.99	16.96	19	9.43	47	9.43	47	5.02	41	8.49	35	5.91	73	6.02	Aug-93
MSCI World ex USA IMI NR USD ²			<u>16.10</u>	28	<u>8.32</u>	54	<u>8.32</u>	54	<u>4.34</u>	54	<u>7.92</u>	49	<u>5.43</u>	83	<u>5.71</u>	Aug-93
Over/Under			0.86		1.11		1.11		0.68		0.57		0.48		0.31	
eV EAFE Core Equity Net Median			14.77		8.85		8.85		4.49		7.74		6.64		7.00	Aug-93
State Street EAFE SC	311,004,224	5.48														Dec-20
MSCI EAFE Small Cap																Dec-20
Over/Under																
eV EAFE Small Cap Equity Net Median																
Emerging Markets	1,469,909,234	25.88	22.04	12	18.96	14	18.96	14	5.83	32	12.68	16			5.73	Jun-12
MSCI Emerging Markets			<u>19.70</u>	37	<u>18.31</u>	21	<u>18.31</u>	21	<u>6.17</u>	17	<u>12.81</u>	14			<u>6.33</u>	Jun-12
Over/Under			2.34		0.65		0.65		-0.34		-0.13				-0.60	
InvMetrics Public DB > \$1 Billion Emg Mkt Eq Net Median			19.44		15.90		15.90		4.92		10.63				5.01	Jun-12
Axiom Emerging Markets	412,043,196	7.26	21.18	38	32.46	14	32.46	14	10.80	14	15.69	17			9.25	May-14
MSCI Emerging Markets			<u>19.70</u>	53	<u>18.31</u>	49	<u>18.31</u>	49	<u>6.17</u>	46	<u>12.81</u>	44			<u>6.50</u>	May-14
Over/Under			1.48		14.15		14.15		4.63		2.88				2.75	
MSCI Emerging Markets Growth NR USD			16.83	84	31.33	15	31.33	15	10.33	17	16.23	14			9.88	May-14
eV Emg Mkts Equity Net Median			19.88		18.05		18.05		5.85		12.37				6.68	May-14

1 Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.

2 Since inception index return sourced from SSgA and is gross of fees.

eA = eVestment



Los Angeles City Employees' Retirement System

NON-U.S. EQUITY (NET)

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
DFA Emerging Markets ¹	409,844,102	7.22	22.68	23	4.48	92	4.48	92	0.24	93	9.50	81			1.61	Aug-14
MSCI Emerging Markets Value NR USD			<u>22.98</u>	21	<u>5.47</u>	90	<u>5.47</u>	90	<u>1.77</u>	85	<u>9.18</u>	82			<u>1.64</u>	Aug-14
Over/Under			-0.30		-0.99		-0.99		-1.53		0.32				-0.03	
eV Emg Mkts Equity Net Median			19.88		18.05		18.05		5.85		12.37				5.68	Aug-14
QMA Emerging Markets	750,071	0.01														
eV Emg Mkts Equity Net Median																May-14
State Street Emerging Markets	377,356,152	6.65														Dec-20
MSCI Emerging Markets																Dec-20
Over/Under																
eV Emg Mkts Equity Net Median																
Wasatch Global Investors	269,915,713	4.75														Dec-20
MSCI Emerging Markets Small Cap																Dec-20
Over/Under																
eV Emg Mkts Small Cap Equity Net Median																Dec-20

1 Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.

2 Since inception index return sourced from SSgA.

eA = eVestment



Los Angeles City Employees' Retirement System

NON-U.S. EQUITY COUNTRY ALLOCATION

Versus MSCI ACWI ex USA - Quarter Ending December 31, 2020		
	Manager Ending Allocation (USD)	Index Ending Allocation (USD)
Europe		
Austria	0.0%	0.1%
Belgium	0.0%	0.6%
Croatia**	0.0%	0.0%
Czech Republic*	0.0%	0.0%
Denmark	1.3%	1.6%
Estonia**	0.0%	0.0%
Finland	2.0%	0.7%
France	12.3%	6.9%
Germany	6.7%	5.9%
Greece*	0.0%	0.0%
Hungary*	0.1%	0.1%
Ireland	2.0%	0.4%
Italy	1.6%	1.5%
Lithuania**	0.0%	0.0%
Luxembourg	0.3%	0.0%
Netherlands	2.2%	2.4%
Norway	0.5%	0.4%
Poland*	0.0%	0.2%
Portugal	0.2%	0.1%
Romania**	0.0%	0.0%
Russia*	0.4%	0.8%
Serbia**	0.0%	0.0%
Slovenia**	0.0%	0.0%
Spain	1.8%	1.5%
Sweden	2.5%	2.1%
Switzerland	5.9%	6.0%
United Kingdom	11.2%	8.8%
Total-Europe	51.0%	40.2%

Versus MSCI ACWI ex USA - Quarter Ending December 31, 2020		
	Manager Ending Allocation (USD)	Index Ending Allocation (USD)
Americas		
Argentina*	0.2%	0.0%
Brazil*	0.9%	1.6%
Canada	4.6%	6.3%
Colombia*	0.4%	0.1%
Mexico*	1.1%	0.5%
United States	1.8%	0.0%
Total-Americas	9.0%	8.8%
AsiaPacific		
Australia	0.5%	4.4%
China*	6.2%	12.2%
Hong Kong	3.5%	2.0%
India*	2.0%	2.9%
Indonesia*	0.3%	0.4%
Japan	13.8%	15.9%
Korea*	3.5%	4.2%
Philippines*	0.2%	0.2%
Singapore	1.1%	0.7%
Taiwan*	3.3%	4.0%
Thailand*	0.2%	0.6%
Total-AsiaPacific	34.6%	48.1%
Other		
Israel	1.0%	0.4%
Other Countries	1.6%	0.0%
South Africa*	0.6%	1.1%
Turkey*	0.1%	0.1%
Total-Other	3.4%	2.9%
Totals		
Developed	76.9%	68.9%
Emerging*	19.5%	31.1%
Other	1.6%	
Cash	2.1%	

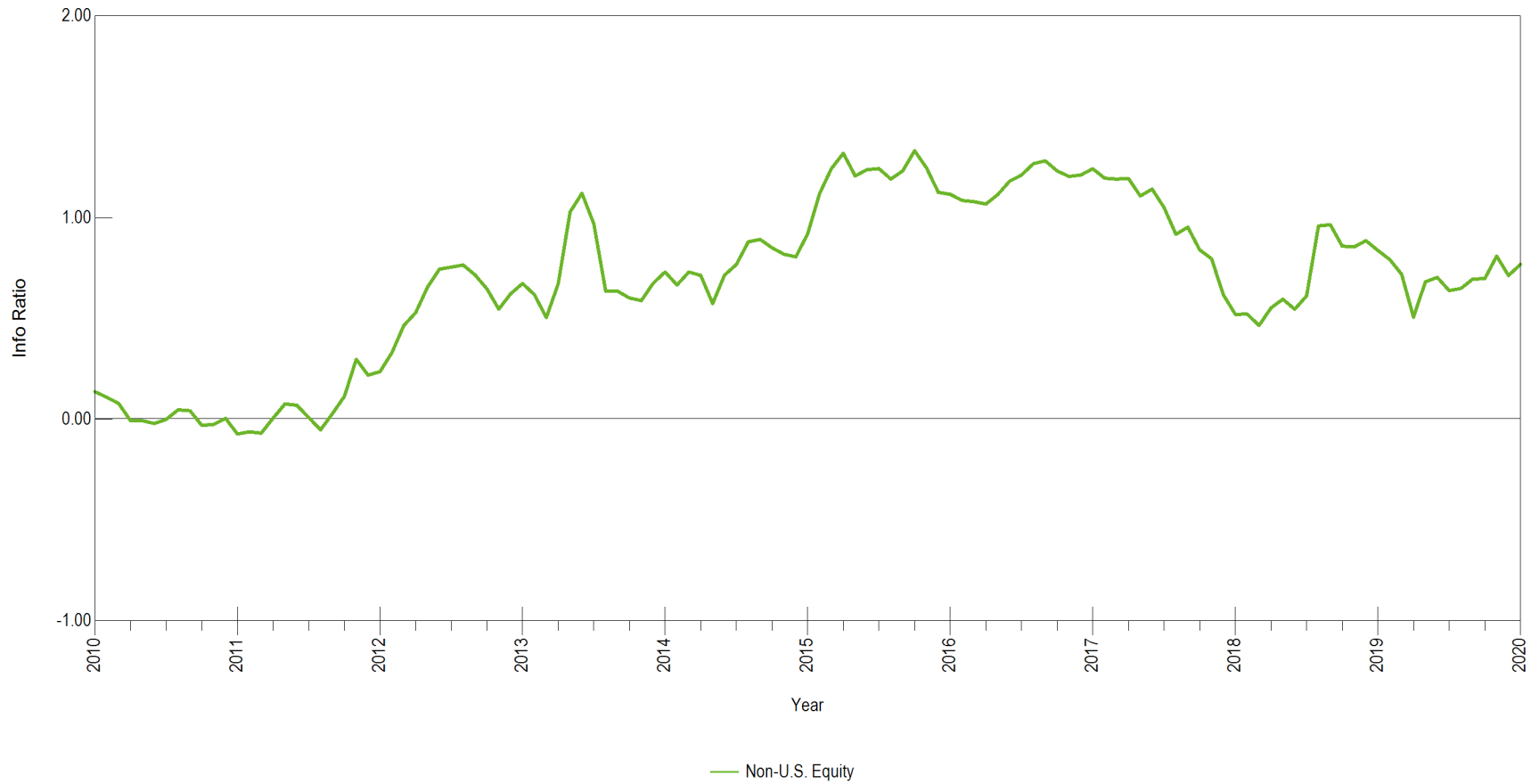
* = Emerging Market

** = Frontier Market



NON-U.S. EQUITY ROLLING 5 YEAR INFORMATION

Rolling 5 Year Information Ratio



*Returns are net of fees



MANAGER REPORT CARD

Non-U.S. Equity Managers	Inception Date	Mandate	Current Quarter (Net)		One Year (Net)		Three Years (Net)		Five Years (Net)		Since Inception (Net)	Annual Mgt Fee Paid \$ (000)	Comments
			Index	Universe	Index	Universe	Index	Universe	Index	Universe			
SsgA (Passive)	Dec-20	Emerging Markets	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Axiom International	Mar-14	Emerging Markets	✓	✓	✓	✓	✓	✓	✓	✓	✓	2,645.8	On watch on August 2020 due to benchmark change
DFA Emerging Markets	Jul-14	Emerging Markets	✗	✓	✗	✗	✗	✗	✓	✗	✗	1,931.9	Performance compliant with LACERS' Manager Monitoring Policy
Oberweis Asset Mgt.	Jan-14	Non-U.S. Developed	✓	✓	✓	✓	✓	✓	✓	✓	✓	2,015.3	Performance compliant with LACERS' Manager Monitoring Policy
Barrow, Hanley, Mewhinney & Strauss	Nov-13	Non-U.S. Developed	✓	✓	✓	✓	✓	✓	✓	✓	✓	2,308.5	On Watch since August 2020 due to organizational change
Lazard Asset Mgt.	Nov-13	Non-U.S. Developed	✓	✓	✓	✓	✓	✓	✓	✓	✓	2,929.5	Performance compliant with LACERS' Manager Monitoring Policy
MFS Institutional Advisors	Oct-13	Non-U.S. Developed	✗	✗	✗	✗	✗	✗	✓	✓	✓	2,535.9	Performance compliant with LACERS' Manager Monitoring Policy
Wasatch	Dec-20	Emerging Markets Small Cap	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
SsgA (Passive)	Dec-20	Non-U.S. Developed Small Cap	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
SsgA (Passive)	Aug-93	Non-U.S. Developed	✗	✗	✓	✗	✓	=	✓	✓	✓✓	380.5	Performance compliant with LACERS' Manager Monitoring Policy

Note: Managers are placed on Watch List for concerns with organization, process and performance. Managers are normally on the Watch List for 12 months though may be longer if manager issues remain but not severe enough to warrant termination recommendation.

- Annual Management Fee Paid as of fiscal year ending June 30, 2020.
- * Where net of fees performance is not available gross of fee returns are evaluated.

Legend	
✓	Outperformed
✗	Underperformed
=	Equal to
✓✓	Gross Return



CORE FIXED INCOME

NEPC, LLC

Los Angeles City Employees' Retirement System

CORE FIXED INCOME (GROSS)

	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Core Fixed Income	3,486,448,653	100.00	1.17	9.09	9.09	5.93	5.08		4.13	Jul-12
<i>Core Fixed Income Blend</i>			<u>0.67</u>	<u>7.51</u>	<u>7.51</u>	<u>5.34</u>	<u>4.44</u>		<u>3.44</u>	<i>Jul-12</i>
Over/Under			0.50	1.58	1.58	0.59	0.64		0.69	
Baird Advisors	360,030,658	10.33	0.76	7.30	7.30	5.20	4.37	3.95	4.55	Mar-05
<i>BBgBarc US Govt/Credit Int TR</i>			<u>0.48</u>	<u>6.43</u>	<u>6.43</u>	<u>4.67</u>	<u>3.64</u>	<u>3.11</u>	<u>3.88</u>	<i>Mar-05</i>
Over/Under			0.28	0.87	0.87	0.53	0.73	0.84	0.67	
LM Capital ¹	359,490,214	10.31	1.65	9.63	9.63	5.80	4.99	4.32	4.96	Mar-05
<i>LM Custom Benchmark</i>			<u>0.67</u>	<u>7.51</u>	<u>7.51</u>	<u>5.34</u>	<u>4.44</u>	<u>3.85</u>	<u>4.35</u>	<i>Mar-05</i>
Over/Under			0.98	2.12	2.12	0.46	0.55	0.47	0.61	
Loomis Sayles & Co. Core Fixed Income	895,770,227	25.69	1.37	10.49	10.49	6.64	6.06	5.07	9.07	Jul-80
<i>Loomis Custom Benchmark</i>			<u>0.67</u>	<u>7.51</u>	<u>7.51</u>	<u>5.34</u>	<u>4.44</u>	<u>3.94</u>	<u>7.58</u>	<i>Jul-80</i>
Over/Under			0.70	2.98	2.98	1.30	1.62	1.13	1.49	
Neuberger Berman	874,977,219	25.10	1.27	9.26	9.26	5.93	4.97	4.52	5.91	Sep-01
<i>Core Fixed Income Blend</i>			<u>0.67</u>	<u>7.51</u>	<u>7.51</u>	<u>5.34</u>	<u>4.44</u>	<u>3.94</u>	<u>4.79</u>	<i>Sep-01</i>
Over/Under			0.60	1.75	1.75	0.59	0.53	0.58	1.12	
SSgA U.S. Aggregate Bond ¹	996,180,334	28.57	0.69	7.57	7.57	5.39	4.46	--	3.91	Jul-14
<i>BBgBarc US Aggregate TR</i>			<u>0.67</u>	<u>7.51</u>	<u>7.51</u>	<u>5.34</u>	<u>4.44</u>	<u>3.84</u>	<u>3.88</u>	<i>Jul-14</i>
Over/Under			0.02	0.06	0.06	0.05	0.02		0.03	

¹ Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.

BBgBarc = Bloomberg Barclays



Los Angeles City Employees' Retirement System

CORE FIXED INCOME (NET)

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Core Fixed Income	3,486,448,653	100.00	1.15	71	8.98	32	8.98	32	5.82	36	4.97	54			4.02	Jul-12
<i>Core Fixed Income Blend</i>			<u>0.67</u>	89	<u>7.51</u>	68	<u>7.51</u>	68	<u>5.34</u>	62	<u>4.44</u>	92			<u>3.44</u>	<i>Jul-12</i>
<i>Over/Under</i>			0.48		1.47		1.47		0.48		0.53				0.58	
<i>InvMetrics Public DB > \$1 Billion US Fixed Income Net Median</i>			1.87		8.16		8.16		5.46		5.07				3.94	<i>Jul-12</i>
Baird Advisors	360,030,658	10.33	0.74	47	7.19	28	7.19	28	5.08	13	4.24	15	3.83	15	4.41	Mar-05
<i>BBgBarc US Govt/Credit Int TR</i>			<u>0.48</u>	77	<u>6.43</u>	56	<u>6.43</u>	56	<u>4.67</u>	44	<u>3.64</u>	54	<u>3.11</u>	62	<u>3.88</u>	<i>Mar-05</i>
<i>Over/Under</i>			0.26		0.76		0.76		0.41		0.60		0.72		0.53	
<i>eV US Interm Duration Fixed Inc Net Median</i>			0.68		6.55		6.55		4.62		3.66		3.19		4.04	<i>Mar-05</i>
LM Capital¹	359,490,214	10.31	1.63	10	9.53	13	9.53	13	5.70	36	4.89	37	4.19	45	4.82	Mar-05
<i>LM Custom Benchmark</i>			<u>0.67</u>	81	<u>7.51</u>	75	<u>7.51</u>	75	<u>5.34</u>	70	<u>4.44</u>	75	<u>3.85</u>	73	<u>4.35</u>	<i>Mar-05</i>
<i>Over/Under</i>			0.96		2.02		2.02		0.36		0.45		0.34		0.47	
<i>eV US Core Fixed Inc Net Median</i>			1.03		8.15		8.15		5.56		4.72		4.11		4.70	<i>Mar-05</i>
Loomis Sayles & Co. Core Fixed Income	895,770,227	25.69	1.34	26	10.36	5	10.36	5	6.52	3	5.93	3	4.94	6		Jul-80
<i>Loomis Custom Benchmark</i>			<u>0.67</u>	81	<u>7.51</u>	75	<u>7.51</u>	75	<u>5.34</u>	70	<u>4.44</u>	75	<u>3.94</u>	65		<i>Jul-80</i>
<i>Over/Under</i>			0.67		2.85		2.85		1.18		1.49		1.00			
<i>eV US Core Fixed Inc Net Median</i>			1.03		8.15		8.15		5.56		4.72		4.11			<i>Jul-80</i>
Neuberger Berman	874,977,219	25.10	1.24	32	9.13	23	9.13	23	5.79	32	4.82	42	4.35	35	5.75	Sep-01
<i>Core Fixed Income Blend</i>			<u>0.67</u>	81	<u>7.51</u>	75	<u>7.51</u>	75	<u>5.34</u>	70	<u>4.44</u>	75	<u>3.94</u>	65	<u>4.79</u>	<i>Sep-01</i>
<i>Over/Under</i>			0.57		1.62		1.62		0.45		0.38		0.41		0.96	
<i>eV US Core Fixed Inc Net Median</i>			1.03		8.15		8.15		5.56		4.72		4.11		4.80	<i>Sep-01</i>
SSgA U.S. Aggregate Bond¹	996,180,334	28.57	0.68	79	7.52	74	7.52	74	5.34	71	4.42	76			3.87	Jul-14
<i>BBgBarc US Aggregate TR</i>			<u>0.67</u>	81	<u>7.51</u>	75	<u>7.51</u>	75	<u>5.34</u>	70	<u>4.44</u>	75			<u>3.88</u>	<i>Jul-14</i>
<i>Over/Under</i>			0.01		0.01		0.01		0.00		-0.02				-0.01	
<i>eV US Core Fixed Inc Net Median</i>			1.03		8.15		8.15		5.56		4.72				4.05	<i>Jul-14</i>

¹ Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.

BBgBarc = Bloomberg Barclays

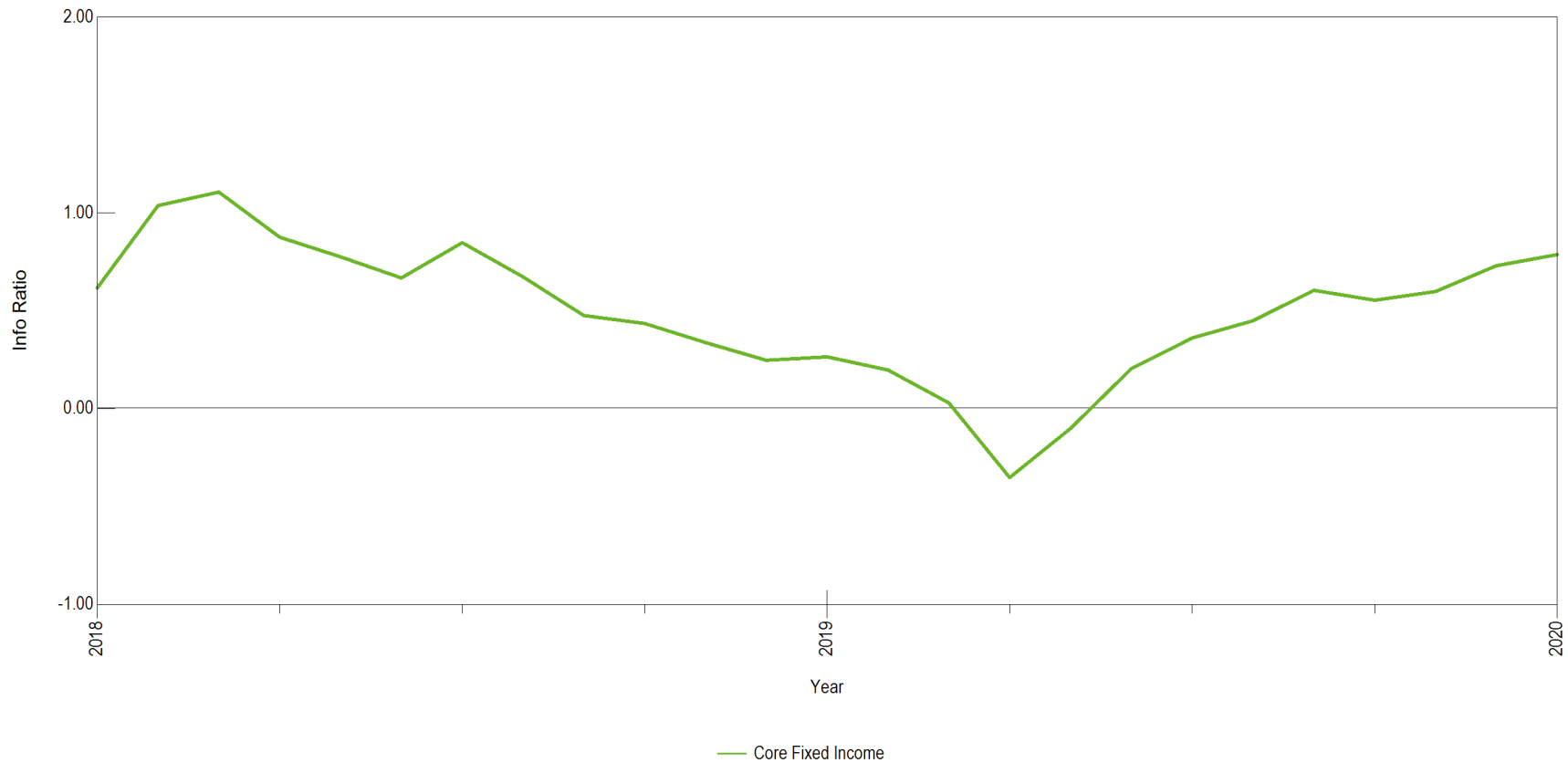
eV = eVestment



Los Angeles City Employees' Retirement System

CORE FIXED INCOME 3 YEAR INFORMATION RATIO

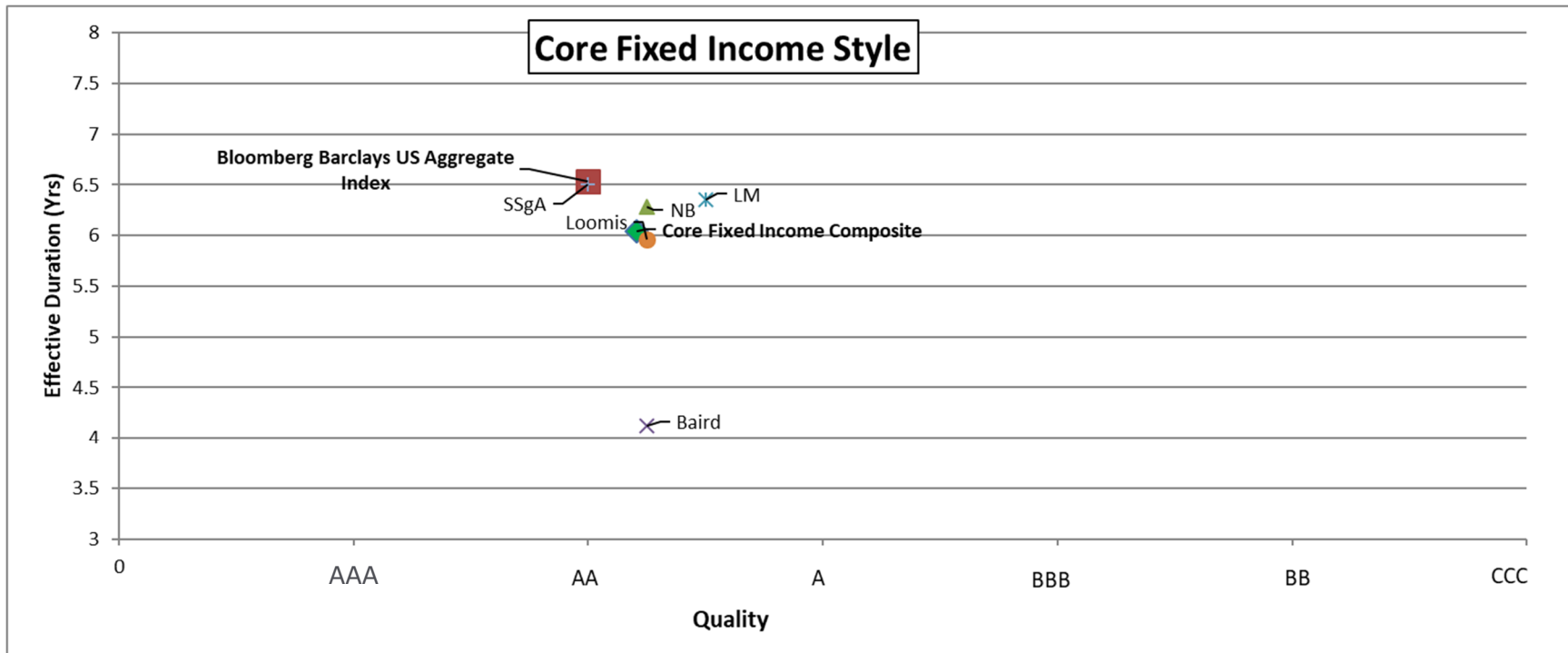
Rolling 3 Year Information Ratio



*Returns are net of fees



CORE FIXED INCOME STYLE ANALYSIS



- LACERS Core Fixed Income Composite has a slightly lower duration (interest rate risk) than its benchmark.
- The Core Fixed Income Composite has slightly lower average quality rating than its benchmark.



MANAGER REPORT CARD

Core Fixed Income Managers	Inception Date	Mandate	Current Quarter (Net)		One Year (Net)		Three Years (Net)		Five Years (Net)		Since Inception (Net)	Annual Mgt Fee Paid \$ (000)	Comments
			Inde	Univer	Inde	Univer	Inde	Univer	Inde	Univer	Index		
			x	se	x	se	x	se	x	se			
Neuberger Berman	Sep-01	Core	✓	✓	✓	✓	✓	✓	✓	✓	1,093.7	On Watch since May 2019 due to performance; Watch extended in April 2020	
Loomis Sayles	Jul-80	Core	✓	✓	✓	✓	✓	✓	✓	✓✓	1,029.2	Performance compliant with LACERS' Manager Monitoring Policy	
Baird Advisors	Mar-05	Intermediate	✓	✓	✓	✓	✓	✓	✓	✓	372.7	Performance compliant with LACERS' Manager Monitoring Policy	
LM Capital Group	Mar-05	Core	✓	✓	✓	✓	✓	✗	✓	✓	317.4	On Watch since May 2019 due to performance; Watch extended in April 2020	
SSgA (Passive)	Jul-14	Core	✓	✗	✓	✗	✗	✗	✗	✗	347.4	Performance compliant with LACERS' Manager Monitoring Policy	

Note: Managers are placed on Watch List for concerns with organization, process and performance. Managers are normally on the Watch List for 12 months though may be longer if manager issues remain but not severe enough to warrant termination recommendation.

- Annual Management Fee Paid as of fiscal year ending June 30, 2020.
- * Where net of fees performance is not available gross of fee returns are evaluated.

Legend	
✓	Outperformed
✗	Underperformed
=	Equal to
✓✓	Gross Return



CREDIT OPPORTUNITIES

NEPC, LLC

Los Angeles City Employees' Retirement System

CREDIT OPPORTUNITIES (GROSS)

	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Credit Opportunities	1,198,630,373	100.00	6.01	4.99	4.99	5.45	7.69		5.88	Jun-13
<i>Credit Opportunities Blend</i>			<u>6.22</u>	<u>6.45</u>	<u>6.45</u>	<u>5.83</u>	<u>8.07</u>		<u>6.20</u>	<i>Jun-13</i>
Over/Under			-0.21	-1.46	-1.46	-0.38	-0.38		-0.32	
Prudential Emerging Markets	463,616,299	38.68	8.03	6.83	6.83	6.21	8.42		6.42	May-14
<i>JP Morgan EMBI Global Diversified</i>			<u>5.80</u>	<u>5.26</u>	<u>5.26</u>	<u>5.05</u>	<u>7.08</u>		<u>5.41</u>	<i>May-14</i>
Over/Under			2.23	1.57	1.57	1.16	1.34		1.01	
Bain Capital Senior Loan Fund, LP*	228,551,152	19.07	4.62	4.95	4.95	4.42	5.45		4.22	Jun-15
<i>Credit Suisse Leveraged Loans</i>			<u>3.64</u>	<u>2.78</u>	<u>2.78</u>	<u>3.99</u>	<u>5.19</u>		<u>4.10</u>	<i>Jun-15</i>
Over/Under			0.98	2.17	2.17	0.43	0.26		0.12	
SLC Mgmt Talf	12,439,077	1.04							-0.28	Jun-20
<i>Credit Suisse Leveraged Loan</i>									<u>9.37</u>	<i>Jun-20</i>
Over/Under									-9.65	
DDJ Capital Management ¹	237,578,641	19.82							4.14	Nov-20
<i>50% BBgBarc US High Yield 2% Issuer Cap / 50% Credit Suisse</i>									<u>4.69</u>	<i>Nov-20</i>
Leveraged Loan Index										
Over/Under									-0.55	
Loomis Sayles & Co. High Yield ¹	251,495,043	20.98							6.80	Nov-20
<i>BBgBarc US High Yield 2% Issuer Cap TR</i>									<u>5.92</u>	<i>Nov-20</i>
Over/Under									0.88	
Benefit Street Partners LLC	4,950,005	0.41							0.00	Dec-20

¹ Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.

- Credit Opportunities Blend = 65% BBgBarc US High Yield 2% Issuer Cap TR / 35% JP Morgan EMBI Global Diversified 7/01/2014 to present; BBgBarc US High Yield 2% Issuer Cap TR prior to

eA = eVestment Alliance

BBgBarc = Bloomberg Barclays

*Net of fee return since vehicle is commingled.



Los Angeles City Employees' Retirement System

CREDIT OPPORTUNITIES (NET)

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Credit Opportunities	1,198,630,373	100.00	5.94		4.70		4.70		5.14		7.35				5.54	Jun-13
<i>Credit Opportunities Blend</i>			<u>6.22</u>		<u>6.45</u>		<u>6.45</u>		<u>5.83</u>		<u>8.07</u>				<u>6.20</u>	<i>Jun-13</i>
Over/Under			-0.28		-1.75		-1.75		-0.69		-0.72				-0.66	
Prudential Emerging Markets	463,616,299	38.68	7.95	29	6.44	57	6.44	57	5.82	21	7.99	18			5.99	May-14
<i>JP Morgan EMBI Global Diversified</i>			<u>5.80</u>	90	<u>5.26</u>	68	<u>5.26</u>	68	<u>5.05</u>	46	<u>7.08</u>	64			<u>5.40</u>	<i>May-14</i>
Over/Under			2.15		1.18		1.18		0.77		0.91				0.59	
<i>eV Emg Mkts Fixed Inc - Hard Currency Net Median</i>			7.19		6.57		6.57		4.87		7.29				4.95	<i>May-14</i>
Bain Capital Senior Loan Fund, LP*	228,551,152	19.07	4.62	8	4.95	4	4.95	4	4.42	4	5.45	5			4.22	Jun-15
<i>Credit Suisse Leveraged Loans</i>			<u>3.64</u>	34	<u>2.78</u>	25	<u>2.78</u>	25	<u>3.99</u>	18	<u>5.19</u>	8			<u>4.10</u>	<i>Jun-15</i>
Over/Under			0.98		2.17		2.17		0.43		0.26				0.12	
<i>eV US Float-Rate Bank Loan Fixed Inc Net Median</i>			3.36		1.99		1.99		3.36		4.47				3.58	<i>Jun-15</i>
SLC Mgmt Talf	12,439,077	1.04													-0.28	Jun-20
<i>Credit Suisse Leveraged Loan Over/Under</i>																
DDJ Capital Management ¹	237,578,641	19.82													4.14	Nov-20
<i>50% BBgBarc US High Yield 2% Issuer Cap / 50% Credit Suisse Leveraged Loan Index</i>															<u>4.69</u>	<i>Nov-20</i>
Over/Under															-0.55	
Loomis Sayles & Co. High Yield ¹	251,495,043	20.98													6.80	Nov-20
<i>BBgBarc US High Yield 2% Issuer Cap TR</i>															<u>5.92</u>	<i>Nov-20</i>
Over/Under															0.88	
Benefit Street Partners LLC	4,950,005	0.41													0.00	Dec-20

¹ Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.

- Credit Opportunities Blend = 65% BBgBarc US High Yield 2% Issuer Cap TR / 35% JP Morgan EMBI Global Diversified 7/01/2014 to present; BBgBarc US High Yield 2% Issuer Cap TR prior to

eA = eVestment Alliance

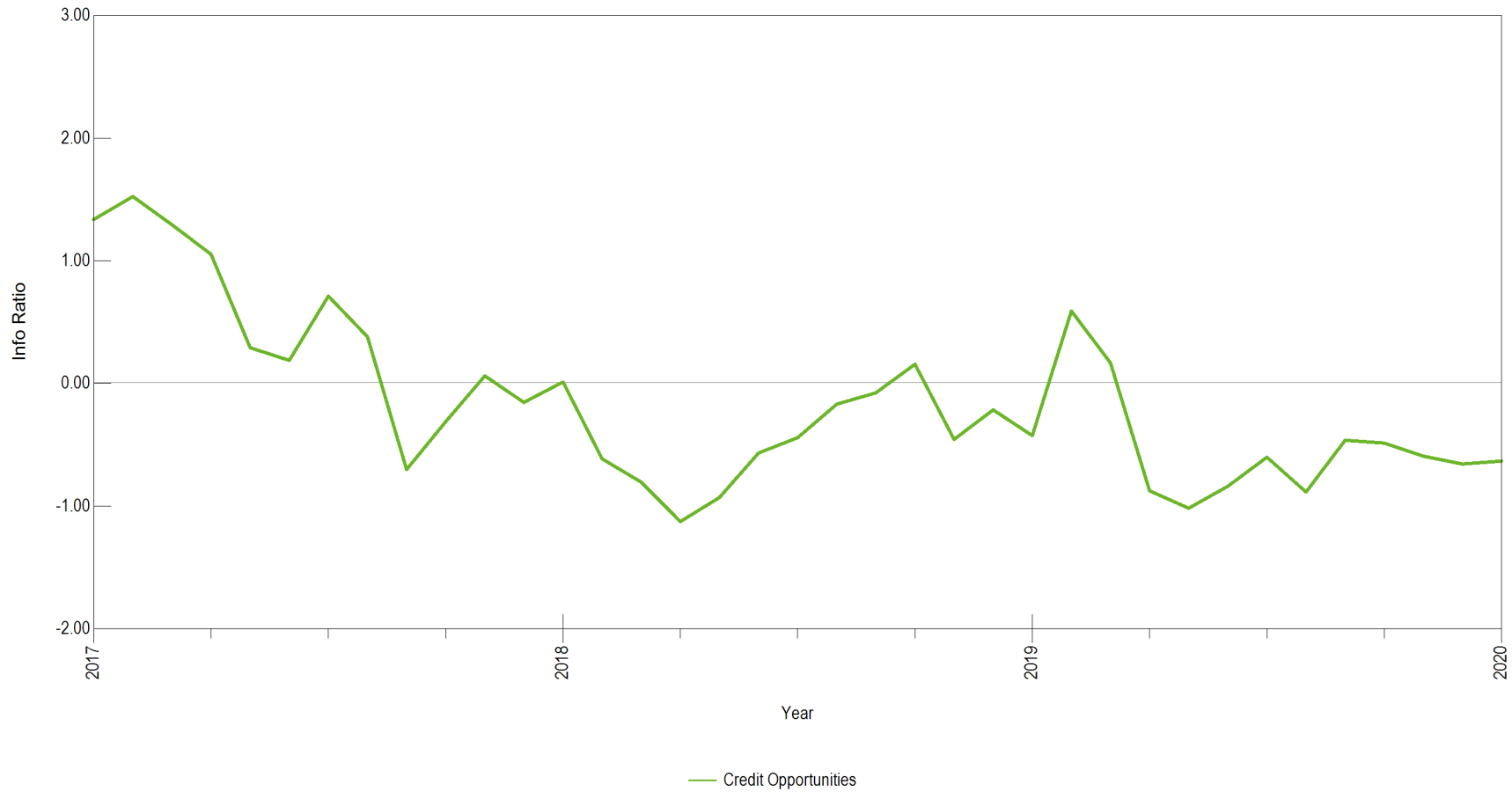
BBgBarc = Bloomberg Barclays



Los Angeles City Employees' Retirement System

CREDIT OPPORTUNITIES ROLLING 1 YEAR

Rolling 1 Year Information Ratio



*Returns are net of fees



MANAGER REPORT CARD

Credit Opportunities Managers	Inception Date	Mandate	Current Quarter (Net)		One Year (Net)		Three Years (Net)		Five Years (Net)		Since Inception (Net)	Annual Mgt Fee Paid \$ (000)	Comments
			Index	Index	Index	Index	Index	Index					
Prudential	May-14	Emerging Market Debt	✓	✓	✓	✓	✓	✓	✓	✓	1,538.5	On Watch since May 2020 due to performance	
Bain	Jun-15	Bank Loans	✓	✓	✓	✓	✓	✓	✓	✓	885.4	On Watch since July 2020 due to performance	
Benefit Street Partners	Dec-20	Private Credit	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Loomis Sayles	Nov-20	High Yield	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
DDJ	Nov-20	High Yield/Bank Loan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		

Note: Managers are placed on Watch List for concerns with organization, process and performance. Managers are normally on the Watch List for 12 months though may be longer if manager issues remain but not severe enough to warrant termination recommendation.

- Annual Management Fee Paid as of fiscal year ending June 30, 2020.
- * Where net of fees performance is not available gross of fee returns are evaluated.

Legend	
✓	Outperformed
✗	Underperformed
=	Equal to
✓✓	Gross Return



REAL ASSETS

NEPC, LLC

Los Angeles City Employees' Retirement System

REAL ASSETS (GROSS)

	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Real Assets	2,105,856,735	100.00	2.94	2.75	2.75	4.58	5.59	7.69	6.18	Nov-94
<i>CPI + 5% (Unadjusted)</i>			<u>1.30</u>	<u>6.42</u>	<u>6.42</u>	<u>6.94</u>	<u>7.04</u>	<u>6.82</u>	<u>7.25</u>	<i>Nov-94</i>
Over/Under			1.64	-3.67	-3.67	-2.36	-1.45	0.87	-1.07	
Public Real Assets	1,296,377,277	61.56	4.30	7.04	7.04	4.88	5.11		2.90	Jun-14
<i>Public Real Assets Blend</i>			<u>6.95</u>	<u>4.74</u>	<u>4.74</u>	<u>3.31</u>	<u>4.07</u>		<u>0.63</u>	<i>Jun-14</i>
Over/Under			-2.65	2.30	2.30	1.57	1.04		2.27	
TIPS	847,921,562	40.26	1.68	12.02	12.02	6.36	5.38		3.52	Jul-14
<i>BBgBarc US TIPS TR</i>			<u>1.62</u>	<u>10.99</u>	<u>10.99</u>	<u>5.92</u>	<u>5.08</u>		<u>3.36</u>	<i>Jul-14</i>
Over/Under			0.06	1.03	1.03	0.44	0.30		0.16	
DFA US TIPS ¹	847,921,562	40.26	1.68	12.02	12.02	6.36	5.50		3.63	Aug-14
<i>BBgBarc US TIPS TR</i>			<u>1.62</u>	<u>10.99</u>	<u>10.99</u>	<u>5.92</u>	<u>5.08</u>		<u>3.36</u>	<i>Aug-14</i>
Over/Under			0.06	1.03	1.03	0.44	0.42		0.27	
REITS	232,223,596	11.03	8.90	-0.16	-0.16	7.53	8.22		7.66	Mar-15
<i>FTSE NAREIT All Equity REIT</i>			<u>8.14</u>	<u>-5.12</u>	<u>-5.12</u>	<u>5.29</u>	<u>6.62</u>		<u>5.53</u>	<i>Mar-15</i>
Over/Under			0.76	4.96	4.96	2.24	1.60		2.13	
CenterSquare US Real Estate ¹	232,223,596	11.03	8.90	-0.16	-0.16	7.53	8.22		8.36	May-15
<i>FTSE NAREIT All Equity REIT</i>			<u>8.14</u>	<u>-5.12</u>	<u>-5.12</u>	<u>5.29</u>	<u>6.62</u>		<u>6.56</u>	<i>May-15</i>
Over/Under			0.76	4.96	4.96	2.24	1.60		1.80	
Commodities	216,232,118	10.27	10.45	-2.30	-2.30	-2.00	1.78		-3.29	Jun-15
<i>Bloomberg Commodity Index TR USD</i>			<u>10.19</u>	<u>-3.12</u>	<u>-3.12</u>	<u>-2.53</u>	<u>1.03</u>		<u>-3.85</u>	<i>Jun-15</i>
Over/Under			0.26	0.82	0.82	0.53	0.75		0.56	
CoreCommodity Mgmt ¹	216,232,118	10.27	10.45	-2.30	-2.30	-2.00	1.78		-3.29	Jul-15
<i>Bloomberg Commodity Index TR USD</i>			<u>10.19</u>	<u>-3.12</u>	<u>-3.12</u>	<u>-2.53</u>	<u>1.03</u>		<u>-3.85</u>	<i>Jul-15</i>
Over/Under			0.26	0.82	0.82	0.53	0.75		0.56	
Private Real Estate	791,188,233	37.57	0.89	-3.59	-3.59	3.50	5.53	8.49	6.47	Oct-94
<i>Real Estate Blend</i>			<u>1.49</u>	<u>1.98</u>	<u>1.98</u>	<u>5.75</u>	<u>7.06</u>	<u>10.16</u>	<u>9.49</u>	<i>Oct-94</i>
Over/Under			-0.60	-5.57	-5.57	-2.25	-1.53	-1.67	-3.02	
Timber	18,291,225	0.87	-1.81	2.55	2.55	2.26	2.68	5.26	8.82	Sep-99

¹ Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.

- Public Real Assets Custom Benchmark = 60% BBgBarc US TIPS TR / 20% Bloomberg Commodity Index TR USD / 10% Alerian MLP TR USD / 10% FTSE NAREIT All REIT

- Real Estate Blend = NCREIF-ODCE + 80bps 7/1/2014 to present; NCREIF Property Index 1 Qtr Lag plus 100bps 7/1/2012 - 6/30/2014; NCREIF Property Index prior to

eA = eVestment Alliance



Los Angeles City Employees' Retirement System

REAL ASSETS (NET)

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Real Assets	2,105,856,735	100.00	2.90	56	2.60	47	2.60	47	4.42	47	5.42	32	7.55	29		Nov-94
<i>CPI + 5% (Unadjusted)</i>			<u>1.30</u>	79	<u>6.42</u>	24	<u>6.42</u>	24	<u>6.94</u>	22	<u>7.04</u>	19	<u>6.82</u>	32		Nov-94
Over/Under			1.60		-3.82		-3.82		-2.52		-1.62		0.73			
<i>InvMetrics Public DB > \$1 Billion Real Assets/Commodities Gross Median</i>			3.50		0.97		0.97		3.06		5.08		4.86			Nov-94
Public Real Assets	1,296,377,277	61.56	4.26		6.83		6.83		4.66		4.86				2.70	Jun-14
<i>Public Real Assets Blend</i>			<u>6.95</u>		<u>4.74</u>		<u>4.74</u>		<u>3.31</u>		<u>4.07</u>				<u>0.63</u>	Jun-14
Over/Under			-2.69		2.09		2.09		1.35		0.79				2.07	
TIPS	847,921,562	40.26	1.67		11.97		11.97		6.31		5.32				3.46	Jul-14
<i>BBgBarc US TIPS TR</i>			<u>1.62</u>		<u>10.99</u>		<u>10.99</u>		<u>5.92</u>		<u>5.08</u>				<u>3.36</u>	Jul-14
Over/Under			0.05		0.98		0.98		0.39		0.24				0.10	
DFA US TIPS ¹	847,921,562	40.26	1.67	64	11.97	16	11.97	16	6.31	15	5.45	20			3.58	Aug-14
<i>BBgBarc US TIPS TR</i>			<u>1.62</u>	69	<u>10.99</u>	37	<u>10.99</u>	37	<u>5.92</u>	45	<u>5.08</u>	49			<u>3.36</u>	Aug-14
Over/Under			0.05		0.98		0.98		0.39		0.37				0.22	
<i>eV US TIPS / Inflation Fixed Inc Net Median</i>			1.85		10.61		10.61		5.87		5.06				3.23	Aug-14
REITS	232,223,596	11.03	8.79		-0.58		-0.58		7.08		7.74				7.21	Mar-15
<i>FTSE NAREIT All Equity REIT</i>			<u>8.14</u>		<u>-5.12</u>		<u>-5.12</u>		<u>5.29</u>		<u>6.62</u>				<u>5.53</u>	Mar-15
Over/Under			0.65		4.54		4.54		1.79		1.12				1.68	
CenterSquare US Real Estate ¹	232,223,596	11.03	8.79	75	-0.58	26	-0.58	26	7.08	35	7.74	20			7.90	May-15
<i>FTSE NAREIT All Equity REIT</i>			<u>8.14</u>	87	<u>-5.12</u>	70	<u>-5.12</u>	70	<u>5.29</u>	49	<u>6.62</u>	38			<u>6.56</u>	May-15
Over/Under			0.65		4.54		4.54		1.79		1.12				1.34	
<i>eV US REIT Net Median</i>			10.67		-3.55		-3.55		5.20		5.86				6.03	May-15
Commodities	216,232,118	10.27	10.31		-2.86		-2.86		-2.61		1.07				-3.95	Jun-15
<i>Bloomberg Commodity Index TR USD</i>			<u>10.19</u>		<u>-3.12</u>		<u>-3.12</u>		<u>-2.53</u>		<u>1.03</u>				<u>-3.85</u>	Jun-15
Over/Under			0.12		0.26		0.26		-0.08		0.04				-0.10	
CoreCommodity Mgmt ¹	216,232,118	10.27	10.31		-2.86		-2.86		-2.61		1.07				-3.95	Jul-15
<i>Bloomberg Commodity Index TR USD</i>			<u>10.19</u>		<u>-3.12</u>		<u>-3.12</u>		<u>-2.53</u>		<u>1.03</u>				<u>-3.85</u>	Jul-15
Over/Under			0.12		0.26		0.26		-0.08		0.04				-0.10	

1 Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance. No universe is available.

