



OHIO DEFERRED COMPENSATION

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM

BOARD MEETING AGENDA

MAY 16, 2023



OHIO DEFERRED COMPENSATION

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM
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NOTICE

A meeting of the Ohio Deferred Compensation Audit Committee will be held at 8:30 a.m. on Tuesday May 16, 2023. The Ohio DC Board meeting will be held at 9 a.m. on Tuesday May 16, 2023. The meetings will be held at the Ohio Public Employees Retirement System offices located at 277 East Town Street, Columbus, Ohio.

The purpose of the Audit Committee meeting will be to review the results of the 2022 independent financial audit.

The agenda for the Board meeting is enclosed.

Members of the public may view the live video of the Board meeting. To join the webinar meeting online or with call-in capabilities, use the link below to register.

https://us02web.zoom.us/webinar/register/WN_trmmy8LiRe69PoKu8e_dSg

Once your registration is complete you will receive additional information regarding how to observe the meeting.



OHIO DEFERRED COMPENSATION

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM

AGENDA *May 16, 2023* **9:00 a.m.**

Roll Call	9:00 a.m.
Review and Approve Minutes	9:00-9:05 a.m.
Committee Reports	
1. Audit Committee (Stewart Smith)	9:05-9:20 a.m.
• 2022 Financial Audit	
• Independent Auditor's Communication to Those Charged with Governance	
• Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters	
• 2022 Annual Report Highlights (Paul Miller)	
• Draft 2022 Annual Comprehensive Annual Report	
Action Items	
2. February Special Board Meeting Follow-up (Chair Thomas)	9:20-9:30 a.m.
3. RVK Reports, separate cover (Matthias Bauer, Stephen Budinsky)	9:30-10:30 a.m.
• Administrative Fee Review	
• Target Date Fund Review	
• Quarterly Investment Performance Analysis (3/31/2023)	
Discussion Items	
4. Self-Certified Unforeseeable Emergency Withdrawals (Kevin Kirkpatrick)	10:30-10:50 a.m.
5. Ohio DC Brand Refresh (Matt Gill, Scott McAllister)	10:50-11:20 a.m.
6. Proposed 2023 Strategic Planning Meeting Agenda (Paul Miller)	11:20-11:25 a.m.
7. Executive Session pursuant to Ohio Revised Code 121.22(G)(3), to discuss imminent court action, <i>at meeting</i>	11:25 a.m.-12:00 p.m.
Information Items	
8. Strategic Plan Objectives Update	
9. April Board Update	
10. Finance	
• Administrative Fund Financial Statements (April)	
• First Quarter 2023 Unaudited Financial Statements	
11. Service and Marketing Update	

MINUTES

**Minutes of
OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION
AUDIT COMMITTEE**

A publicly noticed meeting of the Ohio Public Employees Deferred Compensation Board–Audit Committee was held at the Ohio Public Employees Retirement System offices located at 277 East Town Street, Columbus, Ohio, on March 14, 2023, at 8:38 a.m.

Members present: Committee Chair Stewart Smith; Vice Committee Chair Timothy Steitz; and Mr. James R. Tilling.

Also present: Mr. Paul D. Miller, Interim Executive Director, Mr. Kevin Kirkpatrick, Ms. Natasha Natale, and Ms. Cindy Ward of the Ohio Public Employees Deferred Compensation Program; Mr. Matt Gill of Nationwide; Ms. Caroline Mills and Ms. Rachel Huston of the Attorney General's office; and Mr. Zac Morris of Rea & Associates (Rea).

Member(s) absent: Ms. Julie Albers and Mr. James Kunk.

Committee Chair Smith called the meeting to order.

Mr. Miller indicated that the Auditor of State helps select our independent auditor and Rea has been the auditor for the past eight years. He indicated the audit planning has started and noted the current audit costs and there were no audit findings from the prior audit that needed to be discussed. Mr. Miller stated the Audit Committee would meet again prior to the May 16 Board meeting to review the draft reports, audit results, findings, and recommendations.

Mr. Morris noted the audit entrance conference agenda and indicated that the communication with those charged with governance was included in the materials. Mr. Morris cited the importance of communication between Rea, management and the Board. Rea complies with applicable professional independence standards. Mr. Morris reviewed the audit planning process, and internal controls and testing used to develop the audit procedures used to identify significant risks and material misstatements. He reviewed the risks that will be tested. The audit field work will begin in mid-April.

Mr. Morris highlighted the scope of the audit that will include a review of investments, contributions, participant data, the administrative fund, and non-payroll and payroll items. Participant confirmations have been sent. Rea will also assist with the implementation of GASB 87.

Discussion was held regarding the zero-dollar impact of GASB 87 on the Program's balance sheet, and the items requested on the participant confirmations. Mr. Morris noted that after the conclusion of the current five-year contract, the Auditor of State will require a mandatory rotation and Rea will not be eligible to bid for one audit cycle.

Mr. Steitz moved; Mr. Tilling seconded to recommend to the full Board approval of the 2022 audit scope as presented by Rea.

Roll call vote was taken:

Mr. Steitz	yes	Committee Chair Smith	yes
Mr. Tilling	yes		

The motion passed unanimously.

Mr. Tilling moved; Mr. Steitz seconded to adjourn the meeting of the Audit Committee at 8:50 a.m.

Minutes of OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION BOARD

A publicly noticed meeting of the Ohio Public Employees Deferred Compensation Board was held at the Ohio Public Employees Retirement System offices located at 277 East Town Street, Columbus, Ohio on March 14, 2023, at 9:12 a.m.

Members present: Chair Ken Thomas; Ms. Julie Albers; Senator Louis W. Blessing, III; Representative Richard Brown; Mr. Kevin Milstead, representing Ms. Kathleen Madden; Mr. Scott Richter; Mr. Stewart Smith; Mr. Timothy Steitz; Mr. James R. Tilling; and Mr. Steve Toth.

Also present: Mr. Paul D. Miller, Interim Executive Director, Mr. Kevin Kirkpatrick, Ms. Natasha Natale, and Ms. Cindy Ward of the Ohio Public Employees Deferred Compensation Program; Mr. Matt Gill and Mr. Cedric Gaaskjolen of Nationwide, Ms. Caroline Mills and Ms. Rachel Huston of the Attorney General's office; Mr. Matthias Bauer and Mr. Stephen Budinsky of RVK, Inc. (RVK); and Mr. Zac Morris of Rea & Associates (Rea).

Member(s) absent: Mr. Randy V. Desposito; Mr. James E. Kunk; and Mr. Christopher Mabe.

In the absence of Chair Thomas and Vice Chair Albers, Mr. Toth called the meeting to order.

Mr. Toth welcomed Senator Blessing to the Board.

Minutes

The minutes of the January 17, 2023, Board meeting and the February 21, 2023, Special Board meeting were presented.

Representative Brown moved; Mr. Smith seconded to accept and file the minutes listed above as presented.

All aye. The motion passed without dissent.

Committee Reports

Mr. Smith, Chair of the Audit Committee, reported that the committee met with staff and a representative of Rea to discuss the 2022 audit plans, procedures, and scope. He noted that the meeting materials were behind tab one in the agenda book. The Audit Committee is recommending approval of the 2022 audit scope as presented.

Mr. Smith moved; Mr. Tilling seconded to approve the 2022 audit scope as presented.

Mr. Toth asked for any questions or discussion regarding the motion.

Roll call vote was taken:

Senator Blessing	yes	Mr. Smith	yes
Representative Brown	yes	Mr. Steitz	yes
Mr. Milstead	yes	Mr. Tilling	yes
Mr. Richter	yes	Mr. Toth	yes

The motion passed unanimously.

Action Items

(Ms. Albers entered the meeting.)

Mr. Budinsky provided the background for the investment menu design review. He reviewed the investment menu design philosophy that includes simplification, diversification, and cost effectiveness. Mr. Budinsky summarized the investment menu structure recommendations and potential investment menu items for further review.

Mr. Budinsky presented the proposed updates to the Investment Policy Statement, and he explored the Ohio DC menu design framework. He reviewed the utilization, holdings overlap and style differences of the large cap growth equity funds, and a manager comparison of T. Rowe Price, Fidelity Contrafund and Fidelity Growth Company.

Mr. Budinsky discussed the strategy and fees of the US Bond investment option currently managed by TCW, and the rationale for possibly spreading the mandate across multiple managers.

Mr. Budinsky highlighted Ohio DC investment option participant utilization, including equity allocation, target date funds, and single-fund investors. He noted the positive improvement of participant allocations over the last five years.

(Chair Thomas entered the meeting.)

Discussion was held regarding possible ambiguity with the Contrafund and the Growth Company names, the characteristics comparison of the large cap growth investment options, the value in finding a complimentary manager to add to the US Bond investment option, the potential for education on the investment objectives of the large cap investment options, and white-labeling in relation to asset retention.

(Senator Blessing and Representative Brown left the meeting.)

Mr. Bauer presented the fourth quarter 2022 capital markets review and noted the market performance, recession concerns, interest rate adjustments, inflation data, recent bank failures, and the treasury yield curve.

Mr. Bauer highlighted Ohio DC's asset allocation and fund monitoring summary. The US Large Growth Company Stock is in a "yellow" status due to short-term underperformance. SVO strategies managed by Jennison and Nationwide are in "yellow" status due to recent organization changes. RVK does not recommend any changes to the investment options.

Mr. Bauer reviewed comparative performance and the fund fees peer group analysis. He highlighted the cash flows for the target date funds, and the active and passive investment options. Mr. Budinsky reported that all of the trading has been completed for the SVO transition, and the in-kind transfer should be completed later in the week with everything wrapped up by month end.

Mr. Toth moved; Mr. Smith seconded to accept the RVK reports as presented and approve the proposed edits to the Investment Policy Statement.

Chair Thomas asked for any questions or discussion regarding the motion.

Roll call vote was taken:

Ms. Albers	yes	Mr. Steitz	yes
Mr. Milstead	yes	Mr. Tilling	yes
Mr. Richter	yes	Mr. Toth	yes
Mr. Smith	yes	Chair Thomas	yes

The motion passed unanimously.

Mr. Miller presented a recommended budget amendment to cover the executive recruiter consultant fees. The search is currently on hold, but the negotiated contract price is \$70,000. Due to the extended vacancy of the Executive Director position, salary expenses will be under budget. Mr. Miller recommended the Board approve a \$70,000 increase to the professional fees budget and a \$70,000 decrease to the salary budget. Chair Thomas noted that the conversation with EFL regarding the paused search went very well.

Ms. Albers moved; Mr. Richter seconded to approve a \$70,000 increase to the professional fees budget and a \$70,000 decrease to the salary budget.

Chair Thomas asked for any questions or discussion regarding the motion.

Roll call vote was taken:

Ms. Albers	yes	Mr. Steitz	yes
Mr. Milstead	yes	Mr. Tilling	yes
Mr. Richter	yes	Mr. Toth	yes
Mr. Smith	yes	Chair Thomas	yes

The motion passed unanimously.

Ms. Ward stated the NAGDCA annual conference will be held October 8-11 in Seattle, Washington. Registration opens in May. The 2023 budget includes sufficient travel expenses for several Board members and staff to attend this conference. Board members should contact Ms. Ward if they plan to attend.

Mr. Toth moved, Ms. Albers seconded to approve travel and registration for any Board member interested in attending the 2023 NAGDCA Annual Conference.

Chair Thomas asked for any questions or discussion regarding the motion.

Roll call vote was taken:

Ms. Albers	yes	Mr. Steitz	yes
Mr. Milstead	yes	Mr. Tilling	yes
Mr. Richter	yes	Mr. Toth	yes
Mr. Smith	yes	Chair Thomas	yes

The motion passed unanimously.

Discussion Items

Mr. Kirkpatrick reviewed the 2021 changes to the incentive compensation and the staffing flexibility added to the Nationwide contract, which were continued into 2022 and in the two-year

extension, ending on June 30, 2024. A strategic objective was created in 2021 to develop an appropriate participant service model. Mr. Kirkpatrick reviewed the background information regarding the Nationwide contract including the evolution of the service model and the changes made in the past few years to meet the needs of participants. The current service model provides flexibility and the ability to meet the demands of high call volumes in the Service Center. A scorecard was developed to manage accountability after the discontinuation of the incentive compensation. Nationwide continues to maintain acceptable participant satisfaction scores. Staff is recommending the Board approve the completion of Strategic Planning Objective 1-48, maintain the current service staffing model, and use the flexible model in the development of the next Request for Proposal (RFP).

Ms. Albers moved; Mr. Tilling seconded to approve the completion of Strategic Planning Objective 1-48, maintain the current customer service staffing model, and use this flexible new model in the development of our next RFP for an enrollment, education, and service provider.

Chair Thomas asked for any questions or discussion regarding the motion.

Roll call vote was taken:

Ms. Albers	yes	Mr. Steitz	yes
Mr. Milstead	yes	Mr. Tilling	yes
Mr. Richter	yes	Mr. Toth	yes
Mr. Smith	yes	Chair Thomas	yes

The motion passed unanimously.

Mr. Kirkpatrick reported that the current Nationwide contract expires on June 30, 2024 and without an extension the RFP process should begin immediately. To allow time for a new Executive Director to be hired and to allow staff to focus on other priorities, staff is asking the Board to consider a contract extension. The Ohio DC Purchasing Policy gives the Board discretion to waive or modify any provision of the purchasing policy, if deemed to be in the best interest of Ohio DC. Nationwide is receptive to negotiating a contract extension.

Mr. Kirkpatrick provided Nationwide's history serving as Ohio DC's Enrollment, Education and Customer Service Provider since 1999. The most recent RFP concluded with a five year contract with Nationwide that began on July 1, 2014. That contract has been extended twice for an additional five years. Mr. Kirkpatrick reported that Nationwide continues to be successful in maintaining acceptable service levels for the previously contracted incentives categories. It is recommended that the Board provide staff with the authority to waive the RFP requirement and enter into negotiations with Nationwide to extend the contract.

Mr. Tilling moved; Mr. Richter seconded to provide staff with the authority to waive the RFP requirement and enter into negotiations with Nationwide for an extension of the contract, with possible variations pursuant to negotiations.

Chair Thomas asked for any questions or discussion regarding the motion.

Discussion was held regarding the Service Center call metrics, the potential length of the contract extension, the number of vendors in the market that can provide the contracted services, the potential cost to switch vendors, and the improvements with Nationwide's staff turnover. Discussion continued regarding Nationwide's history with Ohio DC, how they have demonstrated the ability to address participant needs and concerns, and the Board's satisfaction with their services.

Roll call vote was taken:

Ms. Albers	yes	Mr. Steitz	yes
Mr. Milstead	yes	Mr. Tilling	yes
Mr. Richter	yes	Mr. Toth	yes
Mr. Smith	yes	Chair Thomas	yes

The motion passed unanimously.

Chair Thomas noted that after he, Ms. Albers, and the Interim Executive Director reviewed Ohio DC's compensatory time policy, which was recently put into place for exempt employees, it was determined it would be prudent to rescind the policy. Chair Thomas noted the potential for an ad-hoc committee to be formed to review other personnel policies.

Ms. Albers moved; Mr. Smith seconded to excuse Mr. Desposito and Mr. Mabe.

All aye. The motion passed without dissent.

Information Items

Mr. Miller reminded the Board that the August Strategic Planning meeting date was changed to Tuesday August 15, 2023. He highlighted the Service Efforts Report 2022 and the Priority Projects Update. He reported that staff is working to bring information to the Board regarding provisions of the SECURE 2.0 Act and a brand refresh that could include a logo update. Mr. Miller cited the State of Ohio Auto Enrollment statistics.

Mr. Smith moved; Mr. Richter seconded to adjourn the meeting at 10:56 a.m. until the next regular meeting of the Board, May 16, 2023, to be held at the Ohio Public Employees Retirement System offices, located at 277 East Town Street.

COMMITTEE REPORTS



OHIO DEFERRED COMPENSATION

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM

MEMORANDUM

TO: Audit Committee

FROM: Paul D. Miller, Interim Executive Director

DATE: May 16, 2023

SUBJECT: 2022 Financial Audit

Executive Summary

An independent public accounting firm audits Ohio DC's financial statements annually. Zac Morris from Rea & Associates (Rea) will attend the May Audit Committee and Board meetings to discuss the 2022 audit results and answer questions. Rea's opinion on Ohio DC's financial statements is included in the *2022 Annual Comprehensive Financial Report* (Annual Report). Their opinion concludes that the Ohio DC financial statements present fairly, in all material respects, in accordance with accounting principles generally accepted in the United States the plan net position available for benefits. Rea has also issued reports regarding our internal controls, which indicate no concerns. These draft reports are provided to the Audit Committee and Board for review and discussion.

Independent Auditor

Rea was selected via a competitive bidding process conducted by the Auditor of State (AOS). The AOS policy allows entities at the end of their first five-year contract to extend it for a second five-year term without a search, if all three parties (AOS, entity, and accounting firm) agree to the renewal. The Board approved a five-year contract extension in November 2020. Rea is completing the second annual audit of a second five-year contract, and the current year fees for this engagement are \$43,840.

2022 Annual Comprehensive Financial Report

Ohio DC management has prepared the Annual Report to summarize the financial and operating results for 2022. The format of the Annual Report is required to include financial, investment, and statistical sections. The financial section is produced by Ohio DC management in accordance with generally accepted accounting principles and was audited by Rea. Rea reads and edits the remaining sections of the Annual Report but does not perform an audit on these pages.

2022 Audit Results

The audit resulted in an unmodified (clean) opinion on Ohio DC's financial statements. In addition, the auditors found no deficiencies or material weaknesses in their review of the internal control systems that would affect financial reporting.

If the auditors identify areas to recommend improvements to our internal controls, they may issue a Management Letter report. For the audit year ended December 31, 2022, no recommendations were identified, and no Management Letters were issued. Therefore, no changes to policies or procedures are necessary to address areas of concern to the auditors.

Pension/Other Postemployment Benefits Update

GASB Statement 68 "Accounting and Financial Reporting for Pensions" is a standard that notes an unfunded pension liability is an obligation of the government entity and should be reported as its liability. OPERS has calculated the allocation of its unfunded liability to the employers within their system and has provided the information and numbers necessary for this disclosure. Ohio DC's net pension liability decreased to \$950,519 from \$1,656,847 as of December 31, 2022, and 2021, respectively.

GASB Statement 75 "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions" significantly revised accounting for costs and liabilities related to other postemployment benefits (OPEB). Ohio DC's net OPEB asset increased to \$370,534 from \$213,807 as of December 31, 2022, and 2021, respectively.

Leases/Lease Liability Update

GASB Statement 87 "Leases" is a standard that requires recognition of lease assets and liabilities for leases previously classified as operating leases, and therefore not reflected on the balance sheet. Implementation of this standard resulted in restating 2021 assets, liabilities, and administrative fund deductions. A full summary of the changes can be reviewed in Note 2 of the Annual Report. Ohio DC's only lease is for office space, and the lease runs through February 28, 2029.

Ohio DC's lease asset balance decreased to \$1,668,629 from \$1,939,218 as of December 31, 2022 and 2021, respectively. Ohio DC's lease liability balance decreased to \$1,783,909 from \$1,997,567 as of December 31, 2022 and 2021, respectively.

Reports

Included in the Board agenda are a series of draft reports for review and discussion including:

1. Independent Auditor's Communication to Those Charged with Governance
2. Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters
3. 2022 Annual Report Highlights
4. *Draft Annual Comprehensive Financial Report for the years ended December 31, 2022 and 2021*

Recommendation

Staff recommends that the Audit Committee recommend to the full Board approval of the 2022 Annual Report and the audit reports as presented.



**Ohio Public Employees Deferred Compensation Program
Audit Exit Conference Agenda
May 16, 2023**

- Summary of audit process
 - Investments
 - Confirmations
 - 3rd party price testing
 - Participant data Scope
 - Confirmations
 - Testing
 - Admin Fund Scope
 - Payroll
 - Non-payroll
 - Recordkeeping fees
 - GASB 87 implementation
 - Building lease
- Reports issued
 - Opinion
 - Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards
 - AU-C 260 Communication With Those Charged With Governance
- Questions

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM

FRANKLIN COUNTY, OHIO

*REPORT TO THOSE CHARGED WITH
GOVERNANCE*

MAY 16, 2023



Rea & associates

To Those Charged with Governance
Ohio Public Employees Deferred Compensation Program
Franklin County, OH
257 East Town St., Suite 457
Columbus, Oh 43215

We are pleased to present this report related to our audit of the financial statements of the Ohio Public Employees Deferred Compensation Program, Franklin County, Ohio (the Program) as of and for the year ended December 31, 2022. This report summarizes certain matters required by professional standards to be communicated to you in your oversight responsibility for the Program's financial reporting process.

Government Auditing Standards require that we describe the scope of our testing of compliance with laws and regulations and internal control over financial reporting and report any irregularities, illegal acts, other material noncompliance and significant deficiencies in the internal controls. We have issued a report dated May 16, 2023, on compliance and internal control over financial reporting required by *Government Auditing Standards* as of and for the year ended December 31, 2022.

The report is intended solely for the information and use of those charged with governance, and is not intended to be, and should not be, used by anyone other than this specified party. It will be our pleasure to respond to any questions you have about this report. We appreciate the opportunity to continue to be of service to the Program.

Rea & Associates, Inc.

Rea & Associates, Inc.
Dublin, Ohio
May 16, 2023

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REQUIRED COMMUNICATIONS

Generally accepted auditing standards (AU-C 260, *The Auditor's Communication With Those Charged With Governance*) require the auditor to promote effective two-way communication between the auditor and those charged with governance. Consistent with this requirement, the following summarizes our responsibilities regarding the financial statement audit as well as observations arising from our audit that are significant and relevant to your responsibility to oversee the financial reporting process.

Our Responsibilities With Regard to the Financial Statement Audit

Our responsibilities under auditing standards generally accepted in the United States of America have been described to you in our arrangement letter dated February 22, 2023. Our audit of the financial statements does not relieve management or those charged with governance of their responsibilities, which are also described in that letter.

Overview of the Planned Scope and Timing of the Financial Statement Audit

We have issued a separate communication dated February 22, 2023 regarding the planned scope and timing of our audit and identified significant risks.

Accounting Policies and Practices

Preferability of Accounting Policies and Practices

Under generally accepted accounting principles, in certain circumstances, management may select among alternative accounting practices. In our view, in such circumstances, management has selected the preferable accounting practice.

Adoption of, or Change in, Accounting Policies

Management has the ultimate responsibility for the appropriateness of the accounting policies used by the School. Following is a description of significant accounting policies or their application that were either initially selected or changed during the year.

For the year ended December 31, 2022, the Program has implemented Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*, GASB Statement No. 91, *Conduit Debt Obligations*, GASB Statement No. 92, *Omnibus 2020*, a certain provision of GASB Statement No. 93, *Replacement of Interbank Offered Rates*, certain provisions of GASB Statement No. 97, *Component Unit Criteria and Deferred Compensation Plans*, and certain provisions of GASB Statement No. 99, *Omnibus 2022*.

Significant Accounting Policies

We did not identify any significant accounting policies in controversial or emerging areas for which there is a lack of authoritative guidance or consensus.

Significant Unusual Transactions

We did not identify any significant unusual transactions.

Audit Adjustments and Uncorrected Misstatements

There were no audit adjustments made to the original trial balance presented to us to begin our audit. We are not aware of any uncorrected misstatements other than misstatements that are clearly trivial.

Departure from the Auditor's Standard Report

Emphasis of Matter Paragraph

As identified above in the Accounting Policies and Practices section of the report, the Program implemented GASB 87, Leases. In light of this matter, we have included an emphasis-of-matter paragraph in the auditor's report. Below is the paragraph to be included in the auditor's report:

Emphasis of Matter

As discussed in Note 2 to the financial statements, the Program adopted Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*. Our opinion is not modified with respect to this matter.

Other Information Included in the Popular Annual Financial Report (PAFR)

Our responsibility for other information included in the PAFR is to read the information and consider whether its content or the manner of its presentation is materially inconsistent with the financial information covered by our auditor's report, whether it contains a material misstatement of fact or whether the other information is otherwise misleading. The Program's PAFR has not been issued at the time of issuing our auditor's report. Prior to issuance of the Program's PAFR, we will read the it and determine whether there are any material inconsistencies with the audited financial statements.

Observations About the Audit Process

Disagreements With Management

We encountered no disagreements with management over the application of significant accounting principles, the basis for management's judgments on any significant matters, the scope of the audit or significant disclosures to be included in the financial statements.

Consultations With Other Accountants

We are not aware of any consultations management had with other accountants about accounting or auditing matters.

Significant Issues Discussed With Management

No significant issues arising from the audit were discussed or the subject of correspondence with management.

Significant Difficulties Encountered in Performing the Audit

We did not encounter any significant difficulties in dealing with management during the audit.

Difficult or Contentious Matters That Required Consultation

We did not encounter any significant and difficult or contentious matters that required consultation outside the engagement team.

Independence

As described in their engagement letter to you, our team assisted in compiling journal entries for Pension and OPEB accruals and leases. This theoretically impairs our independence to audit your statements. However, no impairment existed because we applied the appropriate safeguards and you were able to assign a knowledgeable employee to review and approve the work, and therefore retain responsibility for your Corporation's financial statements.

Significant Written Communications Between Management and Our Firm

Copies of significant written communications between our firm and the management of the Program, including the draft representation letter to be provided to us by management, is attached as Exhibit A.

Exhibit A SIGNIFICANT WRITTEN COMMUNICATIONS BETWEEN MANAGEMENT AND OUR FIRM



OHIO DEFERRED COMPENSATION

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM

May 16, 2023

Rea & Associates, Inc.
5775 Perimeter Drive, Suite 200
Dublin, Oh 43017

This representation letter is provided in connection with your audits of the basic financial statements of the Ohio Public Employee Deferred Compensation Program, Franklin County, Ohio (the Program) as of and for the years ended December 31, 2022 and 2021 for the purpose of expressing an opinion on whether the financial statements are presented fairly, in all material respects in accordance with accounting principles generally accepted in the United States (U.S. GAAP).

We confirm, to the best of our knowledge and belief, as of the date of this letter:

Financial Statements

1. We have fulfilled our responsibilities, as set out in the terms of the audit arrangements communicated in the entrance conference on February 22, 2023 for the preparation and fair presentation of the financial statements referred to above in accordance with U.S. GAAP.
2. We acknowledge our responsibility for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.
3. We acknowledge our responsibility for the design, implementation, and maintenance of internal control to prevent and detect fraud.
4. Significant assumptions used by us in making accounting estimates, including those measured at fair value, are reasonable and reflect our judgment based on our knowledge and experience about past and current events and our assumptions about conditions we expect to exist and courses of action we expect to take.
5. In that regard, we are responsible for the estimation methods and assumptions used in measuring assets and liabilities reported or disclosed at fair value, including information obtained from brokers, pricing services or other third parties. The methods and significant assumptions used to determine fair values of the financial instruments are as follows:
 - Investments in benefit responsive guaranteed investment contracts are recorded at contract value and investments in traditional guaranteed investment contracts are recorded at market value.
 - Mutual Fund Investments are valued at the share prices of mutual funds as reported by the fund providers.
 - Collective trust fund investments are valued at the unit prices of the collective trust funds as reported by the fund providers.
 - Separate account investments are valued at the market value of the underlying assets as reported by the fund custodian.
 - Assets held for purchased annuities are valued at amounts reported by Nationwide, which are actuarially determined.

Our valuation methodologies have been consistently applied from period to period. The methods and assumptions used result in a measure of fair value appropriate for financial statement measurement and disclosure purposes.

6. Related-party transactions, including those with other organizations for which the nature and significance of their relationship with the Program are such that exclusion would cause the reporting Program's financial statements to be misleading or incomplete, and leasing arrangements, have been recorded in accordance with the economic substance of the transaction and appropriately accounted for and disclosed in accordance with the requirements of U.S. GAAP.
7. All events subsequent to the date of the financial statements, and for which U.S. GAAP requires adjustment or disclosure, have been adjusted or disclosed.
8. The effects of all known actual or possible litigation and claims have been accounted for and disclosed in accordance with U.S. GAAP.
9. We have no intention to terminate the Plan.
10. We have properly reported and disclosed amendments to the Plan instrument, if any.
11. We have no direct or indirect, legal or moral obligation for any debt of any organization, public or private, that is not disclosed in the financial statement.
12. We believe that all leases have been properly recorded in accordance with GASB Statement No. 87.
13. We have complied with all aspects of contractual agreements that would have a material effect on the financial statements in the event of noncompliance. In connection therewith, we specifically represent that we are responsible for determining that we are not subject to the requirements of the Single Audit Act because we have not received, expended or otherwise been the beneficiary of the required amount of federal awards during the period of this audit.
14. We have no knowledge of any uncorrected misstatements in the financial statements.

Information Provided

15. We have provided you with:
 - Access to all information, of which we are aware that is relevant to the preparation and fair presentation of the financial statements such as records, documentation, and other matters;
 - Additional information that you have requested from us for the purpose of the audit;
 - Unrestricted access to persons within the Program from whom you determined it necessary to obtain audit evidence.
 - The currently effective version of the Plan document and all related amendments. The Plan document was most recently amended on January 1, 2023.
 - All correspondence, filings, reports, and determinations with the Internal Revenue Service (IRS).
 - Minutes of the meetings of the governing board and committees, or summaries of actions of recent meetings for which minutes have not yet been prepared.
16. All transactions have been recorded in the accounting records and are reflected in the financial statements.
17. We have disclosed to you the results of our assessment of risk that the financial statements, including how fraud may materially misstate the financial statements, noting no indication of fraud.

18. It is our responsibility to establish and maintain internal control over financial reporting. One of the components of internal control is risk assessment. We hereby represent that our risk assessment process includes identification and assessment of risks of material misstatement due to fraud. We have shared with you our fraud risk assessment, including a description of the risks, our assessment of the magnitude and likelihood of misstatements arising from those risks, and the controls that we have designed and implemented in response to those risks.
19. We have no knowledge of allegations of fraud or suspected fraud, affecting the Program's financial statements involving:
 - Management.
 - Employees who have significant roles in the internal control.
 - Others where the fraud could have a material effect on the financial statements.
20. We have no knowledge of any allegations of fraud or suspected fraud affecting the Program's financial statements received in communications from employees, former employees, analysts, regulators, short sellers, or others.
21. We have no knowledge of noncompliance or suspected noncompliance with laws and regulations whose effects were considered when preparing financial statements.
22. We have disclosed to you all known actual or possible litigation, claims or assessments, or unasserted claims or assessments, violations or possible violations of laws and regulations, or other matters, including gain or loss contingencies, whose effects should be considered when preparing the financial statements, or others acting on behalf of the Plan.
23. We have disclosed to you the identity of the Program's related parties and all the related-party relationships and transactions of which we are aware.
24. We are aware of no significant deficiencies, including material weaknesses, in the design or operation of internal controls that could adversely affect the Program's ability to record, process, summarize, and report financial data.
25. We are aware of no communications from regulatory agencies concerning noncompliance with, or deficiencies in, financial reporting practices.
26. During the course of your audit, you may have accumulated records containing data that should be reflected in our books and records. All such data have been so reflected. Accordingly, copies of such records in your possession are no longer needed by us.
27. The Program is eligible under the appropriate section of the IRC and intends to continue as an eligible plan.
28. We have complied with (a) all aspects of contractual agreements, including provisions of the Plan, that would have a material effect on the financial statements in the event of noncompliance, (b) all participant eligibility and coverage requirements of the Plan and the Internal Revenue Code (IRC), and (d) the filing requirements of appropriate agencies.
29. We have reviewed the complementary user entity control considerations of the Service Organization Controls (SOC 1) Reports for all investment managers who have provided a SOC 1, and we believe all applicable controls are properly designed and implemented and operating effectively.
30. As the PAFR was not available by the date of the auditor's report, we will provide you with the annual report as soon as it is available and prior to our issuance of the report, so you can complete your procedures in regard to this information.

Supplementary Information

31. With respect to supplementary information presented in relation to the financial statements as a whole:
- We acknowledge our responsibility for the presentation of such information.
 - We believe such information, including its form and content, is fairly presented in accordance with accounting principles generally accepted in the United States of America.
 - The methods of measurement or presentation have not changed from those used in the prior period.
32. With respect to the Management's Discussion and Analysis, the Schedule of the Program's Proportionate Share of the Net Pension Liability, the Schedule of the Program's Pension Contributions, the Schedule of the Program's Proportionate Share of the Net OPEB Liability/(Asset), the Schedule of the Program's Contributions-OPEB presented as required by the Governmental Accounting Standards Board to supplement the basic financial statements:
- We acknowledge our responsibility for the presentation of such required supplementary information.
 - We believe such required supplementary information is measured and presented in accordance with guidelines prescribed by accounting principles generally accepted in the United States of America.
 - The methods of measurement or presentation have not changed from those used in the prior period.

Compliance Considerations

In connection with your audit, conducted in accordance with *Government Auditing Standards*, we confirm that management:

1. Is responsible for the preparation and fair presentation of the financial statements in accordance with the applicable financial reporting framework.
2. Is responsible for compliance with the laws, regulations, and provisions of contracts and grant agreements applicable to the auditee.
3. Is aware of no instances that have occurred, or are likely to have occurred, of fraud and noncompliance with provisions of laws and regulations that have a material effect on the financial statements or other financial data significant to the audit objectives, and any other instances that warrant the attention of those charged with governance.
4. Is aware of no instances that have occurred, or are likely to have occurred, of noncompliance with provisions of contracts and grant agreements that have a material effect on the determination of financial statement amounts.
5. Is aware of no instances that have occurred, or are likely to have occurred, of waste or abuse that could be quantitatively or qualitatively material to the financial statements.
6. Is responsible for the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.
7. Acknowledges its responsibility for the design, implementation and maintenance of internal controls to prevent and detect fraud.
8. Has a process to track the status of audit findings and recommendations.
9. Has identified for the auditor previous audits, attestation engagements and other studies related to the audit objectives and whether related recommendations have been implemented.
10. Acknowledges its responsibilities as it relates to non-audit services performed by the auditor, including a statement that it assumes all management responsibilities; that it oversees the services by designating an

individual, preferably within senior management, who possesses suitable skill, knowledge or experience; that it evaluates the adequacy and results of the services performed; and that it accepts responsibility for the results of the services.

Ohio Public Employee Deferred Compensation Program

Audit Committee Chair

Director of Finance / Interim- Executive Director

OHIO PUBLIC EMPLOYEES
DEFERRED COMPENSATION
PROGRAM
FRANKLIN COUNTY, OHIO

*REPORT ISSUED PURSUANT TO
GOVERNMENT AUDITING STANDARDS*

FOR THE YEAR ENDED
DECEMBER 31, 2022



Rea & associates

Ohio Public Employees Deferred Compensation Program
Franklin County, Ohio
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December 31, 2022

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To the Ohio Public Employees Deferred Compensation Program Board
Franklin County, OH
257 East Town St., Suite 400
Columbus, Oh 43215

**Independent Auditor's Report on Internal Control over Financial Reporting and on
Compliance and Other Matters Based on an Audit of Financial Statements Performed in
Accordance with *Government Auditing Standards***

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the of the Ohio Public Employees Deferred Compensation Program, Franklin County, Ohio (the Program), as of and for the year ended December 31, 2022, and the related notes to the financial statements, which collectively comprise the Program's basic financial statements, and have issued our report thereon dated May 16, 2023, wherein we noted the Program adopted Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Program's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Program's internal control. Accordingly, we do not express an opinion on the effectiveness of the Program's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that were not identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Program's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of This Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Rea & Associates, Inc.

Rea & Associates, Inc.
Dublin, Ohio
May 16, 2023

2022 Annual Report Highlights

Paul D. Miller



**OHIO DEFERRED
COMPENSATION**

Audit Testing

- An auditor's responsibility is to express an opinion on the financial statements based upon performing sufficient audit procedures.
- Audits are conducted with generally accepted auditing standards and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States.
- Procedures are selected based on an auditor's judgment including the assessment of risks of material misstatement of the financial statements.



OHIO DEFERRED
COMPENSATION

Audit Results

- Unmodified (clean) opinion on Ohio DC's financial statements.
- No deficiencies or material weaknesses in the review of the internal control systems that would affect financial reporting.
- No Management Letters issued (no recommendations on improvements to our internal controls).



OHIO DEFERRED
COMPENSATION

Financial Position

Plan Net Position Available for Benefits:

Balance December 31, 2021	\$20,234,000,000
Change in Net Position 2022	- <u>3,375,000,000</u>
Balance December 31, 2022	\$16,859,000,000



OHIO DEFERRED
COMPENSATION

Change in Financial Position

Net Investment Loss	\$ -3,084,000,000
Net Rollovers	-387,000,000
Contributions over Distributions	107,000,000
Administrative Expenses & Other	<u>- 11,000,000</u>
Change in Net Position 2022	\$ -3,375,000,000



OHIO DEFERRED
COMPENSATION

Statistical Highlights

Successful year for participants shown by these year-end statistics: (* indicates record level numbers for Ohio DC):

- Contributing employers = 2,042*
- Participant accounts = 261,753*, including 7,223* Roth accounts
- Actively contributing accounts = 125,401
- Annual contributions = \$601,100,000*
- Annual distributions = \$494,100,000



OHIO DEFERRED
COMPENSATION

Major Initiatives in 2022

- Moved four index investment options from Vanguard mutual funds to collective investment trusts managed by State Street to lower investment fees.
- Moved Dodge & Cox Stock investors from a mutual fund paying recordkeeping reimbursements to a new share class without these reimbursements and renamed the option as US Large Value Company Stock.
- Renamed five white label funds to better communicate the fund strategy instead of the fund asset class.
- Implemented auto enrollment of certain new hires at the State of Ohio to enhance their retirement savings.

Summary

- Finance staff prepared in a timely manner the Ohio DC books, records, and draft Annual Report for the auditors.
- The auditors continue to utilize a remote audit process (since 2020).
 - Audit requests were able to be fulfilled remotely.
 - Remote access to the recordkeeping system was granted to the auditors.
- No audit findings regarding accounting records or systems of internal control.

Summary

- Staff will submit the Annual Report to the Auditor of State and to the Government Finance Officers Association for their Certificate of Achievement For Excellence in Financial Reporting for review.
 - All 30 of our previous Annual Reports have earned the Certificate of Achievement For Excellence in Financial Reporting.
- Staff will prepare and submit a Popular Annual Financial Report (PAFR) to the Government Finance Officers Association for review.
- The Annual Report and PAFR will be posted to our websites for participants, employers, and the public to see our financial results.



OHIO DEFERRED
COMPENSATION

Ohio Public Employees Deferred Compensation Program



**Annual Comprehensive Financial Report
For the years ending December 31, 2022 and 2021**

**OHIO PUBLIC EMPLOYEES
DEFERRED COMPENSATION PROGRAM**

**Annual Comprehensive Financial Report
For the years ended December 31, 2022 and 2021**

DRAFT

Christina Elliott, Executive Director*
Paul D. Miller, Director of Finance

257 East Town Street, Suite 400, Columbus, Ohio 43215-4623

**Executive Director through December 2, 2022*

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OHIO DEFERRED COMPENSATION

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM

INTRODUCTORY SECTION

CERTIFICATE OF ACHIEVEMENT



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Ohio Public Employees Deferred Compensation Program

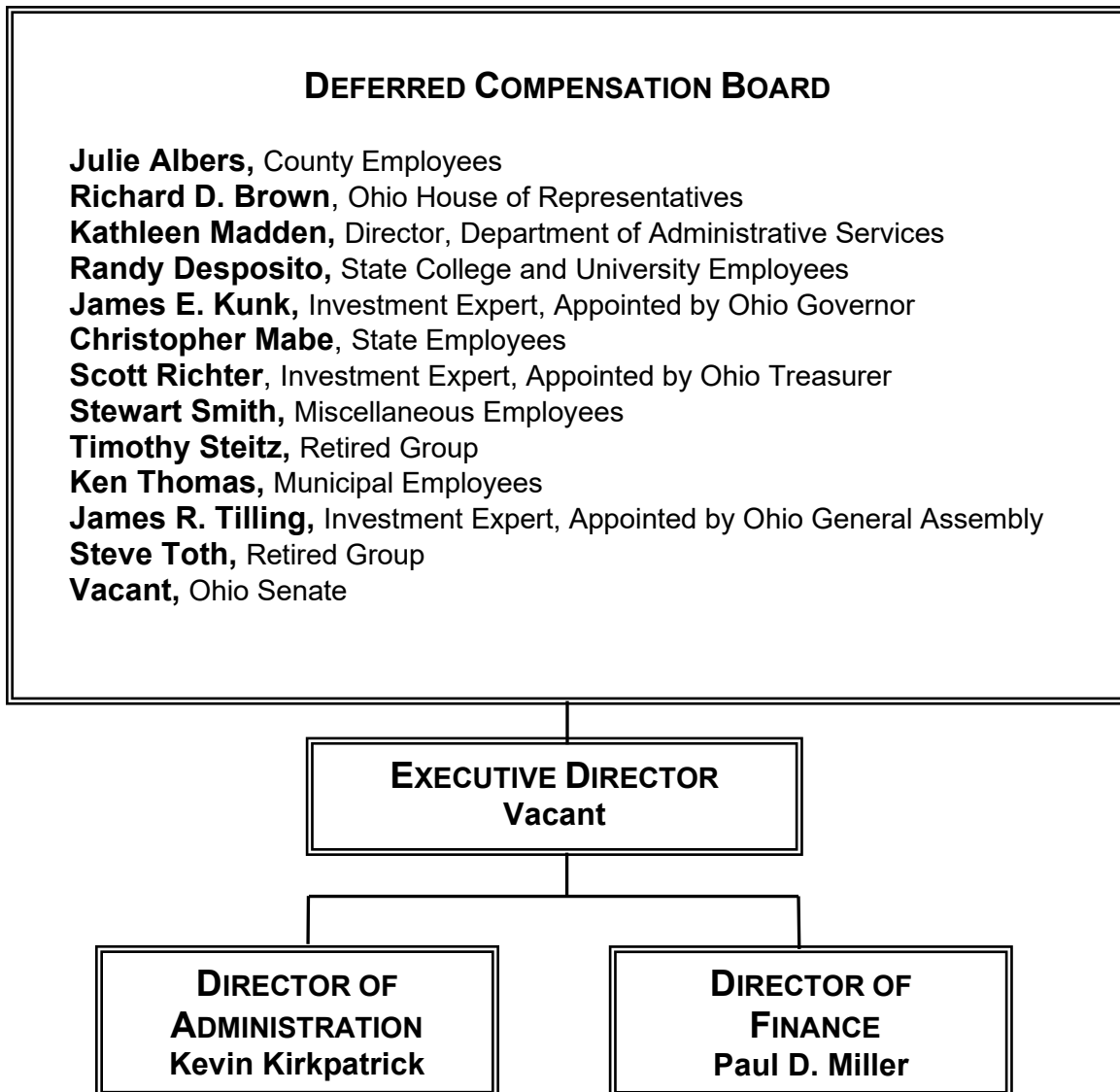
For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

December 31, 2021

Christopher P. Morrell

Executive Director/CEO

ORGANIZATIONAL CHART AS OF DECEMBER 31, 2022



ADVISORS TO THE BOARD

Independent Public Accountants

Rea & Associates (under contract with the Auditor of State)

Legal Counsel

Dave Yost, Attorney General

Investment Consultant

RVK

See pages 33-34 for a list of external investment managers.



OHIO DEFERRED COMPENSATION

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM

May 16, 2023

Dear Chair and Members of the Board:

We are pleased to present the Annual Comprehensive Financial Report (Annual Report) for the Ohio Public Employees Deferred Compensation Program (the Program) for the years ended December 31, 2022 and 2021. The Annual Report was prepared to assist the user in understanding the Program's functions and how participants use the Program to supplement their retirement income. Program management is responsible for the contents of this report. Management's Discussion and Analysis (MD&A) complements this letter of transmittal and should be read in conjunction with it.

The Deferred Compensation Board (the Board) was established pursuant to Ohio Revised Code Section 145 (currently 148) to administer the Program for all eligible employees. The Program provides services to 261,753 participant accounts from 2,042 State and local government employers. The State created the Program as a separate legal entity and does not appoint a voting majority of the Program's governing Board. The Program is self-funded and governed by its own Board. The State does not approve the Program's budget or set Program rates or charges. Therefore, the Program is not part of the State of Ohio reporting entity.

Program History and Overview

The Program first received deferrals in 1976 pursuant to Internal Revenue Code (IRC) Section 457 and ORC (ORC) Section 148. All public employees who are eligible to participate in one of Ohio's statutory retirement systems (including the Cincinnati Retirement System) can contribute a portion of their annual includable compensation. Withdrawals may be made at retirement, death, termination of employment, or due to certain qualifying unforeseeable emergencies. Participation is strictly voluntary, and the Program is intended to supplement retirement benefits from the other statutory retirement systems.

During 2018, the ORC and Program's Plan Document were amended to allow after-tax Roth contributions in addition to pre-tax deferrals. The Program began accepting Roth contributions in early 2020.

Economic Conditions and Outlook

All Program participants are members of one of the State's statutory retirement systems and contribute to this Program on a voluntary basis to supplement their retirement income. As a self-directed plan, participants are responsible for their own savings and investment decisions, but most of their retirement planning success depends on the amount of their contributions and the overall direction of the financial markets.

Financial markets in 2022 were negatively affected by rising interest and inflation rates. During 2022, the federal funds rate rose from near zero to 4.25 percent. Annual inflation as reported by the U.S. Bureau of Labor Statistics was up 8.0 percent in 2022, which was more than the cumulative inflation rate of 7.7 percent for the previous three years (2019-2021) combined.

Under these challenging conditions, the U.S. stock markets were down 18.1 percent in 2022, as tracked by the S&P 500 index. This drop came after double-digit market increases of 31.5 percent, 18.4 percent, and 28.7 percent in 2019, 2020, and 2021, respectively. Normal market cycles will contain these types of highs and lows, and Program communications in 2022 encouraged participants to identify their risk tolerance and maintain a long-term investment perspective in the face of one year's poor performance.

Despite the poor market performance, participants remained engaged in their retirement savings. The Program achieved these all-time high levels in 2022:

- 2,042 contributing employers
- 261,753 participant accounts, including 7,223 Roth accounts
- \$601.1 million total annual contributions

The market volatility and performance in 2022 affected the level of participant withdrawal transactions. Transfers to other plans dropped by 11 percent compared to 2021 transfers, and withdrawal distributions paid directly to participants were down by less than 1 percent. As more baby boomers reach retirement age, this large group of participants now has access to their deferred compensation savings. Accordingly, the expectations are that the annual amounts distributed to participants and transferred to other retirement plans will continue to grow in the future.

Major Initiatives 2022

During 2021, Ohio Senate Bill 27 was enacted and allows new state of Ohio employees to be automatically enrolled into Ohio DC. Programming for the auto-enrollment initiative began in 2021, and the new initiative was launched in July 2022. New state employees have 90 days to opt out of automatic enrollment, so the first automatic enrollments did not occur until October 2022. Results have been promising so far with most employees remaining in the automatic enrollment process or opting to manually enroll before the 90-day period ends.

Several changes to the Ohio DC fund lineup were completed on December 9, 2022. These changes included moving the four passive investments from Vanguard mutual funds to passive collective investment trust funds managed by State Street Global Advisors to lower participant investment fees. The table below summarizes these changes.

Old Investment Option	Old Expense Ratio	New Investment Option	New Expense Ratio
Vanguard Total International Stock Index	0.07%	Non-US Company Stock Index (State Street)	0.045%
Vanguard Extended Market Index	0.04%	US Small/Mid Company Stock Index (State Street)	0.02%
Vanguard Institutional Index	0.02%	US Large Company Stock Index (State Street)	0.01%
Vanguard Total Bond Market Index	0.03%	US Bond Index (State Street)	0.02%

Another investment option change was the closing of the Dodge & Cox Stock mutual fund. That fund carried a 10 basis point recordkeeping reimbursement that Ohio DC had been rebating to the participants investing in this fund. Participants were moved into a new custom portfolio that will own a new mutual fund share class of Dodge & Cox Stock that does not carry a recordkeeping reimbursement, which should make the performance and fees of this option more transparent. The table below summarizes this change.

Old Investment Option	Old Expense Ratio	New Investment Option	New Expense Ratio
Dodge & Cox Stock	0.51%	US Large Value Company Stock (Dodge & Cox)	0.41%

The final changes to our investment lineup were the renaming of the existing white-label funds. “Ohio DC” was removed from the fund names, so participants were not confused about who is managing these portfolios. In addition, the new fund names better highlight the specific asset class and investment strategy of each option. The table below summarizes these name changes.

Old Option Name (Manager)	New Option Name (Manager)
Ohio DC Large-Cap Growth (T. Rowe Price)	US Large Growth Company Stock (T. Rowe Price)
Ohio DC Small-Cap Growth (Westfield, Fiera)	US Small Growth Company Stock (Westfield, Fiera)
Ohio DC Small-Cap Value (Westwood)	US Small Value Company Stock (Westwood)
Ohio DC International Stock (Vanguard, Schroders, Arrowstreet)	Non-US Company Stock (Vanguard, Schroders, Arrowstreet)
Ohio DC Intermediate Bond (TCW)	US Bond (TCW)
Ohio DC Stable Value Option (Multiple Managers)	Stable Value Option (Multiple Managers)

President Biden signed SECURE Act 2.0 into federal law on December 29, 2022, which contained many provisions applicable to governmental defined contribution plans and retirement plan administrators. These provisions have staggered effective dates, and while some are mandatory, others are optional. Some of the key provisions affecting the Program include:

- The required minimum distribution age is moving from age 72 to age 73 effective for persons who attain age 72 after December 31, 2022.
- The IRC 457 rule requiring that deferred compensation agreements be entered into before the first day of the month in which the compensation is available has been replaced with a rule that deferred compensation amounts may be changed at any time before the compensation is available.
- Beginning in 2024, catch-up contributions (for those age 50 or older) that are above the regular contribution limit must be made on a Roth (after-tax) basis unless the participant’s prior year wages with the same employer do not exceed \$145,000 (indexed for inflation).
- A new catch-up limit will become available in 2025 for participants aged 60, 61, 62, and 63.

