

# District of Columbia Retirement Board

Quarterly Summary

March 31, 2023

Fund Evaluation Report

Allocation vs. Targets and Policy					
	Current Balance	Current Allocation	Policy	Policy Range	
US Equity	\$2,075,128,905	20%	20%	15% - 25%	
Developed Market Equity	\$1,702,791,222	16%	16%	12% - 20%	
Emerging Market Equity	\$1,018,643,874	10%	10%	7% - 13%	
Investment Grade Bonds	\$695,646,714	7%	7%	7% - 15%	
Long-Term Government Bonds	\$299,089,199	3%	3%	1% - 5%	
TIPS	\$593,037,470	6%	5%	4% - 8%	
Foreign Bonds	\$216,082,615	2%	2%	1% - 3%	
Emerging Market Bonds	\$436,343,339	4%	4%	2% - 6%	
High Yield Bonds	\$278,224,010	3%	2%	2% - 6%	
Bank Loans	\$309,614,075	3%	2%	2% - 5%	
Private Equity	\$1,126,248,353	11%	9%	5% - 13%	
Private Debt	\$198,125,983	2%	3%	1% - 5%	
Real Estate	\$843,404,180	8%	8%	4% - 9%	
Natural Resources	\$244,907,089	2%	2%	1% - 3%	
Infrastructure	\$391,088,584	4%	6%	1% - 7%	
Cash	\$104,666,911	1%	1%	0% - 5%	
<b>Total</b>	<b>\$10,533,042,523</b>	<b>100%</b>	<b>100%</b>		

Market Value Summary				
	Market Value 12/31/22 (\$)	Market Value 3/31/23 (\$)	% of Sector	% of Portfolio
<b>Total Fund Aggregate</b>	<b>10,137,385,230</b>	<b>10,533,042,523</b>	--	<b>100.0</b>
<b>Domestic Equity</b>	<b>1,941,047,562</b>	<b>2,075,128,905</b>	<b>19.7</b>	<b>19.7</b>
Northern Trust Russell 3000 Index	1,418,965,152	1,520,886,781	73.3	14.4
Sands Large Cap Growth Equity	60,557,893	71,456,233	3.4	0.7
Channing Small Cap Value Equity	229,183,678	237,845,223	11.5	2.3
Earnest Partners SMID Cap Core	232,340,839	244,940,668	11.8	2.3
<b>International Developed Market Equity</b>	<b>1,624,859,458</b>	<b>1,702,791,222</b>	<b>16.2</b>	<b>16.2</b>
SSgA MSCI World (ex U.S.) Index	1,389,098,776	1,451,834,649	85.3	13.8
Altrinsic International Equity	235,760,682	250,956,573	14.7	2.4
<b>International Emerging Market Equity</b>	<b>1,001,898,668</b>	<b>1,018,643,874</b>	<b>9.7</b>	<b>9.7</b>
SSgA MSCI Emerging Markets Index	671,476,711	674,803,323	66.2	6.4
LSV Emerging Markets Value Equity	330,421,957	343,840,551	33.8	3.3
<b>Fixed Income</b>	<b>2,823,230,247</b>	<b>2,828,037,422</b>	<b>26.8</b>	<b>26.8</b>
BlackRock US Debt Index	429,043,623	468,386,676	16.6	4.4
BlackRock IT Government Bond Index- NL	221,913,517	227,260,038	8.0	2.2
Blackrock LT Govt Bond Index	280,351,427	299,089,199	10.6	2.8
BlackRock U.S. TIPS	597,192,988	593,037,470	21.0	5.6

