



*City of Bristol
Retirement Board*

INFORMATION TO ACCESS THIS MEETING

[https://bristolct-
gov.zoom.us/j/84609765583?pwd=t4wn0uLSsTxK4zp47Nejq3A4buAD40.1](https://bristolct.gov.zoom.us/j/84609765583?pwd=t4wn0uLSsTxK4zp47Nejq3A4buAD40.1)
Meeting ID: 846 0976 5583
Passcode: 882504

The regular Retirement Board meeting will be held on Thursday, October 9, 2025, at 5:00 PM. in City Hall Council Chambers, 111 North Main Street, Bristol, CT.

AGENDA

1. Call to Order
2. Public Participation
3. Approval of Minutes
 - a. September25-Minutes
4. Treasurer's Report
 - a. September25-Treasurers Report
5. Consideration to approve the Treasurer's request for pension withdrawals each month from November 1, 2025 through April 1, 2026
 - a. Pension Fund Cash Requirements.
6. Consent Agenda
 - a. October 25-Retirement
7. Investment Review- Beirne Wealth Consulting, LLC.
 - a. General Fund
8. Any other business proper to come before meeting
9. Adjournment

PER ORDER OF THE CHAIRPERSON
Thomas Barnes, Jr

**MEETING OF THE GENERAL
GOVERNMENT RETIREMENT BOARD**

September 11, 2025

A Regular meeting of the General Government Retirement Board was held on **September 11, 2025 at 5:00 p.m.** in the City Hall Council Chamber, 1st floor, City Hall, 111 North Main Street, Bristol, CT. Members present: Chairman Tom Barnes Jr. (Zoom), Comptroller Diane M. Waldron, Mayor Jeffrey Caggiano, Council member Jacqueline Olsen, Commissioners William Veits (Zoom), David Maikowski (Zoom), Mathew Ragaini, Peter Dauphinais and Thomas DeNoto. Absent: Vice Chairman Robert Parenti and Commissioner Alan Rudolewicz

1. Call to Order

Pledge of Allegiance

The meeting was called to order at 5:00 p.m. by Chairman Tom Barnes Jr.

2. Public Participation

None.

3. Approval of the minutes

a. General Government Retirement Board – Regular Meeting on August 14, 2025.

A motion was made by Comptroller Waldron and seconded by Commissioner Maikowski and it was unanimously voted to:

“Approve the minutes of the General Government Retirement Board Regular Meeting of August 14, 2025 and place them on file.”

4. Treasurers Report

a. August 2025.

A motion was made by Commissioner DeNoto, and seconded by Council member Olsen and it was unanimously voted to:

“Accept the Treasurer’s Report for August 2025, and place it on file.”

5. Consent Agenda.

- a. Consideration of a request to approve the Normal Retirement from Valerie Toner, Bristol Library Department, BPSA Union effective August 16, 2025 with an annual pension amount of \$57,031.44 or \$4,752.62 monthly.

A motion was made by Comptroller Waldron and seconded by Commissioner DeNoto and it was unanimously voted to:

“Approve Consent Agenda Item 5a.”

6. Any other business proper to come before meeting.

None.

At 5:10 p.m. a motion was made by Commissioner DeNoto and seconded by Commissioner Maikowski and it was unanimously voted to:

“Adjourn.”

Respectively submitted,

Diane M. Waldron
Comptroller and Secretary, Retirement Board

DRAFT

Treasurer's Report
Police, Firefighters, Retirement System Fund
September 2025

	Police 710	Firefighter 711	Retirement 712/715	Total
<u>Pension Funds in Pension Bank Accounts</u>				
CASH & CASH EQUIVALENTS: 08/01/2025	\$ 184,656.38	\$ 230,115.66	\$ 398,062.91	\$ 812,834.95
<u>RECEIPTS:</u>				
Employee Contributions City/BDA/WPC	43,943.75	21,254.47	75,850.06	141,048.28
Employee Contributions BOE			93,053.68	93,053.68
Employee Contributions Health Dept			7,672.68	7,672.68
Employee Contributions Water Dept			11,345.38	11,345.38
Employer Contributions BOE			-	-
Employer Contributions City/BDA/WPC			-	-
Employer Contributions Water Dept			-	-
Employee Contributions Buy Back			157.20	157.20
Employee Contributions Fire Dept Healthcare 1.00%			7,084.48	7,084.48
Employee Contributions Police Healthcare 1.625%, 1.875%			14,647.75	14,647.75
Employee Contributions Retiree Healthcare -Health Dept - 1.5%			7,914.94	7,914.94
Employee Contributions Retiree Healthcare 233 - 1.5%, 1.75%			9,585.31	9,585.31
Employee Contributions Retiree Healthcare BPSA - 1.5%, 1.75%			6,936.96	6,936.96
Employee Contributions Retiree Healthcare - 1338 -1.5%, 1.75%			10,364.16	10,364.16
Employee Contributions Retiree Healthcare -NBAR - 1.5%, 1.75%			2,003.32	2,003.32
Employee Contributions Retiree Healthcare -BOE NBAR / 818- 1.5%			5,431.19	5,431.19
Miscellaneous Income			-	-
Interest	92.93	91.07	126.19	310.19
Total Receipts, Contributions and Interest	44,036.68	21,345.54	252,173.30	317,555.52
<u>EXPENDITURES:</u>				
Pensions Paid <i>P, F, R total retirees</i>	779,499.94	457,072.30	1,676,042.55	2,912,614.79
Refund of Contributions / Interest	-	-	59,773.23	59,773.23
Fiduciary Insurance	-	-	-	-
Legal- Robinson & Cole	-	-	-	-
Actuary- Milliman	9,235.00	9,235.00	9,235.00	27,705.00
Accountant/Bookkeeper Salaries (Note 1)	-	-	-	-
Comptroller/Assistant to Comptroller Salaries (Note 1)	-	-	-	-
Postage (Note 1)	-	-	-	-
Other Expenses / (Revenue) (Tyler Technologies)	-	-	-	-
Total Expenditures	788,734.94	466,307.30	1,745,050.78	3,000,093.02
CURRENT MONTH, Surplus/(deficit)	(744,698.26)	(444,961.76)	(1,492,877.48)	(2,682,537.50)
TRSFN IN-FIDELITY TO PENSION	800,000.00	450,000.00	1,420,000.00	2,670,000.00
CASH & CASH EQUIVALENTS: 8/31/2025	\$ 239,958.12	\$ 235,153.90	\$ 325,185.43	\$ 800,297.45
(Beginning Bal+Current Month+Transfer in)				
<u>Pension Trust Funds</u>				
Market Value at July 1, 2024 (Note 2)				\$ 787,081,248
Actuarial Value at July 1, 2024 (Note 2)				\$ 766,895,958
Accrued Liability				\$ (623,550,579)
Pension Surplus (Unfunded Liability)				\$ (143,345,379)
Funded Ratio= Actuarial Value divided by Accrued Liability				123.0%

Note 1: Amount will be invoiced quarterly by the Comptroller's office to the Pension fund.

Note 2: Source: Milliman Actuarial Valuation as of July 1, 2024 projected for fiscal year 2025-26, final report dated February 7, 2025.

City of Bristol, Connecticut
Pension Fund Cash Requirements
November 2025 through April 2026

	<u>POLICE</u>	<u>FIREFIGHTERS</u>	<u>RETIREMENT</u>	<u>TOTAL</u>
Current Fidelity Funding	785,000.00	455,000.00	1,430,000.00	2,670,000.00
Cash Equivalents @ 9/30/25	\$ 239,958.12	\$ 235,153.90	\$ 325,185.43	800,297.45
October 2025 Net change estimated + (-)	40,000.00	25,000.00	-	
<u>ESTIMATED RECEIPTS Nov 2025 through April 2026</u>				
Interest Income 6 mos	540.00	540.00	750.00	1,830.00
Employee Contributions 6 mos	306,600.00	148,400.00	1,680,000.00	2,135,000.00
<u>ESTIMATED EXPENDITURES: Nov 2025 through Apr 2026</u>				
Pensions to be paid:				
Police: 13.4 Payments @ \$390k	(5,226,000.00)			(5,226,000.00)
Fire: 13.4 Payments @ \$225K		(3,015,000.00)		(3,015,000.00)
Retirement: 6.1 Payments @ \$1,673k			(10,205,300.00)	(10,205,300.00)
Refunds + Interest	(15,000.00)	(15,000.00)	(300,000.00)	(330,000.00)
Estimated Fire DROP lump sum payments		(96,241.53)		
Attorney Fees	(1,000.00)	(1,000.00)	(1,000.00)	(3,000.00)
Fiduciary Insurance	(7,500.00)	(7,500.00)	(7,500.00)	(22,500.00)
Actuary Fee	(11,700.00)	(11,700.00)	(11,700.00)	(35,100.00)
Accounting Fees (Note 2)	(15,950.00)	(15,925.00)	(16,800.00)	(48,675.00)
Cash shortage through 4/30/2026	\$ (4,690,051.88)	\$ (2,753,272.63)	\$ (8,536,364.57)	(15,979,689.08)
Proposed withdrawal Nov-Apr	4,800,000.00	2,850,000.00	8,670,000.00	16,320,000.00
Planned surplus (Note 1)	109,948.12	96,727.37	133,635.43	
Proposed monthly withdrawal Nov-Apr	800,000.00	475,000.00	1,445,000.00	2,720,000.00

Note 1: The goal is to have approximately \$100,000 excess per fund available in Pension bank accounts to cover unexpected activity or changes in estimates.

Note 2: Accounting fees include salaries of Treasury and Pension Coordinator (50%), PT Bookkeeping Clerk (20%) Deputy Treasurer (5%), Budget & Finance Analyst (20%), Comptroller (15%), Assistant to Comptroller (5%) and \$920 postage for 6 months

CITY OF BRISTOL-GENERAL CITY RETIREMENT
BENEFIT CALCULATION

Department: BOE
Group: Local #2267

Employee: Kimberly Soto
Soc.Sec: "On File"

Date of Retire: 9/5/2025 82 rule:80/85

Normal Retirement

CALENDAR YEAR	GROSS EARNINGS	PENSION CALCULATION
2025	\$ 68,760.02 *	Highest Three Years:
2024	\$ 63,830.79 *	
2023	\$ 63,250.95 *	\$ 68,760.02
	\$ (42,802.70) *	\$ 63,830.79
2022	\$ 64,094.84 *	\$ 63,250.95
2021	\$ 58,749.64	\$ (42,802.70)
2020	\$ 61,554.91	\$ 64,094.84
2019	\$ 52,183.10	
2018	\$ 59,531.60	Calculation: \$ 217,133.90
2017	\$ 55,397.47	
2016	\$ 49,716.33	Sum Of Highest Three Years Divided By 3
		= Average Annual Earnings
		\$ 217,133.90 x 1/3 =
		\$ 72,377.97
		\$ 72,377.97 Average Annual Earnings
		x .0240 Percentage Factor
		\$ 1,737.07
		x 25 Years of Service
		\$ 43,426.75 Annual Pension: Normal Retirement
		\$ 3,618.90 Monthly Pension: Normal Retirement

Comments: City Retirement Benefits are Exclusive of Social Security Benefits.
2025 Gross Wages include an accrual payout of \$ 18,477.33

Prepared by: Lindsey Schaffril

Date: 9/24/2025

Reviewed by:

Robert A. Marziale

Date: 9-25-25

Approved by:

Danemulaxion

Date: 9/25/25

Board

Approved:

Date:



INVOICE

Date: 10/7/2025
Invoice #: 22

City of Bristol
111 North Main Street
Bristol, CT 06010

For the period 10-1-25 through 12-31-25
Client Annual Fee: \$437,091

PERIOD	DESCRIPTION		AMOUNT
For the period 10-1-25 through 12-31-25			
	Quarterly Consulting Fee to be charged		\$109,272.75
		Net Amount	\$109,272.75

We will debit the accounts accordingly
Mail To: Beirne Wealth Consulting Services, LLC, Attn: Richard DeFrancesco 3 Enterprise Drive, Suite 410 Shelton, CT 06484

On a timely basis, please inform your Advisor, in writing, of any material changes in your financial situation and/or investment objectives, which might affect the investment of your assets.

