



New York City
Board of Education Retirement System
Performance Overview as of June 30, 2021

Total Fund Overview

**New York City
Board of Education Retirement System**

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Through June 30, 2021



New York City Board of Education Retirement System (BERS) **Consultant's Commentary – Through June 30, 2021**

Total Fund Performance

The Board of Education Retirement System (BERS) Total Fund returned +5.89% net of fees for the quarter ended June 30, 2021, versus the policy benchmark's return of +5.37%. For the fiscal year to date as of June 30, 2021, the Total Fund returned +27.97% net of fees, versus the benchmark return of +27.47%.

Total Fund Asset Allocation

As of June 30, 2021, the BERS Total Fund had \$8.71 billion, up from \$8.28 billion at March 31, 2021.

U.S. Equity Commentary

As of June 30, 2021, U.S. Equity was \$2.89 billion or 33.2% of the NYBERS Total Fund. The U.S. equity composite was positive in the second quarter of 2021 returning +7.95%. This performance was below the Russell 3000 index return of +8.24%.

Active U.S. Equity Managers

Wellington returned +2.90% during the quarter, below the S&P Midcap 400 Index return of +3.64%. For the fiscal year to date as of June 30, 2021, Wellington returned +43.43% versus +53.24% for the S&P Midcap 400 Index.

- Sector allocation, a result of the bottom-up stock selection process, was a driver of relative underperformance. Allocation effect was driven by the overweight to information technology and underweight to real estate, but partially offset by the overweight to health care and underweight to consumer staples. Stock selection also detracted from returns. Weak selection in health care was partially offset by selection in information technology, consumer discretionary and communication services.

- At the issuer level, the top two relative contributors were out of benchmark allocations to CommScope Holding and Apellis Pharmaceuticals, while the top two relative detractors were out of benchmark allocations to ChemoCentryx and F5 Networks.

Wasatch returned +7.50% during the quarter, above the Russell 2000 Growth Index return of +3.92%. For the fiscal year to date as of June 30, 2021, Wasatch returned +52.70% versus +51.36% for the Russell 2000 Growth Index.

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- For the second quarter, the top contributor to the strategy performance was Pool Corp. (POOL), a wholesale distributor of swimming pools and related supplies. The company's customers include more than 120,000 contractors and retailers. Pool offers approximately 200,000 national-brand and private-label products from more than 2,000 suppliers. The prevalence of stay-at-home orders during the pandemic led many consumers to seek alternative outdoor activities, and Pool enjoyed a record year in 2020.
- The largest detractor from the strategy performance for the second quarter was Allegiant Travel Co. (ALGT), which offers airline flights, hotel bookings, car rentals, travel management and other related services. In 2020, unlike other travel related competitors, Allegiant was not forced to raise dilutive equity or take government money. Since then, Allegiant has strengthened its relationships with pilots and crews and has positioned itself to benefit from leisure travel, which should accelerate sooner than business travel. During the second quarter, the stock simply gave back some of its gains but the company's fundamentals are still attractive from a risk/reward perspective.

World ex-USA Commentary

As of June 30, 2021, World ex-USA Equity was \$887.9 million (10.2%) of the NYBERS Total Fund. World ex-USA Equity returned +5.99% in the second quarter of 2021 versus +5.52% for the World ex-USA custom benchmark.

Active World ex-USA Equity Managers

Sprucegrove returned +3.96% during the quarter versus +5.65% for NYC Developed Value Benchmark. For the fiscal year to date as of June 30, 2021, Sprucegrove returned +45.61% versus +33.60% for the NYC Developed Value Benchmark.

- The portfolio continues to represent high quality value style holdings with a projected ROE of 14.8%, which is higher than the World ex-USA Index at 11.0%. The portfolio has a normalized P/E ratio of 15.7x, less than the 17.6x for the Index. These characteristics are consistent with the historical profile of the manager. The manager believes the portfolio is attractively valued compared to the market. The strategy is well diversified across sectors and geographies, a residual from bottom up selection.
- The U.K. was the largest country exposure in the Fund at 24.6%, followed by Japan at 10.7%. Exposure to Emerging Markets was 13.8% and cash was 5.0% of the Fund at quarter end.
- Over the quarter, the Fund's underperformance was mainly due to a combination of an underweight position and stock selection in France (Total and Air Liquide). Stock selection in Holland (SBM Offshore and Boskalis) and Germany (Henkel and BASF) and an underweight position in Canada also had a negative impact on relative performance. Underperformance was partially offset by position relative performance due to an underweight position in Japan and stock selection in the United Kingdom (IMI and Travis Perkins).
- The top 10 holdings represent 20.6% of the portfolio.

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Baillie Gifford returned +7.38% in the quarter versus +5.65% for NYC Developed Growth Benchmark. For the fiscal year to date as of June 30, 2021, Baillie Gifford returned +46.11% versus +33.60% for the NYC Developed Growth Benchmark.

- ASML, a semiconductor equipment manufacturer, was the portfolio's largest holdings at 7.2%.
- At quarter end, the portfolio had 13.4% invested in Emerging Markets.
- The top 10 holdings represent 42.3% of the portfolio.

Acadian performed above the index for the quarter, +8.71% versus +5.31% for the S&P EPAC Small Cap Index. For the fiscal year to date as of June 30, 2021, Acadian returned +51.87% versus +42.23% for the S&P EPAC Small Cap Index.

- The top allocation by country was Japan with 15.2% followed by Switzerland (11.4%) and Australia (9.1%).
- The portfolio had a P/E of 18.2x while the benchmark had a P/E of 41.1x.
- At quarter end, the portfolio's emerging markets exposure was 6.9%.
- The portfolio held 1,078 stocks.

Algert underperformed for the quarter, +4.12% versus +4.34% for the MSCI EAFE Small Cap Index. For the fiscal year to date as of June 30, 2021, Algert returned +40.41% versus +40.98% for the MSCI EAFE Small Cap Index.

- During the second quarter, stock selection was a modestly positive contributor to excess returns relative to the benchmark. The strategy's currency, country, industry and risk factor exposures collectively detracted during the quarter.
- Catalyst-related exposures were the primary positive contributor to performance for the quarter, most notably in Europe and to a lesser extent, Japan. Catalyst-driven exposures successfully captured the recovery in corporate profits and outlook across Europe, backed in part by ongoing policy support mechanisms, including the EU Next Generation initiative. Given the quickly evolving nature of the corporate recovery, NLP-based data sets provided timely information on the growing fundamental differentiation across firms as they adapt to the nascent economic expansion. As the quarter progressed however, worrisome growth in new COVID infections globally dampened growth prospects and investor bullishness. Amid this retrenchment, the strategy's catalyst-related exposures were able to capture the rotation away from economically sensitive firms towards more defensively oriented peers.
- The portfolio held 138 stocks compared to MSCI EAFE Small Cap of 2,384 stocks.

Through June 30, 2021



Emerging Markets Equity Commentary

As of June 30, 2021, Emerging Markets Equity was \$524.8 million or 6.0% of the NYBERS Total Fund. Emerging Markets outperformed for the quarter, +5.99% versus +5.05% for the MSCI Emerging Markets, Net Index.

Emerging Markets Equity Managers

Acadian underperformed for the quarter, posting a +4.86% versus +5.05% for the MSCI Emerging Markets, Net Index. For the fiscal year to date as of June 30, 2021, Acadian returned +40.79% versus +40.90% for the MSCI Emerging Markets, Net Index.

- The portfolio had a P/E of 10.4x, while the benchmark had a P/E of 18.7x.
- At quarter end, the portfolio held 458 stocks and the benchmark held 1,412.
- The top allocation by country was China with 34.8% followed by Taiwan (18.8%) and South Korea (17.3%).

CONY GT EM BlackRock returned +4.90% versus +5.50% for the MSCI Emerging Markets, Net Index during the quarter. For the fiscal year to date as of June 30, 2021, CONY GT EM BlackRock returned +40.66% versus +40.90% for the MSCI Emerging Markets, Net Index.

- Despite the diverging rates of restrictions and vaccination programs across emerging markets, and the increasing number of Covid-19 infections, EM posted a positive return over the period. The rise of restrictions hampered mobility in some countries and weighed down on economies across regions. However, the improving global macro backdrop, the weakened US dollar, and the rise in commodity prices proved beneficial for emerging markets, all supporting positive performance throughout the quarter.
- Most of the GICS sectors within the MSCI Emerging Markets Index posted positive returns over the quarter. Health Care (+14.10%), Industrials (+13.51%), and Energy (+12.65%) were the best performers. While Real Estate (-5.88%), Consumer Discretionary (+1.46%), and Communication Services (+1.96%) were among the lowest performers.

JP Morgan returned +8.93% versus +5.05% for the MSCI Emerging Markets, Net Index during the quarter.

- Stock selection in China aided performance, with the portfolio's position in WuXi Biologics, a global biologics service provider, outperforming. The company raised revenue and profit guidance as WuXi continues to diversify its revenue sources due to increasing demand from global pharmaceutical outsourcing. Additionally, Xinyi Solar, a leading solar glass manufacturer, was also among the top contributors, benefitting from an improved demand outlook.

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- Stock selection in the communication services sector was a leading contributor to returns. Sea Limited, an ASEAN e-commerce and gaming business listed in Singapore, was among the top performers. Results announced during the quarter signaled continued growth across Sea's gaming, ecommerce, and fintech businesses.

Global Equity Managers

Morgan Stanley returned +7.27% versus +7.39% for the MSCI AC World Index, during the quarter. For the fiscal year to date as of June 30, 2021, Morgan Stanley outperformed returning +42.76% versus +39.26% for the MSCI AC World Index.

- During the second quarter of 2021, the portfolio's unfavorable stock selection offset the favorable sector allocation. Global equities advanced during the period, led by information technology, energy and health care. The utilities sector declined, while industrials, consumer staples and consumer discretionary also underperformed the MSCI AC World Index. Stock selection and a sector overweight position in information technology contributed positively to relative performance. Top individual contributors included shares of Canadian e-commerce solution provider Shopify, French luxury brand Hermès, Danish transport and logistics company DSV Panalpina A/S; Eastern European business services firm EPAM Systems and creative software developer Adobe.

- Stock selection in consumer discretionary and financials were the greatest detractors from relative performance during the period. Top individual detractors included Chinese tutorial provider TAL Education Group, global ride-booking and food delivery platform Uber Technologies, online travel agent Trip.com, entertainment leader Walt Disney and online luxury marketplace Farfetch Limited.

Fiera returned +10.57% versus +7.74% for the MSCI World Index, during the quarter. For the fiscal year to date as of June 30, 2021, Fiera returned +41.73% versus +39.04% for the MSCI World Index.

- The leading contributors to performance over the quarter were Moody's and MSCI. Moody's reported solid returns in both its information services and analytics segments. The company increased its guidance for the year based on strong results, with the expectations of issuance levels looking brighter than originally feared given the strong GDP outlook, which has historically been positively correlated to issuance levels. As of MSCI, the company reported solid results with strong growth across the board, with Indices and ESG revenues posting double-digit growth. The company continues to see strong demand for their ESG products, which include ESG benchmarking, climate data and ESG ratings, and are committed to continue investing internally to expand their capabilities.

- The largest detractors over the quarter were Becton Dickinson and Intercontinental Hotel Group (IHG). Becton Dickinson's underperformance was largely driven by a faster than initially anticipated volume and price erosion of their rapid antigen test, Veritor, as well as the continual overhang of the FDA resubmission process for one of the company's key products. Becton Dickinson furthermore announced the spin-off of its small diabetes business over the quarter as the company believes that the business differs from its core competencies. With investors already having begun pricing in a recovery, IHG's stock entered the period with a rich

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valuation. The hotel group, in addition, is taking the opportunity to optimize its portfolio, which is putting pressure on room growth in the short term.

Fixed Income – Structured Manager Composite Commentary

As of June 30, 2021, the Total Structured Portfolio was \$1.38 billion or 15.9% of the NYBERS Total Fund. Structured Fixed Income returned +2.01% in the second quarter versus +1.93% for the benchmark. For the fiscal year to date as of June 30, 2021, Structured Fixed Income returned -0.59% versus -0.42% for the benchmark.

Fixed Income – Structured Manager Composite Managers

BlackRock (mortgages) returned +0.51% in the quarter versus the NYC Custom Mortgage Benchmark return of +0.33%. For the fiscal year to date as of June 30, 2021, BlackRock (mortgages) returned +0.14% versus -0.48% for the NYC Custom Mortgage Benchmark.

- Sector allocation and security selection benefited results versus the index while duration negatively affected relative performance versus the index. Exposure to commercial mortgage backed securities also contributed to some of the outperformance.
- At quarter end, the portfolio held 1,699 holdings.

T Rowe Price returned +3.64% in the quarter versus the Bloomberg Barclay U.S. Corporate Investment Grade Index return of +3.55%.

- Credit selection within banking aided relative results, although an overweight allocation to the sector detracted marginally as a flattening yield curve compressed lending margins. Improving economic activity and steady balance sheets provided tailwinds for the global banking sector. Holdings in Barclays PLC and Morgan Stanley were constructive. Selection within consumer noncyclical was also beneficial, and an underweight allocation to the sector further supported results. The sector received a boost from positive vaccine news, economic reopening, and healthy quarterly earnings. Holdings in AbbVie and Albertsons Cos outperformed. In addition, an overweight allocation to energy contributed to relative performance alongside rising oil prices, although credit selection within the sector negated some gains as higher-beta exploration and production companies outperformed their higher-quality midstream peers.
- Yield curve positioning hurt relative performance. A modest overweight within the intermediate part of the curve detracted as intermediate-term U.S. Treasury yields rose. Security selection among electric credits hindered relative performance, although an underweight allocation was beneficial. Credits issued by Pacific Gas & Electric and Southern California Edison underperformed with the start of the fire season out west.

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SSgA LI Treasury (governments) returned +4.06% in the quarter versus the +4.17% return for the NYC - Treasury Agency Plus Five. For the fiscal year to date as of June 30, 2021, SSgA (governments) returned -6.27% versus the -6.52% for the NYC - Treasury Agency Plus Five.

- US Treasury yields retreated from year to date highs reached in March with the 10-year yield declining 27 basis points (bps) to end the quarter at 1.47% while the 30-year declined 32 bps to 2.09%. The US economy continues to reopen broadly amid an accelerated vaccine rollout and positive data releases. Investor sentiment remains generally positive, even as multiple headwinds, mainly the threat of higher inflation, supply chain disruptions, and a new variant of Covid-19, linger.

SSGA 1-10 Yr. Treasury/ Agency returned +0.65% in the quarter versus the FTSE USBIG Treasury/Agency 1-10 Yr. Index return of +0.68%. For the fiscal year to date as of June 30, 2021, the SSgA 1-10 Yr. Treasury Index returned -1.14%, versus the FTSE USBIG Treasury/Agency 1-10 Yr. return of -1.09%.

SSGA 1 -3 Yr. Treasury Index returned -0.03% in the quarter, matching the FTSE USBIG Treasury 1 -3 Yr. Index return of -0.03%. For the fiscal year to date as of June 30, 2021, the SSgA 1-3 Yr. Treasury Index returned +0.08%, versus the FTSE USBIG Treasury 1 -3 Yr. Index return of +0.07%.

SSGA LT Treasury 10Y Plus returned +6.97% in the quarter versus the FTSE Treasury 10+ return of +6.98%.

Enhanced Yield Fixed Income & Bank Loans Commentary

As of June 30, 2021, Enhanced Yield Fixed Income was \$780.5 million or 9.0% of the NYBERS Total Fund.

Mackay Shields returned +2.41% in the quarter versus +2.74% for Bloomberg Barclays US High Yield – 2% Issuer Cap Index. For the fiscal year to date as of June 30, 2021, Mackay Shields returned +13.46% versus +15.34% for the Bloomberg Barclays US High Yield – 2% Issuer Cap Index.

- An underweight to CCC's was negative for relative performance as riskier bonds significantly outperformed, however, this effect was offset by positive security selection within the portfolio. Positions in Carlson Travel underperformed in Support Services, detracting from relative returns. Within the Electric-Integrated sector, an overweight to PG&E was negative for performance.
- An overweight to Energy and positive security selection in Exploration and Production were the top contributors to relative performance for the quarter as positions in Gulfport Energy and Talos Energy outperformed the broader market. Positioning in Oil Field Equipment and Services and Refining slightly detracted from returns. An underweight to Telecom-Wireline and Packaging

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benefitted returns as the sectors lagged during the quarter. Selection within Media-Content helped as the portfolio avoided names that underperformed within the sector.

Nomura returned +2.96% in the quarter versus +2.74% for Bloomberg Barclays US High Yield – 2% Issuer Cap Index. For the fiscal year to date as of June 30, 2021, Nomura returned +18.70% versus +15.34% for the Bloomberg Barclays US High Yield – 2% Issuer Cap Index.

- Three of the largest contributors to relative performance were Energy subsectors –the overweight to Oil Field Equipment & Services and positive security selection in Exploration & Production and Gas Distribution. From a ratings perspective, positive credit selection in BBs and the overweight to CCCs contributed to relative performance. Overweight in Bs detracted slightly in the quarter, but positive credit selection more than offset this effect. The duration posture also continued to generate alpha in Q2.
- The overweight and negative credit selection in the Pharmaceuticals sector, the underweight to the Wholesale Food sector, and negative credit selection in Automakers all detracted from relative performance during the second quarter.

TIPS, ETI, Cash Commentary

As of June 30, 2021, Fixed Income – TIPS, ETI and Cash was \$419.50 million or 4.8% of the NYBERS Total Fund.

Fixed Income – TIPS Managers

SSgA (TIPS) returned +3.43% in the quarter, above the +3.25% return for the Barclays Global Inflation Linked Index. For the fiscal year to date as of June 30, 2021, SSgA (TIPS) returned +6.50%, versus the +6.51% return for the Barclays Global Inflation Linked Index.

Fixed Income – Core Managers

Pugh returned +2.14% in the quarter, versus the +1.83% return for Bloomberg Barclays Aggregate Index.

- Asset allocation and security selection both contributed positively to performance, partially offset by a modest negative impact from duration positioning. The overweight positioning in Corporates, ABS, and CMBS all contributed to the outperformance. In addition, the underweight to MBS was beneficial as the sector generated negative excess returns over the quarter. Security selection within Corporates and ABS positively impacted performance, due in part to an overweight exposure to BBB-rated, crossover, and high yield Corporates, which outperformed higher quality alternatives.
- Duration was managed to be slightly lower than the Index throughout the quarter as interest rates declined, negatively impacting performance. At quarter end, the portfolio duration was 6.36, slightly lower than Index duration of 6.58.