## Fund Summary | As of March 31, 2023

	Market Value 12/31/22 (\$)	Market Value 3/31/23 (\$)	% of Sector	% of Portfolio
Polen Capital Credit US Opportunistic High Yield	317,874,229	278,224,010	9.8	2.6
Wellington Blended Opportunistic Emerging Markets Debt	419,592,477	436,343,339	15.4	4.1
Mondrian International Fixed Income	210,607,024	216,082,615	7.6	2.1
Beach Point Loan Fund	346,654,962	309,614,075	10.9	2.9
<b>Private Equity</b>	<b>1,076,355,309</b>	<b>1,126,248,353</b>	<b>10.7</b>	<b>10.7</b>
<b>Private Debt</b>	<b>168,942,141</b>	<b>198,125,983</b>	<b>1.9</b>	<b>1.9</b>
<b>Real Assets</b>	<b>1,413,578,808</b>	<b>1,479,399,853</b>	<b>14.0</b>	<b>14.0</b>
<b>Real Estate</b>	<b>810,230,682</b>	<b>843,404,180</b>	<b>57.0</b>	<b>8.0</b>
<b>Public Real Estate</b>	<b>302,381,167</b>	<b>341,212,372</b>	<b>40.5</b>	<b>3.2</b>
Northern Trust Global Real Estate Index Fund	302,381,167	341,212,372	100.0	3.2
<b>Private Real Estate</b>	<b>507,849,515</b>	<b>502,191,808</b>	<b>59.5</b>	<b>4.8</b>
<b>Infrastructure</b>	<b>381,470,394</b>	<b>391,088,584</b>	<b>26.4</b>	<b>3.7</b>
<b>Natural Resources</b>	<b>221,877,732</b>	<b>244,907,089</b>	<b>16.6</b>	<b>2.3</b>
<b>Cash</b>	<b>87,473,037</b>	<b>104,666,911</b>	<b>1.0</b>	<b>1.0</b>
Northern Trust STIF	87,473,037	104,666,911	100.0	1.0