Beirne Wealth Consulting Services, LLC ~ 3 Enterprise Drive Suite 410 ~ Shelton, CT 06484 ~ 203-701-8606

PRELIMINARY REPORT PREPARED FOR:



Your Strategic Partner for Defined Benefit Plans

Period Ending 9/30/2025

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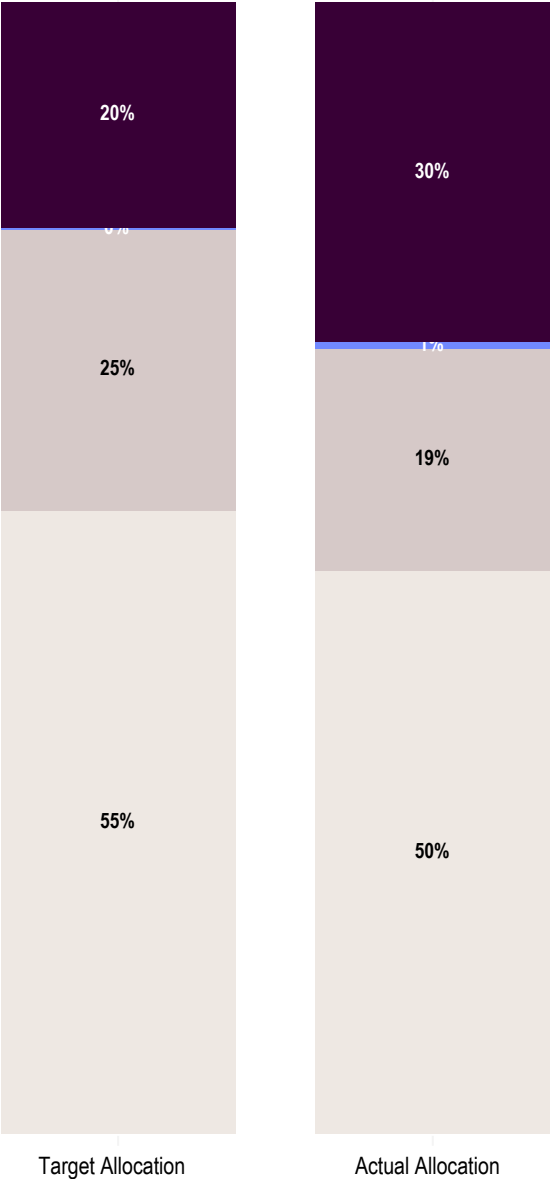
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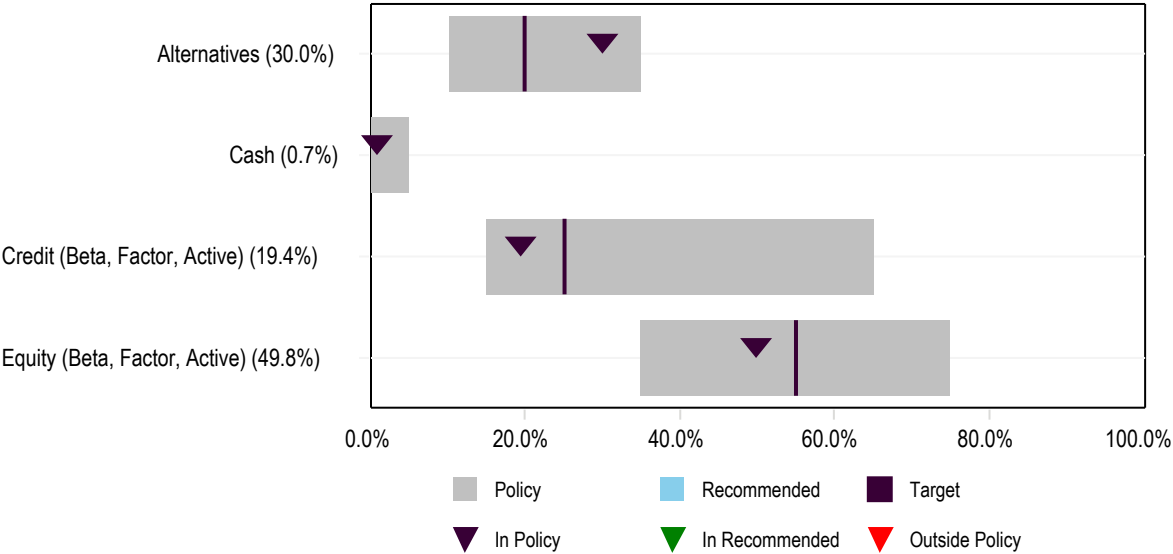
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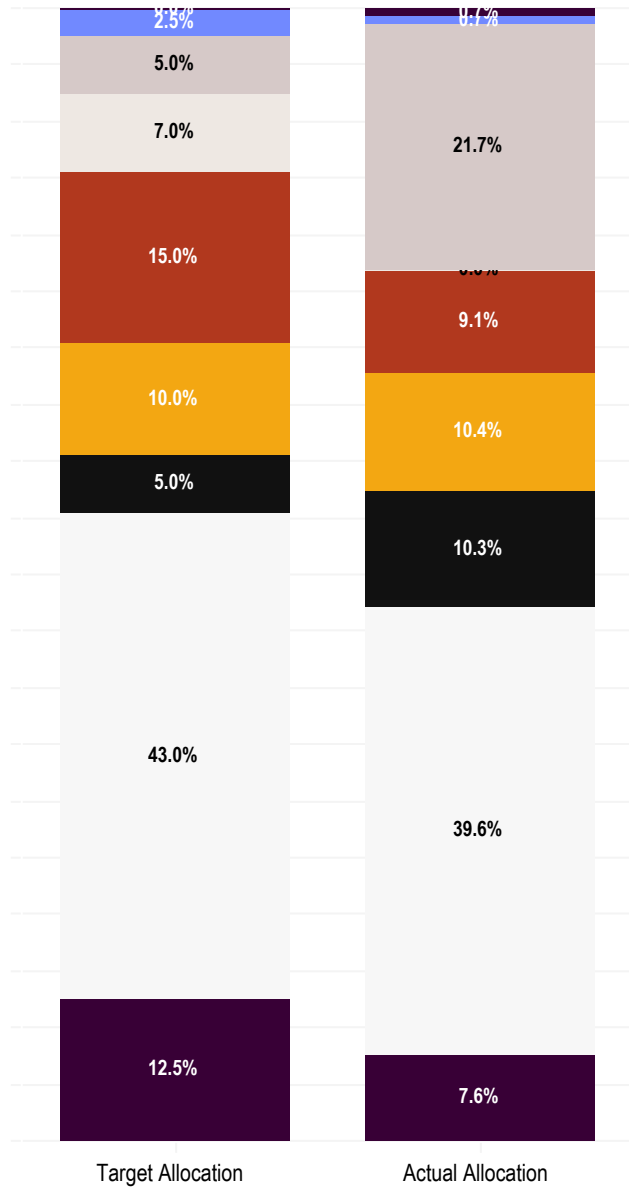




As of June 30, 2025

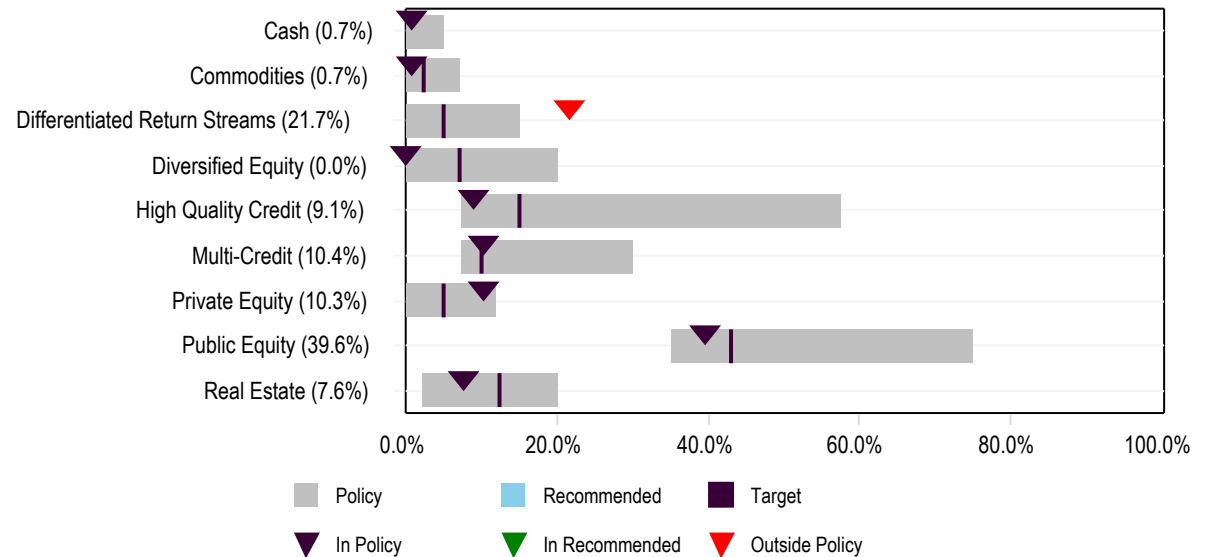
	Current Balance	Current Allocation	Policy	Policy Range	Difference	Within IPS Range?
Alternatives	\$259,792,537	30.0	20.0	10.0 - 35.0	10.0	Yes
Cash	\$6,069,624	0.7	0.0	0.0 - 5.0	0.7	Yes
Credit (Beta, Factor, Active)	\$168,263,862	19.4	25.0	15.0 - 65.0	-5.6	Yes
Equity (Beta, Factor, Active)	\$431,011,401	49.8	55.0	35.0 - 75.0	-5.2	Yes
Total	\$865,137,424	100.0	100.0		0.0	





