



BURLINGTON RETIREMENT SYSTEM

City of Burlington

City Hall, Room 20, 149 Church Street, Burlington, VT 05401

Robert Hooper, Chairman of the Board

Munir Kasti, Vice-Chairman

Meeting – Monday, August 15, 2022

Start Time – 9:00 AM – 11:00 AM

Location – Burlington City Hall, 1st Floor, Councilor Bushor Conference Room

or

Join Zoom Meeting:

<https://us02web.zoom.us/j/85261644826?pwd=SmI1amsvSkRmNzFSU29sV2VOMXhNUT09>

Meeting ID: 852- 6164- 4826

Passcode: 834923, and you may join by phone, dial +1 929 205 6099, and meeting # 852-6164-4826

1. Agenda
2. Public Forum
3. Approve Minutes
 - July 18, 2022
4. Approve Return of Contributions

	Effective Date of Benefit	
• Marie Susan Fetterhoff, Class B \$1,365.23	08/01/2022	
5. Approve Retirement Applications

	Effective Date of Benefit	Payment Date
• Dan Bajura, Class B \$588.37	08/01/2022	08/15/2022
• Jared Grenon, Class A \$7,962.90	08/01/2022	08/15/2022
• Laurie Fay, Class B \$84.55	09/01/2022	09/15/2022
• Linda L. Tang, Class B \$4,633.69	08/01/2022	08/15/2022
• Richard C. Couillard, Class B \$1,962.93	09/01/2022	09/15/2022
6. **Expected Executive Session** – Disability Retirement Application

	Effective Date of Benefit	Payment Date
• Roger L. Dickson, Class B \$4,334.49	08/01/2022	09/15/2022
7. Administrative Updates
 - Retirement Administrative Assistant – supports Payroll & Retirement
8. Fiducient
 - Fiduciary Governance Calendar: IPS review and Fiduciary Best Practices
 - July Investment Performance Report
 - Portfolio Recommendations

9. Adjourn

**BURLINGTON RETIREMENT BOARD
CITY HALL, 1ST FLOOR BUSHOR CONF ROOM
OR
REMOTE MEETING WITH CALL-IN
BURLINGTON, VERMONT
MINUTES OF MEETING
DRAFT
July 18, 2022**

MEMBERS PRESENT: Robert Hooper (Chair)
Patrick Robins
David Mount
Kyle Blake
Tom Chenette
Matthew Dow

MEMBERS ABSENT: Munir Kasti
Katherine Schad

OTHERS PRESENT: Rich Goodwin
Chris Rowllins
Richard Carey
Hayley McClenahan

1.0 CALL TO ORDER

Robert Hooper called the Retirement Board meeting to order at 9:04 AM.

MOTION by Patrick Robins, SECOND by David Mount, to approve the agenda as presented.

VOTING: unanimous; motion carries.

2.0 PUBLIC FORUM (VERBAL)

2.01 Verbal Comments
None.

3.0. APPROVE MINUTES

3.01 Minutes of June 21, 2022

MOTION by Patrick Robins, SECOND by David Mount, to approve the minutes of June 21, 2022 as amended:

- **Remove Hayley McClenahan from list of attendees**

VOTING: unanimous; motion carries (Matthew Dow absent for vote).

MOTION by Patrick Robins, SECOND by David Mount, to ratify the approval of the return of contributions as presented in the draft minutes of June 21, 2022.

VOTING: unanimous; motion carries.

4.0 APPROVE RETURN OF CONTRIBUTIONS

4.01 Approve Return of Contributions

Approve Return of Contributions	Amount	Effective Date of Benefit
Joshua M. Meyers, Class B	\$7,236.25	07/01/2022
Carol A. Braden, Class B	\$31,595.36	08/01/2022
Nyla Ruiz, Class B	\$3,038.43	08/01/2022
Marielle Matthews, Class B	\$5,083.15	08/01/2011
Devin Jones, Class B	\$12,945.15	08/01/2022

MOTION by Patrick Robins, SECOND by David Mount, to approve the return of contributions applications as presented.

VOTING: unanimous; motion carries (Matthew Dow absent for vote).

5.0 APPROVE RETIREMENT APPLICATIONS

5.01 Approve Retirement Applications

Approve Retirement Applications	Amount	Effective Date of Benefit	Actual First Payment Date
Thomas E. Carter, Class B	\$2,296.55	06/01/2022	07/15/2022
Gary Lavigne, Class B	\$4,884.04	07/01/2022	07/15/2022
Jeffrey B. Shedd, Class B	\$1,129.14	07/01/2022	07/15/2022
Rebecca Goldberg, Class B	\$1,215.10	05/01/2022	07/15/2022

MOTION by Patrick Robins, SECOND by David Mount, to approve the retirement applications as presented.

VOTING: unanimous; motion carries (Matthew Dow absent for vote).

Board members discussed how retirement payments are calculated. Finance Director Goodwin noted that there are 28 different variations and plans in place. He said that the plans and options are driven by an employee's union and date of hire. He said that he will send the BERS Board a list of the different multipliers that can be applied, the difference between survivor benefits, and tools that will give members good background on how the numbers are calculated. He noted that the City's actuaries spent a year automating the City's ability to do these calculations, and additionally the City brought in an independent auditor to audit those calculations. He said that as an end check, he reviews every calculation that is presented to the BERS board for approval.

6.0 ADMINISTRATIVE UPDATES

6.01 Administrative Updates

Finance Director Goodwin said that there is a candidate for the Retirement Administrator position for the City. He said that they anticipate the candidate starting in the first week of August. He noted that David Mount participated in the interview process for the candidates.

7.0 FIDUCIENT

7.01 BERS June Performance Flash Report

Mr. Rowlins first outlined the capital market results ending June 30th. He noted that June was a difficult month for both fixed income and global equities, as the Federal Reserve and central banks around the globe move to combat inflation by increasing rates (while also stoking concerns about a recession). He noted negative returns in the fixed-income asset class for the month, due to the previously-noted concerns and general fears of an economic slowdown. He also noted negative returns in global equities, due also to high inflation and continued supply issues, and in the case of European markets, due to higher energy prices from sanctions on Russia. He additionally noted generally negative growth in the real asset class.

Mr. Robins asked what passive investment strategy the BERS Board is following. Mr. Rowlins replied that there is active management within the fixed income class, and that the equity asset class is exclusively passively managed. He said that the last few years have been difficult for active managers given market momentum and the cap weighted construct of market indices.. He showed the portfolio's manager absolute and relative performance, noting that the low cost passive strategies over time have tended to rank in the top half and top quartile of a respective peer group). Mr. Robins said that it is helpful to discuss the BERS' modified passive approach on a regular basis.

Mr. Rowlins then presented the performance of the BERS portfolio as of June 30, 2022. He noted that portfolio declined 6.7% (net) for the month of June and declined 12.4% (net) for the quarter. For the plan's fiscal year ending June 30th, Mr. Rowlins reported that the portfolio shed 13.2%.He then spoke about the asset allocation as of June 30, 2022. He noted that the value of the plan's investable assets stood at approximately \$213.8 million. He said that the portfolio has roughly 18% of its allocation in fixed income, 75% in equities, and 7% in real assets. He noted that the benefit of higher interest rates is higher yields on fixed income, which over time is expected to deliver higher absolute returns for the fixed income asset class and could serve to temper the portfolio's global equity posture.

Mr. Robins asked what kind of impact a 16% negative return will have on the portfolio's growth in future. Mr. Rowlins noted the 31% growth in the prior fiscal year, and noted that gains and losses are amortized, which helps to mitigate volatility around funding and contribution amounts. He said that Fiducient has produced it's mid-year capital market assumptions in light of the market dislocation across both equity and fixed income and that Fiducient is reviewing the allocation to determine if adjustments should be made going forward

Mr. Rowlin spoke briefly about the UBS Trumbull property fund, which was inherited from a prior financial advisor. He noted that UBS had notably underperformed its benchmark for the last number of years and that there were a significant number of redemptions in the portfolio. He said that Fiducient put in a full redemption request, which are provided quarterly based on liquidity in the portfolio. He said that even though the BERS portfolio is in the queue for redemption, they are still realizing returns on the amount still in the fund which have provided a an attractive non-correlating return stream versus public equities and fixed income over the last six month

7.02 Fiducient Mid-Year Capital Market Update – June 2022

Mr. Rowlin then provided an overview of the mid-year capital market update.

Finance Director Goodwin spoke about the fiscal year loss this year of 13% and the high returns last year of 31%. He said that because of that return on investment last year, the portfolio market value increased by \$50 million (which will be amortized over five years). He said that the negative growth this year could be tempered by the gains last year. He noted that overall, the City's contribution to the plan has been relatively low, and that there was a reduction in the amount of money coming out of employees' checks last year (and it is anticipated to remain low in FY24, though it depends on how the portfolio performs over the next year).

8.0 ADJOURN

8.01 Motion to Adjourn

MOTION by David Mount, SECOND by Patrick Robins, to adjourn the meeting.

VOTING: unanimous; motion carries.

The meeting adjourned without objection at 10:07 AM.

RScty: AACoonrad

Calculation of Return of Employee Contributions

Form A

Burlington Employees' Retirement System

Marie Susan Fetterhoff

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Pension Benefit and Options. If it is determined at any time that the information provided in this Pension Distribution Kit conflicts with the terms of the Plan, the terms of the Plan will govern. Under the law, a plan must be operated in accordance with its terms and errors must be corrected. As a Plan participant, you may have made post-tax contributions to the Plan. As a result, a portion of your benefit may be non-taxable. **Consult with your tax advisor if you have any questions.**

Information Used in Determination

Participant Name:	Marie Susan Fetterhoff	Class:	B
Date of Birth:		Department:	School
Date of Hire:	08/29/2020	Post-Tax Employee Contributions:	\$0.00
Date of Termination:	12/10/2021	Normal Retirement Date (NRD):	09/17/2025
Beneficiary Date of Birth:	N/A	Payment Start Date:	08/01/2022
		Vesting Percentage:	0.0000%

Determination of Employee Contribution Balance with Interest

<u>Period Ending</u>	<u>Description</u>	<u>Transaction</u>	<u>Balance at End of Period</u>
06/30/2021	Contributions	\$899.46	\$899.46
06/30/2021	Interest at 2%	\$0.00	\$899.46
12/10/2021	Contributions	\$445.53	\$1,344.99
06/30/2022	Interest at 2%	\$17.99	\$1,362.98
07/31/2022	Interest at 2%	\$2.25	\$1,365.23

(1) Pre-Tax Employee Contributions (Taxable):	\$1,344.99
(2) Interest Accrued on Employee Contributions (5.5% through 12/31/2017, 2% thereafter):	\$20.24
(3) Total Return of Employee Contributions with Interest:	\$1,365.23

Determination of Taxable Portion of Benefit

<u>Form of Payment</u>	<u>Total Benefit</u>	<u>Taxable Portion</u>	<u>Non-Taxable Portion</u>
Return of Contributions	\$1,365.23	\$1,365.23	0.00

Calculation of Benefit Options

Burlington Employees' Retirement System, Class B - School

Form A

Dan Bajura

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Pension Benefit and Options. If it is determined at any time that the information provided in this Pension Distribution Kit conflicts with the terms of the Plan, the terms of the Plan will govern. Under the law, a plan must be operated in accordance with its terms and errors must be corrected.

Type of Calculation

Vested - Early Retirement

Information Used in Benefit Determination

Participant Name:	Dan Bajura	Class:	B
Date of Birth:		Department:	School
Date of Hire:	09/04/1990	Vesting Percentage:	100.0000%
Date of Termination:	09/27/2001	Normal Retirement Date (NRD):	08/06/2025
Beneficiary Date of Birth:	N/A	Payment Start Date:	08/01/2022
		Employee Contribution Balance w/ Interest as of 08/01/2022:	N/A

Earnings

Average Final Compensation*: \$28,879.07

Determination of Benefit Amount

(1) Years of Creditable Service (CS)		11.08333	
(2) Years of CS on or prior to 06/30/2006 [(2) + (3) is not to exceed 25 years]		11.08333	
(3) Years of CS after 06/30/2006 [(2) + (3) is not to exceed 25 years]		0.00000	
COLA Option	Full COLA	Half COLA	No COLA
(4) Accrual Rate on or prior to 06/30/2006 (not to exceed 25 years)	1.600%	1.900%	2.200%
(5) Accrual Rate after 06/30/2006 (not to exceed 25 years)	1.600%	1.800%	2.000%
(6) Retirement Accrual Percentage = [(2) x (4)] + [(3) x (5)]	17.7333%	21.0583%	24.3833%
(7) Monthly Vested Benefit Payable at NRD = (6) x Average Final Compensation/12 x Vesting Percentage	\$426.77	\$506.79	\$586.81
(8) Early Retirement Reduction Factor	0.9383	0.9383	0.9383
(9) Monthly Vested Benefit Payable at Payment Start Date (7) x (8)	\$400.44	\$475.52	\$550.60

Benefit Options Available

Form of Payment	Option Factor	Full COLA		Half COLA		No COLA	
		Initial Benefit	Survivor's Benefit ⁽¹⁾	Initial Benefit	Survivor's Benefit ⁽¹⁾	Initial Benefit	Survivor's Benefit ⁽¹⁾
Straight Life Annuity	1.0686	\$427.91	**	\$508.14	**	\$588.37	**
10 Year Certain & Life Annuity	1.0000	\$400.44	\$400.44	\$475.52	\$475.52	\$550.60	\$550.60
100% Joint & Survivor Annuity	N/A	N/A	N/A	N/A	N/A	N/A	N/A
50% Joint & Survivor Annuity	N/A	N/A	N/A	N/A	N/A	N/A	N/A
100% Joint & Survivor Pop-Up Annuity	N/A	N/A	N/A	N/A	N/A	N/A	N/A
50% Joint & Survivor Pop-Up Annuity	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Return of Employee Contributions	N/A	N/A	N/A	N/A	N/A	N/A	N/A

(1) **Survivor Benefits:** for the Joint & Survivor Annuity payments, the survivor's benefit is only payable if the chosen survivor is alive upon the participant's death. If the chosen survivor is not alive, then no additional benefit is payable upon participant death. The choice of survivor may not be changed after benefit payments have commenced.

* Average is of the three highest years of base earnings

** Amount in excess (if any) of accumulated employee contributions, with interest, over payments made

Calculation of Benefit Options

Form A

Burlington Employees' Retirement System, Class A - Fire Non-Union

Jared Grenon

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Pension Benefit and Options. If it is determined at any time that the information provided in this Pension Distribution Kit conflicts with the terms of the Plan, the terms of the Plan will govern. Under the law, a plan must be operated in accordance with its terms and errors must be corrected.

Type of Calculation

Vested - Early Retirement

Information Used in Benefit Determination

Participant Name:	Jared Grenon	Class:	A
Date of Birth:		Department:	Fire Non-Union
Date of Hire:	11/29/1999	Vesting Percentage:	100.0000%
Date of Termination:	07/17/2022	Normal Retirement Date (NRD):	11/20/2030
Beneficiary Date of Birth:		Payment Start Date:	08/01/2022
		Employee Contribution Balance w/ Interest as of 08/01/2022:	\$216,647.99

Earnings

Average Final Compensation*: \$101,972.04

Determination of Benefit Amount

(1) Years of Creditable Service (CS)		22.66667	
(2) Years of CS on or prior to June 30, 2006 [(2)+(3) is not to exceed 25 years] (6.58333 of overtime service)		6.58333	
(3) Years of CS after June 30, 2006 [(2) + (3) is not to exceed 25 years] (16.08333 of overtime service)		16.08333	
COLA Option	Full COLA	Half COLA	No COLA
(4) Accrual Rate on or prior to June 30, 2006 (not to exceed 25 years)	2.750%	3.250%	3.800%
(5) Accrual Rate after June 30, 2006 (not to exceed 25 years)	2.750%	3.250%	3.600%
(6) Retirement Accrual Percentage = [1.17 x (6.58333) x (4)] + [1.17 x (16.08333) x (5)]	72.9300%	86.1900%	97.0125%
(7) Monthly Vested Benefit Payable at NRD = (6) x Average Final Compensation/12 x Vesting Percentage	\$6,197.35	\$7,324.14	\$8,243.80
(8) Early Retirement Reduction Factor	0.9575	0.9575	0.9575
(9) Monthly Vested Benefit Payable at Payment Start Date (7) x (8)	\$5,933.96	\$7,012.87	\$7,893.44

Benefit Options Available

Form of Payment	Option Factor	Full COLA		Half COLA		No COLA	
		Initial Benefit	Survivor's Benefit ⁽¹⁾	Initial Benefit	Survivor's Benefit ⁽¹⁾	Initial Benefit	Survivor's Benefit ⁽¹⁾
Straight Life Annuity	1.0088	\$5,986.18	**	\$7,074.58	**	\$7,962.90	**
5 Year Certain & Life Annuity	1.0000	\$5,933.96	\$5,933.96	\$7,012.87	\$7,012.87	\$7,893.44	\$7,893.44
100% Joint & Survivor Annuity	0.8666	\$5,142.37	\$5,142.37	\$6,077.35	\$6,077.35	\$6,840.46	\$6,840.46
50% Joint & Survivor Annuity	0.9323	\$5,532.23	\$2,766.12	\$6,538.10	\$3,269.05	\$7,359.05	\$3,679.53
100% Joint & Survivor Pop-Up Annuity	0.8594	\$5,099.65	\$5,099.65	\$6,026.86	\$6,026.86	\$6,783.62	\$6,783.62
50% Joint & Survivor Pop-Up Annuity	0.9282	\$5,507.90	\$2,753.95	\$6,509.35	\$3,254.68	\$7,326.69	\$3,663.35
Return of Employee Contributions	N/A	\$216,647.99	N/A	\$216,647.99	N/A	\$216,647.99	N/A

(1) **Survivor Benefits:** for the Joint & Survivor Annuity payments, the survivor's benefit is only payable if the chosen survivor is alive upon the participant's death. If the chosen survivor is not alive, then no additional benefit is payable upon participant death. The choice of survivor may not be changed after benefit payments have commenced.

* Average is of the three highest years of base earnings

**Amount in excess (if any) of accumulated employee contributions, with interest, over payments made

Calculation of Benefit Options

Burlington Employees' Retirement System, Class B - BED Non-Union

Form A

Laurie Fay

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Pension Benefit and Options. If it is determined at any time that the information provided in this Pension Distribution Kit conflicts with the terms of the Plan, the terms of the Plan will govern. Under the law, a plan must be operated in accordance with its terms and errors must be corrected.

Type of Calculation

Vested - Regular Retirement

Information Used in Benefit Determination

Participant Name:	Laurie Fay	Class:	B
Date of Birth:		Department:	BED Non-Union
Date of Hire:	08/21/1978	Vesting Percentage:	65.8333%
Date of Termination:	03/13/1985	Normal Retirement Date (NRD):	08/31/2022
Beneficiary Date of Birth:		Payment Start Date:	09/01/2022
		Employee Contribution Balance w/ Interest as of 09/01/2022:	N/A

Earnings

Average Final Compensation*: \$17,831.13

Determination of Benefit Amount

(1) Years of Creditable Service (CS)	6.58333
(2) Years of CS on or prior to 06/30/2006 [(2) + (3) is not to exceed 25 years]	6.58333
(3) Years of CS after 06/30/2006 [(2) + (3) is not to exceed 25 years]	0.00000
(4) Years of CS in excess of 25 years	N/A

COLA Option

(5) Accrual Rate on or prior to 06/30/2006 (not to exceed 25 years)	1.200%
(6) Accrual Rate after 06/30/2006 (not to exceed 25 years)	1.200%
(7) Accrual Rate in excess of 25 years	0.500%
(8) Retirement Accrual Percentage = [(2) x (5)] + [(3) x (6)] + [(4) x (7)]	7.9000%
(9) Monthly Vested Benefit Payable at Payment Start Date = (8) x Average Final Compensation/12 x Vesting Percentage	\$77.28
(10) Early Retirement Reduction Factor	1.0000
(11) Monthly Vested Benefit Payable at Payment Start Date (9) x (10)	\$77.28

Benefit Options Available

Form of Payment	Option Factor	Full COLA	
		Initial Benefit	Survivor's Benefit ⁽¹⁾
Straight Life Annuity	1.0941	\$84.55	**
10 Year Certain & Life Annuity	1.0000	\$77.28	\$77.28
100% Joint & Survivor Annuity	0.9074	\$70.12	\$70.12
50% Joint & Survivor Annuity	0.9920	\$76.66	\$38.33
100% Joint & Survivor Pop-Up Annuity	0.8911	\$68.86	\$68.86
50% Joint & Survivor Pop-Up Annuity	0.9897	\$76.48	\$38.24
Return of Employee Contributions	N/A	N/A	N/A

(1) **Survivor Benefits:** for the Joint and Survivor Annuity payments, the survivor's benefit is only payable if the chosen survivor is alive upon the participant's death. If the chosen survivor is not alive, then no additional benefit is payable upon participant death. The choice of survivor may not be changed after benefit payments have commenced.