Implementing these plan changes will take staff time and resources to update systems and participant communications over the next several years.

Financial Information and the Internal Control Structure

Program management is responsible for the information in this report and for establishing and maintaining a system of internal controls sufficient to provide integrity to all financial information and to permit reporting in conformity with accounting principles generally accepted in the United States of America. We believe the information presented in this Annual Report is accurately and fairly presented in all material respects. Internal controls can provide reasonable, but not absolute assurance that Program objectives will be met. The concept of reasonable assurance implies a high degree of assurance, constrained by the costs and benefits of establishing incremental control procedures.

The “Plan Net Position Available for Benefits” and “Changes in Plan Net Position Available for Benefits” are included as a “Pension Fund” in the Financial Section of this presentation. The Program reports all financial activity on the accrual basis of accounting. Additions are recorded in the period in which they are earned, and deductions are recorded in the period in which the liability is incurred.

During 2022, excess Administration Fund cash was held in money market accounts, certificates of deposit, StarOhio, and federal agency securities. Cash is held for capital acquisitions and is used to supplement monthly operations if administrative expenses exceed revenues during a given month. Program management seeks to maintain sufficient cash reserves to cover six to 18 months of operating expenses. The Program held about 16 months of operating expenses in cash reserve as of December 31, 2022.

Program Additions

Program additions come from participant contributions, transfers from other plans, investment income earned on participant accounts, and recordkeeping rebates/income. Participant contributions and transfers from other plans are the largest sources of Program additions in 2022, while net investment performance resulted in a net loss that reduced additions.

Total employee contributions were \$601 million in 2022 compared to \$582 million in 2021 and \$550 million in 2020. More employees are participating each year, and their average annual deferral keeps increasing. Transfers of other retirement assets into the Program were \$105 million in 2022, a decrease compared to \$138 million in 2021 and a slight increase versus \$104 million in 2020. Net investment performance was a loss of \$3.1 billion for 2022 compared to income of \$2.5 billion in 2021, and \$2.8 billion income in 2020, which is consistent with overall market performance during those time periods.

Program Deductions

Long-term trends of positive investment performance and higher participant contributions have increased participant account balances, resulting in more funds available for retirement income. Poor market performance in 2022 encouraged participants to remain invested and withdraw less. Distributions decreased by 0.3 percent between 2022 and 2021. The amount distributed to participants increased 68.4 percent between 2013 and 2022, and the number of accounts taking distributions increased 45 percent during this period.

The amounts transferred to other eligible retirement plans, including transfers to defined benefit plans to purchase service credit, decreased by 11 percent between 2022 and 2021, after increasing by 53 percent between 2021 and 2020. The substantial changes occurred because of volatile market performances, which discourage this activity in down markets, but promote greater activity in up markets.

Investments

The Program is a self-directed plan, so participants choose the investment options for their current deferrals and balances. The Board has adopted an investment policy to ensure that a suitable number of diverse investment options are offered and regularly monitored.

The Stable Value Option (SVO) continues to be the most popular investment choice and accounts for 31.4 percent of all invested assets. The one-year return on SVO investments was 1.74 percent in 2022. In addition to the SVO, participants can select from 14 investment options, including a series of target date funds, to create a diversified portfolio. The target date funds are the default investment option of the Program's EZ Enrollment plan, and accordingly have seen a steady increase in asset growth over recent years. Investment performance results and related investment expense ratios are reported to participants in their Annual and Quarterly Statements and in the Program's newsletter and website. A listing of investment options and their performance returns is included in the Investment Section of this report.

Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) most recently awarded a Certificate of Achievement for Excellence in Financial Reporting to the Ohio Public Employees Deferred Compensation Program for the fiscal year ended December 31, 2021. The Certificate of Achievement is the highest form of recognition for excellence in State and local government financial reporting. To be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized Annual Report, whose contents conform to program standards. Such reports must satisfy both accounting principles generally accepted in the United States of America and applicable legal requirements.

A Certificate of Achievement is valid for a one-year period. We believe our current Annual Report continues to conform to Certificate of Achievement program requirements, and the Annual Report will be submitted to the GFOA to determine its eligibility for another Certificate of Achievement.

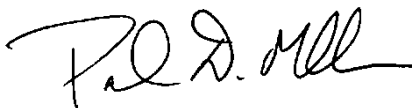
Independent Auditors

The Program financial statements for the year ended December 31, 2022, and 2021 were audited by Rea & Associates under contract with the Auditor of State of Ohio.

Acknowledgments

The preparation of this report reflects the combined efforts of the Program's staff under the direction of the Board and its Audit Committee. The purpose of this report is to provide complete and reliable information as a basis for making decisions and as a means for determining responsible stewardship over the assets contributed by participants.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Paul D. Miller". The signature is fluid and cursive, with the first name "Paul" and last name "Miller" clearly distinguishable.

Paul D. Miller, CPA
Director of Finance

PLAN SUMMARY

Ohio Revised Code Section 148 established the Ohio Public Employees Deferred Compensation Plan (the Plan), which will at all times comply with the current Internal Revenue Code and Internal Revenue Service Regulations. The Plan is effective as to each eligible employee (i.e., public employees as defined in Section 148.01(A)(1) of the Ohio Revised Code) upon the date they become an active participant by executing a participation agreement with the employer. During 2022, the Plan was reviewed by staff and outside counsel to make sure the Plan remains consistent with current Federal and State laws and regulations. The key edit to the Plan Document was:

- An update to reflect IRS proposed regulations related to situations when multiple beneficiary accounts are created and then the oldest beneficiary subsequently dies, resulting in the remaining beneficiaries possibly being subject to the non-spousal 10-year distribution rule.

This change was approved by the Board and was effective January 1, 2023.

This Plan summary includes all Plan revisions approved by the Board and effective as of December 31, 2022. Participants should refer to the Plan Document for complete Plan information.

Delegation by Employer - The participating employers have delegated their administrative powers, duties, and responsibilities under the Plan to the Ohio Public Employees Deferred Compensation Board.

Commencement of Participation - Each eligible employee shall be permitted to participate under this Plan. An eligible employee shall elect to participate and become an active participant by executing a participation agreement with their employer, or by being enrolled automatically by their employer. A participation agreement shall specify:

- a. The amount of the active participant's compensation, which the employer and the participant agree to defer, subject to limitations;
- b. The date as of which reduction and deferral of compensation pursuant to the participation agreement shall begin, which date shall be as early as administratively practicable, but no earlier than the first day of the first calendar month following the execution of the participation agreement; and
- c. The investment option(s) selected by the participant unless automatically enrolled and defaulted into a LifePath portfolio.

Deferrals - The term deferrals will include both traditional pre-tax deferrals and Roth after-tax contributions.

Maximum and Minimum Deferrals - Normally, the maximum amount that may be deferred by an active participant into the Plan in any Plan year shall not exceed the lesser of (A) \$20,500 for the year 2022, and then indexed as allowed by law in future years or (B) 100 percent of an active participant's includable compensation (as defined by the Internal Revenue Code). In addition, for the year 2022, participants who have attained age 50 may defer an additional \$6,500, which amount may increase in future years as indexed as allowed by law.

Under certain circumstances, participants may defer up to two times the normal annual deferral limit (\$41,000 in 2022) during each of the last three years prior to normal retirement age, if the participant contributed less than the maximum amount during earlier years.

The limitations on the maximum amount of deferral above shall be reduced by any amount excluded from the participant's gross income for the Plan year under another Section 457 plan maintained by any employer.

The Plan administrator may establish a minimum deferral amount or minimum allocation to any investment.

Amendments of Participation Agreements - The election of an eligible employee to participate under the Plan is irrevocable as to all amounts actually deferred under the participation agreement. The participant may, by amendment of the participation agreement or other forms authorized by the administrator, do any of the following: (a) change the specification of any investment option as to the amounts to be deferred in the future; (b) terminate the election to be an active participant; or (c) change the amount of compensation to be deferred. An amendment or termination shall be effective as early as administratively practicable, but not earlier than the first day of the following calendar month.

Exchanges - A participant (or beneficiary, if the participant has died) may make exchanges between investment options. Any such exchange shall be effective at the price next computed following receipt of the exchange request and shall be subject to such restrictions as are established by the Plan administrator or its investment managers. Participants with four exchanges in any 45-day period will lose their electronic trading privilege and will be restricted to one mail-in exchange every five days for the following twelve-month period.

Maintenance of Accounts - The Plan administrator shall establish an account for each participant to which shall be credited or charged, as the case may be, amounts deferred under the Plan and any increase or decrease of the account value of the investment options specified in the participation agreement or any amendment thereto. All investment options offered under this Plan must be

offered by persons, companies, or entities authorized and duly licensed by the State of Ohio and appropriate Federal agencies regulating such investments to do business in the State of Ohio. The Plan and the employer shall not be responsible for any decrease in value of a participant's account resulting from capital or market changes or any other changes occurring in the investment option or the participant's account. The Plan administrator may from time to time assess reasonable service charges against all or any portion of the deferred amounts or accounts to defray costs associated with the implementation and administration of the Plan.

Crediting of Accounts - Each participant's account shall be credited with amounts authorized for deferral and received by the Plan administrator.

Report - A report of the total amount credited to a participant's account, in such form as the Plan administrator determines, shall be furnished to the participant not more than 60 days after the end of each calendar quarter. All reports to a participant shall be based on the net fair value of the investment options as of the end of the reporting period, to the extent such values are available to the Plan administrator.

Assets Held in Trust - Plan assets are not the property of participating employees. All Plan assets and income shall be held by the Board in trust on behalf of the employer for the exclusive benefit of participants and their beneficiaries. All assets, whenever contributed to the Plan, are assigned to the trust established by the Board.

Rollovers - Any participant (or spousal beneficiary) who has separated from service with an employer with which the participant maintained an account under an eligible retirement plan may, upon proper written request, rollover the account value from that account to the participant's Ohio Public Employees Deferred Compensation Plan account.

Any participant (or beneficiary) who has separated from service with an employer with which the participant maintained an account with the Ohio Public Employees Deferred Compensation Plan may, upon proper written request, rollover the account value from that account directly to another eligible retirement plan or account.

Service Credit Purchase - Participants may use all or a portion of their account balances as a direct trustee-to-trustee transfer to a governmental defined benefit system, which permits the purchase of permissive service credit or the repayment of service credits.

In-Service Transfers - If an employer offers multiple IRC 457 deferred compensation plans, which meet certain conditions, the Plan will allow participants to move their account balances between reciprocating plans as an in-service transfer prior to severance from employment.

Election of Benefit Payment Date - (a) Participant - Upon severance from employment, a participant may elect a date to begin receiving benefit payments from the Plan. Benefit payments may begin after verification of severance, receipt of final deferral, and completion of the Withdrawal Election Form. Payments must begin no later than December 31 of the year in which the participant reaches age 72 (or such other age as required under IRC section 401(a)(9)). If the participant has not had a severance from employment as of this date, then payments must begin no later than December 31 of the year in which the participant has a severance from employment.

(b) Beneficiary - If a participant or spousal beneficiary dies before his or her account has been exhausted, then the remaining account balance shall be paid to the designated beneficiary.

The beneficiary shall have the right to elect a benefit option, subject to the following limitations. (1) If a participant dies on or after the required minimum distribution date, payments shall continue to be paid to the beneficiary at least as rapidly as they were being paid to the participant. (2) If a participant dies before the required minimum distribution date, the beneficiary may choose a payment option subject to the following requirements: (a) if the beneficiary is the participant's surviving spouse, distribution may be delayed until December 31 of the year in which the participant would have reached age 72 (or such other age as required under IRC section 401(a)(9)), or (b) if the beneficiary is someone other than the surviving spouse, distribution of the account must begin by December 31 of the year following the participant's death, or (c) if the beneficiary is not a person, such as a trust or estate, the entire account must be distributed by the end of the calendar year which contains the fifth anniversary of the participant's death. (3) If a spousal beneficiary dies after the participant, but before the full account value is distributed, any remaining account value will be paid to the spousal beneficiary's designated beneficiaries in a lump-sum payment.

Beginning after 2021, certain beneficiaries are classified as eligible designated beneficiaries and are entitled to receive distributions over a life expectancy period. Beneficiaries who are not eligible designated beneficiaries must take distributions over a ten-year period.

Election of Benefit Payment Options - All distributions are subject to the requirements of IRC Sections 457(d) and 401(a)(9) and the regulations there under. The Plan administrator will annually determine if the participant's or beneficiary's annual distributions meet their minimum distribution requirements and adjust the amount, if necessary, to comply with these provisions.

Initial benefit payment elections and subsequent changes will be effective only if made on forms provided or in the manner prescribed by the Plan administrator and received by the date determined by the Plan administrator. Purchased annuity benefit payments options may not be changed once payments have begun. No benefit payment option shall be available which is not provided for on the benefit payment election form provided by the Plan administrator or is not permitted by the Plan Document. Benefit payments are taxable income to participants and beneficiaries in the year of distribution and are subject to the applicable tax withholding rules.

Require Elections for Benefit Payment Date and Option - (a) Participant - If a participant does not choose a benefit payment date, benefit payments shall begin by December 31 of the year the participant reaches age 72 (or such other age as required under IRC section 401(a)(9)). Benefits shall be paid for a fixed time period over the maximum number of years allowed by the required minimum distribution tables.

(b) Beneficiary - If a spousal beneficiary of a participant who dies before the required minimum distribution date does not elect a benefit payment date, benefit payments shall begin by December 31 of the year the participant would have reached age 72 (or such other age as required under IRC section 401(a)(9)). If a non-spousal beneficiary of a participant does not choose a benefit payment date, benefit payments shall begin by December 31 of the year following the participant's death. Benefits shall be paid for a fixed time period for the maximum number of years allowed by the required minimum distribution tables.

Emergency Withdrawals - A participant may request an unforeseeable emergency withdrawal by submitting that request in writing on the approved form to the Plan administrator's staff. An unforeseeable emergency is a severe financial hardship of the participant or beneficiary resulting from a sudden and unexpected illness or accident. If the participant request is denied, a request for review of the staff determination may be made in writing. If this review fails to confirm a claim of unforeseeable emergency, an appeal may be made to the Ohio Public Employees Deferred Compensation Board. The decision of the Board shall be final and not subject to further appeal. If at any time a request for withdrawal is approved, the Plan administrator may thereupon distribute so much of the participant's account as is necessary to provide the amount approved to meet the unforeseeable emergency.

Acceleration - If upon a participant's separation from service and the Board's receipt of the last deferral, the participant's account value is less than \$1,000, the Plan administrator may accelerate the payment of benefits otherwise due in the future and pay to such participant the full account value in a lump sum less the required tax withholding.

Qualified Domestic Relations Order - The Plan administrator shall comply with the provisions of a domestic relations order which the Plan administrator determines to constitute a Qualified Domestic Relations Order, as defined by the Internal Revenue Code. The Plan permits distributions at any time to an alternative payee under a Qualified Domestic Relations Order.

Small Balance Distribution - A participant may elect a small balance distribution if the account value is \$5,000 or less, the full value of the account is to be distributed, the participant has not deferred into the Plan for two years, the participant agrees not to recommence deferrals to the Plan for one year, and there has been no prior distribution under this Plan provision.

Benefit Payment Options - The following benefit payment options are available under the Plan. Definitions of each are provided on the benefit payment election form.

1. Payments of an annual percent
2. Payments of a dollar amount
3. Systematic withdrawals for a fixed-time period
4. Partial lump sum payout
5. Lump sum payout

Designation of Beneficiaries - At any time after commencing participation in the Plan, a participant, or spousal beneficiary may designate a beneficiary for any benefits that the participant or spousal beneficiary is entitled to receive under the Plan and which are unpaid at the time of the participant's death, on a form filed with and accepted by the Plan administrator. If a participant or spousal beneficiary die without having a proper beneficiary form completed and on file, the benefits payable on or after the date of death shall be paid to the fiduciary of the probate estate, provided that if the Plan administrator does not receive notice that a fiduciary has been appointed, payment may be made to those persons making claims to receive the property under intestacy laws of the jurisdiction of their residence at the time of the participant's death.

If a non-spousal beneficiary dies while receiving Plan benefits, any remaining benefits which the non-spousal beneficiary is entitled to receive under the Plan and which are unpaid at the time of the beneficiary's death shall be paid in a lump sum amount determined under each applicable investment option to the fiduciary of the beneficiary's probate estate, provided that if the Plan administrator does not receive notice that a fiduciary has been appointed, payment shall be made to those persons making claims to receive the beneficiary's property under the intestacy laws of the jurisdiction of the beneficiary's residence at the time of death.

If a trust is named as beneficiary, satisfactory evidence must be furnished to the Plan that the trust is the only beneficiary qualified to receive payment. The Plan will be fully discharged of liability for any action taken by the trustee and for all amounts paid to the trustee. In all dealings with the trust, the Plan will be fully protected against the claims of every other person. The Plan will not recognize a change in the trust as beneficiary unless the change is documented on forms provided by the Plan administrator.

Designation Forms - A participant may change any beneficiary at any time by filing with the Plan administrator a dated change of beneficiary form. These designations shall be on forms provided by the Plan administrator and shall be effective on the date filed with and accepted by the Plan administrator.



OHIO DEFERRED COMPENSATION

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM

FINANCIAL SECTION

INDEPENDENT AUDITORS' REPORT



To the Ohio Public Employees Deferred Compensation Program Board
Franklin County, OH
257 East Town St., Suite 400
Columbus, OH 43215

Independent Auditor's Report

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of the Ohio Public Employees Deferred Compensation Program, Franklin County, Ohio (the Program) as of and for the years ended December 31, 2022 and 2021, and the related notes to the financial statements, which collectively comprise the Program's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the plan net position available for benefits of the Ohio Public Employees Deferred Compensation Program, Franklin County, Ohio as of December 31, 2022 and 2021, and the respective changes in its plan net position available for benefits for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to the financial audits contained in *Government Auditing Standards* (*Government Auditing Standards*), issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Program, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Emphasis of Matter

As discussed in Note 2 to the financial statements, the Program adopted Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*. Our opinion is not modified with respect to this matter.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Program's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we

- exercise professional judgment and maintain professional skepticism throughout the audit.
- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Program's internal control. Accordingly, no such opinion is expressed.
- evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Program's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and pension and other post-employment benefit schedules, as listed in the table of contents, be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Program's basic financial statements. The supplemental schedules, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to

the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplementary schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the introductory section, investment section and statistical section but does not include the basic financial statements and our auditor's report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated May 16, 2023 on our consideration of the Program's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Program's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Program's internal control over financial reporting and compliance.

Rea & Associates, Inc.

Rea & Associates, Inc.
Dublin, Ohio
May 16, 2023

MANAGEMENT'S DISCUSSION AND ANALYSIS

Management of the Ohio Public Employees Deferred Compensation Program (the Program) offers this narrative overview of the financial statements contained in this Annual Report. The financial statements consist of the Statements of Plan Net Position Available for Benefits and the Statements of Changes in Plan Net Position Available for Benefits. All assets, deferred outflows, liabilities, and deferred inflows associated with the Program's operations are included on the Statement of Plan Net Position Available for Benefits. The Program's financial activities for the periods are reported on the Statement of Changes in Plan Net Position Available for Benefits. Additional information is presented in the Notes to the Financial Statements and the Supplemental Information Schedules.

GASB 68 AND GASB 75

The net pension liability (NPL) is reported pursuant to GASB Statement 68, *Accounting and Financial Reporting for Pensions—an Amendment of GASB Statement 27*, and Other Postemployment Benefits (OPEB) are reported in accordance with GASB Statement 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. These two standards significantly revised accounting for costs and liabilities related to pension and OPEB plans. For reasons discussed below, many end users of this financial statement will gain a clearer understanding of the Program's actual financial condition by adding deferred inflows related to pension and OPEB, the net pension liability and the net OPEB liability (asset) to the reported net position and subtracting deferred outflows related to pension and OPEB.

Governmental Accounting Standards Board standards are national and apply to all government financial reports prepared in accordance with generally accepted accounting principles. Prior accounting for pensions (GASB 27) and postemployment benefits (GASB 45) focused on a funding approach. This approach limited pension and OPEB costs to contributions annually required by law, which may or may not be sufficient to fully fund each plan's *net pension liability* or *net OPEB liability*. GASB 68 and GASB 75 take an earnings approach to pension and OPEB accounting; however, the nature of Ohio's statewide pension/OPEB plans and state law governing those systems requires additional explanation in order to properly understand the information presented in these statements.

GASB 68 and GASB 75 require the net pension liability and the net OPEB liability (asset) to equal the Program's proportionate share of each plan's collective:

1. Present value of estimated future pension/OPEB benefits attributable to active and inactive employees' past service
- 2 Minus plan assets available to pay these benefits

GASB notes that pension and OPEB obligations, whether funded or unfunded, are part of the “employment exchange” – that is, the employee is trading his or her labor in exchange for wages, benefits, and the promise of a future pension and other postemployment benefits. GASB noted that the unfunded portion of this promise is a present obligation of the government, part of a bargained-for benefit to the employee, and should accordingly be reported by the government as a liability since they received the benefit of the exchange. However, the Program is not responsible for certain key factors affecting the balance of these liabilities. In Ohio, the employee shares the obligation of funding pension benefits with the employer. Both employer and employee contribution rates are capped by State statute. A change in these caps requires action of both Houses of the General Assembly and approval of the Governor. Benefit provisions are also determined by State statute. The Ohio revised Code permits but does not require the retirement systems to provide healthcare to eligible benefit recipients. The retirement systems may allocate a portion of the employer contributions to provide for these OPEB benefits.

The employee enters the employment exchange with the knowledge that the employer’s promise is limited not by contract but by law. The employer enters the exchange also knowing that there is a specific, legal limit to its contribution to the retirement system. In Ohio, there is no legal means to enforce the unfunded liability of the pension/OPEB plan *as against the public employer*. State law operates to mitigate/lessen the moral obligation of the public employer to the employee, because all parties enter the employment exchange with notice as to the law. The retirement system is responsible for the administration of the pension and OPEB plans.

Most long-term liabilities have set repayment schedules or, in the case of compensated absences (i.e., sick and vacation leave), are satisfied through paid time-off or termination payments. There is no repayment schedule for the net pension liability. As explained above, changes in benefits, contribution rates, and return on investments affect the balance of these liabilities, but are outside the control of the local government. In the event that contributions, investment returns, and other changes are insufficient to keep up with required payments, State statute does not assign/identify the responsible party for the unfunded portion. Due to the unique nature of how the net pension liability and the net OPEB liability (where applicable) are satisfied, these liabilities are separately identified within the long-term liability section of the statement of net position.

In accordance with GASB 68 and GASB 75, the Program’s statements prepared on an accrual basis of accounting include an annual pension expense and an annual OPEB expense for their proportionate share of each plan’s *change* in net pension liability and net OPEB liability (asset), respectively, not accounted for as deferred inflows/outflows.

GASB 87

This Statement requires recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. These changes were incorporated in the Program's 2022 financial statements; see Note 2 for information.

PROGRAM ADDITIONS

Over most recent periods, the largest item in Program additions has been investment income, which is mainly determined by the overall performance of the U.S. equity and fixed income markets. In 2022, U.S. equity and fixed income markets generally produced negative annual returns, after producing positive returns since 2018. Net investment results in 2022 were investment losses of \$3.1 billion, compared to net gains of \$2.5 billion in 2021 and net gains of \$2.8 billion in 2020.

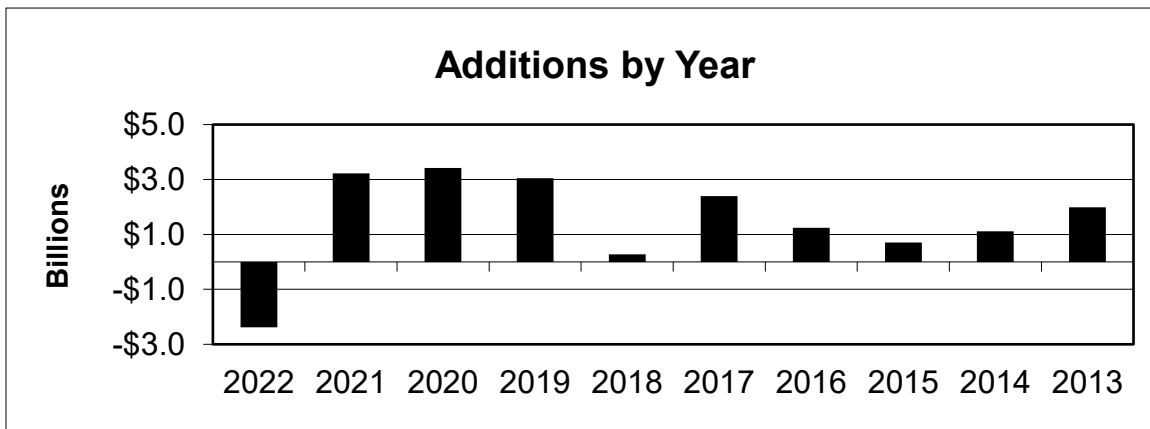
Participant contributions in 2022 increased 3.3 percent compared to 2021 and 5.8 percent between 2021 and 2020. The number of actively contributing employees in 2022 decreased slightly to 125,401, while the average annual contribution rose to be just under \$4,800. The IRS determines the annual maximum limit that participants may contribute based on inflation indices, and the annual limits in 2022 were increased to \$20,500 for most participants, \$27,000 for participants 50 and over, and \$41,000 for participants in catch-up status. These limits were an increase over the 2021 limits of \$19,500 for most participants, \$26,000 for participants aged 50 and over, and \$39,000 for participants in catch-up status. The annual limits will increase again in 2023, which usually generates higher total contributions into the Program.

Annual enrollments into the Program remain relatively high due to the availability of online enrollments and the return to office for many public employees, which continued to offset the remaining impacts of the COVID-19 pandemic era. Higher enrollments as well as auto-escalation of contribution amounts continue to lead to greater participant contributions. Transfers from other retirement plans during 2022 decreased 23.7 percent compared to 2021, falling back in line with 2020 numbers, after experiencing a large gain of 32.6 percent in 2021 compared to 2020.

On December 9, 2022, the Program removed the last investment option that paid a recordkeeping reimbursements. The Program had been rebating that reimbursement entirely to the investors in that option.

	<u>2022</u>	<u>2021</u>	<u>2020</u>
Net investment income (loss)	(\$3,084,174,888)	\$2,496,193,268	\$2,769,516,049
Participant contributions	601,094,646	582,061,454	549,917,095
Transfer from other plans	104,965,825	137,519,233	103,711,983
Recordkeeping income/rebates	<u>1,258,631</u>	<u>1,325,396</u>	<u>990,763</u>
Total Additions	<u>(\$2,376,855,786)</u>	<u>\$3,217,099,351</u>	<u>\$3,424,135,890</u>

The following graph shows a 10-year history of total Program additions. While participant contributions have trended up over this period, investment income has the greatest impact on total additions and the year-to-year fluctuations.



PROGRAM DEDUCTIONS

Over the past ten years, Program deductions have generally trended upwards year over year. That trend changed in 2022 as total deductions experienced a 5.8 percent decrease compared to 2021.

Distributions to participants decreased by 0.3 percent in 2022 compared to 2021 after increasing 32.8 percent for 2021 compared to 2020. The number of participants taking a distribution in 2022 increased slightly by 0.9 percent compared to 2021 after increasing 65.5 percent for 2021 compared to 2020. The significant increase in 2021 is the result of participants resuming distributions after Required Minimum Distributions were waived during 2020. The average annual distribution per participant decreased slightly by 1.7 percent in 2022 compared to 2021 after decreasing 19.8 percent for 2021 compared to 2020. The current decrease was driven by market performance lowering account balances, and the prior year decrease related to the resumption of Required Minimum Distribution amounts, which are generally lower than participant initiated withdrawal amounts.

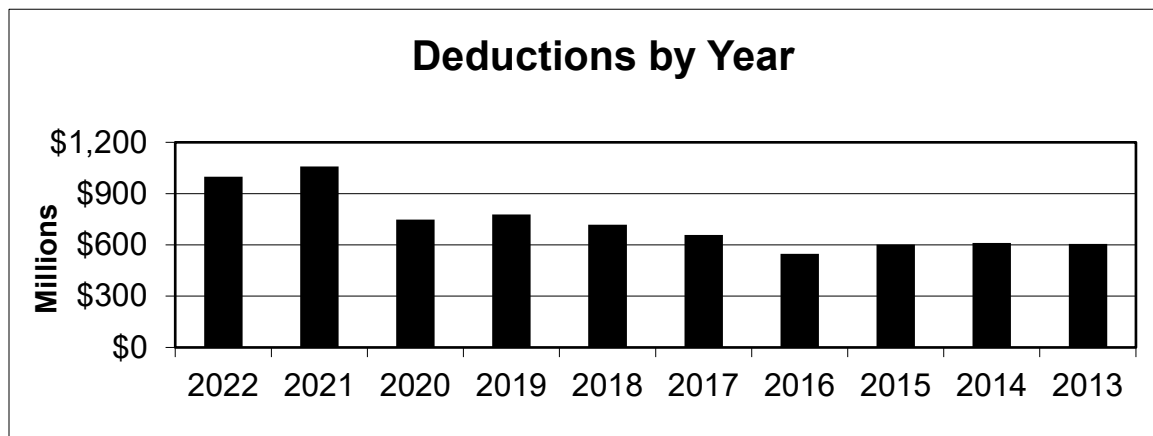
Transfers to other plans decreased 11.0 percent between 2022 and 2021, after increasing 53.0 percent for 2021 compared to 2020. Delays and interruptions in processing transfers during COVID-19 lockdowns throughout 2020 resulted in participants delaying transfers to other plans until 2021. This participant behavior, along with strong market performance that allows effective marketing of other plans resulted in the significant increase. The Program continues to offer communication materials promoting the benefits of keeping account balances in the Program after retirement, but as account balances rise, there are greater efforts by other plans to attract these accounts.

Other deductions, which are primarily administrative expenses, increased 12.4 percent between 2022 and 2021 after decreasing 15.4 percent for 2021 compared to 2020. The 2021 administrative expenses were unusually low due to a significant pension related adjustment due to changes in pension and OPEB assumptions. Implementation of GASB 87 resulted in lease costs that were previously reported as rent expense, now being reported as amortization and interest expenses, but total administrative expenses were not significantly changed.

	<u>2022</u>	<u>2021</u>	<u>2020</u>
Distributions to participants	\$494,069,158	\$495,667,695	\$373,282,249
Transfers to other plans	492,305,859	553,151,565	361,564,004
Other deductions	<u>12,066,168</u>	<u>10,793,697</u> *	<u>12,693,586</u>
Total Deductions	<u>\$998,441,185</u>	<u>\$1,059,612,957</u>	<u>\$747,539,839</u>

*NOTE - 2021 Other deductions have been restated due to the implementation of GASB 87.

The graph below shows the 10-year history of total Program deductions. The general trend over this period has been a steady increase in Program deductions. There were slight dips in total deductions in 2016 and 2020, due to decreases in distributions to participants in those years. The trend of increases was generated by more people taking distributions (larger numbers of baby boomers retired) and greater amounts available (larger account balances resulting from increased contribution trends and generally positive market performance over longer periods).



PLAN NET POSITION AVAILABLE FOR BENEFITS

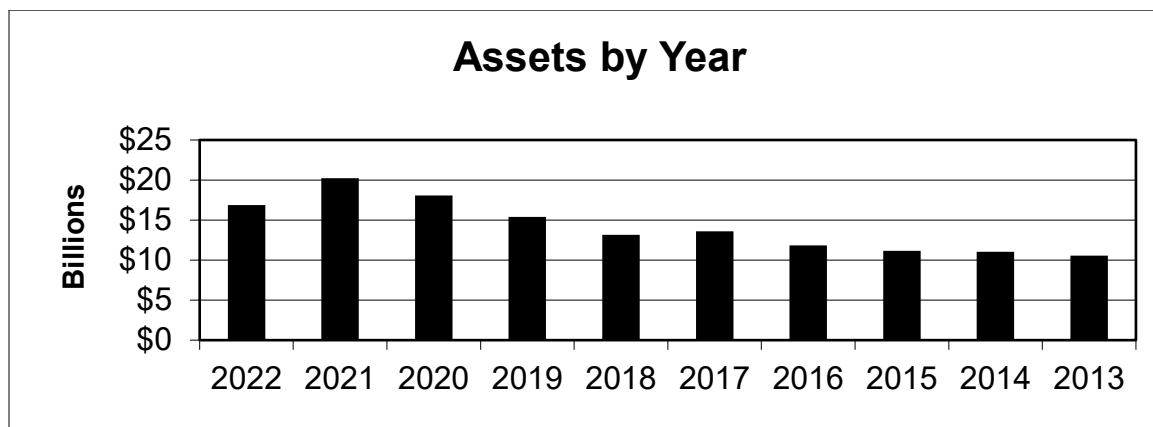
Total assets and deferred outflows as of December 31, 2022 decreased \$3.4 billion compared to the prior year-end. The primary reason for this decrease was net investment loss of \$3.1 billion.

Program liabilities and deferred inflows are generally unpaid operating expenses at year-end, trade settlement payments due for investments purchased on the final business day of the year, and net pension/OPEB liability. Total liabilities can vary depending on the volume of participant account activity (contributions and exchanges) on the final business day of the year.

	<u>2022</u>	<u>2021</u>	<u>2020</u>
Capital Assets	\$16,818,293	\$15,946,233 *	\$15,238,348 *
Other Assets and Deferred Outflows	<u>16,856,957,790</u>	<u>20,226,406,272</u>	<u>18,074,973,185</u>
Total Assets and Deferred Outflows	16,873,776,083	20,242,352,505	18,090,211,533
Total Liabilities and Deferred Inflows	<u>14,410,593</u>	<u>7,690,044 *</u>	<u>13,035,466 *</u>
Net Position Available for Benefits	<u><u>\$16,859,365,490</u></u>	<u><u>\$20,234,662,461</u></u>	<u><u>\$18,077,176,067</u></u>
Change in Net Position	<u><u>(\$3,375,296,971)</u></u>	<u><u>\$2,157,486,394</u></u>	<u><u>\$2,676,596,051</u></u>

*NOTE - 2020 and 2021 Capital Assets and Long-Term Liabilities have been restated due to the implementation of GASB 87.

As shown in the graph below, the net position available for benefits had trended up over the past 10 years, prior to the challenging market conditions of 2022, which produced a slight dip in this upward trend.



PROPERTY AND EQUIPMENT

At the end of 2022, the Program had \$16,818,293 (net of accumulated depreciation and amortization) in recordkeeping system, participant web portal, lease asset, furniture and fixtures, office equipment, and leasehold improvements. See Note 12 for further description of capital assets. The following table shows 2022 balances compared to 2021 and 2020:

	<u>2022</u>	<u>2021</u>	<u>2020</u>
<i>Non-Depreciable:</i>			
Recordkeeping System	\$986,561	\$466,388	\$179,323
<i>Depreciable:</i>			
Recordkeeping system	10,650,950	10,618,300	10,234,039
Participant web portal	3,478,255	2,878,787	2,586,823
Lease Asset	1,668,630	1,939,218 *	2,209,807 *
Furniture and fixtures	7,362	11,968	13,067
Office equipment	<u>26,535</u>	<u>31,572</u>	<u>15,289</u>
Net Capital Assets	<u>\$16,818,293</u>	<u>\$15,946,233</u>	<u>\$15,238,348</u>

* Note - 2020 and 2021 Capital Assets were restated due to the implementation of GASB 87.

LONG-TERM DEBT OBLIGATIONS

At the end of 2022, the only outstanding debt obligations of the Program were lease liabilities totaling \$1,783,909 with \$226,836 of that total due within one-year. 2021 and 2020 lease liability amounts were restated due to the implementation of GASB 87. See Note 11 to the basic financial statements for additional information on the Program's long-term obligations.

PROGRAM ACTIONS

Several changes to the Ohio DC fund lineup were completed on December 9, 2022. These changes included moving the four passive investments from Vanguard mutual funds to passive collective investment trust funds managed by State Street Global Advisors to lower participant investment fees. Another investment change was the closing of the Dodge & Cox Stock mutual fund. That fund carried a 10 basis point recordkeeping reimbursement that Ohio DC had been rebating to the participants investing in this fund. Participants were moved into a new custom portfolio that will own a new mutual fund share class of Dodge & Cox Stock that does not carry a recordkeeping reimbursement, which should make the performance and fees of this option more transparent. The final changes to the investment lineup were the renaming of the existing white-label funds. "Ohio DC" was removed from the fund names, to avoid confusion about who was managing these portfolios. In addition, the new fund names better highlight the specific asset class and investment strategy of each option.

CONTACTING THE PROGRAM'S FINANCIAL MANAGEMENT

This financial report is designed to provide participants, beneficiaries, employers, trustees, investment managers, and the public with a general overview of the Program's finances and to show the Program's accountability for the money it receives. If you have questions about this report or need additional financial information, contact the Program's administrative offices at 614-466-7245.

STATEMENTS OF PLAN NET POSITION AVAILABLE FOR BENEFITS

As of December 31, 2022 and 2021

	<u>2022</u>	<u>2021-Restated</u>
Assets:		
Investments:		
Collective trust funds	\$6,376,660,324	\$8,619,598,839
Stable value option	5,285,307,837	5,101,608,705
Mutual funds	976,214,550	4,554,751,119
Separate account	4,176,435,996	1,915,137,743
Purchased annuities	9,487,082	10,375,512
Total investments	<u>16,824,105,789</u>	<u>20,201,471,918</u>
Cash and cash equivalents	16,746,321	15,306,139
Contributions receivable and cash held for investment	14,755,392	8,399,419
Accounts receivable and prepaids	562,230	563,251
Property and equipment, net	16,818,293	15,946,233 *
Net OPEB Asset	<u>370,534</u>	<u>213,807</u>
Total assets	<u>16,873,358,559</u>	<u>20,241,900,767</u>
Deferred Outflows of Resources:		
Pension: OPERS	391,664	261,498
OPEB: OPERS	<u>25,859</u>	<u>190,240</u>
Total deferred outflows of resources	<u>417,523</u>	<u>451,738</u>
Liabilities:		
Accounts payable	9,441,998	1,883,013
Accrued expenses	664,332	776,501
Net Pension Liability	950,519	1,656,847
Lease Liability	<u>1,783,909</u>	<u>1,997,567 *</u>
Total liabilities	<u>12,840,757</u>	<u>6,313,928</u>
Deferred Inflows of Resources:		
Pension: OPERS	1,184,122	722,765
OPEB: OPERS	<u>385,713</u>	<u>653,351</u>
Total deferred inflows of resources	<u>1,569,835</u>	<u>1,376,116</u>
Plan Net Position Available for Benefits	<u>\$16,859,365,490</u>	<u>\$20,234,662,461</u>

* NOTE - 2021 balances for Property and equipment, net as well as Lease liability were restated due to implementation of GASB 87.

The accompanying notes are an integral part of the financial statements.

STATEMENTS OF CHANGES IN PLAN NET POSITION AVAILABLE FOR BENEFITS

For the years ended December 31, 2022 and 2021

	<u>2022</u>	<u>2021-Restated</u>
Additions:		
Net Investment Income:		
Net gain (loss) on funds	(\$3,176,439,300)	\$2,405,273,010
Stable value income	104,892,699	104,074,297
Investment expenses	<u>(12,628,287)</u>	<u>(13,154,039)</u>
Net investment income (loss)	(3,084,174,888)	2,496,193,268
Participant contributions	601,094,646	582,061,454
Transfers from other plans	104,965,825	137,519,233
Recordkeeping rebates	1,255,206	1,320,058
Recordkeeping income	<u>3,425</u>	<u>5,338</u>
Total additions	<u>(2,376,855,786)</u>	<u>3,217,099,351</u>
Deductions:		
Distributions to participants	494,069,158	495,667,695
Transfers to other plans	492,305,859	553,151,565
Administrative expenses	<u>12,066,168</u>	<u>10,793,697</u>
Total deductions	<u>998,441,185</u>	<u>1,059,612,957</u>
Change in Net Position	(3,375,296,971)	2,157,486,394
Plan Net Position Available for Benefits:		
Beginning of Year	<u>20,234,662,461</u>	<u>18,077,176,067</u>
End of Year	<u><u>\$16,859,365,490</u></u>	<u><u>\$20,234,662,461</u></u> *

*NOTE- 2021 Plan Net Position Available for Benefits has been restated due to implementation of GASB 87.

The accompanying notes are an integral part of the financial statements.

NOTES TO THE FINANCIAL STATEMENTS

1. General Description of the Program:

The following description of the Ohio Public Employees Deferred Compensation Program (the Program) is provided for general information only. Participants should refer to the Plan Document for complete information.

The Program is a voluntary defined contribution other employee benefit plan established pursuant to Ohio Revised Code (ORC) Section 148, which permits the Board to maintain and alter the Program, as necessary. Under the Program provisions, any public employee within Ohio (as defined in ORC Section 148.01(A)(1)) is eligible to contribute into the Program, through payroll deductions, any amount up to the maximum permitted under Section 457 of the Internal Revenue Code. Amounts contributed by employees are deferred for Federal and State income tax purposes until such amounts are distributed by the Program. As of December 31, 2022, and 2021, there were 2,042 and 2,022 respectively, State and local governments in the Program, and 125,401 and 125,610 respectively, actively deferring participant accounts in the Program.

Plan assets are not the property of the participating employees. All Plan assets and income are held by the Board in trust on behalf of the employers for the exclusive benefit of participants and their beneficiaries. All assets, whenever contributed to the Plan, are assigned to the trust established by the Board.

As of December 31, 2022, Program participants have the following investment options:

- A Stable Value Option administered by the Program. Investment portfolios are managed by Goldman Sachs Asset Management (GSAM); Dodge & Cox (Dodge & Cox); Earnest Partners (Earnest); JP Morgan Asset Management (JP Morgan); Jennison Associates LLC (Jennison); Nationwide Asset Management LLC (Nationwide); Payden & Rygel (Payden); and State Street Global Advisors (State Street).
- Mutual funds managed by The Vanguard Group, Inc. (Vanguard).
- Separate accounts managed by Fiera Capital (Fiera), T. Rowe Price (Price), Westfield Capital Management (Westfield), Westwood Management (Westwood), Arrowstreet Capital, L.P. (Arrowstreet) and Schroder Investment Management (Schroeder), and Vanguard. In addition, a small allocation of several separate accounts is managed by State Street for daily liquidity.

- Collective trust funds managed by BlackRock Institutional Trust Company (BlackRock); Fidelity Investment Company (Fidelity); and TCW Investment Management Company (TCW).

Participants may withdraw the value of their account upon termination of employment, retirement, disability, or unforeseeable financial emergency. Participants may select various payout options including lump sum payments or payments over various periods. If a purchased annuity option was selected, the payments may be actuarially determined.

2. Summary of Significant Accounting Policies:

Organization:

The Ohio Revised Code Section 148.02 created the Deferred Compensation Board (the Board) to administer the Program for all eligible employees. However, under the criteria set forth in governmental accounting standards, the Program is not considered a component unit of the State of Ohio, because of the following:

- The Program is a separate legal entity.
- The State does not appoint a voting majority of the Program's Board.
- The State does not approve the Program budget or set Program rates or charges.
- The Program provides services to Ohio local governments as well as to the State of Ohio.

The Ohio Deferred Compensation Board is constructed of the members of the Ohio Public Employees Retirement System (OPERS) Board, a member of the Ohio Senate, and a member of the Ohio House of Representatives. The two members from the Ohio General Assembly must be of different political parties and are appointed by their respective leadership. Seven members of the OPERS Board are elected by the groups they represent: retired employees (2), State employees, municipal employees, county employees, non-teaching employees of State colleges and universities, and miscellaneous employees. The four statutory Board members are the Director of the Ohio Department of Administrative Services and investment experts appointed by the Governor of Ohio, Treasurer of State, and Ohio General Assembly.

Basis of Accounting and Measurement Focus:

The activities of the Program are accounted for as a Pension Fund and follow the accrual basis of accounting and reporting for defined contribution plans recommended by the Governmental Accounting Standards Board. The Program is accounted for on a flow of economic resources measurement focus. With this measurement focus, all assets, deferred outflow, liabilities, and deferred inflows

associated with the Program's operations are included on the Statement of Plan Net Position Available for Benefits. Activities of the Program are accounted for in two funds, which are combined for financial reporting:

Program Fund:

The Program Fund reflects all participant contributions, earnings, or losses on investments and distributions to participants.

Administration Fund:

The Administration Fund is used to account for customer service and administrative costs incurred by Program operations. The Administration Fund recovers the costs of its operations through fees charged to the participant accounts in the Program Fund.

Deferred Outflows/Inflows of Resources:

In addition to assets, the statements of financial position will sometimes report a separate section for deferred outflows of resources. Deferred outflows of resources represent a consumption of net assets that applies to future periods and will not be recognized as an outflow of resources (expense/expenditure) until then. For the Program, deferred outflows of resources are reported on the Statement of Net Position Available for Plan Benefits for pension and OPEB. The deferred outflows of resources related to pension and OPEB are explained in Notes 14 and 15.

In addition to liabilities, the statements of financial position report a separate section for deferred inflows of resources. Deferred inflows of resources represent an acquisition of net assets that applies to future periods and will not be recognized as an inflow of resources (revenue) until that time. For the Program, deferred inflows of resources include pension and OPEB. Deferred inflows of resources related to pension and OPEB plans are reported on the Statement of Net Position Available for Plan Benefits. (See Notes 14 and 15).

Stable Value Option:

The Program administers the Stable Value Option (SVO), the stable value investment option offered to participants. As of December 31, 2022, the Program has stable value funds invested with eight professional investment managers. The Program determines the quarterly interest rate credited to participants by calculating the net weighted average return of these investments. The Program is also responsible for calculating daily account balances, disbursing funds for benefit withdrawals, and processing investment exchanges.

As of December 31, 2022, the investment portfolios of the SVO are managed by GSAM; Dodge & Cox; Earnest; JP Morgan; Jennison; Nationwide; Payden; and State Street. The Program's Stable Value Investment Policy specifies investment guidelines, including asset class, credit rating, portfolio diversification, and duration. The GSAM portfolio includes a cash reserve account to buffer the other investment portfolios from daily cash flows into and out of the SVO.

Funds invested in the SVO portfolios are covered by guarantee agreements with banks and insurance companies. These agreements provide the formulas for determining the quarterly interest rate earned by the stable value investment portfolio and provide for benefit withdrawals at the guaranteed value. As of December 31, 2022, the Program's guarantee agreements are with Metropolitan Life Insurance Co.; Transamerica Premier Life Insurance Co.; Prudential Insurance Co. of America; Reinsurance Group of America; and the Royal Bank of Canada.

Investments Valuation:

The SVO contains benefit responsive synthetic guaranteed investment contracts that are valued at contract value, which represents contributions received, plus the interest credited, less applicable charges and amounts withdrawn.

Mutual fund investments are valued at the share prices of mutual funds as reported by the fund providers, which represent contributions received, plus appreciation (depreciation) of the underlying portfolio, less applicable charges and amounts withdrawn.

Separate account investments are valued at the fair value of the underlying assets as reported by the fund custodian, which represent contributions received, plus appreciation (depreciation) of the underlying portfolio, less applicable charges and amounts withdrawn.

Collective trust fund investments are valued at the unit prices of the collective trust funds as reported by the fund providers, which represent contributions received, plus appreciation (depreciation) of the underlying portfolio, less applicable charges and amounts withdrawn.

Assets held for purchased annuities are valued at amounts reported by Nationwide, which are actuarially determined. These amounts represent reserves established by Nationwide and are based on actuarial assumptions as to anticipated mortality, withdrawals, and investment yield. Nationwide periodically adjusts and updates these assumptions.

The Program categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets. Level 2 inputs are significant other observable inputs. Level 3 inputs are significant unobservable inputs. See Note 6 for additional information.

Stable Value Income:

Stable value income is recorded as earned for each of the investment components of the SVO. The gross crediting rates for each guarantee agreement were adjusted quarterly and ranged from 1.24 percent to 2.34 percent during 2022, and from 1.21 percent to 2.72 percent during 2021.

The assets held for purchased annuities were credited interest based on reserve assumptions used by Nationwide at the participant's annuitization date. The annuitization rates ranged from -2.3 percent to +2.5 percent during 2022 and 2021.

Net Gain or Loss on Invested Funds:

Investment income or loss consists of dividends and capital gains paid, and appreciation or depreciation on mutual funds, collective trust funds, and separate accounts.

Historical Trend Information:

Unaudited historical trend information designed to provide information about the Program's progress is presented in the accompanying Statistical Section of this report.

Property and Equipment:

Property and equipment of the Board are stated at cost less accumulated depreciation. Depreciation on property and equipment is calculated using the straight-line method over the estimated useful lives of the assets. Leased Assets are amortized in a systematic and rational manner over the shorter of the lease term or useful life of the underlying asset.

Board Employees' Deferred Compensation Benefits:

All employees of the Board are eligible to participate in the Program, which it administers. The Deferred Compensation Board employees' assets in the Program were valued at fair value and are included as Plan Net Position Available for Benefits.

Pensions/Other Postemployment Benefits (OPEB):

For purposes of measuring the net pension/OPEB liability, deferred outflows of resources and deferred inflows of resources related to pensions/OPEB, and pension/OPEB expense, information about the fiduciary net position of the pension/OPEB plans and additions to/deductions from their fiduciary net position have been determined on the same basis as they are reported by the pension/OPEB plan. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. The pension/OPEB plans report investments at fair value.