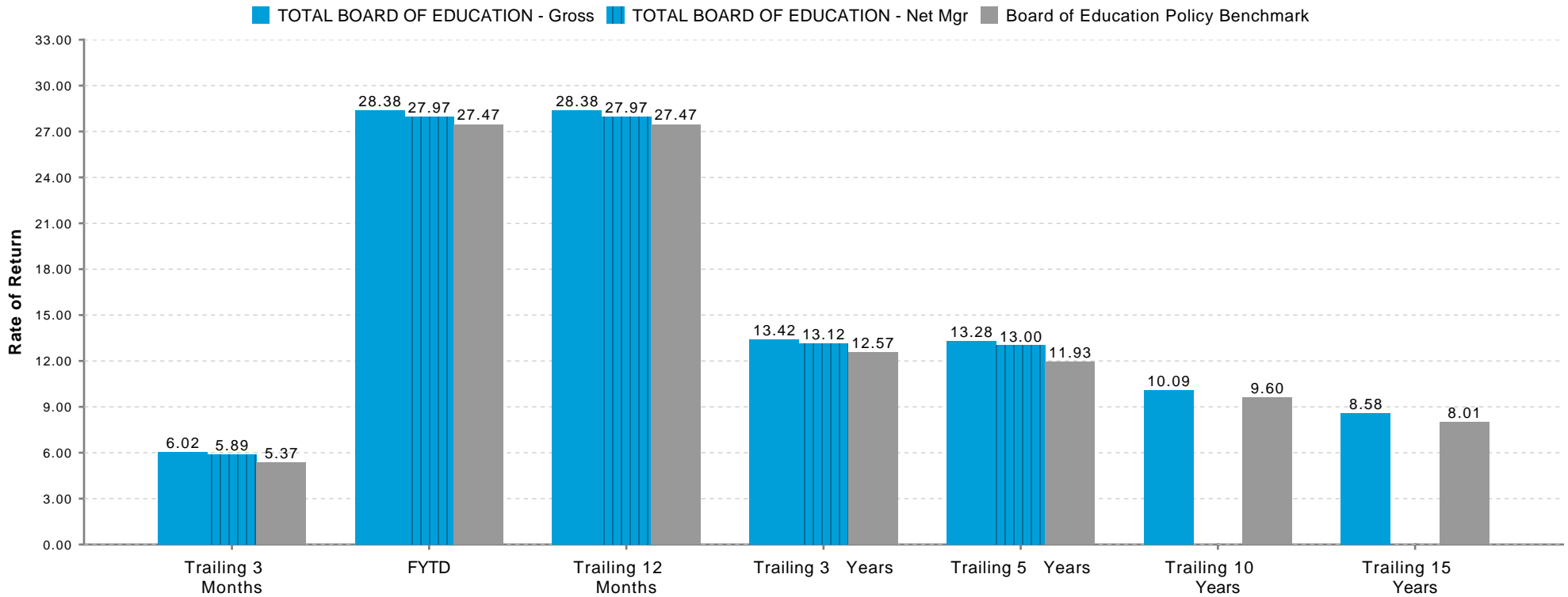
Total Portfolio Returns: June 30, 2021



Market Value (Billions)

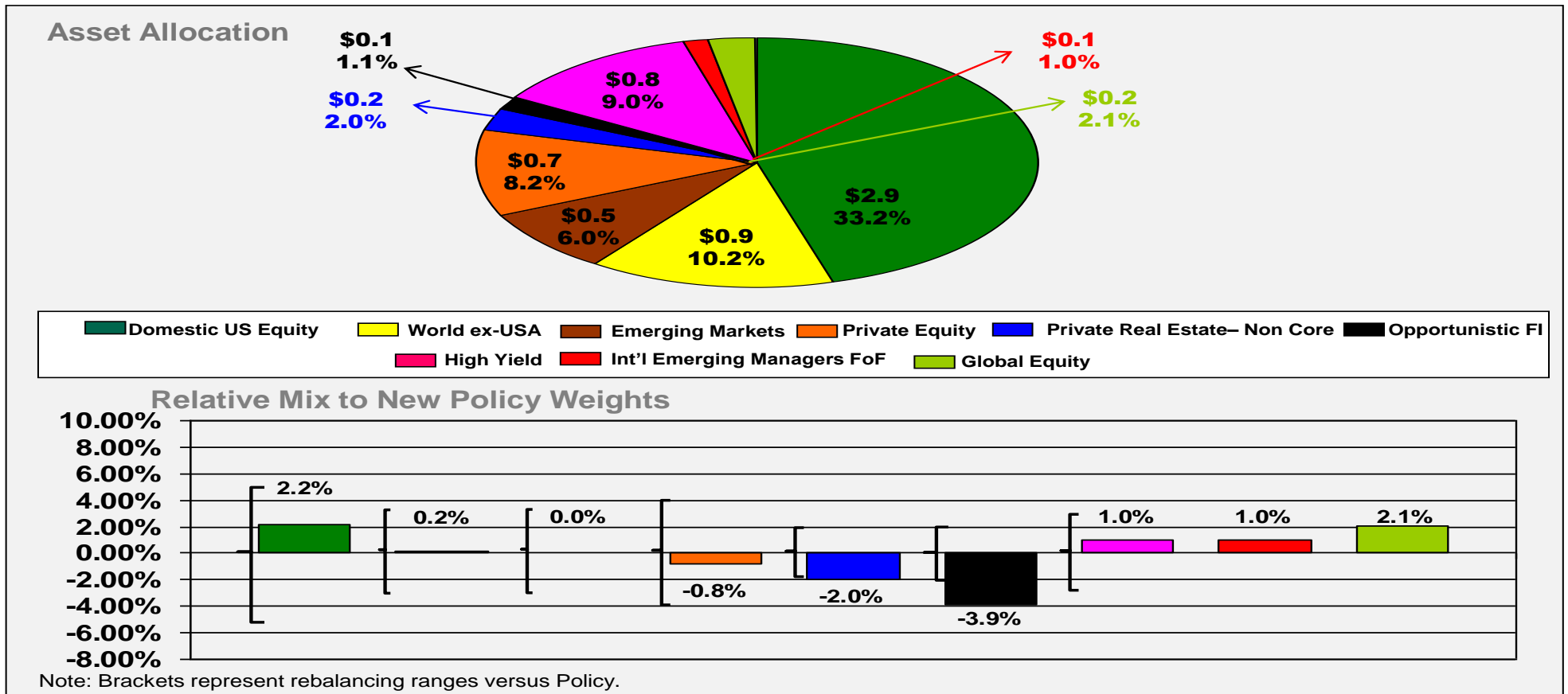
\$8.7

TOTAL BOARD OF EDUCATION

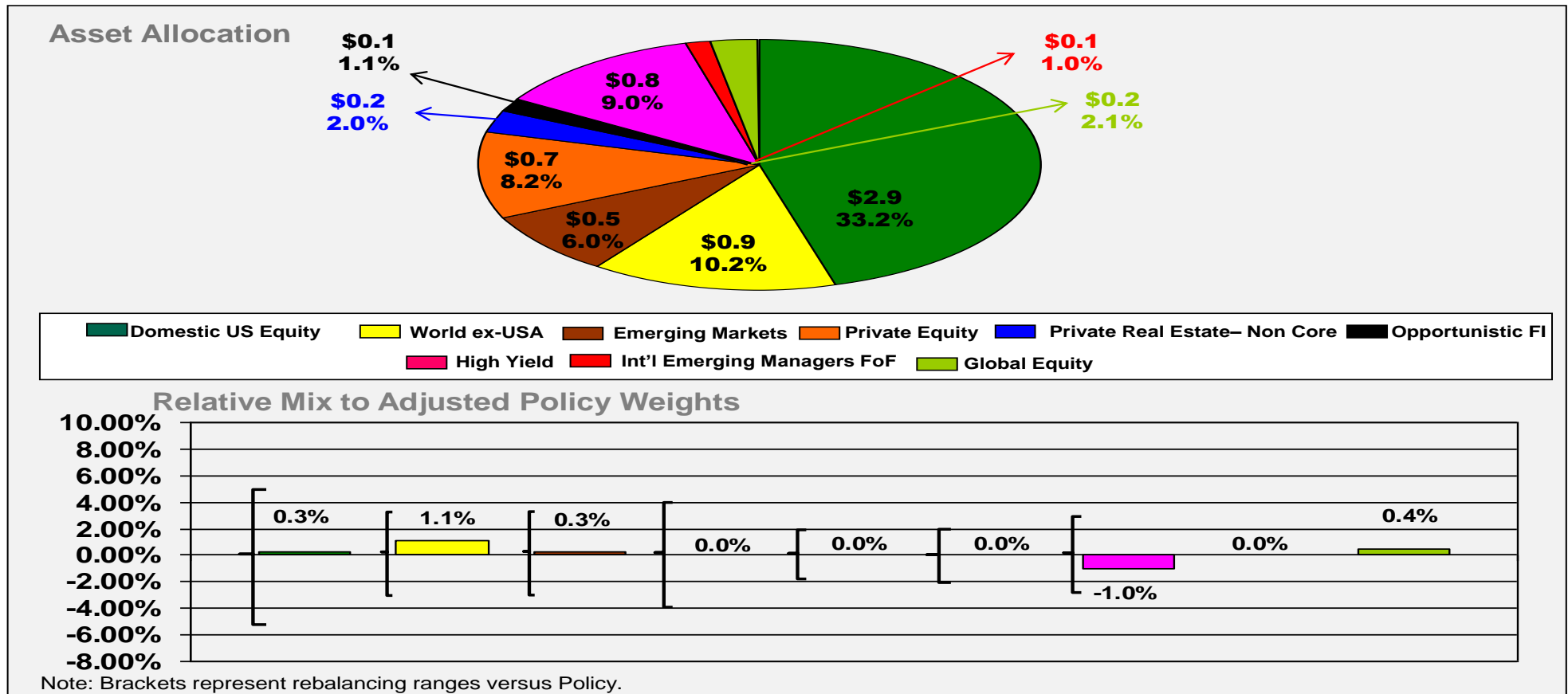


	Plan 3 Years	Benchmark 3 Years	Plan 5 Years	Benchmark 5 Years	Plan 10 Years	Benchmark 10 Years
Standard Deviation						
TOTAL BOARD OF EDUCATION	10.1	10.5	13.3	8.5	8.6	8.6

Portfolio Asset Allocation – Growth

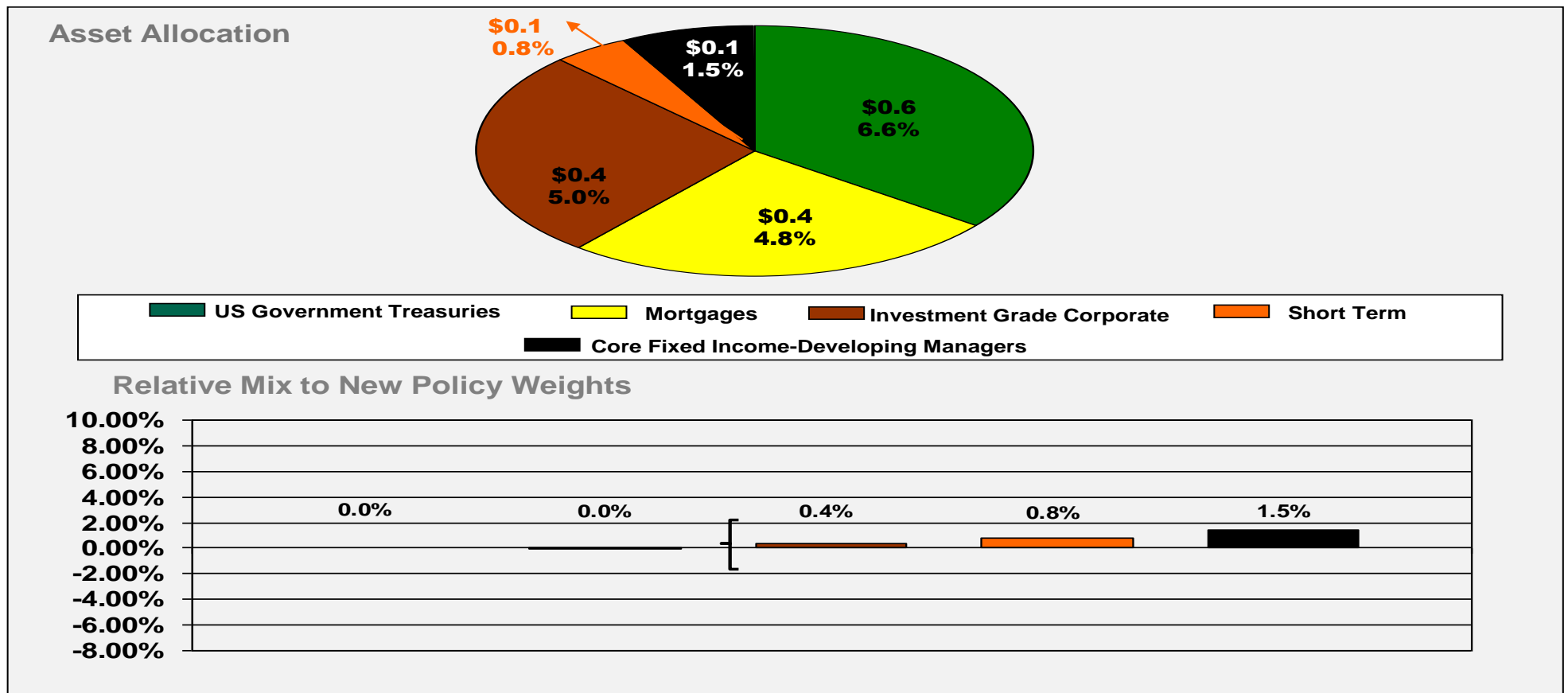


Portfolio Asset Allocation – Growth

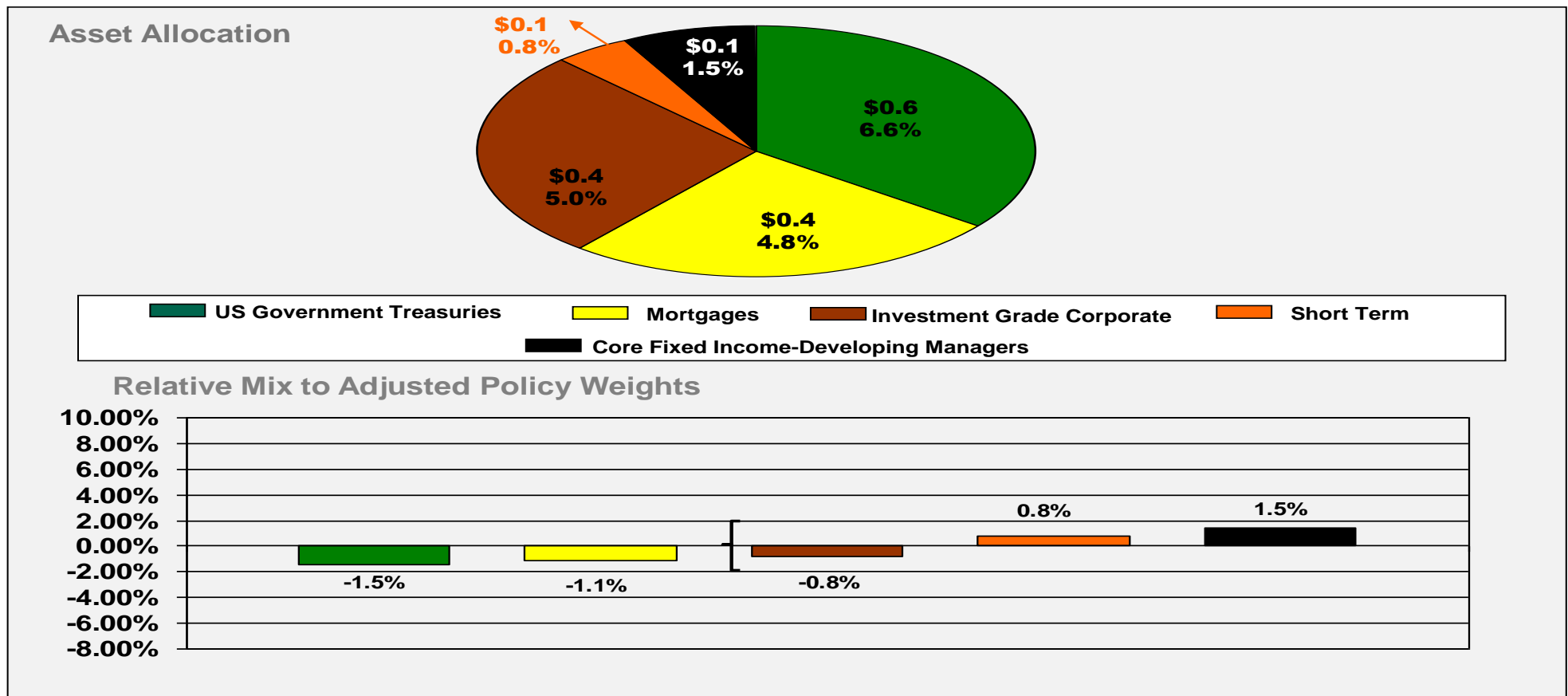


Note: On June 30, 2021 BERS' combined Fixed Income and Cash portfolios have a duration of 5.5 years. The duration of the Bloomberg US Aggregate Index was 6.6 years on that date.

Portfolio Asset Allocation – Deflation Protection

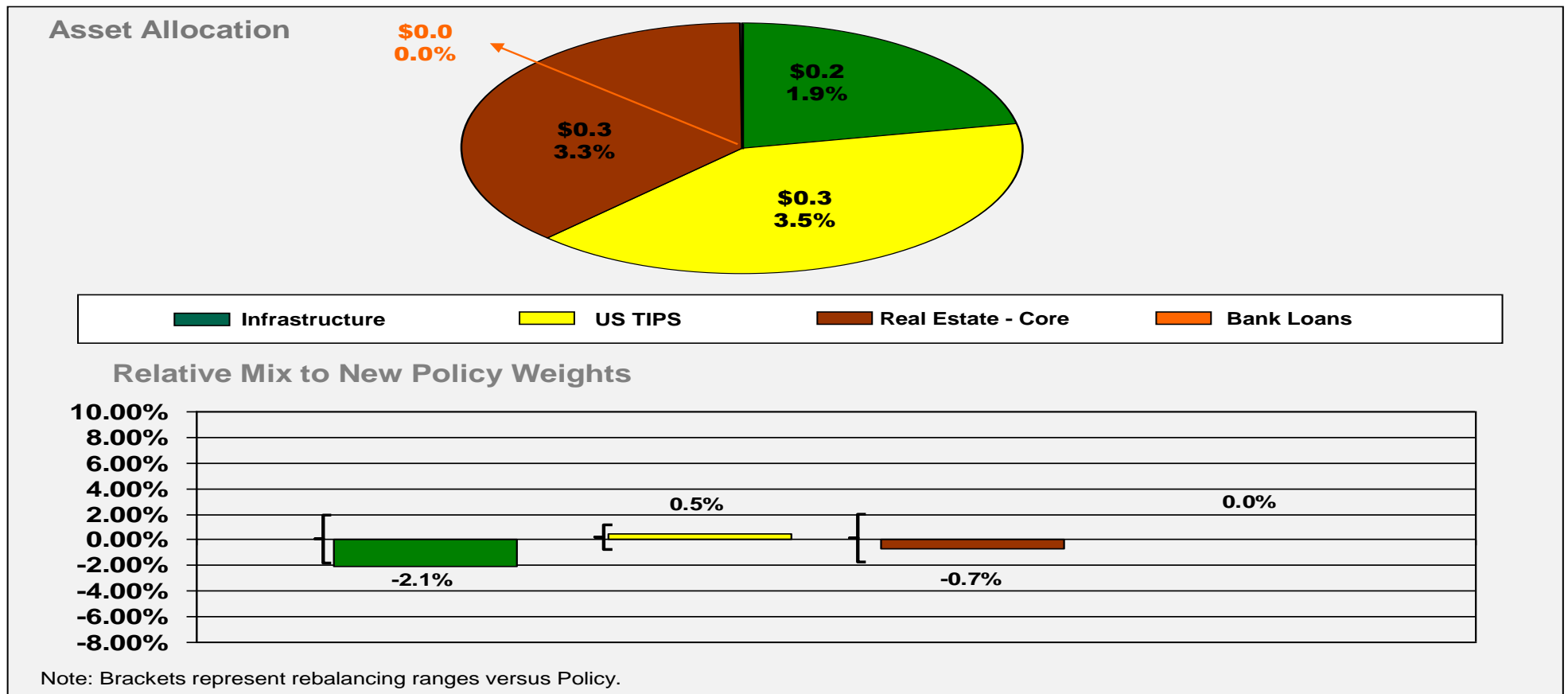


Portfolio Asset Allocation – Deflation Protection

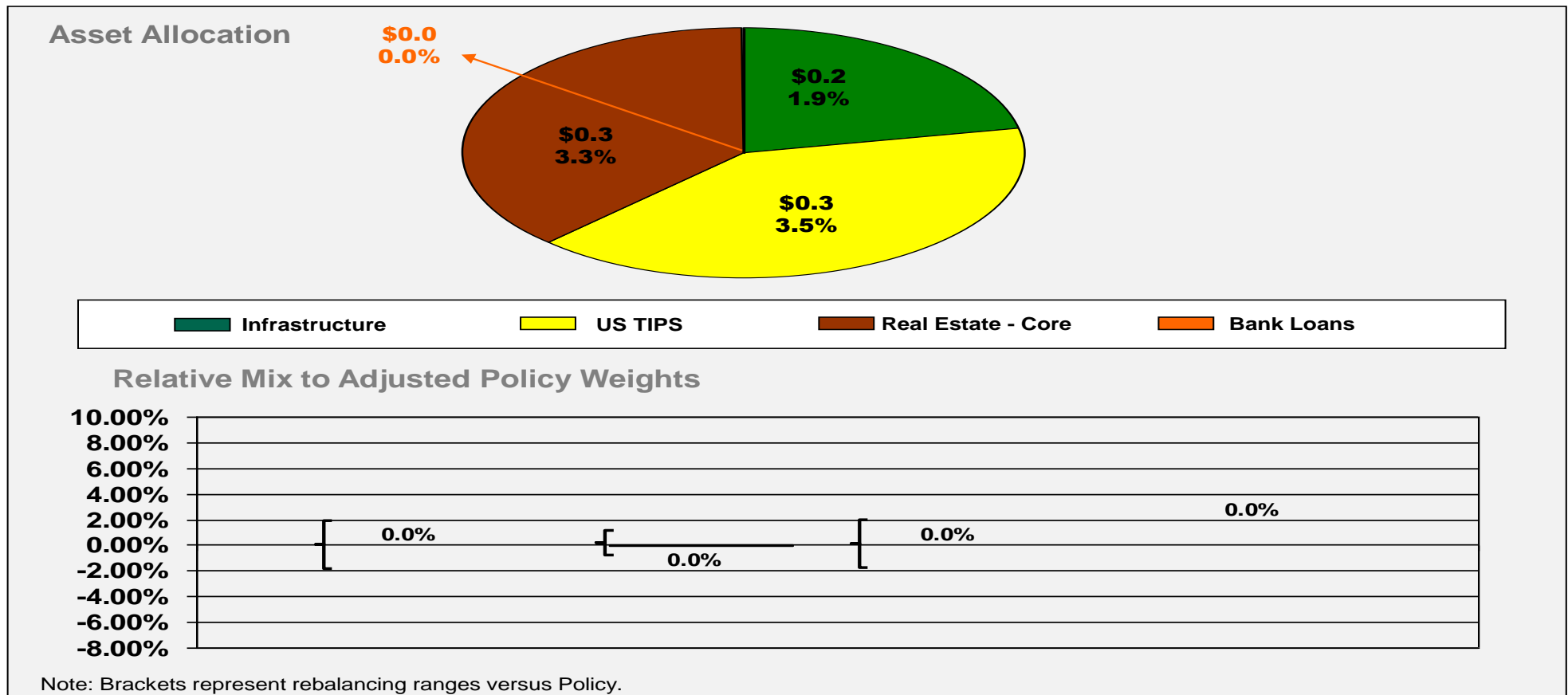


Note: On June 30, 2021 BERS' combined Fixed Income and Cash portfolios have a duration of 5.5 years. The duration of the Bloomberg US Aggregate Index was 6.6 years on that date.

