

March 19, 2024

# Investment Menu Design Review

## Ohio Deferred Compensation Program



# Agenda

1. Introduction
2. Summary of Recommendations
3. Investment Policy Statement Review
4. Investment Menu Review (Addition of LifePath 2065 Fund)
5. US Bond Fund Structure
6. Multi-Manager Equity Investment Option Structures
7. Investment Menu Utilization Review
8. Appendix
  - a) Investment Menu Utilization (Continued)
  - b) Proposed IPS Edits (Redline & Clean)
  - c) US Large Cap Growth Equity

# Background

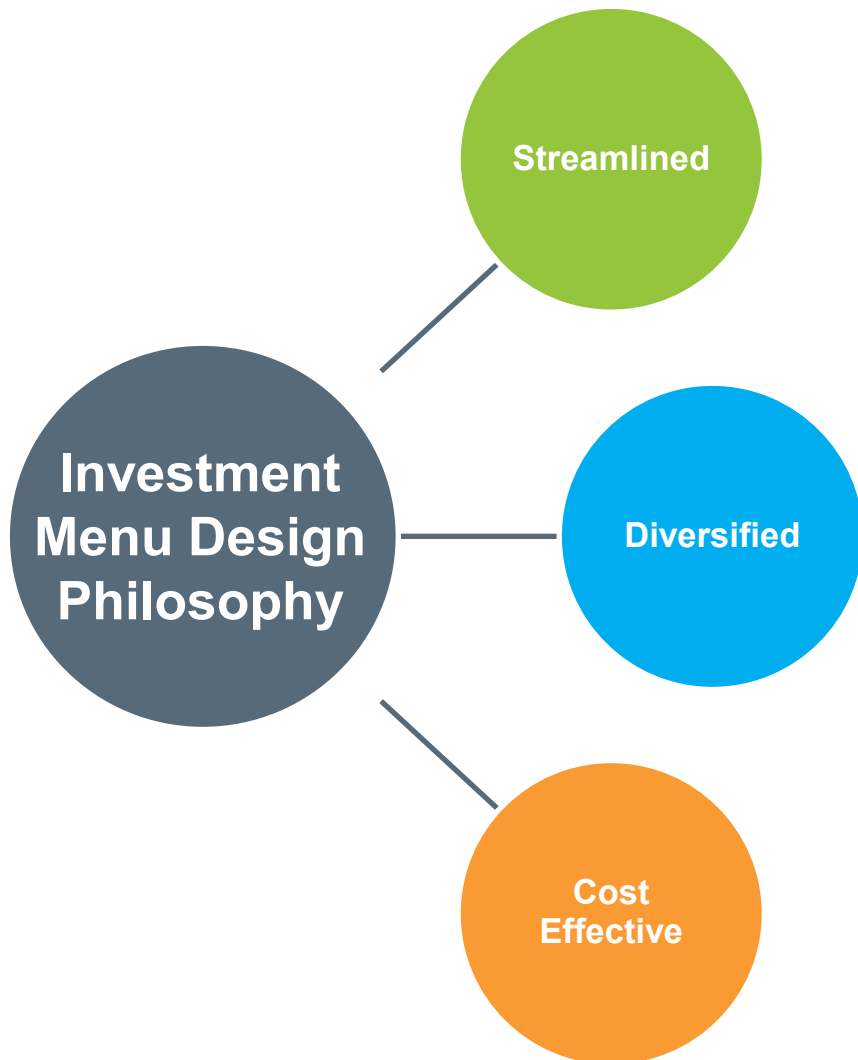
On a periodic basis, RVK recommends that plan sponsors take a deeper dive into the investment menu structure by reviewing **best practices**, **trends**, and **participant usage**.

Menu structure reviews tend to focus more on **coverage**, **fit**, and **utilization** with the goal of identifying and discussing ways to improve investment outcomes.

We apply the following framework for developing, implementing, and evaluating DC Plan investment menus:



# Investment Menu Design Framework



- Too many choices can create “choice overload,” which can lead to procrastination and poor decision making by participants.
- Behavioral research studies have shown that participants may feel overwhelmed by too many investment choices, potentially hindering their ability or inclination to engage with the plan.<sup>1</sup>

- Broad asset class exposures allow participants to focus more on asset allocation and less on sub-asset class structure or manager decisions.
- Mix of active and passive investment options.
- Additional diversifiers that provide exposure beyond equities and fixed income.

- Controlling investment fees plays an important factor in helping participants create successful outcomes.

<sup>1</sup>Sheena S. Iyengar and Mark R. Lepper, “When Choice is Demotivating: Can One Desire Too Much of a Good Thing?,” Journal of Personality and Social Psychology: Vol. 79 No. 6, 2000.

# Summary of Recommendations



# Investment Menu Structure Summary

Goals	RVK Observations	Related Recommendations?
<p><b>Goal #1:</b> Review compliance with policies</p>	<p>RVK observes that Ohio DC is aligned with its policies. Should the Board make changes to the investment alternatives offered to participants, RVK and Staff will update the Policy accordingly for the Board’s review and approval.</p>	<p><b>YES</b>, RVK recommends additions to the Ohio Investment Policy regarding multi-manager fund target weights and rebalancing.</p>
<p><b>Goal #2:</b> Review the structure of the investment menu</p>	<p>RVK observes that Ohio DC offers a sufficient number of investment options that cover the broad equity and fixed income markets. These options are high-quality investment strategies, generally offering complementary exposures, that are tiered to assist participants in selecting an appropriate investment strategy.</p>	<p><b>YES</b>, RVK recommends that Ohio DC add the LifePath 2065 fund to the target date fund suite.</p> <p>Additional areas for potential review can be found on the following slide.</p>
<p><b>Goal #3:</b> Review how participants are utilizing the investment menu over time</p>	<p>RVK continues to observe that most participants are building diversified investment portfolios, consistent with the previous analysis. There are pockets of participants that have chosen to take a more conservative or more aggressive investment approach, however without knowing each participant’s complete financial situation, it is challenging to opine if these decisions are intentional or not. Continuing to provide targeted communications to these participants is a prudent practice.</p>	<p><b>NO</b>, none at this time.</p>

# Investment Menu Structure Summary

## Potential Areas for Further Review

RVK recommends **exploring** the following investment menu items further:

Potential Areas for Further Review	Description
<b>Evaluate Single vs. Multi-Manager Approach within the US Bond Fund</b>	Explore if a multi-manager approach within the US Bond Fund would provide more attractive diversification and risk-mitigation benefits to participants relative to the existing single-manager approach. RVK to conduct additional analysis and explore further with Ohio DC staff.
<b>Evaluate Structures of Multi-Manager Equity Investment Options</b>	Evaluate the underlying structures and investment managers within Ohio DC's "white labeled" equity options. RVK to conduct additional analysis and explore further with Ohio DC staff.
<b>Evaluate US Large Company Growth Offerings</b>	Re-evaluate the decision to offer three (3) US large cap growth stock options and explore if consolidation would be beneficial to participants. RVK to conduct additional analysis and explore further with Ohio DC staff.

# Investment Policy Statement Review





# Proposed Investment Policy Statement Updates

**Plan fiduciaries should review the Investment Policy Statement (IPS) periodically to ensure that its objectives, constraints, and policies remain appropriate.**

- As investment menu changes are considered, fiduciaries should review the IPS to confirm the intended changes are within the appropriate guidelines and rules.
- Major changes are generally made only in response to significant developments in market conditions, circumstances, objectives, best practices, or constraints on the plan.

---

**While Ohio DC's investment menu remains in compliance with its IPS, RVK has reviewed the IPS and recommends the following changes:**

- **General:**
  - Change “The Program” to “Ohio DC” throughout to align with other Ohio DC policy documents.
- **Section III:**
  - Update Investment objective type names to more clearly define investment universe.
- **Addition of Appendix A. – Multi-Manager Investment Options**
  - Add a section that more clearly defines the Multi-Manager Investment Option compositions and rebalancing policy.

**Board Action: Approve proposed Investment Policy Statement (IPS) edits. Full Redlined and clean copies can be found in the Appendix.**

# Proposed Investment Policy Statement Updates

## Section III

Investment Objective Type	Universe/Peer Group	Investment Alternative	Benchmark
Targeted Maturity Asset Allocation	Multi-Asset or Target Date Strategy by Vintage	LifePath Portfolios (BlackRock) – Five-year vintages ranging from Retirement to 2060	Blended benchmark comprising Russell 1000 Index, Russell 2000 Index, MSCI All Country World Ex US IM Index, Bloomberg US Aggregate Bond Index, Bloomberg US Treasury: US TIPS Index, FTSE EPRA/NAREIT Developed Index, Bloomberg Commodity Index, and FTSE 3 Month T-Bill Index
Indexed <u>US</u> Fixed Income	Not Applicable	US Bond Index (State Street)	Bloomberg US Aggregate Bond Index
Indexed US Large Company Stock	Not Applicable	US Large Company Stock Index (State Street)	S&P 500 Index
Indexed US Small Company Stock	Not Applicable	Non-US Company Stock Index (State Street)	Russell Small Cap Completion Index
Indexed Non-US Stock	Not Applicable	Non-US Company Stock Index (State Street)	MSCI ACW Ex US IM Index
Stable Value <del>Option</del>	Not Applicable	Stable Value Option (Multiple Managers)	See Stable Value Policy
Diversified <u>US</u> Fixed Income	Core Plus Fixed Income Mutual Fund Strategy	US Bond (TCW)	Bloomberg US Aggregate Bond Index
Large <u>US</u> Company Value Stock	Large-Cap Value Mutual Fund Strategy	US Large Value Company Stock (Dodge & Cox)	Russell 1000 Value Index
Large <u>US</u> Company Growth Stock	Large-Cap Growth Mutual Fund Strategy	Fidelity Contrafund Fidelity Growth Company US Large Growth Company Stock (T. Rowe Price/State Street)	Russell 1000 Growth Index
Medium <u>US</u> Company Stock	Mid-Cap Growth Mutual Fund Strategy	Vanguard Capital Opportunity	Russell Mid-Cap Growth Index
Small <u>US</u> Company Value Stock	Small-Cap Value Mutual Fund Strategy	US Small Value Company Stock (Westwood/State Street)	Russell 2000 Value Index
Small <u>US</u> Company Growth Stock	Small-Cap Growth Mutual Fund Strategy	US Small Growth Company Stock (Westfield/Fiera/State Street)	Russell 2000 Growth Index
Non-US Stock	All Country World Ex US Mutual Fund Strategy	Non-US Company Stock (Arrowstreet, Schroders, Vanguard)	MSCI All Country World Ex US Index

# Proposed Investment Policy Statement Updates

## Addition of Appendix A. – Multi-Manager Investment Options

### Appendix A. – Multi-Manager Investment Options

**I. Targets.** The below table outlines Ohio DC's current multi-manager investment options and details the underlying investment managers and their target allocations.

<u>Investment Option Name</u>	<u>Underlying Managers and Target Allocations</u>	<u>Permitted Tolerance Range &amp; Rebalancing Frequency</u>
<u>Large US Company Growth Stock</u>	95% - T Rowe Price 5% - State Street	+/- 3.0% (monthly*)
<u>Small US Company Value Stock</u>	93% - Westwood 7% - State Street	+/- 4.0% (monthly*)
<u>Small US Company Growth Stock</u>	66% - Westfield 27% - Fiera 7% - State Street	+/- 4.0% (monthly*)
<u>Non-US Company Stock</u>	35% - Schroders 30% - Arrowstreet 35% - Vanguard	+/- 0.0% (daily rebalancing through cash flows, with monthly rebalance to target )
<u>Stable Value Option</u>	<u>See Stable Value Policy</u>	<u>See Stable Value Policy</u>

\* Measured monthly and rebalanced to target triggered if tolerance breached.

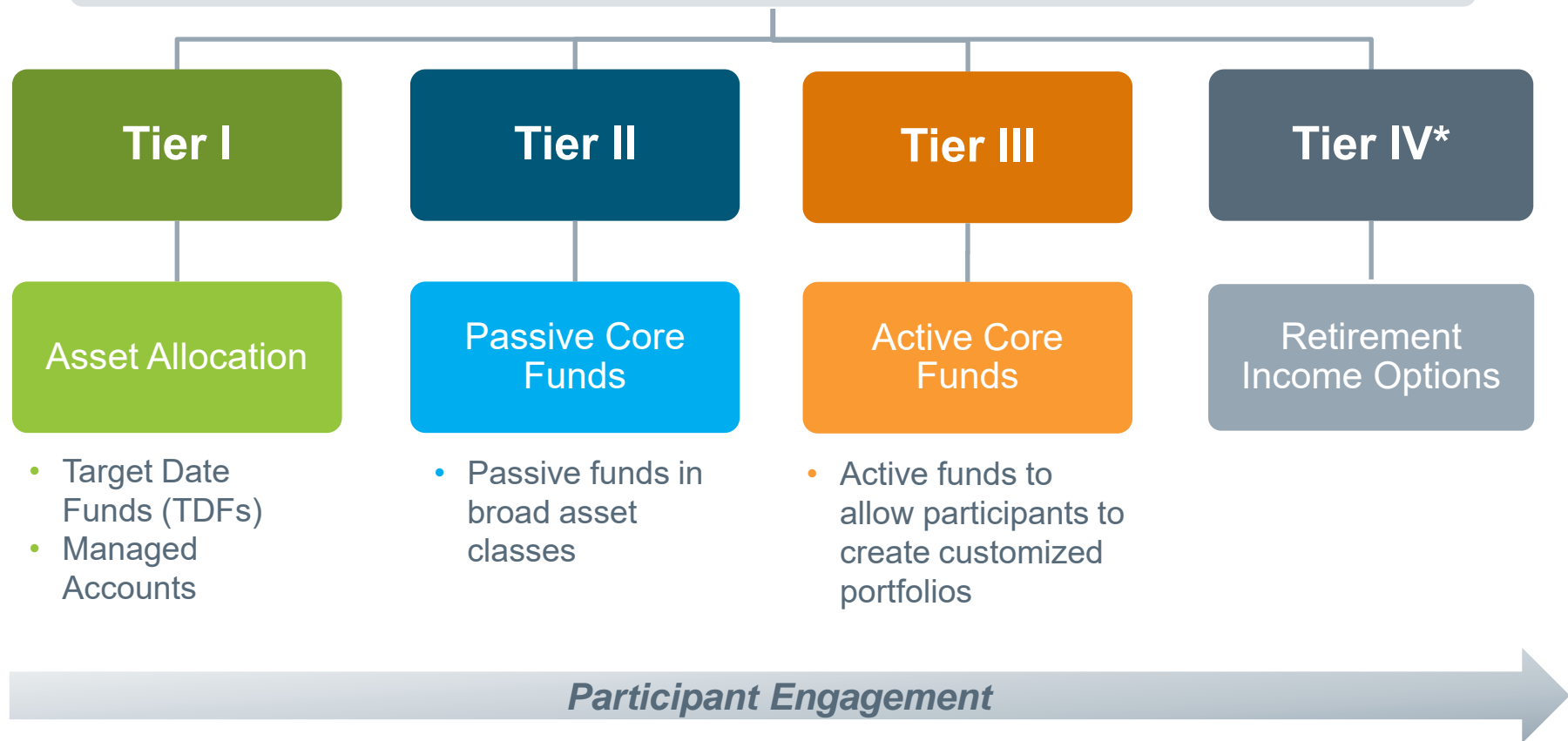
**II. Rebalancing Policy.** Rebalancing manager allocations is necessary to control risk, as market movements will cause the investment option's manager allocations to deviate from their strategic target allocations. Rebalances can be meaningful to a portfolio, so to minimize transaction costs and active manager holdings impact, permitted tolerance ranges are utilized to determine if a rebalance is needed. A standing instruction is in place with the custodian bank to allocate daily participant cash flows and measure the need for periodic rebalancing in accordance with the permitted tolerance ranges and rebalancing frequency shown in the table above. The custodian bank executes necessary portfolio trades and/or cash movements based on a standing direction. Stable Value Option rebalancing policy can be found in the Stable Value Policy.