Implementation of New Accounting Principles

For the year ended December 31, 2022, the Program has implemented Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*, GASB Statement No. 91, *Conduit Debt Obligations*, GASB Statement No. 92, *Omnibus 2020*, a certain provision of GASB Statement No. 93, *Replacement of Interbank Offered Rates*, certain provisions of GASB Statement No. 97, *Component Unit Criteria and Deferred Compensation Plans*, and certain provisions of GASB Statement No. 99, *Omnibus 2022*.

GASB Statement No. 87 requires recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. These changes were incorporated in the Program's 2022 financial statements; see information below.

GASB Statement No. 91 provides a single method of reporting conduit debt obligations by issuers and eliminates diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures. The implementation of GASB Statement No. 91 did not have an effect on the financial statements of the Program.

GASB Statement No. 92 enhances comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB Statements. The implementation of GASB Statement No. 92 did not have an effect on the financial statements of the Program.

GASB Statement No. 93 addresses accounting and financial reporting effects that result from the replacement of interbank offered rates (IBORs) with other reference rates in order to preserve the reliability, relevance, consistency, and comparability of reported information. The implementation of paragraph 11b of GASB Statement No. 93 did not have an effect on the financial statements of the Program.

GASB Statement No. 97 results in more consistent financial reporting of defined contribution pension plans, defined contribution OPEB plans, and other employee benefit plans, while mitigating the costs associated with reporting those plans. The implementation of certain provisions of GASB Statement No. 97 (all except paragraphs 4 and 5) did not have an effect on the financial statements of the Program.

GASB Statement No. 99 enhances comparability in accounting and financial reporting and improves the consistency of authoritative literature by addressing (1) practice issues that have been identified during implementation and application of certain GASB Statements and (2) accounting and financial reporting for financial guarantees. The implementation of certain provisions of GASB Statement No. 99 that relate to extension of LIBOR, accounting for SNAP distributions, disclosures of nonmonetary transactions, and pledges of future revenues by pledging governments, did not have an effect on the financial statements of the Program.

Restatements – Certain restatements of 2021 amounts were made to conform with the 2022 presentation for GASB No. 87. The restatements had the following effect on net position:

Schedule of Plan Net Position Available for Benefits

	Previously Reported	Change	Adjusted Balance
Assets/Deferred Outflows:			
Property and Equipment, Net	\$ 14,007,015	\$ 1,939,218	\$ 15,946,233
Total Assets	20,239,961,549	1,939,218	20,241,900,767
Deferred Outflows	451,738	-	451,738
Liabilities/Deferred Inflows:			
Long Term Liabilities	-	1,997,567	1,997,567
Total Liabilities	4,316,361	1,997,567	6,313,928
Deferred Inflows	1,376,116	-	1,376,116

Plan Net Position Available

for Benefits	20,234,720,810	(58,349)	20,234,662,461
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December 31, 2020 amounts were restated to account for a right-of-use lease asset and lease liability of \$2,209,807 in accordance with GASB 87. There was no impact on plan net position available for benefits.

**Statement of Changes in Plan Net Position
Available for Benefits**

	Previously Reported	Change	Adjusted Balance
Depreciation and Amortization	\$ 913,649	\$ 270,589	\$ 1,184,238
Interest Expense	-	125,448	125,448
Customer Service	6,537,668	(164,988)	6,372,680
Rent Expense	172,700	(172,700)	-
Total Administrative Fund Deductions	\$ 10,735,348	\$ 58,349	\$ 10,793,697

3. Tax Status:

The Program is an eligible deferred compensation program as defined by Section 457 of the Internal Revenue Code. Accordingly, any amount of compensation deferred under the Program and any income attributable to the amounts so deferred shall be included in the taxable income of the participant only for the taxable year in which such compensation or other income is paid or otherwise made available to the participant or his beneficiary. Compensation contributed to Roth accounts maintained by the Program are not tax deductible but allow for tax-free distributions of the after-tax contribution amounts and any income attributable to the amounts, after certain conditions are met.

4. Participant Contributions:

Participant Contributions Receivable and Cash Held for Investment represent amounts withheld from participants, but not remitted to the investment providers at year-end. The Program maintains a bank account for the purpose of consolidating the deposit of all participant contributions. Contributions are subsequently remitted to the investment providers as designated by the participants. Funds deposited but not remitted to the investment providers were \$8,515,066 and \$2,894,425 at December 31, 2022 and 2021, respectively.

5. Cash and cash equivalents:

The Board's policy is to invest excess Administrative Fund cash in bank checking and money market accounts, certificates of deposit, commercial paper, or issues of the U.S. Government and its agencies, all with maturities of five years or less. The Program also may invest in StarOhio (the State Treasury Asset Reserve of Ohio), investment pools managed by the State Treasurer's Office that allows governments within the State to pool their funds for investment purposes. StarOhio is not registered with the Securities Exchange Commission as an investment company, but has adopted Governmental Accounting Standards Board (GASB), Statement No. 79, *Certain External Investment Pools and Pool Participants*. StarOhio operates in a manner similar to Rule 2a-7 of the Investment Company Act of 1940.

Investments in StarOhio are valued at StarOhio's net asset value (NAV) per share provided by STAR Ohio, which is the price the investment could be sold for on December 31, 2022. The NAV per share is calculated on an amortized cost basis that provides an NAV per share that approximates fair value. The weighted average maturity of the portfolio held by StarOhio as of December 31, 2022, is 31.9 days and carries a rating of AAAm from Standard and Poor's.

For 2022, there were no limitations or restrictions on any participant withdrawals due to redemption notice periods, liquidity fees, or redemption gates. However, notice must be given 24 hours in advance of all deposits and withdrawals exceeding \$25 million. STAR Ohio reserves the right to limit the transaction to \$100 million, requiring the excess amount to be transacted the following business day(s), but only to the \$100 million limit. All accounts of the participant will be combined for these purposes.

At December 31, 2022 and 2021, the book carrying value balances were \$16,746,321 and \$15,306,139 respectively. The bank balances were insured up to \$250,000 by the Federal Deposit Insurance Corporation (FDIC). The remaining bank deposits are covered by collateral held in the name of the Program's pledging financial institution, as required by State statute.

Protection of the Program's deposits is provided by the FDIC, by eligible securities pledged by the financial institution as security for repayment, or by the financial institutions participation in the Ohio Pooled Collateral System (OPCS), a collateral pool of eligible securities deposited with a qualified trustee and pledged to the Treasurer of State to secure the repayment of all public monies deposited in the financial institution.

The Program has no deposit policy for custodial risk beyond the requirements of State statute. Ohio law requires that deposits either be insured or protected by:

- Eligible securities pledged to the Program and deposited with a qualified trustee by the financial institution as security for repayment whose fair value at all times shall be at least 105 percent of the deposits being secured; or
- Participation in the Ohio Pooled Collateral System (OPCS), a collateral pool of eligible securities deposited with a qualified trustee and pledged to the Treasurer of State to secure the repayment of all public monies deposited in the financial institution. OPCS required the total fair value of the securities pledged to be 102 percent of the deposits being secured or a rate set by the Treasurer of State.

6. Program Investments:

A summary of Program investments is as follows:

December 31, 2022		
	Carrying Value	Fair Value
Collective Trust Funds	\$6,376,660,324	\$6,376,660,324
Stable Value Option	5,285,307,837	4,902,011,278
Mutual Funds	976,214,550	976,214,550
Separate Account	4,176,435,996	4,176,435,996
Purchased Annuities	9,487,082	9,487,082
Total Investments	<u>\$16,824,105,789</u>	<u>\$16,440,809,230</u>

December 31, 2021		
	Carrying Value	Fair Value
Collective Trust Funds	\$8,619,598,839	\$8,619,598,839
Stable Value Option	5,101,608,705	5,186,375,714
Mutual Funds	4,554,751,119	4,554,751,119
Separate Account	1,915,137,743	1,915,137,743
Purchased Annuities	10,375,512	10,375,512
Total Investments	<u>\$20,201,471,918</u>	<u>\$20,286,238,927</u>

Stable Value Option:

The investments of the Stable Value Option (SVO) are governed by the Stable Value Investment Policy enacted by the Board. The SVO invests in a diversified portfolio of bonds and fixed income investments including U.S. government and agency securities, residential and commercial mortgage-backed securities, asset-backed securities, and corporate securities. The SVO also invests in stable value contracts that may include wrapper contracts, and separate and general account group annuity and other types of investment contracts (SV Contracts). SV Contracts, which are contractual agreements issued by banks, insurance companies, and other financial institutions, are purchased by the SVO with the objective of providing principal stability. The SVO may also invest in commingled bank trust funds or insurance company funds that own bonds or fixed income securities described above.

Fully benefit responsive guaranteed investment contracts (SV Contracts) are normally valued using a book value record determined by the contract's terms, which is intended to help reduce principal fluctuations and provide for certain transactions at book value. SV Contracts credit a stated interest rate that is determined periodically and may vary from period to period. SV Contract issuers are typically paid ongoing fees from the assets of the SVO. These fees are

calculated based on a percentage of the SV Contract's book value. The SVO's returns are affected by cash flows including participant contributions, withdrawals and transfers, and the total return performance of the associated fixed income account portfolios.

At December 31, 2022, investments in separate account portfolios managed by Dodge & Cox, Earnest, JP Morgan, Jennison, Nationwide, Payden, and State Street were held in custody for the Program by Bank of New York Mellon. The quoted market prices of these investments have been used for disclosure purposes.

Funds managed by GSAM were in GSAM commingled bond funds and are disclosed at fair value. These investments are valued using level 2 inputs, which consist of other observable means, including quoted prices for similar items in an active market.

The Program has entered into SV Contracts to fund qualified withdrawals at contract value for participant driven transactions as allowed by the normal operation of the Program. These investments are reported at contract value. The contract value represents participant contributions plus earnings based on the credited rate of interest stipulated under the terms of the various SV Contracts. As of December 31, 2022, the fair value of the SVO assets was less than the book value by \$383.3 million or 7.3 percent. The crediting rate formula under many of the SV Contracts is intended to converge the fair value and book value of SVO assets over time, although changing market conditions, combined with participant activity, may affect the feasibility and timing of converging the carrying and fair values of the SVO.

A summary of the fair value of investments in the Stable Value Option by investment manager at December 31, 2022 and 2021 is as follows:

	<u>2022</u>	<u>2021</u>
Goldman Sachs	\$1,689,482,853	\$1,689,650,333
Dodge & Cox	711,016,288	767,986,813
JP Morgan Investment Advisors	546,341,288	595,091,459
Nationwide Asset Management	542,422,516	592,728,184
Jennison Associates	480,218,526	519,420,638
State Street Global Advisors	389,923,606	424,713,815
Payden & Rygel	284,407,493	312,831,421
Earnest Partners	<u>258,198,708</u>	<u>283,953,051</u>
Total Fair Value	4,902,011,278	5,186,375,714
Total Carrying Value	<u>5,285,307,837</u>	<u>5,101,608,705</u>
Difference	<u>(\$383,296,559)</u>	<u>\$84,767,009</u>

The SVO is typically expected to maintain a relatively stable principal value. However, in some circumstances the SVO's principal value may fluctuate up or down without advance notice. Therefore, it is possible to lose money investing in the SVO. An investment in the SVO is not insured or guaranteed by the Program, SVO managers, the FDIC, or any other government agency. Some of the primary risks that may impact the SVO are described below.

Credit Risk – The Program's investment policy requires the average quality of the SVO structure to be A-/A3 or better and restricts the amount of investments in securities rated below BBB-/Baa3 to 10 percent or less of assets. In addition, no more than one percent of the assets will be invested in any single high yield (below BBB) issuer.

As of December 31, 2022, the overall average credit quality of the SVO portfolio was AA. The fair value weighted average credit quality of the SVO investments is determined by S&P Global Ratings ("S&P"), Moody's Investor Services, Inc. ("Moody's"), and/or Fitch Ratings ("Fitch") are shown in the table below as of December 31, 2022, and 2021. Investments in U.S. government securities or obligations explicitly guaranteed by the U.S. government are not considered to have credit risk.

Credit Rating	2022		2021	
	Fair Value	Portfolio %	Fair Value	Portfolio %
AAA	\$1,620,018,180	33.0%	\$1,597,859,606	33.1%
AA	181,469,281	3.7%	165,368,294	3.9%
A	820,590,570	16.7%	800,038,532	14.6%
BBB	803,919,074	16.4%	882,747,097	16.6%
BB	3,404,064	0.1%	8,032,803	0.2%
B and below	246,017	0.0%	281,518	0.1%
Subtotal	3,429,647,186	70.0%	3,454,327,850	68.5%
U.S. Treasury Securities	1,472,364,092	30.0%	1,732,047,864	31.5%
Fair Value Stable Value Investments	<u>\$4,902,011,278</u>	100.0%	<u>\$5,186,375,714</u>	100.0%

Concentration of Credit Risk – The Program's investment policy precludes investments in any one corporate issuer from exceeding 5 percent of the SVO assets.

Interest Rate Risk – Interest rate risk is the chance that changes in market interest rates will adversely affect the fair value of the investments. The Program's investment policy segments the SVO into three different categories: a liquidity buffer, a fixed maturity schedule, and an open maturity structure. The Program does not have an investment policy that addresses interest rate risk.

Within the liquidity buffer, the SVO will primarily invest in short-term investment funds or money market instruments but may also invest in high-quality buffer stable value contracts that provide same day liquidity for withdrawals.

The investments within the fixed maturity schedule will normally pursue a passive laddered maturity structure, whereby the dollar-weighted duration of the structure will be no more than 3.5 years.

The underlying portfolios within the open market structure will be kept within +/- 20.0 percent of the duration of the Bloomberg Intermediate Aggregate Bond Index, Bloomberg Intermediate Government/Credit Index, or a blend of the Bloomberg Aggregate Bond Index and Bloomberg Stable Income Market Index.

The segmented time distribution reflects fixed-income maturities over different time intervals. The longer the maturity, the more susceptible the value of the investment is to fluctuate in market interest rates.

The following tables show the maturity of the SVO investments segmented by time periods and sectors.

As of December 31, 2022:

<u>Investment</u>	<u>Less than 1 Year</u>	<u>1-5 Years</u>	<u>6-10 Years</u>	<u>More than 10 Years</u>	<u>Total</u>
U.S. Treasury Securities	\$314,480,655	\$1,007,585,571	\$128,749,593	\$21,548,273	\$1,472,364,092
Corporate Bonds	321,766,107	1,151,551,610	225,913,971	2,035,764	1,701,267,452
Mortgage Obligations	35,524,180	653,309,008	223,583,042	0	912,416,230
U.S. Government Agency Securities	7,247,853	199,632,866	83,805,938	874,146	291,560,803
Cash Equivalents	133,093,560	0	0	0	133,093,560
Asset Backed Securities	134,809,056	119,703,310	327,805	0	254,840,171
Other Government Related Securities	23,610,377	94,170,091	18,688,501	0	136,468,969
Fair Value Stable Value Investments	<u>\$970,531,788</u>	<u>\$3,225,952,456</u>	<u>\$681,068,850</u>	<u>\$24,458,183</u>	<u>\$4,902,011,277</u>

As of December 31, 2021:

<u>Investment</u>	<u>Less than 1 Year</u>	<u>1-5 Years</u>	<u>6-10 Years</u>	<u>More than 10 Years</u>	<u>Total</u>
U.S. Treasury Securities	\$251,118,598	\$1,223,098,225	\$232,131,663	\$25,699,378	\$1,732,047,864
Corporate Bonds	304,991,251	1,168,848,943	304,926,704	4,633,752	1,783,400,650
Mortgage Obligations	47,338,915	855,207,431	73,595,986	0	976,142,332
U.S. Government Agency Securities	2,585,088	271,169,796	13,542,127	1,167,377	288,464,388
Cash Equivalents	118,998,499	0	0	0	118,998,499
Asset Backed Securities	62,708,726	98,050,690	0	0	160,759,416
Other Government Related Securities	21,042,377	81,993,386	23,526,802	0	126,562,565
Fair Value Stable Value Investments	<u>\$808,783,454</u>	<u>\$3,698,368,471</u>	<u>\$647,723,282</u>	<u>\$31,500,507</u>	<u>\$5,186,375,714</u>

The Stable Value Option investments include collateralized mortgage obligations (CMO) and asset-backed securities (ABS). These types of securities are purchased for their predictable cash flow characteristics and for favorable yields compared to similar investments. However, these investment vehicles are based on cash flows from interest and principal payments from the underlying

investments that are sensitive to prepayments, which may result from a decline in interest rates. At December 31, 2022, the Program had investments in CMO and ABS totaling \$171.6 million and \$254.8 million, respectively.

Collective Trust Funds:

The non-SVO investment options are governed by an investment policy adopted by the Board. This policy covers the responsibility to offer a sufficient range of investment options to allow participants to diversify their balances and construct portfolios that reasonably span the risk/return spectrum. Selection and monitoring of the investment options is also covered by this policy.

A collective trust fund is a professionally managed investment fund that pools money from many investors to purchase securities. A collective trust fund is similar to a mutual fund, but is monitored by state banking regulators, instead of the U.S. Securities and Exchange Commission (SEC). Collective trust funds generally have lower fees than mutual funds, so they may offer the opportunity for greater account growth. The Program does not have in-house investment staff, so it often utilizes collective trust funds and mutual funds to provide professional investment management.

The Program utilizes a series of collective trust funds as target date funds. A target date fund is a single investment option that provides a diversified mix of investments (equities, fixed income, cash, commodities, etc.). The fund initially invests aggressively and then becomes more conservative over time as the portfolio ages and nears the retirement date within the fund name. When the target date fund reaches the retirement year within the fund name, the fund is closed, and all assets are moved to the Retirement target date fund.

Shares of collective trust funds are priced at the net asset value as calculated by the fund provider. There are no unfunded commitments or restrictions on redemptions.

A summary of collective trust investments as of December 31, 2022 and 2021 is as follows:

	<u>Collective Trust Funds - 2022</u>			<u>Collective Trust Funds - 2021</u>		
		<u>Share</u>	<u>Shares</u>		<u>Share</u>	<u>Shares</u>
	<u>Fair Value</u>	<u>Price</u>	<u>Owned</u>	<u>Fair Value</u>	<u>Price</u>	<u>Owned</u>
			<u>(1,000's)</u>			<u>(1,000's)</u>
Fidelity:						
Contrafund	\$1,455,151,860	24.59	59,177	\$2,134,663,381	33.75	63,249
Growth Company	1,601,062,038	35.41	45,215	2,575,062,212	52.75	48,816
Total Fidelity	<u>3,056,213,898</u>			<u>4,709,725,593</u>		
BlackRock Investments:						
LifePath Retirement	768,520,343	11.90	64,601	991,897,618	13.93	71,206
LifePath 2025	481,959,262	12.36	38,992	585,008,346	14.58	40,124
LifePath 2030	630,496,338	12.82	49,188	728,962,369	15.25	47,801
LifePath 2035	324,900,725	13.26	24,496	361,817,583	15.91	22,742
LifePath 2040	354,383,961	13.65	25,956	400,425,857	16.52	24,239
LifePath 2045	182,005,135	13.96	13,035	196,250,863	17.00	11,544
LifePath 2050	192,299,723	14.11	13,627	208,122,988	17.25	12,065
LifePath 2055	151,174,521	14.14	10,695	157,256,003	17.29	9,095
LifePath 2060	30,806,389	14.12	2,181	22,065,324	17.28	1,277
Total BlackRock	<u>3,116,546,397</u>			<u>3,651,806,951</u>		
TCW Investments:						
US Bond	203,900,029	10.58	19,272	258,066,295	12.33	20,930
Total Collective Trust Funds	<u>\$6,376,660,324</u>			<u>\$8,619,598,839</u>		

Mutual Funds:

A mutual fund is a professionally managed investment fund that pools money from many investors to purchase securities. Mutual funds are registered and monitored by SEC.

Several changes to the Ohio DC fund lineup were completed on December 9, 2022. These changes included moving the four passive investments from Vanguard mutual funds to passive collective investment trust funds managed by State Street Global Advisors to lower participant investment fees. Another investment change was the closing of the Dodge & Cox Stock mutual fund. That fund carried a 10 basis point recordkeeping reimbursement that Ohio DC had been rebating to the participants investing in this fund. Participants were moved into a new custom portfolio that will own a new mutual fund share class of Dodge & Cox Stock that does not carry a recordkeeping reimbursement, which should make the performance and fees of this option more transparent. The five new investment options carry white label names to highlight their investment strategies and are classified as separate accounts in the financial statements.

Shares of mutual funds are priced at the net asset value as calculated by the fund provider. A summary of year-end investments as of December 31, 2022 and 2021 is as follows:

	Mutual Funds - 2022			Mutual Funds - 2021		
	Fair Value	Share Price	Shares Owned (1,000's)	Fair Value	Share Price	Shares Owned (1,000's)
Vanguard:						
Capital Opportunity	\$976,214,550	\$146.11	6,681	\$1,234,475,400	\$193.61	6,376
Institutional Index	0	0.00	0	959,576,314	405.80	2,365
Extended Market Index	0	0.00	0	440,548,848	342.26	1,287
Total Bond Market Index	0	0.00	0	295,006,781	11.19	26,363
Total International Stock Index	0	0.00	0	210,875,061	136.80	1,541
Total Vanguard Funds	976,214,550			3,140,482,404		
Dodge & Cox Stock Fund	0	0.00	0	1,414,268,715	245.26	5,766
Total Mutual Funds	\$976,214,550			\$4,554,751,119		

Separate Accounts:

A separate account can be a diversified portfolio(s) of investments similar to a mutual fund. While a mutual fund's strategy is determined by the mutual fund's provider, the owner of the separate account has the ability to choose the investment manager(s) and strategy. Because separate accounts are not marketed to the public and do not have the same reporting requirements as a registered mutual fund, they generally have lower operating costs than mutual funds. As noted above, five mutual fund options were transitioned to separate account options on December 9, 2022.

The US Large Value Company Stock fund has a target allocation of 100 percent invested in the Dodge & Cox Stock mutual fund (X share class). The US Large Company Stock Index has a target allocation of 100 percent invested in a collective investment trust fund passively managed by State Street. The US Large Growth Company Stock fund has a target allocation of 95 percent actively managed by Price and 5 percent passively managed by State Street. The Non-US Company Stock fund has a target allocation of 35.0 percent actively managed by Vanguard, 35.0 percent actively managed by Schroder, and 30.0 percent actively managed by Arrowstreet. The US Small/Mid Company Stock Index has a target allocation of 100 percent invested in a collective investment trust fund passively managed by State Street. The US Bond Index has a target allocation of 100 percent invested in a collective investment trust fund passively managed by State Street. The US Small Value Company Stock fund has a target allocation of 92.5 percent actively managed by Westwood and 7.5 percent passively managed by State Street. The US Small Growth Company Stock fund has a target allocation of 65.0 percent actively managed by Westfield, 27.5 percent actively managed by Fiera, and 7.5 percent passively managed by State Street. The Non-US Company Stock Index has a target allocation of 100 percent invested in a collective investment trust fund passively managed by State Street.

A summary of separate account investments as of December 31, 2022 and 2021 is as follows:

	Separate Account - 2022			Separate Account - 2021		
	<u>Fair Value</u>	<u>Share Price</u>	<u>Shares Owned (1,000's)</u>	<u>Fair Value</u>	<u>Share Price</u>	<u>Shares Owned (1,000's)</u>
US Large Value Company Stock (Manager: <i>Dodge and Cox</i>)	\$1,296,132,245	\$9.91	130,790	n/a	n/a	n/a
US Large Company Stock Index (Manager: <i>State Street</i>)	792,389,334	9.77	81,104	n/a	n/a	n/a
US Large Growth Company Stock (Manager: <i>T Rowe Price, State Street</i>)	475,884,761	163.59	2,909	\$787,852,441	\$251.05	3,138
Non-US Company Stock (Managers: <i>Vanguard, Schroder, Arrowstreet</i>)	466,407,839	10.71	43,549	607,563,517	13.06	46,521
US Small/Mid Company Stock Index (Manager: <i>State Street</i>)	310,642,212	9.79	31,731	n/a	n/a	n/a
US Bond Index (Manager: <i>State Street</i>)	243,178,203	9.85	24,688	n/a	n/a	n/a
US Small Value Company Stock (Managers: <i>Westwood, State Street</i>)	221,463,131	13.81	16,036	258,130,965	15.75	16,389
US Small Growth Company Stock (Managers: <i>Westfield, Fiera, State Street</i>)	187,596,607	16.31	11,502	261,590,820	21.79	12,005
Non-US Company Stock Index (Manager: <i>State Street</i>)	182,741,664	9.87	18,515	n/a	n/a	n/a
	<u>\$4,176,435,996</u>			<u>\$1,915,137,743</u>		

Purchased Annuities:

Until 2004, Program participants could annuitize a portion of their account balance after termination. Annuity contracts were purchased from Nationwide Insurance that paid benefits over a participant's remaining life or set term. The annuity investment yield, mortality assumptions, and reserves are all determined by Nationwide Insurance. Purchased annuities are valued using level 2 inputs which consist of other observable means, including quoted prices for similar items in an active market.

The remaining assets held in purchased annuities are valued at amounts reported by Nationwide Insurance, which are actuarially determined. Investments in purchased annuities were \$9,487,082 and \$10,375,512 as of December 31, 2022 and 2021, respectively.

7. Investment Expenses:

Investment manager, custodian, and book value guarantee fees are charged against the assets within the Stable Value Option portfolios.

Fees associated with the Program investment options are shown below:

	<u>2022</u>	<u>2021</u>
Stable Value - Book Value Guarantee Fees:	\$7,617,926	\$7,839,175
Stable Value - Management/Custodial Fees:		
Goldman Sachs Asset Management	1,245,872	1,237,994
Dodge & Cox	710,280	796,017
JP Morgan Asset Management	677,603	726,958
Nationwide Asset Management	650,878	704,877
Jennison Associates	615,994	676,114
Earnest Partners	364,866	398,751
Payden & Rygel	366,125	395,204
State Street	193,404	195,607
Bank of New York Mellon	185,339	183,342
Total Stable Value Investment Expenses	<u>\$12,628,287</u>	<u>\$13,154,039</u>

8. Recordkeeping Reimbursements/Rebates:

In past years, certain mutual fund providers reimbursed the Program for performing recordkeeping services. Through 2015, the Program retained these reimbursements as the primary funding source of administrative operations.

Effective January 1, 2016, the Program began charging a uniform participant fee to fund administrative operations. The annualized fee is 0.14 percent of participant assets, but it is waived for participants with assets below \$5,000 and capped at \$220 per year per participant. The new participant fee is deducted from accounts quarterly, and the quarterly maximum is \$55. When this fee was implemented, recordkeeping reimbursements received from mutual funds were rebated into participant accounts that invested in the respective mutual funds.

During December 2021, the Program waived collection of quarterly participants fees for the final quarter of the year to keep Program reserves within policy guidelines.

As of December 9, 2022, there are no remaining investment options that provide a recordkeeping reimbursement. During 2022 and 2021, rebates to participant accounts were \$1,255,205 and \$1,320,058 respectively.

9. Customer Service Expense:

The Program has contracted with NRS to provide enrollment, education, and customer service to all eligible employees and participants. NRS has approximately 15 employees who provide group and individual meeting opportunities both virtually and while visiting employer worksites throughout Ohio. NRS has approximately 30 employees at their Service Center, who provide participants with call center, walk-in, and administrative support services.

In 2021, the Program negotiated a contract extension with NRS to continue services through June 30, 2024. Costs associated with customer service expenses were \$6,646,928 and \$6,372,680 for the years ended December 31, 2022 and 2021, respectively, and are included in Administrative Expenses.

10. Vacation and Sick Leave:

As of December 31, 2022, and 2021, the Program had accrued \$423,611 and \$456,548 respectively, for unused vacation and sick leave for employees of the Board. At termination or retirement, employees are entitled to full compensation for all unused vacation time. With two years or more of employment prior to termination, employees are entitled to 50 percent payment of unused sick leave at termination. Vacation and sick leave accrual is recorded in accrued expenses.

11. Long-Term Liabilities:

The Program signed an agreement to lease building space beginning March 1, 2019, and ending February 28, 2029. Due to the implementation of GASB Statement 87, this lease has met the criteria of leases thus requiring them to be recorded by the Program. The future lease payments were discounted based on the Program's incremental borrowing rate. This discount is being amortized over the life of the lease.

A summary of the Lease Payable activity for 2021 and 2022 is shown below:

	Balance December 31, 2021	Additions	Deductions	Balance December 31, 2022	Amount Due In One Year
Lease Payable	<u>\$ 1,997,567</u>	<u>0</u>	<u>(213,658)</u>	<u>\$ 1,783,909</u>	<u>\$ 226,836</u>

	Restated-Balance January 1, 2021	Additions	Deductions	Balance December 31, 2021	Amount Due In One Year
Lease Payable	<u>\$ 2,209,807</u>	<u>0</u>	<u>(212,240)</u>	<u>\$ 1,997,567</u>	<u>\$ 213,658</u>

A summary of the principal and interest amounts for the remaining lease payments is as follows:

Lease Payments			
<u>Fiscal Year</u>	<u>Principal</u>	<u>Interest</u>	<u>Total Payments</u>
2023	\$ 226,836	\$ 100,864	\$ 327,700
2024	261,666	86,409	348,075
2025	282,100	70,050	352,150
2026	299,499	52,651	352,150
2027	317,971	34,179	352,150
2028-2029	395,837	15,004	410,841
	<u>\$ 1,783,909</u>	<u>\$ 359,157</u>	<u>\$ 2,143,066</u>

12. Property and Equipment:

The Program completed and put into service the initial phase of a modernization project to update the daily recordkeeping system on March 25, 2019. The project improved functionality of the system, as well as updated the software language and hardware to current industry standards. Additional enhancements to the recordkeeping system as well as a participant web portal were put into service annually through 2022. The final phase of the modernization project is expected to be implemented throughout 2023.

Outside consultant costs associated with the modernization project totaled \$2,357,574 and \$2,228,282 in 2022 and 2021 respectively. Of these costs, \$519,979 and \$557,025 in 2022 and 2021 respectively were expensed as production support. In addition, internal technology staff costs (salaries and benefits) of \$344,303 and \$186,591 were allocated and capitalized to this project for 2022 and 2021 respectively.

Property and equipment include purchases of \$1,000 or more with a useful life of at least three years. Property and equipment at December 31 are summarized as follows:

	<u>Estimated Useful Life</u>	<u>2022</u>	<u>2021</u>
Non-Depreciable:			
Recordkeeping system		\$986,561	\$466,388
Depreciable:			
Recordkeeping system	20 years	12,759,320	12,091,172
Participant web portal	10 years	4,429,969	3,436,393
Lease Asset	10 years	2,209,807	2,209,807 *
Furniture and fixtures	7 years	251,832	251,831
Office equipment	5 years	147,831	136,274
Leasehold Improvements	7 years	46,551	46,551
Computer equipment	3 years	2,869	2,869
		<u>20,834,740</u>	<u>18,641,285</u>
Less accumulated depreciation and amortization		<u>(4,016,447)</u>	<u>(2,695,052)</u>
Property and Equipment, Net		<u><u>\$16,818,293</u></u>	<u><u>\$15,946,233</u></u>

* Note - 2021 Capital Assets were restated due to the implementation of GASB 87.

Due to the implementation of GASB 87, the Program has reported a Lease Asset and the related amortization relating to the office lease described in Note 11. Lease Asset activity for 2022 and 2021 is summarized below:

	<u>December 31, 2021</u>	<u>Additions</u>	<u>Subtractions</u>	<u>December 31, 2022</u>
Intangible Right to Use-Office Space	\$ 2,209,807	-	-	\$ 2,209,807
Less: Accumulated Amortization Intangible Right to Use-Office Space	(270,589)	(270,589)	-	(541,178)
Total Lease Assets, Net	<u>\$ 1,939,218</u>	<u>(270,589)</u>	<u>-</u>	<u>\$ 1,668,629</u>
	Restated <u>January 1, 2021</u>	<u>Additions</u>	<u>Subtractions</u>	<u>December 31, 2021</u>
Intangible Right to Use-Office Space	\$ 2,209,807	-	-	\$ 2,209,807
Less: Accumulated Amortization Intangible Right to Use-Office Space	-	(270,589)	-	(270,589)
Total Lease Assets, Net	<u>\$ 2,209,807</u>	<u>(270,589)</u>	<u>-</u>	<u>\$ 1,939,218</u>

13. Insurance:

The Program is exposed to various risks of loss related to theft of, damage to, and destruction of assets; injuries to employees; and court challenges to fiduciary decisions. To cover these risks, the Program maintains commercial insurance and holds fidelity bonds on its employees. As required by State law, the Program is registered and insured through the State of Ohio Bureau of Workers' Compensation for injuries to employees. No insurance settlements exceeded coverages in the past three years, and there was no significant reduction in coverage amounts from the prior year.

The Program is self-insured under a professionally administered plan for general health and hospitalization employee benefits. The Program maintains specific stop loss coverage per employee for annual medical benefits in the amount of \$250,000 for both 2022 and 2021. The accrual for future health claims was \$119,208 and \$178,872 as of December 31, 2022 and 2021 respectively. The accrual for future health claims is recorded within accrued expenses.

14. Defined Benefit Pension Plans

The Statewide retirement systems provide both pension benefits and other postemployment benefits (OPEB).

Net Pension Liability/Net OPEB Liability (Asset)

Pensions and OPEB are a component of exchange transactions – between an employer and its employees — of salaries and benefits for employee services. Pensions are provided to an employee—on a deferred-payment basis—as part of the total compensation package offered by an employer for employee services each financial period.

The net pension/OPEB liability (asset) represents the Program's proportionate share of each pension/OPEB plan's collective actuarial present value of projected benefit payments attributable to past periods of service, net of each pension/OPEB plan's fiduciary net position. The net pension/OPEB liability (asset) calculation is dependent on critical long-term variables, including estimated average life expectancies, earnings on investments, cost of living adjustments and others. While these estimates use the best information available, unknowable future events require adjusting this estimate annually.

Ohio Revised Code limits the Program's obligation for the liability to annually required payments. The Program cannot control benefit terms or the manner in which pensions/OPEB are financed; however, the Program does receive the benefit of employees' services in exchange for compensation including pension and OPEB.

GASB 68/75 assumes the liability is solely the obligation of the employer, because (1) they benefit from employee services; and (2) State statute requires funding to come from these employers. All pension contributions to date have come solely from these employers (which also includes pension costs paid in the form of withholdings from employees). The retirement systems may allocate a portion of the employer contributions to provide for these OPEB benefits. In addition, health care plan enrollees pay a portion of the health care costs in the form of a monthly premium. State statute requires the retirement systems to amortize unfunded pension liabilities within 30 years. If the pension amortization period exceeds 30 years, each retirement system's board must propose corrective action to the State legislature. Any resulting legislative change to benefits or funding could significantly affect the net pension/OPEB liability (asset). Resulting adjustments to the net pension/OPEB liability (asset) would be effective when the changes are legally enforceable. The Ohio Revised Code permits but does not require the retirement systems to provide healthcare to eligible benefit recipients.

The proportionate share of each plan's unfunded benefits is presented as a long-term *net pension liability* and *net OPEB liability (asset)*. Any liability for the contractually-required pension/OPEB contributions outstanding at the end of the year is included in accounts payable.

The remainder of this note includes the pension disclosures. See Note 15 for the OPEB disclosures.

Plan Description – Ohio Public Employees Retirement System (OPERS)

Plan Description – Program employee participate in the Ohio Public Employees Retirement System (OPERS). OPERS is a cost-sharing, multiple employer public employee retirement system which administers three separate pension plans. The traditional pension plan is a cost-sharing, multiple-employer defined benefit pension plan. The member-directed plan is a defined contribution plan, and the combined plan is a combination cost-sharing, multiple-employer defined benefit/defined contribution pension plan. Effective January 1, 2022, the Combined Plan is no longer available for member selection. Substantially all employee members are in OPERS' traditional plan; therefore, the following disclosure focuses on the traditional pension plan.

OPERS provides retirement, disability, survivor and death benefits, and annual cost of living adjustments to members. Authority to establish and amend benefits is provided by Chapter 145 of the Ohio Revised Code. OPERS issues a stand-alone financial report that includes financial statements, required supplementary information and detailed information about OPERS' fiduciary net position that may be obtained by visiting <https://www.opers.org/financial/reports.shtml>, by writing to the Ohio Public Employees Retirement System, 277 East Town Street, Columbus, Ohio 43215-4642, or by calling 800-222-7377.

Senate Bill (SB) 343 was enacted into law with an effective date of January 7, 2013. In the legislation, members were categorized into three groups with varying provisions of the law applicable to each group. The following table provides age and service requirements for retirement and the retirement formula applied to final average salary (FAS) for the three member groups as per the reduced benefits adopted by SB 343 (see OPERS Annual Comprehensive Financial Report referenced above for additional information, including requirements for reduced and unreduced benefits):

Group A Eligible to retire prior to January 7, 2013 or five years after January 7, 2013	Group B 20 years of service credit prior to January 7, 2013 or eligible to retire ten years after January 7, 2013	Group C Members not in other Groups and members hired on or after January 7, 2013
State and Local	State and Local	State and Local
Age and Service Requirements: Age 60 with 60 months of service credit or Age 55 with 25 years of service credit	Age and Service Requirements: Age 60 with 60 months of service credit or Age 55 with 25 years of service credit	Age and Service Requirements: Age 57 with 25 years of service credit or Age 62 with 5 years of service credit
Traditional Plan Formula: 2.2% of FAS multiplied by years of service for the first 30 years and 2.5% for service years in excess of 30	Traditional Plan Formula: 2.2% of FAS multiplied by years of service for the first 30 years and 2.5% for service years in excess of 30	Traditional Plan Formula: 2.2% of FAS multiplied by years of service for the first 35 years and 2.5% for service years in excess of 35

Final average Salary (FAS) represents the average of the three highest years of earnings over a member's career for Groups A and B. Group C is based on the average of the five highest years of earnings over a member's career.

Members who retire before meeting the age and years of service credit requirement for unreduced benefits receive a percentage reduction in the benefit amount. The amount of a member's pension benefit vests upon receipt of the initial benefit payment.

When a benefit recipient has received benefits for 12 months, the member is eligible for an annual cost of living adjustment (COLA). This COLA is calculated on the base retirement benefit at the date of retirement and is not compounded. For those who retired prior to January 7, 2013, the cost-of-living adjustment is 3 percent. For those retiring on or after January 7, 2013, beginning in calendar year 2019, the adjustment is based on the average percentage increase in the Consumer Price Index, capped at 3 percent.

Funding Policy - The Ohio Revised Code (ORC) provides statutory authority for member and employer contributions for 2022 and 2021 as follows:

	State and Local
Statutory Maximum Contribution Rates	
Employer	14.0 %
Employee	10.0 %
Actual Contribution Rates	
Employer:	
Pension	14.0 %
Post-employment Health Care Benefits	0.0
Total Employer	14.0 %
Employee	10.0 %

Employer contribution rates are actuarially determined and are expressed as a percentage of covered payroll. The Program's contractually required contribution was \$211,042 for 2022 and \$221,980 for 2021. Of this amount, \$7,946 is reported as an accounts payable.

Pension Liabilities, Pension Expense, and Deferred Outflows/Inflows of Resources Related to Pensions

The net pension liability for OPERS was measured as of December 31, 2021, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The Program's proportion of the net pension liability was based on the Program's share of contributions to the pension plan relative to the contributions of all participating entities. Following is information related to the proportionate share and pension expense:

	2022 OPERS	2021 OPERS
Proportion of the Net Pension Liability:		
Current Measurement Period	0.010925%	0.011189%
Prior Measurement Period	0.011189%	0.010902%
Change in Proportion	-0.000264%	0.000287%
Proportionate Share of the Net		
Pension Liability	\$ 950,519	\$ 1,656,847
Pension Expense	\$ (164,095)	\$ 39,041

Other than contributions made subsequent to the measurement date and differences between projected and actual earnings on investments; deferred inflows/outflows of resources are recognized in pension expense beginning in the current period, using a straight line method over a closed period equal to the average of the expected remaining service lives of all employees that are provided with pensions, determined as of the beginning of the measurement

period. Net deferred inflows/outflows of resources pertaining to the differences between projected and actual investment earnings are similarly recognized over a closed five year period. At December 31, 2022, the Program reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	2022 OPERS	2021 OPERS
Deferred Outflows of Resources		
Differences between Expected and Actual Experience	\$ 48,456	\$ -
Changes of Assumptions	118,861	-
Changes in Proportionate Share and Differences in Contributions	13,305	39,518
Program Contributions Subsequent to the Measurement Date	211,042	221,980
Total Deferred Outflows of Resources	<u>\$ 391,664</u>	<u>\$ 261,498</u>
Deferred Inflows of Resources		
Differences between Expected and Actual Experience	\$ 20,848	\$ 69,306
Net Difference between Projected and Actual Earnings on Pension Plan Investments	1,130,607	645,791
Changes in Proportionate Share and Differences in Contributions	32,667	7,668
Total Deferred Inflows of Resources	<u>\$ 1,184,122</u>	<u>\$ 722,765</u>

\$211,042 reported as deferred outflows of resources related to pension resulting from Program contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ending December 31, 2023. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pension will be recognized in pension expense as follows:

Year Ending December 31:	OPERS
2023	\$ (159,528)
2024	(398,265)
2025	(265,852)
2026	(179,855)
Total	<u>\$ (1,003,500)</u>

Actuarial Assumptions – OPERS

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and cost trends. Actuarially determined amounts are subject to continual review or modification as actual results are compared with past expectations and new estimates are made about the future.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employers and plan members) and include the types of benefits provided at the time of each valuation. The total pension liability was determined by an actuarial valuation as of December 31, 2021, using the following key actuarial assumptions and methods applied to all periods included in the measurement in accordance with the requirements of GASB 67. In 2021, the Board's actuarial consultants conducted an experience study for the period 2016 through 2020, comparing assumptions to actual results. The experience study incorporates both a historical review and forward-looking projections to determine the appropriate set of assumptions to keep the plan on a path toward full funding. Information from this study led to changes in both demographic and economic assumptions, with the most notable being a reduction in the actuarially assumed rate of return from 7.2 percent down to 6.9 percent, for the defined benefit investments. Key actuarial assumptions and methods used in the latest actuarial valuation, prepared as of December 31, 2021, reflecting experience study results, are presented below:

	<u>OPERS Traditional Plan</u>
Wage Inflation	2.75 percent
Future Salary Increases, including inflation	2.75 to 10.75 percent including wage inflation
COLA or Ad Hoc COLA:	
Pre-January 7, 2013 Retirees	3.00 percent, simple
Post-January 7, 2013 Retirees	3.00 percent, simple through 2022, then 2.05 percent, simple
Investment Rate of Return	6.90 percent
Actuarial Cost Method	Individual Entry Age

Key actuarial assumptions and methods used in the prior actuarial valuation, prepared as of December 31, 2020, are presented below:

	<u>OPERS Traditional Plan</u>
Wage Inflation	3.25 percent
Future Salary Increases, including inflation	3.25 to 10.75 percent including wage inflation
COLA or Ad Hoc COLA:	
Pre-January 7, 2013 Retirees	3.00 percent, simple
Post-January 7, 2013 Retirees	0.50 percent, simple through 2021, then 2.15 percent, simple
Investment Rate of Return	7.20 percent
Actuarial Cost Method	Individual Entry Age

For 2021, pre-retirement mortality rates are based on 130 percent of the Pub-2010 General Employee Mortality tables (males and females) for State and Local Government divisions. Post-retirement mortality rates are based on 115 percent of the PubG-2010 Retiree Mortality Tables (males and females). Post-retirement mortality rates for disabled retirees are based on the PubNS-2010 Disabled

Retiree Mortality Tables (males and females). For all of the previously described tables, the base year is 2010 and mortality rates for a particular calendar year are determined by applying the MP-2020 mortality improvement scales (males and females) to all of these tables.

For 2020, pre-retirement mortality rates are based on the RP-2014 Employees mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Post-retirement mortality rates are based on the RP-2014 Healthy Annuitant mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Post-retirement mortality rates for disabled retirees are based on the RP-2014 Disabled mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Mortality rates for a particular calendar year are determined by applying the MP-2015 mortality improvement scale to all of the above described tables.

The most recent experience study was completed for the five-year period ended December 31, 2020.

During 2021, OPERS managed investments in three investment portfolios: the Defined Benefit portfolio, the Health Care portfolio, and the Defined Contribution portfolio. The Defined Benefit portfolio contains the investment assets for the Traditional Pension Plan, the defined benefit component of the Combined Plan and the annuitized accounts of the Member-Directed Plan. Within the Defined Benefit portfolio contributions into the plans are all recorded at the same time, and benefit payments all occur on the first of the month. Accordingly, the money-weighted rate of return is considered to be the same for all plans within the portfolio. The annual money-weighted rate of return expressing investment performance, net of investment expenses and adjusted for the changing amounts actually invested, for the Defined Benefit portfolio was 15.3 percent for 2021.

The allocation of investment assets with the Defined Benefit portfolio is approved by the Board of Trustees as outlined in the annual investment plan. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the defined benefit pension plans. The long-term expected rate of return on defined benefit investment assets was determined using a building-block method in which best-estimate ranges of expected future real rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected real rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adjusted for inflation. Best estimates of geometric rates of return were provided by the Board's investment consultant.

For each major class that is included in the Defined Benefit portfolio's target asset allocation as of December 31, 2021, these best estimates are summarized below:

Asset Class	Target Allocation	Weighted Average Long-Term Expected Real Rate of Return (Geometric)
Fixed Income	24.00%	1.03%
Domestic Equities	21.00	3.78
Real Estate	11.00	3.66
Private Equity	12.00	7.43
International Equities	23.00	4.88
Risk Parity	5.00	2.92
Other investments	4.00	2.85
Total	100.00%	4.21%

Discount Rate The discount rate used to measure the total pension liability for the current year was 6.9 percent. The discount rate for the prior year was 7.2 percent. The projection of cash flows used to determine the discount rate assumed that contributions from plan members and those of the contributing employers are made at the contractually required rates, as actuarially determined. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefits payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Program's Proportionate Share of the Net Pension Liability (Asset) to Changes in the Discount Rate The following table presents the Program's proportionate share of the net pension liability (asset) calculated using the current period discount rate assumption of 6.9 percent, as well as what the Program's proportionate share of the net pension liability (asset) would be if it were calculated using a discount rate that is one-percentage-point lower (5.9 percent) or one-percentage-point higher (7.9 percent) than the current rate:

	1% Decrease	Current Discount Rate	1% Increase
Program's Proportionate Share of the Net Pension Liability (Asset)			
Calendar Year 2022	\$ 2,506,086	\$ 950,519	\$ (343,919)
Calendar Year 2021	\$ 3,160,445	\$ 1,656,847	\$ 406,608

15. Defined Benefit OPEB Plans

Net OPEB Liability (Asset)

See Note 14 for a description of the net OPEB liability (asset).

Plan Description – Ohio Public Employees Retirement System (OPERS)

Plan Description – The Ohio Public Employees Retirement System (OPERS) administers three separate pension plans: the traditional pension plan, a cost-sharing, multiple-employer defined benefit pension plan; the member-directed plan, a defined contribution plan; and the combined plan, a cost-sharing, multiple-employer defined benefit pension plan that has elements of both a defined benefit and defined contribution plan.

OPERS maintains a cost-sharing, multiple-employer defined benefit post-employment health care trust, which funds multiple health care plans including medical coverage, prescription drug coverage and deposits to a Health Reimbursement Arrangement (HRA) to qualifying benefit recipients of both the traditional pension and the combined plans. Currently, Medicare-eligible retirees are able to select medical and prescription drug plans from a range of options and may elect optional vision and dental plans. Retirees and eligible dependents enrolled in Medicare Parts A and B have the option to enroll in a Medicare supplemental plan with the assistance of the OPERS Medicare Connector. The OPERS Medicare Connector is a relationship with a vendor selected by OPERS to assist retirees, spouses and dependents with selecting a medical and pharmacy plan. Monthly allowances, based on years of service and the age at which the retiree first enrolled in OPERS coverage, are deposited into an HRA. For non-Medicare retirees and eligible dependents, OPERS sponsors medical and prescription coverage through a professionally managed self-insured plan. An allowance to offset a portion of the monthly premium is offered to retirees and eligible dependents. The allowance is based on the retiree's years of service and age when they first enrolled in OPERS coverage.

OPERS provides a monthly allowance for health care coverage for eligible retirees and their eligible dependents. The base allowance is determined by OPERS. For those retiring on or after January 1, 2015, the allowance has been determined by applying a percentage to the base allowance. The percentage applied is based on years of qualifying service credit and age when the retiree first enrolled in OPERS health care. Monthly allowances range between 51 percent and 90 percent of the base allowance. Those who retired prior to January 1, 2015, will have an allowance of at least 75 percent of the base allowance.

The health care trust is also used to fund health care for member-directed plan participants, in the form of a Retiree Medical Account (RMA). At retirement or separation, member directed plan participants may be eligible for reimbursement of qualified medical expenses from their vested RMA balance.

Effective January 1, 2022, OPERS discontinued the group plans currently offered to non-Medicare retirees and re-employed retirees. Instead, eligible non-Medicare retirees will select an individual medical plan. OPERS will provide a subsidy or allowance via an HRA allowance to those retirees who meet health care eligibility requirements. Retirees will be able to seek reimbursement for plan premiums and other qualified medical expenses.