* Average is of the three highest years of base earnings

** Amount in excess (if any) of accumulated employee contributions, with interest, over payments made

Calculation of Benefit Options

Form A

Burlington Employees' Retirement System, Class B - IBEW Local 300

Linda L. Tang

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Pension Benefit and Options. If it is determined at any time that the information provided in this Pension Distribution Kit conflicts with the terms of the Plan, the terms of the Plan will govern. Under the law, a plan must be operated in accordance with its terms and errors must be corrected.

Type of Calculation

Vested - Early Retirement

Information Used in Benefit Determination

Participant Name:	Linda L Tang	Class:	B
Date of Birth:		Department:	IBEW Local 300
Date of Hire:	10/03/1994	Vesting Percentage:	100.0000%
Date of Termination:	07/27/2022	Normal Retirement Date (NRD):	10/05/2025
Beneficiary Date of Birth:		Payment Start Date:	08/01/2022
		Employee Contribution Balance w/ Interest as of 08/01/2022:	\$60,108.08

Earnings

Average Final Compensation*: \$95,321.88

Determination of Benefit Amount

(1) Years of Creditable Service (CS)	27.83333
(2) Years of CS on or prior to 05/04/2008 [(2) + (3) is not to exceed 25 years]	13.58333
(3) Years of CS after 05/04/2008 [(2) + (3) is not to exceed 25 years]	11.41667
(4) Years of CS in excess of 25 years	2.83333

COLA Option	Full COLA	Half COLA	No COLA
(5) Accrual Rate on or prior to 05/04/2008 (not to exceed 25 years)	1.600%	1.900%	2.200%
(6) Accrual Rate after 05/04/2008 (not to exceed 25 years)	1.600%	1.800%	2.000%
(7) Accrual Rate in excess of 25 years	0.500%	1.800%	2.000%
(8) Retirement Accrual Percentage = [(2) x (5)] + [(3) x (6)] + [(4) x (7)]	41.4167%	51.4583%	58.3833%
(9) Monthly Vested Benefit Payable at NRD = (8) x Average Final Compensation/12 x Vesting Percentage	\$3,289.93	\$4,087.59	\$4,637.67
(10) Early Retirement Reduction Factor	0.9350	0.9350	0.9350
(11) Monthly Vested Benefit Payable at Payment Start Date (9) x (10)	\$3,076.08	\$3,821.89	\$4,336.22

Benefit Options Available

Form of Payment	Option	Full COLA		Half COLA		No COLA	
		Initial Benefit	Survivor's Benefit ⁽¹⁾	Initial Benefit	Survivor's Benefit ⁽¹⁾	Initial Benefit	Survivor's Benefit ⁽¹⁾
Straight Life Annuity	1.0686	\$3,287.10	**	\$4,084.08	**	\$4,633.69	**
10 Year Certain & Life Annuity	1.0000	\$3,076.08	\$3,076.08	\$3,821.89	\$3,821.89	\$4,336.22	\$4,336.22
100% Joint & Survivor Annuity	0.9419	\$2,897.36	\$2,897.36	\$3,599.84	\$3,599.84	\$4,084.29	\$4,084.29
50% Joint & Survivor Annuity	1.0000	\$3,076.08	\$1,538.04	\$3,821.89	\$1,910.95	\$4,336.22	\$2,168.11
100% Joint & Survivor Pop-Up Annuity	0.9241	\$2,842.61	\$2,842.61	\$3,531.81	\$3,531.81	\$4,007.11	\$4,007.11
50% Joint & Survivor Pop-Up Annuity	0.9977	\$3,069.01	\$1,534.50	\$3,813.10	\$1,906.55	\$4,326.25	\$2,163.13
Return of Employee Contributions	N/A	\$60,108.08	N/A	\$60,108.08	N/A	\$60,108.08	N/A

(1) **Survivor Benefits:** for the Joint & Survivor Annuity payments, the survivor's benefit is only payable if the chosen survivor is alive upon the participant's death. If the chosen survivor is not alive, then no additional benefit is payable upon participant death. The choice of survivor may not be changed after benefit payments have commenced.

* Average is of the three highest years of base earnings

** Amount in excess (if any) of accumulated employee contributions, with interest, over payments made

Calculation of Benefit Options

Form A

Burlington Employees' Retirement System, Class B - IBEW Local 300

Richard A. Couillard

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Pension Benefit and Options. If it is determined at any time that the information provided in this Pension Distribution Kit conflicts with the terms of the Plan, the terms of the Plan will govern. Under the law, a plan must be operated in accordance with its terms and errors must be corrected.

Type of Calculation

Vested - Regular Retirement

Information Used in Benefit Determination

Participant Name:	Richard A Couillard	Class:	B
Date of Birth:		Department:	IBEW Local 300
Date of Hire:	01/22/2002	Vesting Percentage:	100.0000%
Date of Termination:	08/31/2022	Normal Retirement Date (NRD):	08/23/2022
Beneficiary Date of Birth:		Payment Start Date:	09/01/2022
		Employee Contribution Balance w/ Interest as of 09/01/2022:	\$26,348.62

Earnings

Average Final Compensation*: \$67,304.25

Determination of Benefit Amount

(1) Years of Creditable Service (CS)		20.58333	
(2) Years of CS on or prior to 05/04/2008 [(2) + (3) is not to exceed 25 years]		6.25000	
(3) Years of CS after 05/04/2008 [(2) + (3) is not to exceed 25 years]		14.33333	
COLA Option	Full COLA	Half COLA	No COLA
(4) Accrual Rate on or prior to 05/04/2008 (not to exceed 25 years)	1.600%	1.900%	2.200%
(5) Accrual Rate after 05/04/2008 (not to exceed 25 years)	1.600%	1.800%	2.000%
(6) Retirement Accrual Percentage = [(2) x (4)] + [(3) x (5)]	32.9333%	37.6750%	42.4167%
(7) Monthly Vested Benefit Payable at Payment Start Date = (6) x Average Final Compensation/12 x Vesting Percentage	\$1,847.13	\$2,113.07	\$2,379.02
(8) Early Retirement Reduction Factor	1.0000	1.0000	1.0000
(9) Monthly Vested Benefit Payable at Payment Start Date (7) x (8)	\$1,847.13	\$2,113.07	\$2,379.02

Benefit Options Available

Form of Payment	Option Factor	Full COLA		Half COLA		No COLA	
		Initial Benefit	Survivor's Benefit ⁽¹⁾	Initial Benefit	Survivor's Benefit ⁽¹⁾	Initial Benefit	Survivor's Benefit ⁽¹⁾
Straight Life Annuity	1.0941	\$2,020.95	**	\$2,311.91	**	\$2,602.89	**
10 Year Certain & Life Annuity	1.0000	\$1,847.13	\$1,847.13	\$2,113.07	\$2,113.07	\$2,379.02	\$2,379.02
100% Joint & Survivor Annuity	0.8251	\$1,524.07	\$1,524.07	\$1,743.49	\$1,743.49	\$1,962.93	\$1,962.93
50% Joint & Survivor Annuity	0.9407	\$1,737.60	\$868.80	\$1,987.77	\$993.89	\$2,237.94	\$1,118.97
100% Joint & Survivor Pop-Up Annuity	0.8149	\$1,505.23	\$1,505.23	\$1,721.94	\$1,721.94	\$1,938.66	\$1,938.66
50% Joint & Survivor Pop-Up Annuity	0.9362	\$1,729.28	\$864.64	\$1,978.26	\$989.13	\$2,227.24	\$1,113.62
Return of Employee Contributions	N/A	\$26,348.62	N/A	\$26,348.62	N/A	\$26,348.62	N/A

(1) **Survivor Benefits:** for the Joint & Survivor Annuity payments, the survivor's benefit is only payable if the chosen survivor is alive upon the participant's death. If the chosen survivor is not alive, then no additional benefit is payable upon participant death. The choice of survivor may not be changed after benefit payments have commenced.

* Average is of the three highest years of base earnings

**Amount in excess (if any) of accumulated employee contributions, with interest, over payments made

Calculation of Benefit Options

Form A

Burlington Employees' Retirement System, Class B - IBEW Local 300

Roger L. Dickson

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Pension Benefit and Options. If it is determined at any time that the information provided in this Pension Distribution Kit conflicts with the terms of the Plan, the terms of the Plan will govern. Under the law, a plan must be operated in accordance with its terms and errors must be corrected.

Type of Calculation

Disability

Information Used in Benefit Determination

Participant Name:	Roger L Dickson	Class:	B
Date of Birth:		Department:	IBEW Local 300
Date of Hire:	05/08/2006	Vesting Percentage:	100.0000%
Date of Termination:	04/16/2022	Normal Retirement Date (NRD):	09/20/2024
Beneficiary Date of Birth:	N/A	Payment Start Date:	08/01/2022
		Employee Contribution Balance w/ Interest as of 08/01/2022:	\$35,976.65

Earnings

Rate of Compensation: \$69,351.78

Determination of Benefit Amount

COLA Option	No COLA
(1) Retirement Accrual Percentage	75.00%*
(2) Monthly Offset for Workers' Compensation	\$0.00
(3) Monthly Benefit** Payable at Payment Start Date = (1) x Rate of Compensation/12 - (2)	\$4,334.49***

Benefit Options Available

Form of Payment

Straight Life Annuity

	No COLA	
<u>Option</u>	<u>Initial</u>	<u>Survivor's</u>
<u>Factor</u>	<u>Benefit</u>	<u>Benefit</u>
N/A	\$4,334.49	****

* Non-work related disability benefit

** Payable as a Straight Life Annuity

*** The benefit will be recalculated upon the NRD of the member

**** Amount in excess (if any) of accumulated employee contributions, with interest, over payments made



City of Burlington Employees Retirement System

August 2022 Meeting

This report is intended for the exclusive use of clients or prospective clients of Fiducient Advisors. The information contained herein is intended for the recipient, is confidential and may not be disseminated or distributed to any other person without prior approval. Any dissemination or distribution is strictly prohibited. Information has been obtained from a variety of sources believed to be reliable though not independently verified. Any forecasts represent future expectations and actual returns; volatilities and correlations will differ from forecasts. This report does not represent a specific investment recommendation. Please consult with your advisor, attorney and accountant, as appropriate, regarding specific advice.

Past performance does not indicate future performance and there is possibility of a loss.

Table of Contents



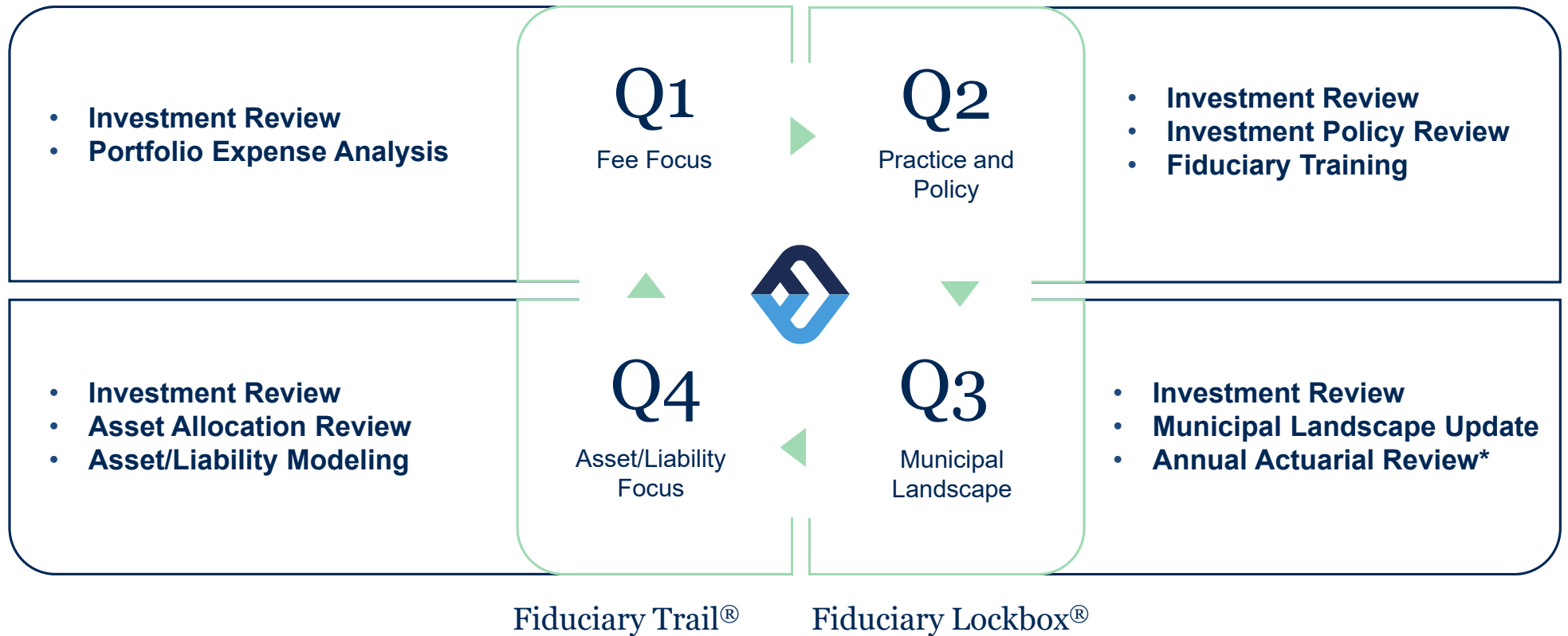
Section 1	Fiduciary Governance Calendar
Section 2	July Portfolio Update
Section 3	Asset Allocation Review



Fiduciary Governance Calendar



Fiduciary Governance Calendar



*Timing of actuarial review is dependent on client's individual plan and/or fiscal year and actuarial input.



Investment Policy Statement

A well-written Investment Policy Statement serves as the blueprint for the management of the investment program. As such, there are certain criteria that are required in an IPS, and other criteria that may or may not be included based on the organization's circumstances:

Important elements of an IPS to consider:

Investment objective(s)	Partial
Assignment of responsibilities	Partial
Asset allocation framework	✓
Rebalancing guidelines	✓
Selection and monitoring criteria for investment strategies	Partial
Termination guidelines for investment strategies	X
Liquidity guidelines	X
Proxy voting	X

In the following pages, you will find a the most recent IPS for the Burlington Employees' Retirement System.

- The most recent IPS for BERS is as of October 2019.
- We believe that there are some important elements that can be added to the existing document to help make the IPS a more effective blueprint for managing the retirement portfolio.
- Fiducient reviewed the existing IPS for BERS and recommends some updates, as shown in the redlined sections of following pages, to ensure all important elements of an IPS are included.

**INVESTMENT POLICY STATEMENT
CITY OF BURLINGTON, VERMONT
BURLINGTON EMPLOYEES' RETIREMENT SYSTEM**

CURRENT VERSION: ~~OCTOBER 3, 2019~~ August 15, 2022

Revised October 3, 2019

Revised November 19, 2015

Revised December 3, 2009

Revised June 23, 2005

Revised February 2, 2000

Revised June 27, 1997

Revised September 18, 1996

Revised October 28, 1993

Revised September 24, 1992

Revised May 28, 1992

Revised November 2, 1989

Adopted March 19, 1987

I. OVERVIEW

The Burlington Employees' Retirement System ("BERS" or the "Plan") is a defined benefit pension plan established to provide retirement benefits to participants in accordance with the benefit structure adopted by the City of Burlington, Vermont.

The Plan is governed by Chapter 24 of the City of Burlington Code of Ordinances as authorized by Title VII of the City of Burlington Charter.

~~This Investment Policy Statement (the "IPS") shall establish the process to be followed in making and executing investment policy. The various outcomes of this process — the assumed investment return, asset allocation, and measurement criteria — shall be included in the investment addendum.~~

This IPS amends, supersedes and restates in its entirety all prior BERS Investment Policy Statements.

If any terms of this IPS conflict with the Plan documents, the terms and conditions of the plan documents shall prevail.

II. PURPOSE OF THE PLAN AND IPS

The Plan's purpose is to provide retirement benefits to employees who are eligible to receive benefits under the Plan.

The purpose of the IPS is to outline the following general provisions affecting the Plan by:

- Assisting the Board to fulfill its fiduciary responsibilities;
- Conveying the Plan's purpose, investment objective, investment strategy and constraints;
- Establishing a decision-making framework to promote the effectiveness of the Plan;
- Intending for the Plan to be maintained in compliance with applicable laws and regulations;
- Setting forth the roles and responsibilities of the Board, Investment Consultant ("Consultant") and other relevant parties.

III. STANDARDS AND DUTIES

A. Fiduciary Standards

Assets of BERS shall be managed in a manner consistent with fiduciary standards. Investments shall be made with the care, skill, and diligence that a prudent person would use in achieving the aims outlined in this IPS.

B. Board Duties

The Board has the responsibility of establishing and maintaining policies governing management of BERS' financial assets (the "Fund"), including:

1. Act solely in the best interest of the Plan beneficiaries and the Plan's objectives.
2. Setting of investment policy;
3. Choosing an asset allocation to balance risk and return;
4. Selecting and evaluating professionals to manage those assets;
5. Communicating guidelines to those professionals.
6. Monitoring performance of the plan.
7. Avoid prohibited transactions and conflicts of interest.

C. Consultant Duties

1. Assist in the development and periodic review of the investment policy.
2. Proactively recommend changes to enhance the effectiveness of the investment policy, investment strategy or asset allocation.
3. Make proactive investment manager hire and fire recommendations.
4. Monitor aggregate and manager-level performance to ensure compliance with stated objectives.
5. Provide the Board with quarterly performance updates.
6. On a timely basis, notify the Board if there are pertinent developments with any of the Plan's investment managers.

D. Investment Managers

1. Manage assets in accordance with the guidelines and objectives outlined in prospectuses (mutual funds), investment agreements (commingled funds, private partnerships, etc.), or manager-specific investment guidelines (separate accounts).
2. Exercise investment discretion to buy, manage and sell assets held in the portfolios.
3. Promptly vote proxies and related actions in a manner consistent with the long-term interest of the Plan as an investor.

4. Communicate all organizational changes in a timely manner, including but not limited to ownership, organizational structure, financial condition and professional staff.
5. Seek "best price and execution" for transactions. Both explicit and implicit transactions costs should be considered.

E. Custodian(s)

1. Safeguard portfolio assets.
2. Accurately value portfolio holdings.
3. Execute buy/sell orders and cash transfers in a timely manner as directed by the Board.
4. Collect all income and dividends owed to the Plan.
5. Settle all transactions (buy/sell orders) initiated by separate account investment managers.
6. Provide reports at least quarterly that detail transactions, cash flows, securities values and changes in the value of each security and the overall portfolio since the previous report.
7. Provide all requested portfolio information to the Consultant and Board in a timely manner.

IV.HH. INVESTMENT GOAL

The long-term goal of the portfolio is to earn the actuarial return assumption net of fees over a long period of time such as 20 years while assuming only as much risk as the Board believes is needed to achieve that return. The return assumption shall not be used to justify taking excessive risk.