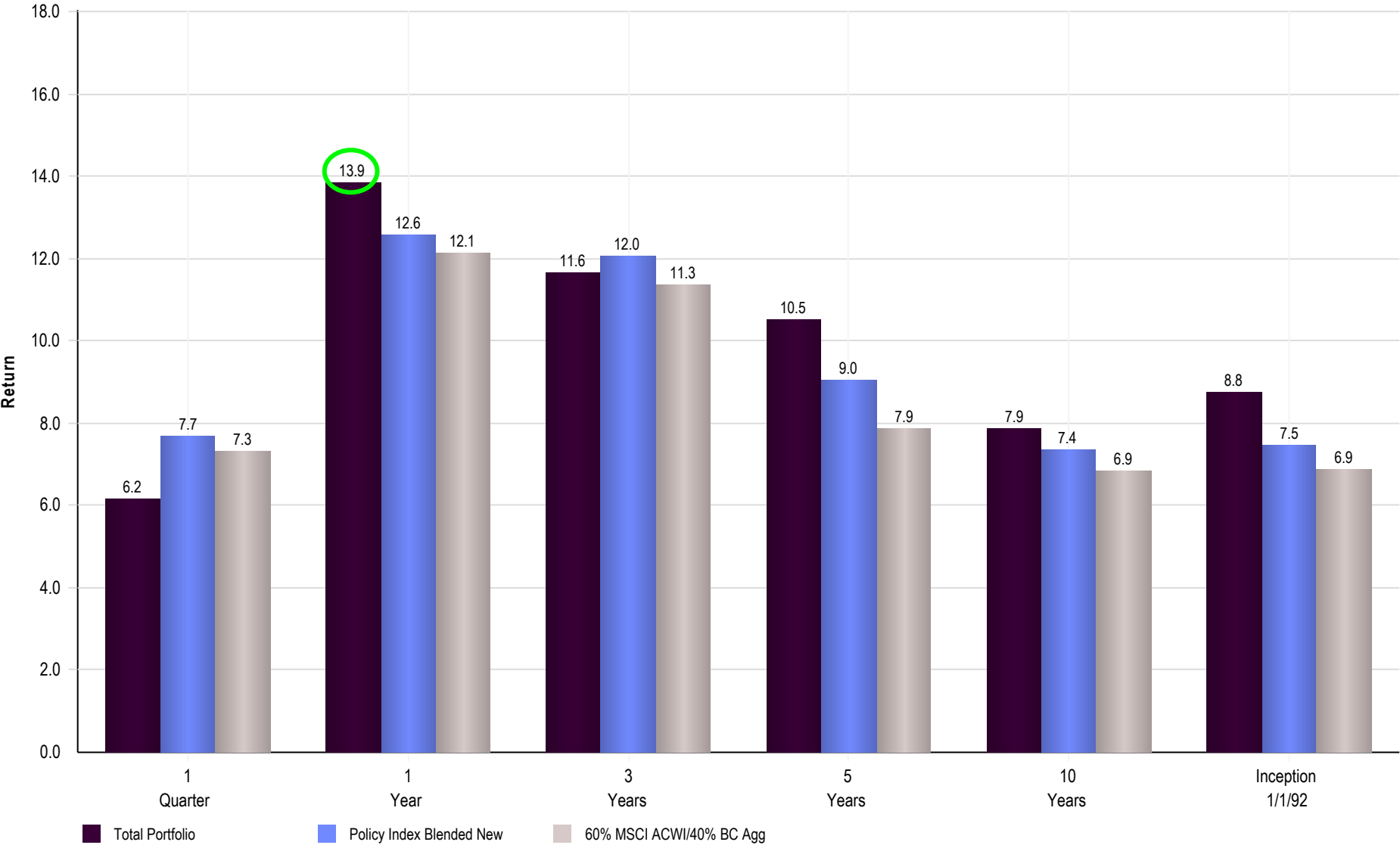
As of June 30, 2025

	Current Balance	Current Allocation	Policy	Policy Range	Difference	Within IPS Range?
Cash	6,069,624	0.7	0.0	0.0 - 5.0	0.7	Yes
Commodities	6,021,509	0.7	2.5	0.0 - 7.0	-1.8	Yes
Differentiated Return Streams	188,131,108	21.7	5.0	0.0 - 15.0	16.7	No
Diversified Equity		0.0	7.0	0.0 - 20.0	-7.0	Yes
High Quality Credit	78,518,800	9.1	15.0	7.5 - 57.5	-5.9	Yes
Multi-Credit	89,745,062	10.4	10.0	7.5 - 30.0	0.4	Yes
Private Equity	88,795,499	10.3	5.0	0.0 - 12.0	5.3	Yes
Public Equity	342,215,902	39.6	43.0	35.0 - 75.0	-3.4	Yes
Real Estate	65,639,920	7.6	12.5	2.0 - 20.0	-4.9	Yes
Total	865,137,424	100.0	100.0		0.0	

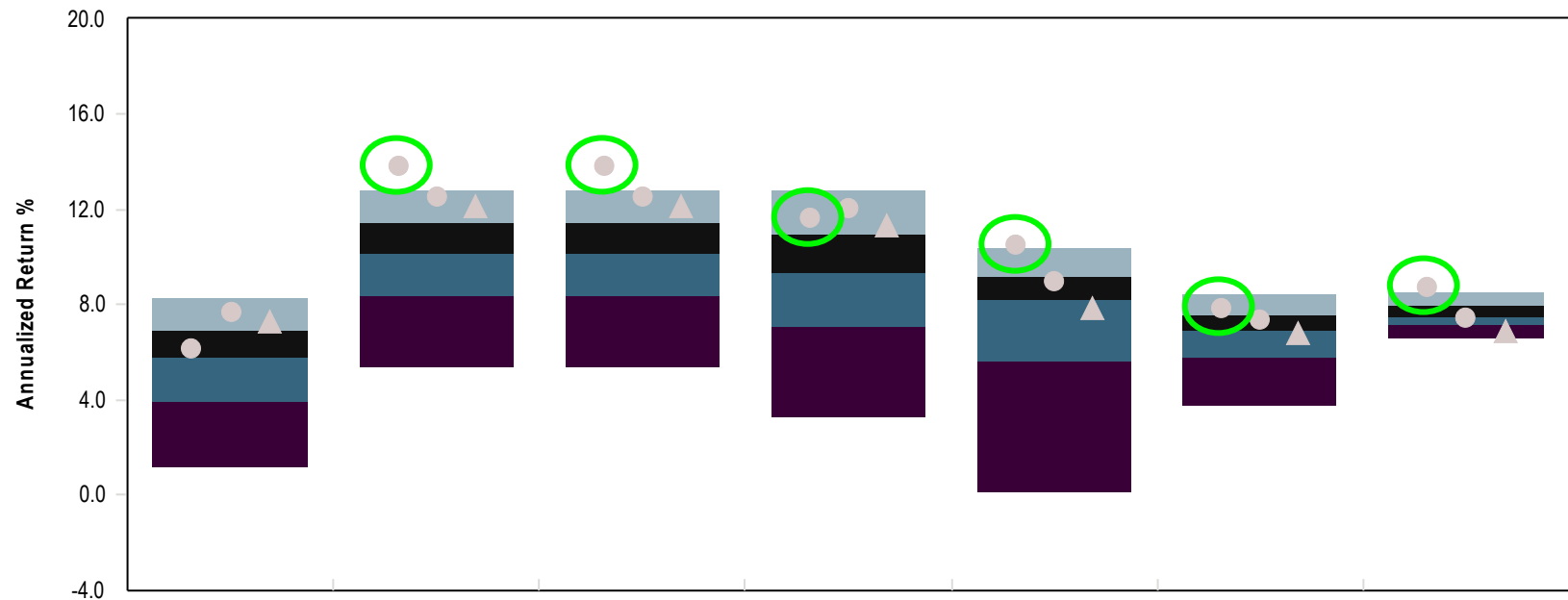


Trailing Net of Fees Returns vs. Index

Run Date: October 7, 2025
As of: June 30, 2025



Total Portfolio vs. All DB Plans

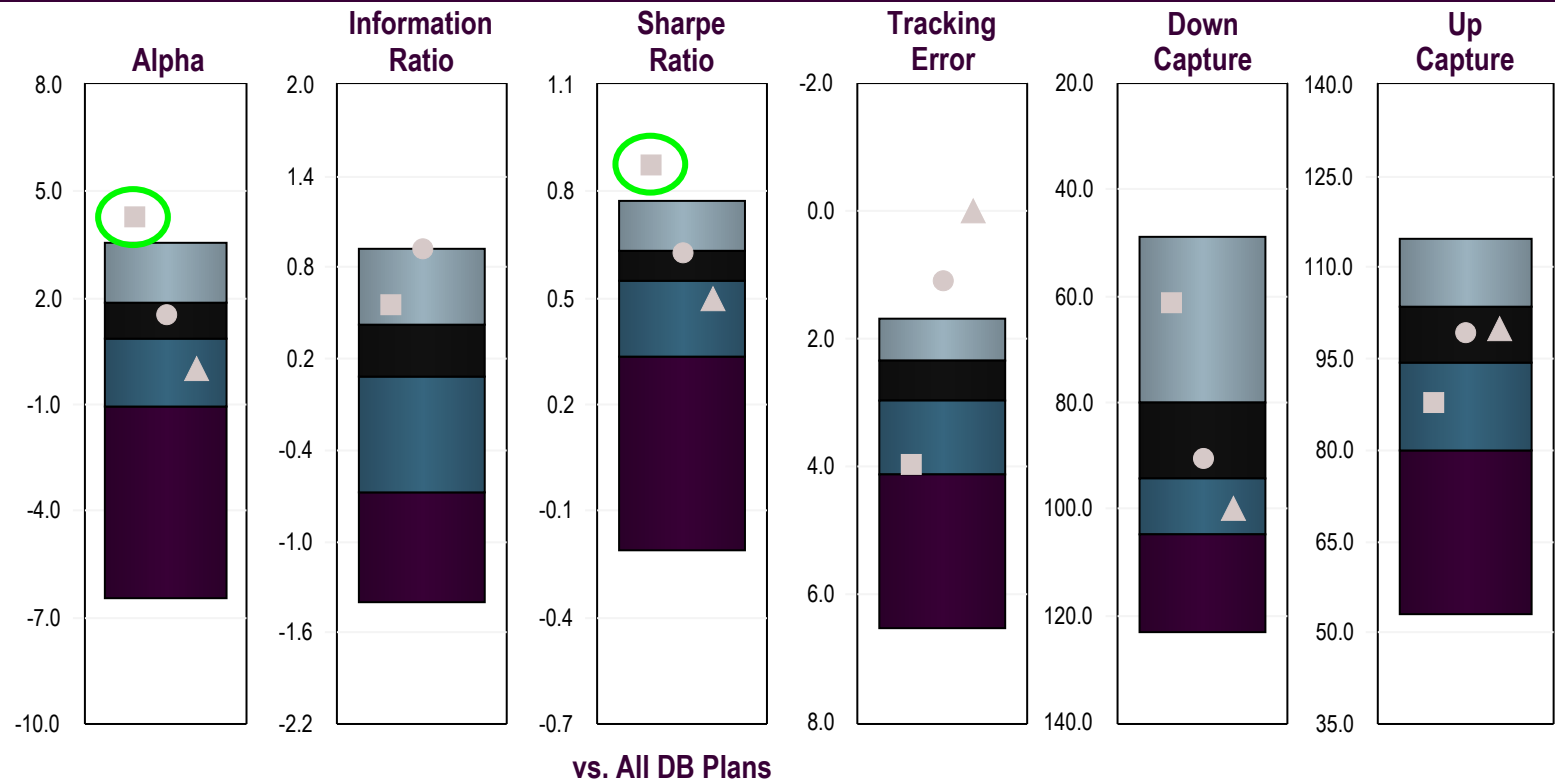


	Period						
	1 Quarter Ending Jun-2025	Jul-2024 To Jun-2025	1 Year Ending Jun-2025	3 Years Ending Jun-2025	5 Years Ending Jun-2025	10 Years Ending Jun-2025	Since Inception Ending Jun-2025
● Total Portfolio	6.2 (44)	13.9 (2)	13.9 (2)	11.6 (14)	10.5 (4)	7.9 (16)	8.8 (4)
■ Policy Index Blended New	7.7 (10)	12.6 (7)	12.6 (7)	12.0 (10)	9.0 (28)	7.4 (34)	7.5 (48)
▲ 60% MSCI ACWI/40% BC Agg	7.3 (17)	12.1 (11)	12.1 (11)	11.3 (17)	7.9 (56)	6.9 (53)	6.9 (86)
5th Percentile	8.3	12.8	12.8	12.8	10.4	8.5	8.5
1st Quartile	6.9	11.4	11.4	10.9	9.1	7.6	7.9
Median	5.8	10.1	10.1	9.4	8.2	6.9	7.4
3rd Quartile	3.9	8.3	8.3	7.1	5.6	5.8	7.2
95th Percentile	1.2	5.4	5.4	3.3	0.1	3.7	6.6
Population	1,712	1,692	1,692	1,602	1,533	1,314	103

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Statistics	Definition
Alpha	- A measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. It is a measure of the portfolio's historical performance not explained by movements of the market , or a portfolio's non-systematic return.
Information Ratio	- Measured by dividing the active rate of return by the tracking error. The higher the Information Ratio, the more value-added contribution by the manager. Negative Information Ratios are difficult to interpret.
Over/Under Performance	- Geometric difference between the managers return and the benchmark return over a specified time period.
Sharpe Ratio	- Also called the reward-to-variability ratio, Sharpe Ratio measures the absolute rate of return per unit of risk and is calculated as the Excess Return vs. the Risk Free Rate divided by the standard deviation of the Excess Return. Investors prefer higher Sharpe Ratios (more return per unit of risk).
Tracking Error	- A measure of the standard deviation of a portfolio's performance relative to the performance of an appropriate market benchmark.
Down Capture	- The ratio of average portfolio return over the benchmark during periods of negative benchmark return. Lower values indicate better product performance.
Up Capture	- The ratio of average portfolio return over the benchmark during periods of positive benchmark return. Higher values indicate better product performance.