Asset Class Performance Summary												
	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	20 Yrs (%)	Inception (%)	Inception Date
<b>Total Fund Aggregate (Gross of Fees)</b>	<b>10,533,042,523</b>	<b>100.0</b>	<b>4.5</b>	<b>4.5</b>	<b>11.2</b>	<b>-3.3</b>	<b>11.0</b>	<b>5.5</b>	<b>6.2</b>	<b>7.0</b>	<b>8.4</b>	<b>Oct-82</b>
<b>Total Fund Aggregate</b>			<b>4.5</b>	<b>4.5</b>	<b>11.2</b>	<b>-3.3</b>	<b>11.0</b>	<b>5.4</b>	<b>6.1</b>	<b>6.8</b>	--	
<i>Interim Policy Benchmark</i>			4.3	4.3	10.3	-5.8	10.0	5.2	6.1	7.4	9.3	Oct-82
<i>Long-Term Policy Benchmark</i>			6.5	6.5	10.5	-8.8	8.6	4.6	5.8	7.0	9.1	Oct-82
<i>60% MSCI ACWI / 40% Barclays Global Aggregate</i>			5.6	5.6	13.8	-7.5	7.7	3.8	5.0	6.5	--	Oct-82
<b>Domestic Equity</b>	<b>2,075,128,905</b>	<b>19.7</b>	<b>6.9</b>	<b>6.9</b>	<b>14.6</b>	<b>-9.2</b>	<b>18.9</b>	<b>10.2</b>	<b>11.6</b>	<b>10.2</b>	<b>10.6</b>	<b>Oct-82</b>
<i>Russell 3000</i>			7.2	7.2	14.9	-8.6	18.5	10.4	11.7	10.4	11.6	Oct-82
<b>International Developed Market Equity</b>	<b>1,702,791,222</b>	<b>16.2</b>	<b>7.9</b>	<b>7.9</b>	<b>25.6</b>	<b>-1.9</b>	<b>13.7</b>	<b>4.3</b>	<b>5.6</b>	<b>7.8</b>	<b>5.7</b>	<b>Apr-87</b>
<i>International Developed Equity Custom Benchmark</i>			8.0	8.0	25.5	-2.7	13.5	3.8	4.9	7.8	5.4	Apr-87
<b>International Emerging Market Equity</b>	<b>1,018,643,874</b>	<b>9.7</b>	<b>4.1</b>	<b>4.1</b>	<b>15.4</b>	<b>-9.5</b>	<b>9.5</b>	<b>-0.4</b>	<b>2.1</b>	<b>--</b>	<b>2.2</b>	<b>Sep-11</b>
<i>MSCI Emerging Markets</i>			4.0	4.0	14.0	-10.7	7.8	-0.9	2.0	9.3	2.0	Sep-11
<b>Fixed Income</b>	<b>2,828,037,422</b>	<b>26.8</b>	<b>3.7</b>	<b>3.7</b>	<b>6.7</b>	<b>-4.7</b>	<b>0.9</b>	<b>0.9</b>	<b>1.4</b>	<b>3.4</b>	<b>6.5</b>	<b>Dec-82</b>
<i>DCRB Fixed Income Custom Benchmark</i>			3.4	3.4	6.9	-4.3	0.3	1.2	1.6	3.4	6.5	Dec-82
<b>Private Equity</b>	<b>1,126,248,353</b>	<b>10.7</b>	<b>2.7</b>	<b>2.7</b>	<b>4.8</b>	<b>3.2</b>	<b>23.3</b>	<b>18.3</b>	<b>14.3</b>	<b>10.9</b>	<b>9.5</b>	<b>Jan-87</b>
<i>Cambridge Spliced US/Global PE &amp; VC Index</i>			0.2	0.2	-1.9	-9.8	18.6	17.1	15.2	13.8	14.6	Jan-87
<i>Long-Term Private Equity Benchmark</i>			9.5	9.5	2.7	-18.1	5.4	7.3	10.7	10.8	--	Jan-87
<b>Private Debt</b>	<b>198,125,983</b>	<b>1.9</b>	<b>1.4</b>	<b>1.4</b>	<b>1.1</b>	<b>2.4</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>8.4</b>	<b>Apr-21</b>
<i>Cambridge Private Credit (1 Quarter Lagged)</i>			3.5	3.5	3.4	3.9	--	--	--	--	9.4	Apr-21
<i>Bloomberg U.S. High Yield 1Q Lagged</i>			4.2	4.2	3.5	-11.2	0.0	2.3	4.0	7.3	-3.3	Apr-21
<b>Real Assets</b>	<b>1,479,399,853</b>	<b>14.0</b>	<b>0.7</b>	<b>0.7</b>	<b>3.6</b>	<b>6.0</b>	<b>13.4</b>	<b>8.3</b>	<b>8.3</b>	<b>6.1</b>	<b>5.2</b>	<b>Mar-96</b>
<i>Interim Real Assets Benchmark</i>			1.2	1.2	2.3	0.5	11.1	6.9	7.8	--	--	Mar-96
<i>Long Term Real Assets Benchmark</i>			8.3	8.3	-1.8	-17.1	1.3	3.8	5.4	6.7	7.0	Mar-96

Note: Market values and performance for the Private Equity and Real Assets portfolios and benchmarks are reported one quarter lagged, adjusted for current quarter cash flows. The REIT portfolio is reported in real time.