The following philosophy should be followed in pursuing that goal:

A. Philosophy

1. Adhere to a long-term perspective;
2. Align strategy with goals and risk tolerance;
3. Maintain consistent exposure to the capital markets;
4. Use simple investment structures that the Trustees understand;
5. Minimize investment costs.

~~The following strategy should be followed in implementing this philosophy:~~

~~B. Implementation Strategy~~

- ~~1. Diversify;~~
- ~~2. Focus primarily on asset allocation;~~
- ~~3. Rebalance to targets, selling on strength and buying on weakness;~~
- ~~4. Emphasize index management;~~

~~5. Keep manager and asset turnover low.~~

IV. INVESTMENT GUIDELINES STRATEGY

The Plan is expected to be maintained in perpetuity. Future amendments to the Plan may occur, but the optimal investment strategy will be determined based on the plan provisions as they exist at any point in time.

The Board acknowledges that the Plan's asset allocation strategy is likely to be its primary determinant of performance. The following strategy should be followed in implementing this philosophy:

1. Diversify;
2. Focus primarily on asset allocation;
3. Rebalance to targets periodically, which is likely to result in reducing exposure to investments that have recently outperformed and/or adding to investments that have recently underperformed;
4. Emphasize index management where appropriate;
5. Keep manager and asset turnover low

With the assistance of its Consultant, the Board intends to review or revise the target allocation to asset classes periodically to ensure the investment strategy remains consistent with the Plan's investment objectives, as those objectives may evolve over time given the plan's funding status and other factors.

In addition to achieving the investment objectives previously outlined in this Statement, the goal of the overall investment strategy is to meet or exceed (a risk-appropriate) benchmark over full market cycles. The benchmark will constitute underlying market indices appropriate for the strategy, and its components will be illustrated in the periodic performance report provided by the Consultant.

VI. INVESTMENT MANAGER SELECTION

The Plan may select investment managers through a variety of investment vehicles including, but not limited to, separate accounts, mutual funds, commingled funds or private partnerships.

The underlying investment managers selected for the Plan are intended to be selected with the care, skill and diligence that would be applied by a prudent person acting in a like capacity and knowledgeable about investing.

With the assistance of its Consultant, the Board will examine investment managers' investment objectives and processes; historical adherence to stated objectives and processes; depth of resources; quality of personnel; historical performance (including risk) versus various appropriate benchmarks; appropriateness of diversification; reasonableness of fees; and any other metric that may be material when evaluating investment managers' capabilities. The Board will use all available information and its best judgment when seeking to hire skillful investment managers. The Board may also select low cost, passively managed investment products where appropriate.

The Trustees understand that should Burlington choose to invest in a commingled fund, the investment policies governing that fund take precedence over the policies in this IPS. When investing in any commingled structure, the Trustees should consider whether those guidelines are sufficiently compatible with BERS own goals.

Should the Trustees decide to invest in any individual account that must conform to standards set forth in this IPS, those standards shall be set forth in the manager's contract and attached to this IPS following the Investment Addendum.

VII. INVESTMENT MANAGER EVALUATION AND OVERSIGHT

With the assistance of its Consultant, the Board intends to periodically review the performance of the underlying investment managers. Investment manager performance will be evaluated against proper indices, peer group comparisons and risk-adjusted performance metrics. They will also be evaluated against other metrics that may include but are not limited to expenses, consistency of strategy or style or other qualitative factors.

Investment managers may be considered for possible termination if they fail to meet performance or other guidelines enumerated in the Plan's periodic performance report provided by the Consultant. The performance summary section of the most recent performance report, including managers and their various benchmarks, will serve as an appendix to this IPS.

With the assistance of its Consultant, the Board intends to use all known information and its best judgment to determine if and when terminating a manager is warranted. Events that may trigger a termination include but are not limited to illegal or unethical behavior on the part of the manager; failure to follow investment guidelines; underperformance; turnover among key personnel; a change in investment style or strategy; insufficient infrastructure to keep pace with asset growth; significant increase in expenses or fees; and any other observation the Board deems may prevent the manager from carrying out its

duties effectively. In addition, managers may be terminated at any time for any reason at the discretion of the Board.

VIII. LIQUIDITY

The Board intends to construct the portfolio to provide adequate liquidity to meet the obligations of the retirement system. Due to market volatility and the uncertain nature of commitments, drawdowns, and distributions, it may not be possible to monitor liquidity continuously. However, attempts will be made to manage liquidity to the greatest extent possible and illiquid assets in the portfolio will be sufficiently limited to ensure all obligations can be met.

IX. PROXY VOTING

For separately managed accounts, if applicable, investment managers will be expected to vote proxies in the best interest of the Plan as an investor. When applicable, mutual fund proxies are intended to be voted in the best interest of the Plan.

DRAFT

INVESTMENT APPENDIX

The following sets out the Board's current choices regarding the ~~actuarial assumption, asset allocation targets and acceptable ranges and performance measurement standards.~~

~~A. Actuarial Assumption: 7.5%~~

B. Asset Allocation

The asset allocation and allowable ranges are:

Asset Allocation Guidelines:	Lower Limit	Target	Upper Limit
Fixed Income and Cash Equivalents	10% <u>15%</u>	18% <u>25%</u>	30% <u>35%</u>
Publicly Traded Global Equity	60% <u>50%</u>	74.5% <u>67.5%</u>	90% <u>85%</u>
<i>Domestic Equity</i>	30%	41.5% <u>40%</u>	55% <u>50%</u>
<i>International Equity</i>	20%	33% <u>27.5%</u>	45% <u>35%</u>
Real Estate	0%	6%	10%
Timber	0%	1%	3%
Private Equity	0%	0.5%	3%

Cash flow should be managed to maintain each allocation close to the target. Rebalancing becomes mandatory if an allocation falls outside the range.

~~C. Performance Measurement~~

~~1. Time Period. Measurement of return for both the portfolio and for individual managers will be over a market cycle assumed for simplicity to be 3-5 years. Trustees are encouraged to make judgments over time periods sufficiently long to encompass both up and down market trends.~~

~~2. Portfolio Goal. The short term goal of the portfolio is to rank in the upper half of a universe of similar portfolios. The long term goal of the portfolio is to earn the actuarial assumption over a long period of time such as 20 years while assuming only as much risk as needed to achieve that return.~~

~~3. Manager Goals.—Each manager shall be measured by an assigned benchmark. Active managers are expected to out perform their benchmark over a market cycle net of fees, and to perform in the upper half of a universe of managers in a similar style. Passive managers are expected to nearly match their benchmark on a monthly basis gross of fees.~~



Governance & Oversight

- While governmental plans are not subject to Title I of ERISA, which deals with fiduciary duties, they are subject to applicable provisions in the Internal Revenue Code (“Code”) and state laws.
- Legislative history suggests that the satisfaction of ERISA rules would be sufficient to satisfy the Code requirements.
- The “exclusive benefit rule” under IRC Section 401(a)(2) has been interpreted to mean exercise of prudence in the investment of plan assets is a requirement.
- Many states have adopted “prudent investor” language, which includes many of the basic ERISA fiduciary principles (including duty of loyalty, duty of prudence, duty to diversify).

“Five Key Duties”

Duty of Loyalty:

Act exclusively in the interest of plan participants and beneficiaries

Duty of Prudence:

Act in accordance with the “prudent expert rule”

Duty to Diversify Investments:

Diversify the portfolio options to balance risk

Duty to Follow Plan Documents:

Follow the plan provisions and policies governing the plan

Duty to Avoid Prohibited Transactions:

Ensure legal and appropriate transactions and be free from conflict



Committee/Board Best Practices

Structure/Makeup

- **Leadership**
 - ✓ Effective leader with the ability to see the big picture and set the direction to achieve the Plan's objectives
 - ✓ Keeps meetings running smoothly and efficiently, guides discussion, encourages participation
- **Committee/Board Makeup**
 - ✓ Controlled turnover leads to well-informed Committee/Board members with institutional memory
 - ✓ Diversity (of age, gender, economic background, profession, etc.) fosters lively discussion and varied points of view
 - ✓ Large enough to promote meaningful discussion/debate, but small enough to reach consensus
 - ✓ Seek ongoing Committee/Board education to enable members to make informed decisions.

Governance

- **Meeting Frequency/Attendance**
 - ✓ Meetings must be frequent enough for the Committee/Board to fulfill its duties, not so frequent as to discourage attendance
 - ✓ Meeting attendance is expected, member participation should be encouraged
- **Meeting Preparation**
 - ✓ Use of a formal agenda leads to a structured, efficient meeting
 - ✓ Materials should be sent in advance and reviewed by all members prior to the meeting
- **Governance Calendar**
 - ✓ Ensures that significant fiduciary responsibilities/obligations are reviewed on a regular basis, including fees
 - ✓ Allows for a structured long-term approach in the face of potential short-term "fire drills"

Documentation

- **Investment Policy Statement**
 - ✓ Serves as the Committee's/Board's blueprint
 - ✓ Outlines roles and responsibilities of the Committee/Board members and other parties
 - ✓ Establishes formal procedures for hiring/terminating managers, evaluating performance, etc.
- **Meeting minutes**
 - ✓ Should be reviewed and approved by all Committee/Board members on a timely basis
 - ✓ Provide historical context for why/how decisions were made and educate newer members on past decisions
- **Clearly outlined goals and objectives**
 - ✓ Require well-defined methods for evaluation

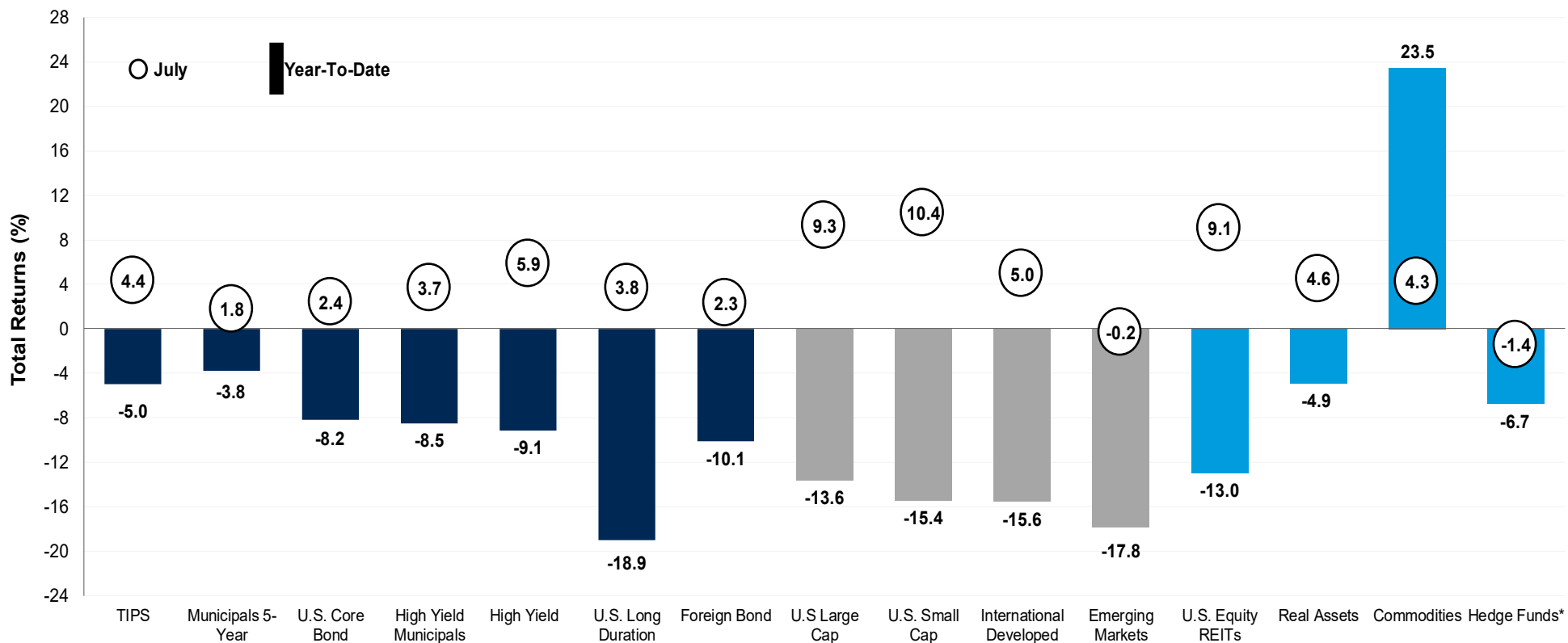
Note: This is not meant to be a complete list of all fiduciary duties and responsibilities. Please consult your legal advisor for advice about your specific situation.



July Portfolio Update



Asset Class Performance



Sources: FactSet, Morningstar. As of July 31, 2022. *Hedge fund returns are as of June 30, 2022.

Fixed Income (July)

- + Falling long-term rates were a reprieve for fixed income investors, marking only the second positive month for the Bloomberg U.S. Aggregate Bond Index this year.
- + U.S. high yield experienced the best monthly return in the last 10 years, driven in part by a strong technical backdrop and risk-on sentiment.
- The U.S. dollar strengthened, reaching parity with the Euro, a headwind for non-USD assets which trailed domestic markets.

Equity (July)

- + U.S. equities rebounded sharply in July, fueled in part by better-than-expected earnings reports and a shift in market sentiment that the Fed's actions may be taking hold to combat inflation as we move into the next year.
- + Developed international markets gained ground but lagged their domestic counterparts.
- Emerging markets fell modestly in the month, driven by weak results in China as the country's manufacturing sector contracted during the month.

Real Asset / Alternatives (July)

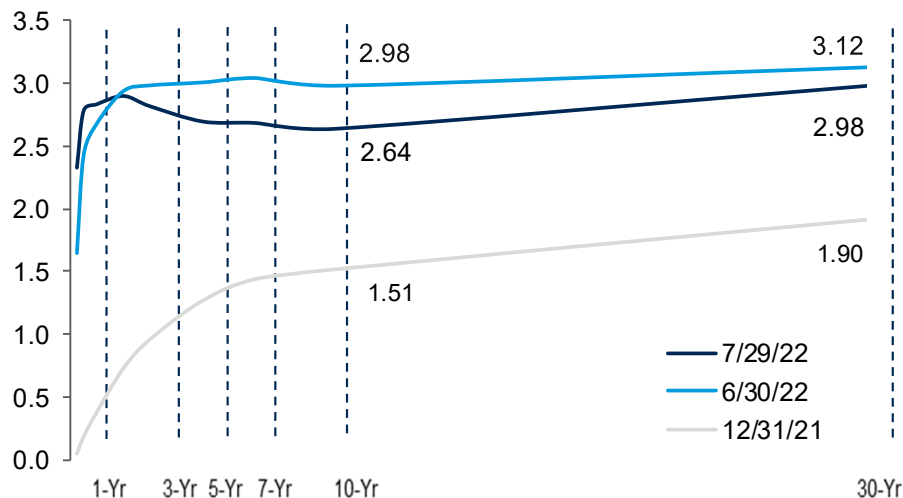
- + REITs moved higher, in line with the broader equity market. Lower interest rates and a strong summer travel season buoyed the sector.
- + Real assets gained ground during July. Inflation remains stubbornly high, and the underlying equity market rally contributed.
- + Commodity markets generally saw price declines in the month yet eked out a modest gain due to a large jump in natural gas prices.



Fixed Income Market Update

U.S. Treasury Yield Curve

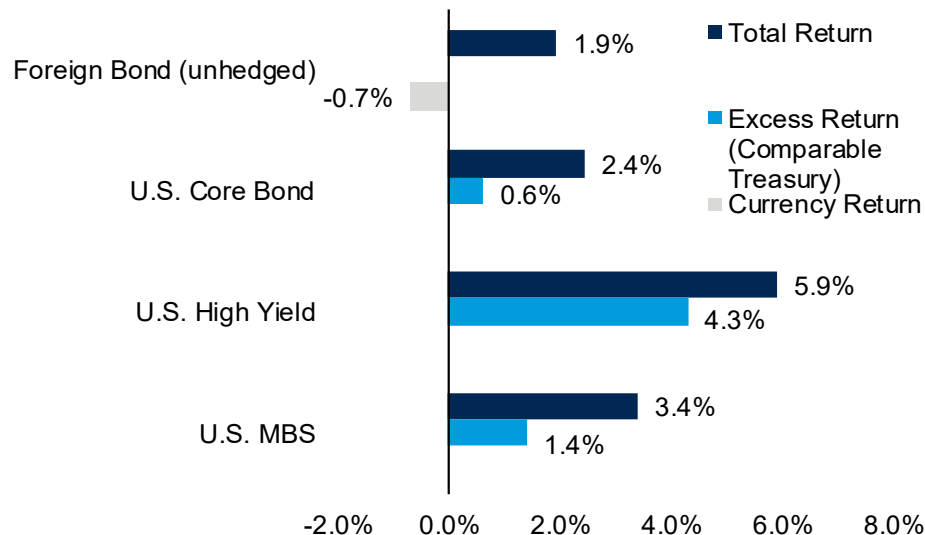
The U.S. yield curve became more inverted during the month, fueled by growing concerns of a recession putting downward pressure on long-term rates while tightening by the Fed pushed short-term rates higher.



Source: FactSet. As of July 31, 2022.

Index Performance Attribution (July 2022)

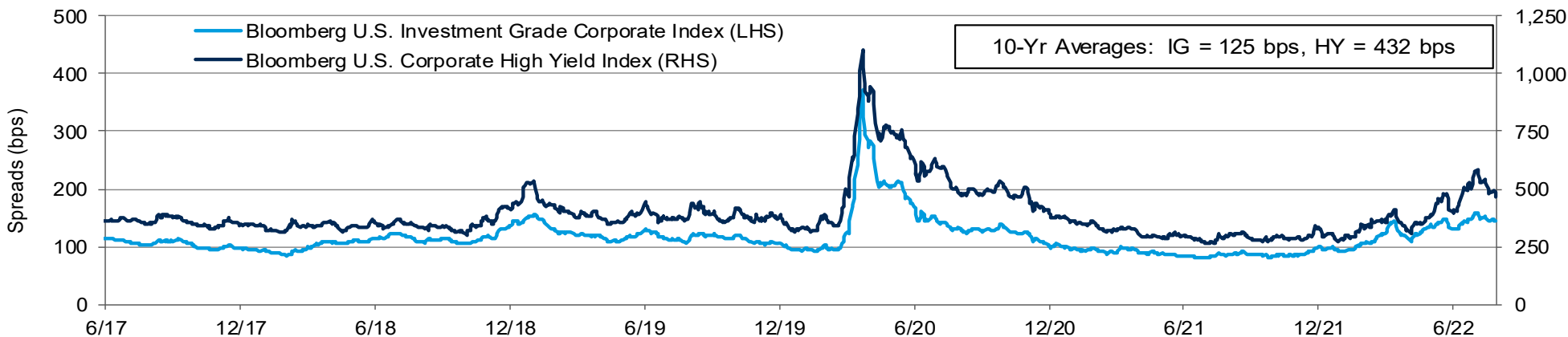
Spread sectors rebounded in July. Higher yields (better valuations) attracted investors and low issuance in the high yield sector provided a technical tailwind.



Source: FactSet. As of July 31, 2022.

Credit Market Spreads – Trailing 5 Years

Corporate bond spreads remain elevated compared to the start of the year but tightened in July, moving off recent year-to-date peaks. Despite the recent negative GDP estimate for the second quarter, better-than-expected earnings reports and a strong technical backdrop pushed spreads tighter.



Source: FactSet. As of July 31, 2022.



