Retirement Board

Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room

Please click the link below to join the webinar:
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Webinar ID: 918 4272 8606

1. Agenda

Subject	**1.1. Motion to amend/adopt agenda**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	1. Agenda
Department	Retirement Administration
Type	Action Procedural
Recommended Action	Motion to amend/adopt agenda

2. Public Forum

Subject	**2.1. Verbal Comments**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	2. Public Forum
Department	Retirement Administration
Type	Action Procedural

3. Approve Minutes

Subject	**3.1. January 22, 2024 Meeting Minutes, Draft**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	3. Approve Minutes
Department	Clerk/Treasurer's Office
Type	Action Minutes
Recommended Action	approve minutes

Subject	**3.2. February 12, 2024 Meeting Minutes, Draft**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	3. Approve Minutes
Department	Clerk/Treasurer's Office
Type	Action Minutes
Recommended Action	approve minutes

Subject	**3.3. November 20, 2023 Corrected Meeting Minutes, Draft**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	3. Approve Minutes
Department	Clerk/Treasurer's Office
Type	Action Minutes
Recommended Action	approve corrected minutes

4. Approve Return of Contributions

Subject	**4.1. Kenneth Godin, Class B $4,498.60, Effective Date of Benefit: 02/01/2024**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	4. Approve Return of Contributions
Department	Retirement Administration
Type	Action
Recommended Action	approve return of contribution for Kenneth Godin

Subject	**4.2. Daniel M. Roy, Class B $33,356.21, Effective Date of Benefit: 04/01/2024**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	4. Approve Return of Contributions
Department	Retirement Administration
Type	Action
Recommended Action	approve contribution for Daniel M. Roy

Subject	**4.3. Jessica E. Richards, Class B $1,070.09, Effective Date of Benefit: 03/01/2024**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	4. Approve Return of Contributions
Department	Retirement Administration
Type	Action
Recommended Action	approve return of contribution for Jessica E. Richards

Subject	**4.4. Peter Hatfield, Class B, $2,434.67, Effective Date of Benefit: 04/01/2024**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	4. Approve Return of Contributions
Department	Retirement Administration
Type	Action
Recommended Action	approve contribution for Peter Hatfield

Subject	**4.5. Gregory J. Bonsignore, Class B $584.76, Effective Date of Benefit: 04/01/2024**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	4. Approve Return of Contributions
Department	Retirement Administration
Type	Action
Recommended Action	approve contribution for Gregory J. Bonsignore

Subject	**4.6. Brendan Kaplan, Class B $9,221.08, Effective Date of Benefit: 04/01/2024**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room

Category	4. Approve Return of Contributions
Department	Retirement Administration
Type	Action
Recommended Action	approve contribution for Brendan Kaplan
Subject	**4.7. Alexander Otto Kreissle, Class B $16,337.37, Effective Date of Benefit: 04/01/2024**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	4. Approve Return of Contributions
Department	Retirement Administration
Type	Action
Recommended Action	approve contribution for Alexander Otto Kreissle
Subject	**4.8. William H. DuShane, Class B $42,458.10, Effective Date of Benefit: 04/01/2024**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	4. Approve Return of Contributions
Department	Retirement Administration
Type	Action
Recommended Action	approve contribution for William H. DuShane
Subject	**4.9. Audrey Ells-Payne, Class B $2,664.05, Effective Date of Benefit: 02/01/2024**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	4. Approve Return of Contributions
Department	Retirement Administration
Type	Action
Recommended Action	approve contribution for Audrey Ells-Payne
Subject	**4.10. Andrea Gunther, Class B $9,141.48, Effective Date of Benefit: 04/01/2024**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	4. Approve Return of Contributions

Department	Retirement Administration
Type	Action
Recommended Action	approve contribution for Andrea Gunther

5. Approve Retirement Applications

Subject	**5.1. William H. Geehan, Class B $500.23, Effective Date of Benefit: 12/01/2023, Payment Date: 02/15/2024**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	5. Approve Retirement Applications
Department	Retirement Administration
Type	Action
Recommended Action	approve retirement application for William H. Geehan

Subject	**5.2. Michael T. Heath, Class B $1,816.94, Effective Date of Benefit: 02/01/2024, Payment Date: 02/15/2024**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	5. Approve Retirement Applications
Department	Retirement Administration
Type	Action
Recommended Action	approve retirement application for Michael T. Heath

Subject	**5.3. William M. Agnew, Class B $487.74, Effective Date of Benefit: 04/01/2024, Payment Date: 04/15/2024**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	5. Approve Retirement Applications
Department	Retirement Administration
Type	Action
Recommended Action	approve retirement application to William M. Agnew

Subject	**5.4. William R. Davis, Class B $5,590.15, Effective Date of Benefit: 03/01/2024, Payment Date: 03/15/2024**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	5. Approve Retirement Applications

Department	Retirement Administration
Type	Action
Recommended Action	approve retirement application for William R. Davis

Subject	**5.5. Howard A. LaRocelle, Class B $2,644.09, Effective Date of Benefit: 03/01/2024, Payment Date: 03/15/2024**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	5. Approve Retirement Applications
Department	Retirement Administration
Type	Action
Recommended Action	approve retirement application for Howard A. LaRocelle

6. Administrative Update

Subject	**6.1. BERS - final FY23 valuation**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	6. Administrative Update
Department	Retirement Administration
Type	Discussion Information

7. Fiducient

Subject	**7.1. Investment Portfolio and Performance Update as of 2/28/2024**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	7. Fiducient
Department	Retirement Administration
Type	Discussion Information

Subject	**7.2. Review of UBS Trumbull Properties Fund - Julie Pierro, Executive Director and Real Estate Investment Specialist**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	7. Fiducient
Department	Retirement Administration

Type	Discussion Information

8. Adjournment

Subject	**8.1. Motion to adjourn**
Meeting	March 18, 2024 - Retirement Board Meeting - Monday, March 18, 2024, 9:30 AM, City Hall, 1st Floor, Bushor Conference Room
Category	8. Adjournment
Department	Retirement Administration
Type	Action Procedural
Recommended Action	Motion to adjourn

BURLINGTON RETIREMENT BOARD
CITY HALL, 1ST FLOOR BUSHOR CONF ROOM
OR
REMOTE MEETING WITH CALL-IN
BURLINGTON, VERMONT
MINUTES OF MEETING
DRAFT
January 22, 2024

MEMBERS PRESENT:
Robert Hooper (Chair, via Zoom)
Munir Kasti (Vice Chair)
Patrick Robins (via Zoom)
Tom Chenette
David Mount
Katherine Schad
Matt Dow (via Zoom)

MEMBERS ABSENT:
Kyle Blake

OTHERS PRESENT:
Hayley McClenahan
Darlene Baker
Kate Pizzi
Chris Rowlins
Brad Long

1.0 CALL TO ORDER

Munir Kasti called the Retirement Board meeting to order at 9:30 AM.

MOTION by David Mount, SECOND by Tom Chenette, to adopt the agenda.

VOTING: unanimous; motion carries (Patrick Robins absent for vote).

2.0 PUBLIC FORUM (VERBAL)

2.01 Verbal Comments
None.

3.0 APPROVE MINUTES

3.1 December 18, 2023

MOTION by Munir Kasti, SECOND by David Mount, to approve the minutes of December 18, 2023 with corrections to add detail explaining Mr. Kasti's dissenting vote on pausing the rate of return assumption at 7.1%.

VOTING: unanimous; motion carries (Patrick Robins absent for vote).

4.0 APPROVE RETURN OF CONTRIBUTIONS

4.1 Bartlet, Sherman, Class B $575.90, Effective Date of Benefit: 01/01/2024

MOTION by Munir Kasti, SECOND by David Mount, to approve the return of contributions for individuals listed in 4.1-4.6 as a slate.

VOTING: unanimous; motion carries.

4.2 Kenneth C. Martel, Class B $363.91, Effective Date of Benefit: 02/01/2024
See item 4.1 above.

4.3 Malik A. Mines, Class B $6,064.02, Effective Date of Benefit 02/01/2024
See item 4.1 above.

4.4 Clayton D. Ellwood, Class B, $7,757.98, Effective Date of Benefit: 02/01/2024
See item 4.1 above.

4.5 Corey Souza, Class B, $27,732.56, Effective Date of Benefit: 02/01/2024
See item 4.1 above.

4.6 Jeffrey Padgett, Class B, $14,965.30, Effective Date of Benefit: 12/01/2023
See item 4.1 above.

5.0 APPROVE RETIREMENT APPLICATIONS

5.1 Chris A. Charbonneau, Class B, $2,972.88, Effective Date of Benefit: 12/01/2023, Payment Date: 12/15/2023

MOTION by Munir Kasti, SECOND by David Mount, to approve the retirement applications for individuals listed in 5.1-5.3 as a slate.

VOTING: unanimous; motion carries.

5.2 Lisa Craver, Class B, $90.63, Effective Date of Benefit: 02/01/2024, Payment Date: 02/15/2024
Mr. Chenette asked about the low dollar amount for Ms. Craver's benefit, and Chief Administrative Officer Schad replied that this was an instance where an individual worked for the City in 1979 for a relatively short stint of time and then went on to have a full career elsewhere.

Mr. Kasti asked for an analysis of how many pensions are in the system for $50 or less and $100 or less. Chief Administrative Officer Schad noted that she will work with staff to put this analysis together for next month's meeting.

See item 5.1 above for approval vote.

5.3 Richard W. Haesler, Class B, $1,810.05, Effective Date of Benefit: 02/01/2024, Payment Date: 02/15/2024
See item 5.1 above.

6.0 ADMINISTRATIVE UPDATE

6.1 Linda Tang pension benefit calculation
Chief Administrative Officer Schad provided an update on this benefit calculation. She noted that this individual worked both for the City and for the Burlington Electric Department, which fall under two different union contracts and pension plans. She said that they have collected the historical data around this case and need to meet with Mr. Kasti to make a determination about the best path forward and making a recommendation to this board. Assistant City Attorney McClenahan noted that in August 2022, a calculation was put before this board which was tabled, and it must be picked back up and either approved or replaced with another calculation.

7.0 FIDUCIENT

7.1 Investment Review as of 12/31/2023
Ms. Pizzi began by noting that the fiduciary governance calendar for Q4 includes conducting an investment review, which is what she will focus on during this item. She spoke about market themes, noting a widely forecasted recession in 2023 that failed to materialize, moderated rates of inflation, and that narrow market leadership of U.S. technology stocks during 2023 has created potential opportunities in other market segments. She noted that one of Fiducient's focuses in the BERS portfolio, given the market uncertainty over the past year, has been to build a resilient portfolio through asset allocation and diversification to prepare for market downturns, rather than trying to predict them.

Ms. Pizzi then spoke about asset class returns as of December 31, 2023, focusing on areas of exposure for the BERS portfolio. She noted that U.S. core bonds quarterly performance was up 6.8% over the last quarter, which resulted in the class's overall positive performance for the year (5.5%). She said that this was driven by interest rates coming down, and the inverse relationship between interest rates and bond value. She also spoke about high yield's good performance, as well as good performance for U.S. long duration bonds. She then spoke about equity asset classes, noting that large cap equities were up 12% for the quarter, and that small caps were at 14% for the quarter (noting that small cap equities tend to be more interest sensitive, so the growth was driven by the lower interest rates). She said that equity performance for the year was strong across the board. She then spoke about real estate and alternative asset classes, noting that the BERS portfolio has exposure to this through Trumbull properties, and noting that Trumbull performed better than their benchmark this quarter. She noted negative performance in commodities, though she added that the BERS portfolio does not have exposure to commodities.

Mr. Rowlins then spoke about BERS portfolio specifically, noting that its total value stands at $233.6 million. He spoke about fixed income, noting that its allocation is in line with the benchmark, and also noting a decision in 2022 to use BlackRock Strategic Income Opportunities to more flexibly and nimbly respond to some of the market volatility and temper some of the interest rate risk within the fixed income space, and that it has served the portfolio well. He spoke about equities, noting that it also aligns with the benchmark in terms of allocation within the portfolio. He spoke about real assets, noting that BERS is in the redemption queue for UBS Trumbull Properties.

Mr. Rowlins then spoke about the portfolio performance as of the end of December, 2023. He noted that the portfolio saw weak performance in October, but stronger performance in both November and December. He noted that overall performance for the quarter was 9.4% growth, which is in line with the benchmark. He said that overall fiscal year performance was at around 5.8% growth, and one-year growth was 15.2%. He spoke in more detail about the declining interest rate environment, which was very conducive to growth in the fixed income space. He spoke about the tailwinds in the domestic and international equity markets that helped boost performance.

7.2 Fiducient's 2024 Outlook & Capital Market Assumptions
Mr. Long began by noting that every year Fiducient updates its 10-year market assumptions, and spoke about the benefits of long-term versus short-term investing. He outlined Fiducient's updated 10-year outlook (for 2024-2033) for each fixed income, global equity, and real assets and alternatives classes. He noted that in the fixed-income space, yields rose in 2023, which drove the increased forward long-term return assumptions. He noted that within equities, the forecast is flat due to higher valuations and modest earnings growth for 2023. He spoke about the modest exposure to real assets and alternatives in the portfolio, and spoke about Fiducient's positioning around inflation. He said that as the Fed strives to get to their target interest rate, it could take several paths to get there. One of them is a soft landing, in which interest rates are tempered and the Fed cuts interest rates modestly. Another is economic contraction or recession, in which the Fed more meaningfully cuts interest rates. He said that both of these are more likely than the Fed raising interest rates in 2024, and that Fiducient has positioned the portfolio accordingly. Mr. Robins asked which real asset classes are predicted for growth in the next year. Mr. Long replied that they don't make one-year forecasts in this exercise, and that real estate is a broad basket. He said that under a more modest environment in which interest rates fall, real estate could benefit from lower rates.

Mr. Long then spoke about what this outlook could mean for asset allocation in the BERS portfolio and potential updates for 2024. He said that fixed income is attractive on a ten-year forward basis, and is attractive relative to equities. He said that within fixed income, what looks most attractive is the high-quality intermediate fixed income (U.S. bonds) that are modestly sensitive to changes in interest rates. He said that in terms of equities, there are modest increases in U.S. large cap and modest decreases across small international cap and emerging markets. He said that with global equities, there is more geopolitical risk and potential impacts on returns and risks, as well as potentially stronger performance in the long-term for the U.S. technology sector (driven by the Magnificent 7), resulting in a reduced overweight to these non-U.S. equities. He spoke about real assets, noting that there is only modest exposure, and said that they would propose modest repositioning toward assets that can benefit from a wider variety of factors.

Mr. Long then spoke about the portfolio implications of this analysis. He said that in general, the 10-year return shows increased opportunity across fixed income and real assets with a modest reduction in equity return expectations. He said that range-bound inflation opens multiple paths and flexibilities to get to lower rates, which creates opportunities for more tailwinds in the fixed income and more rate-sensitive asset spaces. He said that narrow market leadership in U.S. equities means that exposure to large cap U.S. equity remains appropriate, but that long-term investment will benefit from exposure to U.S. small/mid cap and non-U.S. stocks. Mr. Robins noted that he has failed to see a return in emerging market investments over the past 5 or 6 years, and asked when that might materialize. Mr. Long replied that it has been underperforming in the last 3-5 years, noting that much of the emerging market relates to China, and that China has struggled over the past several years due to Covid. He also noted that this market tends to move in longer cyclical cycles, noting that prior to the 2008 financial crisis, emerging markets were outpacing the S&P by a very large margin.

8.0 ADJOURN

8.1 Motion to Adjourn

The meeting adjourned at 10:30 AM.

RScty: AACoonradt

BURLINGTON RETIREMENT BOARD
REMOTE MEETING WITH CALL-IN
BURLINGTON, VERMONT
MINUTES OF MEETING
DRAFT
February 12, 2024

MEMBERS PRESENT:
Robert Hooper (Chair)
Munir Kasti (Vice Chair)
Patrick Robins
Tom Chenette
Kyle Blake
Katherine Schad
Matt Dow

MEMBERS ABSENT:
David Mount

OTHERS PRESENT:
Hayley McClenahan
Darlene Bayko
Lynn Reagan
Richard Carey
Kate Pizzi
Chris Rowlins
Rob Lessard
Steve Lemanski

1.0 CALL TO ORDER
Robert Hooper called the Retirement Board meeting to order at 9:30 AM.

MOTION by Munir Kasti, SECOND by Kyle Blake, to adopt the agenda.

VOTING: unanimous; motion carries.

2.0 PUBLIC FORUM (VERBAL)
2.01 Verbal Comments
None.

3.0 APPROVE MINUTES

3.1 January 22, 2024

MOTION by Patrick Robins, SECOND by Kyle Blake, to approve the minutes of January 22, 2024 as presented.

VOTING: unanimous; motion carries.

4.0 ADMINISTRATIVE UPDATE

4.1 Administrative Update
Chief Administrative Officer Schad noted that this meeting is occurring a week early because an item that the BERS Board needs to discuss (the FY23 Valuation Report) has implications for the City's financial audit, which must be taken up by the Board of Finance next week. She noted that because this meeting is occurring a week early, the February retirement and return of contribution approvals were not yet ready to put on the agenda, and so those will also be up for approval during the March BERS meeting.

Assistant Director of Finance Bayko spoke about statistics that were requested at the BERS Board's January meeting. She noted that there are currently 879 retirees within the system, 50 of whom have a monthly payment of under $100 and 40 of whom have a monthly payment between $100 and $200. Mr. Hooper noted that they had requested these statistics to determine how many smaller payments are being issued from the system, given that there could be cost savings associated with issuing checks on a less frequent basis for smaller payments. He said that they could put this item on a future agenda for further consideration.

Assistant City Attorney McClenahan noted that this Board had had a question about the feasibility of purchase of service credit, and asked whether there has been an update from other City staff. Chief Administrative Officer Schad noted that she and the City's actuaries determined that it is possible but that it is not currently in the City's retirement plan and would need to be negotiated with the unions and also incorporated into an ordinance amendment, were the City to pursue this policy.

5.0 FIDUCIENT

5.1 Investment Portfolio and Performance Update as of 01/31/2024
Ms. Pizzi noted that one impact of moving this meeting up one week is that Fiducient's finalized January numbers are not yet available, though they have preliminary numbers to review at this juncture. She provided an update of the BERS portfolio's balances as of the end of January, noting that the portfolio stood at approximately $234 million as of the end of that month. She said that this is very similar to numbers as of the end of December, and that values are up approximately 0.1%. She said that this is largely due to many asset classes posting negative returns in January, except for U.S. large cap stocks. She spoke briefly about some of the major headwinds for January.

Ms. Pizzi spoke about current allocations for the portfolio, noting 25% of the allocating in fixed income, 75% in equities (42.7% in domestic equities and 27.5% in global equities), with some lingering real assets in the UBS Trumbull Property Fund. She noted that the portfolio is slightly overweight in the domestic equity allocation, but that is to balance the underweight in alternative/real assets, since they are in the full redemption queue for Trumbull.

5.2 Fiducient's Asset Allocation Modeling & Portfolio Implications for BERS
Ms. Pizzi said that at the last BERS meeting, in January, Fiducient's Chief Investment Officer presented on Fiducient's outlook for 2024. She said that two key points from that presentation were the increased expectations around future returns in the long-term for fixed-income

assets, given the restoration of higher yields seen in 2023, and backing off expectations for global equities in the long-term. She said that one impact of moving this meeting up one week is that Fiducient's finalized January numbers are not yet available, though they have preliminary numbers to review at this juncture.

Mr. Rowlins began by briefly speaking about the capital market assumptions. He said that as part of the fiduciary governance calendar, one of the topics is this deeper dive into capital market assumptions and implications that they may have for the BERS portfolio. He showed the 2024-2033 Ten-Year Outlook, breaking it down into the fixed income, global equity, and real assets & alternatives classes, and the more granular subcategories within each of those asset classes. He noted that one of the building blocks of assumptions for the outlook is inflation, and spoke about how Fiducient produces its assumptions, given the volatility seen in the last two years around inflation. He noted that when looking at the yields on nominal bonds, the market is anticipating a 2.4% median inflation over the next ten years, which is what they're using for their assumption. He noted that the restoration of higher yields has led to higher projected performance for fixed-income assets. He noted that projections for U.S. and international equities are flat-to-falling, given higher geopolitical volatility outside the U.S. He noted higher return projections for real assets and alternatives. Ms. Pizzi added that the risk premium that has historically existed within the equity market when compared to the fixed-income market has decreased significantly this year, given the increased expectations for fixed income assets and decreased expectations for equity assets. She said that from a portfolio perspective, the same level of expected return can be achieved by utilizing more bonds and taking less risk in the portfolio. Mr. Rowlins spoke about the larger role that fixed-income could play in the portfolio, given higher bond yields, and said that the weighting of fixed-income is one major topic for today's discussion.

Ms. Pizzi spoke in more detail about the asset allocation analysis Fiducient conducted using the above capital market assumptions, noting that the overall goal is to ensure that the BERS portfolio is strong and structured to support its pension liabilities. She noted that the portfolio is currently generating an expected return of 7.9%, which is well in excess of the current discount rate of 7.1%. She noted that outperforming the discount rate increases the likelihood that the portfolio will generate a return in line with or above the expected discount rate. She presented an alternative allocation, Observation Mix A, which utilizes the different asset classes to maximize the potential return and minimize the potential risk. She said that this alternative increases fixed-income by 2% and removing it from the private real estate target (given that this is already underweight). She said that they are also recommending pulling back slightly on international equities and redistributing it to U.S. equities. She said that this has a minimal impact on the expected return, but decreases risk to the portfolio. She also spoke about Observation Mix C, which increases the allocation to fixed income similarly to Observation Mix A, but also moves allocation from private real estate to public real estate, which does not impact the expected rate of return but increases the risk/volatility slightly. Mr. Kasti asked about whether any analysis was conducted to show how this ultimately closes the unfunded liability gap that the pension currently has, and Ms. Pizzi replied that the goal of this is to ensure that the portfolio performance is in line with the actuarial rate of return assumption of 7.1%, and anything in excess of that will be able to close that unfunded liability gap over time. She said that as long as contributions are being made at the actuarially recommended rate, and that 7.1% rate of return is achieved, then the pension will get to that fully funded position over time. Mr. Lemanski noted that they will also speak to this in more detail during the valuation report conversation. Mr. Blake asked about Observation Mix B, which decreases the expected rate of return but also decreases volatility and risk, which makes more sense to him if the goal is to increase stability and ensure that the funded ratio increases. Ms. Pizzi replied that this mix includes an increase to fixed-income of 35%, which seems high given inflation rate volatility. She said that if the BERS board is comfortable taking that level of return off the table, they can also consider Observation Mix B and a further increase in fixed-income asset allocation. Mr. Robins asked about assumptions of how many rate cuts the Federal Reserve will implement in 2024, and Ms. Pizzi replied that they try to base their assumptions on the markets' assumptions, which anticipate 3 cuts this year.

6.0 FY23 VALUATION REPORT – USI CONSULTING (FORMERLY H&H)

6.1 FY23 Valuation Report – USI Consulting (Formerly H&H)

Mr. Lemanski began by speaking about the purpose of the valuation exercise, which results in the valuation report for the portfolio each year. He said that the ultimate cost of a pension plan is based on the level of benefits promised by the plan, and that investment earnings serve to reduce the cost of the plan's benefits and expenses. He said that actuarial valuation seeks to assign a portion of the costs to the budget year, and is used to determine the level of the City's contributions to the plan. He noted that the Actuarially Determined Employer Contribution (ADEC) developed from the valuation has two components: amortization of unfunded liability, and normal cost.

Mr. Lemanski then provided an overview of the results of the actuarial valuation, comparing this year's numbers to last year's numbers. He said that the funded ratio declined from 69.7% to 66.9% since 2022, and compared this to the benchmark funded ratio for large municipal plans of 76.1% in FY22. He said that the preliminary ADEC for the City increased from $13.1 million to $14.9 million between FY23-24 and FY24-25. He said that assets performed well on a market basis (10.2%), and that asset smoothing showed a return of 5.4%, given that losses from previous years are being smoothed in as well. He said that this underperformance (smoothed asset return of 5.4% versus the assumption of 7.1%) drove the preliminary increased ADEC up by approximately $338,000. He spoke about the experience study and resulting assumption changes, which contributed to the preliminary ADEC increase of about $53,000. He spoke about other plan experience and its effects on the preliminary ADEC increase, noting that the largest driver was salary increases, followed by earlier retirements and fewer mortalities, many new entrants, and an expected increase in normal costs. He said that unfortunately, this all resulted in that significant preliminary ADEC increase.

Mr. Lemanski then spoke about assumptions and assumption changes. He noted that the BERS Board previously approved a scheduled reduction in the assumed rate of investment return from 7.5% to 7.0%, starting in 2019, but noted that the assumption remains at 7.1% for 2023. He noted that other large public sector pension funds had average assumptions of 6.91% (median 7.0%), and that the BERS assumption is in line with this. He noted that the mortality projection scale was not updated for 2023, given that the impacts of COVID may skew future projections for mortality, and the Society of Actuaries has paused on updating the scale.

Mr. Lemanski then spoke in more detail about the ADEC composition, showing a comparison of the 2022 valuation and the current (2023) valuation, as well as a comparison of the ADEC composition both before the experience study and after the experience study 30-year layered changes, as well as after 20-year layered changes. Mr. Kasti asked why the amortization of the unfunded liability after 20 years drives the ADEC lower for that timeframe. Mr. Lemanski noted that this plan since 2004 has been using a 30-year period for its layered amortization assumption, and that every year, a new layer is added as a rolling 30-year payoff. He said that in 2004, a 30-year amortization was common, but that since then, best practices have changed and that 30 years is too long. He said that they would like to propose two alternatives to the BERS board to the 30-year amortization, one of which is a 20-year "fresh start" beginning now, with subsequent changes amortized over 20 years, and a fresh start that retains 18-year (Class A) and 17-year (Class B) amortization, with subsequent changes amortized over 20 years. He said that the difference between the two options is whether the BERS Board would like to fresh start the current unfunded liability amortization at 20 years (or 17/18 years for existing amortization). He said that prospectively, these changes are the same, but that the 20-year fresh start has a short-term cost savings to the City's ADEC of about $720,000. Mr. Blake said that if they opt for the 20-year fresh start, the ADEC drops, but that any type of significant wage benefits that employees see will increase that unfunded liability at the rate that is not proportional to the increase in assets, based on the trends shown in the funded status slide. Mr. Lemanski replied that the funded ratio in 2017 (from that slide) is based on different mortality table assumptions and a different assumed rate of return, so the comparison across years is not necessarily apples-to-apples. He said that there has been an erosion in the funding ratio, but that the different assumptions makes it difficult to see a trended comparison based on current assumptions. Mr. Hooper noted that discussing this alternative would reduce the ADEC and cut the money going into the plan, and asks where the money not going into the plan comes from over the course of the 20 year period. Mr. Lemanski replied that the same benefits will be paid over time but it is a matter of timing of the funding, and that based on this analysis and if all assumptions hold true, the plan will attain 100% funded in 20 years. Mr. Kasti noted that the ADEC contribution is limited from year to year and it has a collar. Mr. Lemanski replied that they are not recommending future direct rate smoothing or a collar going forward. Mr. Blake asked whether the actuaries looked at an 18-year period for existing amortization, rather than bifurcating the Class A and B tiers into different schedules, and Mr. Lemanski replied that they did not look at this, but that it would likely result in an ADEC somewhere in between the two proposed scenarios. Mr. Blake wondered if bifurcating the Class A and B schedules opens up the plan for further bifurcation of these tiers in terms of other policies. Mr. Lemanski replied that there was no intent behind the bifurcation, but it was simply to show the effects of not changing the current period of amortization for each. He emphasized that they are not looking to continue with the 30-year approach, but would recommend moving to one of these 20-year scenarios.

Mr. Lessard then spoke in more detail about the funded status trends for the BERS pension. He, like Mr. Lemanski, noted that year-to-year trend comparisons between 2017 and 2023 are not apples-to-apples, given different assumptions around mortality and rates of return. He also spoke about comparing the funded ratio by using a market value approach versus an actuarial value approach, noting that the actuarial basis was much less volatile. He spoke about funded status by class, and the development of the unfunded accrued liability and funded ratio. He provided details about the summary of fund activity for the fiscal year, noting the breakdown and comparison between the market value analysis and the actuarial value analysis (with the former's approximate rate of return being 10.2% and the latter being 5.4%). Mr. Lemanski added that this is common for a mature municipal plan like the BERS plan, speaking about the negative cash flow that is occurring for the plan (which is normal). Mr. Blake asked for a historical analysis over the past 20 years of the impact on the pension of changes in contracts related to retirement for Class A and B employees, and Chief Administrative Officer Schad agreed that it would be valuable to look at those changes, but also to look at the changes in the assumptions and their impacts on the historical unfunded liability. Mr. Dow asked whether the City is in this situation because it has not followed best practices, and Mr. Lemanski replied that the City has remained aligned with best practice in terms of reviewing its experience studies and adjusting based on those.

Chief Administrative Officer Schad noted that the City's general fund is struggling this year with the reduction in federal funds and yet the City has a practice of fully funding the ADEC every year. She said that given this, she would like to explore the 20-year fresh start amortization, as that would also allow for a less steep increase in the ADEC and draw on cash between FY24 and FY25. Mr. Robins confirmed that this would be in line with best practice and with the approach that other municipal plans have taken. Mr. Kasti noted that it would also be equitable across employees.

MOTION by Katherine Schad, SECOND by Munir Kasti, to adopt the 20 years "fresh start" amortization policy for the current unfunded accrued liability, with subsequent changes amortized over a 20-year period.

VOTING: unanimous; motion carries.

7.0 ADJOURNMENT

7.1 Motion to Adjourn

The meeting adjourned at 12:04 PM.