# Investment Menu Review



# Investment Menu Design Framework

With the goal of offering a solution for all investor types, structuring investment menus into different tiers can be an effective tool.



\* As appropriate dependent on plan demographics and additional retirement programs.

# Ohio DC Investment Menu

Ohio DC continues to offer investment options for various investor types.

A tiered Investment menu that offers options for:

- “Do It For Me” Investors → Target date funds
- “Do It With Me” Investors
  - Passively managed investment options
  - Actively managed investment options

Ohio DC Steps to Date
●
●
●
●

Ohio DC continues to make enhancements to the investment menu structure.

**Solutions:**

- Streamline the number of investment options
- Offer the spectrum of liquid asset class exposures
- Use of white label funds
- Control investment management fees

Ohio DC Steps to Date
●
●
●
●

- Ohio DC has made progress in achieving the stated solution.
- Ohio DC has not made any progress in achieving the stated solution.

# Ohio DC Investment Menu

	Tier I Target Date Funds (TDFs) Hassle-Free TDFs	Tier II Passively Managed Options Hands-On Investing (Core Menu)	Tier III Actively Managed Options
<b>US Equity</b>	BlackRock LifePath		
US Large Cap	✓	US Large Company Stock Index	US Large Value Company Stock Fidelity Growth Company Fidelity Contrafund US Large Growth Company Stock
US Mid Cap	✓		Vanguard Capital Opportunity
US Small Cap	✓	US Small/Mid Company Stock Index	US Small Value Company Stock US Small Growth Company Stock
<b>International Equity</b>			
Broad International Equity	✓	Non-US Company Stock Index	Non-US Company Stock
<b>Inflation Protection</b>			
Real Return/TIPS	✓		
<b>Fixed Income</b>			
Core Plus Fixed Income			US Bond
Core Fixed Income	✓	US Bond Index	
<b>Capital Preservation</b>			
Stable Value			Stable Value

Overlap
  Style Choice

# BlackRock LifePath Fund Changes

- **Background:** Ohio DC currently offers participants access to a target date fund (TDF) series through the BlackRock LifePath suite of funds, which is the default investment option for participants who do not select their own investments.
  - Ohio DC currently offers 5-year “vintages” of the funds ranging from Retirement to 2060.
  - As each TDF vintage progresses towards its retirement date, it reduces its expected risk by decreasing the equity allocation. Once the vintage meets its retirement date, BlackRock will merge the fund into the LifePath Retirement Fund. Later this year, BlackRock is expected to close and merge the LifePath 2025 vintage.
  - Ohio DC has a precedent of adding a new fund vintage as an old one is retired—in this case, adding the LifePath 2065 Fund.
- Ohio DC’s IPS States: *“TDF vintages that reach the end of their de-risking glide path will be automatically discontinued and the assets will be mapped into the TDF Retirement vintage. Additionally, new TDF vintages may be added over time to ensure portfolios exist for all stages of the glide path and participant target retirement dates.”*
- The addition of a new vintage is generally considered a fund change, requiring communication to participants.

**Recommendation:** RVK recommends that the Board approve the addition of the 2065 Fund to the LifePath target date fund suite offered to plan participants in order to support the asset allocation decisions of young participants joining Ohio DC and align the addition with the anticipated closure and merger of the 2025 Fund. The transition is expected to occur in 2024.



# US Bond Fund Structure



# US Bond Fund Structure

Ohio DC provides an active fixed income investment option on the core investment lineup through the custom-named US Bond Fund. The option currently consists of a Collective Investment Trust (“CIT”) managed by TCW. As of December 31, 2023, the US Bond Fund has ~\$216 million in assets.

## Current Strategy:

- TCW applies an active value-oriented management philosophy. Investment portfolios are managed through a combination of top-down and bottom-up fundamental analysis. A Generalist/Specialist team approach is applied whereby Generalist portfolio managers are primarily responsible for developing investment strategy, including duration, yield curve, and sector decisions, based on their long-term economic outlook position.
- The team believes in the full cycles of economic and credit risk and the mean-reverting nature of fixed income instruments. This entails taking less credit risk during periods of low-risk premiums and a more opportunistic approach during elevated risk premium environments. They can also construct portfolios with less systematic market risk exposure.
- TCW generally *overweights* Investment Grade Corporates, ABS, and MBS and *underweights* US Treasuries.

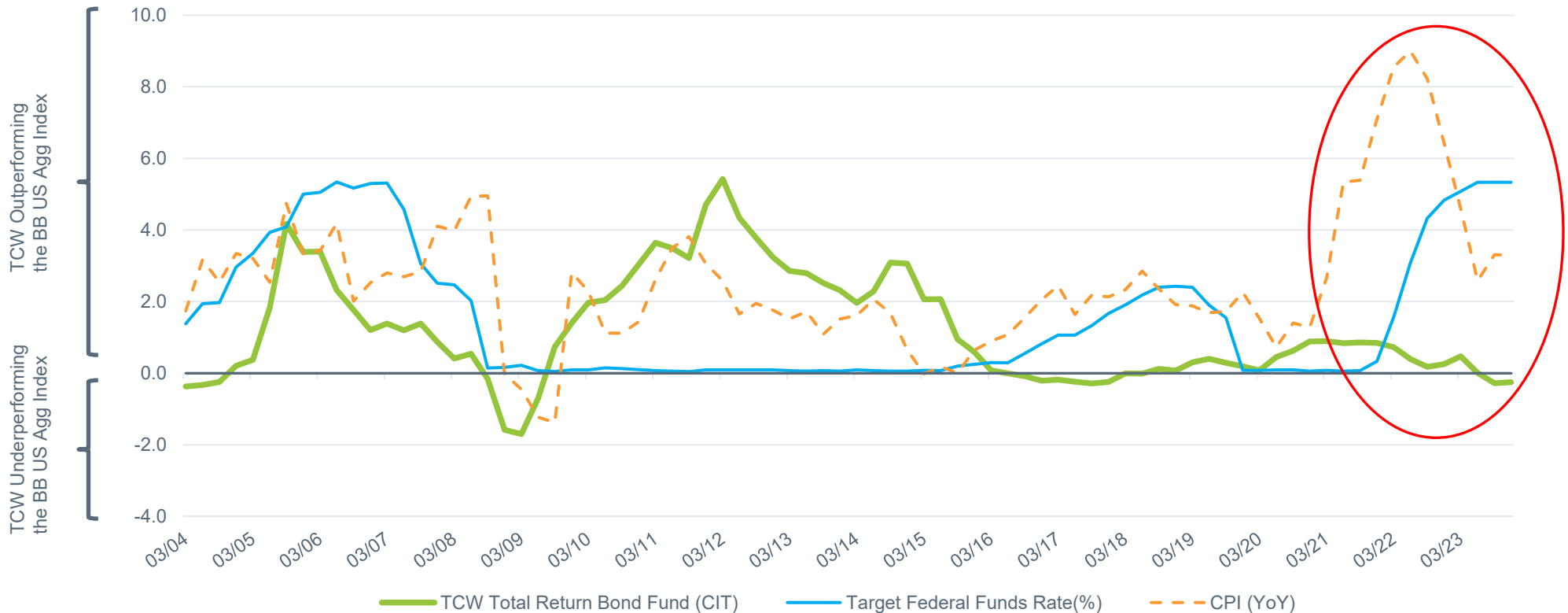
## Fees:

- The expense ratio for the current share class is 0.25%, ranking in the 27<sup>th</sup> percentile for similarly sized mandates. The asset minimum for current Class B share class is \$190 million. Should assets drop below \$190 million, the next least expensive share class is 0.30% for the Class C.

# US Bond Fund Performance

- Over the last 20-years, the three-year return of TCW Total Return Bond Fund has consistently outperformed the Bloomberg US Aggregate Index.
- Recently, the 3-year performance has lagged slightly, as 2022 & 2023 saw high inflation and rising interest rates, which have caused headwinds for some fixed income managers.

TCW Three-Year Rolling Historical Excess Return

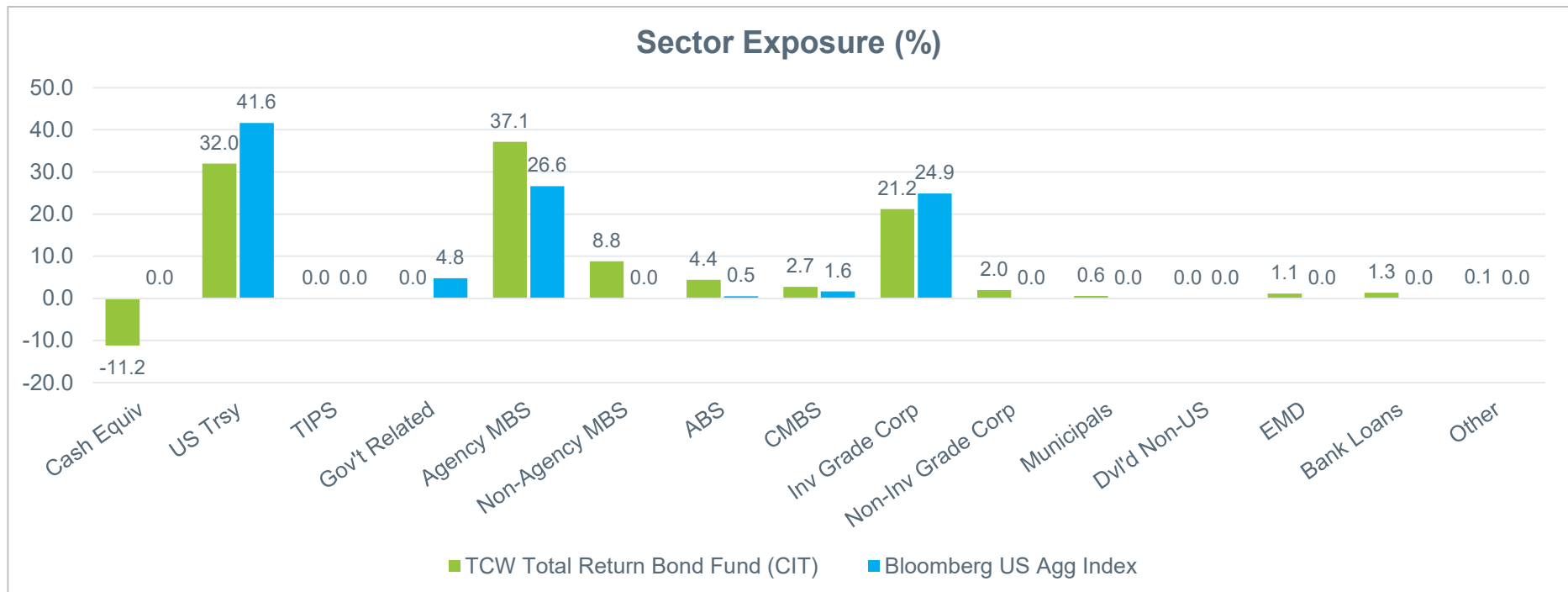


# US Bond Fund Structure

## Characteristics and Sector Exposure – As of 12/31/2023

Currently, TCW has a slightly higher duration (higher interest rate sensitivity) than the index, and they also have a higher yield. TCW is underweight to US Treasury and Investment Grade Corporate Credit and is overweight to Agency & non-Agency MBS, ABS, and CMBS.

	TCW Total Return Bond Fund (CIT)	Bloomberg US Agg Index
Avg. Maturity	8.00	8.46
Avg. Quality	Aa2	Aa2/Aa3
Effective Duration	7.00	6.24
Holdings Count	845	13,334
Yield To Maturity	4.71	4.53



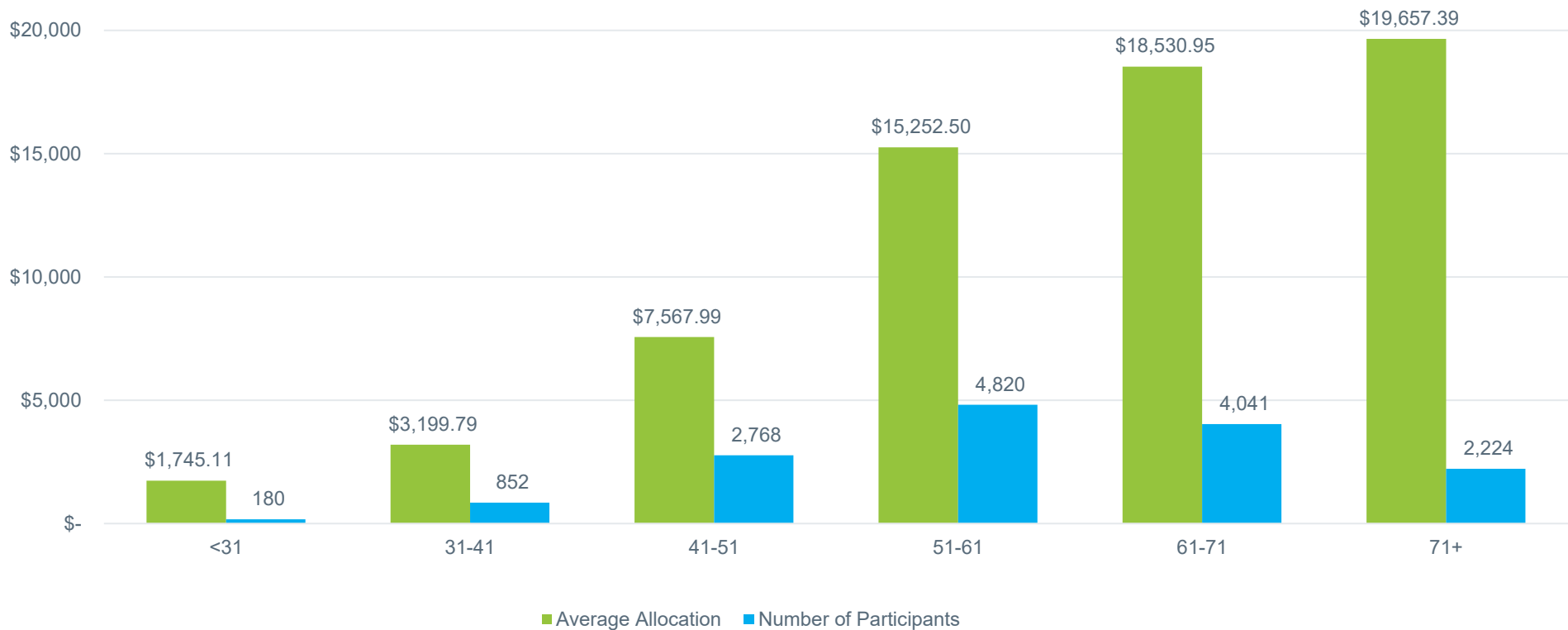
All data as of December 31, 2023. Allocation to "other" consists of Equity, Swaps, and Options.

# US Bond Fund Participant Utilization

Compared to other Ohio DC investment options, the US Bond fund has relatively lower utilization by participants.

- 0.06% of Ohio DC participants are invested in the US Bond fund, roughly 15,000 individuals.
- 1.13% of participants' assets are invested in the US Bond fund, roughly \$216 million.

**Bond Fund Participants**  
Utilization by Age



# US Bond Fund Structure

RVK believes that there may be benefits to allocating the US Bond Fund mandate among multiple investment managers:

- ***Diversification:*** Adding an additional manager could provide complementary exposure, smoothing performance volatility and enhancing performance.
- ***Additional manager flexibility:*** An additional manager would reduce exposure to a single manager and provide a secondary strategy in the case of a manager termination.
- ***Ability to add a WMOE manager:*** A manager search may also provide an opportunity to add a WMOE manager to the investment option.

# Multi-Manager Equity Investment Option Structures

February  
29, 2024

# Multi-Manager Equity Investment Option Structures

- Ohio DC currently offers four equity investment options that consist of multiple managers.
- The target allocations for each of these managers were set at the time of each option's implementation.
  - RVK believes it's prudent to periodically reevaluate the structure of each of each investment option for alignment with its goals and objectives.