Portfolio Asset Allocation – Inflation Protection

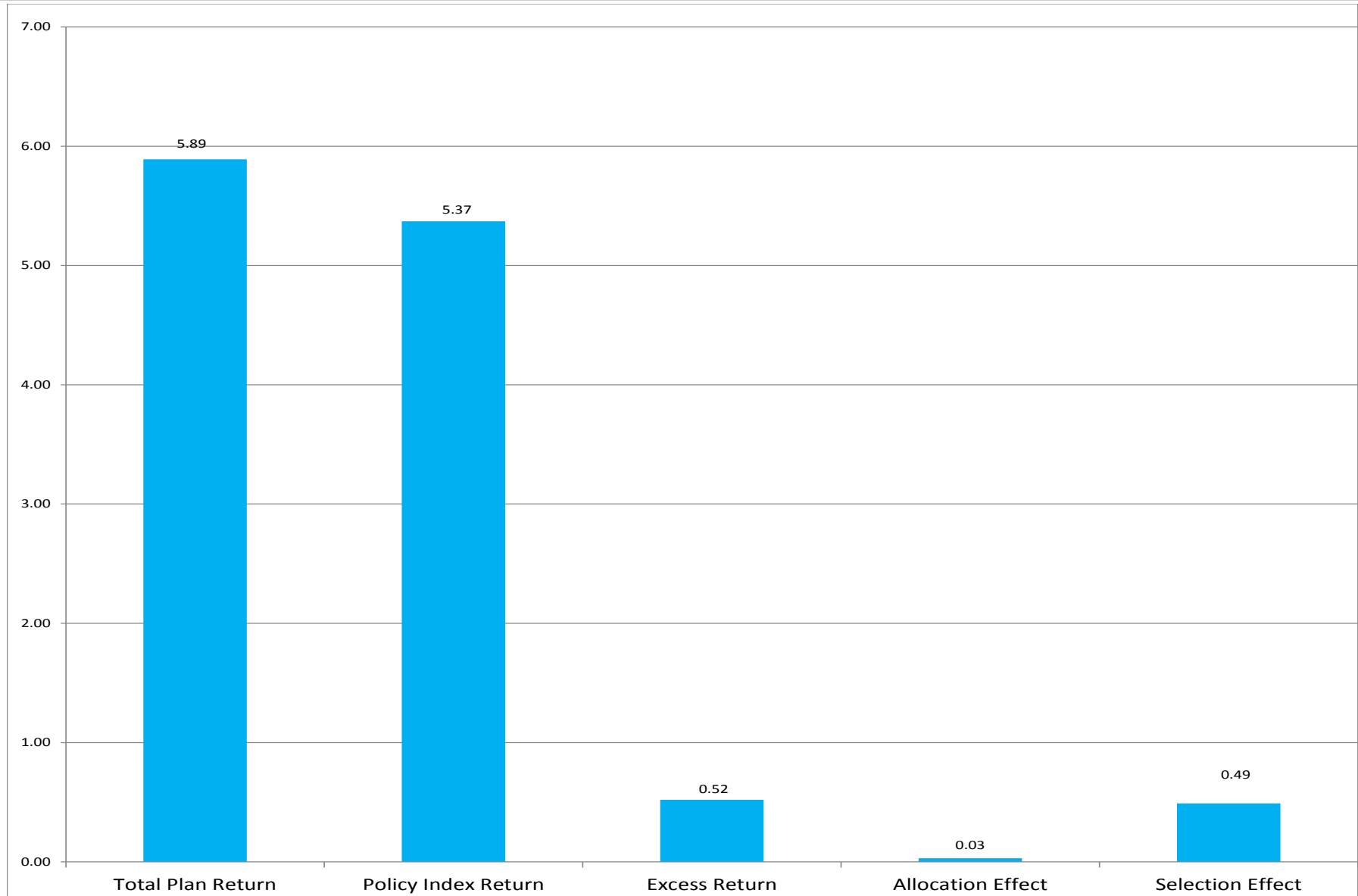


Portfolio Asset Allocation – Inflation Protection

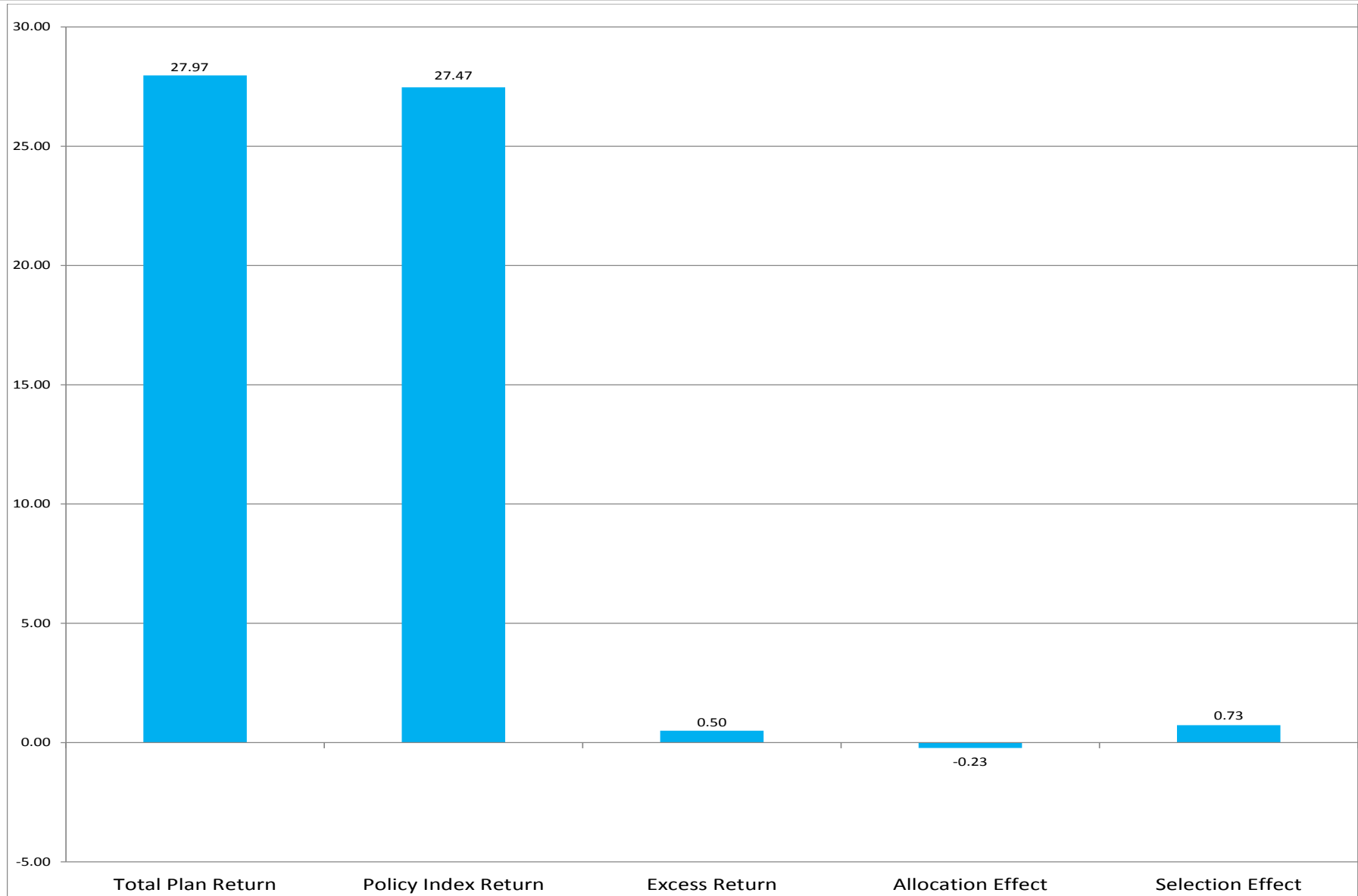


Note: On June 30, 2021 BERS' combined Fixed Income and Cash portfolios have a duration of 5.5 years. The duration of the Bloomberg US Aggregate Index was 6.6 years on that date.

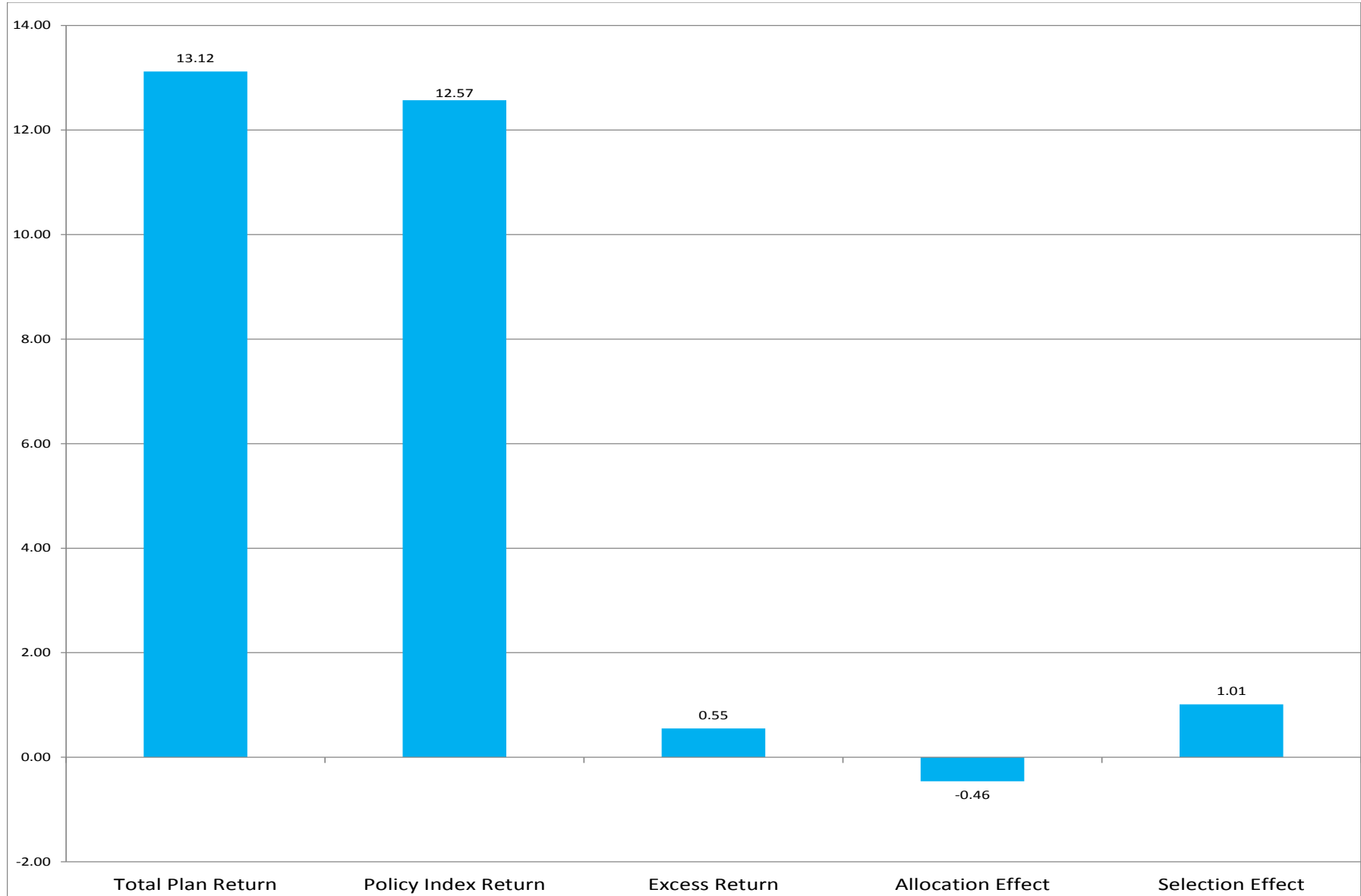
Performance Attribution: Total Plan - Quarter Ending: June 30, 2021



Performance Attribution: Total Plan - Fiscal Year To Date: June 30, 2021



Performance Attribution: Total Plan - 3 Years Ending: June 30, 2021



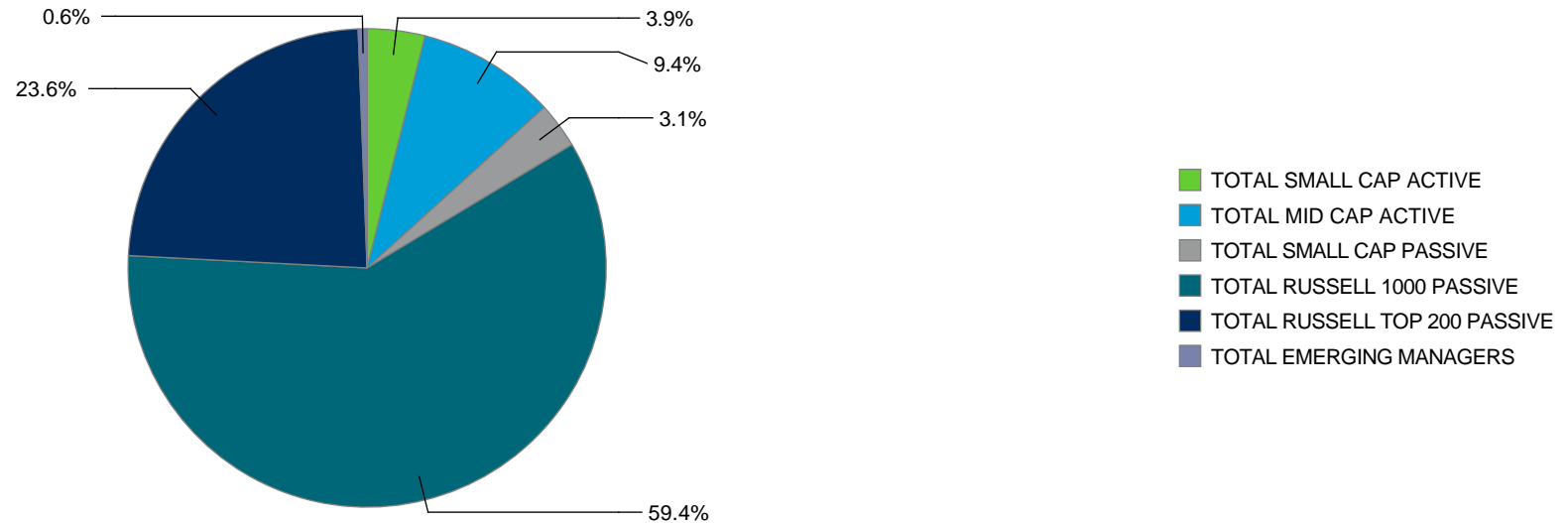
Allocation Effect - Asset Class Breakdown				
	Quarter	FYTD	3 Years	Benchmark
TOTAL BOARD OF EDUCATION	0.03	-0.23	-0.46	Board of Education Policy Benchmark
TOTAL DOMESTIC EQUITY	0.00	-0.13	-0.12	RUSSELL 3000
TOTAL WORLD ex-USA	0.00	0.09	0.01	MSCI World ex USA IMI Net
TOTAL GLOBAL EQUITY	0.01	0.04	0.00	MSCI AC WORLD
TOTAL EMERGING MARKETS	0.00	0.02	-0.04	MSCI Emerging Markets
TOTAL INTERNATIONAL FOF	0.00	0.00	0.00	MSCI ACWI Ex US IMI Net
TOTAL PRIVATE EQUITY	0.00	0.01	-0.03	Russell 3K + 300bps
TOTAL PRIVATE REAL ESTATE - CORE	-0.01	-0.01	-0.01	NCREIF ODCE net
TOTAL PRIVATE REAL ESTATE NON-CORE	0.00	0.00	-0.01	NCREIF ODCE net + 200bps
TOTAL INFRASTRUCTURE	0.00	0.00	0.00	CPI + 4%
TOTAL US TREASURY SHORT TERM	0.01	-0.37	-0.14	FTSE USBIG Treasury 1-3 Y Index
TOTAL US TREASURY INTERMEDIATE	-0.01	-0.03	-0.01	FTSE USBIG Treasury/Agency 1-10 y
TOTAL ACTIVE GOVERNMENT	0.01	0.10	-0.04	NYC - Treasury Agency Plus Five
TOTAL US TREASURY LONG DURATION	0.00	0.05	0.01	FTSE Treasury 10+
TOTAL INVESTMENT GRADE CORPORATE	0.02	0.55	0.13	NYC Custom IGC Benchmark
TOTAL MORTGAGES	0.06	0.24	0.06	NYC Custom Mortgage Benchmark
TOTAL CORE FI- DEVELOPING MGRS	-0.05	-0.43	-0.13	Bloomberg U.S. Aggregate
TOTAL ETI	0.00	0.00	0.00	ETI Custom Benchmark
TOTAL HIGH YIELD	0.03	0.40	0.13	High Yield Custom Benchmark
TOTAL BANK LOANS	0.00	-0.05	-0.01	Credit Suisse Lev Loan Index
TOTAL TIPS MANAGERS	0.00	-0.06	-0.03	Bloomberg Global Infl-Linked: U.S. TIPS
TOTAL OPPORTUNISTIC FIXED	0.00	-0.01	0.00	OFI - JPMGHY / CSFB 50/50 Blend Plus 300
TOTAL CASH	-0.04	-0.63	-0.24	

Selection Effect - Asset Class Breakdown				
	Quarter	FYTD	3 Years	Benchmark
TOTAL BOARD OF EDUCATION	0.49	0.73	1.01	Board of Education Policy Benchmark
TOTAL DOMESTIC EQUITY	-0.10	-0.11	0.00	RUSSELL 3000
TOTAL WORLD ex-USA	0.04	1.21	0.79	MSCI World ex USA IMI Net
TOTAL GLOBAL EQUITY	0.03	0.05	0.12	MSCI AC WORLD
TOTAL EMERGING MARKETS	0.05	-0.08	-0.14	MSCI Emerging Markets
TOTAL INTERNATIONAL FOF	0.02	0.02	0.02	MSCI ACWI Ex US IMI Net
TOTAL PRIVATE EQUITY	0.40	-0.80	0.00	Russell 3K + 300bps
TOTAL PRIVATE REAL ESTATE - CORE	-0.03	-0.09	0.00	NCREIF ODCE net
TOTAL PRIVATE REAL ESTATE NON-CORE	0.02	0.18	0.06	NCREIF ODCE net + 200bps
TOTAL INFRASTRUCTURE	0.02	0.21	0.10	CPI + 4%
TOTAL US TREASURY SHORT TERM	0.00	0.00	0.00	FTSE USBIG Treasury 1-3 Y Index
TOTAL US TREASURY INTERMEDIATE	0.00	0.00	0.00	FTSE USBIG Treasury/Agency 1-10 y
TOTAL ACTIVE GOVERNMENT	0.00	0.00	0.00	NYC - Treasury Agency Plus Five
TOTAL US TREASURY LONG DURATION	0.00	0.01	0.00	FTSE Treasury 10+
TOTAL INVESTMENT GRADE CORPORATE	0.00	0.00	0.00	NYC Custom IGC Benchmark
TOTAL MORTGAGES	0.01	0.03	0.01	NYC Custom Mortgage Benchmark
TOTAL CORE FI- DEVELOPING MGRS	0.00	0.03	0.01	Bloomberg U.S. Aggregate
TOTAL ETI	0.01	0.00	0.01	ETI Custom Benchmark
TOTAL HIGH YIELD	0.00	0.05	0.03	High Yield Custom Benchmark
TOTAL BANK LOANS	0.00	-0.02	-0.02	Credit Suisse Lev Loan Index
TOTAL TIPS MANAGERS	0.01	0.00	0.00	Bloomberg Global Infl-Linked: U.S. TIPS
TOTAL OPPORTUNISTIC FIXED	0.02	0.04	0.01	OFI - JPMGHY / CSFB 50/50 Blend Plus 300
TOTAL CASH	0.00	0.00	0.00	