- Public Real Assets Custom Benchmark = 60% BBgBarc US TIPS TR / 20% Bloomberg Commodity Index TR USD / 10% Alerian MLP TR USD / 10% FTSE NAREIT All REIT

eA = eVestment Alliance



Los Angeles City Employees' Retirement System

REAL ASSETS (NET)

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Private Real Estate	791,188,233	37.57	0.86	66	-3.68	95	-3.68	95	3.41	85	5.45	76	8.38	64		Oct-94
<i>Real Estate Blend</i>			<u>1.49</u>	61	<u>1.98</u>	4	<u>1.98</u>	4	<u>5.75</u>	9	<u>7.06</u>	9	<u>10.16</u>	11		Oct-94
<i>Over/Under</i>			-0.63		-5.66		-5.66		-2.34		-1.61		-1.78			
<i>InvMetrics Public DB Real Estate</i>			1.64		0.45		0.45		4.70		6.15		8.79			Oct-94
<i>Priv Net Median</i>																
Timber	18,291,225	0.87	-1.81		2.55		2.55		2.26		2.68		5.06			Sep-99

- Real Estate Blend = NCREIF-ODCE + 80bps 7/1/2014 to present; NCREIF Property Index 1 Qtr Lag plus 100bps 7/1/2012 - 6/30/2014; NCREIF Property Index prior to eA = eVestment Alliance



MANAGER REPORT CARD

Real Assets Managers	Inception Date	Mandate	Current Quarter (Net)		One Year (Net)		Three Years (Net)		Five Years (Net)		Since Inception (Net)	Annual Mgt Fee Paid \$ (000)	Comments
			Index	Universe	Index	Universe	Index	Universe	Index	Universe	Index		
DFA	Jul-14	U.S. TIPS	✓	✘	✓	✓	✓	✓	✓	✓	✓	383.6	Performance compliant with LACERS' Manager Monitoring Policy
CenterSquare	Apr-15	REITS	✓	✘	✓	✓	✓	✓	✓	✓	✓	923.6	Performance compliant with LACERS' Manager Monitoring Policy
CoreCommodity Mgt.	Jul-15	Commodities	✓	N/A	✓	N/A	✘	N/A	✓	N/A	✘	1,141.2	On Watch since September 2020 due to performance

Note: Managers are placed on Watch List for concerns with organization, process and performance. Managers are normally on the Watch List for 12 months though may be longer if manager issues remain but not severe enough to warrant termination recommendation.

- Annual Management Fee Paid as of fiscal year ending June 30, 2020.
- * Where net of fees performance is not available gross of fee returns are evaluated.

Legend	
✓	Outperformed
✘	Underperformed
=	Equal to
✓✓	Gross Return



APPENDIX

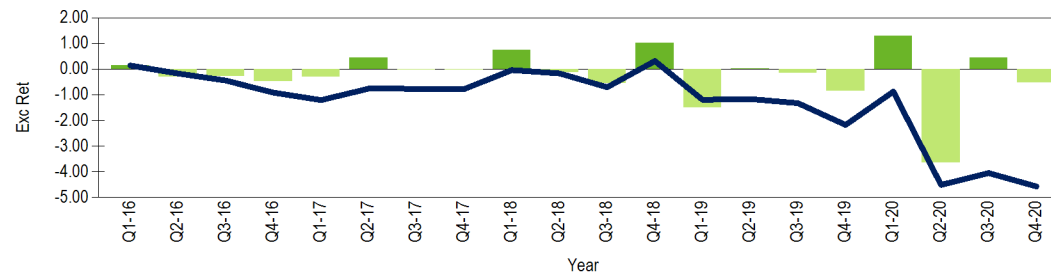
NEPC, LLC

Los Angeles City Employees' Retirement System

TOTAL FUND PERFORMANCE SUMMARY (GROSS)

	Market Value	3 Mo	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank	15 Yrs	Rank	Inception	Inception Date
LACERS Master Trust	\$20,959,422,719	10.32%	53	12.05%	44	12.05%	44	8.35%	42	9.93%	41	8.82%	24	7.34%	28	8.44%	Oct-94
Policy Index		10.84%	33	14.06%	19	14.06%	19	9.40%	21	10.74%	9	9.01%	17	7.45%	16	8.50%	Oct-94
InvMetrics Public DB \$5-50B Gross Median		10.42%		11.01%		11.01%		7.90%		9.47%		8.43%		6.91%		8.23%	Oct-94

Quarterly and Cumulative Excess Performance



5 Years Ending December 31, 2020

	Annualized Return (%)	Rank	Annualized Standard Deviation	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
LACERS Master Trust	9.93%	41	8.98%	59	0.98	66	1.08	55
Policy Index	10.74%	9	10.30%	93	0.93	76	1.06	62
InvMetrics Public DB \$5-50B Gross Median	9.47%	--	8.62%	--	1.01	--	1.11	--

3 Years Ending December 31, 2020

	Annualized Return (%)	Rank	Annualized Standard Deviation	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
LACERS Master Trust	8.35%	42	10.92%	60	0.63	63	0.80	51
Policy Index	9.40%	21	12.58%	93	0.63	63	0.83	44
InvMetrics Public DB \$5-50B Gross Median	7.90%	--	10.54%	--	0.68	--	0.80	--



Los Angeles City Employees' Retirement System

TOTAL FUND RISK STATISTICS (NET)

3 Years Ending December 31, 2020

	% of Total MV (%)	Annualized Return (%)	Rank	Annualized Standard Deviation	Rank	Annualized Alpha Jensen (%)	Rank	Information Ratio	Rank	Sortino Ratio RF	Rank	Tracking Error	Rank
LACERS Master Trust	100.00%	8.16%	44	10.93%	60	-0.16%	56	-0.60	87	0.78	56	2.07%	46
Total Equity	52.06%	9.53%	46	18.87%	68	-0.18%	55	-0.20	53	0.56	51	0.93%	13
U.S. Equity	24.97%	13.68%	36	19.68%	46	-0.80%	40	-0.95	58	0.80	39	0.86%	16
Non-U.S. Equity	27.09%	6.16%	33	18.78%	60	1.18%	32	0.84	26	0.35	42	1.51%	17
Developed ex-U.S.	20.08%	6.04%	51	19.02%	73	1.65%	49	0.75	49	0.34	53	2.34%	34
Emerging Markets	7.01%	5.83%	32	20.22%	66	-0.41%	30	-0.18	36	0.33	28	1.89%	18
Core Fixed Income	16.63%	5.83%	36	3.41%	11	0.55%	27	0.79	5	3.02	9	0.62%	13
Credit Opportunities	5.72%	5.14%	--	10.74%	--	-1.14%	--	-0.41	--	0.29	--	1.70%	--
Real Assets	10.05%	4.42%	47	3.76%	11	1.22%	63	-0.66	92	0.91	30	3.80%	15
Public Real Assets	6.19%	4.66%	--	6.37%	--	2.02%	--	0.33	--	0.59	--	4.12%	--
Private Real Estate	3.77%	3.41%	85	2.78%	65	2.09%	14	-0.58	89	0.81	89	4.02%	89
Private Equity	11.69%	12.64%	52	9.15%	60	11.55%	24	-0.24	67	1.65	65	22.14%	86

5 Years Ending December 31, 2020

	% of Total MV (%)	Annualized Return (%)	Rank	Annualized Standard Deviation	Rank	Annualized Alpha Jensen (%)	Rank	Information Ratio	Rank	Sortino Ratio RF	Rank	Tracking Error	Rank
LACERS Master Trust	100.00%	9.74%	46	8.99%	59	0.27%	50	-0.60	91	1.06	62	1.68%	40
Total Equity	52.06%	12.17%	44	15.50%	59	0.02%	41	0.03	35	0.82	46	0.80%	8
U.S. Equity	24.97%	14.85%	44	16.08%	42	-0.62%	37	-0.74	66	0.95	32	0.79%	14
Non-U.S. Equity	27.09%	9.96%	35	15.82%	59	0.84%	32	0.77	16	0.73	47	1.34%	13
Developed ex-U.S.	20.08%	9.07%	52	15.93%	62	1.45%	46	0.81	33	0.66	55	2.00%	28
Emerging Markets	7.01%	12.68%	16	17.93%	73	-0.32%	16	-0.09	18	0.94	15	1.57%	13
Core Fixed Income	16.63%	4.97%	54	3.13%	12	0.62%	52	0.93	5	2.09	1	0.58%	17
Credit Opportunities	5.72%	7.35%	--	8.71%	--	-1.29%	--	-0.49	--	0.57	--	1.50%	--
Real Assets	10.05%	5.42%	32	3.18%	4	1.11%	72	-0.51	92	1.50	30	3.17%	6
Public Real Assets	6.19%	4.86%	--	5.56%	--	1.79%	--	0.24	--	0.85	--	3.35%	--
Private Real Estate	3.77%	5.45%	76	2.37%	34	4.62%	8	-0.41	86	1.80	74	3.97%	83
Private Equity	11.69%	11.81%	49	7.36%	48	10.94%	22	-0.40	66	1.87	73	17.85%	79

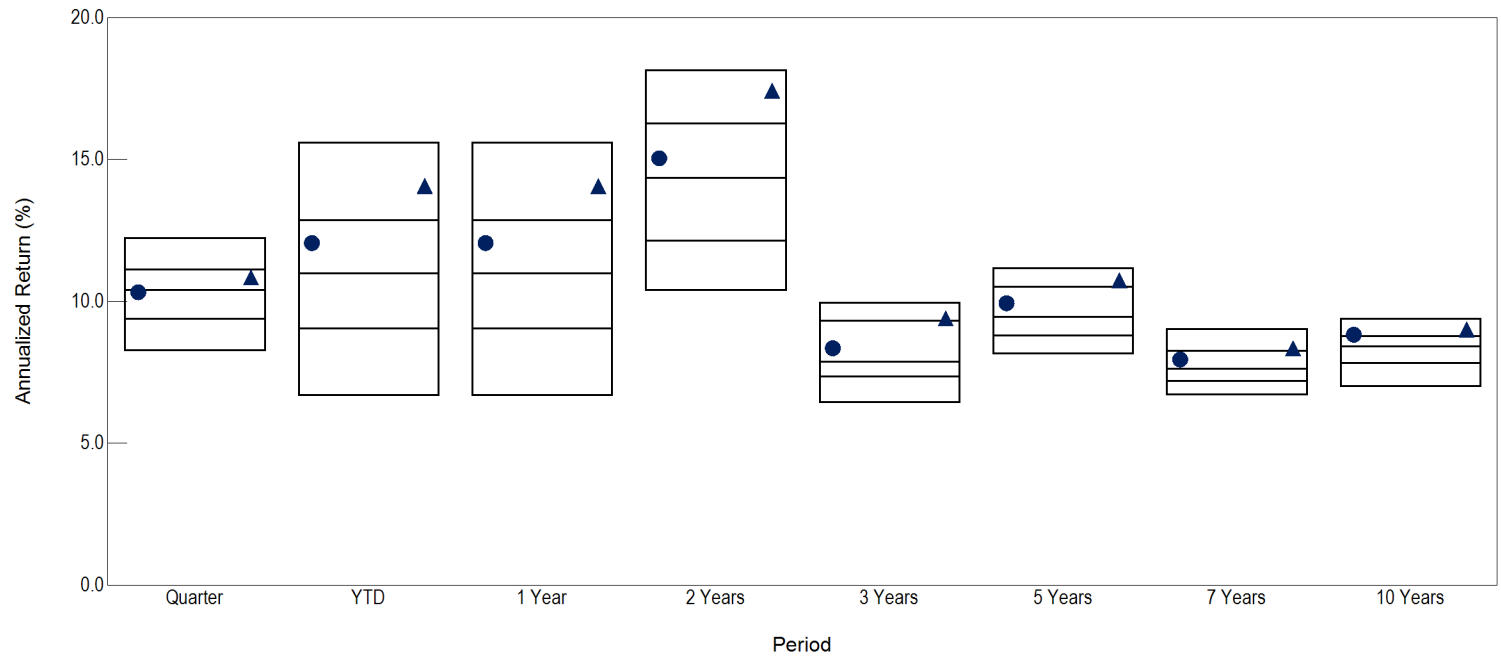
Sortino Ratio RF = Sortino Ratio Risk Free. The risk free rate is the Citi 91 Day T-Bill Index.
Peer universe: InvMetrics Public DB \$5-50B Gross (USD)



Los Angeles City Employees' Retirement System

TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

LACERS Master Trust vs. InvMetrics Public DB \$5-50B Gross



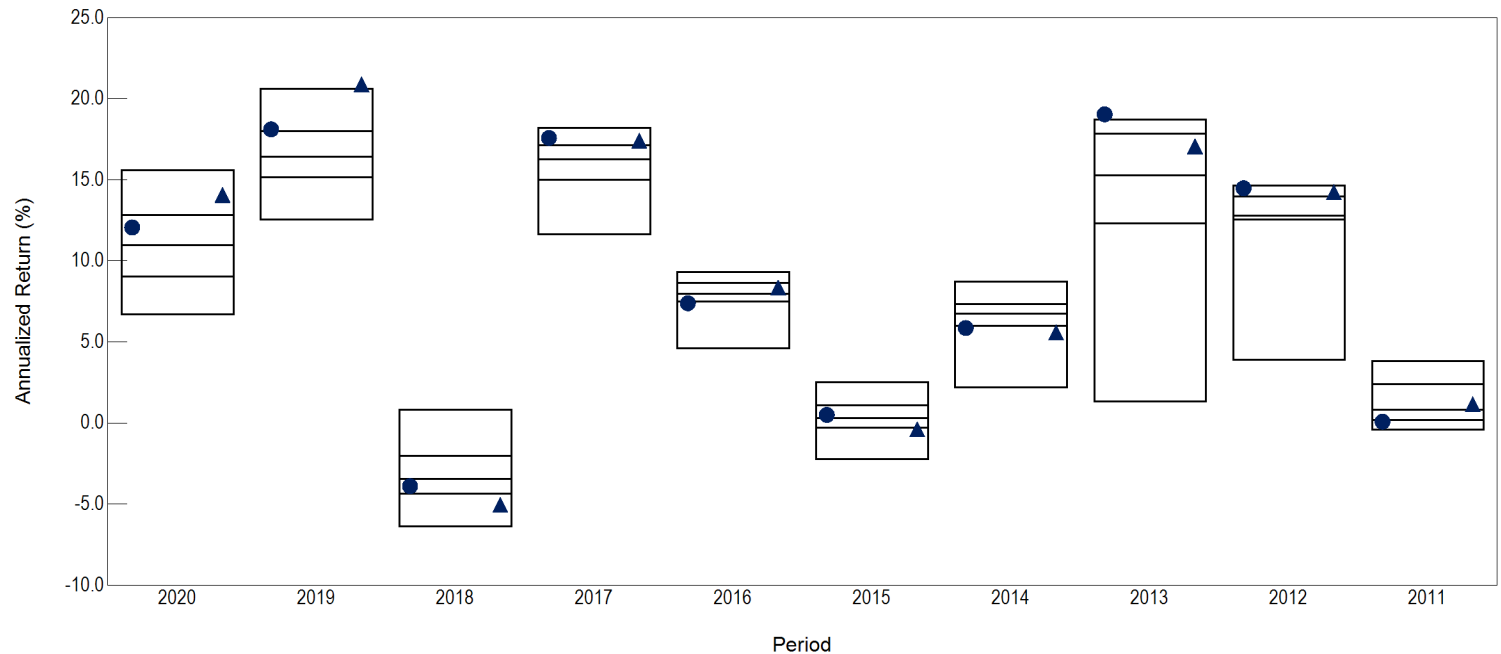
	Return (Rank)															
5th Percentile	12.24	15.58	15.58	18.14	9.95	11.16	9.03	9.38								
25th Percentile	11.15	12.88	12.88	16.28	9.33	10.53	8.28	8.81								
Median	10.42	11.01	11.01	14.38	7.90	9.47	7.65	8.43								
75th Percentile	9.41	9.06	9.06	12.15	7.36	8.82	7.21	7.84								
95th Percentile	8.29	6.73	6.73	10.42	6.46	8.18	6.74	7.04								
# of Portfolios	32	32	32	32	32	32	30	29								
● LACERS Master Trust	10.32	(53)	12.05	(44)	12.05	(44)	15.04	(36)	8.35	(42)	9.93	(41)	7.95	(43)	8.82	(24)
▲ Policy Index	10.84	(33)	14.06	(19)	14.06	(19)	17.42	(14)	9.40	(21)	10.74	(9)	8.34	(24)	9.01	(17)



Los Angeles City Employees' Retirement System

TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

LACERS Master Trust vs. InvMetrics Public DB \$5-50B Gross



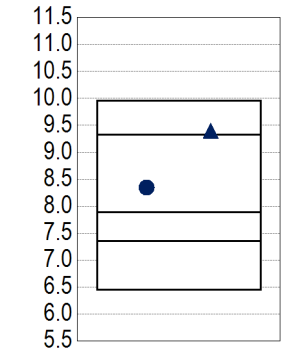
	Return (Rank)																			
5th Percentile	15.58	20.62	0.81	18.21	9.30	2.50	8.72	18.69	14.65	3.83										
25th Percentile	12.88	18.02	-1.99	17.15	8.68	1.12	7.38	17.86	14.01	2.41										
Median	11.01	16.46	-3.40	16.29	7.99	0.35	6.79	15.31	12.83	0.86										
75th Percentile	9.06	15.18	-4.32	15.05	7.51	-0.24	6.04	12.36	12.58	0.21										
95th Percentile	6.73	12.57	-6.33	11.68	4.65	-2.20	2.25	1.36	3.92	-0.37										
# of Portfolios	32	27	25	46	30	24	24	23	16	16										
● LACERS Master Trust	12.05	(44)	18.10	(23)	-3.89	(67)	17.57	(12)	7.38	(78)	0.49	(41)	5.85	(81)	19.03	(4)	14.47	(7)	0.08	(89)
▲ Policy Index	14.06	(19)	20.88	(5)	-5.04	(84)	17.41	(14)	8.35	(41)	-0.39	(77)	5.58	(87)	17.06	(31)	14.23	(21)	1.17	(44)



TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

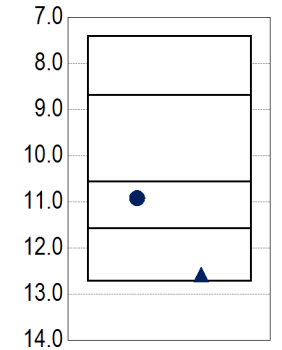
LACERS Master Trust vs. InvMetrics Public DB \$5-50B Gross 3 Years

Annualized Return (%)	Annualized Standard Deviation	Annualized Alpha (%)	Sharpe Ratio	Sortino Ratio Risk Free	Tracking Error
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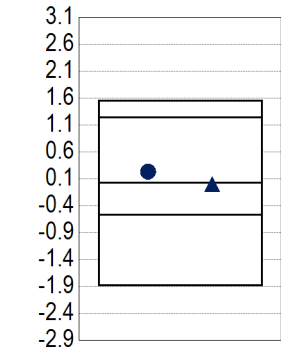
● LACERS Master Trust	Value	8.35
	Rank	42
▲ Policy Index	Value	9.40
	Rank	21

Universe	
5th %tile	9.95
25th %tile	9.33
Median	7.90
75th %tile	7.36
95th %tile	6.46



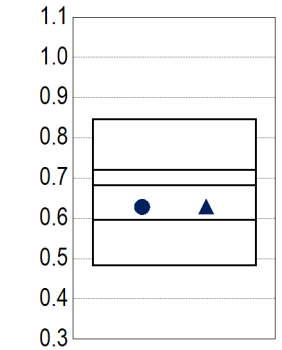
● LACERS Master Trust	Value	10.92
	Rank	60
▲ Policy Index	Value	12.58
	Rank	93

Universe	
5th %tile	7.40
25th %tile	8.67
Median	10.54
75th %tile	11.56
95th %tile	12.70



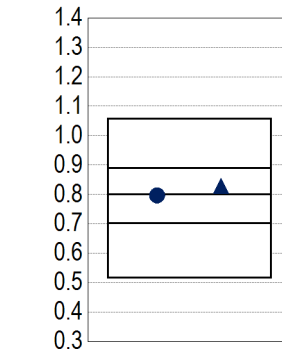
● LACERS Master Trust	Value	0.23
	Rank	46
▲ Policy Index	Value	0.00
	Rank	51

Universe	
5th %tile	1.56
25th %tile	1.25
Median	0.04
75th %tile	-0.56
95th %tile	-1.87



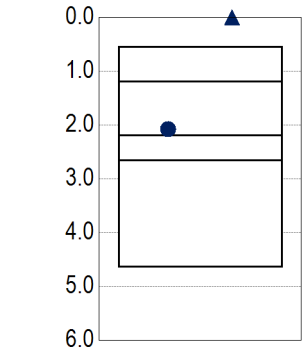
● LACERS Master Trust	Value	0.63
	Rank	63
▲ Policy Index	Value	0.63
	Rank	63

Universe	
5th %tile	0.85
25th %tile	0.72
Median	0.68
75th %tile	0.60
95th %tile	0.48



● LACERS Master Trust	Value	0.80
	Rank	51
▲ Policy Index	Value	0.83
	Rank	44

Universe	
5th %tile	1.06
25th %tile	0.89
Median	0.80
75th %tile	0.70
95th %tile	0.52



● LACERS Master Trust	Value	2.08
	Rank	47
▲ Policy Index	Value	0.00
	Rank	1

Universe	
5th %tile	0.55
25th %tile	1.18
Median	2.18
75th %tile	2.65
95th %tile	4.63

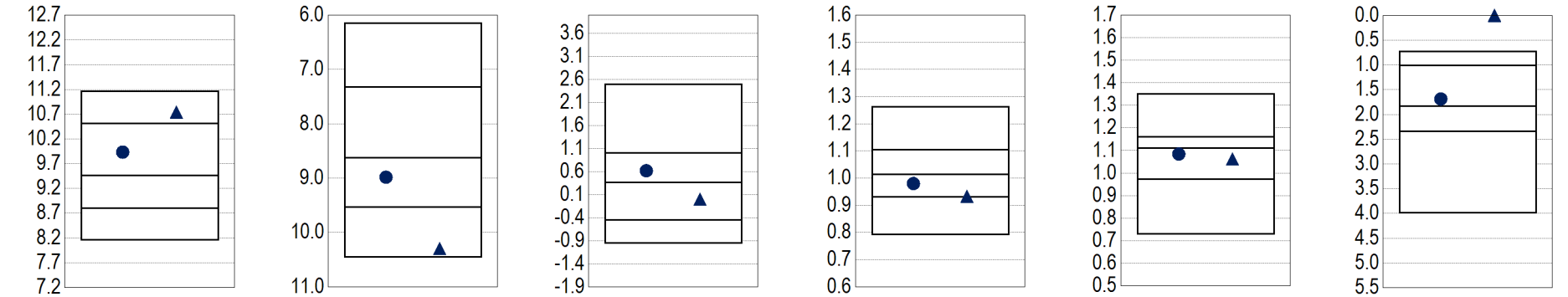
Sortino Ratio RF = Sortino Ratio Risk Free. The risk free rate is the Citi 91 Day T-Bill Index.



TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

LACERS Master Trust vs. InvMetrics Public DB \$5-50B Gross 5 Years

Annualized Return (%)	Annualized Standard Deviation	Annualized Alpha (%)	Sharpe Ratio	Sortino Ratio Risk Free	Tracking Error
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Metric	LACERS Master Trust Value	LACERS Master Trust Rank	Policy Index Value	Policy Index Rank	Universe 5th %tile	Universe 25th %tile	Universe Median	Universe 75th %tile	Universe 95th %tile
Annualized Return (%)	9.93	41	10.74	9	11.16	10.53	9.47	8.82	8.18
Annualized Standard Deviation	8.98	59	10.30	93	6.15	7.31	8.62	9.53	10.44
Annualized Alpha (%)	0.62	46	0.00	58	2.49	1.01	0.37	-0.44	-0.94
Sharpe Ratio	0.98	66	0.93	76	1.26	1.11	1.01	0.93	0.79
Sortino Ratio Risk Free	1.08	55	1.06	62	1.35	1.16	1.11	0.98	0.73
Tracking Error	1.69	40	0.00	1	0.73	1.00	1.82	2.33	3.97

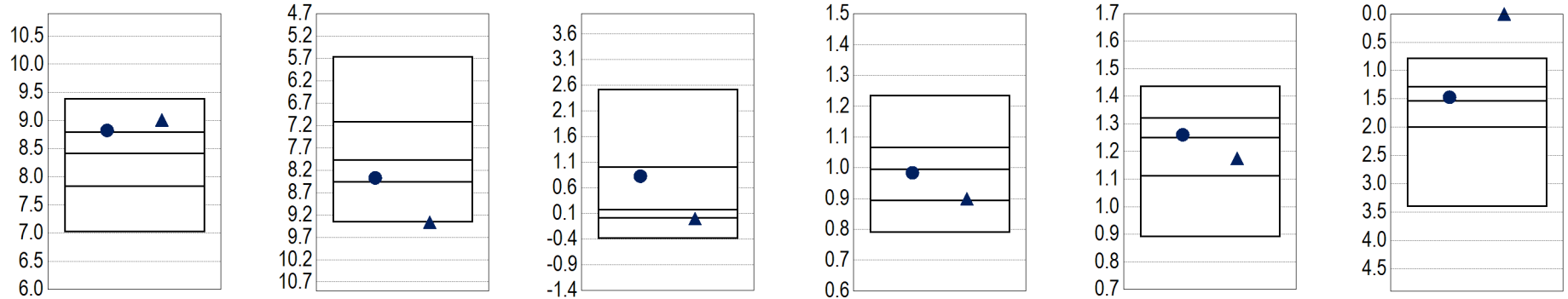
Sortino Ratio RF = Sortino Ratio Risk Free. The risk free rate is the Citi 91 Day T-Bill Index.



TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

LACERS Master Trust vs. InvMetrics Public DB \$5-50B Gross 10 Years

Annualized Return (%)	Annualized Standard Deviation	Annualized Alpha (%)	Sharpe Ratio	Sortino Ratio Risk Free	Tracking Error
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	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank
● LACERS Master Trust	8.82	24	8.37	71	0.83	36	0.98	58	1.26	46	1.47	43
▲ Policy Index	9.01	17	9.36	97	0.00	78	0.90	75	1.18	71	0.00	1
Universe												
5th %tile	9.38		5.66		2.51		1.23		1.44		0.79	
25th %tile	8.81		7.10		1.01		1.07		1.32		1.28	
Median	8.43		7.96		0.19		1.00		1.25		1.52	
75th %tile	7.84		8.45		0.03		0.90		1.11		1.99	
95th %tile	7.04		9.34		-0.37		0.79		0.89		3.38	

Sortino Ratio RF = Sortino Ratio Risk Free. The risk free rate is the Citi 91 Day T-Bill Index.



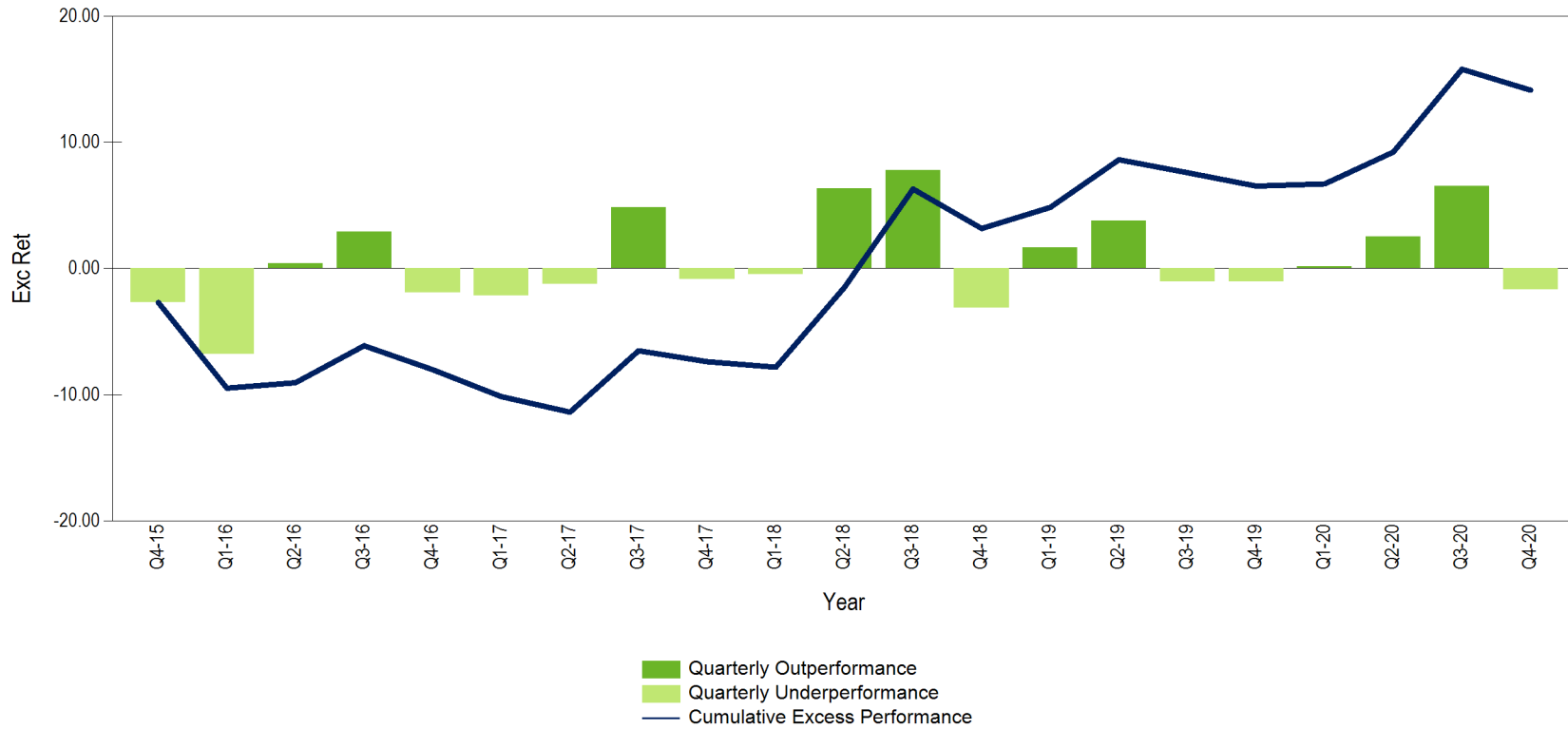
U.S. EQUITY MANAGER PERFORMANCE

NEPC, LLC

Los Angeles City Employees' Retirement System

EAM INVESTORS

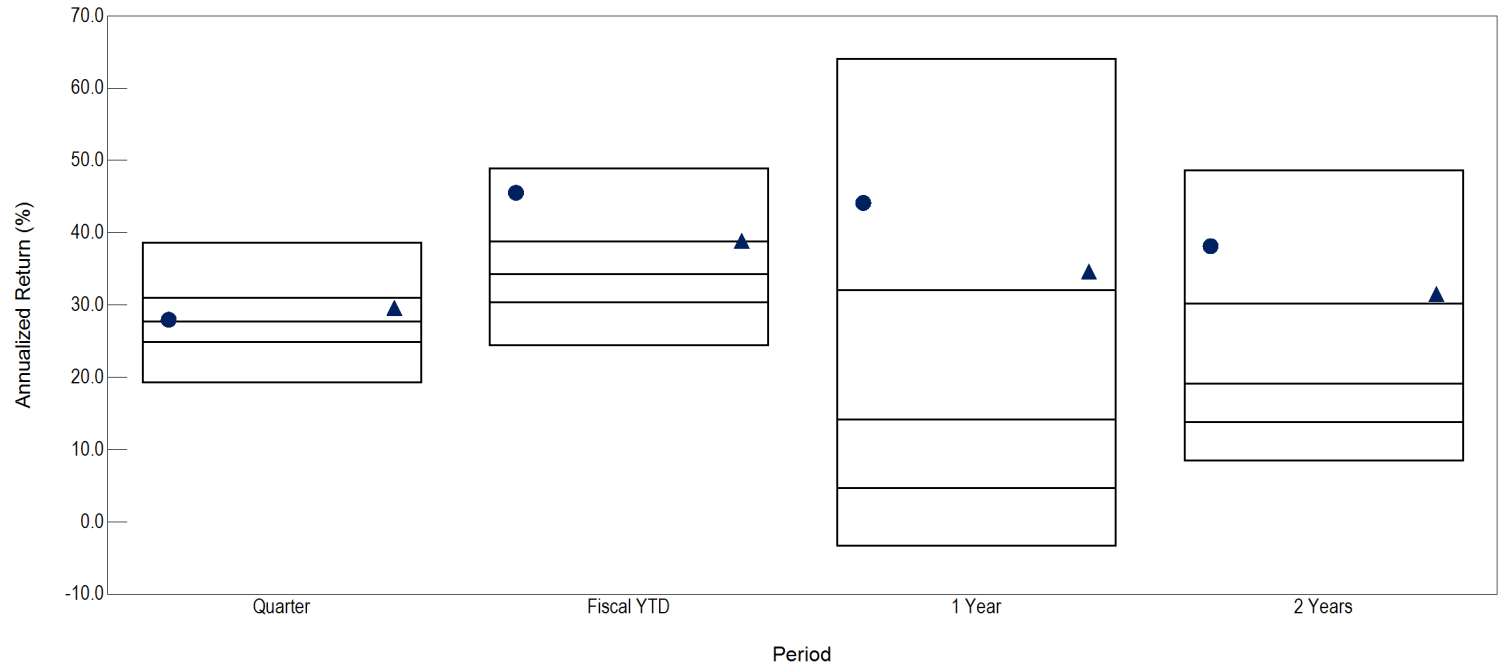
Quarterly and Cumulative Excess Performance



Los Angeles City Employees' Retirement System

EAM INVESTORS

EAM Investors vs. eV US Small Cap Equity Net



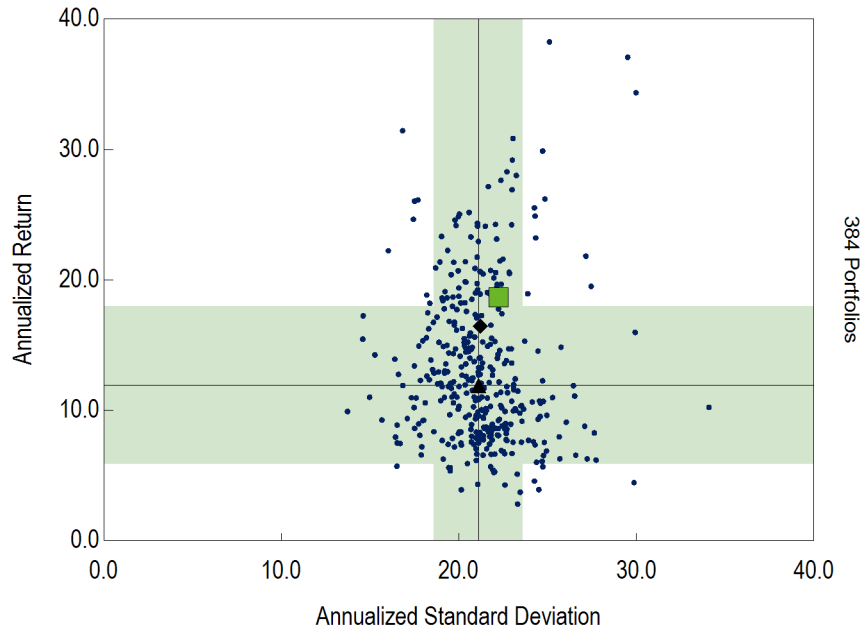
	Return (Rank)		Quarter		Fiscal YTD		1 Year		2 Years	
5th Percentile			38.59		48.85		64.04		48.65	
25th Percentile			31.05		38.91		32.16		30.29	
Median			27.81		34.39		14.22		19.19	
75th Percentile			24.93		30.50		4.72		13.90	
95th Percentile			19.34		24.48		-3.21		8.53	
# of Portfolios			421		421		421		415	
● EAM Investors			27.95	(49)	45.50	(10)	44.11	(15)	38.13	(14)
▲ Russell 2000 Growth			29.61	(38)	38.88	(26)	34.63	(23)	31.52	(22)



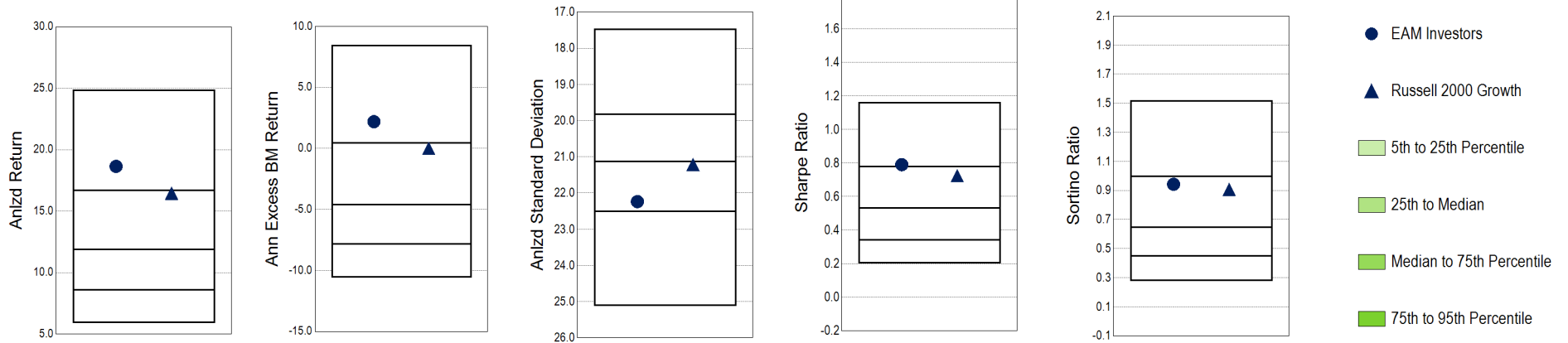
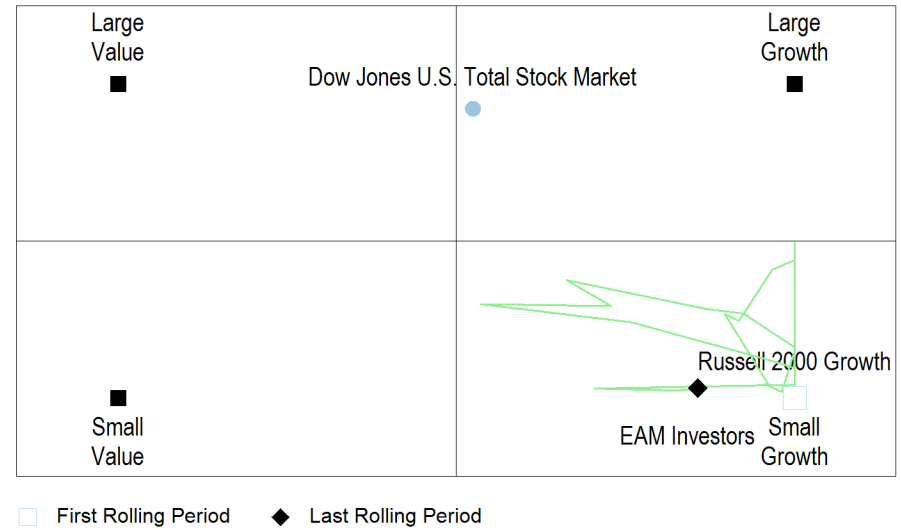
Los Angeles City Employees' Retirement System

EAM INVESTORS

Since Inception Risk Return

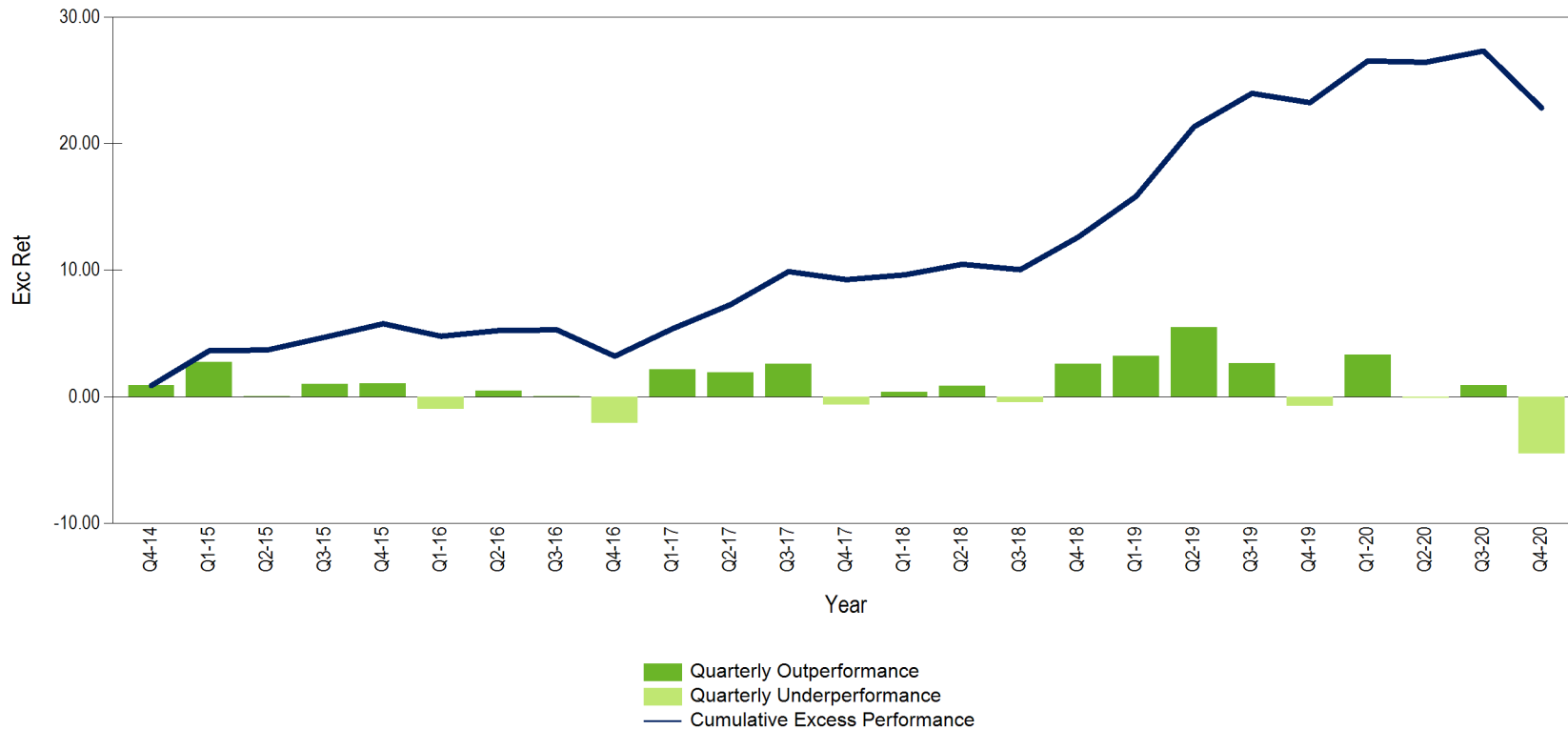


Since Inception Style Map



PRINCIPAL GLOBAL INVESTORS

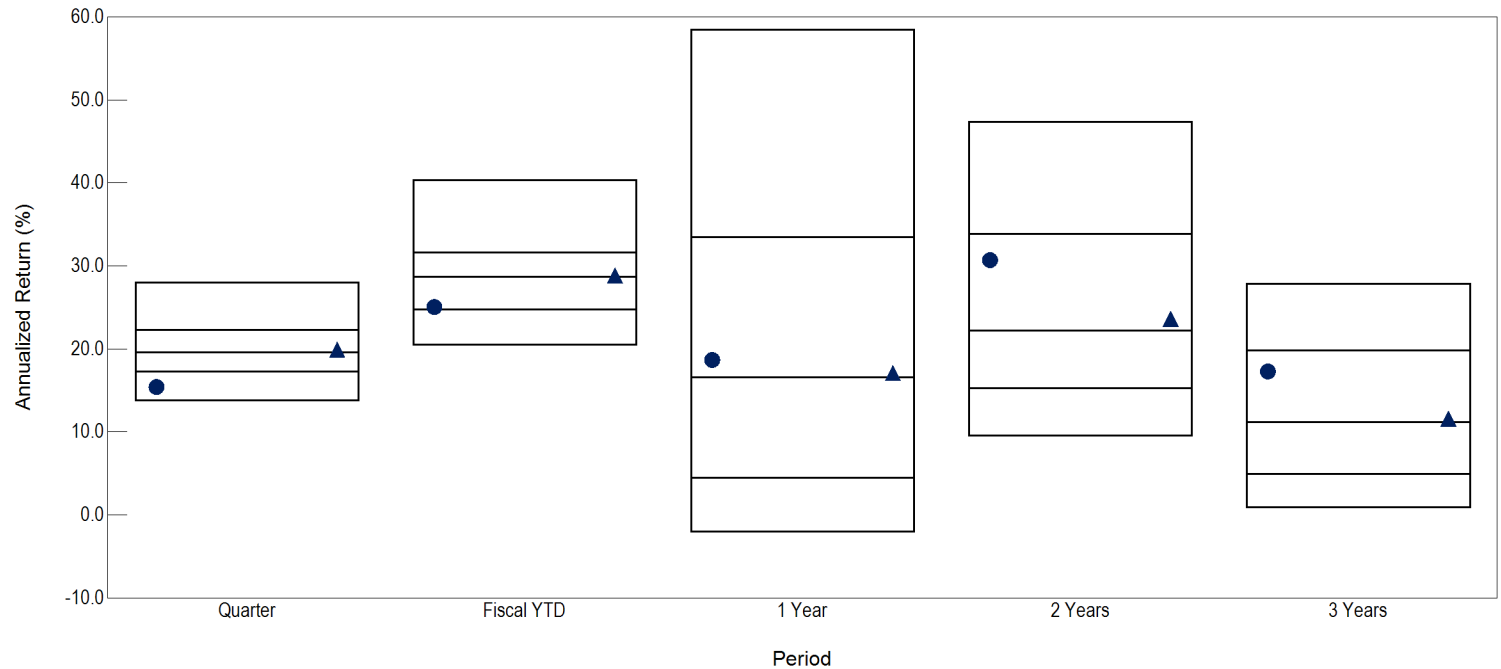
Quarterly and Cumulative Excess Performance



Los Angeles City Employees' Retirement System

PRINCIPAL GLOBAL INVESTORS

Principal Global Investors vs. eV US Mid Cap Equity Net



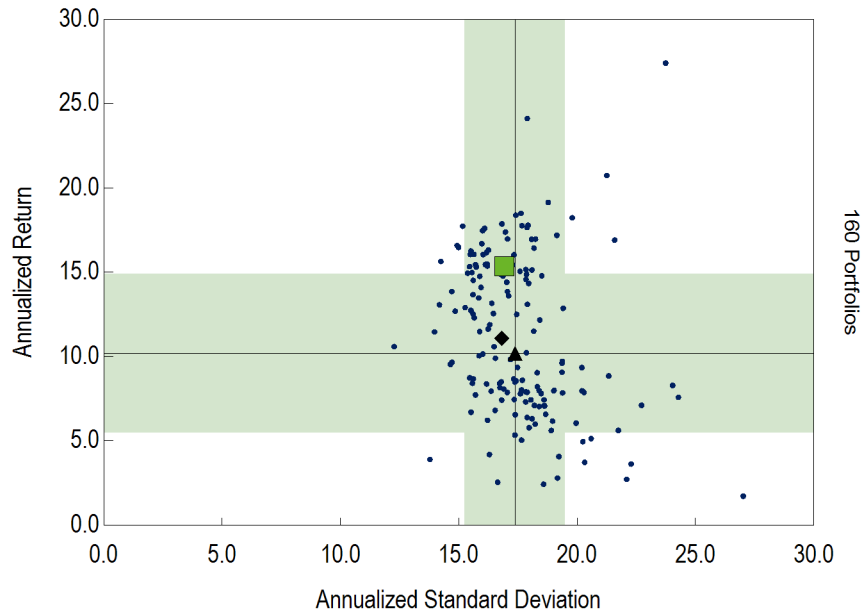
	Return (Rank)									
5th Percentile	28.01		40.34		58.47		47.38		27.83	
25th Percentile	22.35		31.70		33.54		33.96		19.93	
Median	19.69		28.78		16.68		22.26		11.23	
75th Percentile	17.36		24.88		4.55		15.34		5.05	
95th Percentile	13.92		20.62		-1.94		9.68		1.01	
# of Portfolios	179		179		178		176		175	
● Principal Global Investors	15.41	(87)	25.05	(74)	18.68	(47)	30.71	(36)	17.29	(34)
▲ Russell MidCap	19.91	(49)	28.86	(49)	17.10	(49)	23.64	(49)	11.61	(50)