RScty: AACoonradt

BURLINGTON RETIREMENT BOARD
CITY HALL, 1ST FLOOR BUSHOR CONF ROOM
OR
REMOTE MEETING WITH CALL-IN
BURLINGTON, VERMONT
MINUTES OF MEETING
DRAFT
November 20, 2023

MEMBERS PRESENT:	Robert Hooper (Chair) Munir Kasti (Vice Chair) David Mount Kyle Blake Tom Chenette Katherine Schad
MEMBERS ABSENT:	Patrick Robins
OTHERS PRESENT:	Kate Pizzi Hayley McClenahan Steve Lemanski Robert Lessard

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1.0 CALL TO ORDER
Robert Hooper called the Retirement Board meeting to order at 9:33 AM.

2.0 PUBLIC FORUM (VERBAL)
2.01 Verbal Comments
None.

3.0 APPROVE MINUTES
3.1 October 16, 2023

MOTION by David Mount, SECOND by Tom Chenette, to approve the minutes of October 16, 2023.

VOTING: unanimous; motion carries.

4.0 APPROVE RETURN OF CONTRIBUTIONS

4.1 Daniela Puentes Jaimes, Class B $2,251.55, Effective Date of Benefit: 12/01/2023

MOTION by Tom Chenette, SECOND by David Mount, to approve the return of contributions for Daniela Puentes Jaimes.

VOTING: unanimous; motion carries.

4.2 Joseph Crites, Class B $2,811.29, Effective Date of Benefit: 12/01/2023

MOTION by Tom Chenette, SECOND by David Mount, to approve the return of contributions for Joseph Crites.

VOTING: unanimous; motion carries.

4.3 Cristopher R. Farnsworth, Class B $22,382.07, Effective Date of Benefit: 11/01/2023

MOTION by Tom Chenette, SECOND by David Mount, to approve the return of contributions for Christopher R. Farnsworth.

VOTING: unanimous; motion carries.

4.4 Denise A. Bailey, Class B $6,201.92, Effective Date of Benefit: 12/01/2023

MOTION by Tom Chenette, SECOND by David Mount, to approve the return of contributions for Denise A. Bailey.

VOTING: unanimous; motion carries.

4.5 Jordan Elizabeth Poirier, Class B $42,923.60, Effective Date of Benefit 12/01/2023

MOTION by Tom Chenette, SECOND by David Mount, to approve the return of contributions for Jordan Elizabeth Poirier.

VOTING: unanimous; motion carries.

4.6 Ravi Venkataraman, Class B $2,075.15, Effective Date of Benefit: 12/01/2023

MOTION by Tom Chenette, SECOND by David Mount, to approve the return of contributions for Ravi Venkataraman.

VOTING: unanimous; motion carries.

5.0 APPROVE RETIREMENT APPLICATIONS

5.1 Lise Veronneau, Class B $7,528.61, Effective Date of Benefit: 11/01/2023, Payment Date: 11/15/2023

MOTION by David Mount, SECOND by Kyle Blake, to approve the retirement application for Lise Veronneau.

VOTING: unanimous; motion carries.

5.2 Robyn M. Miller

MOTION by David Mount, SECOND by Kyle Blake, to approve the retirement application for Robyn M. Miller.

VOTING: unanimous; motion carries.

5.3 James MacKinnon

MOTION by David Mount, SECOND by Kyle Blake, to approve the retirement application for James MacKinnon.

VOTING: unanimous; motion carries.

5.4 Craig E. Paradee

MOTION by David Mount, SECOND by Kyle Blake, to approve the retirement application for Craig E. Paradee.

VOTING: unanimous; motion carries.

5.5 John Vickery

MOTION by David Mount, SECOND by Kyle Blake, to approve the retirement application for John Vickery.

VOTING: unanimous; motion carries.

5.6 Suzanne T. Lamphere

MOTION by David Mount, SECOND by Kyle Blake, to approve the retirement application for Suzanne T. Lamphere.

VOTING: unanimous; motion carries.

5.7 Barbara E. Kopacz, Class B $815.29, Effective Date of Benefit: 12/01/2023, Payment Date: 12/15/2023

MOTION by David Mount, SECOND by Kyle Blake, to approve the retirement application for Barbara E. Kopacz.

VOTING: unanimous; motion carries.

6.0 DISABILITY RETIREMENT APPLICATION

6.1 Effective Date of Benefit: N/A. Payment Date
Chief Administrative Officer Schad noted that this is a placeholder on the agenda and that there are no Disability Retirement Applications for the BERS Board to consider this month.

7.0 ADMINISTRATIVE UPDATE

7.1 CY2024 COLA approvals
Chief Administrative Officer Schad said that COLAs are issued by calendar year, per the City's charter, and that the rate of COLAs for different classes is dictated by contract. She noted that it is the BERS Board's charge to approve the COLAs. She pointed out where the BERS Board has discretion to not approve the COLA for certain classes and age groups if the funding levels aren't sufficient, though she recommended approving the full COLA for each class and age group as presented. Mr. Blake asked what impacted approving the COLAs would have on the funded ratios for the pension, and Mr. Lemanski replied that the actuaries have built assumptions into funded ratio projections that the COLAs would be approved.

MOTION by Kyle Blake, SECOND by Tom Chenette, to approve the COLA increases as allowed by the COLA basis.

VOTING: unanimous; motion carries.

8.0 INVESTMENT UPDATE

8.1 Investment Portfolio and Performance Update for October 2023
Ms. Pizzi began by providing an overview of asset class performance for October, 2023. She noted that she is also presenting Year to Date performance numbers through November 16, 2023, as the market has changed significantly since the end of October. She noted that strong economic data was put out in October, which actually had a negative impact on equity markets, as they are anticipating interest rates to stay higher for longer than anticipated. She noted that since the end of October, interest rates have decreased, leading investors to speculate that they may be dropping and causing positive increases in core bonds and other fixed income assets. She also noted strong returns in the last two weeks in equities across the board, though they had had poor performance in October. She noted poor October performance for the real asset markets, though there was a positive showing in the last two weeks.

Ms. Pizzi then spoke about asset allocation in the BERS portfolio. She noted that the total plan value is currently at approximately $208.3 million (which includes the prepaid pension benefits of about $2.3 million). She noted that 26% of assets are allocated to fixed income (slightly above the target allocation of 25%), about 69% are allocated to equities, and 4.5% to real assets (under the target of 6%). She noted that some redemptions have come in from the UBS Trumbull Property redemption pool (approximately $288,000).

Ms. Pizzi then provided an overview of the BERS portfolio performance. She noted that the portfolio is down 2.7% from last month overall (a decrease of $5.7 million) which is in line with the benchmark. She noted that the portfolio is down 5.9% fiscal year-to-date, and up 2.5% calendar year-to-date. She spoke briefly about manager performance.

9.0 ACTUARIAL UPDATE

9.1 Review and recommendations regarding 2023 Experience Study
Mr. Lemanski and Mr. Lessard of Hooker & Holcombe walked through the BERS 2023 Experience Study. Mr. Lemanski began by speaking about the purpose of the experience study. He said that the experience study was conducted using experience from July 1, 2017 through June 30, 2022 and that it analyzed the demographic and economic assumptions of the plan. He said that it compares current plan assumptions

against actual experience to determine whether the assumptions remain reasonable. He said that where experience is different enough, they update the assumptions. He said that this leads to less fluctuation in actual plan experience and gains/losses.

Mr. Lessard then outlined the demographic assumptions and proposed changes to assumptions based on experience in the study. Mr. Lessard spoke briefly about mortality assumptions, noting that they are proposing to change to different set of mortality tables, which were derived from the first-ever published mortality study of public sector experience. He spoke about retirement assumptions, noting that they are proposing decreasing the rate from 15-35 years of service to 15-30 years of service, given that members are retiring with fewer years of service than were used in previous assumptions. He said that within Class A, they should also consider separate retirement assumptions for Fire and Police. He noted that age-based retirement rates remain appropriate for Class B, with minor adjustments. He spoke about turnover assumptions, noting that service-based turnover rates remain appropriate for Class A, though experience suggests they should consider separate turnover assumptions for Fire and Police. He recommended that Class B assumptions for turnover use the same methodology as in prior experience studies, but with slightly increased rates. He then spoke about disability assumptions. He noted that Class A experience suggests that separate disability assumptions should be used for Fire and Police, and that Class B experience shows that there were fewer actual disabilities than expected, leading to the proposed rate decrease. He spoke briefly about the spouse age difference assumption, noting a proposed decrease from 3 years to 2 years in the assumption of the age difference.

Mr. Lemanski then spoke about the economic assumptions and proposed changes to assumptions based on the experience study. He spoke about inflation assumptions and COLAs. He noted that though recent inflation has been high, they do not believe this trend will continue indefinitely, and they have proposed an increase in the inflation assumption from 2.6% to 2.7%, an increase in payroll growth assumptions from 3% to 3.1% per year, and are proposing to keep COLAs at 2.6%, as it remains in line with long-term expectations. He spoke about rate of compensation increases (which include promotions and step increases in addition to general increases). He noted that for Class A, they are proposing separate assumptions for Fire and Police based on experience, and that the proposed Fire rates are generally slightly higher than the proposed Police rates at earlier service periods. He noted that there were proposed small adjustments to the rates for Class B. He noted that all rate increasers incorporate a long-term inflation assumption of 2.7%. Mr. Lemanski then spoke about COLA election assumptions, noting that the plan has full/half/no COLA election for determining accrual rates used to calculate a member's final benefit. He noted that new hires are only able to take a full COLA benefit, but people hired prior to certain dates in each class can take a large benefit with no COLA, a smaller benefit with half COLA, and a smaller benefit with full COLA. He noted that they are proposing to change the Class A assumption from 85 no COLA/15% full COLA to 80% no COLA and 20% full COLA, and the Class B assumption from 75% no COLA/25% full COLA to 70% no COLA/30% full COLA. He noted that experience has shown that people are electing to take the full COLA more often than the assumptions had anticipated, saying that some of this may be due to heightened inflation. Mr. Lemanski then spoke about investment return assumption, noting that they are proposing an assumption of 7.1% or lower, based on current capital market assumptions. He said that the final assumption should be selected in consultation with the BERS investment advisor.

The BERS Board discussed the experience study and the proposed changes to the assumptions presented by Mr. Lemanski and Mr. Lessard. Chief Administrative Officer Schad asked Ms. Pizzi whether her firm would advise selecting a rate of return assumption of 7.10%. Ms. Pizzi replied that 7.10% is a supportable rate, based on portfolio performance and asset allocation. Mr. Lemanski said that a possible alternative is that the BERS Board could adopt all other assumption proposals except for the proposed rate of return, and allow Hooker & Holcombe to true up both 2022 and 2023 with the updated assumptions. He said that they could revisit the topic of the rate of return assumption once that is complete and discuss it when they discuss the portfolio's direct rate smoothing and funding policy. Mr. Mount asked about funding ratios and what a good target funding ratio is based on what other public pension plans are seeing. Mr. Lemanski replied that a good target for funding ratios tends to be around 75%.Mr. Kasti noted that the BERS Board had previously approved a five-year plan to adjust the investment return assumption down to 7.00% in 2023, and asked why they would deviate from that. He also asked what was included in the study for depreciation and smoothing. Mr. Lemanski replied that funding policy (amortization and smoothing) will be discussed separately, and that they are just discussing assumptions at this juncture, and that funding policy will be discussed when the valuation results are presented. He said that while the policy recommended a 7.00% investment return assumption for 2023, they have analyzed experience from the past five years to recommend a different assumption, which they are proposing now.

MOTION by David Mount, SECOND by Katherine Schad, to accept the proposed assumption changes as presented by Hooker & Holcombe, with the exception of the investment return assumption; further to request that Hooker & Holcombe prepare the FY23 valuation report using rate of return assumptions of 7.00% and 7.10%, so that the BERS Board may compare them and make a final decision on the investment return assumption.

VOTING: 3 ayes, 1 nay (Mr. Blake), 1 abstention (Mr. Chenette); motion carries.

10.0 ADJOURN

10.1 Motion to Adjourn

The meeting adjourned at 11:05 AM.

RScty: AACoonradt

USICG/H&H Participant Service Center
95 Glastonbury Blvd. STE 102
Glastonbury, CT 06033-4456

Kenneth Godin

January 18, 2024

Re: Your Pension Benefit from the Burlington Employees' Retirement System

Dear Mr. Godin:

We had previously sent you a Pension Distribution Kit related to your benefit from the above Plan. As noted in that package, since you did return your forms by January 1, 2024, your return of employee contributions benefit will be automatically rolled into an IRA managed by Schwab. Your benefit has been recalculated to include interest through February 1, 2024. Your final benefit amount payable as a return of employee contributions is $4,498.60. This amount will be rolled over into the IRA as soon as administratively possible.

The Participant Service Center is ready to assist you with any questions you may have about this.

Call the Participant Service Center at 1.866.495.3548 between
8:30 am and 4:30 pm ET, Monday – Friday. (Multilingual Services are available)

Send an email to **ServiceCenter@pensionedge.com**.
Please note “City of Burlington, VT” in your subject line.

Send by mail to USI Consulting Group, ATTN: USICG/H&H Participant Service Center,
95 Glastonbury Blvd, STE 102, Glastonbury, CT 06033

Calculation of Benefit Options

Form A

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

Daniel M. Roy

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Benefit 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:	**Daniel M. Roy**	Class:	B
Date of Birth:		Department:	IBEW Local 300
Date of Hire:	03/31/2015	Vesting Percentage:	100.0000%
Date of Termination:	10/06/2022	Normal Retirement Date (NRD):	02/22/2040
Beneficiary Date of Birth:		Payment Start Date:	04/01/2024
		Employee Contribution Balance w/ Interest as of 04/01/2024:	$33,356.21

Earnings

Average Final Compensation*: $92,117.40

Determination of Benefit Amount

(1)	Years of Creditable Service (CS)	7.50000
(2)	Years of CS on or prior to 05/04/2008 [(2) + (3) is not to exceed 25 years]	0.00000
(3)	Years of CS after 05/04/2008 [(2) + (3) is not to exceed 25 years]	7.50000
(4)	Years of CS in excess of 25 years	N/A
	COLA Option	Full COLA
(5)	Accrual Rate on or prior to 05/04/2008 (not to exceed 25 years)	1.400%
(6)	Accrual Rate after 05/04/2008 (not to exceed 25 years)	1.400%
(7)	Accrual Rate in excess of 25 years	0.500%
(8)	Retirement Accrual Percentage = [(2) x (5)] + [(3) x (6)] + [(4) x (7)]	10.5000%
(9)	Monthly Vested Benefit Payable at NRD *= (8) x Average Final Compensation/12 x Vesting Percentage*	$806.03
(10)	Early Retirement Reduction Factor	1.0000
(11)	Monthly Vested Benefit Payable at Normal Retirement Date = (9) x (10)	$806.03

Benefit Options – *payable at Normal Retirement Date*

Form of Payment	Option Factor	Full COLA Initial Benefit	Full COLA Survivor's Benefit[1]
Straight Life Annuity	1.0941	$881.88	**
10 Year Certain & Life Annuity	1.0000	$806.03	$806.03
100% Joint & Survivor Annuity	0.8251	$665.06	$665.06
50% Joint & Survivor Annuity	0.9407	$758.23	$379.12
100% Joint & Survivor Pop-Up Annuity	0.8149	$656.83	$656.83
50% Joint & Survivor Pop-Up Annuity	0.9362	$754.61	$377.31

Benefit Options – *payable at Payment Start Date*

Return of Employee Contributions (100% taxable)	N/A	$33,356.21	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 five highest years of base earnings*

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

Calculation of Return of Employee Contributions — Form A

Burlington Employees' Retirement System — Jessica E. Richards

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Benefit 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:	**Jessica E. Richards**	Class:	B
Date of Birth:		Department:	School
Date of Hire:	01/09/2023	Post-Tax Employee Contributions:	$0.00
Date of Termination:	12/13/2023	Normal Retirement Date (NRD):	07/11/2062
Beneficiary Date of Birth:	N/A	Payment Start Date:	03/01/2024
		Vesting Percentage:	0.0000%

Determination of Employee Contribution Balance with Interest

Period Ending	Description	Transaction	Balance at End of Period
06/30/2023	Contributions	$659.54	$659.54
06/30/2023	Interest at 2%	$0.00	$659.54
12/13/2023	Contributions	$401.79	$1,061.33
02/29/2024	Interest at 2%	$8.76	$1,070.09

(1)	Pre-Tax Employee Contributions (Taxable):	$1,061.33
(2)	Interest Accrued on Employee Contributions (5.5% through 12/31/2017, 2% thereafter):	$8.76
(3)	Total Return of Employee Contributions with Interest:	$1,070.09

Determination of Taxable Portion of Benefit

Form of Payment	Total Benefit	Taxable Portion	Non-Taxable Portion
Return of Contributions	$1,070.09	$1,070.09	0.00

Calculation of Return of Employee Contributions — Form A

Burlington Employees' Retirement System — Peter Hatfield

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Benefit 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:	**Peter Hatfield**	Class:	B
Date of Birth:		Department:	AFSCME Local 1343
Date of Hire:	01/09/2023	Post-Tax Employee Contributions:	$0.00
Date of Termination:	01/11/2024	Normal Retirement Date (NRD):	01/09/2028
Beneficiary Date of Birth:	N/A	Payment Start Date:	04/01/2024
		Vesting Percentage:	0.0000%

Determination of Employee Contribution Balance with Interest

Period Ending	Description	Transaction	Balance at End of Period
06/30/2023	Contributions	$1,204.79	$1,204.79
06/30/2023	Interest at 2%	$0.00	$1,204.79
01/11/2024	Contributions	$1,211.85	$2,416.64
03/31/2024	Interest at 2%	$18.03	$2,434.67

(1)	Pre-Tax Employee Contributions (Taxable):	$2,416.64
(2)	Interest Accrued on Employee Contributions (5.5% through 12/31/2017, 2% thereafter):	$18.03
(3)	Total Return of Employee Contributions with Interest:	$\boxed{\$2,434.67}$

Determination of Taxable Portion of Benefit

Form of Payment	Total Benefit	Taxable Portion	Non-Taxable Portion
Return of Contributions	$2,434.67	$2,434.67	0.00

Calculation of Return of Employee Contributions — Form A

Burlington Employees' Retirement System — Gregory J. Bonsignore

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Benefit 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:	**Gregory J. Bonsignore**	Class:	B
Date of Birth:		Department:	School
Date of Hire:	02/07/2022	Post-Tax Employee Contributions:	$0.00
Date of Termination:	06/10/2022	Normal Retirement Date (NRD):	09/12/2038
Beneficiary Date of Birth:		Payment Start Date:	04/01/2024
		Vesting Percentage:	0.0000%

Determination of Employee Contribution Balance with Interest

Period Ending	Description	Transaction	Balance at End of Period
06/10/2022	Contributions	$564.84	$564.84
06/30/2022	Interest at 2%	$0.00	$564.84
06/30/2023	Interest at 2%	$11.30	$576.14
03/31/2024	Interest at 2%	$8.62	$584.76

(1) Pre-Tax Employee Contributions (Taxable): $564.84

(2) Interest Accrued on Employee Contributions (5.5% through 12/31/2017, 2% thereafter): $19.92

(3) Total Return of Employee Contributions with Interest: $584.76

Determination of Taxable Portion of Benefit

Form of Payment	Total Benefit	Taxable Portion	Non-Taxable Portion
Return of Contributions	$584.76	$584.76	0.00

Calculation of Return of Employee Contributions — Form A

Burlington Employees' Retirement System — Brendan Kaplan

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Benefit 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:	**Brendan Kaplan**	Class:	B
Date of Birth:		Department:	Non-Union
Date of Hire:	06/13/2018	Post-Tax Employee Contributions:	$0.00
Date of Participation:	03/16/2020	Normal Retirement Date (NRD):	03/09/2062
Date of Termination:	01/31/2023	Payment Start Date:	04/01/2024
Beneficiary Date of Birth:	N/A	Vesting Percentage:	0.0000%

Determination of Employee Contribution Balance with Interest

Period Ending	Description	Transaction	Balance at End of Period
06/30/2020	Contributions	$616.62	$616.62
06/30/2020	Interest at 2%	$0.00	$616.62
06/30/2021	Contributions	$2,844.93	$3,461.55
06/30/2021	Interest at 2%	$12.33	$3,473.88
06/30/2022	Contributions	$3,415.25	$6,889.13
06/30/2022	Interest at 2%	$69.48	$6,958.61
01/31/2023	Contributions	$1,987.36	$8,945.97
06/30/2023	Interest at 2%	$139.17	$9,085.14
03/31/2024	Interest at 2%	$135.94	$9,221.08

(1)	Pre-Tax Employee Contributions (Taxable):	$8,864.16
(2)	Interest Accrued on Employee Contributions (5.5% through 12/31/2017, 2% thereafter):	$356.92
(3)	Total Return of Employee Contributions with Interest:	$\boxed{\$9,221.08}$

Determination of Taxable Portion of Benefit

Form of Payment	Total Benefit	Taxable Portion	Non-Taxable Portion
Return of Contributions	$9,221.08	$9,221.08	0.00

Calculation of Return of Employee Contributions — Form A

Burlington Employees' Retirement System — Alexander Otto Kreissle

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Benefit 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:	**Alexander Otto Kreissle**	Class:	B
Date of Birth:		Department:	AFSCME Local 1343
Date of Hire:	02/19/2019	Post-Tax Employee Contributions:	$0.00
Date of Termination:	12/28/2023	Normal Retirement Date (NRD):	10/31/2061
Beneficiary Date of Birth:	N/A	Payment Start Date:	04/01/2024
		Vesting Percentage:	0.0000%

Determination of Employee Contribution Balance with Interest

Period Ending	Description	Transaction	Balance at End of Period
06/30/2019	Contributions	$927.20	$927.20
06/30/2019	Interest at 2%	$0.00	$927.20
06/30/2020	Contributions	$2,374.98	$3,302.18
06/30/2020	Interest at 2%	$18.54	$3,320.72
06/30/2021	Contributions	$2,559.94	$5,880.66
06/30/2021	Interest at 2%	$66.41	$5,947.07
06/30/2022	Contributions	$3,016.57	$8,963.64
06/30/2022	Interest at 2%	$118.94	$9,082.58
06/30/2023	Contributions	$2,951.66	$12,034.24
06/30/2023	Interest at 2%	$181.65	$12,215.89
12/28/2023	Contributions	$1,268.70	$13,484.59
03/31/2024	Interest at 2%	$182.78	$13,667.37

(1)	Pre-Tax Employee Contributions (Taxable):	$13,099.05
(2)	Interest Accrued on Employee Contributions (5.5% through 12/31/2017, 2% thereafter):	$568.32
(3)	Total Return of Employee Contributions with Interest:	$13,667.37

Determination of Taxable Portion of Benefit

Form of Payment	Total Benefit	Taxable Portion	Non-Taxable Portion
Return of Contributions	$13,667.37	$13,667.37	0.00

Calculation of Benefit Options — Form A

Burlington Employees' Retirement System, Class B - Non-Union — William H. Dushane

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Benefit 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:	**William H. Dushane**	Class:	B
Date of Birth:		Department:	Non-Union
Date of Hire:	01/01/2007	Vesting Percentage:	100.0000%
Date of Termination:	05/14/2019	Normal Retirement Date (NRD):	12/16/2035
Beneficiary Date of Birth:		Payment Start Date:	04/01/2024
		Employee Contribution Balance w/ Interest as of 04/01/2024:	$42,458.10

Earnings

Average Final Compensation*: $78,640.20

Determination of Benefit Amount

(1)	Years of Creditable Service (CS)	12.33333
(2)	Years of CS on or prior to 06/30/2006 [(2) + (3) is not to exceed 25 years]	0.00000
(3)	Years of CS after 06/30/2006 [(2) + (3) is not to exceed 25 years]	12.33333
(4)	Years of CS in excess of 25 years	N/A
	COLA Option	Full COLA
(5)	Accrual Rate on or prior to 06/30/2006 (not to exceed 25 years)	1.400%
(6)	Accrual Rate after 06/30/2006 (not to exceed 25 years)	1.400%
(7)	Accrual Rate in excess of 25 years	0.500%
(8)	Retirement Accrual Percentage = [(2) x (5)] + [(3) x (6)] + [(4) x (7)]	17.2667%
(9)	Monthly Vested Benefit Payable at NRD *= (8) x Average Final Compensation/12 x Vesting Percentage*	$1,131.55
(10)	Early Retirement Reduction Factor	1.0000
(11)	Monthly Vested Benefit Payable at Normal Retirement Date = (9) x (10)	$1,131.55

Benefit Options – *payable at Normal Retirement Date*

Form of Payment	Option Factor	Full COLA Initial Benefit	Full COLA Survivor's Benefit[(1)]
Straight Life Annuity	1.0941	$1,238.03	**
10 Year Certain & Life Annuity	1.0000	$1,131.55	$1,131.55
100% Joint & Survivor Annuity	0.8641	$977.77	$977.77
50% Joint & Survivor Annuity	0.9657	$1,092.74	$546.37
100% Joint & Survivor Pop-Up Annuity	0.8502	$962.04	$962.04
50% Joint & Survivor Pop-Up Annuity	0.9610	$1,087.42	$543.71

Benefit Options – *payable at Payment Start Date*

Return of Employee Contributions (100% taxable)	N/A	$42,458.10	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 Return of Employee Contributions — Form A

Burlington Employees' Retirement System — Audrey Ells-Payne

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:	**Audrey Ells-Payne**	Class:	B
Date of Birth:		Department:	School
Date of Hire:	08/24/2012	Post-Tax Employee Contributions:	$0.00
Date of Termination:	06/12/2015	Normal Retirement Date (NRD):	01/24/2048
Beneficiary Date of Birth:		Payment Start Date:	02/01/2024
		Vesting Percentage:	0.0000%

Determination of Employee Contribution Balance with Interest

Period Ending	Description	Transaction	Balance at End of Period
06/30/2013	Contributions	$634.70	$634.70
06/30/2013	Interest at 5.5%	$0.00	$634.70
06/30/2014	Contributions	$653.62	$1,288.32
06/30/2014	Interest at 5.5%	$34.91	$1,323.23
06/12/2015	Contributions	$669.82	$1,993.05
06/30/2015	Interest at 5.5%	$72.78	$2,065.83
06/30/2016	Interest at 5.5%	$113.62	$2,179.45
06/30/2017	Interest at 5.5%	$119.87	$2,299.32
12/31/2017	Interest at 5.5%	$62.38	$2,361.70
06/30/2018	Interest at 2%	$23.50	$2,385.20
06/30/2019	Interest at 2%	$47.70	$2,432.90
06/30/2020	Interest at 2%	$48.66	$2,481.56
06/30/2021	Interest at 2%	$49.63	$2,531.19
06/30/2022	Interest at 2%	$50.62	$2,581.81
06/30/2023	Interest at 2%	$51.64	$2,633.45
01/31/2024	Interest at 2%	$30.60	$2,664.05

(1)	Pre-Tax Employee Contributions (Taxable):	$1,958.14
(2)	Interest Accrued on Employee Contributions (5.5% through 12/31/2017, 2% thereafter):	$705.91
(3)	Total Return of Employee Contributions with Interest:	$\boxed{\$2,664.05}$

Determination of Taxable Portion of Benefit

Form of Payment	Total Benefit	Taxable Portion	Non-Taxable Portion
Return of Contributions	$2,664.05	$2,664.05	0.00

Calculation of Return of Employee Contributions — Form A

Burlington Employees' Retirement System — **Andrea Gunther**

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Benefit 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:	**Andrea Gunther**	Class:	B
Date of Birth:		Department:	Non-Union
Date of Hire:	04/05/2021	Post-Tax Employee Contributions:	$0.00
Date of Termination:	12/20/2023	Normal Retirement Date (NRD):	02/08/2043
Beneficiary Date of Birth:		Payment Start Date:	04/01/2024
		Vesting Percentage:	0.0000%

Determination of Employee Contribution Balance with Interest

Period Ending	Description	Transaction	Balance at End of Period
06/30/2021	Contributions	$577.30	$577.30
06/30/2021	Interest at 2%	$0.00	$577.30
06/30/2022	Contributions	$3,539.88	$4,117.18
06/30/2022	Interest at 2%	$11.55	$4,128.73
06/30/2023	Contributions	$3,405.88	$7,534.61
06/30/2023	Interest at 2%	$82.57	$7,617.18
12/20/2023	Contributions	$1,410.33	$9,027.51
03/31/2024	Interest at 2%	$113.97	$9,141.48

(1) Pre-Tax Employee Contributions (Taxable): $8,933.39

(2) Interest Accrued on Employee Contributions (5.5% through 12/31/2017, 2% thereafter): $208.09

(3) Total Return of Employee Contributions with Interest: $\boxed{\$9,141.48}$

Determination of Taxable Portion of Benefit

Form of Payment	Total Benefit	Taxable Portion	Non-Taxable Portion
Return of Contributions	$9,141.48	$9,141.48	0.00

Calculation of Benefit Options — Form A

Burlington Employees' Retirement System, Class B - AFSCME Local 1343 — William H. Geehan

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:	**William H Geehan**	Class:	B
Date of Birth:		Department:	AFSCME Local 1343
Date of Hire:	07/06/2009	Vesting Percentage:	100.0000%
Date of Termination:	02/19/2020	Normal Retirement Date (NRD):	09/27/2026
Beneficiary Date of Birth:		Payment Start Date:	12/01/2023
		Employee Contribution Balance w/ Interest as of 12/01/2023:	$21,873.06

Earnings

Average Final Compensation*: $49,468.19

Determination of Benefit Amount

(1)	Years of Creditable Service (CS)	10.58333
(2)	Years of CS on or prior to 06/30/2006 [(2) + (3) is not to exceed 25 years]	0.00000
(3)	Years of CS after 06/30/2006 [(2) + (3) is not to exceed 25 years]	10.58333
(4)	Years of CS in excess of 25 years	N/A
	COLA Option	Full COLA
(5)	Accrual Rate on or prior to 06/30/2006 (not to exceed 25 years)	1.400%
(6)	Accrual Rate after 06/30/2006 (not to exceed 25 years)	1.400%
(7)	Accrual Rate in excess of 25 years	0.500%
(8)	Retirement Accrual Percentage = [(2) x (5)] + [(3) x (6)] + [(4) x (7)]	14.8167%
(9)	Monthly Vested Benefit Payable at NRD *= (8) x Average Final Compensation/12 x Vesting Percentage*	$610.80
(10)	Early Retirement Reduction Factor	0.9433
(11)	Monthly Vested Benefit Payable at Payment Start Date = (9) x (10)	$576.17