Total Domestic Equity Asset Allocations: June 30, 2021



	<u>Market Value (Billions)</u>	<u>% of Plan</u>
TOTAL DOMESTIC EQUITY	\$2.9	33.2

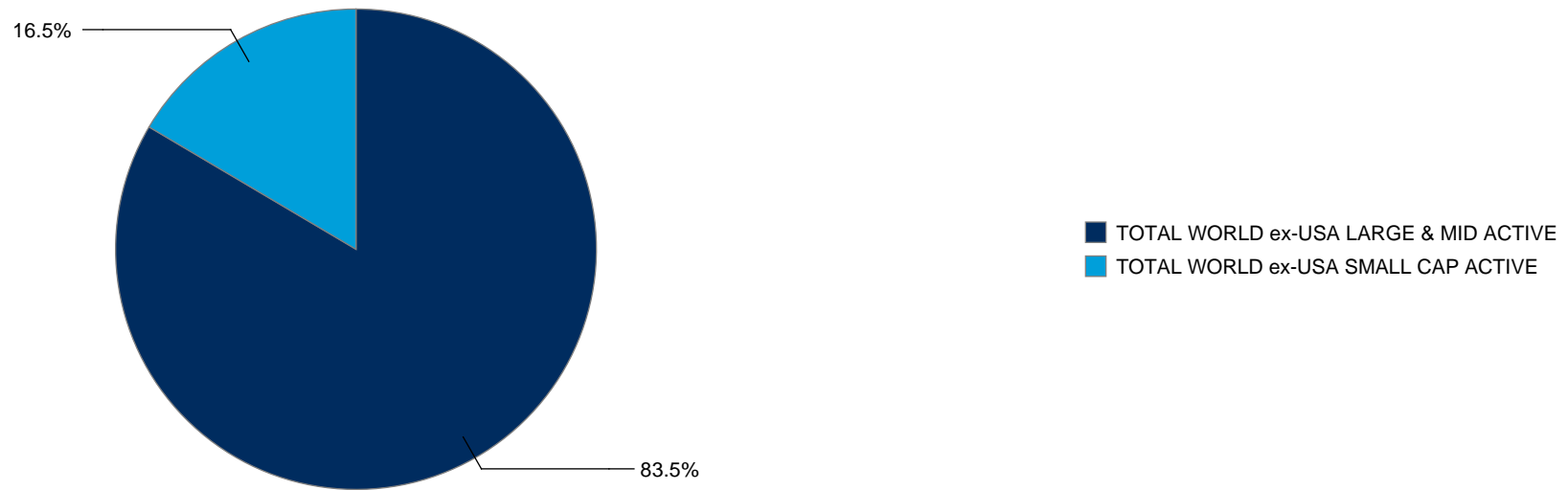


	<u>Policy Weight</u>	<u>Actual Weight</u>	<u>Under/Over Weight</u>	<u>Quarterly Returns</u>		
				<u>Fund</u>	<u>Benchmark</u>	<u>Excess</u>
TOTAL SMALL CAP ACTIVE	3.9	3.9	(0.1)	7.5	4.3	3.2
TOTAL MID CAP ACTIVE	7.0	9.4	2.4	2.9	7.5	(4.6)
TOTAL SMALL CAP PASSIVE	2.6	3.1	0.5	4.5	4.3	0.2
TOTAL RUSSELL 1000 PASSIVE	68.0	59.5	(8.5)	8.6	8.5	0.0
TOTAL RUSSELL TOP 200 PASSIVE	18.0	23.6	5.6	8.9	8.9	(0.0)
TOTAL EMERGING MANAGERS	0.5	0.6	0.1	4.5	4.3	0.2

World ex-USA Equity Asset Allocation: June 30, 2021



	<u>Market Value (Millions)</u>	<u>% of Plan</u>
TOTAL WORLD ex-USA	\$887.9	10.2

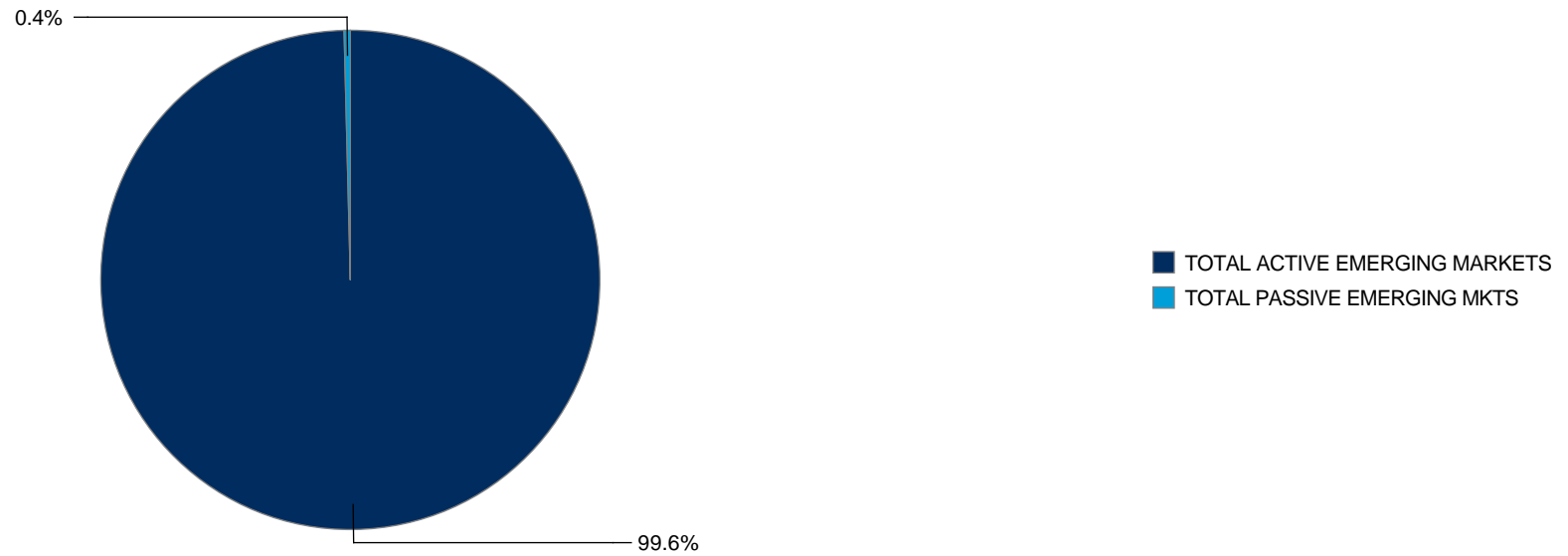


	<u>Asset Weight</u>	<u>Quarterly Returns</u>		
		<u>Fund</u>	<u>Benchmark</u>	<u>Excess</u>
TOTAL WORLD ex-USA LARGE & MID ACTIVE	83.54	5.69	5.65	0.04
TOTAL WORLD ex-USA SMALL CAP ACTIVE	16.46	7.54	5.31	2.23
TOTAL WORLD ex-USA	100.00	5.99	5.52	0.47

Emerging Markets Equity Asset Allocation: June 30, 2021



	<u>Market Value (Millions)</u>	<u>% of Plan</u>
TOTAL EMERGING MARKETS	\$524.8	6.0

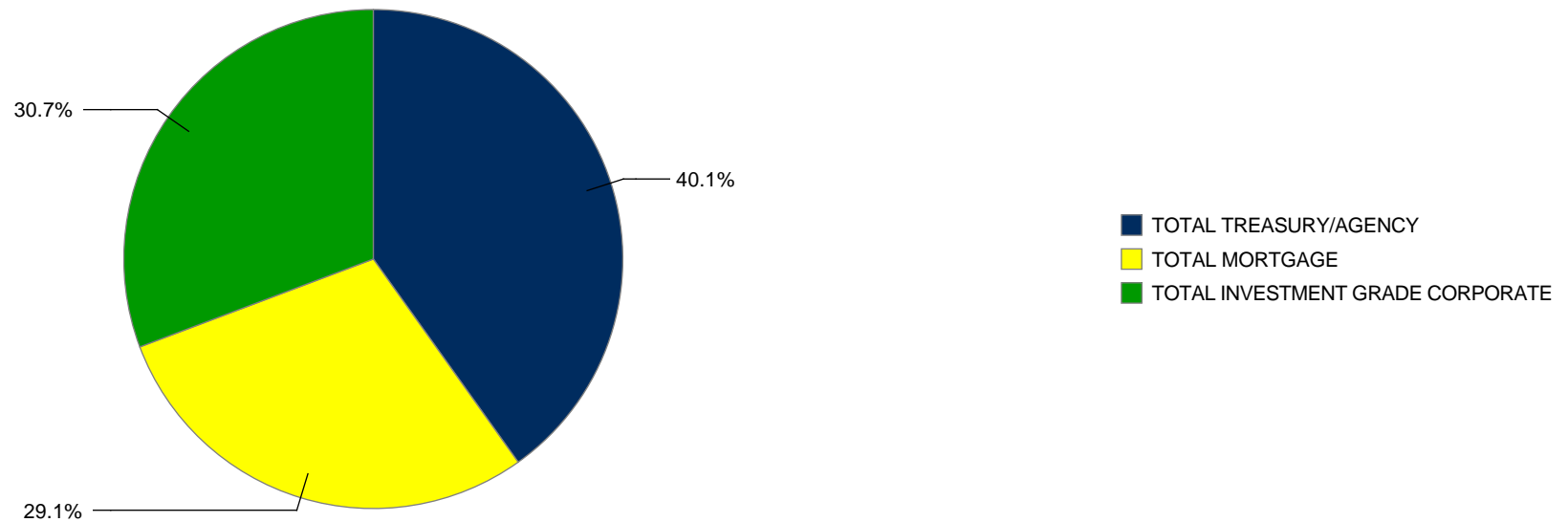


	<u>Asset Weight</u>	<u>Quarterly Returns</u>		
		<u>Fund</u>	<u>Benchmark</u>	<u>Excess</u>
TOTAL ACTIVE EMERGING MARKETS	99.60	6.00	5.05	0.95
TOTAL PASSIVE EMERGING MARKETS	0.40	4.90	5.05	(0.14)
TOTAL EMERGING MARKETS	100.00	5.99	5.05	0.95

Structured Fixed Income Asset Allocation: June 30, 2021



	<u>Market Value (Billions)</u>	<u>% of Plan</u>
TOTAL STRUCTURED + ETI	\$1.4	16.4

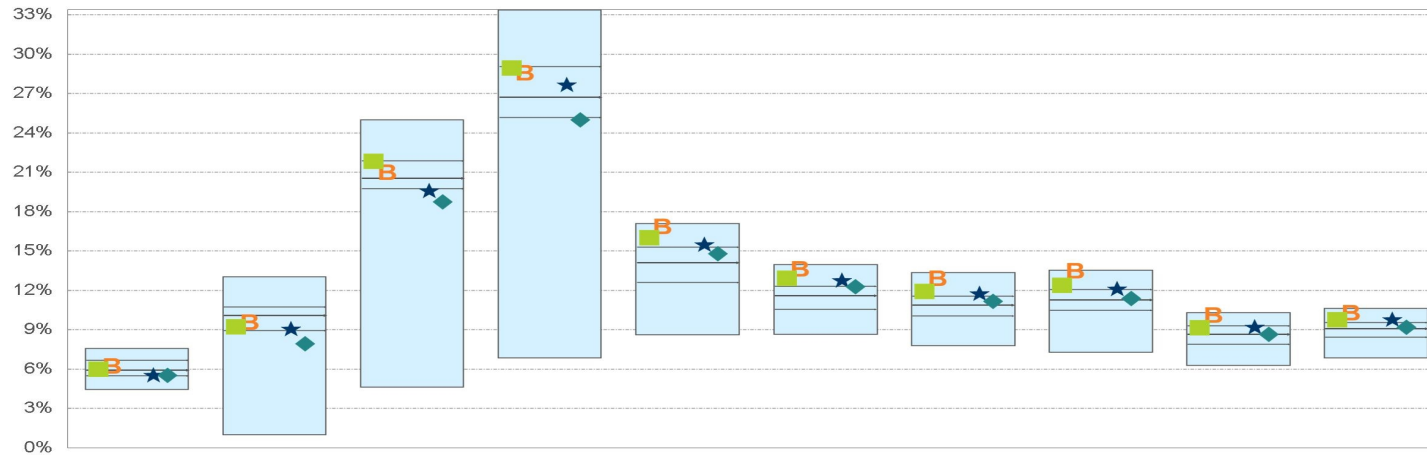


	<u>Policy Weight</u>	<u>Asset Weight</u>	<u>Under/Over Weight</u>	<u>Quarterly Returns</u>		
				<u>Fund</u>	<u>Benchmark</u>	<u>Excess</u>
TOTAL TREASURY/AGENCY	40.81	40.13	(0.68)	1.77	1.95	(0.17)
TOTAL MORTGAGE	29.94	29.14	(0.80)	0.67	0.33	0.34
TOTAL INVESTMENT GRADE CORPORATE	29.25	30.72	1.47	3.64	3.55	0.09



City of New York Performance Comparison

Total Returns of Master Trusts - Public : Plans > \$1 Billion
Cumulative Periods Ending : June 30, 2021



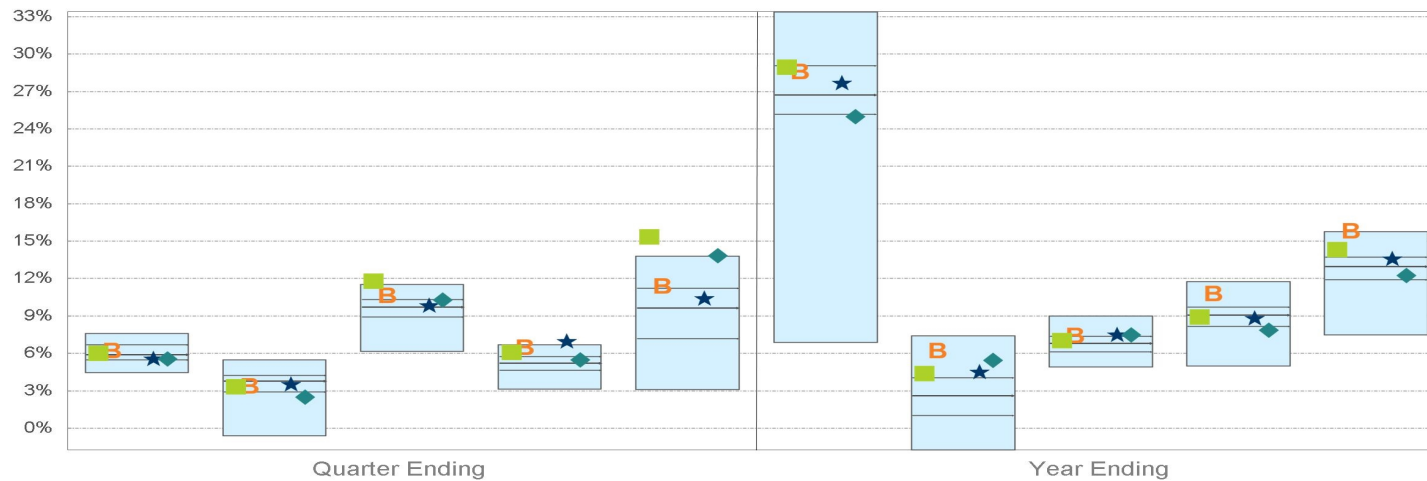
Percentile Rankings	1 Qtr	2 Qtrs	3 Qtrs	1 Year	2 Years	3 Years	4 Years	5 Years	7 Years	10 Years
5th	7.59	13.03	24.99	33.37	17.09	13.99	13.35	13.55	10.32	10.62
25th	6.68	10.73	21.88	29.05	15.29	12.32	11.58	12.07	9.29	9.54
50th	5.91	10.09	20.55	26.73	14.10	11.61	10.88	11.27	8.64	9.07
75th	5.48	8.95	19.74	25.18	12.62	10.57	10.07	10.49	7.89	8.45
95th	4.47	0.99	4.64	6.87	8.61	8.64	7.78	7.30	6.27	6.85
No. Of Obs	70	70	70	70	64	58	58	58	58	58
B Total System - BOE	6.02 (44)	9.37 (67)	20.78 (39)	28.38 (29)	16.65 (9)	13.42 (9)	12.71 (9)	13.28 (6)	9.90 (11)	10.09 (13)
★ Board of Ed Policy Ben	5.37 (77)	8.88 (76)	19.38 (76)	27.47 (36)	15.30 (23)	12.57 (18)	11.57 (26)	11.93 (30)	9.03 (32)	9.60 (21)
■ Public Mkt Equiv 25	5.78 (60)	9.03 (73)	21.63 (30)	28.74 (26)	15.81 (9)	12.73 (16)	11.71 (19)	12.18 (16)	8.93 (33)	9.57 (23)
◆ Public Mkt Equiv 35	5.32 (80)	7.71 (86)	18.54 (80)	24.77 (76)	14.57 (40)	12.08 (35)	10.95 (48)	11.17 (53)	8.43 (57)	8.99 (51)

Wilshire Trust Universe Comparison Service® (TUCS®)



City of New York Performance Comparison

Total Returns of Master Trusts - Public : Plans > \$1 Billion
Consecutive Time Periods: June 30, 2021



Percentile Rankings	Jun 21	Mar 21	Dec 20	Sep 20	Jun 20	Jun 21	Jun 20	Jun 19	Jun 18	Jun 17
5th	7.59	5.49	11.52	6.70	13.78	33.37	7.39	9.00	11.76	15.77
25th	6.68	4.25	10.33	5.76	11.22	29.05	4.05	7.36	9.72	13.72
50th	5.91	3.78	9.73	5.23	9.64	26.73	2.60	6.79	9.06	12.96
75th	5.48	2.90	8.92	4.64	7.19	25.18	1.02	6.13	8.18	11.89
95th	4.47	-0.62	6.16	3.15	3.10	6.87	-1.74	4.91	5.00	7.49
No. Of Obs	70	70	70	70	70	70	64	59	60	60
B Total System - BOE	6.02 (44)	3.16 (72)	10.43 (22)	6.29 (10)	11.19 (26)	28.38 (29)	5.99 (12)	7.23 (31)	10.59 (7)	15.60 (6)
★ Board of Ed Policy Ben	5.37 (77)	3.33 (66)	9.65 (52)	6.78 (1)	10.20 (36)	27.47 (36)	4.29 (23)	7.30 (28)	8.63 (60)	13.39 (28)
■ Public Mkt Equiv 25	5.78 (60)	3.08 (73)	11.55 (3)	5.85 (22)	15.12 (1)	28.74 (26)	4.17 (23)	6.81 (48)	8.70 (56)	14.09 (14)
◆ Public Mkt Equiv 35	5.32 (80)	2.27 (83)	10.06 (33)	5.26 (48)	13.60 (6)	24.77 (76)	5.21 (13)	7.25 (30)	7.64 (83)	12.03 (71)