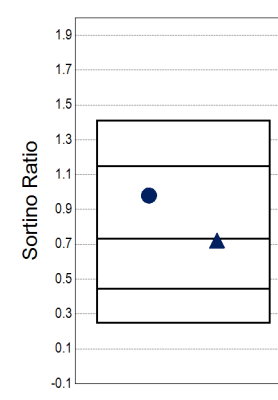
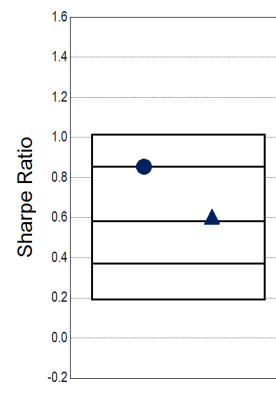
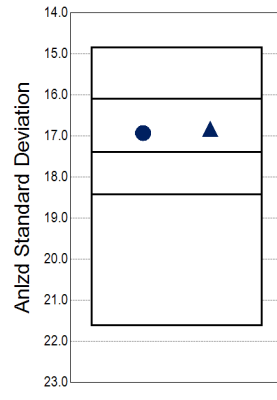
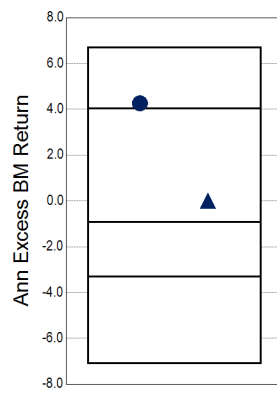
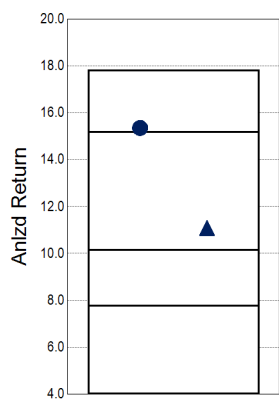
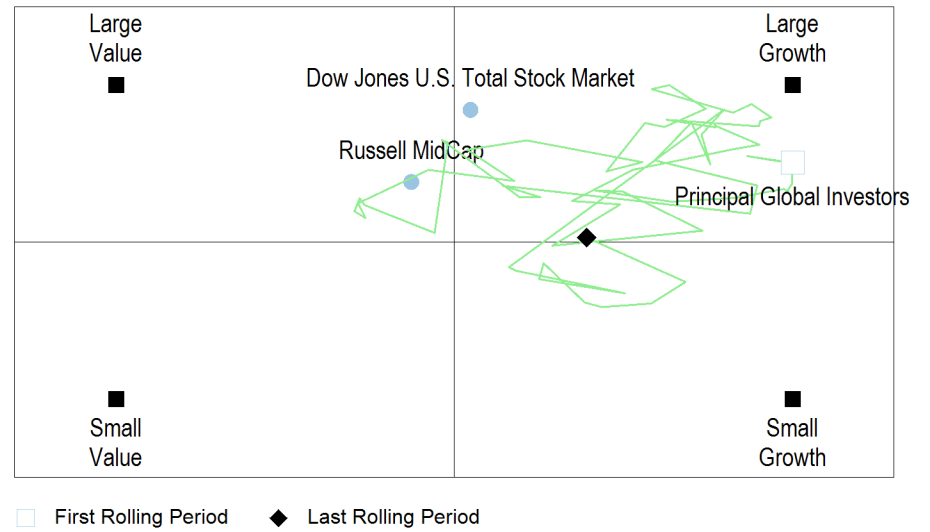
Los Angeles City Employees' Retirement System

PRINCIPAL GLOBAL INVESTORS

Since Inception Risk Return



Since Inception Style Map



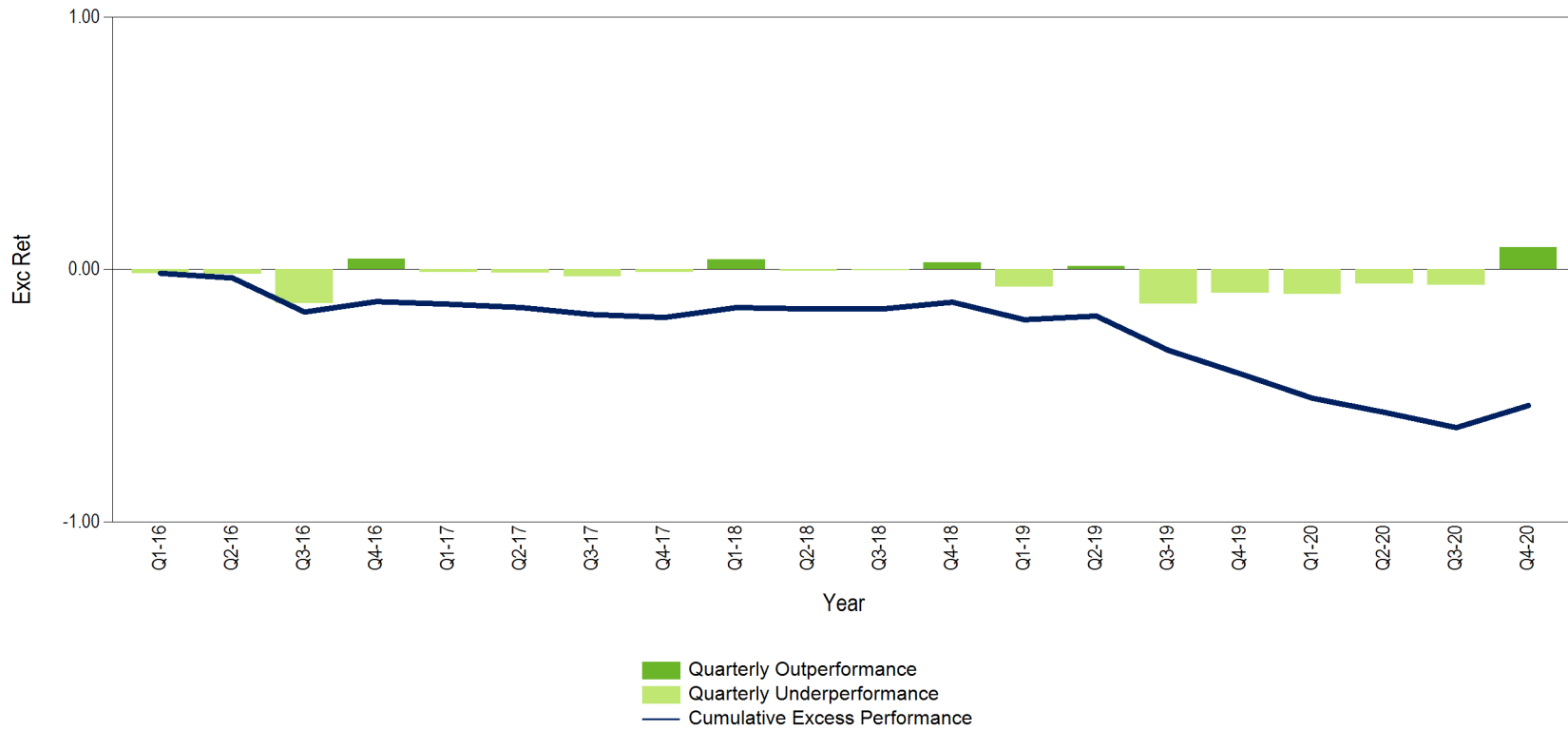
- Principal Global Investors
- ▲ Russell MidCap
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



Los Angeles City Employees' Retirement System

RHUMBLINE ADVISORS S&P 500

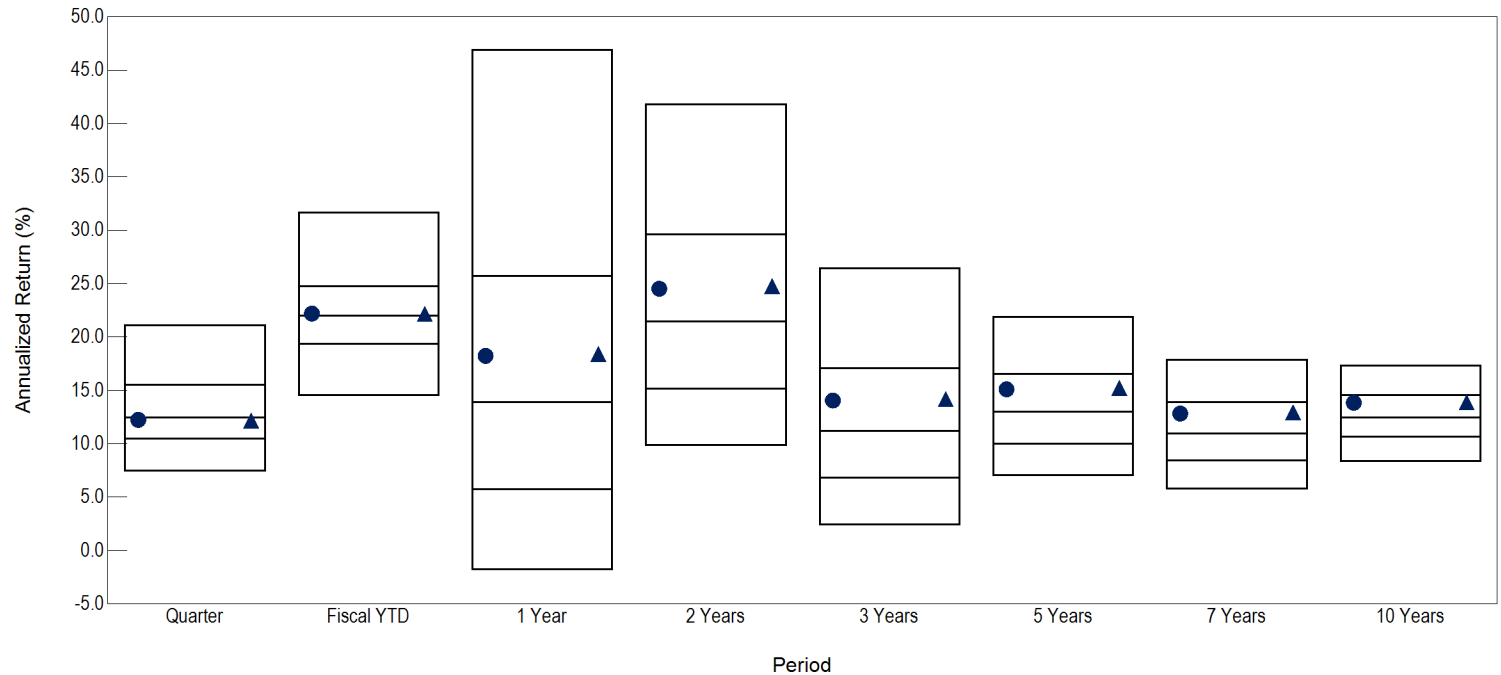
Quarterly and Cumulative Excess Performance



Los Angeles City Employees' Retirement System

RHUMBLINE ADVISORS S&P 500

RhumbLine Advisers S&P 500 vs. eV US Large Cap Equity Net

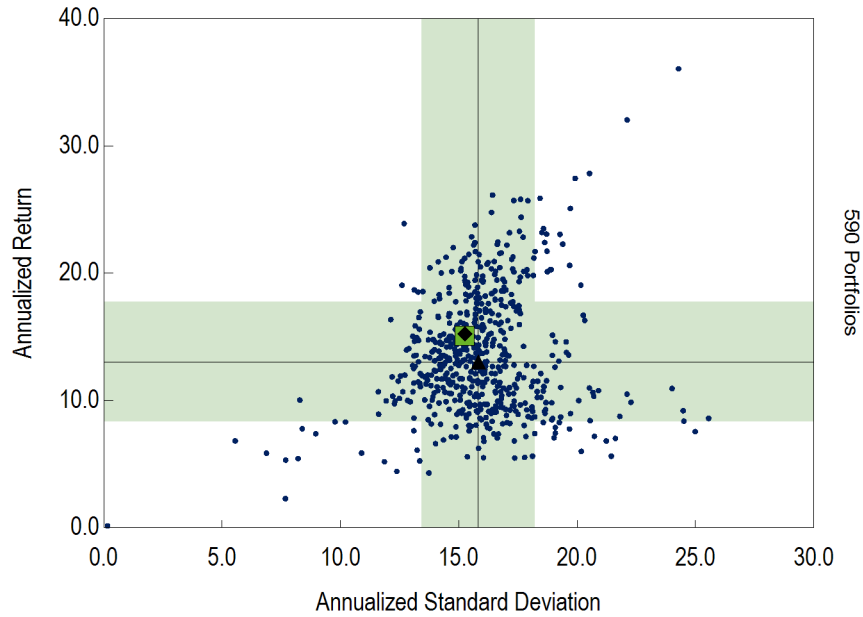


	Return (Rank)															
5th Percentile	21.09	31.67	46.90	41.78	26.41	21.88	17.85	17.32	21.09	31.67	46.90	41.78	26.41	21.88	17.85	17.32
25th Percentile	15.57	24.80	25.80	29.70	17.11	16.59	13.97	14.61	15.57	24.80	25.80	29.70	17.11	16.59	13.97	14.61
Median	12.49	22.07	13.96	21.49	11.25	13.03	11.04	12.52	12.49	22.07	13.96	21.49	11.25	13.03	11.04	12.52
75th Percentile	10.52	19.42	5.77	15.19	6.88	10.03	8.51	10.71	10.52	19.42	5.77	15.19	6.88	10.03	8.51	10.71
95th Percentile	7.52	14.64	-1.73	9.92	2.47	7.13	5.87	8.46	7.52	14.64	-1.73	9.92	2.47	7.13	5.87	8.46
# of Portfolios	654	654	653	641	629	590	551	473	654	654	653	641	629	590	551	473
● RhumbLine Advisers S&P 500	12.24	(53)	22.19	(49)	18.23	(40)	24.51	(39)	14.05	(36)	15.09	(32)	12.82	(31)	13.83	(33)
▲ S&P 500	12.15	(55)	22.16	(49)	18.40	(39)	24.77	(38)	14.18	(36)	15.22	(32)	12.91	(31)	13.88	(32)

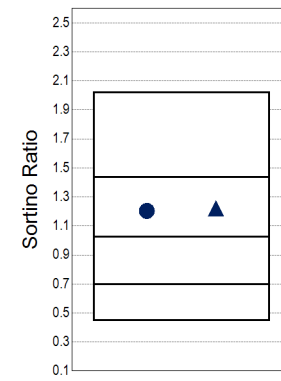
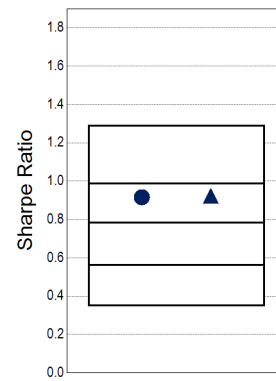
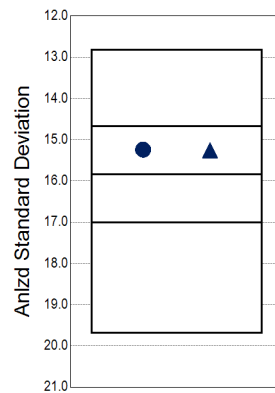
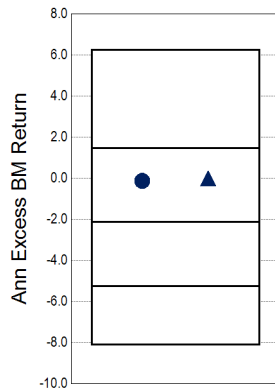
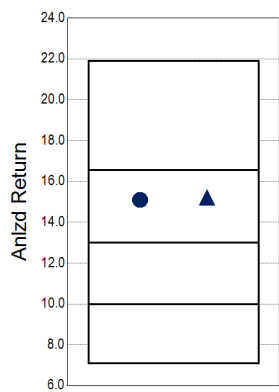
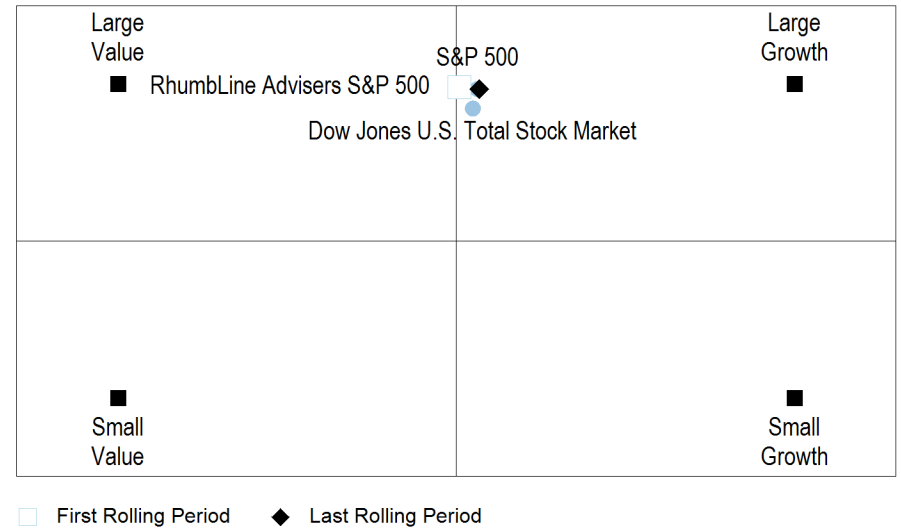


RHUMBLINE ADVISORS S&P 500

5 Year Risk Return



5 Year Style Map

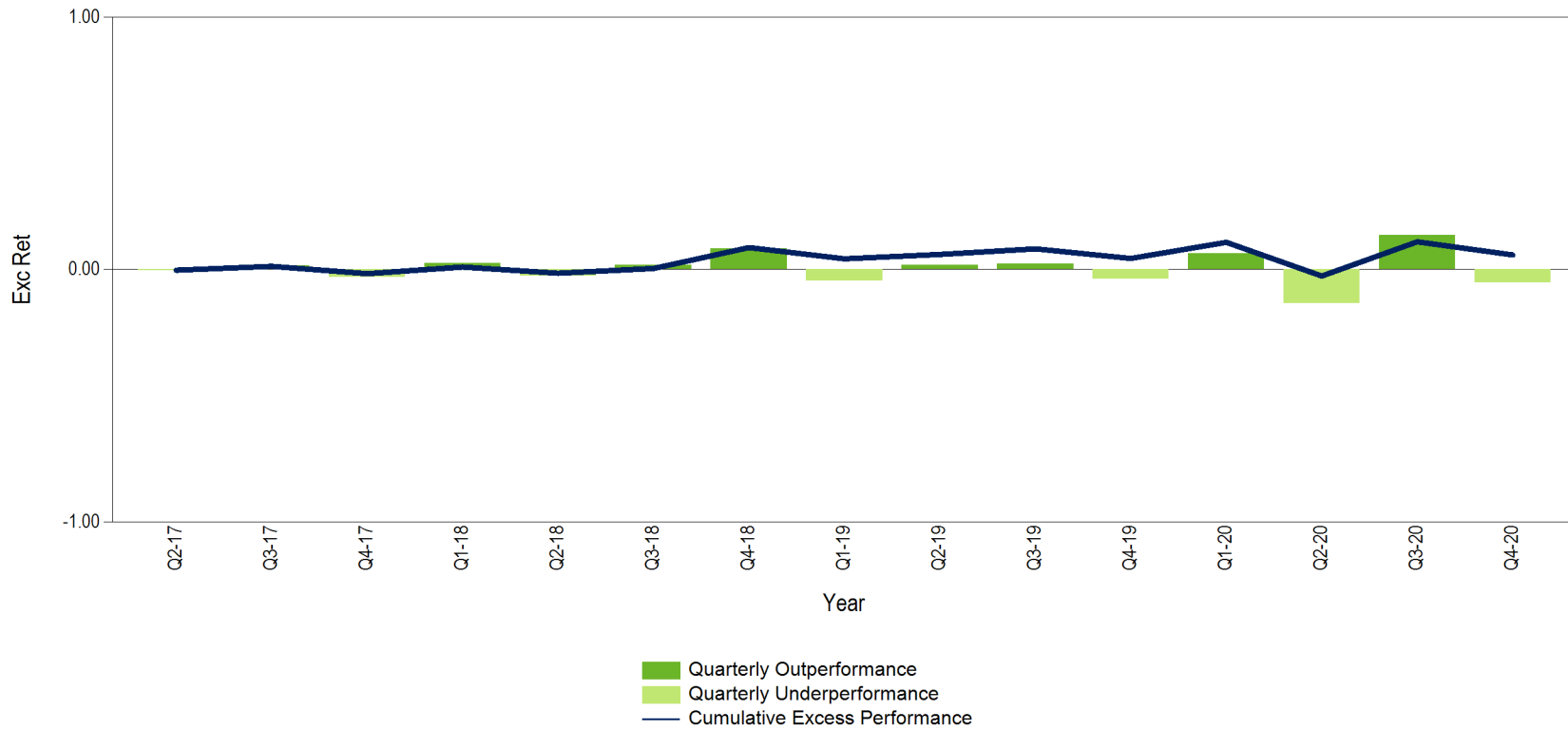


- RhumbLine Advisers S&P 500
- ▲ S&P 500
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



RHUMBLINE ADVISORS RUSSELL 2000

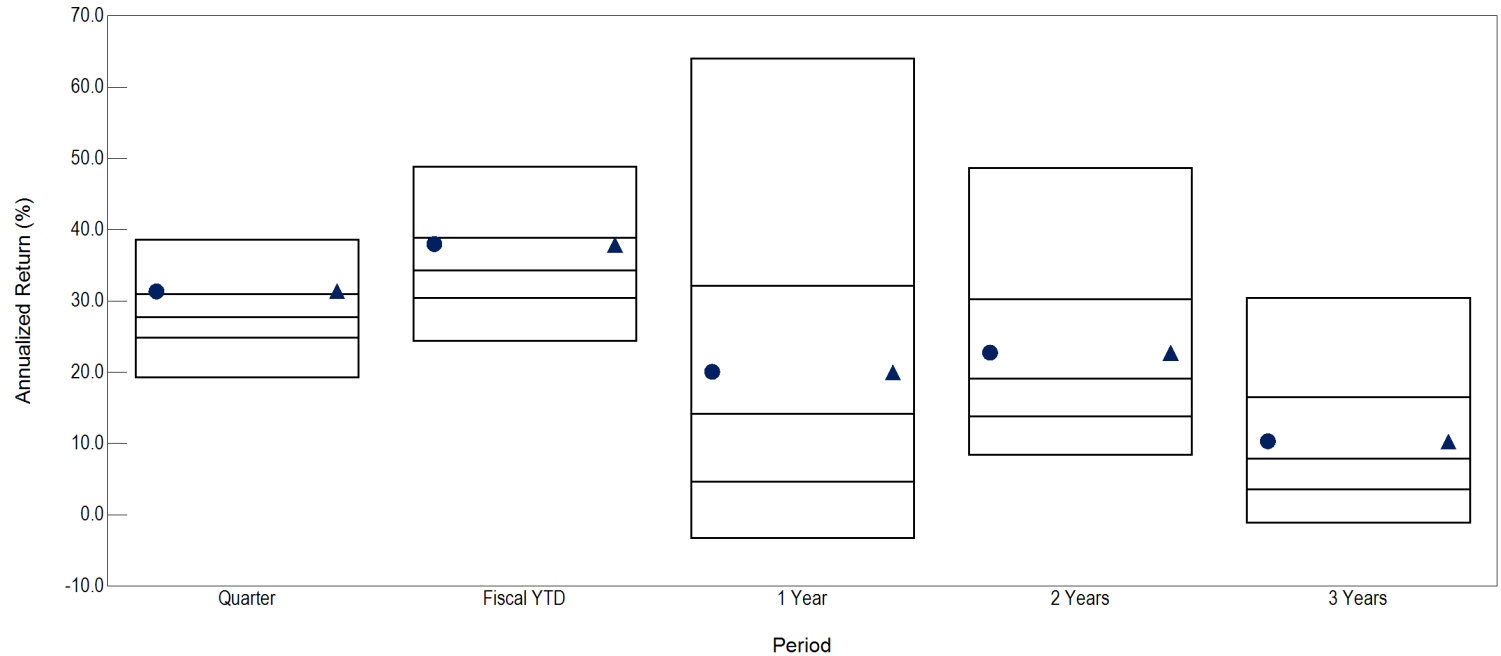
Quarterly and Cumulative Excess Performance



Los Angeles City Employees' Retirement System

RHUMBLINE ADVISORS RUSSELL 2000

RhumbLine Advisers Russell 2000 vs. eV US Small Cap Equity Net

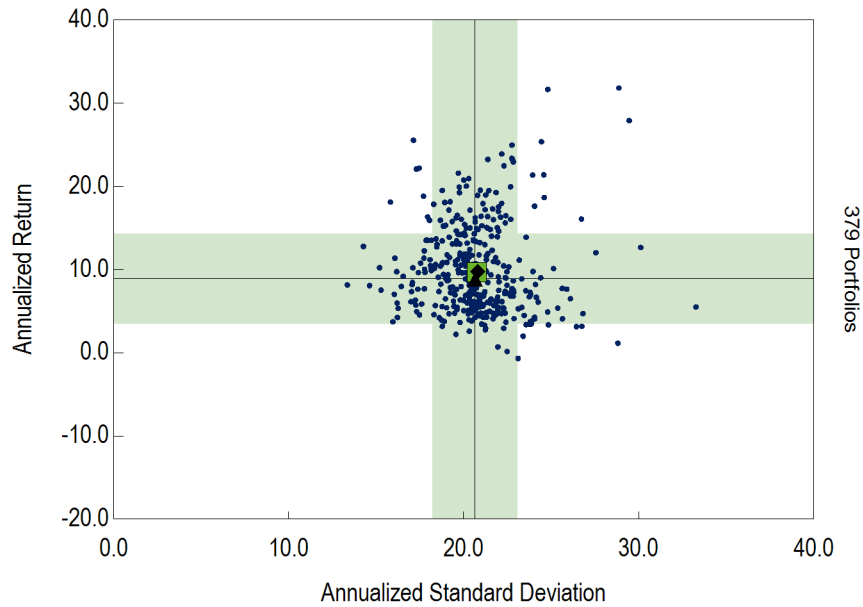


	Return (Rank)		Return (Rank)		Return (Rank)		Return (Rank)		Return (Rank)	
5th Percentile	38.59		48.85		64.04		48.65		30.42	
25th Percentile	31.05		38.91		32.16		30.29		16.58	
Median	27.81		34.39		14.22		19.19		7.92	
75th Percentile	24.93		30.50		4.72		13.90		3.65	
95th Percentile	19.34		24.48		-3.21		8.53		-1.06	
# of Portfolios	421		421		421		415		412	
● RhumbLine Advisers Russell 2000	31.32	(24)	37.97	(31)	20.05	(40)	22.74	(40)	10.31	(41)
▲ Russell 2000	31.37	(24)	37.85	(31)	19.96	(40)	22.71	(40)	10.25	(41)

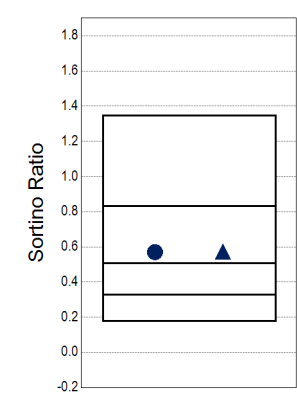
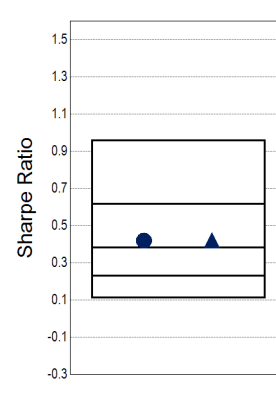
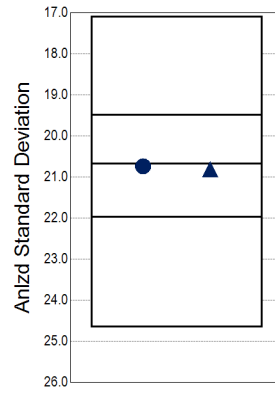
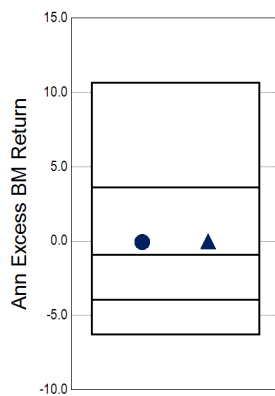
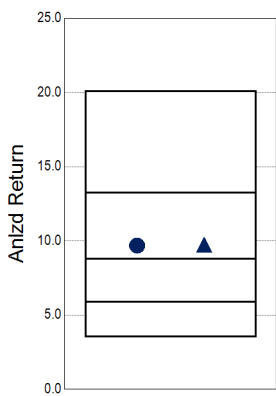
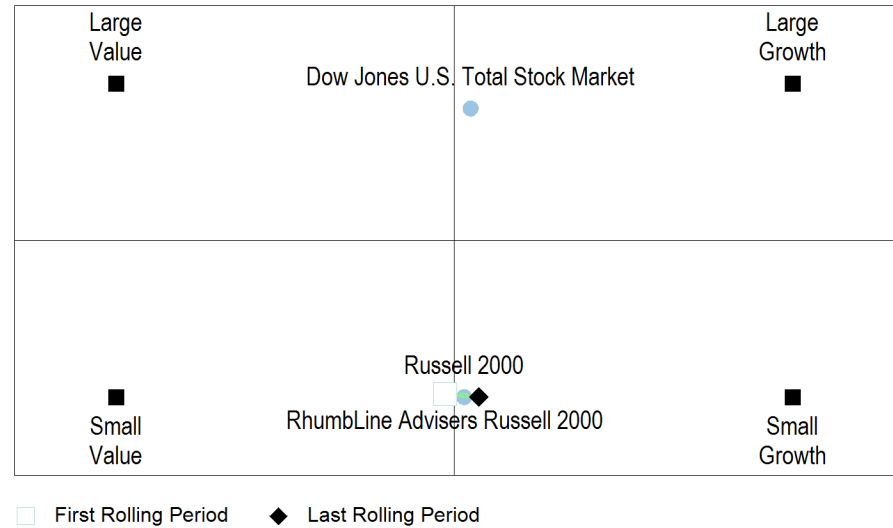


RHUMBLINE ADVISORS RUSSELL 2000

Since Inception Risk Return



Since Inception Style Map

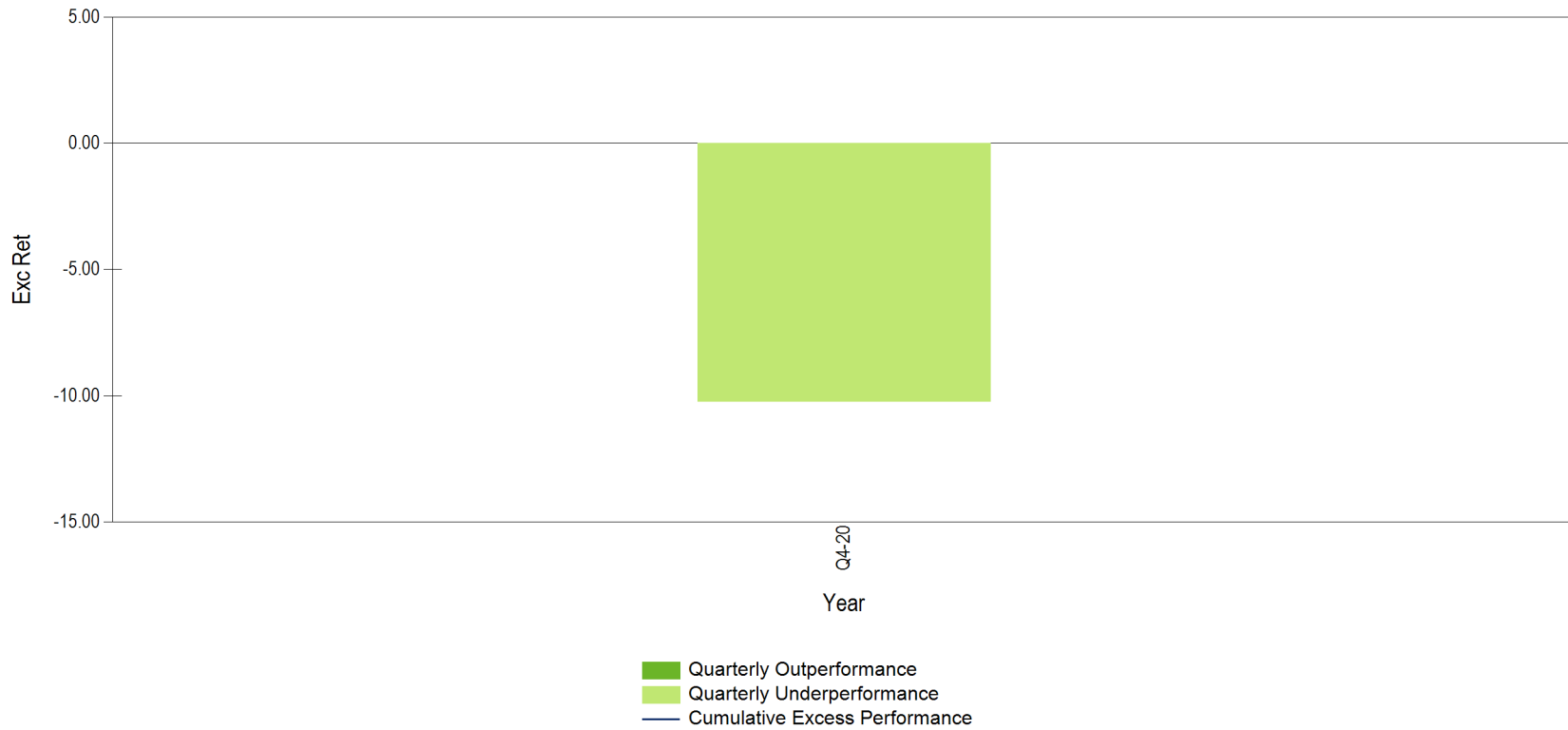


- RhumbLine Advisers Russell 2000
- ▲ Russell 2000
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



COPELAND CAPITAL MANAGEMENT

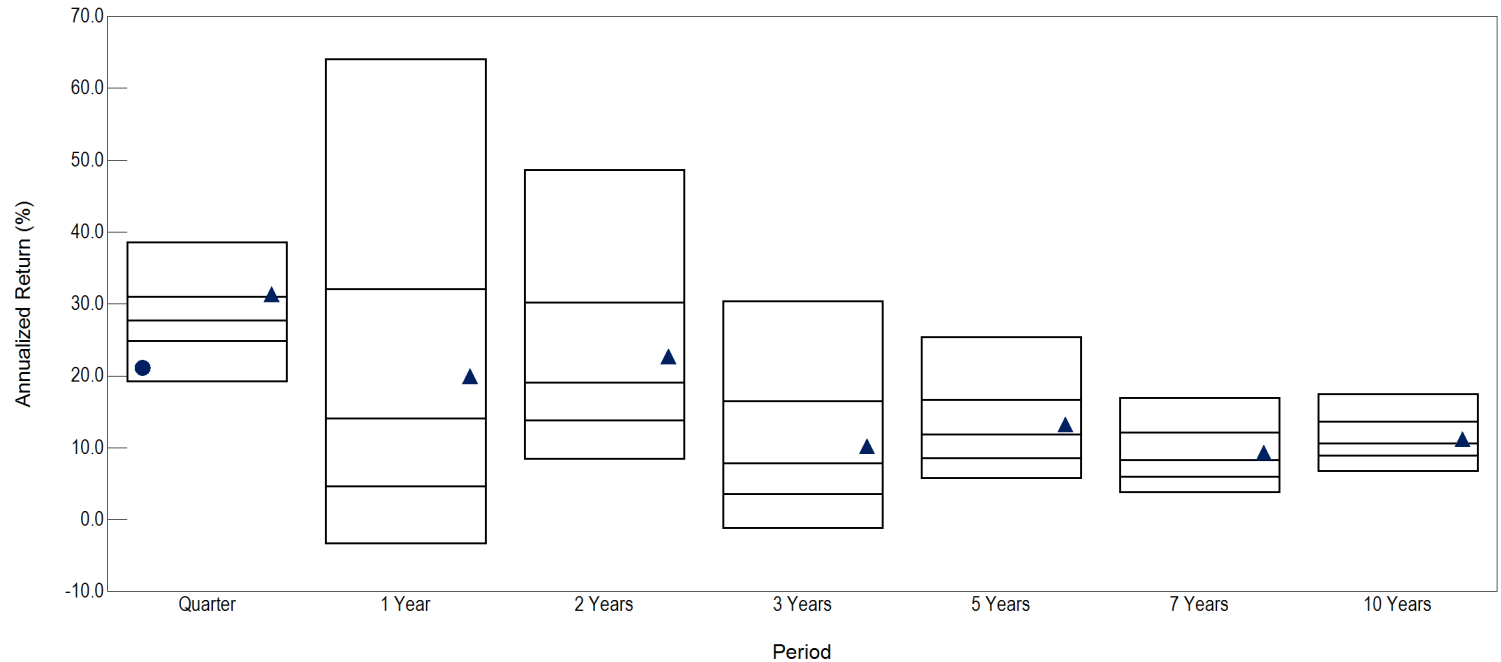
Quarterly and Cumulative Excess Performance



Los Angeles City Employees' Retirement System

COPELAND CAPITAL MANAGEMENT

Copeland Capital Management vs. eV US Small Cap Equity Net

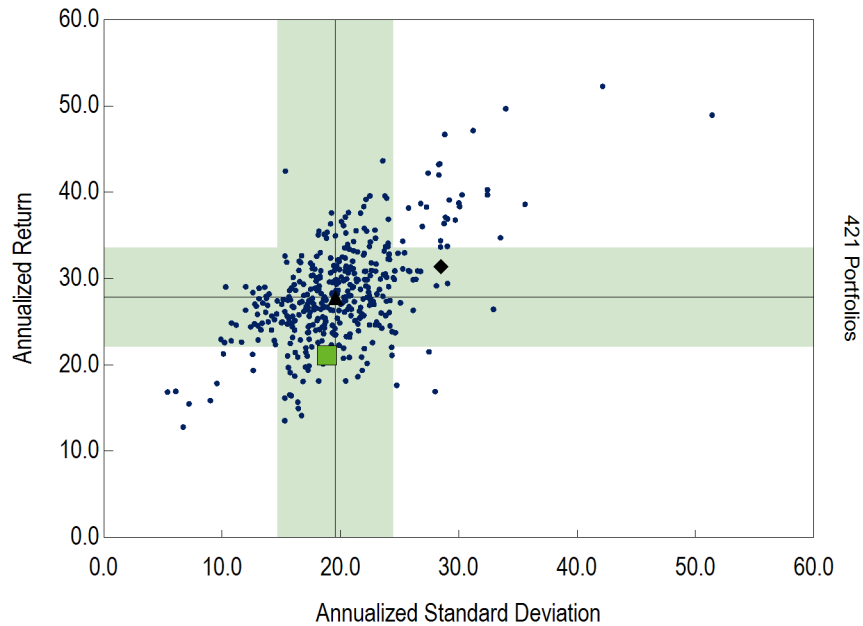


	Return (Rank)													
5th Percentile	38.59	64.04	48.65	30.42	25.41	16.93	17.46							
25th Percentile	31.05	32.16	30.29	16.58	16.76	12.23	13.74							
Median	27.81	14.22	19.19	7.92	11.93	8.35	10.67							
75th Percentile	24.93	4.72	13.90	3.65	8.62	6.05	9.03							
95th Percentile	19.34	-3.21	8.53	-1.06	5.90	3.98	6.83							
# of Portfolios	421	421	415	412	391	365	329							
● Copeland Capital Management	21.12	(92)	--	(--)	--	(--)	--	(--)	--	(--)	--	(--)	--	(--)
▲ Russell 2000	31.37	(24)	19.96	(40)	22.71	(40)	10.25	(41)	13.26	(42)	9.34	(43)	11.20	(45)

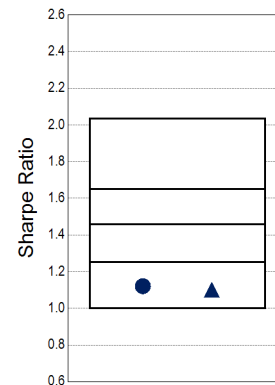
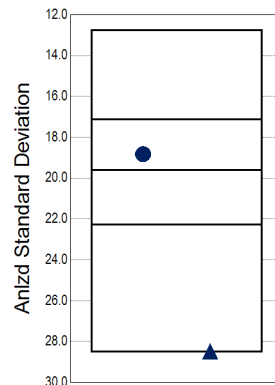
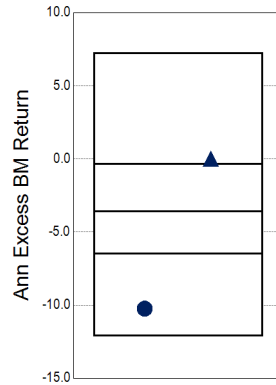
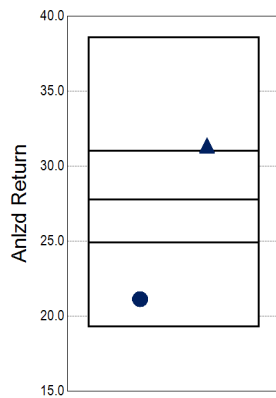
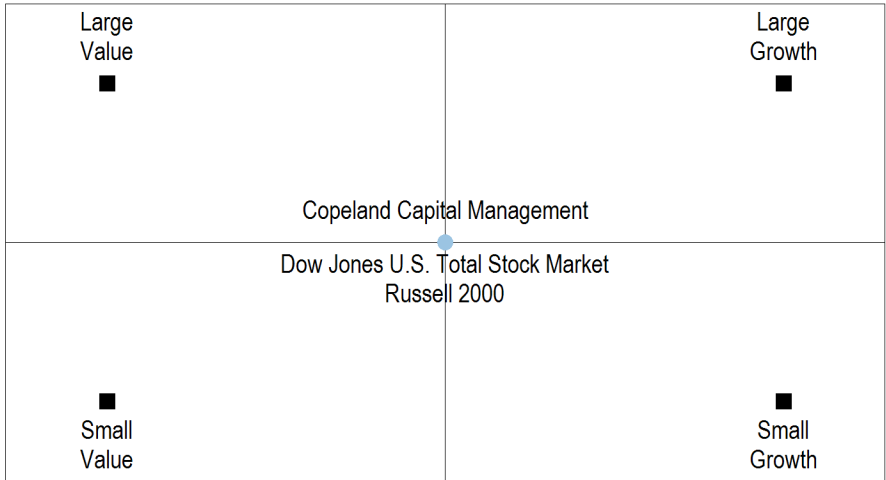


COPELAND CAPITAL MANAGEMENT

Since Inception Risk Return



U.S. Effective Style Map
3 Months Ending December 31, 2020

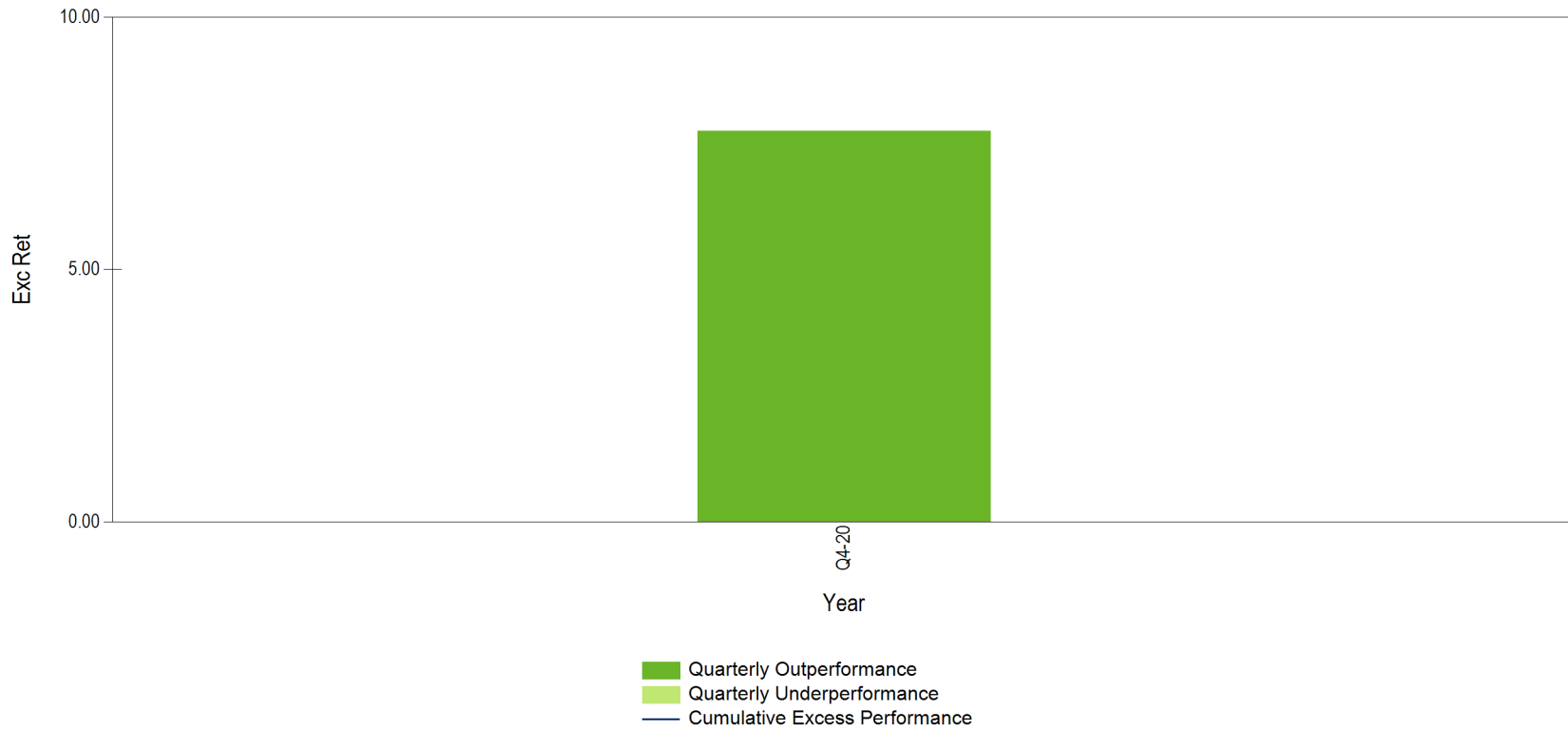


- Copeland Capital Management
- ▲ Russell 2000
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