In order to qualify for postemployment health care coverage, age and service retirees under the traditional pension must have twenty or more years of qualifying Ohio service credit with a minimum age of 60. Members in Group A are eligible for coverage at any age with 30 or more years of qualifying service. Members in Group B are eligible at any age with 32 years of qualifying service, or at age 52 with 31 years of qualifying service. Members in Group C are eligible for coverage with 32 years of qualifying service and a minimum age of 55. Current retirees eligible (or who became eligible prior to January 1, 2022) to participate in the OPERS health care program will continue to be eligible after January 1, 2022. Eligibility requirements change for those retiring after January 1, 2022, with differing eligibility requirements for Medicare retirees and non-Medicare retirees. The health care coverage provided by OPERS meets the definition of an Other Post Employment Benefit (OPEB) as described in GASB Statement 75. See OPERS' Annual Comprehensive Financial Report referenced below for additional information.

The Ohio Revised Code permits, but does not require, OPERS to provide health care to its eligible benefit recipients. Authority to establish and amend health care coverage is provided to the Board in Chapter 145 of the Ohio Revised Code.

Disclosures for the health care plan are presented separately in the OPERS financial report. Interested parties may obtain a copy by visiting <https://www.opers.org/financial/reports.shtml>, by writing to OPERS, 277 East Town Street, Columbus, Ohio 43215-4642, or by calling (614) 222-5601 or 800-222-7377.

Funding Policy - The Ohio Revised Code provides the statutory authority allowing public employers to fund postemployment health care through their contributions to OPERS. When funding is approved by OPERS Board of Trustees, a portion of each employer's contribution to OPERS is set aside to fund OPERS health care plans. Beginning in 2018, OPERS no longer allocated a portion of its employer contributions to health care.

Employer contribution rates are expressed as a percentage of the earnable salary of active members. In 2022, state and local employers contributed at a rate of 14.0 percent of earnable salary and public safety and law enforcement employers contributed at 18.1 percent. These are the maximum employer contribution rates permitted by the Ohio Revised Code. Active member contributions do not fund health care.

Each year, the OPERS Board determines the portion of the employer contribution rate that will be set aside to fund health care plans. For 2022, OPERS did not allocate any employer contribution to health care for members. The OPERS Board is also authorized to establish rules for the retiree or their surviving beneficiaries to pay a portion of the health care provided. Payment amounts vary depending on the number of covered dependents and the coverage selected. The employer contribution as a percentage of covered payroll deposited into the RMA for participants in the member-directed plan for 2022 was 4.0 percent.

Employer contribution rates are actuarially determined and are expressed as a percentage of covered payroll. The Program had no contractually required contribution for 2022 or 2021.

Net OPEB Liability (Asset), OPEB Expense, and Deferred Outflows/Inflows of Resources Related to OPEB

The net OPEB liability (asset) and total OPEB liability for OPERS were determined by an actuarial valuation as of December 31, 2020, rolled forward to the measurement date of December 31, 2021, by incorporating the expected value of health care cost accruals, the actual health care payment, and interest accruals during the year. The Program's proportion of the net OPEB liability (asset) was based on the Program's share of contributions to the retirement plan relative to the contributions of all participating entities. Following is information related to the proportionate share and OPEB expense:

	2022 OPERS	2021 OPERS
Proportion of the Net OPEB Liability (Asset):		
Current Measurement Period	0.011830%	0.0120010%
Prior Measurement Period	0.012001%	0.0112111%
Change in Proportion	-0.000171%	0.0007899%
Proportionate Share of the Net		
OPEB Liability (Asset)	\$ (370,534)	\$ (213,807)
OPEB Expense	\$ (259,984)	\$ (1,231,990)

At December 31, 2022, the Program reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	2022 OPERS	2021 OPERS
Deferred Outflows of Resources		
Changes of Assumptions	\$ -	\$ 105,111
Changes in Proportionate Share and Differences in Contributions	25,859	85,129
Total Deferred Outflows of Resources	<u>\$ 25,859</u>	<u>\$ 190,240</u>
Deferred Inflows of Resources		
Differences between Expected and Actual Experience	\$ 56,205	\$ 192,959
Net Difference between Projected and Actual Earnings on OPEB Plan Investments	176,643	113,878
Changes of Assumptions	149,988	346,432
Changes in Proportionate Share and Differences in Contributions	2,877	82
Total Deferred Inflows of Resources	<u>\$ 385,713</u>	<u>\$ 653,351</u>

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Year Ending December 31:	OPERS
2023	\$ (212,791)
2024	(83,099)
2025	(38,596)
2026	(25,368)
Total	<u>\$ (359,854)</u>

Actuarial Assumptions – OPERS

Actuarial valuations of an ongoing plan involve estimates of the values of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and cost trends. Actuarially determined amounts are subject to continual review or modification as actual results are compared with past expectations and new estimates are made about the future.

Projections of health care costs for financial reporting purposes are based on the substantive plan (the plan as understood by the employers and plan members) and include the types of coverage provided at the time of each valuation and the historical pattern of sharing of costs between OPERS and plan members. In 2021, the Board's actuarial consultants conducted an experience study for the period 2016 through 2020, comparing historical assumptions to actual results. The experience study incorporates both a historical review and forward-looking projections to determine the appropriate set of assumptions to keep the plan on a path toward full funding. Information from this study led to changes in both

demographic and economic assumptions. The actuarial valuation used for 2021 compared to those used for 2020 are as follows:

	<u>December 31, 2021</u>	<u>December 31, 2020</u>
Wage Inflation	2.75 percent	3.25 percent
Projected Salary Increases,	2.75 to 10.75 percent	3.25 to 10.75 percent
	including wage inflation	including wage inflation
Single Discount Rate	6.00 percent	6.00 percent
Investment Rate of Return	6.00 percent	6.00 percent
Municipal Bond Rate	1.84 percent	2.00 percent
Health Care Cost Trend Rate	5.50 percent, initial	8.50 percent, initial
	3.50 percent, ultimate in 2034	3.50 percent, ultimate in 2035
Actuarial Cost Method	Individual Entry Age	Individual Entry Age

For 2021, pre-retirement mortality rates are based on 130 percent of the Pub-2010 General Employee Mortality tables (males and females) for State and Local Government divisions. Post-retirement mortality rates are based on 115 percent of the PubG-2010 Retiree Mortality Tables (males and females). Post-retirement mortality rates for disabled retirees are based on the PubNS-2010 Disabled Retiree Mortality Tables (males and females). For all of the previously described tables, the base year is 2010 and mortality rates for a particular calendar year are determined by applying the MP-2020 mortality improvement scales (males and females) to all of these tables.

For 2020, pre-retirement mortality rates are based on the RP-2014 Employees mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Post-retirement mortality rates are based on the RP-2014 Healthy Annuitant mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Post-retirement mortality rates for disabled retirees are based on the RP-2014 Disabled mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Mortality rates for a particular calendar year are determined by applying the MP-2015 mortality improvement scale to all of the above-described tables.

The most recent experience study was completed for the five-year period ended December 31, 2020.

During 2021, OPERS managed investments in three investment portfolios: the Defined Benefit portfolio, the Health Care portfolio and the Defined Contribution portfolio. The Health Care portfolio includes the assets for health care expenses for the Traditional Pension Plan, Combined Plan and Member-Directed Plan eligible members. Within the Health Care portfolio, if any contributions are made

into the plans, the contributions are assumed to be received continuously throughout the year based on the actual payroll payable at the time contributions are made. Health care-related payments are assumed to occur mid-year. Accordingly, the money-weighted rate of return is considered to be the same for all plans within the portfolio. The annual money-weighted rate of return expressing investment performance, net of investment expenses and adjusted for the changing amounts actually invested, for the Health Care portfolio was 14.3 percent for 2021.

The allocation of investment assets within the Health Care portfolio is approved by the Board of Trustees as outlined in the annual investment plan. Assets are managed on a total return basis with a long-term objective of continuing to offer a sustainable health care program for current and future retirees. OPERS' primary goal is to achieve and maintain a fully funded status for the benefits provided through the defined pension plans. Health care is a discretionary benefit. The long-term expected rate of return on health care investment assets was determined using a building-block method in which best-estimate ranges of expected future rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future rates of return by the target asset allocation percentage, adjusted for inflation. Best estimates of geometric rates of return were provided by the Board's investment consultant. For each major asset class that is included in the Health Care's portfolio's target asset allocation as of December 31, 2021, these best estimates are summarized in the following table:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Weighted Average Long-Term Expected Real Rate of Return (Geometric)</u>
Fixed Income	34.00%	0.91%
Domestic Equities	25.00	3.78
Real Estate Investment Trust	7.00	3.71
International Equities	25.00	4.88
Risk Parity	2.00	2.92
Other investments	7.00	1.93
Total	<u>100.00%</u>	<u>3.45%</u>

Discount Rate A single discount rate of 6.0 percent was used to measure the total OPEB liability on the measurement date of December 31, 2021. Projected benefit payments are required to be discounted to their actuarial present value using a single discount rate that reflects (1) a long-term expected rate of return on OPEB plan investments (to the extent that the health care fiduciary net position is projected to be sufficient to pay benefits), and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate are not met). This single

discount rate was based on an expected rate of return on the health care investment portfolio of 6.00 percent and a municipal bond rate of 1.84 percent (Fidelity Index's "20-Year Municipal GO AA Index"). The projection of cash flows used to determine this single discount rate assumed that employer contributions will be made at rates equal to the actuarially determined contribution rate. Based on these assumptions, the health care fiduciary net position and future contributions were sufficient to finance health care costs through 2121. As a result, the actuarial assumed long-term expected rate of return on health care investments was applied to projected costs through the year 2121, the duration of the projection period through which projected health care payments are fully funded.

Sensitivity of the Program's Proportionate Share of the Net OPEB (Asset) to Changes in the Discount Rate The following table presents the Program's proportionate share of the net OPEB (asset) calculated using the single discount rate of 6.00 percent, as well as what the Program's proportionate share of the net OPEB (asset) would be if it were calculated using a discount rate that is one-percentage-point lower (5.00 percent) or one-percentage-point higher (7.00 percent) than the current rate:

	1% Decrease	Current Discount Rate	1% Increase
Program's Proportionate Share of the Net OPEB (Asset)			
Calendar Year 2022	\$ (217,909)	\$ (370,534)	\$ (497,215)
Calendar Year 2021	\$ (53,164)	\$ (213,807)	\$ (345,869)

Sensitivity of the Program's Proportionate Share of the Net OPEB (Asset) to Changes in the Health Care Cost Trend Rate Changes in the health care cost trend rate may also have a significant impact on the net OPEB (asset). The following table presents the net OPEB (asset) calculated using the assumed trend rates, and the expected net OPEB (asset) if it were calculated using a health care cost trend rate that is 1.0 percent lower or 1.0 percent higher than the current rate.

Retiree health care valuations use a health care cost-trend assumption that changes over several years built into the assumption. The near-term rates reflect increases in the current cost of health care; the trend starting in 2022 is 5.50 percent. If this trend continues for future years, the projection indicates that years from now virtually all expenditures will be for health care. A more reasonable alternative is the health plan cost trend will decrease to a level at, or near, wage inflation. On this basis, the actuaries project premium rate increases will continue to exceed wage inflation for approximately the next decade, but by less each year, until leveling off at an ultimate rate, assumed to be 3.50 percent in the most recent valuation.

	<u>1% Decrease</u>	<u>Current Trend Rate</u>	<u>1% Increase</u>
Program's Proportionate Share of the Net OPEB (Asset)			
Calendar Year 2022	\$ (374,538)	\$ (370,534)	\$ (365,784)
Calendar Year 2021	\$ (219,018)	\$ (213,807)	\$ (207,977)

16. Eliminations:

The Administration Fund recovers some customer service and administrative costs through charges made to the Program Fund. Charges of \$15,138,097 and \$11,903,748 were made during 2022 and 2021, respectively, for this purpose, including \$706,762 and \$1,073,865 payable to the Administrative Fund as of December 31, 2022 and 2021, respectively. These inter-fund charges and payables were eliminated in the Combining Schedule of Plan Net Position Available for Benefits and the Combining Schedule of Changes in Plan Net Position Available for Benefits.

17. Subsequent Events:

The plan document was amended as of January 1, 2023, to ensure consistency with Federal laws and regulations, and current plan features and practices.

In March 2023, the Program appointed State Street Bank and Trust Company to transition assets in the Stable Value Option, managed by State Street Global Advisors, to Earnest Partners, Nationwide, Payden Rygel, and JP Morgan. The transition was successfully completed on March 15, 2023.

18. COVID-19

In March 2020, the World Health Organization recognized the outbreak of COVID-19 disease as a pandemic. Governments worldwide continue to take actions to prevent the spread of the outbreak, including event cancellations and quarantines that have created widespread adverse impacts to the global economy as well as business interruptions. Given the dynamic nature of these circumstances and the duration of business disruption, the future financial impact on the Program cannot be reasonably estimated at this time.

SCHEDULE OF THE PROGRAM'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY

	Last Nine Years ⁽¹⁾								
	2022	2021	2020	2019	2018	2017	2016	2015	2014
<i>Ohio Public Employees' Retirement System (OPERS)</i>									
Program's Proportion of the Net Pension Liability	0.010925%	0.011189%	0.010902%	0.011065%	0.0111272%	0.0111205%	0.0110210%	0.0108110%	0.0108110%
Program's Proportionate Share of the Net Pension Liability	\$ 950,519	\$ 1,656,847	\$ 2,154,854	\$ 3,030,479	\$ 1,745,641	\$ 2,525,283	\$ 1,908,976	\$ 1,303,927	\$ 1,274,476
Program's Covered Payroll	\$ 1,585,571	\$ 1,575,929	\$ 1,533,957	\$ 1,494,521	\$ 1,470,471	\$ 1,437,558	\$ 1,371,650	\$ 1,325,533	\$ 1,305,569
Program's Proportionate Share of the Net Pension Liability as a Percentage of its Covered Payroll	59.95%	105.13%	140.48%	202.77%	118.71%	175.66%	139.17%	98.37%	97.62%
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	92.62%	86.88%	82.17%	74.70%	84.66%	77.25%	81.08%	86.45%	86.36%

(1) Although this schedule is intended to reflect information for ten years, information prior to 2014 is not available.

Note: The amounts presented for each fiscal year were determined as of the measurement date, which is the prior fiscal year.

Notes to the Required Supplementary Information

Changes in Assumptions

Discount Rate:

2022	6.90 percent
2021	7.20 percent
2020	7.20 percent
2019	7.50 percent
2018	8.00 percent

2017 reflects an adjustment of the rates of withdrawal, disability, retirement and mortality to more closely reflect actual experience. The expectation of retired life mortality was based on RP-2014 Healthy Annuitant mortality table and RP-2014 Disabled mortality table. Wage inflation rate was also reduced from 3.25 percent to 2.75 percent.

Changes in Benefit Terms

In October 2020, the OPERS Board adopted a change in COLA for post-January 7, 2013 retirees, changing it from 1.4 percent simple through 2020 then 2.15 percent simple to 0.5 percent simple through 2021 then 2.15 percent simple.

In October 2019, the OPERS Board adopted a change in COLA for post-January 7, 2013 retirees, changing it from 3 percent simple through 2018 then 2.15 percent simple to 1.4 percent simple through 2020 then 2.15 percent simple.

For 2021, the OPERS Board lowered the investment rate of return from 7.2 percent to 6.9 percent along with certain other changes to assumptions for the actuarial valuation as of December 31, 2021.

For 2019, the single discount rate changed from 7.50 percent to 7.20 percent.

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF THE PROGRAM'S CONTRIBUTIONS - PENSION

Last Ten Years

	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
<i>Ohio Public Employees' Retirement System (OPERS)</i>										
Contractually Required Contribution	\$ 211,042	\$ 221,980	\$ 220,630	\$ 214,754	\$ 209,233	\$ 191,161	\$ 172,507	\$ 164,598	\$ 159,064	\$ 169,724
Contributions in Relation to the Contractually Required Contribution	<u>(211,042)</u>	<u>(221,980)</u>	<u>(220,630)</u>	<u>(214,754)</u>	<u>(209,233)</u>	<u>(191,161)</u>	<u>(172,507)</u>	<u>(164,598)</u>	<u>(159,064)</u>	<u>(169,724)</u>
Contribution Deficiency (Excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Program's Covered Payroll	\$1,507,443	\$1,585,571	\$1,575,929	\$1,533,957	\$1,494,521	\$1,470,471	\$1,437,558	\$1,371,650	\$1,325,533	\$1,305,569
Contributions as a Percentage of Covered Payroll	14.00%	14.00%	14.00%	14.00%	14.00%	13.00%	12.00%	12.00%	12.00%	13.00%

**REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF THE PROGRAM'S PROPORTIONATE SHARE
OF THE NET OPEB LIABILITY (ASSET)**

	Last Six Years ⁽¹⁾					
	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>
Ohio Public Employees' Retirement System (OPERS)						
Program's Proportion of the Net OPEB Liability (Asset)	0.011830%	0.012001%	0.011211%	0.010611%	0.0106867%	0.0107080%
Program's Proportionate Share of the Net OPEB Liability (Asset)	\$ (370,534)	\$ (213,807)	\$ 1,548,530	\$ 1,383,424	\$ 1,160,495	\$ 1,081,544
Program's Covered Payroll	\$ 1,585,571	\$ 1,575,929	\$ 1,533,957	\$ 1,494,521	\$ 1,470,471	\$ 1,437,558
Program's Proportionate Share of the Net OPEB Liability (Asset) as a Percentage of its Covered Payroll	-23.37%	-13.57%	100.95%	92.57%	78.92%	75.23%
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	128.23%	115.57%	47.80%	46.33%	54.14%	54.04%

(1) Although this schedule is intended to reflect information for ten years, information prior to 2017 is not available.

Note: The amounts presented for each fiscal year were determined as of the measurement date, which is the prior fiscal year.

Notes to the Required Supplementary Information

Change in Assumptions

Amounts reported incorporate changes in key methods and assumptions used in calculating the total OPEB liability as presented as follows:

<u>Year</u>	<u>Discount Rate</u>	<u>Municipal Bond Rate</u>	<u>Health Care Cost Trend Rate</u>
2022	6.00%	1.84%	5.50%
2021	6.00%	2.00%	8.50%
2020	3.16%	2.75%	10.50%
2019	3.96%	3.71%	10.00%
2018	3.85%	3.31%	7.50%
2017	4.23%	n/a	n/a

For 2019, the investment rate of return decreased from 6.50 percent to 6.00 percent.

Changes in Benefit Terms

For 2022, the cost of living adjustments decreased from 2.20 percent simple to 2.05 percent simple. For 2021, the cost of living adjustments decreased from 3.00 percent simple to 2.20 percent simple.

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF THE PROGRAM'S CONTRIBUTIONS - OPEB

Last Seven Years ⁽¹⁾

	2022	2021	2020	2019	2018	2017	2016
Ohio Public Employees' Retirement System (OPERS)							
Contractually Required Contribution	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,705	\$ 28,751
Contributions in Relation to the Contractually Required Contribution	-	-	-	-	-	(14,705)	(28,751)
Contribution Deficiency (Excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Program's Covered Payroll (2)	\$ 1,507,443	\$ 1,585,571	\$ 1,575,929	\$ 1,533,957	\$ 1,494,521	\$ 1,470,471	\$ 1,437,558
Contributions as a Percentage of Covered Payroll	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	2.00%

(1) Beginning in 2016, OPERS used one trust fund as the funding vehicle for all health care plans; therefore, information prior to 2016 is not presented.

(2) The OPEB plan includes the members from the traditional plan, the combined plan and the member directed plan.

COMBINING SCHEDULE OF PLAN NET POSITION AVAILABLE FOR BENEFITS
As of December 31, 2022
With Totals for 2021

	2022				
	PROGRAM FUND	ADMINIS- TRATION FUND	COMBINING ENTRIES	TOTAL	2021-Restated
Assets:					
Investments:					
Collective trust funds	\$6,376,660,324			\$6,376,660,324	\$8,619,598,839
Stable value option	5,285,307,837			5,285,307,837	5,101,608,705
Mutual funds	976,214,550			976,214,550	4,554,751,119
Separate account	4,176,435,996			4,176,435,996	1,915,137,743
Purchased annuities	9,487,082			9,487,082	10,375,512
Total investments	16,824,105,789			16,824,105,789	20,201,471,918
Cash and cash equivalents		\$16,746,321		16,746,321	15,306,139
Contributions receivable and cash held for investment	14,755,392			14,755,392	8,399,419
Accounts receivable and prepaids		1,268,993	(\$706,762)	562,231	563,251
Property and equipment, net		16,818,293		16,818,293	15,946,233 *
Net OPEB Asset		370,534		370,534	213,807
Total assets	16,838,861,181	35,204,141	(706,762)	16,873,358,560	20,241,900,767
Deferred Outflows of Resources:					
Pension: OPERS		391,664		391,664	261,498
OPEB: OPERS		25,859		25,859	190,240
Total deferred outflows of resources	0	417,523	0	417,523	451,738
Liabilities:					
Accounts payable	9,205,350	943,410	(706,762)	9,441,998	1,883,013
Accrued expenses		664,332		664,332	776,501
Lease Liabilities		1,783,909		1,783,909	1,997,567 *
Net Pension Liability		950,519		950,519	1,656,847
Total liabilities	9,205,350	4,342,170	(706,762)	12,840,758	6,313,928
Deferred Inflows of Resources:					
Pension: OPERS		1,184,122		1,184,122	722,765
OPEB: OPERS		385,713		385,713	653,351
Total deferred inflows of resources	0	1,569,835	0	1,569,835	1,376,116
Plan Net Position Available for Benefits	\$16,829,655,831	\$29,709,659	\$0	\$16,859,365,490	\$20,234,662,461

* NOTE - 2021 Property and equipment, net and Lease Liabilities have been restated due to implementation of GASB 87.

COMBINING SCHEDULE OF CHANGES IN PLAN NET POSITION AVAILABLE FOR BENEFITS

**For the year ended December 31, 2022
With Totals for 2021**

	2022			
	PROGRAM FUND	ADMINIS- TRATION FUND	COMBINING ENTRIES	TOTAL
				2021-Restated
Additions:				
Net Investment Income:				
Net gain (loss) on funds	(\$3,176,439,300)			(\$3,176,439,300)
Stable value income	105,084,980	(\$192,281)		104,892,699
Investment expenses	(12,628,287)			(12,628,287)
Net investment income (loss)	(3,083,982,607)	(192,281)		(3,084,174,888)
Employee contributions	601,094,646			601,094,646
Transfers from other plans	104,965,825			104,965,825
Recordkeeping rebates	1,255,206			1,255,206
Recordkeeping income		15,141,522	(\$15,138,097)	3,425
Total additions	(2,376,666,930)	14,949,241	(15,138,097)	(2,376,855,786)
Deductions:				
Distributions to participants	494,069,158			494,069,158
Transfers to other plans	492,305,859			492,305,859
Administrative expenses	15,138,097	12,066,168	(15,138,097)	12,066,168
Total deductions	1,001,513,114	12,066,168	(15,138,097)	998,441,185
Change in Net Position	(3,378,180,044)	2,883,073		(3,375,296,971)
Plan Net Position Available for Benefits:				
Beginning of Year	20,207,835,874	26,826,587	0	20,234,662,461
End of Year	\$16,829,655,830	\$29,709,660	\$0	\$16,859,365,490

SCHEDULE OF ADMINISTRATION FUND DEDUCTIONS

For the years ended December 31, 2022 and 2021

	<u>2022</u>	<u>2021</u>
Customer Service	\$6,646,928	\$6,372,680 *
Salaries and benefits:		
Salaries and wages	1,655,182	1,764,420
Retirement contributions	(371,353)	(1,155,912)
Insurance	163,543	154,185
Other benefits	29,858	28,438
	<u>1,477,230</u>	<u>791,131</u>
Depreciation and amortization	1,321,395	1,184,238 *
Information Technology expense	949,577	929,144
Professional Services:		
Consulting	442,014	362,631
Information Technology	89,565	103,414
Auditing	44,842	43,699
	<u>576,421</u>	<u>509,744</u>
Administration:		
Postage and delivery	406,049	359,550
Participant statements	147,051	138,455
	<u>553,100</u>	<u>498,005</u>
Insurance	203,051	166,186
Bank Fees	166,611	157,561
Interest Expense	114,042	125,448 *
Office supplies:		
Printing	22,917	17,634
Office supplies	4,573	5,414
Telephone and fax	4,319	4,489
	<u>31,809</u>	<u>27,537</u>
Professional Expense	21,456	25,566
Miscellaneous	4,548	6,457
Total Administrative Fund Deductions	<u>\$12,066,168</u>	<u>\$10,793,697</u>

*NOTE-Customer Service, Depreciation and amortization, and Interest Expense have been restated due to implementation of GASB 87.

SCHEDULE OF CASH RECEIPTS AND DISBURSEMENTS

For the years ended December 31, 2022 and 2021

	<u>2022</u>	<u>2021</u>
Cash and cash equivalents, beginning of year	\$15,306,139	\$16,706,392
Receipts:		
Investment redemptions	986,375,017	1,048,819,260
Employee contributions	595,993,879	588,351,842
Transfers from other plans	104,965,825	137,519,233
Recordkeeping income	<u>179,266</u>	<u>0</u>
Total cash receipts	<u>1,687,513,987</u>	<u>1,774,690,335</u>
Disbursements:		
Investment purchases	671,866,344	697,072,290
Distributions to participants	494,069,158	495,667,695
Transfers to other plans	492,305,859	553,151,565
Investment expenses	13,955,263	16,895,037
Administrative expenses	11,683,727	11,239,232
Purchase of property and equipment	2,193,454	1,892,124
Recordkeeping expense	<u>0</u>	<u>172,645</u>
Total cash disbursements	<u>1,686,073,805</u>	<u>1,776,090,588</u>
Cash and cash equivalents, end of year	<u>\$16,746,321</u>	<u>\$15,306,139</u>

SCHEDULE OF INVESTMENT EXPENSES

For the years ended December 31, 2022 and 2021

	<u>2022</u>	<u>2021</u>
Stable Value - Book Value Guarantee Fees:	\$7,617,926	\$7,839,175
Stable Value - Management/Custodial Fees:		
Goldman Sachs Asset Management	1,245,872	1,237,994
Dodge & Cox	710,280	796,017
JP Morgan Asset Management	677,603	726,958
Nationwide Asset Management	650,878	704,877
Jennison Associates	615,994	676,114
Earnest Partners	364,866	398,751
Payden & Rygel	366,125	395,204
State Street	193,404	195,607
Bank of New York Mellon	185,339	183,342
Total Stable Value Investment Expenses	<u>\$12,628,287</u>	<u>\$13,154,039</u>

Investment manager, custodian, and book value guarantee fees are charged against the assets within the Stable Value Option portfolios.



OHIO DEFERRED COMPENSATION

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM

INVESTMENT SECTION

INVESTMENT SUMMARY

The Program is a self-directed plan, allowing participants to choose the investment options for their current contributions and account balances. The Board has adopted an investment policy that ensures that a sufficient number of suitable, diverse investment options are offered to participants. Independent professionals manage all investments, and the Program does not maintain any in-house investment staff, so the Program does not incur any direct investment expenses. The Executive Director is responsible for overseeing investments and preparation of the investment summary section.

	December 31, 2022		December 31, 2021	
	<u>Carrying Value</u>	<u>Allocation</u>	<u>Carrying Value</u>	<u>Allocation</u>
Collective Trust Funds	\$6,376,660,324	37.9%	\$8,619,598,839	42.6%
Stable Value Option	5,285,307,837	31.4%	5,101,608,705	25.3%
Mutual Funds	976,214,550	5.8%	4,554,751,119	22.5%
Separate Account	4,176,435,996	24.8%	1,915,137,743	9.5%
Purchased Annuities	<u>9,487,082</u>	0.1%	<u>10,375,512</u>	0.1%
Total Investments	<u>\$16,824,105,789</u>	100.0%	<u>\$20,201,471,918</u>	100.0%

INVESTMENT FEE RATES

The following table shows the investment fee rates charged by each investment option as of December 31, 2022, as well as the median in a universe of institutional share class mutual funds for the same asset category (according to *Morningstar*). The performance returns reported to participants have been reduced by these investment expenses. The Program pays the Stable Value Option investment related expenses, so those fees are included in the financial statements and footnotes.

	Program Investment Fees	Median Mutual Fund Fees
Non-US Company Stock	0.53%	0.77%
Non-US Company Stock Index	0.05%	0.77%
US Small Growth Company Stock	0.68%	0.96%
US Small/Mid Company Stock Index	0.02%	0.95%
US Small Value Company Stock	0.55%	0.94%
Vanguard Capital Opportunity	0.36%	0.82%
Fidelity Growth Company Commingled Pool	0.35%	0.71%
US Large Growth Company Stock	0.32%	0.71%
Fidelity Contrafund Commingled Pool	0.35%	0.71%
US Large Value Company Stock	0.41%	0.65%
US Large Company Stock Index	0.01%	0.20%
BlackRock LifePath Retirement	0.06%	0.42%
BlackRock LifePath 2025	0.06%	0.44%
BlackRock LifePath 2030	0.06%	0.44%
BlackRock LifePath 2035	0.06%	0.46%
BlackRock LifePath 2040	0.06%	0.44%
BlackRock LifePath 2045	0.06%	0.46%
BlackRock LifePath 2050	0.06%	0.45%
BlackRock LifePath 2055	0.06%	0.48%
BlackRock LifePath 2060	0.06%	0.46%
US Bond	0.25%	0.48%
US Bond Index	0.02%	0.42%
Stable Value Option *	0.24%	0.14%

*Stable Value Option fees include investment management fees, but not guarantee or wrap fees.

SCHEDULE OF PERFORMANCE VERSUS BENCHMARKS

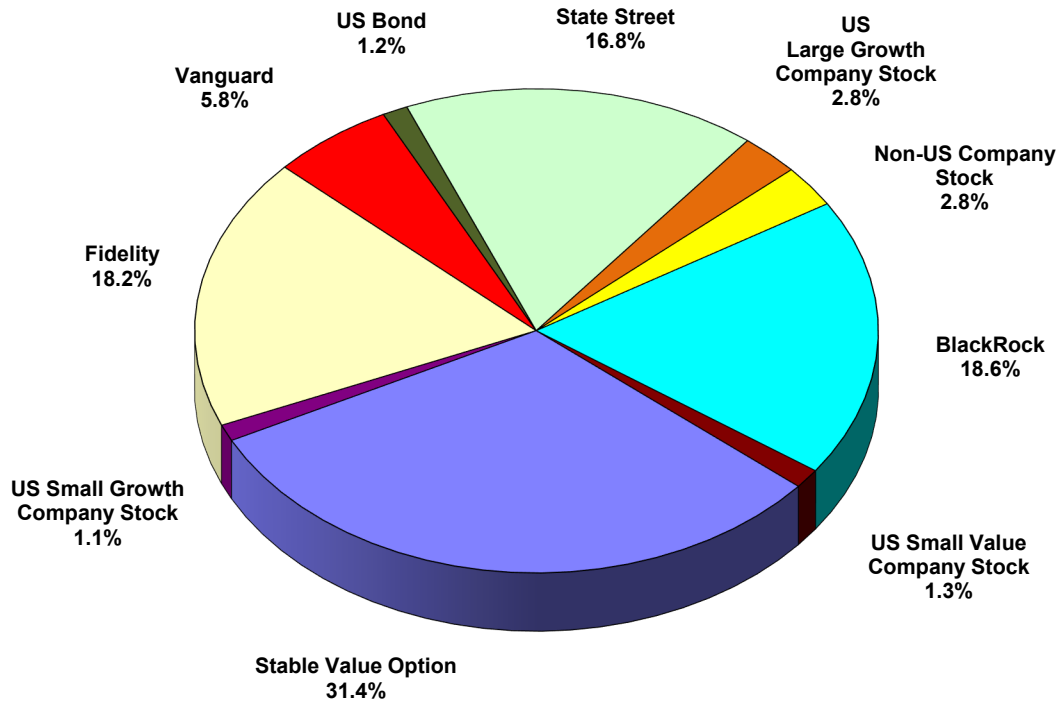
As of December 31, 2022

	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u>10-Year</u>
Non-US Company Stock (inception 9/11/20)	-18.0%	3.0%	n/a	n/a
Benchmark: MSCI All Country World ex-U.S. Index	-16.0%	0.1%	0.9%	3.8%
Non-US Company Stock Index (inception 12/9/22)	-16.3%	0.5%	1.1%	4.1%
Benchmark: MSCI All Country World ex-U.S. Index	-16.6%	0.2%	0.9%	4.0%
US Small Growth Company Stock (inception 6/2/17)	-25.2%	5.5%	8.0%	9.2%
Benchmark: Russell 2000 Growth Index	-26.4%	0.7%	3.5%	9.2%
US Small Value Company Stock (inception 6/2/17)	-12.3%	4.8%	4.8%	6.0%
Benchmark: Russell 2000 Value Index	-14.5%	4.7%	4.1%	8.5%
US Small/Mid Company Stock Index (inception 12/9/22)	-25.4%	3.7%	5.4%	10.0%
Benchmark: Russell Small Cap Compl Index	-25.5%	3.7%	5.3%	9.9%
Vanguard Capital Opportunity	-17.5%	7.1%	8.5%	14.1%
Benchmark: Russell Mid Cap Growth Index	-26.7%	3.9%	7.6%	11.4%
Fidelity Growth Company Commingled Pool (inception 12/13/13)	-32.9%	11.7%	13.2%	15.0%
Benchmark: Russell 1000 Growth Index	-29.1%	7.8%	11.0%	13.0%
US Large Growth Company Stock (inception 8/1/14)	-34.8%	4.1%	8.7%	11.6%
Benchmark: Russell 1000 Growth Index	-29.1%	7.8%	11.0%	14.1%
US Large Value Company Stock (inception 12/9/22)	-7.2%	9.4%	8.7%	12.4%
Benchmark: Russell 1000 Val Index	-7.5%	6.0%	6.7%	10.3%
US Large Stock Index (inception date 12/9/22)	-18.1%	7.6%	9.4%	12.6%
S&P 500 Index	-18.1%	7.7%	9.4%	12.6%
Fidelity Contrafund Commingled Pool (inception 1/17/14)	-27.1%	6.1%	9.0%	10.6%
Benchmark: Russell 1000 Growth Index	-29.1%	7.8%	11.0%	14.1%
BlackRock LifePath Retirement	-14.6%	0.8%	2.7%	4.1%
Benchmark: BlackRock Custom	-14.5%	0.8%	2.7%	4.0%
BlackRock LifePath 2025	-15.2%	1.2%	3.2%	5.4%
Benchmark: BlackRock Custom	-15.2%	1.2%	3.2%	5.3%
BlackRock LifePath 2030	-16.0%	1.9%	3.8%	6.1%
Benchmark: BlackRock Custom	-15.9%	1.9%	3.8%	5.9%
BlackRock LifePath 2035	-16.7%	2.5%	4.4%	6.8%
Benchmark: BlackRock Custom	-16.7%	2.5%	4.3%	6.6%
BlackRock LifePath 2040	-17.3%	3.1%	4.8%	7.3%
Benchmark: BlackRock Custom	-17.4%	3.0%	4.8%	7.1%
BlackRock LifePath 2045	-17.9%	3.6%	5.2%	7.8%
Benchmark: BlackRock Custom	-18.0%	3.5%	5.1%	7.6%
BlackRock LifePath 2050	-18.2%	3.8%	5.4%	8.0%
Benchmark: BlackRock Custom	-18.3%	3.7%	5.3%	7.8%
BlackRock LifePath 2055	-18.3%	3.9%	5.5%	8.1%
Benchmark: BlackRock Custom	-18.4%	3.8%	5.3%	8.0%
BlackRock LifePath 2060	-18.3%	3.9%	5.5%	6.7%
Benchmark: BlackRock Custom	-18.4%	3.8%	5.3%	n/a
US Bond (inception 1/30/2015)	-14.2%	-2.5%	0.3%	0.7%
Benchmark: Bloomberg US Aggregate Bond Index	-13.0%	-2.7%	0.0%	1.1%
US Bond Index (inception 12/9/22)	-13.1%	-2.7%	0.0%	1.1%
Benchmark: Bloomberg US Aggregate Bond Index	-13.0%	-2.7%	0.0%	1.1%
Stable Value Option	1.7%	2.0%	2.2%	2.2%
Benchmark: Morningstar US CIT Stable Val Index	1.9%	2.0%	2.1%	2.0%

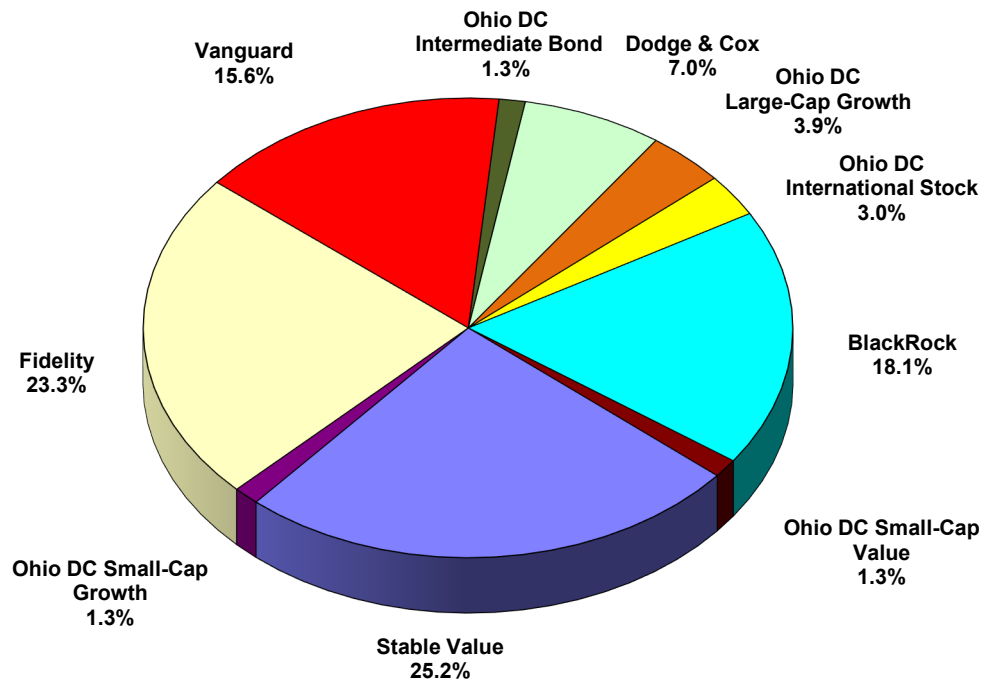
Investment returns are a time-weighted return based on the market rate of return. Returns are shown net of investment management fees. The 3-year, 5-year, and 10-year investment returns are annualized. Funds with inception date of 12/9/22 are reflective of returns established prior to becoming an option in Ohio DC's portfolio.

INVESTMENT MIX

December 31, 2022

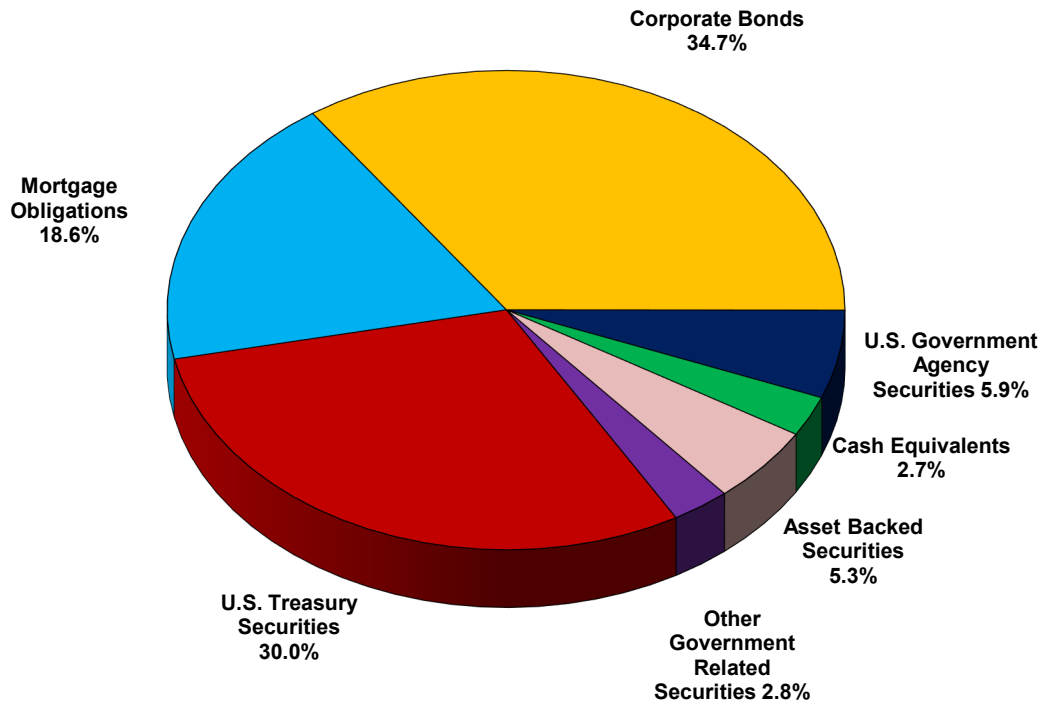


December 31, 2021

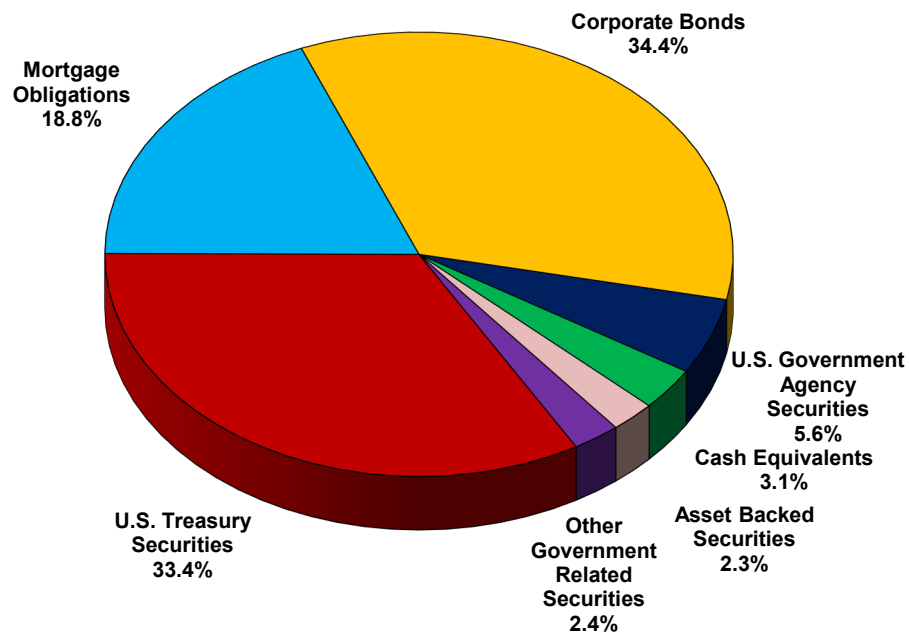


STABLE VALUE OPTION DIVERSIFICATION

December 31, 2022



December 31, 2021





OHIO DEFERRED COMPENSATION

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM

STATISTICAL SECTION

STATISTICAL INFORMATION

The objective of the Statistical Section is to provide the financial statement users with historical perspective, context, and detail to assist in using the information in the financial statements and the notes to the financial statements to better understand and assess the Ohio Public Employees Deferred Compensation Program's economic condition. The schedules in the Statistical Section show financial trend information that assists users in understanding how the Ohio Public Employees Deferred Compensation Program's financial position has changed over time. The financial trend schedules presented are:

- Changes in Plan Net Position Available for Benefits
- Employee Participation and Deferral Trends
- Number of Employers Contributing
- Principle Contributing Employers
- Benefit Payments

CHANGES IN PLAN NET POSITION AVAILABLE FOR BENEFITS

Years ending December 31, 2013 – 2022
(In Millions)

	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
Additions:										
Net Investment Income:										
Net gain (loss) on funds	(\$3,176.5)	\$2,405.3	\$2,655.3	\$2,273.4	(\$446.9)	\$1,700.4	\$583.1	\$44.4	\$498.5	\$1,310.0
Stable value income	104.9	104.1	126.6	132.8	117.4	111.5	114.5	116.7	117.0	122.2
Investment expenses	(12.6)	(13.2)	(12.4)	(12.8)	(12.3)	(13.0)	(13.1)	(13.5)	(14.5)	(14.2)
Net investment income (loss)	(3,084.2)	2,496.2	2,769.5	2,393.4	(341.8)	1,798.9	684.5	147.6	601.0	1,418.0
Participant contributions	601.1	582.1	549.9	518.1	496.3	475.9	447.1	444.0	427.0	430.0
Transfers from other plans	105.0	137.5	103.7	128.8	117.4	116.9	102.0	107.0	83.5	127.3
Recordkeeping rebates	1.2	1.3	1.0	1.1	1.1	1.3	5.1	0.0	0.0	0.0
Recordkeeping income	0.0	0.0	0.0	0.0	0.0	0.1	0.0	6.5	6.9	6.5
Total additions	(2,376.9)	3,217.1	3,424.1	3,041.4	273.0	2,393.1	1,238.7	705.1	1,118.4	1,981.8
Deductions:										
Distributions to participants	494.1	495.7	373.2	405.9	387.3	351.5	317.9	318.4	308.7	293.4
Transfers to other plans	492.3	553.2	361.6	359.3	321.2	295.5	219.8	273.0	291.9	301.3
Administrative expenses	12.0	10.7	12.7	12.7	10.4	10.6	10.5	10.0	9.9	10.1
Total deductions	998.4	1,059.6	747.5	777.9	718.9	657.6	548.2	601.4	610.5	604.8
Change in Net Position	(3,375.3)	2,157.5	2,676.6	2,263.5	(445.9)	1,735.5	690.5	103.7	507.9	1,377.0
Plan Net Position Available for Benefits:										
Beginning of Year	20,234.7	18,077.2	15,400.6	\$13,137.1	*13,583.0	11,848.6	11,158.1	*11,054.4	10,547.6	9,170.6
End of Year	<u>\$16,859.4</u>	<u>\$20,234.7</u>	<u>\$18,077.2</u>	<u>\$15,400.6</u>	<u>\$13,137.1</u>	<u>\$13,584.1</u>	<u>\$11,848.6</u>	<u>\$11,158.1</u>	<u>\$11,055.5</u>	<u>\$10,547.6</u>

*Note – 2018 and 2015 beginning of year Plan Net Position Available for Benefits were restated due to the implementation of GASB 75 and 68, respectively. 2021 end of year Plan Net Position Available for Benefits was restated due to the implementation of GASB 87.

EMPLOYEE PARTICIPATION

	Eligible Employees	Total Participant Accounts	Participants Currently Contributing	Current Participation Rate
2013	669,874	206,968	105,856	15.8%
2014	669,382	211,055	107,845	16.1%
2015	666,671	216,892	111,223	16.7%
2016	673,033	222,042	113,810	16.9%
2017	706,108	228,380	117,005	16.6%
2018	665,444	237,100	120,990	18.2%
2019	666,822	241,900	123,380	18.5%
2020	647,510	249,060	124,380	19.2%
2021	637,118	254,740	125,610	19.7%
2022	660,323	261,753	125,401	19.0%

Note – During 2018, the Ohio Public Employees Retirement System adjusted their calculation of active members downward. During 2017, the School Employees Retirement System of Ohio adjusted their calculation of active members upward. Details are available in the Annual Reports of these entities.

CONTRIBUTION/ACCOUNT TRENDS

	Total Annual Contributions	Average Annual Contribution	Net Position Available for Benefits	Average Participant Account
2013	\$430,050,916	\$4,063	\$10,547,521,260	\$50,962
2014	426,998,670	3,959	11,055,497,450	52,382
2015	444,027,787	3,992	11,158,105,670	51,445
2016	447,140,841	3,929	11,848,619,180	53,362
2017	475,928,694	4,068	13,584,133,531	59,480
2018	496,296,253	4,102	13,137,141,837	55,408
2019	518,057,583	4,199	15,400,580,016	63,665
2020	549,917,095	4,421	18,077,176,067	72,582
2021	582,061,454	4,634	20,234,662,461 *	79,433
2022	601,094,646	4,793	16,859,365,490	64,409

*NOTE - 2021 Net Position Available for Benefits has been restated due to the implementation of GASB 87.