Actual Fees Incurred

Through June 30, 2021



**BOARD OF EDUCATION RETIREMENT SYSTEM
INVESTMENT MANAGEMENT FEES INCURRED FOR FISCAL YEAR ENDED JUNE 30, 2020**

INVESTMENT STYLE (EQUITIES)	Avg. Net Asset Value FY 2020 (\$MM)	Base Mgmt. Fees (\$M)	Partnership Fees (\$M)	Base Mgmt. Fees & Partnership Fees in BPS	Performance / Carry Fees in (\$M)	Performance / Carry Fees in BPS	Total Investment Mgmt. Fees in (\$M)	Total Investment Mgmt. Fees in BPS
Total US Equities	2,159.63	733.76	-	3.40	1,111.30	5.15	1,845.06	8.54
Small Cap Active:	82.11	112.58	-	13.71	-	-	112.58	13.71
Small Cap Growth	82.11	112.58	-	13.71	-	-	112.58	13.71
Small Cap Value	-	-	-	-	-	-	-	-
Small Cap Core	-	-	-	-	-	-	-	-
Small Cap Fundamental Index	-	-	-	-	-	-	-	-
Mid Cap Active:	169.88	509.71	-	30.00	1,111.30	65.42	1,621.01	-
Mid Cap Growth	-	-	-	-	-	-	-	-
Mid Cap Value	-	-	-	-	-	-	-	-
Mid Cap Core	169.88	509.71	-	30.00	1,111.30	65.42	1,621.01	95.42
Other Active:								
Russell 1000 Fundamental	-	-	-	-	-	-	-	-
Legato (Emerging Manager- Equity)	11.23	55.96	-	49.83	-	-	55.96	49.83
U.S. Environmental Managers	-	-	-	-	-	-	-	-
Total US Active Equities	263.22	678.25	-	25.77	1,111.30	42.22	1,789.55	67.99
Small Cap Passive:								
Small Cap Passive	92.39	3.87	-	0.42	-	-	3.87	0.42
Mid Cap Passive:								
Mid Cap Passive	-	-	-	-	-	-	-	-
Russell / S&P Passive:								
Russell 1000 Growth Passive	-	-	-	-	-	-	-	-
Russell 1000 Value Passive	-	-	-	-	-	-	-	-
Russell 1000 Core Passive	1,347.77	26.74	-	0.20	-	-	26.74	0.20
Passive Russell 3000	-	-	-	-	-	-	-	-
Passive S&P 500	-	-	-	-	-	-	-	-
Passive Russell Top 200	456.24	24.89	-	0.55	-	-	24.89	0.55
Total US Passive Equities	1,896.41	55.50	-	0.29	-	-	55.50	0.29

Actual Fees Incurred

Through June 30, 2021



**BOARD OF EDUCATION RETIREMENT SYSTEM
INVESTMENT MANAGEMENT FEES INCURRED FOR FISCAL YEAR ENDED JUNE 30, 2020**

	Avg. Net Asset Value FY 2020 (\$MM)	Base Mgmt. Fees (\$M)	Partnership Fees (\$M)	Base Mgmt. Fees & Partnership Fees in BPS	Performance / Carry Fees in (\$M)	Performance / Carry Fees in BPS	Total Investment Mgmt. Fees in (\$M)	Total Investment Mgmt. Fees in BPS
Total International Equities	1,352.80	3,111.61	-	23.00	-	-	3,111.61	23.00
Global Equity	113.95	627.05	-	55.03	-	-	627.05	55.03
Active Total Global Equities	113.95	627.05	-	55.03	-	-	627.05	55.03
Active Total World Ex USA:	867.67	1,903.99	-	21.94	-	-	1,903.99	21.94
World Ex-USA Large & Mid Developed Growth Active	461.01	921.76	-	19.99	-	-	921.76	19.99
World Ex-USA Large & Mid Developed Value Active	308.27	653.66	-	21.20	-	-	653.66	21.20
World Ex-USA Developed Small Cap Active	98.39	328.57	-	33.40	-	-	328.57	33.40
Total World Ex USA	-	-	-	-	-	-	-	-
NON-U.S. Activist	-	-	-	-	-	-	-	-
NON-U.S. Environmental Managers	-	-	-	-	-	-	-	-
Active Emerging Markets	291.74	966.60	-	33.13	-	-	966.60	33.13
International Fund of Funds	60.00	204.03	-	34.00	-	-	204.03	34.00
Total Active International Equities	1,219.41	3,074.62	-	25.21	-	-	3,074.62	25.21
Int'l Passive Equities:								
World Ex-USA Small Cap Passive	-	-	-	-	-	-	-	-
World Ex-USA Large & Mid Cap Passive	-	-	-	-	-	-	-	-
Passive Global	-	-	-	-	-	-	-	-
Passive Emerging Markets	133.38	36.99	-	2.77	-	-	36.99	2.77
Total Int'l Passive Equities	133.38	36.99	-	2.77	-	-	36.99	2.77
REITS Active Equities	-	-	-	-	-	-	-	-
Total Equities	3,626.38	4,472.42	-	12.33	1,111.30	3.06	5,583.72	15.40

Actual Fees Incurred

Through June 30, 2021



**BOARD OF EDUCATION RETIREMENT SYSTEM
INVESTMENT MANAGEMENT FEES INCURRED FOR FISCAL YEAR ENDED JUNE 30, 2020**

INVESTMENT STYLE (FIXED INCOME)	Avg. Net Asset Value FY 2020 (\$MM)	Base Mgmt. Fees (\$M)	Partnership Fees (\$M)	Base Mgmt. Fees & Partnership Fees in BPS	Performance / Carry Fees in (\$M)	Performance / Carry Fees in BPS	Total Investment Mgmt. Fees in (\$M)	Total Investment Mgmt. Fees in BPS
Total Fixed Income	2,134.84	1,981.04	-	9.28	-	-	1,981.04	9.28
Structured Program:	1,294.47	563.98	-	4.36	-	-	563.98	4.36
Government Treas/Agency Sector	830.02	268.12	-	3.23	-	-	268.12	3.23
Long Duration Treasury	-	-	-	-	-	-	-	-
Mortgage Sector	220.37	92.90	-	4.22	-	-	92.90	4.22
Investment Grade Credit Sector	244.08	202.96	-	8.32	-	-	202.96	8.32
Developing Managers	-	-	-	-	-	-	-	-
Emerging Managers	-	-	-	-	-	-	-	-
TIPS:	307.01	15.37	-	0.50	-	-	15.37	0.50
Active TIPS Managers	-	-	-	-	-	-	-	-
Passive TIPS Managers	307.01	15.37	-	0.50	-	-	15.37	0.50
High Yield	299.95	942.47	-	31.42	-	-	942.47	31.42
Bank Loans	121.87	384.61	-	31.56	-	-	384.61	31.56
Convertible Bonds	-	-	-	-	-	-	-	-
ETI - Access - RBC	10.24	18.19	-	17.76	-	-	18.19	17.76
ETI - AFL-CIO HIT	17.75	56.42	-	31.79	-	-	56.42	31.79
Other ETI Programs (Internally Managed)	14.98	-	-	-	-	-	-	-
Short Term (Internally Managed)	68.58	-	-	-	-	-	-	-
Total Public Markets	5,761.22	6,453.46	-	11.20	1,111.30	1.93	7,564.76	13.13

Actual Fees Incurred

Through June 30, 2021



BOARD OF EDUCATION RETIREMENT SYSTEM
INVESTMENT MANAGEMENT FEES INCURRED FOR FISCAL YEAR ENDED JUNE 30, 2020

INVESTMENT STYLE (PRIVATE MARKETS)	Avg. Net Asset Value FY 2020 (\$MM)	Base Mgmt. Fees (\$M)	Partnership Fees (\$M)	Base Mgmt. Fees & Partnership Fees in BPS	Performance / Carry Fees in (\$M)	Performance / Carry Fees in BPS	Total Investment Mgmt. Fees in (\$M)	Total Investment Mgmt. Fees in BPS
Hedge Funds	-	-	-	-	-	-	-	-
Private Equity	461.42	8,052.61	1,464.92	206.27	4,124.55	89.39	13,642.07	295.65
Private Real Estate	385.34	3,754.03	1,659.80	140.49	2,294.51	59.54	7,708.34	200.04
Infrastructure	137.94	2,596.55	248.87	102.35	376.78	13.55	3,222.20	115.91
Opportunistic Fixed Income	-	-	-	-	-	-	-	-
Total Private Markets	984.70	14,403.18	3,373.58	180.53	6,795.84	69.01	24,572.61	249.54
Total Overall	6,745.92	20,856.65	3,373.58	35.92	7,907.14	11.72	32,137.37	47.64

The overall carried interest and performance incentive fees paid by BERS for the Fiscal Year: 11.72 BPS

General Footnotes:

- 1) Infrastructure's fees in bps are based off total committed amounts rather than Avg. NAV due to its early fund life juncture. The total committed amount as of 6/30/20 for BERS is : \$278m
- 2) Private Market expense data is limited to the partnerships that have provided ILPA files. In the event where there is no ILPA, GP financial statements are prorated for each of the participants of the partnership and/or adjusted for cash flow expenses reported by our custodian bank.

Securities Lending Income

Through June 30, 2021



**NYC BOARD OF EDUCATION RETIREMENT SYSTEM
SECURITIES LENDING INCOME
June 30, 2021**

	U. S. FIXED INCOME	U. S. EQUITY	INTERNATIONAL EQUITY	TOTAL
1989	70,000	-	-	70,000
1990	79,000	-	-	79,000
1991	111,000	-	-	111,000
1992	122,000	11,000	-	133,000
1993	79,000	32,000	15,000	126,000
1994	93,000	77,000	20,000	190,000
1995	112,000	93,000	12,000	217,000
1996	99,000	76,000	27,000	202,000
1997	101,000	126,000	40,000	267,000
1998	111,000	170,000	60,000	341,000
1999	159,000	263,000	100,000	522,000
2000	193,000	310,000	97,000	600,000
2001	295,000	208,000	159,000	662,000
2002	209,000	143,000	152,000	504,000
2003	153,000	158,000	195,000	506,000
2004	226,000	255,000	174,000	655,000
2005	384,000	479,000	217,000	1,080,000
2006	303,000	734,000	246,000	1,283,000
2007	593,000	1,208,000	272,000	2,073,000
2008	2,514,000	2,266,000	451,000	5,231,000
2009	698,000	1,416,000	367,000	2,481,000
2010	246,000	729,000	326,000	1,301,000
2011	340,000	943,000	599,000	1,882,000
2012	516,000	1,144,000	495,000	2,155,000
2013	349,000	1,325,000	446,000	2,120,000
2014	287,000	512,000	1,387,000	2,186,000
2015	338,000	429,000	1,985,000	2,752,000
2016	418,000	1,585,000	1,685,000	3,688,000
2017	686,000	1,015,000	1,215,000	2,916,000
2018	582,738	682,039	954,109	2,218,886
2019	319,440	712,602	788,647	1,820,689
2020	360,464	392,674	356,478	1,109,617
2021 (6 months)	268,217	307,625	46,535	622,377
Since Inception	<u>11,414,860</u>	<u>17,801,940</u>	<u>12,887,769</u>	<u>42,104,569</u>

**New York City
Board of Education Retirement System**

Appendix A

Consolidated Performance Report

Consolidated Performance Report

Through June 30, 2021



	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE 2020	CYE 2020	CYE 2019	CYE 2018	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
SYSTEM RETURN SUMMARY															
5 BERS-TOTAL PORTFOLIO - GROSS	8,713	100.00	6.02	28.38	9.37	5.99	16.68	19.37	(2.80)	28.38	13.42	13.28	10.09	9.27	07/01/1987
BERS - ESTIMATED INVESTMENT FEES			(0.13)	(0.41)	(0.21)	(0.27)	(0.29)	(0.31)	(0.18)	(0.41)	(0.30)	(0.28)			
EST MANAGEMENT FEES - PUBLIC MARKET (ACCRUAL)			(0.05)	(0.13)	(0.07)	(0.11)	(0.12)	(0.12)	(0.11)	(0.13)	(0.12)	(0.12)			
EST MANAGEMENT FEES - ALTERNATIVE MARKETS (CASH)			(0.08)	(0.28)	(0.14)	(0.16)	(0.17)	(0.19)	(0.07)	(0.28)	(0.18)	(0.16)			
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
BERS-TOTAL PORTFOLIO - NET MGR			5.89	27.97	9.16	5.72	16.39	19.06	(2.98)	27.97	13.12	13.00			
BOARD OF EDUCATION POLICY BENCHMARK			5.37	27.47	8.88	4.29	14.46	19.07	(3.19)	27.47	12.57	11.93	9.60		
EXCESS RETURN			0.52	0.50	0.28	1.44	1.93	(0.01)	0.21	0.50	0.55	1.07	0.49		
EQUITY RETURN DETAIL															
18 BERS-TOTAL EQUITY (INCLUDES ALTERNATIVES) - GROSS	5,911	67.84	7.76	41.69	13.67	4.88	20.57	24.41	(4.39)	41.69	16.73	17.23	12.59	10.17	08/01/1993
ESTIMATED INVESTMENT FEES			(0.17)	(0.59)	(0.29)	(0.34)	(0.39)	(0.42)	(0.22)	(0.59)	(0.41)	(0.37)			
EST MANAGEMENT FEES			(0.17)	(0.59)	(0.29)	(0.34)	(0.39)	(0.42)	(0.22)	(0.59)	(0.41)	(0.37)			
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
BERS-TOTAL EQUITY (INCLUDES ALTERNATIVES) - NET MGR			7.59	41.10	13.38	4.54	20.18	23.99	(4.61)	41.10	16.32	16.87			
26 BERS-TOTAL EQUITY - GROSS	4,566	52.41	7.46	44.31	12.80	5.28	23.57	28.11	(9.28)	44.31	17.00	17.54	12.42	10.02	04/01/2004
ESTIMATED INVESTMENT FEES			(0.08)	(0.25)	(0.12)	(0.17)	(0.20)	(0.20)	(0.13)	(0.25)	(0.20)	(0.18)			
EST MANAGEMENT FEES			(0.08)	(0.25)	(0.12)	(0.17)	(0.20)	(0.20)	(0.13)	(0.25)	(0.20)	(0.18)			
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
BERS-TOTAL EQUITY - NET MGR			7.38	44.06	12.68	5.11	23.38	27.91	(9.41)	44.06	16.80	17.36			
34 BERS-TOTAL DOMESTIC EQUITY - GROSS	2,889	33.15	8.02	43.93	14.67	6.98	21.91	31.14	(4.58)	43.93	18.86	18.31	14.72	10.85	09/01/1991
ESTIMATED INVESTMENT FEES			(0.07)	(0.13)	(0.08)	(0.09)	(0.11)	(0.10)	(0.06)	(0.13)	(0.12)	(0.09)			
BERS-TOTAL DOMESTIC EQUITY - NET MGR			7.95	43.79	14.59	6.89	21.80	31.04	(4.64)	43.79	18.75	18.22			
RUSSELL 3000 (DAILY)			8.24	44.16	15.11	6.53	20.89	31.02	(5.24)	44.16	18.73	17.89	14.70	10.70	
EXCESS RETURN			(0.29)	(0.37)	(0.52)	0.36	0.91	0.02	0.60	(0.37)	0.02	0.33	0.02	0.16	
44 BERS-TOTAL SMALL CAP - GROSS	200	2.30	6.67	60.95	18.55	(1.99)	24.30	25.20	(10.89)	60.95	15.13	17.43	11.98	8.92	04/01/2004
ESTIMATED INVESTMENT FEES			(0.47)	(0.91)	(0.57)	(0.08)	(0.21)	(0.00)	(0.00)	(0.91)	(0.25)	(0.16)			
BERS-TOTAL SMALL CAP - NET MGR			6.19	60.05	17.98	(2.07)	24.10	25.20	(10.90)	60.05	14.88	17.28			
RUSSELL 2000 (DAILY)			4.29	62.03	17.54	(6.63)	19.96	25.52	(11.01)	62.03	13.52	16.47	12.34	9.68	
EXCESS RETURN			1.90	(1.98)	0.44	4.55	4.13	(0.33)	0.12	(1.98)	1.36	0.81	(0.35)	(0.77)	
54 BERS-TOTAL MID CAP - GROSS	272	3.13	3.24	44.24	8.81	0.83	26.31	33.87	(6.73)	44.24	16.78	18.69	14.85	15.76	10/01/2010
ESTIMATED INVESTMENT FEES			(0.34)	(0.80)	(0.44)	(0.95)	(1.19)	(1.19)	(0.64)	(0.80)	(1.08)	(0.81)			
BERS-TOTAL MID CAP - NET MGR			2.90	43.43	8.37	(0.12)	25.12	32.68	(7.37)	43.43	15.70	17.88			
RUSSELL MIDCAP (DAILY)			7.50	49.80	16.25	(2.24)	17.10	30.54	(9.06)	49.80	16.45	15.62	13.24	14.38	
EXCESS RETURN			(4.60)	(6.36)	(7.88)	2.12	8.02	2.14	1.69	(6.36)	(0.74)	2.26	1.62	1.39	
64 BERS-TOTAL RUSSELL 1000 - GROSS	1,717	19.71	8.57	43.19	15.07	7.49	20.97	31.35		43.19	19.25			19.01	04/01/2018
ESTIMATED INVESTMENT FEES			(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)		(0.00)	(0.00)			(0.00)	
BERS-TOTAL RUSSELL 1000 - NET MGR			8.57	43.19	15.07	7.48	20.97	31.35		43.19	19.24			19.00	
RUSSELL 1000 (DAILY)			8.54	43.07	14.95	7.48	20.96	31.43		43.07	19.16			18.84	
EXCESS RETURN			0.04	0.11	0.11	0.00	0.00	(0.07)		0.11	0.09			0.16	
74 BERS-TOTAL RUSSELL TOP 200 PASSIVE - GROSS	681	7.81	8.91	40.72	14.49	11.26	22.41	31.67		40.72	20.19			20.26	05/01/2018
ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.00)	(0.01)	(0.01)	(0.00)		(0.01)	(0.01)			(0.01)	
BERS-TOTAL RUSSELL TOP 200 PASSIVE - NET MGR			8.90	40.72	14.49	11.25	22.40	31.66		40.72	20.19			20.25	
RUSSELL TOP 200 INDEX (DAILY)			8.93	40.81	14.50	11.20	22.37	31.75		40.81	20.19			20.26	
EXCESS RETURN			(0.02)	(0.09)	(0.02)	0.05	0.03	(0.09)		(0.09)	(0.00)			(0.01)	