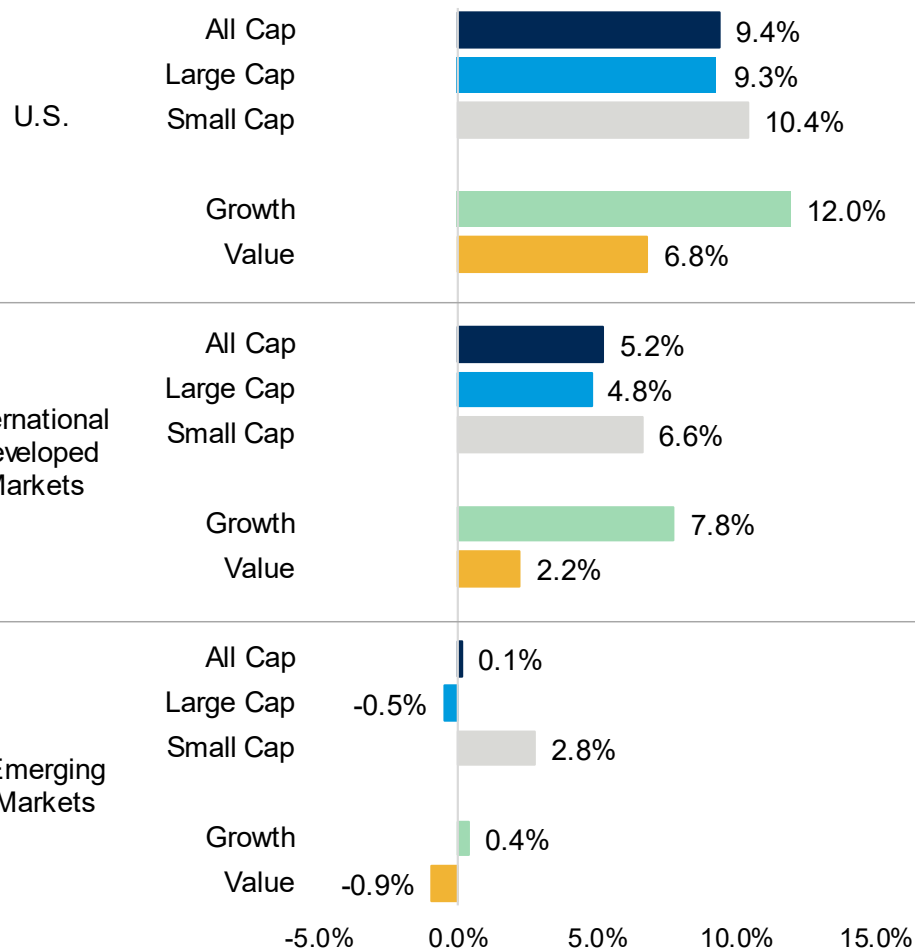
Equity Market Update

Market Capitalization & Style Performance (July 2022)

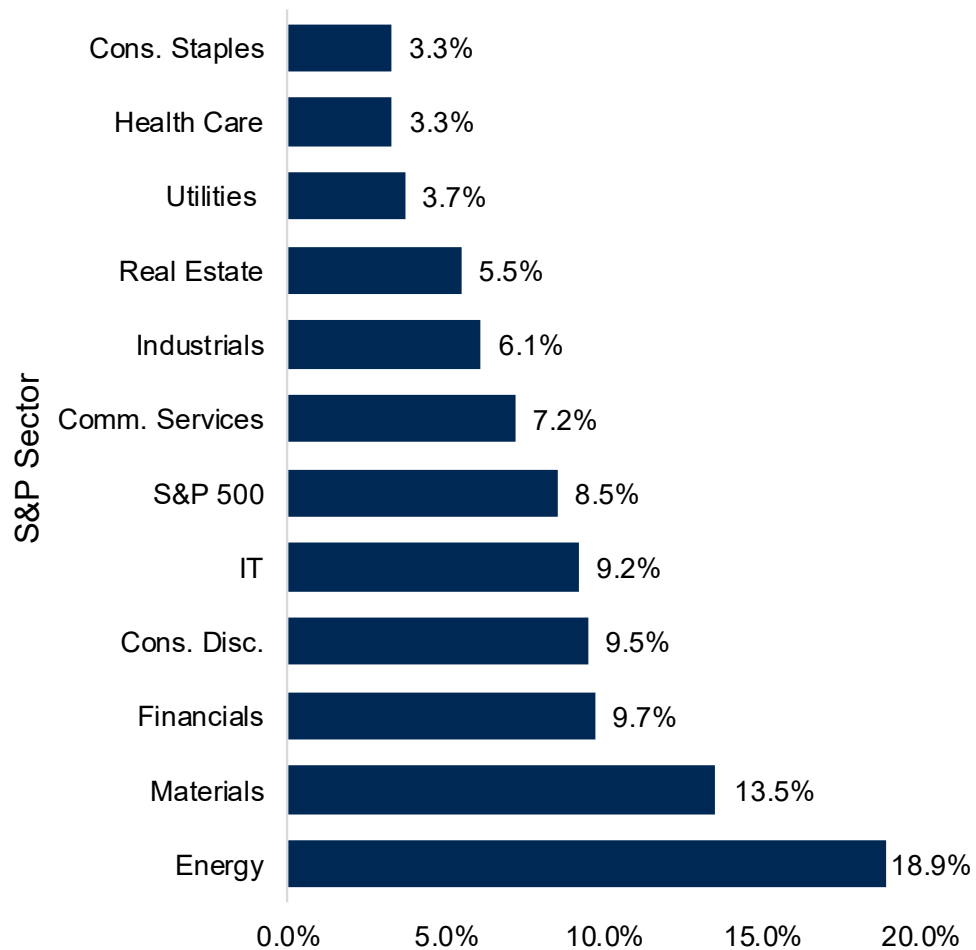
Equity markets bounced in July. Growth stocks outpaced value, a reversal from earlier in the year. Favorable earnings reports, especially among Tech companies, have provided a tailwind and falling long-term rates more favorably impacted the higher valuation companies.

U.S. Equities – Returns by Sector (July 2022)

All sectors in the S&P 500 were positive in July. Energy was the notable standout for the month as Exxon Mobile, Chevron, Phillips 66 and Valero beat earnings expectations for the second quarter. Information technology was also a large contributor given its significant weight in the S&P 500.



Source: FactSet. As of July 31, 2022.



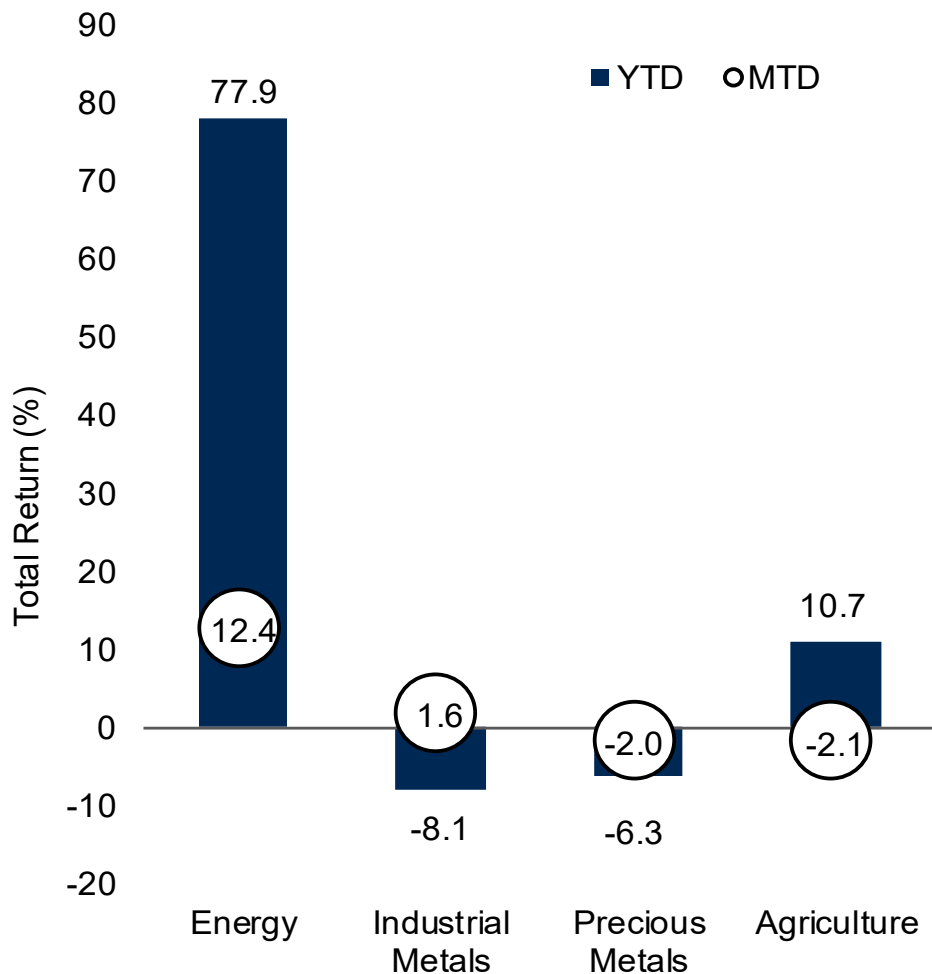
Source: FactSet. As of July 31, 2022.



Real Asset Market Update

Real Assets Performance

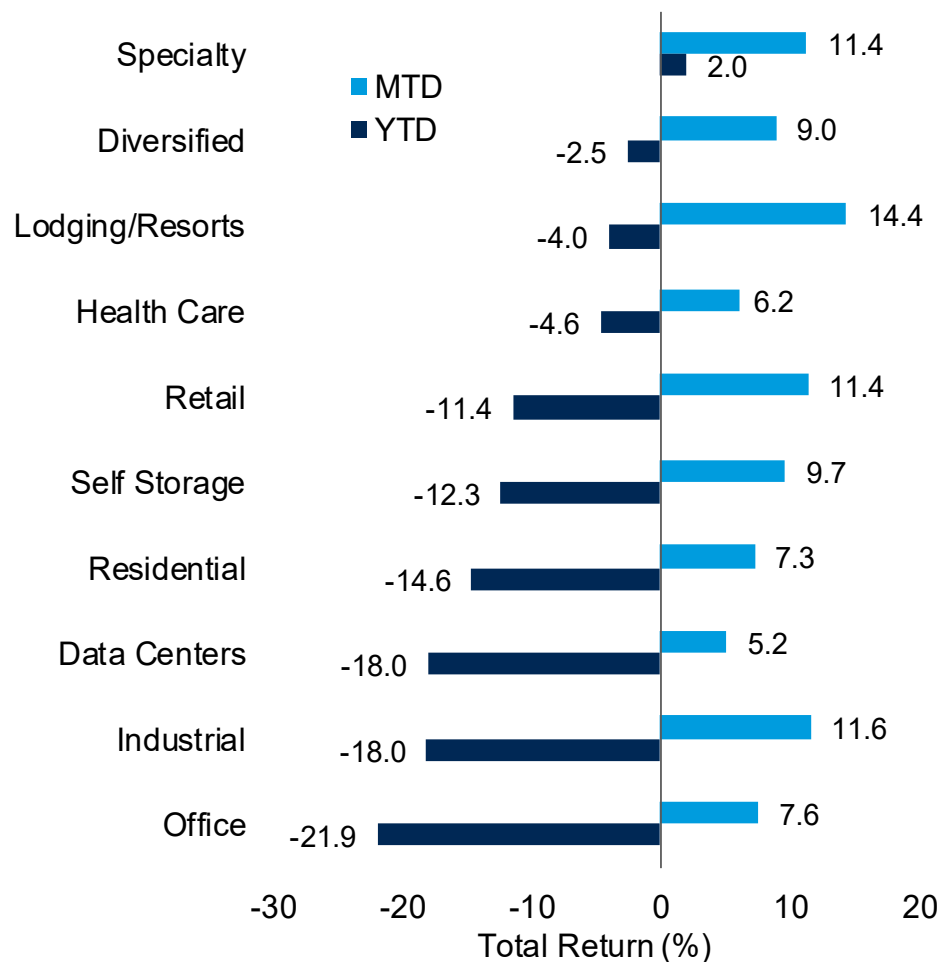
Natural gas was the star of the show in the energy market, as prices soared amid uncertainty of Russian gas supply to Western Europe, while oil prices continue to fall of peaks from earlier in the year. Other commodity markets were weaker amid prospects of a slowing global economy.



Source: FactSet. As of July 31, 2022.

REIT Sector Performance

REITs moved higher in the month as rates came down, alongside the broader equity market. Returns were widely positive, with all underlying sectors seeing a move higher. Retail, industrial, and lodging/resorts were all among the top performers as consumers continue to satisfy pent up demand for travel and services.



Source: FactSet. As of July 31, 2022.



Financial Markets Performance

Total Return as of July 31, 2022
Periods greater than one year are annualized
All returns are in U.S. dollar terms

Global Fixed Income Markets	MTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
Bloomberg 1-3-Month T-Bill	0.1%	0.2%	0.3%	0.5%	1.1%	0.8%	0.6%	0.7%
Bloomberg U.S. TIPS	4.4%	-5.0%	-3.6%	4.4%	4.0%	3.4%	2.0%	4.1%
Bloomberg Municipal Bond (5 Year)	1.8%	-3.8%	-4.2%	0.5%	1.4%	1.7%	1.7%	3.1%
Bloomberg High Yield Municipal Bond	3.7%	-8.5%	-8.2%	2.2%	4.3%	5.1%	4.6%	4.4%
Bloomberg U.S. Aggregate	2.4%	-8.2%	-9.1%	-0.2%	1.3%	1.7%	1.6%	3.4%
Bloomberg U.S. Corporate High Yield	5.9%	-9.1%	-8.0%	1.9%	3.1%	4.4%	4.9%	6.4%
Bloomberg Global Aggregate ex-U.S. Hedged	2.7%	-5.4%	-6.5%	-0.9%	1.8%	2.2%	2.8%	3.5%
Bloomberg Global Aggregate ex-U.S. Unhedged	1.9%	-14.9%	-18.5%	-4.2%	-1.9%	0.0%	-1.0%	1.4%
Bloomberg U.S. Long Gov / Credit	3.8%	-18.9%	-19.4%	-1.4%	1.7%	2.9%	2.6%	5.5%
JPMorgan GBI-EM Global Diversified	0.3%	-14.3%	-18.7%	-6.0%	-2.6%	-0.1%	-1.7%	1.8%
Global Equity Markets	MTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
S&P 500	9.2%	-12.6%	-4.6%	13.4%	12.8%	12.2%	13.8%	9.4%
Dow Jones Industrial Average	6.8%	-8.6%	-4.1%	9.2%	10.9%	11.8%	12.3%	8.9%
NASDAQ Composite	12.4%	-20.5%	-15.0%	15.8%	15.4%	14.6%	16.7%	12.3%
Russell 3000	9.4%	-13.7%	-7.4%	12.6%	12.2%	11.6%	13.5%	9.3%
Russell 1000	9.3%	-13.6%	-6.9%	12.9%	12.6%	11.9%	13.7%	9.4%
Russell 1000 Growth	12.0%	-19.4%	-11.9%	16.1%	16.3%	14.8%	16.0%	11.6%
Russell 1000 Value	6.6%	-7.1%	-1.4%	8.9%	8.3%	8.6%	11.1%	6.9%
Russell Mid Cap	9.9%	-13.8%	-9.8%	9.5%	9.7%	9.4%	12.3%	8.7%
Russell Mid Cap Growth	12.2%	-22.6%	-21.8%	7.5%	11.1%	9.9%	12.8%	9.2%
Russell Mid Cap Value	8.6%	-9.0%	-2.9%	9.4%	7.8%	8.4%	11.5%	7.9%
Russell 2000	10.4%	-15.4%	-14.3%	7.5%	7.1%	7.6%	10.6%	7.5%
Russell 2000 Growth	11.2%	-21.6%	-23.2%	4.7%	6.9%	6.5%	10.7%	7.9%
Russell 2000 Value	9.7%	-9.3%	-4.8%	9.4%	6.7%	8.2%	10.2%	6.9%
MSCI ACWI	7.0%	-14.6%	-10.5%	8.5%	7.9%	7.9%	9.3%	5.4%
MSCI ACWI ex. U.S.	3.4%	-15.6%	-15.3%	2.9%	2.4%	3.5%	5.0%	1.8%
MSCI EAFE	5.0%	-15.6%	-14.3%	3.2%	2.6%	3.1%	5.8%	1.8%
MSCI EAFE Growth	7.9%	-21.0%	-19.1%	4.0%	4.6%	4.7%	6.9%	3.1%
MSCI EAFE Value	2.1%	-10.3%	-9.9%	1.6%	0.3%	1.2%	4.4%	0.4%
MSCI EAFE Small Cap	6.6%	-19.7%	-20.3%	3.5%	2.3%	4.6%	7.8%	3.3%
MSCI Emerging Markets	-0.2%	-17.8%	-20.1%	0.9%	1.0%	3.8%	2.8%	1.6%
Alternatives	MTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
Consumer Price Index*	1.3%	5.4%	9.0%	5.0%	3.9%	3.2%	2.6%	2.4%
FTSE NAREIT Equity REITs	9.1%	-13.0%	-2.5%	6.6%	6.9%	7.2%	8.1%	7.0%
S&P Real Assets	4.6%	-4.9%	-2.3%	5.1%	4.9%	5.0%	4.6%	4.8%
FTSE EPRA NAREIT Developed	10.7%	-4.1%	5.5%	5.3%	7.2%	5.8%	8.1%	5.7%
FTSE EPRA NAREIT Developed ex U.S.	6.3%	-15.1%	-17.6%	-2.2%	1.1%	2.1%	4.0%	1.2%
Bloomberg Commodity Total Return	4.3%	23.5%	27.2%	16.2%	8.8%	5.1%	-1.0%	-1.6%
HFRI Fund of Funds Composite*	-1.4%	-6.7%	-5.7%	3.9%	3.6%	2.7%	3.7%	1.8%
HFRI Fund Weighted Composite*	-2.9%	-5.6%	-5.6%	6.2%	5.1%	4.4%	5.0%	3.7%
Alerian MLP	12.5%	23.8%	25.3%	4.1%	1.8%	0.0%	1.4%	4.6%

Sources: FactSet, Morningstar. As of July 31, 2022. Periods greater than 1 year are annualized. All returns are in U.S. dollar terms.

*HFRI returns as of June 30, 2022.