NUMBER OF EMPLOYERS CONTRIBUTING

	<u>State</u>	<u>County</u>	<u>City</u>	<u>Metro Housing</u>	<u>Village</u>	<u>Library</u>	<u>Medical Center</u>	<u>Education</u>	<u>Misc</u>	<u>Township</u>	<u>Total</u>
2013	1	88	241	51	210	176	23	608	157	247	1,802
2014	1	88	242	51	214	178	20	618	157	248	1,817
2015	1	88	243	51	221	181	19	644	168	260	1,876
2016	1	88	243	51	221	180	18	649	166	265	1,882
2017	1	88	244	51	222	186	16	655	174	272	1,909
2018	1	88	245	51	226	188	16	672	187	275	1,949
2019	1	88	245	51	234	190	18	684	189	278	1,978
2020	1	88	245	52	240	190	16	691	188	287	1,998
2021	1	88	245	52	246	189	17	699	192	293	2,022
2022	1	88	245	52	253	188	16	707	196	296	2,042

PRINCIPAL CONTRIBUTING EMPLOYERS

<u>Employer Name</u>	<u>2022</u>			<u>2013</u>		
	<u>Participant Accounts</u>	<u>Rank</u>	<u>Percent of Total Program</u>	<u>Participant Accounts</u>	<u>Rank</u>	<u>Percent of Total Program</u>
State of Ohio	63,389	1	24.1%	54,740	1	26.4%
City of Columbus	9,344	2	3.6%	8,132	2	3.9%
City of Cleveland	7,784	3	3.0%	6,890	3	3.3%
Cuyahoga County	6,045	4	2.4%	5,701	4	2.8%
Franklin County	4,921	5	1.9%	3,905	6	1.9%
Metrohealth Medical Center	4,832	6	1.8%	3,399	7	1.6%
City of Cincinnati	4,617	7	1.8%	4,376	5	2.1%
Ohio State University	2,971	8	1.1%	1,649	11	0.8%
Montgomery County	2,879	9	1.1%	2,628	8	1.3%
City of Toledo	2,398	10	0.9%	1,983	10	1.0%
All Others	152,573	N/A	58.3%	113,565	N/A	54.8%
Total Participation	<u>261,753</u>		<u>100.0%</u>	<u>206,968</u>		<u>100.0%</u>

BENEFIT PAYMENTS

	Participant Distributions	Beneficiary Distributions	Total Distributions
2013	\$271,707,261	\$21,675,324	\$293,382,585
2014	285,019,349	23,650,622	308,669,971
2015	293,242,254	25,188,391	318,430,645
2016	291,369,661	26,582,052	317,951,713
2017	318,679,103	32,827,814	351,506,917
2018	353,187,404	34,148,997	387,336,401
2019	366,885,439	38,963,744	405,849,183
2020	342,631,574	30,650,675	373,282,249
2021	439,400,600	56,267,095	495,667,695
2022	437,617,513	56,451,645	494,069,158

	Number of Participant Distributions	Number of Beneficiary Distributions	Number of Total Distributions
2013	30,649	2,710	33,359
2014	32,158	2,974	35,132
2015	32,809	3,292	36,101
2016	32,564	3,547	36,111
2017	36,626	3,795	40,421
2018	37,565	4,150	41,715
2019	45,508	4,836	50,344
2020	27,225	1,724	28,949
2021	42,614	5,307	47,921
2022	42,640	5,713	48,353

	Average Participant Distribution	Average Beneficiary Distribution	Average Annual Distribution
2013	\$8,865	\$7,998	\$8,795
2014	8,863	7,952	8,786
2015	8,938	7,651	8,821
2016	8,948	7,494	8,805
2017	8,701	8,650	8,696
2018	9,402	8,229	9,285
2019	8,062	8,057	8,062
2020	12,585	17,779	12,894
2021	10,311	10,602	10,343
2022	10,263	9,881	10,218

ACTION ITEMS



OHIO DEFERRED COMPENSATION

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM

MEMORANDUM

TO: Board of Trustees

FROM: Ken Thomas, Board Chair

DATE: May 16, 2023

SUBJECT: February 2023 Special Meeting Follow-up

Executive Summary

Upon review of the special meeting held February 21, 2023, an irregularity was discovered. The February 21, 2023 meeting was publicly noticed for ORC 121.22 (G)(1)... to consider the appointment, employment or dismissal of a public employee or official. However, upon review of the minutes at our Board meeting on March 14, 2023, the motion to go into Executive Session on February 21st was for both (G)(1) and (G)(5)... matters to be kept confidential by federal law or regulations or state statutes.

Special board meetings are permitted and must state the expressed reason for such. Because the special meeting notice was for only (G)(1) it was not permissible for me to include (G)(5) in the motion, even though all that was discussed in Execution Session pertained to personnel matters. We now have to correct the irregularity during this meeting in order to move forward. So given that, we must affirm the motions made when we exited Executive Session at the February 21, 2023 meeting.

I apologize for the oversight on my part and can assure you it won't happen again.

Recommendation

I am recommending the Board affirm the motions provided below.

- The Chair would entertain a motion to appoint Mr. Miller as the Interim Executive Director effective February 21, 2023 and provide him with a 4% increase to his salary while he is performing the interim duties. Mr. Kirkpatrick will continue in the position as Director of Administration.
- The Chair would entertain a motion to pause the Executive Director search.



OHIO DEFERRED COMPENSATION

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM

MEMORANDUM

To: Board of Trustees

From: Paul D. Miller, Interim Executive Director

Date: May 16, 2023

Subject: RVK Reports

Executive Summary

Each quarter, our independent investment consultants present a report detailing the overall investment market environment and the specific performance of Ohio DC's investment options. The current RVK report includes investment performance through March 31, 2023. In addition, RVK will be presenting reviews of our plan fees and target date funds. Matthias Bauer and Stephen Budinsky from RVK will attend the meeting to present this information.

First Quarter Investment Performance and Activity

The large-cap U.S. equity market, as measured by the Standard and Poor's 500 Index, gained 7.5 percent during the first quarter but was down 7.7 percent over one year. Developed international markets, as measured by the MSCI EAFE Index, gained 8.5 percent during the first quarter but were down 1.4 percent for one year. Fixed income performance, as measured by the Bloomberg U.S. Aggregate Bond Index, gained 3.0 percent during the first quarter but was down 4.8 percent for one year.

Stable Value Option (SVO) assets decreased by \$25 million (0.5 percent) during the first quarter. The SVO's quarter-over-quarter decrease was attributable to the net of \$30 million in new contributions, \$32 million in interest earnings, \$21 million exchanged to the SVO from other investment options, and \$108 million in distributions (benefit withdrawals, net rollovers, in-service transfers, and fees). The SVO's annualized crediting rate was 2.50 percent in the first quarter of 2023 and increased to 2.60 percent for the second quarter 2023.

Ohio DC's other investment options (excluding the SVO) increased in value by \$864 million (up 7.5 percent) during the first quarter. The quarter-over-quarter increase was attributable to new contributions of \$150 million, \$21 million exchanged to the SVO, net distributions of \$159 million (benefit withdrawals, rollovers, in-service transfers, and fees), and positive investment performance of \$894 million.

Current Fund Monitoring Results

Our fund monitoring system color-codes all our investment managers. A “green” status means no action is required; a “yellow” status means monitor the option closely; an “orange” status means a decision must be made within 180 days to close the option; and a “red” status means all invested balances must be moved out of the option. A “gray” status indicates that prior period performance was not measured before an investment option was included in our lineup.

At the end of the fourth quarter of 2022, all our investment options were rated “green,” except for US Large Growth Company Stock (T. Rowe Price) and two strategies within the SVO, Jennison and Nationwide. US Large Growth Company Stock (T. Rowe Price) underperformed over the shorter and longer time periods, while Jennison and Nationwide had recent organizational changes. These three strategies are at “yellow” or “closely monitor” status, which indicated that we should continue to monitor them, but no action was needed.

At the end of the first quarter of 2023, all our investment options are rated “green,” except for two strategies within the SVO, Jennison and Nationwide. US Large Growth Company Stock (T. Rowe Price) exceeded its performance benchmark for the current quarter and moved from “yellow” to “green” status. Jennison and Nationwide had recent organizational changes and remain at “yellow” or “closely monitor” status, which indicates that we should continue to monitor them, but no action is needed at this time.

Annual Fee Benchmarking Review

Section VIII of our Investment Policy Statement includes a provision that plan fees be evaluated annually to determine if they are considered “reasonable.” In addition, we have adopted an Administrative Fee Policy Statement to serve as a guideline to maintain an equitable and transparent funding of Ohio DC operations. On a regular basis, our investment consultant has reviewed Ohio DC administrative fees for compliance with these policies. RVK has identified seven best practices in plan fee management, Ohio DC is addressing all of them, and no actions are necessary.

Information in the RVK materials compares our costs to a peer group of other public DC plans surveyed by RVK. Our total plan costs of \$209 per participant per year equals the median of the public plan peer group. Our total plan costs (0.32 percent of assets) are below the public plan peer group cost (0.34 percent). The two components of total cost are investment management costs and recordkeeping and administrative costs. Ohio DC’s weighted-average investment management cost (0.25 percent) is slightly higher than the peer group (0.22 percent) due to our participants’ higher utilization of actively managed investment options. Our investment manager fees continue to rank favorably when compared to institutional fund fee peer groups. Ohio DC’s recordkeeping and administrative expenses (0.07 percent) are below the median of the public plans (0.14 percent) on an asset-weighted basis and a per participant cost basis.

The fees collected by Ohio DC are intended to cover current recordkeeping and administrative costs, as well as fund capital expenditures and maintain adequate fund reserves. During 2021, we noted that plan assets and fund reserves were growing faster than expenditures, so a fee holiday was approved for the fourth quarter of 2021 resulting in a reduction of about \$4 million in fees collected. It was noted that if those trends continued, further fee holidays or adjustments to the fee formula might be needed. With a significant drop in plan assets due to market performance and decisions on Ohio DC staff still to be made, no recommendations on fee holidays or adjusting fee formulas are being made at this time.

Target Date Fund Review

The BlackRock target date funds (LifePath) are Ohio DC's default investment options. On a regular basis, the investment consultant will review these options to make sure they continue to operate as expected and are the proper default option for our participants.

Ohio DC uses the BlackRock LifePath series that is passively managed, has extremely low pricing (6 basis points), and ranks fourth nationally in target date assets under management. Generally, the LifePath series utilizes a glidepath that holds more equity in the early investment years and then becomes more conservative in the years leading up to retirement compared to most other target date glidepaths.

The DOL provides ERISA plans with a check list on selecting and monitoring target date funds. Although Ohio DC is not an ERISA plan, using these guidelines are considered best practice. RVK reviewed these guidelines and found Ohio DC to be following all of them, and no actions are needed at this time. The eight DOL guidelines include:

- Establish a process for comparing and selecting target date funds.
- Establish a process for the periodic review of selected target date funds.
- Understand the fund's investments – the allocation in different asset classes (stocks, bonds, cash), individual investments, and how these will change over time.
- Review the fund's fees and investment expenses.
- Inquire about whether a custom or non-proprietary target date fund would be a better fit for the plan.
- Develop effective employee communications.
- Take advantage of available sources of information to evaluate the target date funds and recommendations received regarding the target date fund selection.
- Document the process.

In addition, RVK monitored LifePath's investment strategy, fund performance, fees, plan utilization, and pending litigation. No exceptions or concerns were noted, so continuing with the BlackRock LifePath funds is appropriate.

Recommendations

Staff recommends the Board accept the RVK reports as presented.



Administrative Fee Review

Ohio Deferred Compensation Program (“Ohio DC”)

May 16, 2023



Executive Summary

Introduction:

- Ohio DC Staff regularly monitors Ohio DC's fees and expenses, which are generally reviewed with the Board annually.
- The purpose of this presentation is to review current and anticipated program expenses, review the method by which fees are assessed to participants, and benchmark current expenses.

Summary:

- The Plan collected \$15.1 million in participant fees and paid \$12.3 million in Plan costs.
- The Admin Reserve Fund holds 16.7 months of 2022 operating expenses, which is within the policy guideline of 6-18 months.
- Recordkeeping and administration fees and expenses were compared by RVK to a peer group of Public Plans and were viewed as reasonable.
- The Ohio DC Program plan costs remained largely stable from 2021 to 2022 both on a per participant and asset weight basis, while the total fees collected from participants increased slightly following the fee holiday in 2021.
- While Ohio DC participants are more invested in active funds than the peer group, investment management fees remained reasonable with total investment management fees were viewed as reasonable when compared to peers.
- **Ohio Board Action: None**
 - The information provided is for educational purposes.

Best Practice Plan Fee Management

- We recommend that plan fiduciaries follow a few standard practices to demonstrate appropriate management and monitoring of fees.

Best Practices in Plan Fee Management
• Perform periodic investment management fee comparisons
• Regularly investigate opportunities for lower fees
• Perform periodic reviews of the fee model
• Periodically re-negotiate service agreements
• Perform periodic recordkeeping and administration fee benchmarking studies
• Establish a process for periodic formal bid solicitations (i.e., RFI / RFP)
• Create an annual plan fee budget

Ohio Public Employees DC Program	
●	RVK Quarterly Report – Fee Peer Group Comparisons
●	Periodic reviews as assets increase and new share classes become available
●	2022 Fee Structure Review
●	Nationwide Customer Service Agreement renegotiated in 2021. Last formal RFP was in 2013.
●	RVK Annual Fee Review NAGDCA Perspectives in Practice Survey
●	2013 Internal vs. External recordkeeping system evaluation. Formal bid solicitation process is established via Ohio DC's purchasing policy.
●	Regularly reviewed with the Board by Staff

- No action necessary
- RVK recommends further review
- RVK recommends a change to the current plan

Current Administrative Fee Policy

Purpose

The Administrative Fee Policy Statement (“AFPS”) is intended to serve as a guideline for the Board to fund Program administrative services in an equitable manner and to provide enhanced fee transparency.

Previous Discussions

In 2014 and 2015, the Board studied various options to develop a more equitable methodology for allocating administrative fees to participants. At the time, an asset-based approach was the most optimal solution for the Program. The Board also reviewed the existing fee structure in 2019 and 2022 and determined that no action was necessary at the time.

Current Policy

1. Rebating all revenue sharing to participants that were invested in investment options providing revenue sharing. Rebates will be disclosed in participant quarterly account statements.
2. Charging an explicit asset-based administrative fee that will be disclosed in quarterly account statements
3. Waiving fees for participants with small account balances
4. Capping the maximum annual amount of administrative fees to be charged to each participant
5. Moving assets to non-revenue sharing share classes, when available
6. Excluding investment options with revenue sharing from future manager searches

RVK notes that with the transition of the Dodge & Cox Stock Fund to the new share class in 2022, Ohio DC no longer offers any mutual funds with revenue sharing embedded.

Current Administrative Fee Policy

Current Policy

As part of the review and approval of each annual administrative expense budget, the Board will review the administrative fee structure and determine if any changes are needed to the fees or to the AFPS.

The Board may also approve fee changes as needed in accordance with the AFPS.

Whenever the Board changes the structure of administrative fees, this policy should be amended to reflect the new administrative fee structure.

All changes to the administrative fees shall be communicated to participants in a timely and appropriate manner.

Note: *The Administrative Fee Policy is included in the Appendix for reference.*

Summary of Fees and Expenses

Plan Fees / Revenues

Ohio DC generates revenues to pay for administrative plan expenses by charging participants an asset-based fee with a fee waiver and large balance fee cap*:

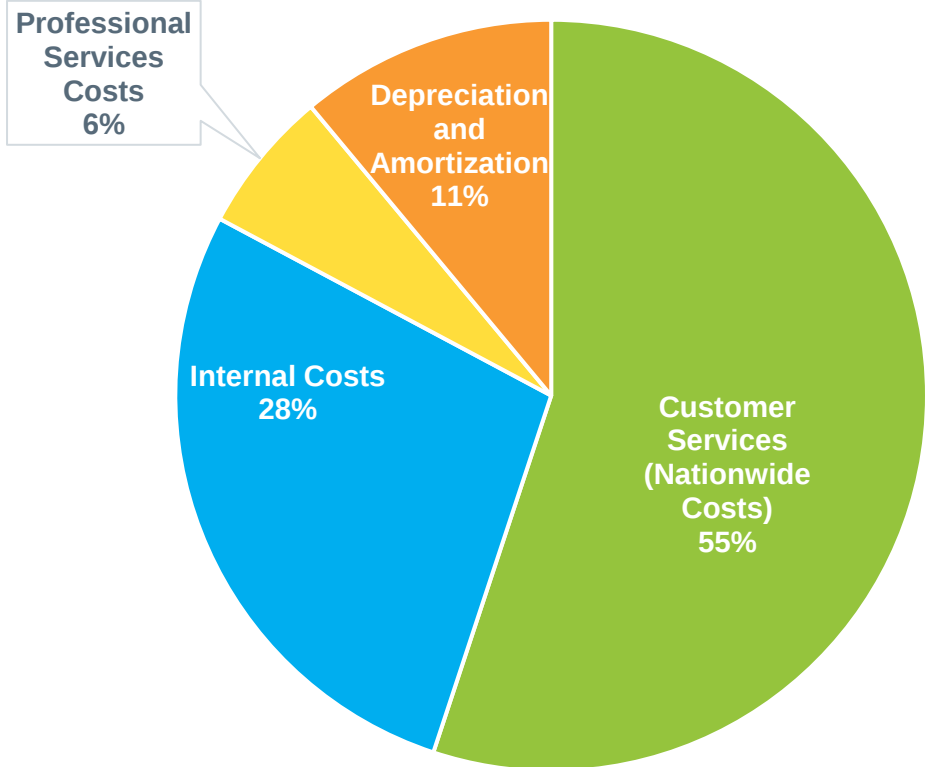
Ohio DC Administrative Fees

- **0.14%** on account assets
- **Fee waiver** for participants with **<\$5,000** balance
- **Fees capped at \$55 per quarter** (\$220 per year)
- **No individual participant transaction fees**

Approximate \$15.1 million in fees were deducted from participants' accounts in 2022 to pay for Recordkeeping & Administrative Expenses and capital expenses relating to the recordkeeping modernization project.

Plan Expense / Costs

In 2022, Ohio DC had approximately \$12.1 million in actual administrative expenses.



*Ohio DC generates additional revenue through interest income and other miscellaneous sources. These sources represented approximately 1.3% of revenue in 2022.

Ohio DC Program Administrative Reserve Balance

- As the Program does not receive external funding from participating employers or from the State of Ohio to offset its administrative service expenses, participants are charged fees to cover all Ohio DC administrative expenses.
- In order to ensure sufficient operating cash reserves to pay for unanticipated expenses, fund new initiatives or capital projects, and cover expenses should assets or participants drop, Ohio DC maintains a Fund Reserve Policy within the Board Governance Policy Manual:
 - *Ohio DC will seek to retain a fund reserve equal to six to eighteen months of operating expenses.*
- As of December 31, 2022, Ohio DC held approximately **\$16.7 million in Administrative Fund Reserves**, which equals approximately **16.7 months of 2022 operating expenses**.
 - Given potential asset and participant growth, it is possible that the 18-month threshold will be exceeded later in 2023 or 2024.
 - Due to current elevated levels of market volatility, Ohio DC Staff and RVK do not recommend any action at this time and will continue to monitor the Administrative Fund Reserves and anticipated operating expenses.
- Should it be necessary to reduce the Administrative Fund Reserve, it can generally be accomplished through one of the following three methods:
 - One-time participant fee reimbursement
 - A “Fee Holiday” – Temporarily eliminating participant fees
 - A temporary or permanent adjustment to the participant fee formula

Peer Group Characteristics

The 2022 annual RVK DC Plan Fee Benchmarking survey, conducted by RVK's Defined Contribution Solutions Group ("DCSG"), includes **71** DC plans.

- 19 public plans and 52 private plans
- A variety of plan types (401(a), 401(k), 403(b), 457(b), and non-qualified plans)
- Over \$50 billion in plan assets
- Over 640,000 total participant accounts
- A wide variety of plan participant administrative fee structures, including asset based, per participant, revenue sharing, and hybrid structures
- Plans served by 19 different DC recordkeepers

All data shown is as of December 31, 2022, unless otherwise noted.

Ohio DC is the largest plan in terms of total assets and total participant accounts. Ohio DC's average participant account balance of \$65,400 is slightly below the average reported by the peer group.

Ohio DC is benchmarked to the Public Plans peer group.

Fee Benchmarking Summary

- The Ohio DC Program's recordkeeping and administration fees and expenses are at or below the median of the Public Plans peer group on an asset-weighted basis and per participant basis with the exception of Total Recordkeeping and Admin Plan Revenue on a per participant basis.
- Weighted-average Investment Management Costs (in % terms) are slightly higher than the median of the Public Plans peer group, due to a higher allocation to actively managed funds versus the peer group.

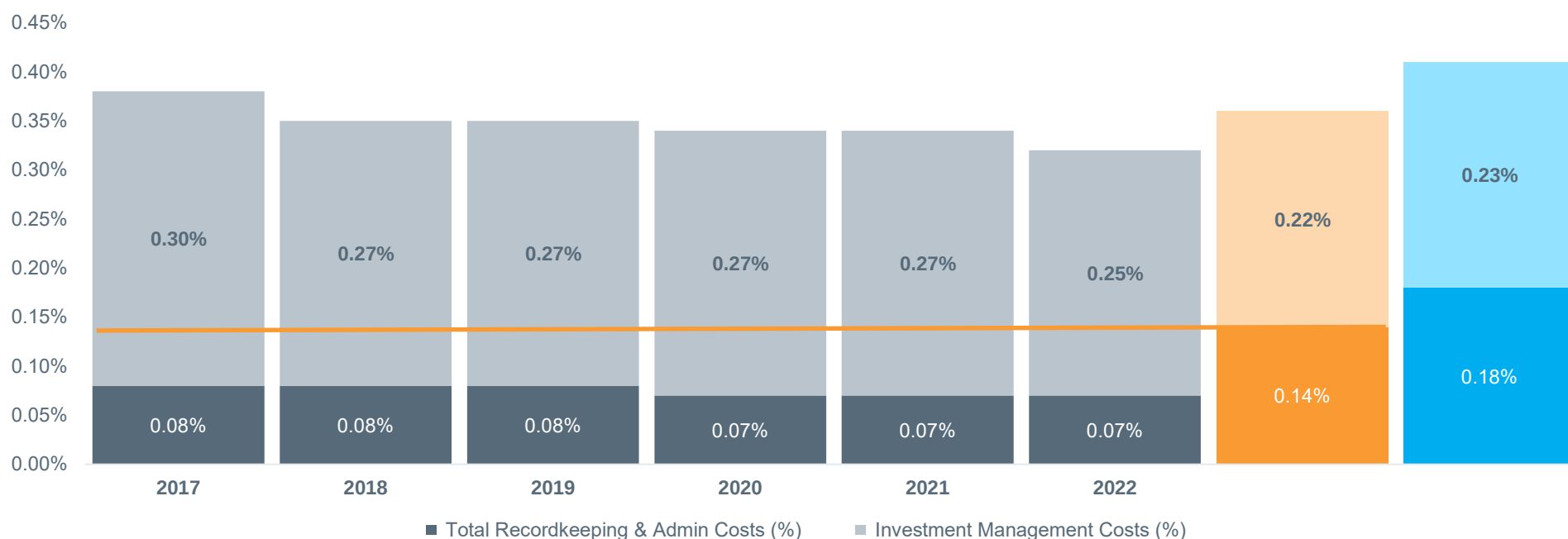
	Public Plans		Ohio Public Employees Deferred Compensation 457(b) Plan	
	Median Fees		Plan Fees	
	\$ Per Participant	% of Plan Assets	\$ Per Participant	% of Plan Assets
Total Plan Costs	\$209	0.34%	\$209	0.32%
Asset-Weighted Investment Management Costs	\$161	0.22%	\$161	0.25%
Total Recordkeeping & Admin Costs	\$50	0.14%	\$48	0.07%
Total Recordkeeping and Administration Plan Revenue	\$51	0.13%	\$60	0.09%

The "\$ Per Participant" comparison is based on the Ohio DC's 251,376 participant accounts as of 12/31/2022.

Total Plan Cost Changes Over Time (%)

The Ohio DC Program's plan costs as a percentage of assets have remained largely stable, decreasing slightly over the last 6 years.

Total Plan Costs (%)



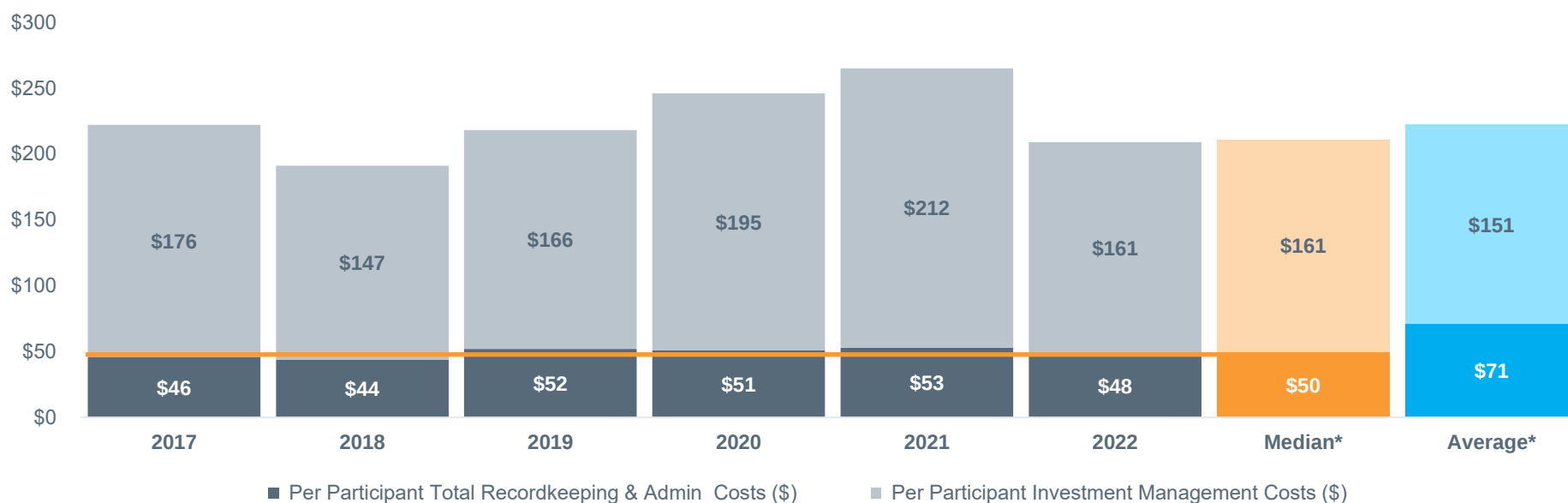
	2017	2018	2019	2020	2021	2022	2022 vs 2021		Median*	Average*
Total Plan Costs (%)	0.37%	0.35%	0.34%	0.34%	0.34%	0.32%	(0.02%)	↓	0.34%	0.41%
Investment Management Costs (%)	0.30%	0.27%	0.27%	0.27%	0.27%	0.25%	(0.02%)	↓	0.22%	0.23%
Total Recordkeeping & Admin Costs (%)	0.08%	0.08%	0.08%	0.07%	0.07%	0.07%	0.00%	-	0.14%	0.18%

* Means and medians are for the Public plans peer group based on data as of 12/31/2022.
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Total Plan Cost Changes Over Time (\$)

- Total recordkeeping & admin costs remained consistent in 2022 (\$12.1 million) compared to 2021.
 - Total recordkeeper & admin costs increased from 2018 (\$10.4 million) to 2020 (\$12.7 million) as the Program began allocating expenses related to the recordkeeping modernization project.
- In the last year, average per participant investment management costs have decreased as market performance has caused account balances to decline faster than the rate of new participants.

Total Plan Costs (\$)



	2017	2018	2019	2020	2021	2022	2022 vs. 2021 Change		Median*	Average*
Per Participant Total Plan Costs (\$)	\$222	\$191	\$219	\$246	\$265	\$209	(\$56)	↓	\$209	\$222
Per Participant Investment Management Costs (\$)	\$176	\$147	\$166	\$195	\$212	\$161	(\$51)	↓	\$161	\$151
Per Participant Total Recordkeeping & Admin Costs (\$)	\$46	\$44	\$52	\$51	\$53	\$48	(\$5)	↓	\$50	\$71
Per Participant Balance (\$)	\$59,458	\$55,119	\$63,919	\$73,352	\$82,800	\$65,364	(\$17,436)	↓	\$71,708	\$69,661

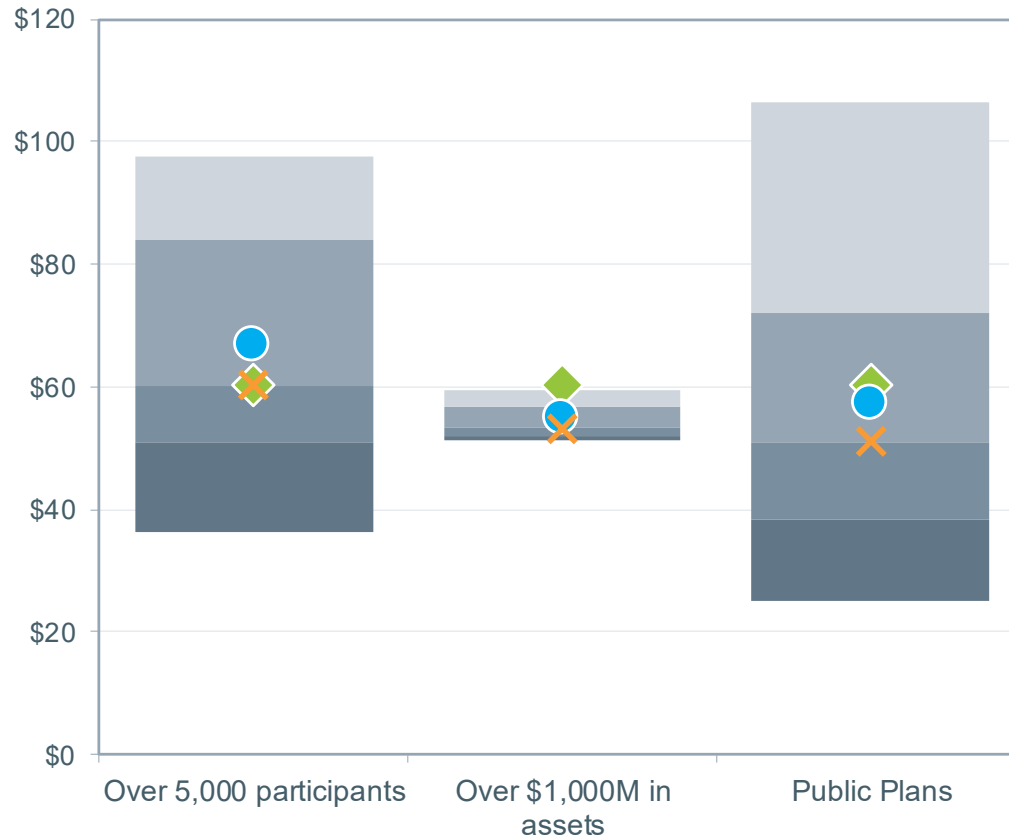
* Average and median are for the Public plans peer group based on data as of 12/31/2022.
Confidential and Proprietary Information. For Institutional Investor Use Only.

Average Plan Participant Account Fees (\$)

(What Participants Are Paying)

Public Plans

Per Participant Recordkeeping & Administrative Fees (\$)



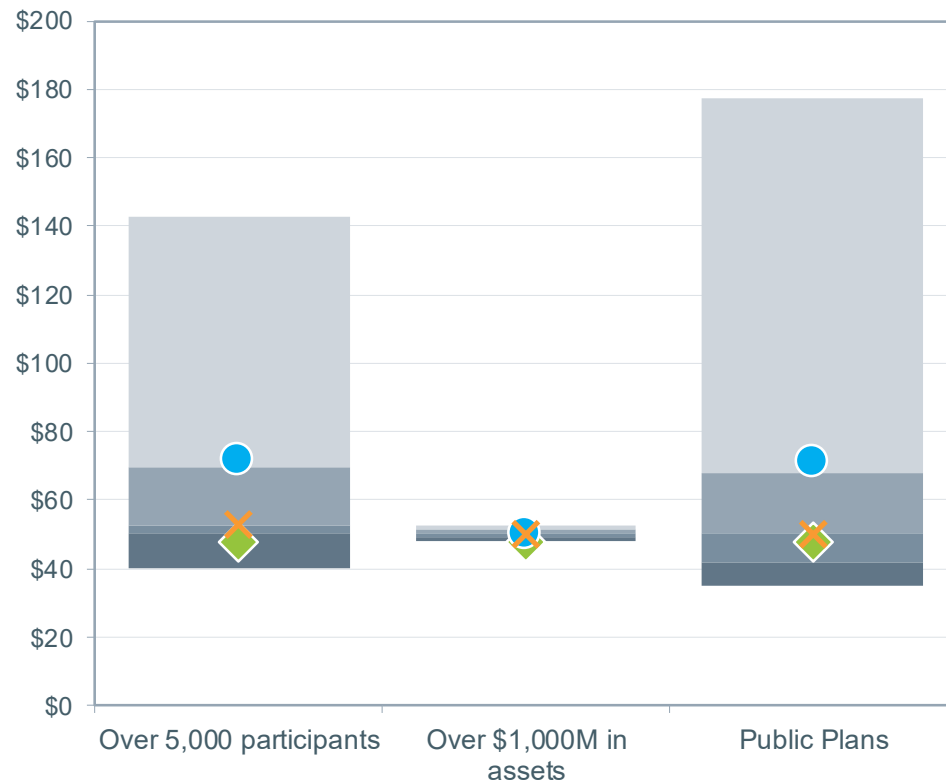
- The Ohio DC Program's average recordkeeping and administration fees of \$60 per participant account **are above the median and average** of the Public Plans peer group but **at the median and below average** for those plans with >5,000 participants.

	Ohio Public Employees Deferred Compensation 457(b) Plan: \$60 Per Account		
75th Percentile	\$84	\$57	\$72
Median	\$60	\$53	\$51
25th Percentile	\$51	\$52	\$38
Average	\$67	\$55	\$57
Number of Plans	9	3	19

Average Recordkeeping and Administrative Costs (\$)

Public Plans

Per Participant Recordkeeping & Administrative Cost (\$)



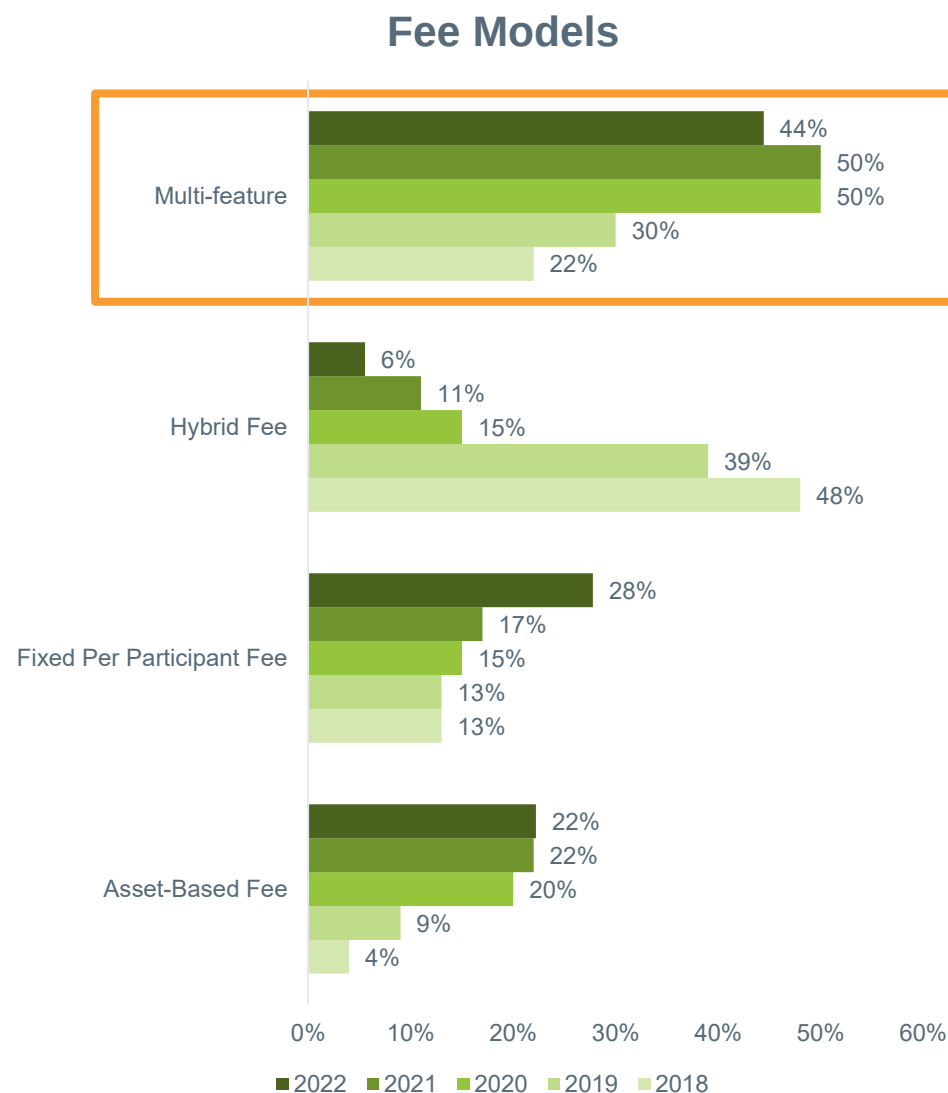
- The Ohio DC Program's average recordkeeping and administration expenses of \$48 per participant account **are below the median and average** of the Public Plans peer group and those plans with >5,000 participant accounts.

◆	Ohio Public Employees Deferred Compensation 457(b) Plan:			\$48 Per Account
	75th Percentile	\$70	\$52	\$68
X	Median	\$53	\$50	\$50
	25th Percentile	\$50	\$49	\$42
●	Average	\$72	\$50	\$71
	Number of Plans	9	3	19

Ohio DC's recordkeeping and administrative costs includes depreciation and amortization.

Recordkeeping and Administrative Fee Models

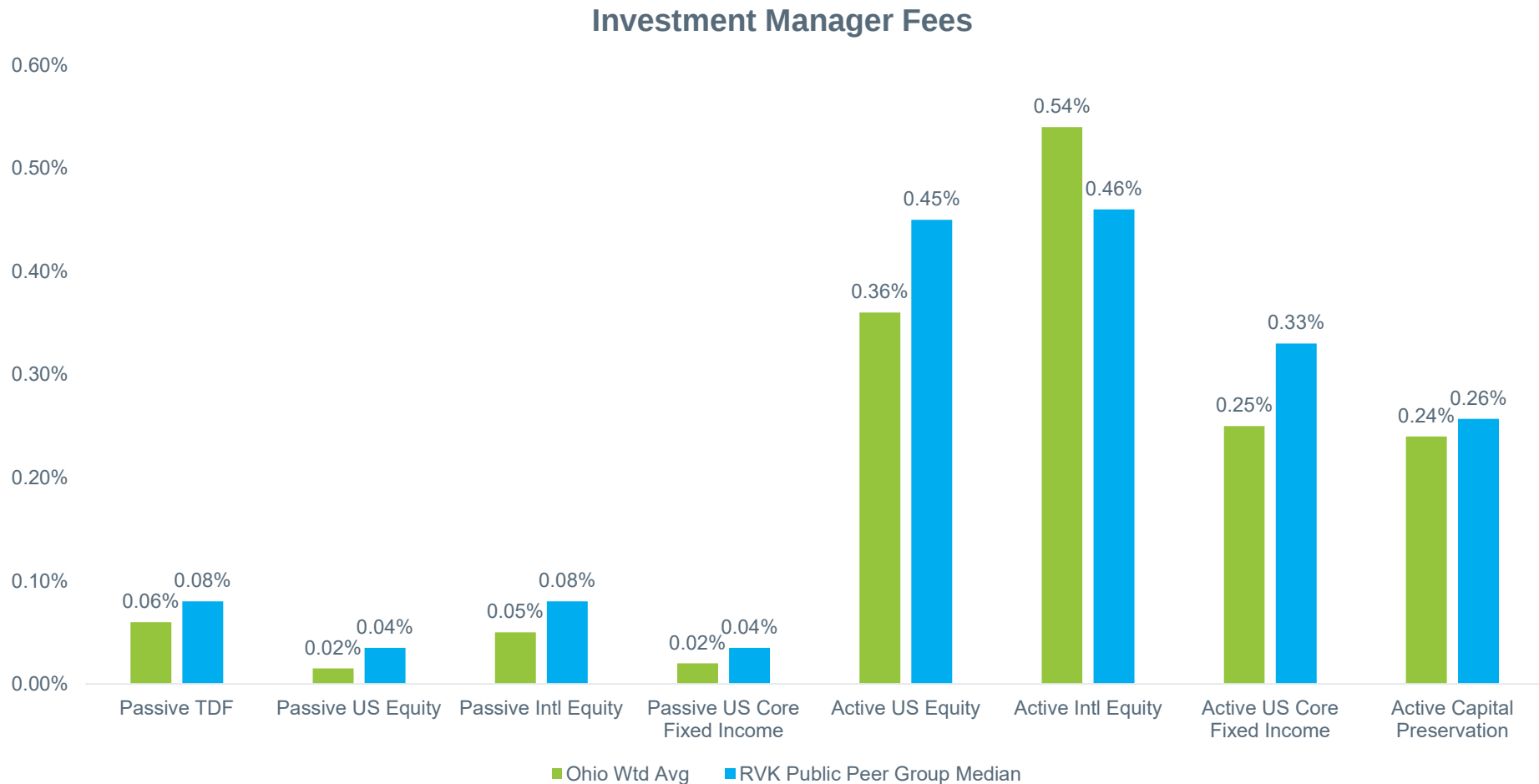
- “Multi-feature” fee structures including models with a fee cap or fee waiver remain the most popular model.
- Ohio’s fee model is consistent with 44% of the peer group.



Multi-feature consists of fees models which cap fees for the highest impacted and waive fees for participants with the lowest balances.

Active/Passive Investment Manager Fees

Against RVK's Public Plans peer group, Ohio DC fees rank **at or below median** in all asset classes both active and passive, with the exception of Active International Equity, where Ohio DC fees declined this year compared to last year.

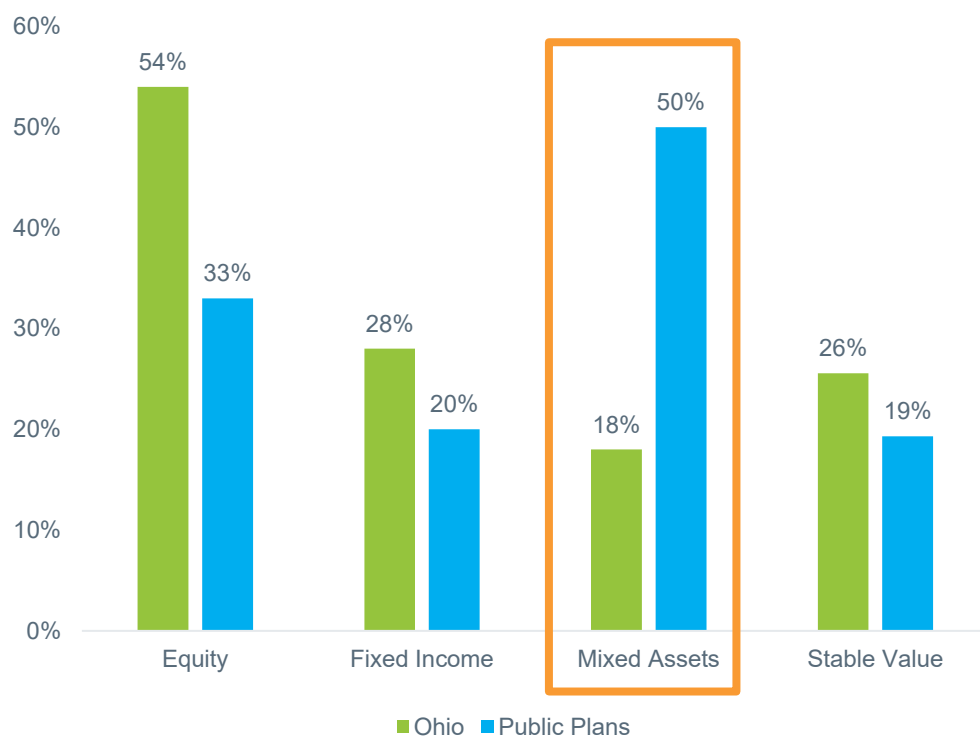


RVK's Public Plans peer group capital preservation asset class includes both money market and stable value funds. Ohio DC investment manager fees are the weighted average fee for each asset class (based on market values of 12/31/2022).

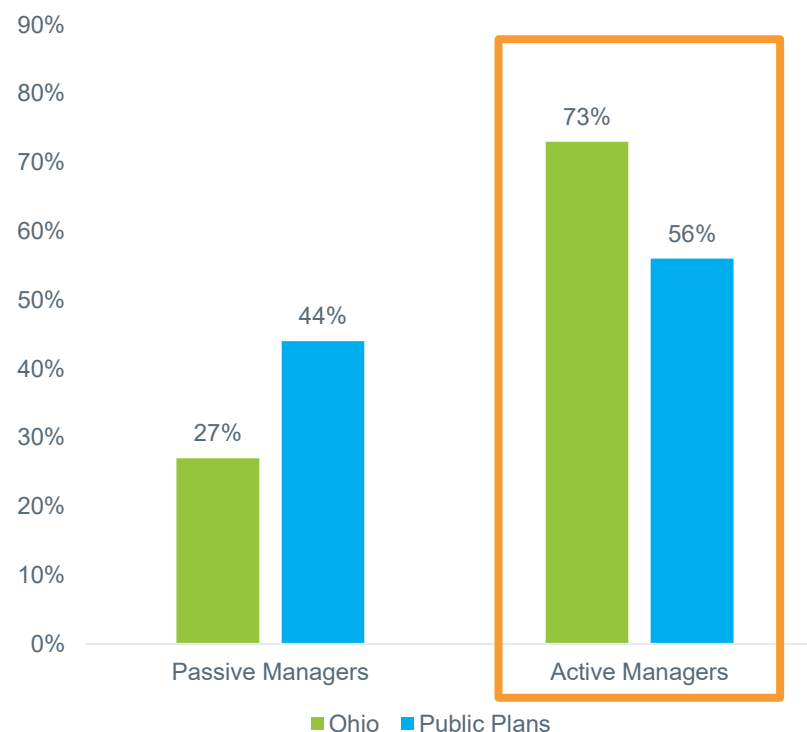
Investment Allocations

Similar to the previous year, the Ohio DC Program has a lower allocation to target date funds and a higher allocation to actively managed funds when compared to the Public Plans peer group.

Asset Classes*



Active vs. Passive



The peer group allocations may not sum to 100% due to the use of median allocations within each category. The median plan may differ across each category. "Hybrid Managers" consist of funds that include significant allocations to both active and passive management.

"Mixed Assets" may include balanced funds, white label funds, risk-based funds, and target date funds.

*The Fixed Income allocations include Stable Value.

Conclusion

- Recordkeeping and administration fees and expenses as well as investment management fees are reasonable.
- Administrative Reserve Fund balance remains within Policy guidelines.
- No action is recommended at this time.

Ohio Public Employees Deferred Compensation Program
Administrative Fee Policy Statement
Adopted 5/19/2015
Amended 11/17/2015

Purpose

The Administrative Fee Policy Statement (AFPS) is intended to serve as a guideline for the Board to fund Program administrative services in an equitable manner and to provide enhanced fee transparency.

Background

Program expenses and related fees can be split into two general categories; investment services and administrative services. Investment services are expenses incurred by the investment manager and are associated with investing participants' assets. Administrative services include all other services to run the Program such as recordkeeping, accounting, legal, trustee services, website, customer service and participant communications.

Participants are charged asset-based fees to cover the investment services expenses as determined by the investment manager. The investment expenses are collected by the investment manager through the expense ratio, which reduces fund performance accordingly. A portion of these fees are sometimes shared with recordkeepers in the form of revenue sharing to offset the cost of administrative expenses.

The Program does not receive any external funding from participating employers or from the State of Ohio to offset its administrative services expenses. Participants are charged fees to cover all Program administrative expenses and to provide the Program with sufficient operating cash reserves. Historically, the Program received revenue sharing from most mutual fund managers and applied an asset-based fee for collective investment trusts (CITs) and separate accounts. For a period of time, it also applied a small fixed dollar fee. The practice of using revenue sharing to fund administrative expenses is a long-standing industry practice. However, the amount of revenue sharing can vary significantly by each investment option meaning that participants with similar asset sizes might pay different amounts of administrative fees based on their investment choices.

Policy Rationale

The Board studied various options over several months to develop a more equitable methodology for allocating administrative fees to participants.

Per capita or fixed dollar fees were considered, but were not chosen because of the greater impact on participants with small balances while benefiting participants with large balances compared to the current fee practice. Hybrid fees also were considered, but they add complexity to the administration of fees and are more difficult for participants to understand.

Participants are familiar with an asset-based approach as it is currently used for both investment services fees and administrative services fees.

The new AFPS is predicated on:

1. Eliminating mutual fund share classes that offer revenue sharing if non-revenue sharing share classes are available,
2. Rebating revenue sharing to participants
3. Excluding investment options with revenue sharing from all new searches.

4. Charging a separate asset-based administrative fee to participants with a cap on the total amount of fees charged annually, with the exception of certain participants with small account balances for which fees will be waived. Rebating revenue sharing fees to participants will eliminate fee differentials resulting from investment choices while enhancing fee transparency.

Waiving administrative fees for participants with small balances is intended to encourage new enrollment and increased contributions to the Program that will allow the account to initially grow without offsetting fees and to allow the Program to recover more fees from the participants as their account(s) grow over time.

Once a participant's combined account balance reaches a certain asset size, asset-based administrative fees will be applied to the total amount of assets. However, asset-based fees for a participant will be capped at a certain amount annually, so that participants with large balances are not charged excessive fees.

The administrative fee structure provides simplicity so that the fees can be easily communicated, transparency so that participants can determine the amount of fees paid, and the equitable sharing of costs over time by participants.

Fee Policy

The fee policy requires:

1. Rebating all revenue sharing to participants that were invested in investment options providing revenue sharing. Rebates will be disclosed in participant quarterly account statements
2. Charging an explicit asset-based administrative fee that will be disclosed in quarterly account statements
3. Waiving fees for participants with small account balances
4. Capping the maximum annual amount of administrative fees to be charged to each participant.
5. Moving assets to non-revenue sharing share classes, when available
6. Excluding investment options with revenue sharing from future manager searches

Establishing Fees

The new fee structure will become effective following the completion of modifications to the recordkeeping system and communication of the new administrative fee structure to participants.

As part of the review and approval of each annual administrative expense budget, the Board will review the administrative fee structure and determine if any changes are needed to the fees or to the AFPS. The Board may also approve fee changes as needed in accordance with the AFPS.

Whenever the Board changes the structure of administrative fees, this policy should be amended to reflect the new administrative fee structure.

All changes to the administrative fees shall be communicated to participants in a timely and appropriate manner.