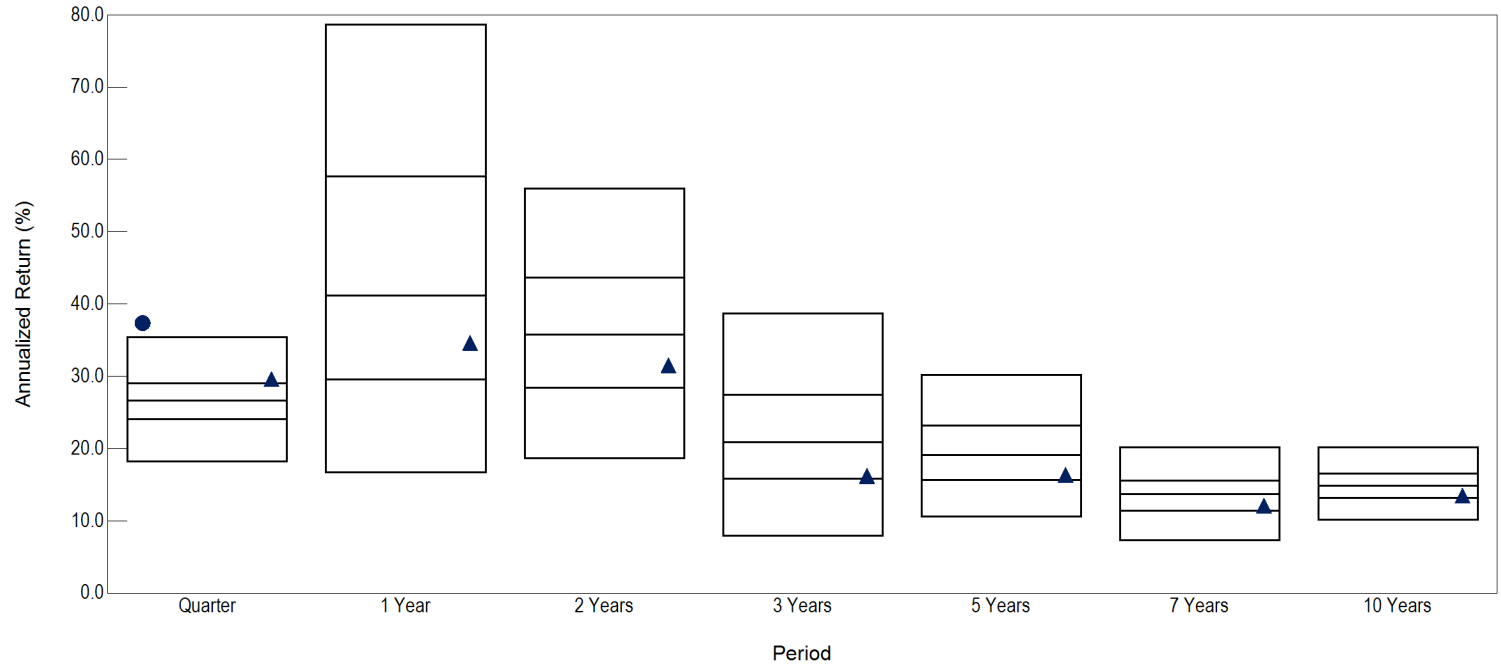
GRANAHAAN INVESTMENT MANAGEMENT

Quarterly and Cumulative Excess Performance



GRANAHAN INVESTMENT MANAGEMENT

Granahan Investment Management vs. eV US Small Cap Growth Equity Net

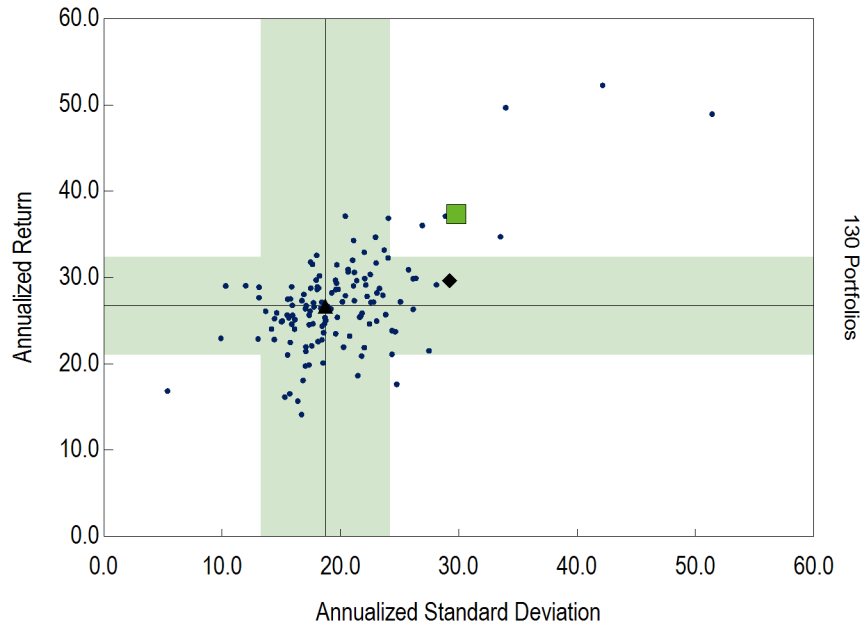


	Return (Rank)													
5th Percentile	35.44		78.62		55.98		38.67		30.18		20.18		20.15	
25th Percentile	29.15		57.70		43.75		27.49		23.31		15.67		16.63	
Median	26.70		41.25		35.83		20.92		19.20		13.76		14.94	
75th Percentile	24.11		29.63		28.53		15.90		15.72		11.50		13.26	
95th Percentile	18.32		16.83		18.77		8.02		10.68		7.39		10.24	
# of Portfolios	130		130		130		130		122		112		105	
● Granahan Investment Management	37.35	(3)	--	(--)	--	(--)	--	(--)	--	(--)	--	(--)	--	(--)
▲ Russell 2000 Growth	29.61	(24)	34.63	(66)	31.52	(63)	16.19	(73)	16.36	(73)	12.08	(71)	13.48	(73)

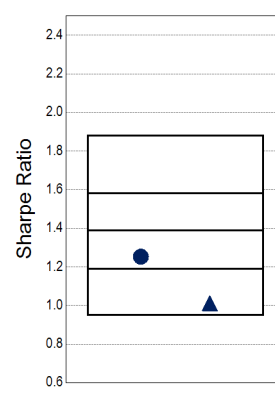
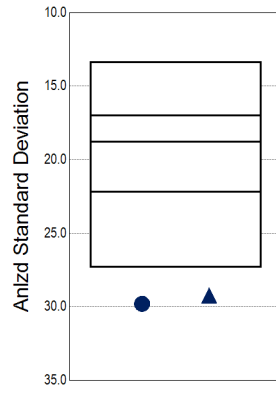
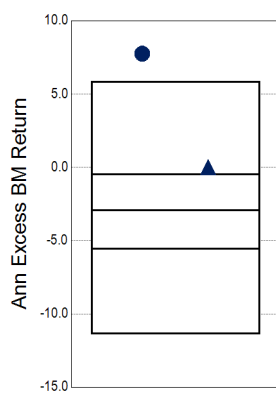
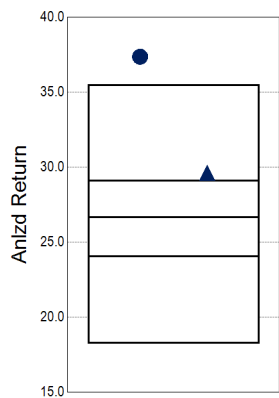


GRANAHAN INVESTMENT MANAGEMENT

Since Inception Risk Return



U.S. Effective Style Map



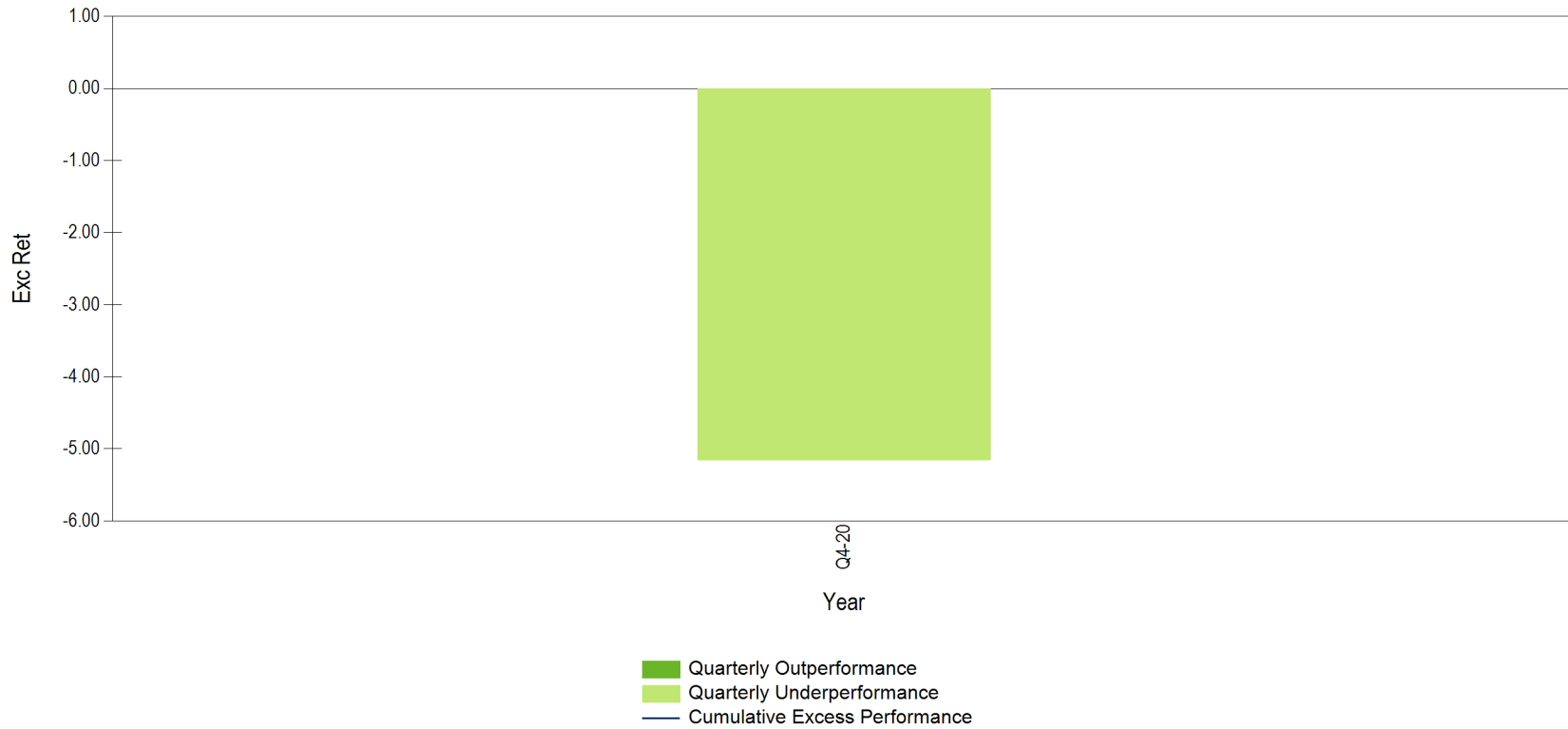
- Granahan Investment Mana...
- ▲ Russell 2000 Growth
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



Los Angeles City Employees' Retirement System

SEGALL, BRYANT & HAMILL

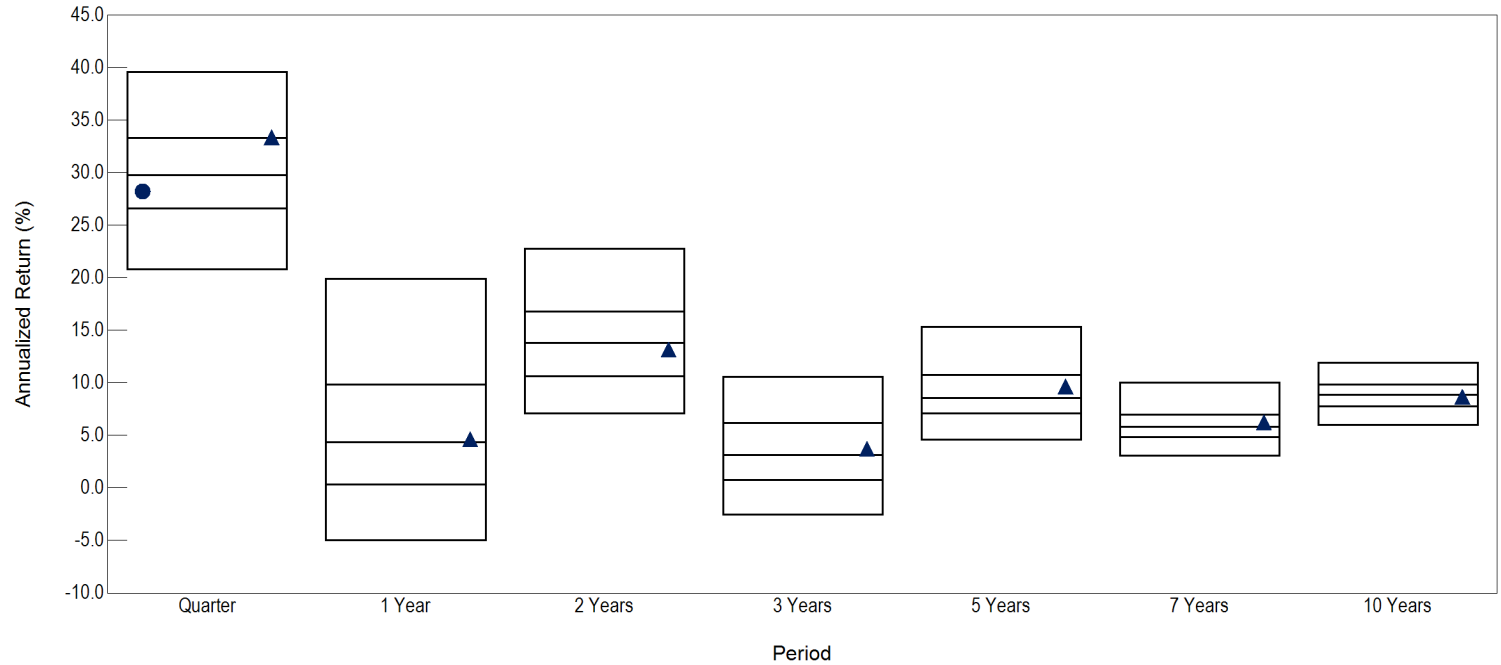
Quarterly and Cumulative Excess Performance



Los Angeles City Employees' Retirement System

SEGALL, BRYANT & HAMILL

Segall, Bryant & Hamill vs. eV US Small Cap Value Equity Net



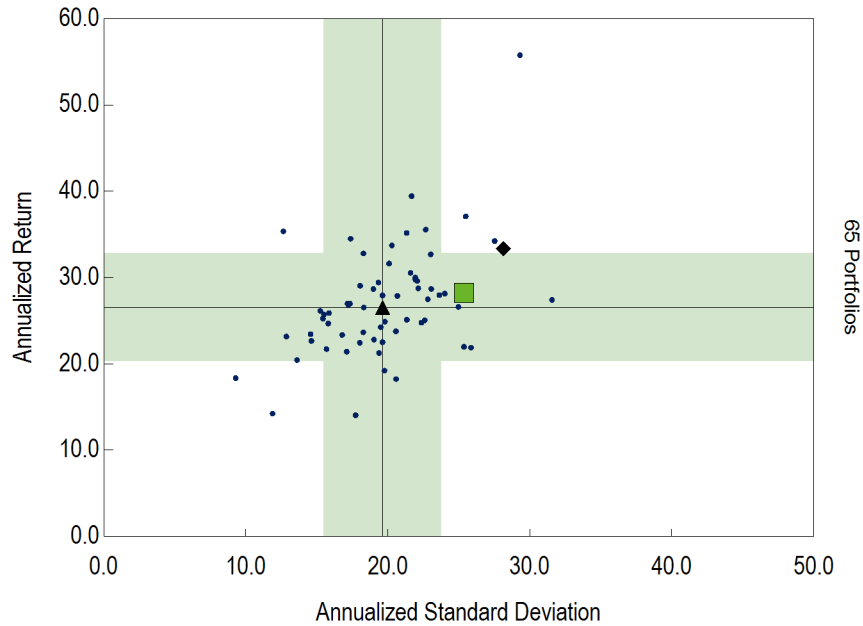
	Return (Rank)													
5th Percentile	39.59	19.88	22.72	10.56	15.32	9.99	11.92							
25th Percentile	33.33	9.89	16.84	6.25	10.79	7.05	9.87							
Median	29.79	4.42	13.86	3.19	8.62	5.90	8.93							
75th Percentile	26.67	0.41	10.70	0.80	7.17	4.89	7.84							
95th Percentile	20.87	-4.93	7.14	-2.49	4.68	3.16	6.07							
# of Portfolios	178	178	174	171	165	155	142							
● Segall, Bryant & Hamill	28.20	(60)	--	(--)	--	(--)	--	(--)	--	(--)	--	(--)	--	(--)
▲ Russell 2000 Value	33.36	(25)	4.63	(50)	13.17	(57)	3.72	(47)	9.65	(37)	6.25	(43)	8.66	(56)



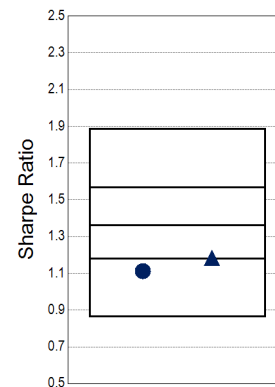
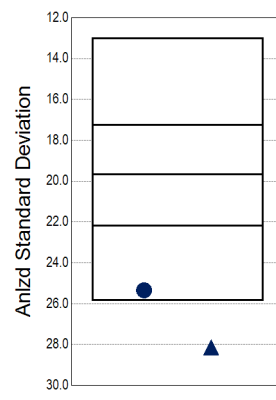
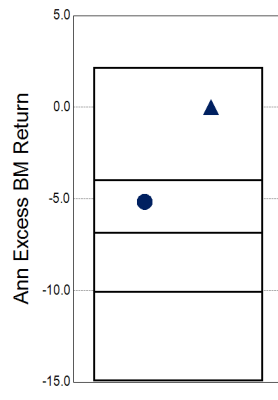
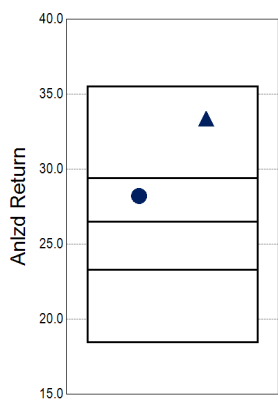
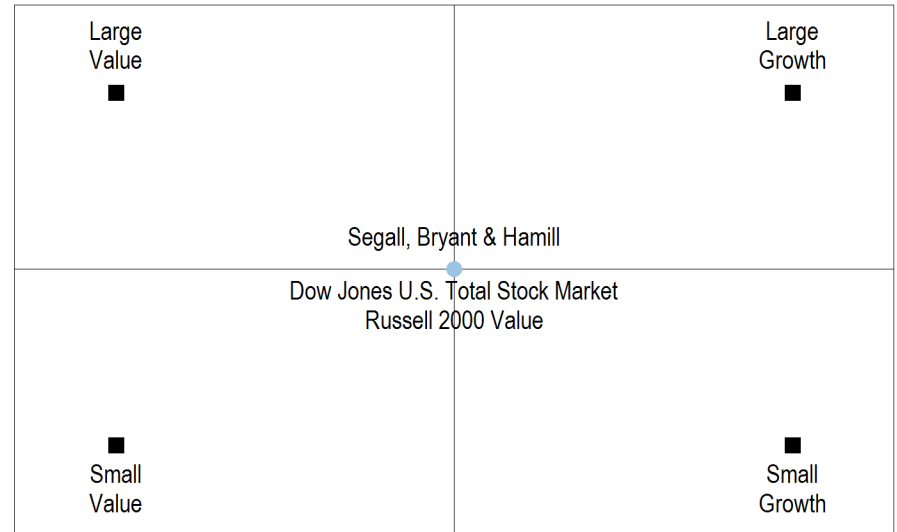
Los Angeles City Employees' Retirement System

SEGALL, BRYANT & HAMILL

Since Inception Risk Return



U.S. Effective Style Map



- Segall, Bryant & Hamill
- ▲ Russell 2000 Value
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



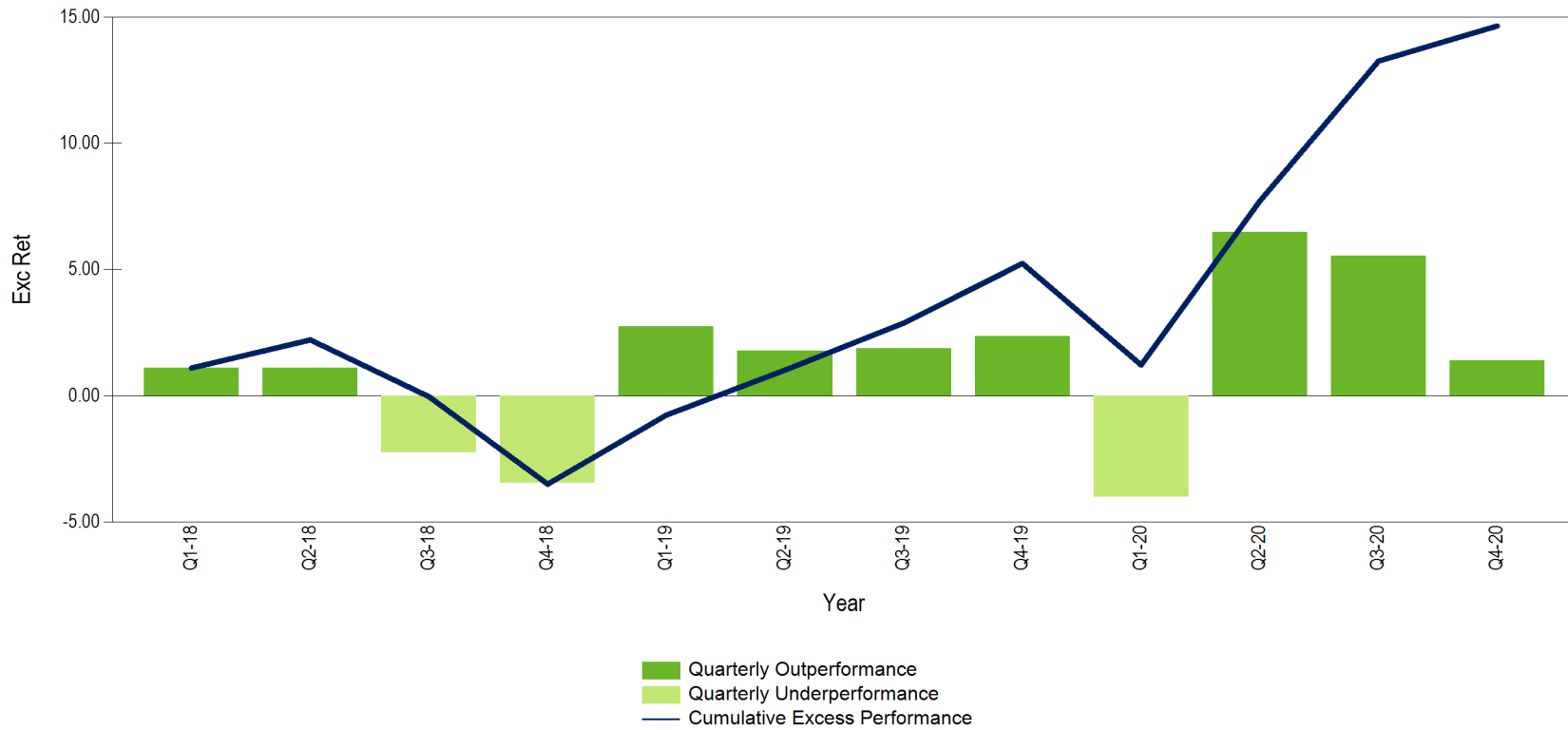
NON-U.S. EQUITY MANAGER PERFORMANCE

NEPC, LLC

Los Angeles City Employees' Retirement System

BARROW HANLEY

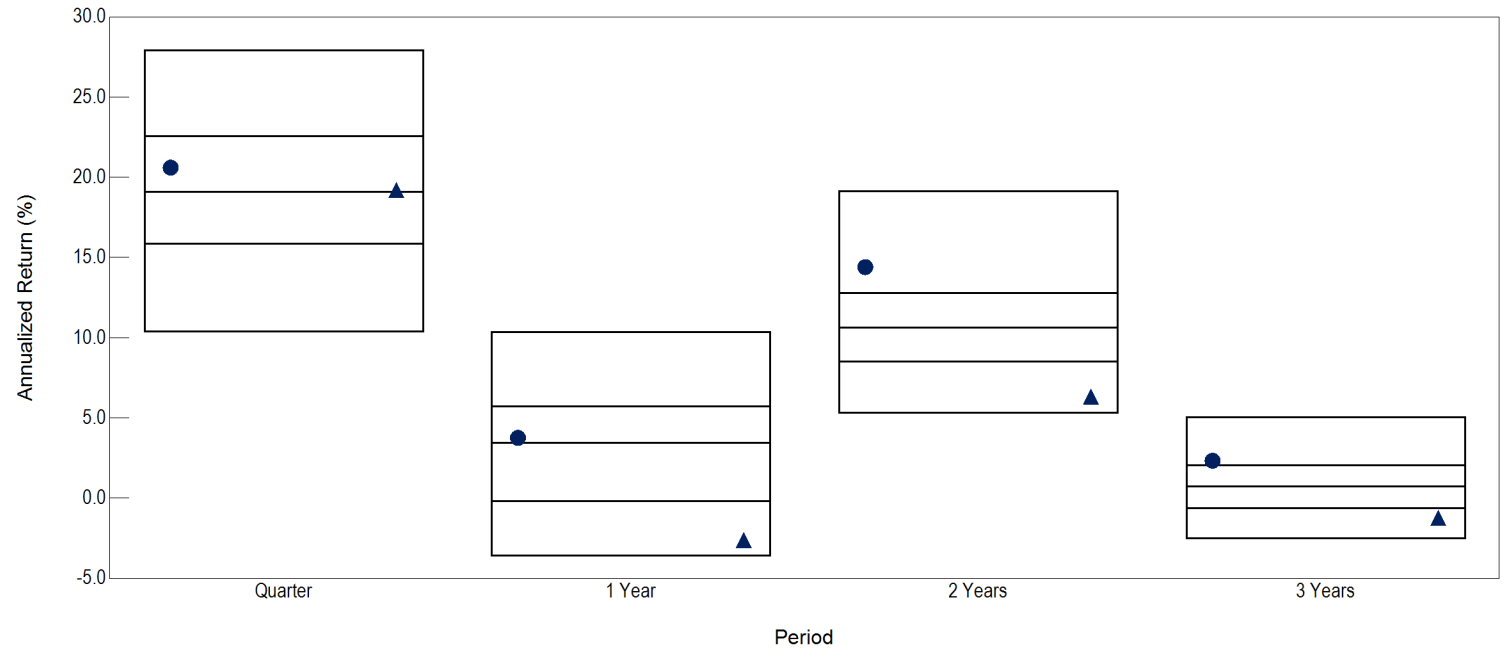
Quarterly and Cumulative Excess Performance



Los Angeles City Employees' Retirement System

BARROW HANLEY

Barrow Hanley vs. eV EAFE Value Equity Net



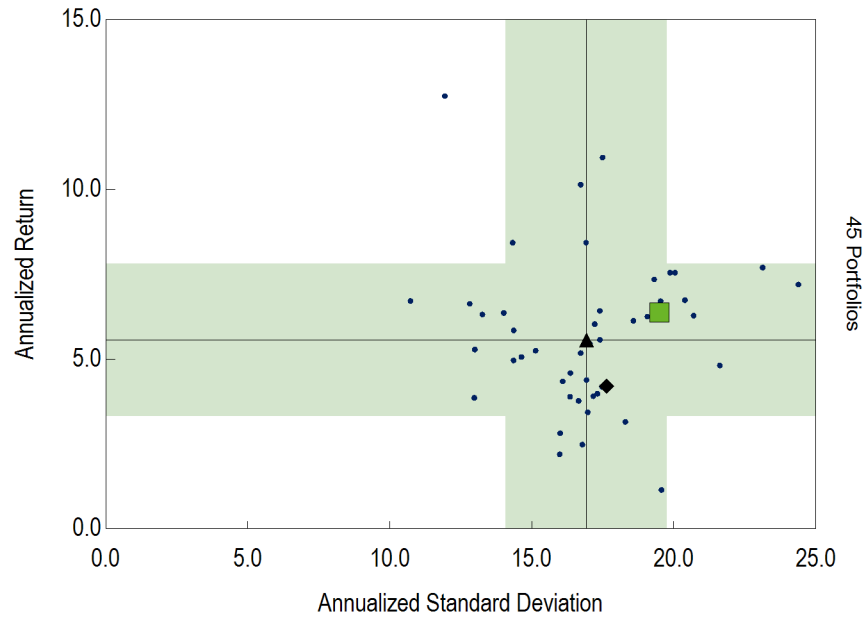
	Return (Rank)			
	Quarter	1 Year	2 Years	3 Years
5th Percentile	27.91	10.35	19.14	5.06
25th Percentile	22.59	5.74	12.82	2.08
Median	19.15	3.47	10.66	0.77
75th Percentile	15.91	-0.13	8.56	-0.59
95th Percentile	10.42	-3.55	5.38	-2.45
# of Portfolios	59	59	54	51
● Barrow Hanley	20.60	3.75	14.39	2.33
▲ MSCI EAFE Value	19.20	-2.63	6.32	-1.24
	(37)	(46)	(16)	(21)
	(49)	(91)	(91)	(78)



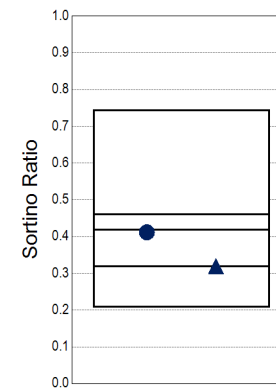
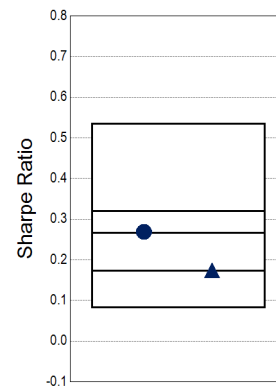
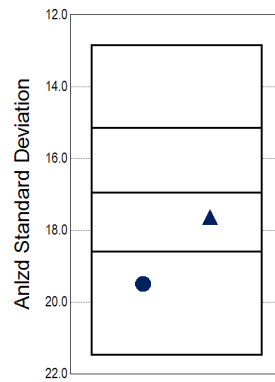
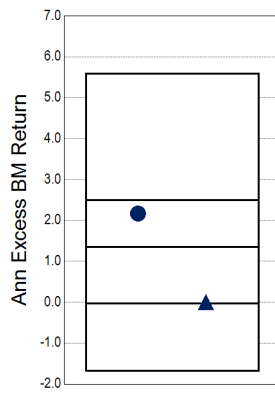
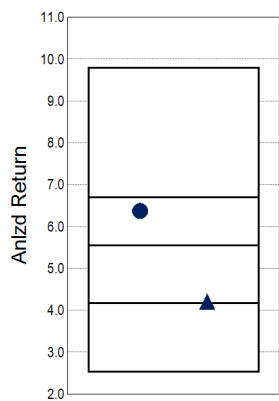
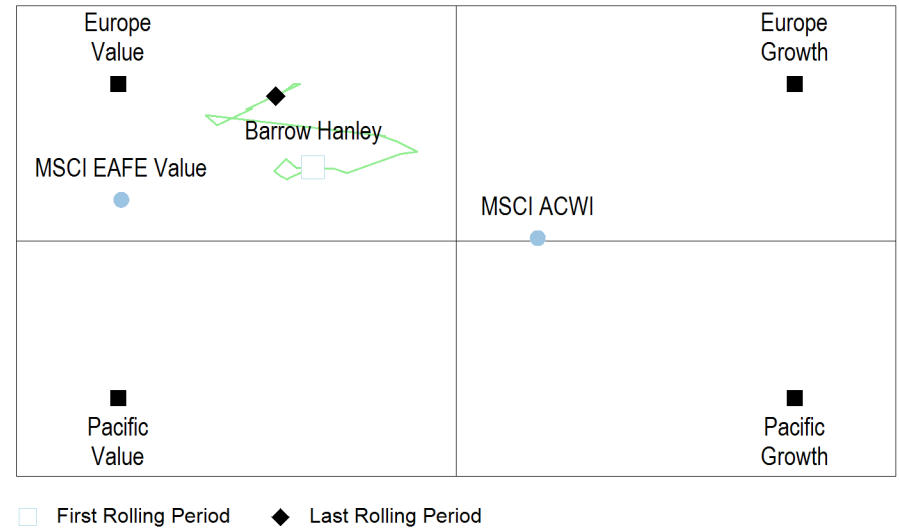
Los Angeles City Employees' Retirement System

BARROW HANLEY

5 Year Risk Return



5 Year Style Map

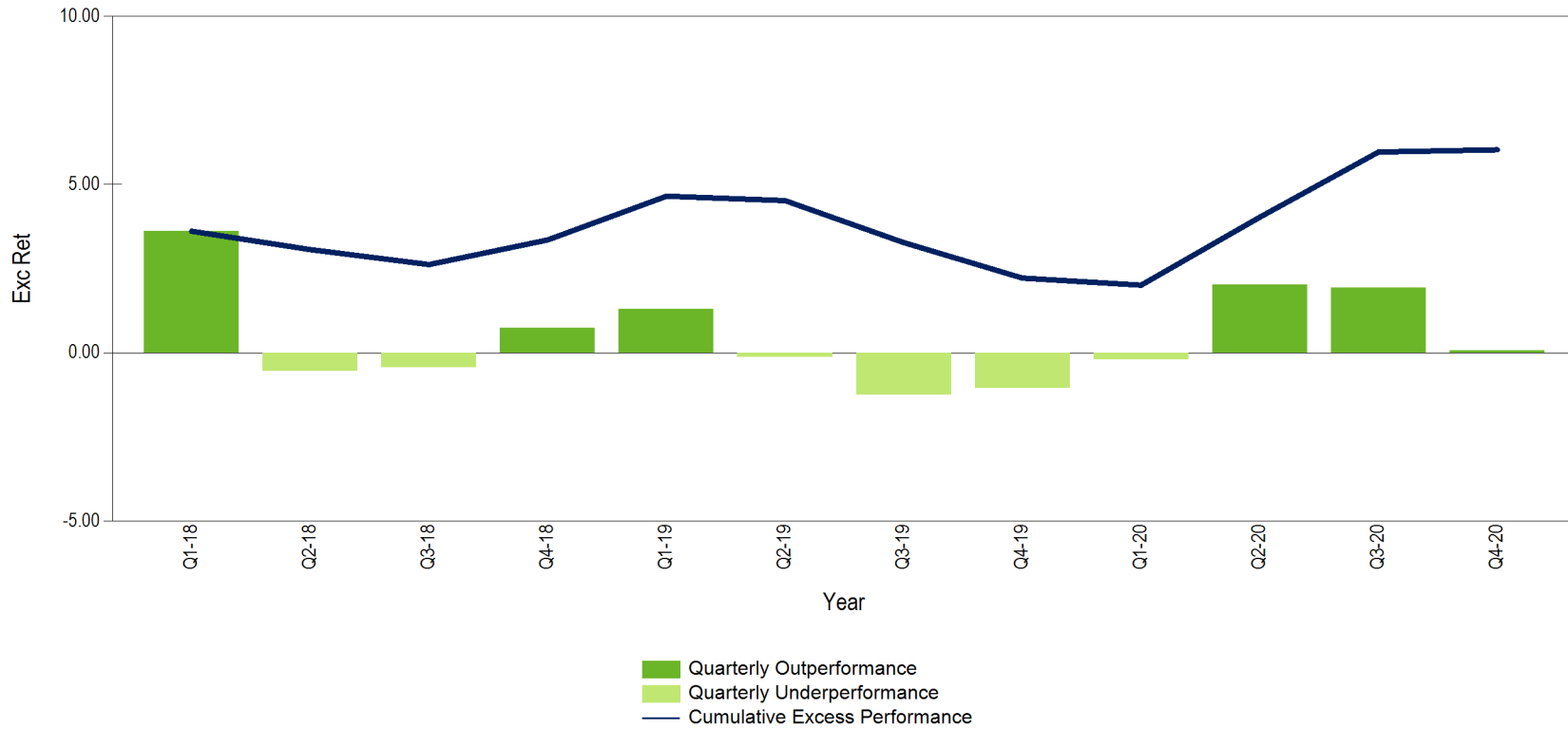


- Barrow Hanley
- ▲ MSCI EAFE Value
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



LAZARD ASSET MANAGEMENT

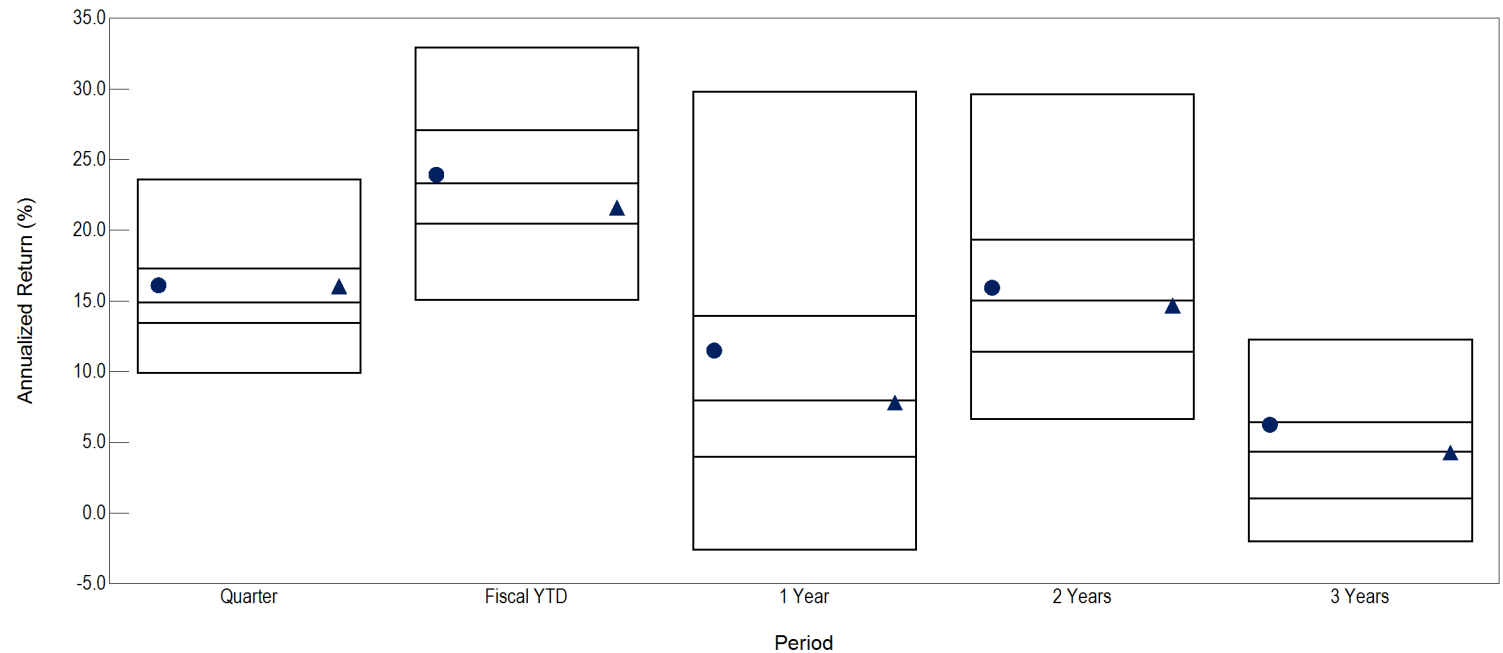
Quarterly and Cumulative Excess Performance



Los Angeles City Employees' Retirement System

LAZARD ASSET MANAGEMENT

Lazard Asset Management vs. eV All EAFE Equity Net

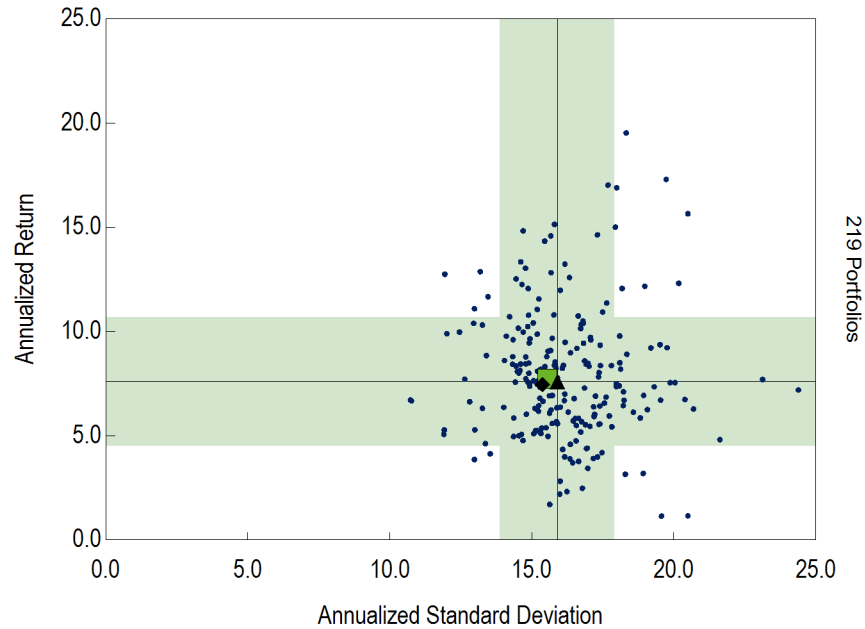


	Return (Rank)									
5th Percentile	23.60		32.94		29.81		29.62		12.27	
25th Percentile	17.36		27.11		14.00		19.38		6.48	
Median	14.95		23.36		8.02		15.07		4.40	
75th Percentile	13.51		20.50		4.02		11.45		1.07	
95th Percentile	9.97		15.12		-2.56		6.70		-1.95	
# of Portfolios	255		255		255		248		243	
● Lazard Asset Management	16.11	(36)	23.93	(46)	11.50	(34)	15.94	(43)	6.25	(27)
▲ MSCI EAFE	16.05	(37)	21.61	(64)	7.81	(53)	14.70	(56)	4.28	(52)

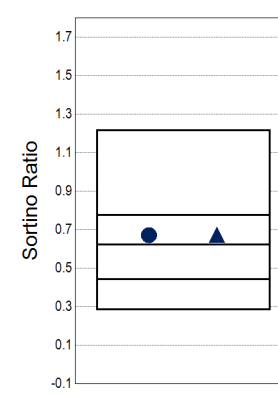
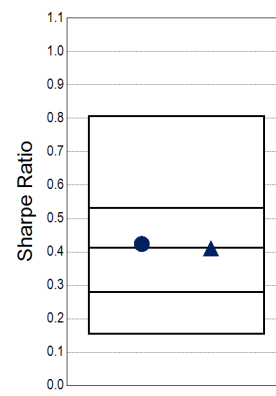
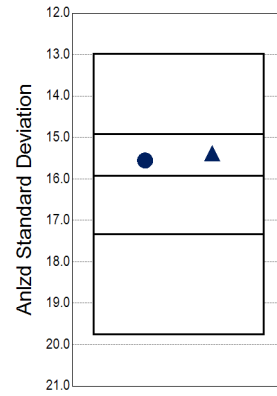
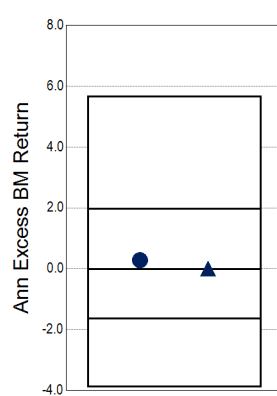
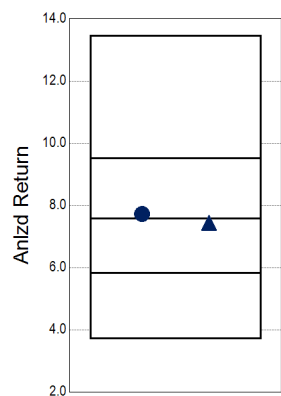
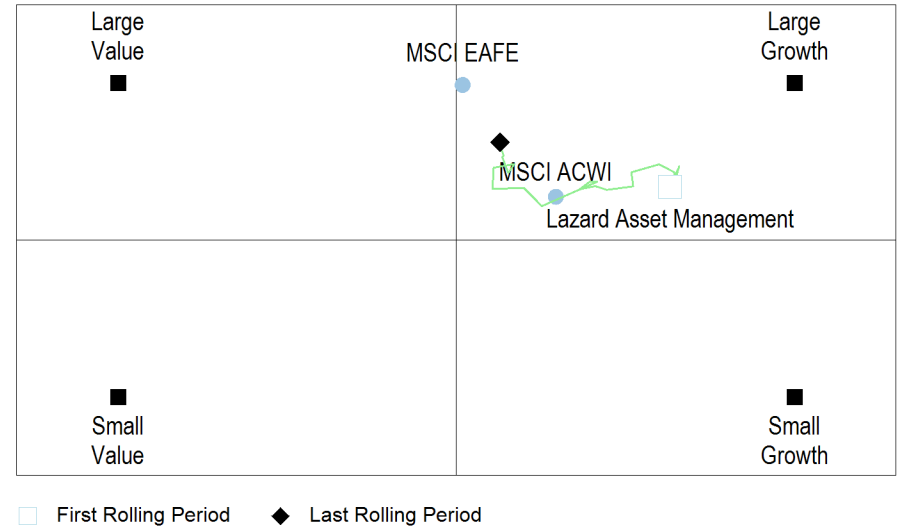


LAZARD ASSET MANAGEMENT

5 Year Risk Return



5 Year Style Map



- Lazard Asset Management
- ▲ MSCI EAFE
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