Investment Option Name	Underlying Managers and Target Allocations	Permitted Tolerance Range & Rebalancing Frequency	Comments
Large US Company Growth Stock	95% - T Rowe Price Large Cap Growth (SA) 5% - State Street Large Cap Growth Index (CIT)	+/- 3.0% (monthly*)	The 5% allocation to the Index manager is to provide participants with daily liquidity through a diversified CIT vehicle, rather than source daily liquidity from a separate account with required trading and transactional costs.
Small US Company Value Stock	93% - Westwood Small Cap Value (SA) 7% - State Street Small Cap Value Index NL (CIT)	+/- 4.0% (monthly*)	The 7% allocation to the Index manager is to provide participants with daily liquidity through a diversified CIT vehicle, rather than source daily liquidity from a separate account with required trading and transactional costs.
Small US Company Growth Stock	66% - Westfield Small Cap Growth (SA) 27% - Fiera Small Cap Growth (SA) 7% - State Street Small Cap Growth Index NL (CIT)	+/- 4.0% (monthly*)	The 66% / 27% target allocations to Westfield and Fiera, respectively, seek to provide diversification through the use of two complementary managers. The 7% allocation to the index manager is to provide participants with daily liquidity through a diversified CIT vehicle, rather than source daily liquidity from one or both separate accounts with required trading and transactional costs.
Non-US Company Stock	35% - Schroders QEP Intl Value (CIT) 30% - Arrowstreet Intl Eq ACW Ex US C (CIT) 35% - Vanguard Intl Growth;Adm (VWILX)	+/- 0.0% (daily rebalancing through cash flows, with monthly rebalance to target)	The structure of the multi-manager fund seeks to provide broad exposure to non-US stocks, while balancing exposure to value, core, & growth styles. All three vehicles have daily liquidity for cash flows, and the fund is rebalanced to target each month.

\* Measured monthly and rebalance to target triggered if tolerance breached.

RVK notes that the Stable Value Option uses a multi-manager approach that is evaluated as part of the Stable Value Option Review.



# Multi-Manager Equity Investment Option Structures

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019
<b>US Large Growth Company Stock</b>	14.44	47.11	47.11	5.83	16.44	17.43	14.33	-34.97	23.90	39.54	29.39
Russell 1000 Grth Index	14.16	42.68	42.68	8.86	19.50	17.68	14.86	-29.14	27.60	38.49	36.39
Difference	0.28	4.43	4.43	-3.03	-3.06	-0.25	-0.53	-5.83	-3.70	1.05	-7.00
IM U.S. Large Cap Growth Equity (SA+CF) Median	13.81	39.08	39.08	6.24	16.46	15.44	12.68	-30.66	24.06	34.47	33.08
Rank	30	12	12	58	51	16	12	82	51	27	85
<b>T Rowe Price Large Cap Growth (SA)</b>	14.48	47.38	47.38	5.84	16.40	17.46	14.36	-34.95	23.68	39.89	28.83
Russell 1000 Grth Index	14.16	42.68	42.68	8.86	19.50	17.68	14.86	-29.14	27.60	38.49	36.39
Difference	0.32	4.70	4.70	-3.02	-3.10	-0.22	-0.50	-5.81	-3.92	1.40	-7.56
IM U.S. Large Cap Equity (SA+CF) Median	11.67	24.27	24.27	8.86	14.51	12.48	11.09	-17.60	26.47	16.96	29.73
Rank	11	4	4	83	24	7	6	94	73	9	57
<b>State Street Large Cap Growth Index NL (CIT)</b>	14.20	42.67	42.67	8.82	19.46	17.61	14.81	-29.18	27.54	38.45	36.35
Russell 1000 Grth Index	14.16	42.68	42.68	8.86	19.50	17.68	14.86	-29.14	27.60	38.49	36.39
Difference	0.04	-0.01	-0.01	-0.04	-0.04	-0.07	-0.05	-0.04	-0.06	-0.04	-0.04
IM U.S. Large Cap Growth Equity (SA+CF) Median	13.81	39.08	39.08	6.24	16.46	15.44	12.68	-30.66	24.06	34.47	33.08
Rank	37	32	32	18	12	15	7	44	24	31	24
<b>US Small Value Company Stock</b>	15.12	17.76	17.76	9.73	11.47	N/A	N/A	-12.37	28.02	2.17	27.48
Russell 2000 Val Index	15.26	14.65	14.65	7.94	10.00	6.10	6.76	-14.48	28.27	4.63	22.39
Difference	-0.14	3.11	3.11	1.79	1.47	N/A	N/A	2.11	-0.25	-2.46	5.09
IM U.S. Small Cap Value Equity (SA+CF) Median	12.82	16.47	16.47	9.82	11.82	7.30	7.39	-11.63	28.62	4.29	23.95
Rank	13	40	40	52	55	N/A	N/A	60	53	63	20
<b>Westwood Small Cap Value (SA)</b>	15.12	17.75	17.75	9.96	11.73	N/A	N/A	-12.26	28.69	2.52	27.75
Russell 2000 Val Index	15.26	14.65	14.65	7.94	10.00	6.10	6.76	-14.48	28.27	4.63	22.39
Difference	-0.14	3.10	3.10	2.02	1.73	N/A	N/A	2.22	0.42	-2.11	5.36
IM U.S. Small Cap Value Equity (SA+CF) Median	12.82	16.47	16.47	9.82	11.82	7.30	7.39	-11.63	28.62	4.29	23.95
Rank	13	40	40	48	52	N/A	N/A	58	50	60	19
<b>State Street Small Cap Value Index NL (CIT)</b>	15.23	14.59	14.59	7.83	10.00	6.13	6.74	-14.59	28.10	5.10	22.24
Russell 2000 Val Index	15.26	14.65	14.65	7.94	10.00	6.10	6.76	-14.48	28.27	4.63	22.39
Difference	-0.03	-0.06	-0.06	-0.11	0.00	0.03	-0.02	-0.11	-0.17	0.47	-0.15
IM U.S. Small Cap Value Equity (SA+CF) Median	12.82	16.47	16.47	9.82	11.82	7.30	7.39	-11.63	28.62	4.29	23.95
Rank	12	66	66	73	81	78	74	76	53	45	67

# Multi-Manager Equity Investment Option Structures

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019
<b>US Small Growth Company Stock</b>	<b>13.10</b>	<b>22.46</b>	<b>22.46</b>	<b>0.32</b>	<b>14.84</b>	<b>N/A</b>	<b>N/A</b>	<b>-25.26</b>	<b>10.31</b>	<b>41.72</b>	<b>39.56</b>
Russell 2000 Grth Index	12.75	18.66	18.66	-3.50	9.22	8.08	7.16	-26.36	2.83	34.63	28.48
Difference	0.35	3.80	3.80	3.82	5.62	N/A	N/A	1.10	7.48	7.09	11.08
IM U.S. Small Cap Growth Equity (SA+CF) Median	10.83	17.37	17.37	-2.47	11.47	11.16	8.68	-28.57	11.67	41.94	28.66
Rank	17	13	13	32	16	N/A	N/A	32	53	51	12
<b>Westfield Small Cap Growth (SA)</b>	<b>12.93</b>	<b>22.41</b>	<b>22.41</b>	<b>0.17</b>	<b>14.71</b>	<b>N/A</b>	<b>N/A</b>	<b>-25.34</b>	<b>9.96</b>	<b>38.83</b>	<b>42.34</b>
Russell 2000 Grth Index	12.75	18.66	18.66	-3.50	9.22	8.08	7.16	-26.36	2.83	34.63	28.48
Difference	0.18	3.75	3.75	3.67	5.49	N/A	N/A	1.02	7.13	4.20	13.86
IM U.S. Small Cap Growth Equity (SA+CF) Median	10.83	17.37	17.37	-2.47	11.47	11.16	8.68	-28.57	11.67	41.94	28.66
Rank	19	14	14	32	17	N/A	N/A	32	56	58	3
<b>Fiera Small Cap Growth (SA)</b>	<b>13.64</b>	<b>23.97</b>	<b>23.97</b>	<b>2.49</b>	<b>17.09</b>	<b>N/A</b>	<b>N/A</b>	<b>-24.23</b>	<b>14.61</b>	<b>50.38</b>	<b>35.95</b>
Russell 2000 Grth Index	12.75	18.66	18.66	-3.50	9.22	8.08	7.16	-26.36	2.83	34.63	28.48
Difference	0.89	5.31	5.31	5.99	7.87	N/A	N/A	2.13	11.78	15.75	7.47
IM U.S. Small Cap Growth Equity (SA+CF) Median	10.83	17.37	17.37	-2.47	11.47	11.16	8.68	-28.57	11.67	41.94	28.66
Rank	12	7	7	15	4	N/A	N/A	24	43	38	27
<b>State Street Small Cap Growth Index NL (CIT)</b>	<b>12.71</b>	<b>18.51</b>	<b>18.51</b>	<b>-3.63</b>	<b>9.04</b>	<b>7.89</b>	<b>7.02</b>	<b>-26.50</b>	<b>2.73</b>	<b>34.14</b>	<b>28.42</b>
Russell 2000 Grth Index	12.75	18.66	18.66	-3.50	9.22	8.08	7.16	-26.36	2.83	34.63	28.48
Difference	-0.04	-0.15	-0.15	-0.13	-0.18	-0.19	-0.14	-0.14	-0.10	-0.49	-0.06
IM U.S. Small Cap Growth Equity (SA+CF) Median	10.83	17.37	17.37	-2.47	11.47	11.16	8.68	-28.57	11.67	41.94	28.66
Rank	21	41	41	61	86	95	90	36	83	67	51

# Multi-Manager Equity Investment Option Structures

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019
<b>Non-US Company Stock</b>	<b>8.60</b>	<b>16.15</b>	<b>16.15</b>	<b>1.10</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-18.06</b>	<b>8.56</b>	<b>N/A</b>	<b>N/A</b>
MSCI ACW Ex US Index (USD) (Net)	9.75	15.62	15.62	1.55	7.08	6.33	3.83	-16.00	7.82	10.65	21.51
Difference	-1.15	0.53	0.53	-0.45	N/A	N/A	N/A	-2.06	0.74	N/A	N/A
IM All ACWI Ex US (SA+CF) Median	9.88	16.10	16.10	1.16	7.91	7.00	4.44	-17.59	8.52	14.50	24.63
Rank	76	50	50	52	N/A	N/A	N/A	54	50	N/A	N/A
<b>Schroders QEP Intl Value (CIT)</b>	<b>6.54</b>	<b>13.37</b>	<b>13.37</b>	<b>4.71</b>	<b>6.57</b>	<b>5.48</b>	<b>3.34</b>	<b>-11.13</b>	<b>13.94</b>	<b>0.94</b>	<b>18.64</b>
MSCI ACW Ex US Val Index (USD) (Net)	8.43	17.30	17.30	5.80	6.34	5.30	2.92	-8.59	10.46	-0.77	15.72
Difference	-1.89	-3.93	-3.93	-1.09	0.23	0.18	0.42	-2.54	3.48	1.71	2.92
IM ACWI Ex US Value (MF) Median	7.23	15.36	15.36	4.55	6.52	4.95	2.29	-11.04	10.01	3.69	17.82
Rank	90	72	72	46	45	29	21	53	15	68	35
<b>Arrowstreet Intl Eq ACW Ex US C (CIT)</b>	<b>7.77</b>	<b>20.82</b>	<b>20.82</b>	<b>6.99</b>	<b>13.41</b>	<b>11.64</b>	<b>N/A</b>	<b>-10.51</b>	<b>13.26</b>	<b>23.13</b>	<b>24.45</b>
MSCI ACW Ex US Index (USD) (Net)	9.75	15.62	15.62	1.55	7.08	6.33	3.83	-16.00	7.82	10.65	21.51
Difference	-1.98	5.20	5.20	5.44	6.33	5.31	N/A	5.49	5.44	12.48	2.94
IM ACWI Ex US Core (MF) Median	9.46	15.00	15.00	1.53	7.70	6.46	3.84	-16.67	8.87	13.50	22.78
Rank	88	2	2	1	1	1	N/A	6	5	7	40
<b>Vanguard Intl Growth;Adm (VWILX)</b>	<b>11.37</b>	<b>14.81</b>	<b>14.81</b>	<b>-7.61</b>	<b>10.62</b>	<b>10.98</b>	<b>7.09</b>	<b>-30.79</b>	<b>-0.74</b>	<b>59.74</b>	<b>31.48</b>
MSCI ACW Ex US Index (USD) (Net)	9.75	15.62	15.62	1.55	7.08	6.33	3.83	-16.00	7.82	10.65	21.51
Difference	1.62	-0.81	-0.81	-9.16	3.54	4.65	3.26	-14.79	-8.56	49.09	9.97
IM International Equity (MA) Median	9.00	15.73	15.73	1.01	5.74	4.79	2.56	-17.60	7.69	10.90	20.37
Rank	23	60	60	92	14	11	15	96	94	1	3

# Investment Menu Utilization Review



# Investment Menu Demographics Summary Update

Ohio DC has seen incremental changes to participant allocations over the last 5 years that RVK views positively.

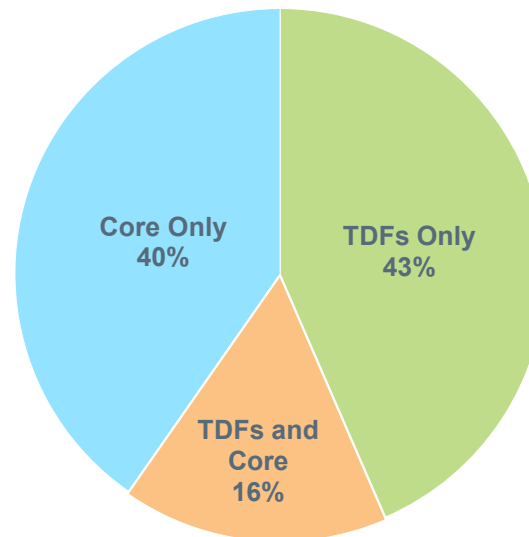
- In 2023, **50%** of participants were “appropriately”\* allocated, compared to **43%** in 2018.
- Among **Target Date Fund Only** participants, the number of single target date fund users have increased from **31%** in 2018 to **42%** in 2023.

Among **TDF+Core** participants, the average equity allocations range between **62%** and **67%**, which suggests a continued preference for more risk within each age cohort.

The number of **Core Only** “single-fund” participants has generally remained steady, around 20% of the overall participant population (and representing half of the Core Only population).

- These participants overwhelmingly continue to favor the Stable Value Option, and the majority of the remaining single fund investors continue to favor active US large cap equity options.