Total Portfolio

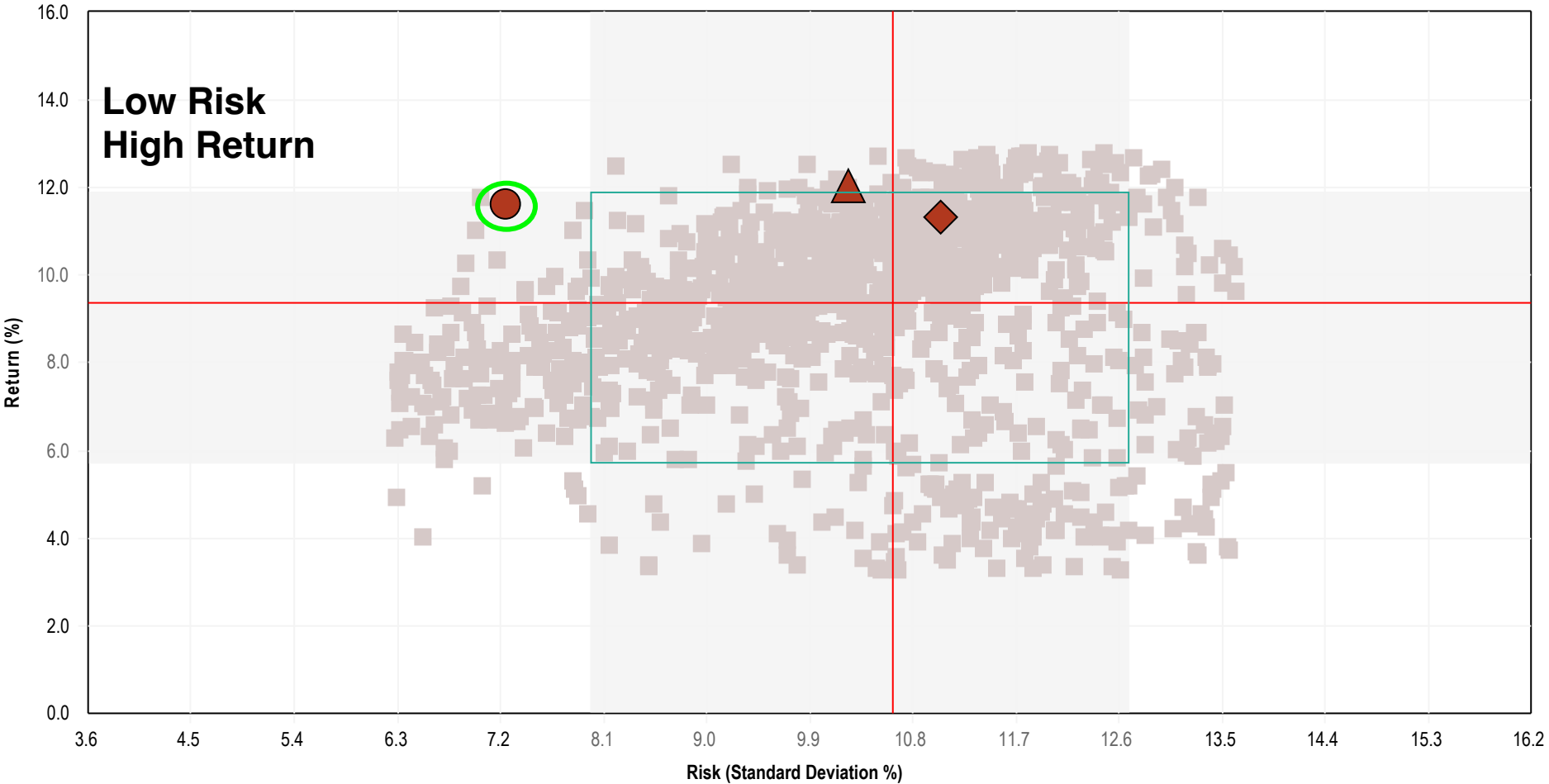


	5 Years Ending Jun-2025	5 Years Ending Jun-2025	5 Years Ending Jun-2025	5 Years Ending Jun-2025	5 Years Ending Jun-2025	5 Years Ending Jun-2025
■ Total Portfolio	4.3 (3)	0.6 (17)	0.9 (3)	4.0 (73)	61.4 (9)	87.9 (64)
● Policy Index Blended New	1.5 (32)	0.9 (5)	0.6 (27)	1.1 (1)	90.4 (42)	99.3 (37)
▲ 60% MSCI ACWI/40% BC Agg	0.0 (67)	-	0.5 (61)	0.0 (1)	100.0 (62)	100.0 (36)

5th Percentile	3.6	0.9	0.8	1.7	48.9	114.7
1st Quartile	1.9	0.4	0.6	2.3	80.2	103.5
Median	0.9	0.1	0.5	3.0	94.3	94.3
3rd Quartile	-1.1	-0.7	0.3	4.1	104.8	80.0
95th Percentile	-6.5	-1.4	-0.2	6.5	123.2	53.2

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

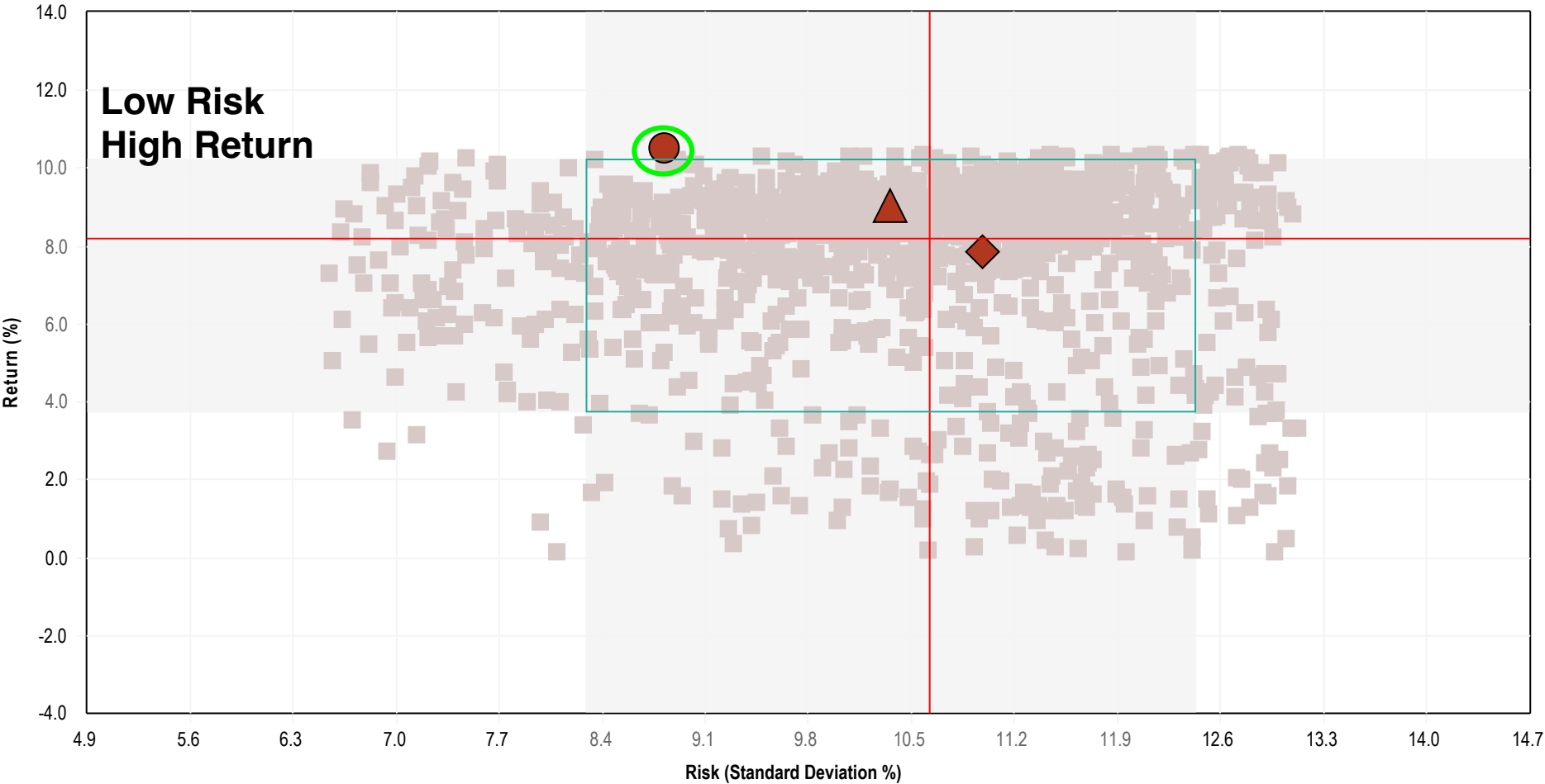
3 Years vs. All DB Plans as of June 30, 2025



	Return	Standard Deviation
● Total Portfolio	11.6	7.2
▲ Policy Index Blended New	12.0	10.2
◆ 60% MSCI ACWI/40% BC Agg	11.3	11.1
— Median	9.4	10.6

Calculation based on monthly periodicity.

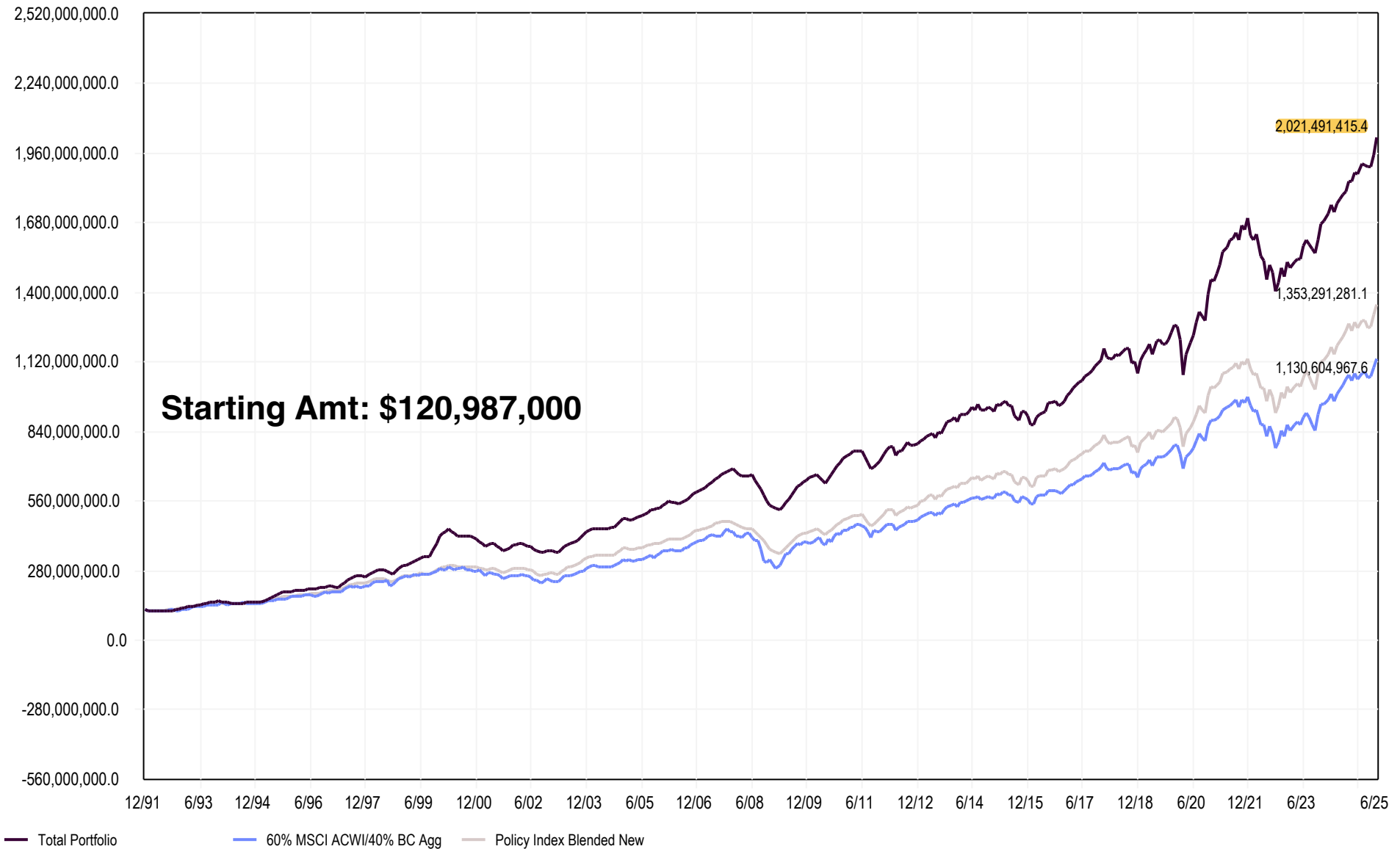
5 Years vs. All DB Plans as of June 30, 2025



	Return	Standard Deviation
● Total Portfolio	10.5	8.8
▲ Policy Index Blended New	9.0	10.4
◆ 60% MSCI ACWI/40% BC Agg	7.9	11.0
— Median	8.2	10.6

Calculation based on monthly periodicity.