Los Angeles City Employees' Retirement System

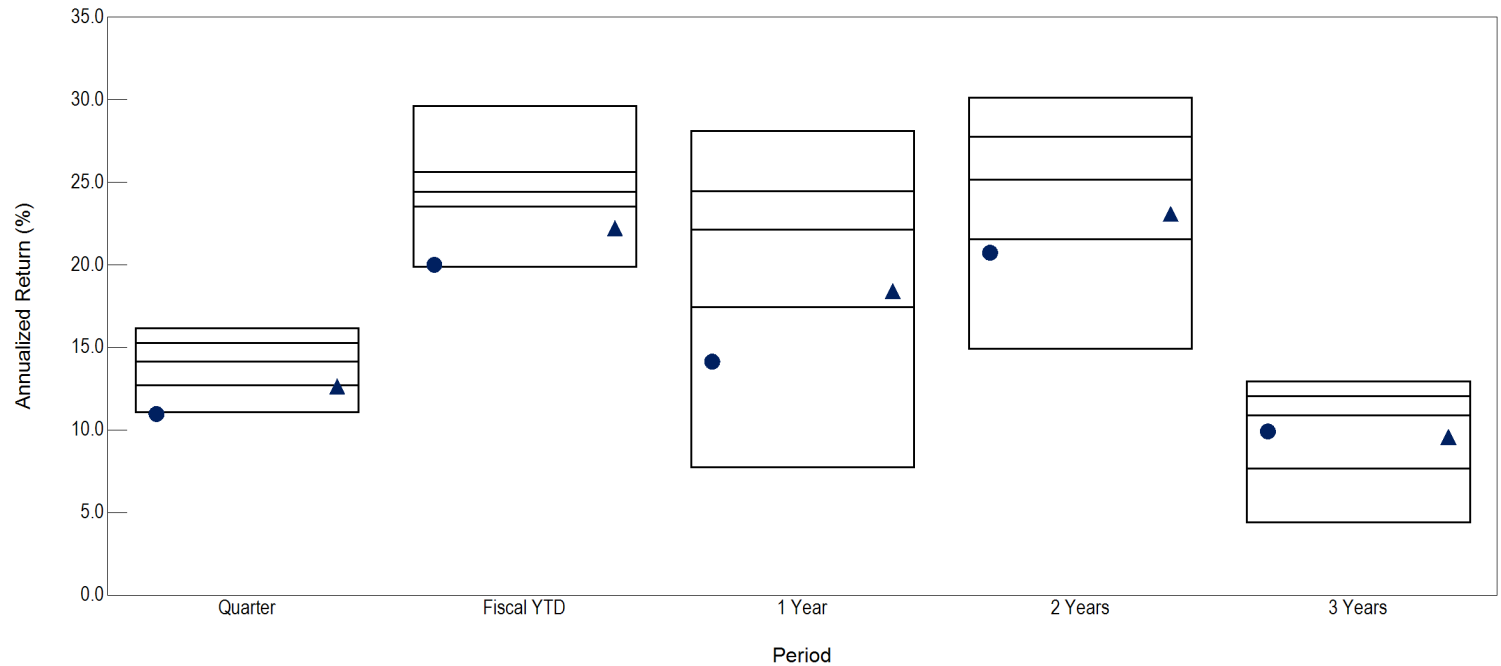
MFS INSTITUTIONAL ADVISORS

Quarterly and Cumulative Excess Performance



MFS INSTITUTIONAL ADVISORS

MFS Institutional Advisors vs. eV EAFE All Cap Growth Net

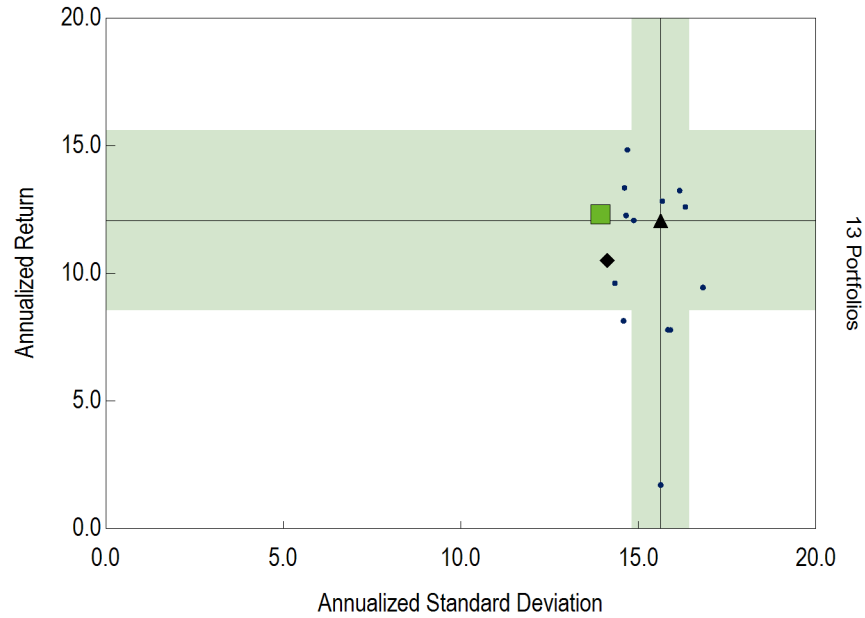


	Return (Rank)									
5th Percentile	16.16		29.59		28.09		30.09		12.95	
25th Percentile	15.30		25.64		24.47		27.76		12.07	
Median	14.17		24.44		22.14		25.18		10.92	
75th Percentile	12.75		23.55		17.48		21.56		7.68	
95th Percentile	11.12		19.92		7.79		14.93		4.46	
# of Portfolios	14		14		14		14		14	
● MFS Institutional Advisors	10.96	(96)	19.99	(95)	14.13	(87)	20.72	(85)	9.90	(57)
▲ MSCI World ex USA Growth NR USD	12.63	(78)	22.21	(90)	18.41	(72)	23.07	(67)	9.57	(58)

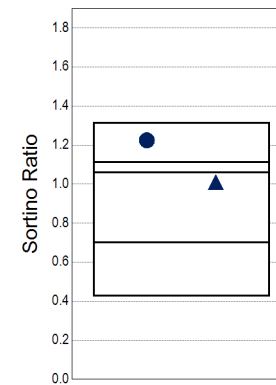
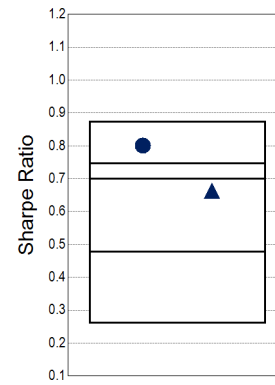
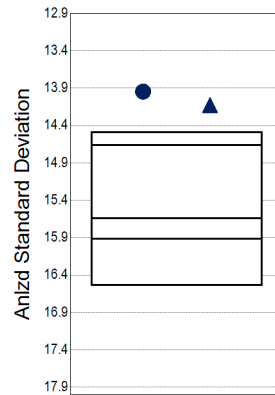
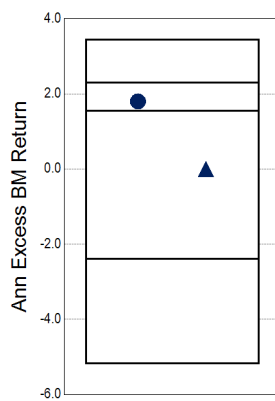
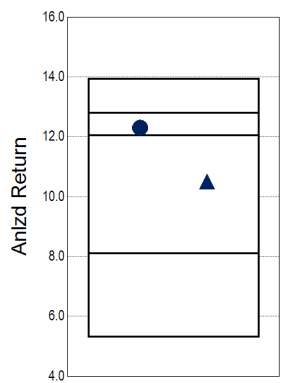
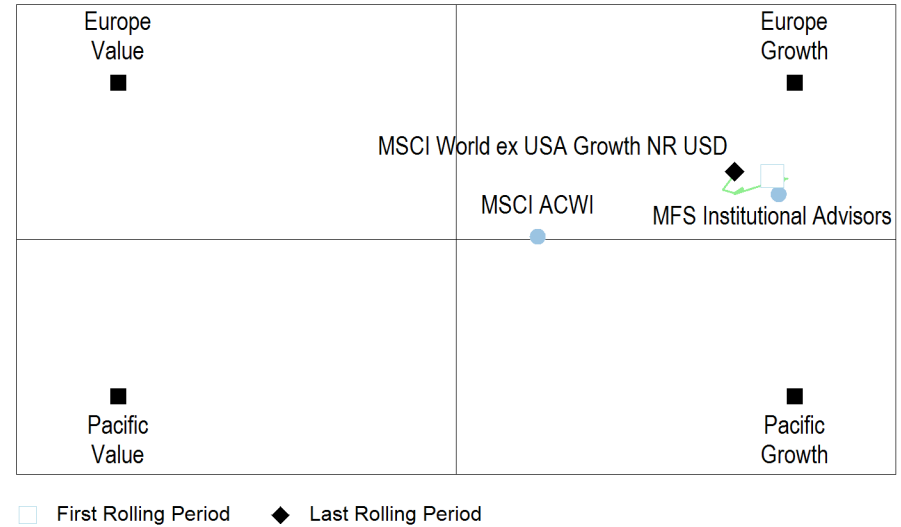


MFS INSTITUTIONAL ADVISORS

5 Year Risk Return



5 Year Style Map



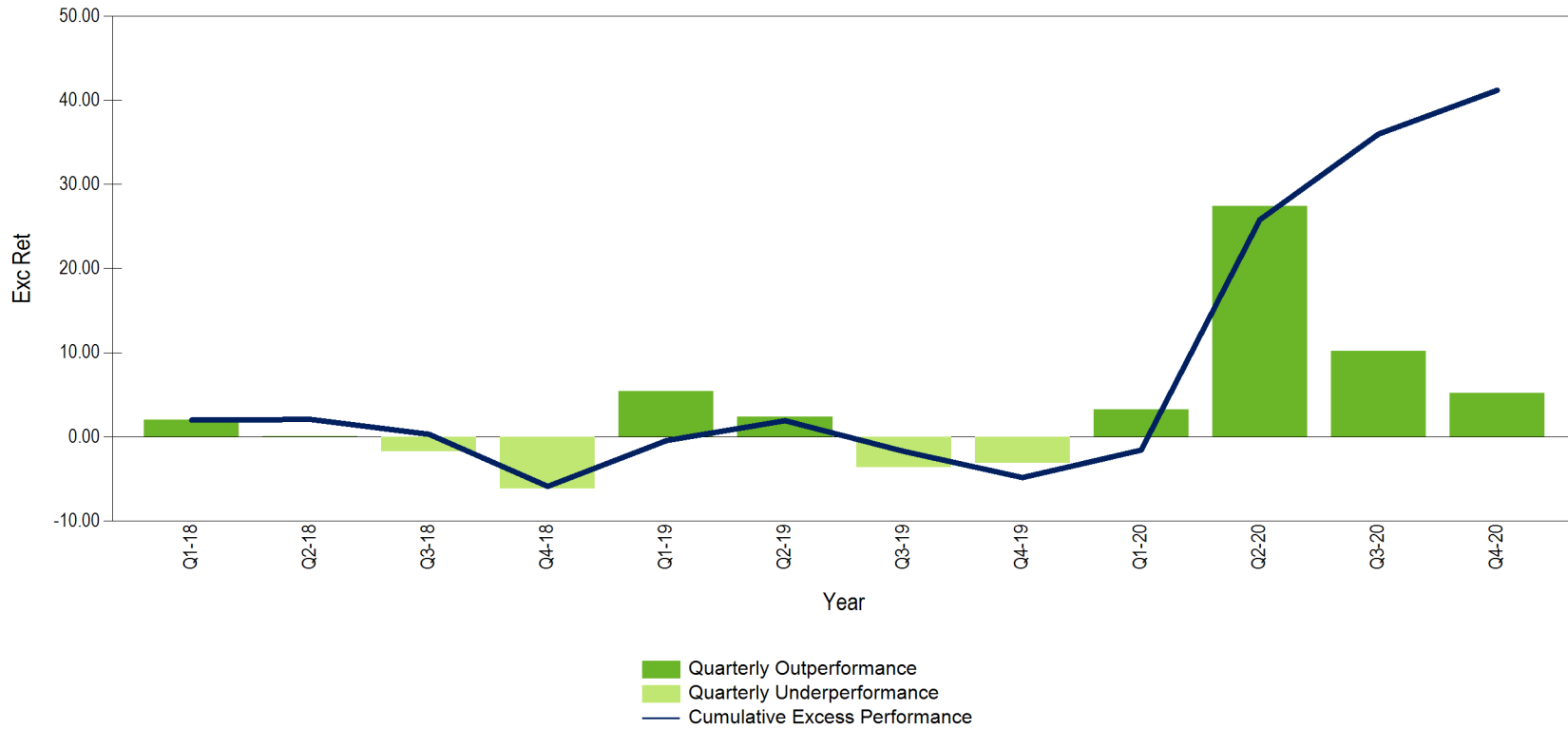
- MFS Institutional Advisors
- ▲ MSCI World ex USA Growth NR USD
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



Los Angeles City Employees' Retirement System

OBERWEIS ASSET MGMT

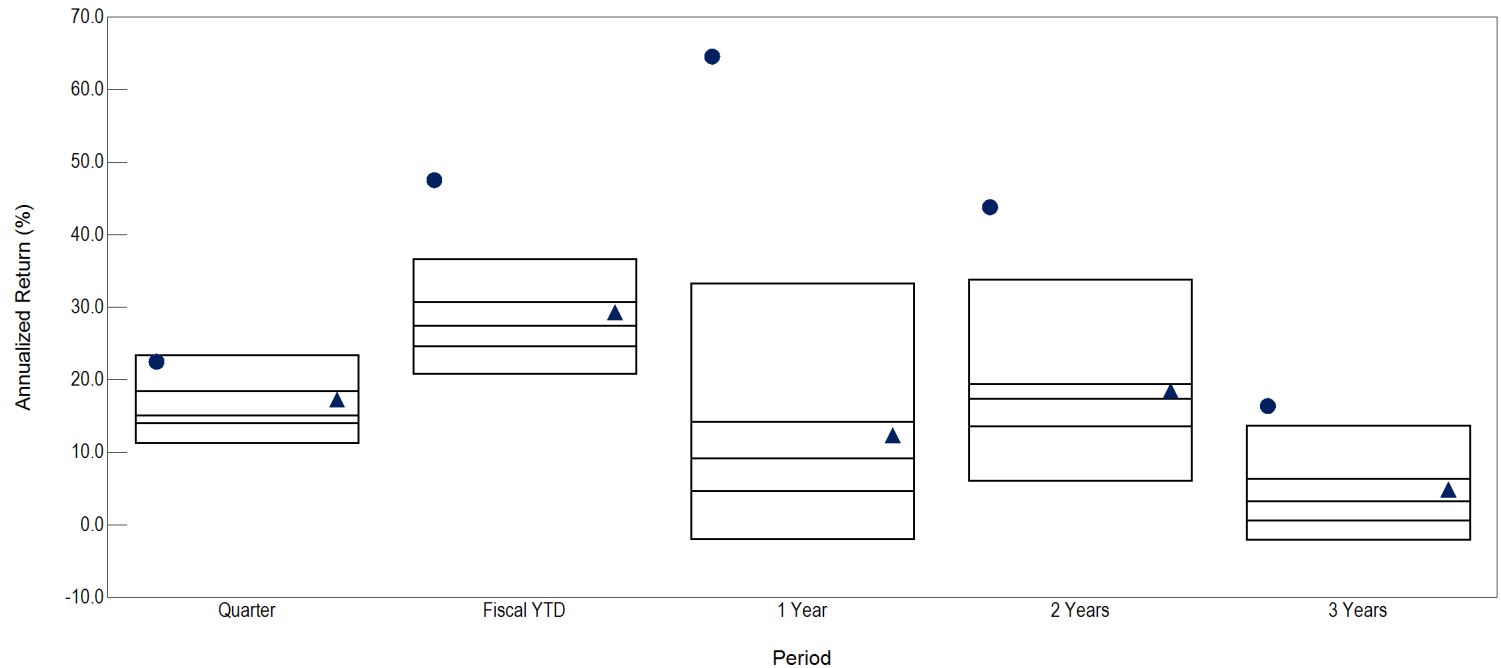
Quarterly and Cumulative Excess Performance



Los Angeles City Employees' Retirement System

OBERWEIS ASSET MGMT

Oberweis Asset Mgmt vs. eV EAFE Small Cap Equity Net



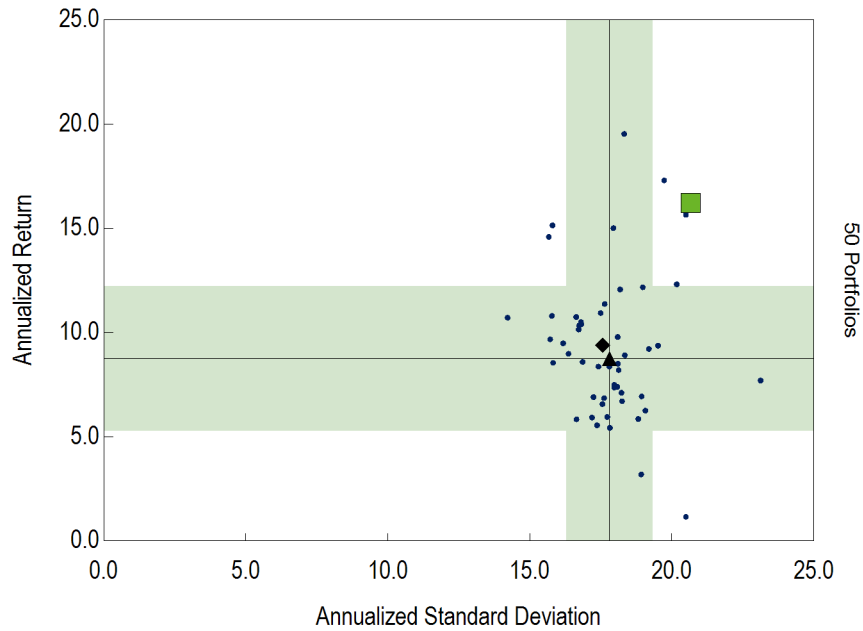
	Return (Rank)									
5th Percentile	23.41		36.62		33.28		33.79		13.68	
25th Percentile	18.55		30.77		14.29		19.52		6.47	
Median	15.19		27.55		9.28		17.48		3.31	
75th Percentile	14.11		24.72		4.73		13.64		0.67	
95th Percentile	11.40		20.95		-1.91		6.14		-1.99	
# of Portfolios	63		63		63		61		59	
● Oberweis Asset Mgmt	22.47	(9)	47.51	(1)	64.55	(1)	43.78	(1)	16.37	(1)
▲ MSCI EAFE Small Cap	17.27	(34)	29.29	(37)	12.34	(40)	18.49	(37)	4.85	(40)



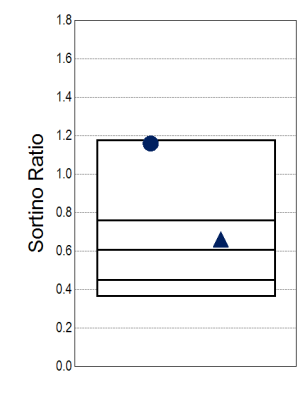
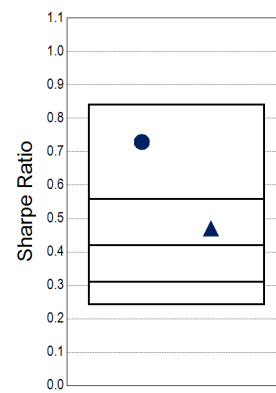
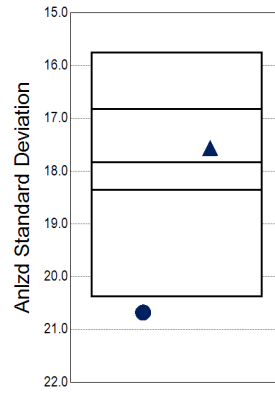
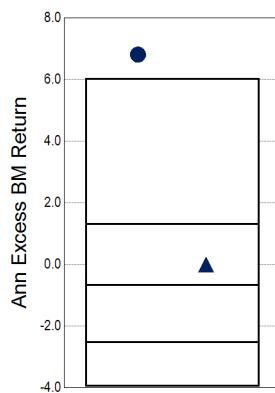
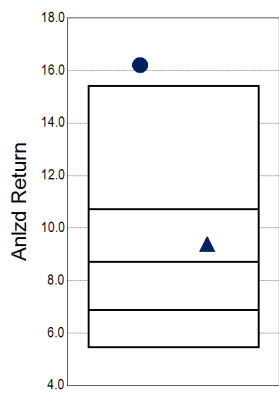
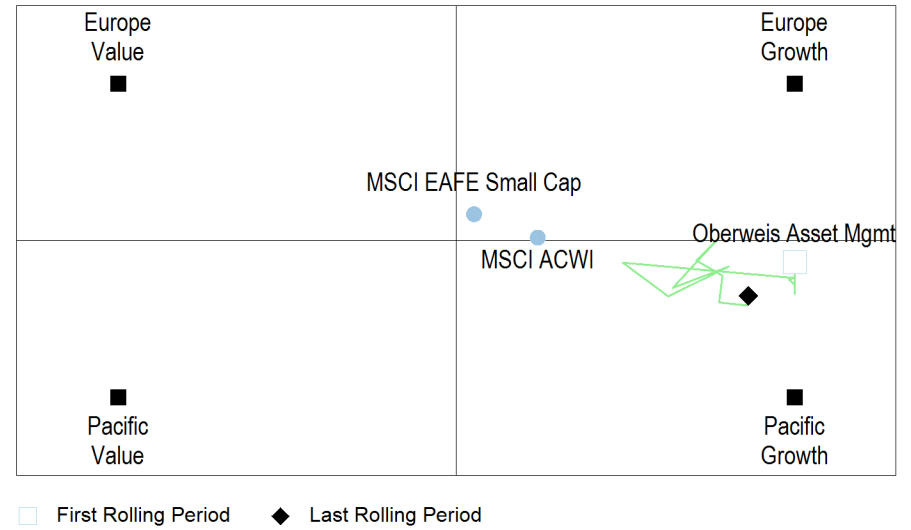
Los Angeles City Employees' Retirement System

OBERWEIS ASSET MGMT

5 Year Risk Return



5 Year Style Map



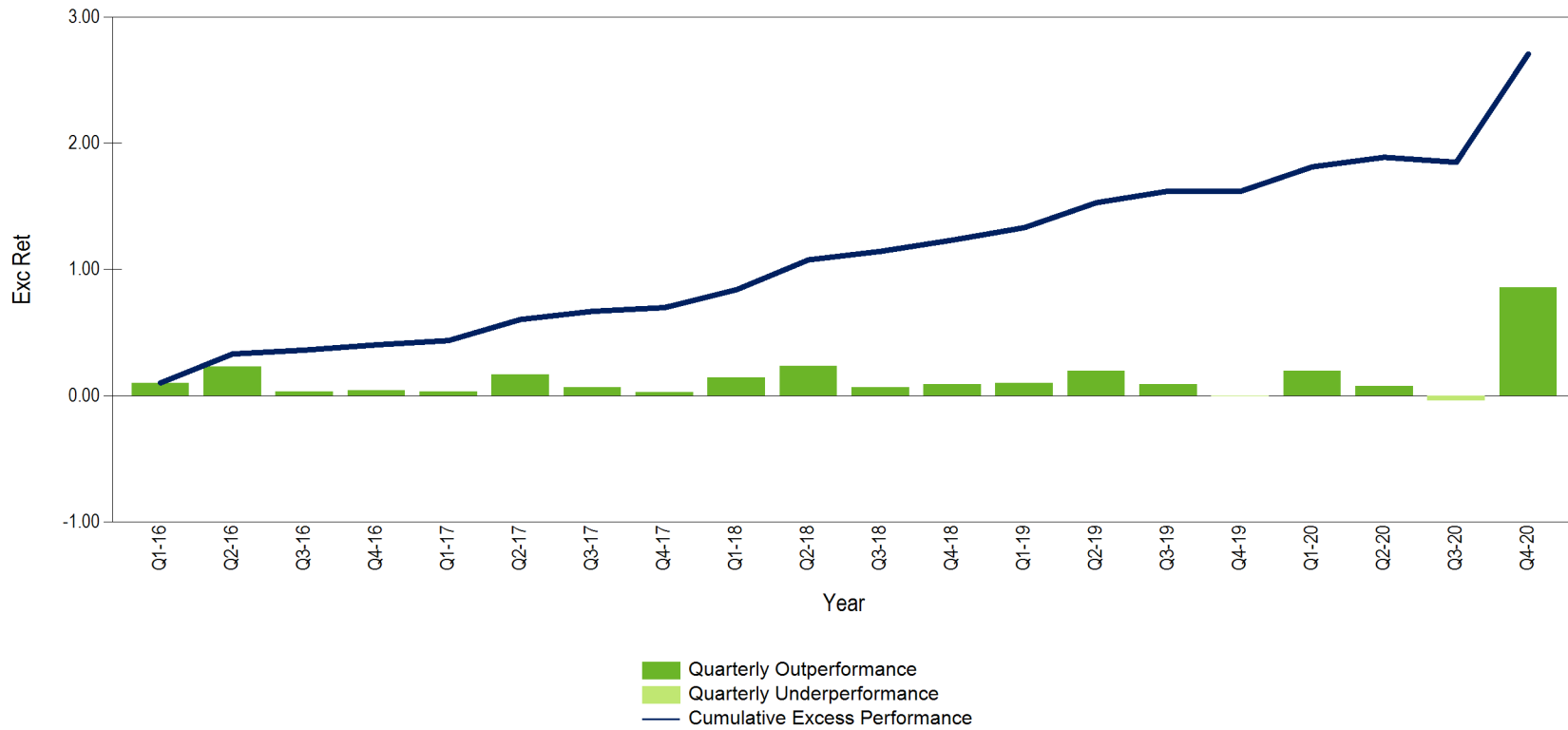
- Oberweis Asset Mgmt
- ▲ MSCI EAFE Small Cap
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



Los Angeles City Employees' Retirement System

SSGA WORLD EX US IMI

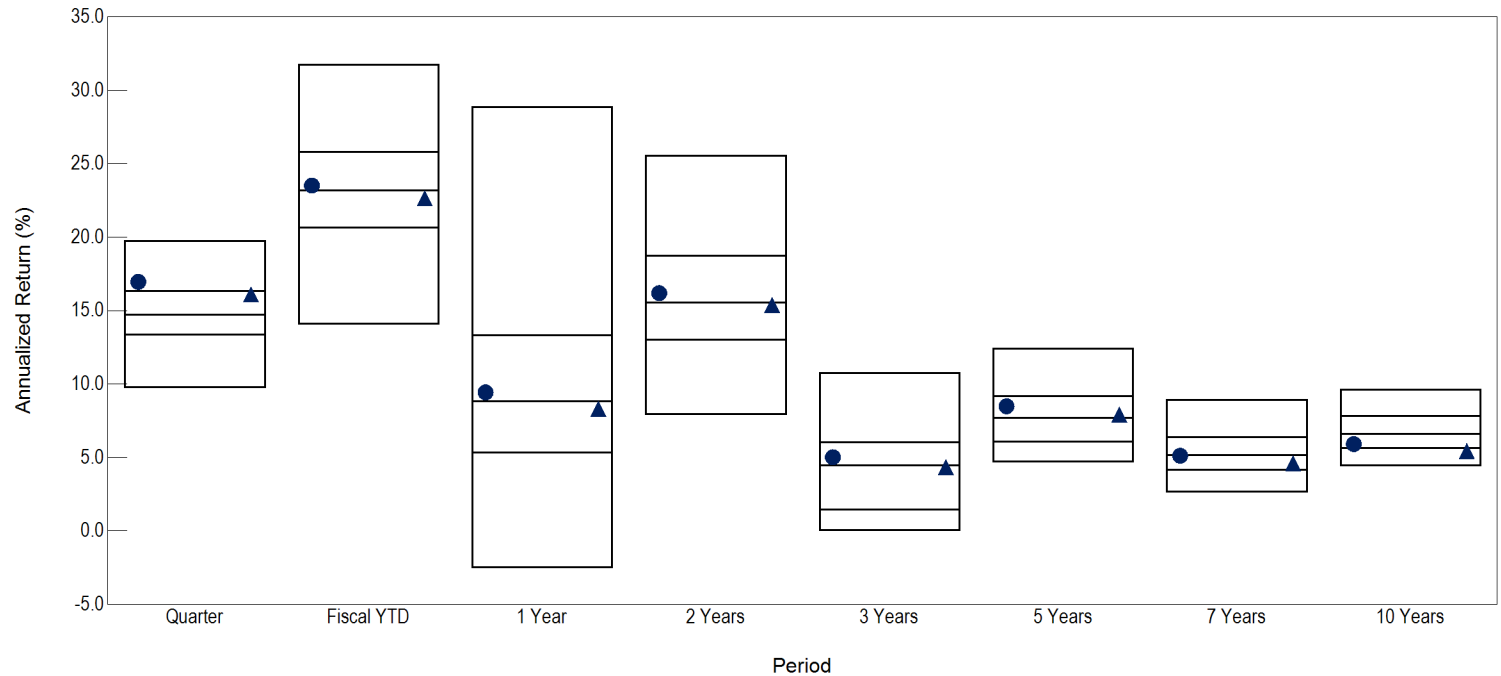
Quarterly and Cumulative Excess Performance



Los Angeles City Employees' Retirement System

SSGA WORLD EX US IMI

SSgA World ex US IMI vs. eV EAFE Core Equity Net



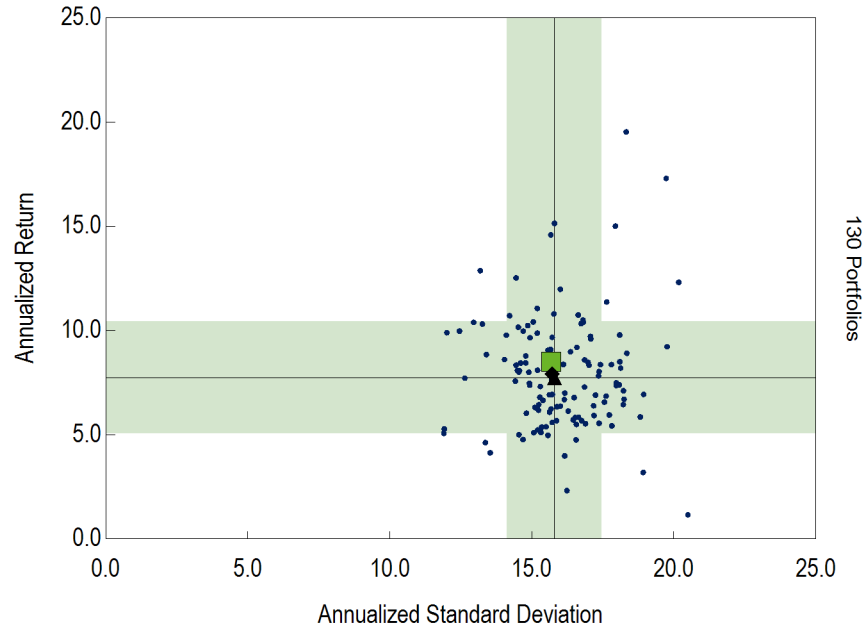
	Return (Rank)															
5th Percentile	19.74	(19)	31.72	(47)	28.87	(47)	25.54	(41)	10.73	(41)	12.43	(35)	8.93	(54)	9.61	(73)
25th Percentile	16.37	(28)	25.84	(54)	13.36	(54)	18.79	(53)	6.10	(54)	9.21	(49)	6.45	(64)	7.88	(83)
Median	14.77		23.22		8.85		15.61		4.49		7.74		5.20		6.64	
75th Percentile	13.39		20.69		5.38		13.05		1.51		6.14		4.21		5.71	
95th Percentile	9.83		14.16		-2.43		8.00		0.09		4.76		2.74		4.53	
# of Portfolios	145		145		145		144		142		130		111		83	
● SSGA World ex US IMI	16.96	(19)	23.51	(47)	9.43	(47)	16.19	(41)	5.02	(41)	8.49	(35)	5.12	(54)	5.91	(73)
▲ MSCI World ex USA IMI NR USD	16.10	(28)	22.65	(54)	8.32	(54)	15.38	(53)	4.34	(54)	7.92	(49)	4.61	(64)	5.43	(83)



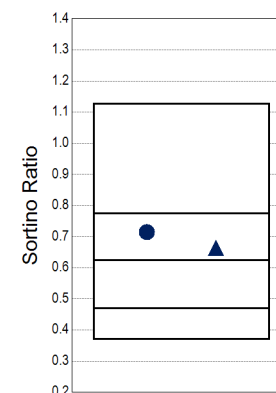
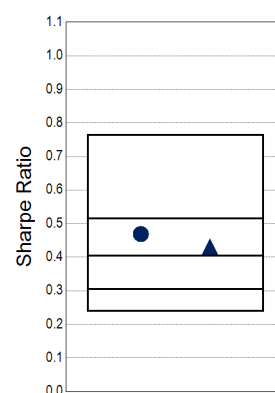
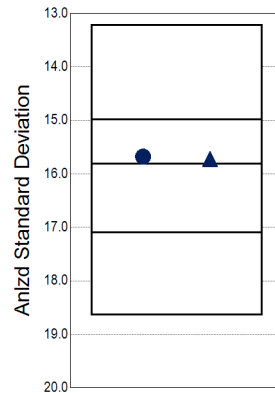
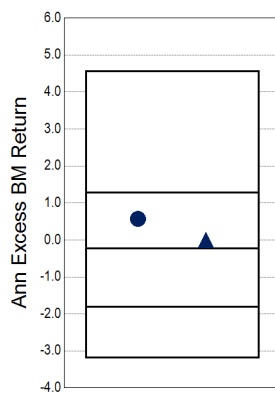
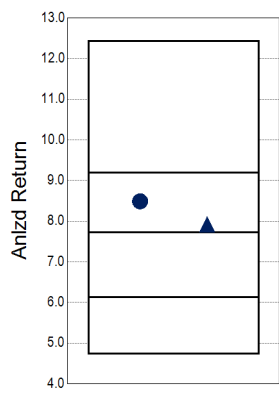
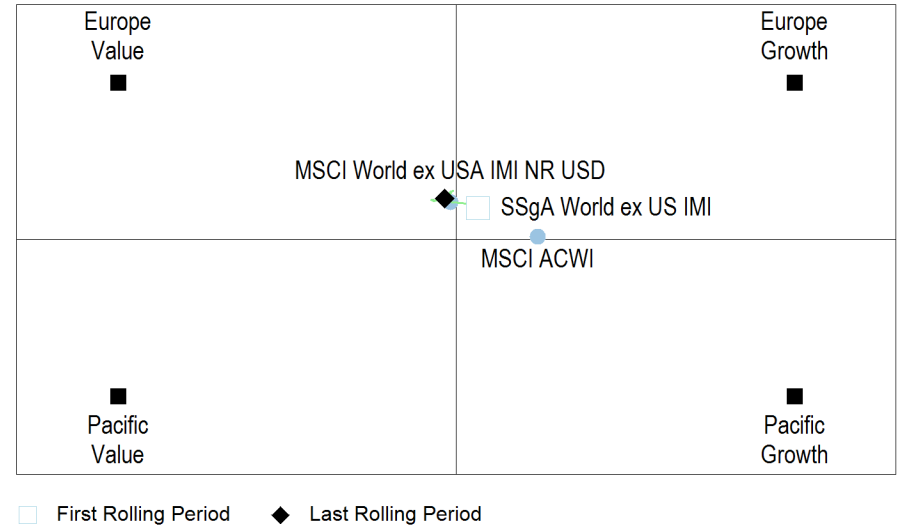
Los Angeles City Employees' Retirement System

SSGA WORLD EX US IMI

5 Year Risk Return



5 Year Style Map

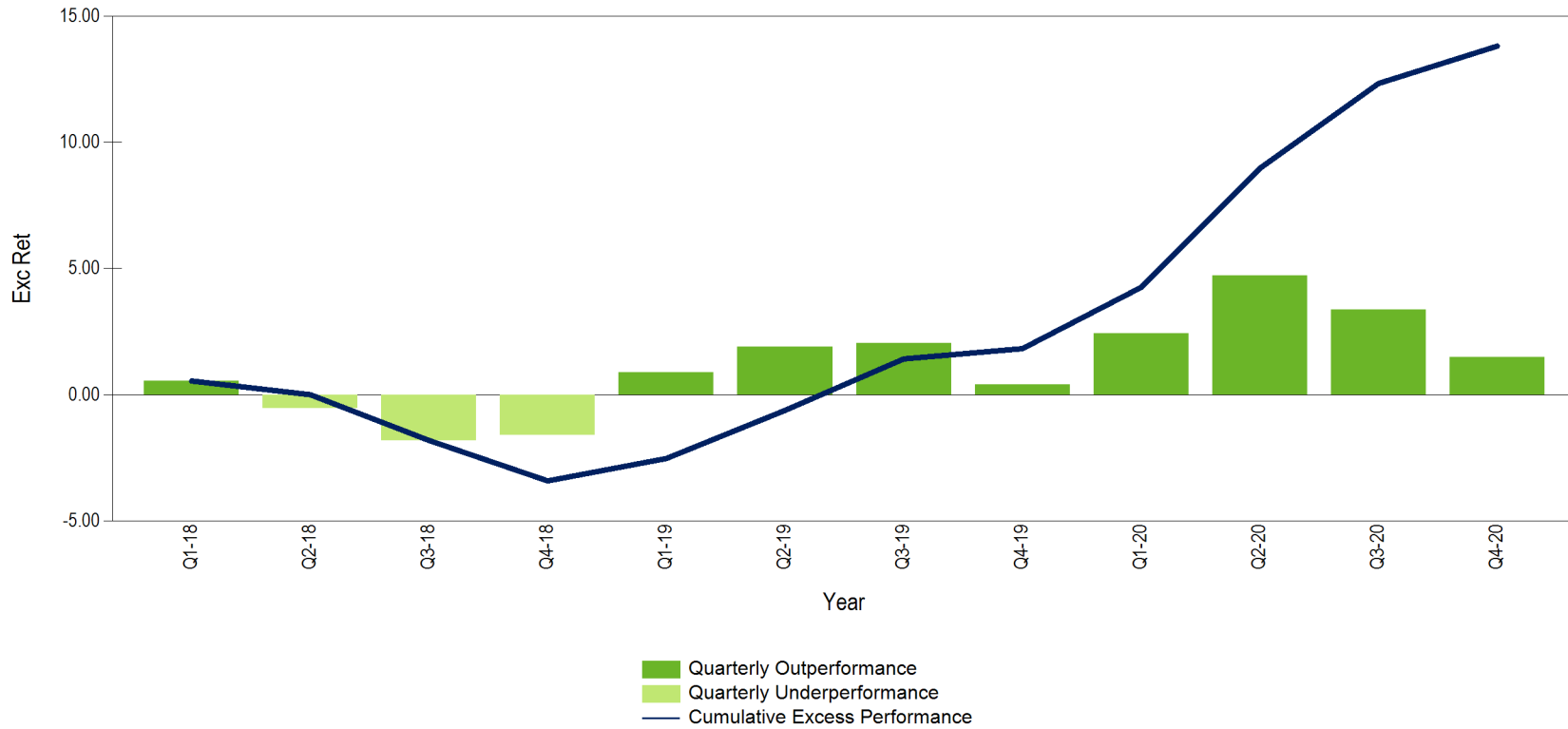


- SSGA World ex US IMI
- ▲ MSCI World ex USA IMI NR USD
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



AXIOM EMERGING MARKETS

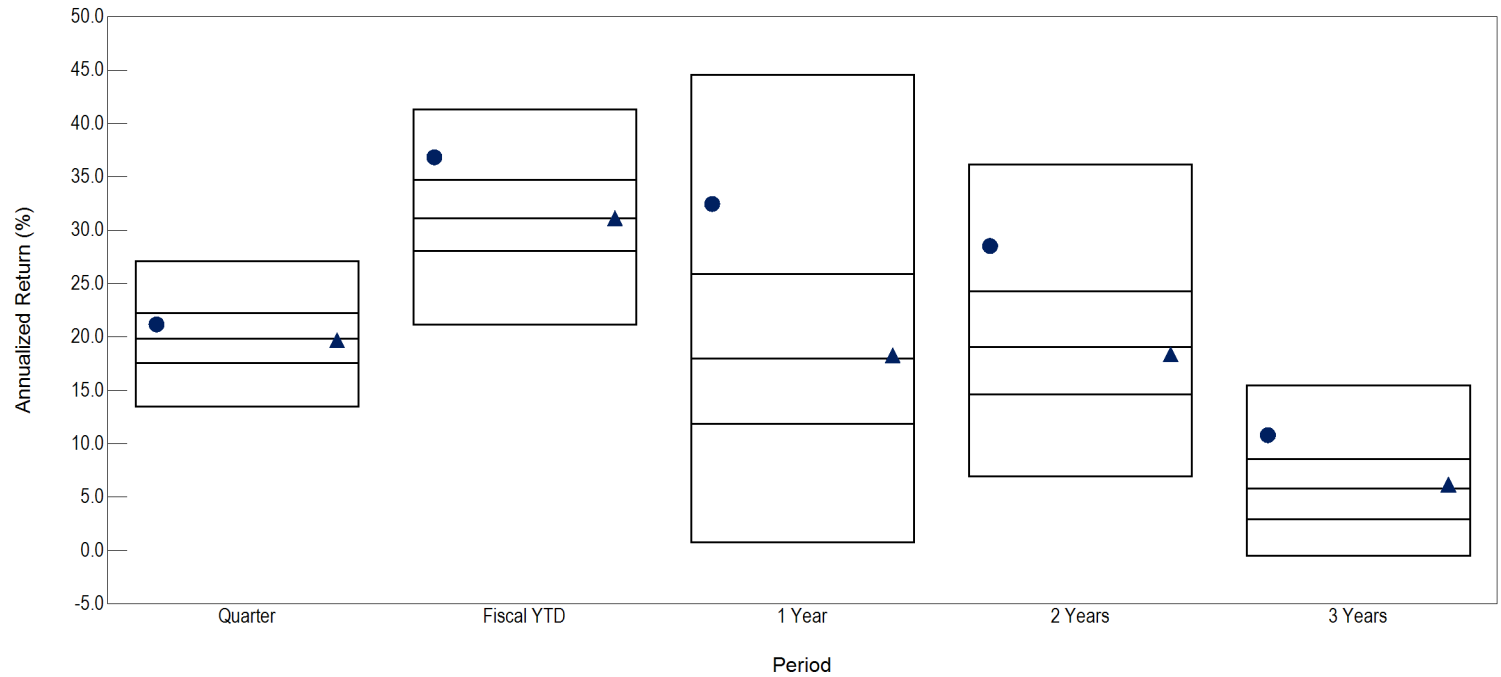
Quarterly and Cumulative Excess Performance



Los Angeles City Employees' Retirement System

AXIOM EMERGING MARKETS

Axiom Emerging Markets vs. eV Emg Mkts Equity Net

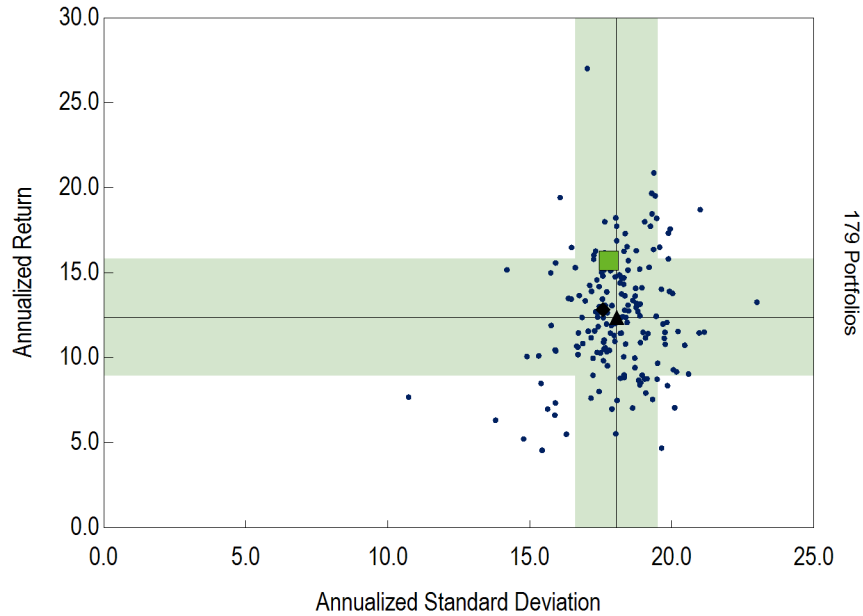


	Return (Rank)									
5th Percentile	27.10		41.34		44.57		36.15		15.47	
25th Percentile	22.31		34.80		25.94		24.35		8.60	
Median	19.88		31.18		18.05		19.12		5.85	
75th Percentile	17.62		28.12		11.94		14.67		2.98	
95th Percentile	13.53		21.20		0.83		6.99		-0.43	
# of Portfolios	231		231		231		220		206	
● Axiom Emerging Markets	21.18	(38)	36.84	(15)	32.46	(14)	28.52	(15)	10.80	(14)
▲ MSCI Emerging Markets	19.70	(53)	31.14	(52)	18.31	(49)	18.37	(56)	6.17	(46)

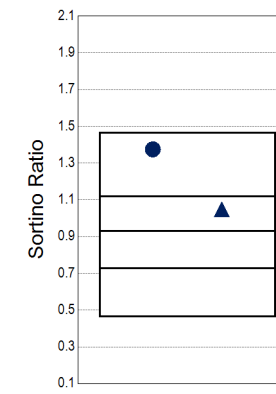
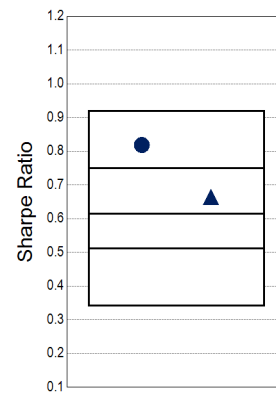
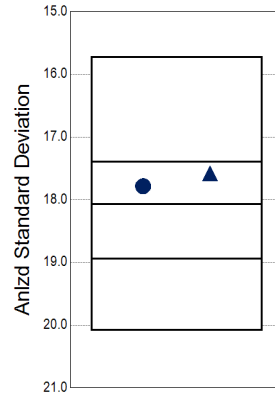
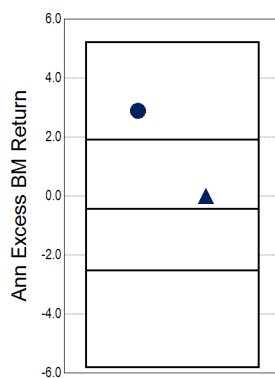
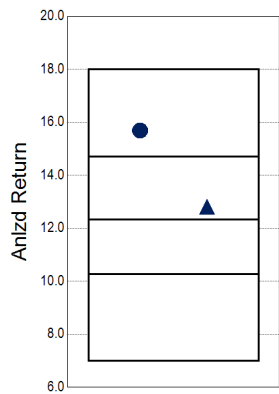
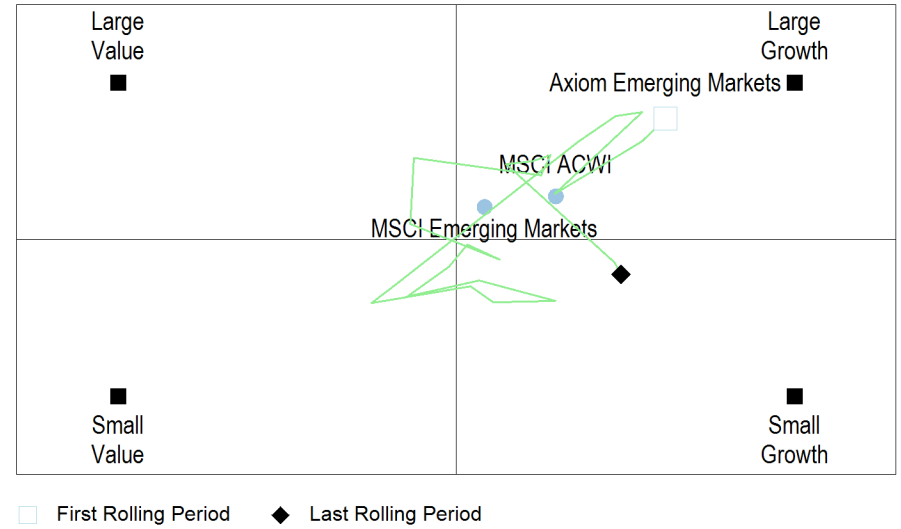