Benefit Options Available

Form of Payment	Option Factor	Full COLA Initial Benefit	Full COLA Survivor's Benefit[(1)]
Straight Life Annuity	1.0686	$615.70	**
10 Year Certain & Life Annuity	1.0000	$576.17	$576.17
100% Joint & Survivor Annuity	0.8682	$500.23	$500.23
50% Joint & Survivor Annuity	0.9580	$551.97	$275.99
100% Joint & Survivor Pop-Up Annuity	0.8549	$492.57	$492.57
50% Joint & Survivor Pop-Up Annuity	0.9513	$548.11	$274.06
Return of Employee Contributions	N/A	$21,873.06	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 - AFSCME Local 1343 — Michael T. Heath

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Benefit 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

Late Service

Information Used in Benefit Determination

Participant Name:	**Michael T. Heath**	Class:	B
Date of Birth:		Department:	AFSCME Local 1343
Date of Hire:	02/02/2004	Vesting Percentage:	100.0000%
Date of Termination:	01/03/2024	Normal Retirement Date (NRD):	11/20/2023
Beneficiary Date of Birth:		Payment Start Date:	02/01/2024
		Employee Contribution Balance w/ Interest as of 02/01/2024:	$32,415.39

Earnings

Average Final Compensation*: $48,663.48

Determination of Benefit Amount

(1)	Years of Creditable Service (CS)			19.91667
(2)	Years of CS on or prior to 06/30/2006 [(2) + (3) is not to exceed 25 years]			2.41667
(3)	Years of CS after 06/30/2006 [(2) + (3) is not to exceed 25 years]			17.50000
	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)]	31.8667%	36.0917%	40.3167%
(7)	Monthly Vested Benefit Payable at Payment Start Date *= (6) x Average Final Compensation/12 x Vesting Percentage*	$1,292.29	$1,463.62	$1,634.96
(8)	Monthly Vested Benefit at NRD: *={[Years of CS on or prior to 06/30/2006 and prior to NRD (2.41667) x (4)] + [Years of CS after 06/30/2006 and prior to NRD (17.41667) x (5)]} x Average Final Compensation/12 x Vesting Percentage*	$1,286.88	$1,457.54	$1,628.20
(9)	Monthly Vested Benefit Payable at Payment Start Date: *= [Greater of (8)] x 1.019943 Late Adjustment Factor or (7)*	$1,312.54	$1,486.61	$1,660.67

Benefit Options Available

		Full COLA		Half COLA		No COLA	
Form of Payment	Option Factor	Initial Benefit	Survivor's Benefit(1)	Initial Benefit	Survivor's Benefit(1)	Initial Benefit	Survivor's Benefit(1)
Straight Life Annuity	1.0941	$1,436.05	**	$1,626.50	**	$1,816.94	**
10 Year Certain & Life Annuity	1.0000	$1,312.54	$1,312.54	$1,486.61	$1,486.61	$1,660.67	$1,660.67
100% Joint & Survivor Annuity	N/A	N/A	N/A	N/A	N/A	N/A	N/A
50% Joint & Survivor Annuity	0.9010	$1,182.60	$591.30	$1,339.44	$669.72	$1,496.26	$748.13
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	0.8985	$1,179.32	$589.66	$1,335.72	$667.86	$1,492.11	$746.06
Return of Employee Contributions	N/A	$32,415.39	N/A	$32,415.39	N/A	$32,415.39	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 - AFSCME Local 1343 — William M. Agnew

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Benefit 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:	**William M. Agnew**	Class:	B
Date of Birth:		Department:	AFSCME Local 1343
Date of Hire:	08/29/2000	Vesting Percentage:	100.0000%
Date of Termination:	09/11/2007	Normal Retirement Date (NRD):	03/04/2027
Beneficiary Date of Birth:	N/A	Payment Start Date:	04/01/2024
		Employee Contribution Balance w/ Interest as of 04/01/2024:	$1,966.60

Earnings

Average Final Compensation*: $38,418.04

Determination of Benefit Amount

(1)	Years of Creditable Service (CS)			7.00000
(2)	Years of CS on or prior to 06/30/2006 [(2) + (3) is not to exceed 25 years]			5.83333
(3)	Years of CS after 06/30/2006 [(2) + (3) is not to exceed 25 years]			1.16667
	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)]	11.2000%	13.1833%	15.1667%
(7)	Monthly Vested Benefit Payable at NRD *= (6) x Average Final Compensation/12 x Vesting Percentage*	$358.57	$422.07	$485.56
(8)	Early Retirement Reduction Factor	0.9400	0.9400	0.9400
(9)	Monthly Vested Benefit Payable at Payment Start Date = (7) x (8)	$337.06	$396.75	$456.43

Benefit Options Available

Form of Payment	Option Factor	Full COLA Initial Benefit	Full COLA Survivor's Benefit[1]	Half COLA Initial Benefit	Half COLA Survivor's Benefit[1]	No COLA Initial Benefit	No COLA Survivor's Benefit[1]
Straight Life Annuity	1.0686	$360.18	**	$423.97	**	$487.74	**
10 Year Certain & Life Annuity	1.0000	$337.06	$337.06	$396.75	$396.75	$456.43	$456.43
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	$1,966.60	N/A	$1,966.60	N/A	$1,966.60	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 - BED Non-Union — William R. Davis

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Benefit 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:	**William R. Davis**	Class:	B
Date of Birth:		Department:	BED Non-Union
Date of Hire:	01/15/1984	Vesting Percentage:	100.0000%
Date of Termination:	02/01/2024	Normal Retirement Date (NRD):	10/20/2026
Beneficiary Date of Birth:		Payment Start Date:	03/01/2024
		Employee Contribution Balance w/ Interest as of 03/01/2024:	$44,185.84

Earnings

Average Final Compensation*: $106,879.32

Determination of Benefit Amount

(1)	Years of Creditable Service (CS)	40.08333
(2)	Years of CS on or prior to 06/30/2006 [(2) + (3) is not to exceed 25 years]	22.50000
(3)	Years of CS after 06/30/2006 [(2) + (3) is not to exceed 25 years]	2.50000
(4)	Years of CS in excess of 25 years	15.08333

	COLA Option	Full COLA	Half COLA	No COLA
(5)	Accrual Rate on or prior to 06/30/2006 (not to exceed 25 years)	1.600%	1.900%	2.200%
(6)	Accrual Rate after 06/30/2006 (not to exceed 25 years)	1.600%	1.800%	2.000%
(7)	Accrual Rate in excess of 25 years	0.500%	0.500%	0.500%
(8)	Retirement Accrual Percentage = [(2) x (5)] + [(3) x (6)] + [(4) x (7)]	47.5417%	54.7917%	62.0417%
(9)	Monthly Vested Benefit Payable at NRD *= (8) x Average Final Compensation/12 x Vesting Percentage*	$4,234.35	$4,880.08	$5,525.81
(10)	Early Retirement Reduction Factor	0.9467	0.9467	0.9467
(11)	Monthly Vested Benefit Payable at Payment Start Date = (9) x (10)	$4,008.66	$4,619.97	$5,231.28

Benefit Options Available

Form of Payment	Option Factor	Full COLA Initial Benefit	Full COLA Survivor's Benefit(1)	Half COLA Initial Benefit	Half COLA Survivor's Benefit(1)	No COLA Initial Benefit	No COLA Survivor's Benefit(1)
Straight Life Annuity	1.0686	$4,283.65	**	$4,936.90	**	$5,590.15	**
10 Year Certain & Life Annuity	1.0000	$4,008.66	$4,008.66	$4,619.97	$4,619.97	$5,231.28	$5,231.28
100% Joint & Survivor Annuity	0.8356	$3,349.64	$3,349.64	$3,860.45	$3,860.45	$4,371.26	$4,371.26
50% Joint & Survivor Annuity	0.9376	$3,758.52	$1,879.26	$4,331.68	$2,165.84	$4,904.85	$2,452.43
100% Joint & Survivor Pop-Up Annuity	0.8260	$3,311.15	$3,311.15	$3,816.10	$3,816.10	$4,321.04	$4,321.04
50% Joint & Survivor Pop-Up Annuity	0.9320	$3,736.07	$1,868.04	$4,305.81	$2,152.91	$4,875.55	$2,437.78
Return of Employee Contributions	N/A	$44,185.84	N/A	$44,185.84	N/A	$44,185.84	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 — Howard A. Larochelle

IMPORTANT: City of Burlington reserves the right to correct any errors in the Calculation of Benefit 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:	**Howard A. Larochelle**	Class:	B
Date of Birth:		Department:	IBEW Local 300
Date of Hire:	01/05/2004	Vesting Percentage:	100.0000%
Date of Termination:	02/19/2024	Normal Retirement Date (NRD):	10/22/2025
Beneficiary Date of Birth:		Payment Start Date:	03/01/2024
		Employee Contribution Balance w/ Interest as of 03/01/2024:	$57,636.91

Earnings

Average Final Compensation*: $73,962.48

Determination of Benefit Amount

(1)	Years of Creditable Service (CS)			20.16667
(2)	Years of CS on or prior to 05/04/2008 [(2) + (3) is not to exceed 25 years]			4.33333
(3)	Years of CS after 05/04/2008 [(2) + (3) is not to exceed 25 years]			15.83333
	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)]	32.2667%	36.7333%	41.2000%
(7)	Monthly Vested Benefit Payable at NRD *= (6) x Average Final Compensation/12 x Vesting Percentage*	$1,988.77	$2,264.07	$2,539.38
(8)	Early Retirement Reduction Factor	0.9667	0.9667	0.9667
(9)	Monthly Vested Benefit Payable at Payment Start Date = (7) x (8)	$1,922.54	$2,188.68	$2,454.82

Benefit Options Available

Form of Payment	Option Factor	Full COLA Initial Benefit	Full COLA Survivor's Benefit[(1)]	Half COLA Initial Benefit	Half COLA Survivor's Benefit[(1)]	No COLA Initial Benefit	No COLA Survivor's Benefit[(1)]
Straight Life Annuity	1.0771	$2,070.77	**	$2,357.43	**	$\boxed{\$2,644.09}$	**
10 Year Certain & Life Annuity	1.0000	$1,922.54	$1,922.54	$2,188.68	$2,188.68	$2,454.82	$2,454.82
100% Joint & Survivor Annuity	0.9055	$1,740.86	$1,740.86	$1,981.85	$1,981.85	$2,222.84	$2,222.84
50% Joint & Survivor Annuity	0.9838	$1,891.39	$945.70	$2,153.22	$1,076.61	$2,415.05	$1,207.53
100% Joint & Survivor Pop-Up Annuity	0.8880	$1,707.22	$1,707.22	$1,943.55	$1,943.55	$2,179.88	$2,179.88
50% Joint & Survivor Pop-Up Annuity	0.9776	$1,879.48	$939.74	$2,139.65	$1,069.83	$2,399.83	$1,199.92
Return of Employee Contributions	N/A	$57,636.91	N/A	$57,636.91	N/A	$57,636.91	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*

BURLINGTON EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL VALUATION REPORT

JUNE 30, 2023

Table of Contents

Report Prepared By:

Steve A. Lemanski	Robert P. Lessard	Rebecca Lunt
Partner | Vice President, Senior Consulting Actuary	Consulting Actuary	Senior Actuarial Associate
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Executive Summary

	June 30, 2023			June 30, 2022		
	Class A	**Class B**	**Total**	**Class A**	**Class B**	**Total**
Number of members						
Active employees	160	763	923	150	726	876
Terminated vested members	31	358	389	36	384	420
Vested in employee contributions only	24	355	379	26	321	347
Retired, disabled and beneficiaries	217	658	875	213	625	838
Total	432	2,134	2,566	425	2,056	2,481
Covered employee payroll	11,685,113	46,967,315	58,652,428	10,181,529	41,180,282	51,361,810
Average plan salary	73,032	61,556	63,545	67,877	56,722	58,632
Actuarial present value of future benefits	193,575,065	209,305,325	402,880,390	181,435,446	194,585,060	376,020,507
Actuarial accrued liability	162,527,797	184,722,081	347,249,878	153,271,248	172,546,768	325,818,016
Plan assets						
Market value of assets	100,055,156	123,599,082	223,654,238	92,241,807	117,182,995	209,424,802
Actuarial value of assets	103,910,050	128,361,068	232,271,118	100,004,390	127,044,496	227,048,886
Unfunded accrued liability	58,617,747	56,361,013	114,978,760	53,266,858	45,502,272	98,769,130
Funded ratio	63.9%	69.5%	66.9%	65.2%	73.6%	69.7%
Actuarially determined employer contribution (ADEC)						
Fiscal year ending	2025	2025	2025	2024	2024	2024
ADEC	7,651,246	6,592,054	14,243,300	7,045,557	6,011,496	13,057,053

Valuation Results and Highlights

Purpose of the Valuation

The purpose of the valuation is to develop the Actuarially Determined Employer Contribution (ADEC).

The ultimate cost of a pension plan is based primarily on the level of benefits promised by the plan. The pension fund's investment earnings serve to reduce the cost of plan benefits and expenses. Thus,

> Ultimate cost = Benefits Paid + Expenses Incurred – Investment Return – Employee Contributions

The actuarial cost method distributes this ultimate cost over the working lifetime of current plan participants. By means of this budgeting process, costs are allocated to both past and future years, and a cost is assigned to the current year. The current year's allocated cost, or normal cost, is the building block upon which the actuarially determined employer contribution is developed. The June 30, 2023 valuation produces the contribution for the fiscal year ending 2025.

Information Available in the Valuation Report

The Executive Summary is intended to emphasize the notable results of the valuation from the perspective of the Plan Sponsor. Supporting technical detail is documented in Results of the Valuation, Supporting Exhibits and Description of Actuarial Methods and Assumptions. A concise summary of the principal provisions of the Plan is outlined in Summary of Plan Provisions.

Changes Reflected in the Valuation

The assumptions were updated based on the experience study covering the period July 1, 2017 to June 30, 2022, which increased the unfunded accrued liability and ADEC by $3,191,000 and $53,000, respectively. In addition, the change in method for amortizing the unfunded accrued liability decreased the ADEC by $726,000.

Cash Contribution for Fiscal Year Ending 2025

The City cost is:	2025 Fiscal Year
Class A	$7,651,246
Class B	6,592,054
Total	$14,243,300

Liability Experience During Period Under Review

The plan experienced a net actuarial loss on liabilities of approximately $10,407,000 since the prior valuation. The loss was mainly due to salary increases that were higher than expected, as well as losses from actual turnover and retirement patterns.

Asset Experience During Period Under Review

The plan's assets provided the following rates of return during the past fiscal year:

	2023 Fiscal Year
Market Value Basis	10.2%
Actuarial Value Basis	5.4%

The Actuarial Value of assets, rather than the Market Value, is used to determine plan contributions. The Actuarial Value spreads the asset volatility over 5 years, thereby smoothing out fluctuations that are inherent in the Market Value.

Assessment and Measurement of Risks

Financial Significance of Plan

It is important to understand the size of the pension plan compared to the size of the sponsor of that plan. Additional pension contributions may be required at inopportune times for the plan sponsor. In general, a plan sponsor with assets or revenue that are much larger than the liabilities in its pension plans will be better able to withstand increases in required pension contributions.

Plan Maturity Measurements

	June 30, 2023	June 30, 2022
Actuarial accrued liability for members currently in pay status as a percentage of the total actuarial accrued liability	61.4%	62.3%

• A lower percentage results in greater volatility as the investment return assumption changes.

• A higher percentage results in greater demand on cash due to a proportionately higher percentage of benefits being in pay status.

	June 30, 2023
Duration of benefit payments using an investment rate of return of 7.10%	13.2 years

• A higher duration will occur if the plan's percentage of members in pay status decreases. A plan with a higher duration will have a liability that is more sensitive to changes in the investment return assumption.

	June 30, 2023	June 30, 2022
Ratio of market value of assets to covered payroll	3.8	4.1

• A higher ratio is more typical of relatively mature plans with a larger percentage of inactive members and may cause more potential contribution volatility as pension fund assets fluctuate.

Risks to Assess

Estimated Impact of a 5% Reduction in Market Value of Assets

	Fiscal Year Ending 2025
Increase in actuarially determined employer contribution (ADEC)	198,653
• Plans would generally be subject to a larger amortization payment if the market value of assets were 5% smaller. As a result, the ADEC would generally be higher for up to 20 years.	

Due to the asset smoothing method, the ADEC will additionally increase by the same amount in each of the next few years. Each of these additional contributions will continue for up to 20 years.

Estimated Impact of a 1-Year Increase in Life Expectancies

	Fiscal Year Ending 2025
Increase in actuarially determined employer contribution (ADEC)	652,907
• If members live longer than expected, it generally results in larger benefits and/or additional benefit payments made. As a result, the ADEC would generally be higher for up to 20 years.	

Low-Default-Risk Obligation Measure

	July 1, 2022
Low-default-risk obligation measure (LDROM)*	526,239,096
Total actuarial accrued liability (AAL) for all members**	347,249,878
Difference between LDROM and AAL	178,989,218
• This exhibit illustrates the impact on the ongoing funding liability if the plan decided to invest completely in low-default-risk securities.	

** The LDROM discount rate is 3.65%. The discount rate used for this purpose is equal to the published Bond Buyer GO 20-Bond Municipal Index effective as of June 30, 2023. Other than the discount rate, the assumptions and methods are consistent with those used in the actuarial valuation. The disclosure of the LDROM is for illustrative purposes and does not necessarily imply that the associated discount rate should be used for funding purposes.*

*** The discount rate used in the valuation is 7.10%.*

Historical Results

Valuation Year Beginning	Investment Return Assumption	Annual Effective Rate of Return on Market Value of Assets	Market Value of Assets as a % of Actuarial Accrued Liability	Benefit Payments as a % of Market Value of Assets
2023	7.10%	N/A	64.4%	N/A
2022	7.10%	10.2%	64.3%	10.2%
2021	7.20%	-13.3%	80.1%	8.3%
2020	7.30%	31.1%	66.4%	9.5%
2019	7.40%	2.3%	70.0%	8.9%
2018	7.50%	5.1%	71.4%	8.8%
2017	8.00%	9.6%	69.5%	8.9%
2016	8.00%	14.1%	63.8%	9.4%
2015	8.00%	-1.3%	69.3%	8.8%

Implications of Contribution Allocation Procedure or Funding Policy

I have assessed the impact of the funding policy on the anticipated employer contributions and the plan's funded status. The funding policy is described in the Description of Actuarial Methods section of this report.

I have estimated the approximate length of time before the unfunded accrued liability, if any, will become fully amortized. The period is estimated to be 20 years. Subsequent to the end of this period, the future anticipated employer contributions will be the corresponding annual normal costs.

I have assessed whether the funding policy will be sufficient to cover future benefit payments and administrative expenses. The current funding policy is anticipated to cover these costs indefinitely.

Certification

This report presents the results of the June 30, 2023 Actuarial Valuation for Burlington Employees' Retirement System (the Plan) for the purpose of estimating the funded status of the Plan and determining the Actuarially Determined Employer Contribution (ADEC) for the fiscal year ending June 30, 2025. This report may not be appropriate for any other purpose.

The valuation has been performed in accordance with generally accepted actuarial principles and practices. It is intended to comply with all applicable Actuarial Standards of Practice.

As required under Part II, Section 24-61 of the Burlington Code of Ordinances, experience studies are performed at least one in every five-year period. The assumptions in this report were based on an experience study covering the period July 1, 2017 to June 30, 2022.

In our opinion, the actuarial assumptions used in this report are reasonably related to the experience of the Plan and to reasonable long-term expectations.

In preparing this valuation, I have relied on employee data provided by the Plan Sponsor, and on asset and contribution information provided by the Trustee. I have audited neither the employee data nor the financial information, although I have reviewed them for reasonableness.

The results in this valuation report are based on the Plan as summarized in the *Summary of Plan Provisions* section of this report and the actuarial assumptions and methods detailed in the *Description of Actuarial Methods and Assumptions* section of this report.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as, but not limited to, the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of this report, an analysis of the potential range of such future measurements has not been performed.

I have no relationship with the employer or the Plan that would impair, or appear to impair, my objectivity in performing the work presented in this report. I am a member of the American Academy of Actuaries and meet its Qualification Standards to render the actuarial opinion contained herein.

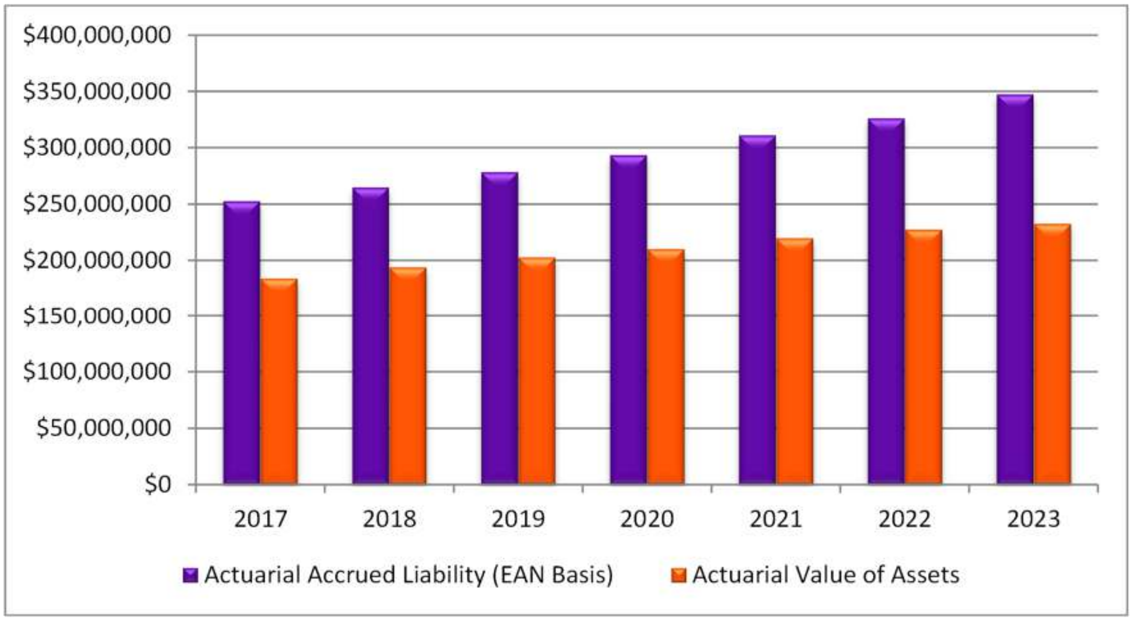
Steve A. Lemanski, FSA, FCA, MAAA	Robert P. Lessard
Enrolled Actuary 23-05506	Robert P. Lessard, ASA, FCA, MAAA
	Enrolled Actuary 23-08801

March 5, 2024

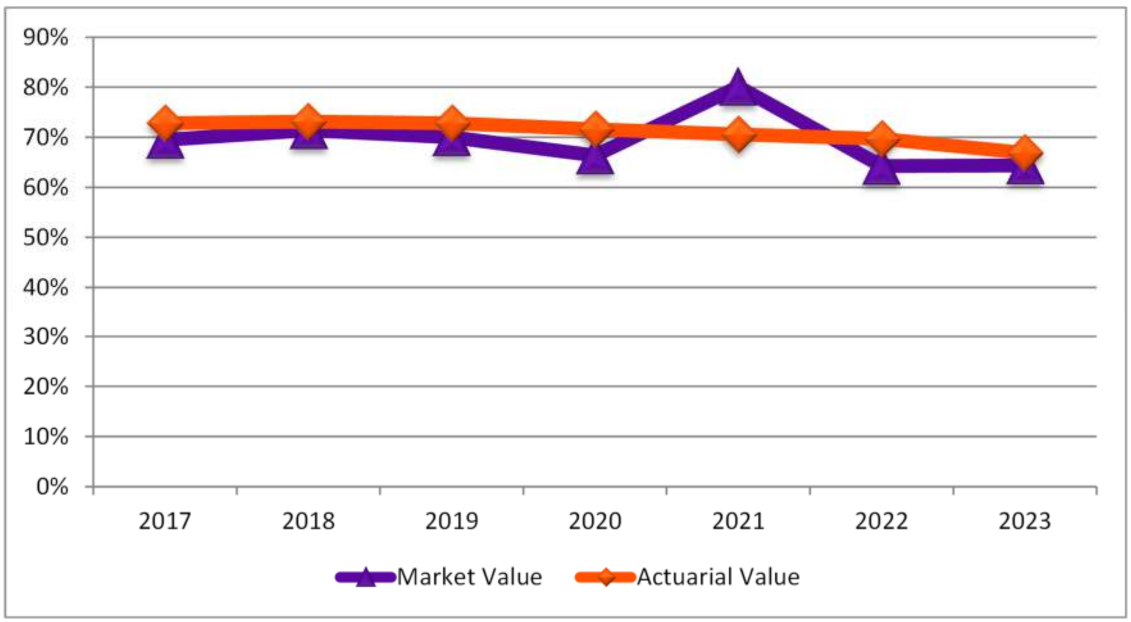
Development of Unfunded Accrued Liability and Funded Ratio

	June 30, 2023			June 30, 2022		
	Class A	**Class B**	**Total**	**Class A**	**Class B**	**Total**
Actuarial accrued liability for inactive members						
Retired, disabled and beneficiaries	$107,454,674	$105,885,423	$213,340,097	$105,400,394	$97,587,155	$202,987,549
Terminated vested members	2,908,661	11,735,265	14,643,926	3,459,222	12,695,920	16,155,142
Due refund of employee contributions only	272,096	1,454,521	1,726,617	310,147	1,167,726	1,477,872
Total	110,635,431	119,075,209	229,710,640	109,169,763	111,450,801	220,620,563
Actuarial accrued liability for active employees	51,892,366	65,646,872	117,539,238	44,101,485	61,095,967	105,197,453
Total actuarial accrued liability	162,527,797	184,722,081	347,249,878	153,271,248	172,546,768	325,818,016
Actuarial value of assets	103,910,050	128,361,068	232,271,118	100,004,390	127,044,496	227,048,886
Unfunded accrued liability	58,617,747	56,361,013	114,978,760	53,266,858	45,502,272	98,769,130
Funded ratio	63.9%	69.5%	66.9%	65.2%	73.6%	69.7%

Actuarial Accrued Liability vs. Actuarial Value of Assets



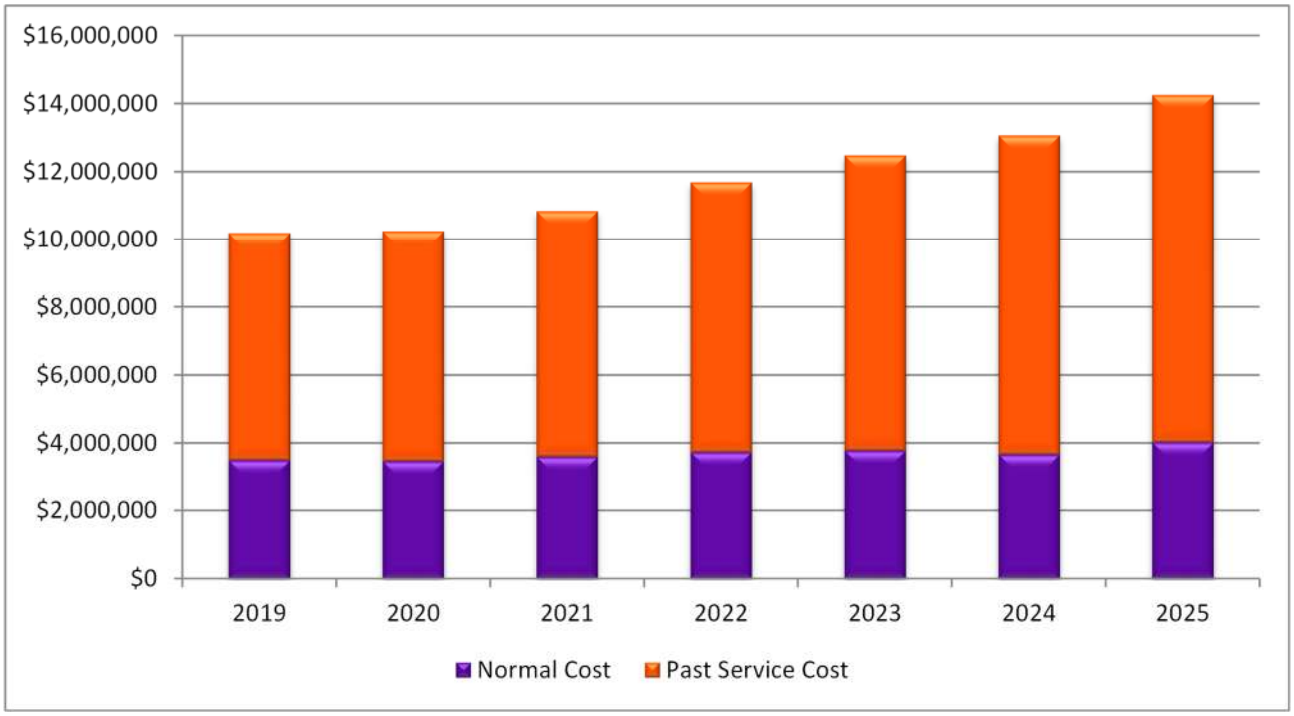
Funded Ratio



Determination of Normal Cost and Actuarially Determined Employer Contribution

	June 30, 2023		June 30, 2022	
	Cost	Percent of payroll	Cost	Percent of payroll
Gross normal cost	$7,402,863	11.3%	$6,545,615	11.8%
Estimated employee contributions	(3,493,344)	-5.3%	(2,980,079)	-5.4%
City's normal cost	3,909,519	5.9%	3,565,536	6.4%
Amortization of unfunded accrued liability	10,212,586	15.6%	9,384,551	17.0%
Contribution before adjustment as of the valuation date	14,122,105	21.5%	12,950,087	23.4%
Estimated valuation year payroll for actives not yet at 100% assumed retirement age	65,752,934		55,392,895	
Fiscal year ending	2025		2024	
Adjustment for interest and inflation	121,195		106,966	
Actuarially determined employer contribution	14,243,300		13,057,053	

Actuarially Determined Employer Contribution



Actuarially Determined Employer Contribution per Group

	Class A	Class B IBEW Local 300	Class B BED Non-Union	Class B School	Class B Other	Class B	Total
Gross normal cost	$3,767,240	$385,540	$339,033	$910,783	$2,000,267	$3,635,623	$7,402,863
Estimated employee contributions	(1,396,018)	(267,780)	(167,083)	(447,992)	(1,214,471)	(2,097,326)	(3,493,344)
City's normal cost	2,371,222	117,760	171,950	462,791	785,796	1,538,297	3,909,519
Actuarial accrued liability	162,527,797	32,107,962	24,905,210	26,585,470	101,123,439	184,722,081	347,249,878
Actuarial value of assets	103,910,050	22,311,422	17,306,319	18,473,911	70,269,416	128,361,068	232,271,118
Unfunded accrued liability	58,617,747	9,796,540	7,598,891	8,111,559	30,854,023	56,361,013	114,978,760
Amortization of unfunded accrued liability	5,206,516	870,143	674,945	720,481	2,740,501	5,006,070	10,212,586
Contribution before adjustment as of the valuation date	7,577,738	987,903	846,895	1,183,272	3,526,297	6,544,367	14,122,105
Estimated valuation year payroll for actives not yet at 100% assumed retirement age	13,238,445	6,852,473	4,310,578	10,783,367	30,568,071	52,514,489	65,752,934
City's normal cost as a percentage of payroll	17.9%	1.7%	4.0%	4.3%	2.6%	2.9%	5.9%
Contribution as a percentage of payroll	57.2%	14.4%	19.6%	11.0%	11.5%	12.5%	21.5%
Fiscal year ending June 30, 2025							
Adjustment for interest and inflation	73,508	3,651	5,330	14,346	24,360	47,687	121,195
Actuarially determined employer contribution	7,651,246	991,554	852,225	1,197,618	3,550,657	6,592,054	14,243,300

Determination of Actuarial Gain/Loss

The Actuarial Gain/Loss is the difference between the expected unfunded accrued liability and the actual unfunded accrued liability, without regard to any changes in actuarial methods, actuarial assumptions or plan provisions. This can also be referred to an Experience Gain/Loss, since it reflects the difference between what was expected and what was actually experienced.