Investment Tier Utilization

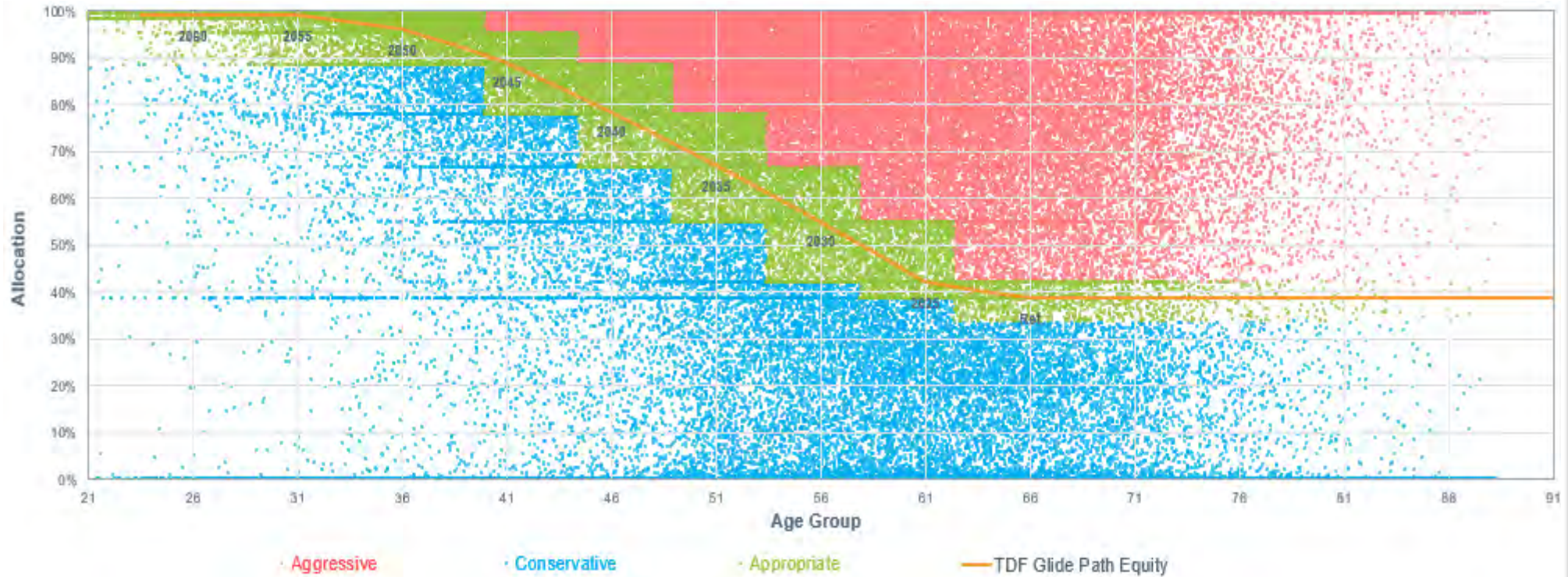


\* “Appropriate” asset allocation is defined as the participant having an equity allocation within 5 years of the age-appropriate target date fund equity allocation. Participant balances are as of 12/31/2023 and were sourced from the Ohio DC Information Technology Department. Percentages shown may not sum up to 100% exactly due to rounding.

# Investment Menu Review Analysis

## Equity Allocation

### Participant Equity Allocations



	2018	2022	2023						
Total Participants in Age Group	Total	Total	Total	<31	31-41	41-51	51-61	61-71	71+
Participants in Aggressive Equity Range	25%	25%	26%	0%	0%	24%	37%	37%	36%
Participants in Appropriate Equity Range	43%	47%	50%	96%	90%	61%	42%	25%	9%
Participants in Conservative Equity Range	33%	28%	25%	4%	11%	15%	21%	38%	55%
Participants 100% in Equities	11%	12%	12%	6%	10%	14%	14%	10%	10%
Participants 0% in Equities	20%	17%	16%	1%	2%	4%	12%	28%	46%

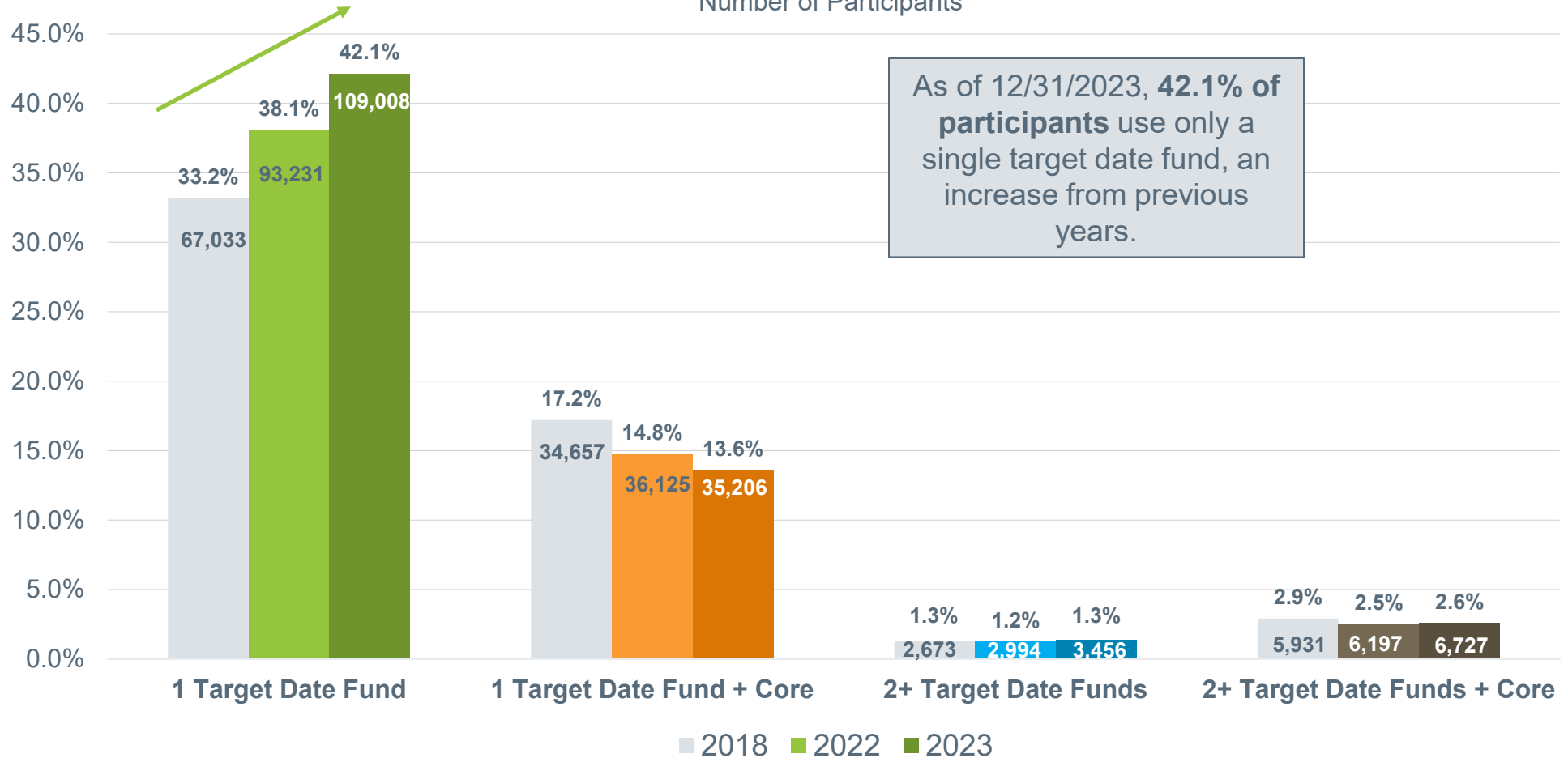
Participant balances are as of 12/31/2023 and were sourced from the Ohio DC Information Technology Department. Percentages shown may not sum up to 100% exactly due to rounding.

# Investment Menu Review Analysis

## Target Date Fund Investors

### Participant Investment Selections

Number of Participants



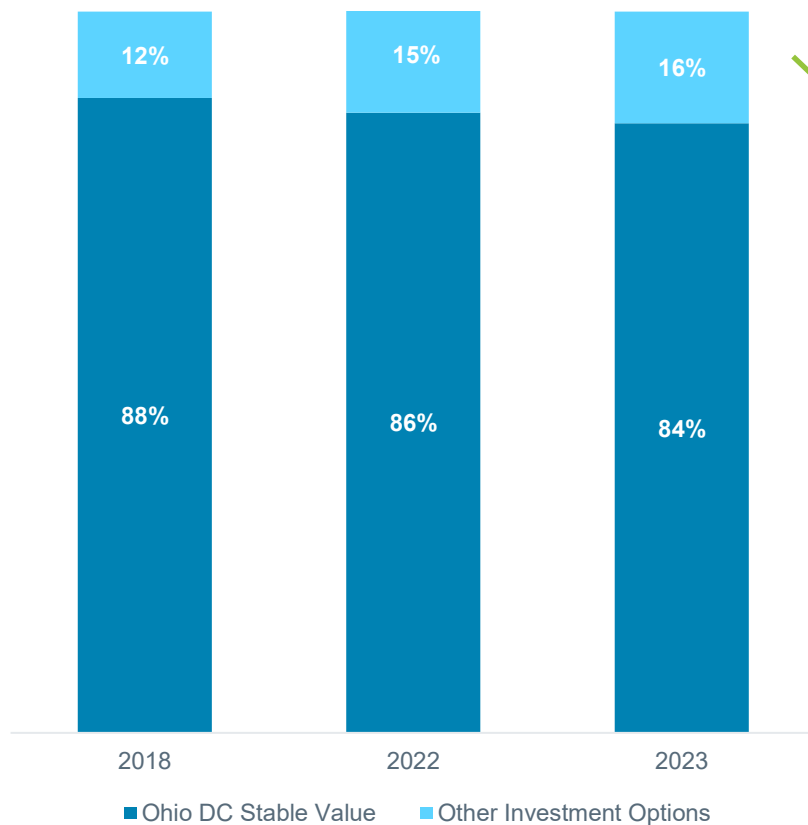
Participant balances are as of 12/31/2023 and were sourced from the Ohio DC Information Technology Department. Total Participant Population: 12/31/2023 – 258,640, 12/31/2022 – 251,376, 12/31/2018 – 201,763.

# Investment Menu Review Analysis - Utilization

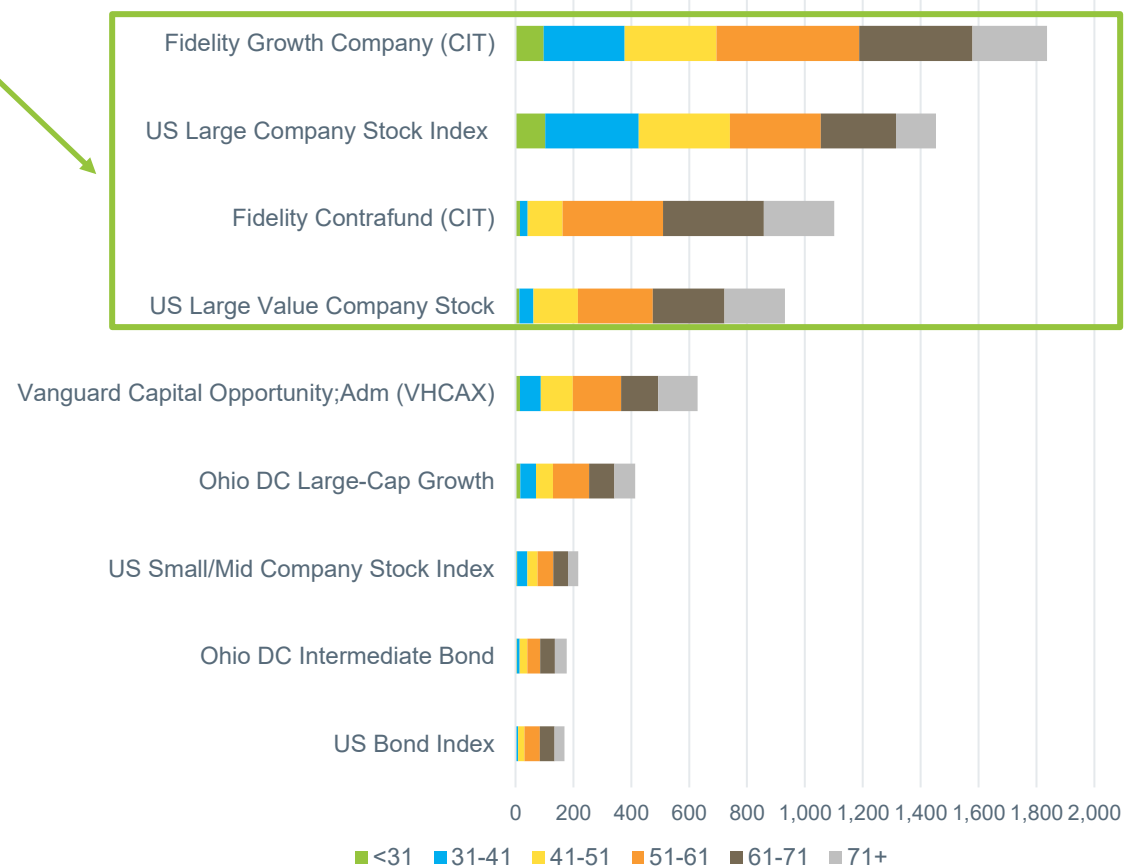
## Core Investors – A Closer Look at Single-Fund Investors

- Most participants holding a single fund continue to invest in Stable Value Option. The percentage of single fund investors using the SVO decreased slightly from 89% in 2018 to 85% in 2023.
- The majority of the remaining single fund investors continue to favor active US large cap equity options.

Participants Holding a Single Fund



Top 10 Funds



Participant balances are as of 12/31/2023 and were sourced from the Ohio DC Information Technology Department. Allocations shown may not sum up to 100% exactly due to rounding.



# Summary & Conclusions

February  
29, 2024

# Summary and Conclusions

**RVK recommends the Board take the following actions:**

- **Approve proposed Investment Policy Statement (IPS) edits** – full “Redline” and clean copies can be found in the Appendix.
- **Approve the addition of the 2065 Fund to the LifePath target date fund suite offered to plan participants** – in order to support the asset allocation decisions of young participants joining Ohio DC and align the addition with the expected merger of the 2025 Fund.

**RVK would like the Board’s thoughts and feedback on how to prioritize the following items:**

- **Evaluate Single vs. Multi-Manager Approach within US Bond Fund** – explore potential diversification and risk-mitigation benefits to participants relative to the existing single-manager approach.
- **Structure reviews of Ohio DC’s equity options** – re-evaluate existing structures and investment managers with consideration of the appropriate risk-and-return characteristics, fees, etc. for each option.
- **Large-Cap Growth Manager Structure** – Re-evaluate the decision to offer three (3) US large cap growth stock options and explore if consolidation would be beneficial to participants.

*Appendix*  
**Investment Menu Utilization (Continued)**

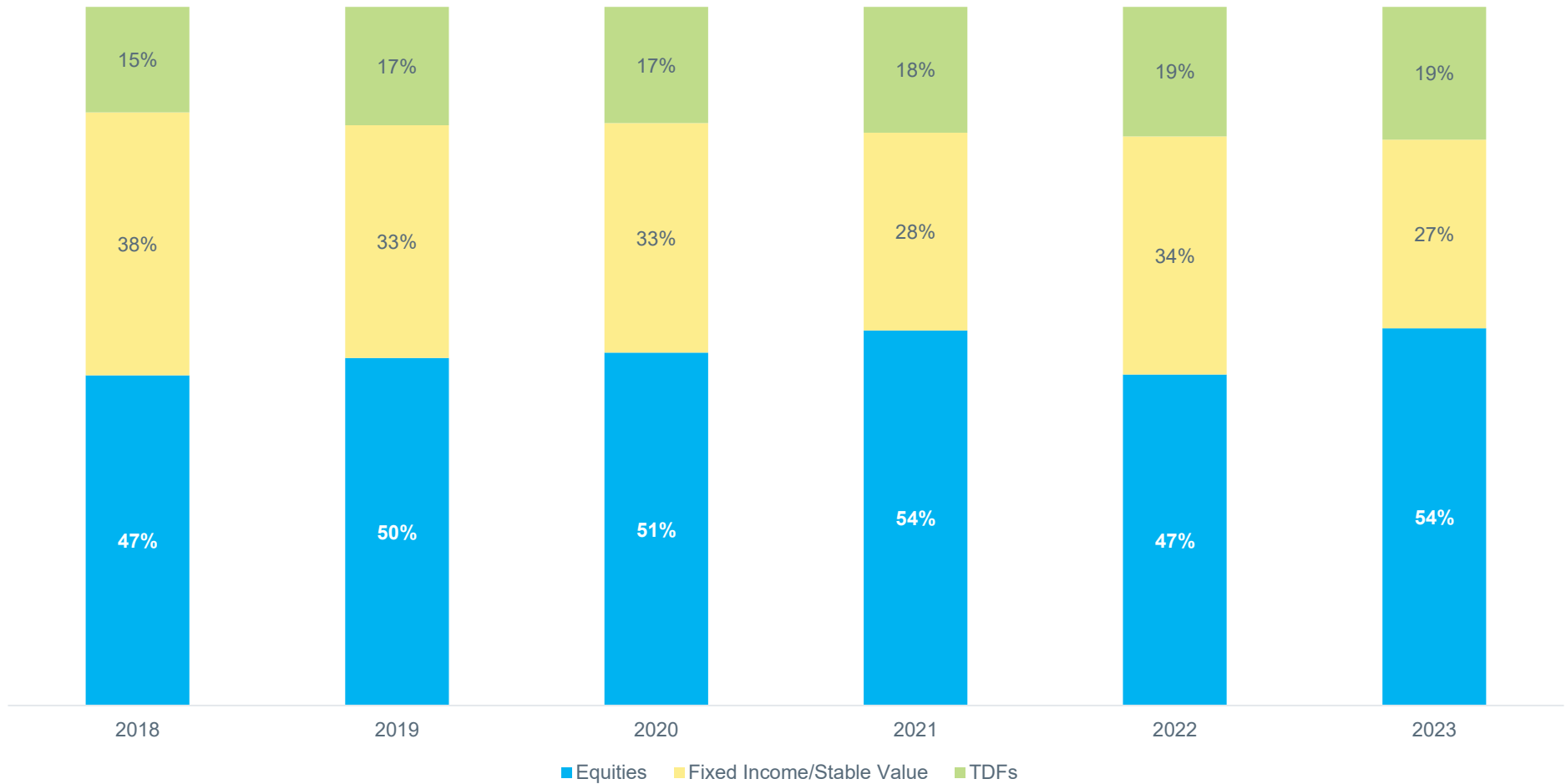


# Investment Menu Review Analysis

## Total Investments

Target date funds have grown from 15% of plan assets in 2018 to 19% of plan assets in 2023 while fixed income/stable value declined slightly.