Since Inception as of June 30, 2025



Calculation based on monthly periodicity.

As of June 30, 2025

Partnerships	Inception Date	Investment Strategy	Capital Commitment \$	Capital Contributed	Market Value \$	Distributed \$	Net Growth	IRR (%)	TVPI Multiple
Arsenal III, LP(\$15 mill)	01/31/2019	Venture Capital	15,000,000	13,840,515	32,005,463	7,520,799	25,685,747	26.3	2.9
Arsenal Growth Equity IV, LP(\$35 mill)	01/24/2023	Venture Capital	35,000,000	18,180,989	25,522,096	1,376,147	8,717,254	25.8	1.5
Zephyr Peacock India Fund III Limited (\$5 million)	05/31/2012	Venture Capital	5,000,000	4,696,818	1,797,446	3,024,480	123,838	0.4	1.0
Zephyr Peacock India Growth Fund US, LP(\$6 million)	07/01/2018	Venture Capital	6,000,000	4,888,655	5,380,141	508,040	999,526	5.5	1.2
Arsenal-Beamer Investors, LLC(\$2.9 million)	05/29/2024	Co-Investment	2,900,000	2,900,000	3,372,372	-	472,372	14.9	1.2
Arsenal-Cart Investors II, LLC(\$2 million)	10/12/2021	Co-Investment	2,000,000	2,000,000	5,461,015	-	3,461,015	31.0	2.7
Arsenal-Elevate Investors I, LLC(\$4.6 million)	08/24/2022	Co-Investment	4,600,000	5,060,000	5,142,371	-	82,371	0.6	1.0
Arsenal-Sayari Investors, LLC(\$2 million)	10/12/2021	Co-Investment	2,000,000	2,000,000	5,476,299	-	3,476,299	31.1	2.7
GWC Select Opportunities SPC(\$2.5 million)	10/26/2022	Co-Investment	2,500,000	2,500,000	4,638,296	-	2,138,296	25.9	1.9
GWC Select Opportunities SPC1(\$2.6 million)	08/01/2023	Co-Investment	2,600,000	2,600,000	2,647,293	534,446	581,739	12.2	1.2
Longford Capital (\$15 million)	07/01/2013	Other	15,000,000	14,614,150	6,789,443	18,559,627	10,734,920	12.9	1.7
Longford Capital Fund II, LP (\$30 million)	11/30/2016	Other	30,000,000	26,308,972	14,627,363	19,004,292	7,322,683	7.8	1.3
Longford Capital Fund III, LP(\$30 million)	04/01/2020	Other	30,000,000	23,228,314	19,923,183	11,203,362	7,898,231	19.8	1.3
Greywolf Containership Opps II, LP(\$6 million)	10/25/2022	Other	6,000,000	6,080,780	5,957,580	3,524,162	3,400,962	25.2	1.6
Greywolf Opportunities Offshore Fund II, LP(\$24 million)	09/26/2022	Distressed	24,000,000	24,000,000	31,409,008	-	7,409,008	18.8	1.3
EnTrust Structured Income Fund	03/01/2013	Credit	19,000,000	19,000,000	4,286,931	20,910,034	6,196,965	4.9	1.3
EnTrust Structured Income II-A	07/01/2017	Credit	35,000,000	35,000,000	14,075,460	31,779,524	10,854,984	5.3	1.3
Golub Capital BDC 4, Inc.(\$22 million)	11/08/2022	Private Debt	22,000,000	19,030,000	19,030,000	2,924,148	2,924,148	14.8	1.2
Silver Point Specialty Credit Fund III, LP(\$22 million)	03/08/2023	Direct Lending	22,000,000	14,490,580	8,949,626	6,916,797	1,375,843	9.5	1.1
Greywolf Distressed Opp Fund, LP(\$17 million)	07/31/2020	Distressed	17,000,000	17,000,000	16,806,242	5,243,413	5,049,655	8.0	1.3
Entrust Blue Ocean Fund, LP(\$17 million)	04/01/2020	Shipping	17,000,000	18,348,989	19,700,652	10,863,137	12,214,800	17.5	1.7
Entrust Blue Ocean Fund II, LP (\$30 mill)	11/06/2023	Shipping	30,000,000	25,913,757	28,552,949	-	2,639,192	6.2	1.1
Corrum Capital Real Assets, LP (\$10 million)	06/01/2015	Structured Finance	10,000,000	7,572,480	6,021,509	2,472,249	921,278	1.5	1.1
Boyd Titanium GSA Fund (\$34.5 million)	09/30/2013	Real Estate	34,500,000	34,500,000	31,433,704	19,563,429	16,497,133	5.2	1.5
Boyd Watterson State Govt Fund, LP(\$10 million)	02/01/2018	Real Estate	10,000,000	10,000,000	9,529,082	3,950,487	3,479,569	5.0	1.3
Boyd Diversified Gov't REIT(\$10 million)	12/21/2022	Real Estate	24,000,000	24,000,000	24,246,538	2,207,525	2,454,063	4.7	1.1
Invesco Mortgage Recovery Fund II, LP(\$10 million)	03/31/2015	Real Estate	10,000,000	7,634,840	418,311	5,506,652	-1,709,877	-12.9	0.8
Lone Star (\$10 million)	06/01/2011	Real Estate	9,000,000	8,971,009	12,285	13,799,344	4,840,620	24.8	1.5
Total			442,100,000	394,360,849	353,212,658	191,392,096	150,242,635	8.9	1.4

Periods Ending 09/30/25

Name	1 Month	Last 3 Months	YTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years
US Equity									
Russell 3000 Index	3.5	8.2	14.4	17.4	24.1	15.7	14.7	14.2	12.5
S&P 500 Index	3.7	8.1	14.8	17.6	24.9	16.5	15.3	14.6	12.7
Russell 1000 Index	3.5	8.0	14.6	17.7	24.6	16.0	15.0	14.5	12.7
Russell 1000 Growth Index	5.3	10.5	17.2	25.5	31.6	17.6	18.8	17.4	11.4
Russell 1000 Value Index	1.5	5.3	11.7	9.4	17.0	13.9	10.7	11.2	13.4
Russell Midcap Index	0.9	5.3	10.4	11.1	17.7	12.7	11.4	12.1	14.3
Russell 2000 Index	3.1	12.4	10.4	10.8	15.2	11.6	9.8	10.4	11.1
Russell 2000 Growth Index	4.2	12.2	11.7	13.6	16.7	8.4	9.9	11.0	8.1
Russell 2000 Value Index	2.0	12.6	9.0	7.9	13.6	14.6	9.2	9.5	13.4
International Equity									
MSCI AC World Index	3.7	7.7	18.9	17.8	23.7	14.1	12.5	10.8	-
MSCI AC World ex USA	3.6	7.0	26.6	17.1	21.3	10.8	8.8	6.6	-
MSCI EAFE Index	2.0	4.8	25.7	15.6	22.3	11.7	8.7	7.3	10.6
MSCI Emerging Markets Index	7.2	10.9	28.2	18.2	18.8	7.5	8.4	4.4	-
Fixed Income									
90 Day U.S. Treasury Bill	0.3	1.1	3.2	4.4	4.8	3.0	2.1	1.4	4.9
Blmbg. U.S. Aggregate	1.1	2.0	6.1	2.9	4.9	-0.4	1.8	2.3	8.3
Blmbg. U.S. Gov't/Credit	1.1	1.9	5.9	2.7	4.9	-0.6	2.0	2.4	8.3
Bloomberg U.S. Municipal Bond Index	2.3	3.0	2.6	1.4	4.7	0.9	2.3	2.9	7.9
Blmbg. U.S. Corp: High Yield Index	0.8	2.5	7.2	7.4	11.1	5.5	6.2	6.2	9.3
Real Estate									
FTSE NAREIT All REITs Index	0.3	2.7	4.5	-4.1	8.3	6.8	6.5	8.2	10.7
NCREIF Property Index	-	-	-	-	-	-	-	-	7.9
Alternatives									
Barclay Hedge Fund Index	-	-	-	-	-	-	-	-	-
Inflation									
CPI - All Urban Consumers (SA)	-	-	-	-	-	-	-	-	3.1