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	20 Yrs (%)	Inception (%)	Inception Date
<b>Real Estate</b>	<b>843,404,180</b>	<b>8.0</b>	<b>-0.8</b>	<b>-0.8</b>	<b>2.1</b>	<b>-3.4</b>	<b>11.3</b>	<b>6.7</b>	<b>7.0</b>	<b>5.2</b>	<b>3.0</b>	<b>Apr-88</b>
<i>Interim Real Estate Benchmark</i>			-0.2	-0.2	1.1	-6.6	9.9	5.9	7.6	--	--	Apr-88
<i>Long Term Real Estate Benchmark</i>			7.2	7.2	-5.4	-24.2	-0.1	1.9	6.4	7.9	7.7	Apr-88
<b>Public Real Estate</b>	<b>341,212,372</b>	<b>3.2</b>	<b>0.8</b>	<b>0.8</b>	<b>8.6</b>	<b>-19.9</b>	<b>6.4</b>	<b>0.8</b>	<b>2.7</b>	<b>--</b>	<b>4.5</b>	<b>Apr-05</b>
<i>Public Real Estate Benchmark</i>			0.5	0.5	7.8	-21.1	5.4	-0.1	1.9	--	4.9	Apr-05
<b>Private Real Estate</b>	<b>502,191,808</b>	<b>4.8</b>	<b>-1.7</b>	<b>-1.7</b>	<b>-1.0</b>	<b>8.2</b>	<b>11.5</b>	<b>9.8</b>	<b>10.0</b>	<b>6.2</b>	<b>3.6</b>	<b>Apr-88</b>
<i>Cambridge Real Estate (1 Quarter Lagged)</i>			-0.7	-0.7	-2.0	1.8	9.1	8.5	10.5	9.2	8.3	Apr-88
<b>Infrastructure</b>	<b>391,088,584</b>	<b>3.7</b>	<b>1.8</b>	<b>1.8</b>	<b>5.0</b>	<b>14.0</b>	<b>18.3</b>	<b>13.4</b>	<b>11.2</b>	<b>--</b>	<b>9.8</b>	<b>Jun-08</b>
<i>Cambridge Infrastructure (1 Quarter Lagged)</i>			3.4	3.4	3.1	7.4	10.5	10.1	10.2	10.0	7.5	Jun-08
<i>Infrastructure Long-Term Benchmark</i>			6.8	6.8	-1.4	-15.7	-0.4	2.7	4.8	--	5.2	Jun-08
<b>Natural Resources</b>	<b>244,907,089</b>	<b>2.3</b>	<b>4.2</b>	<b>4.2</b>	<b>6.4</b>	<b>36.4</b>	<b>18.1</b>	<b>10.7</b>	<b>12.7</b>	<b>--</b>	<b>11.4</b>	<b>Oct-12</b>
<i>CA Energy Upstream, Royalties, and PE (1 Quarter Lagged)</i>			2.7	2.7	4.8	20.5	11.1	4.8	-1.0	10.5	-0.4	Oct-12
<i>S&amp;P Global Natural Resources (1-Qtr Lag)</i>			17.2	17.2	11.9	10.3	11.6	7.3	4.9	9.0	5.5	Oct-12
<b>Cash</b>	<b>104,666,911</b>	<b>1.0</b>	<b>1.1</b>	<b>1.1</b>	<b>2.1</b>	<b>2.8</b>	<b>1.0</b>	<b>1.4</b>	<b>0.9</b>	<b>1.5</b>	<b>3.5</b>	<b>Jul-89</b>
<i>ICE BofA 91 Days T-Bills TR</i>			1.1	1.1	1.9	2.5	0.9	1.4	0.9	1.3	2.8	Jul-89

Note: Market values and performance for the Private Equity and Real Assets portfolios and benchmarks are reported one quarter lagged, adjusted for current quarter cash flows. The REIT portfolio is reported in real time.

## **Disclaimer, Glossary, and Notes**

WE HAVE PREPARED THIS REPORT (THIS "REPORT") FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE "RECIPIENT").

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM," "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.



**Credit Risk:** Refers to the risk that the issuer of a fixed income security may default (i.e., the issuer will be unable to make timely principal and/or interest payments on the security.)

**Duration:** Measure of the sensitivity of the price of a bond to a change in its yield to maturity. Duration summarizes, in a single number, the characteristics that cause bond prices to change in response to a change in interest rates. For example, the price of a bond with a duration of three years will rise by approximately 3% for each 1% decrease in its yield to maturity. Conversely, the price will decrease 3% for each 1% increase in the bond's yield. Price changes for two different bonds can be compared using duration. A bond with a duration of six years will exhibit twice the percentage price change of a bond with a three-year duration. The actual calculation of a bond's duration is somewhat complicated, but the idea behind the calculation is straightforward. The first step is to measure the time interval until receipt for each cash flow (coupon and principal payments) from a bond. The second step is to compute a weighted average of these time intervals. Each time interval is measured by the present value of that cash flow. This weighted average is the duration of the bond measured in years.