Actuarial Gain / Loss		
Expected unfunded accrued liability June 30, 2023		
Expected unfunded accrued liability June 30, 2023		
Unfunded accrued liability June 30, 2022	$98,769,130	
Gross normal cost June 30, 2022	6,545,615	
City and employee contributions for 2022-2023	(15,330,533)	
Interest at 7.10% to June 30, 2023	6,946,916	
Expected unfunded accrued liability June 30, 2023	96,931,128	
Actuarial (gain) / loss June 30, 2023	14,856,651	
Actual unfunded accrued liability June 30, 2023, prior to plan provision, assumption and method changes		111,787,779
Sources of (gain) / loss		
Assets	4,450,000	
Salary increases	6,670,000	
Retiree mortality	1,184,000	
Turnover, disability and retirements	1,974,000	
New entrants	241,000	
Data adjustments	(56,000)	
COLA increases	453,000	
Other experience	(59,000)	
Total (gain) / loss (rounded to nearest $1,000)	14,857,000	
Assumption and method changes since prior valuation		3,190,981
Actual unfunded accrued liability June 30, 2023, after plan provision, assumption and method changes		114,978,760

Development of Asset Values

Summary of Fund Activity	Market Value	Actuarial Value
1. Beginning value of assets June 30, 2022		
Trust assets	$209,424,802	$227,048,886
2. Contributions		
City contributions during year	11,254,693	11,254,693
Employee contributions during year	4,075,840	4,075,840
Total for plan year	15,330,533	15,330,533
3. Disbursements		
Benefit payments during year	21,384,228	21,384,228
Administrative expenses during year	722,335	722,335
Other disbursements	184,884	184,884
Total for plan year	22,291,447	22,291,447
4. Net investment return		
Interest and dividends	7,335,342	N/A
Realized and unrealized gain / (loss)	14,087,843	N/A
Expected return	N/A	14,634,713
Recognized gain / (loss)	N/A	(2,451,567)
Required adjustment due to corridor	N/A	0
Reversal of prior year required adjustment	N/A	0
Investment-related expenses	(232,835)	N/A
Total for plan year	21,190,350	12,183,146
5. Ending value of assets June 30, 2023		
Trust assets: (1) + (2) - (3) + (4)	223,654,238	232,271,118
6. Approximate rate of return	10.2%	5.4%

Relationship of Actuarial Value to Market Value

1. Market value 6/30/2023	$223,654,238
2. Gain / (loss) not recognized in actuarial value 6/30/2023	(8,616,880)
3. Preliminary actuarial value 6/30/2023: (1) - (2)	232,271,118
4. Preliminary actuarial value as a percentage of market value: (3) ÷ (1)	103.9%
5. Gain / (loss) recognized for corridor minimum / maximum	N/A
6. Actuarial value 6/30/2023 after corridor minimum / maximum: (3) + (5)	232,271,118
7. Actuarial value as a percentage of market value: (6) ÷ (1)	103.9%

Development of Market Value Gain / Loss for 2022-2023 Plan Year

1. Market value 6/30/2022	$209,424,802
2. City contributions	11,254,693
3. Employee contributions	4,075,840
4. Benefit payments and other disbursements	21,569,112
5. Administrative expenses	722,335
6. Expected return at 7.10%	14,634,713
7. Expected value 6/30/2023: (1) + (2) + (3) - (4) - (5) + (6)	217,098,601
8. Market value 6/30/2023	223,654,238
9. Market value gain / (loss) for 2022-2023 plan year: (8) - (7)	6,555,637

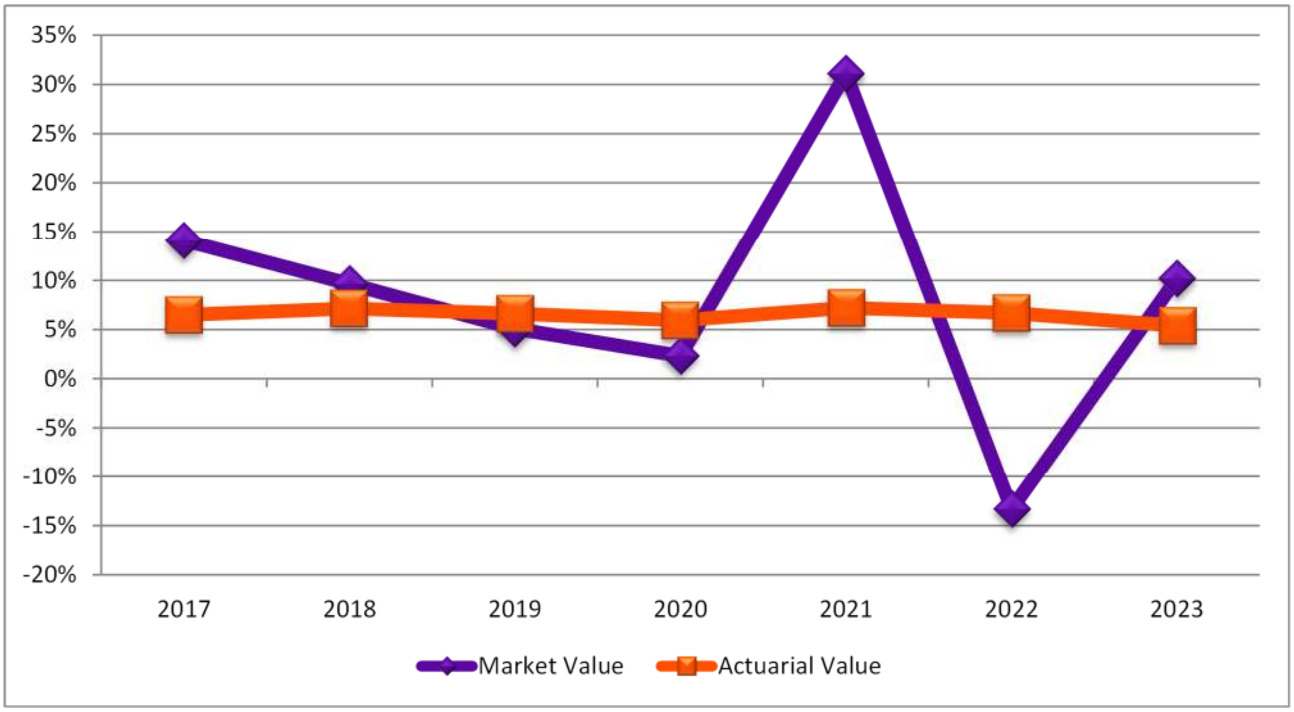
Recognition of Gain / Loss in Actuarial Value

Year	(a) Gain / (loss)	(b) Total recognized as of 6/30/2022	(c) Recognized in current year: 20% of (a)	(d) Total recognized as of 6/30/2023: (b) + (c)	(e) Not recognized as of 6/30/2023: (a) - (d)
2018-2019	($4,474,973)	($3,579,977)	($894,996)	($4,474,973)	$0
2019-2020	(9,744,015)	(5,846,411)	(1,948,803)	(7,795,214)	(1,948,801)
2020-2021	45,779,498	18,311,800	9,155,900	27,467,700	18,311,798
2021-2022	(50,373,977)	(10,074,795)	(10,074,795)	(20,149,590)	(30,224,387)
2022-2023	6,555,637	0	1,311,127	1,311,127	5,244,510
Total			(2,451,567)		(8,616,880)

Rate of Return on Market Value of Assets				
Period Ending	Average Annual Effective Rate of Return			
June 30	1 Year	3 Years	5 Years	10 Years
2014	15.0%	7.5%	12.3%	6.3%
2015	-1.7%	6.4%	8.2%	5.4%
2016	-1.3%	3.7%	3.8%	4.2%
2017	14.1%	3.4%	6.3%	3.9%
2018	9.6%	7.3%	6.9%	5.7%
2019	5.1%	9.5%	5.0%	8.6%
2020	2.3%	5.6%	5.8%	7.0%
2021	31.1%	12.1%	12.0%	7.8%
2022	-13.3%	5.1%	6.0%	6.1%
2023	10.2%	7.8%	6.1%	6.5%

Rate of Return on Actuarial Value of Assets				
Period Ending	Average Annual Effective Rate of Return			
June 30	1 Year	3 Years	5 Years	10 Years
2014	11.0%	6.5%	5.0%	4.8%
2015	7.8%	8.3%	6.3%	5.6%
2016	4.4%	7.7%	6.3%	5.6%
2017	6.5%	6.2%	7.2%	5.2%
2018	7.1%	6.0%	7.3%	5.1%
2019	6.6%	6.7%	6.5%	5.7%
2020	5.9%	6.6%	6.1%	6.2%
2021	7.2%	6.6%	6.7%	6.5%
2022	6.7%	6.6%	6.7%	6.9%
2023	5.4%	6.4%	6.4%	6.8%

Actual Rate of Return on Assets



Target Allocation and Expected Rate of Return
June 30, 2023

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return*	Weighting
Core Fixed Income	17.50%	5.00%	0.88%
U.S. Bonds - Dynamic	7.50%	5.60%	0.42%
U.S. Large Cap Equity	32.00%	6.70%	2.14%
U.S. Small Cap Equity	9.00%	6.50%	0.59%
International Developed Equity	20.50%	8.90%	1.82%
International Emerging Markets Equity	7.00%	10.80%	0.76%
Private Equity	0.50%	9.70%	0.05%
Real Estate	6.00%	7.40%	0.44%
	100.00%		7.10%
Interaction Effect			0.90%
Long-Term Expected Nominal Return			8.00%

**Long-Term Real Returns are provided by Fiducient Advisors. The supporting information is contained in the July 26, 2023 email regarding Fiducient Advisors' Capital Market Assumptions. The returns are geometric means.*

The long-term expected rate of return on pension plan investments was determined using a building block method in which best-estimate ranges of expected future real rates of return are developed. Best estimates of the real rates of return for each major asset class are included in the pension plan's target asset allocation.

The information above is based on geometric means and does not reflect additional returns through investment selection, asset allocation and rebalancing. An expected rate of return of 7.10% was used.

Amortization of Unfunded Liability

Schedule of Amortization Bases - Total				
	Date established	**Amortization installment**	**Years remaining**	**Present value of remaining installments as of June 30, 2023**
2023 base	June 30, 2023	10,212,586	20	114,978,760

Schedule of Amortization Bases - Class A				
	Date established	**Amortization installment**	**Years remaining**	**Present value of remaining installments as of June 30, 2023**
2023 base	June 30, 2023	5,206,516	20	58,617,747

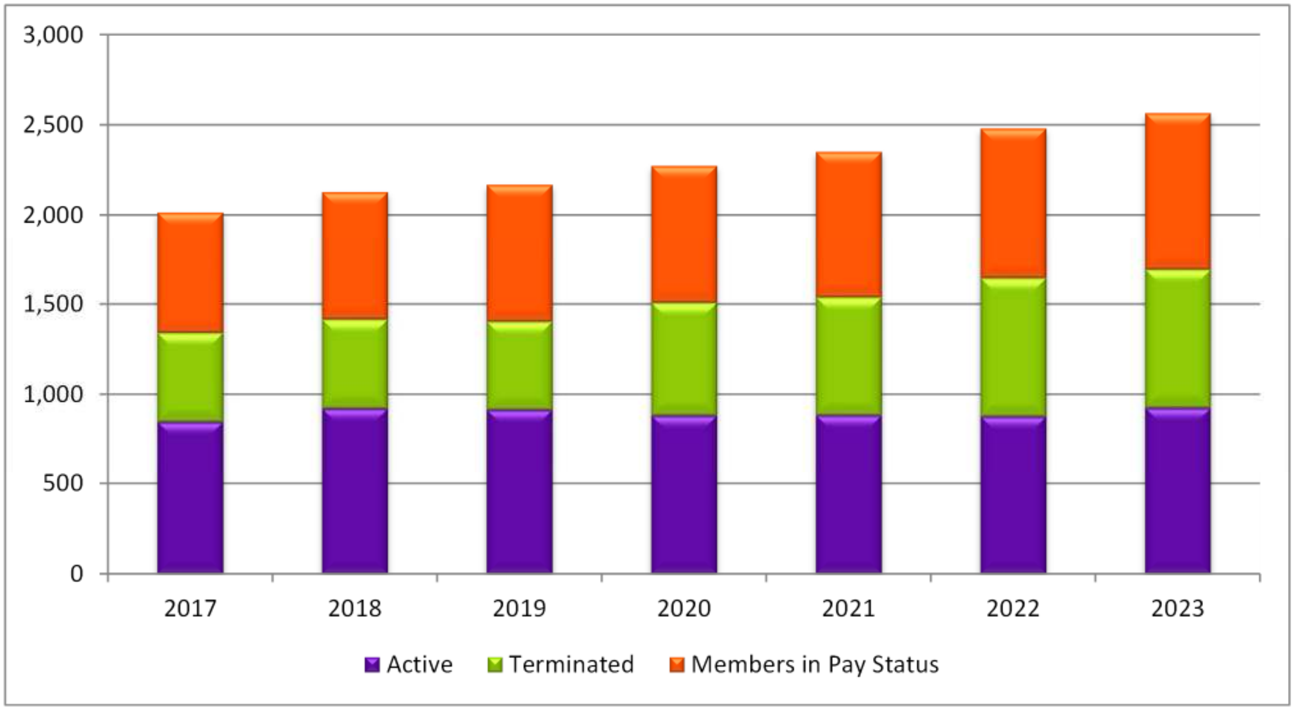
Schedule of Amortization Bases - Class B				
	Date established	**Amortization installment**	**Years remaining**	**Present value of remaining installments as of June 30, 2023**
2023 base	June 30, 2023	5,006,070	20	56,361,013

Member Data

The data reported by the Plan Sponsor for this valuation includes 923 active employees who met the Plan's minimum age and service requirements as of June 30, 2023.

Member Data					
	Active	**Terminated vested**	**Due refund of contributions**	**Members in pay status**	**Total**
Total members June 30, 2022	876	420	347	838	2,481
Adjustments	0	-6	+5	-1	-2
Retirements	-15	-35	N/A	+50	0
Disabilities	-3	-1	N/A	+4	0
Terminations					
Vested	-26	+26	N/A	N/A	0
Lump sum payments	-34	-14	-43	N/A	-91
Due contributions only	-46	N/A	+46	N/A	0
Deaths					
With death benefit	-1	0	0	-7	-8
Without death benefit	0	-1	0	-17	-18
Transfers	0	0	0	N/A	0
Rehires	+7	-3	-4	N/A	0
New beneficiaries	N/A	N/A	N/A	+8	+8
New entrants	+165	+3	+28	N/A	+196
Total members June 30, 2023	923	389	379	875	2,566

Member Counts by Status



Member Data				
	Active	**Terminated vested**	**Due refund of contributions**	**Members in pay status**
Average age				
June 30, 2022	43.9	53.3	38.4	69.7
June 30, 2023	43.7	53.1	38.3	70.0
Average service				
June 30, 2022	9.9	N/A	N/A	N/A
June 30, 2023	9.4	N/A	N/A	N/A
Covered employee payroll				
June 30, 2022	$51,361,810	N/A	N/A	N/A
June 30, 2023	58,652,428	N/A	N/A	N/A
Total annual benefits				
June 30, 2022	N/A	$2,774,847	N/A	$19,822,002
June 30, 2023	N/A	2,515,746	N/A	21,012,530

Member Data - Class A					
	Active	**Terminated vested**	**Due refund of contributions**	**Members in pay status**	**Total**
Total members June 30, 2022	150	36	26	213	425
Adjustments	+4	0	0	-1	+3
Retirements	-3	-3	N/A	+6	0
Disabilities	0	N/A	N/A	0	0
Terminations					
Vested	-3	+3	N/A	N/A	0
Lump sum payments	-9	-4	-3	N/A	-16
Due contributions only	-1	N/A	+1	N/A	0
Deaths					
With death benefit	0	0	0	0	0
Without death benefit	0	0	0	-2	-2
Transfers	0	0	0	N/A	0
Rehires	+2	-1	-1	N/A	0
New beneficiaries	N/A	N/A	N/A	+1	+1
New entrants	+20	N/A	+1	N/A	+21
Total members June 30, 2023	160	31	24	217	432

Member Data - Class B					
	Active	Terminated vested	Due refund of contributions	Members in pay status	Total
Total members June 30, 2022	726	384	321	625	2,056
Adjustments	-4	-6	+5	0	-5
Retirements	-12	-32	N/A	+44	0
Disabilities	-3	-1	N/A	+4	0
Terminations					
Vested	-23	+23	N/A	N/A	0
Lump sum payments	-25	-10	-40	N/A	-75
Due contributions only	-45	N/A	+45	N/A	0
Deaths					
With death benefit	-1	0	0	-7	-8
Without death benefit	0	-1	0	-15	-16
Transfers	0	0	0	N/A	0
Rehires	+5	-2	-3	N/A	0
New beneficiaries	N/A	N/A	N/A	+7	+7
New entrants	+145	+3	+27	N/A	+175
Total members June 30, 2023	763	358	355	658	2,134

Description of Actuarial Methods

Asset Valuation Method

The Actuarial Value of assets used in the development of plan contributions phases in the recognition of differences between the actual return on Market Value and expected return on Market Value over a 5-year period at 20% per year.

Actuarial Cost Method

Changes in Actuarial Cost Method: None.

Description of Current Actuarial Cost Method: Entry Age Normal (level percentage of salary)

Normal Cost: Under this method, the total normal cost is the sum of amounts necessary to fund each active member's normal retirement benefit if paid annually from entry age to assumed retirement age. Entry age is the age at which the employee would have been first eligible for the plan, if it had always been in effect. The normal cost for each participant is expected to remain a level percentage of the employee's salary. The normal cost for the plan is the difference between the total normal cost for the year and the anticipated member contributions for that year.

Past Service Liability: The present value of future benefits that relates to service before the valuation date is the total past service liability. The unfunded past service liability is the difference between the total past service liability and any assets (including accumulated member contributions). Unfunded accrued liabilities as of June 30, 2023 were amortized over a closed 20-year period. Future changes in the unfunded accrued liability will be amortized separately, assuming a new 20-year amortization each valuation.

Prior Past Service Liability: The present value of future benefits that relates to service before the valuation date is the total past service liability. The unfunded past service liability is the difference between the total past service liability and any assets (including accumulated member contributions). Unfunded accrued liabilities as of June 30, 2004 were amortized over a closed 30-year period. Future changes in the unfunded accrued liability will be amortized separately, assuming a new 30-year amortization each valuation.

Experience Gains and Losses: All experience gains and losses (the financial effect of the difference between the actual experience during the prior period and the result expected by the actuarial assumptions for that prior period) appear directly in the past service liability and are amortized at the same rate the plan is amortizing the remaining unfunded past service liability.

Description of Actuarial Assumptions

Changes in Actuarial Assumptions

The valuation reflects changes in the actuarial assumptions listed below. (The assumptions used before and after these changes are more fully described in the next section.)

- Rate of compensation increase
- Inflation
- Mortality
- Retirement, termination, and disability rates
- Accrual rate election
- Spouse's age
- Payroll growth

The assumptions indicated were changed to better reflect the Enrolled Actuary's current best estimate of anticipated experience of the plan.

Investment rate of return (net of investment-related and administrative expenses)

7.10%.

Rate of compensation increase (including inflation)

Class A - Fire

Completed Years of Service	Rate*
<1	11.0%
1	9.0%
2	8.0%
3	7.0%
4	6.5%
5	6.0%
6	5.5%
7	5.0%
8	5.0%
9	5.0%
10	4.8%
11	4.7%
12	4.6%
13	4.5%
14	4.4%
15	4.3%
16	4.2%
17	4.0%
18	3.8%
19	3.7%
20+	3.6%

* Inflation: 2.70%

Class A - Police

Completed Years of Service	Rate*
<1	9.0%
1	8.0%
2	7.2%
3	6.2%
4	6.0%
5	5.7%
6	5.5%
7	5.3%
8	5.2%
9	5.1%
10	4.9%
11	4.7%
12	4.6%
13	4.5%
14	4.4%
15	4.3%
16	4.2%
17	4.0%
18	3.8%
19	3.7%
20+	3.6%

* Inflation: 2.70%

Class B

Completed Years of Service	Rate*
<1	6.5%
1	6.2%
2	6.0%
3	5.1%
4	4.9%
5	4.8%
6	4.7%
7	4.6%
8	4.5%
9	4.4%
10	4.3%
11	4.2%
12	4.1%
13	4.1%
14	4.0%
15	3.9%
16	3.9%
17	3.9%
18	3.8%
19	3.7%
20+	3.6%

* Inflation: 2.70%

Rate of compensation increase (including inflation) (cont.)

Prior:

Class A

Completed Years of Service	Rate
<1	10.0%
1	8.5%
2	7.3%
3	6.3%
4	5.9%
5	5.6%
6	5.4%
7	5.2%
8	5.0%
9	4.8%
10	4.7%
11	4.6%
12	4.5%
13	4.4%
14	4.3%
15	4.2%
16	4.0%
17	3.8%
18	3.7%
19	3.6%
20+	3.5%

Class B

Completed Years of Service	Rate
<1	6.6%
1	6.0%
2	5.5%
3	5.1%
4	4.9%
5	4.7%
6	4.5%
7	4.4%
8	4.3%
9	4.3%
10	4.2%
11	4.2%
12	4.1%
13	4.0%
14	3.9%
15	3.8%
16	3.8%
17	3.8%
18	3.7%
19	3.6%
20+	3.5%

The actuarial assumption in regards to rate of compensation increases shown above are based on the results of an actuarial experience study for the period July 1, 2017 through June 30, 2022.

Inflation

2.70%. (Prior: 2.60%)

This assumption is based on long-term historical inflation numbers. While near term averages have been higher, we do not believe this trend will continue indefinitely and expect that there will be a reversion to the long-term average.

Mortality

Class A:

Retirees – Pub-2010 Public Retirement Plans Amount-Weighted Mortality Tables for Public Safety Employees, for non-annuitants and annuitants, projected to the valuation date with Scale MP-2021, set forward 2 years.

Disabled – Pub-2010 Public Retirement Plans Amount-Weighted Mortality Tables for Public Safety Disabled Retirees, projected to the valuation date with Scale MP-2021.

Survivors – Pub-2010 Public Retirement Plans Amount-Weighted Mortality Tables for Public Safety Contingent Survivors, projected to the valuation date with Scale MP-2021.

Class B:

Retirees – Pub-2010 Public Retirement Plans Amount-Weighted Mortality Tables for General Employees, for non-annuitants and annuitants, projected to the valuation date with Scale MP-2021, set forward 2 years.

Disabled – Pub-2010 Public Retirement Plans Amount-Weighted Mortality Tables for General Disabled Retirees, projected to the valuation date with Scale MP-2021, set forward 3 years.

Survivors – Pub-2010 Public Retirement Plans Amount-Weighted Mortality Tables for General Contingent Survivors, projected to the valuation date with Scale MP-2021, set forward 3 years.

Prior:

Class A:

Retirees – RP-2014 Adjusted to 2006 Total Dataset Mortality Table, projected to the valuation date with Scale MP-2021.

Disabled – RP-2014 Adjusted to 2006 Disabled Mortality Table, projected to the valuation date with Scale MP-2021.

Survivors – RP-2014 Adjusted to 2006 Total Dataset Mortality Table, projected to the valuation date with Scale MP-2021.

Class B:

Retirees – RP-2014 Adjusted to 2006 Total Dataset Mortality Table, projected to the valuation date with Scale MP-2021, set forward 2 years.

Disabled – RP-2014 Adjusted to 2006 Disabled Mortality Table, projected to the valuation date with Scale MP-2021.

Survivors – RP-2014 Adjusted to 2006 Total Dataset Mortality Table, projected to the valuation date with Scale MP-2021, set forward 2 years

Mortality improvement

Projected to date of decrement using Scale MP-2021 (generational).

We have selected this mortality assumption because it is based on the most recently published public retirement mortality study released by the Society of Actuaries.

Retirement age

Class A - Fire

Completed Years of Service	Rate
<15	0%
15-18	2.5%
19	5%
20-23	20%
24	50%
25	85%
26-29	60%
30+	100%

Compulsory retirement is assumed at age 60.

Class A - Police

Completed Years of Service	Rate
<15	0%
15-16	2.5%
17-18	7.5%
19	20%
20-24	40%
25	85%
26-29	60%
30+	100%

Compulsory retirement is assumed at age 60.

Class B

Age	Rate
55-57	3%
58-59	8%
60-61	10%
62	16%
63-64	20%
65-69	30%
70-74	50%
75+	100%

Prior:

Class A

Completed Years of Service	Rate
<15	0%
15-18	5%
19	15%
20-23	25%
24	30%
25	75%
26-29	50%
30-34	75%
35+	100%

Compulsory retirement is assumed at age 60.

Retirement age (cont.)

Class B

Age	Rate
55-59	5.0%
60	7.5%
61	12.5%
62	18.0%
63	22.5%
64-65	25.0%
66-69	30.0%
70-74	50.0%
75+	100.0%

Termination prior to retirement

Class A - Fire

Completed Years of Service	Rate
<3	10.0%
3	9.0%
4	8.0%
5	7.0%
6	6.0%
7	5.0%
8	4.5%
9	4.0%
10+	0.0%

Class A - Police

Completed Years of Service	Rate
<2	12.0%
2	11.0%
3	10.0%
4	9.0%
5	7.0%
6	6.0%
7	5.0%
8	4.0%
9	3.0%
10+	0.0%

Termination prior to retirement (cont.)

Class B – 110% of the Vaughn Select & Ultimate Withdrawal Table for service prior to 3 years, and 140% of the Vaughn Select & Ultimate Withdrawal Table thereafter.

Sample rates

	Completed Years of Service			
Age	**0**	**1**	**2**	**3+**
20	32.8%	27.5%	23.1%	26.0%
25	30.6%	24.8%	20.4%	19.0%
30	28.4%	22.0%	17.6%	14.1%
35	26.2%	19.6%	15.2%	11.1%
40	24.0%	17.4%	13.0%	9.1%
45	21.8%	15.5%	11.1%	7.7%
50	19.6%	13.9%	9.5%	6.3%
55	0.0%	0.0%	0.0%	0.0%

Prior:

Class A

Completed Years of Service	Rates
<1	8.0%
1	7.0%
2-6	6.0%
7	5.0%
8	4.5%
9	4.0%
10+	0.0%

Class B: 100% of the Vaughn Select & Ultimate Withdrawal Table for service prior to 3 years, and 130% of the Vaughn Select & Ultimate Withdrawal Table thereafter.

Sample rates

	Completed Years of Service			
Age	**0**	**1**	**2**	**3+**
20	29.8%	25.0%	21.0%	24.18%
25	27.8%	22.5%	18.5%	17.68%
30	25.8%	20.0%	16.0%	13.13%
35	23.8%	17.8%	13.8%	10.27%
40	21.8%	15.8%	11.8%	8.45%
45	19.8%	14.1%	10.1%	7.15%
50	17.8%	12.6%	8.6%	5.85%
55	0.0%	0.0%	0.0%	0.00%

Disability

Class A Fire: 1985 Pension Disability Study Class 3 Table for Males and Females.

Class A Police: 1985 Pension Disability Study Class 2 Table for Males and Females.

Class B: 60% of 1985 Pension Disability Study Class 1 Table for Males and Females.

Prior:

Class A: 1985 Pension Disability Study Class 2 Table for Males and Females.

Class B: 1985 Pension Disability Study Class 1 Table for Males and Females.

The actuarial assumptions in regards to rates of decrement shown above are based on the results of an actuarial experience study for the period July 1, 2017 through June 30, 2022.