Approx 47% Priced

City of Bristol Employee Pension Plan

Total Portfolio

Run Date: October 7, 2025

As of September 30, 2025

	Market Value (\$)	% of Portfolio	Month	Quarter	YTD	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	15 Years	Inception (%)	Inception Date
Total Portfolio	903,680,016	100.00	1.96	5.30	13.49	15.09	14.93	10.30	9.20	7.83	8.87	Jan-92
Policy Index Blended New			-	-	-	-	-	-	-	-	-	
60% MSCI ACWI/40% BC Agg			2.61	5.36	13.48	11.42	15.64	7.91	8.01	7.18	7.01	
Credit	170,631,586	18.88	0.42	0.98	7.29	9.14	8.33	8.14	-	-	6.50	Jan-19
Blmbg. U.S. Aggregate			1.09	2.03	6.13	2.88	4.93	-0.45	1.84	2.26	1.90	
High Quality Credit	80,501,773	8.91	0.90	1.43	5.02	3.13	6.65	4.33	-	-	4.51	Jan-19
Blmbg. U.S. Aggregate			1.09	2.03	6.13	2.88	4.93	-0.45	1.84	2.26	1.90	
Boyd Watterson Fixed Income	30,019,451	3.32	1.24	2.46	6.61	3.14	5.19	-0.13	2.16	2.58	5.45	Apr-90
Blmbg. U.S. Aggregate			1.09	2.03	6.13	2.88	4.93	-0.45	1.84	2.26	5.12	
iShares Core US Aggregate Bond ETF(AGG)	16,444,974	1.82	1.13	2.06	6.19	2.89	-	-	-	-	5.00	Aug-23
Blmbg. U.S. Aggregate			1.09	2.03	6.13	2.88	4.93	-0.45	1.84	2.26	5.00	
Golub Capital BDC 4, Inc.(\$22 million)[CE]	20,350,000	2.25	0.82	0.82	6.35	9.46	-	-	-	-	13.81	Dec-22
Blmbg. U.S. Aggregate			1.09	2.03	6.13	2.88	4.93	-0.45	1.84	2.26	4.37	
EnTrust Structured Income II-A	13,687,348	1.51	0.00	-0.78	-0.81	-3.09	2.54	7.21	-	-	4.69	Jul-17
Blmbg. U.S. Aggregate			1.09	2.03	6.13	2.88	4.93	-0.45	1.84	2.26	1.70	
Multi-Credit	90,129,813	9.97	0.00	0.58	9.39	15.16	9.57	14.58	-	-	9.18	Jan-19
Blmbg. U.S. Corp: High Yield Index			0.82	2.54	7.22	7.41	11.09	5.55	6.17	6.16	6.26	
Prytania Athena Fund	14,908,923	1.65	0.00	2.63	12.49	17.32	15.59	11.98	5.44	-	4.78	Mar-14
Blmbg. Global High Yield Index			0.67	2.60	9.60	9.20	13.79	5.31	5.69	5.72	4.51	
EnTrust Structured Income Fund	4,110,153	0.45	0.00	-1.12	-7.93	-11.68	-3.99	6.27	4.78	-	4.00	Mar-13
Blmbg. U.S. Aggregate			1.09	2.03	6.13	2.88	4.93	-0.45	1.84	2.26	1.87	
Beach Point TR Offshore Fund II	11,070,465	1.23	0.00	1.55	5.14	8.14	9.76	7.52	5.76	-	6.06	Jan-12
Blmbg. U.S. Corp: High Yield Index			0.82	2.54	7.22	7.41	11.09	5.55	6.17	6.16	6.12	
Silver Point Specialty Credit Fund III, LP(\$22 million)	9,249,951	1.02	0.00	0.00	5.88	3.92	-	-	-	-	8.55	Apr-23
Blmbg. U.S. Corporate Investment Grade Index			1.50	2.60	6.88	3.63	7.07	0.35	3.12	3.52	5.54	
GWC Select Opportunities SPC1(\$2.6 million)	2,575,071	0.28	0.00	0.00	4.68	7.80	-	-	-	-	11.03	Sep-23
Blmbg. U.S. Corp: High Yield Index			0.82	2.54	7.22	7.41	11.09	5.55	6.17	6.16	10.38	
Greywolf Opportunities Offshore Fund II, LP(\$24 million)	31,409,008	3.48	0.00	0.00	17.00	24.90	13.34	-	-	-	13.34	Oct-22
Blmbg. U.S. Corp: High Yield Index			0.82	2.54	7.22	7.41	11.09	5.55	6.17	6.16	11.09	
Greywolf Distressed Opp Fund, LP(\$17 million)	16,806,242	1.86	0.00	0.00	4.41	18.14	6.07	9.27	-	-	8.61	Aug-20
Blmbg. U.S. Universal Index			1.06	2.13	6.31	3.40	5.60	0.08	2.26	2.62	-0.07	

Approx 47% Priced

City of Bristol Employee Pension Plan

Total Portfolio												
	Market Value (\$)	% of Portfolio	Month	Quarter	YTD	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	15 Years	Inception (%)	Inception Date
Equity	465,491,830	51.51	3.71	8.00	19.73	20.20	22.62	13.57	-	-	15.20	Jan-19
MSCI AC World Index			3.66	7.74	18.86	17.80	23.70	14.07	12.47	10.75	14.55	
Public Equity	376,847,014	41.70	4.63	10.12	23.83	22.64	25.12	13.58	-	-	15.23	Jan-19
MSCI AC World Index			3.66	7.74	18.86	17.80	23.70	14.07	12.47	10.75	14.55	
Neuberger Berman Large Cap Growth	90,867,985	10.06	2.93	4.12	13.64	16.34	29.42	15.45	18.72	15.80	14.67	Feb-79
Russell 1000 Growth Index			5.31	10.51	17.24	25.53	31.61	17.58	18.83	17.36	12.50	
iShares Russell 1000 Growth ETF(IWF)	14,078,936	1.56	5.22	10.43	-	-	-	-	-	-	27.95	May-25
Russell 1000 Growth Index			5.31	10.51	17.24	25.53	31.61	17.58	18.83	17.36	27.96	
iShares Russell 1000 Value ETF(IWD)	7,902,164	0.87	1.42	5.28	11.42	9.26	16.71	13.67	-	-	10.66	Feb-19
Russell 1000 Value Index			1.49	5.33	11.65	9.44	16.96	13.87	10.72	11.24	10.86	
Columbia Dividend Income	21,080,633	2.33	2.46	6.04	13.22	11.85	17.89	14.05	-	-	12.08	May-19
Russell 1000 Value Index			1.49	5.33	11.65	9.44	16.96	13.87	10.72	11.24	10.05	
Eagle Equity	37,059,440	4.10	1.03	3.37	12.32	14.16	28.00	17.24	-	-	14.84	Apr-19
Russell 1000 Value Index			1.49	5.33	11.65	9.44	16.96	13.87	10.72	11.24	10.50	
Robeco LCV	51,565,884	5.71	3.10	7.55	14.98	13.86	19.27	17.45	11.92	-	10.92	Oct-13
Russell 1000 Value Index			1.49	5.33	11.65	9.44	16.96	13.87	10.72	11.24	10.02	
Patient Opportunity I(LMNOX)	10,735,182	1.19	0.95	14.59	20.08	30.30	29.42	12.39	-	-	12.62	Apr-19
Russell 1000 Value Index			1.49	5.33	11.65	9.44	16.96	13.87	10.72	11.24	10.50	
Fiera SMID Growth	31,853,713	3.52	-0.43	5.90	2.71	4.94	12.80	9.15	11.55	-	10.10	Nov-14
Russell 2500 Growth Index			2.80	10.73	9.95	12.62	15.97	7.76	10.93	11.92	9.87	
iShares Russell 2000 ETF(IWM)	12,164,890	1.35	3.17	12.44	-	-	-	-	-	-	24.86	May-25
Russell 2000 Index			3.11	12.39	10.39	10.76	15.21	11.56	9.77	10.42	24.83	
Neuberger Berman International	22,632,915	2.50	-0.49	-0.90	18.11	11.11	17.35	6.74	7.27	7.01	6.74	Feb-05
MSCI EAFE Index			1.96	4.83	25.72	15.58	22.33	11.71	8.70	7.26	6.40	
Vanguard Developed Mkts Ind(VTMNX)	3,555,164	0.39	2.88	5.85	27.89	17.44	22.05	11.37	-	-	11.08	Mar-20
FTSE Developed x North America Index			2.31	5.52	26.98	16.25	22.21	11.38	8.72	7.23	11.29	
GAMCO Gold	31,588,110	3.50	19.79	43.24	120.76	96.54	48.89	16.33	18.69	-	4.45	Feb-12
Philadelphia Gold and Silver Index			19.41	44.92	118.93	89.33	47.06	18.25	22.20	2.05	4.08	
Sprott Asset Management	24,791,160	2.74	20.23	44.48	111.33	96.82	49.35	16.06	17.80	-	3.22	Feb-12
Philadelphia Gold and Silver Index			19.41	44.92	118.93	89.33	47.06	18.25	22.20	2.05	4.08	
iShares MSCI Emerging Markets ETF(EEM)	16,970,838	1.88	7.10	10.70	28.89	19.56	18.19	6.31	-	-	6.52	Feb-17
MSCI Emerging Markets Index			7.18	10.95	28.22	18.17	18.81	7.51	8.43	4.39	7.65	

Approx 47% Priced

City of Bristol Employee Pension Plan

Total Portfolio												
	Market Value (\$)	% of Portfolio	Month	Quarter	YTD	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	15 Years	Inception (%)	Inception Date
Private Equity	88,644,816	9.81	0.00	-0.17	4.85	10.90	11.41	24.98	13.59	-	9.52	Jan-12
7.5% Annual Return			0.60	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	
Arsenal III, LP(\$15 mill)	32,005,463	3.54	0.00	0.00	6.63	12.34	7.89	25.42	-	-	28.62	Feb-19
Arsenal Growth Equity IV, LP(\$35 mill)	25,522,096	2.82	0.00	0.00	4.05	9.57	-	-	-	-	22.42	Feb-23
Arsenal-Beamer Investors, LLC(\$2.9 million)	3,372,372	0.37	0.00	0.00	0.62	-4.40	-	-	-	-	11.98	Jun-24
Arsenal-Cart Investors II, LLC(\$2 million)	5,461,015	0.60	0.00	0.00	19.55	26.62	15.63	-	-	-	29.24	Nov-21
Arsenal-Elevate Investors I, LLC(\$4.6 million)	5,142,371	0.57	0.00	0.00	4.09	-1.30	0.47	-	-	-	0.45	Sep-22
Arsenal-Sayari Investors, LLC(\$2 million)	5,476,299	0.61	0.00	0.00	7.77	34.13	35.83	-	-	-	29.33	Nov-21
GWC Select Opportunities SPC(\$2.5 million)	4,638,296	0.51	0.00	0.00	1.41	47.27	-	-	-	-	23.60	Nov-22
Zephyr Peacock India Fund III Limited (\$5 million)	1,797,446	0.20	0.00	0.00	-18.70	-25.56	-16.21	-1.74	-1.63	-	-1.57	Jun-12
Zephyr Peacock India Growth Fund US, LP(\$6 million)	5,229,458	0.58	0.00	0.00	0.83	-4.24	12.23	9.39	-	-	2.18	Jul-18
Alternatives	261,968,290	28.99	0.00	3.67	7.88	10.99	8.33	6.72	-	-	5.88	Jan-19
Barclay Hedge Fund Index			-	-	-	-	-	-	-	-	-	
Real Estate	65,639,920	7.26	0.00	0.00	2.43	2.55	-1.78	1.19	-	-	2.67	Jan-19
NCREIF Property Index			-	-	-	-	-	-	-	-	-	
Boyd Titanium GSA Fund (\$34.5 million)	31,433,704	3.48	0.00	0.00	1.91	2.09	-2.37	1.38	4.70	-	4.88	Oct-13
Boyd Watterson State Govt Fund, LP(\$10 million)	9,529,082	1.05	0.00	0.00	2.05	2.19	-1.88	2.06	-	-	4.29	Feb-18
Boyd Diversified Gov't REIT(\$10 million)	24,246,538	2.68	0.00	0.00	3.34	4.12	-	-	-	-	4.40	Jan-23
Invesco Mortgage Recovery Fund II, LP(\$10 million)	418,311	0.05	0.00	0.00	-1.68	-30.06	-51.32	-42.43	-20.57	-	-19.97	Apr-15
Lone Star (\$10 million)	12,285	0.00	0.00	0.00	-3.68	10.28	24.72	44.50	22.43	-	19.39	Jun-11
Commodities	5,671,509	0.63	0.00	0.00	-0.25	16.94	0.58	1.03	-	-	-3.36	Jan-19
Bloomberg Commodity Index Total Return			2.15	3.65	9.38	8.88	2.76	11.53	3.96	-0.51	7.55	
Corrum Capital Real Assets, LP (\$10 million)	5,671,509	0.63	0.00	0.00	-0.25	16.94	0.58	1.03	0.90	-	0.54	Jun-15