PORTLAND

BOISE

CHICAGO

NEW YORK

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Target Date Fund Review

Ohio Deferred Compensation Program (“Ohio DC”)

May 16, 2023



Table of Contents

- Executive Summary
- Market Overview
- Plan Participant Utilization
- Strategy and Performance Summary
- Investment Performance & Risk Review
- Appendix
 - *BlackRock LifePath Historical Performance*
 - *Custom Target Date Fund Considerations*

Executive Summary

The purpose of this presentation is to provide the Board with a review of the Ohio DC's default investment option, the BlackRock LifePath Index Funds.

- **Plan Utilization – The BlackRock LifePath Index Funds are the second most popular investment option in the Plan after the Stable Value Option, making up 19% of total assets.**
 - There is larger adoption of the target date funds among the 40-and-under age group.
 - The LifePath Funds are the designated default investment option for the auto-enrollment program.
 - A minority of participants are invested in multiple target date funds, or a target date fund in addition to one or more core options.
- **Investment Strategy – BlackRock continues to be a leader in the target date space, ranking fourth in target date assets under management.**
 - There were no changes to the investment process, philosophy, or investment objective for any LifePath strategies. RVK remains confident that BlackRock maintains a strong and experienced team.
 - Passive implementation of underlying investment strategies for the funds' strategic allocation.
 - Strategic glidepath allocation is more conservative relative to peer products approaching retirement and more aggressive in the longer-dated vintages.
 - In 2022, BlackRock disaggregated its US Bond allocation, which RVK found to be reasonable and aligned with the stated objectives and philosophy.

Executive Summary

- **Performance – The Funds have performed in-line with their respective custom target date indices.**
 - Performance versus peers has been challenged recently due to glidepath positioning, but most vintages have performed above median over the 3-, 5-, and 7-year trailing periods.
 - The 2035 through 2025 funds—the more conservative fund allocations—have trailed the median of their respective peers over all trailing periods.
- **Fees – The current Institutional Premium share class charges 6 basis points and ranks in the top percentile (lowest fee) versus peers across all vintages.**
- **LifePath Litigation Update –** In early August 2022, lawsuits were filed against a number of large plan sponsors alleging fiduciary breaches due to the continued offering of BlackRock LifePath Target Date Funds on the investment lineup. Three lawsuits have been dismissed so far, with judges generally rejecting the idea that the relative performance of comparator TDF series cited in the allegations represented significant enough evidence for the cases to move forward.
- **No Action is recommended to the Board as a result of this review. RVK recommends retaining BlackRock.**

Target Date Fund Monitoring & Evaluation

Plan sponsors are responsible for prudent selection and monitoring of the plan's Target Date Fund series. While Ohio DC is not subject to ERISA, the DOL offers useful tips for use by plan sponsors and fiduciaries when selecting and monitoring target date funds.

	DOL Target Date Fund Tips
1	Establish a process for comparing and selecting TDFs.
2	Establish a process for the periodic review of selected TDFs.
3	Understand the fund's investments– the allocation in different asset classes (stocks, bonds, cash), individual investments, and how these will change over time.
4	Review the funds' fees and investment expenses.
5	Inquire about whether a custom or non-proprietary target date fund would be a better fit for your plan.
6	Develop effective employee communications.
7	Take advantage of available sources of information to evaluate the TDF and recommendations you received regarding the TDF selection.
8	Document the process.

	Ohio DC
●	Periodic Strategic Reviews
●	Quarterly / Periodic Reviews
●	Quarterly Reviews
●	Quarterly Reviews
●	Periodic Strategic Reviews
●	Ohio DC provides sufficient communications
●	Quarterly / Strategic Reviews
●	Quarterly / Strategic Reviews

- No action necessary
- RVK recommends further review
- RVK recommends a change to the current plan

Market Overview

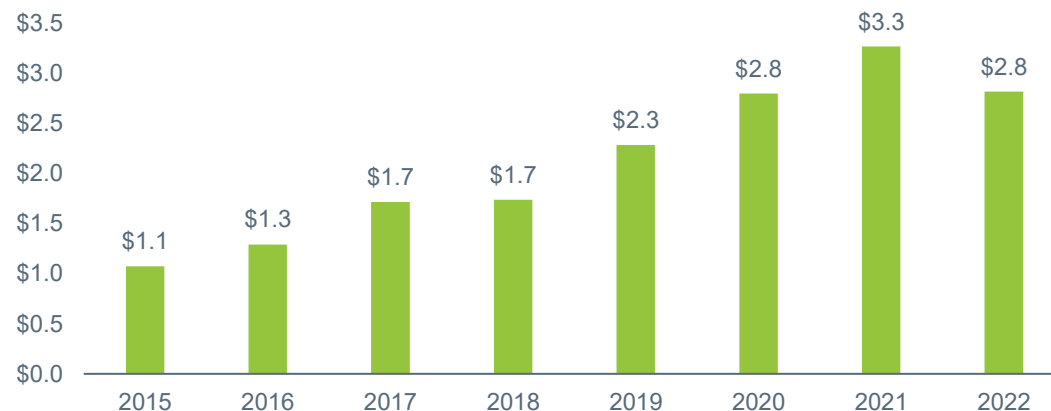
Target Date Funds



Target Date Funds Market Overview

- Target date funds saw \$153.3 billion in positive net flows during 2022; however, total assets fell to \$2.8 trillion due to the market downturn.
- Passive target date series (as currently used by Ohio DC) continue to experience more inflows than actively-managed funds.
- Collective Investment Trusts (CITs) continue to benefit from the trend toward lower fees and accounted for 79% of net inflows in 2022. The market share of CITs grew to roughly 47% as of December 31, 2022, up from less than 20% in 2014.
- The industry continues to be top-heavy, with five asset managers representing ~79% of the market, similar to 2021.
- Only Vanguard and BlackRock LifePath Index made the top five for both CIT and mutual fund flows.

**Target Date Fund Assets
(\$ Trillions)**



Top 5 Target Date Fund Series

Manager	Style	Total TDF Assets (\$ Billions)	Market Share
Vanguard	Passive	\$1,056	36%
Fidelity Investments	Active/Hybrid/Passive	\$399	14%
T. Rowe Price	Active/Hybrid	\$321	12%
BlackRock	Passive/Hybrid	\$249	10%
American Funds	Active	\$224	8%

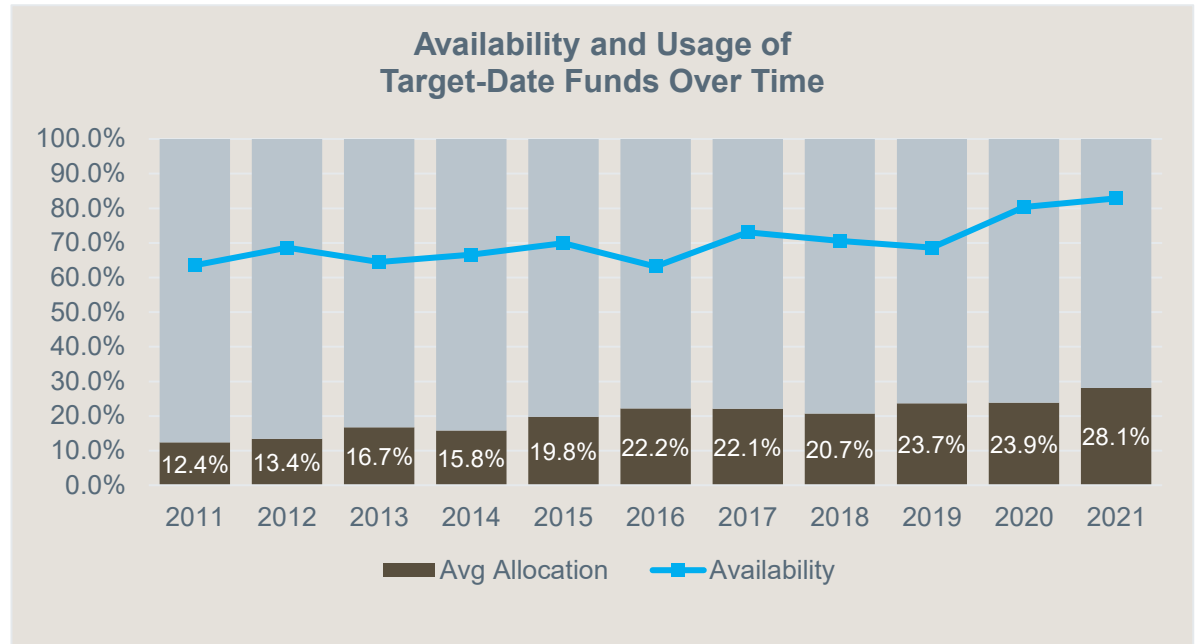
Data shown includes Target Date mutual funds and collective trusts as of 12/31/2022 and is sourced from Morningstar.

Default Investment Alternative Review

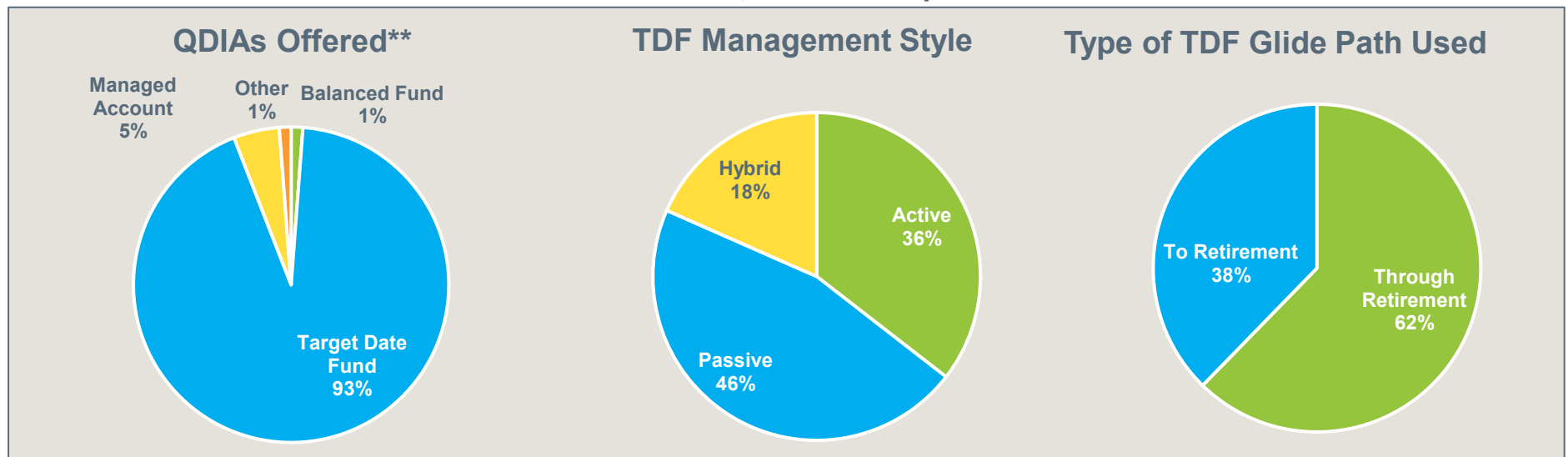
Target Date Fund Trends

PSCA's* 65th Annual Survey Results

- 93% of Plan sponsors with > 5,000+ participants offer TDFs as their Qualified Default Investment Alternative (QDIA).
- The average allocation to TDFs has doubled from 2011 to 2021.
- More plans offer Through glide paths compared with To glide paths.



DC Plans with > 5,000+ Participants



*2022 Plan Sponsors Council of America (PSCA) Annual Survey of Profit Sharing and 401(k) Plans. There were 553 Plans respondents, including 294 401(k) Plans and 259 combination profit sharing/401(k) plans. Of the respondents, 90 had greater than 5,000 participants.

**Breakdown of Type of QDIA Used in Plans that offer one.

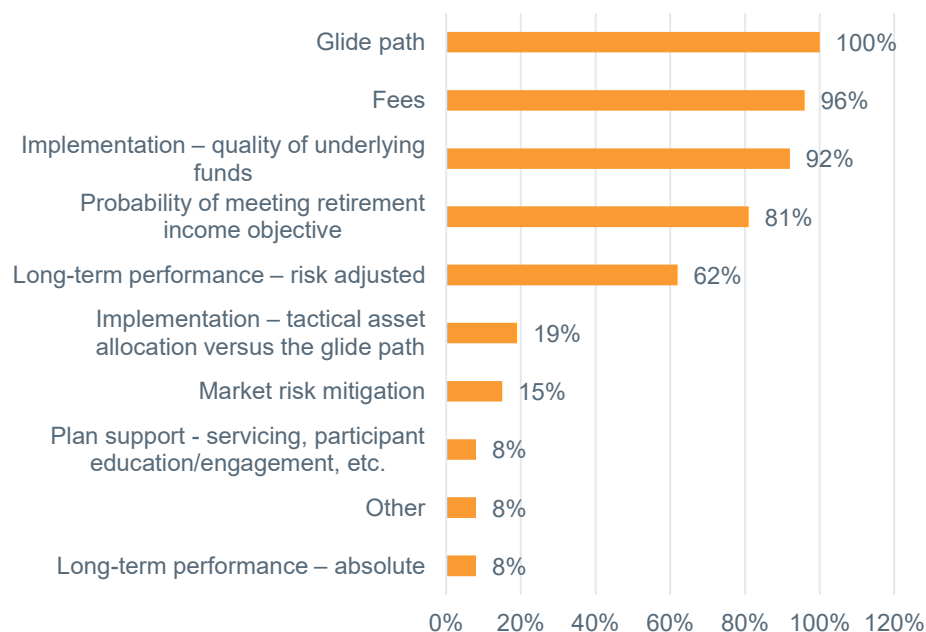
Default Investment Alternative Review

Target Date Funds Trends (continued)

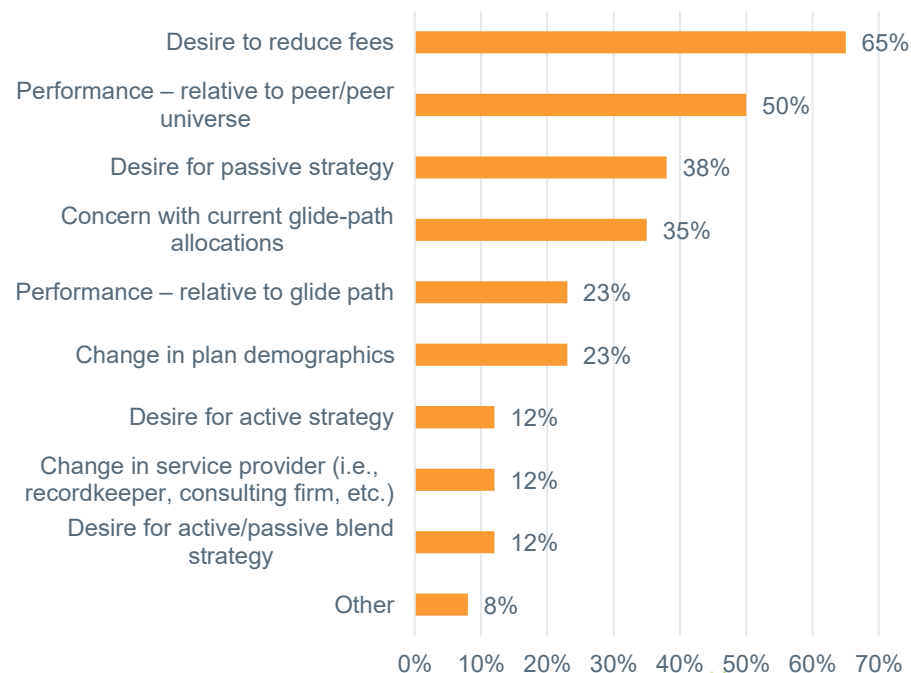
2022 PIMCO DC Consultant Study*

- Glide path structure (asset allocation) and fees continue to be cited as the most important considerations in evaluating TDFs.
 - The quality of underlying funds and the probability of meeting retirement income objectives are getting increased focus as well.
- On the other hand, 65% of clients who expressed interest in changing an existing TDF manager cited a desire to reduce fees, while 50% cited performance concerns.

Important Considerations for Evaluating TDFs



Top Factors for Changing TDF Manager



*2022 PIMCO DC Consultant Study – Large/Mid Consultants. Survey respondents were allowed to select up to 5 factors for Key Factors in Evaluating TDFs and up to 3 factors for Top Factors for Changing TDF Manager.

Plan Participant Utilization

Ohio Deferred Compensation Program

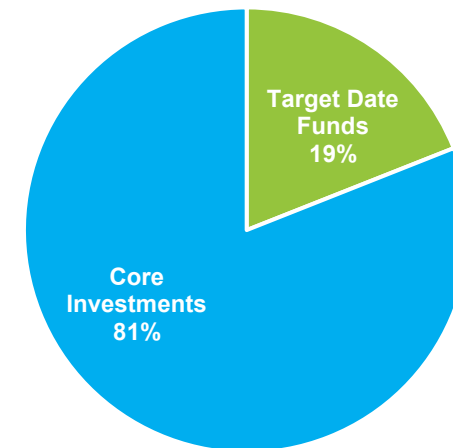


Target Date Fund Utilization

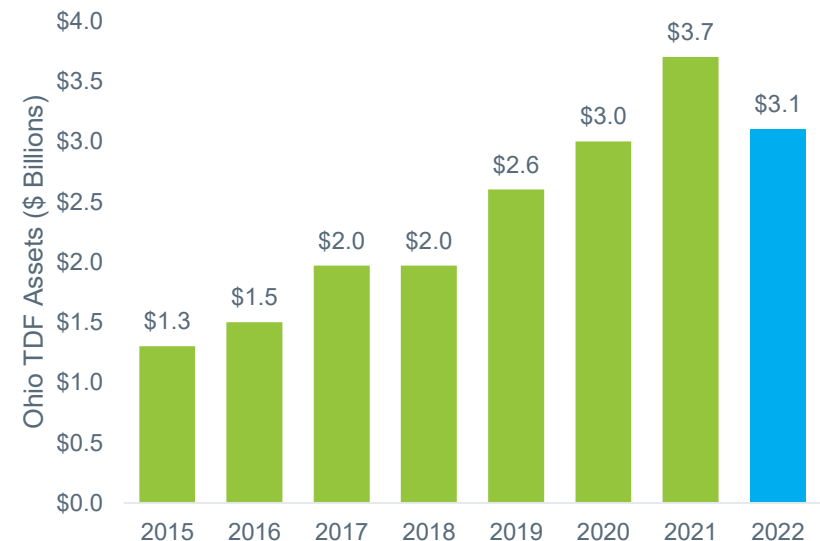
Observations

- The BlackRock LifePath Funds are the designated default investment option for Ohio DC.
- As of March 31, 2023, participants have \$3.3 billion in assets invested across 9 vintages, representing 19% of total plan assets.
- As a result of participant contributions and market returns, total target date assets for Ohio DC have more than doubled since 2015.
- 40% of participants invest in target date funds as their only option.

Plan Assets Breakdown



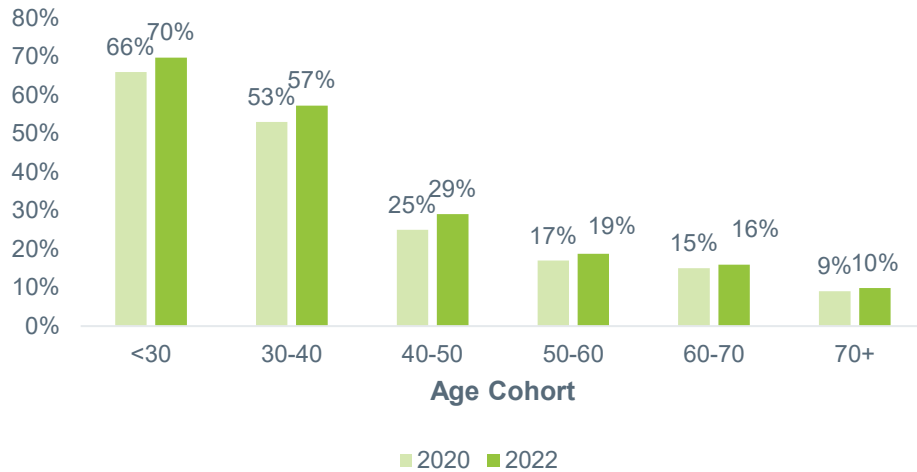
Ohio DC LifePath Growth (\$ Billions)



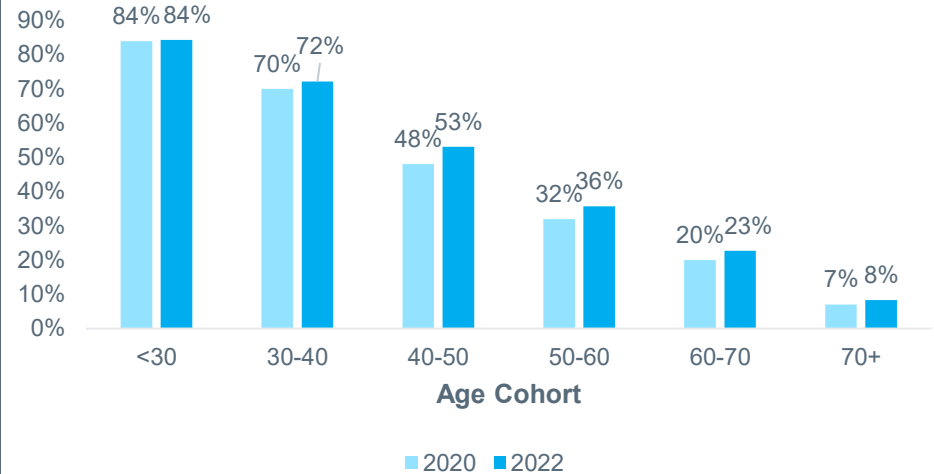
Participant information is shown as of 12/31/2022. Percentage shown is based on all participants that invest in target date funds.

Target Date Fund Utilization

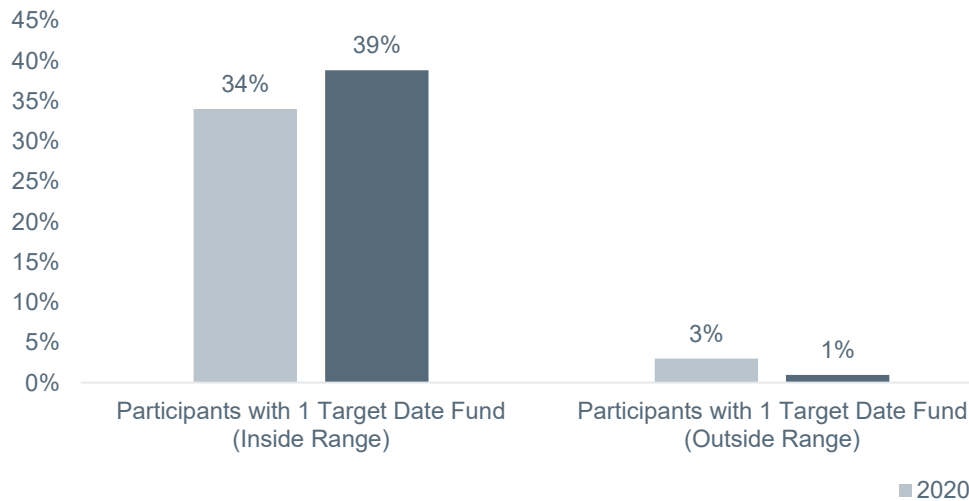
Total Assets in Target Date Funds



Total Assets in Target Date Funds



Target Date Fund Usage*



~15% of total plan participants are invested in multiple target date funds or a target date fund in addition to a non-target date fund.



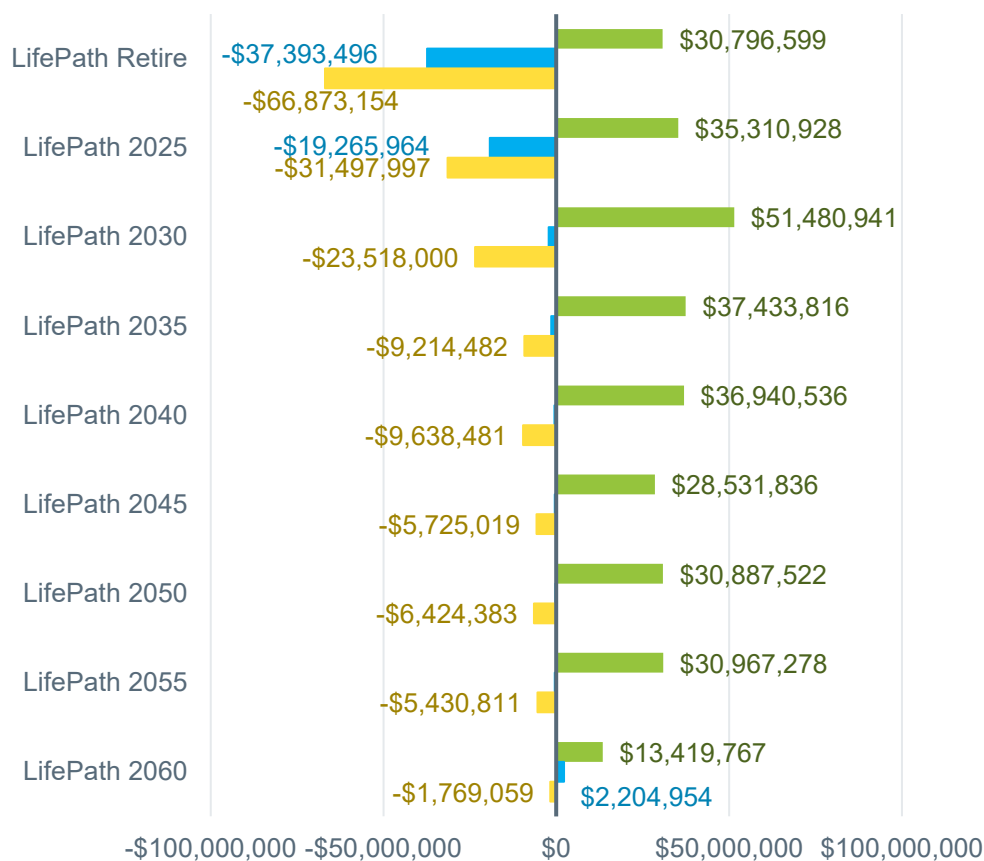
Participant balances are as of 12/31/2020 & 12/31/2022 and were sourced from the Ohio DC Information Technology Department.

*~2% of plan participants are in multiple TDFs and non-TDFs.

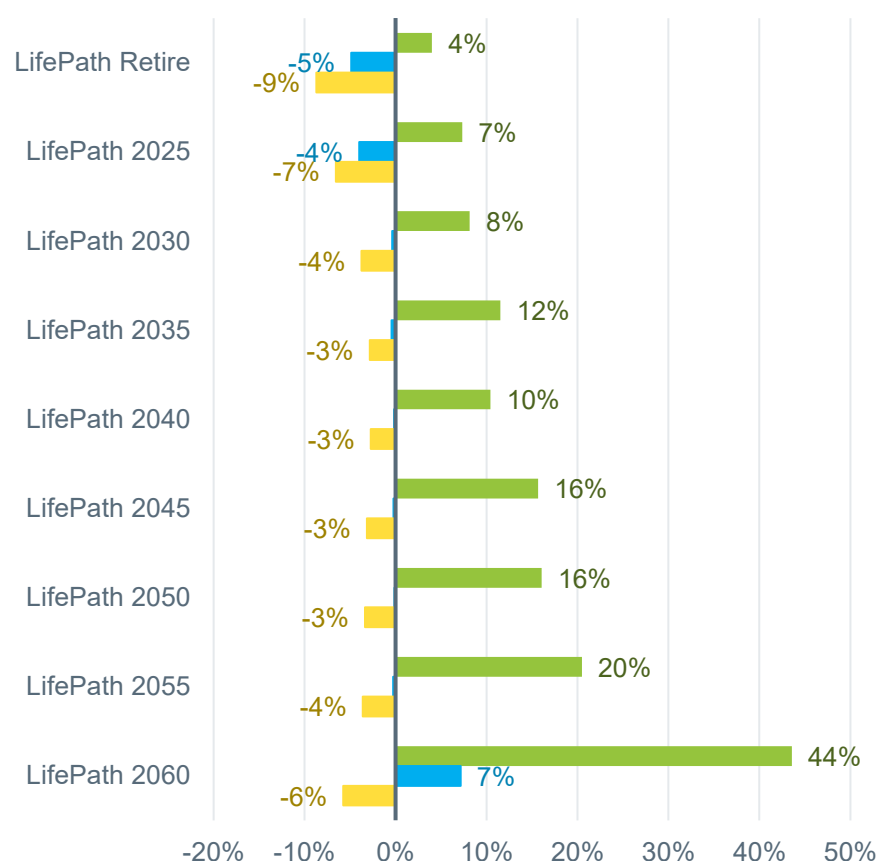
Ohio DC TDF Flows

- Annual 2022 net flows represented \$78 million in positive flows made up of \$296 million contributions, \$160 million in distributions, and -\$60 million in net exchanges.

Cash Flows in Dollars



Cash Flows in Percentage of Market Value



Key: ■ Contributions ■ Net Exchanges ■ Distributions

Cash flows shown represent annual flows 1/1/2022-12/31/2022. Contributions consists of employee contributions and positive net rollovers. Distributions consists of distributions and negative rollovers.

Strategy and Performance Summary

BlackRock LifePath



Ohio DC Philosophy and Design Review Observations

Based on RVK's Understanding of Ohio DC:

Based on previous reviews and our knowledge of Ohio DC participants, RVK believes that Ohio DC intends to provide participants with a low-cost, high quality, diversified target date fund strategy to accommodate a broad base of plan participants.

Ohio DC is designed to provide participants with the opportunity to save for retirement, accumulate assets, and translate account balances into income at retirement through systematic withdrawals, total or partial lump sum distributions, and/or external annuity options outside of the plan.

Suitability of BlackRock LifePath Index Funds:

The BlackRock LifePath Index funds align well with what we believe Ohio DC intends to provide participants:

- The funds specifically address accumulation risk with a higher allocation to risk assets during a participant's early working years and market risk by protecting capital and mitigating volatility for a participant near and at retirement.
- The funds are an appropriate strategy to help support the accumulation and decumulation objectives for a broad participant demographic, including those with varying expected pension benefits, and those with differing expected retirement dates.
- The funds focus is on appropriate asset allocation, as implemented through low-cost passive investments.
- The funds offer additional diversification through the use of broad US and non-US equities, investment-grade fixed income, and inflation-sensitive asset classes.

BlackRock LifePath Review Summary

Investment Strategy	RVK Rating	Comments
Objective	●	To provide stable spending throughout a lifetime by reducing downside risk and keeping participants invested in the market.
Risks Addressed	●	The strategy attempts to address three main risks: market risk, inflation risk, and accumulation risk.
Firm	●	BlackRock is a leader in the DC industry and one of the first managers to introduce a TDF strategy to the market in 1993. It is one of the top 5 providers of target date fund solutions.
Team	●	Each LifePath product has a dedicated portfolio management team accountable for implementation and/or performance decisions away from the glidepath and strategic asset allocation. For the LifePath Index strategy, portfolio management is led by Greg Savage, CFA, Managing Director. Mr. Savage heads portfolio management within the U.S. Index Asset Allocation (“IAA”) Team, which itself is a part of BlackRock’s ETF & Index Investments (“EI”) group. Mr. Savage and his team are responsible for the daily management of the LifePath Index / LifePath ESG Index strategy, directing trades, managing daily flows, and monthly/quarterly rebalancing activities. There have been no recent changes to the investment team.
Philosophy and Process	●	Strategy does not target an income or wealth replacement ratio; instead, it focuses on the ability to deliver stable spending throughout retirement. This approach is based off the human capital theory, which suggests that a participant’s ability to earn income is converted to financial capital over time, and financial assets should de-risk to reflect diminishing human capital.

● No action necessary ● RVK recommends further review ● RVK recommends action

BlackRock LifePath Review Summary

Investment Strategy	RVK Rating	Comments
Asset Allocation	●	The strategy uses forward-looking asset class assumptions with an emphasis on risk management designed to provide a smooth transition of investment risk over time. In 2022, BlackRock made changes to its fixed income exposure across the glide path, disaggregating its US bond allocation in order to focus on credit exposure earlier in life and shifting to rates (i.e., Government bonds) as retirement approaches. Implementation of these changes were completed at the end of May 2022. RVK finds these changes, which were reviewed with the Board in March 2022 (prior to implementation), to be reasonable and aligned with its investment objective and philosophy.
Asset Allocation	●	The strategy uses forward-looking asset class assumptions with an emphasis on risk management designed to provide a smooth transition of investment risk over time.
Asset Classes	●	The funds have broad asset class exposure with allocations to inflation sensitive investments. The funds are limited to liquid assets that can be passively managed.
Fees	●	The fees for Ohio at 0.06% are extremely competitive compared to peers within the TDF universe.

BlackRock LifePath Review Summary

Investment Strategy	RVK Rating	Comments
Flows	●	Over the last five years, BlackRock has consistently experienced positive net cash flows. In 2022, the series ranked fourth in receiving net inflows at an estimated \$20 billion. The majority of that inflow was in the CIT vehicle.
Performance Review	● ● ● ● ●	• The funds have performed in-line with their objectives. • The funds have tracked their composite benchmarks within a reasonable range over time. • The funds early in the glidepath tend to be more aggressive than peers resulting in higher returns and higher volatility compared to peers as measured by the Sharpe ratio. • The funds close to retirement continue to exhibit downside protection, compared to peers. • The funds have performed in-line with peers over longer time periods.

BlackRock LifePath Litigation Update

- In early August 2022, lawsuits were filed against a number of large plan sponsors alleging fiduciary breaches due to the continued offering of BlackRock LifePath Target Date Funds (“TDFs”) on the investment lineup.
 - The lawsuits, which in some cases contained identical language, asserted that LifePath’s performance compared to a select group of competitor TDFs (some of which have active management and all of which have different glide paths) had lagged over a period of several years.
 - In December 2022 and February 2023, three lawsuits (against plans sponsored by Microsoft, Booz Hamilton and Capital One) were dismissed in two courts, but the plaintiffs were given the ability to amend and refile the complaints. In dismissing the lawsuits, the judges rejected the idea that the relative performance of comparator TDF series cited in the allegations (given different strategies, glidepaths, and investments) represented significant enough evidence for the cases to move forward.
 - As of April 2023, Microsoft’s lawsuit was dismissed for a second time “with prejudice” (preventing the plaintiffs from amending the lawsuit again).
 - RVK notes that, while the dismissals are encouraging for plan sponsors, additional cases remain pending in other jurisdictions, and the ultimate path of these lawsuits through the legal system remains uncertain.
- As with all fiduciary decisions, plan fiduciaries should follow a thorough and well-documented process to ensure that the investment options offered continue to be appropriate for their specific population. Plan sponsors should avoid reacting to allegations where the facts and circumstances may not be applicable to their particular plan.
- **RVK continues to maintain a positive research ranking for the BlackRock LifePath TDF strategy. We have no concerns with LifePath’s team, investment strategy, glide path, or performance. No action is recommended as a result of the recent litigation news.**
- As always, a sponsor/committee should continue to review all investment options, including the BlackRock LifePath TDFs, in the context of their participant populations and goals for the plan.

Investment Performance & Risk Review

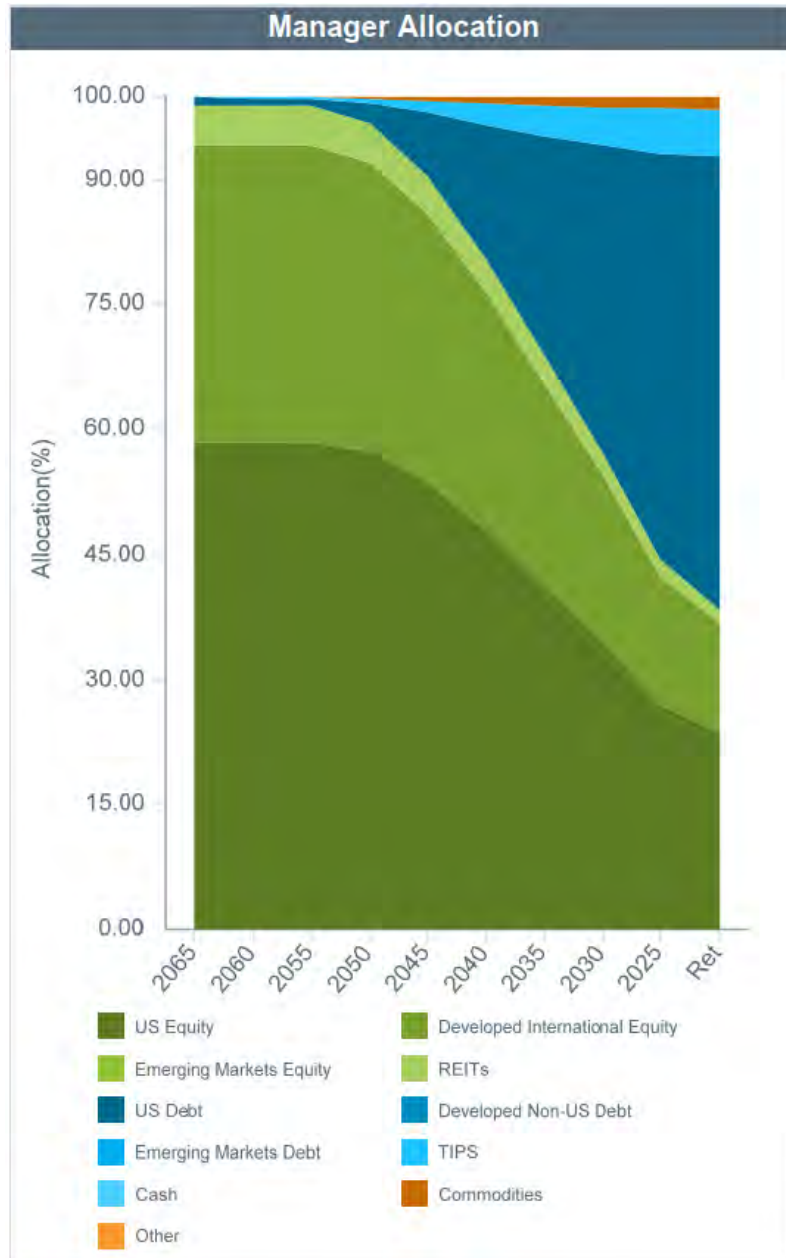
BlackRock LifePath



Ohio DC Investment Lineup

	Tier I	Tier II	Tier III
	Target Date Funds (TDFs)	Passively Managed Options	Actively Managed Options
	Hassle-Free TDFs	Hands-On Investing (Core Menu)	
US Equity	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
International Equity			
Broad International Equity	✓	Non-US Company Stock Index	Non-US Company Stock
Inflation Protection			
Real Return/TIPS	✓		
Fixed Income			
Core Plus Fixed Income			US Bond
Core Fixed Income	✓	US Bond Index	
Capital Preservation			
Stable Value			Stable Value

Asset Allocation



Morningstar as of 12/31/2022.

Characteristics

Glidepath: To

Equity Starting Point: 99%

Equity at Retirement: 40%

Equity Landing: 40%

Roll Down after Retirement (Yrs): N/A

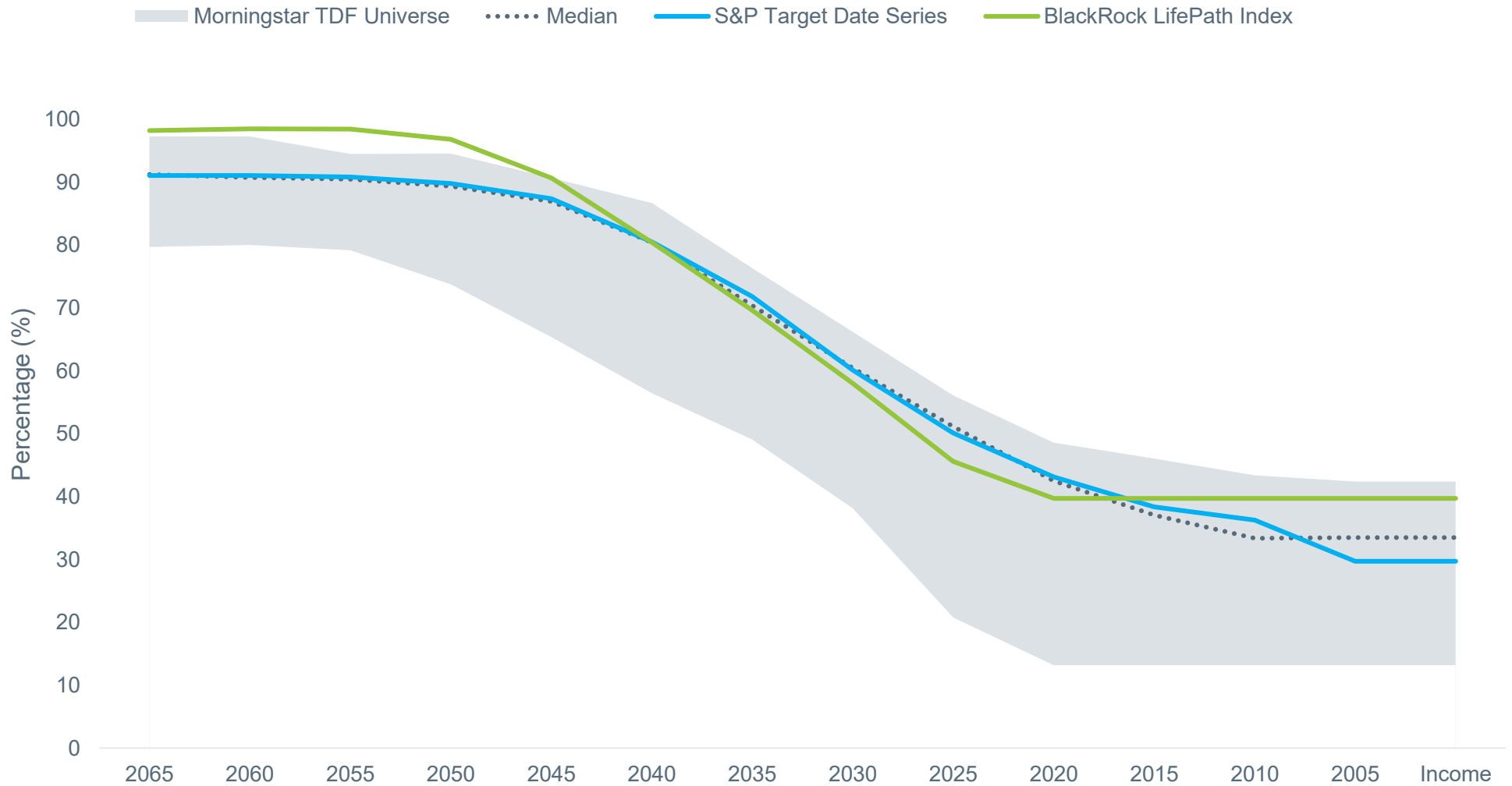
Management Style: 100% Passive

Inflation Allocation: REITs, Commodities, TIPS

Architecture: Closed

Total Equity Allocation vs. Peers

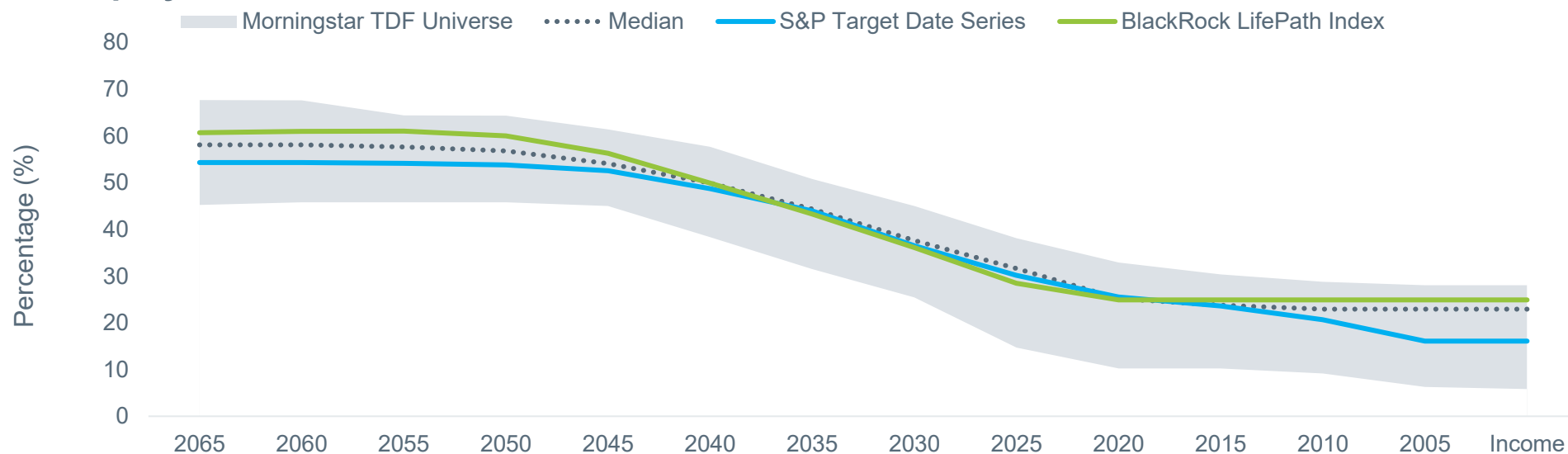
BlackRock Total Equity Risk Assets Glide Path



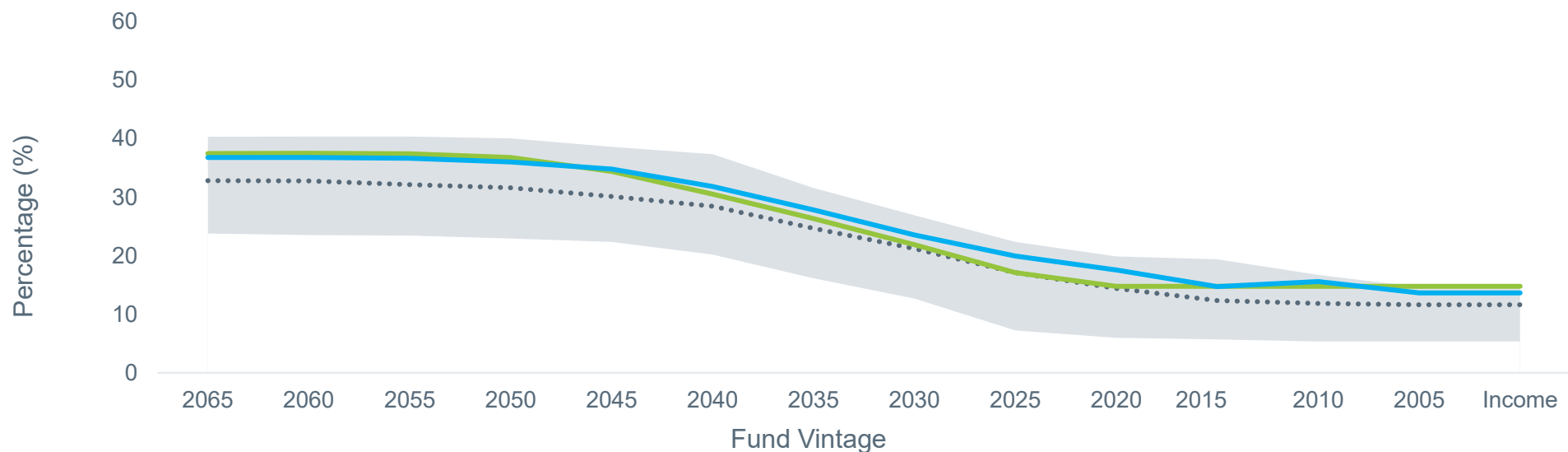
Data sourced from Morningstar for the Mutual Fund Target Date Fund universe, 12/31/2022. Total Equity Risk Assets allocations include allocations to commodities and REITS. The shaded gray area represents the universe's 5th and 95th percentile.