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EQUITY RETURN DETAIL															
86	BERS-TOTAL EMERGING MANAGER - GROSS	18	0.21	4.71	67.82	21.66	(7.77)	19.98	23.94	(7.81)	67.82	15.84		15.15	05/01/2017
	ESTIMATED INVESTMENT FEES			(0.19)	(0.94)	(0.38)	(0.46)	(0.60)	(0.62)	(0.46)	(0.94)	(0.60)		(0.54)	
	BERS-TOTAL EMERGING MANAGER - NET MGR			4.52	66.87	21.28	(8.22)	19.38	23.33	(8.27)	66.87	15.24		14.61	
	RUSSELL 2000 (DAILY)			4.29	62.03	17.54	(6.63)	19.96	25.52	(11.01)	62.03	13.52		14.26	
	EXCESS RETURN			0.23	4.85	3.75	(1.60)	(0.58)	(2.20)	2.74	4.85	1.72		0.35	
96	BERS-TOTAL WORLD ex-USA EQUITY - GROSS	888	10.19	6.05	48.07	8.77	6.45	34.62	26.47	(14.67)	48.07	16.04	18.28	10.01	8.89
	ESTIMATED INVESTMENT FEES			(0.06)	(0.36)	(0.13)	(0.26)	(0.33)	(0.31)	(0.21)	(0.36)	(0.28)	(0.29)		
	BERS-TOTAL WORLD ex-USA EQUITY - NET MGR			5.99	47.71	8.63	6.18	34.29	26.16	(14.88)	47.71	15.76	18.00		
	NYC DEVELOPED EQUITY BENCHMARK			5.52	34.82	9.92	(5.11)	8.32	22.91	(14.68)	34.82	8.62	10.64	6.06	6.49
	EXCESS RETURN			0.47	12.89	(1.28)	11.29	25.97	3.26	(0.19)	12.89	7.14	7.36	3.95	2.40
106	BERS-TOTAL WORLD ex-USA LARGE & MID ACTIVE - GROSS	742	8.51	5.75	47.10	7.39	7.88	37.50	27.08	(13.90)	47.10	16.62	18.91	10.43	11/01/2013
	ESTIMATED INVESTMENT FEES			(0.06)	(0.34)	(0.12)	(0.25)	(0.32)	(0.29)	(0.20)	(0.34)	(0.27)	(0.27)	(0.26)	
	BERS-TOTAL WORLD ex-USA LARGE & MID ACTIVE - NET MGR			5.69	46.76	7.27	7.63	37.17	26.79	(14.09)	46.76	16.35	18.64	10.17	
	NYC CUSTOM WORLD EX-USA LG & MID ACT INDEX			5.65	33.60	9.92	(5.42)	7.59	22.49	(14.09)	33.60	8.57	10.48	5.60	
	EXCESS RETURN			0.04	13.16	(2.65)	13.05	29.59	4.30	(0.00)	13.16	7.78	8.16	4.57	
126	BERS-TOTAL WORLD ex-USA SMALL CAP ACTIVE - GROSS	146	1.68	7.63	52.68	16.39	(2.72)	17.27	22.61	(18.96)	52.68	11.78	14.93	11.47	05/01/2013
	ESTIMATED INVESTMENT FEES			(0.09)	(0.50)	(0.19)	(0.32)	(0.39)	(0.41)	(0.27)	(0.50)	(0.37)	(0.38)		
	BERS-TOTAL WORLD ex-USA SMALL CAP ACTIVE - NET MGR			7.54	52.17	16.20	(3.04)	16.88	22.21	(19.22)	52.17	11.41	14.55		
	S&P EPAC SMALL CAP USD NET			5.31	42.23	9.16	(4.00)	13.78	23.71	(18.58)	42.23	8.53	11.83	9.11	
	EXCESS RETURN			2.23	9.94	7.04	0.96	3.10	(1.50)	(0.65)	9.94	2.88	2.72	2.36	
136	BERS-TOTAL EMERGING MARKETS - GROSS	525	6.02	6.11	39.86	9.31	(5.94)	13.05	16.90	(16.14)	39.86	9.46	12.86	4.53	8.21
	ESTIMATED INVESTMENT FEES			(0.11)	(0.41)	(0.20)	(0.22)	(0.26)	(0.27)	(0.20)	(0.41)	(0.28)	(0.30)		
	BERS-TOTAL EMERGING MARKETS - NET MGR			5.99	39.44	9.11	(6.16)	12.79	16.63	(16.34)	39.44	9.18	12.56		
	MSCI EMERGING MARKETS			5.05	40.90	7.45	(3.39)	18.31	18.42	(14.57)	40.90	11.27	13.03	4.28	
	EXCESS RETURN			0.95	(1.46)	1.66	(2.77)	(5.52)	(1.79)	(1.77)	(1.46)	(2.10)	(0.47)	0.25	
146	BERS-TOTAL ACTIVE EMERGING MARKETS - GROSS	523	6.00	6.11	38.63	9.45	(6.90)	11.09	16.09	(16.99)	38.63	8.48	12.31	4.25	8.81
	ESTIMATED INVESTMENT FEES			(0.11)	(0.50)	(0.22)	(0.31)	(0.37)	(0.38)	(0.28)	(0.50)	(0.37)	(0.38)		
	BERS-TOTAL ACTIVE EMERGING MARKETS - NET MGR			6.00	38.13	9.23	(7.21)	10.72	15.71	(17.27)	38.13	8.11	11.92		
	MSCI EMERGING MARKETS			5.05	40.90	7.45	(3.39)	18.31	18.42	(14.57)	40.90	11.27	13.03	4.28	8.82
	EXCESS RETURN			0.95	(2.77)	1.79	(3.82)	(7.59)	(2.71)	(2.70)	(2.77)	(3.17)	(1.10)	(0.04)	(0.01)
156	BERS-TOTAL PASSIVE EMERGING MARKETS - GROSS	2	0.02	4.91	40.69	7.77	(3.70)	17.29	18.79	(14.45)	40.69	11.18		13.21	12/01/2016
	ESTIMATED INVESTMENT FEES			(0.01)	(0.03)	(0.01)	(0.02)	(0.02)	(0.03)	0.01	(0.03)	(0.02)		(0.04)	
	BERS-TOTAL PASSIVE EMERGING MARKETS - NET MGR			4.90	40.66	7.76	(3.72)	17.27	18.76	(14.45)	40.66	11.16		13.17	
	MSCI EMERGING MARKETS			5.05	40.90	7.45	(3.39)	18.31	18.42	(14.57)	40.90	11.27		13.27	
	EXCESS RETURN			(0.14)	(0.24)	0.31	(0.34)	(1.04)	0.34	0.12	(0.24)	(0.12)		(0.10)	
166	BERS-TOTAL INTERNATIONAL FUND OF FUNDS - GROSS	84	0.97	8.44	40.75	10.16	(2.01)	17.00	22.67	(14.23)	40.75	11.57		11.31	05/01/2017
	ESTIMATED INVESTMENT FEES			(0.29)	(0.70)	(0.35)	(0.33)	(0.41)	(0.42)	(0.30)	(0.70)	(0.44)		(0.42)	
	BERS-TOTAL INTERNATIONAL FUND OF FUNDS - NET MGR			8.16	40.05	9.81	(2.34)	16.60	22.25	(14.53)	40.05	11.13		10.89	
	MSCI ACWI EX USA IMI NET			5.60	37.18	9.58	(4.74)	11.12	21.63	(14.76)	37.18	9.42		9.53	
	EXCESS RETURN			2.56	2.87	0.23	2.39	5.48	0.62	0.23	2.87	1.70		1.36	
176	BERS-TOTAL GLOBAL EQUITY - GROSS	181	2.07	8.92	43.05	9.44	16.61	39.74	36.70		43.05	22.37		21.37	06/01/2018
	ESTIMATED INVESTMENT FEES			(0.14)	(0.77)	(0.29)	(0.64)	(0.77)	(0.79)		(0.77)	(0.67)		(0.67)	
	BERS-TOTAL GLOBAL EQUITY - NET MGR			8.78	42.28	9.15	15.96	38.98	35.91		42.28	21.70		20.71	
	MSCI AC WORLD (DAILY CONST)			7.39	39.26	12.30	2.11	16.25	26.60		39.26	14.57		13.95	
	EXCESS RETURN			1.38	3.02	(3.15)	13.85	22.72	9.31		3.02	7.13		6.76	

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ALTERNATIVE EQUITY RETURN DETAIL																
188	BERS-TOTAL PRIVATE EQUITY (TIME WEIGHTED) - GROSS	713	8.19	13.30	54.87	25.57	4.59	18.72	14.11	20.44	54.87	23.49	21.04	17.19	10.17	07/01/2006
	ESTIMATED INVESTMENT FEES			(0.54)	(2.40)	(1.16)	(1.06)	(1.24)	(1.45)	(0.76)	(2.40)	(1.45)	(1.37)			
	BERS-TOTAL PRIVATE EQUITY (TIME WEIGHTED) - NET MGR			12.77	52.48	24.41	3.52	17.48	12.66	19.69	52.48	22.03	19.68			
	NYC R3000 +3% LAGGED			7.12	67.21	23.72	(6.37)	18.42	6.00	21.06	67.21	20.59	20.09	17.30	14.18	
	EXCESS RETURN			5.65	(14.74)	0.69	9.90	(0.94)	6.66	(1.37)	(14.74)	1.44	(0.42)	(0.12)	(4.01)	
198	BERS-TOTAL PRIVATE REAL ESTATE (TIME WEIGHTED) - GROSS	464	5.32	4.13	10.43	8.12	1.64	0.82	7.61	11.95	10.43	7.25	9.30	10.91	10.80	12/01/2010
	ESTIMATED INVESTMENT FEES			(0.35)	(0.97)	(0.57)	(0.64)	(0.63)	(0.71)	(0.56)	(0.97)	(0.73)	(0.74)			
	BERS-TOTAL PRIVATE REAL ESTATE (TIME WEIGHTED) - NET MGR			3.78	9.46	7.55	1.00	0.18	6.90	11.40	9.46	6.52	8.56			
	NCREIF NFI-ODCE NET + 100 BP			3.94	8.15	6.16	2.34	1.35	5.43	8.43	8.15	5.64	6.68	9.68	10.49	
	EXCESS RETURN			(0.16)	1.31	1.39	(1.34)	(1.16)	1.47	2.97	1.31	0.89	1.89	1.24	0.31	
208	BERS-TOTAL INFRASTRUCTURE (TIME WEIGHTED) - GROSS	168	1.92	4.95	21.46	10.16	8.72	10.82	13.63	14.77	21.46	14.12	15.76	14.98	12/01/2013	
	ESTIMATED INVESTMENT FEES			(0.81)	(2.01)	(1.19)	(1.71)	(1.40)	(1.45)	(1.06)	(2.01)	(1.60)	(1.73)		(2.77)	
	BERS-TOTAL INFRASTRUCTURE (TIME WEIGHTED) - NET MGR			4.14	19.45	8.97	7.01	9.42	12.17	13.70	19.45	12.52	14.03		12.21	
	CPI + 4%			3.35	9.57	5.65	4.74	5.25	6.38	6.02	9.57	6.66	6.54		6.03	
	EXCESS RETURN			0.80	9.89	3.32	2.27	4.17	5.79	7.69	9.89	5.85	7.49		6.18	

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FIXED INCOME RETURN DETAIL																
220	BERS-TOTAL FIXED INCOME - GROSS	2,803	32.16	2.40	4.35	0.75	8.25	9.20	9.46	(0.33)	4.35	6.59	4.67	4.48	7.63	02/01/1980
	ESTIMATED INVESTMENT FEES			(0.03)	(0.11)	(0.05)	(0.10)	(0.10)	(0.10)	(0.09)	(0.11)	(0.10)	(0.11)			
	EST MANAGEMENT FEES															
	EST INCENTIVE FEES															
	EST OTHER FEES															
	EST FEE OFFSETS															
	BERS-TOTAL FIXED INCOME - NET MGR			2.37	4.24	0.70	8.15	9.09	9.36	(0.42)	4.24	6.48	4.56			
228	BERS-FIXED INCOME (ex ALTERNATIVE CREDIT & CASH) - GROSS	1,859	21.34	2.26	0.68	(1.01)	10.82	10.08	9.00	(0.45)	0.68	6.28	3.79		4.00	11/01/2013
	ESTIMATED INVESTMENT FEES			(0.01)	(0.05)	(0.03)	(0.04)	(0.05)	(0.04)	(0.04)	(0.05)	(0.05)	(0.05)		(0.06)	
	EST MANAGEMENT FEES															
	EST INCENTIVE FEES															
	EST OTHER FEES															
	EST FEE OFFSETS															
	BERS-FIXED INCOME (ex ALTERNATIVE CREDIT & CASH) - NET MGR			2.25	0.63	(1.04)	10.78	10.03	8.96	(0.49)	0.63	6.24	3.75		3.94	
236	BERS-TOTAL STRUCTURED FIXED INCOME - GROSS	1,382	15.86	2.02	(0.54)	(1.61)	11.52	10.05	9.16	(0.36)	(0.54)	6.28	3.74	4.27	7.36	01/01/1985
	ESTIMATED INVESTMENT FEES			(0.01)	(0.05)	(0.02)	(0.05)	(0.05)	(0.05)	(0.04)	(0.05)	(0.05)	(0.05)			
	BERS-TOTAL STRUCTURED FIXED INCOME - NET MGR			2.01	(0.59)	(1.63)	11.47	10.00	9.12	(0.40)	(0.59)	6.23	3.69			
	NYC CUSTOM STRUCTURED INDEX-BERS			1.93	(0.42)	(1.55)	13.00	11.38	10.27	(0.21)	(0.42)	7.20	4.12	4.34		
	EXCESS RETURN			0.08	(0.17)	(0.08)	(1.53)	(1.38)	(1.15)	(0.19)	(0.17)	(0.96)	(0.43)	(0.08)		
246	BERS-TOTAL GOVERNMENT - GROSS	572	6.57	1.78	(2.80)	(2.31)	13.52	10.87	8.16	(0.23)	(2.80)	6.02	2.14	4.27	6.97	05/01/1987
	ESTIMATED INVESTMENT FEES			(0.00)	(0.02)	(0.01)	(0.04)	(0.03)	(0.03)	(0.03)	(0.02)	(0.03)	(0.03)			
	BERS-TOTAL GOVERNMENT - NET MGR			1.77	(2.83)	(2.32)	13.48	10.84	8.13	(0.25)	(2.83)	6.00	2.11			
	CUSTOM GOVERNMENT BENCHMARK - BOE			1.95	(3.00)	(2.41)	17.08	13.94	10.40	(0.05)	(3.00)	7.83	3.44	4.97		
	EXCESS RETURN			(0.17)	0.17	0.09	(3.60)	(3.10)	(2.27)	(0.20)	0.17	(1.83)	(1.34)	(0.70)		
256	BERS-TOTAL MORTGAGE - GROSS	372	4.26	0.52	0.18	(0.61)	5.94	4.47	6.97	1.04	0.18	4.22	2.76	3.06	5.45	08/01/1993
	ESTIMATED INVESTMENT FEES			(0.01)	(0.04)	(0.02)	(0.04)	(0.04)	(0.05)	(0.04)	(0.04)	(0.04)	(0.04)			
	BERS-TOTAL MORTGAGE - NET MGR			0.51	0.14	(0.63)	5.90	4.42	6.93	1.00	0.14	4.18	2.72			
	NYC CUSTOM MORTGAGE BENCHMARK			0.33	(0.48)	(0.77)	5.96	3.91	6.68	1.01	(0.48)	3.91	2.33	2.67	4.98	
	EXCESS RETURN			0.18	0.62	0.14	(0.06)	0.52	0.25	(0.01)	0.62	0.27	0.39	0.40	0.47	
266	BERS-TOTAL INVESTMENT GRADE CORPORATE - GROSS	438	5.03	3.67	3.35	(1.71)	9.81	10.51	14.68	(2.55)	3.35	7.75	5.15	5.37	7.18	04/01/1987
	ESTIMATED INVESTMENT FEES			(0.03)	(0.09)	(0.05)	(0.09)	(0.09)	(0.10)	(0.08)	(0.09)	(0.09)	(0.09)			
	BERS-TOTAL INVESTMENT GRADE CORPORATE - NET MGR			3.64	3.26	(1.76)	9.72	10.41	14.58	(2.63)	3.26	7.66	5.06			
	NYC CUSTOM IGC BENCHMARK			3.55	3.34	(1.07)	9.26	9.70	13.40	(1.90)	3.34	7.53	4.70	4.90		
	EXCESS RETURN			0.09	(0.08)	(0.68)	0.45	0.71	1.18	(0.73)	(0.08)	0.12	0.36	0.47		

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FIXED INCOME RETURN DETAIL															
278	BERS-TOTAL CORE FI- DEVELOPING MGRS - GROSS	128	1.47	2.19	(1.15)									(0.02)	09/01/2020
	ESTIMATED INVESTMENT FEES			(0.05)	(0.10)									(0.17)	
	BERS-TOTAL CORE FI- DEVELOPING MGRS - NET MGR			2.14	(1.25)									(0.18)	
	BLOOMBERG U.S. AGGREGATE			1.83	(1.60)									(1.00)	
	EXCESS RETURN			0.31	0.35									0.82	
288	BERS-TOTAL TIPS - GROSS	305	3.50	3.43	6.50	1.74	8.36	11.07	8.45	(1.28)	6.50	6.56	4.19	3.58	06/01/2005
	ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)		
	BERS-TOTAL TIPS - NET MGR			3.43	6.50	1.74	8.36	11.06	8.44	(1.29)	6.50	6.55	4.18		
	BLOOMBERG GLOBAL INFL-LINKED: U.S. TIPS			3.25	6.51	1.73	8.28	10.99	8.43	(1.26)	6.51	6.53	4.17	3.40	4.16
	EXCESS RETURN			0.18	(0.02)	0.01	0.08	0.07	0.02	(0.03)	(0.02)	0.02	0.01	0.17	0.14
298	BERS-TOTAL TARGETED INVESTMENTS (NO CASH) - GROSS	44	0.50	2.07	0.60	(0.91)	8.34	6.81	9.87	1.08	0.60	6.06	3.57	4.13	12/01/1984
	ESTIMATED INVESTMENT FEES			(0.04)	(0.17)	(0.08)	(0.19)	(0.19)	(0.21)	(0.25)	(0.17)	(0.20)	(0.22)	(0.28)	(0.13)
	BERS-TOTAL TARGETED INVESTMENTS (NO CASH) - NET MGR			2.02	0.42	(0.99)	8.15	6.63	9.66	0.83	0.42	5.85	3.35	3.84	6.52
	BERS CUSTOM BENCHMARK (NO CASH)			1.06	(0.05)	(0.96)	7.37	5.84	7.67	0.85	(0.05)	4.78	2.88	3.20	
	EXCESS RETURN			0.96	0.47	(0.03)	0.78	0.78	1.99	(0.02)	0.47	1.07	0.47	0.64	

Consolidated Performance Report

Through June 30, 2021



	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE 2020	CYE 2020	CYE 2019	CYE 2018	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
ALTERNATIVE CREDIT INCOME RETURN DETAIL															
310 BERS-TOTAL HIGH YIELD - GROSS	781	8.96	2.76	16.38	4.33	1.26	8.45	14.08	(1.64)	16.38	8.17	7.84	6.88	6.23	08/01/1997
ESTIMATED INVESTMENT FEES			(0.07)	(0.35)	(0.15)	(0.32)	(0.34)	(0.37)	(0.30)	(0.35)	(0.33)	(0.34)			
BERS-TOTAL HIGH YIELD - NET MGR			2.69	16.03	4.18	0.94	8.12	13.71	(1.94)	16.03	7.84	7.51			
HIGH YIELD CUSTOM BENCHMARK			2.74	15.34	3.61	(0.00)	7.05	14.32	(2.34)	15.34	7.42	7.19	6.41	6.14	
EXCESS RETURN			(0.05)	0.69	0.56	0.94	1.07	(0.61)	0.40	0.69	0.42	0.32	0.47	0.09	
320 BERS- TOTAL BANK LOANS - GROSS	1	0.01				(2.77)	1.43	8.17	0.71						12/01/2012
ESTIMATED INVESTMENT FEES						(0.31)	(0.31)	(0.36)	(0.33)						
BERS-TOTAL BANK LOANS - NET MGR						(3.08)	1.12	7.82	0.38						
CSFB LEVERAGED LOAN INDEX						(2.27)	2.78	8.17	1.14						
EXCESS RETURN						(0.81)	(1.66)	(0.36)	(0.76)						
330 BERS-TOTAL OPPORTUNISTIC FIXED INCOME - GROSS	92	1.06	4.72		11.32									18.06	08/01/2020
ESTIMATED INVESTMENT FEES			0.00		0.00									0.00	
BERS-TOTAL OPPORTUNISTIC FIXED INCOME - NET MGR			4.72		11.32									18.06	
OPPORTUNISTIC FIXED INCOME JPMGHY / CSFB 50/50 BLEND PLUS 300			2.83		5.27									13.62	
EXCESS RETURN			1.89		6.05									4.43	
CASH SUMMARY															
342 Short Term BERS - GROSS	70	0.81	0.05	0.15	0.08	1.36	0.44	2.00	1.92	0.15	1.20	1.15	0.78	1.88	10/01/2000
ESTIMATED INVESTMENT FEES			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Short Term BERS - NET MGR			0.05	0.15	0.08	1.36	0.44	2.00	1.92	0.15	1.20	1.15	0.78		
346 Cash Account	0	0.00													
348 Securities Lending	0	0.00													
350 KKR Cash Account	0	0.00													

**New York City
Board of Education Retirement System**

Appendix B

Public Markets Manager Performance Detail

Public Markets Manager Performance Detail

Net Returns Through June 30, 2021



	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
EQUITY SUMMARY										
US EQUITY										
Wasatch-US SCG	111	1.28	7.50	52.70	13.18	38.80				
RUSSELL 2000 GROWTH DAILY			3.92	51.36	8.98	34.63				
Excess			3.58	1.34	4.20	4.17				
BlackRock US SCG R2000	0	0.00	3.91	51.45	9.30	34.42	28.39	(9.14)	22.26	11.29
RUSSELL 2000 GROWTH DAILY			3.92	51.36	8.98	34.63	28.48	(9.31)	22.17	11.32
Excess			(0.01)	0.09	0.32	(0.21)	(0.09)	0.17	0.09	(0.02)
BlackRock US SCV R2000	89	1.02	4.48	73.35	26.57	4.87	22.60	(12.79)	7.34	31.71
RUSSELL 2000 VALUE DAILY			4.56	73.28	26.69	4.63	22.39	(12.86)	7.84	31.74
Excess			(0.08)	0.07	(0.12)	0.24	0.20	0.08	(0.49)	(0.03)
Wellington US MCC	272	3.13	2.90	43.43	8.37	25.12	32.68	(7.37)	25.06	12.28
S&P MID CAP 400			3.64	53.24	17.59	13.66	26.20	(11.08)	16.24	20.74
Excess			(0.74)	(9.80)	(9.22)	11.46	6.48	3.71	8.82	(8.45)
BlackRock US LMC R1000 Core	1,717	19.71	8.57	43.19	15.07	20.97	31.36			
RUSSELL 1000 (DAILY)			8.54	43.07	14.95	20.96	31.43			
Excess			0.04	0.11	0.11	0.00	(0.07)			
SSGA US LMC Top 200 Core	681	7.81	8.90	40.72	14.49	22.40	31.66			
RUSSELL TOP 200 INDEX (DAILY)			8.93	40.81	14.50	22.37	31.75			
Excess			(0.02)	(0.09)	(0.02)	0.03	(0.09)			
FUND OF FUNDS										
BERS-TOTAL FUNDS OF FUNDS	18	0.21	4.52	66.87	21.28	19.38	23.33	(8.27)		
RUSSELL 2000 (DAILY)			4.29	62.03	17.54	19.96	25.52	(11.01)		
Excess			0.23	4.85	3.75	(0.58)	(2.20)	2.74		