Approx 47% Priced

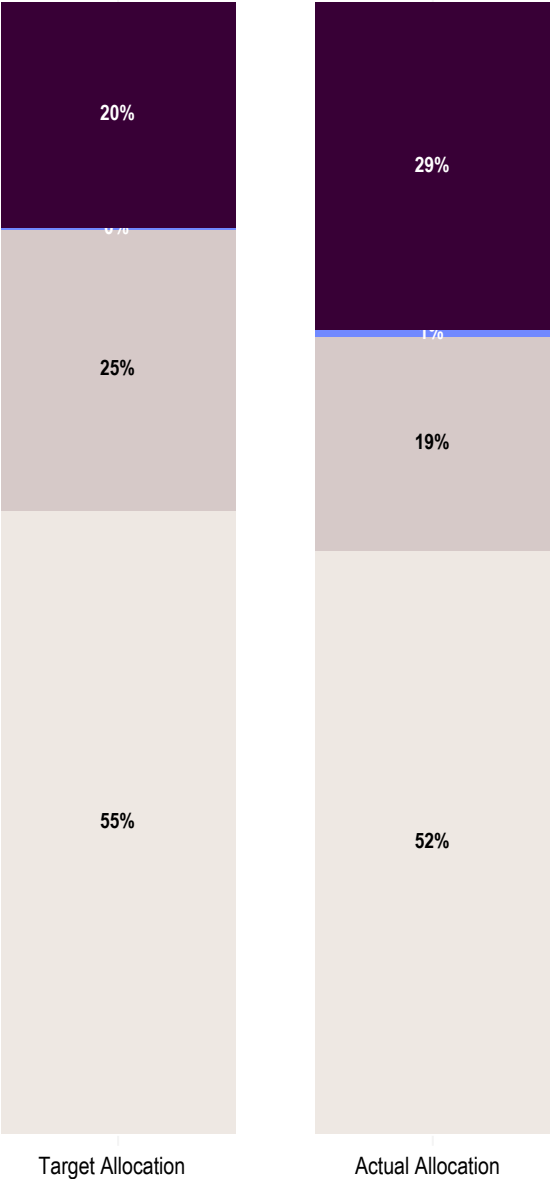
City of Bristol Employee Pension Plan

	Total Portfolio											
	Market Value (\$)	% of Portfolio	Month	Quarter	YTD	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	15 Years	Inception (%)	Inception Date
Differentiated Return Stream	190,656,861	21.10	0.00	5.08	10.14	14.04	13.56	9.65	-	-	7.36	Jan-19
<i>CPI+2%</i>			-	-	-	-	-	-	-	-	-	
Kelly Park Capital	19,307,579	2.14	0.00	0.68	4.20	5.50	5.08	1.91	-	-	2.24	Jan-20
Verition International Multi-Strategy Fund, Ltd.	47,847,007	5.29	0.00	1.56	2.86	7.25	7.86	8.99	-	-	11.35	Jan-20
OCO Opportunities Offshore Fund, Ltd.	34,813,053	3.85	0.00	32.41	53.92	66.07	28.98	28.07	13.56	-	12.54	Feb-14
Greywolf Containership Opps II, LP(\$6 million)	3,100,220	0.34	0.00	0.00	9.77	23.98	-	-	-	-	21.84	Nov-22
Entrust Blue Ocean Fund, LP(\$17 million)	16,872,316	1.87	0.00	0.00	0.08	1.53	8.48	16.25	-	-	15.68	Apr-20
Entrust Blue Ocean Fund II, LP (\$30 mill)	27,748,808	3.07	0.00	0.00	2.81	4.84	-	-	-	-	3.29	Dec-23
Longford Capital (\$15 million)	6,789,443	0.75	0.00	0.00	5.02	7.16	51.37	34.89	23.42	-	11.95	Jul-13
Longford Capital Fund II, LP (\$30 million)	13,505,252	1.49	0.00	0.00	4.00	4.78	10.64	6.93	-	-	3.56	Dec-16
Longford Capital Fund III, LP(\$30 million)	20,673,183	2.29	0.00	0.00	7.69	10.00	23.14	15.83	-	-	10.82	Apr-20
Cash	5,588,310	0.62	0.33	1.02	3.03	4.17	4.54	2.81	-	-	2.40	Jan-19
Cash Account	5,588,310	0.62	0.33	1.02	3.03	4.17	4.54	2.81	1.84	-	1.38	Jan-12
<i>90 Day U.S. Treasury Bill</i>			0.33	1.08	3.17	4.38	4.77	2.98	2.07	1.40	1.52	

Approx. 53% of the portfolio is unvalued as of 9/30. This includes approx. 34% which is only valued quarterly.

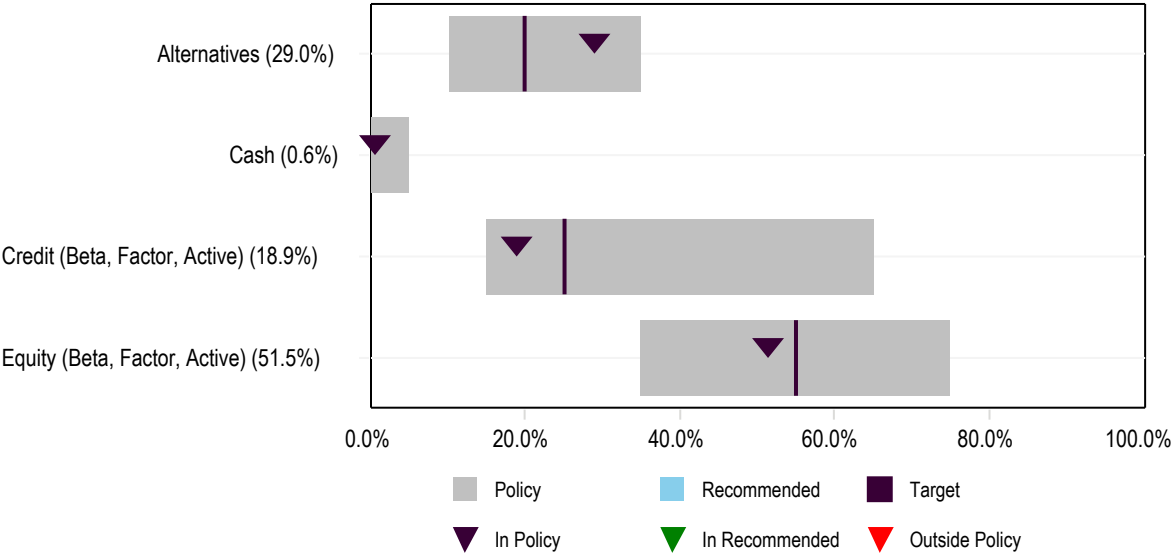
Policy Index-Blended New = MSCI ACWI 55% / BBgBarc US Aggregate TR 25% / Barclay Hedge Fund Index 20%.

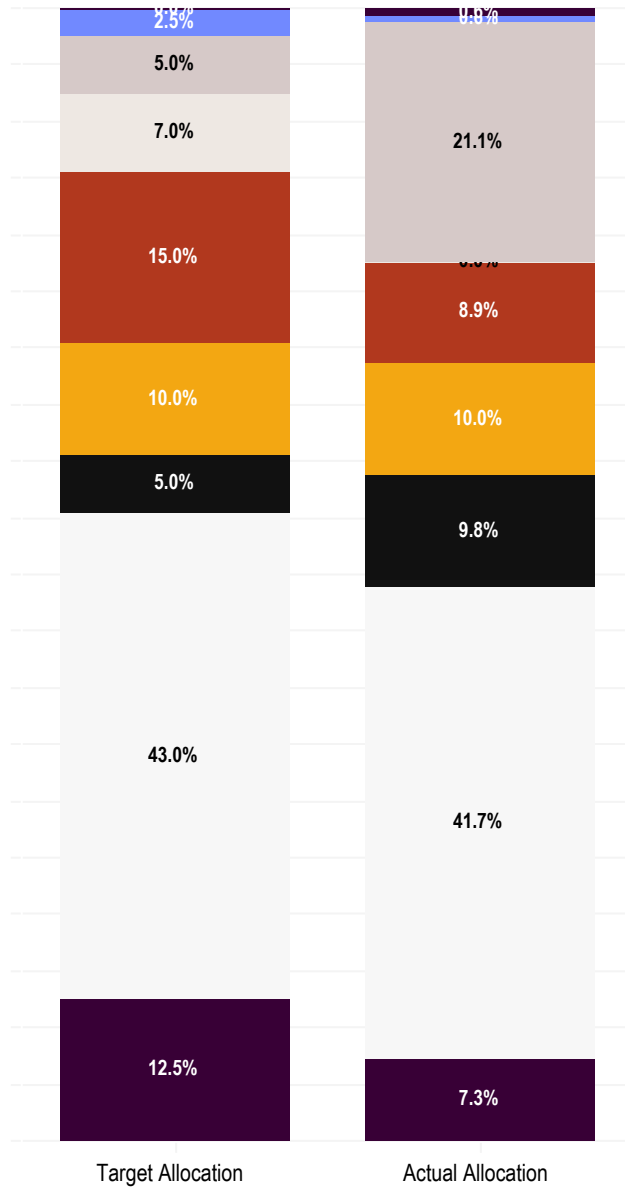
From 4/30/2022-1/1/2019 the Policy Index Blended New consists of MSCI ACWI 55% / BBgBarc US Aggregate TR 25% / HFRI Fund of Funds Composite Index 20%. Prior to 1/1/2019 the Policy Index Blended New consists of 15% Russell 1000 Growth, 15% Russell 1000 Value, 5% Russell MidCap, 13.6% MSCI EAFE, 7.5% MSCI Emerging Markets, 21.3% BC US Aggregate, 7.6% BofA HY BB-B Rated Constrained Index, 10% HFRX Global Hedge Fund Index, 5% Private Equity Actual.



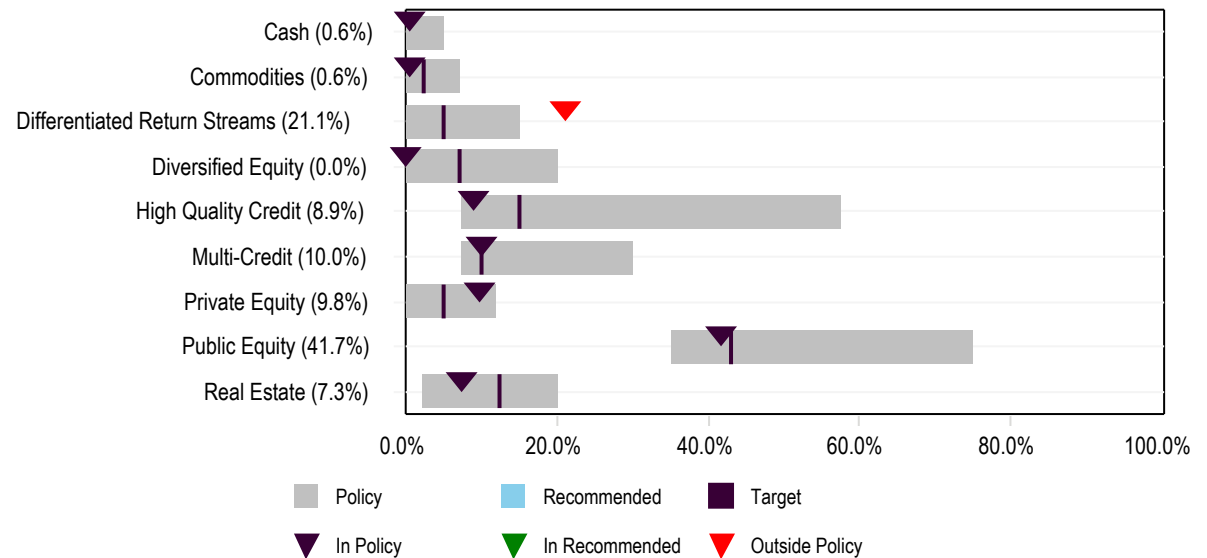
As of September 30, 2025

	Current Balance	Current Allocation	Policy	Policy Range	Difference	Within IPS Range?
Alternatives	\$261,968,290	29.0	20.0	10.0 - 35.0	9.0	Yes
Cash	\$5,588,310	0.6	0.0	0.0 - 5.0	0.6	Yes
Credit (Beta, Factor, Active)	\$170,631,586	18.9	25.0	15.0 - 65.0	-6.1	Yes
Equity (Beta, Factor, Active)	\$465,491,830	51.5	55.0	35.0 - 75.0	-3.5	Yes
Total	\$903,680,016	100.0	100.0		0.0	



**As of September 30, 2025**

	Current Balance	Current Allocation	Policy	Policy Range	Difference	Within IPS Range?
Cash	5,588,310	0.6	0.0	0.0 - 5.0	0.6	Yes
Commodities	5,671,509	0.6	2.5	0.0 - 7.0	-1.9	Yes
Differentiated Return Streams	190,656,861	21.1	5.0	0.0 - 15.0	16.1	No
Diversified Equity		0.0	7.0	0.0 - 20.0	-7.0	Yes
High Quality Credit	80,501,773	8.9	15.0	7.5 - 57.5	-6.1	Yes
Multi-Credit	90,129,813	10.0	10.0	7.5 - 30.0	0.0	Yes
Private Equity	88,644,816	9.8	5.0	0.0 - 12.0	4.8	Yes
Public Equity	376,847,014	41.7	43.0	35.0 - 75.0	-1.3	Yes
Real Estate	65,639,920	7.3	12.5	2.0 - 20.0	-5.2	Yes
Total	903,680,016	100.0	100.0		0.0	