US & International Equity Allocations vs. Peers

US Equity Glide Path



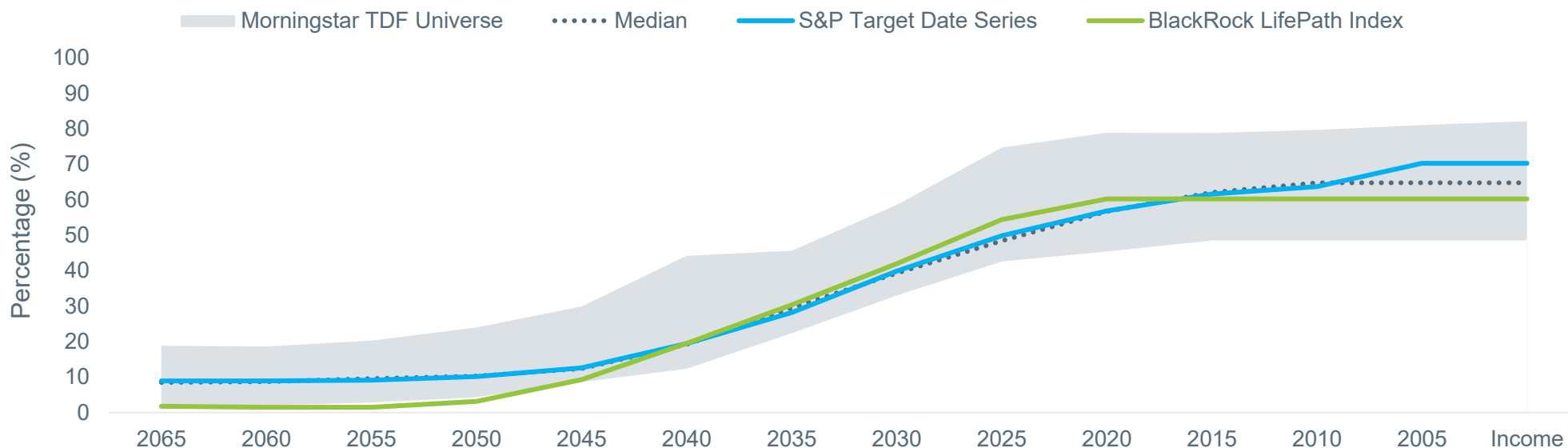
International Equity Glide Path



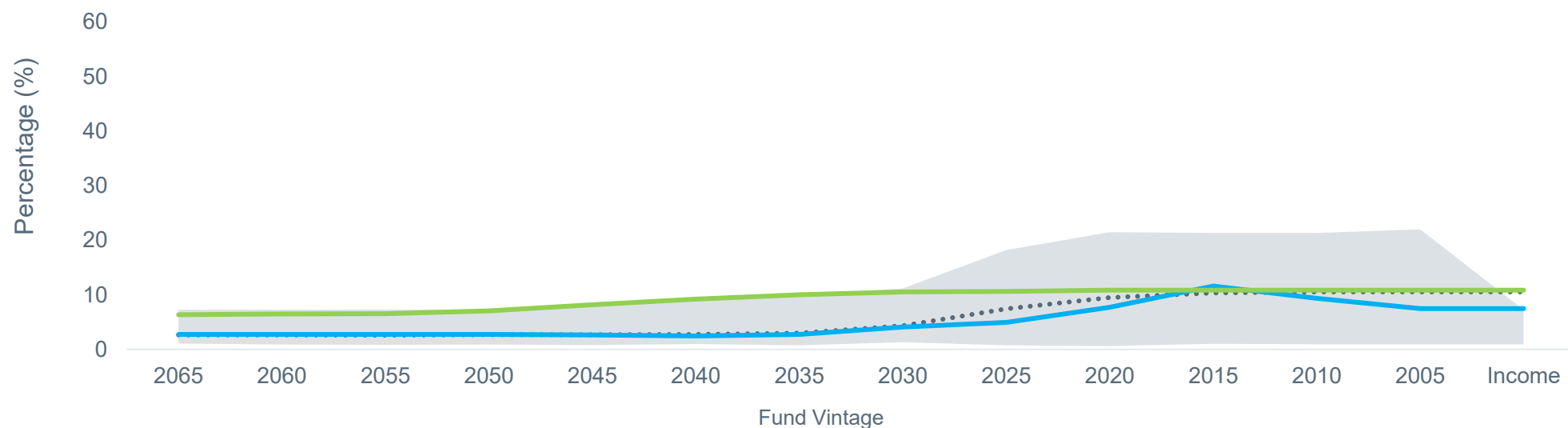
Data sourced from Morningstar for the Mutual Fund Target Date Fund universe, 12/31/2022. Allocations shown for US and Int'l equity include allocations to REITs, and do not include allocations to commodities. The shaded gray area represents the universe's 5th and 95th percentile.

Fixed Income & Other Allocations vs. Passive Peers

Fixed Income & Cash Glide Path



Real Assets (TIPS, REITS, Commodities, and Other) Glide Path



Data sourced from Morningstar for the Mutual Fund Target Date Fund universe, 12/31/2022. Allocations shown for Fixed Income does not include TIPS. The shaded gray area represents the universe's 5th and 95th percentile.

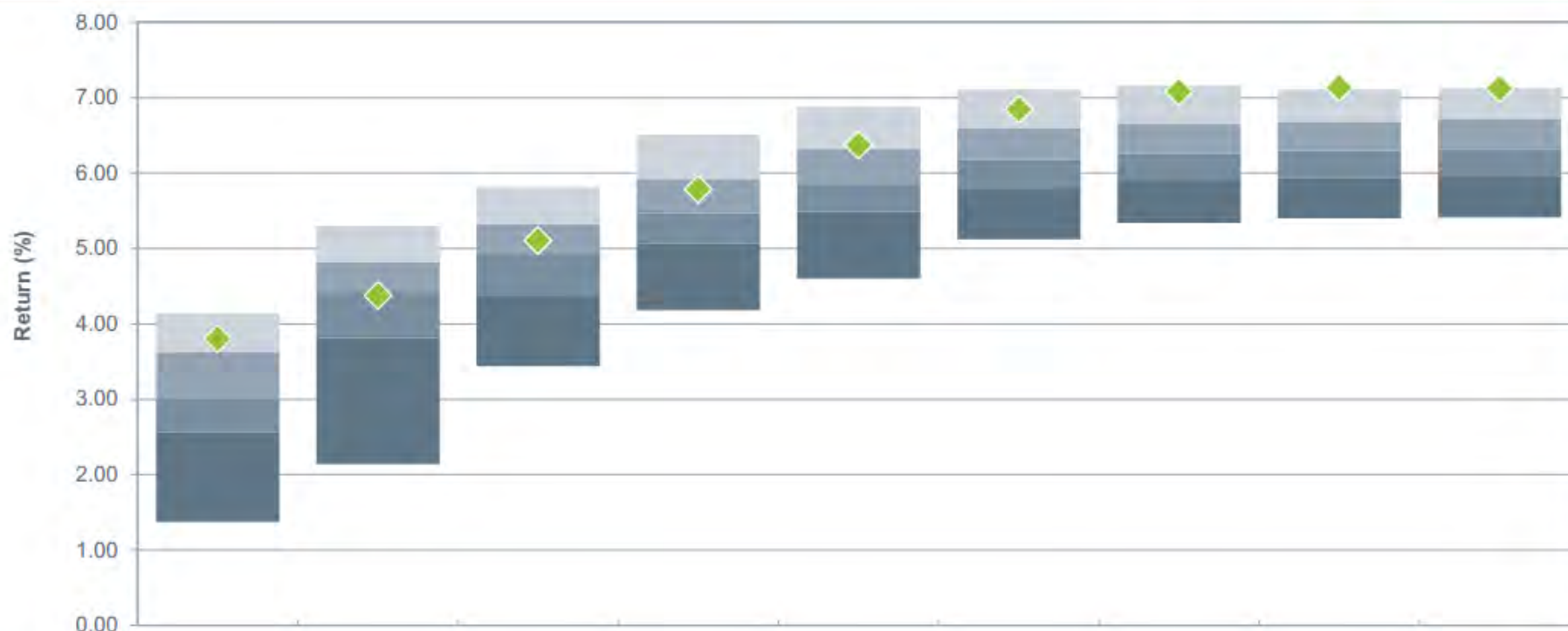
Historical Performance Summary

	Risk Profile		Long-Term Performance					Down Market Experience			
	Equity Allocation	10-Year Standard Deviation	10 Year Annualized Returns	10 Year Sharpe Ratio	10 Year Sharpe Ratio Rank	7 Year Rolling Performance Rank	10 Year Rolling Performance Rank	Q1 2020 Performance Ranking	Q1 2020 Performance	2022 YTD Performance Ranking	2022 YTD Performance
Retirement	38%	6.9%	4.0%	0.50	43	11	16	63	-7.7%	79	-14.6
2025	46%	8.6%	5.3%	0.56	56	57	75	24	-11.3%	43	-15.2
2035	70%	11.3%	6.7%	0.56	61	46	68	44	-17.1%	40	-16.7
2045	91%	13.4%	7.7%	0.56	61	24	50	77	-21.3%	43	-17.9
2055	99%	14.0%	8.1%	0.57	57	16	42	84	-22.1%	50	-18.3

Data as of 12/31/2022. Average allocation to equity represents the average allocation to equity (including REITs and commodity) assets over the accumulation period. Peer group consists of the Morningstar TDF (MF). Rankings are from 1-100, with a 1 indicating the top ranking.

Five-Year Performance vs. Peers

(Longer-Term Experience)



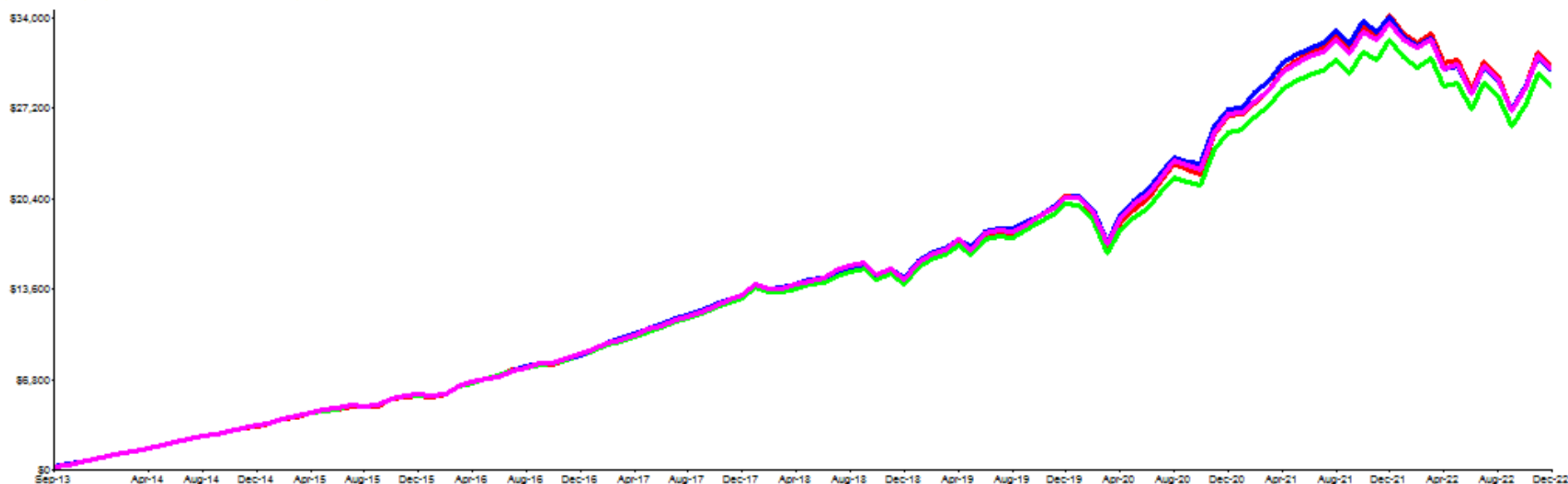
Fund	LifePath Retire	LifePath 2025	LifePath 2030	LifePath 2035	LifePath 2040	LifePath 2045	LifePath 2050	LifePath 2055	LifePath 2060
	Mixed-Asset Target Today (MF)	Mixed-Asset Target 2025 (MF)	Mixed-Asset Target 2030 (MF)	Mixed-Asset Target 2035 (MF)	Mixed-Asset Target 2040 (MF)	Mixed-Asset Target 2045 (MF)	Mixed-Asset Target 2050 (MF)	Mixed-Asset Target 2055 (MF)	Mixed-Asset Target 2060 (MF)
Peer Group									
◆ Fund Return	3.80	4.37	5.10	5.78	6.37	6.84	7.08	7.13	7.12
Median Return	3.01	4.41	4.93	5.47	5.86	6.17	6.25	6.29	6.32
Percentile Rank	16	52	41	32	23	16	8	5	6
Population	114	158	165	159	162	155	158	155	146

Performance shown is net of fees and as of 3/31/2023.

BlackRock Lifepath Index Fund Annual Review

Select Positively Rated Strategies

Ending Value
Monthly Contribution of \$200 – Common Period (Sep 2013 – Dec 2022)



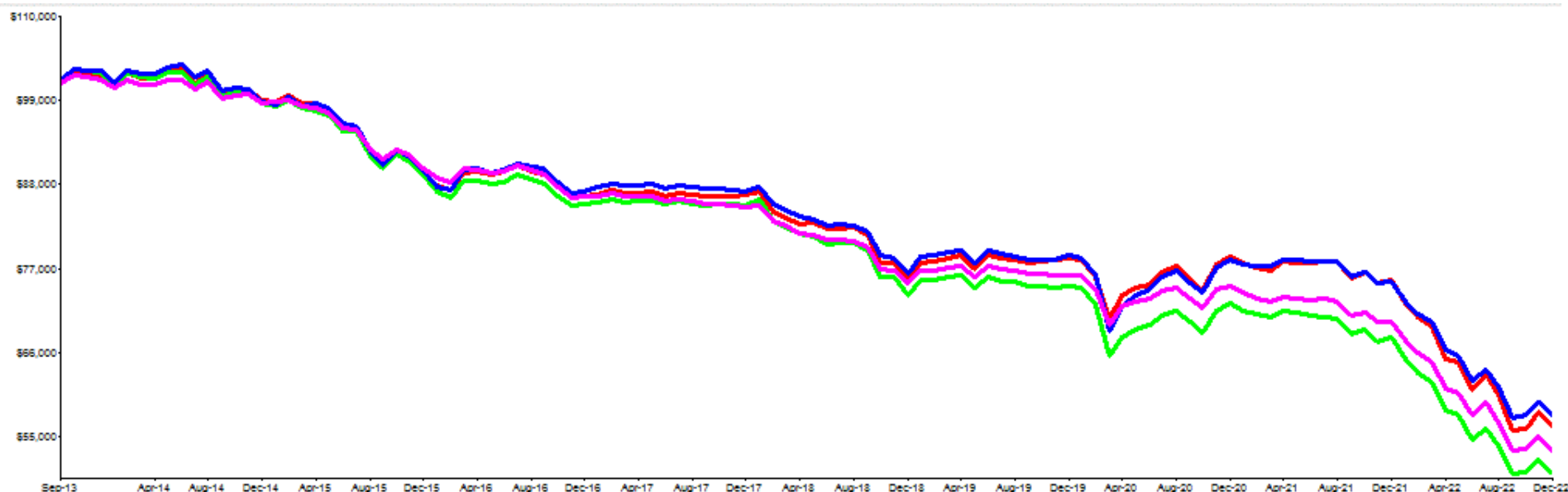
	BlackRock LifePath 2050 ■	JPMIM: JSBF 2050 ■	T. Rowe Price Target 2050 ■	Vanguard Target Retirement 2050 ■
Initial Investment (Sep-13)	\$0	\$0	\$0	\$0
Ending Value (Dec-22)	\$30,251	\$28,827	\$29,994	\$30,108
Total Annualized Return	7.59%	6.99%	7.90%	7.79%
Total Cumulative Return	97.94%	87.83%	103.35%	101.42%
Best Monthly Return	12.43% (Nov-20)	11.70% (Nov-20)	10.85% (Nov-20)	11.26% (Nov-20)
Worst Monthly Return	-14.52% (Mar-20)	-14.35% (Mar-20)	-13.58% (Mar-20)	-13.26% (Mar-20)
Max Drawdown Return	-25.53%	-24.93%	-25.30%	-24.43%
Max Drawdown Period	Jan-22 - Sep-22 (9)	Jan-22 - Sep-22 (9)	Jan-22 - Sep-22 (9)	Jan-22 - Sep-22 (9)
Recovery Period	Oct-22 - Nov-22 (2)	Oct-22 - Nov-22 (2)	Oct-22 - Nov-22 (2)	Oct-22 - Nov-22 (2)

Performance is product specific and net of fees.

BlackRock Lifepath Index Fund Annual Review

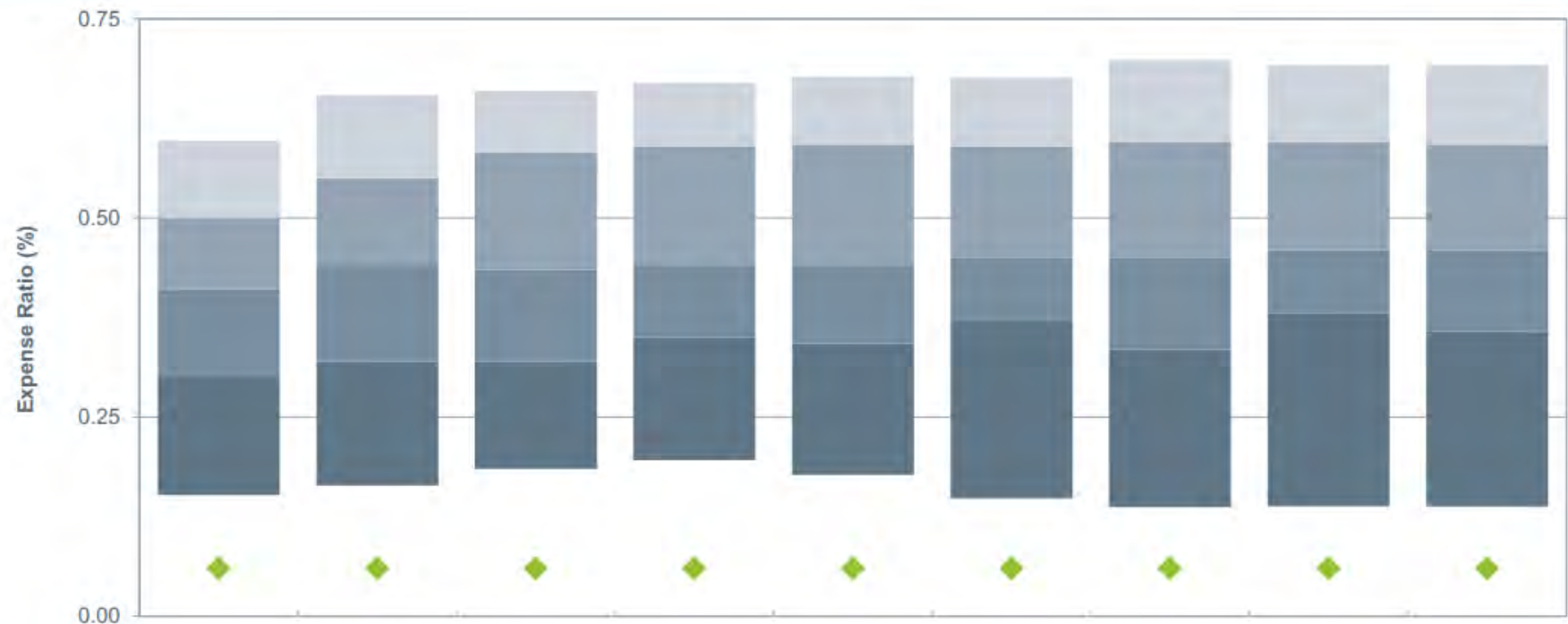
Select Positively Rated Strategies

Ending Value
Monthly Distribution of \$700 – Common Period (Sep 2013 – Dec 2022)



	BlackRock LifePath Income 	JPMIM: JSBF Income Fund 	T. Rowe Price Target 2005 	Vanguard Target Retirement Income 
Initial Investment (Sep-13)	\$100,000	\$100,000	\$100,000	\$100,000
Ending Value (Dec-22)	\$56,292	\$50,210	\$57,772	\$53,028
Total Annualized Return	4.12%	3.40%	4.36%	3.73%
Total Cumulative Return	45.80%	36.62%	48.95%	40.79%
Best Monthly Return	5.61% (Nov-20)	5.36% (Nov-20)	5.75% (Apr-20)	4.35% (Nov-22)
Worst Monthly Return	-6.58% (Sep-22)	-8.26% (Mar-20)	-8.46% (Mar-20)	-5.31% (Sep-22)
Max Drawdown Return	-18.45%	-17.80%	-15.90%	-15.89%
Max Drawdown Period	Jan-22 - Sep-22 (9)	Jan-22 - Sep-22 (9)	Jan-22 - Sep-22 (9)	Jan-22 - Sep-22 (9)
Recovery Period	Oct-22 - Nov-22 (2)	Oct-22 - Nov-22 (2)	Oct-22 - Nov-22 (2)	Oct-22 - Nov-22 (2)

BlackRock LifePath Fees vs. Peers



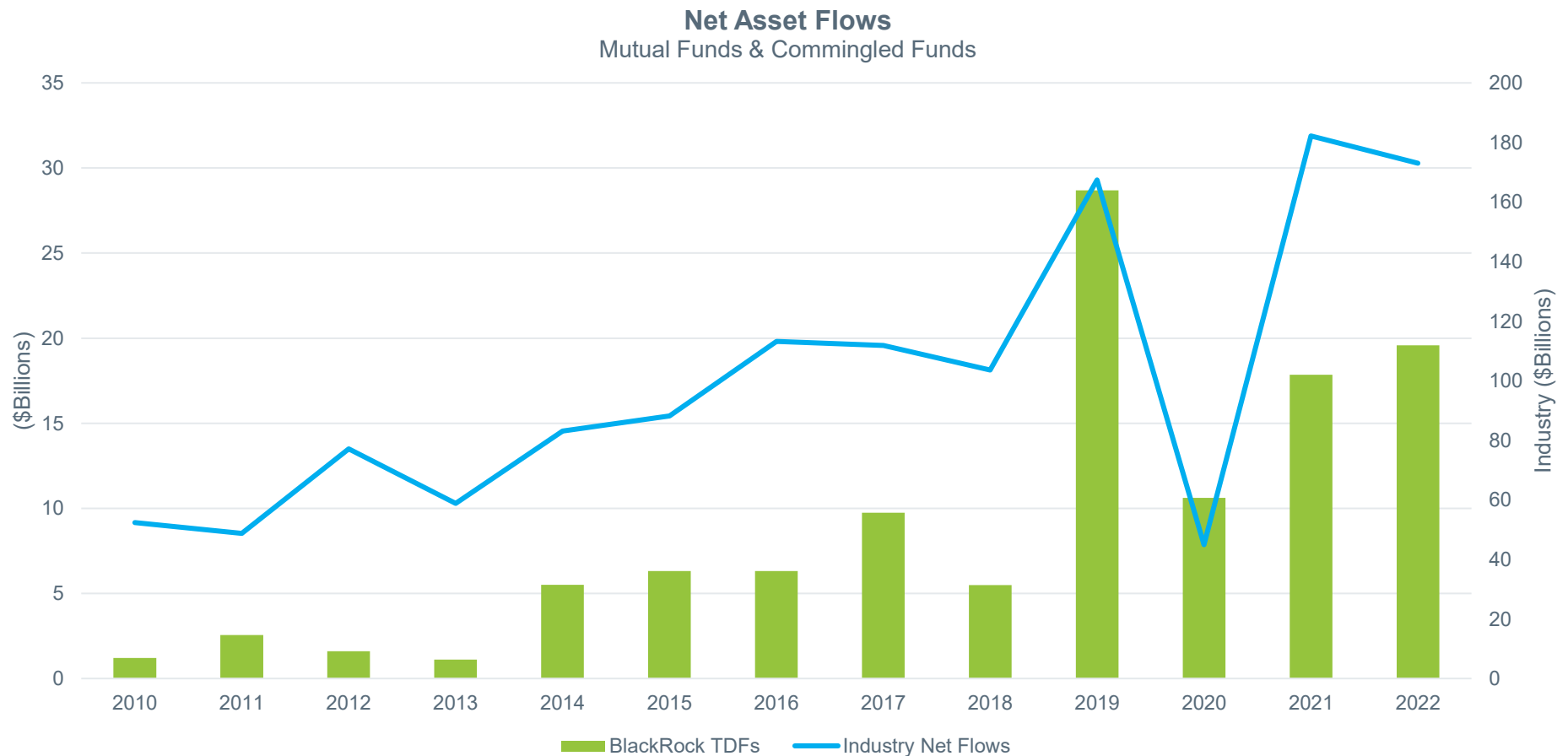
Fund	LifePath Retire	LifePath 2025	LifePath 2030	LifePath 2035	LifePath 2040	LifePath 2045	LifePath 2050	LifePath 2055	LifePath 2060
Peer Group	Mixed-Asset Target Today (MF)	Mixed-Asset Target 2025 (MF)	Mixed-Asset Target 2030 (MF)	Mixed-Asset Target 2035 (MF)	Mixed-Asset Target 2040 (MF)	Mixed-Asset Target 2045 (MF)	Mixed-Asset Target 2050 (MF)	Mixed-Asset Target 2055 (MF)	Mixed-Asset Target 2060 (MF)
◆ Fund Expense Ratio	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Median Expense Ratio	0.41	0.44	0.44	0.44	0.44	0.45	0.45	0.46	0.46
Percentile Rank	1	1	1	1	1	1	1	1	1
Population	27	37	36	37	36	37	35	39	36

Fee peer group shown is as of 3/31/2023.

BlackRock TDF Fund Annual Review

AUM/Flows

- BlackRock TDF AUM across mutual funds and collective investment trusts were \$249 billion as of 12/31/2022.
- Net annual flows in BlackRock TDFs through 12/31/2022 were roughly \$20 billion across the strategies' mutual funds and CITs. Industry net flows declined sharply in 2020 but recovered in 2021 and 2022.



Asset flow data is sourced from Morningstar and is representative of mutual fund and commingled fund estimated flows as of 12/31/2022.

Appendix

BlackRock LifePath Historical Performance



Target Date Fund Performance Review

Summary

- The following slides are intended to compare performance of the BlackRock Lifepath Index fund suite to other target date fund providers which are positively viewed by RVK.
- The table below details key characteristics for the peer TDFs which BlackRock is being compared against.
 - RVK notes that these comparisons use the mutual fund version of each TDF suite in order to provide the most applicable comparison against peers. Ohio DC participants are currently provided access to a collective investment trust version of the BlackRock funds, which has the same glidepath but is offered at a more advantageous fee than the mutual fund version.

Firm Name	Strategy Name	Vehicle Type	Total Fee (basis points)	% Passive Allocation	Equity Allocation 2050 Fund	Equity Allocation 2030 Fund	Equity Allocation Landing	Post-Retirement Rolldown Period (Years)
BlackRock	LifePath Index	Mutual Fund	9 bps	100%	97%	59%	40%	0
Vanguard	Target Retirement	Mutual Fund	8 bps	100%	90%	68%	30%	7
JP Morgan	Smart Retirement Blend	Mutual Fund	19 bps	35% to 83%	94%	63%	40%	0
T. Rowe Price	Retirement	Mutual Fund	34 – 46 bps	9% to 15%	98%	77%	30%	30

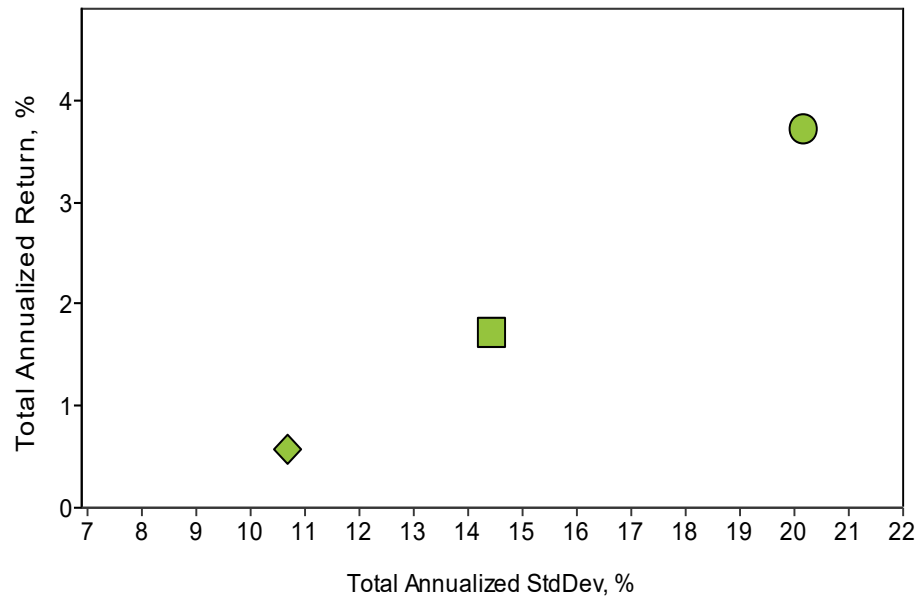
Data is as of 12/31/2022. Equity Allocation includes Commodities.

Target Date Fund Performance Review

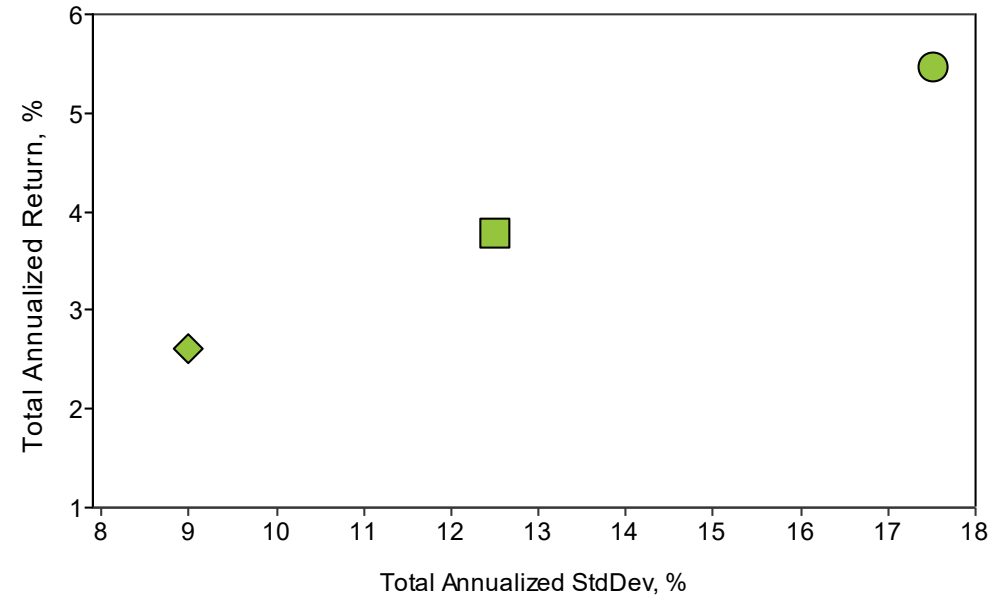
Risk/Return Comparison of Selected Vintages

As of December 2022

Three Year Risk/Return



Five Year Risk/Return



● BlackRock LifePath 2050 ■ BlackRock LifePath 2030 ◆ BlackRock LifePath Retirement

	Annualized Return	Annualized Std. Dev.
BlackRock LifePath 2050	3.72	20.18
BlackRock LifePath 2030	1.73	14.42
BlackRock LifePath Retirement	0.58	10.68

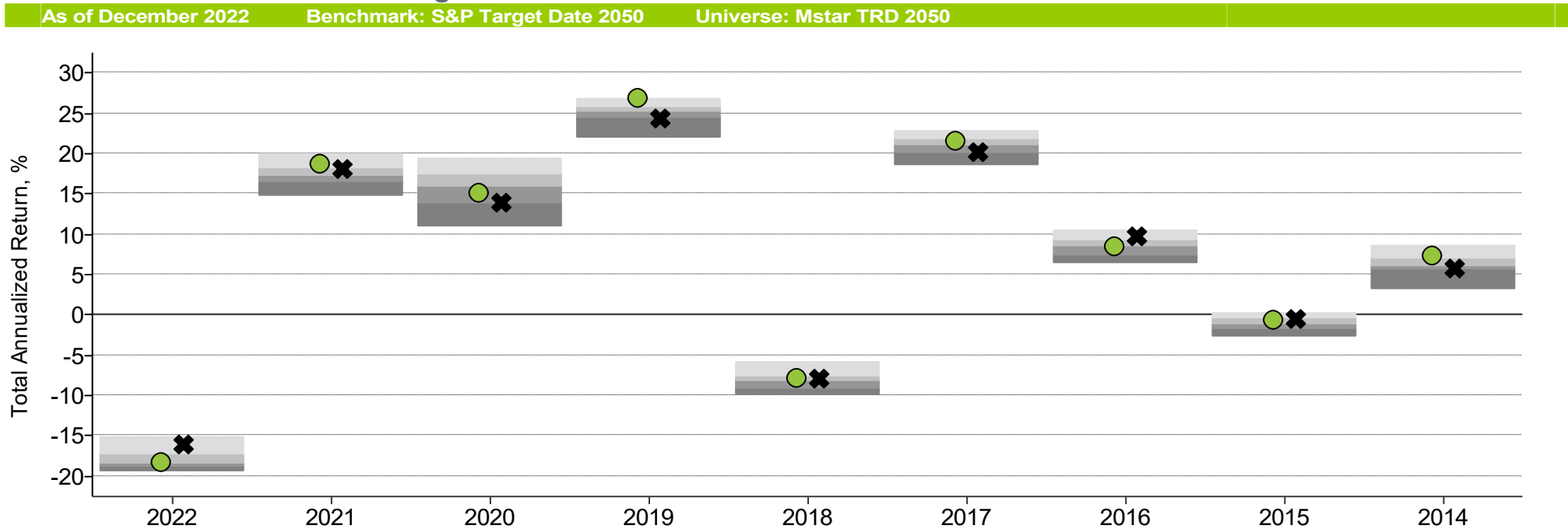
	Annualized Return	Annualized Std. Dev.
BlackRock LifePath 2050	5.45	17.52
BlackRock LifePath 2030	3.78	12.51
BlackRock LifePath Retirement	2.62	9.00

Performance is net of fees.

Target Date Fund Performance Review

Performance Comparison

Calendar Year Returns – Target 2050



● BlackRock LifePath 2050 ✕ S&P Target Date 2050

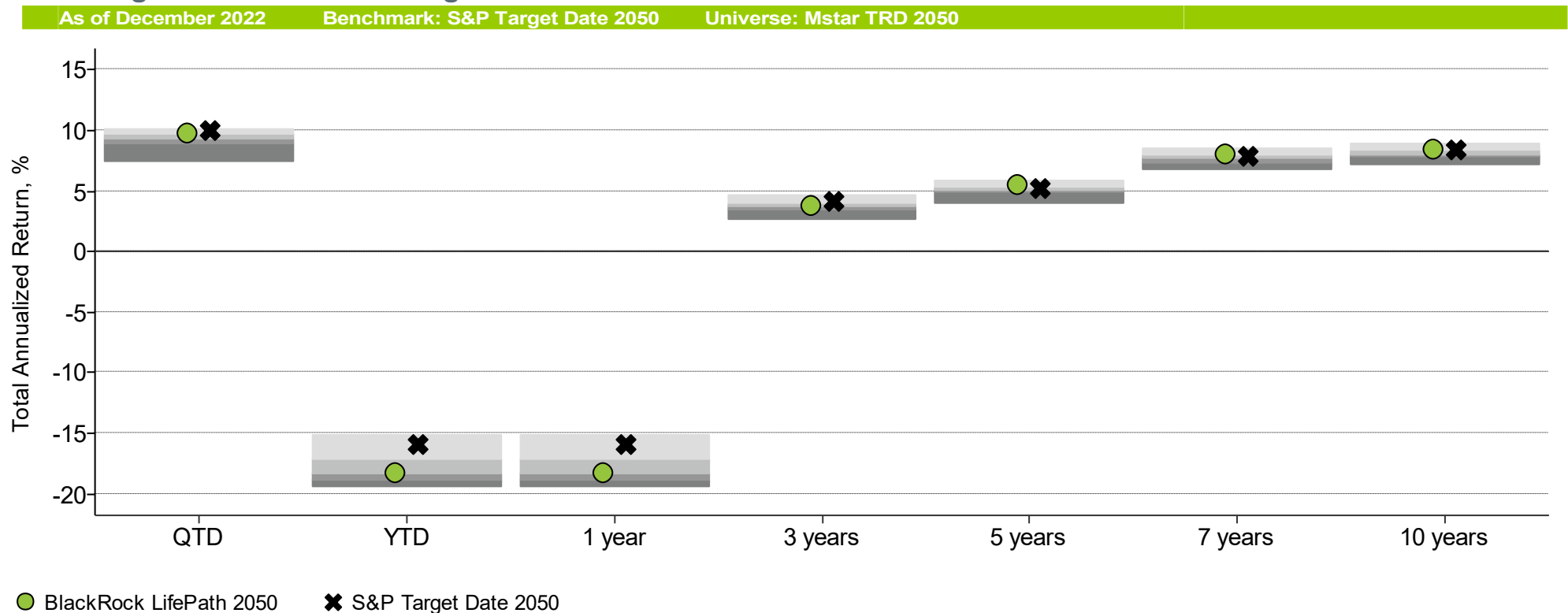
Calendar Year Performance	2022		2021		2020		2019		2018		2017		2016		2015		2014	
	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
BlackRock LifePath 2050	-18.3	55	18.7	14	15.0	65	26.8	6	-7.8	36	21.4	38	8.4	58	-0.7	35	7.3	13
S&P Target Date 2050	-16.0	13	18.0	30	13.9	76	24.4	76	-7.9	46	20.2	76	9.7	17	-0.5	28	5.7	75
MStar TRD 2050 Median	-18.3	50	17.4	50	15.9	50	25.2	50	-8.1	50	21.1	50	8.6	50	-1.1	50	6.2	50

Performance is net of fees.

Target Date Fund Performance Review

Performance Comparison (continued)

Trailing Period Returns – Target 2050



Annualized Performance	QTD		YTD		1 year		3 years		5 years		7 years		10 years	
	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
BlackRock LifePath 2050	9.7	28	-18.3	55	-18.3	55	3.7	46	5.4	21	8.0	29	8.3	30
S&P Target Date 2050	10.0	15	-16.0	13	-16.0	13	4.1	20	5.3	32	7.9	34	8.3	29
MStar TRD 2050 Median	9.3	50	-18.3	50	-18.3	50	3.7	50	5.1	50	7.7	50	8.0	50

Performance is net of fees.

Target Date Fund Performance Review

Performance Comparison (continued)

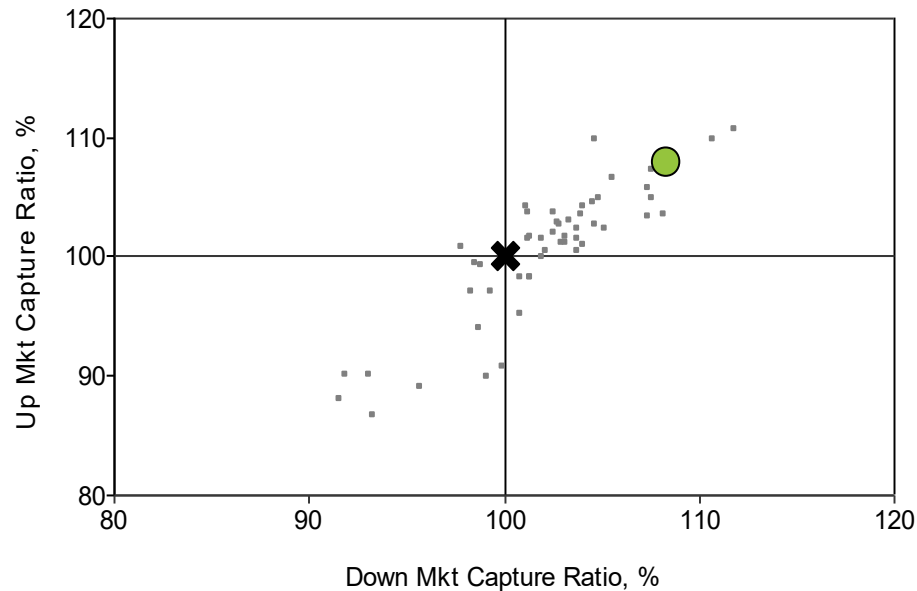
Three- and Five-Year Up/Down Market Capture – Target 2050

As of December 2022

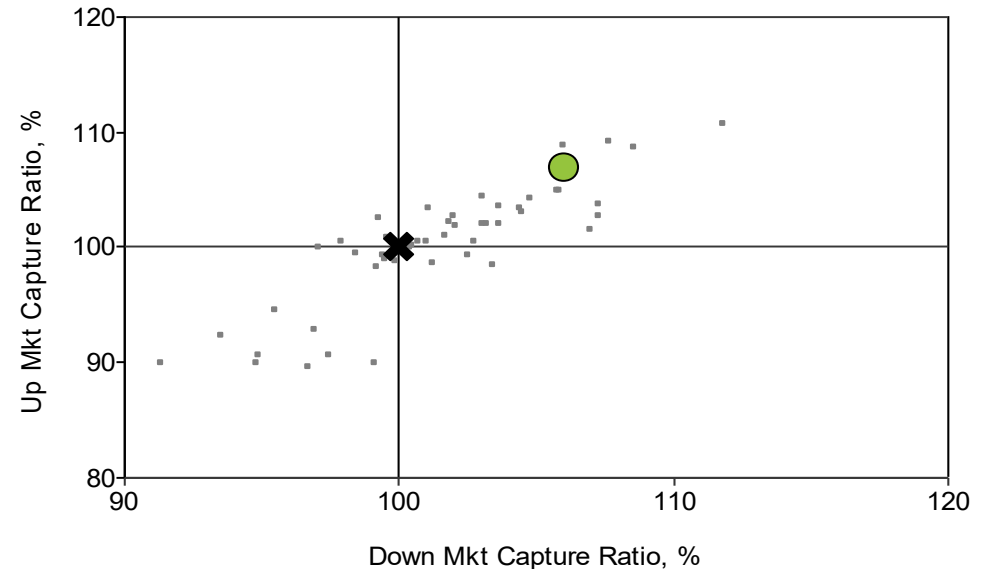
Benchmark: S&P Target Date 2050

Universe: Mstar TRD 2050

Three Year Up/Down Market Capture Ratio



Five Year Up/Down Market Capture Ratio



■ MStar TRD 2050 ● BlackRock LifePath 2050 ✕ S&P Target Date 2050

	Up Mkt Cap Ratio, %	Up Mkt Months	Down Mkt Cap Ratio, %	Down Mkt Months
BlackRock LifePath 2050	107.84	21	108.29	15
S&P Target Date 2050	100.00	21	100.00	15
MStar TRD 2050 Median	101.66	21	102.44	15

	Up Mkt Cap Ratio, %	Up Mkt Months	Down Mkt Cap Ratio, %	Down Mkt Months
BlackRock LifePath 2050	106.91	38	106.04	22
S&P Target Date 2050	100.00	38	100.00	22
MStar TRD 2050 Median	100.61	38	100.96	22

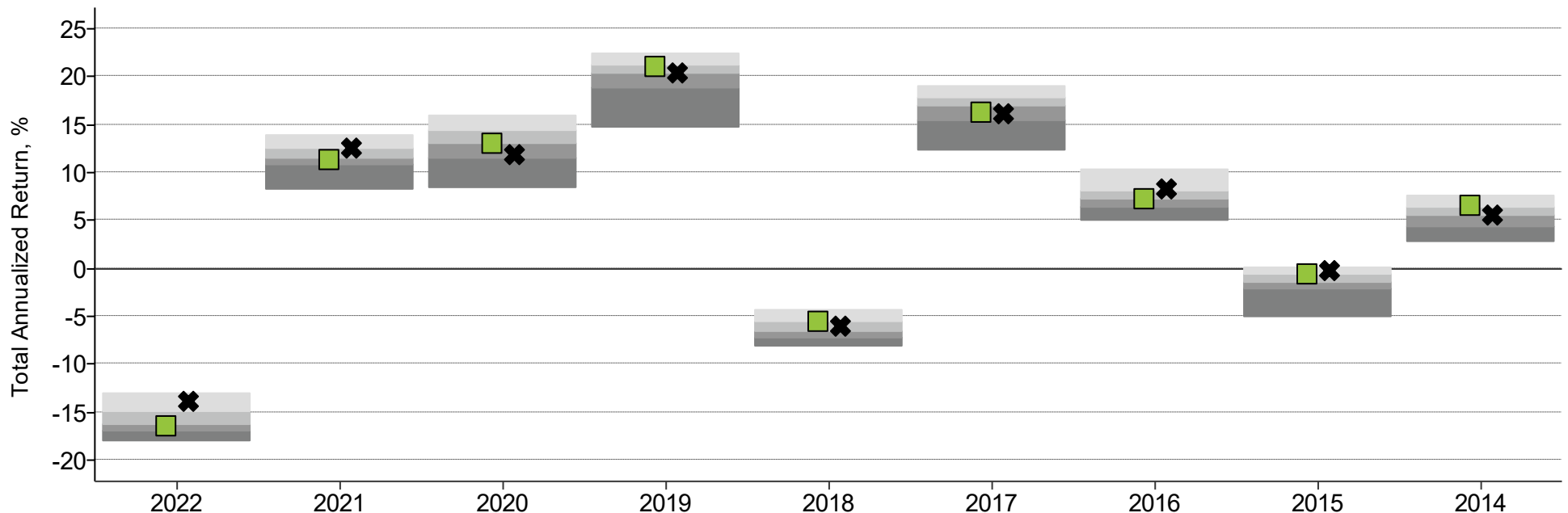
Performance is net of fees.

Target Date Fund Performance Review

Performance Comparison (continued)

Calendar Year Returns – Target 2030

As of December 2022 Benchmark: S&P Target Date 2030 Universe: Mstar TRD 2030



■ BlackRock LifePath 2030 ✕ S&P Target Date 2030

Calendar Year Performance	2022		2021		2020		2019		2018		2017		2016		2015		2014	
	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
BlackRock LifePath 2030	-16.4	52	11.4	54	13.0	52	21.1	32	-5.6	27	16.4	63	7.3	53	-0.5	22	6.6	20
S&P Target Date 2030	-14.0	11	12.6	26	11.9	67	20.4	50	-6.0	37	16.2	65	8.3	18	-0.3	16	5.6	44
MStar TRD 2030 Median	-16.3	50	11.5	50	13.1	50	20.3	50	-6.5	50	17.0	50	7.3	50	-1.4	50	5.5	50

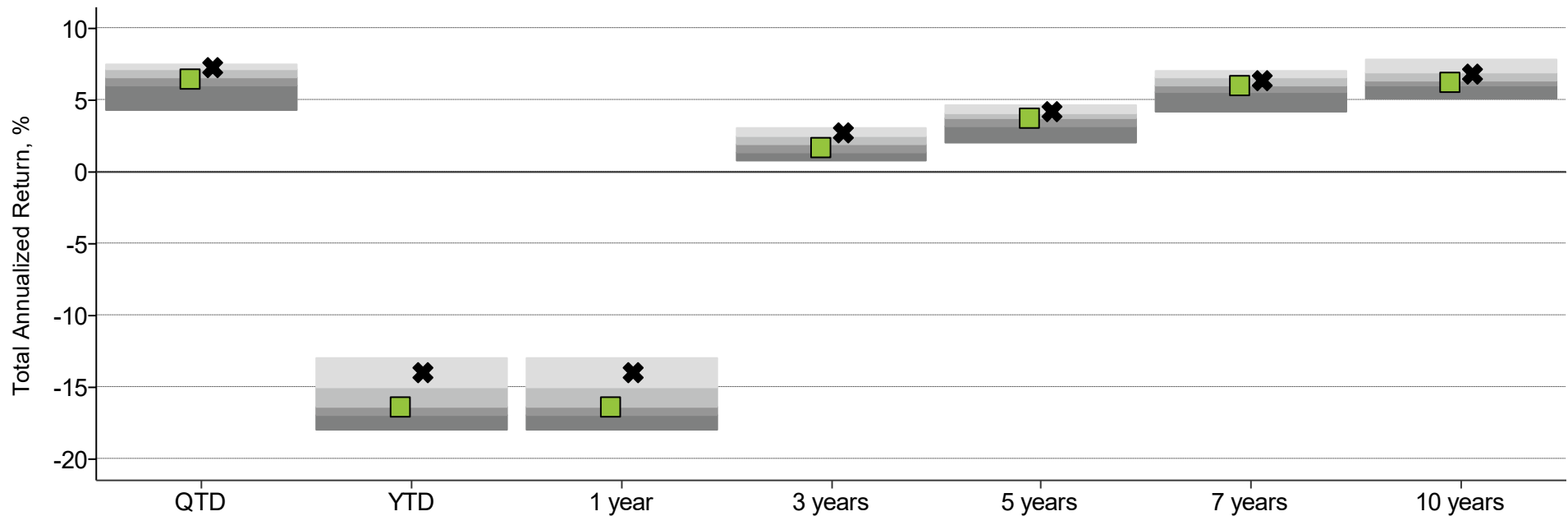
Performance is net of fees.

Target Date Fund Performance Review

Performance Comparison (continued)

Trailing Period Returns – Target 2030

As of December 2022 Benchmark: S&P Target Date 2030 Universe: Mstar TRD 2030



■ BlackRock LifePath 2030 ✕ S&P Target Date 2030

Annualized Performance	QTD		YTD		1 year		3 years		5 years		7 years		10 years	
	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
BlackRock LifePath 2030	6.5	57	-16.4	52	-16.4	52	1.7	64	3.8	48	6.0	52	6.3	59
S&P Target Date 2030	7.3	19	-14.0	11	-14.0	11	2.7	16	4.2	22	6.4	33	6.8	33
MStar TRD 2030 Median	6.6	50	-16.3	50	-16.3	50	2.0	50	3.7	50	6.1	50	6.4	50

Performance is net of fees.