AXIOM EMERGING MARKETS

5 Year Risk Return



5 Year Style Map



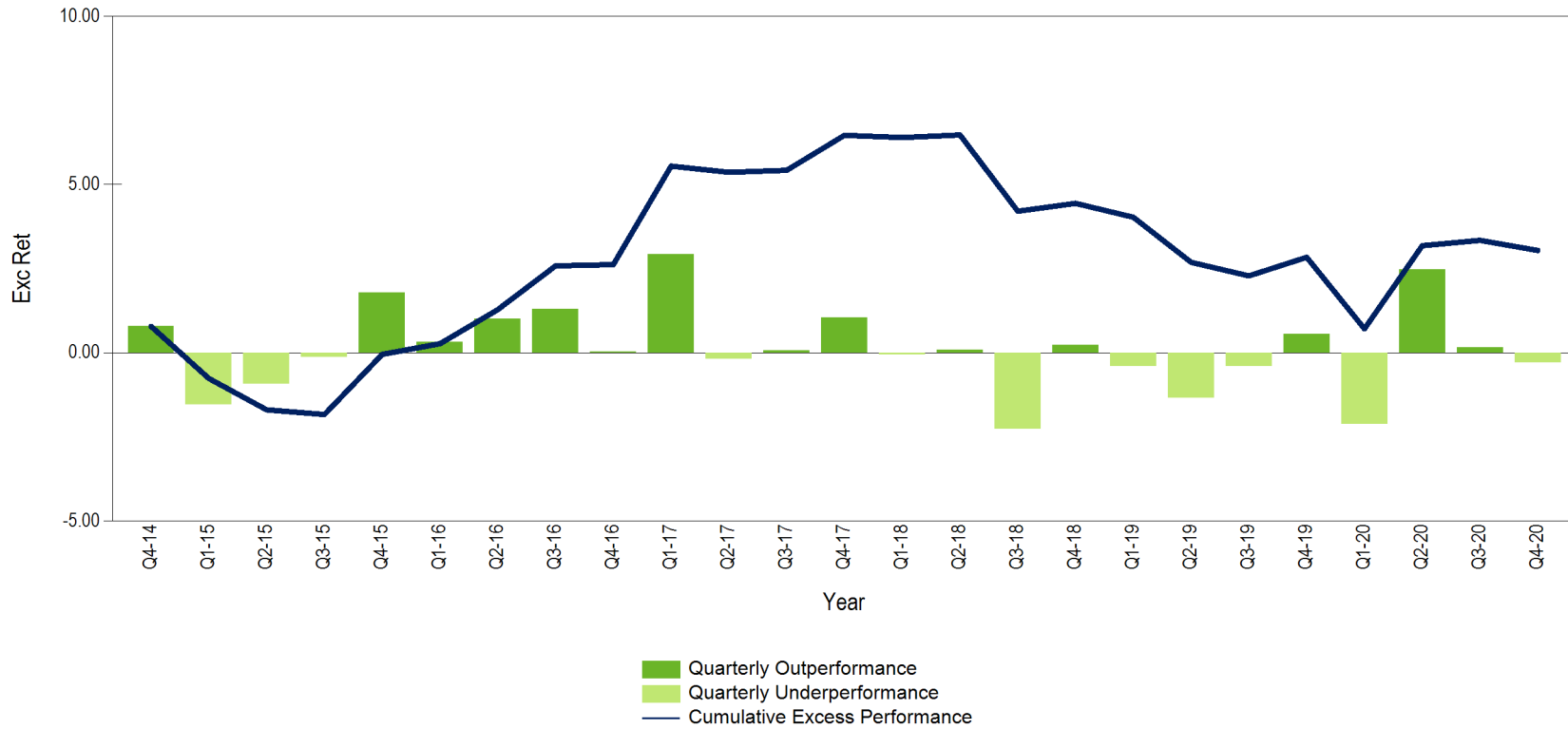
- Axiom Emerging Markets
- ▲ MSCI Emerging Markets
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



Los Angeles City Employees' Retirement System

DFA EMERGING MARKETS

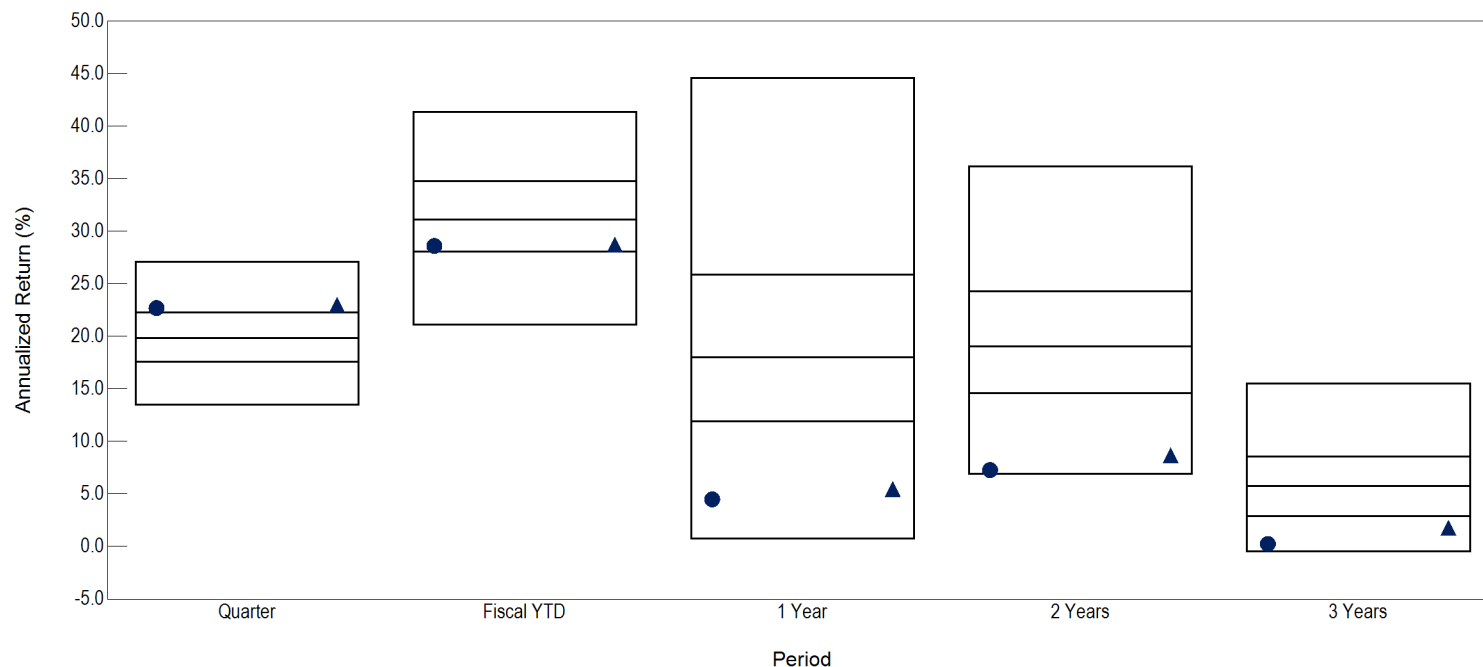
Quarterly and Cumulative Excess Performance



Los Angeles City Employees' Retirement System

DFA EMERGING MARKETS

DFA Emerging Markets vs. eV Emg Mkts Equity Net



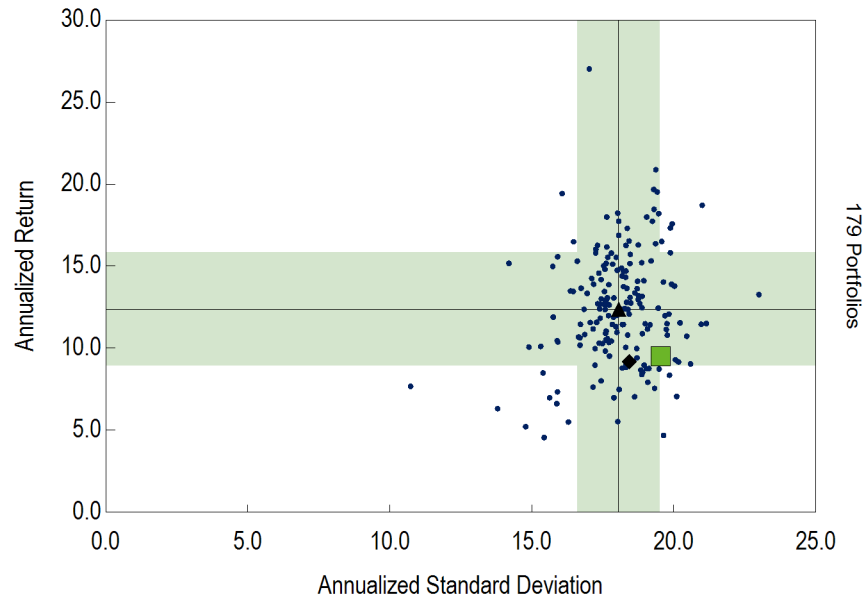
	Return (Rank)									
5th Percentile	27.10		41.34		44.57		36.15		15.47	
25th Percentile	22.31		34.80		25.94		24.35		8.60	
Median	19.88		31.18		18.05		19.12		5.85	
75th Percentile	17.62		28.12		11.94		14.67		2.98	
95th Percentile	13.53		21.20		0.83		6.99		-0.43	
# of Portfolios	231		231		231		220		206	
● DFA Emerging Markets	22.68	(23)	28.58	(73)	4.48	(92)	7.27	(94)	0.24	(93)
▲ MSCI Emerging Markets Value NR USD	22.98	(21)	28.70	(73)	5.47	(90)	8.67	(91)	1.77	(85)



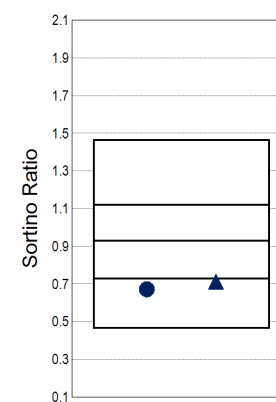
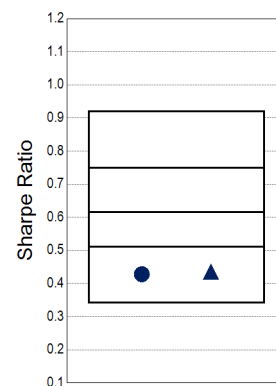
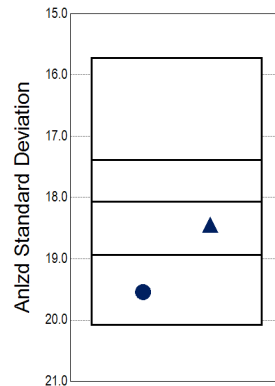
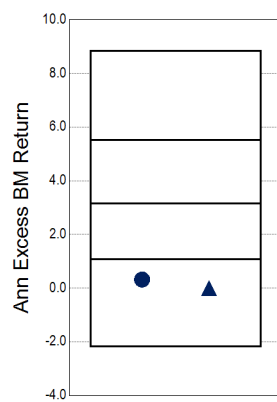
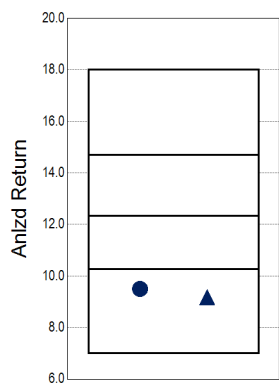
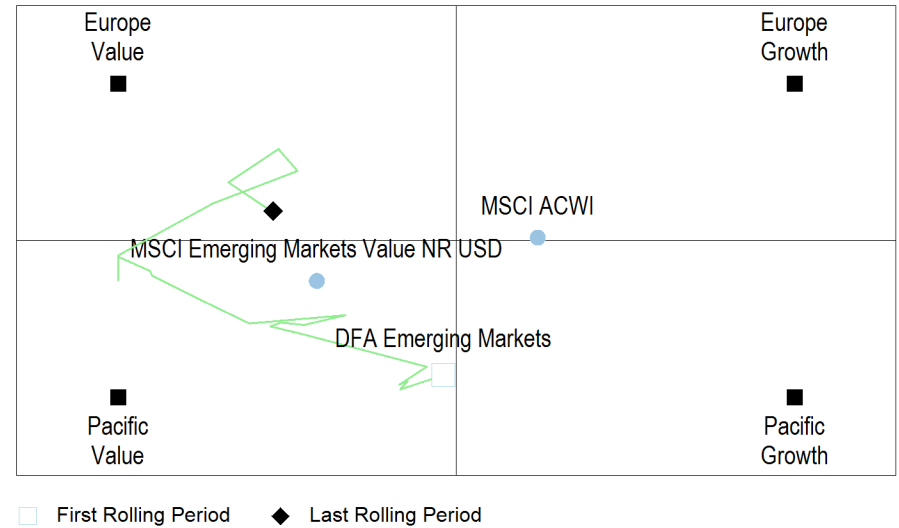
Los Angeles City Employees' Retirement System

DFA EMERGING MARKETS

5 Year Risk Return



5 Year Style Map



- DFA Emerging Markets
- ▲ MSCI Emerging Markets Value NR USD
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



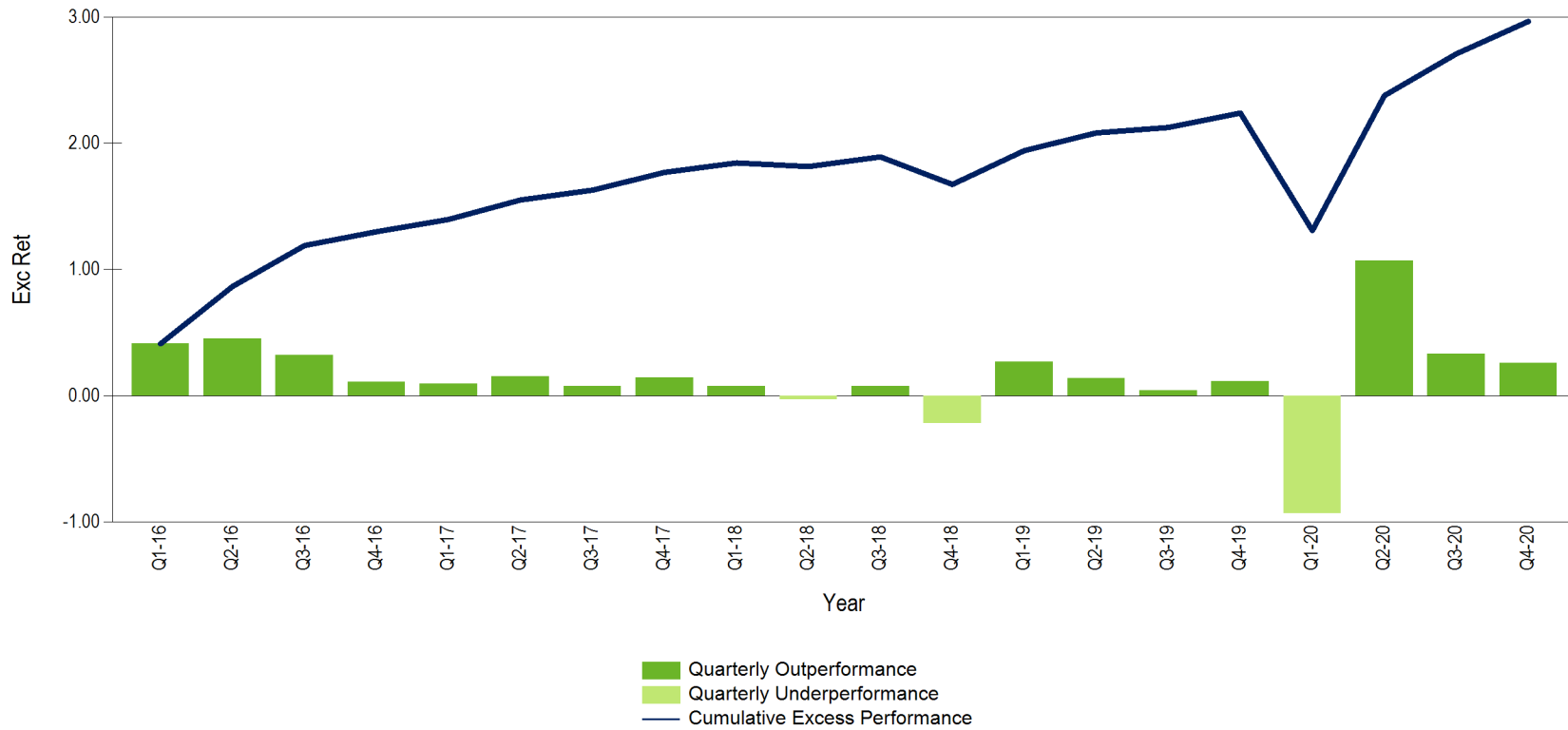
CORE FIXED INCOME MANAGER PERFORMANCE

NEPC, LLC

Los Angeles City Employees' Retirement System

BAIRD ADVISORS

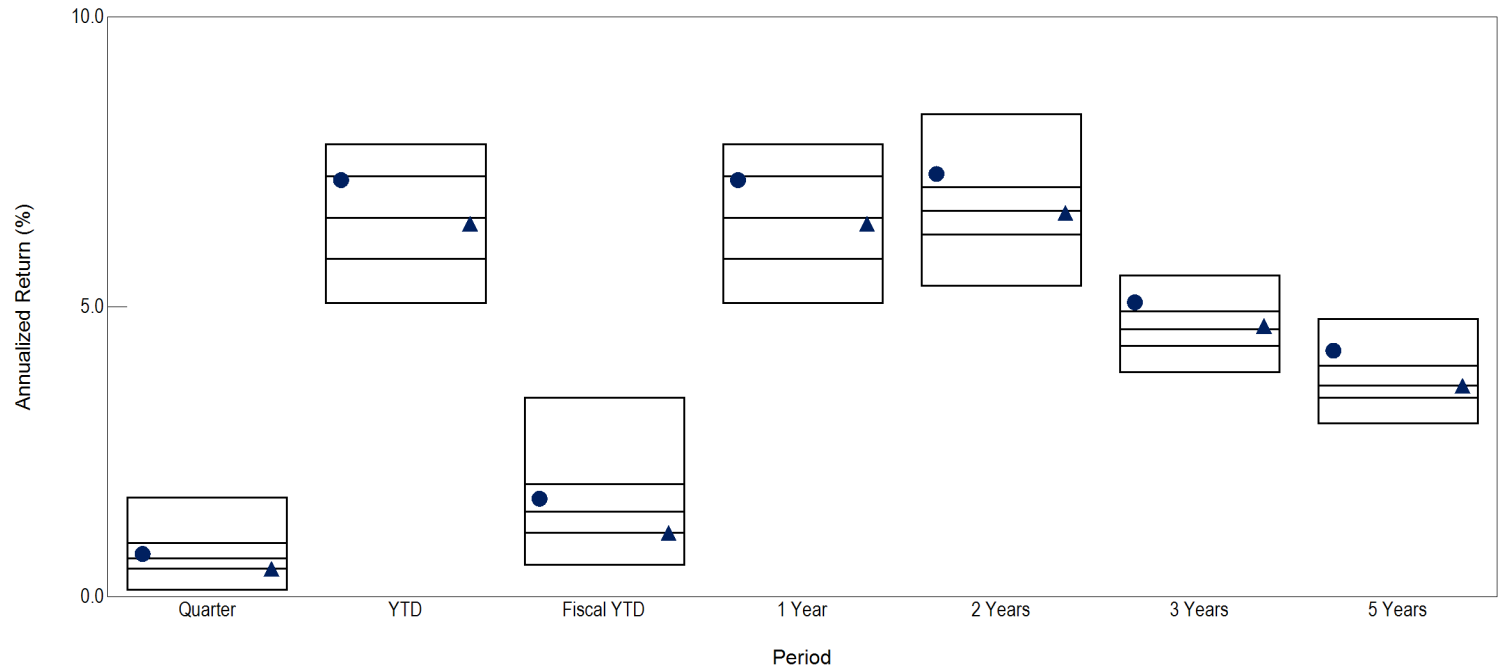
Quarterly and Cumulative Excess Performance



Los Angeles City Employees' Retirement System

BAIRD ADVISORS

Baird Advisors vs. eV US Interm Duration Fixed Inc Net



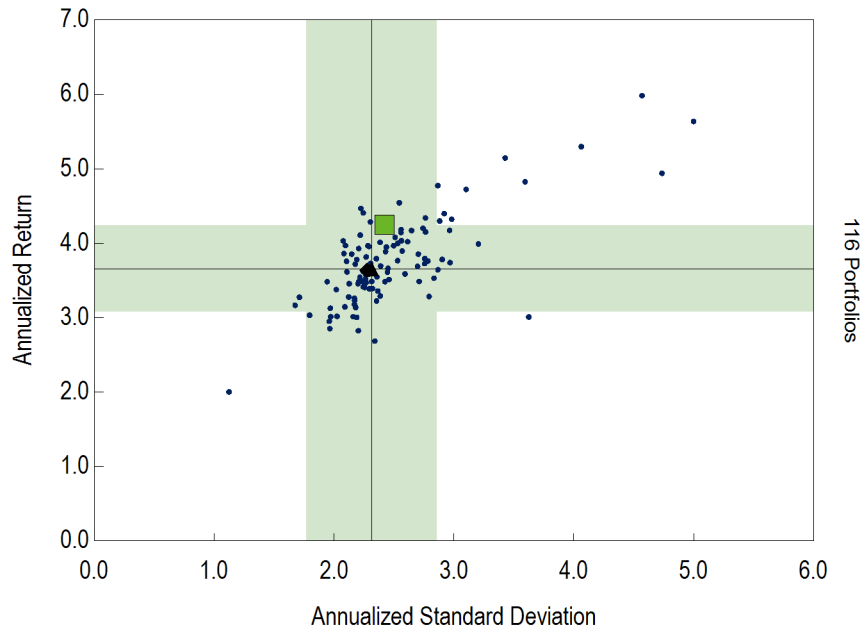
	Return (Rank)													
5th Percentile	1.71	7.81	3.43	7.81	8.32	5.54	4.79							
25th Percentile	0.94	7.26	1.96	7.26	7.08	4.93	4.00							
Median	0.68	6.55	1.48	6.55	6.67	4.62	3.66							
75th Percentile	0.50	5.84	1.11	5.84	6.26	4.34	3.45							
95th Percentile	0.13	5.08	0.56	5.08	5.38	3.89	3.01							
# of Portfolios	122	122	122	122	119	118	116							
● Baird Advisors	0.74	(47)	7.19	(28)	1.69	(43)	7.19	(28)	7.29	(18)	5.08	(13)	4.24	(15)
▲ BBgBarc US Govt/Credit Int TR	0.48	(77)	6.43	(56)	1.10	(78)	6.43	(56)	6.62	(56)	4.67	(44)	3.64	(54)



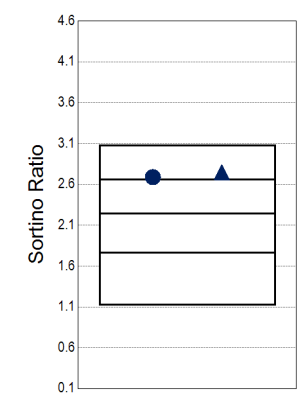
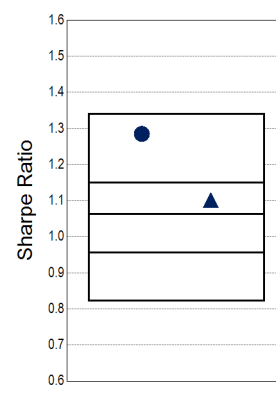
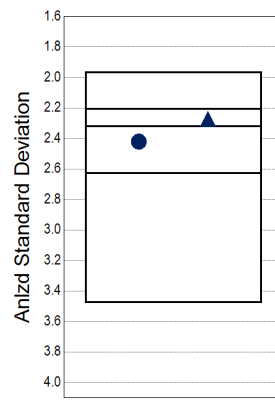
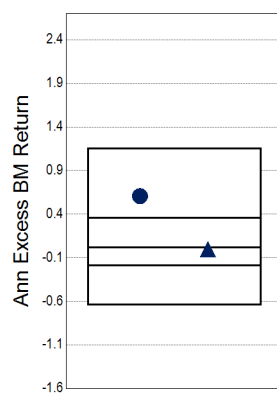
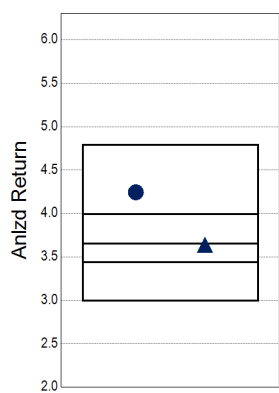
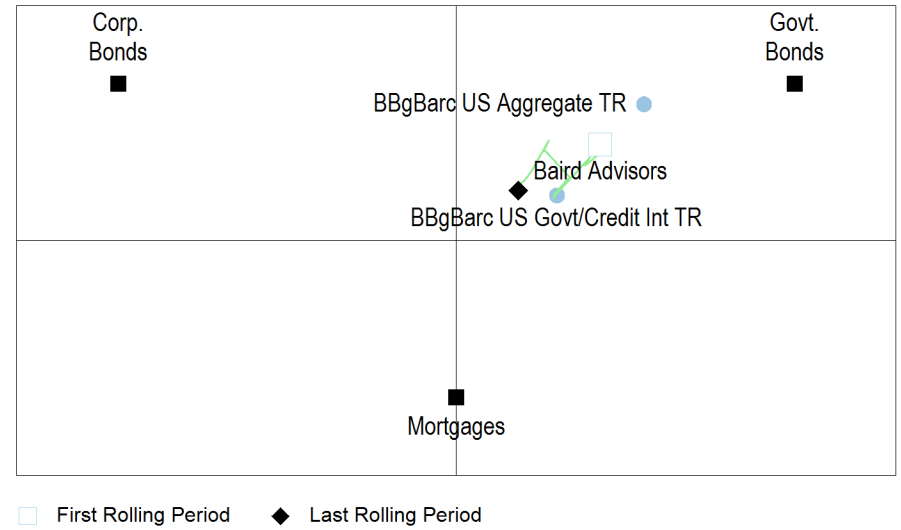
Los Angeles City Employees' Retirement System

BAIRD ADVISORS

5 Year Risk Return



5 Year Style Map



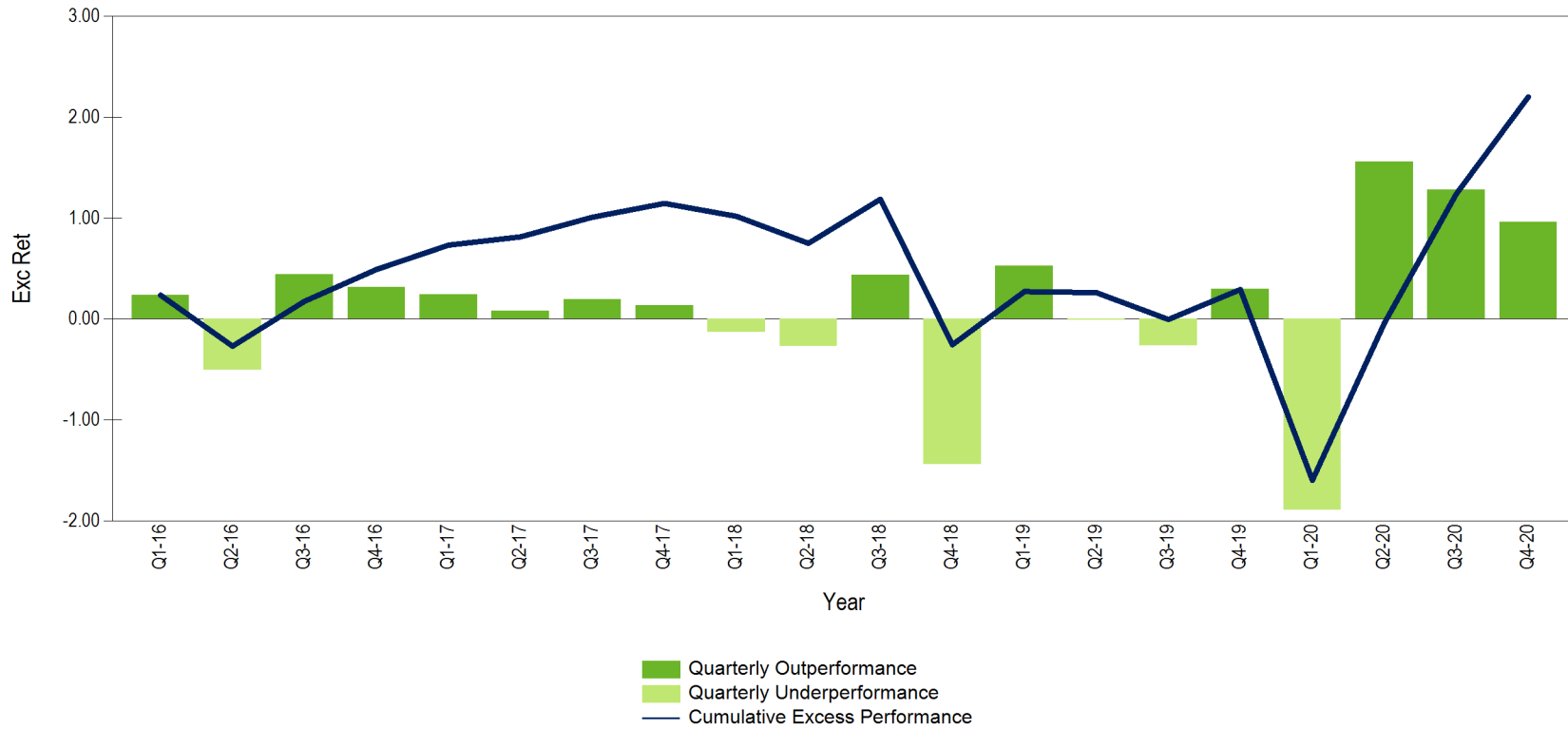
- Baird Advisors
- ▲ BBgBarc US Govt/Credit Int TR
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



Los Angeles City Employees' Retirement System

LM CAPITAL

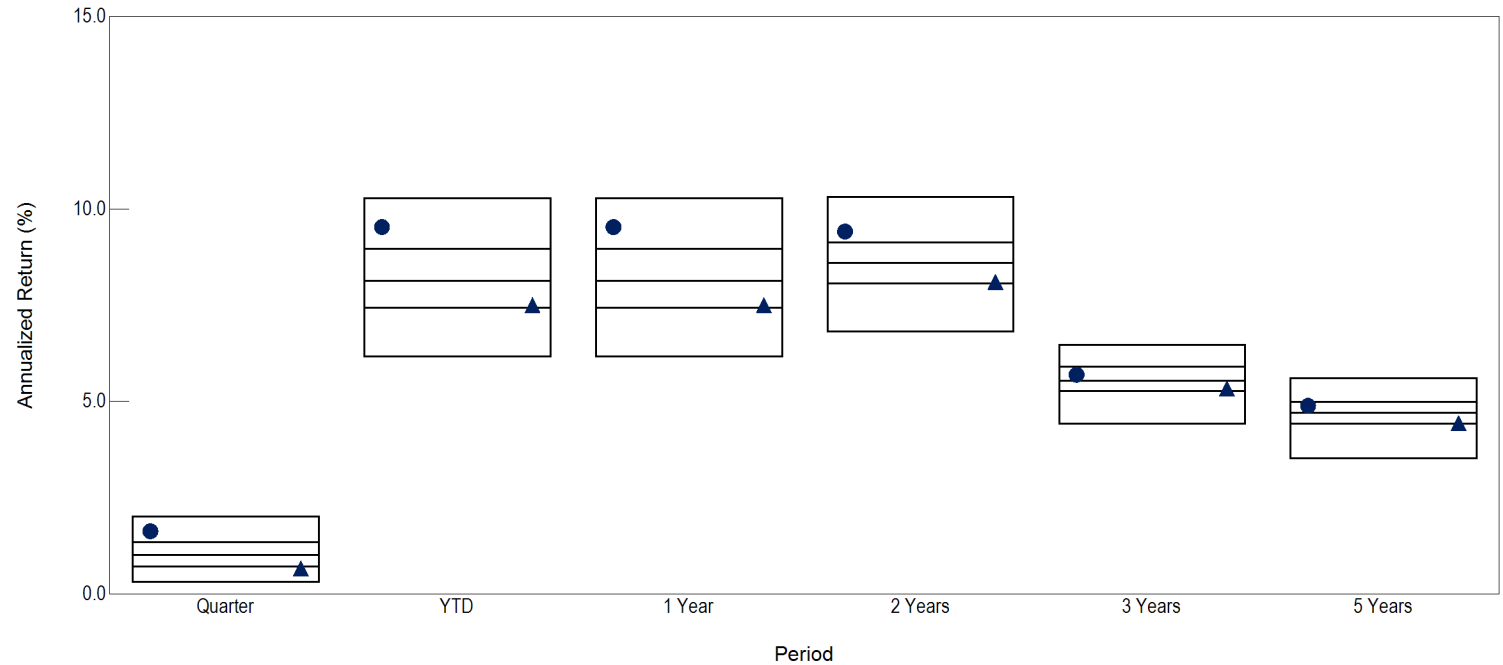
Quarterly and Cumulative Excess Performance



Los Angeles City Employees' Retirement System

LM CAPITAL

Core Fixed Income Managers vs. eV US Core Fixed Inc Net



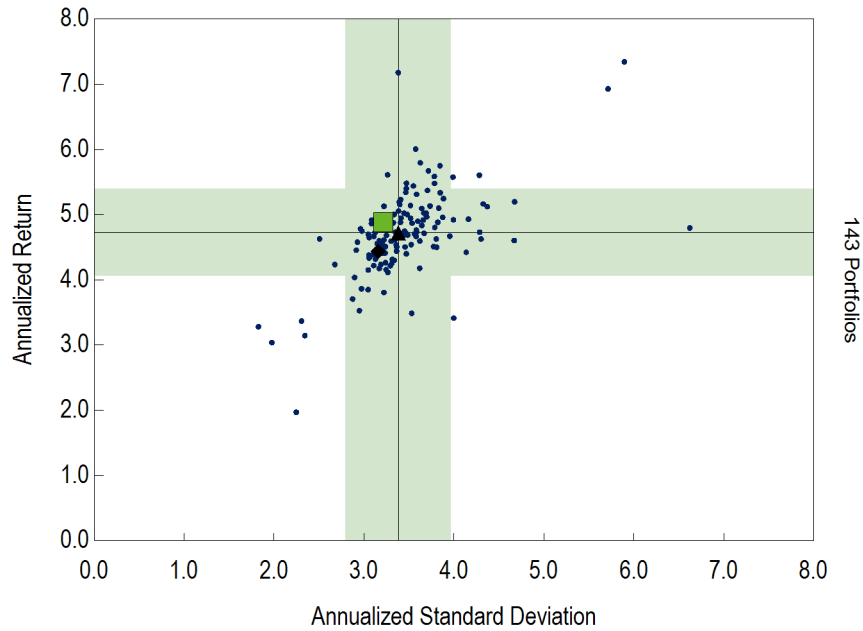
	Return (Rank)		Return (Rank)		Return (Rank)		Return (Rank)		Return (Rank)		Return (Rank)	
5th Percentile	2.02		10.28		10.28		10.32		6.46		5.61	
25th Percentile	1.36		8.98		8.98		9.16		5.92		5.00	
Median	1.03		8.15		8.15		8.62		5.56		4.72	
75th Percentile	0.73		7.45		7.45		8.09		5.29		4.43	
95th Percentile	0.34		6.19		6.19		6.83		4.44		3.55	
# of Portfolios	150		149		149		147		145		143	
● LM Capital	1.63	(10)	9.53	(13)	9.53	(13)	9.42	(18)	5.70	(36)	4.89	(37)
▲ LM Custom Benchmark	0.67	(81)	7.51	(75)	7.51	(75)	8.11	(74)	5.34	(70)	4.44	(75)



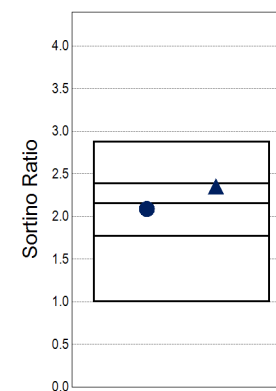
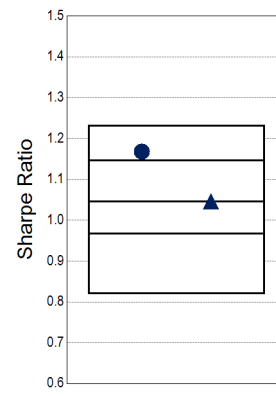
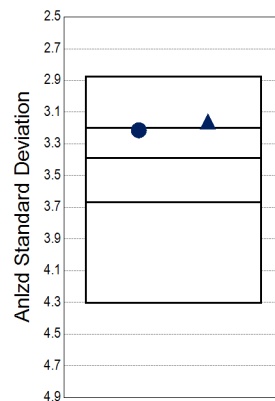
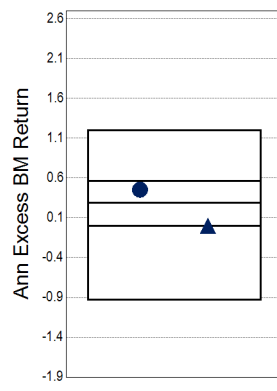
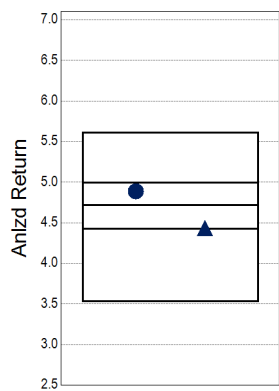
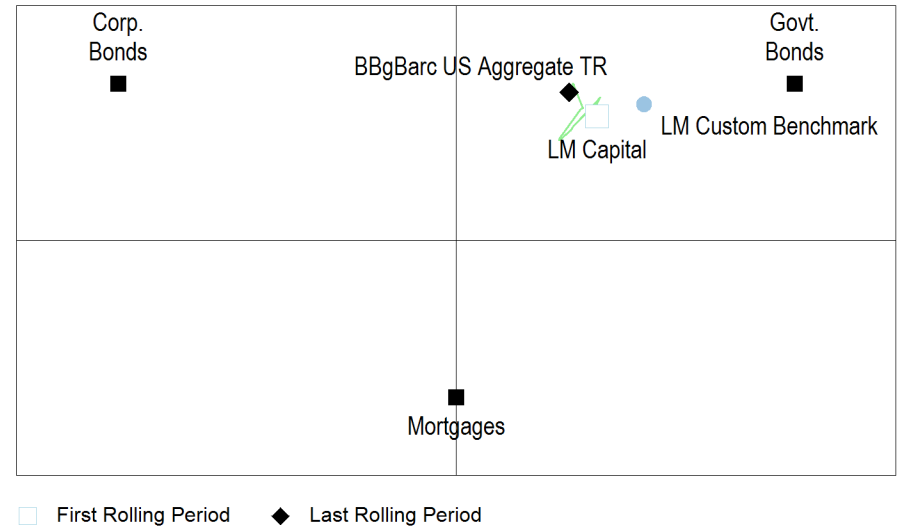
Los Angeles City Employees' Retirement System

LM CAPITAL

5 Year Risk Return



5 Year Style Map



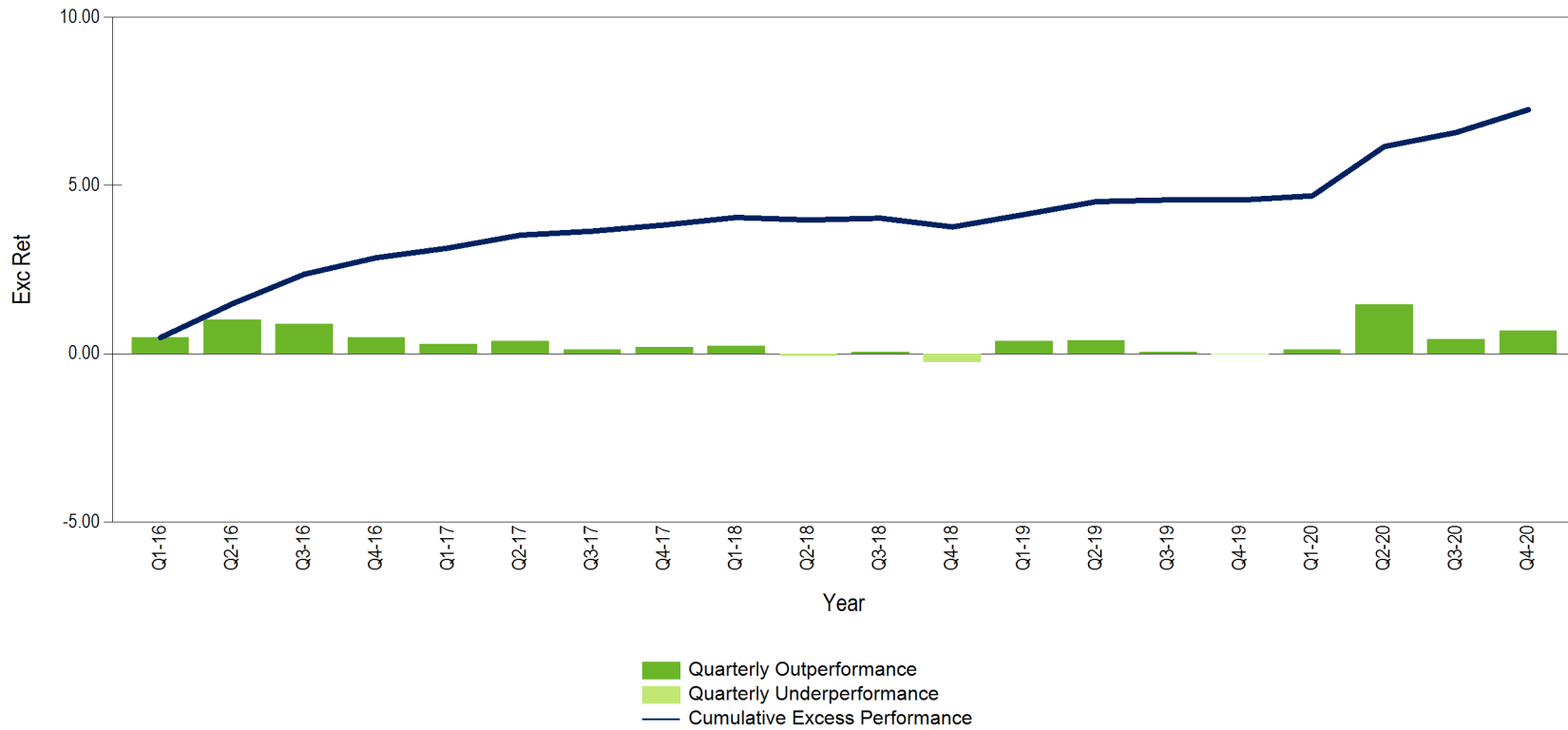
- LM Capital
- ▲ LM Custom Benchmark
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



Los Angeles City Employees' Retirement System

LOOMIS SAYLES

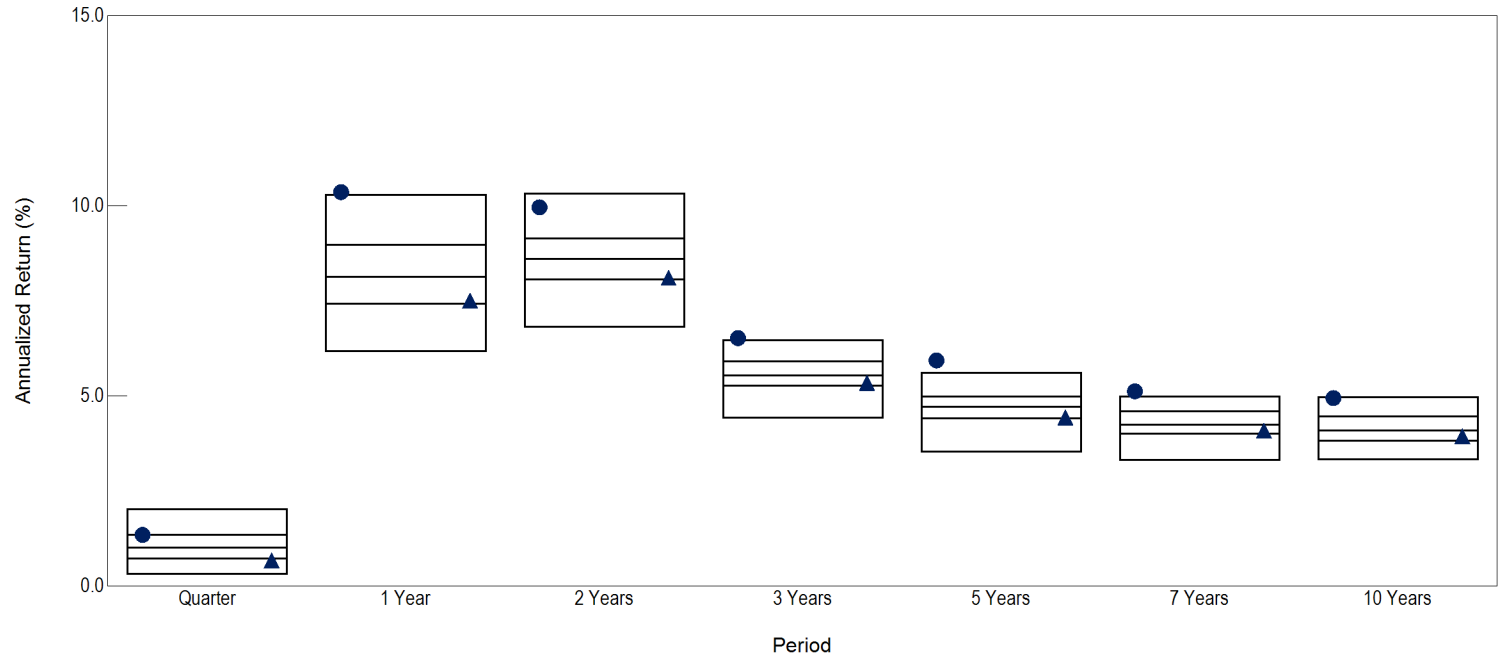
Quarterly and Cumulative Excess Performance



Los Angeles City Employees' Retirement System

LOOMIS SAYLES

Loomis Sayles vs. eV US Core Fixed Inc Net



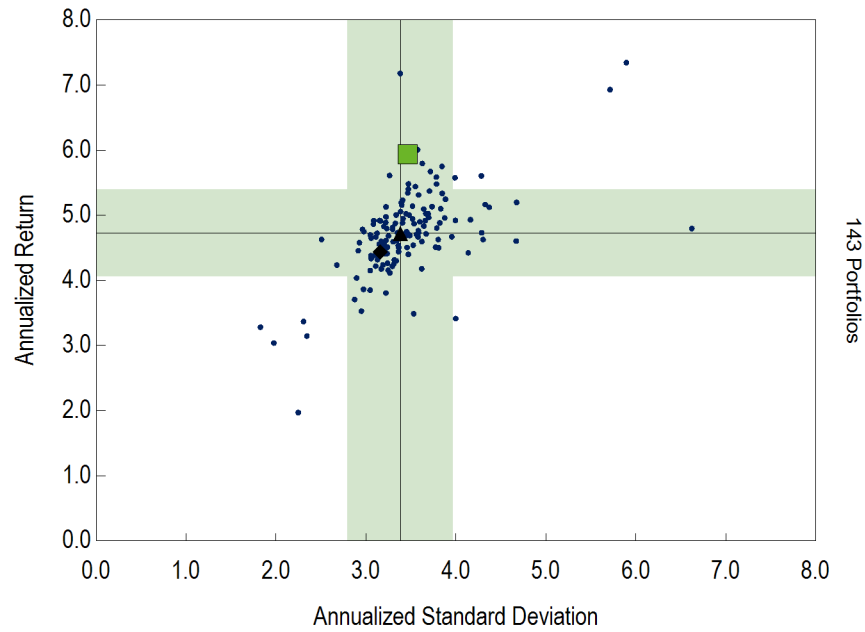
	Return (Rank)													
5th Percentile	2.02	10.28	10.32	6.46	5.61	4.98	4.97							
25th Percentile	1.36	8.98	9.16	5.92	5.00	4.62	4.48							
Median	1.03	8.15	8.62	5.56	4.72	4.25	4.11							
75th Percentile	0.73	7.45	8.09	5.29	4.43	4.03	3.83							
95th Percentile	0.34	6.19	6.83	4.44	3.55	3.33	3.34							
# of Portfolios	150	149	147	145	143	139	128							
● Loomis Sayles	1.34	(26)	10.36	(5)	9.96	(7)	6.52	(3)	5.93	(3)	5.12	(3)	4.94	(6)
▲ Loomis Custom Benchmark	0.67	(81)	7.51	(75)	8.11	(74)	5.34	(70)	4.44	(75)	4.09	(71)	3.94	(65)