Asset Allocation

Total Plan

As of July 31, 2022

	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)	Differences (%)
Total Plan	215,497,367	100.0	100.0	0.0
Prepaid Pension Benefits	-4,118,608	-1.9	0.0	-1.9
Total Invested Assets	219,615,975	101.9	100.0	1.9
Short Term Liquidity	1,190,062	0.6	0.0	0.6
Key Bank Cash Portfolio	1,150,204	0.5	0.0	0.5
First American Govt Oblig Fund Z	39,858	0.0	0.0	0.0
Fixed Income	39,755,173	18.4	18.0	0.4
JIC Core Bond Fund I	33,228,062	15.4	15.0	0.4
BlackRock Strategic Income Opportunities K	6,527,111	3.0	3.0	0.0
Equity	163,669,219	75.9	75.0	0.9
Domestic Equity	93,757,719	43.5	41.5	2.0
Mellon Large Cap Core	69,987,234	32.5	31.0	1.5
Mellon Smid Cap Core	23,770,484	11.0	10.5	0.5
International Equity	68,985,245	32.0	33.0	-1.0
Mellon EAFE Fund	49,532,865	23.0	23.0	0.0
Mellon Emerging Markets	19,452,380	9.0	10.0	-1.0
Private Equity	926,255	0.4	0.5	-0.1
Hamilton Lane II	23,901	0.0	-	-
Hamilton Lane VII A	626,892	0.3	-	-
Hamilton Lane VII B	275,462	0.1	-	-
Real Assets	15,001,522	7.0	7.0	0.0
UBS Trumbull Property Fund	12,702,268	5.9	6.0	-0.1
Molpus SWF II	2,299,254	1.1	1.0	0.1

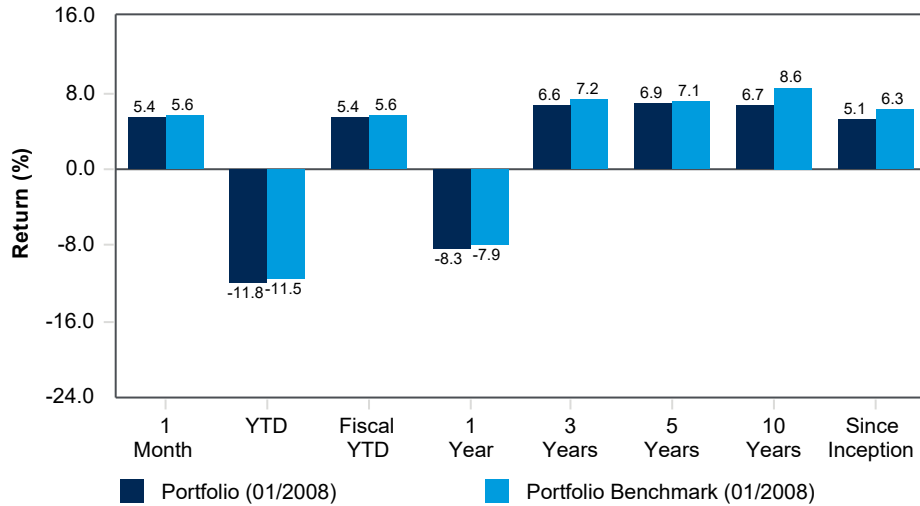


Portfolio Dashboard

Total Invested Assets

As of July 31, 2022

Historical Performance



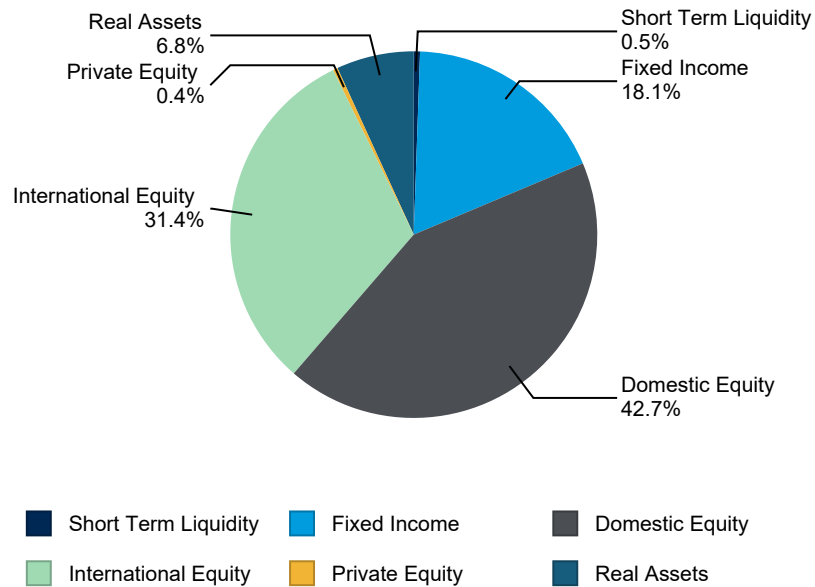
Summary of Cash Flows

	1 Month	YTD	Fiscal YTD	1 Year
Total Invested Assets				
Beginning Market Value	214,359,548	256,242,164	214,359,548	246,666,584
Net Contributions	-6,140,000	-6,140,001	-6,140,000	-6,171,018
Gain/Loss	11,396,427	-30,486,188	11,396,427	-20,879,591
Ending Market Value	219,615,975	219,615,975	219,615,975	219,615,975

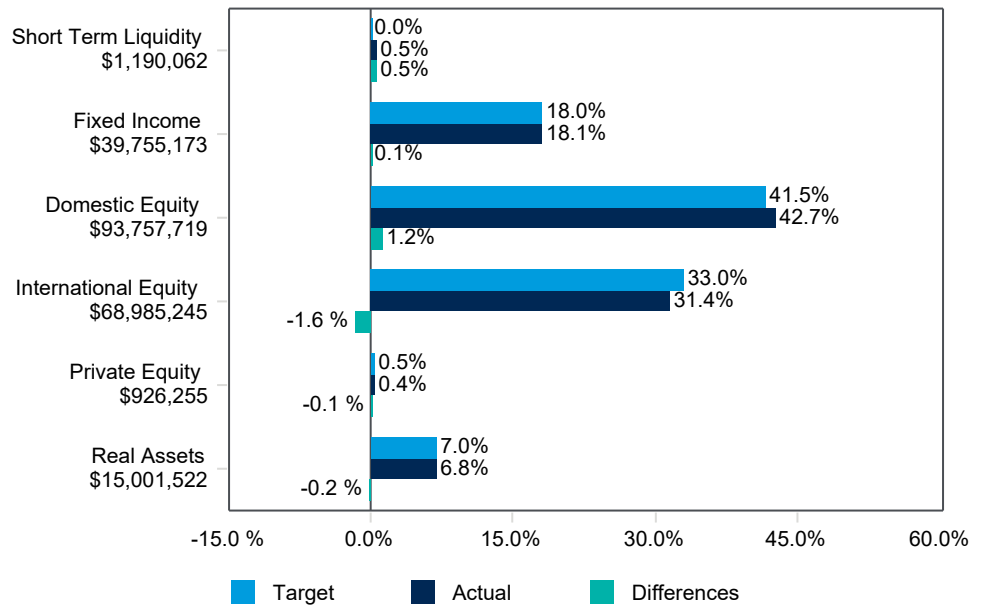
Current Benchmark Composition

From Date	To Date	Composition
05/2021	Present	18.00% Blmbg. U.S. Aggregate, 31.50% S&P 500, 10.50% Russell 2500 Index, 23.00% MSCI EAFE (Net), 10.00% MSCI Emerging Markets (Net), 6.00% NCREIF Fund Index - ODCE (net), 1.00% NCREIF Timberland Index

Portfolio Allocation



Actual vs. Target Allocations





Asset Allocation

Total Invested Assets

As of July 31, 2022

	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)	Differences (%)
Total Invested Assets	219,615,975	100.0	100.0	0.0
Short Term Liquidity	1,190,062	0.5	0.0	0.5
Key Bank Cash Portfolio	1,150,204	0.5	0.0	0.5
First American Govt Oblig Fund Z	39,858	0.0	0.0	0.0
Fixed Income	39,755,173	18.1	18.0	0.1
JIC Core Bond Fund I	33,228,062	15.1	15.0	0.1
BlackRock Strategic Income Opportunities K	6,527,111	3.0	3.0	0.0
Equity	163,669,219	74.5	75.0	-0.5
Domestic Equity	93,757,719	42.7	41.5	1.2
Mellon Large Cap Core	69,987,234	31.9	31.0	0.9
Mellon Smid Cap Core	23,770,484	10.8	10.5	0.3
International Equity	68,985,245	31.4	33.0	-1.6
Mellon EAFE Fund	49,532,865	22.6	23.0	-0.4
Mellon Emerging Markets	19,452,380	8.9	10.0	-1.1
Private Equity	926,255	0.4	0.5	-0.1
Hamilton Lane II	23,901	0.0	-	-
Hamilton Lane VII A	626,892	0.3	-	-
Hamilton Lane VII B	275,462	0.1	-	-
Real Assets	15,001,522	6.8	7.0	-0.2
UBS Trumbull Property Fund	12,702,268	5.8	6.0	-0.2
Molpus SWF II	2,299,254	1.0	1.0	0.0



Manager Performance

Total Invested Assets (excluding Prepaid)

As of July 31, 2022

	Allocation		Performance(%)								
	Market Value (\$)	%	1 Month	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Total Invested Assets (excluding Prepaid)	219,615,975	100.0	5.4	-11.8	5.4	-8.3	6.6	6.9	6.7	5.1	01/2008
<i>Policy Benchmark</i>			<i>5.6</i>	<i>-11.5</i>	<i>5.6</i>	<i>-7.9</i>	<i>7.2</i>	<i>7.1</i>	<i>8.6</i>	<i>6.3</i>	
Short Term Liquidity	1,190,062	0.5	0.0	0.1	0.0	0.1	-	-	-	0.0	01/2021
<i>90 Day U.S. Treasury Bill</i>			<i>0.1</i>	<i>0.2</i>	<i>0.1</i>	<i>0.2</i>	<i>0.6</i>	<i>1.1</i>	<i>0.6</i>	<i>0.2</i>	
Key Bank Cash Portfolio	1,150,204	0.5	0.0	0.0	0.0	0.0	-	-	-	0.0	01/2021
<i>90 Day U.S. Treasury Bill</i>			<i>0.1</i>	<i>0.2</i>	<i>0.1</i>	<i>0.2</i>	<i>0.6</i>	<i>1.1</i>	<i>0.6</i>	<i>0.2</i>	
First American Govt Oblig Fund Z	39,858	0.0	0.1	-	0.1	-	-	-	-	-	02/2022
<i>90 Day U.S. Treasury Bill</i>			<i>0.1</i>	<i>0.2</i>	<i>0.1</i>	<i>0.2</i>	<i>0.6</i>	<i>1.1</i>	<i>0.6</i>	<i>0.2</i>	
Fixed Income	39,755,173	18.1	2.5	-8.1	2.5	-9.4	-	-	-	-6.4	01/2021
<i>Blmbg. U.S. Aggregate</i>			<i>2.4</i>	<i>-8.2</i>	<i>2.4</i>	<i>-9.1</i>	<i>-0.2</i>	<i>1.3</i>	<i>1.6</i>	<i>-6.2</i>	
JIC Core Bond Fund I	33,228,062	15.1	2.7	-8.7	2.7	-9.9	0.1	1.6	2.1	-2.5	03/2020
<i>Blmbg. U.S. Aggregate</i>			<i>2.4</i>	<i>-8.2</i>	<i>2.4</i>	<i>-9.1</i>	<i>-0.2</i>	<i>1.3</i>	<i>1.6</i>	<i>-2.7</i>	
IM U.S. Broad Market Core Fixed Income (MF) Median			2.5	-8.8	2.5	-9.8	-0.2	1.2	1.7	-2.5	
JIC Core Bond Fund I Rank			21	42	21	53	30	18	22	52	
BlackRock Strategic Income Opportunities K	6,527,111	3.0	1.6	-3.9	1.6	-4.1	2.1	2.6	3.0	-2.9	02/2022
<i>Blmbg. U.S. Aggregate</i>			<i>2.4</i>	<i>-8.2</i>	<i>2.4</i>	<i>-9.1</i>	<i>-0.2</i>	<i>1.3</i>	<i>1.6</i>	<i>-6.1</i>	
IM Alternative Credit Focus (MF) Median			1.6	-6.3	1.6	-6.3	1.0	1.3	1.7	-5.2	
BlackRock Strategic Income Opportunities K Rank			51	28	51	23	21	19	14	18	

Manager performance for mutual funds and ETFs is based on NAV and provided by Lipper. Performance for non-mutual fund or ETF investments is based on the returns provided by managers, calculations based on a manager statement, or calculations based on a statement or data from the client's custodian. Funds may include returns of an equivalent share class with a longer return history if period includes dates prior to the fund's inception. Returns are net of fees unless otherwise stated. The fund's inception date represents the first month the client made the investment. Composite performance includes all funds held in the composite since inception. Inception dates for asset class composites reflect the start date at which these returns could be calculated using historical and existing system capabilities and may vary from the inception dates of underlying component strategies.



Manager Performance

Total Invested Assets (excluding Prepaid)

As of July 31, 2022

	Allocation		Performance(%)								
	Market Value (\$)	%	1 Month	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Equity	163,669,219	74.5	6.8	-14.2	6.8	-10.4	-	-	-	1.1	01/2021
<i>MSCI AC World Index (Net)</i>			<i>7.0</i>	<i>-14.6</i>	<i>7.0</i>	<i>-10.5</i>	<i>8.5</i>	<i>7.9</i>	<i>9.3</i>	<i>0.8</i>	
Domestic Equity	93,757,719	42.7	9.5	-12.8	9.5	-6.2	-	-	-	6.2	01/2021
<i>Domestic Equity Benchmark</i>			<i>9.5</i>	<i>-12.8</i>	<i>9.5</i>	<i>-6.3</i>	<i>12.4</i>	<i>11.8</i>	<i>13.2</i>	<i>6.4</i>	
Mellon Large Cap Core	69,987,234	31.9	9.2	-12.6	9.2	-4.6	13.3	12.8	-	13.7	04/2016
<i>S&P 500</i>			<i>9.2</i>	<i>-12.6</i>	<i>9.2</i>	<i>-4.6</i>	<i>13.4</i>	<i>12.8</i>	<i>13.8</i>	<i>13.7</i>	
IM U.S. Large Cap Core Equity (MF) Median			8.5	-13.7	8.5	-7.3	12.1	11.9	12.9	12.8	
Mellon Large Cap Core Rank			31	33	31	23	21	24	-	22	
Mellon Smid Cap Core	23,770,484	10.8	10.4	-13.6	10.4	-11.1	9.2	9.1	-	11.0	04/2016
<i>Russell 2500 Index</i>			<i>10.3</i>	<i>-13.7</i>	<i>10.3</i>	<i>-11.3</i>	<i>9.1</i>	<i>8.9</i>	<i>11.7</i>	<i>10.9</i>	
IM U.S. SMID Cap Equity (MF) Median			10.0	-14.3	10.0	-10.6	8.6	8.6	11.3	10.6	
Mellon Smid Cap Core Rank			37	47	37	53	40	39	-	36	
International Equity	68,985,245	31.4	3.4	-16.1	3.4	-16.0	-	-	-	-7.4	01/2021
<i>International Equity Benchmark</i>			<i>3.4</i>	<i>-16.2</i>	<i>3.4</i>	<i>-16.0</i>	<i>3.1</i>	<i>2.5</i>	<i>4.7</i>	<i>-6.8</i>	
Mellon EAFE Fund	49,532,865	22.6	5.0	-15.2	5.0	-14.0	3.6	3.1	-	5.8	04/2016
<i>MSCI EAFE (Net)</i>			<i>5.0</i>	<i>-15.6</i>	<i>5.0</i>	<i>-14.3</i>	<i>3.2</i>	<i>2.6</i>	<i>5.8</i>	<i>5.3</i>	
IM International Large Cap Core Equity (MF) Median			4.5	-15.8	4.5	-14.5	3.5	2.2	5.2	4.8	
Mellon EAFE Fund Rank			34	44	34	40	47	19	-	21	
Mellon Emerging Markets	19,452,380	8.9	-0.4	-18.3	-0.4	-20.6	0.7	0.8	-	5.2	04/2016
<i>MSCI Emerging Markets (Net)</i>			<i>-0.2</i>	<i>-17.8</i>	<i>-0.2</i>	<i>-20.1</i>	<i>0.9</i>	<i>1.0</i>	<i>2.8</i>	<i>5.3</i>	
IM Emerging Markets Equity (MF) Median			0.2	-20.5	0.2	-23.7	0.7	0.4	2.7	4.8	
Mellon Emerging Markets Rank			62	31	62	31	50	43	-	41	
Private Equity	926,255	0.4	0.0	-0.3	0.0	-0.3	-	-	-	9.8	01/2021
Hamilton Lane II	23,901	0.0	0.0	-7.9	0.0	-19.0	-0.8	8.6	11.3	14.6	03/2009
Hamilton Lane VII A	626,892	0.3	0.0	0.0	0.0	4.0	17.0	15.0	14.1	13.3	07/2011
Hamilton Lane VII B	275,462	0.1	0.0	0.0	0.0	-6.3	6.5	7.5	9.6	9.7	07/2011

Manager performance for mutual funds and ETFs is based on NAV and provided by Lipper. Performance for non-mutual fund or ETF investments is based on the returns provided by managers, calculations based on a manager statement, or calculations based on a statement or data from the client's custodian. Funds may include returns of an equivalent share class with a longer return history if period includes dates prior to the fund's inception. Returns are net of fees unless otherwise stated. The fund's inception date represents the first month the client made the investment. Composite performance includes all funds held in the composite since inception. Inception dates for asset class composites reflect the start date at which these returns could be calculated using historical and existing system capabilities and may vary from the inception dates of underlying component strategies.



Manager Performance

Total Invested Assets (excluding Prepaid)

As of July 31, 2022

	Allocation		Performance(%)								
	Market Value (\$)	%	1 Month	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Real Assets	15,001,522	6.8	0.0	9.3	0.0	22.9	-	-	-	16.0	01/2021
UBS Trumbull Property Fund	12,702,268	5.8	0.0	11.2	0.0	23.8	6.9	5.3	-	5.3	07/2016
<i>NCREIF Fund Index - ODCE (net)</i>			<i>0.0</i>	<i>12.0</i>	<i>0.0</i>	<i>28.3</i>	<i>11.7</i>	<i>9.6</i>	<i>10.2</i>	<i>9.0</i>	
Molpus SWF II	2,299,254	1.0	0.0	-0.4	0.0	18.8	4.4	2.5	3.7	2.9	03/2009
<i>NCREIF Timberland Index</i>			<i>0.0</i>	<i>5.1</i>	<i>0.0</i>	<i>12.0</i>	<i>5.0</i>	<i>4.3</i>	<i>5.5</i>	<i>3.9</i>	

Valuations data as of:

Hamilton Lane VII - 3/31/2022

Hamilton Lane II and Molpus SWF II - 3/31/2022

UBS Trumbull Property Fund - 6/30/2022

All private equity and real estate assets are adjusted for any capital activity.

Manager performance for mutual funds and ETFs is based on NAV and provided by Lipper. Performance for non-mutual fund or ETF investments is based on the returns provided by managers, calculations based on a manager statement, or calculations based on a statement or data from the client's custodian. Funds may include returns of an equivalent share class with a longer return history if period includes dates prior to the fund's inception. Returns are net of fees unless otherwise stated. The fund's inception date represents the first month the client made the investment. Composite performance includes all funds held in the composite since inception. Inception dates for asset class composites reflect the start date at which these returns could be calculated using historical and existing system capabilities and may vary from the inception dates of underlying component strategies.



Benchmark History

Policy Benchmark

As of July 31, 2022

Members	Weight (%)
May-2021	
Blmbg. U.S. Aggregate	18.00
S&P 500	31.50
Russell 2500 Index	10.50
MSCI EAFE (Net)	23.00
MSCI Emerging Markets (Net)	10.00
NCREIF Fund Index - ODCE (net)	6.00
NCREIF Timberland Index	1.00
Dec-2019	
Blmbg. U.S. Aggregate	20.00
S&P 500	32.00
Russell 2500 Index	18.00
MSCI EAFE (Net)	10.00
MSCI Emerging Markets (Net)	10.00
NCREIF Fund Index - ODCE (net)	8.00
NCREIF Timberland Index	2.00
Jun-2017	
Blmbg. Intermed. U.S. Government/Credit	20.00
S&P 500	30.00
Russell 2500 Index	18.00
S&P Completion Index	2.00
MSCI EAFE (Net)	10.00
MSCI Emerging Markets (Net)	10.00
NCREIF Fund Index - ODCE (net)	8.00
NCREIF Timberland Index	2.00

Members	Weight (%)
Jan-2016	
Blmbg. Intermed. U.S. Government/Credit	28.00
S&P 500	30.00
Russell 2500 Index	18.00
S&P Completion Index	2.00
MSCI EAFE (Net)	10.00
MSCI Emerging Markets (Net)	10.00
NCREIF Timberland Index	2.00
Jan-2008	
Blmbg. U.S. Aggregate	20.00
S&P 500	32.00
Russell 2500 Index	18.00
MSCI EAFE (Net)	10.00
MSCI Emerging Markets (Net)	10.00
NCREIF Fund Index - ODCE (net)	8.00
NCREIF Timberland Index	2.00



Asset Allocation Review



Mid-Year Update: Revisiting our Themes of 2022

From Pandemic to Endemic

Despite movement toward less virulent variants of Covid-19, we expect its impact on supply chain bottlenecks to continue.

Portfolio Impact: Expect bottlenecks to continue to weigh on production, economic growth and inflation forces.

Policy Maker Tightrope

Central bankers are implementing an array of policy responses to respond to their unique economic circumstances, which is causing inflationary and interest rate conditions to remain unsettled.

Portfolio Impact: We believe **active management of fixed income** and **duration positioning** within the portfolio remains prudent.

Inflation: Coming or Going?

Inflation continues to run at 40-year highs, which is untenable to the Fed. With the 75 basis point hike in June, the Fed is on a more accelerated path to higher interest rates.