Total Investments



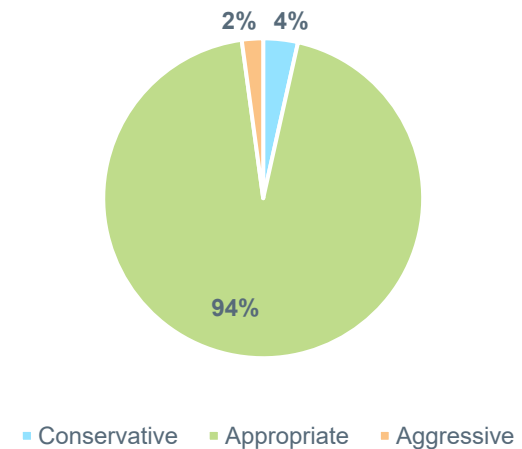
Asset allocations shown may not sum up to 100% exactly due to rounding.

# Investment Menu Review Analysis

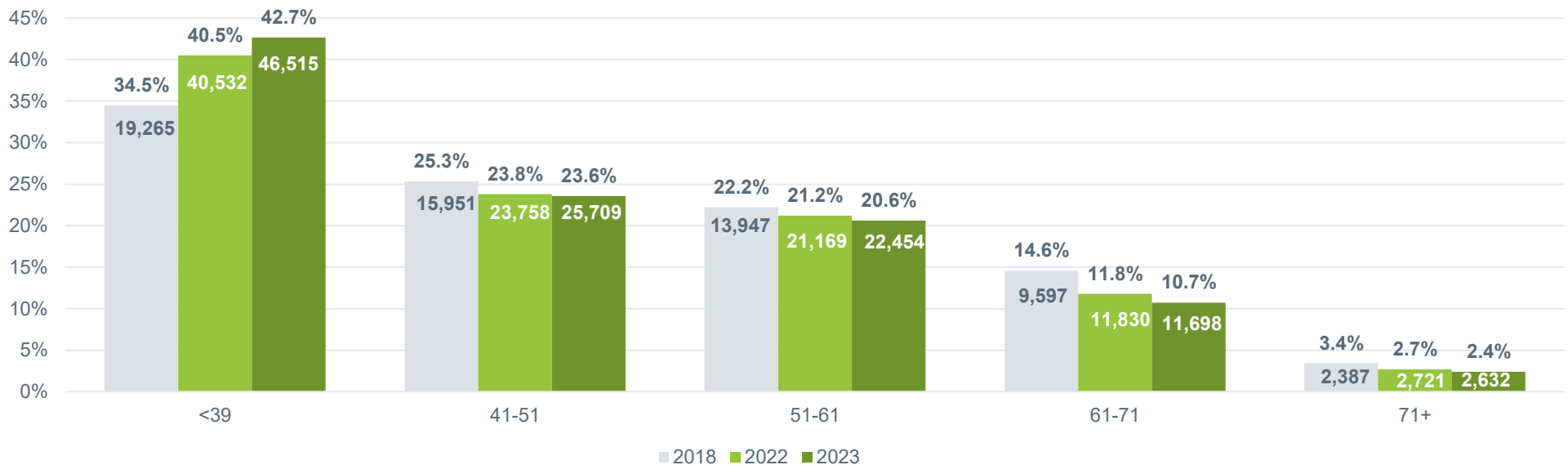
## Target Date Fund Investors – Single TDF Usage

- **94%** of single fund TDF participants are invested in an “age-appropriate” fund. This is consistent with previous years.
- Of the 40% of participants invested in a single TDF, **43%** are younger than age 39.

### Age Appropriate Utilization



### Single TDF Participants Utilization by Age



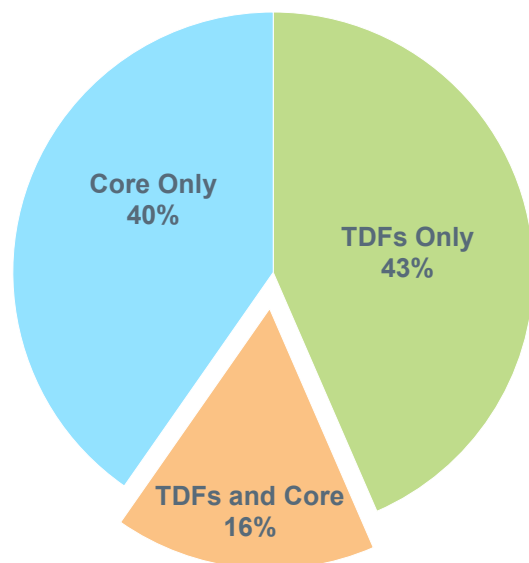
Participant balances are as of 12/31/2023 and were sourced from the Ohio DC Information Technology Department. Total Participant Population: 12/31/2023 – 258,640, 12/31/2022 – 251,376, 12/31/2018 – 201,763. Age-appropriate target date funds are defined as suitable fund vintages assuming a retirement age between 60-70, based on a participant’s current age.

# Investment Menu Review Analysis

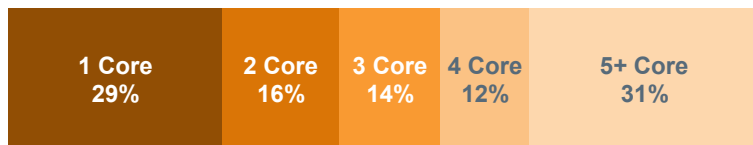
## Multi-Tier Investors

- Average target date fund allocations range between **28%** and **44%** across age groups.
- Average equity allocations range between **62%** and **67%**, which suggests a preference for more risk within each age cohort.

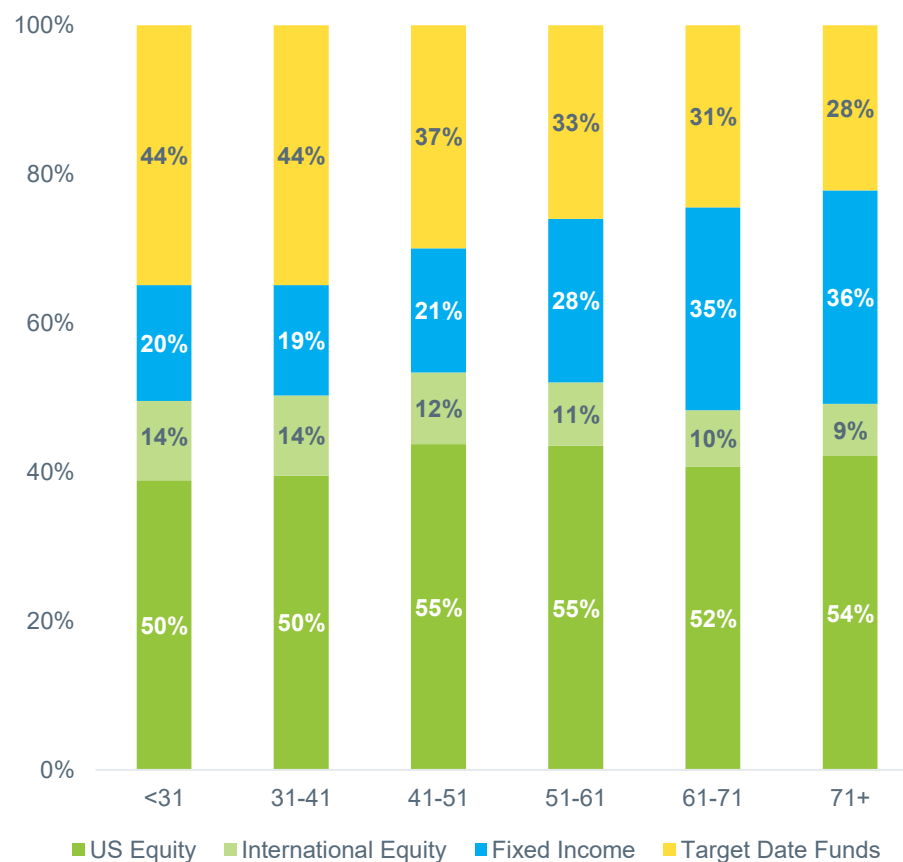
**Investment Tier Utilization**



**One TDF + Core Options**



**Average Asset Allocation  
TDF+ Core Investors**



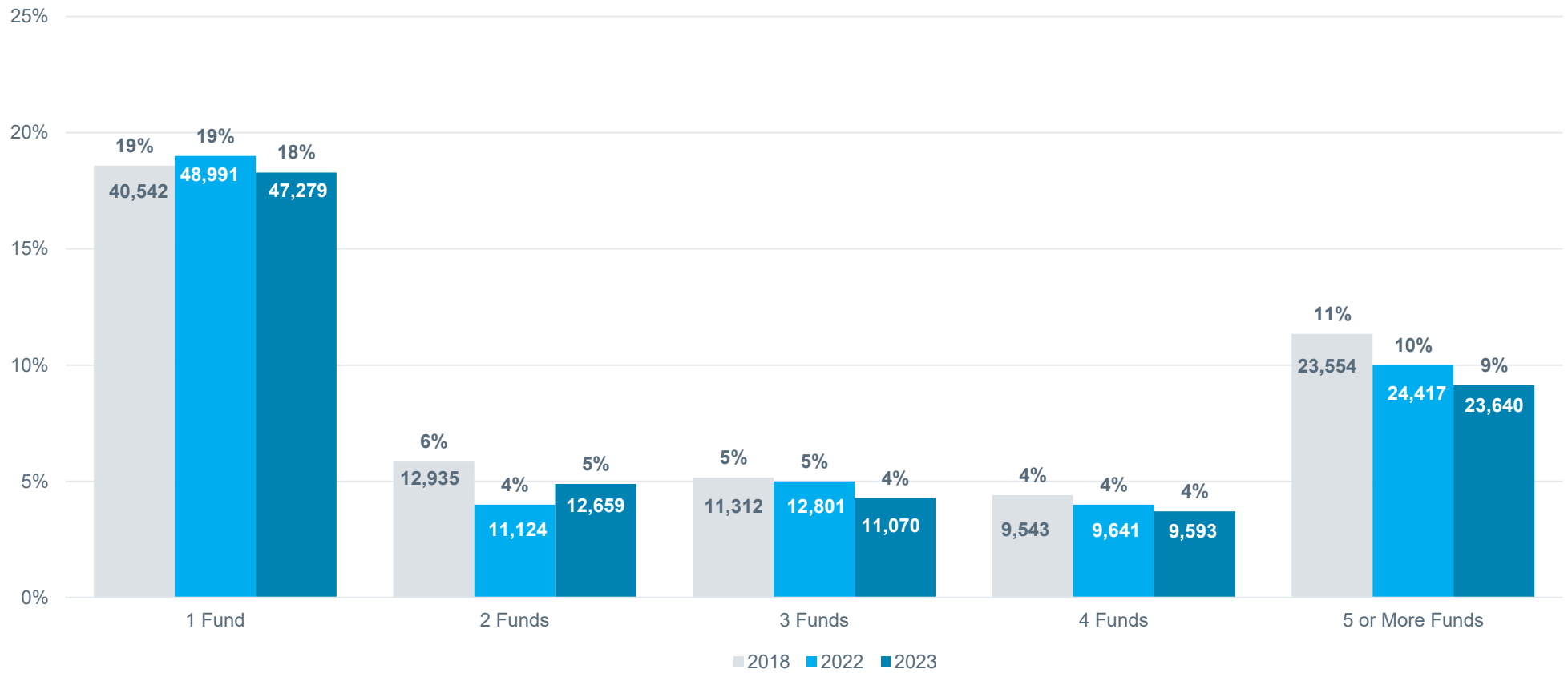
Participant balances are as of 12/31/2023 and were sourced the Ohio DC Information Technology Department. Allocations shown may not sum up to 100% exactly due to rounding.

# Investment Menu Review Analysis

## Core Investors

- **40%** of participants are solely invested in the core menu, a slight decrease from 45% in 2018.
- **18%** of participants are core menu only single-fund holders, a slight decrease from 19% in 2018.

**Count of Investment Options**  
(% of Core Investors)



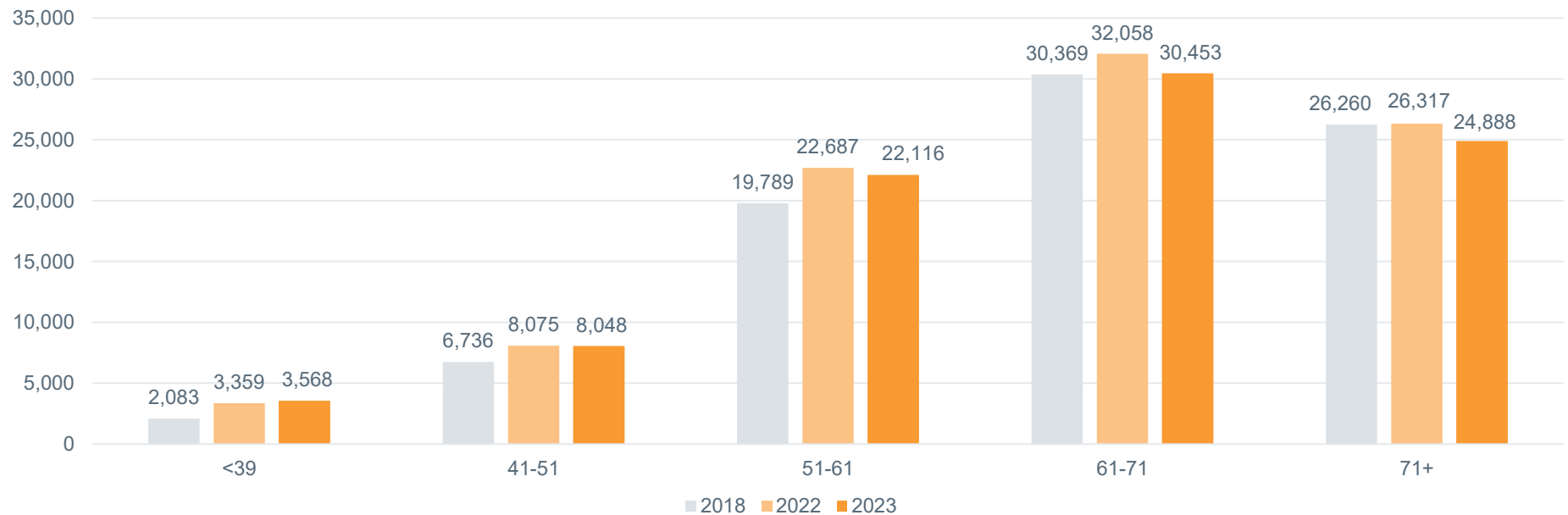
Participant balances are as of 12/31/2023 and were sourced from the Ohio DC Information Technology Department. Total Participant Population: 12/31/2023 – 258,640, 12/31/2022 – 251,376, 12/31/2018 – 201,763.