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INDEX DEFINITIONS

- Citigroup 3 Month T-Bill measures monthly return equivalents of yield averages that are not marked to market. The Three-Month Treasury Bill Indexes consist of the last three three-month Treasury bill issues.
- Bloomberg Barclays Treasury U.S. T-Bills-1-3 Month Index includes aged U.S. Treasury bills, notes and bonds with a remaining maturity from 1 up to (but not including) 3 months. It excludes zero coupon strips.
- Bloomberg Barclays Capital US Treasury Inflation Protected Securities Index consists of Inflation-Protection securities issued by the U.S. Treasury.
- Bloomberg Barclays Muni Index is a rules-based, market-value-weighted index engineered for the long-term tax-exempt bond market. Bonds must be rated investment-grade by at least two ratings agencies.
- Bloomberg Barclays Muni 1 Year Index is the 1-year (1-2) component of the Municipal Bond index.
- Bloomberg Barclays Muni 3 Year Index is the 3-year (2-4) component of the Municipal Bond index.
- Bloomberg Barclays Muni 5 Year Index is the 5-year (4-6) component of the Municipal Bond index.
- Bloomberg Barclays Muni 7 Year Index is the 7-year (6-8) component of the Municipal Bond index.
- Bloomberg Barclays Intermediate U.S. Gov't/Credit is the Intermediate component of the U.S. Government/Credit index, which includes securities in the Government and Credit Indices. The Government Index includes treasuries and agencies, while the credit index includes publicly issued U.S. corporate and foreign debentures and secured notes that meet specified maturity, liquidity, and quality requirements.
- Bloomberg Barclays U.S. Aggregate Index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset backed securities.
- Bloomberg Barclays Global Aggregate ex. USD Indices represent a broad-based measure of the global investment-grade fixed income markets. The two major components of this index are the Pan-European Aggregate and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds and Canadian government, agency and corporate securities.
- Bloomberg Barclays U.S. Corporate High Yield Index covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included.
- JP Morgan Government Bond Index-Emerging Market (GBI-EM) Index is a comprehensive, global local emerging markets index, and consists of regularly traded, liquid fixed-rate, domestic currency government bonds to which international investors can gain exposure.
- The S&P 500 is a capitalization-weighted index of 500 stocks designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.
- The Dow Jones Industrial Index is a price-weighted average of 30 blue-chip stocks that are generally the leaders in their industry.
- The NASDAQ is a broad-based capitalization-weighted index of stocks in all three NASDAQ tiers: Global Select, Global Market and Capital Market.
- Russell 3000 is a market-cap-weighted index which consists of roughly 3,000 of the largest companies in the U.S. as determined by market capitalization. It represents nearly 98% of the investable U.S. equity market.
- Russell 1000 consists of the largest 1000 companies in the Russell 3000 Index.
- Russell 1000 Growth measures the performance of those Russell 1000 companies with higher P/B ratios and higher forecasted growth values.
- Russell 1000 Value measures the performance of those Russell 1000 companies with lower P/B ratios and lower forecasted growth values.
- Russell Mid Cap measures the performance of the 800 smallest companies in the Russell 1000 Index.
- Russell Mid Cap Growth measures the performance of those Russell Mid Cap companies with higher P/B ratios and higher forecasted growth values.
- Russell Mid Cap Value measures the performance of those Russell Mid Cap companies with lower P/B ratios and lower forecasted growth values.

- Russell 2000 consists of the 2,000 smallest U.S. companies in the Russell 3000 index.
- Russell 2000 Growth measures the performance of the Russell 2000 companies with higher P/B ratios and higher forecasted growth values.
- Russell 2000 Value measures the performance of those Russell 2000 companies with lower P/B ratios and lower forecasted growth values.
- Russell 2500 consists of the 2,500 smallest U.S. companies in the Russell 3000 index.
- Russell 2500 Growth measures the performance of the Russell 2500 companies with higher P/B ratios and higher forecasted growth values.
- Russell 2500 Value measures the performance of those Russell 2500 companies with lower P/B ratios and lower forecasted growth values.
- MSCI World captures large and mid-cap representation across 23 Developed Markets countries. With 1,645 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
- MSCI ACWI (All Country World Index) ex. U.S. Index captures large and mid-cap representation across 22 of 23 Developed Markets countries (excluding the United States) and 23 Emerging Markets countries. With 1,859 constituents, the index covers approximately 85% of the global equity opportunity set outside the US.
- MSCI ACWI (All Country World Index) ex. U.S. Small Cap Index captures small cap representation across 22 of 23 Developed Markets countries (excluding the US) and 23 Emerging Markets countries. With 4,368 constituents, the index covers approximately 14% of the global equity opportunity set outside the US.
- MSCI EAFE is an equity index which captures large and mid-cap representation across Developed Markets countries around the world, excluding the US and Canada. With 930 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
- MSCI EAFE Value captures large and mid-cap securities exhibiting overall value style characteristics across Developed Markets countries around the world, excluding the US and Canada. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield. With 507 constituents, the index targets 50% coverage of the free float-adjusted market capitalization of the MSCI EAFE Index.
- MSCI EAFE Growth captures large and mid-cap securities exhibiting overall growth style characteristics across Developed Markets countries around the world, excluding the US and Canada. The growth investment style characteristics for index construction are defined using five variables: long-term forward EPS growth rate, short-term forward EPS growth rate, current internal growth rate and long-term historical EPS growth trend and long term historical sales per share growth trend. With 542 constituents, the index targets 50% coverage of the free float-adjusted market capitalization of the MSCI EAFE Index.
- MSCI Emerging Markets captures large and mid-cap representation across 23 Emerging Markets countries. With 836 constituents, the index covers approximately 85% of the free-float adjusted market capitalization in each country.
- Consumer Price Index is a measure of prices paid by consumers for a market basket of consumer goods and services. The yearly (or monthly) growth rates represent the inflation rate.
- FTSE NAREIT Equity REITs Index contains all Equity REITs not designed as Timber REITs or Infrastructure REITs.
- S&P Developed World Property defines and measures the investable universe of publicly traded property companies domiciled in developed markets. The companies in the index are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- S&P Developed World Property x U.S. defines and measures the investable universe of publicly traded property companies domiciled in developed countries outside of the U.S. The companies included are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- Bloomberg Commodity Index is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification.
- HFRI Fund Weighted Composite Index is a global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Constituent funds report monthly net of all fees performance in US Dollar and have a minimum of \$50 Million under management or a twelve (12) month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.
- The Alerian MLP Index is the leading gauge of energy Master Limited Partnerships (MLPs). The float adjusted, capitalization-weighted index, whose constituents represent approximately 85% of total float-adjusted market capitalization, is disseminated real-time on a price-return basis (AMZ) and on a total-return basis.
- The Adjusted Alerian MLP Index is commensurate with 65% of the monthly returns of the Alerian MLP Index to incorporate the effect of deferred tax liabilities incurred by MLP entities.

DEFINITION OF KEY STATISTICS AND TERMS

- Returns: A percentage figure used when reporting historical average compounded rate of investment return. All returns are annualized if the period for which they are calculated exceeds one year.
- Universe Comparison: The universe compares the fund's returns to a group of other investment portfolios with similar investment strategies. The returns for the fund, the index and the universe percentiles are displayed. A percentile ranking of 1 is the best, while a percentile ranking of 100 is the worst. For example, a ranking of 50 indicates the fund outperformed half of the universe. A ranking of 25 indicates the fund was in the top 25% of the universe, outperforming 75%.
- Returns In Up/Down Markets: This measures how the fund performed in both up and down markets. The methodology is to segregate the performance for each time period into the quarters in which the market, as defined by the index, was positive and negative. Quarters with negative index returns are treated as down markets, and quarters with positive index returns are treated as up markets. Thus, in a 3 year or 12 quarter period, there might be 4 down quarters and 8 up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the down quarters. The up-market capture ratio is the ratio of the fund's return in up markets to the index. The down-market capture ratio is the ratio of the fund's return in down markets to the index. Ideally, the fund would have a greater up market capture ratio than down market capture ratio.
- Standard Deviation: Standard deviation is a statistical measure of the range of performance within which the total returns of a fund fall. When a fund has a high standard deviation, the range of performance is very wide, meaning there is a greater volatility. Approximately 68% of the time, the total return of any given fund will differ from the average total return by no more than plus or minus the standard deviation figure. Ninety-five percent of the time, a fund's total return will be within a range of plus or minus two times the standard deviation from the average total return. If the quarterly or monthly returns are all the same the standard deviation will be zero. The more they vary from one another, the higher the standard deviation. Standard deviation can be misleading as a risk indicator for funds with high total returns because large positive deviations will increase the standard deviation without a corresponding increase in the risk of the fund. While positive volatility is welcome, negative is not.
- R-Squared: This reflects the percentage of a fund's movements that are explained by movements in its benchmark index. An R-squared of 100 means that all movements of a fund are completely explained by movements in the index. Conversely, a low R-squared indicates very few of the fund's movements are explained by movements in the benchmark index. R-squared can also be used to ascertain the significance of a particular beta. Generally, a higher R-squared will indicate a more reliable beta figure. If the R-squared is lower, then the beta is less relevant to the fund's performance. A measure of diversification, R-squared indicates the extent to which fluctuations in portfolio returns are explained by market. An R-squared = 0.70 implies that 70% of the fluctuation in a portfolio's return is explained by the fluctuation in the market. In this instance, overweighting or underweighting of industry groups or individual securities is responsible for 30% of the fund's movement.
- Beta: This is a measure of a fund's market risk. The beta of the market is 1.00. Accordingly, a fund with a 1.10 beta is expected to perform 10% better than the market in up markets and 10% worse than the market in down markets. It is important to note, however, a low fund beta does not imply the fund has a low level of volatility; rather, a low beta means only that the fund's market-related risk is low. Because beta analyzes the market risk of a fund by showing how responsive the fund is to the market, its usefulness depends on the degree to which the markets determine the fund's total risk (indicated by R-squared).
- Alpha: The Alpha is the nonsystematic return, or the return that cannot be attributed to the market. It can be thought of as how the manager performed if the market's return was zero. A positive alpha implies the manager added value to the return of the portfolio over that of the market. A negative alpha implies the manager did not contribute any value over the performance of the market.
- Sharpe Ratio: The Sharpe ratio is the excess return per unit of total risk as measured by standard deviation. Higher numbers are better, indicating more return for the level of risk experienced. The ratio is a fund's return minus the risk-free rate of return (30-day T-Bill rate) divided by the fund's standard deviation. The higher the Sharpe ratio, the more reward you are receiving per unit of total risk. This measure can be used to rank the performance of mutual funds or other portfolios.
- Treynor Ratio: The Treynor ratio measures returns earned in excess of that which could have been earned on a riskless investment per each unit of market risk. The ratio relates excess return over the risk-free rate to the additional risk taken; however, systematic risk is used instead of total risk. The Treynor ratio is similar to the Sharpe ratio, except in the fact that it uses the beta to evaluate the returns.
- Tracking Error: Tracking error measures the volatility of the difference in annual returns between the manager and the index. This value is calculated by measuring the standard deviation of the difference between the manager and index returns. For example, a tracking error of +/- 5 would mean there is about a 68% chance (1 standard deviation event) that the manager's returns will fall within +/- 5% of the benchmark's annual return.
- Information Ratio: The information ratio is a measure of the consistency of excess return. This value is determined by taking the annualized excess return over a benchmark (style benchmark by default) and dividing it by the standard deviation of excess return.
- Downside Risk: Downside risk is a measure similar to standard deviation but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. The higher the factor, the riskier the product.