Portfolio Impact: An **allocation to real assets** continues to be an important diversifier in the portfolio.

Volatility Ahead

With tightening monetary policy and higher bond yields, equity markets are repricing until a new equilibrium is achieved. Interest rate volatility and inflation data is impacting bond pricing as well.

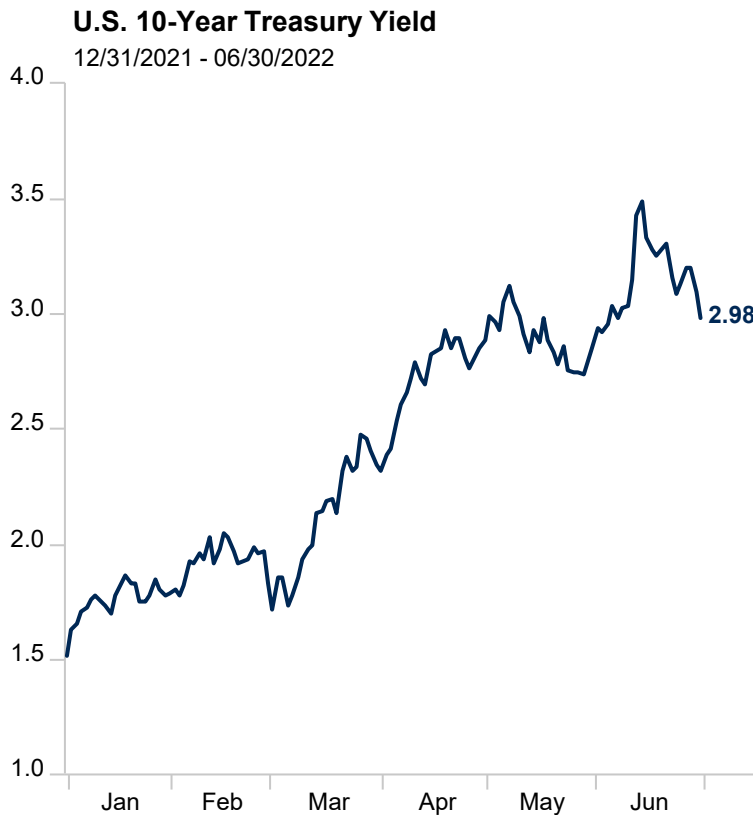
Portfolio Impact: We continue to advocate for a **globally diversified equity portfolio**, **active management in fixed income** and **real asset exposure** to help weather volatility.

Revised return assumptions: Our capital markets research team revises our forward-looking assumptions as economic and market dynamics change. We completed this exercise in early June, and as expected, our forward-looking return assumptions for many asset classes increased due to the widescale repricing of equity and fixed income markets. However, due to the fact that the year-to-date market selloff has afflicted nearly all asset classes, our forecast revisions have not prompted allocation/portfolio changes.

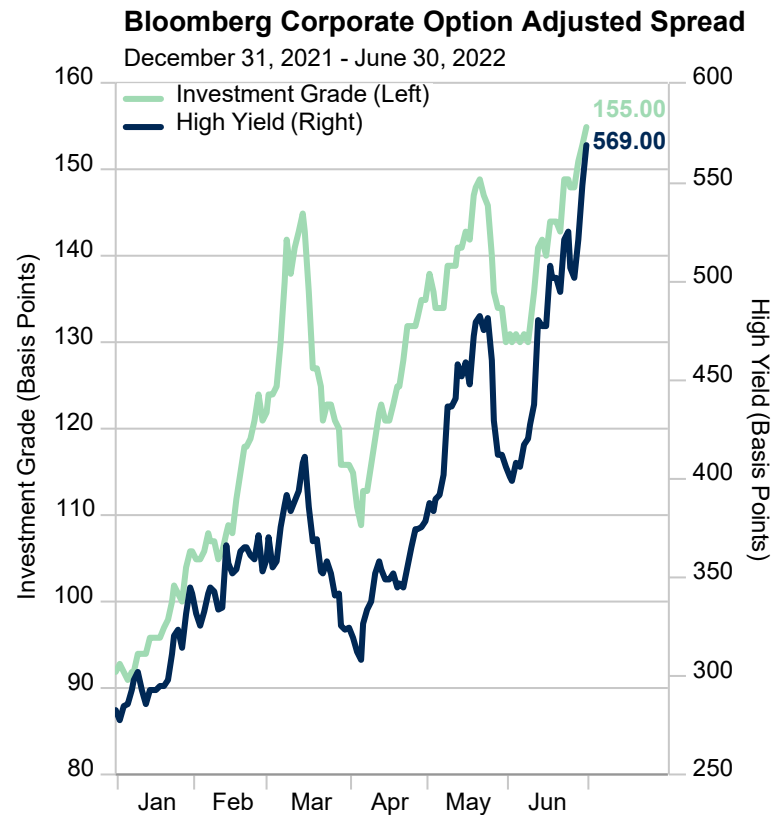


Fixed Income – Current Landscape

- Core fixed income, as measured by the total return of Bloomberg US Aggregate Index, has experienced its worst start on record year-to-date through June 30th.
- Aside from cash, there have been few places for fixed income investors to hide in this environment, as Treasury yields have risen sharply amidst inflationary pressures and central bank actions and credit spreads have widened rapidly in the risk-off market.



Sources: FactSet, Federal Reserve. As of June 30, 2022.



Sources: FactSet, Bloomberg. As of June 30, 2022.

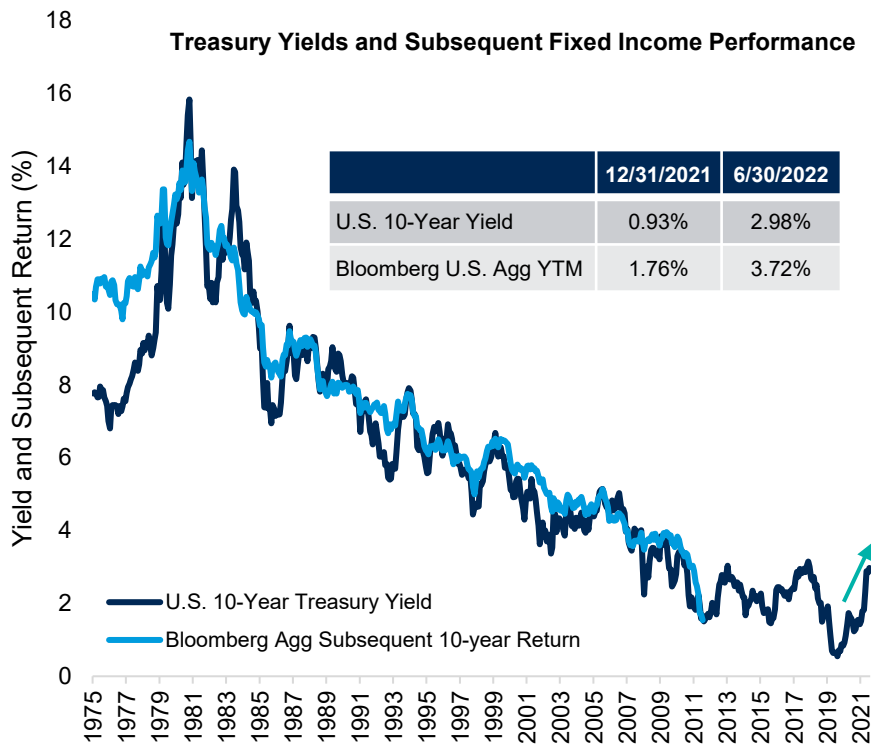
Past performance does not indicate future performance and there is a possibility of a loss.



Fixed Income – More Favorable Outlook

- Despite the very challenged trailing returns, there is a silver lining to the rising rate environment.
- Starting yield is a strong indicator of future returns for fixed income. The sharp rise in Treasury yields has created a more favorable outlook for the asset class than we have seen in quite some time. In fact, based on the current 10-year breakeven inflation rate, real yields are now positive.
- Similarly, the yield per unit of duration profile for the Bloomberg US Aggregate Index has improved significantly this year, touching levels last seen in 2018.

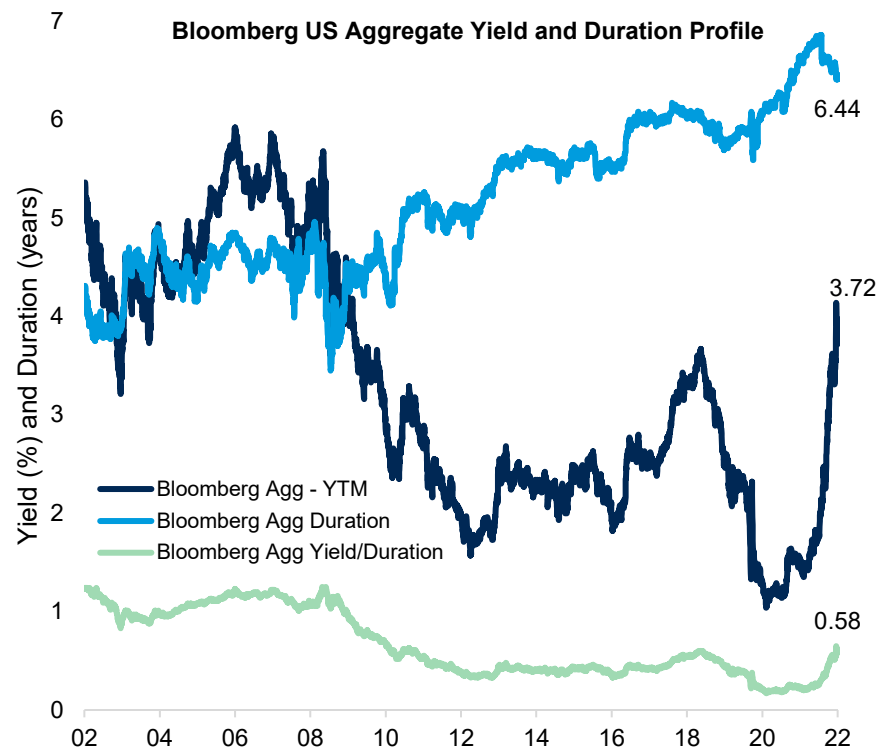
Treasury Yields and Subsequent Fixed Income Performance



Sources: FactSet, Morningstar Direct, Fiducient Advisors. For the period January 1, 1976 to June 30, 2022.

Past performance does not indicate future performance and there is a possibility of a loss.

Bloomberg US Aggregate Yield and Duration Profile

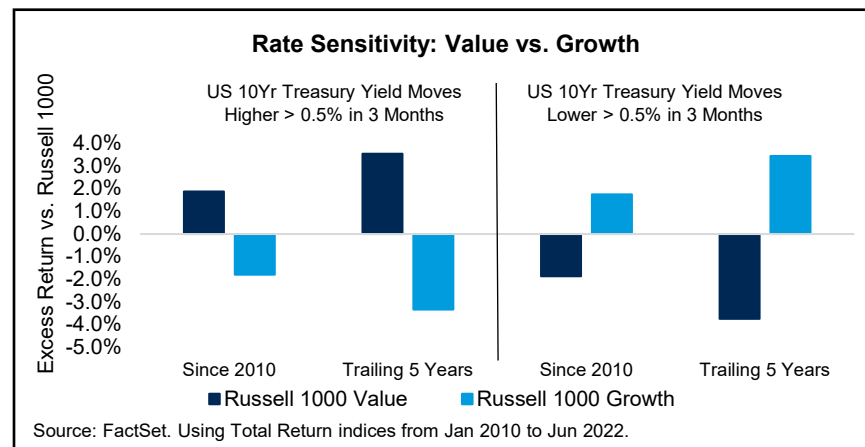
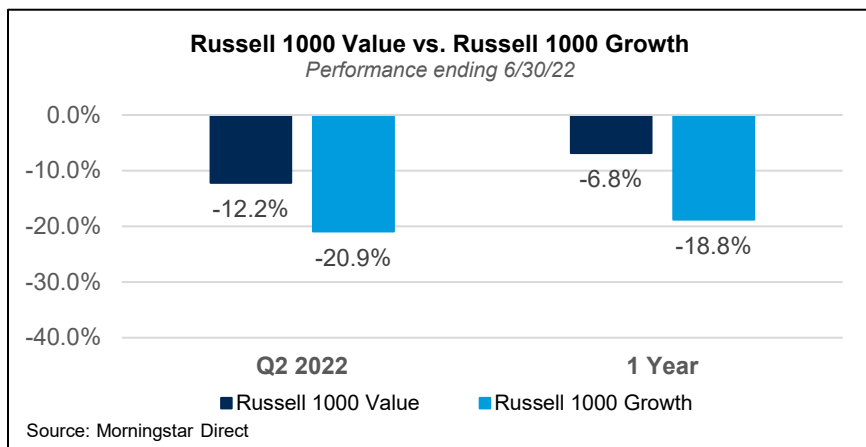


Sources: FactSet, Bloomberg. As of June 30, 2022.



Equities – Dispersion in Returns

- Alongside the heightened volatility experienced over the past year, markets have also experienced a notable dispersion in returns across investment styles, underlying sectors, and individual company returns. Value has outperformed growth notably during the timeframe, reversing a period of growth leadership that lasted nearly more than a decade.
- The rising rate environment has caused investors to pause and re-evaluate their willingness to pay for growth exposure. A higher discount rate now required to value the future earning potential of a business has caused the value of many growth companies to fall significantly.
- Due to the market pullback the annual reconstitution of the Russell indices has resulted in some notable changes, namely Meta, Zoom, PayPal, and Netflix all now being considered value stocks.



Total Returns of Russell 1000 Index

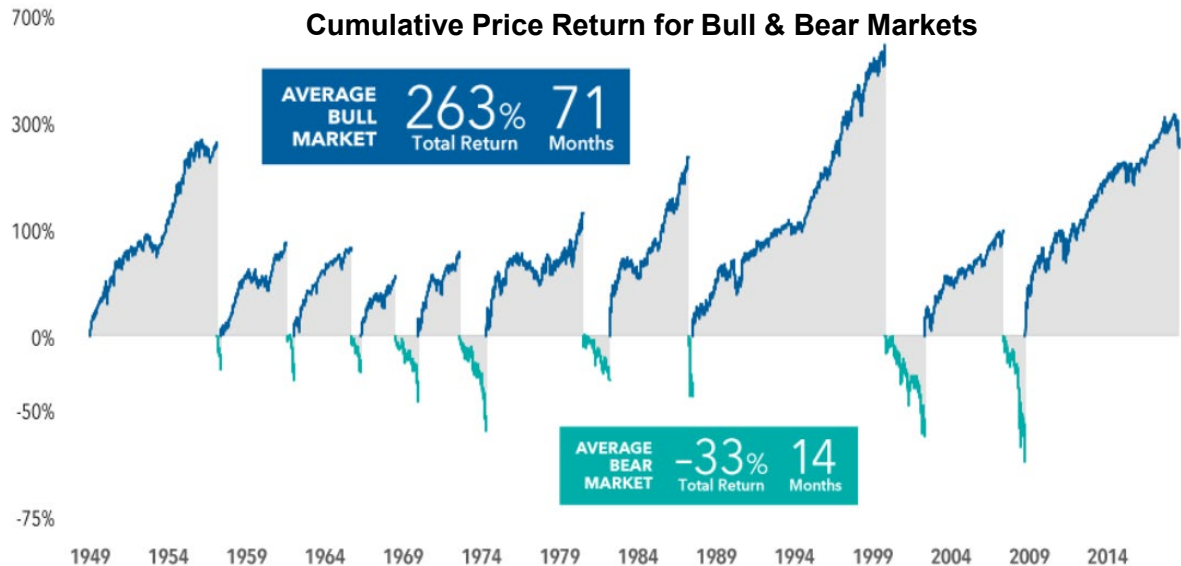
P/E Quintile	May Return	QTD Return	YTD Return
Quintile 1 (Highest)	-7.3%	-22.1%	-31.0%
Quintile 2	-3.5%	-11.5%	-17.5%
Quintile 3	-0.3%	-6.9%	-10.9%
Quintile 4	-0.9%	-6.5%	-5.7%
Quintile 5 (Lowest)	2.0%	-2.4%	2.7%

Source: FactSet. As of May 13, 2022.

TAKEAWAY: We continue to advocate for a balanced approach to equity investing. Despite the recent outperformance of value stocks, market conditions can change rapidly. Having a pronounced style bias may result in adverse outcomes.



Challenging Market Environments: Historical Perspective



- Bear markets tend to be much shorter in duration than bull markets.
- The declines seen in bear markets have historically been far less significant than the gains experienced during bull markets.

Source: Capital Group, RIMES, Standard & Poor's. As of December 31, 2018. Bear markets are peak-to-trough price declines of 20% or more in the S&P 500. Bull markets are all other periods. Returns shown on a logarithmic scale.

		After Rate Hike		
		+3 Months	+6 Months	+12 Months
Fixed Income	Investment Grade Bonds	0.0%	2.0%	4.2%
	High Yield Bonds	0.4%	4.2%	2.6%
U.S. Equity	U.S. Large Cap Equities	-1.9%	4.7%	7.5%
	U.S. Mid Cap Equities	-2.9%	4.2%	9.6%
	U.S. Small Cap Equities	-2.9%	2.5%	7.4%
	U.S. Growth	-1.5%	8.2%	14.2%
	U.S. Value	-2.5%	1.4%	2.0%
International Equity	International Equities	0.9%	12.5%	10.7%
	Emerging Markets	-1.9%	13.2%	11.8%

- While many segments of the market experience short-term losses following interest rate hikes, longer-term results tend to be robust.

TAKEAWAY: Remaining invested through all types of market environments is key to long-term investment success.

Source: ClearBridge Investments. Indices used include the following: U.S. Large-Cap Equities: S&P 500; U.S. Mid-Cap Equities: S&P Midcap 400; U.S. Small-Cap Equities: S&P 600; U.S. Growth: Russell 1000 Growth; U.S. Value: Russell 1000 Value; Investment Grade Bonds: Bloomberg U.S. Corporate Bond; High Yield: Bloomberg U.S. High Yield Bonds (1-5Yr); Emerging Market Equities: MSCI Emerging Markets; International Equities: MSCI ACWI ex-U.S. *Averages included in the table use the last four rate hike occurrences with initial rate hikes on Feb. 4, 1994, Jun. 30, 1999, Jun. 30, 2004 and Dec. 14, 2016. Source: Bloomberg, FactSet. Data as of March 31, 2022. Past performance is not a guarantee of future results. Investors cannot invest directly in an index, and unmanaged index returns do not reflect any fees, expenses or sales charges.



2022-2031 Ten-Year Outlook

Executive Summary of Return Assumption Changes

Asset Class	2022 Mid Year Update E(R) - 10 Year	Original 2022 Outlook E(R) - 10 Year	Year Over Year Change
Inflation	2.6%	2.5%	0.1%
Cash*	0.9%	0.1%	0.8%
TIPS	3.1%	1.3%	1.8%
Muni Bond**	3.8%	1.2%	2.7%
Muni High Yield**	7.8%	4.9%	2.9%
US Bond	3.4%	1.7%	1.7%
Dynamic Bonds***	3.4%	2.0%	1.4%
Global Bonds	3.0%	1.4%	1.6%
Corp HY Bond	5.5%	3.7%	1.8%
Global Equity	8.1%	7.2%	0.9%
US Equity (AC)	6.6%	5.9%	0.8%
US Equity (LC)	6.5%	5.7%	0.8%
US Equity (MC)	6.8%	6.1%	0.8%
US Equity (SC)	6.8%	6.1%	0.7%
Int'l Dev. Equity	9.3%	7.7%	1.6%
EM Equity	10.6%	9.6%	1.0%
Real Estate	5.8%	5.4%	0.4%
Broad Real Assets****	5.4%	4.7%	0.7%
Marketable Alternatives	7.2%	5.9%	1.3%
Private Equity	9.6%	8.9%	0.8%

*3-month forecast

**Tax equivalent yield based on highest marginal tax rate (37%)

***33% Cash, 33% Corp HY, and 34% Global Bonds

****20% REITs, 20% Global Infrastructure, 20% Commodities, 20% US Bonds, 15% Corp High Yield, 5% TIPS

Intra-Year Shifts

- Forecasted inflation increased modestly
- Nominal and real Interest rates rose significantly across the globe leading to meaningfully higher forecasted returns.
- Except for cash, all fixed income categories now have a positive real return expectation.
- The meaningful global equity market rout in the first half of 2022 has led to a meaningfully higher rate of return across all equity asset classes.
- With inflation expectations remaining stubbornly high, real assets remain an important diversifier.
- Alternative asset class return expectations rose modestly.