**Information Ratio:** This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.

**Jensen's Alpha:** A measure of the average return of a portfolio or investment in excess of what is predicted by its beta or "market" risk.  $\text{Portfolio Return} - [\text{Risk Free Rate} + \text{Beta} * (\text{market return} - \text{Risk Free Rate})]$ .

**Market Capitalization:** For a firm, market capitalization is the total market value of outstanding common stock. For a portfolio, market capitalization is the sum of the capitalization of each company weighted by the ratio of holdings in that company to total portfolio holdings; thus it is a weighted-average capitalization. Meketa Investment Group considers the largest 65% of the broad domestic equity market as large capitalization, the next 25% of the market as medium capitalization, and the smallest 10% of stocks as small capitalization.

**Market Weighted:** Stocks in many indices are weighted based on the total market capitalization of the issue. Thus, the individual returns of higher market-capitalization issues will more heavily influence an index's return than the returns of the smaller market-capitalization issues in the index.

**Maturity:** The date on which a loan, bond, mortgage, or other debt/security becomes due and is to be paid off.

**Prepayment Risk:** The risk that prepayments will increase (homeowners will prepay all or part of their mortgage) when mortgage interest rates decline; hence, investors' monies will be returned to them in a lower interest rate environment. Also, the risk that prepayments will slow down when mortgage interest rates rise; hence, investors will not have as much money as previously anticipated in a higher interest rate environment. A prepayment is any payment in excess of the scheduled mortgage payment.

**Price-Book Value (P/B) Ratio:** The current market price of a stock divided by its book value per share. Meketa Investment Group calculates P/B as the current price divided by Compustat's quarterly common equity. Common equity includes common stock, capital surplus, retained earnings, and treasury stock adjusted for both common and nonredeemable preferred stock. Similar to high P/E stocks, stocks with high P/B's tend to be riskier investments.

**Price-Earnings (P/E) Ratio:** A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about its future. Either of these situations would result in lower relative P/E ratios. Some stocks exhibit above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates P/E as the current price divided by the I/B/E/S consensus of twelve-month forecast earnings per share.

**Quality Rating:** The rank assigned a security by such rating services as Fitch, Moody's, and Standard & Poor's. The rating may be determined by such factors as (1) the likelihood of fulfillment of dividend, income, and principal payment of obligations; (2) the nature and provisions of the issue; and (3) the security's relative position in the event of liquidation of the company. Bonds assigned the top four grades (AAA, AA, A, BBB) are considered investment grade because they are eligible bank investments as determined by the controller of the currency.

**Sharpe Ratio:** A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.

**STIF Account:** Short-term investment fund at a custodian bank that invests in cash-equivalent instruments. It is generally used to safely invest the excess cash held by portfolio managers.

**Standard Deviation:** A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and 95% of the observations will fall within two standard deviations of the mean.

**Style:** The description of the type of approach and strategy utilized by an investment manager to manage funds. For example, the style for equities is determined by portfolio characteristics such as price-to-book value, price-to-earnings ratio, and dividend yield. Equity styles include growth, value, and core.

**Tracking Error:** A divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark, as defined by the difference in standard deviation.