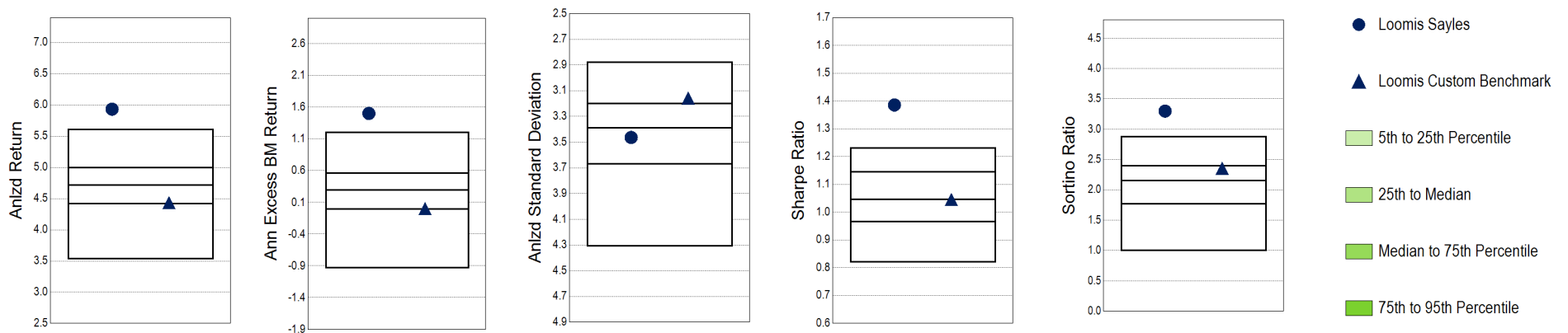
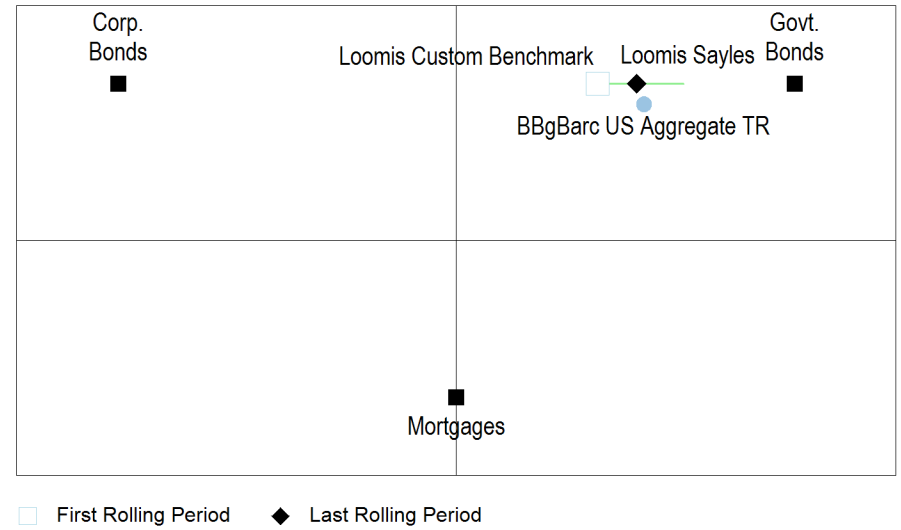
Los Angeles City Employees' Retirement System

LOOMIS SAYLES

5 Year Risk Return



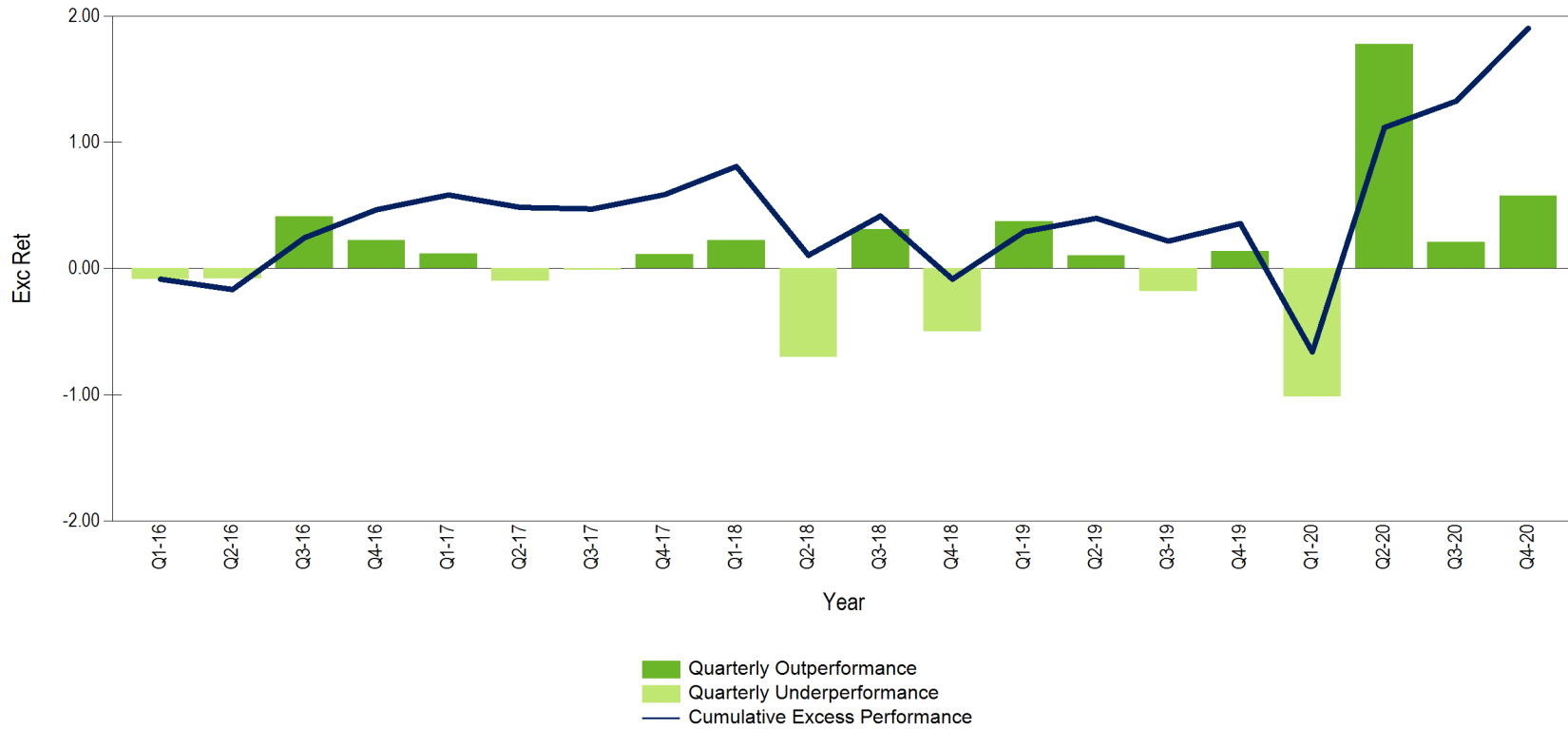
5 Year Style Map



Los Angeles City Employees' Retirement System

NEUBERGER BERMAN

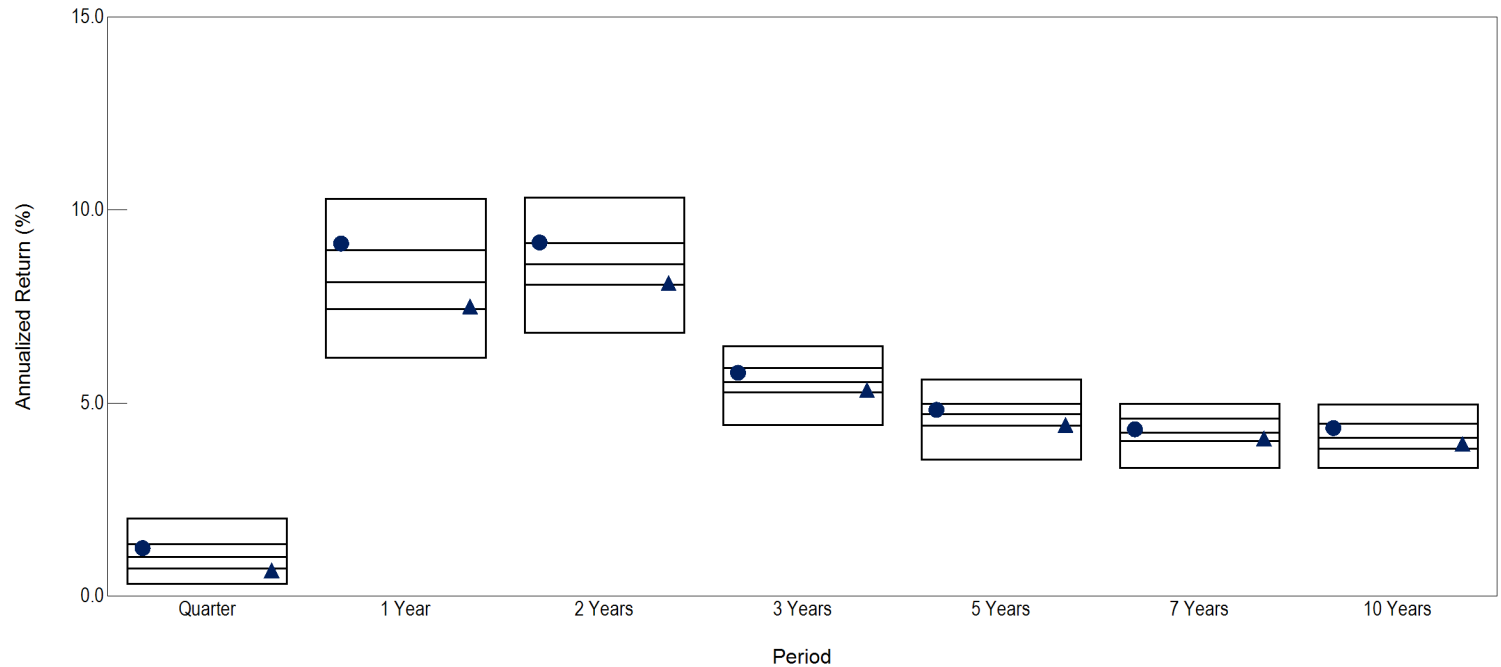
Quarterly and Cumulative Excess Performance



Los Angeles City Employees' Retirement System

NEUBERGER BERMAN

Neuberger Berman vs. eV US Core Fixed Inc Net



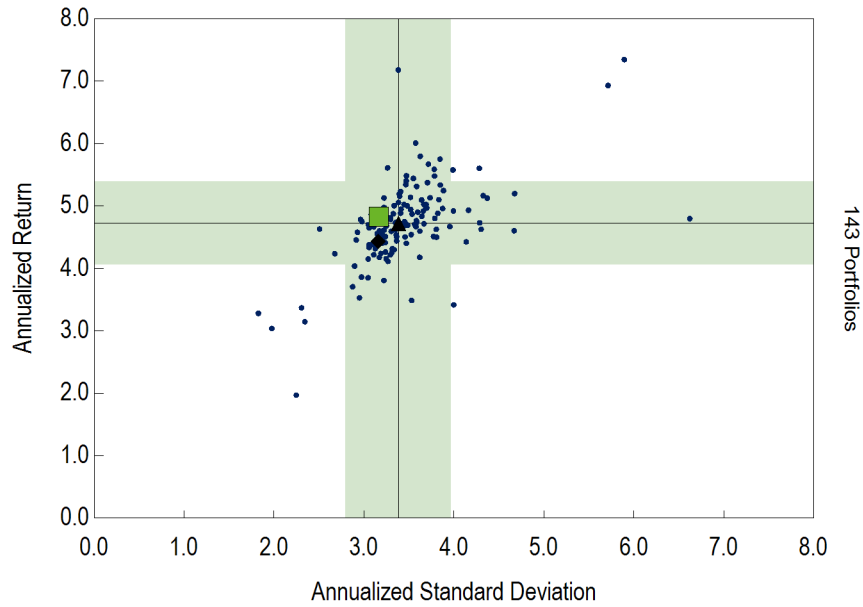
	Return (Rank)		1 Year		2 Years		3 Years		5 Years		7 Years		10 Years	
5th Percentile	2.02	10.28	10.32	6.46	5.61	4.98	4.97							
25th Percentile	1.36	8.98	9.16	5.92	5.00	4.62	4.48							
Median	1.03	8.15	8.62	5.56	4.72	4.25	4.11							
75th Percentile	0.73	7.45	8.09	5.29	4.43	4.03	3.83							
95th Percentile	0.34	6.19	6.83	4.44	3.55	3.33	3.34							
# of Portfolios	150	149	147	145	143	139	128							
● Neuberger Berman	1.24	(32)	9.13	(23)	9.16	(25)	5.79	(32)	4.82	(42)	4.32	(46)	4.35	(35)
▲ Core Fixed Income Blend	0.67	(81)	7.51	(75)	8.11	(74)	5.34	(70)	4.44	(75)	4.09	(71)	3.94	(65)



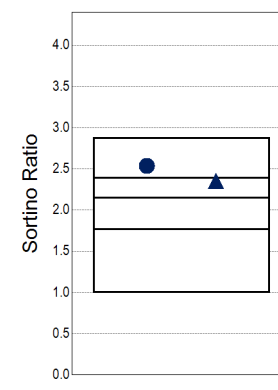
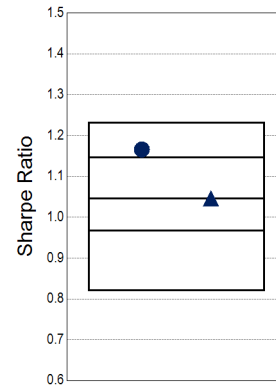
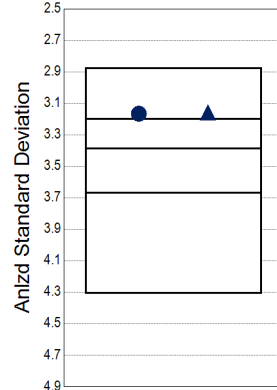
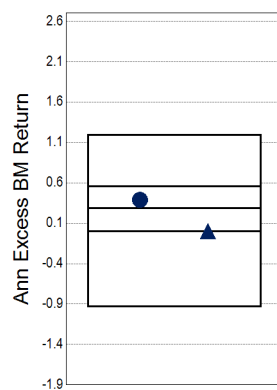
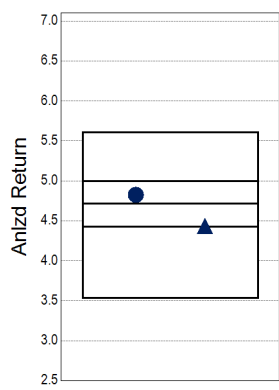
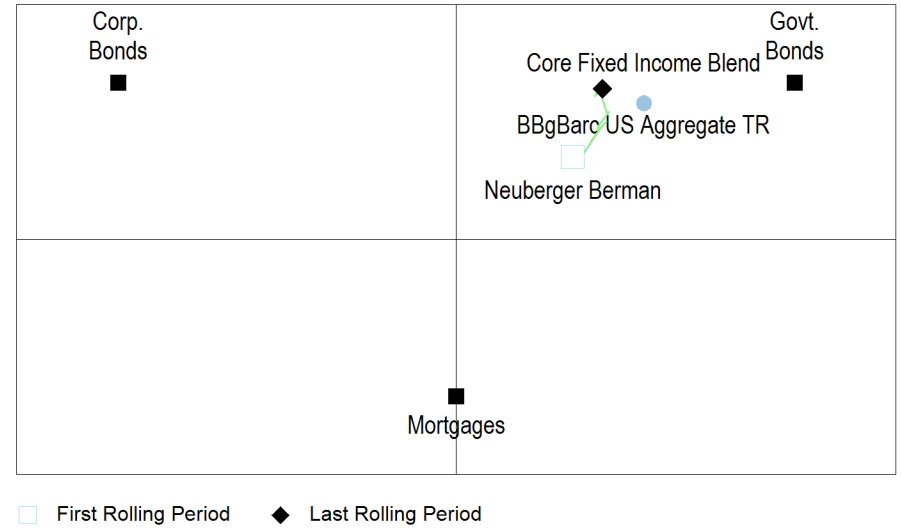
Los Angeles City Employees' Retirement System

NEUBERGER BERMAN

5 Year Risk Return



5 Year Style Map



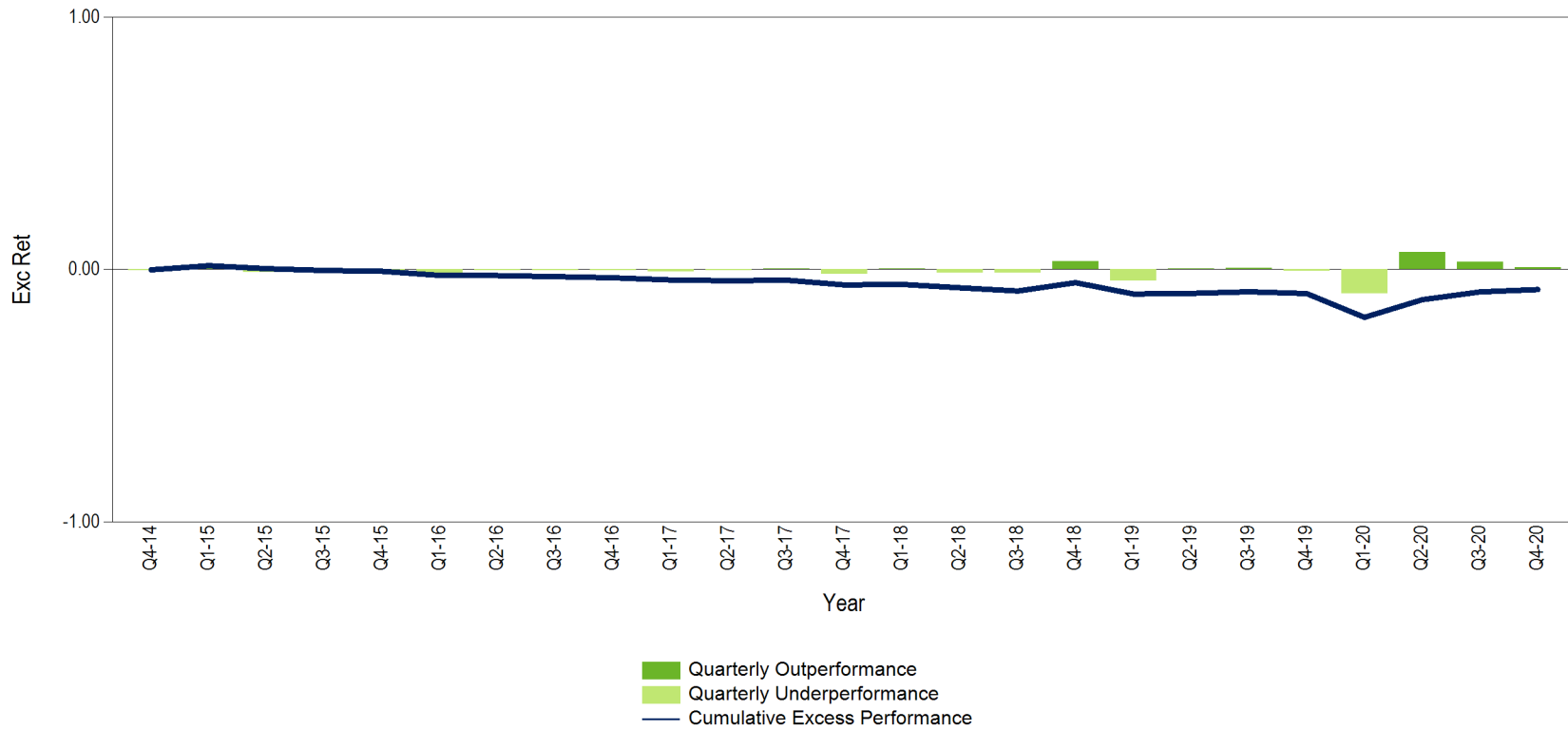
- Neuberger Berman
- ▲ Core Fixed Income Blend
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



Los Angeles City Employees' Retirement System

SSGA U.S. AGGREGATE BOND

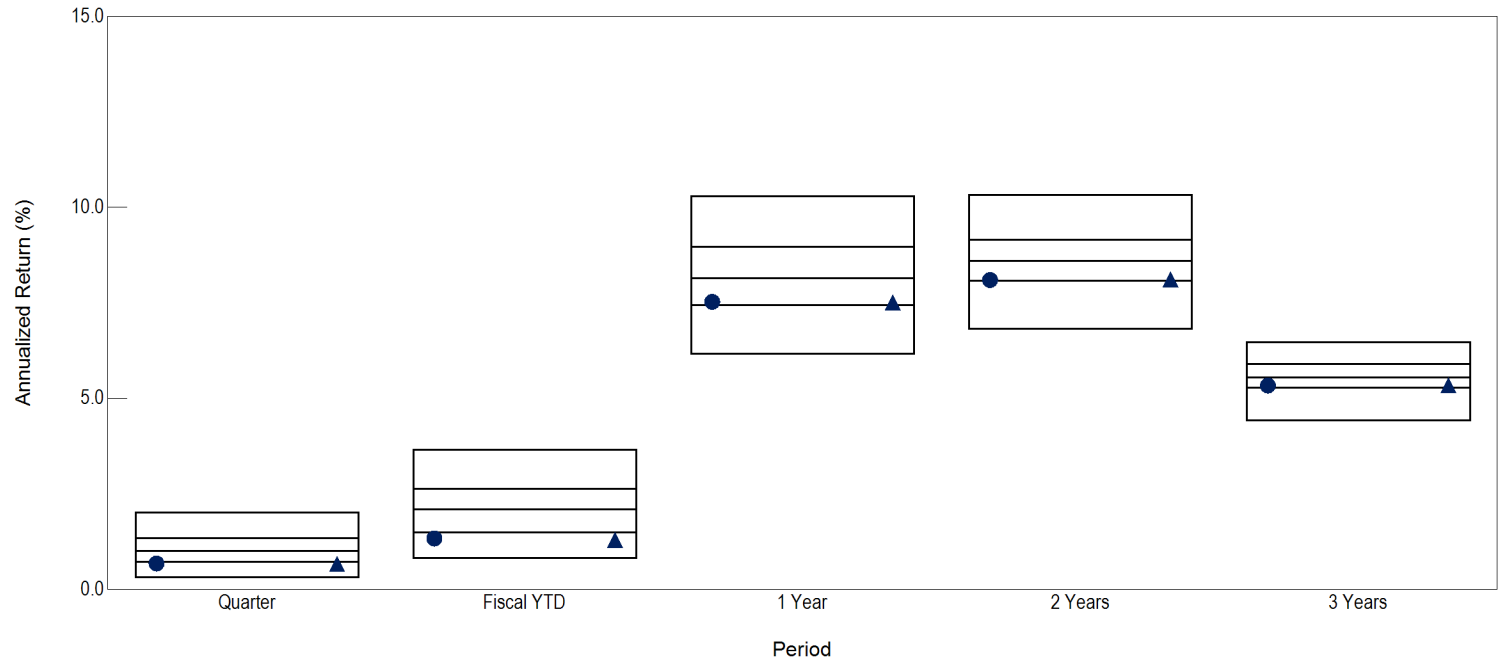
Quarterly and Cumulative Excess Performance



Los Angeles City Employees' Retirement System

SSGA U.S. AGGREGATE BOND

SSgA U.S. Aggregate Bond vs. eV US Core Fixed Inc Net



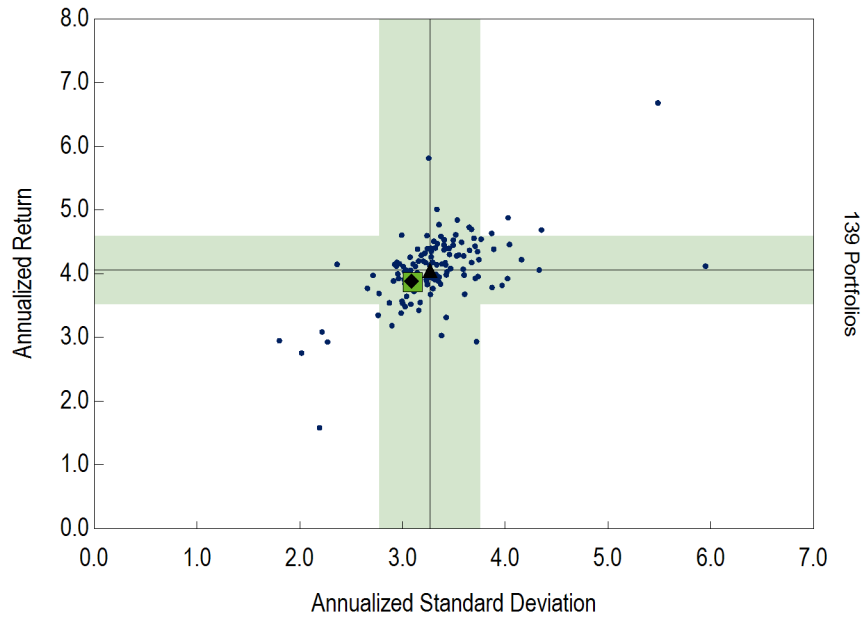
	Return (Rank)									
5th Percentile	2.02		3.66		10.28		10.32		6.46	
25th Percentile	1.36		2.64		8.98		9.16		5.92	
Median	1.03		2.10		8.15		8.62		5.56	
75th Percentile	0.73		1.52		7.45		8.09		5.29	
95th Percentile	0.34		0.84		6.19		6.83		4.44	
# of Portfolios	150		149		149		147		145	
● SSGA U.S. Aggregate Bond	0.68	(79)	1.33	(84)	7.52	(74)	8.10	(75)	5.33	(71)
▲ BBgBarc US Aggregate TR	0.67	(81)	1.29	(86)	7.51	(75)	8.11	(74)	5.34	(70)



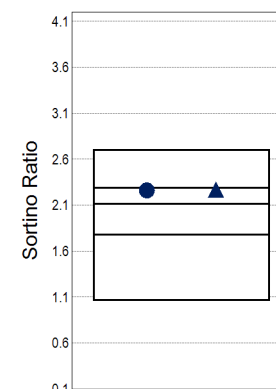
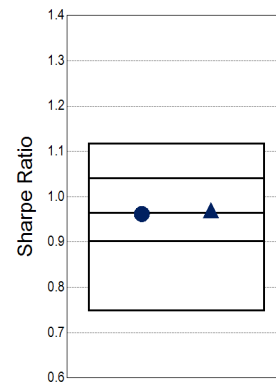
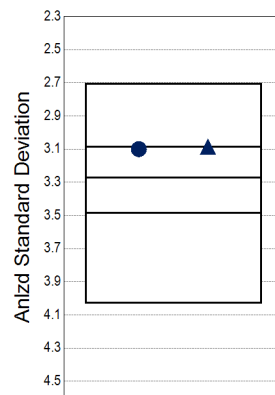
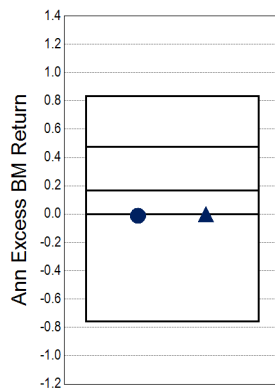
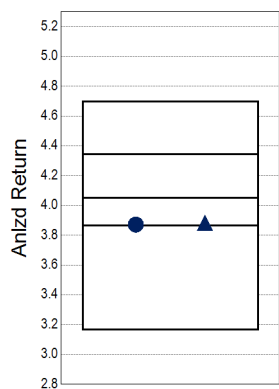
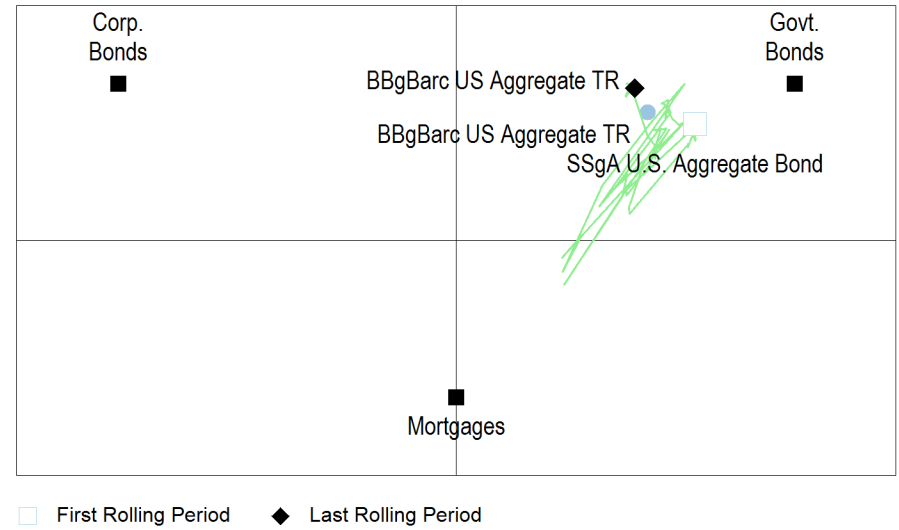
Los Angeles City Employees' Retirement System

SSGA U.S. AGGREGATE BOND

Since Inception Risk Return



Since Inception Style Map



- SSGA U.S. Aggregate Bond
- ▲ BBgBarc US Aggregate TR
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile

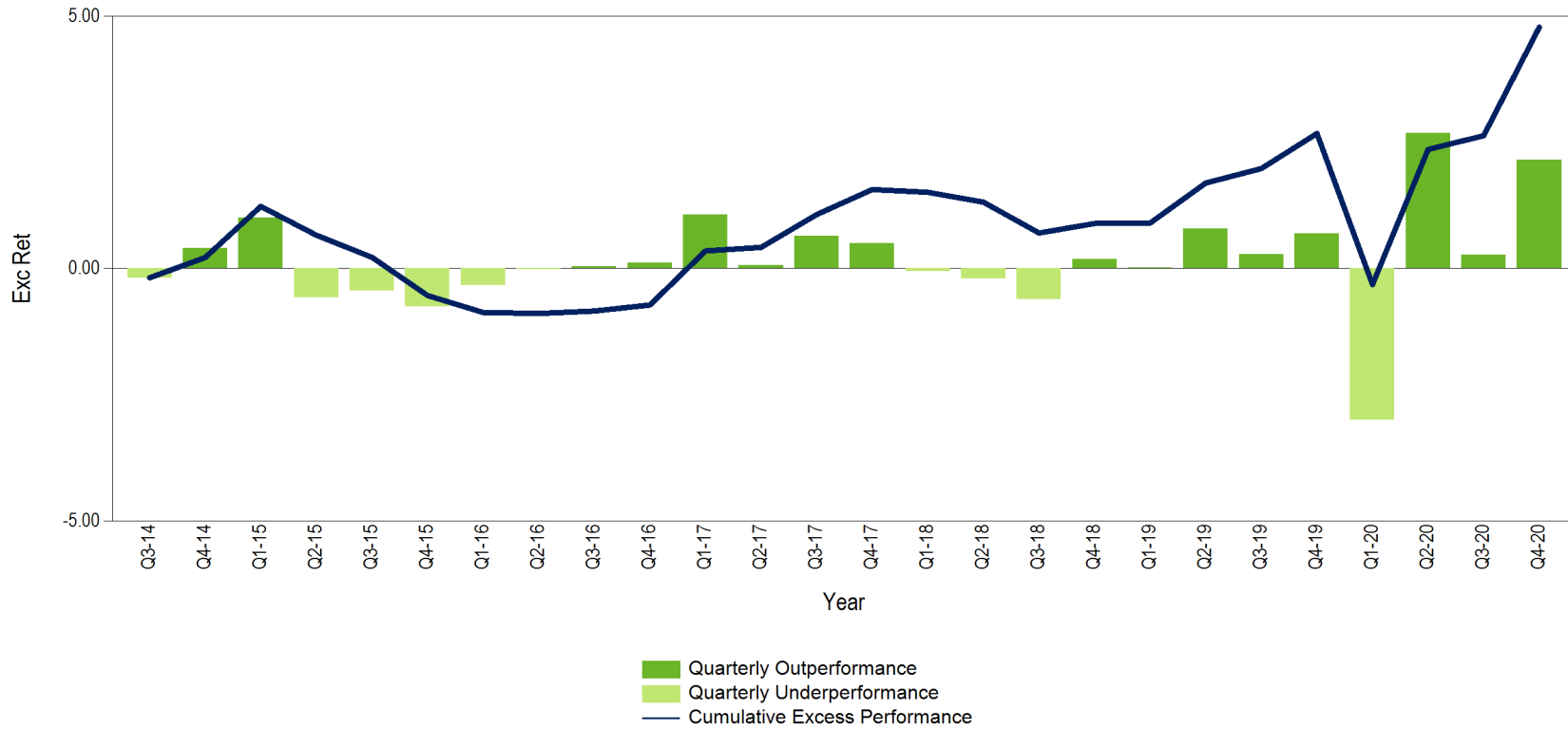


CREDIT OPPORTUNITIES MANAGER PERFORMANCE

NEPC, LLC

PRUDENTIAL EMERGING MARKETS

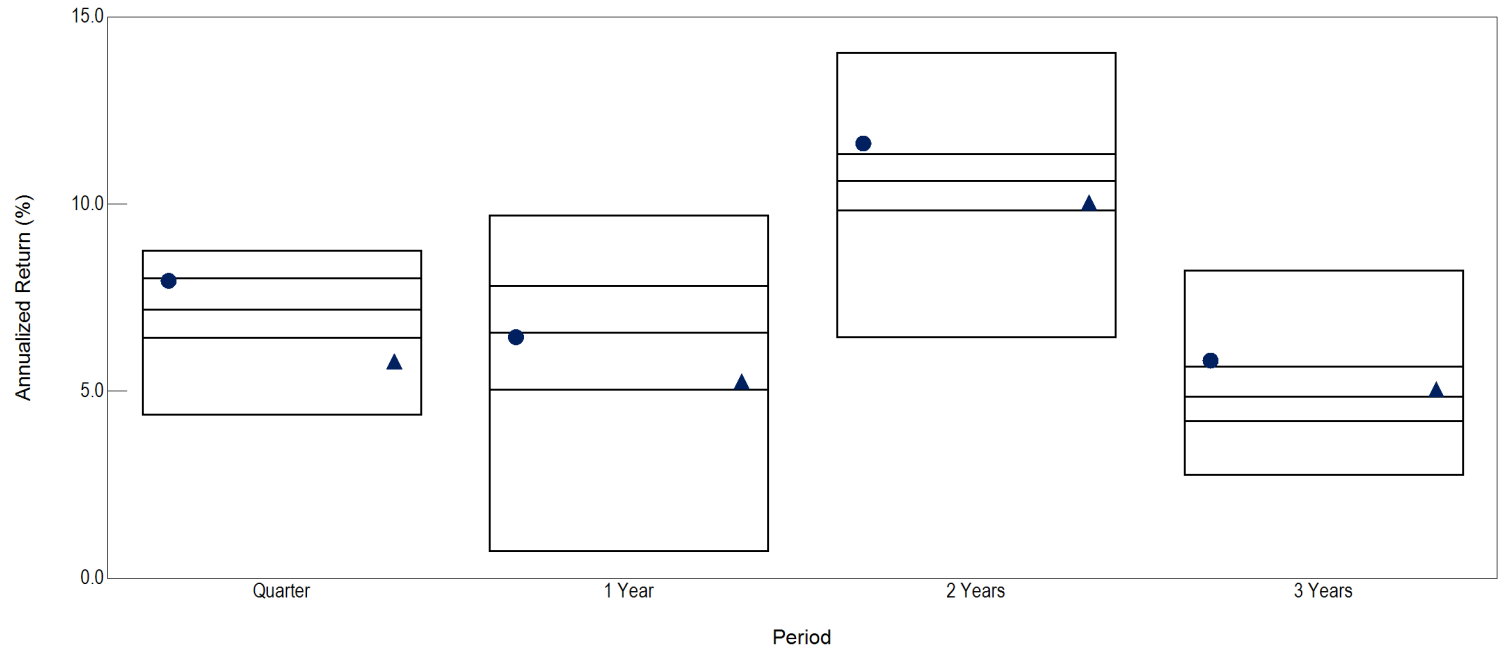
Quarterly and Cumulative Excess Performance



Los Angeles City Employees' Retirement System

PRUDENTIAL EMERGING MARKETS

Prudential Emerging Markets vs. eV Emg Mkts Fixed Inc - Hard Currency Net

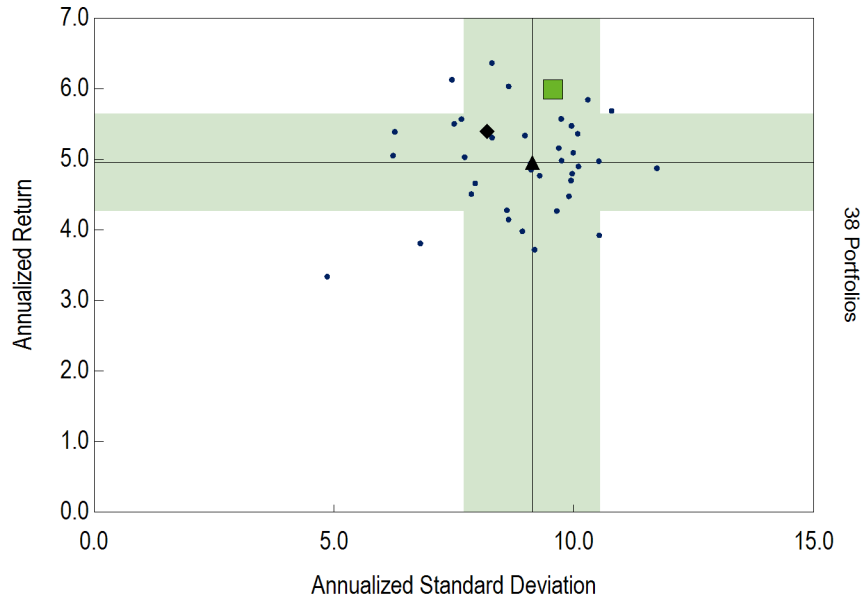


	Return (Rank)							
	Quarter	1 Year	2 Years	3 Years	Quarter	1 Year	2 Years	3 Years
5th Percentile	8.76	9.69	14.03	8.23				
25th Percentile	8.03	7.83	11.35	5.66				
Median	7.19	6.57	10.64	4.87				
75th Percentile	6.45	5.05	9.85	4.21				
95th Percentile	4.38	0.75	6.46	2.78				
# of Portfolios	48	47	45	43				
● Prudential Emerging Markets	7.95	6.44	11.62	5.82	(29)	(57)	(21)	(21)
▲ JP Morgan EMBI Global Diversified	5.80	5.26	10.04	5.05	(90)	(68)	(65)	(46)

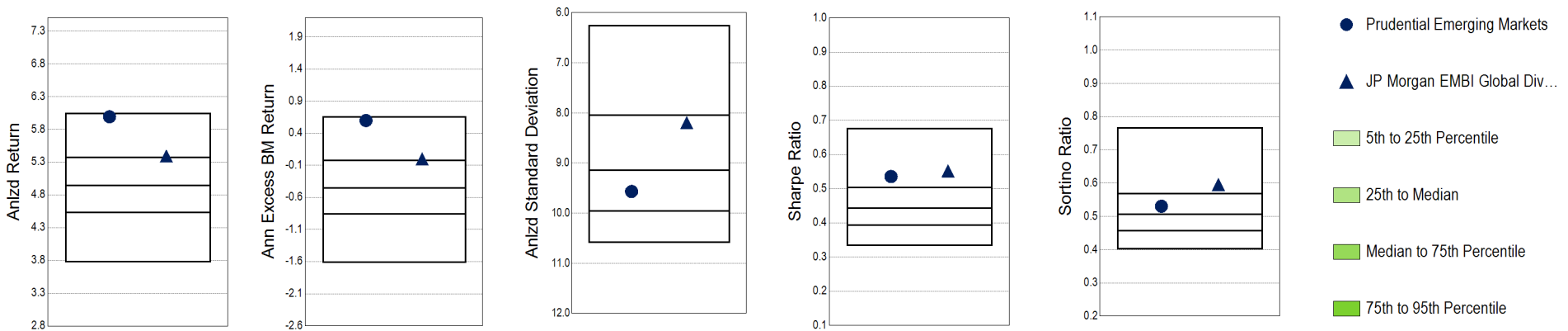
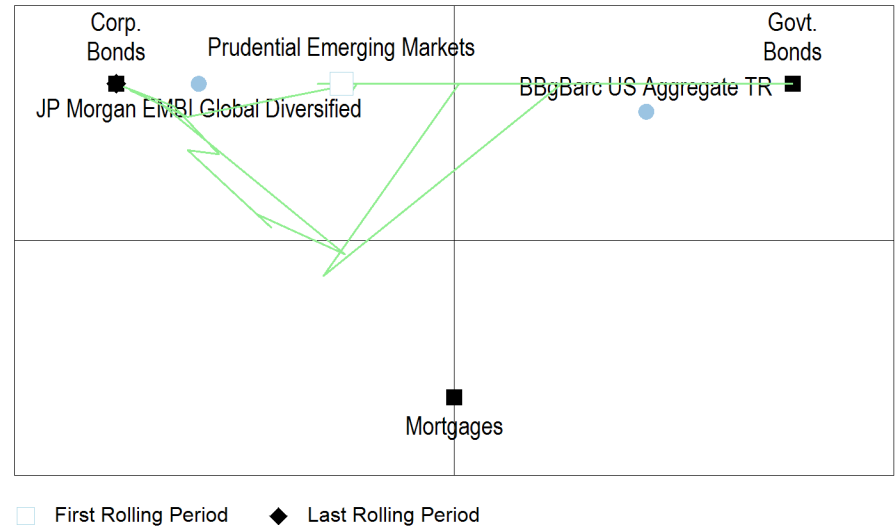


PRUDENTIAL EMERGING MARKETS

Since Inception Risk Return

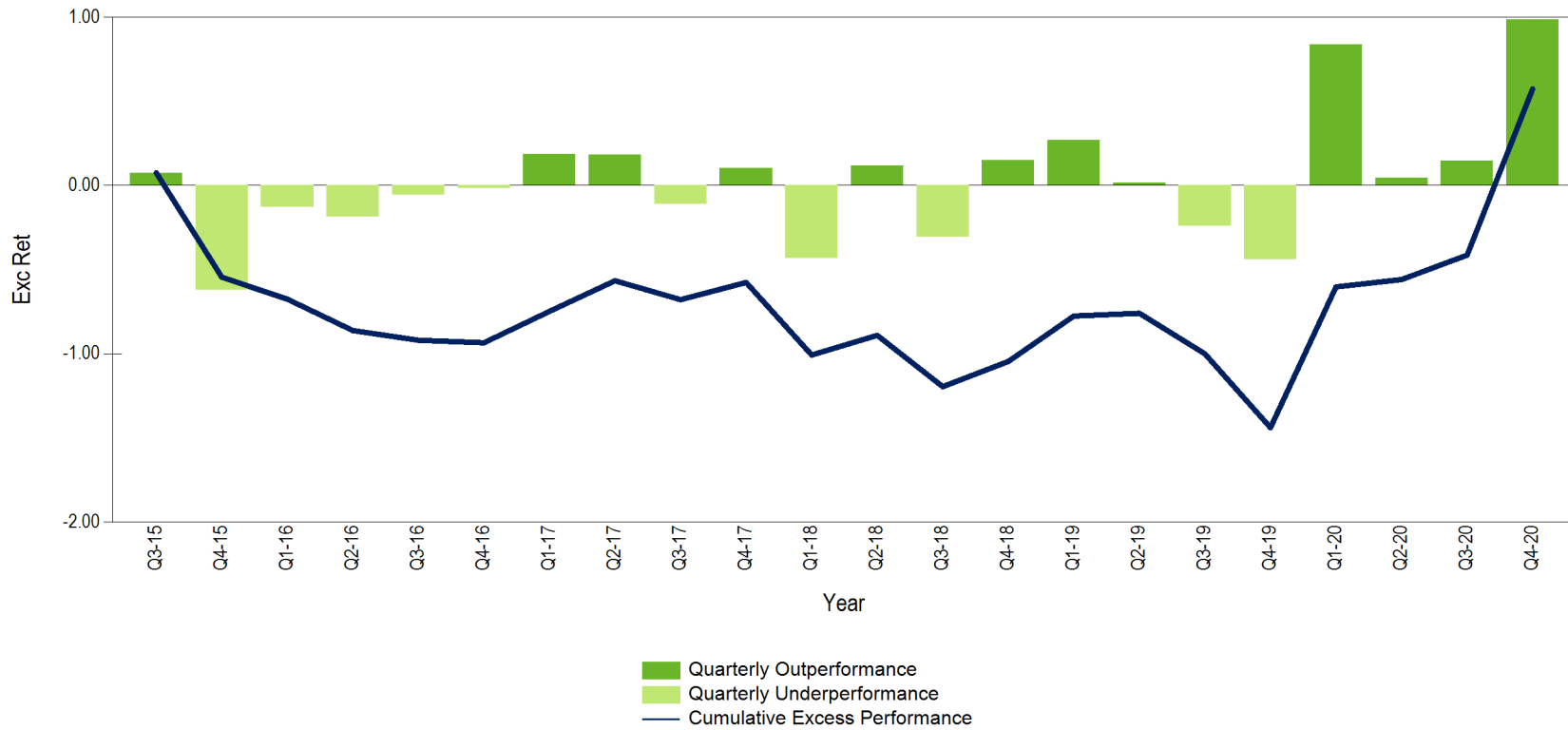


Since Inception Style Map



BAIN CAPITAL SENIOR LOAN FUND, LP

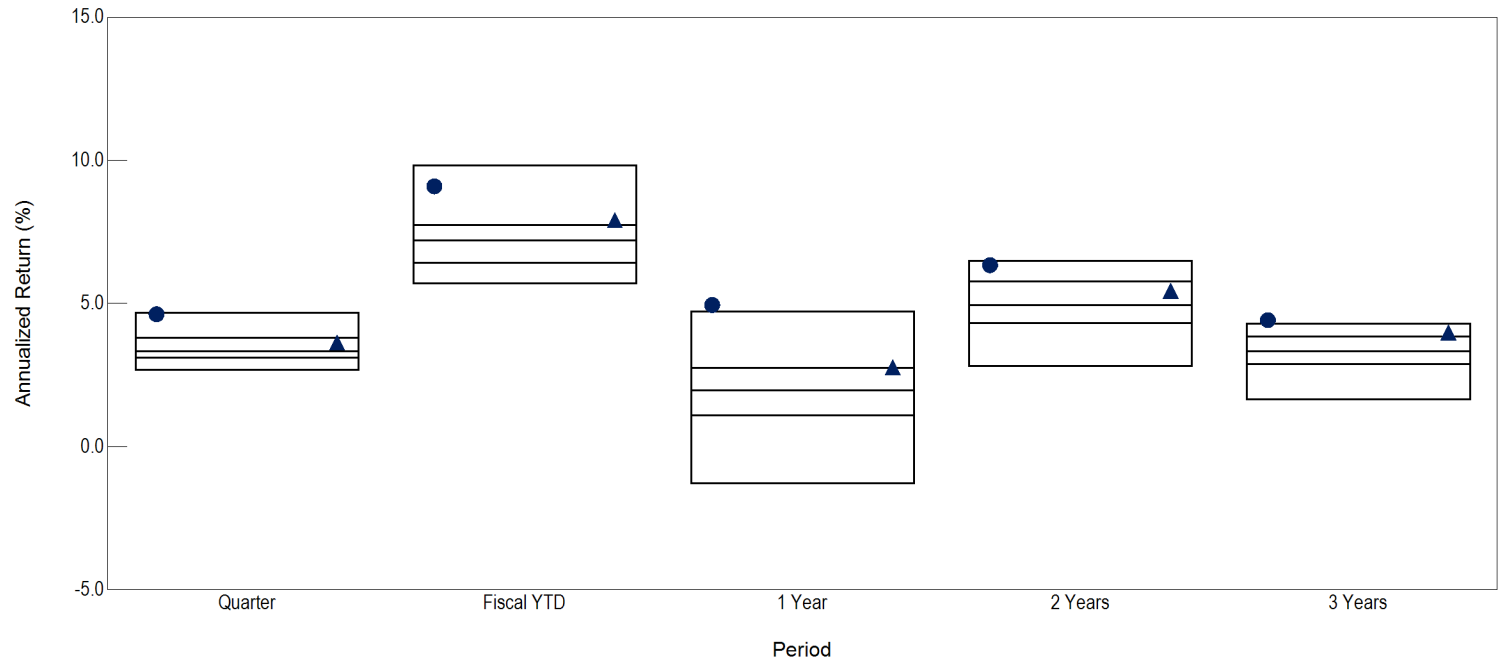
Quarterly and Cumulative Excess Performance