# Investment Menu Review Analysis - Utilization

## Core Investors – Stable Value Utilization

- A significant number of participants ages 60+ continue to invest in stable value. While the number of people investing in stable value has increased since 2018, there has been a steady decline in participants as a percentage of the total population.

Stable Value Utilization By Age



% of Population Invested in Stable Value	Age Group					Total Population
	<39	41-51	51-61	61-71	71+	
December 31, 2023	6.1%	20.4%	46.8%	49.7%	47.7%	<b>34.4%</b>
December 31, 2022	6.2%	21.1%	49.0%	52.0%	48.1%	<b>36.8%</b>
December 31, 2018	6.7%	19.0%	39.0%	59.6%	78.3%	<b>42.2%</b>

Participant balances are as of 12/31/2023 and were sourced from the Ohio DC Information Technology Department. Allocations shown may not sum up to 100% exactly due to rounding.



*Appendix*  
**Proposed IPS Edits (Redline & Clean)**



# Investment Menu Design Framework

**Plan fiduciaries should review the Investment Policy Statement (IPS) periodically to ensure that its objectives, constraints, and policies remain appropriate.**

- As investment menu changes are considered, fiduciaries should review the IPS to confirm the intended changes are within the appropriate guidelines and rules.

---

## Ohio Deferred Compensation Program Investment Policy Statement

**The objective of the Board is to offer:** a broad range of investment alternatives with materially different risk and return characteristics to allow participants, by choosing among such investment alternatives, the opportunity to diversify their balances and construct portfolios consistent with their unique individual circumstances, goals, time horizons, and tolerance for risk. It is also the objective of the Board to offer investment alternatives at a reasonable cost. The Board will periodically re-evaluate the investment alternatives structure and make changes as appropriate.

**Women and Minority-Owned, Ohio-Based and Emerging (WMOE) Business Enterprises.** The Board recognizes that Ohio DC is a public agency with a diverse membership that aspires to fully consider WMOE organizations for all of its service provider relationships. The Staff and Consultant are requested to provide an assessment of the most qualified WMOE organizations that meet its criteria as approved by the Board while conducting searches for service providers. Disabled veterans are included in the definition of minority.

**Ohio Public Employees Deferred Compensation Program  
Investment Policy Statement**

Adopted 12/17/1996

Last Revised 3/194/20234

- I. **General.** The purpose of this statement is to establish the investment policy for the management of the assets of the Ohio Public Employees Deferred Compensation Program ("~~Program~~Ohio DC"), with the exception of the Stable Value Option, which has additional investment policy guidelines outlined within the "Stable Value Option Investment Policy Statement." This policy will be reviewed periodically (typically annually) by ~~the Program's~~Ohio DC's investment consultant ("Consultant"). Any changes the Consultant recommends will be discussed with ~~Ohio DC~~the Program's staff ("Staff") and presented to the Board for final approval. In addition, the Consultant will be evaluated by the Staff and Board annually concerning their work on ~~Ohio DC~~the Program.

It is the intention of the Board that the assets of ~~Ohio DC~~the Program shall be maintained in compliance with all applicable laws governing the operation of ~~Ohio DC~~the Program. Practices in this regard include, but are not limited to, the following:

- Although ~~Ohio DC~~the Program is not subject to Employee Retirement Income Security Act of 1974 ("ERISA"), ~~Ohio DC~~the Program intends to generally follow the fiduciary best practices of ERISA when feasible.
- ~~Ohio DC~~Program investment alternatives shall be selected and monitored with the care, skill, and diligence that would be applied by a prudent investor, acting in a like capacity and knowledgeable in the investment of retirement funds.
  - All transactions undertaken on behalf of ~~Ohio DC~~the Program shall be for the sole interest of participants. For purposes of this policy, the term "Participants" means any participant, beneficiary, or alternate payee who has an account or accounts within ~~Ohio DC~~the Program.
- The Board, in consultation with the Consultant and Staff, will select and retain investment alternatives after review of such factors as the investment experience of the underlying investment manager, suitability of the investment approach employed, investment record, and other components as listed in Section V.
- Participants will be provided the opportunity to obtain information to make informed decisions with regard to the investment alternatives available under ~~Ohio DC~~the Program.

- II. **Distinction of Responsibilities.** The Board, in consultation with its Staff and Consultant, is responsible for the selection and monitoring of the investment alternatives and service providers of ~~Ohio DC~~the Program. Participants are responsible for the allocation of their assets among the investment alternatives in ~~Ohio DC~~the Program. The Staff and retained service providers are responsible for the safekeeping of securities, settlement of trades, collection of income, establishment and monitoring of liquidity allocations to accommodate participant cash flow needs, and administrative reporting. The Consultant is responsible for providing investment advice concerning the investment management of ~~Ohio DC~~the Program assets consistent with the investment objectives, policies, guidelines, and constraints as established in this Policy. The investment managers are responsible for selecting investments with the same care, skill, prudence, and due diligence that experienced investment professionals acting in a like capacity would use in accordance and compliance with all applicable laws, rules and regulations. Investment managers are responsible for communicating any material changes in the

process, philosophy, management, and/or performance of the underlying investment strategies, and voting all proxies in the best interests of Participants.

**III. Investment Objectives and Program-Lineup Structure.** The objective of the Board is to offer a broad range of investment alternatives with materially different risk and return characteristics to allow participants, by choosing among such investment alternatives, the opportunity to diversify their balances and construct portfolios consistent with their unique individual circumstances, goals, time horizons, and tolerance for risk. It is also the objective of the Board to offer investment alternatives at a reasonable cost. The Board will periodically re-evaluate the investment alternative structure and make changes as appropriate.

The appropriate fund peer group and/or passive benchmark for each investment objective type and current offerings are as follows can be found in the table below. Additional information regarding allocations and rebalancing for multi-manager funds can be found in Appendix A.:

Investment Objective Type	Universe/Peer Group	Investment Alternative	Benchmark
Targeted Maturity Asset Allocation	Multi-Asset or Target Date Strategy by Vintage	LifePath Portfolios (BlackRock) – Five-year vintages ranging from Retirement to 2060	Blended benchmark comprising Russell 1000 Index, Russell 2000 Index, MSCI All Country World Ex US IM Index, Bloomberg US Aggregate Bond Index, Bloomberg US Treasury: US TIPS Index, FTSE EPRA/NAREIT Developed Index, Bloomberg Commodity Index, and FTSE 3 Month T-Bill Index
Indexed <u>US</u> Fixed Income	Not Applicable	US Bond Index (State Street)	Bloomberg US Aggregate Bond Index
Indexed US Large Company Stock	Not Applicable	US Large Company Stock Index (State Street)	S&P 500 Index
Indexed US Small Company Stock	Not Applicable	Non-US Company Stock Index (State Street)	Russell Small Cap Completion Index
Indexed Non-US Stock	Not Applicable	Non-US Company Stock Index (State Street)	MSCI ACW Ex US IM Index
Stable Value <del>Option</del>	Not Applicable	Stable Value Option (Multiple Managers)	See Stable Value Policy
Diversified <u>US</u> Fixed Income	Core Plus Fixed Income Mutual Fund Strategy	US Bond (TCW)	Bloomberg US Aggregate Bond Index
Large <u>US</u> Company Value Stock	Large-Cap Value Mutual Fund Strategy	US Large Value Company Stock (Dodge & Cox)	Russell 1000 Value Index
Large <u>US</u> Company Growth Stock	Large-Cap Growth Mutual Fund Strategy	Fidelity Contrafund Fidelity Growth Company US Large Growth Company Stock (T. Rowe Price/State Street)	Russell 1000 Growth Index
Medium <u>US</u> Company Stock	Mid-Cap Growth Mutual Fund Strategy	Vanguard Capital Opportunity	Russell Mid-Cap Growth Index

Small <u>US</u> Company Value Stock	Small-Cap Value Mutual Fund Strategy	US Small Value Company Stock (Westwood/State Street)	Russell 2000 Value Index
Small <u>US</u> Company Growth Stock	Small-Cap Growth Mutual Fund Strategy	US Small Growth Company Stock (Westfield/Fiera/State Street)	Russell 2000 Growth Index
Non-US Stock	All Country World Ex US Mutual Fund Strategy	Non-US Company Stock (Arrowstreet, Schroders, Vanguard)	MSCI All Country World Ex US Index

**IV. Adding New Investment Alternatives/Managers.** Investment alternative or investment manager additions may be the result of a Request For Proposal (“RFP”) with public notice or Staff/Consultant search and evaluation. A formal RFP process may be waived at the discretion of the Board if doing so is determined to be in the best interests of Participants. The screening process for the initial selection of a new investment alternative or investment manager for inclusion in Ohio DC’s lineup the Program will consider attributes relevant to the specific asset class and search objective, as developed by the Staff, with the assistance of the Consultant. These attributes may include:

- Appropriate governance practices such as board oversight, relative transparency, and appropriate incentives for key talent (governance rating)
- Compelling aspects from a talent, process, trading, size, product fit, ownership, and organizational perspective (manager research rating)
- Strategy assets of at least \$100 million with at least five years of operating history
- No-load fund structure (no front-end or deferred sales charges), or be willing to waive the load or charges
- Three- and five-year returns equal to or exceeding the appropriate fund peer group median or passive benchmark
- Ability to execute prior day pricing for trading matched with redemption fee policies (if relevant) within the parameters necessary to administratively record keep the investment alternative
- Ability to provide Ohio DC the Program, or an acceptable intermediary, daily share/unit prices
- No recordkeeping reimbursements in the fund’s expense ratio
- Competitive and reasonable fees
- Agreement to conduct operational processes regarding the receipt of daily fund prices and transaction orders
- Portfolio manager should have at least two years tenure with the strategy unless there is team management, in which case the average team tenure should be at least five years

In certain cases, some of the above criteria may be waived as approved by the Board. For example, there may be few investment products available related to a specific search, or an investment manager qualifies under the policy that follows below.

**Women and Minority-Owned, Ohio-Based and Emerging (WMOE) Business Enterprises.** The Board recognizes that Ohio DC the Program is a public agency with a diverse membership that aspires to fully consider WMOE organizations for all its service provider relationships. The Staff and Consultant are requested to provide an assessment

of the most qualified WMOE organizations that meet its criteria as approved by the Board while conducting searches for service providers. Disabled veterans are included in the definition of minority.

The Staff and Consultant are allowed to relax specific criteria, to the extent that the Staff and Consultant are unable to find a representative list of WMOE enterprises that meet the selection criteria as approved by the Board. The candidate(s) that most closely meet the criteria and WMOE characteristics will be presented to the Board for consideration. The Board requests that the Staff and Consultant report on the specific criteria that was relaxed, with reasoning, upon delivery of the search materials.

**V. Quarterly Review.** A quarterly review of investment alternatives and investment managers will generally include historical performance and other information as listed below:

- [Program Ohio DC](#), investment alternative, and investment manager assets
- Appropriate peer group and benchmark comparisons over various time periods
- Risk/reward analysis over short- and longer-term time periods
- Any material changes in the investment manager's investment philosophy or process, personnel, or organization
- Style analysis
- Fund objective (and changes in fund objective)
- Expense ratio
- Portfolio turnover
- Sector, regional, and cash allocations
- Current level of participation among [Program Ohio DC](#) participants (number of actively deferring/account holders, total current deferrals, etc.)
- Other pertinent information as available

**VI. Investment Alternative/Manager Monitoring Policy.** The Board acknowledges that, from time to time, there may be a need to replace an existing investment alternative or investment manager. The Board has developed the following "Fund Monitoring" methodology to help govern decisions to close an investment alternative or replace an investment manager.

The Board's considerations in the process will generally be based on the following key criteria:

- The investment alternative or investment manager has underperformed its benchmark over the most recent trailing five-year period
- The investment alternative or investment manager has underperformed its benchmark in three of four of the most recent calendar quarters
- The investment alternative or investment manager's investment strategy and/or portfolio characteristics have materially diverged from its designated style
- Adverse change in the investment alternative or investment manager's portfolio management team and/or organizational structure
- Weak manager research rating, as reported by the Consultant

The table below summarizes the status that will be applied in this methodology:

Status		Number of Criteria Met	Generally Indicated Action
	<b>GREEN</b>	Less than 2	No action.
	<b>YELLOW</b>	2 to 3	The Board may place the investment alternative or investment manager on a “closely monitored list”.
	<b>ORANGE</b>	4	The Board will evaluate if all future contributions to the investment alternative or investment manager should be halted. The Board will continue to closely monitor the investment alternative or investment manager and make a decision within 180 days whether to close out the investment alternative or continue to closely monitor.
	<b>RED</b>	Greater than 4	The Board will evaluate closing out the investment alternative or investment manager and moving all invested balances to another investment alternative or investment manager as soon as administratively possible.

It is expected that investment alternatives or investment managers will not be reactivated once a status change occurs and the process to close out begins. However, the Board retains the discretion to re-evaluate investment alternatives and investment managers or delay the process as it may deem appropriate. If significant negative factors exist, accelerated status changes may be recommended. The Board reserves the right to close an investment alternative at any time for reasons that may go beyond the fund monitoring policy, such as material administrative and operational problems with the investment management company.

All investment alternative status changes will be announced in the most appropriate issue(s) of Ohio DCthe Program’s newsletter, and all affected participants will be sent individual notifications. Deadlines for completing a new allocation or transferring balances to another investment alternative will be communicated at least 30 days prior to the transition date. Investment alternative changes to a lower fee share class or investment vehicle of the same strategy and portfolio management do not require 30 days advance notification.

If an investment manager is terminated and/or added within a white label option, advance notification to participants is not required, but will be announced in the appropriate newsletter(s).

**VII. Plan Fees.** It is the intention of the Board to act in the best interest of Participants. On a periodic (typically annual) basis, costs will be evaluated to determine if they are considered “reasonable.” More information on Plan Fees can be found in the “Administrative Fee Policy Statement.”

**VIII. Fund Mapping.** If the Board decides to terminate an investment alternative, participants will be granted an opportunity to direct their assets to Ohio DCthe Program's other investment alternatives prior to the termination date. Assets that are not directed by participants will be transferred or "mapped" to Ohio DCthe Program's investment alternative(s) that the Board deems appropriate. Changes to a lower fee share class or investment vehicle of the same strategy and portfolio management do not require the opportunity for Participants to direct their assets to Ohio DCthe Program's other investment alternatives.

The mapping factors that the Board may consider include, but are not limited to, the following:

**Alignment of investment fund type**, such as:

- Asset class (e.g., US stock, non-US stock, fixed income)
- Capitalization (e.g., large, mid, small)
- Style (e.g., value, growth)
- Maturity (short, intermediate, long-term)

**Similar investment strategy**, such as:

- Broad market vs. focused market
- Active vs. passive management
- Balanced vs. 100% stock or bond
- Equity income, growth & income, aggressive growth
- Diversified vs. concentrated
- Core vs. core-plus

**Age-based** that corresponds to the appropriate time period until reaching the age of 65 for each participant.

**IX. Target Date Funds.** Target Date Funds ("TDF") are offered to provide a suite of asset allocation portfolios that allow participants to choose a single investment alternative that is appropriate based on an expected target retirement date. Each TDF vintage (e.g., 2040 Fund) will include a professionally managed portfolio of underlying investments that may include fixed income, equity, and alternative asset classes. The investment manager will adjust and rebalance the allocation of assets within each TDF vintage over time to reduce the expected risk by decreasing the equity allocation as each TDF vintage progresses towards its target retirement date.

TDF vintages that reach the end of their de-risking glide path will be automatically discontinued and the assets will be mapped into the TDF Retirement vintage. Additionally, new TDF vintages may be added over time to ensure portfolios exist for all stages of the glide path and participant target retirement dates.