For additional information on forecast methodologies, please speak with your advisor. Please see Index Proxy Summary slide at the end of this presentation for summary of indexes used to represent each asset class. Past performance does not indicate future performance and there is a possibility of a loss.



2022-2041 Twenty-Year Outlook

Executive Summary of Return Assumption Changes

Asset Class	2022 Mid Year Update E(R) - 20 Year	Original 2022 Outlook E(R) - 20 Year	Year Over Year Change
Inflation	2.8%	2.6%	0.2%
Cash*	1.4%	0.7%	0.7%
TIPS	3.6%	2.1%	1.6%
Muni Bond**	4.6%	2.1%	2.5%
Muni High Yield**	8.6%	5.6%	2.9%
US Bond	3.9%	2.5%	1.5%
Dynamic Bonds***	3.9%	2.8%	1.2%
Global Bonds	3.5%	2.2%	1.4%
Corp HY Bond	6.0%	4.5%	1.6%
Global Equity	8.9%	8.1%	0.8%
US Equity (AC)	7.4%	6.8%	0.6%
US Equity (LC)	7.3%	6.6%	0.7%
US Equity (MC)	7.6%	7.0%	0.6%
US Equity (SC)	7.6%	7.0%	0.6%
Int'l Dev. Equity	10.1%	8.6%	1.5%
EM Equity	11.4%	10.5%	0.9%
Real Estate	6.6%	6.3%	0.3%
Broad Real Assets****	6.2%	5.6%	0.6%
Marketable Alternatives	8.0%	6.8%	1.2%
Private Equity	10.4%	9.8%	0.6%

*3-month forecast

**Tax equivalent yield based on highest marginal tax rate (37%)

***33% Cash, 33% Corp HY, and 34% Global Bonds

****20% REITs, 20% Global Infrastructure, 20% Commodities, 20% US Bonds, 15% Corp High Yield, 5% TIPS

Intra-Year Shifts

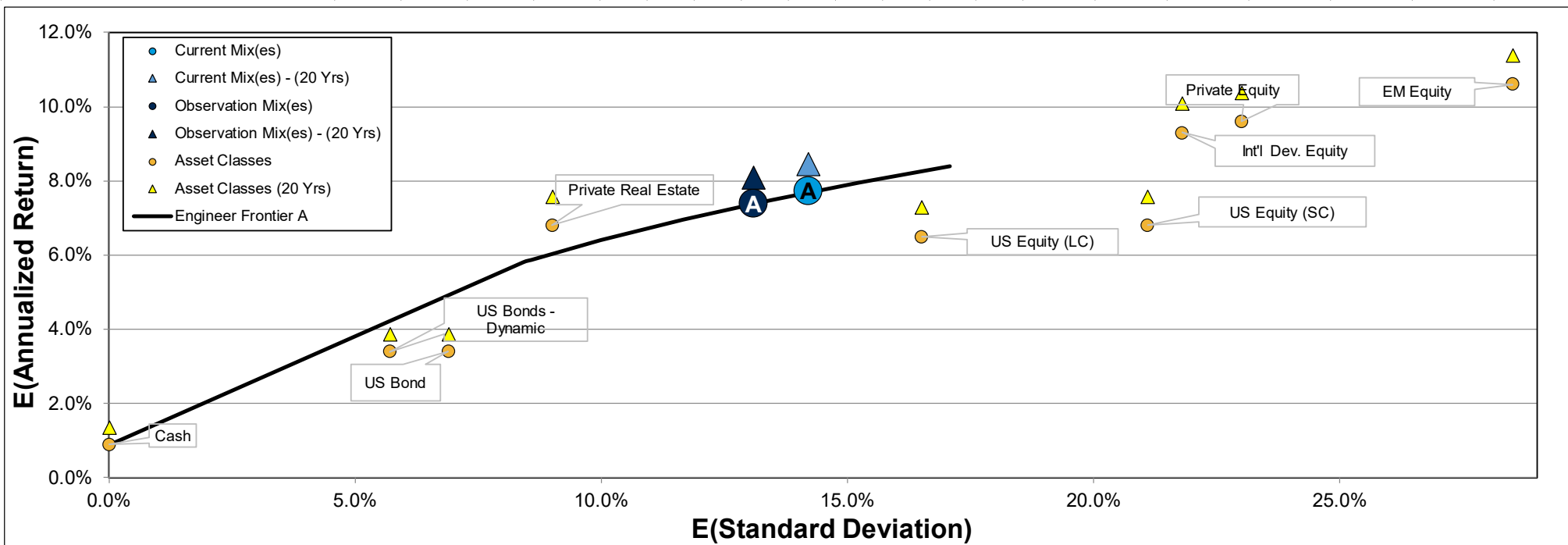
- Forecasted inflation increased modestly
- Nominal and real Interest rates rose significantly across the globe leading to meaningfully higher forecasted returns.
- Except for cash, all fixed income categories now have a positive real return expectations.
- The meaningful global equity market rout in the first half of 2022 has led to a meaningfully higher rate of return across all equity asset classes.
- With inflation expectations remaining stubbornly high, real assets remain an important diversifier.
- Alternative asset class return expectations rose modestly.

For additional information on forecast methodologies, please speak with your advisor. Please see Index Proxy Summary slide at the end of this presentation for summary of indexes used to represent each asset class. Past performance does not indicate future performance and there is a possibility of a loss.



Frontier Engineer® Analysis

6/30/2022	Asset Allocation													Forecasts					Past (1/88-6/22)	
	Fixed Income	Equity	Real Assets	Alternatives	Cash	US Bond	US Bonds - Dynamic	US Equity (LC)	US Equity (SC)	Int'l Dev. Equity	EM Equity	Private Real Estate	Private Equity	Annualized Return (20 Years)	Annualized Return (10 Years)	Annualized Volatility	Normal 100 Year Flood*	Non-Normal 100 Year Flood**	Annualized Return	Annualized Volatility
Current Mix (A)	18%	75%	7%	1%		15.0%	3.0%	31.0%	10.5%	23.0%	10.0%	7.0%	0.5%	8.5%	7.7%	14.2%	-24%	-35%	8.6%	12.3%
Observation Mix (A)	25.0%	67.5%	7.0%	0.5%		17.5%	7.5%	29.5%	9.5%	19.5%	9.0%	7.0%	0.5%	8.1%	7.4%	13.1%	-22%	-32%	8.5%	11.3%



*The expected one in a hundred worst case calendar year return based on normally distributed capital market assumptions. Greater losses are possible (1% expected likelihood).

**The expected one in a hundred worst case calendar year return based on non-normally distributed capital market assumptions (factoring in skewness & kurtosis). Greater losses are possible (1% expected likelihood).

Historical Returns and Risk Metrics for each Mix represent back-tested calculations developed with the benefit of hindsight. Return calculations use an asset-weighted methodology based on the target asset allocation of each mix and the total return of index proxies used to represent each asset class and are gross of fees. Historical returns are hypothetical and do not represent returns earned by a client. It is not possible to invest in an index. Please see disclosures at the end of this presentation for additional important information, including index proxies used to represent each asset class. Please ask for a copy of Fiducient Advisors' white paper titled 10-Year Capital Market Forecasts. Past performance does not indicate future performance and it is possible to lose money when investing.

Burlington Employees' Retirement System

Cash Flow Worksheet

Objective : 1) Reallocate BERS portfolio using four step dollar cost averaging (DCA) approach.

Investment Name	Unreconciled Balance As of: 7/31/2022 (unless otherwise stated)	Current Allocation	Current Target Allocation	Proposed Target Allocation	Total Trade Amount	TRW Step 1	TRW Step 2	TRW Step 3	TRW Step 4	Resulting Balances	Resulting Allocation
<i>Cash</i>											
	\$39,858	0.0%	0.0%	0.0%	\$0	\$0	\$0	\$0	\$0	\$39,858	0.0%
US Bank Cash	\$39,858	0.0%	0.0%	0.0%						\$39,858	0.0%
<i>Fixed Income</i>											
	\$39,755,173	18.2%	18.0%	25.0%	\$15,000,000	\$3,750,000	\$3,750,000	\$3,750,000	\$3,750,000	\$54,755,173	25.1%
Johnson Institutional Core Bond	\$33,228,062	15.2%	15.0%	17.5%	\$5,080,000	\$1,270,000	\$1,270,000	\$1,270,000	\$1,270,000	\$38,308,062	17.5%
BlackRock Strategic Income Opportunities K	\$6,527,111	3.0%	3.0%	7.5%	\$9,920,000	\$2,480,000	\$2,480,000	\$2,480,000	\$2,480,000	\$16,447,111	7.5%
<i>Domestic Equity</i>											
	\$93,757,718	42.9%	41.5%	40.0%	(\$6,200,000)	(\$1,550,000)	(\$1,550,000)	(\$1,550,000)	(\$1,550,000)	\$87,557,718	40.1%
BNYM Mellon DV NSL Stock Index Fund ¹	\$69,987,234	32.0%	31.0%	31.0%	(\$2,160,000)	(\$540,000)	(\$540,000)	(\$540,000)	(\$540,000)	\$67,827,234	31.0%
BNYM Mellon DV SL Smid Cap Stock Index Fund ¹	\$23,770,484	10.9%	10.5%	9.0%	(\$4,040,000)	(\$1,010,000)	(\$1,010,000)	(\$1,010,000)	(\$1,010,000)	\$19,730,484	9.0%
<i>International Equity</i>											
	\$68,985,245	31.6%	33.0%	27.5%	(\$8,800,000)	(\$2,200,000)	(\$2,200,000)	(\$2,200,000)	(\$2,200,000)	\$60,185,245	27.5%
BNYM Mellon DV NSL International Stock Index Fund ¹	\$49,532,865	22.7%	23.0%	20.5%	(\$4,680,000)	(\$1,170,000)	(\$1,170,000)	(\$1,170,000)	(\$1,170,000)	\$44,852,865	20.5%
BNYM Mellon DV NSL Emerging Markets Stock Index Fund ¹	\$19,452,380	8.9%	10.0%	7.0%	(\$4,120,000)	(\$1,030,000)	(\$1,030,000)	(\$1,030,000)	(\$1,030,000)	\$15,332,380	7.0%
<i>Alternatives - Private Equity</i>											
	\$926,255	0.4%	0.5%	0.5%	\$0	\$0	\$0	\$0	\$0	\$926,255	0.4%
Hamilton Lane II (3/31/2022, adjusted by subsequent flows)	\$23,901	0.0%								\$23,901	0.0%
Hamilton Lane VII A (3/31/2022, adjusted by subsequent flows)	\$626,892	0.3%								\$626,892	0.3%
Hamilton lane VII B (3/31/2022, adjusted by subsequent flows)	\$275,462	0.1%								\$275,462	0.1%
<i>Alternatives - Real Assets</i>											
	\$15,001,522	6.9%	7.0%	7.0%	\$0	\$0	\$0	\$0	\$0	\$15,001,522	6.9%
UBS TPF (6/30/2022, adjusted by subsequent flows)	\$12,702,268	5.8%	6.0%	6.0%						\$12,702,268	5.8%
Molpus SWF II (3/31/2022, adjusted by subsequent flows)	\$2,299,254	1.1%	1.0%	1.0%						\$2,299,254	1.1%
Investment Portfolio Total	\$218,465,771	100.0%	100.0%	100.0%	\$0	\$0	\$0	\$0	\$0	\$218,465,771	100.0%

Balance information has been compiled solely by Fiduciant Advisors and has not been independently verified. In preparing this report, Fiduciant Advisors has relied upon information provided by the investment managers and/or the custodian. Unless otherwise noted, daily valued investments are valued as of the previous business day's closing NAV. Held at source investments are valued as of the most recent month end statement, unless otherwise noted. Exceptions to daily liquidity are noted, if applicable.

You acknowledge and agree that you are solely responsible for issuing any instructions and implementing any transactions that may be necessary or appropriate in order to complete fund changes that we may recommend in light of your objectives and policies, performance by the investment managers and such other market conditions and factors which are deemed relevant. You understand and agree that our duties and responsibilities under this agreement do not include acting as your agent in connection with: (a) establishing or terminating client accounts with investment managers, (b) providing purchase or sale instructions to custodians, (c) providing investment or withdrawal instructions to mutual fund or other investment management companies, (d) providing or relaying wire transfer instructions relating to the settlement of transactions, or (e) advising on or voting proxies on your behalf. We shall not be liable to you for any failure relating to the issuance, delivery, accuracy or completeness of such instructions in effecting any such securities transactions approved by you in accordance with any rebalancing. You are responsible for verifying the accuracy of this information and directly communicating any instructions to appropriate parties. We are neither authorized to initiate transactions on your behalf nor can we assume responsibility for inaccurate or incomplete information. You understand that these transactions may not necessarily be performed simultaneously. There may be risks to being un-invested during periods of extreme market volatility. Sale proceeds and/or cash may be "out of the market" for a period of time due to transactional and procedural constraints.

Signature _____

Date _____



Capital Market Assumptions

Return & Risk Assumptions (Forecasts)	Arithmetic Return	Geometric Return	Standard Deviation	Skewness	Kurtosis
US Bond	3.6%	3.4%	6.9%	-0.45	1.45
US Bonds - Dynamic	3.6%	3.4%	5.7%	-1.05	7.64
US Equity (LC)	7.9%	6.5%	16.5%	-0.59	0.99
US Equity (SC)	9.0%	6.8%	21.1%	-0.50	1.34
Int'l Dev. Equity	11.7%	9.3%	21.8%	-0.57	1.45
EM Equity	14.7%	10.6%	28.5%	-0.67	2.07
Private Real Estate	7.2%	6.8%	9.0%	-0.77	7.24
Private Equity	12.2%	9.6%	23.0%	0.00	0.00

Correlation Assumptions (Forecasts)	US Bond	US Bonds - Dynamic	US Equity (LC)	US Equity (SC)	Int'l Dev. Equity	EM Equity	Private Real Estate	Private Equity
US Bond	1.00	0.37	0.19	0.11	0.16	0.05	0.21	-0.05
US Bonds - Dynamic	0.37	1.00	0.53	0.51	0.47	0.53	0.53	0.20
US Equity (LC)	0.19	0.53	1.00	0.84	0.69	0.66	0.63	0.38
US Equity (SC)	0.11	0.51	0.84	1.00	0.62	0.66	0.70	0.39
Int'l Dev. Equity	0.16	0.47	0.69	0.62	1.00	0.71	0.51	0.33
EM Equity	0.05	0.53	0.66	0.66	0.71	1.00	0.47	0.31
Private Real Estate	0.21	0.53	0.63	0.70	0.51	0.47	1.00	0.21
Private Equity	-0.05	0.20	0.38	0.39	0.33	0.31	0.21	1.00

May 31, 2022 Ten-Year Forecasted CMAs

For additional information on forecast methodologies, please speak with your advisor. Please see Index Proxy Summary slide at the end of this presentation for summary of indexes used to represent each asset class. Past performance does not indicate future performance.



Capital Market Assumptions

Return & Risk Assumptions (Forecasts)	Arithmetic Return	Geometric Return	Standard Deviation	Skewness	Kurtosis
US Bond	4.1%	3.9%	6.9%	-0.45	1.45
US Bonds - Dynamic	4.0%	3.9%	5.7%	-1.05	7.64
US Equity (LC)	8.6%	7.3%	16.5%	-0.59	0.99
US Equity (SC)	9.8%	7.6%	21.1%	-0.50	1.34
Int'l Dev. Equity	12.5%	10.1%	21.8%	-0.57	1.45
EM Equity	15.4%	11.4%	28.5%	-0.67	2.07
Private Real Estate	8.0%	7.6%	9.0%	-0.77	7.24
Private Equity	13.0%	10.4%	23.0%	0.00	0.00

Correlation Assumptions (Forecasts)	US Bond	US Bonds - Dynamic	US Equity (LC)	US Equity (SC)	Int'l Dev. Equity	EM Equity	Private Real Estate	Private Equity
US Bond	1.00	0.35	0.18	0.09	0.15	0.03	0.21	-0.14
US Bonds - Dynamic	0.35	1.00	0.52	0.51	0.47	0.53	0.53	0.16
US Equity (LC)	0.18	0.52	1.00	0.84	0.69	0.67	0.62	0.37
US Equity (SC)	0.09	0.51	0.84	1.00	0.62	0.67	0.70	0.37
Int'l Dev. Equity	0.15	0.47	0.69	0.62	1.00	0.71	0.50	0.32
EM Equity	0.03	0.53	0.67	0.67	0.71	1.00	0.47	0.31
Private Real Estate	0.21	0.53	0.62	0.70	0.50	0.47	1.00	0.19
Private Equity	-0.14	0.16	0.37	0.37	0.32	0.31	0.19	1.00

May 31, 2022 Twenty-Year Forecasted CMAs

For additional information on forecast methodologies, please speak with your advisor. Please see Index Proxy Summary slide at the end of this presentation for summary of indexes used to represent each asset class. Past performance does not indicate future performance.



Indices for Past Return & Risk Metrics

Indices used to generate historical risk and return metrics	Most Recent Index	Index Dates		Linked Index 1	Index Dates		Linked Index 2	Index Dates		Linked Index 2	Index Dates	
Cash	FTSE Treasury Bill 3 Mon USD	6/22	- 1/79	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.
US Bond	Bloomberg US Agg Bond TR USD	6/22	- 1/79	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.
US Bonds - Dynamic	*Custom Blend of Indices	6/22	- 2/90	Bloomberg US Agg Bond TR USD	1/90	- 1/79	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.
US Equity (LC)	S&P 500 TR USD	6/22	- 1/79	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.
US Equity (SC)	Russell 2000 TR USD	6/22	- 1/79	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.
Int'l Dev. Equity	MSCI EAFE GR USD	6/22	- 1/79	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.
EM Equity	MSCI EM GR USD	6/22	- 1/88	MSCI EAFE GR USD	12/87	- 1/79	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.
Private Real Estate	Wilshire US RESI TR USD	6/22	- 1/79	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.
Private Equity	Cambridge PE 67% Buyout v.s. 33% Venture	6/22	- 4/86	Russell 2000 TR USD	3/86	- 1/79	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.

*US Bonds - Dynamic Index - 1/3 Bloomberg Gbl Agg Ex USD TR Hdg USD, 1/3 FTSE Treasury Bill 3 Mon USD & 1/3 Bloomberg US Corporate High Yield TR USD

Note: Private Equity Index is frequently 3-6 months behind the other indices. For historical return calculation purposes, it is given 0% returns during the most recent period where gaps may exist.



Disclosure

The historical performance information derived from the Frontier Engineer and used or presented in charts, tables, or graphs represent simulated historical performance, which has been derived by retroactively applying an asset allocation modeling process in its most recently developed form with its most recently derived ten-year (forward-looking) capital market assumptions. Such historical return simulations (or back testing) was performed by simulating the combination of actual index returns for the historical period with a buy and hold strategy effective January 1, 1988 through the most recently available month-end date with simulated rebalancing occurring every month-end (with the reinvestment of dividends and capital gains from each index).

Back tested performance is hypothetical and does not reflect actual trades or actual client performance. As with all models, there are inherent limitations which are derived from the retroactive application developed with the benefit of hindsight, including the risk that certain factors such as material economic and market conditions could have contributed to materially different (either higher or lower) performance results than those depicted, or that certain material factors may have been included or excluded from consideration. As such, actual results during the applicable back tested period would have been different than those depicted.