Administrative expenses

Currently, there is no expense load assumed for administrative expenses.

Cost of living increases

2.60%.

Accrual rate election

Class A: 80% of retiring members are assumed to elect the no COLA accrual rate and 20% of retiring members are assumed to elect the full COLA accrual rate.

Class B: 70% of retiring members are assumed to elect the no COLA accrual rate and 30% of retiring members are assumed to elect the full COLA accrual rate.

Prior:

Class A: 85% of retiring members are assumed to elect the no COLA accrual rate and 15% of retiring members are assumed to elect the full COLA accrual rate.

Class B: 75% of retiring members are assumed to elect the no COLA accrual rate and 25% of retiring members are assumed to elect the full COLA accrual rate.

Payroll growth

3.10% per year. (Prior: 3.00%)

Percent of active employees married

80%.

Spouse's age

Husbands are assumed to be 2 years older than wives.

Prior: Husbands are assumed to be 3 years older than wives.

The assumption changes increased liabilities by about 0.9%.

Summary of Plan Provisions

This exhibit summarizes the major provisions of the Plan. It is not intended to be, nor should it be interpreted as a complete statement of all plan provisions. To the extent that this summary does not accurately reflect the plan provisions, then the results of this valuation may not be accurate.

Plan identification

Single-employer pension plan.

Effective date

July 1, 1954.

Average Final Compensation (AFC)

For Class A Police non-union employees, Class A Police employees hired after January 10, 2011, Class A Fire employees hired after October 7, 2011 Class B AFSCME Local 1343 employees hired after June 7, 2011, Class B IBEW Local 300 employees hired after October 30, 2012 or any employees hired on or after January 1, 2018, it is the average earnable compensation during the highest 5 non-overlapping 12-month periods. For all others, it is the average earnable compensation during the highest 3 non-overlapping 12-month periods.

Membership eligibility

Regular employees of the City of Burlington excluding elective officers other than the mayor and excluding teachers other than certain teachers employed prior to July 1, 1947.

Membership classification

Class A

Members of the Fire and Police Departments not including clerical employees.

Class B

All other members.

Service retirement

Eligibility

Class A

For Police employees hired before July 1, 2006, age 42 and 5 years of creditable service. For Police employees hired after January 10, 2011, age 40 and 20 years of creditable service. For other Police Union employees, age 45 and 5 years of creditable service. For Fire employees hired after January 10, 2011, age 45 and 20 years of creditable service. For Fire Union employees hired on or before January 10, 2011, age 45 and 5 years of creditable service. For all others, age 42 and 5 years of creditable service. Compulsory at age 60.

Class B

Age 55 and 5 years of creditable service.

Service retirement (continued)

Amount of Benefit

Class A

For Fire employees hired before January 1, 2007 and Police employees hired before July 1, 2006, 2.75% of AFC times creditable service not in excess of 25 years plus 0.50% of AFC times creditable service between 25 and 35 years. For Police employees hired after January 10, 2011, 2.50% of AFC times creditable service not in excess of 20 years plus 5.00% of AFC times creditable service between 20 and 25 years. For Fire employees hired after January 10, 2011, 3.00% of AFC times creditable service not in excess of 25 years plus 0.50% of AFC times creditable service between 25 and 35 years. For all others, 2.65% of AFC times creditable service not in excess of 25 years plus 0.50% of AFC times creditable service between 25 and 35 years. Benefit increased by Cost of Living Adjustment detailed below.

In lieu of this benefit, at the time of retirement, a member may choose either (i) an accrual rate of 3.25% for the first 25 years of creditable service, plus an accrual of 0.50% for creditable service between 25 and 35 years, and a Cost of Living Adjustment equal to one half of the Cost of Living Adjustment detailed below, or (ii) an accrual rate of 3.80% for all years of service prior to June 30, 2006 for the first 25 years, an accrual rate of 3.60% for all years of service commencing July 1, 2006 for the first 25 years, plus an accrual rate of 0.50% for creditable service between 25 and 35 years, and no Cost of Living Adjustment.

A Fire employee hired on or after January 1, 2007 or a Police employee hired on or after July 1, 2006 may only select a benefit with a full Cost of Living Adjustment. Any Fire employee hired after October 5, 2015 cannot receive a pension that exceeds 90% of the employee’s average final compensation.

For Police employees hired after January 10, 2011, the above benefits based on AFC and creditable service at retirement are reduced actuarially for the period of time by which retirement precedes age 50.

For all other Police employees, prior to age 55, the above benefit based on AFC and creditable service at retirement is reduced actuarially for the period of time by which retirement precedes the earlier of 25 years of creditable service and age 55. For employees who terminate with 20 to 25 years of creditable service the above benefit based on AFC and creditable service at retirement is reduced by 1.82% for each year that creditable service is less than 25 years.

For Fire employees hired on or after January 10, 2011, who are at least age 45 with 20 years of creditable service, the normal retirement benefit is reduced actuarially for the period of time by which retirement precedes age 50. For employees who terminate with 20 to 25 years of creditable service who retire at age 50 or later, the above benefit based on AFC and creditable service at retirement is reduced by 1.82% for each year that creditable service is less than 25 years. Employees that retiree at age 50 with at least 25 years of creditable service receive an unreduced benefit.

For Fire employees hired on or after January 1, 2007 but before January 10, 2011, the normal retirement benefit is reduced actuarially for the period to time by which retirement precedes age 55. For employees who terminate with 20 to 25 years of creditable service and have attained age 48, the above benefit based on AFC and creditable service at retirement is reduced by 1.82% for each year that creditable service is less than 25 years. Employees that retire at age 50 with at least 20 years of creditable service or at age 45 with at least 25 years of creditable service receive an unreduced benefit.

For Fire employees hired before January 1, 2007, the normal retirement benefit is reduced actuarially for the period of time by which retirement precedes the earlier of age 55 or 25 years of creditable service. For employees who terminate with 20 to 25 years of creditable service, the above benefit based on AFC and creditable service at retirement is reduced by 1.82% for each year that creditable service is less than 25 years. Employees that retire at age 45 with at least 25 years of creditable service receive an unreduced benefit.

Service retirement (continued)

Class B

For employees hired prior to July 1, 2006 (on or before May 4, 2008 for IBEW): Age 65 and older, the greater of (i) 1.60% of AFC (at age 65) times creditable service not in excess of 25 years plus 0.50% of AFC (at age 65) times creditable service in excess of 25 years or (ii) the actuarial equivalent of the benefit determined at age 65. This benefit will be increased by the Cost of Living Adjustment detailed below.

In lieu of this benefit, at the time of retirement, an IBEW member may choose (i) an accrual rate of 1.90% for all years of service prior on or before May 4, 2008 and an accrual rate of 1.80% for all years of service after May 4, 2008, and a Cost of Living Adjustment equal to one-half of the Cost of Living Adjustment detailed below, or (ii) an accrual rate of 2.20% for all years of service on or before May 4, 2008 and an accrual rate of 2.00% for all years of service after May 4, 2008, and no Cost of Living Adjustment.

In lieu of this benefit, at the time of retirement, a member not in IBEW may choose (i) an accrual rate of 1.90% for all years of service prior to June 30, 2006 for the first 25 years, an accrual rate of 1.80% for all years of service on or after July 1, 2006 for the first 25 years, plus an accrual of 0.50% for creditable service in excess of 25 years, and a Cost of Living Adjustment equal to one-half of the Cost of Living Adjustment detailed below, or (ii) an accrual rate of 2.20% for all years of service prior to June 30, 2006 (on or before May 4, 2008 for IBEW) for the first 25 years, an accrual rate of 2.00% for all years of service on or after July 1, 2006 for the first 25 years, plus an accrual of 0.50% for creditable service in excess of 25 years, and no Cost of Living Adjustment.

For employees hired on or after July 1, 2006 (after May 4, 2008 for IBEW): Age 65 and older, the greater of (i) 1.40% of AFC (at age 65) times creditable service not in excess of 25 years plus 0.50% of AFC (at age 65) times creditable service in excess of 25 years or (ii) the actuarial equivalent of the benefit determined at age 65. This benefit will be increased by the Cost of Living Adjustment detailed below.

An employee hired on or after July 1, 2006 (after May 4, 2008 for IBEW) may only select a benefit with a full Cost of Living Adjustment.

Except for employees detailed below, prior to age 65, the above benefit based on AFC and creditable service at retirement reduced by 2% for each year that retirement precedes age 65. For IBEW employees hired before May 4, 2008, who elect a contribution rate of 4% is elected the early reduction factor is 2% for each year the retirement precedes age 65. For IBEW employees hired before May 4, 2008, who elect a contribution rate of 3% the benefit is reduced by a factor which varies with age. The factor equals 1 at 65 and .4 at 50.

For IBEW employees hired after May 4, 2008, the benefit is reduced by a factor which varies by age. The factor equals 1 at 65 but is equal to .356 at age 55.

For AFSCME Local 1343 employees hired before January 1, 2006 that meet the Rule of 82 by December 7, 2011 but retire later than December 7, 2011, the reduction is 4% per year at ages 55 to 59 for each year under age 65, and the standard 2% per year reduction for ages 60 to 65. For other AFSCME Local 1343 employees retiring after December 7, 2011, there will be full actuarial reduction from ages 55 to 59 and the standard 2% per year reduction for ages 60 to 65.

Cost of Living Adjustment

Benefits increase annually by changes in the Consumer Price Index of more than 1%. For Class A Fire employees retiring after October 5, 2015, Class A Police employees retiring after August 29, 2016, Class B AFSCME employees retiring after October 30, 2015, Class B IBEW employees retiring after March 9, 2016, and all employees retiring after July 1, 2017, the maximum annual increase is 2.75%. For all other members, the maximum annual increase is 5%. Increases are not applicable to deferred vested benefit prior to commencement, survivor income benefit, disability benefit prior to normal retirement age or members who choose to have no cost of living adjustment. For Class B employees that retire after July 1, 2018, the retirement COLA will be determined annually by the BERS Board equal to the CPI-U Northeast Region, with a maximum COLA increase of 2.75%, except that if the funding level of the BERS falls below 81%, the BERS Board may reduce or vote for no COLA for payees prior to age 65 for the upcoming year. For Class A Police employees who retire after February 1, 2019 and Fire employees who retire after March 28, 2019, the retirement COLA will be determined annually by the BERS Board equal to the CPI-U Northeast Region, with a maximum COLA of 2.75%, except that if the Class A funding level of the BERS falls below 73%, the BERS Board may reduce or vote for no COLA for the upcoming year.

Service Adjustment

Class A service for calculation of benefits shall be adjusted such that any Class A employee shall be granted 1.07 years of credit for each year in which the employee worked prior to July 1, 1996, and 1.17 years thereafter, in a position regularly assigned a workweek consisting on average of fifty-three or more hours of work per week.

Disability Retirement

Eligibility

All Members. Permanently disabled. Class B AFSCME Local 1343 employees must have 2 years of creditable service to be eligible for disabilities that are not work-related. Class A Fire employees hired after October 7, 2011 must have 1 year of creditable service to be eligible for disabilities that are not work-related. All other employees are immediately eligible.

Amount of Benefit

A benefit payable until normal service retirement eligibility (Class A - age 55 and 5 years of creditable service, Class B - age 65 and 5 years of creditable service). For Class A Fire employees hired after October 7, 2011, it is equal to 66 2/3% of the member's earnable compensation less workmen's compensation. For Class B IBEW employees hired after October 20, 2012 and Class B AFSCME employees, it is equal to 66 2/3% of the member's earnable compensation less workmen's compensation and Social Security. For all others, it is equal to 75% of the member's earnable compensation less workmen's compensation and, in the case of Class B, less Social Security.

After normal service retirement eligibility, a service retirement benefit based on AFC at retirement and creditable service at normal service retirement eligibility, including the period while permanently disabled and receiving a disability benefit from the System.

Accidental Death

Eligibility

Class A only. Death due to accident while in the performance of duty.

Amount of Benefit

A benefit to the spouse until death or remarriage of the greater of (i) 55% of AFC, and (ii) the participant's current accrued retirement benefit. Upon death or remarriage of the spouse, the benefit will be payable to children until age 21.

Survivor Income

Eligibility

All members. Death in active service.

Amount of Benefit

Class A

30% of compensation during the July preceding death payable to spouse until earlier of death or 2nd anniversary of remarriage. An additional 5% per unmarried child under 21 (maximum additional 10%) is payable until benefits cease or children no longer eligible. If there is no spouse or spouse dies, the benefit is payable to unmarried children under age 21 until earlier of death, marriage or age 21.

Class B

30% of compensation during the July preceding death payable to spouse until earlier of death, 2nd anniversary of remarriage or age 62. Upon the spouse's attainment of age 62 (if not remarried) a benefit based on the 50% Joint and Survivor form of payment will be paid to the spouse for life. If there is no spouse or spouse dies, the benefit is payable to unmarried children under age 21 until earlier of death, marriage or age 21.

Return of Contributions

Accumulated contributions returned upon separation with no vested benefits under the plan or upon death with no accidental death benefit payable. Interest will accrue on these contributions at a rate of 5.5% until December 31, 2017 and 2.0% thereafter, or at a higher rate as may be set by the Retirement Board. Interest will only accrue on contributions made after June 30, 1980.

Upon death of a retired member, the excess of his contribution at retirement over the benefits paid will be paid to his beneficiary or estate.

Vested Retirement

Eligibility

5 years of creditable service.

Vesting percentage.

100% after 5 years. Prior to July 1, 2017, several groups had a graded vesting schedule of 20% after completion of 3 years of creditable service to 100% after completion of 7 years of creditable service.

Amount of Benefit

Class A

Vesting percentage times the benefit calculated using AFC and creditable service at termination. The benefit is payable commencing at age 55. Member may elect early receipt with reduction as for service retirement prior to age 55.

Class B

Vesting percentage times the benefit calculated using AFC and creditable service at termination. The benefit is payable commencing at age 65. Member may elect early receipt with reduction as for service retirement prior to age 65.

Survivor Spouse's Pension

Eligibility

All members. Death of a terminated member entitled to a vested retirement benefit prior to commencement of such benefit.

Amount of Benefit

50% of reduced accrued benefit reflecting the 50% Joint and Survivor form of payment (ages as of date payments commence) payable at member's early retirement date. Spouse may elect to receive payments later than member's early retirement date with no reduction for receipt at member's 65th birthday.

Offsets on Benefits

Disability and accidental death benefits are offset by workmen's compensation paid for the same disability or death.

Employee Contributions

Class A

11.0% of earnable compensation for Class A employees for the first 35 years of creditable service, and none thereafter.

Class A employees shall contribute to the BERS a percentage of their salary. The total contribution required from both the City and employees will be based on the annual system valuation prepared by the City's actuaries. Effective retroactive to July 1, 2018, employees shall contribute a percentage so that all employees are contributing 28% (and the City is contributing 72%) of the total contribution required. For Fiscal Year 2019, this means that each Class A employee contributed 12.69% of the employee's base pay. The individual employee contribution for each subsequent fiscal year will be determined prior to the beginning of the fiscal year.

Effective July 1, 2020, employees shall contribute a percentage so that all employees are contributing 29% (and the City is contributing 71%) of the total contribution required.

Effective July 1, 2021, employees shall contribute a percentage so that all employees are contributing 30% (and the City is contributing 70%) of the total contribution required.

Class B

Member contributions for Class B employees, who elected to continue to be eligible for early retirement benefits at 2% per year deduction between ages 55 and 65, in accordance with the 2006-2009 collective bargaining agreement will be 4.8% in fiscal year 2016-2017, and 5.2% beginning with fiscal year 2017-2018. Member contributions for all other Class B employees will be will be 3.8% in fiscal year 2016-2017, and 4.2% beginning with fiscal year 2017-2018.

Class B employees shall contribute to the BERS a percentage of their annual salary. The total contribution required from both the City and employees will be based on the annual system valuation prepared by the City's actuaries.

Effective retroactive to July 1, 2018, employees shall contribute a percentage so that all employees are contributing 28% (and the City is contributing 72%) of the total contribution required. For Fiscal Year 2019, this shall mean that the contribution rate for a Class B employee was 4.41% of the employee's base pay.

Employee Contributions (continued)

Effective July 1, 2022, employees shall contribute a percentage so that all employees are contributing 30% (and the City is contributing 70%) of the total contribution required.

Notwithstanding the above, an individual Class A Fire employee's contribution shall not exceed 14% of their eligible wages in Fiscal Years 2023, 2024, and 2025.

Notwithstanding the above, an individual Class B employee's contribution shall not exceed 7% of their eligible wages in Fiscal Years 2023, 2024, 2025, and 2026.

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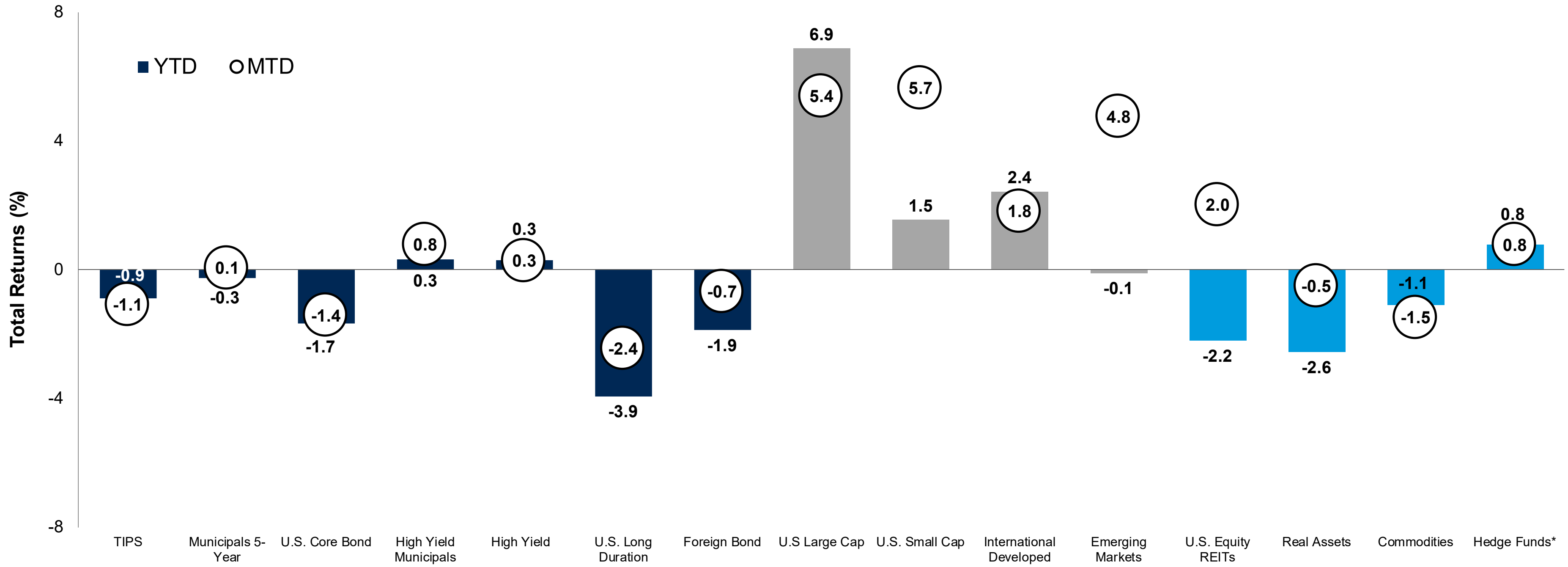
City of Burlington Employees Retirement System

Monthly Performance Update - February 2024

Asset Class Performance



Source: Morningstar Direct. As of February 29, 2024. *Hedge fund returns are as of January 31, 2024.

Fixed Income (February)

- Fixed income volatility continued in February as markets repriced expectations for the timing of Fed rate cuts in 2024, going from five expected cuts to three. Interest rates moved higher as a result and the Bloomberg Agg declined during the month.

+ High yield corporate bonds edged out a modest positive return on the back of tightening credit spreads.

- Rising interest rates outside of the U.S. were a headwind for non-U.S. debt, as was a stronger U.S. U.S. dollar.

Equity (February)

+ U.S. markets were positive in February. Small cap modestly outpaced large cap due to a surge in the biotech industry.

+ International developed markets, while positive, trailed the U.S. and emerging regions. Underlying country results were mixed with mainland Europe outperforming the United Kingdom.

+ A sharp rebound in China (+8.4%) buoyed Emerging Markets. Government policy action to help stabilize the property market and a focus on deleveraging helped boost investor confidence.

Real Asset / Alternatives (February)

+ REITs were positive during the month. Despite the rising rate environment, the segment benefited from its equity beta.

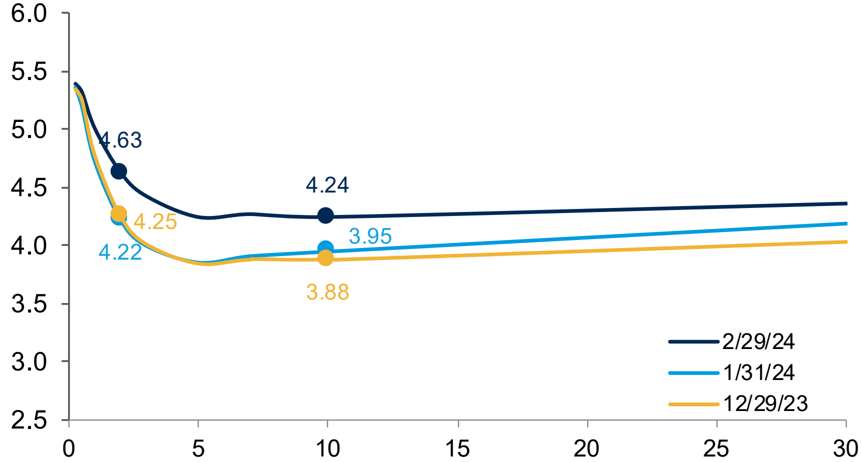
- Commodity markets were broadly negative in February, with weakness across various underlying sub-components.

- Real Assets were negatively impacted by falling commodity prices, rising interest rates and mixed property performance.

Fixed Income Market Update

U.S. Treasury Yield Curve

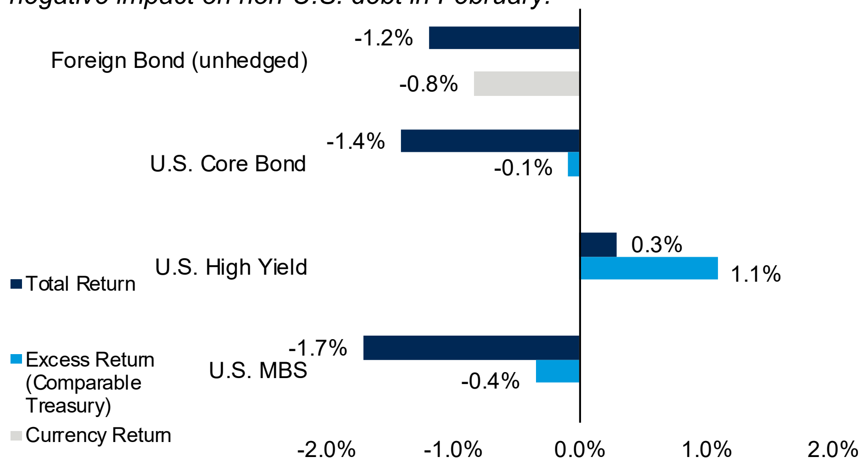
Interest rates rose across the U.S. yield curve during February. Federal Reserve language indicating a willingness to keep rates higher for longer than the market originally expected was one of the factors driving the move.



Source: FactSet. As of February 29, 2024.

Index Performance Attribution (February 2024)

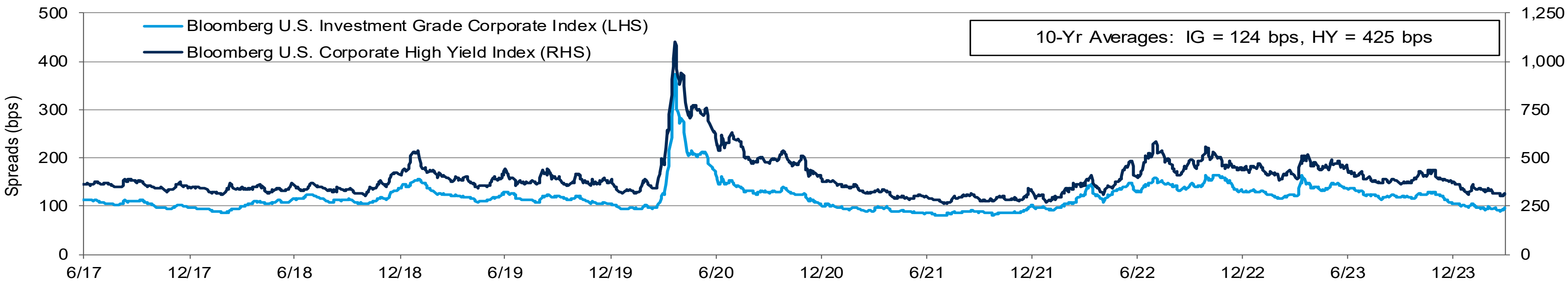
Corporate spread areas outperformed similar duration Treasuries in the period. A resilient economic backdrop and strong consumer has provided support for non-government sectors. Currency return had a negative impact on non-U.S. debt in February.



Source: FactSet. As of February 29, 2024.

Credit Market Spreads – Trailing 5 Years

Corporate fundamentals, both in investment grade and high yield, continue to remain positive. This, combined with positive sentiment around a “soft” – or even “no” – landing scenario, and a favorable demand environment given the all-in yield levels has pushed spreads tighter. Both sectors sit well below their 10-year averages and, in our view, are “priced nearly for perfection”.



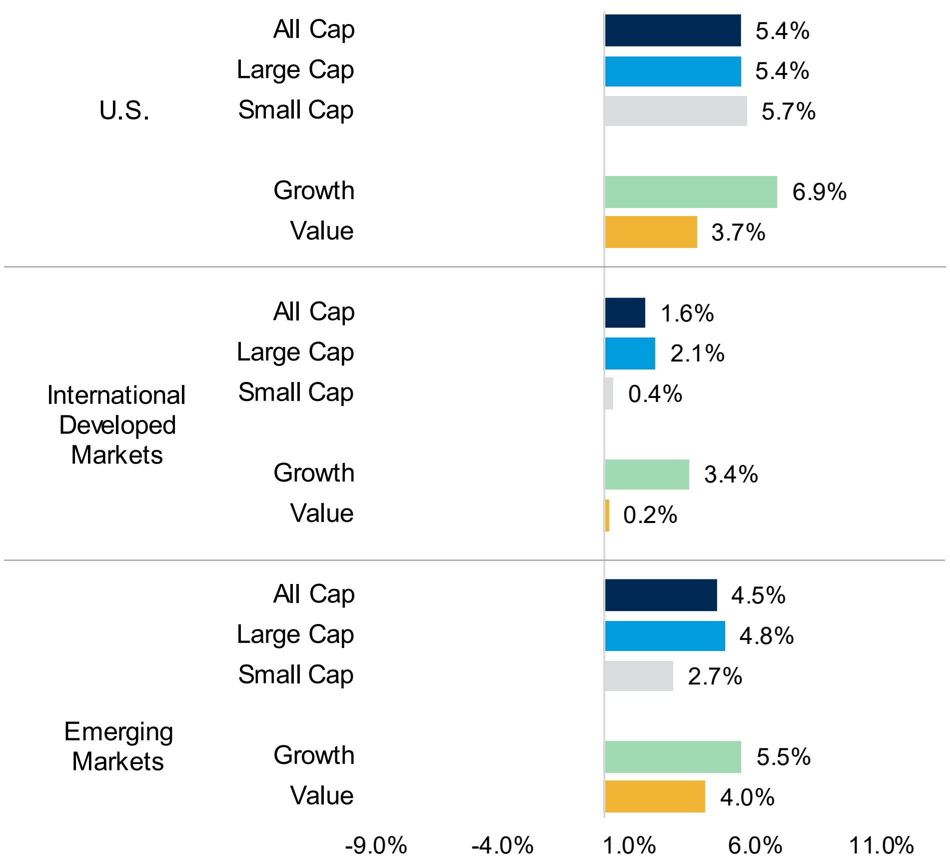
Source: FactSet. As of February 29, 2024.

See disclosures for list of indices representing each asset class. Past performance does not indicate future performance and there is a possibility of a loss. Indices cannot be invested in directly.

Equity Market Update

Market Capitalization & Style Performance (February 2024)

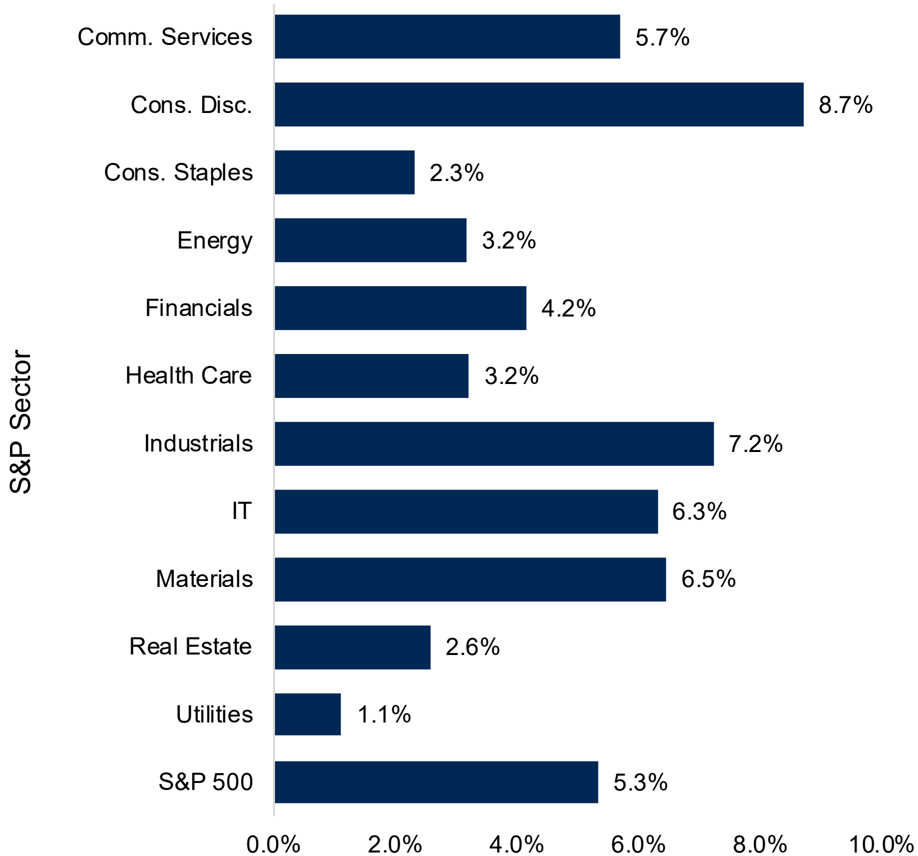
Equity markets were positive around the globe in February. Broadly, growth outperformed value in most regions. Market capitalization was mixed with small cap outperforming large cap within the U.S., while large cap outperformed small in international markets.