The Board recognizes that some Ohio DCProgram participants may fail to make investment choices for their Program-Ohio DC account. Therefore, the Board believes it is appropriate to designate the target date funds as the default investment option for any Participant who fails to make an investment choice for his or her contributions.



## Appendix A. – Multi-Manager Investment Options

**I. Targets.** The below table outlines Ohio DC’s current multi-manager investment options and details the underlying investment managers and their target allocations.

<u>Investment Option Name</u>	<u>Underlying Managers and Target Allocations</u>	<u>Permitted Tolerance Range &amp; Rebalancing Frequency</u>
<u>Large US Company Growth Stock</u>	<u>95% - T Rowe Price 5% - State Street</u>	<u>+/- 3.0% (monthly*)</u>
<u>Small US Company Value Stock</u>	<u>93% - Westwood 7% - State Street</u>	<u>+/- 4.0% (monthly*)</u>
<u>Small US Company Growth Stock</u>	<u>66% - Westfield 27% - Fiera 7% - State Street</u>	<u>+/- 4.0% (monthly*)</u>
<u>Non-US Company Stock</u>	<u>35% - Schroders 30% - Arrowstreet 35% - Vanguard</u>	<u>+/- 0.0% (daily rebalancing through cash flows, with monthly rebalance to target-)</u>
<u>Stable Value Option</u>	<u>See Stable Value Policy</u>	<u>See Stable Value Policy</u>

\* Measured monthly and rebalanced to target triggered if tolerance breached.

**II. Rebalancing Policy.** Rebalancing manager allocations is necessary to control risk, as market movements will cause the investment option’s manager allocations to deviate from their strategic target allocations. Rebalances can be meaningful to a portfolio, so to minimize transaction costs and active manager holdings impact, permitted tolerance ranges are utilized to determine if a rebalance is needed. A standing instruction is in place with the custodian bank to allocate daily participant cash flows and measure the need for periodic rebalancing in accordance with the permitted tolerance ranges and rebalancing frequency shown in the table above. The custodian bank executes necessary portfolio trades and/or cash movements based on a standing direction. Stable Value Option rebalancing policy can be found in the Stable Value Policy.

**Ohio Public Employees Deferred Compensation Program  
Investment Policy Statement**

Adopted 12/17/1996

Last Revised 3/19/2024

- I. **General.** The purpose of this statement is to establish the investment policy for the management of the assets of the Ohio Public Employees Deferred Compensation Program (“Ohio DC”), with the exception of the Stable Value Option, which has additional investment policy guidelines outlined within the “Stable Value Option Investment Policy Statement.” This policy will be reviewed periodically (typically annually) by Ohio DC’s investment consultant (“Consultant”). Any changes the Consultant recommends will be discussed with Ohio DC’s staff (“Staff”) and presented to the Board for final approval. In addition, the Consultant will be evaluated by the Staff and Board annually concerning their work on Ohio DC.

It is the intention of the Board that the assets of Ohio DC shall be maintained in compliance with all applicable laws governing the operation of Ohio DC. Practices in this regard include, but are not limited to, the following:

- Although Ohio DC is not subject to Employee Retirement Income Security Act of 1974 (“ERISA”), Ohio DC intends to generally follow the fiduciary best practices of ERISA when feasible.
- Ohio DC investment alternatives shall be selected and monitored with the care, skill, and diligence that would be applied by a prudent investor, acting in a like capacity and knowledgeable in the investment of retirement funds.
  - All transactions undertaken on behalf of Ohio DC shall be for the sole interest of participants. For purposes of this policy, the term "Participants" means any participant, beneficiary, or alternate payee who has an account or accounts within Ohio DC.
- The Board, in consultation with the Consultant and Staff, will select and retain investment alternatives after review of such factors as the investment experience of the underlying investment manager, suitability of the investment approach employed, investment record, and other components as listed in Section V.
- Participants will be provided the opportunity to obtain information to make informed decisions with regard to the investment alternatives available under Ohio DC.

- II. **Distinction of Responsibilities.** The Board, in consultation with its Staff and Consultant, is responsible for the selection and monitoring of the investment alternatives and service providers of Ohio DC. Participants are responsible for the allocation of their assets among the investment alternatives in Ohio DC. The Staff and retained service providers are responsible for the safekeeping of securities, settlement of trades, collection of income, establishment and monitoring of liquidity allocations to accommodate participant cash flow needs, and administrative reporting. The Consultant is responsible for providing investment advice concerning the investment management of Ohio DC assets consistent with the investment objectives, policies, guidelines, and constraints as established in this Policy. The investment managers are responsible for selecting investments with the same care, skill, prudence, and due diligence that experienced investment professionals acting in a like capacity would use in accordance and compliance with all applicable laws, rules and regulations. Investment managers are responsible for communicating any material changes in the process, philosophy, management, and/or performance of the underlying investment strategies, and voting all proxies in the best interests of Participants.

**III. Investment Objectives and Lineup Structure.** The objective of the Board is to offer a broad range of investment alternatives with materially different risk and return characteristics to allow participants, by choosing among such investment alternatives, the opportunity to diversify their balances and construct portfolios consistent with their unique individual circumstances, goals, time horizons, and tolerance for risk. It is also the objective of the Board to offer investment alternatives at a reasonable cost. The Board will periodically re-evaluate the investment alternative structure and make changes as appropriate.

The appropriate fund peer group and/or passive benchmark for each investment objective type and current offerings can be found in the table below. Additional information regarding allocations and rebalancing for multi-manager funds can be found in Appendix A.

Investment Objective Type	Universe/Peer Group	Investment Alternative	Benchmark
Targeted Maturity Asset Allocation	Multi-Asset or Target Date Strategy by Vintage	LifePath Portfolios (BlackRock) – Five-year vintages ranging from Retirement to 2060	Blended benchmark comprising Russell 1000 Index, Russell 2000 Index, MSCI All Country World Ex US IM Index, Bloomberg US Aggregate Bond Index, Bloomberg US Treasury: US TIPS Index, FTSE EPRA/NAREIT Developed Index, Bloomberg Commodity Index, and FTSE 3 Month T-Bill Index
Indexed US Fixed Income	Not Applicable	US Bond Index (State Street)	Bloomberg US Aggregate Bond Index
Indexed US Large Company Stock	Not Applicable	US Large Company Stock Index (State Street)	S&P 500 Index
Indexed US Small Company Stock	Not Applicable	Non-US Company Stock Index (State Street)	Russell Small Cap Completion Index
Indexed Non-US Stock	Not Applicable	Non-US Company Stock Index (State Street)	MSCI ACW Ex US IM Index
Stable Value	Not Applicable	Stable Value Option (Multiple Managers)	See Stable Value Policy
Diversified US Fixed Income	Core Plus Fixed Income Mutual Fund Strategy	US Bond (TCW)	Bloomberg US Aggregate Bond Index
Large US Company Value Stock	Large-Cap Value Mutual Fund Strategy	US Large Value Company Stock (Dodge & Cox)	Russell 1000 Value Index
Large US Company Growth Stock	Large-Cap Growth Mutual Fund Strategy	Fidelity Contrafund Fidelity Growth Company US Large Growth Company Stock (T. Rowe Price/State Street)	Russell 1000 Growth Index
Medium US Company Stock	Mid-Cap Growth Mutual Fund Strategy	Vanguard Capital Opportunity	Russell Mid-Cap Growth Index
Small US Company Value Stock	Small-Cap Value Mutual Fund Strategy	US Small Value Company Stock (Westwood/State Street)	Russell 2000 Value Index

Small US Company Growth Stock	Small-Cap Growth Mutual Fund Strategy	US Small Growth Company Stock (Westfield/Fiera/State Street)	Russell 2000 Growth Index
Non-US Stock	All Country World Ex US Mutual Fund Strategy	Non-US Company Stock (Arrowstreet, Schroders, Vanguard)	MSCI All Country World Ex US Index

**IV. Adding New Investment Alternatives/Managers.** Investment alternative or investment manager additions may be the result of a Request For Proposal (“RFP”) with public notice or Staff/Consultant search and evaluation. A formal RFP process may be waived at the discretion of the Board if doing so is determined to be in the best interests of Participants. The screening process for the initial selection of a new investment alternative or investment manager for inclusion in Ohio DC’s lineup will consider attributes relevant to the specific asset class and search objective, as developed by the Staff, with the assistance of the Consultant. These attributes may include:

- Appropriate governance practices such as board oversight, relative transparency, and appropriate incentives for key talent (governance rating)
- Compelling aspects from a talent, process, trading, size, product fit, ownership, and organizational perspective (manager research rating)
- Strategy assets of at least \$100 million with at least five years of operating history
- No-load fund structure (no front-end or deferred sales charges), or be willing to waive the load or charges
- Three- and five-year returns equal to or exceeding the appropriate fund peer group median or passive benchmark
- Ability to execute prior day pricing for trading matched with redemption fee policies (if relevant) within the parameters necessary to administratively record keep the investment alternative
- Ability to provide Ohio DC, or an acceptable intermediary, daily share/unit prices
- No recordkeeping reimbursements in the fund’s expense ratio
- Competitive and reasonable fees
- Agreement to conduct operational processes regarding the receipt of daily fund prices and transaction orders
- Portfolio manager should have at least two years tenure with the strategy unless there is team management, in which case the average team tenure should be at least five years

In certain cases, some of the above criteria may be waived as approved by the Board. For example, there may be few investment products available related to a specific search, or an investment manager qualifies under the policy that follows below.

**Women and Minority-Owned, Ohio-Based and Emerging (WMOE) Business Enterprises.** The Board recognizes that Ohio DC is a public agency with a diverse membership that aspires to fully consider WMOE organizations for all its service provider relationships. The Staff and Consultant are requested to provide an assessment of the most qualified WMOE organizations that meet its criteria as approved by the Board while conducting searches for service providers. Disabled veterans are included in the definition of minority.

The Staff and Consultant are allowed to relax specific criteria, to the extent that the Staff and Consultant are unable to find a representative list of WMOE enterprises that meet the selection criteria as approved by the Board. The candidate(s) that most closely meet the criteria and WMOE characteristics will be presented to the Board for consideration. The Board requests that the Staff and Consultant report on the specific criteria that was relaxed, with reasoning, upon delivery of the search materials.

**V. Quarterly Review.** A quarterly review of investment alternatives and investment managers will generally include historical performance and other information as listed below:

- Ohio DC, investment alternative, and investment manager assets
- Appropriate peer group and benchmark comparisons over various time periods
- Risk/reward analysis over short- and longer-term time periods
- Any material changes in the investment manager's investment philosophy or process, personnel, or organization
- Style analysis
- Fund objective (and changes in fund objective)
- Expense ratio
- Portfolio turnover
- Sector, regional, and cash allocations
- Current level of participation among Ohio DC participants (number of actively deferring/account holders, total current deferrals, etc.)
- Other pertinent information as available

**VI. Investment Alternative/Manager Monitoring Policy.** The Board acknowledges that, from time to time, there may be a need to replace an existing investment alternative or investment manager. The Board has developed the following "Fund Monitoring" methodology to help govern decisions to close an investment alternative or replace an investment manager.

The Board's considerations in the process will generally be based on the following key criteria:

- The investment alternative or investment manager has underperformed its benchmark over the most recent trailing five-year period
- The investment alternative or investment manager has underperformed its benchmark in three of four of the most recent calendar quarters
- The investment alternative or investment manager's investment strategy and/or portfolio characteristics have materially diverged from its designated style
- Adverse change in the investment alternative or investment manager's portfolio management team and/or organizational structure
- Weak manager research rating, as reported by the Consultant

The table below summarizes the status that will be applied in this methodology:

Status		Number of Criteria Met	Generally Indicated Action
	<b>GREEN</b>	Less than 2	No action.
	<b>YELLOW</b>	2 to 3	The Board may place the investment alternative or investment manager on a “closely monitored list”.
	<b>ORANGE</b>	4	The Board will evaluate if all future contributions to the investment alternative or investment manager should be halted. The Board will continue to closely monitor the investment alternative or investment manager and make a decision within 180 days whether to close out the investment alternative or continue to closely monitor.
	<b>RED</b>	Greater than 4	The Board will evaluate closing out the investment alternative or investment manager and moving all invested balances to another investment alternative or investment manager as soon as administratively possible.

It is expected that investment alternatives or investment managers will not be reactivated once a status change occurs and the process to close out begins. However, the Board retains the discretion to re-evaluate investment alternatives and investment managers or delay the process as it may deem appropriate. If significant negative factors exist, accelerated status changes may be recommended. The Board reserves the right to close an investment alternative at any time for reasons that may go beyond the fund monitoring policy, such as material administrative and operational problems with the investment management company.

All investment alternative status changes will be announced in the most appropriate issue(s) of Ohio DC’s newsletter, and all affected participants will be sent individual notifications. Deadlines for completing a new allocation or transferring balances to another investment alternative will be communicated at least 30 days prior to the transition date. Investment alternative changes to a lower fee share class or investment vehicle of the same strategy and portfolio management do not require 30 days advance notification.

If an investment manager is terminated and/or added within a white label option, advance notification to participants is not required, but will be announced in the appropriate newsletter(s).

**VII. Plan Fees.** It is the intention of the Board to act in the best interest of Participants. On a periodic (typically annual) basis, costs will be evaluated to determine if they are considered “reasonable.” More information on Plan Fees can be found in the “Administrative Fee Policy Statement.”

**VIII. Fund Mapping.** If the Board decides to terminate an investment alternative, participants will be granted an opportunity to direct their assets to Ohio DC's other investment alternatives prior to the termination date. Assets that are not directed by participants will be transferred or "mapped" to Ohio DC's investment alternative(s) that the Board deems appropriate. Changes to a lower fee share class or investment vehicle of the same strategy and portfolio management do not require the opportunity for Participants to direct their assets to Ohio DC's other investment alternatives.

The mapping factors that the Board may consider include, but are not limited to, the following:

**Alignment of investment fund type**, such as:

- Asset class (e.g., US stock, non-US stock, fixed income)
- Capitalization (e.g., large, mid, small)
- Style (e.g., value, growth)
- Maturity (short, intermediate, long-term)

**Similar investment strategy**, such as:

- Broad market vs. focused market
- Active vs. passive management
- Balanced vs. 100% stock or bond
- Equity income, growth & income, aggressive growth
- Diversified vs. concentrated
- Core vs. core-plus

**Age-based** that corresponds to the appropriate time period until reaching the age of 65 for each participant.

**IX. Target Date Funds.** Target Date Funds ("TDF") are offered to provide a suite of asset allocation portfolios that allow participants to choose a single investment alternative that is appropriate based on an expected target retirement date. Each TDF vintage (e.g., 2040 Fund) will include a professionally managed portfolio of underlying investments that may include fixed income, equity, and alternative asset classes. The investment manager will adjust and rebalance the allocation of assets within each TDF vintage over time to reduce the expected risk by decreasing the equity allocation as each TDF vintage progresses towards its target retirement date.

TDF vintages that reach the end of their de-risking glide path will be automatically discontinued and the assets will be mapped into the TDF Retirement vintage. Additionally, new TDF vintages may be added over time to ensure portfolios exist for all stages of the glide path and participant target retirement dates.

The Board recognizes that some Ohio DC participants may fail to make investment choices for their Ohio DC account. Therefore, the Board believes it is appropriate to designate the target date funds as the default investment option for any Participant who fails to make an investment choice for his or her contributions.

## Appendix A. – Multi-Manager Investment Options

- I. **Targets.** The below table outlines Ohio DC’s current multi-manager investment options and details the underlying investment managers and their target allocations.