The asset allocation modeling process currently used was initially developed in 2002, and was not offered as a strategy prior to that time. The output of a forward-looking model (or process) is a representation of allocation percentages among specific asset classes. Clients cannot invest directly in a target allocation, but rather, in underlying securities within designated asset classes. Advisor may change its models from time to time, and regularly updates its model as additional capital market assumption information becomes available or to increase or decrease relative weightings or emphasis on certain factors. Consequently, the Advisor may choose to deviate from a stated model over time as the model itself is revised, which could have a materially positive or negative impact on performance.

During the period represented, numerous modelling changes were made, including the regular changes in (ten-year) forward-looking expected returns, expected volatilities, expected non-normal return distribution assumptions, as well as tracking-error assumptions and risk budgets. Furthermore, such assumptions can be modified client-by-client depending on certain preferences, priorities, constraints or unique considerations applicable to each client.

Other economic and market factors may have impacted decision-making when using the model to manage client funds, including the list of approved asset classes by a client or client type as well as any client-directed or Advisor implemented constraints.

All investments bear the risk of loss, including the loss of principal. Past performance, actual or hypothetical, is no guarantee of future results.

The returns displayed on the preceding pages are gross of fees. Actual performance would be reduced by investment advisory fees and other expenses that may be incurred in the management of the client's portfolio. The collection of fees produces a compounding effect on the total rate of return net of management fees. As an example, the effect of investment management fees on the total value of a client's portfolio assuming (a) quarterly fee assessment, (b) \$1,000,000 investment, (c) portfolio return of 8% a year, and (d) 0.50% annual investment advisory fee would be \$5,228 in the first year, and cumulative effects of \$30,342 over five years and \$73,826 over ten years. Additional information on advisory fees charged by Fiduciant Advisors are described in Part 2 of the Form ADV.



INDEX DEFINITIONS

FTSE Treasury Bill 3 Month measures return equivalents of yield averages and are not marked to market. It is an average of the last three three-month Treasury bill month-end rates.

Bloomberg Barclays Capital US Treasury Inflation Protected Securities Index consists of Inflation-Protection securities issued by the U.S. Treasury.

Bloomberg Barclays Muni 5 Year Index is the 5 year (4-6) component of the Municipal Bond index.

Bloomberg Barclays High Yield Municipal Bond Index covers the universe of fixed rate, non-investment grade debt.

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.

FTSE World Government Bond Index (WGBI) (Unhedged) provides a broad benchmark for the global sovereign fixed income market by measuring the performance of fixed-rate, local currency, investment-grade sovereign debt from over 20 countries,

FTSE World Government Bond Index (WGBI) (Hedged) is designed to represent the FTSE WGBI without the impact of local currency exchange rate fluctuations.

Bloomberg Barclays US Corporate High Yield TR USD 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 Index (GBI-EMI) 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.

JPMorgan EMBI Global Diversified is an unmanaged, market-capitalization weighted, total-return index tracking the traded market for U.S.-dollar-denominated Brady bonds, Eurobonds, traded loans, and local market debt instruments issued by sovereign and quasi-sovereign entities.

MSCI ACWI is designed to represent performance of the full opportunity set of large- and mid-cap stocks across multiple developed and emerging markets, including cross-market tax incentives.

The S&P 500 is a capitalization-weighted index designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.

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 Mid Cap measures the performance of the 800 smallest companies in the Russell 1000 Index.

Russell 2000 consists of the 2,000 smallest U.S. companies in the Russell 3000 index.

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. The index covers approximately 85% of the free float-adjusted market capitalization in each country.

MSCI Emerging Markets captures large and mid-cap representation across Emerging Markets countries. The index covers approximately 85% of the free-float adjusted market capitalization in each country

The Wilshire US Real Estate Securities Index (Wilshire US RESI) is comprised of publicly-traded real estate equity securities and designed to offer a market-based index that is more reflective of real estate held by pension funds.

Alerian MLP Index is a 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.

Bloomberg Commodity Index (BCI) 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.

Treasury Inflation-Protected Securities (TIPS) are Treasury bonds that are indexed to inflation to protect investors from the negative effects of rising prices. The principal value of TIPS rises as inflation rises.

HFRI Fund of Funds Composite is an equal-weighted index consisting of over 800 constituent hedge funds, including both domestic and offshore funds.

Cambridge Associates U.S. Private Equity Index (67% Buyout vs. 33% Venture) is based on data compiled from more than 1,200 institutional-quality buyout, growth equity, private equity energy, and mezzanine funds formed between 1986 and 2015.

HFN Hedge Fund Aggregate Average is an equal weighted average of all hedge funds and CTA/managed futures products reporting to the HFN Database. Constituents are aggregated from each of the HFN Strategy Specific Indices.

Goldman Sachs Commodity Index (GSCI) is a broadly diversified, unleveraged, long-only composite index of commodities that measures the performance of the commodity market.



Definitions & Disclosures

Please note: Due to rounding methodologies of various data providers, certain returns in this report might differ slightly when compared to other sources

REGULATORY DISCLOSURES

Offer of ADV Part 2A: Rule 204-3 under the Investment Advisers Act of 1940 requires that we make an annual offer to clients to send them, without charge, a written disclosure statement meeting the requirements of such rule. We will be glad to send a copy of our ADV Part 2A to you upon your written request to compliance@fiducient.com.

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.
- **Ryan 3 Yr. GIC** is an arithmetic mean of market rates of \$1 million Guaranteed Interest Contracts held for three years.
- **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.
- **Fund Specific Broad Real Asset Benchmarks:**
 - **DWS Real Assets:** 30%: Dow Jones Brookfield Infrastructure Index, 30%: FTSE EPRA/NAREIT Developed Index, 15%: Bloomberg Commodity Index, 15%: S&P Global Natural Resources Index, 10%: Barclays U.S. Treasury Inflation Notes Total Return Index
 - **PIMCO Inflation Response Multi Asset Fund:** 45% Barclays U.S. TIPS, 20% Bloomberg Commodity Index, 15% JP Morgan Emerging Local Markets Plus, 10% Dow Jones Select REIT, 10% Bloomberg Gold Subindex Total Return
 - **Principal Diversified Real Assets:** 35% BbgBarc U.S. Treasury TIPS Index, 20% S&P Global Infrastructure Index NTR, 20% S&P Global Natural Resources Index NTR, 15% Bloomberg Commodity Index, and 10% FTSE EPRA/NAREIT Developed Index NTR
 - **Wellington Diversified Inflation H:** 50% MSCI ACWI Commodity Producers Index, 25% Bloomberg Commodity Index, and 25% Bloomberg Barclays US TIPS 1 – 10 Year Index
- **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.
- **Cambridge Associates U.S. Private Equity Index** is based on data compiled from more than 1,200 institutional-quality buyout, growth equity, private equity energy, and mezzanine funds formed between 1986 and 2015.
- **Cambridge Associates U.S. Venture Capital Index** is based on data compiled from over 1,600 institutional-quality venture capital funds formed between 1986 and 2015.
- **Vanguard Spliced Bloomberg Barclays US1-5Yr Gov/Cr Flt Adj Index:** Bloomberg Barclays U.S. 1–5 Year Government/Credit Bond Index through December 31, 2009; Bloomberg Barclays U.S. 1–5 Year Government/Credit Float Adjusted Index thereafter.
- **Vanguard Spliced Bloomberg Barclays US5-10Yr Gov/Cr Flt Adj Index:** Bloomberg Barclays U.S. 5–10 Year Government/Credit Bond Index through December 31, 2009; Bloomberg Barclays U.S. 5–10 Year Government/Credit Float Adjusted Index thereafter.
- **Vanguard Spliced Bloomberg Barclays US Agg Flt Adj Index:** Bloomberg Barclays U.S. Aggregate Bond Index through December 31, 2009; Bloomberg Barclays U.S. Aggregate Float Adjusted Index thereafter.
- **Vanguard Spliced Bloomberg Barclays US Long Gov/Cr Flt Adj Index:** Bloomberg Barclays U.S. Long Government/Credit Bond Index through December 31, 2009; Bloomberg Barclays U.S. Long Government/Credit Float Adjusted Index thereafter.
- **Vanguard Balanced Composite Index:** Made up of two unmanaged benchmarks, weighted 60% Dow Jones U.S. Total Stock Market Index (formerly the Dow Jones Wilshire 5000 Index) and 40% Bloomberg Barclays U.S. Aggregate Bond Index through May 31, 2005; 60% MSCI US Broad Market Index and 40% Bloomberg Barclays U.S. Aggregate Bond Index through December 31, 2009; 60% MSCI US Broad Market Index and 40% Bloomberg Barclays U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Bloomberg Barclays U.S. Aggregate Float Adjusted Index thereafter.
- **Vanguard Spliced Intermediate-Term Tax-Exempt Index:** Bloomberg Barclays 1–15 Year Municipal Bond Index.
- **Vanguard Spliced Extended Market Index:** Dow Jones Wilshire 4500 Index through June 17, 2005; S&P Transitional Completion Index through September 16, 2005; S&P Completion Index thereafter.
- **Vanguard Spliced Value Index:** S&P 500 Value Index (formerly the S&P 500/Barra Value Index) through May 16, 2003; MSCI US Prime Market Value Index through April 16, 2013; CRSP US Large Cap Value Index thereafter.
- **Vanguard Spliced Large Cap Index:** Consists of MSCI US Prime Market 750 Index through January 30, 2013, and the CRSP US Large Cap Index thereafter.
- **Vanguard Spliced Growth Index:** S&P 500 Growth Index (formerly the S&P 500/Barra Growth Index) through May 16, 2003; MSCI US Prime Market Growth Index through April 16, 2013; CRSP US Large Cap Growth Index thereafter.
- **Vanguard Spliced Mid Cap Value Index:** MSCI US Mid Cap Value Index through April 16, 2013; CRSP US Mid Cap Value Index thereafter.
- **Vanguard Spliced Mid Cap Index:** S&P MidCap 400 Index through May 16, 2003; the MSCI US Mid Cap 450 Index through January 30, 2013; and the CRSP US Mid Cap Index thereafter.
- **Vanguard Spliced Mid Cap Growth Index:** MSCI US Mid Cap Growth Index through April 16, 2013; CRSP US Mid Cap Growth Index thereafter.
- **Vanguard Spliced Total Stock Market Index:** Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 22, 2005; MSCI US Broad Market Index through June 2, 2013; and CRSP US Total Market Index thereafter.
- **Vanguard Spliced Small Cap Value Index:** SmallCap 600 Value Index (formerly the S&P SmallCap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap Value Index through April 16, 2013; CRSP US Small Cap Value Index thereafter.



- **Vanguard Spliced Small Cap Index:** Russell 2000 Index through May 16, 2003; the MSCI US Small Cap 1750 Index through January 30, 2013; and the CRSP US Small Cap Index thereafter.
- **Vanguard Spliced Small Cap Growth Index:** S&P SmallCap 600 Growth Index (formerly the S&P SmallCap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap Growth Index through April 16, 2013; CRSP US Small Cap Growth Index thereafter.
- **Vanguard Spliced Total International Stock Index:** Consists of the Total International Composite Index through August 31, 2006; the MSCI EAFE + Emerging Markets Index through December 15, 2010; the MSCI AC USA IMI Index through June 2, 2013; and FTSE Global All Cap ex US Index thereafter. Benchmark returns are adjusted for withholding taxes.
- **Vanguard Spliced Developed Markets Index:** MSCI EAFE Index through May 28, 2013; FTSE Developed ex North America Index through December 20, 2015; FTSE Developed All Cap ex US Transition Index through May 31, 2016; FTSE Developed All Cap ex US Index thereafter. Benchmark returns are adjusted for withholding taxes.
- **Vanguard Spliced Emerging Markets Index:** Select Emerging Markets Index through August 23, 2006; MSCI Emerging Markets Index through January 9, 2013; FTSE Emerging Transition Index through June 27, 2013; FTSE Emerging Index through November 1, 2015; and FTSE Emerging Markets All Cap China A Transition Index thereafter. Benchmark returns are adjusted for withholding taxes.
- **Vanguard REIT Spliced Index:** MSCI US REIT Index adjusted to include a 2% cash position (Lipper Money Market Average) through April 30, 2009; MSCI US REIT Index through January 31, 2018; MSCI US Investable Market Real Estate 25/50 Transition Index through July 24, 2018; MSCI US Investable Market Real Estate 25/50 Index thereafter.

Additional:

- Equity sector returns are calculated by Russell and MSCI for domestic and international markets, respectively. MSCI sector definitions correspond to the MSCI GICS® classification (Global Industry Classification System); Russell uses its own sector and industry classifications.
- MSCI country returns are calculated by MSCI and are free float-adjusted market capitalization indices that are designed to measure equity market performance in each specific country.
- Currency returns are calculated using Bloomberg's historical spot rate indices and are calculated using the U.S. dollar as the base currency.
- The Index of Leading Economic Indicators, calculated by The Conference Board, is used as a barometer of economic activity over a range of three to six months. The index is used to determine the direction and stability of the economy. The composite index of leading indicators, which is derived from 10 leading indicators, helps to signal turning points in the economy and forecast economic cycles. The leading indicators are the following: average weekly hours, average weekly initial claims, manufacturers' new orders, both consumer and non-defense capital goods, vendor performance, building permits, stock prices, money supply (M2), the interest rate spread and the index of consumer expectations.
- S&P Target Date Indexes are constructed using a survey method of current target date investments with \$100 million or more in assets under management. Allocations for each vintage are comprised of exchange-traded funds that represent respective asset classes used in target date portfolios. The indexes are designed to represent a market consensus glide path.

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 can't 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 rather than the standard deviation of portfolio returns. High values mean better return for risk taken.



- **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 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 the standard deviation of excess return.
- **Consistency:** Consistency shows the percent of the periods the fund has beaten the index and the percent of the periods the index has beat the fund. A high average for the fund (e.g., over 50) is desirable, indicating the fund has beaten the index frequently.
- **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.
- **M-Squared:** M-squared, or the Modigliani risk-adjusted performance measure is used to characterize how well a portfolio's return rewards an investor for the amount of risk taken, relative to that of some benchmark portfolio and to the risk-free rate.

DEFINITION OF KEY PRIVATE EQUITY TERMS

- **PIC (Paid in Capital):** The amount of committed capital that has been transferred from the limited partner to the general partner.
- **TVPI (Total Value to Paid in Capital):** Money returned to limited partners plus the fund's unrealized investments, divided by money paid-in to the partnership. The TVPI should equal RVPI plus DPI.
- **DPI (Distribution to Paid In Capital):** Money returned (distributions) to limited partners divided by money paid in to the partnership. Also called cash-on-cash multiple.
- **RVPI (Residual Value to Paid In Capital):** The value of a fund's unrealized investments divided by money paid-in to the partnership.
- **Internal rate of return (IRR):** This is the most appropriate performance benchmark for private equity investments. It is a time-weighted return expressed as a percentage. IRR uses the present sum of cash drawdowns (money invested), the present value of distributions (money returned from investments) and the current value of unrealized investments and applies a discount.
- **Commitment:** Every investor in a private equity fund commits to investing a specified sum of money in the fund partnership over a specified period of time. The fund records this as the limited partnership's capital commitment. The sum of capital commitments is equal to the size of the fund.
- **Capital Distribution:** These are the returns that an investor in a private equity fund receives. It is the income and capital realized from investments less expenses and liabilities. Once a limited partner has had their cost of investment returned, further distributions are actual profit. The partnership agreement determines the timing of distributions to the limited partner. It will also determine how profits are divided among the limited partners and general partner.
- **Carried Interest:** The share of profits that the fund manager is due once it has returned the cost of investment to investors. Carried interest is normally expressed as a percentage of the total profits of the fund.
- **Co-Investment:** Co-Investments are minority investments made alongside a private equity investor in an LBO, a recapitalization, or an expansion capital transaction. It is a passive, non-controlling investment, as the private equity firm involved will typically exercise control and perform monitoring functions.
- **General Partner (GP):** This can refer to the top-ranking partners at a private equity firm as well as the firm managing the private equity fund.
- **GP Commitments:** It is normal practice for the GP managing a private equity fund to also make a financial commitment to the fund on the same basis as the LPs in the fund, and this is seen as an important factor driving the alignment of GP and LP interests. The historic benchmark for GP commitments has been 1% of the total fund size, but this is by no means universal, and many GPs commit significantly larger amounts. Furthermore, there has been a marked trend towards GPs making larger commitments to their funds over recent years.
- **Leveraged Buy-Out (LBO):** The acquisition of a company using debt and equity finance.
- **Limited Partner (LP):** Institutions or high-net-worth individuals/sophisticated investors that contribute capital to a private equity fund.
- **Public Market Equivalent (PME):** Performance measure used to evaluate performance relative to the market. It is calculated as the ratio of the discounted value of the LP's inflows divided by the discounted value of outflows, with the discounting performed using realized market returns.
- **Primaries:** An original investment vehicle that invests directly into a company or asset.

VALUATION POLICY

Fiducient Advisors does not engage an independent third-party pricing service to value securities. Our reports are generated using the security prices provided by custodians used by our clients. Our custodial pricing hierarchy is available upon request. If a client holds a security not reported by the first custodian within the hierarchy, the valuation is generated from the next custodian within the hierarchy, and so forth. Each custodian uses pricing services from outside vendors, where the vendors may generate nominally different prices. Therefore, this report can reflect minor valuation differences from those contained in a custodian's report. In rare instances where FA overrides a custodial price, prices are taken from Bloomberg.

REPORTING POLICY

This report is intended for the exclusive use of the client listed within the report. Content is privileged and confidential. Any dissemination or distribution is strictly prohibited. Information has been obtained from a variety of sources believed to be reliable though not independently verified. Any forecast represents median expectations and actual returns, volatilities and correlations will differ from forecasts. Please note each client has customized investment objectives and constraints and the investment strategy for each portfolio is based on a client-specific asset allocation model. Past performance does not indicate future performance and there is a possibility of a loss. Performance calculated net of investment fees. Certain portfolios presented may be gross of Fiducient Advisors' fees and actual performance would be reduced by investment advisory fees. This report does not represent a specific investment recommendation. Please consult with your advisor, attorney, and accountant, as appropriate, regarding specific advice.



Custodian reports are the reports that govern the account. There will be different account values between Fiducient Advisors' reports and the custodian reports based on whether the report utilizes trade date or date to calculate value. Additionally, difference between values contained on reports may be caused by different accrued income values. Any forecasts represent future expectations and actual returns, volatilities and will differ from forecasts. This report does not represent a specific investment recommendation. Please consult with your advisor, attorney, and accountant, as appropriate, regarding specific advice. Past performance does not indicate future performance and there is a possibility of a loss.

Manager performance for mutual funds and ETFs is based on NAV and provided by Lipper. Performance for non-mutual fund or ETF investments is based on the returns provided by managers, calculations based on a manager statement, or calculations based on a statement or data from the client's custodian. Unless specified otherwise, all returns are net of individual manager fees, represent total returns and are annualized for periods greater than one year. The deduction of fees produces a compounding effect that reduces the total rate of return over time. As an example, the effect of investment management fees on the total value of a client's portfolio assuming (a) quarterly fee assessment, (b) \$1,000,000 investment, (c) portfolio return of 8% a year, and (d) 0.50% annual investment advisory fee would be \$5,228 in the first year, and cumulative effects of \$30,342 over five years and \$73,826 over ten years. Additional information on advisory fees charged by Fiducient Advisors are described in Part 2 of the Form ADV.

OTHER

By regulation, closed-end funds utilizing debt for leverage must report their interest expense, as well as their income tax expense, as part of their total expense ratio. To make for a useful comparison between closed-end funds and both open-end funds and exchange-traded funds, adjusted expense ratios excluding interest and income tax expenses are utilized for closed-end funds within this report. See disclosure on closed-end fund fact sheets for information regarding the total expense ratio of each closed-end fund.

Please advise us of any changes in your objectives or circumstances.

CUSTODIAN STATEMENTS

Please remember to review the periodic statements you receive from your custodian. If you do not receive periodic statements from your custodian or notice issues with the activity reported in those statements, please contact FA or your custodian immediately.