Public Markets Manager Performance Detail



Net Returns Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
BERS-TOTAL LEGATO	18	0.21	4.52	66.87	21.28	19.38	23.33	(8.27)		
RUSSELL 2000 (DAILY)			4.29	62.03	17.54	19.96	25.52	(11.01)		
Excess			0.23	4.85	3.75	(0.58)	(2.20)	2.74		
NON - US EQUITY										
Sprucegrove WorldxUS LMCC	370	4.24	3.96	45.61	10.47	5.35	17.55	(13.67)	27.15	11.14
NYC Developed Value Benchmark ^[1]			5.65	33.60	9.92	7.59	22.49	(14.09)	22.77	5.02
Excess			(1.68)	12.00	0.55	(2.24)	(4.94)	0.42	4.38	6.12
Baillie Gifford WorldxUS LMCC	371	4.25	7.38	46.11	4.05	66.99	36.64	(15.35)	44.17	0.70
NYC Developed Growth Benchmark ^[2]			5.65	33.60	9.92	7.59	22.49	(14.09)	27.77	(3.04)
Excess			1.74	12.51	(5.87)	59.40	14.15	(1.26)	16.40	3.74
Acadian WorldxUS SCC	110	1.27	8.71	51.87	17.95	15.96	21.82	(19.22)	38.38	6.41
S&P EPAC Small Cap USD NET			5.31	42.23	9.16	13.78	23.71	(18.58)	33.47	1.34
Excess			3.40	9.64	8.78	2.18	(1.89)	(0.65)	4.91	5.07
Algert EAFE SCC	36	0.41	4.12	40.41	11.33	9.76				
MSCI EAFE SMALL CAP NET (DAILY)			4.34	40.98	9.04	12.34				
Excess			(0.23)	(0.58)	2.29	(2.59)				
EMERGING MARKETS										
Acadian EM	364	4.18	4.86	40.79	11.34	10.72	15.71	(17.27)	40.45	12.74
MSCI EMERGING MARKETS			5.05	40.90	7.45	18.31	18.42	(14.57)	37.28	11.19
Excess			(0.19)	(0.12)	3.89	(7.59)	(2.71)	(2.70)	3.16	1.55
JP Morgan AM-EM ACG	159	1.82	8.93							
MSCI EMERGING MARKETS			5.05							
Excess			3.88							
BlackRock MSCI EM Core	2	0.02	4.90	40.66	7.76	17.27	18.76	(14.45)	37.25	
MSCI EMERGING MARKETS			5.05	40.90	7.45	18.31	18.42	(14.57)	37.28	
Excess			(0.14)	(0.24)	0.31	(1.04)	0.34	0.12	(0.03)	

Public Markets Manager Performance Detail



Net Returns Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
INTERNATIONAL FOF										
BERS-TOTAL INTERNATIONAL FOF	84	0.97	8.16	40.05	9.81	16.60	22.25	(14.53)		
MSCI ACWI ex USA IMI Net			5.60	37.18	9.58	11.12	21.63	(14.76)		
Excess			2.56	2.87	0.23	5.48	0.62	0.23		
BERS-TOTAL INTERNATIONAL XPONANCE										
BERS-TOTAL INTERNATIONAL XPONANCE	84	0.97	8.16	40.05	9.81	16.60	22.25	(14.53)		
MSCI ACWI ex USA IMI Net			5.60	37.18	9.58	11.12	21.63	(14.76)		
Excess			2.56	2.87	0.23	5.48	0.62	0.23		
GLOBAL EQUITY										
Morgan Stanley-Global	97	1.11	7.27	42.76	5.86	58.66	38.03			
MSCI AC WORLD (Daily Const)			7.39	39.26	12.30	16.25	26.60			
Excess			(0.13)	3.50	(6.44)	42.41	11.44			
Fiera-Global	84	0.96	10.57	41.73	13.20	20.57	33.97			
MSCI World Index			7.74	39.04	13.05	15.90	27.67			
Excess			2.83	2.68	0.16	4.66	6.30			
FIXED INCOME SUMMARY										
STRUCTURED FIXED INCOME										
BlackRock Mortgages	372	4.26	0.51	0.14	(0.63)	4.42	6.93	1.00	3.06	2.32
NYC Custom Mortgage Benchmark ⁽³⁾			0.33	(0.48)	(0.77)	3.91	6.68	1.01	2.47	1.59
Excess			0.18	0.62	0.14	0.52	0.25	(0.01)	0.59	0.73
Prudential Corporate	0	0.00				9.89	13.63	(1.95)	6.21	5.86
NYC - Investment Grade Credit						9.70	13.40	(1.90)	6.04	5.56
Excess						0.19	0.24	(0.05)	0.17	0.30
Taplin Corporate	0	0.00				11.01	15.70	(3.42)	7.18	8.02
NYC Custom IGC Benchmark ⁽⁴⁾						9.70	13.40	(1.90)	6.04	5.56
Excess						1.31	2.30	(1.52)	1.14	2.46

Public Markets Manager Performance Detail



Net Returns Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
T Rowe Price-Corporate	438	5.02	3.64							
Bloomberg U.S. Corporate Inv Grade			3.55							
Excess			0.09							
SSGA LI Treasury	138	1.58	4.06	(6.27)	(4.80)	12.59	10.57	(0.18)	4.92	1.23
NYC - Treasury Agency Plus Five			4.17	(6.52)	(5.04)	12.85	10.40	(0.05)	4.66	1.21
Excess			(0.11)	0.24	0.24	(0.26)	0.17	(0.12)	0.27	0.01
SSGA IT Treasury 1-10Y	227	2.61	0.65	(1.14)	(1.12)	5.73				
FTSE USBIG Treasury/Agency 1-10 y			0.68	(1.09)	(1.06)	5.72				
Excess			(0.03)	(0.05)	(0.05)	0.02				
SSGA ST Treasury 1-3Y	148	1.69	(0.03)	0.08	(0.09)	3.05	3.56	1.51	0.45	
FTSE USBIG Treasury 1-3 Y Index			(0.03)	0.07	(0.08)	3.09	3.56	1.56	0.42	
Excess			0.00	0.02	(0.02)	(0.04)	0.00	(0.05)	0.03	
SSGA LT Treasury 10Y Plus	60	0.69	6.97							
FTSE Treasury 10+			6.98							
Excess			(0.01)							
HIGH YIELD										
Mackay Shields High Yield	389	4.46	2.41	13.46	3.46	8.00	13.85			
Bloomberg U.S. HY - 2% Issuer Cap			2.74	15.34	3.61	7.05	14.32			
Excess			(0.32)	(1.88)	(0.15)	0.95	(0.47)			
Nomura High Yield	392	4.50	2.96	18.70	4.89	8.22	13.74			
Bloomberg U.S. HY - 2% Issuer Cap			2.74	15.34	3.61	7.05	14.32			
Excess			0.22	3.36	1.28	1.17	(0.58)			
BANK LOANS										
Barings Bank Loans	1	0.01				1.12	7.82	0.38	4.47	8.48
CSFB LEVERAGED LOAN INDEX						2.78	8.17	1.14	4.25	9.88
Excess						(1.66)	(0.36)	(0.76)	0.22	(1.39)

Public Markets Manager Performance Detail



Net Returns Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
TIPS										
SSGA TIPS	305	3.50	3.43	6.50	1.74	11.06	8.44	(1.29)	3.04	4.78
Bloomberg Global Infi-Linked: U.S. TIPS			3.25	6.51	1.73	10.99	8.43	(1.26)	3.01	4.68
Excess			0.18	(0.02)	0.01	0.07	0.02	(0.03)	0.04	0.09
CORE FI-DEVELOPING MANAGERS										
Pugh-CorePlus	128	1.47	2.14		(1.25)					
Bloomberg U.S. Aggregate			1.83		(1.60)					
Excess			0.31		0.35					
ECONOMICALLY TARGETED INVESTMENTS										
RBC Access MBS	11	0.12	1.46	0.08	(0.82)	6.14	7.21	0.49	2.64	1.61
Access RBC Benchmark			0.44	(0.76)	(0.99)	4.69	6.05	1.17	1.96	1.52
Excess			1.02	0.84	0.17	1.45	1.16	(0.69)	0.69	0.09
AFL-CIO Housing Investment Trust	18	0.21	1.54	0.12	(0.74)	6.20	7.78	0.16	3.17	1.94
Bloomberg U.S. Aggregate			1.83	(0.33)	(1.60)	7.51	8.72	0.01	3.54	2.65
Excess			(0.29)	0.45	0.87	(1.31)	(0.94)	0.15	(0.38)	(0.71)
CPC Construction Facility	2	0.02	0.77	2.65	2.26	0.67	8.12	4.14	6.05	(3.95)
CPC CONST BENCHMARK			0.60	2.45	1.21	2.73	4.09	3.99	3.34	3.03
Excess			0.17	0.20	1.06	(2.06)	4.03	0.15	2.72	(6.99)
BOA PPAR FNMA	1	0.01	3.35	(1.21)	(2.31)	6.12	13.54	2.33	5.21	4.07
FNMA Plus 85bps			0.62	0.51	(0.43)	5.14	7.80	1.86	3.61	2.38
Excess			2.72	(1.72)	(1.89)	0.98	5.74	0.47	1.60	1.69
Citibank PPAR FNMA	3	0.03	3.57	(0.97)	(2.20)	7.06	19.71	2.63	5.26	3.71
FNMA Plus 85bps			0.62	0.51	(0.43)	5.14	7.80	1.86	3.61	2.38
Excess			2.94	(1.48)	(1.77)	1.92	11.91	0.77	1.65	1.33

Public Markets Manager Performance Detail

Net Returns Through June 30, 2021



	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
Citibank PPAR GNMA	0	0.00	1.53	2.05	(0.24)	8.31	5.33	1.90	3.10	2.78
GNMA Plus 65bps			0.12	(0.14)	(0.66)	4.31	6.73	1.63	2.53	2.28
Excess			1.42	2.19	0.42	4.00	(1.41)	0.27	0.57	0.50
CFSB PPAR FNMA	0	0.00	4.06		(2.71)					
FNMA Plus 85bps			0.62		(0.43)					
Excess			3.43		(2.28)					
CFSB PPAR GNMA	0	0.00	1.35	2.07	(0.17)	8.01	5.91	0.99	3.83	3.21
GNMA Plus 65bps			0.12	(0.14)	(0.66)	4.31	6.73	1.63	2.53	2.28
Excess			1.24	2.22	0.48	3.69	(0.82)	(0.65)	1.30	0.93
CPC PPAR FNMA	1	0.01	3.87	1.54	(0.63)	7.00	13.18	2.31	5.06	6.15
FNMA Plus 85bps			0.62	0.51	(0.43)	5.14	7.80	1.86	3.61	2.38
Excess			3.25	1.03	(0.20)	1.87	5.38	0.45	1.45	3.77
ECLF PPAR FNMA	0	0.00	4.07	(0.03)	(2.48)					
FNMA Plus 85bps			0.62	0.51	(0.43)					
Excess			3.45	(0.55)	(2.05)					
JPMC PPAR FNMA	4	0.05	3.40	(0.50)	(2.35)	8.33	14.68	1.68	9.96	7.94
FNMA Plus 85bps			0.62	0.51	(0.43)	5.14	7.80	1.86	3.61	2.38
Excess			2.77	(1.02)	(1.93)	3.19	6.88	(0.18)	6.35	5.56
LIIF PPAR FNMA	2	0.02	3.38	(1.01)	(2.31)	6.44	16.35	2.27	9.55	5.03
FNMA Plus 85bps			0.62	0.51	(0.43)	5.14	7.80	1.86	3.61	2.38
Excess			2.76	(1.52)	(1.88)	1.30	8.55	0.41	5.94	2.65
LIIF PPAR GNMA	0	0.00	0.96	2.04	0.42	6.19	5.54	2.53	2.52	3.88
GNMA Plus 65bps			0.12	(0.14)	(0.66)	4.31	6.73	1.63	2.53	2.28
Excess			0.85	2.18	1.08	1.87	(1.19)	0.89	(0.01)	1.61

Public Markets Manager Performance Detail



Net Returns Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
LISC PPAR FNMA	0	0.00	4.09	17.94	(2.45)	31.93	14.95			
FNMA Plus 85bps			0.62	0.51	(0.43)	5.14	7.80			
Excess			3.46	17.42	(2.02)	26.80	7.15			
NCBCI PPAR FNMA	0	0.00	1.21	2.86	0.37	8.49	4.08	2.00	1.75	3.46
FNMA Plus 85bps			0.62	0.51	(0.43)	5.14	7.80	1.86	3.61	2.38
Excess			0.59	2.35	0.80	3.36	(3.72)	0.15	(1.86)	1.07
NCBCI PPAR GNMA	0	0.00	1.11	3.07	0.64	8.16	3.69	1.23	3.01	3.51
GNMA Plus 65bps			0.12	(0.14)	(0.66)	4.31	6.73	1.63	2.53	2.28
Excess			0.99	3.21	1.29	3.85	(3.04)	(0.41)	0.48	1.23
Wells Fargo PPAR FNMA	1	0.01	3.93	19.77	(2.60)	28.61	21.71			
FNMA Plus 85bps			0.62	0.51	(0.43)	5.14	7.80			
Excess			3.31	19.25	(2.18)	23.48	13.91			
CASH										
Short Term BERS	70	0.81	0.05	0.15	0.08	0.44	2.00	1.92	1.10	0.55
ICE BofA US 3-Month Treasury Bill			(0.00)	0.09	0.02	0.67	2.28	1.87	0.86	0.33
Excess			0.05	0.06	0.05	(0.23)	(0.28)	0.05	0.24	0.23
Cash Account	0	0.00								
Securities Lending	0	0.00								

**New York City
Board of Education Retirement System**

Appendix C

Alternative Assets Manager Performance Detail

Alternative Assets Manager Performance Detail

Through March 31, 2021



	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
TOTAL PRIVATE EQUITY		1,089,503,727	690,734,495	464,883,853	682,520,268	1.71	14.4%
TOTAL ACTIVE							
Mesirow Financial Private Equity Partnership Fund III	2005	57,000,000	55,663,273	85,809,616	9,857,335	1.72	8.4%
Mesirow Financial Private Equity Partnership Fund IV	2006	25,000,000	24,217,233	36,341,368	10,351,348	1.93	11.3%
New York Fairview Private Equity Fund	2006	19,000,000	17,700,307	21,210,778	2,783,416	1.36	5.4%
Mesirow Financial Private Equity Partnership Fund V	2008	45,000,000	42,314,326	57,284,625	41,968,229	2.35	18.1%
Platinum Equity Capital Partners III	2011	15,000,000	14,642,373	25,837,949	4,222,967	2.20	36.9%
<u>NYCBERS - 2012 Emerging Manager Program</u>	<u>2012</u>	<u>14,650,000</u>	<u>15,014,728</u>	<u>6,933,813</u>	<u>23,767,096</u>	<u>2.12</u>	<u>19.0%</u>
Warburg Pincus Private Equity XI	2012	25,000,000	25,366,427	28,362,185	14,884,879	1.71	12.7%
Apollo Investment Fund VIII	2013	20,000,000	19,005,468	11,785,363	17,408,953	1.59	12.5%
ASF VI B	2013	15,000,000	12,114,181	15,165,195	2,292,471	1.44	12.3%
Carlyle Partners VI	2013	20,000,000	21,359,663	13,115,234	26,129,830	1.93	16.6%
Landmark - NYC Fund I	2013	6,000,000	5,468,107	4,625,940	4,223,450	1.62	16.1%
Landmark Equity Partners XV	2013	19,000,000	15,251,966	11,750,846	9,474,816	1.37	13.4%
ASF VI B NYC Co-Invest	2014	5,000,000	4,188,738	4,804,538	1,701,226	1.55	14.2%
Bridgepoint Europe V	2014	8,857,553	7,918,365	5,135,492	8,413,110	1.72	18.2%
Carlyle Partners VI - Side Car	2014	2,200,000	1,603,009	754,120	2,547,148	2.21	15.3%
Crestview Partners III	2014	15,000,000	12,161,297	6,699,260	10,937,317	1.57	13.7%
Crestview Partners III (Co-Investment B)	2014	5,000,000	5,181,674	250,760	5,614,634	1.14	3.4%
CVC Capital Partners VI	2014	20,037,822	18,930,683	9,586,380	22,361,496	1.85	16.6%
Lexington Capital Partners VIII	2014	20,000,000	18,161,156	12,733,386	15,209,581	1.63	19.0%
Vista Equity Partners Fund V	2014	25,000,000	30,595,713	29,916,013	32,147,775	2.63	21.2%
ASF VII B	2015	10,000,000	5,595,006	2,977,546	5,338,497	1.49	17.5%
ASF VII B NYC Co-Invest	2015	6,000,000	3,701,330	2,400,401	3,697,194	1.65	20.9%
Centerbridge Capital Partners III	2015	2,500,000	2,830,586	1,528,514	2,862,511	1.84	20.0%
EQT VII	2015	17,715,106	19,083,376	14,447,771	21,941,065	2.15	26.3%
<u>NYCBERS - 2015 Emerging Manager Program</u>	<u>2015</u>	<u>37,250,000</u>	<u>25,538,648</u>	<u>4,484,155</u>	<u>35,594,561</u>	<u>1.59</u>	<u>27.5%</u>
Siris Partners III	2015	3,500,000	3,542,812	1,839,263	3,334,528	1.56	14.7%
Warburg Pincus Private Equity XII	2015	21,500,000	21,506,301	7,016,867	28,425,418	1.65	18.6%
Welsh, Carson, Anderson & Stowe XII	2015	10,000,000	9,357,372	8,224,005	13,284,522	2.30	32.3%
American Securities Partners VII	2016	8,000,000	7,588,140	1,261,272	8,571,338	1.30	9.8%
Apax IX	2016	13,000,000	12,937,323	4,167,348	21,725,041	2.12	33.3%
BCEC X Metro Co-Investment	2016	4,433,361	4,600,470	28,855	8,515,539	1.86	28.3%

Information provided by the New York City Board of Education Retirement System Consultants

Alternative Assets Manager Performance Detail

Through March 31, 2021



	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
Bridgepoint Europe V Co-Invest	2016	2,952,518	2,702,670	2,228,516	3,312,771	2.05	25.7%
Platinum Equity Capital Partners IV	2016	11,500,000	10,392,488	3,803,281	13,142,709	1.70	24.0%
Vista Equity Partners Fund VI	2016	16,000,000	17,942,244	9,933,321	23,257,110	2.17	21.9%
Ares Corporate Opportunities Fund V	2017	10,000,000	9,994,044	1,901,970	9,105,485	1.12	5.0%
BC European Capital X	2017	11,083,403	10,124,417	189,057	14,659,664	1.47	19.4%
CVC Capital Partners VII	2017	19,077,331	12,356,721	277,357	15,539,996	1.29	19.4%
Green Equity Investors VII	2017	10,000,000	8,857,262	1,566,645	13,882,349	1.90	25.1%
KKR Americas Fund XII	2017	16,000,000	10,382,574	1,127,523	20,174,550	2.11	40.9%
Palladium Equity Partners V	2017	10,000,000	5,280,822	90,997	5,535,419	1.07	5.1%
Warburg Pincus Financial Sector	2017	13,000,000	10,376,645	663,000	12,771,606	1.31	16.9%
Apollo Investment Fund IX	2018	32,000,000	9,284,091	2,035,239	10,467,448	1.40	26.8%
ASF VIII B	2018	21,000,000	4,330,588	63,584	7,009,198	1.63	56.3%
Bridgepoint Europe VI	2018	15,388,972	5,749,527	1,111,261	5,770,771	1.20	NM
EQT VIII	2018	14,145,141	10,446,418	844,935	14,099,181	1.47	32.3%
EQT VIII (Co-Invest)	2018	4,882,193	2,564,771	-	3,670,583	1.43	21.4%
ICG Strategic Equity Fund III	2018	13,340,000	8,140,596	-	11,881,403	1.46	NM
Lexington Capital Partners IX	2018	12,375,000	4,316,201	862,877	5,654,984	1.59	NM
Platinum Equity Capital Partners IV Co-Investment	2018	1,050,000	1,052,043	209,317	1,308,573	1.44	16.5%
Platinum Equity Small Cap Fund	2018	10,000,000	4,765,875	154,242	3,750,000	0.81	-17.7%
Siris Partners IV	2018	10,000,000	5,541,275	827,114	5,757,064	1.21	12.2%
Vista Equity Partners Fund VII	2018	20,500,000	12,437,448	47,788	13,187,977	1.06	6.6%
Apax X USD	2019	12,500,000	1,291,250	-	2,275,307	1.76	NM
ASF VIII B NYC Co-Invest	2019	10,500,000	712,328	-	1,582,962	2.22	102.1%
Bridgepoint Europe VI Co-Invest	2019	3,847,243	2,127,148	-	2,389,280	1.12	NM
KKR European Fund V (USD)	2019	9,950,000	4,207,030	164,111	4,097,615	1.01	NM
<i><u>NYCBERS - 2019 Emerging Manager Program</u></i>	<i><u>2019</u></i>	<i><u>10,500,000</u></i>	<i><u>3,645,254</u></i>	<i><u>101,069</u></i>	<i><u>4,454,379</u></i>	<i><u>1.26</u></i>	<i><u>NM</u></i>
Warburg Pincus Global Growth	2019	15,000,000	7,370,158	108,750	8,284,664	1.14	16.8%
WCAS XIII	2019	10,000,000	2,324,398	-	2,613,261	1.12	17.6%
Clearlake Capital Partners VI	2020	10,000,000	4,852,031	83,386	5,408,100	1.13	NM
Crestview Partners IV	2020	8,000,000	433,087	-	1,234,146	2.85	NM
Crestview Partners IV Co-Invest	2020	2,666,667	144,362	-	479,672	3.32	NM
EQT IX	2020	19,643,000	4,332,757	9,225	5,371,716	1.24	NM
EQT IX (Co-Invest)	2020	5,357,000	-	-	(22,894)	N/A	N/A
FTV VI	2020	3,500,000	1,435,000	-	2,151,189	1.50	NM