Investment Option Name	Underlying Managers and Target Allocations	Permitted Tolerance Range & Rebalancing Frequency
Large US Company Growth Stock	95% - T Rowe Price 5% - State Street	+/- 3.0% (monthly*)
Small US Company Value Stock	93% - Westwood 7% - State Street	+/- 4.0% (monthly*)
Small US Company Growth Stock	66% - Westfield 27% - Fiera 7% - State Street	+/- 4.0% (monthly*)
Non-US Company Stock	35% - Schroders 30% - Arrowstreet 35% - Vanguard	+/- 0.0% (daily rebalancing through cash flows, with monthly rebalance to target)
Stable Value Option	See Stable Value Policy	See Stable Value Policy

\* Measured monthly and rebalanced to target triggered if tolerance breached.

- II. **Rebalancing Policy.** Rebalancing manager allocations is necessary to control risk, as market movements will cause the investment option’s manager allocations to deviate from their strategic target allocations. Rebalances can be meaningful to a portfolio, so to minimize transaction costs and active manager holdings impact, permitted tolerance ranges are utilized to determine if a rebalance is needed. A standing instruction is in place with the custodian bank to allocate daily participant cash flows and measure the need for periodic rebalancing in accordance with the permitted tolerance ranges and rebalancing frequency shown in the table above. The custodian bank executes necessary portfolio trades and/or cash movements based on a standing direction. Stable Value Option rebalancing policy can be found in the Stable Value Policy.

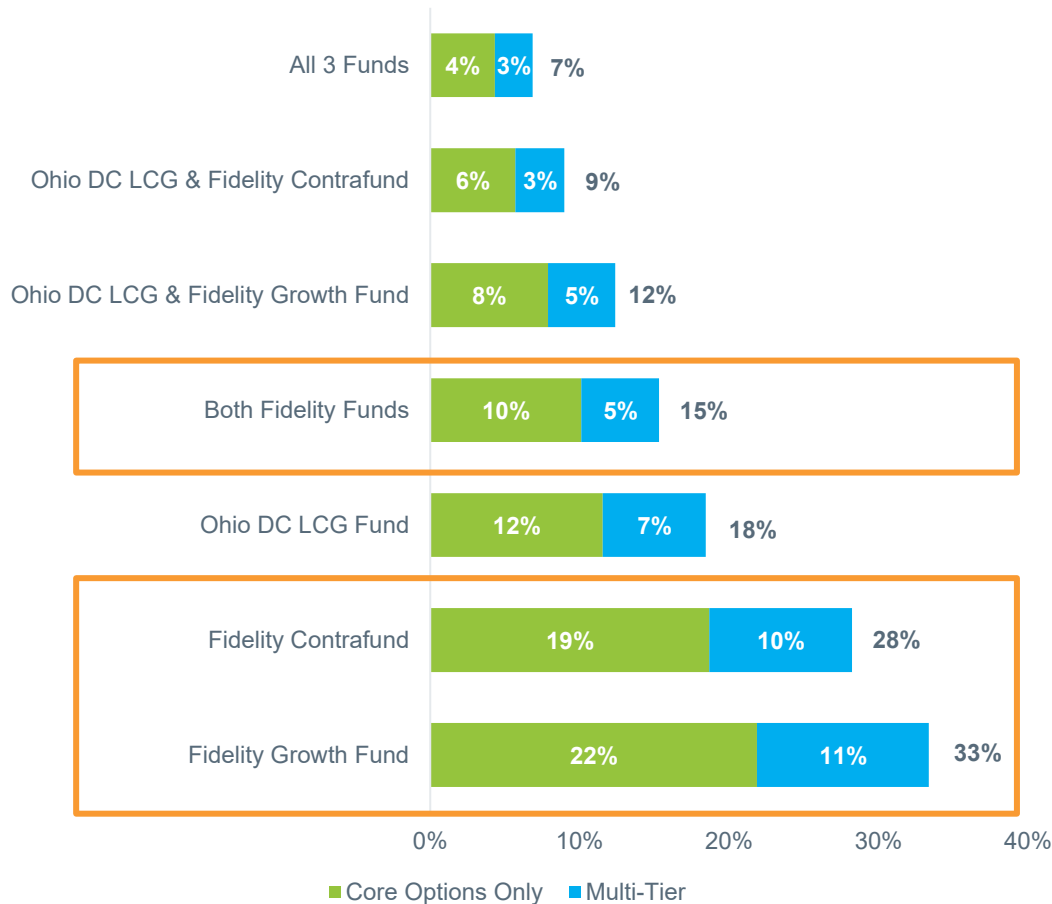


*Appendix*  
**US Large Cap Growth Equity**



# US Large Cap Growth Equity

## Ohio DC Active US Large Cap Growth Participant Usage (TDF+Core or Core Only)

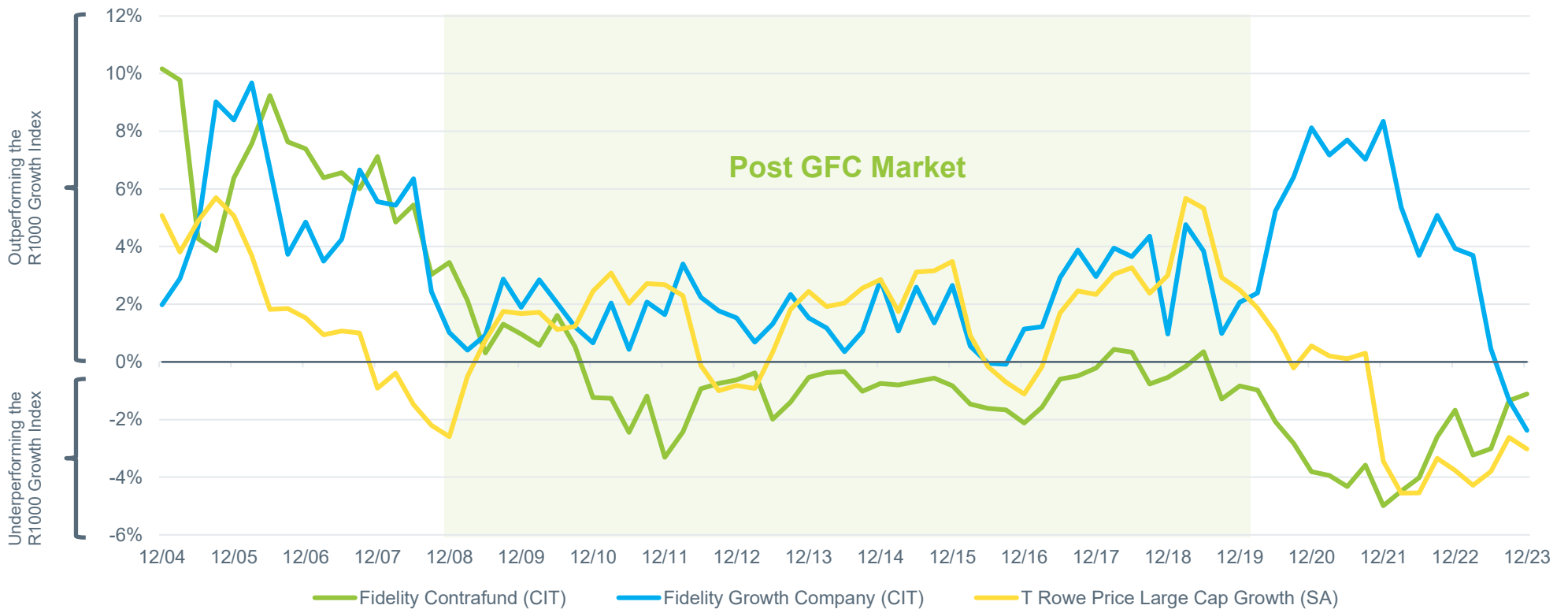


- ~30% of Ohio DC core participants (TDF+Core or Core Only) are invested in at least one of the two Fidelity large cap growth funds.
  - This translates to approximately 17% of all Ohio DC participants, roughly 45,000 individuals.
- Half of those participants (15%) are using both funds.
  - This translates to approximately 9% of all Ohio DC participants, roughly 22,000 individuals.

# US Large Cap Growth Equity

Since the 2008 financial crisis (“GFC”), relative performance between Fidelity Growth Company and Large Growth Company Stock (T. Rowe Price) has generally been similar, outperforming the index, while Fidelity Contrafund has struggled relative to the index. More recently, all three managers have trailed the Russell 1000 Growth Index on a three-year rolling basis.

**Ohio US Large Cap Growth Managers  
Three-Year Rolling Historical Excess Return vs. Russell 1000 Growth Index**



Data is as of 12/31/2023. Calculation is based on quarterly periodicity.

# US Large Cap Growth Equity

T. Rowe Price Large Cap Growth has historically outperformed the Russell 1000 Growth Index in growth-led markets and kept pace with the index in value-led markets. Fidelity Growth Company has historically outperformed the index in only growth-led markets, and Fidelity Contrafund has outperformed in only value-led markets.

As of December 2023      Benchmark: Russell 1000 Growth

**Annualized Excess Returns in Past Style Led Months**



	Annualized Excess Returns		# of Months of Style Leadership	
	Growth Outperforms	Value Outperforms	Growth Outperforms	Value Outperforms
Fidelity Contrafund	-7.07	9.43	182	161
Fidelity Growth Company	10.34	-1.65	170	153
T. Rowe Price LCG	2.83	0.43	143	122

# US Large Cap Growth Equity

## Observations:

- T. Rowe Price is the most concentrated strategy amongst the three, with fewer company holdings relative to the index.
- Fidelity Contrafund and T. Rowe Price strategies have more attractive Sharpe Ratios than Fidelity Growth Company.
  - Fidelity Growth Company exhibits the most attractive up market and down-market protection, historically.
- Fidelity Growth Company has consistently outperformed the index and ranked above median peer. The past 10 years has been more challenging for Fidelity Contrafund.
- Investment fees for all three strategies remain highly competitive relative to peers.

## Ohio DC Large Cap Growth Manager Comparison

Funds	RVK Manager Research Ranking	Fund Type	Holdings	Active Share	Sharpe Ratio (10-year)	Consistency (Info Ratio) (10-year)	Up Markets Capture (10-year)	Down Markets Capture (10-year)	Excess Return (10-year) vs. R 1000 G Index	Excess Return (10-year) vs. Peers (percentile)	Fees (Current Peer Ranking)
T Rowe Price	Positive	Large Cap Growth	61	46.7	0.79	-0.08	97.92	98.15	-0.31	13th	9
Fidelity Contrafund	Neutral	Large Cap Growth	349	48.8	0.78	-0.54	89.97	91.81	-1.86	47th	9
Fidelity Growth Company	Neutral	Large Cap Growth	567	41.2	0.87	0.54	113.36	107.15	3.06	1st	9

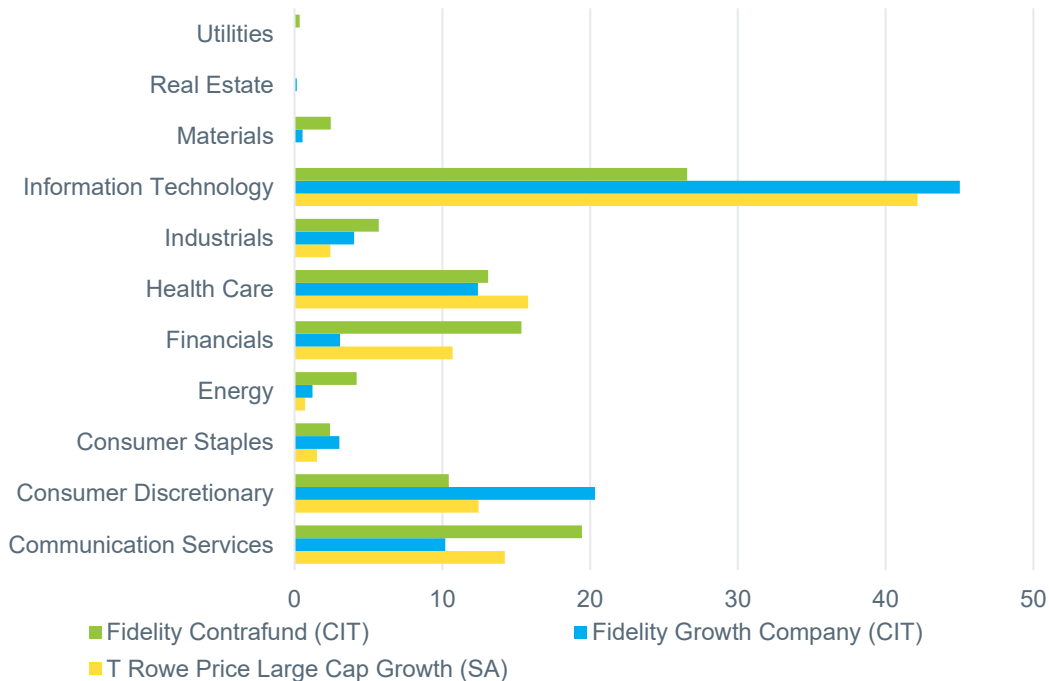
Data shown is as of 12/31/2023. All risk and return statistics are benchmarked against the Russell 1000 Growth Index and Morningstar Large Growth peer group. Fees are benchmarked against the IM Large Cap Growth peer group.

# US Large Cap Growth Equity

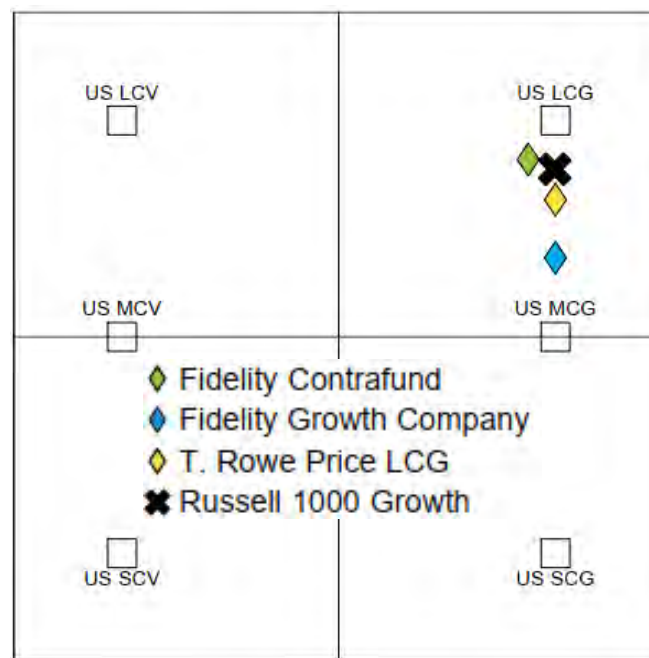
## Holdings Overlap Comparison

Funds	T Rowe Price Large Cap Growth		Fidelity Contrafund		Fidelity Growth Company	
	Count of Securities	% of TRP Market Value	Count of Securities	% of Contrafund Market Value	Count of Securities	% of Growth Company Market Value
T Rowe Price Large Cap Growth (SA)			41	53.07	44	38.67
Fidelity Contrafund 3 (CIT)	41	80.99			108	49.93
Fidelity Growth Company 3 (CIT)	44	79.67	108	72.36		

### Sector Weights (%)



### Style Analysis - 10 Year Average



Data is shown as of 12/31/2023. In the Holdings Overlap Comparison chart, the count represents the number of overlapping securities. The percentage represents the total weight of the overlapping names. For example, of the 41 overlapping securities in the T Rowe Price portfolio compared to Fidelity Contrafund, the overlapping securities represent 80.99% of T Rowe Price's portfolio.

PORTLAND

BOISE

CHICAGO

NEW YORK

**Disclaimer of Warranties and Limitation of Liability** - This document was prepared by RVK, Inc. (RVK) and may include information and data from some or all of the following sources: client staff; custodian banks; investment managers; specialty investment consultants; actuaries; plan administrators/record-keepers; index providers; as well as other third-party sources as directed by the client or as we believe necessary or appropriate. RVK has taken reasonable care to ensure the accuracy of the information or data, but makes no warranties and disclaims responsibility for the accuracy or completeness of information or data provided or methodologies employed by any external source. This document is provided for the client's internal use only and does not constitute a recommendation by RVK or an offer of, or a solicitation for, any particular security and it is not intended to convey any guarantees as to the future performance of the investment products, asset classes, or capital markets.