Source: Morningstar Direct. As of February 29, 2024.

U.S. Equities – Returns by Sector (February 2024)

Positive economic data helped fuel the "risk-on" sentiment in February and the S&P 500 closed the month at a record high. Concentration persists at the top of the index and NVIDIA (+28.6%) was a large contributor to performance following a favorable earnings report. REITs and utilities, which have historically been more sensitive to interest rates, lagged.



Source: Morningstar Direct. As of February 29, 2024.

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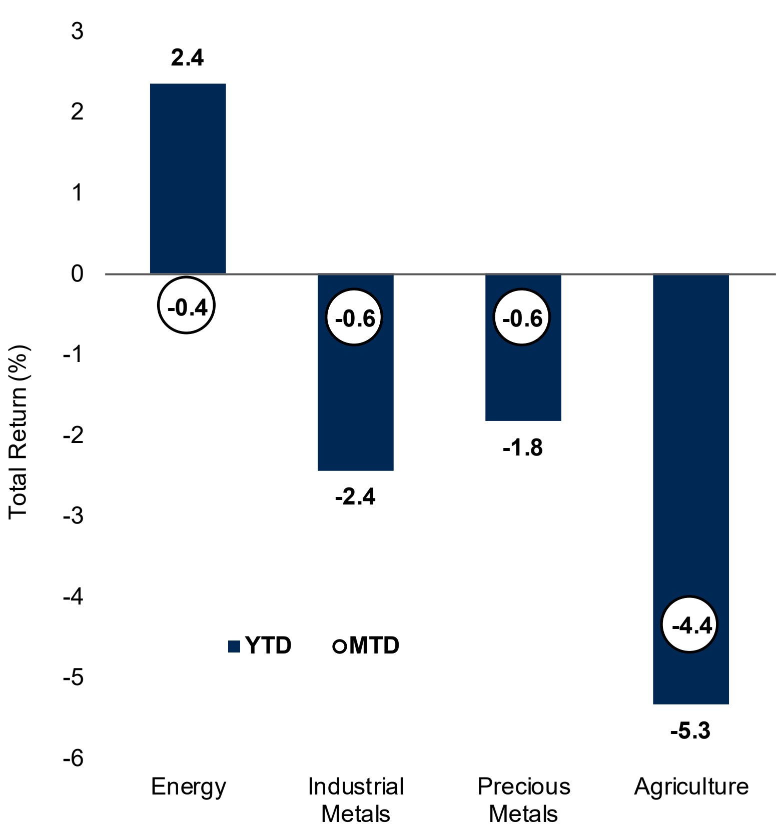
Real Asset Market Update

Commodity Performance (February 2024)

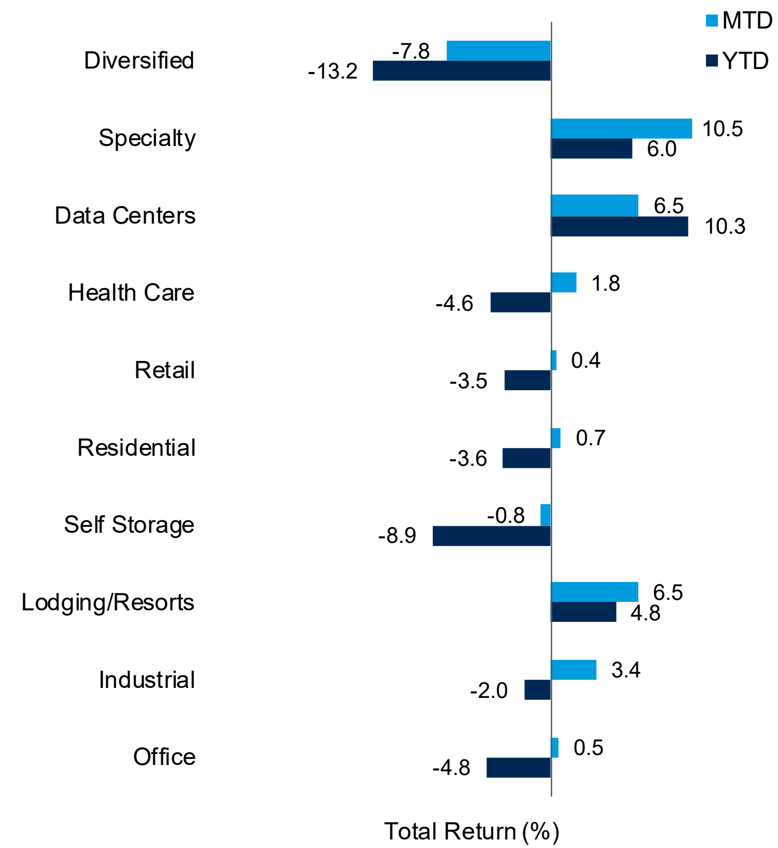
Commodity markets fell during February, with all subcomponents in negative territory. Energy saw essentially flat oil prices, while natural gas prices fell over 15% during the month. Agriculture was particularly impacted by negative pressure in the wheat and soybean markets.



Source: FactSet. As of February 29, 2024.

REIT Sector Performance (February 2024)

REITs posted a gain in February. Sub-sector results were mixed. Lodging/resorts has benefited from an uptick in travel so far in 2024 compared to this time 2023. The more rate sensitive areas of Diversified REITs were a headwind for the sub-sector during the month.



Source: FactSet. As of February 29, 2024.

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Financial Markets Performance

Total Return as of February 29, 2024
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	0.4%	0.9%	5.3%	2.5%	2.0%	1.8%	1.3%	0.9%
Bloomberg U.S. TIPS	-1.1%	-0.9%	2.5%	-0.9%	2.7%	2.2%	2.1%	3.4%
Bloomberg Municipal Bond (5 Year)	0.1%	-0.3%	4.0%	-0.1%	1.4%	1.6%	1.7%	2.5%
Bloomberg High Yield Municipal Bond	0.8%	0.3%	8.3%	0.5%	3.3%	4.0%	4.5%	6.7%
Bloomberg U.S. Aggregate	-1.4%	-1.7%	3.3%	-3.2%	0.6%	0.9%	1.4%	2.6%
Bloomberg U.S. Corporate High Yield	0.3%	0.3%	11.0%	1.8%	4.2%	4.2%	4.3%	9.0%
Bloomberg Global Aggregate ex-U.S. Hedged	-0.2%	-0.3%	7.1%	-0.6%	1.2%	1.8%	2.6%	3.2%
Bloomberg Global Aggregate ex-U.S. Unhedged	-1.2%	-3.5%	2.7%	-7.4%	-2.4%	-0.8%	-1.4%	1.0%
Bloomberg U.S. Long Gov / Credit	-2.4%	-3.9%	1.6%	-7.7%	0.0%	0.7%	2.2%	4.6%
Global Equity Markets	**MTD**	**YTD**	**1YR**	**3YR**	**5YR**	**7YR**	**10YR**	**15YR**
S&P 500	5.3%	7.1%	30.5%	11.9%	14.8%	13.6%	12.7%	16.0%
Dow Jones Industrial Average	2.5%	3.8%	22.0%	10.2%	10.9%	11.8%	11.6%	14.8%
NASDAQ Composite	6.2%	7.3%	41.6%	7.7%	17.4%	16.7%	15.2%	19.0%
Russell 3000	5.4%	6.6%	28.6%	9.9%	13.9%	12.9%	12.0%	15.8%
Russell 1000	5.4%	6.9%	29.8%	10.7%	14.4%	13.3%	12.4%	16.0%
Russell 1000 Growth	6.8%	9.5%	45.9%	12.5%	18.8%	18.0%	15.7%	18.4%
Russell 1000 Value	3.7%	3.8%	14.0%	8.4%	9.4%	8.2%	8.7%	13.4%
Russell Mid Cap	5.6%	4.1%	15.5%	5.5%	10.3%	9.9%	9.5%	15.3%
Russell Mid Cap Growth	7.5%	6.9%	25.0%	3.1%	11.6%	12.6%	10.9%	16.2%
Russell Mid Cap Value	4.8%	2.9%	10.9%	6.8%	8.9%	7.5%	8.2%	14.5%
Russell 2000	5.7%	1.5%	10.0%	-0.9%	6.9%	7.2%	7.1%	13.3%
Russell 2000 Growth	8.1%	4.7%	14.2%	-4.6%	6.5%	8.2%	7.3%	13.8%
Russell 2000 Value	3.3%	-1.4%	5.6%	2.5%	6.6%	5.8%	6.5%	12.4%
MSCI ACWI	4.3%	4.9%	23.1%	6.8%	10.5%	9.9%	8.4%	12.0%
MSCI ACWI ex. U.S.	2.5%	1.5%	12.5%	1.3%	5.4%	5.8%	4.0%	8.2%
MSCI EAFE	1.8%	2.4%	14.4%	4.4%	6.8%	6.6%	4.4%	8.6%
MSCI EAFE Growth	3.4%	4.6%	16.6%	2.4%	7.7%	7.8%	5.5%	9.3%
MSCI EAFE Value	0.2%	0.1%	12.1%	6.2%	5.4%	5.1%	3.0%	7.7%
MSCI EAFE Small Cap	0.4%	-1.3%	6.3%	-1.9%	4.2%	4.9%	4.3%	10.3%
MSCI Emerging Markets	4.8%	-0.1%	8.7%	-6.3%	1.9%	3.7%	3.0%	7.4%
Alternatives	**MTD**	**YTD**	**1YR**	**3YR**	**5YR**	**7YR**	**10YR**	**15YR**
Consumer Price Index*	0.3%	0.3%	3.1%	5.7%	4.2%	3.5%	2.8%	2.6%
FTSE NAREIT Equity REITs	2.0%	-2.2%	5.6%	5.0%	4.4%	4.4%	6.4%	13.5%
S&P Real Assets	-0.5%	-2.6%	4.0%	2.4%	3.8%	4.0%	3.3%	7.4%
FTSE EPRA NAREIT Developed	-0.5%	-4.5%	1.5%	-0.4%	0.7%	2.3%	3.6%	10.2%
FTSE EPRA NAREIT Developed ex U.S.	-4.4%	-7.9%	-3.9%	-6.8%	-3.2%	0.1%	0.8%	7.3%
Bloomberg Commodity Total Return	-1.5%	-1.1%	-3.9%	7.1%	5.7%	3.4%	-1.8%	0.4%
HFRI Fund of Funds Composite*	0.8%	0.8%	5.0%	2.7%	4.8%	4.1%	3.4%	3.8%
HFRI Asset Weighted Composite*	1.9%	1.9%	5.5%	4.7%	4.4%	4.1%	3.7%	5.2%
Alerian MLP	4.3%	9.0%	30.9%	30.4%	11.2%	5.9%	2.7%	10.3%

*Sources: Morningstar, FactSet. As of February 29, 2024. *Consumer Price Index and HFRI indexes as of January 31, 2024.*

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Asset Allocation

Total Plan | **As of February 29, 2024**

	Asset Allocation ($)	Asset Allocation (%)	Target Allocation (%)	Differences (%)
Total Plan	**240,047,168**	**100.0**	**100.0**	**0.0**
Prepaid Pension Benefits	-297,135	-0.1	0.0	-0.1
Total Invested Assets	**240,344,303**	**100.1**	**100.0**	**0.1**
Short Term Liquidity	**311,200**	**0.1**	**0.0**	**0.1**
Key Bank Cash Portfolio	48,552	0.0	0.0	0.0
First American Govt Oblig Fund Z	2	0.0	0.0	0.0
First American Govt Oblig Fund Z- Alternatives	262,646	0.1	0.0	0.1
Fixed Income	**59,231,160**	**24.7**	**25.0**	**-0.3**
JIC Core Bond Fund I	41,808,799	17.4	17.5	-0.1
BlackRock Strategic Income Opportunities K	17,422,360	7.3	7.5	-0.2
Equity	**171,875,667**	**71.6**	**69.0**	**2.6**
Domestic Equity	**105,225,069**	**43.8**	**41.0**	**2.8**
Mellon Large Cap Core	83,672,861	34.9	32.0	2.9
Mellon Smid Cap Core	21,552,207	9.0	9.0	0.0
International Equity	**65,954,994**	**27.5**	**27.5**	**0.0**
Mellon EAFE Fund	50,036,100	20.8	20.5	0.3
Mellon Emerging Markets	15,918,894	6.6	7.0	-0.4
Private Equity	**695,604**	**0.3**	**0.5**	**-0.2**
Hamilton Lane II	14,505	0.0	-	-
Hamilton Lane VII A	473,951	0.2	-	-
Hamilton Lane VII B	207,148	0.1	-	-
Real Assets	**8,926,278**	**3.7**	**6.0**	**-2.3**
UBS Trumbull Property Fund	8,926,278	3.7	6.0	-2.3

Valuations data as of:
Hamilton Lane VII - 09/30/2023
Hamilton Lane II - 09/30/2023
UBS Trumbull Property Fund - 09/30/2023

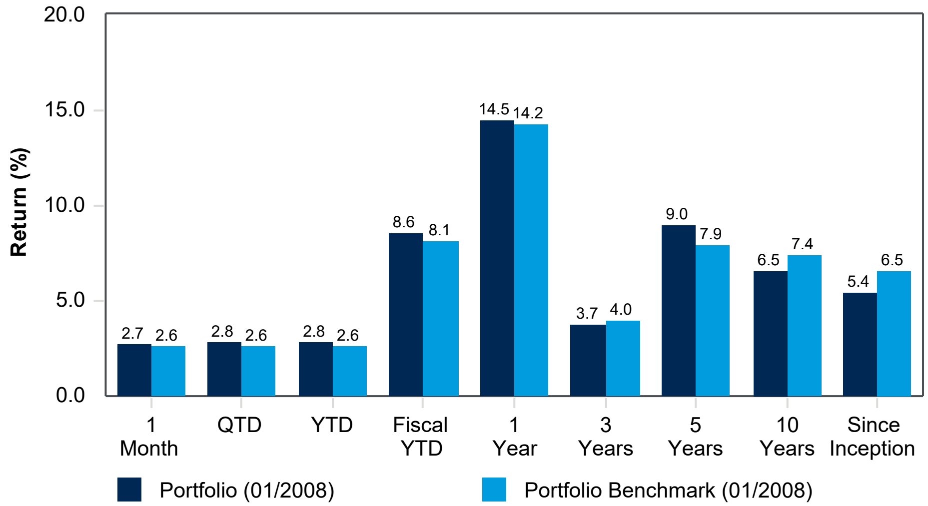
All private equity and real estate assets are adjusted for any subsequent capital activity.

Investments with a zero balance were held in the portfolio during the reporting period and will be removed once they no longer impact portfolio performance.
Asset Allocation weightings may not add up to 100% due to rounding.

Portfolio Dashboard

Total Invested Assets — **As of February 29, 2024**

Historical Performance



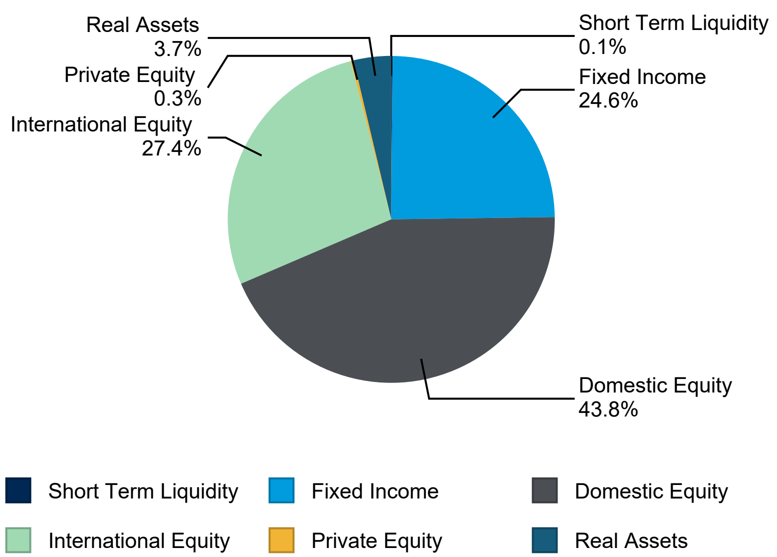
Summary of Cash Flows

	1 Month	QTD	YTD	Fiscal YTD	1 Year
Total Invested Assets					
Beginning Market Value	234,081,973	233,813,358	233,813,358	221,367,949	217,502,589
Net Contributions	-	-	-	20,873	-7,728,546
Gain/Loss	6,262,330	6,530,945	6,530,945	18,955,481	30,570,260
Ending Market Value	240,344,303	240,344,303	240,344,303	240,344,303	240,344,303

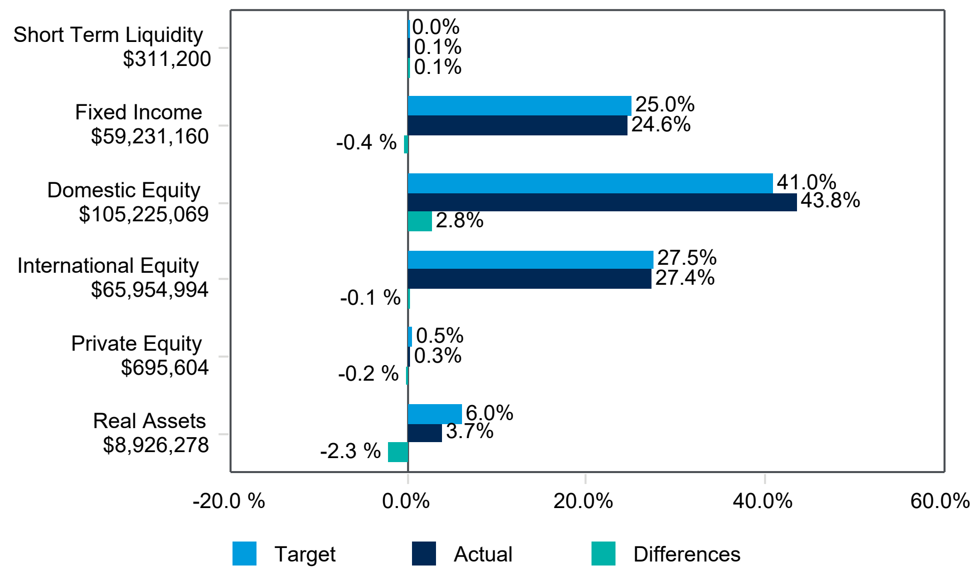
Current Benchmark Composition

From Date	To Date	
01/2023	Present	25.00% Blmbg. U.S. Aggregate, 32.50% S&P 500, 9.00% Russell 2500 Index, 20.50% MSCI EAFE (Net), 7.00% MSCI Emerging Markets (Net), 6.00% NCREIF Fund Index - ODCE (net)

Portfolio Allocation



Actual vs. Target Allocations



Client portfolio performance is presented net of underlying investment manager fees but gross of Fiducient Advisors' fees.

Asset Allocation

Total Invested Assets | **As of February 29, 2024**

	Asset Allocation ($)	Asset Allocation (%)	Target Allocation (%)	Differences (%)
Total Invested Assets	**240,344,303**	**100.0**	**100.0**	**0.0**
Short Term Liquidity	**311,200**	**0.1**	**0.0**	**0.1**
Key Bank Cash Portfolio	48,552	0.0	0.0	0.0
First American Govt Oblig Fund Z	2	0.0	0.0	0.0
First American Govt Oblig Fund Z- Alternatives	262,646	0.1	0.0	0.1
Fixed Income	**59,231,160**	**24.6**	**25.0**	**-0.4**
JIC Core Bond Fund I	41,808,799	17.4	17.5	-0.1
BlackRock Strategic Income Opportunities K	17,422,360	7.2	7.5	-0.3
Equity	**171,875,667**	**71.5**	**69.0**	**2.5**
Domestic Equity	**105,225,069**	**43.8**	**41.0**	**2.8**
Mellon Large Cap Core	83,672,861	34.8	32.0	2.8
Mellon Smid Cap Core	21,552,207	9.0	9.0	0.0
International Equity	**65,954,994**	**27.4**	**27.5**	**-0.1**
Mellon EAFE Fund	50,036,100	20.8	20.5	0.3
Mellon Emerging Markets	15,918,894	6.6	7.0	-0.4
Private Equity	**695,604**	**0.3**	**0.5**	**-0.2**
Hamilton Lane II	14,505	0.0	-	-
Hamilton Lane VII A	473,951	0.2	-	-
Hamilton Lane VII B	207,148	0.1	-	-
Real Assets	**8,926,278**	**3.7**	**6.0**	**-2.3**
UBS Trumbull Property Fund	8,926,278	3.7	6.0	-2.3

Valuations data as of:
Hamilton Lane VII - 09/30/2023
Hamilton Lane II - 09/30/2023
UBS Trumbull Property Fund - 09/30/2023

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

Investments with a zero balance were held in the portfolio during the reporting period and will be removed once they no longer impact portfolio performance.
Asset Allocation weightings may not add up to 100% due to rounding.

Manager Performance

As of February 29, 2024

	Allocation		Performance(%)									
	Market Value ($)	%	1 Month	QTD	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Total Invested Assets (excluding Prepaid)	**240,344,303**	**100.0**	**2.7**	**2.8**	**2.8**	**8.6**	**14.5**	**3.7**	**9.0**	**6.5**	**5.4**	**01/2008**
Policy Benchmark			*2.6*	*2.6*	*2.6*	*8.1*	*14.2*	*4.0*	*7.9*	*7.4*	*6.5*	
Secondary Benchmark			*2.6*	*2.6*	*2.6*	*8.2*	*14.0*	*3.7*	*7.4*	*7.1*	*6.4*	
Short Term Liquidity	**311,200**	**0.1**	**0.3**	**0.7**	**0.7**	**2.6**	**3.0**	**1.1**	**-**	**-**	**1.0**	**01/2021**
90 Day U.S. Treasury Bill			*0.4*	*0.8*	*0.8*	*3.6*	*5.2*	*2.4*	*2.0*	*1.3*	*2.3*	
Key Bank Cash Portfolio	**48,552**	**0.0**										
First American Govt Oblig Fund Z	**2**	**0.0**	**0.4**	**0.9**	**0.9**	**3.5**	**5.2**	**2.4**	**1.9**	**1.2**	**3.5**	**02/2022**
90 Day U.S. Treasury Bill			*0.4*	*0.8*	*0.8*	*3.6*	*5.2*	*2.4*	*2.0*	*1.3*	*3.5*	
First American Govt Oblig Fund Z- Alternatives	**262,646**	**0.1**	**0.4**	**0.9**	**0.9**	**3.5**	**5.2**	**2.4**	**1.9**	**1.2**	**3.5**	**07/2023**
Fixed Income	**59,231,160**	**24.6**	**-1.2**	**-1.3**	**-1.3**	**2.6**	**4.1**	**-2.7**	**-**	**-**	**-3.4**	**01/2021**
Blmbg. U.S. Aggregate			*-1.4*	*-1.7*	*-1.7*	*1.6*	*3.3*	*-3.2*	*0.6*	*1.4*	*-3.7*	
JIC Core Bond Fund I	**41,808,799**	**17.4**	**-1.5**	**-1.7**	**-1.7**	**1.5**	**3.1**	**-3.4**	**0.6**	**1.7**	**-2.1**	**03/2020**
Blmbg. U.S. Aggregate			*-1.4*	*-1.7*	*-1.7*	*1.6*	*3.3*	*-3.2*	*0.6*	*1.4*	*-2.0*	
IM U.S. Broad Market Core Fixed Income (MF) Median			-1.4	-1.4	-1.4	1.9	3.4	-3.2	0.7	1.4	-1.8	
JIC Core Bond Fund I Rank			84	90	90	80	72	67	52	23	68	
BlackRock Strategic Income Opportunities K	**17,422,360**	**7.2**	**-0.4**	**-0.1**	**-0.1**	**5.1**	**6.3**	**0.6**	**3.1**	**2.7**	**1.1**	**02/2022**
Blmbg. U.S. Aggregate			*-1.4*	*-1.7*	*-1.7*	*1.6*	*3.3*	*-3.2*	*0.6*	*1.4*	*-3.8*	
IM Alternative Credit Focus (MF) Median			0.0	0.5	0.5	4.8	6.3	0.2	2.1	1.8	0.7	
BlackRock Strategic Income Opportunities K Rank			79	80	80	44	51	44	31	17	41	

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Manager Performance

As of February 29, 2024

	Allocation		Performance(%)									
	Market Value ($)	%	1 Month	QTD	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Equity	**171,875,667**	**71.5**	**4.2**	**4.4**	**4.4**	**11.7**	**20.9**	**6.1**	**-**	**-**	**7.1**	**01/2021**
MSCI AC World Index (Net)			*4.3*	*4.9*	*4.9*	*12.5*	*23.1*	*6.8*	*10.5*	*8.4*	*7.0*	
Domestic Equity	**105,225,069**	**43.8**	**5.4**	**6.2**	**6.2**	**14.7**	**26.4**	**9.3**	**-**	**-**	**10.3**	**01/2021**
Domestic Equity Benchmark			*5.4*	*6.1*	*6.1*	*14.7*	*26.4*	*9.4*	*13.3*	*11.5*	*10.4*	
Mellon Large Cap Core	**83,672,861**	**34.8**	**5.3**	**7.1**	**7.1**	**15.7**	**30.4**	**11.9**	**14.7**	**-**	**14.1**	**04/2016**
S&P 500			*5.3*	*7.1*	*7.1*	*15.7*	*30.5*	*11.9*	*14.8*	*12.7*	*14.2*	
IM U.S. Large Cap Core Equity (MF) Median			5.3	7.1	7.1	15.9	29.3	10.6	13.8	11.6	13.2	
Mellon Large Cap Core Rank			51	50	50	54	38	25	25	-	22	
Mellon Smid Cap Core	**21,552,207**	**9.0**	**5.5**	**2.7**	**2.7**	**10.9**	**12.4**	**2.3**	**9.0**	**-**	**10.6**	**04/2016**
Russell 2500 Index			*5.4*	*2.7*	*2.7*	*10.8*	*12.2*	*2.1*	*8.8*	*8.4*	*10.4*	
IM U.S. SMID Cap Equity (MF) Median			5.4	3.6	3.6	10.8	12.1	3.2	8.8	8.2	10.1	
Mellon Smid Cap Core Rank			50	65	65	49	48	57	46	-	41	
International Equity	**65,954,994**	**27.4**	**2.5**	**1.8**	**1.8**	**7.5**	**13.2**	**0.9**	**-**	**-**	**1.6**	**01/2021**
International Equity Benchmark			*2.6*	*1.8*	*1.8*	*7.5*	*13.0*	*1.2*	*5.8*	*4.5*	*2.0*	
Mellon EAFE Fund	**50,036,100**	**20.8**	**1.8**	**2.5**	**2.5**	**8.5**	**14.8**	**4.8**	**7.2**	**-**	**7.4**	**04/2016**
MSCI EAFE (Net)			*1.8*	*2.4*	*2.4*	*8.4*	*14.4*	*4.4*	*6.8*	*4.4*	*6.9*	
IM International Large Cap Core Equity (MF) Median			2.9	2.4	2.4	7.0	13.5	3.6	6.7	3.8	6.5	
Mellon EAFE Fund Rank			87	45	45	21	33	15	33	-	19	
Mellon Emerging Markets	**15,918,894**	**6.6**	**4.7**	**-0.2**	**-0.2**	**4.2**	**8.2**	**-6.6**	**1.7**	**-**	**4.9**	**04/2016**
MSCI Emerging Markets (Net)			*4.8*	*-0.1*	*-0.1*	*4.6*	*8.7*	*-6.3*	*1.9*	*3.0*	*5.0*	
IM Emerging Markets Equity (MF) Median			4.5	0.7	0.7	4.5	9.1	-6.7	2.4	2.7	5.0	
Mellon Emerging Markets Rank			40	70	70	52	58	49	64	-	51	

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Manager Performance

As of February 29, 2024

	Allocation		Performance(%)									
	Market Value ($)	%	1 Month	QTD	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Private Equity	695,604	0.3	0.0	0.0	0.0	-2.9	-6.7	-0.3	-	-	-0.2	01/2021
Hamilton Lane II	14,505	0.0	0.0	0.0	0.0	-19.9	-45.2	-24.5	-6.5	3.7	9.2	03/2009
Hamilton Lane VII A	473,951	0.2	0.0	0.0	0.0	-3.9	-6.0	2.7	7.2	9.4	9.9	07/2011
Hamilton Lane VII B	207,148	0.1	0.0	0.0	0.0	0.8	-3.5	-2.3	3.4	6.5	8.0	07/2011
UBS Trumbull Property Fund	8,926,278	3.7	0.0	0.0	0.0	-6.1	-16.0	-0.4	-1.9	-	0.7	07/2016
NCREIF Fund Index - ODCE (net)			*0.0*	*0.0*	*0.0*	*-7.0*	*-12.7*	*4.0*	*3.3*	*6.3*	*4.5*	

Valuations data as of:

Hamilton Lane VII - 09/30/2023
Hamilton Lane II - 09/30/2023
UBS Trumbull Property Fund - 09/30/2023