**Yield to Maturity:** The yield, or return, provided by a bond to its maturity date; determined by a mathematical process, usually requiring the use of a “basis book.” For example, a 5% bond pays \$5 a year interest on each \$100 par value. To figure its current yield, divide \$5 by \$95—the market price of the bond—and you get 5.26%. Assume that the same bond is due to mature in five years. On the maturity date, the issuer is pledged to pay \$100 for the bond that can be bought now for \$95. In other words, the bond is selling at a discount of 5% below par value. To figure yield to maturity, a simple and approximate method is to divide 5% by the five years to maturity, which equals 1% pro rata yearly. Add that 1% to the 5.26% current yield, and the yield to maturity is roughly 6.26%.

$$\frac{5\% \text{ (discount)}}{5 \text{ (yrs. to maturity)}} = 1\% \text{ pro rata, plus } 5.26\% \text{ (current yield)} = 6.26\% \text{ (yield to maturity)}$$

**Yield to Worst:** The lowest potential yield that can be received on a bond without the issuer actually defaulting. The yield to worst is calculated by making worst-case scenario assumptions on the issue by calculating the returns that would be received if provisions, including prepayment, call, or sinking fund, are used by the issuer.

**NCREIF Property Index (NPI):** Measures unleveraged investment performance of a very large pool of individual commercial real estate properties acquired in the private market by tax-exempt institutional investors for investment purposes only. The NPI index is capitalization-weighted for a quarterly time series composite total rate of return.

**NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE):** Measures the investment performance of 28 open-end commingled funds pursuing a core investment strategy that reflects funds' leverage and cash positions. The NFI-ODCE index is equal-weighted and is reported gross and net of fees for a quarterly time series composite total rate of return.

Sources: [Investment Terminology](#), International Foundation of Employee Benefit Plans, 1999.  
[The Handbook of Fixed Income Securities](#), Fabozzi, Frank J., 1991

The Russell Indices®, TM, SM are trademarks/service marks of the Frank Russell Company.

Throughout this report, numbers may not sum due to rounding.

Returns for periods greater than one year are annualized throughout this report.

Values shown are in millions of dollars, unless noted otherwise.

All peer group universes presented in this report are comprised of monthly composite data provided by investment managers through eVestment Alliance.

**Custom Benchmarks:****DCRB Total Policy Interim**

May 31st, 2021, through Present: 11.0% MSCI Emerging Markets ND; 2.2% BC Global Agg ex USD; 6.8% BC (LB) US TIPS; 3.6% BC US Corporate High Yield; 3.6% Credit Suisse Leveraged Loan; 6.8% DCRB CA Glob PE & VC Idx (1QLag); 2.5% DCRB CA RE Idx (1QLag); 3.6% Total Public RE; 1.3% DCRB CA Energy & Royalties(1QL); 17.7% MSCI World ex USA ND; 1.5% HFR Fund Weighted Composite; 7.7% BC U.S. Aggregate; 4.4% 50% JPM GBI-EM Global Diversified / 50% JPMorgan EMBI Global Diversified; 22.1% Russell 3000; 0.6% DCRB CA Infra (1QLag); 3.3% BC U.S. Long Govt. Bond Index; 1.1% ICE BofA ML 90 Day T-Bills; 0.2% DCRB CA Private Debt (1QLag)

**DCRB Total Policy Long Term**

March 31st, 2021, through Present: 10% MSCI Emerging Markets ND; 15% DCRB Real Assets Long Term; 3% DCRB Private Debt Long Term; 1% ICE BofA 3 Month Treasury Bill; 16% MSCI World ex USA ND, 20% Russell 3000; 2% DCRB Hedge Fund Long Term; 9% DCRB Long Term Private Equity; 24% DCRB Fixed Income - Long Term

**DCRB Fixed Income – Long Term**

March 31st, 2021, through Present: 29.2% Barclays US Aggregate Index, 16.7% Barclays US TIPS Index, 8.3% Barclays US High Yield Index, 8.3% CSFB Leveraged Loan Index, 8.3% Barclays Global Aggregate ex US Index, 8.3% JPM GBI-EM Global Diversified Index; 8.3% JPM EMBI Global Diversified; 12.5% Barclays US Long Treasury Bond Index

**DCRB Fixed Income Interim Blend**

May 31st, 2021, through Present: 24.4% Barclays US Aggregate Index, 21.7% Barclays US TIPS Index, 11.3% Barclays US High Yield Index, 11.3% CSFB Leveraged Loan Index, 7.0% Barclays Global Aggregate ex US Index, 13.9% 50% JPM GBI-EM Global Diversified / 50% JPMorgan EMBI Global Diversified; 10.4% BC U.S. Long Govt. Bond Index