Information provided by the New York City Board of Education Retirement System Consultants

Alternative Assets Manager Performance Detail

Through March 31, 2021



	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
ICG Strategic Equity Co-Investment Fund III	2020	4,444,119	3,284,658	-	3,230,788	0.98	NM
KKR Asian Fund IV	2020	25,000,000	-	-	130,798	N/A	N/A
LCP IX Co-invest Partners B	2020	4,125,000	1,286,381	-	1,712,026	1.33	NM
Lindsay Goldberg V	2020	10,500,000	1,941,578	433	2,122,237	1.09	NM
NYC-Northbound Emerging Managers Program	2020	25,000,000	-	-	94,609	N/A	N/A
Valor Equity Partners V	2020	3,500,000	1,168,305	-	1,565,218	1.34	NM
CVC Capital Partners VIII	2021	25,532,300	-	-	-	N/A	N/A
ICG Strategic Equity Co-Investment Fund IV	2021	10,000,000	-	-	-	N/A	N/A
ICG Strategic Equity Fund IV	2021	20,000,000	-	-	-	N/A	N/A
One Rock Capital Partners III	2021	25,000,000	-	-	(180,937)	N/A	N/A
Stellax Capital Partners II	2021	25,000,000	-	-	-	N/A	N/A

Information provided by the New York City Board of Education Retirement System Consultants

Alternative Assets Manager Performance Detail

Through March 31, 2021



	Vintage Year	Style Sector	Original Commitment	Total Contributions	Total Distributions	Market Value	Total Value Multiple	Net IRR%
TOTAL PRIVATE REAL ESTATE			716,992,596	549,859,800	311,865,833	434,377,798	1.39	9.7%
TOTAL PRIVATE REAL ESTATE								
LaSalle Property Fund	2010	Core Portfolio	38,600,000	38,600,000	13,029,951	50,526,204	1.65	8.8%
Trumbull Property Fund	2011	Core Portfolio	41,400,000	63,976,694	70,137,115	30,307,747	1.60	7.4%
NYC Asset Investor #2	2013	Core Portfolio	11,000,000	11,187,179	4,748,101	7,733,871	1.12	2.4%
MetLife Core Property Fund	2014	Core Portfolio	15,000,000	15,000,000	4,389,386	19,143,725	1.57	8.3%
USAA Eagle Real Estate Feeder 1	2015	Core Portfolio	18,000,000	19,729,055	1,821,843	20,981,206	1.17	4.6%
Brookfield Premier Real Estate Partners	2016	Core Portfolio	25,000,000	15,367,759	1,936,731	17,737,311	1.31	8.9%
Exeter Core Industrial Club Fund II	2016	Core Portfolio	10,000,000	9,739,474	2,253,592	11,489,774	1.41	13.1%
Jamestown Premier Property Fund	2016	Core Portfolio	6,246,307	7,303,980	2,742,496	5,202,643	1.10	3.0%
NYCRS Artemis Mach II	2016	Core Portfolio	11,000,000	12,775,721	4,967,662	11,348,370	1.35	11.9%
Heitman Core Real Estate Debt Income Trust	2017	Core Portfolio	25,000,000	11,549,568	1,724,315	11,330,190	1.14	6.5%
Lion Industrial Trust	2017	Core Portfolio	18,000,000	20,973,921	2,973,921	28,580,630	1.54	14.5%
Almanac Realty Securities VIII	2018	Core Portfolio	10,500,000	2,626,481	179,470	2,598,542	1.06	5.9%
Almanac Realty Securities VIII (Sidecar II)	2018	Core Portfolio	7,000,000	1,766,741	105,322	2,008,309	1.20	19.5%
Artemis Real Estate Partners Income and Growth Fund	2018	Core Portfolio	10,000,000	3,077,823	150,743	2,789,869	0.95	NM
Exeter Industrial Core Fund III	2019	Core Portfolio	12,700,000	3,450,590	134,788	3,591,262	1.08	NM
Harrison Street Core Property Fund	2019	Core Portfolio	10,619,463	10,619,463	619,463	10,966,931	1.09	NM
HSRE-Centre Street Core Co-Investment	2019	Core Portfolio	5,000,000	3,320,663	165,674	3,423,778	1.08	NM
Cortland Growth and Income	2020	Core Portfolio	10,000,000	10,277,381	277,381	10,645,778	1.06	NM
RREEF America REIT II	2021	Core Portfolio	17,000,000	-	-	-	N/A	N/A
Franklin Templeton Private Real Estate Fund	2011	Non-Core Portfolio	30,000,000	35,998,165	48,374,586	880,983	1.37	19.3%
Brookfield Strategic Real Estate Partners	2012	Non-Core Portfolio	10,000,000	11,954,921	18,136,068	4,969,763	1.93	19.1%
Blackstone Real Estate Partners Europe IV (USD)	2013	Non-Core Portfolio	32,500,000	32,424,147	37,670,769	10,283,663	1.48	13.1%
NYC Asset Investor #1	2013	Non-Core Portfolio	10,000,000	11,638,238	5,659,831	6,865,812	1.10	1.7%
NYC Asset Investor #3	2013	Non-Core Portfolio	8,000,000	5,611,501	1,012,764	5,991,388	1.25	5.4%
Carlyle Realty Partners VII	2014	Non-Core Portfolio	25,000,000	22,951,414	22,824,266	9,462,443	1.93	12.9%
H/2 Special Opportunities III	2014	Non-Core Portfolio	15,000,000	15,577,770	13,249,676	5,445,487	1.21	6.8%
Blackstone Real Estate Partners VIII	2015	Non-Core Portfolio	16,500,000	18,215,484	12,705,022	13,051,435	1.45	14.0%
European Property Investors Special Opportunities 4	2015	Non-Core Portfolio	11,227,018	10,226,724	2,779,784	10,817,494	1.33	10.7%
PW Real Estate Fund III	2015	Non-Core Portfolio	11,203,575	8,359,122	3,576,452	13,042,566	1.99	28.4%
DivcoWest Fund V	2016	Non-Core Portfolio	10,000,000	7,287,004	1,562,443	6,742,387	1.14	5.3%
H/2 Special Opportunities IV	2016	Non-Core Portfolio	10,000,000	10,076,908	81,350	11,370,035	1.14	8.6%
Westbrook Real Estate Co-Investment Partnership X	2016	Non-Core Portfolio	10,000,000	9,614,089	5,974,064	5,465,547	1.22	10.6%
DRA Growth and Income Fund IX	2017	Non-Core Portfolio	10,000,000	10,419,018	4,034,372	9,424,485	1.32	13.7%
Exeter Industrial Value Fund IV	2017	Non-Core Portfolio	10,000,000	9,443,137	1,019,608	13,730,168	1.56	21.6%
Lone Star Real Estate Fund V	2017	Non-Core Portfolio	11,000,804	6,412,495	3,521,265	2,230,160	0.89	-7.4%
NYCRS-KKR CMBS Retention Partners	2017	Non-Core Portfolio	13,000,000	11,928,444	2,932,042	10,734,494	1.15	5.6%
Pramerica Real Estate Capital VI	2017	Non-Core Portfolio	10,325,370	10,051,208	5,855,706	5,822,730	1.21	10.9%
Aermont Capital Real Estate Fund IV	2018	Non-Core Portfolio	9,839,522	2,419,991	-	1,851,737	0.77	NM
Brookfield Strategic Real Estate Partners III	2018	Non-Core Portfolio	12,000,000	6,873,183	170,188	7,578,941	1.13	NM
KKR Real Estate Partners Americas II	2018	Non-Core Portfolio	10,000,000	9,400,074	2,955,560	8,151,169	1.21	14.0%
Blackstone Real Estate Partners IX	2019	Non-Core Portfolio	15,000,000	5,695,230	815,243	6,081,775	1.23	NM
Greenoak Asia (USD) III	2019	Non-Core Portfolio	10,000,000	4,806,226	3,294,310	1,665,421	1.10	NM

Information provided by the New York City Retirement Systems Consultants. Interim returns are subject to change and may differ due to differences in accounting and performance methodologies.

Alternative Assets Manager Performance Detail

Through March 31, 2021



	Vintage Year	Style Sector	Original Commitment	Total Contributions	Total Distributions	Market Value	Total Value Multiple	Net IRR%
Westbrook Real Estate Fund XI	2019	Non-Core Portfolio	10,000,000	913,587	-	989,989	1.08	NM
DivcoWest Fund VI	2020	Non-Core Portfolio	10,000,000	601,175	-	535,034	0.89	NM
Exeter Industrial Value Fund V	2020	Non-Core Portfolio	5,000,000	1,250,000	-	1,412,986	1.13	NM
KKR Real Estate Partners Europe II	2020	Non-Core Portfolio	9,950,000	13,544	-	314,540	23.22	NM
KKR Real Estate Securities Dislocation Opportunity Co-Investmen	2020	Non-Core Portfolio	10,000,000	4,532,656	901,398	4,908,385	1.35	NM
Rialto Real Estate Fund IV - Debt	2020	Non-Core Portfolio	25,000,000	3,821,853	401,111	4,150,641	1.19	NM
KKR Real Estate Partners Americas III	2021	Non-Core Portfolio	35,000,000	-	-	-	N/A	N/A

Information provided by the New York City Retirement Systems Consultants. Interim returns are subject to change and may differ due to differences in accounting and performance methodologies.

Alternative Assets Manager Performance Detail

Through March 31, 2021



	Vintage Year	Original Commitment	Total Contributions	Total Distributions	Market Value	Total Value Multiple	Net IRR%
TOTAL INFRASTRUCTURE		345,107,278	167,452,381	58,213,529	166,880,638	1.34	12.7%
TOTAL INFRASTRUCTURE							
Brookfield Infrastructure Fund II, L.P.	2013	10,000,000	8,488,769	3,818,973	11,439,749	1.80	13.0%
Global Energy & Power Infrastructure Fund II	2014	15,000,000	15,840,002	12,997,841	8,758,646	1.37	20.7%
IFM Global Infrastructure Fund	2014	15,000,000	20,027,335	7,899,888	24,359,993	1.61	11.2%
KKR Global Infrastructure Investors II L.P.	2014	19,000,000	20,194,814	17,806,391	16,083,205	1.68	18.0%
Actis Energy 4	2016	10,600,000	8,147,233	2,413,933	8,110,000	1.29	12.3%
ASF VII Infrastructure L.P.	2016	12,000,000	7,077,000	520,575	8,427,745	1.26	16.9%
Brookfield Infrastructure Fund III, L.P.	2016	10,000,000	6,200,038	1,700,357	6,219,818	1.28	9.9%
Global Infrastructure Partners III-A/B, L.P.	2016	12,000,000	10,853,225	2,343,021	10,760,842	1.21	7.1%
Axiom Infrastructure North America (2017)	2017	12,221,338	12,546,081	2,376,336	13,059,613	1.23	9.9%
EQT Infrastructure III (No.2) SCSp	2017	9,237,827	9,709,932	1,438,206	13,214,572	1.51	19.2%
NYCRS EIG Energy Partners, L.P.	2017	11,760,000	4,509,935	1,084,023	4,006,808	1.13	7.9%
Cardinal NR Sidecar Holdings L.P.	2018	1,880,000	1,892,049	467,145	2,357,953	1.49	18.8%
EQT Infrastructure IV (No.2) USD SCSp	2018	18,000,000	10,922,741	425,925	11,924,193	1.13	11.0%
Global Infrastructure Partners IV-A/B, L.P.	2018	22,600,000	2,209,212	0	1,522,866	0.69	-64.6%
KKR Global Infrastructure Investors III L.P.	2018	15,600,000	7,726,772	549,756	5,977,601	0.84	-12.8%
Ardian Infrastructure Fund V B	2019	15,068,113	1,789,484	89,341	1,848,495	1.08	6.5%
Brookfield Infrastructure Fund IV Co-Investment (Snow)	2019	2,000,000	2,008,446	133,054	2,210,604	1.17	12.5%
Brookfield Infrastructure Fund IV, L.P.	2019	19,000,000	9,698,500	1,160,949	9,803,489	1.13	12.0%
Global Energy & Power Infrastructure Fund III, L.P.	2019	15,600,000	5,994,813	890,704	5,648,762	1.09	11.0%
Actis Energy 5	2020	27,000,000	-	-	-	NM	NM
EQT Infrastructure IV Co-Investment (B) SCSp (Saber)	2020	1,600,000	1,616,000	97,112	1,812,611	1.18	16.9%
EQT Infrastructure V (No.2) USD SCSp	2020	32,000,000	-	-	(444,794)	NM	NM
NYCRS EIG Energy Partners Co-Investment, L.P.	2021	2,940,000	-	-	-	-	0.0%
Stonepeak Infrastructure Fund IV, L.P.	2021	35,000,000	-	-	(222,133)	NM	NM

Information provided by the New York City Board of Education Retirement System Consultants

Alternative Assets Manager Performance Detail

Through June 30, 2021



	Vintage Year	Commitment - Closing (Base)	Contributions Cumulative (Local)	Distributions Cumulative	Final Market Value	3 Month Base%	Inception IRR%
TOTAL OPPORTUNISTIC FIXED INCOME		150,000,000	77,827,545	6,534,698	94,710,765	4.90%	50.41%
Apollo Centre Street Partnership, L.P.	2020	30,000,000	15,399,853	4,814,698	11,621,725	2.49%	18.34%
KKR-NYC Credit C L.P.	2020	30,000,000	6,750,000	-	7,708,274	8.03%	52.80%
Marathon Centre Street Partnership, L.P. - Asset Class	2020	20,000,000	17,120,000	1,720,000	22,325,931	13.12%	55.48%
Marathon Centre Street Partnership, L.P. - Asset Class - Subsequent Commitment	2020	10,000,000	5,250,000	-	3,266,810	-14.79%	-71.85%
OHA Centre Street Partnership, L.P.	2020	30,000,000	27,307,692	-	43,678,407	3.29%	71.25%
Torchlight Debt Fund VII, LP	2021	30,000,000	6,000,000	-	6,109,618	0.35%	6.10%

Information provided by Alpha Frontier
Above data is not final and subject to change

**New York City
Board of Education Retirement System**

Appendix D

Footnotes

General Notes

- Estimated management fees for public market investments are calculated on an accrual basis without adjustment for management fee caps. Alternative investment (Private Market) fees are recorded on a cash basis and are not inclusive of carried interest paid. Since not all alternative managers currently provide detailed fee disclosure, the alternative investment fees noted here are not comprehensive.
- Returns greater than 1 year are annualized.
- Public Market returns are Net of Manager Fees for periods after January 2014 and Gross of investment advisory fees for other periods unless otherwise indicated.
- Public market excess returns for periods prior to 2014 are based on Gross performance.

Page Specific

Page 12 - 17 - Portfolio Asset Allocation

- Rebalancing Ranges: the minimum and maximum weights that actual Asset Allocation may reach before rebalancing between Asset Classes is necessary.

Pages 18 - 20 - Performance Attribution: Total Plan

- Plan Return at Policy Weights: the return of the Total Plan assuming actual Asset Class results were maintained at target (Adjusted Policy) weights. *Figure = (Return of Asset Class 1 * Target Weight) plus (Return Of Asset Class 2 * Target Weight) plus (.....)*
- **Allocation Effect** = Total Plan Return minus Plan Return At Adjusted Policy Weights. Allocation is the Contribution to Performance resulting from an overweight or underweight to an asset class. E.g. an underweight to an Asset Class that under-performs results in a positive Allocation Effect and vice versa.
- **Selection Effect** = Equal to the Custom Benchmark (Adjusted Policy Index) Return minus Plan Return at Adjusted Policy Weights. This illustrates how the Managers have added or removed value based on their Security Selection decisions, e.g., *If the manager's Actual Returns are higher than the Implied Return there will be a positive Selection Effect.*
- **Policy Index = Custom Benchmark**
The "policy index" is a custom benchmark representing the weighted average return of the weighted benchmark indexes for each major investment program. Weights may reflect an adjustment of actual policy for outstanding commitments for new or revised programs, such as for private market programs, which are invested gradually, or for any new or updated program requiring the completion of RFPs and contracts. The policy index/custom benchmark is calculated monthly based on adjusted policy weights at the beginning of each month.

Glossary of Terms

Through June 30, 2021



The indexes and most recent policy weights are as follows:

*U.S. Equity: Russell 3000 * 33.06%*

*International Developed (EAFE) Markets: MSCI World ex USA IMI Net * 9.09%*

*International Active – Global Equity: MSCI ACWI * 1.65%*

*Emerging Markets: MSCI Emerging Markets *5.73%*

*International Emerging Managers FOF: MSCI ACWI Ex US IMI Net * 0.97%*

*Private Equity: Russell 3000 + 300 b.p. per annum * 7.98%*

*Private Real Estate – Core: NFI - ODCE Net * 3.26%*

Private Real Estate – Non Core: NFI - ODCE Net + 200bps 2.10%*

*Infrastructure: CPI + 4% * 1.91%*

*US Treasury Short Term: FTSE USBIG Treasury 1-3Y * 2.41%*

*US Treasury Intermediate: Citigroup Treasury/Agency 1-10Y * 2.81%*

*Active Government: NYC Treasury Agency + 5 * 2.00%*

*US Treasury Long Duration: FTSE Treasury 10+ * 0.80%*

*Core FI-Developing Managers : Bloomberg U.S. Aggregate * 0.00%*

*Mortgage: Bloomberg US Mortgage Backed Securities * 5.40%*

*ETI: ETI Custom Benchmark * 0.51%*

*Investment Grade Corporate: NYC Custom IGC Benchmark * 5.80%*

*High Yield: Bloomberg U.S. HY - 2% Issuer Cap * 10.01%*

Glossary of Terms

Through June 30, 2021



*Bank Loans: Credit Suisse Leveraged Loan * 0.00%*

*TIPS: Bloomberg Global Infl-Linked: U.S. TIPS * 3.52%*

*Opportunistic Fixed: OFI - JPMGHY / CSFB 50/50 Blend Plus 300 b.p. per annum * 0.99%*

Page 21 – Allocation and Selection Effects - Asset Class Breakdown

- This chart aims to break down the Allocation and Selection Effects shown on the Performance Attribution pages. The aim of the Page is to show the asset classes where Managers are either out performing or underperforming their benchmark and to show the basis point effect that this is having on Plan performance.

Footnotes

Through June 30, 2021



[1] NYC Developed Value Benchmark: Beginning 8.2017 benchmark changed from MSCI EAFE Value Net to MSCI World ex USA Net Index.

[2] NYC Developed Growth Benchmark: Beginning 8.2017 benchmark changed from MSCI EAFE Growth to MSCI World ex USA Net Index.

[3] NYC Custom Mortgage Benchmark: Beginning 9.2020 benchmark changed from FTSE Mortgage Index to Bloomberg US Mortgage Backed Securities.

[4] NYC Custom IGC Benchmark: Beginning 3.2021 benchmark changed from NYC - Investment Grade Credit to Bloomberg U.S. Corporate Inv Grade.