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Benchmark History

Total Invested Assets | **As of February 29, 2024**

Account Name	From Date	To Date	Benchmark
Total Invested Assets	**01/2023**	**Present**	**25.0% Blmbg. U.S. Aggregate, 32.5% S&P 500, 9.0% Russell 2500 Index, 20.5% MSCI EAFE (Net), 7.0% MSCI Emerging Markets (Net), 6.0% NCREIF Fund Index - ODCE (net)**
	09/2022	01/2023	25.0% Blmbg. U.S. Aggregate, 31.5% S&P 500, 9.0% Russell 2500 Index, 20.5% MSCI EAFE (Net), 7.0% MSCI Emerging Markets (Net), 6.0% NCREIF Fund Index - ODCE (net), 1.0% NCREIF Timberland Index
	05/2021	09/2022	18.0% Blmbg. U.S. Aggregate, 31.5% S&P 500, 10.5% Russell 2500 Index, 23.0% MSCI EAFE (Net), 10.0% MSCI Emerging Markets (Net), 6.0% NCREIF Fund Index - ODCE (net), 1.0% NCREIF Timberland Index
	12/2019	05/2021	20.0% Blmbg. U.S. Aggregate, 32.0% S&P 500, 18.0% Russell 2500 Index, 10.0% MSCI EAFE (Net), 10.0% MSCI Emerging Markets (Net), 8.0% NCREIF Fund Index - ODCE (net), 2.0% NCREIF Timberland Index
	06/2017	12/2019	20.0% Blmbg. Intermed. U.S. Government/Credit, 30.0% S&P 500, 18.0% Russell 2500 Index, 2.0% S&P Completion Index, 10.0% MSCI EAFE (Net), 10.0% MSCI Emerging Markets (Net), 8.0% NCREIF Fund Index - ODCE (net), 2.0% NCREIF Timberland Index
	01/2016	06/2017	28.0% Blmbg. Intermed. U.S. Government/Credit, 30.0% S&P 500, 18.0% Russell 2500 Index, 2.0% S&P Completion Index, 10.0% MSCI EAFE (Net), 10.0% MSCI Emerging Markets (Net), 2.0% NCREIF Timberland Index
	01/2008	01/2016	20.0% Blmbg. U.S. Aggregate, 32.0% S&P 500, 18.0% Russell 2500 Index, 10.0% MSCI EAFE (Net), 10.0% MSCI Emerging Markets (Net), 8.0% NCREIF Fund Index - ODCE (net), 2.0% NCREIF Timberland Index
Secondary Benchmark	**01/2023**	**Present**	**25.0% Blmbg. U.S. Aggregate, 32.5% S&P 500, 9.0% Russell 2500 Index, 20.5% MSCI EAFE (Net), 7.0% MSCI Emerging Markets (Net), 6.0% UBS Trumbull Property Fund**
	09/2022	01/2023	25.0% Blmbg. U.S. Aggregate, 31.5% S&P 500, 9.0% Russell 2500 Index, 20.5% MSCI EAFE (Net), 7.0% MSCI Emerging Markets (Net), 6.0% UBS Trumbull Property Fund, 1.0% Molpus SWF II
	05/2021	09/2022	18.0% Blmbg. U.S. Aggregate, 31.5% S&P 500, 10.5% Russell 2500 Index, 23.0% MSCI EAFE (Net), 10.0% MSCI Emerging Markets (Net), 6.0% UBS Trumbull Property Fund, 1.0% Molpus SWF II
	12/2019	05/2021	20.0% Blmbg. U.S. Aggregate, 32.0% S&P 500, 18.0% Russell 2500 Index, 10.0% MSCI EAFE (Net), 10.0% MSCI Emerging Markets (Net), 8.0% UBS Trumbull Property Fund, 2.0% Molpus SWF II
	06/2017	12/2019	20.0% Blmbg. Intermed. U.S. Government/Credit, 30.0% S&P 500, 18.0% Russell 2500 Index, 2.0% S&P Completion Index, 10.0% MSCI EAFE (Net), 10.0% MSCI Emerging Markets (Net), 8.0% UBS Trumbull Property Fund, 2.0% Molpus SWF II
	07/2016	06/2017	28.0% Blmbg. Intermed. U.S. Government/Credit, 30.0% S&P 500, 18.0% Russell 2500 Index, 2.0% S&P Completion Index, 10.0% MSCI EAFE (Net), 10.0% MSCI Emerging Markets (Net), 2.0% Molpus SWF II
	01/2016	07/2016	28.0% Blmbg. Intermed. U.S. Government/Credit, 30.0% S&P 500, 18.0% Russell 2500 Index, 2.0% S&P Completion Index, 10.0% MSCI EAFE (Net), 10.0% MSCI Emerging Markets (Net), 2.0% Molpus SWF II
	03/2009	01/2016	20.0% Blmbg. U.S. Aggregate, 32.0% S&P 500, 18.0% Russell 2500 Index, 10.0% MSCI EAFE (Net), 10.0% MSCI Emerging Markets (Net), 8.0% NCREIF Fund Index - ODCE (net), 2.0% Molpus SWF II
	01/2008	03/2009	20.0% Blmbg. U.S. Aggregate, 32.0% S&P 500, 18.0% Russell 2500 Index, 10.0% MSCI EAFE (Net), 10.0% MSCI Emerging Markets (Net), 8.0% NCREIF Fund Index - ODCE (net), 2.0% NCREIF Timberland Index

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 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 Capital US Treasury Inflation Protected Securities Index** consists of Inflation-Protection securities issued by the U.S. Treasury.
- **Bloomberg 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 Muni 1 Year Index** is the 1-year (1-2) component of the Municipal Bond index.
- **Bloomberg Muni 3 Year Index** is the 3-year (2-4) component of the Municipal Bond index.
- **Bloomberg Muni 5 Year Index** is the 5-year (4-6) component of the Municipal Bond index.
- **Bloomberg Muni 7 Year Index** is the 7-year (6-8) component of the Municipal Bond index.
- **Bloomberg 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 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 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 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%: U.S. Treasury Inflation Notes Total Return Index
  - **PIMCO Inflation Response Multi Asset Fund:** 45% Bloomberg 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 Bloomberg 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 US1-5Yr Gov/Cr Flt Adj Index:** Bloomberg U.S. 1–5 Year Government/Credit Bond Index through December 31, 2009; Bloomberg U.S. 1–5 Year Government/Credit Float Adjusted Index thereafter.
- **Vanguard Spliced Bloomberg US5-10Yr Gov/Cr Flt Adj Index:** Bloomberg U.S. 5–10 Year Government/Credit Bond Index through December 31, 2009; Bloomberg U.S. 5–10 Year Government/Credit Float Adjusted Index thereafter.
- **Vanguard Spliced Bloomberg US Agg Flt Adj Index:** Bloomberg U.S. Aggregate Bond Index through December 31, 2009; Bloomberg U.S. Aggregate Float Adjusted Index thereafter.
- **Vanguard Spliced Bloomberg US Long Gov/Cr Flt Adj Index:** Bloomberg U.S. Long Government/Credit Bond Index through December 31, 2009; Bloomberg 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 U.S. Aggregate Bond Index through May 31, 2005; 60% MSCI US Broad Market Index and 40% Bloomberg U.S. Aggregate Bond Index through December 31, 2009; 60% MSCI US Broad Market Index and 40% Bloomberg U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Blomberg U.S. Aggregate Float Adjusted Index thereafter.
- **Vanguard Spliced Intermediate-Term Tax-Exempt Index:** Bloomberg 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, outperforming75%.
- **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 that 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 an 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 dividin 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.

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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.

MATERIAL RISKS & LIMITATIONS

Fixed Income securities are subject to interest rate risks, the risk of default and liquidity risk. U.S. investors exposed to non-U.S. fixed income may also be subject to currency risk and fluctuations.
-Liability Driven Investing (LDI) Assets

Cash may be subject to the loss of principal and over longer period of time may lose purchasing power due to inflation.
-Short Term Liquidity

Domestic Equity can be volatile. The rise or fall in prices take place for a number of reasons including, but not limited to changes to underlying company conditions, sector or industry factors, or other macro events. These may happen quickly and unpredictably.

International Equity can be volatile. The rise or fall in prices take place for a number of reasons including, but not limited to changes to underlying company conditions, sector or industry impacts, or other macro events. These may happen quickly and unpredictably. International equity allocations may also be impact by currency and/or country specific risks which may result in lower liquidity in some markets.

Real Assets can be volatile and may include asset segments that may have greater volatility than investment in traditional equity securities. Such volatility could be influenced by a myriad of factors including, but not limited to overall market volatility, changes in interest rates, political and regulatory developments, or other exogenous events like weather or natural disaster.

Private Equity involves higher risk and is suitable only for sophisticated investors. Along with traditional equity market risks, private equity investments are also subject to higher fees, lower liquidity and the potential for leverage that may amplify volatility and/or the potential loss of capital.

Private Credit involves higher risk and is suitable only for sophisticated investors. These assets are subject to interest rate risks, the riskof default and limited liquidity. U.S. investors exposed to non-U.S. private credit may also be subject to currency risk and fluctuations.

Private Real Estate involves higher risk and is suitable only for sophisticated investors. Real estate assets can be volatile and may include unique risks to the asset class like leverage and/or industry, sector or geographical concentration. Declines in real estate value may take place for a number of reasons including, but are not limited to economic conditions, change in condition of the underlying property or defaults by the borrow.

Marketable Alternatives involves higher risk and is suitable only for sophisticated investors. Along with traditional market risks, marketable alternatives are also subject to higher fees, lower liquidity and the potential for leverage that may amplify volatility or the potential for loss of capital. Additionally, short selling involved certain risks including, but not limited to additional costs, and the potential for unlimited loss on certain short sale positions.

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 you 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.

FIDUCIENT Advisors

Helping Clients Prosper

BERS Asset Allocation Analysis

February 2024

Disclosure

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2024-2033 Ten-Year Outlook

			2024	2023	Y / Y Change
Fixed Income	The Federal Reserve continued its battle with inflation in 2023 and the market began to believe the rhetoric of "higher for longer". Yields rose across much of fixed income, improving forward long-term return assumptions.	U.S. Bonds	5.7%	5.0%	0.6%
		TIPS	5.2%	4.6%	0.6%
		Dynamic Bonds[1]	6.5%	5.6%	0.9%
	Credit, specifically high yield, was one of the best performing fixed income asset classes in 2023. 2024 projections rose solely based on higher Treasury rates as spreads (the additional yield aboveTreasuries) fell over the year.	High Yield Bonds	7.7%	7.1%	0.6%
		Global Bonds	5.6%	5.1%	0.5%
	Municipal bond forecasts rose as well based on higher rates, but so did interest rate risk given the structure of the market.	Muni Bond[2]	6.3%	5.8%	0.5%
		Muni High Yield[2]	10.2%	9.9%	0.3%
Global Equity	U.S. equity forecasts are nearly flat year over year driven by higher valuations and very modest earnings growth for 2023. International forecasts fell on a similar accord, but to a larger degree also driven by higher anticipated volatility outside of the U.S. Valuations outside the U.S. remain below their 20-year averages while U.S. valuations remain above 20-year averages.	U.S. All Cap	6.5%	6.7%	-0.2%
		Intl Developed Equity	8.2%	8.9%	-0.7%
		Emerging Markets	10.1%	10.8%	-0.7%
Real Assets & Alternatives	Real assets broadly struggled to keep up with equity markets as inflation fell throughout 2023. On the backs of lower prices and inflation remaining elevated, forecasts across real asset categories rose.	Real Estate	7.0%	6.4%	0.6%
		Broad Real Assets[3]	7.5%	6.8%	0.7%
	Marketable alternatives forecasts benefited from higher base rates of returns earned in Treasuries and higher expected volatility within and across asset classes.	Marketable Alts	8.4%	8.1%	0.3%
	Private equity forecasts are largely flat year over year based on the offsetting factors of improving private equity valuations and more modest earnings growth outlook.	Private Equity	9.5%	9.7%	-0.2%

1) Dynamic bonds are a blend of 33% Cash, 33% Corp HY, and 34% Global Bonds. 2) Tax Equivalent yield based on highest marginal Federal tax rate (37%). 3) Broad Real Assets is 20% REITS, 20% Global Infrastructure, 20% Commodities, 20% US Bonds, 15% Corp High Yield, 5% TIPS Outputs and opinions are as of the date referenced and are subject to change based on market or economic conditions. Information is intended for general information purposes only and does not represent any specific investment recommendation. Please consult with your advisor, attorney and accountant, as appropriate, regarding specific advice. There is no guarantee that any of these expectations will become actual results.. 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 indices used to represent each asset class. Past performance does not indicate future performance and there is a possibility of a loss. Please see the Frontier Engineer Hypothetical Performance Disclosures at the end of the presentation for additional information.

2024 Allocation Updates

		Y / Y Change	Context
Fixed Income	U.S. Bonds	▲▲	Increased yields, attractive return potential relative to global equity and a Fed policy path that has increasing potential to moderate or move lower makes intermediate investment-grade bonds more attractive.
	TIPS	▼	High real yields and inflation forecasts above the Fed's target of 2% make TIPS compelling, but higher yields and less overall interest rate risk make U.S. Bonds more so, therefore we are reducing TIPS modestly year over year.
	Dynamic Bonds	- -	Given broader interest rate volatility and the potential for more credit relative events in the future, flexibility remains an attractive trait but we are not compelled to shift allocations at this time.
	High Yield Bonds	▼	While yields are high relative to recent history, spreads (the yield above Treasuries) are modest. Coupled with our view that credit risk will rise in the coming years, we are reducing our allocation to credit risk broadly.
	Global Bonds	▼	The outlook for global bonds remains attractive, but on a risk-adjusted basis slightly less than U.S. Therefore, we are modestly reducing the position.
Global Equity	U.S. Large Cap	▲	We remain underweight U.S. large cap stocks based on the relative opportunity to U.S. small and international equities. However, we have reduced that underweight based on the significant percentage increase in U.S. equities in global indices.
	U.S. Mid/Small Cap	▼	We remain overweight U.S. small cap securities. The dispersion between U.S. large and small cap stocks driven by a handful of securities has produced near-all time relative valuation differences. Additionally, small cap securities may benefit from easing rate policies. However, we have reduced that overweight based on the significant percentage increase in U.S. large cap equities in U.S. indices.
	Int'l Developed Equity	▼	Non-U.S. equity remains attractive and an overweight within portfolios, but risk management compels us to temper how far to extend that view. Therefore, we are reducing our overweight slightly to non-U.S. equities. Valuations remain compelling both relative to both the U.S. and their own 20-year history. However, geopolitical risks remain elevated and in some way have expanded over the course of 2023.
	Emerging Markets	▼	
Real Assets & Alternatives	Real Estate	▼	Our overall level to real assets will remain the same year over year give our view of inflation remaining in the "messy middle". A 2% - 5% range offers compelling opportunities within the overall category. However, our mix is shifting away modestly from real estate and toward assets that can benefit from a wider variety of factors.
	Broad Real Assets	▲	

Portfolio Implications

- Our 10-year return forecasts show increased opportunity across fixed income and real assets with a modest reduction in equity return expectations.
  - *This makes for one of the more attractive risk-adjusted returns for fixed income relative to equity we have seen in several years.*

- We believe range-bound inflation opens multiple paths to lower rates, creating opportunities for tailwinds in fixed income and more rate-sensitive assets.

- Narrow market leadership in U.S. equities creates fragility within, and opportunity outside of, U.S. technology stocks.
  - *Exposure to large cap U.S. equity remains appropriate, but we also believe long-term investors will benefit from exposure to U.S. small and mid capitalization and non-U.S. stocks.*

- The most predicted recession in history has not yet come to pass. We believe investor mindsets should shift from **predict** to **prepare**, as risks remain acute and market timing futile.
  - *The best way to prepare for uncertainty is by building a well-diversified portfolio.*

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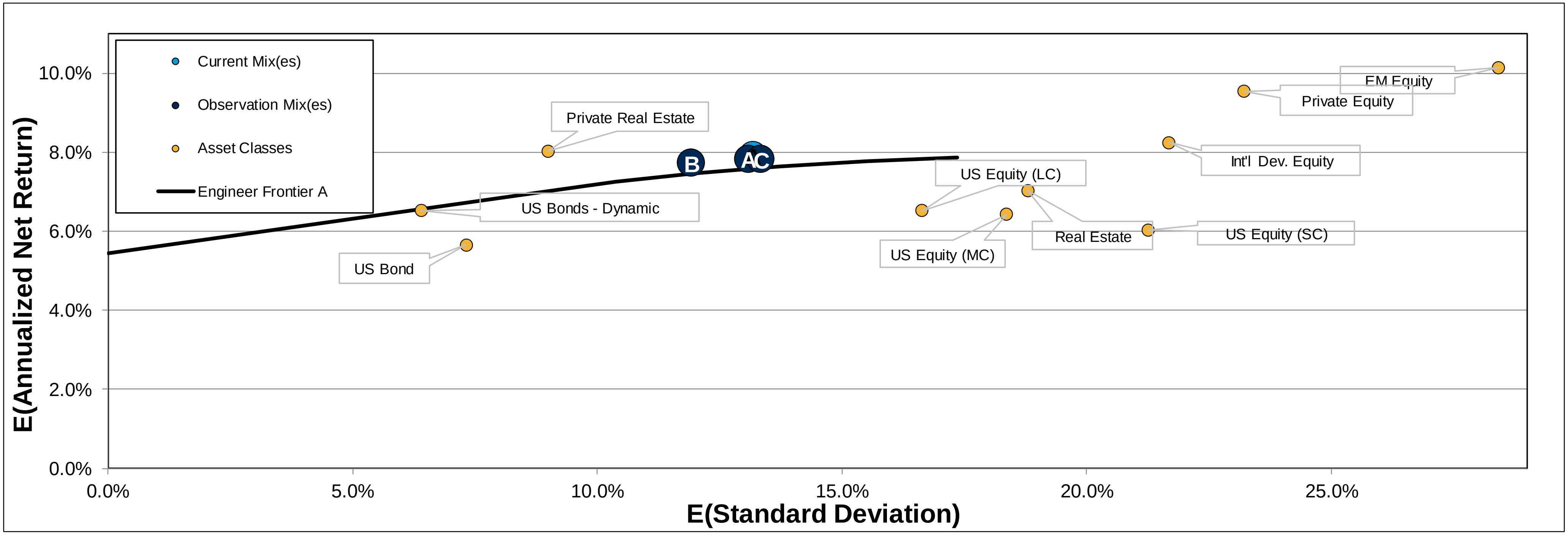
Asset Allocation Analysis

- We believe **Asset Allocation** is the primary determinant of long-term investment results.
- Our propriety **Frontier Engineer®** system is the cornerstone of asset allocation decisions.
- Our Capital Markets Group develops **Capital Market Assumptions** (CMAs) for each major asset class at least annually.
  - ✓ The Capital Markets Group considers and analyzes a wide variety of factors that we believe will have the greatest impact on future returns and risks for each asset class studied.
  - ✓ Our CMAs are not intended to predict the future return in any single year, but rather to reflect our median expected outcome over the next ten years.
  - ✓ Our forecasting efforts center on **a ten-year horizon**. Any adjustments made to extend the forecast horizon to **twenty years** or beyond are grounded in our expectation that asset classes ultimately mean revert towards longer term historical averages.
  - ✓ Fiducient Advisors' Capital Markets Team develop our CMAs based on a "building block" approach outlined in our white paper "Capital Market Forecasts". (Copies are available upon requested.)
- **Correlations** (how asset classes behave in reference to one another) also significantly impact asset allocation analysis.
- **Fat Tails** (non-normal return elements of skewness & kurtosis) also meaningfully impact our asset allocation analysis.

Asset Allocation Analysis: Frontier Engineer® Analysis

	Asset Allocation													Forecasts				Past (1/88-11/23)	
	Fixed Income	Equity	Real Assets	Alternatives	US Bond	US Bonds - Dynamic	US Equity (LC)	US Equity (MC)	US Equity (SC)	Int'l Dev. Equity	EM Equity	Real Estate	Private Real Estate	Private Equity	Annualized Net Return	Annualized Volatility	Normal 100 Year Flood*	Non-Normal 100 Year Flood**	Annualized Net Return	Annualized Volatility
Current Mix (A)	25%	69%	6%	1%	17.5%	7.5%	32.0%	6.4%	2.6%	20.5%	7.0%		6.0%	0.5%	7.9%	13.2%	-22%	-29%	8.9%	11.4%
Observation Mix (A)	27%	69%	4%	1%	20%	7%	33%	4.0%	5.5%	19.0%	7.0%	0%	4%	0.5%	7.8%	13.1%	-22%	-28%	8.8%	11.2%
Observation Mix (B)	35%	61%	4%	1%	27.5%	7.5%	28.0%	6%	3.5%	16.5%	6.5%	0%	4%	0.5%	7.7%	11.9%	-19%	-25%	8.6%	10.1%
Observation Mix (C)	27%	69%	4%	1%	20%	7%	33%	4.0%	5.5%	19.0%	7.0%	4%		0.5%	7.8%	13.3%	-22%	-28%	8.9%	11.1%

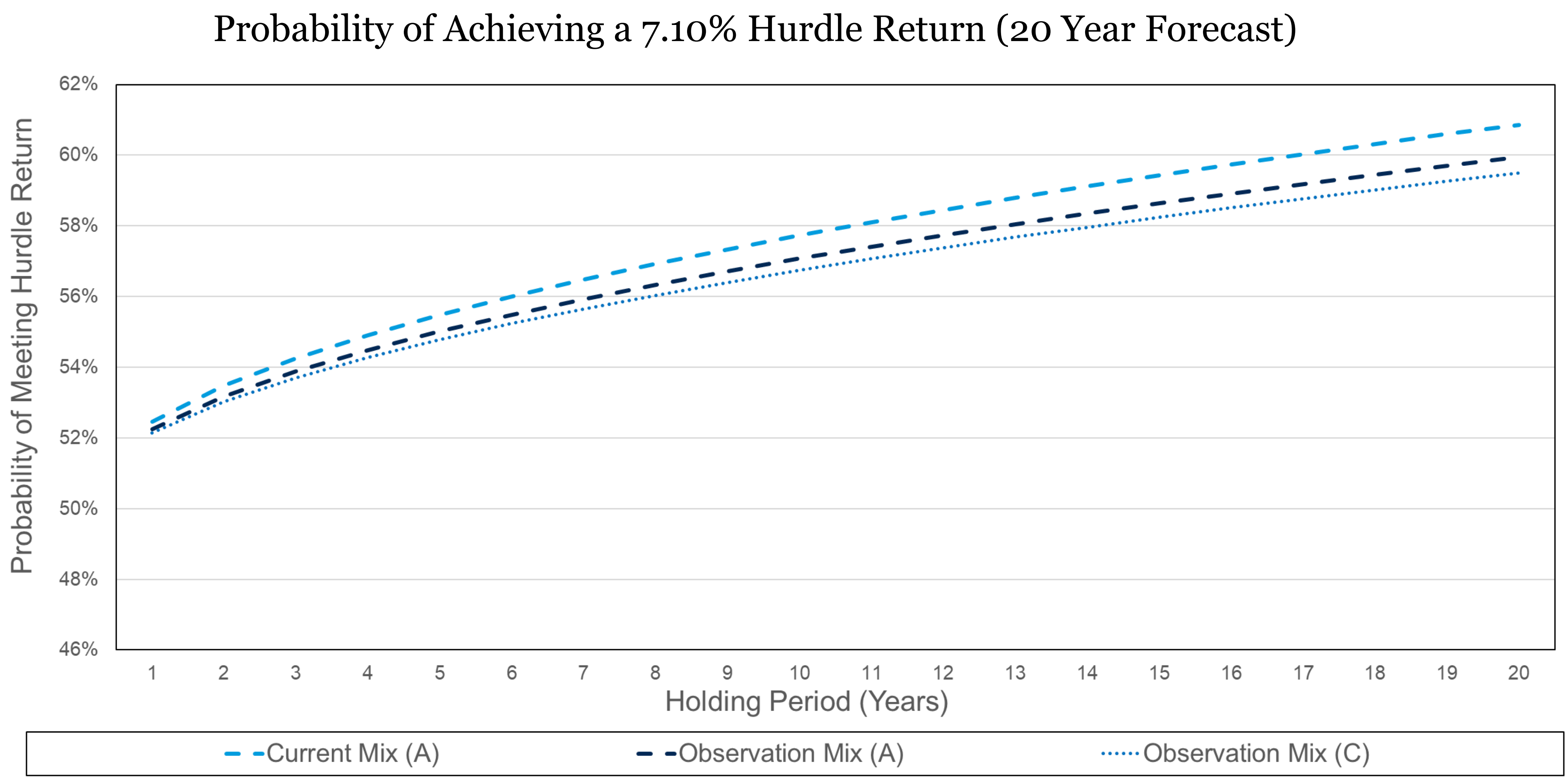


The expected one in a hundred worst case calendar year return based on normally distributed capital market assumptions. Greater losses are possible (1% expected likelihood).

***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 net 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 the Frontier Engineer Hypothetical Performance Disclosures at the end of the presentation for additional 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. Please refer to the Capital Markets Assumptions Slide for the hypothetical alpha and hypothetical fee inputs used in the calculation methodology.

Asset Allocation Analysis: Probability of Success



**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 net 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 the Frontier Engineer Hypothetical Performance Disclosures at the end of the presentation for additional 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. Please refer to the Capital Markets Assumptions Slide for the hypothetical alpha and hypothetical fee inputs used in the calculation methodology.

Allocation Changes for Consideration by BERS

Investment Name	Action	Current Target Allocation	New Allocation	Change
Cash	*No change*	**0.0%**	**0.0%**	**0.0%**
Fixed Income	*Increase*	**25.0%**	**27.0%**	**2.0%**
Core Bonds	Increase	17.5%	20.0%	2.5%
Dynamic Bonds	Decrease	7.5%	7.0%	-0.5%
Domestic Equity	*Increase*	**41.0%**	**42.5%**	**1.5%**
US Large Cap	Increase	32.0%	33.0%	1.0%
SMID Cap	Increase	9.0%	9.5%	0.5%
International Equity	*Decrease*	**27.5%**	**26.0%**	**-1.5%**
Developed Markets	Decrease	20.5%	19.0%	-1.5%
Emerging Markets	No change	7.0%	7.0%	0.0%
Private Real Estate	*No change*	**6.0%**	**4.0%**	**-2.0%**
Private Equity	*No change*	**0.5%**	**0.5%**	**0.0%**
Investment Portfolio Total		**100.0%**	**100.0%**	**0.0%**

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U.S. Investment Grade Bonds

Represented by the Barclays U.S. Aggregate Bond Index, the category represents investment grade bonds traded in United States. The index includes Treasury securities, Government agency bonds, Mortgage-backed bonds, Corporate bonds and a small amount of foreign bonds traded in the US. Municipal bonds and TIPS are excluded from the index.

10-Year Forecasts

Annual Return	Annual Risk
5.7%	7.3%

Historical Returns as of 12/31/23

Bloomberg US Agg Bond TR USD

	1 Year	3 Year	5 Year	10 Year	15 Year
Annualized Total Returns	5.5%	-3.3%	1.1%	1.8%	2.7%
Annualized Standard Deviation	8.5%	7.2%	6.2%	4.8%	4.2%

Pros:
- *Intermediate Duration:* Relatively modest average duration (typically between 5 - 7 years) leads to moderate volatility.
- *High Quality:* Heavy exposure to the highest quality (AAA) U.S. fixed income segments. No high yield (BB or lower) exposure.
- *Deflation/Disinflation Protection:* Declining interest rates lead to short-term price gains.
- *Portfolio Ballast:* Typically provides favorable correlation benefits relative to risk assets in times of economic and/or financial turmoil.

Cons:
- *Modest Return Potential:* High quality nature moderates return potential relative to riskier segments of the portfolio.
- *Credit Risk:* Subject to some relatively modest credit risk.
- *Interest Rate Risk:* Bond prices fall in a rising interest rate (and/or inflationary) environment.

Highest Correlation:

TIPS
Municipal Bonds
Global Bonds

Lowest Correlation:

EM Equity
U.S. Small Cap
Global Equity

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Dynamic Bonds

Bonds issued in the United States & foreign developed countries including but not limited to, Japan, United Kingdom, France, Germany, Italy, Spain, Canada, Netherlands, Belgium, Australia, Denmark, Sweden and emerging economies. Issues include government securities, corporate credit, structured securities and derivatives. Derivative allocations include futures, swaps and forwards, which may be utilized to hedge exposures or create synthetic exposures.

10-Year Forecasts

Annual Return	Annual Risk
6.5%	6.4%

Historical Returns as of 12/31/23

***Custom Blend of Indices**

	1 Year	3 Year	5 Year	10 Year	15 Year
Annualized Total Returns	8.6%	0.8%	3.0%	2.8%	4.4%
Annualized Standard Deviation	4.3%	4.5%	4.5%	3.4%	3.4%

** Dynamic bonds are a blend of 33% Cash, 33% Corp HY, and 34% Global Bonds.*

Pros:

- *Large Opportunity Set:* There are many fixed income opportunities other than traditional U.S. Government and investment grade corporate bonds. Many of the world's bonds are issued outside of the U.S.
- *Limited Interest Rate Exposure:* Strategies exhibit lower interest rate exposures through the utilization of active duration management, hedging strategies, relative value trades, cash, or derivatives.
- *Diversification Benefits:* Historically, offered low correlation to other fixed income asset classes and global equities.

Cons:

- *Credit risk*: Potential elevated allocations to credit increases default risk and correlations to equity portfolios.
- *Concentration:* Portfolios are structured to be dynamic, tactical, and flexible. Because of this, portfolios may result in concentrated single sector or market exposures depending on prevailing market conditions.
- *Foreign exchange:* Global in nature, these portfolios will oscillate between dollar denominated and non-dollar securities and currency positions. This may result in additional volatility depending on exchange rate movements.