**DCRB Public Equity Long Term**

November 30th, 2015, through March 31st, 2017: 43.8% Russell 3000; 37.5% MSCI World ex USA ND; 18.8% MSCI Emerging Markets ND

March 31st, 2017, to Present: 43.5% Russell 3000; 34.8% MSCI World ex USA ND; 21.7% MSCI Emerging Markets ND

**DCRB Custom MSCI Wld ex US Net**

Inception through March 31st, 2006: 100% MSCI EAFE Net

March 31st, 2006, to August 31st, 2011: 100% MSCI ACWI ex US Net

August 31st, 2011, to Present: 100% MSCI World ex US Net

**DCRB Hedge Fund Long Term**

September 30th, 2013, through March 31st, 2021: ML 3mo LIBOR + 500 bps

March 31st, 2021, to Present: ICE BofA 3 Month Treasury Bill

**DCRB PE Program Blend**

December 31st, 2007, through Present: CA Global PE & VC Index (1Q lag)

**DCRB Real Assets Long Term**

March 31st, 1988, through March 31st, 2021: CPI+5.5% Qtr Lag

March 31st, 2021, to Present: 10% BB Barclays US TIPS Qtr Lag; 56.7% FTSE EPRA NAREIT Global Net Qtr Lag; 13.3% S&P Global Natural Resources Qtr Lag; 10% MSCI World ex USA ND Qtr Lag; 10% BBG Barclays US Aggregate Qtr Lag

**DCRB Long Term Private Equity**

Inception through December 31st, 2007: Russell 3000 + 3% Quarter Lag

December 31st, 2007, to March 31st, 2021: MSCI ACWI ND + 3% Quarter Lag

March 31st, 2021, to Present: 67% Russell 3000 Qtr Lag; 22% MSCI World ex USA ND Qtr Lag; 11% MSCI Emerging Markets ND Qtr Lag

**DCRB Real Assets Interim**

May 31st, 2021, to Present: 76.5% DCRB RE Interim, 7.7% DCRB CA Infra (1Q Lag), 15.8% DCRB CA Energy & Royalties (1Q Lag)

**DCRB Real Estate Long Term**

March 31st, 1988, to December 31st, 2013: 80% DCRB CA RE Idx (1Q Lag), 20% MSCI Real Estate (1Q Lag)

December 31st, 2013, to September 30th, 2020: 80% DCRB CA RE Idx (1Q Lag), 20% FTSE EPRA/NAREIT Global GR (1Q Lag)

September 30th, 2013, to March 31st, 2021: 80% DCRB CA RE Idx (1Q Lag), 20% FTSE EPRA/NAREIT Global GR (1Q Lag)

March 31st, 2021, to Present: 100% FTSE EPRA NAREIT Global Net Qtr Lag

### **Total Public Real Estate**

March 31st, 2005, to December 31st, 2013: MSCI REIT Index

December 31st, 2013, to Present: FTSE EPRA/NAREIT Global Net

### **DCRB Real Estate Interim**

April 30th, 2018, to March 31st, 2021: 64% FTSE EPRA/NAREIT Global GR, 36% DCRB CA RE Idx (1Q Lag)

March 31st, 2021, to Present: 64% FTSE EPRA/NAREIT Global Net, 36% DCRB CA RE Idx (1Q Lag)

### **DCRB Private Debt Long Term**

March 31st, 2021, through Present: 100% BB Barclays US Corporate HY (1Q Lag)

### **DCRB Infrastructure Long Term**

March 31st, 2021, through Present: 25% MSCI World ex-U.S. ND 25% FTSE EPRA NAREIT Global Index (net) 25% Bloomberg U.S. Aggregate 25% Bloomberg U.S. TIPS (1Q Lag)