Los Angeles City Employees' Retirement System

BAIN CAPITAL SENIOR LOAN FUND, LP

Bain Capital Senior Loan Fund, LP vs. eV US Float-Rate Bank Loan Fixed Inc Net

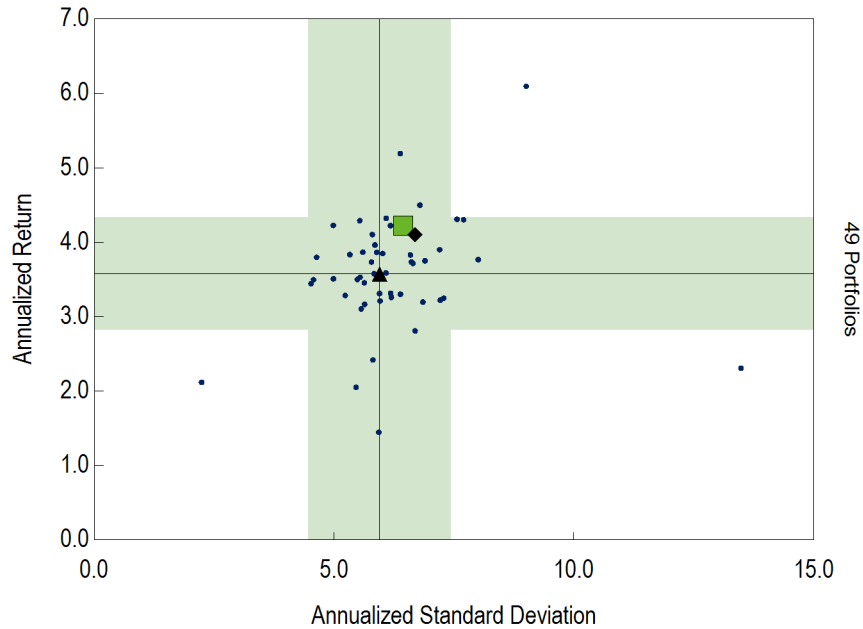


	Return (Rank)									
5th Percentile	4.69		9.83		4.72		6.48		4.29	
25th Percentile	3.82		7.77		2.77		5.80		3.87	
Median	3.36		7.22		1.99		4.96		3.36	
75th Percentile	3.12		6.45		1.12		4.34		2.91	
95th Percentile	2.70		5.72		-1.25		2.85		1.68	
# of Portfolios	54		54		54		54		53	
● Bain Capital Senior Loan Fund, LP	4.62	(8)	9.09	(13)	4.95	(4)	6.34	(10)	4.42	(4)
▲ Credit Suisse Leveraged Loans	3.64	(34)	7.91	(23)	2.78	(25)	5.44	(39)	3.99	(18)

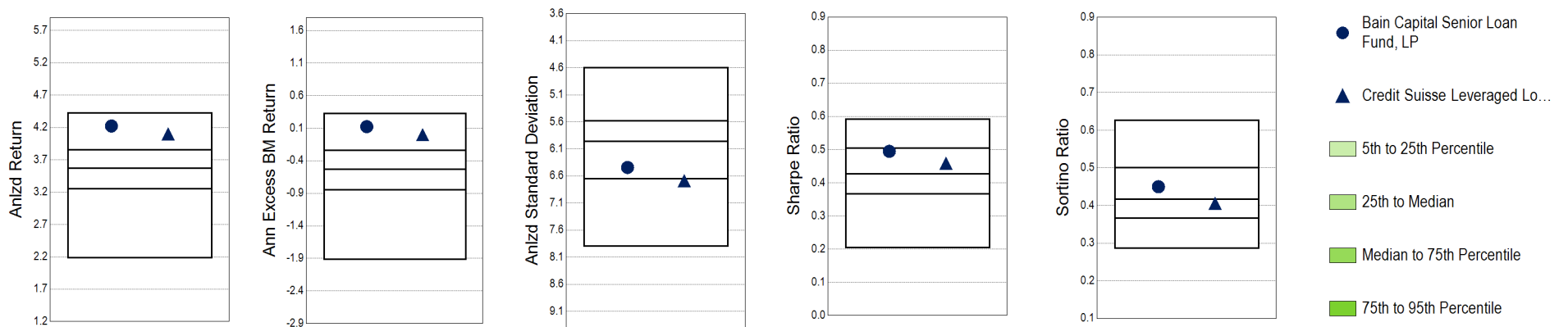
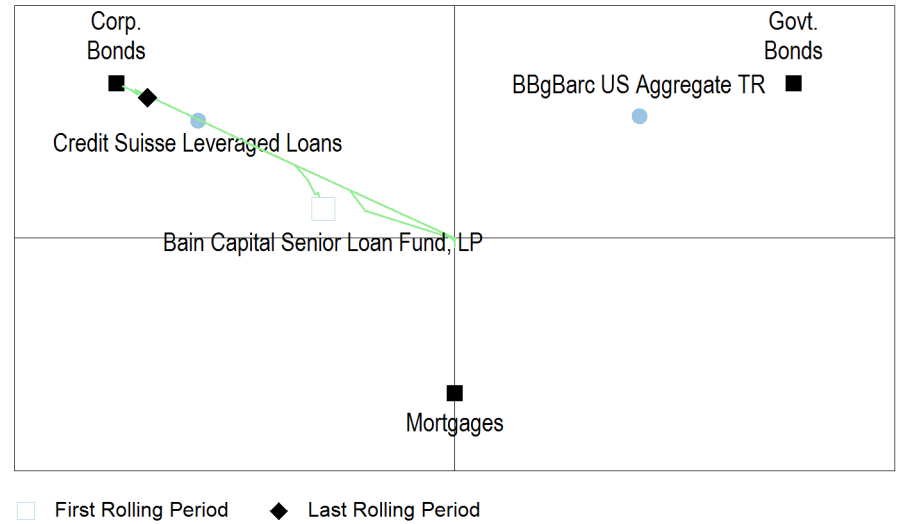


BAIN CAPITAL SENIOR LOAN FUND, LP

Since Inception Risk Return



Since Inception Style Map



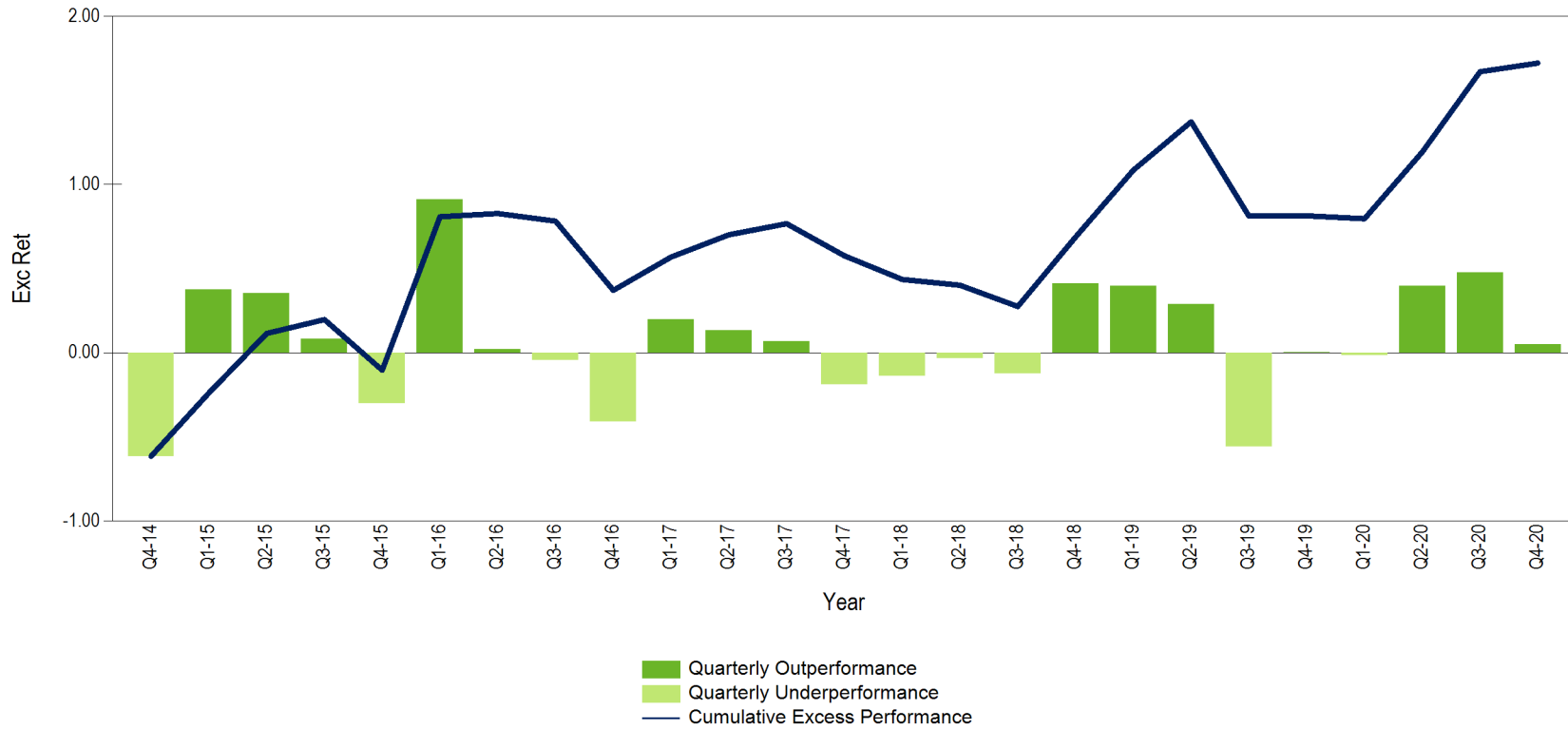
REAL ASSETS MANAGER PERFORMANCE

NEPC, LLC

Los Angeles City Employees' Retirement System

DFA US TIPS

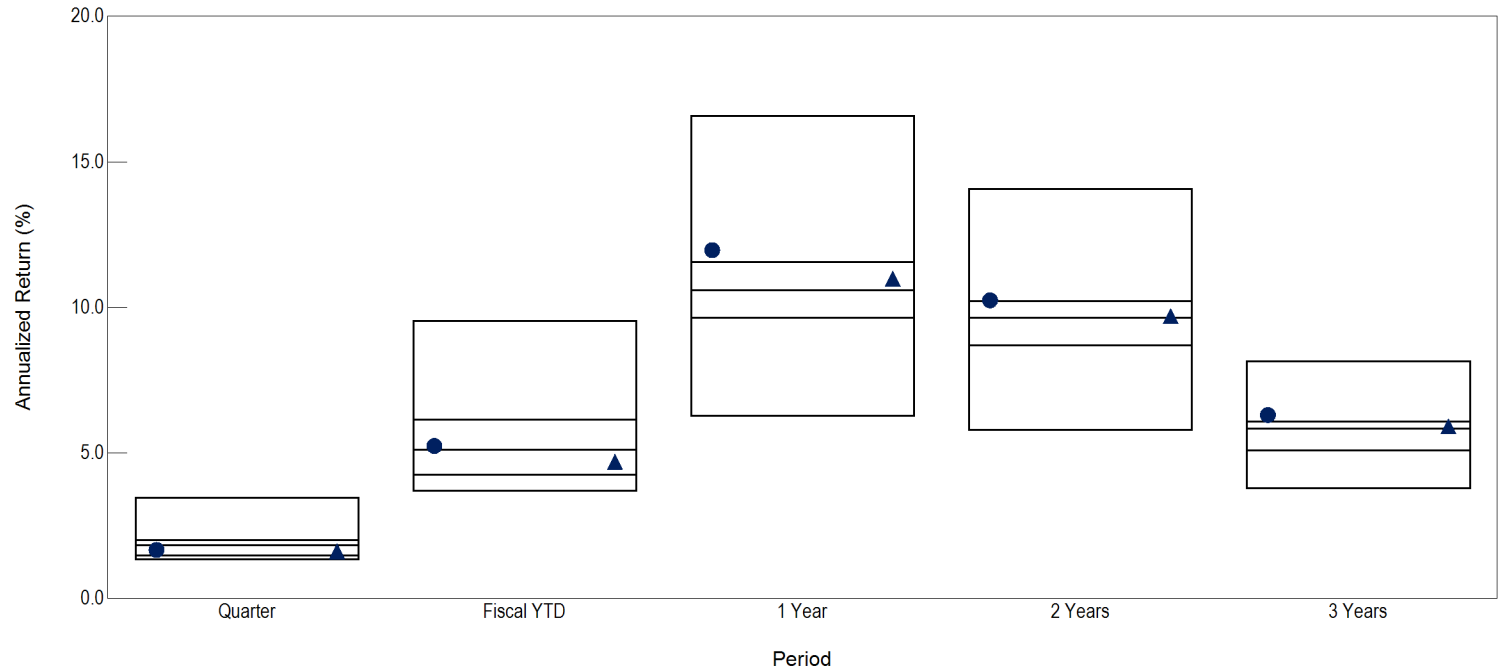
Quarterly and Cumulative Excess Performance



Los Angeles City Employees' Retirement System

DFA US TIPS

DFA US TIPS vs. eV US TIPS / Inflation Fixed Inc Net



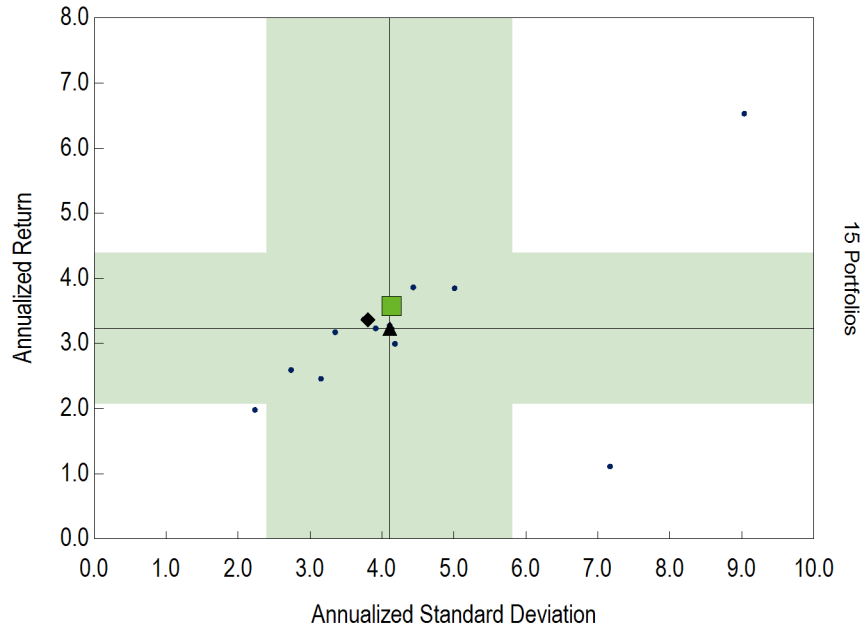
	Return (Rank)									
5th Percentile	3.46		9.55		16.58		14.07		8.15	
25th Percentile	2.02		6.18		11.58		10.25		6.11	
Median	1.85		5.13		10.61		9.68		5.87	
75th Percentile	1.51		4.28		9.66		8.72		5.11	
95th Percentile	1.37		3.73		6.31		5.81		3.82	
# of Portfolios	17		17		17		16		16	
● DFA US TIPS	1.67	(64)	5.24	(44)	11.97	(16)	10.24	(26)	6.31	(15)
▲ BBgBarc US TIPS TR	1.62	(69)	4.70	(62)	10.99	(37)	9.70	(46)	5.92	(45)



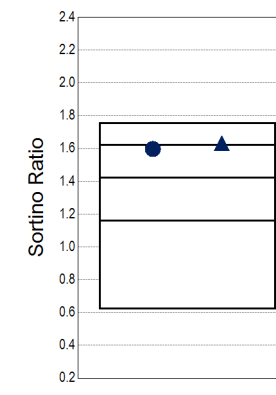
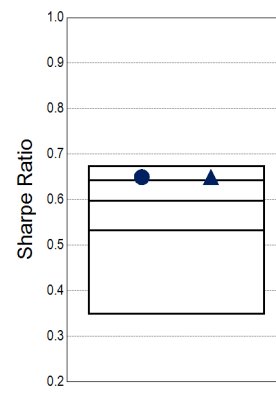
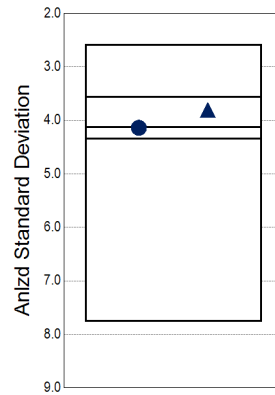
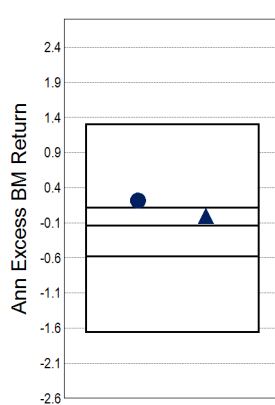
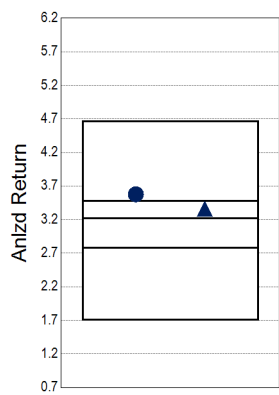
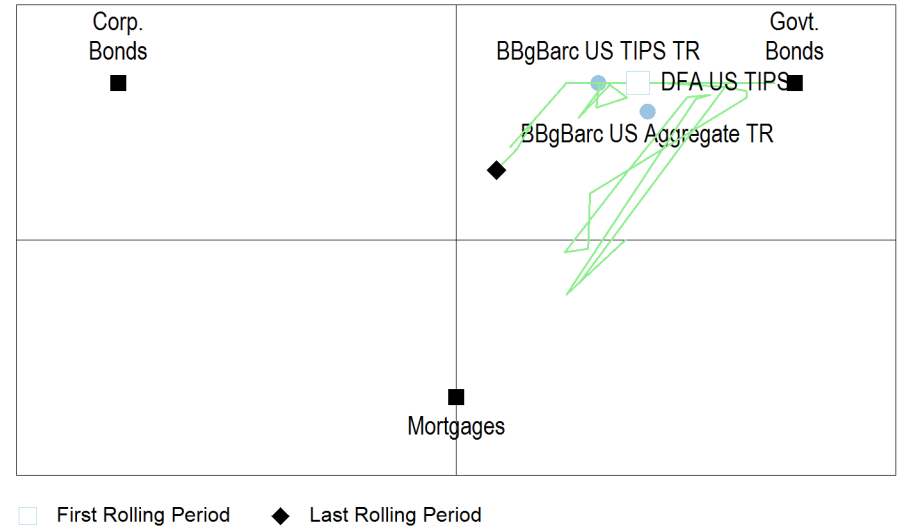
Los Angeles City Employees' Retirement System

DFA US TIPS

Since Inception Risk Return



Since Inception Style Map

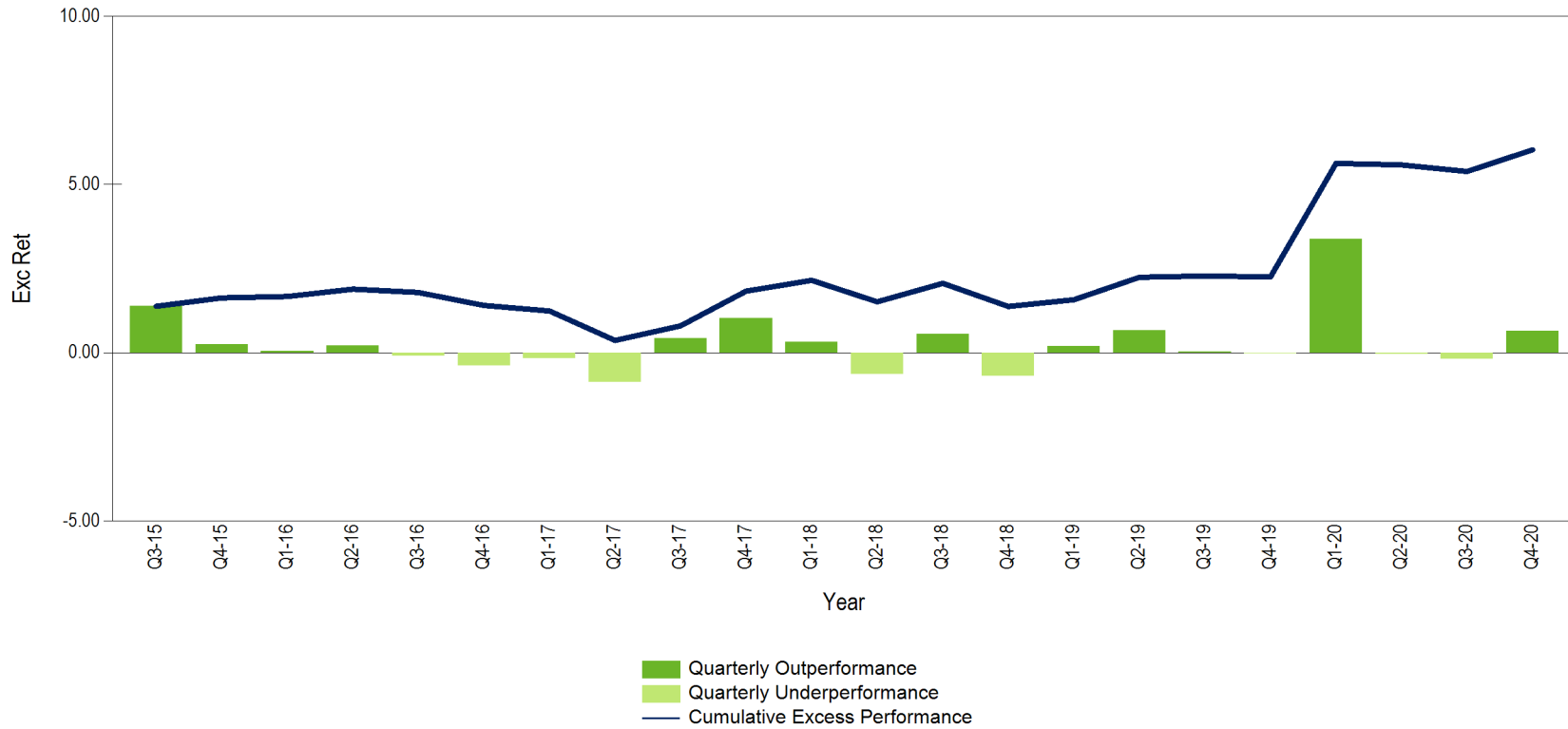


- DFA US TIPS
- ▲ BgBarc US TIPS TR
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



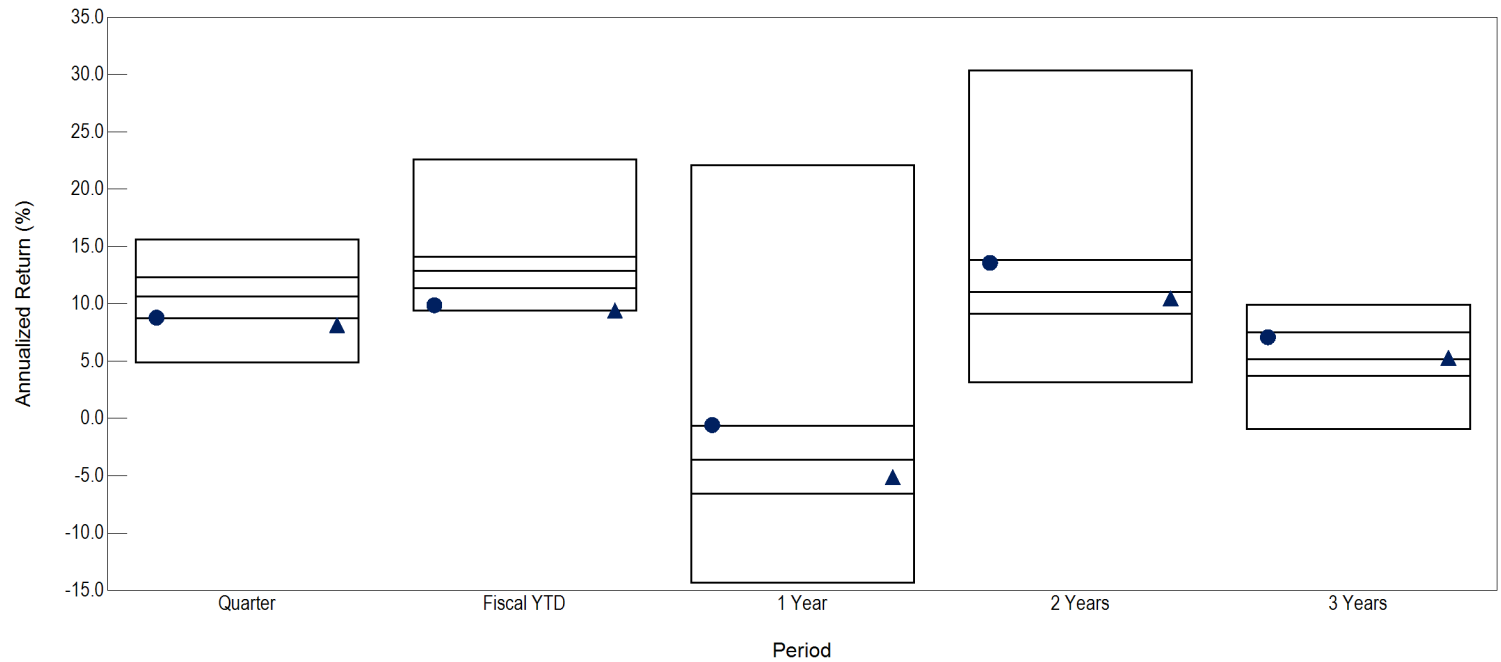
CENTERSQUARE US REAL ESTATE

Quarterly and Cumulative Excess Performance



CENTERSQUARE US REAL ESTATE

CenterSquare US Real Estate vs. eV US REIT Net

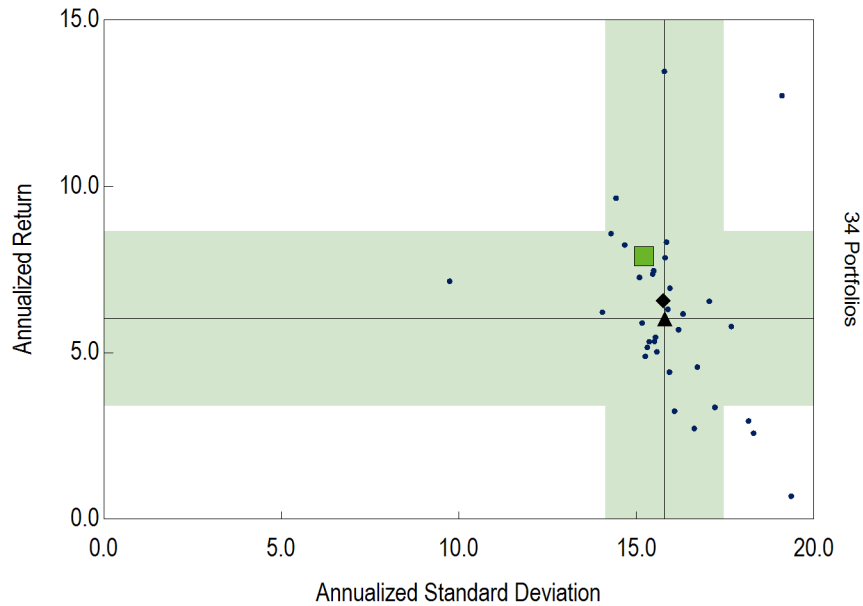


	Return (Rank)									
5th Percentile	15.59		22.60		22.06		30.35		9.92	
25th Percentile	12.39		14.15		-0.58		13.89		7.58	
Median	10.67		12.90		-3.55		11.10		5.20	
75th Percentile	8.78		11.41		-6.53		9.16		3.75	
95th Percentile	4.93		9.47		-14.28		3.23		-0.88	
# of Portfolios	37		37		37		36		35	
● CenterSquare US Real Estate	8.79	(75)	9.87	(95)	-0.58	(26)	13.57	(30)	7.08	(35)
▲ FTSE NAREIT All Equity REIT	8.14	(87)	9.43	(96)	-5.12	(70)	10.49	(56)	5.29	(49)

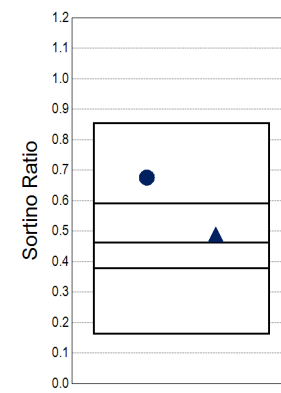
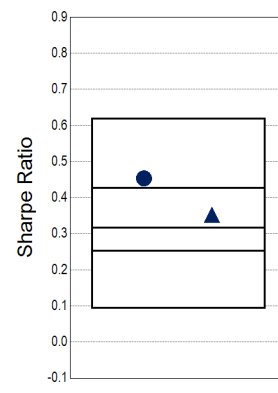
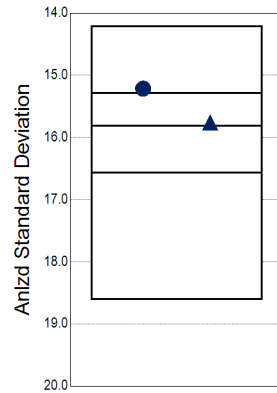
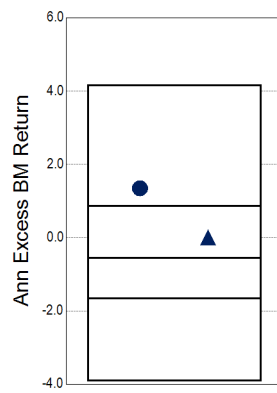
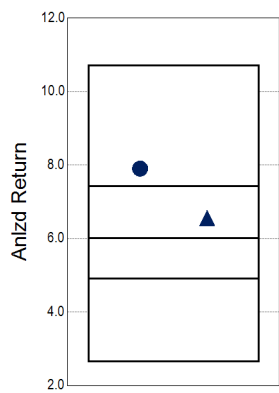
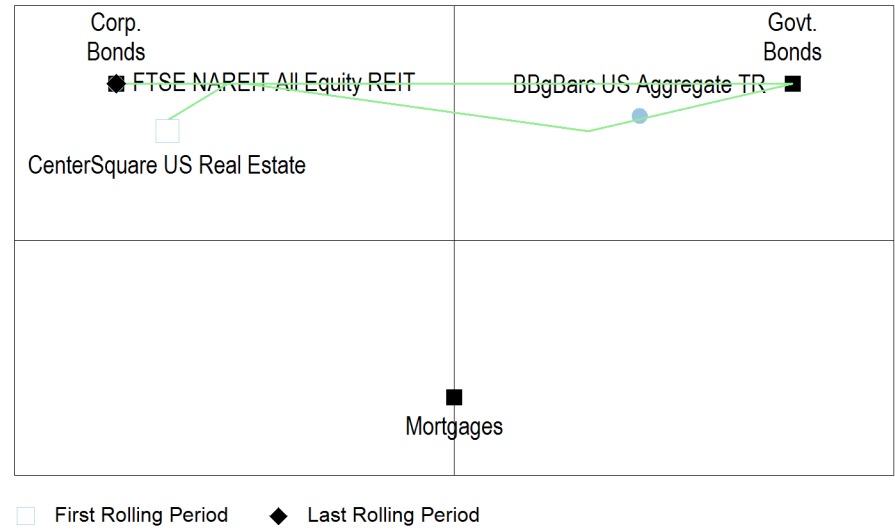


CENTERSQUARE US REAL ESTATE

Since Inception Risk Return



Since Inception Style Map



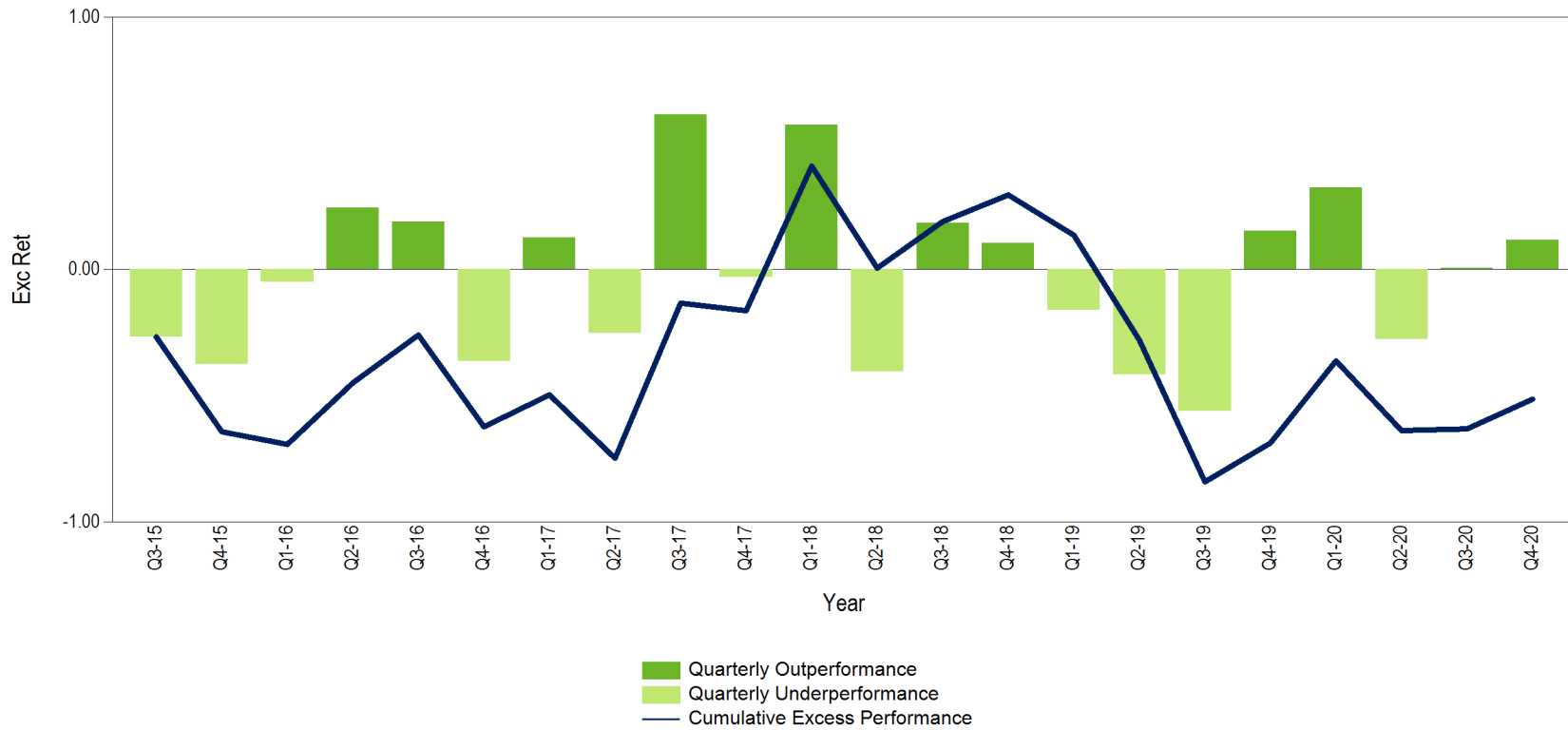
- CenterSquare US Real Estate
- ▲ FTSE NAREIT All Equity REIT
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



Los Angeles City Employees' Retirement System

CORE COMMODITY MGMT

Quarterly and Cumulative Excess Performance



DEFINITIONS

NEPC, LLC

POLICY INDEX DEFINITIONS

Policy Index: Current (adopted January 10, 2012) 24% Russell 3000 Index, 29% MSCI ACWI ex USA Net Index, 19% Bbg Barclays U.S. Aggregate Bond Index, 5% Credit Opportunities Blend, 10% Real Assets Blend, 12% Private Equity Blend, 1% Citi 3 Month T-Bill Index

U.S. Equity Blend: July 1, 2011 - Current: Russell 3000 Index; September 30, 1994 - December 31, 1999 S&P 500 Index 33.75, Russell 1000 Value Index 35%, Russell 1000 Growth 12.5%, Russell 2000 Value 12.5%, Russell 2000 Growth 6.25%

Core Fixed Income Blend: July 1, 2013 – Current: Bbg Barclays U.S. Aggregate Bond Index

Credit Opportunities Blend: 65% Bbg Barclays U.S. HY 2% Cap Index, 35% JPM EMBIGD Index

Public Real Assets Blend: 60% Bbg Barclays U.S. TIPS Index, 20% Bbg Commodity Index, 10% FTSE NAREIT All Equity Index, 10% Alerian MLP Index

Real Estate Blend: July 1, 2014 - Current NCREIF ODCE + 0.80%; July 1, 2012 - June 30, 2014 NCREIF Property Index Lagged +1%; October 1, 1994 - June 30, 2012 NCREIF Property Index Lagged

Private Equity Blend: February 1, 2012 – current: Russell 3000 + 3%; Inception – January 31, 2012: Russell 3000 + 4%

Note: Policy index definitions do not reflect the updated target asset allocation adopted on April 10, 2018.

Note: See Investment Policy for a full description of the indices listed.



GLOSSARY OF INVESTMENT TERMINOLOGY

Of Portfolios/Observations¹ - The total number of data points that make up a specified universe

Allocation Index³ - The allocation index measures the value added (or subtracted) to each portfolio by active management. It is calculated monthly: The portfolio asset allocation to each category from the prior month-end is multiplied by a specified market index.

Asset Allocation Effect² - Measures an investment manager's ability to effectively allocate their portfolio's assets to various sectors. The allocation effect determines whether the overweighting or underweighting of sectors relative to benchmark contributes positively or negatively to the overall portfolio return. Positive allocation occurs when the portfolio is over weighted in a sector that outperforms the benchmark and underweighted in a sector that underperforms the benchmark. Negative allocation occurs when the portfolio is over weighted in a sector that underperforms the benchmark and under weighted in a sector that outperforms the benchmark.

Agency Bonds (Agencies)³ - The full faith and credit of the United States government is normally not pledged to payment of principal and interest on the majority of government agencies issuing these bonds, with maturities of up to ten years. Their yields, therefore, are normally higher than government and their marketability is good, thereby qualifying them as a low risk-high liquidity type of investment. They are eligible as security for advances to the member banks by the Federal Reserve, which attests to their standing.

Asset Backed Securities (ABS)³ - Bonds which are similar to mortgage-backed securities but are collateralized by assets other than mortgages; commonly backed by credit card receivables, auto loans, or other types of consumer financing.

Attribution³ - Attribution is an analytical technique that allows us to evaluate the performance of the portfolio relative to the benchmark. A proper attribution tells us where value was added or subtracted as a result of the manager's decisions.

Average Effective Maturity⁴ - For a single bond, it is a measure of maturity that takes into account the possibility that a bond might be called back to the issuer.

For a portfolio of bonds, average effective maturity is the weighted average of the maturities of the underlying bonds. The measure is computed by weighing each bond's maturity by its market value with respect to the portfolio and the likelihood of any of the bonds being called. In a pool of mortgages, this would also account for the likelihood of prepayments on the mortgages.

Batting Average¹ - A measurement representing an investment manager's ability to meet or beat an index.

Formula: Divide the number of days (or months, quarters, etc.) in which the manager beats or matches the index by the total number of days (or months, quarters, etc.) in the period of question and multiply that factor by 100.

Brinson Fachler (BF) Attribution¹ - The BF methodology is a highly accepted industry standard for calculating the allocation, selection, and interaction effects within a portfolio that collectively explains a portfolio's underlying performance. The main advantage of the BF methodology is that rather than using the overall return of the benchmark, it goes a level deeper than BHB and measures whether the benchmark sector, country, etc. outperformed/or underperformed the overall benchmark.

Brinson Hood Beebower (BHB) Attribution¹ - The BHB methodology shows that excess return must be equal to the sum of all other factors (i.e., allocation effect, selection effect, interaction effect, etc.). The advantage to using the BHB methodology is that it is a highly accepted industry standard for calculating the allocation, selection, and interaction effects within a portfolio that collectively explains a portfolio's underlying performance.

Corporate Bond (Corp)⁴ - A debt security issued by a corporation and sold to investors. The backing for the bond is usually the payment ability of the company, which is typically money to be earned from future operations. In some cases, the company's physical assets may be used as collateral for bonds.

Correlation¹ - A range of statistical relationships between two or more random variables or observed data values. A correlation is a single number that describes the degree of relationship between variables.

Data Source: ¹InvestorForce, ²Interaction Effect Performance Attribution, ³NEPC, LLC, ⁴Investopedia, ⁵Hedgeco.net



GLOSSARY OF INVESTMENT TERMINOLOGY

Coupon⁴ – The interest rate stated on a bond when it is issued. The coupon is typically paid semiannually. This is also referred to as the “coupon rate” or “coupon percent rate.”

Currency Effect¹ – Is the effect that changes in currency exchange rates over time affect excess performance.

Derivative Instrument² – A financial obligation that derives its precise value from the value of one or more other instruments (or assets) at the same point of time. For example, the relationship between the value of an S&P 500 futures contract (the derivative instrument in this case) is determined by the value of the S&P 500 Index and the value of a U.S. Treasury bill that matures at the expiration of the futures contract.

Downside Deviation¹ – Equals the standard deviation of negative return or the measure of downside risk focusing on the standard deviation of negative returns.

Formula:

Annualized Standard Deviation (Fund Return - Average Fund Return) where average fund return is greater than individual fund returns, monthly or quarterly.

Duration³ – Duration is a measure of interest rate risk. The greater the duration of a bond, or a portfolio of bonds, the greater its price volatility will be in response to a change in interest rates. A bond’s duration is inversely related to interest rates and directly related to time to maturity.

Equity/Debt/Cash Ratio¹ – The percentage of an investment or portfolio that is in Equity, Debt, and/or Cash (i.e. A 7/89/4 ratio represents an investment that is made up of 7% Equity, 89% Debt, and 4% Cash).

Foreign Bond³ – A bond that is issued in a domestic market by a foreign entity, in the domestic market’s currency. A foreign bond is most often issued by a foreign firm to raise capital in a domestic market that would be most interested in purchasing the firm’s debt. For foreign firms doing a large amount of business in the domestic market, issuing foreign bonds is a common practice.

Hard Hurdle⁵ – is a hurdle rate that once beaten allows a fund manager to charge a performance fee on only the funds above the specified hurdle rate.

High-Water Mark⁴ – The highest peak in value that an investment fund/account has reached. This term is often used in the context of fund manager compensation, which is performance based. Some performance-based fees only get paid when fund performance exceeds the high-water mark. The high-water mark ensures that the manager does not get paid large sums for poor performance.

Hurdle Rate⁴ – The minimum rate of return on an investment required, in order for a manager to collect incentive fees from the investor, which is usually tied to a benchmark.

Interaction Effects² – The interaction effect measures the combined impact of an investment manager’s selection and allocation decisions within a sector. For example, if an investment manager had superior selection and over weighted that particular sector, the interaction effect is positive. If an investment manager had superior selection, but underweighted that sector, the interaction effect is negative. In this case, the investment manager did not take advantage of the superior selection by allocating more assets to that sector. Since many investment managers consider the interaction effect to be part of the selection or the allocation, it is often combined with the either effect.

Median³ – The value (rate of return, market sensitivity, etc.) that exceeds one-half of the values in the population and that is exceeded by one-half of the values. The median has a percentile rank of 50.

Modified Duration³ – The percentage change in the price of a fixed income security that results from a change in yield.

Mortgage Backed Securities (MBS)³ – Bonds which are a general obligation of the issuing institution but are also collateralized by a pool of mortgages.

Municipal Bond (Muni)⁴ – A debt security issued by a state, municipality or county to finance its capital expenditures.

Net Investment Change¹ – Is the change in an investment after accounting for all Net Cash Flows.

Performance Fee⁴ – A payment made to a fund manager for generating positive returns. The performance fee is generally calculated as a percentage of investment profits, often both realized and unrealized.

Data Source: ¹InvestorForce, ²Interaction Effect Performance Attribution, ³NEPC, LLC, ⁴Investopedia, ⁵Hedgeco.net



GLOSSARY OF INVESTMENT TERMINOLOGY

Policy Index³ - A custom benchmark designed to indicate the returns that a passive investor would earn by consistently following the asset allocation targets set forth in this investment policy statement.

Price to Book (P/B)⁴ - A ratio used to compare a stock's market value to its book value. It is calculated by dividing the current closing price of the stock by the latest quarter's book value per share, also known as the "price-equity ratio".

Price to Earnings (P/E)³ - The weighted equity P/E is based on current price and trailing 12 months earnings per share (EPS).

Price to Sales (P/S)⁴ - A ratio for valuing a stock relative to its own past performance, other companies, or the market itself. Price to sales is calculated by dividing a stock's current price by its revenue per share for the trailing 12 months.

Return on Equity (ROE)⁴ - The amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

Selection (or Manager) Effect² - Measures the investment manager's ability to select securities within a given sector relative to a benchmark. The over or underperformance of the portfolio is weighted by the benchmark weight, therefore, selection is not affected by the manager's allocation to the sector. The weight of the sector in the portfolio determines the size of the effect—the larger the sector, the larger the effect is, positive or negative.

Soft Hurdle rate⁵ - is a hurdle rate that once beaten allows a fund manager to charge a performance fee based on the entire annualized return.

Tiered Fee¹ - A fee structure that is paid to fund managers based on the size of the investment (i.e. 1.00% fee on the first \$10M invested, 0.90% on the next \$10M, and 0.80% on the remaining balance).

Total Effects² - The active management (total) effect is the sum of the selection, allocation, and interaction effects. It is also the difference between the total portfolio return and the total benchmark return. You can use the active management effect to determine the amount the investment manager has added to a portfolio's return.

Total Return¹ - The actual rate of return of an investment over a specified time period. Total return includes interest, capital gains, dividends, and distributions realized over a defined time period.

Universe³ - The list of all assets eligible for inclusion in a portfolio.

Upside Deviation¹ - Standard Deviation of Positive Returns

Weighted Avg. Market Cap.⁴ - A stock market index weighted by the market capitalization of each stock in the index. In such a weighting scheme, larger companies account for a greater portion of the index. Most indexes are constructed in this manner, with the best example being the S&P 500.

Yield (%)³ - The current yield of a security is the current indicated annual dividend rate divided by current price.

Yield to Maturity³ - The discount rate that equates the present value of cash flows, both principal and interest, to market price.

Data Source: ¹InvestorForce, ²Interaction Effect Performance Attribution, ³NEPC, LLC, ⁴Investopedia, ⁵Hedgero.net



DISCLOSURES

NEPC, LLC

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.
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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.