Highest Correlation:

HY Bonds
Broad Real Assets
Global Infrastructure

Lowest Correlation:

Foreign Bonds
Commodity Futures
Municipal Bonds

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Large Cap U.S. Stocks

Stocks with market capitalizations greater than $15 Billion. Large cap stocks represents the vast majority of the total U.S. equity market.

10-Year Forecasts

Annual Return	Annual Risk
6.5%	16.6%

Historical Returns as of 12/31/23

S&P 500 TR USD

	1 Year	3 Year	5 Year	10 Year	15 Year
Annualized Total Returns	26.3%	10.0%	15.7%	12.0%	14.0%
Annualized Standard Deviation	14.7%	17.5%	18.5%	15.2%	15.4%

Pros:
- *Large and Liquid Market:* U.S. large cap stocks represent the largest and most liquid segment of the global equity market.
- *Long Historical Data Set*: The S&P 500 Index performance history dates back to January 1, 1926.
- *Less Volatility:* Lower long-term volatility than mid cap, small cap, or foreign equity markets.

Cons:
- *Risk:* Subject to equity risk.
- *Lower Risk Premium:* Less risk, but potentially less long-term return than mid cap, small cap, or emerging market equities.
- *Concentration:* Some large cap benchmarks (S&P 500 Index and Russell 1000 Growth Index) have become increasingly more concentrated with 5-7 stocks driving most of the return, making it challenging for active managers on a relative performance basis.

Highest Correlation:

U.S. All Cap
U.S. Mid Cap
Global Equity

Lowest Correlation:

Foreign Bonds
TIPS
Municipal Bonds

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Mid Cap U.S. Stocks

Stocks between $3 and $15 billion in market capitalization.

10-Year Forecasts

Annual Return	Annual Risk
6.4%	18.4%

Historical Returns as of 12/31/23

Russell Mid Cap TR USD

	1 Year	3 Year	5 Year	10 Year	15 Year
Annualized Total Returns	17.2%	5.9%	12.7%	9.4%	13.6%
Annualized Standard Deviation	20.1%	19.4%	21.5%	17.2%	17.5%

Pros:
- *Risk Premium:* Offers a potential risk-premium over large cap stocks.
- *Higher Growth:* Smaller companies can grow earnings faster than larger companies.
- *Less Volatility:* Lower long-term volatility than small cap stocks.

Cons:
- *Risk:* Higher volatility than large cap stocks.
- *Diversification:* High correlation to both large cap and small cap stocks. Mid cap has a very high correlation to a 60/40 large & small cap mix.
- *Arbitrary Classification:* Arbitrary divide between "smaller" large cap and "larger" mid cap stocks. Conflicting definitions of mid-small cap barrier.

Highest Correlation:

U.S. All Cap
U.S. Large Cap
U.S. Small Cap

Lowest Correlation:

Foreign Bonds
Municipal Bonds
TIPS

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Small Cap U.S. Stocks

Stocks with market capitalizations of $3 billion or less.

10-Year Forecasts

Annual Return	Annual Risk
6.0%	21.3%

Historical Returns as of 12/31/23

Russell 2000 TR USD

	1 Year	3 Year	5 Year	10 Year	15 Year
Annualized Total Returns	16.9%	2.2%	10.0%	7.2%	11.3%
Annualized Standard Deviation	24.2%	21.4%	24.2%	20.2%	20.5%

Pros:

- *Risk Premium:* Offers a potential risk-premium over large and mid cap stocks.
- *Higher Growth:* Smaller companies can grow earnings faster than larger companies.
- *Upside:* Virtually all large cap stocks started as small cap stocks at one time in their history.

Cons:

- *Risk:* Higher volatility than large cap and mid cap stocks.
- *Liquidity/Opportunity Set:* Smaller capitalization stocks have less liquidity and marketability. Access to quality small cap managers is often constrained.

Highest Correlation:

U.S. Mid Cap
U.S. All Cap
U.S. Large Cap

Lowest Correlation:

Foreign Bonds
Municipal Bonds
TIPS

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International Developed Equity

Stocks of companies located outside of the U.S. in developed countries. Countries include Japan, the United Kingdom, France, Germany, Australia, Austria, Belgium, Denmark, Finland, Hong Kong, Ireland, Italy, Israel, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, and Switzerland. Canada is also considered an international developed market but is not included in the MSCI EAFE Index.

10-Year Forecasts

Annual Return	Annual Risk
8.2%	21.7%

Historical Returns as of 12/31/23

MSCI EAFE GR USD

	1 Year	3 Year	5 Year	10 Year	15 Year
Annualized Total Returns	18.9%	4.5%	8.7%	4.8%	7.4%
Annualized Standard Deviation	16.9%	16.8%	18.1%	15.2%	16.8%

Pros:

- *Large Universe:* Consists of publicly traded companies in developed countries domiciled outside of the U.S. Many of the best companies in the world are located outside of the U.S.
- *Diversification*: Higher correlation to U.S. equity markets in recent years, but still low enough to provide diversification benefits.
- *Currency Diversification*: Add diversification through foreign currency exposure (away from the U.S. dollar).

Cons:

- *Equity Risk:* Subject to global economic/financial conditions.
- *Currency Risk:* Subject to currency risk as investment returns are translated back into U.S. dollars.
- *Political, Financial, Currency, and Regulatory Risks*: Each country or region has its own political, financial, currency and regulatory risks.
- *Relative Performance:* Can experience prolonged periods of out- or underperformance relative to U.S. equities. A strong U.S. Dollar can be a major headwind for performance relative to U.S. equities.

Highest Correlation:

Global Equity
Global Infrastructure
EM Equity

Lowest Correlation:

Municipal Bonds
US Bonds
TIPS

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Emerging Markets Equity

Stocks of companies located outside of the U.S. in developing countries. Emerging markets countries are nations with social or business activity in the process of rapid growth and industrialization. Emerging market countries in the MSCI Emerging Markets index include China, Brazil, South Korea, Taiwan, South Africa, India, Mexico, Israel, Malaysia, Chile, Turkey, Thailand, Poland, Hungary, Greece, Colombia, the Czech Republic, Egypt, the Philippines, Argentina, Indonesia, Kuwait, Peru, and Saudi Arabia.

10-Year Forecasts

Annual Return	Annual Risk
10.1%	28.4%

Historical Returns as of 12/31/23

MSCI EM GR USD

	1 Year	3 Year	5 Year	10 Year	15 Year
Annualized Total Returns	10.3%	-4.7%	4.1%	3.0%	6.9%
Annualized Standard Deviation	18.1%	17.4%	19.2%	17.2%	19.2%

Pros:
- *Higher Return Potential:* Emerging economies may exhibit higher GDP growth than developed markets.
- *Diversification:* Diversification benefits, particularly if measured over longer holding periods (decades).
- *Currency:* Provides diversification through foreign currency exposure (away from the U.S. dollar).
- *Large Opportunity Set:* The universe includes thousands of companies and contains many world class companies.

Cons:
- *Volatility*: Opportunity for high returns comes with increased risk.
- *Sensitivity to Extremes*: More sensitivity to global economic crisis. Correlations with other risky assets rise during periods of extreme stress.
- *Sensitivity to Capital Flows:* Capital flows into and out of the asset class can cause heightened volatility.
- *Political, Financial, Currency, and Regulatory Risks*: Emerging market countries have greater political, financial, currency and regulatory instability than developed markets.
- *Increased Governance Risk:* Companies in emerging markets sometimes have governance structures that are less favorable to minority investors and a lack of transparency can also be an issue for investors.

Highest Correlation:

Global Equity
EM Bonds
International Equity

Lowest Correlation:

U.S. Bonds
Municipal Bonds
Foreign Bonds

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Real Estate Investment Trusts

Real Estate Investment Trusts (or REITs) is a tax designation for a companies investing in real estate that reduces or eliminates corporate income taxes. In return for the favorable tax treatment, REITs are required to distribute 90% of their (taxable) income to investors. REITs can be publicly or privately held. Public REITs may be listed on public stock exchanges like shares of common stock in other firms.

10-Year Forecasts

Annual Return	Annual Risk
7.0%	18.8%

Historical Returns as of 12/31/23

FTSE Nareit All Equity REITs TR USD

	1 Year	3 Year	5 Year	10 Year	15 Year
Annualized Total Returns	11.4%	5.7%	7.6%	8.0%	10.9%
Annualized Standard Deviation	22.5%	21.4%	20.7%	17.2%	20.5%

Pros:
- *Dividend Yield*: While an equity asset class, dividend yields have historically exceeded other equity classes.
- *Diversification Benefits*: Have often offered relatively low correlation to both stocks and bonds.

Cons:
- *Volatility*: Relatively high volatility.
- *Heavy Reliance on Credit:* REITs are unique in their heavy reliance on the credit markets, subjecting them to added risk in difficult credit environments.
- *Fat Tails*: Relatively high fixed cost businesses coupled with leverage make REITs vulnerable to extreme events (or fat left tails).

Highest Correlation:

Broad Real Assets
Global Infrastructure
U.S. Mid Cap

Lowest Correlation:

Foreign Bonds
Municipal Bonds
U.S. Bonds

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Broad Real Assets

A real asset is a value-generating, physical/tangible asset that has intrinsic value in and of itself. Examples of real assets include land, metals, real estate, infrastructure and commodities. Diversified real asset portfolios strategically and tactically allocate among the various real asset categories, with the goal of providing investors with absolute return, a hedge against rising inflation, and low correlation to more traditional investments.

10-Year Forecasts

Annual Return	Annual Risk
7.5%	11.8%

Historical Returns as of 12/31/23

S&P Real Asset TR USD

	1 Year	3 Year	5 Year	10 Year	15 Year
Annualized Total Returns	7.8%	3.9%	5.9%	3.9%	6.9%
Annualized Standard Deviation	13.2%	12.6%	14.0%	11.1%	11.2%

Pros:

- *Hedge against rising inflation:* Due to their inherent physical nature, real assets provide a hedge against rising levels of inflation, especially unexpected inflation. Additionally, many real asset securities have cash flows and revenue streams that are directly linked to CPI.
- *Diversification:* Real assets have low correlations with traditional asset classes, such as stocks and bonds.
- *Alternative Income:* Select areas, such as Real Estate and Infrastructure, often have an attractive income component that helps to mitigate volatility.

Cons:

- *Short history:* Diversified Real Assets are a relatively new asset class. While many of the underlying components themselves have longer track records, others, such as TIPS (late 1990's) and MLPs (early 1990's) remain limited.
- *Exposure to super-cycles:* The more tangible real asset categories (direct commodities, natural resources) have historically gone through super-cycles. This can result in lower returns for extended periods when inflation is subdued. This risk is mitigated through diversified portfolios' exposure to equities, which should mitigate prolonged periods of muted returns.
- *Unique Risk Exposures:* Real assets may be more heavily exposed to geopolitical, weather-related, and regulatory risks. These risks can often be sudden and unavoidable.
- *Heterogeneity:* Due to the breadth of the investable universe with multiple underlying categories, real asset portfolios can look quite different from another. This can create challenges in benchmarking and in comparing portfolios.

Broad Real Assets is 20% REITS, 20% Global Infrastructure, 20% Commodities, 20% US Bonds, 15% Corp High Yield, 5% TIPS. ***Any forecast represent median expectations and actual returns, volatilities and correlations will differ from forecasts. Please see Fiducient Advisors' most recent 10-Year Capital Market Forecasts white paper for additional information.*** *Use of Indices and Benchmark Return Indices cannot be invested in directly. Index performance is reported gross of fees and expenses and assumes the reinvestment of dividends and capital gains. January 31, 2023 Ten –Year Forecasted CMAs. Historical mix return calculations assume a weighted average excess return assumption of 0.5% with a Fiducient Advisors' hypothetical fee of 0.25%. Past performance does not indicate future performance and there is a possibility of a loss. 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. Please see the Frontier Engineer Hypothetical Performance Disclosures at the end of the presentation for additional information.*

Historical Annual Total Return

Annualized net returns as of 11/30/2023	Fixed Income	Equity	Real Assets	Alternatives	Past 3 Months (Not Annualized)	1-Year Return	3-Year Return	5-Year Return	7-Year Return	10-Year Return	15-Year Return	20-Year Return	25-Year Return	30-Year Return	35.92-Year Return
Current Mix (A)	25%	69%	6%	1%	0.9%	8.5%	4.1%	7.4%	7.9%	7.0%	9.7%	7.7%	7.0%	8.0%	8.9%
Observation Mix (A)	27%	69%	4%	1%	0.9%	8.3%	3.8%	7.3%	7.8%	6.9%	9.5%	7.6%	6.9%	7.9%	8.8%
Observation Mix (B)	35%	61%	4%	1%	0.8%	7.5%	3.0%	6.7%	7.1%	6.4%	8.9%	7.2%	6.7%	7.7%	8.6%
Observation Mix (C)	27%	69%	4%	1%	0.9%	8.2%	3.8%	7.3%	7.8%	6.9%	9.5%	7.6%	6.9%	7.9%	8.9%
Cash	100%				1.4%	5.1%	2.1%	1.9%	1.7%	1.2%	0.8%	1.4%	1.8%	2.4%	3.0%
TIPS	100%				0.1%	0.1%	-1.5%	2.7%	2.1%	2.0%	3.6%	3.5%	4.7%	4.7%	5.7%
US Bond	100%				0.3%	1.2%	-4.5%	0.7%	0.8%	1.4%	2.7%	3.0%	3.7%	4.3%	5.3%
US Bonds - Dynamic	100%				1.5%	5.5%	0.2%	2.4%	2.5%	2.6%	4.4%	3.8%	4.0%	4.6%	5.5%
For. Dev. Bond	100%				0.9%	1.3%	-6.9%	-1.4%	-0.3%	0.2%	1.4%	2.4%	2.9%	3.9%	4.6%
Global Bonds	100%				0.8%	2.0%	-6.4%	-0.7%	0.0%	-0.1%	1.7%	2.4%	2.9%	3.7%	4.9%
HY Bond	100%				2.1%	8.7%	1.4%	4.1%	4.3%	4.3%	9.4%	6.5%	6.2%	6.6%	7.6%
EM Bond	100%				-3.9%	6.0%	-4.7%	-0.3%	1.0%	-0.8%	2.8%	4.4%	6.2%	6.5%	7.5%
Global Equity		100%			1.7%	12.6%	6.2%	9.6%	10.2%	8.2%	10.7%	8.2%	6.4%	7.8%	8.0%
US Equity (AC)		100%			1.4%	12.6%	8.3%	11.8%	12.3%	11.2%	13.6%	9.6%	7.8%	9.9%	10.8%
US Equity (LC)		100%			1.7%	13.8%	9.8%	12.5%	13.0%	11.8%	13.7%	9.7%	7.6%	10.0%	10.8%
US Equity (MC)		100%			-0.5%	2.9%	4.9%	8.7%	9.1%	8.9%	13.3%	9.6%	9.2%	10.5%	11.4%
US Equity (SC)		100%			-4.4%	-2.6%	1.1%	4.8%	6.0%	6.1%	10.9%	7.6%	7.7%	8.3%	9.4%
Non-US Equity (ACWI)		100%			1.3%	9.8%	2.2%	5.6%	6.5%	3.9%	7.3%	6.3%	5.2%	5.8%	5.8%
Int'l Dev. Equity		100%			1.3%	13.0%	4.3%	6.5%	7.1%	4.4%	7.5%	6.2%	4.8%	5.7%	5.6%
EM Equity		100%			1.2%	4.6%	-3.7%	2.7%	4.8%	2.5%	7.2%	7.4%	7.6%	5.2%	9.4%
Real Estate			100%		0.7%	-2.8%	3.6%	4.1%	5.4%	7.1%	11.4%	8.0%	9.0%	9.2%	9.7%
Broad Real Assets			100%		1.1%	1.5%	3.4%	4.3%	4.5%	3.5%	6.9%	6.5%	8.1%	7.4%	6.5%
Marketable Alternatives				100%	0.4%	4.0%	2.6%	4.3%	3.9%	3.1%	3.5%	3.3%	4.4%	4.8%	6.8%
Private Equity				100%	0.0%	1.1%	9.4%	13.7%	14.1%	13.1%	13.1%	13.2%	13.3%	15.2%	14.7%

[1]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).
[2]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 net 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 the Frontier Engineer Hypothetical Performance Disclosures at the end of the presentation for additional 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.

Calendar Year Total Return

Calendar Net Year Returns	Fixed Income	Equity	Real Assets	Alternatives	YTD 11/30/2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	1988
Current Mix (A)	25%	69%	6%	1%	12%	-16%	16%	13%	23%	-6%	18%	8%	0%	8%	18%	14%	-1%	14%	29%	-31%	8%	18%	10%	15%	28%	-10%	-6%	-4%	19%	13%	16%	14%	22%	1%	20%	5%	26%	-8%	23%	20%
Observation Mix (A)	27%	69%	4%	1%	12%	-16%	15%	13%	22%	-6%	17%	9%	0%	7%	18%	14%	-1%	14%	28%	-30%	8%	17%	9%	14%	28%	-10%	-6%	-4%	19%	13%	16%	14%	22%	1%	20%	5%	27%	-7%	23%	19%
Observation Mix (B)	35%	61%	4%	1%	10%	-15%	13%	13%	21%	-5%	16%	8%	0%	7%	15%	13%	0%	14%	26%	-27%	8%	16%	9%	13%	25%	-8%	-4%	-2%	16%	13%	16%	13%	22%	1%	19%	6%	26%	-5%	22%	18%
Observation Mix (C)	27%	69%	4%	1%	11%	-15%	15%	13%	22%	-6%	18%	9%	0%	7%	18%	14%	-1%	14%	28%	-30%	8%	17%	9%	14%	28%	-10%	-5%	-4%	19%	13%	16%	14%	23%	1%	20%	6%	27%	-6%	24%	19%
Cash	100%				5%	2%	0%	1%	2%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	2%	5%	5%	3%	1%	1%	2%	4%	6%	5%	5%	5%	5%	6%	4%	3%	4%	6%	8%	9%	7%
TIPS	100%				1%	-12%	6%	11%	8%	-1%	3%	5%	-1%	4%	-9%	7%	14%	6%	11%	-2%	12%	0%	3%	8%	8%	17%	8%	13%	2%	4%	3%	4%	18%	-3%	10%	7%	16%	9%	15%	8%
US Bond	100%				2%	-13%	-2%	8%	9%	0%	4%	3%	1%	6%	-2%	4%	8%	7%	6%	5%	7%	4%	2%	4%	4%	10%	8%	12%	-1%	9%	10%	4%	18%	-3%	10%	7%	16%	9%	15%	8%
US Bonds - Dynamic	100%				6%	-7%	1%	5%	8%	1%	4%	7%	-1%	3%	2%	7%	4%	7%	19%	-7%	4%	7%	3%	6%	10%	3%	6%	3%	3%	6%	9%	8%	14%	0%	10%	9%	21%	1%	15%	8%
For. Dev. Bond	100%				3%	-18%	-6%	8%	7%	1%	6%	3%	-2%	4%	-2%	4%	5%	4%	3%	9%	8%	5%	-2%	9%	10%	14%	1%	4%	-1%	15%	3%	8%	19%	1%	14%	6%	14%	9%	0%	6%
Global Bonds	100%				1%	-16%	-5%	9%	7%	-1%	7%	2%	-3%	1%	-3%	4%	6%	6%	7%	5%	9%	7%	-4%	9%	13%	17%	2%	3%	-5%	14%	4%	5%	20%	0%	11%	6%	16%	11%	15%	8%
HY Bond	100%				9%	-11%	5%	7%	14%	-2%	8%	17%	-4%	2%	7%	16%	5%	15%	58%	-26%	2%	12%	3%	11%	29%	-1%	5%	-6%	2%	2%	13%	11%	19%	-1%	17%	16%	46%	-10%	1%	13%
EM Bond	100%				4%	-12%	-9%	3%	13%	-6%	15%	10%	-15%	-6%	-9%	17%	-2%	16%	22%	-5%	18%	15%	6%	23%	17%	14%	10%	13%	20%	-8%	11%	38%	27%	-19%	17%	16%	46%	-10%	1%	13%
Global Equity		100%			17%	-18%	19%	17%	27%	-9%	25%	8%	-2%	5%	23%	17%	-7%	13%	35%	-42%	12%	22%	11%	16%	35%	-19%	-16%	-14%	27%	22%	15%	13%	19%	5%	25%	-4%	20%	-16%	18%	24%
US Equity (AC)		100%			20%	-19%	26%	21%	31%	-5%	21%	13%	0%	13%	34%	16%	1%	17%	28%	-37%	5%	16%	6%	12%	31%	-22%	-11%	-7%	21%	24%	32%	22%	37%	0%	11%	10%	34%	-5%	29%	18%
US Equity (LC)		100%			21%	-18%	29%	18%	31%	-4%	22%	12%	1%	14%	32%	16%	2%	15%	26%	-37%	5%	16%	5%	11%	29%	-22%	-12%	-9%	21%	29%	33%	23%	38%	1%	10%	8%	30%	-3%	32%	17%
US Equity (MC)		100%			9%	-17%	23%	17%	31%	-9%	19%	14%	-2%	13%	35%	17%	-2%	25%	40%	-41%	6%	15%	13%	20%	40%	-16%	-6%	8%	18%	10%	29%	19%	34%	-2%	14%	16%	42%	-11%	26%	20%
US Equity (SC)		100%			4%	-20%	15%	20%	26%	-11%	15%	21%	-4%	5%	39%	16%	-4%	27%	27%	-34%	-2%	18%	5%	18%	47%	-20%	2%	-3%	21%	-3%	22%	16%	28%	-2%	19%	18%	46%	-19%	16%	25%
Non-US Equity (ACWI)		100%			11%	-16%	8%	11%	22%	-14%	28%	5%	-5%	-3%	16%	17%	-13%	12%	42%	-45%	17%	27%	17%	21%	41%	-15%	-19%	-15%	31%	14%	2%	7%	10%	7%	35%	-11%	14%	-23%	12%	28%
Int'l Dev. Equity		100%			13%	-14%	12%	8%	23%	-13%	26%	2%	0%	-4%	23%	18%	-12%	8%	32%	-43%	12%	27%	14%	21%	39%	-16%	-21%	-14%	27%	20%	2%	6%	12%	8%	33%	-12%	12%	-23%	11%	29%
EM Equity		100%			6%	-20%	-2%	19%	19%	-14%	38%	12%	-15%	-2%	-2%	19%	-18%	19%	79%	-53%	40%	33%	35%	26%	56%	-6%	-2%	-31%	66%	-25%	-12%	6%	-5%	-7%	75%	11%	60%	-11%	65%	40%
Real Estate			100%		2%	-25%	41%	-5%	29%	-4%	9%	9%	3%	28%	3%	20%	8%	28%	28%	-38%	-16%	35%	12%	32%	37%	4%	14%	26%	-5%	-18%	20%	35%	15%	3%	20%	15%	36%	-15%	9%	13%
Broad Real Assets			100%		3%	-10%	15%	1%	17%	-6%	11%	11%	-10%	5%	4%	14%	3%	15%	33%	-28%	11%	23%	10%	20%	26%	25%	-3%	28%	10%	-14%	2%	14%	14%	4%	4%	4%	4%	-6%	2%	3%
Marketable Alternatives				100%	4%	-5%	6%	11%	8%	-4%	8%	1%	0%	3%	9%	5%	-6%	6%	11%	-21%	10%	10%	7%	7%	12%	1%	3%	4%	26%	-5%	16%	14%	11%	-3%	26%	12%	14%	18%	23%	19%
Private Equity				100%	2%	-12%	40%	32%	16%	13%	16%	9%	8%	15%	23%	12%	12%	18%	10%	-20%	18%	25%	21%	22%	14%	-16%	-21%	10%	125%	21%	32%	33%	32%	14%	23%	14%	14%	4%	9%	9%

Historical Returns for each Mix based on back-tested return 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 net of fees. Historical returns used are hypothetical and do not represent returns earned by a client. It is not possible to invest in an index. Please see the Frontier Engineer Hypothetical Performance Disclosures at the end of the presentation for additional information, including index proxies used to represent each asset class. For additional information on forecast methodologies, 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.

Capital Market Assumptions

Return & Risk Assumptions (Forecasts)	Arithmetic Return	Geometric Return	Standard Deviation	Skewness	Kurtosis
US Bond	5.9%	5.7%	7.3%	-0.50	1.68
US Bonds - Dynamic	6.7%	6.5%	6.4%	-0.96	6.34
US Equity (LC)	7.9%	6.5%	16.6%	-0.55	0.79
US Equity (MC)	8.1%	6.4%	18.4%	-0.67	2.02
US Equity (SC)	8.3%	6.0%	21.3%	-0.44	1.10
Int'l Dev. Equity	10.6%	8.2%	21.7%	-0.52	1.25
EM Equity	14.2%	10.1%	28.4%	-0.61	1.96
Real Estate	8.8%	7.0%	18.8%	-0.70	6.53
Private Real Estate	8.4%	8.0%	9.0%	-0.75	6.78
Private Equity	12.2%	9.5%	23.2%	0.00	0.00

Correlation Assumptions (Forecasts)	US Bond	US Bonds - Dynamic	US Equity (LC)	US Equity (MC)	US Equity (SC)	Int'l Dev. Equity	EM Equity	Real Estate	Private Real Estate	Private Equity
US Bond	1.00	0.57	0.22	0.22	0.13	0.19	0.11	0.23	0.00	-0.08
US Bonds - Dynamic	0.57	1.00	0.61	0.66	0.59	0.56	0.57	0.61	0.00	0.18
US Equity (LC)	0.22	0.61	1.00	0.94	0.84	0.70	0.66	0.61	0.00	0.36
US Equity (MC)	0.22	0.66	0.94	1.00	0.94	0.69	0.69	0.68	0.00	0.37
US Equity (SC)	0.13	0.59	0.84	0.94	1.00	0.63	0.66	0.66	0.00	0.36
Int'l Dev. Equity	0.19	0.56	0.70	0.69	0.63	1.00	0.71	0.52	0.00	0.32
EM Equity	0.11	0.57	0.66	0.69	0.66	0.71	1.00	0.46	0.00	0.30
Real Estate	0.23	0.61	0.61	0.68	0.66	0.52	0.46	1.00	0.00	0.19
Private Real Estate	0.23	0.61	0.61	0.68	0.66	0.52	0.46	1.00	0.00	0.19
Private Equity	-0.08	0.18	0.36	0.37	0.36	0.32	0.30	0.19	0.00	1.00

October 31, 2023 Ten-Year Forecasted CMAs

*Historical mix return calculations assume a weighted average excess return assumption of 0.5% with a Fiducient Advisors' hypothetical fee of 0.25%.

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. Please see the Frontier Engineer Hypothetical Performance Disclosures at the end of the presentation for additional information.

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
US Bond	Bloomberg US Agg Bond TR USD	11/23 - 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	11/23 - 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	11/23 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
US Equity (MC)	Russell Mid Cap TR USD	11/23 - 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	11/23 - 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	11/23 - 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	11/23 - 1/88	MSCI EAFE GR USD	12/87 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
Real Estate	FTSE Nareit All Equity REITs TR USD	11/23 - 1/79	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.	N.A.	N.A. - N.A.
Private Real Estate	Wilshire US RESI TR USD	11/23 - 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 vs. 33% Venture	11/23 - 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. Past performance, actual or hypothetical, is no guarantee of future results and there is a possibility of a loss. Please see Frontier Engineer Hypothetical Performance Disclosures at the end of the presentation for additional information, including index proxies used to represent each asset class.

Frontier Engineer® Hypothetical Performance Disclosures

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 hypothetical annual Fiducient Advisors' fee is divided by 12 and subtracted from the historical monthly (index) returns. The hypothetical excess return assumption is divided by 12 and added to the historical monthly (index) returns. Furthermore, for forecasted total portfolio (index-based) annual returns based on capital market assumptions, the annual Fiducient Advisors' fee assumption is subtracted from the hypothetical annual manager excess return assumption. Additional information on advisory fees charged by Fiducient Advisors are described in Part 2 of the Form ADV.

Disclosure

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

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

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

Bloomberg 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 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.

Disclosure

Material Risk Disclosures

Fixed Income securities are subject to interest rate risks, the risk of default and liquidity risk. U.S. investors exposed to non-U.S. fixed income may also be subject to currency risk and fluctuations.

Cash may be subject to the loss of principal and over longer period of time may lose purchasing power due to inflation.
Domestic Equity can be volatile. The rise or fall in prices take place for a number of reasons including, but not limited to changes to underlying company conditions, sector or industry factors, or other macro events. These may happen quickly and unpredictably.

International Equity can be volatile. The rise or fall in prices take place for a number of reasons including, but not limited to changes to underlying company conditions, sector or industry impacts, or other macro events. These may happen quickly and unpredictably. International equity allocations may also be impact by currency and/or country specific risks which may result in lower liquidity in some markets.

Real Assets can be volatile and may include asset segments that may have greater volatility than investment in traditional equity securities. Such volatility could be influenced by a myriad of factors including, but not limited to overall market volatility, changes in interest rates, political and regulatory developments, or other exogenous events like weather or natural disaster.

Private Equity involves higher risk and is suitable only for sophisticated investors. Along with traditional equity market risks, private equity investments are also subject to higher fees, lower liquidity and the potential for leverage that may amplify volatility and/or the potential loss of capital.

Private Credit involves higher risk and is suitable only for sophisticated investors. These assets are subject to interest rate risks, the risk of default and limited liquidity. U.S. investors exposed to non-U.S. private credit may also be subject to currency risk and fluctuations.

Private Real Estate involves higher risk and is suitable only for sophisticated investors. Real estate assets can be volatile and may include unique risks to the asset class like leverage and/or industry, sector or geographical concentration. Declines in real estate value may take place for a number of reasons including, but are not limited to economic conditions, change in condition of the underlying property or defaults by the borrow.

Marketable Alternatives involves higher risk and is suitable only for sophisticated investors. Along with traditional market risks, marketable alternatives are also subject to higher fees, lower liquidity and the potential for leverage that may amplify volatility or the potential for loss of capital. Additionally, short selling involved certain risks including, but not limited to additional costs, and the potential for unlimited loss on certain short sale positions.