Target Date Fund Performance Review

Performance Comparison (continued)

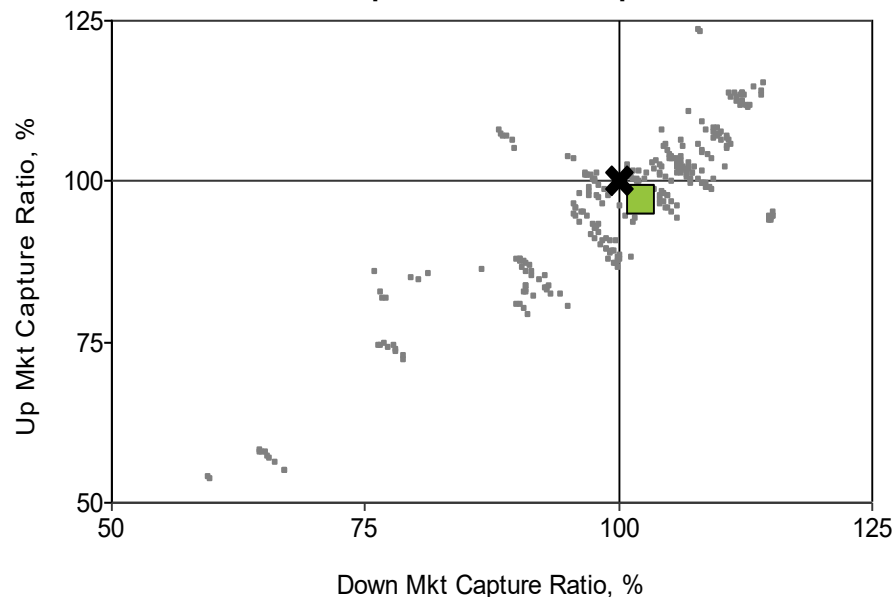
Three- and Five-Year Up/Down Market Capture – Target 2030

As of December 2022

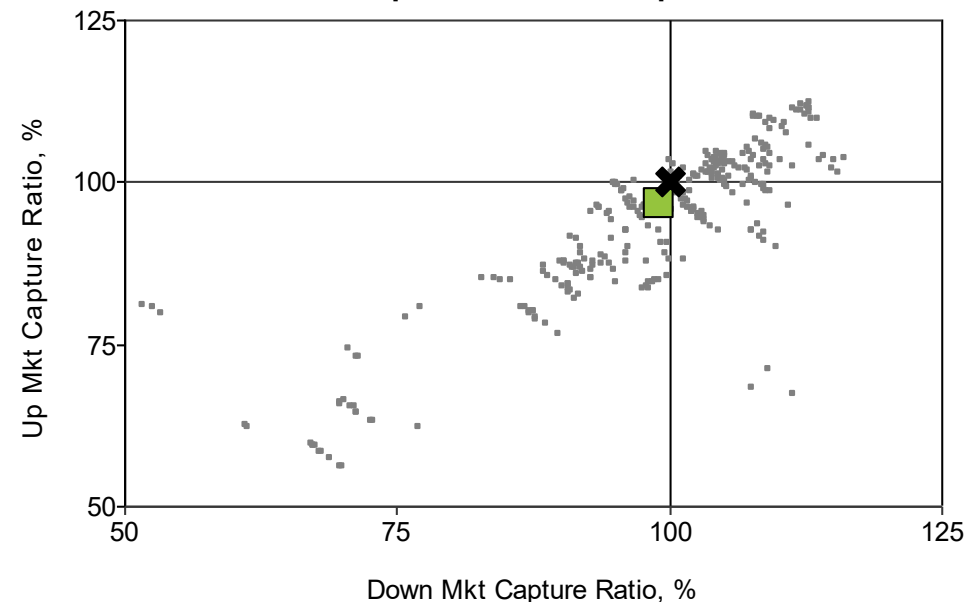
Benchmark: S&P Target Date 2050

Universe: Mstar TRD 2050

Three Year Up/Down Market Capture Ratio



Five Year Up/Down Market Capture Ratio



■ MStar TRD 2030 ■ BlackRock LifePath 2030 ✕ S&P Target Date 2030

	Up Mkt Cap Ratio, %	Up Mkt Months	Down Mkt Cap Ratio, %	Down Mkt Months
BlackRock LifePath 2030	97.16	21	102.13	15
S&P Target Date 2030	100.00	21	100.00	15
MStar TRD 2030 Median	98.73	21	101.83	15

	Up Mkt Cap Ratio, %	Up Mkt Months	Down Mkt Cap Ratio, %	Down Mkt Months
BlackRock LifePath 2030	96.86	37	98.95	23
S&P Target Date 2030	100.00	37	100.00	23
MStar TRD 2030 Median	96.58	32	100.46	20

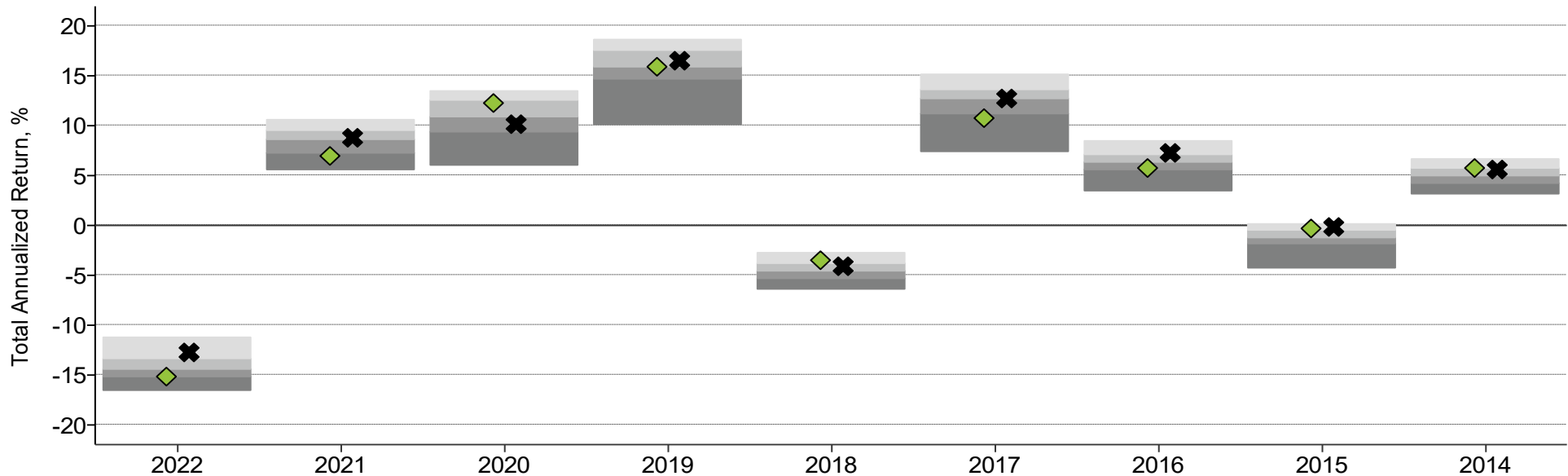
Performance is net of fees.

Target Date Fund Performance Review

Performance Comparison (continued)

Calendar Year Returns – Target 2020

As of December 2022 Benchmark: S&P Target Date 2020 Universe: Mstar TRD 2020



◆ BlackRock LifePath Retirement ✕ S&P Target Date 2020

Calendar Year Performance	2022		2021		2020		2019		2018		2017		2016		2015		2014	
	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
BlackRock LifePath Retirement	-15.2	77	6.9	80	12.2	33	15.9	51	-3.5	16	10.8	80	5.8	68	-0.3	19	5.8	28
S&P Target Date 2020	-12.8	19	8.8	46	10.2	59	16.5	40	-4.2	38	12.8	49	7.2	21	-0.2	14	5.7	31
MStar TRD 2020 Median	-14.5	50	8.6	50	11.0	50	16.0	50	-4.5	50	12.7	50	6.4	50	-1.2	50	5.1	50

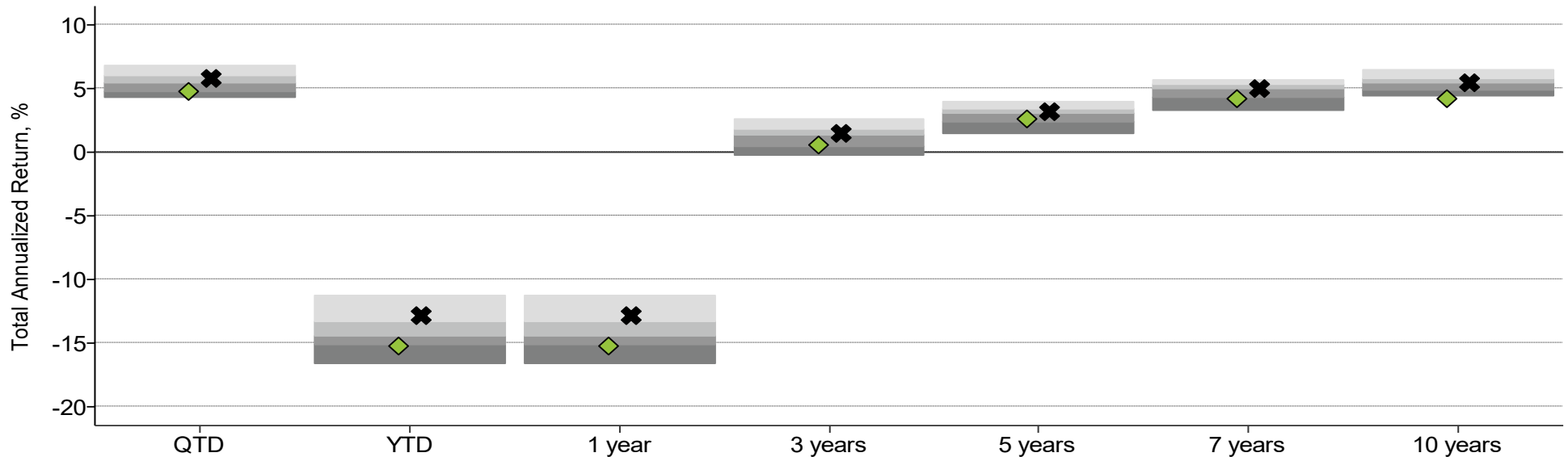
Performance is net of fees.

Target Date Fund Performance Review

Performance Comparison (continued)

Trailing Period Returns – Target 2020

As of December 2022 Benchmark: S&P Target Date 2020 Universe: Mstar TRD 2020



◆ BlackRock LifePath Retirement ✕ S&P Target Date 2020

Annualized Performance	QTD		YTD		1 year		3 years		5 years		7 years		10 years	
	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
BlackRock LifePath Retirement	4.8	80	-15.2	77	-15.2	77	0.6	73	2.6	67	4.2	81	4.2	98
S&P Target Date 2020	5.8	38	-12.8	19	-12.8	19	1.5	43	3.1	42	5.1	51	5.5	49
MStar TRD 2020 Median	5.5	50	-14.5	50	-14.5	50	1.3	50	3.1	50	5.1	50	5.5	50

Performance is net of fees.

Target Date Fund Performance Review

Performance Comparison (continued)

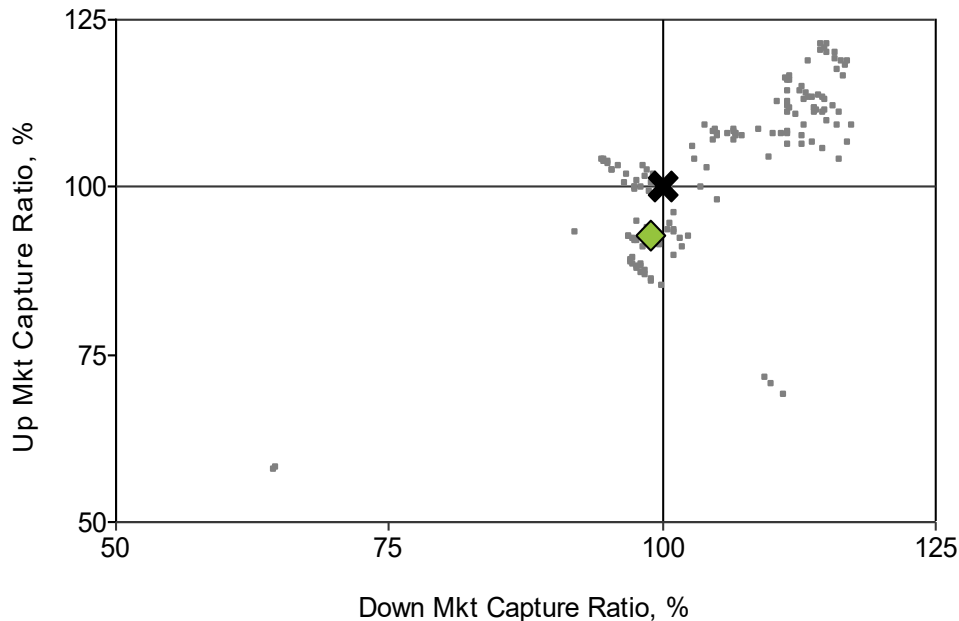
Three- and Five-Year Up/Down Market Capture – Target 2020

As of December 2022

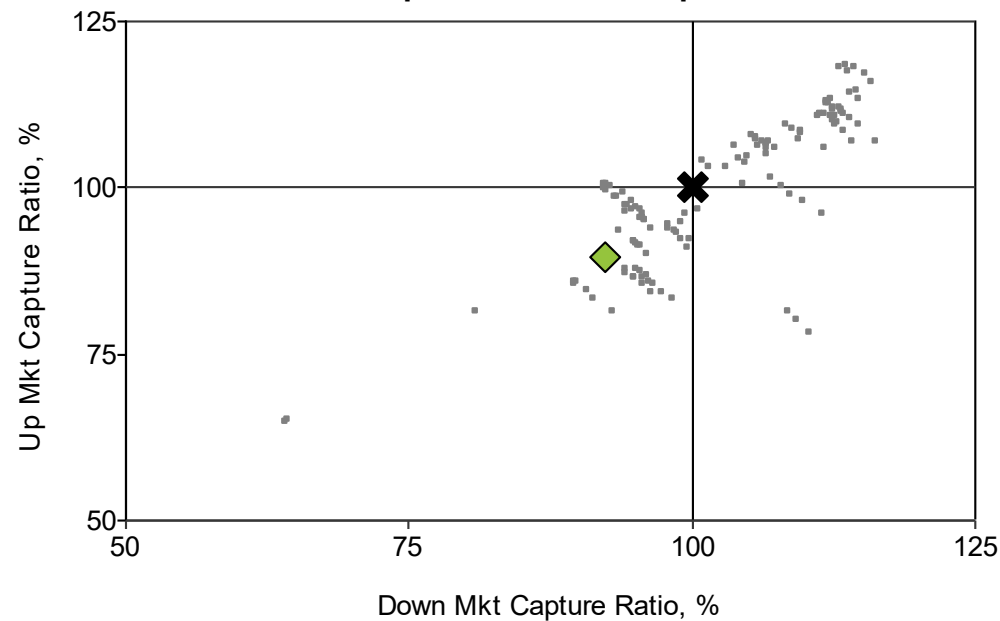
Benchmark: S&P Target Date 2020

Universe: Mstar TRD 2020

Three Year Up/Down Market Capture Ratio



Five Year Up/Down Market Capture Ratio



■ MStar TRD 2020 ◆ BlackRock LifePath Retirement ✕ S&P Target Date 2020

	Up Mkt Cap Ratio, %	Up Mkt Months	Down Mkt Cap Ratio, %	Down Mkt Months
BlackRock LifePath Retirement	92.84	21	98.98	15
S&P Target Date 2020	100.00	21	100.00	15
MStar TRD 2020 Median	105.88	21	104.97	15

	Up Mkt Cap Ratio, %	Up Mkt Months	Down Mkt Cap Ratio, %	Down Mkt Months
BlackRock LifePath Retirement	89.50	37	92.38	23
S&P Target Date 2020	100.00	37	100.00	23
MStar TRD 2020 Median	100.00	37	102.14	23

Performance is net of fees.

Appendix

Historical TDF Reviews & Custom Target Date Fund Considerations



Executive Summary

Historical Reviews

November 2021

- Market Overview & Target Date Trends
- Plan Participant Utilization
- BlackRock LifePath Strategy Review
- BlackRock LifePath Performance Review

August 2020

- Market Overview & Target Date Trends
- Plan Participant Utilization
- BlackRock LifePath Strategy Review
- BlackRock LifePath Performance Review

September 2019

- BlackRock LifePath Target Date Fund Changes Memo

January 2018

- Market Overview & Target Date Trends
- Plan Participant Utilization
- BlackRock LifePath Strategy Review
- BlackRock LifePath Performance Review

2021 Recommendations

1. Retain BlackRock
2. Designation BlackRock LifePath TDF as the default investment for auto-enrollment

2020 Recommendations

1. Retain BlackRock

2019 Recommendations

1. Retain BlackRock

2018 Recommendations

1. Retain BlackRock
2. Transition to lower-fee share class
3. Add the 2060 Fund once the 2020 Fund merges into the Retirement Fund

Custom Target Date Fund Options

- There are different levels of customization available across target date funds:
 - A custom glide path, designed specifically for the plan's participants
 - An off-the-shelf glide path that utilizes open architecture funds, primarily those available on the plan's core investment lineup
- The level of customization will impact:
 - Liability and oversight from the Board
 - Fees
 - Internal resources
 - Operations
 - Evaluation and monitoring practices
- Management and Oversight
 - The use of a non-discretionary investment advisor (typically operating as an ERISA 3(21) fiduciary)
 - The use of a discretionary investment manager (typically operating as an ERISA 3(38) fiduciary)

Considerations of Off-the-Shelf vs. Custom TDFs

- Custom TDFs allow for building custom glide paths to accommodate unique attributes of the plan's underlying demographics and/or leverage custom underlying investment options. However, other factors to consider are the expected administrative burden, oversight considerations, and costs.
- There are a wide variety of glidepath designs and objectives available in the off-the-shelf TDF marketplace, and plan sponsors generally can receive a more cost-effective TDF solution from an off-the-shelf product.

	Off-the-shelf TDF	Custom TDF
Potential for custom glide path	X	✓
Ability to Leverage Investment Menu Options	✓	✓
Financial Cost	Investment management fees	Investment management fees + 3(38) fees + CIT unitization fees + other operational costs + Potential administrative oversight costs
Minimal Administrative Resources	✓	x
Minimal Additional Oversight Responsibilities	✓	oversight of any new building blocks and the 3(38) service provider

Operational Complexities of Custom TDFs

Operational and Oversight Considerations

There are additional operational and oversight considerations that a plan's fiduciary should be aware of before considering custom solutions:

	Custom Solutions
Responsibility / Oversight	Additional responsibilities may include: • Fund asset allocation decisions • Fund operations (error correction policies, fund accounting and reporting, connectivity to recordkeeper) • Benchmarking custom solutions • Periodic reviews of 3(38) services **Some of these responsibilities can be delegated to a 3(38) manager
Administrative / Operational Duties	Additional responsibilities include: • Review / upload custom fund fact sheets • Ensure timely reporting of custom CITs to recordkeeper • Additional legal reviews (and costs) **Some of these responsibilities can be delegated to a 3(38) manager
Resources / Staffing Costs	• Potential for additional staff time commitments associated with implementation, ongoing monitoring, and periodic reviews. • Potential for additional coordination and collaboration between the plan's consultant, custom TDF provider, and recordkeeper. • Potential for engagement with an external party to review the plan's 3(38) manager's services.

Off-the-Shelf vs. Custom Target Date Fund

Evaluation & Considerations

- ☐ Are there unique characteristics about the plan's attributes and participant demographics that may justify a custom glide path?
- ☐ Is there a desire by the Board to leverage the due diligence and oversight of the investments within the core menu and utilize open-architecture across the target date fund option?
- ☐ Is there a desire by the Board to implement the asset allocation of the target date fund differently than what is available through the current approach, or an alternative off-the-shelf option?
- ☐ Is there a desire by the Board to be more involved in determining and selecting the underlying asset classes and investment managers within the target date fund option?
- ☐ From an operational standpoint, does the current record keeping system have the ability to facilitate a custom target date fund series?
- ☐ How would investment management costs be impacted? Will they decrease, increase, or stay the same?

PORTLAND

BOISE

CHICAGO

NEW YORK

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Quarterly Investment Performance Analysis

Ohio Public Employees Deferred Compensation Program

Period Ended: March 31, 2023



TABLE OF CONTENTS

CAPITAL MARKET REVIEW

This section is intended to review capital markets in general. It highlights key events that impacted the markets during the quarter, main economic indicators, and a brief summary of the performance of different US Equity, International Equity and Fixed Income sectors. It concludes with an exhibit (often referred to as a quilt chart) that shows the historical and YTD performance of major market indices representing the broad range of investable asset classes. To find additional information and definitions of the main key economic indicators and exhibits, please reference the Addendum & Glossary.

PLAN PERFORMANCE REVIEW

This section provides a review of Ohio Public Employees' asset allocations across each of the investment tiers, followed by investment option comparative performance against appropriate benchmarks and peer groups, and a peer group analysis of the options' investment management fees. To find additional information on the indices shown in this section, please reference the Addendum & Glossary section.

INVESTMENT MANAGER PROFILES

This section provides product-specific performance, risk statistics, and investment holdings analyses for Ohio Public Employees' investment options. To find additional information and definitions of the statistics and exhibits shown in this section, please reference the Addendum, Investment Policy, & Glossary section.

INVESTMENT POLICY STATEMENTS

This section includes both the Ohio Investment Policy Statement and Ohio Stable Value Option Investment Policy Statement. If there are any recommended edits, it may also include a summary of the recommended changes and/or the specific redlined edits.

ADDENDUM & GLOSSARY

The Addendum provides reference material to better understand the report, including historical changes to the Program, general performance comments, and index definitions. The Glossary covers all terms referenced throughout the performance report.

FOLLOW-UP ITEMS (AS NEEDED)

This section includes any follow-up items from the previous meeting material or supplemental material as needed.

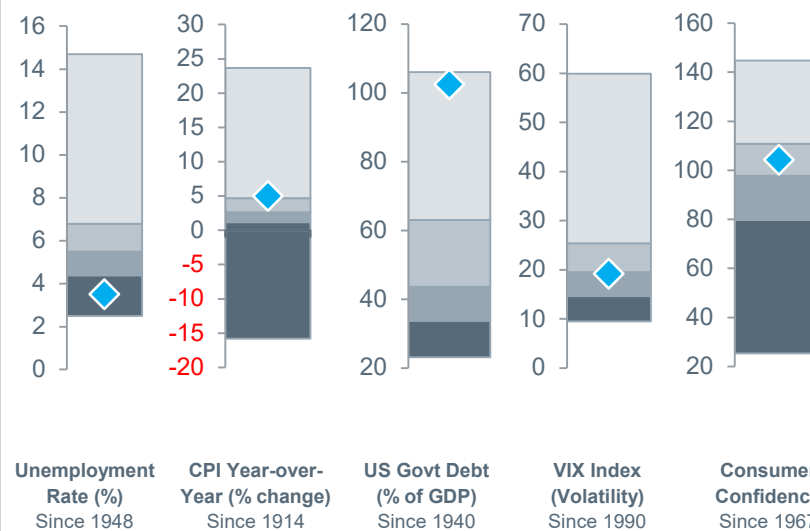
Capital Markets Review



First Quarter Economic Environment

During Q1, both defensive and risk assets generally provided positive returns, following a difficult environment in 2022 characterized by geopolitical risk and rising interest rates. Although, capital markets continued to experience bouts of volatility. Despite this volatility, broad equity market indexes finished Q1 in positive territory. The broad bond market delivered positive returns in Q1 as market participants changed expectations on future interest rate moves from pricing in rate hikes to discounting rate pauses, or in some circumstances, cuts. Internationally, moderate winter temperatures helped to ease energy price inflation in Europe, but the uncertainty around supply shortages persisted due to the ongoing war in Ukraine. The FOMC decided to increase the federal funds rate in Q1 to a target range between 4.75% - 5.00%, representing a second straight monthly increase of 0.25% after a string of 0.50% to 0.75% increases. The FOMC's actions demonstrated continued focus on combating inflation, although FOMC data indicated that most officials expect only one more rate hike in 2023. The most recent data release indicated that Headline CPI for March came in slightly below average expectations, with estimated year-over-year inflation of 5.00%. Recessionary risks remained a concern, and recent FOMC minutes indicated that members thought it was increasingly likely that the US will enter a recession later in 2023 due to banking sector stresses. The IMF revised its global GDP growth forecast at the end of the quarter to 2.80%, a decline from its January 2023 forecast of 2.90%.

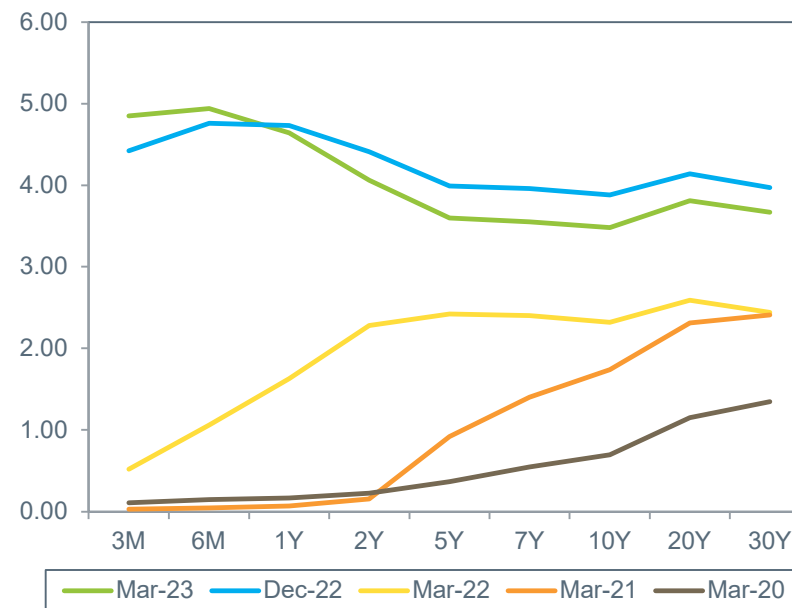
Key Economic Indicators

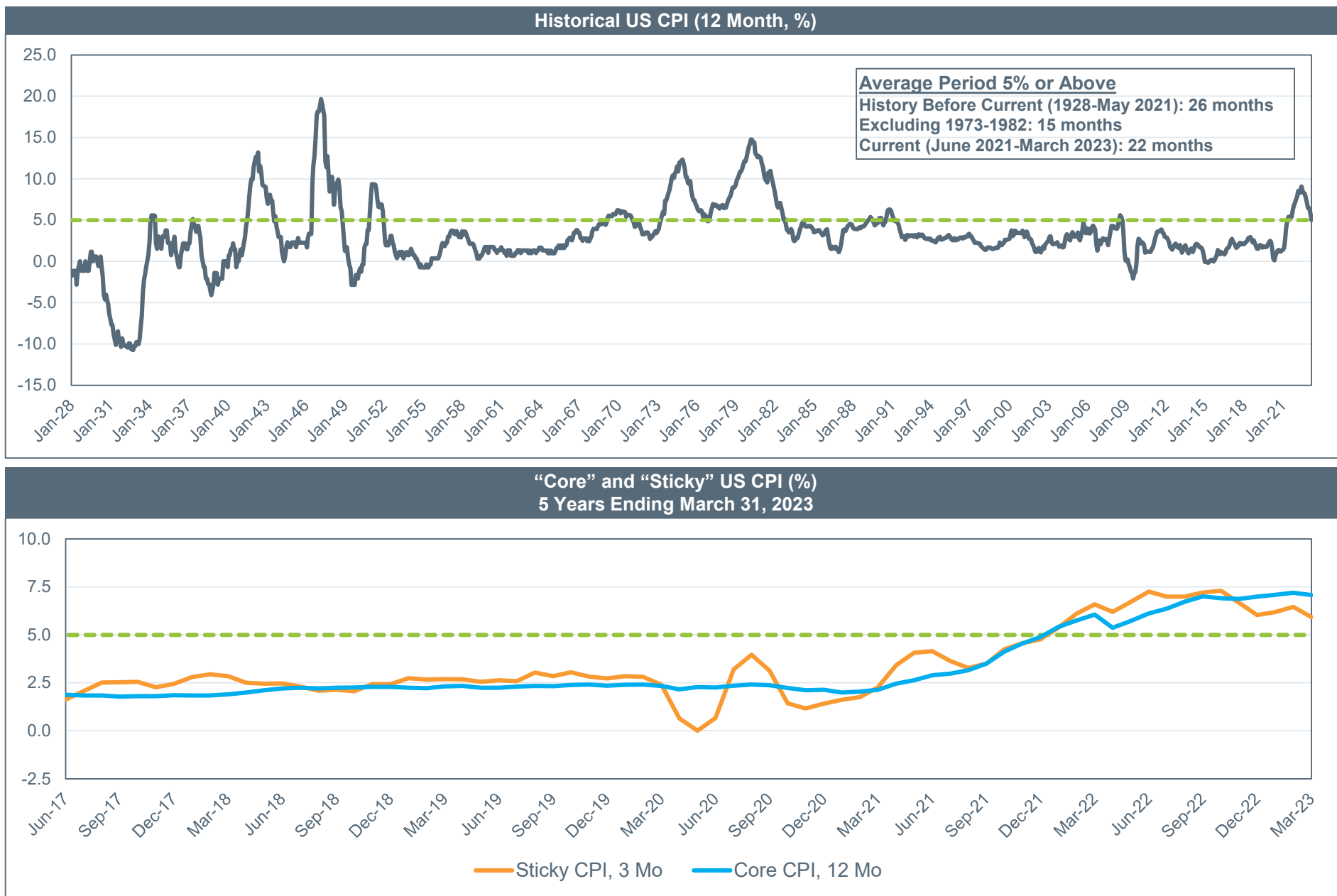


Economic Indicators	Mar-23	Dec-22	Mar-22	Mar-20	20 Yr
Federal Funds Rate (%)	4.83 ▲	4.33	0.33	0.08	1.34
Breakeven Infl. - 5 Yr (%)	2.47 ▲	2.38	3.43	0.53	1.93
Breakeven Infl. - 10 Yr (%)	2.33 ▲	2.30	2.83	0.93	2.09
CPI YoY (Headline) (%)	5.0 ▼	6.5	8.5	1.5	2.5
Unemployment Rate (%)	3.5 —	3.5	3.6	4.4	6.0
Real GDP YoY (%)	1.6 ▲	0.9	3.7	0.8	2.0
PMI - Manufacturing	46.3 ▼	48.4	57.1	49.1	53.6
USD Total Wtd Idx	119.48 ▼	121.40	115.35	122.55	103.40
WTI Crude Oil per Barrel (\$)	75.7 ▼	80.3	100.3	20.5	68.4
Gold Spot per Oz (\$)	1,979 ▲	1,824	1,937	1,577	1,179

Market Performance (%)	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	7.50	7.50	-7.73	11.19	12.24
Russell 2000	2.74	2.74	-11.61	4.71	8.04
MSCI EAFE (Net)	8.47	8.47	-1.38	3.52	5.00
MSCI EAFE SC (Net)	4.92	4.92	-9.83	0.87	5.86
MSCI Emg Mkts (Net)	3.96	3.96	-10.70	-0.91	2.00
Bloomberg US Agg Bond	2.96	2.96	-4.78	0.90	1.36
ICE BofAML 3 Mo US T-Bill	1.07	1.07	2.50	1.41	0.87
NCREIF ODCE (Gross)	-3.16	-3.16	-3.07	7.52	9.45
FTSE NAREIT Eq REIT (TR)	2.68	2.68	-19.19	6.02	5.97
HFRI FOF Comp	0.71	0.71	-1.94	3.10	3.24
Bloomberg Cmdty (TR)	-5.36	-5.36	-12.49	5.36	-1.72

Treasury Yield Curve (%)





As of March 31, 2023. Sources: US Bureau of Labor Statistics, Federal Reserve Bank of Cleveland, and Federal Reserve Bank of Atlanta.
 Core CPI is represented by the Revised FRB Cleveland Trimmed Mean, 12-month. Sticky CPI is represented by the FRB Atlanta Sticky-Price Index, 3-month.

First Quarter Review

Broad Market

US equity markets performed well in Q1 overall, despite market turmoil caused by the banking sector in March and uncertainty regarding the Fed's path for short-term interest rates. The Russell 1000 Index was up 7.5%, while the Russell 2000 Index was up 2.7%. At the beginning of Q1, US stocks were buoyed by investor optimism after economic data indicated that inflation continued to cool, leading to expectations that the Fed's rate hiking cycle could end soon. However, the remainder of Q1 saw significant volatility due to both bank failures and weakening earnings.

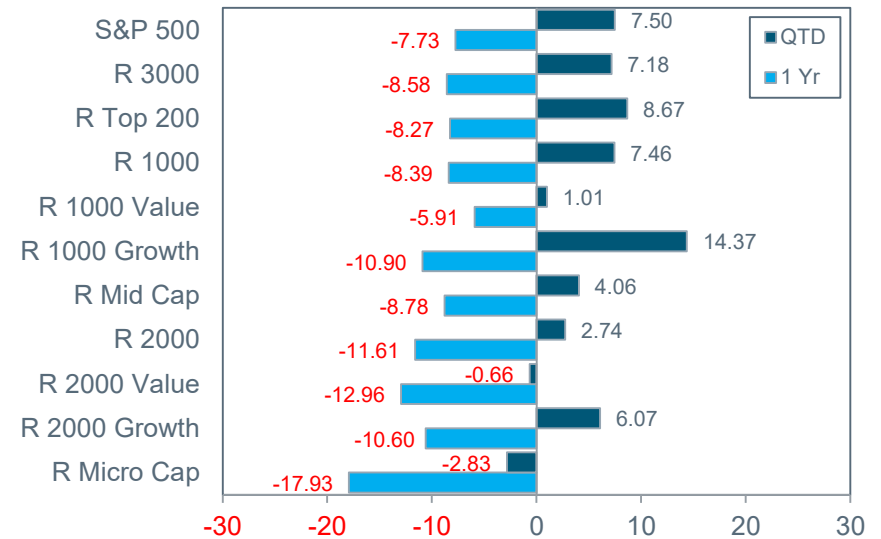
Market Cap

Active large- and mid-cap managers across all style groups struggled to outpace their respective benchmarks in Q1. Small-cap managers performed well, with value-oriented managers having a better success rate than core and growth managers.

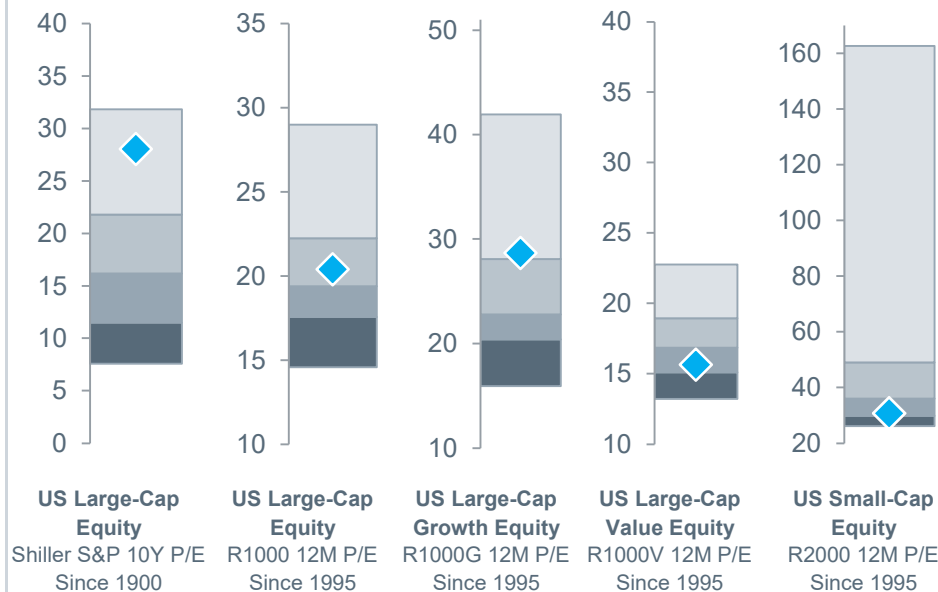
Style and Sector

There was a strong rotation back into growth stocks across market capitalizations in Q1. The Russell 1000 Growth and Russell 2000 Growth indexes exceeded their value counterparts by 13.4% and 6.7%, respectively. Information technology and communication services were the best performing sectors while energy, healthcare, financials, and utilities were the largest contractors.

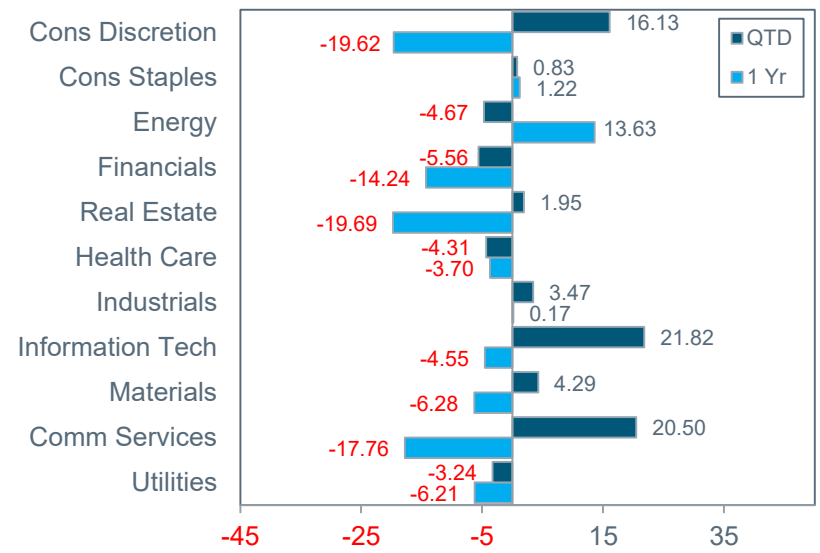
Style and Capitalization Market Performance (%)



Valuations



S&P 500 Index Sector Performance (%)



Valuation data courtesy of Bloomberg Professional Service and Robert J. Shiller, Irrational Exuberance, Second Edition.
P/E metrics shown represent the 5th through 95th percentiles to minimize the effect of outliers.

First Quarter Review

Developed Markets

Q1 represented another strong showing for developed international equity markets, with the MSCI EAFE returning 8.5%, which outperformed both US as well as emerging markets. Growth stocks outperformed value stocks during the quarter, but they still lagged when measured over the trailing three-year period. Small-cap stocks underperformed large-cap stocks. Active management was broadly additive during the quarter.

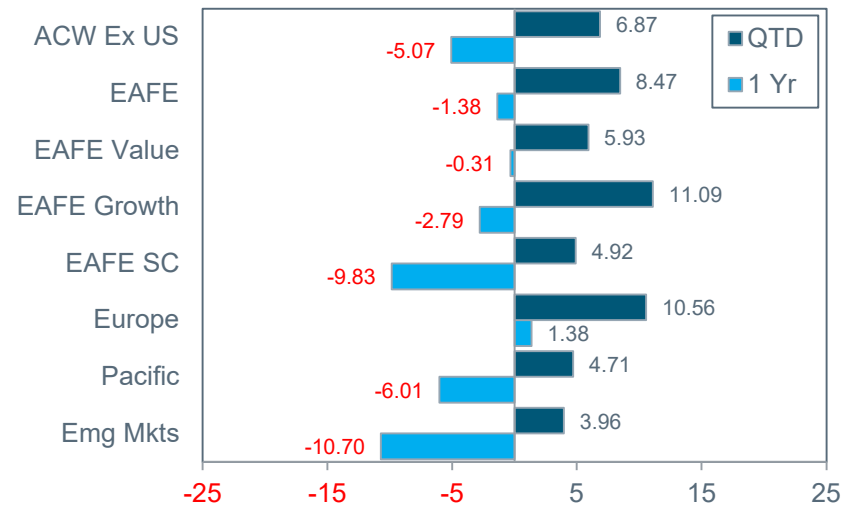
Emerging Markets

Although concerns about bank stability began in the US, they soon spread to Europe. After turmoil at Swiss bank Credit Suisse, UBS stepped in at the end of March to buy the troubled firm for \$3.25 billion, averting a major failure.

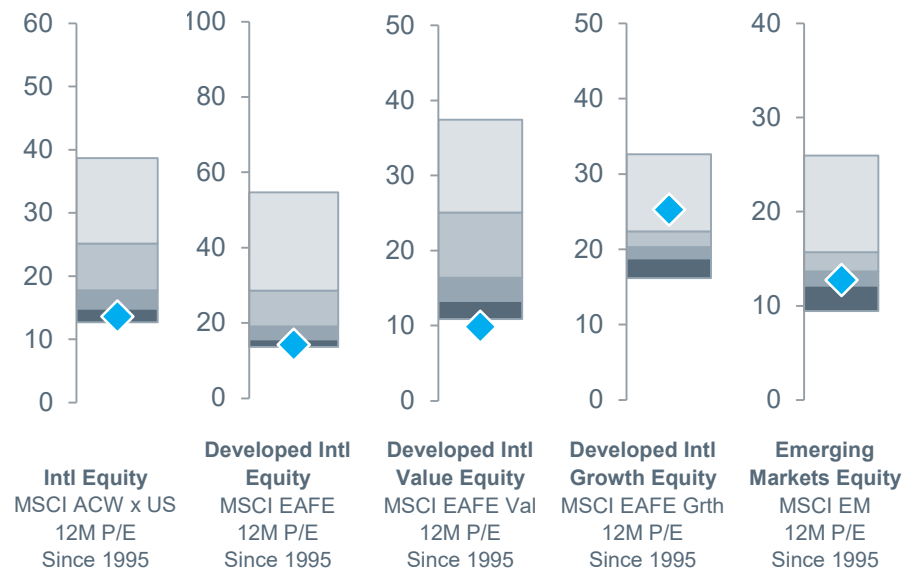
Market Cap & Style

As noted above, emerging markets continued to lag developed markets during Q1 with the MSCI Emerging Market Index returning 4.0%.

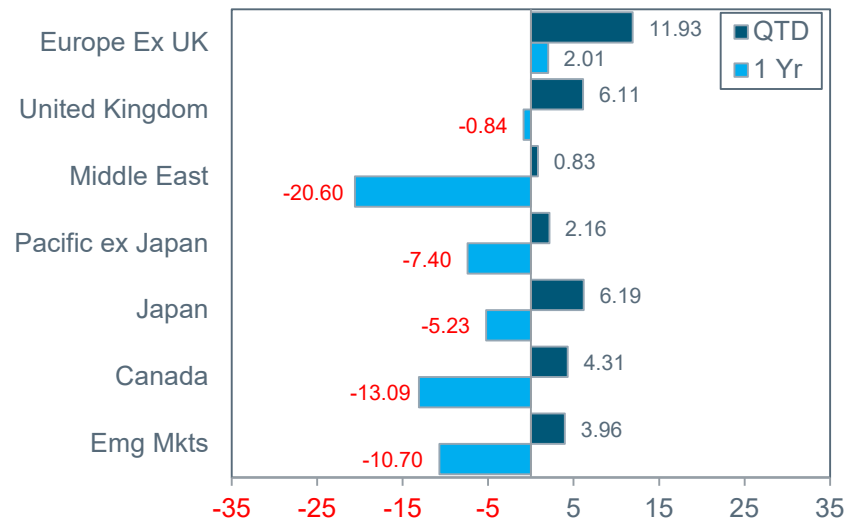
MSCI Style and Capitalization Market Performance (%)



Valuations



MSCI Region Performance (%)



Valuation data courtesy of Bloomberg Professional Service.

P/E metrics shown represent the 5th through 95th percentiles to minimize the effect of outliers. All returns are shown net of foreign taxes on dividends.

First Quarter Review

Broad Market

The decline in yields across Treasury notes and bonds produced a tailwind for fixed income markets, as the Bloomberg US Aggregate Bond Index experienced its best quarter in three years, returning 3.0% in Q1. However, volatility from 2022 continued into the new year as the Fed appeared to maintain its focus on fighting inflation. After initially declining in January, intermediate and long-term Treasury yields rose in February before falling again in March.

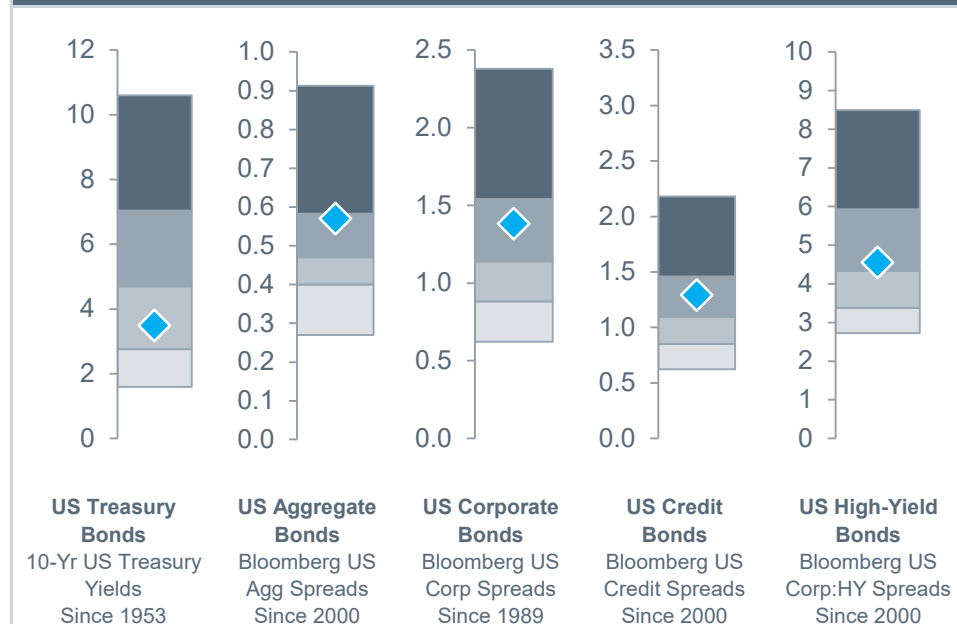
Credit Market

Corporate credit rallied to start the year amid expectations for a more dovish Fed. The optimism proved to be short-lived, however, as the banking crisis pushed spreads wider again in March. The Bloomberg US Credit Index returned 3.5% in Q1, lagging the Bloomberg US High Yield Index return of 3.6%.

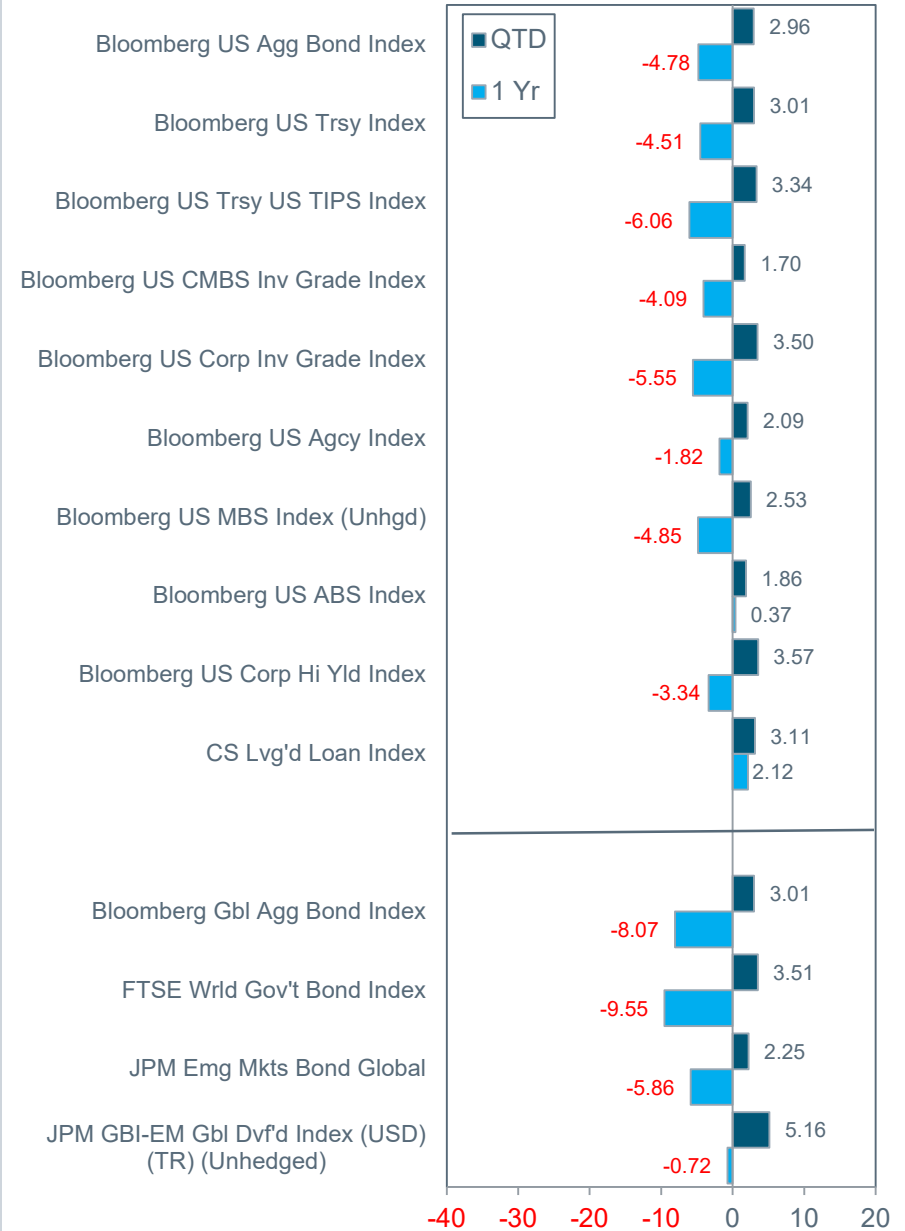
Emerging Market Debt

Emerging market debt added to its recent rally, with the JPMorgan EMBI Global Diversified Index returning 1.9% in Q1, benefitting from the decline in Treasury yields. Despite a resurgence in February, the US dollar weakened over the quarter vs. emerging market currencies, and the JPMorgan GBI-EM Global Diversified Index ended the quarter up 5.2%.

Valuations



Fixed Income Performance (%)



Valuation data courtesy of Bloomberg Professional Service.

Valuations shown represent the 5th through 95th percentiles to minimize the effect of outliers.

First Quarter Review - Absolute Return

General Market - Hedge Funds

During Q1, hedge funds broadly delivered positive results across most peer groups. Led by strong conditions for long/short equity and fixed income trading, the HFRI Fund-Weighted Composite Index delivered a quarterly return of 1.3%. Macro-oriented strategies, one of the top performing peer groups in 2022, widely struggled in Q1, driven by shifting momentum across interest rate and commodity trends that provided strong tailwinds in recent quarters. Although there were significant fluctuations throughout, overall alpha was broadly flat for the quarter, with longs performing above global indices as shorts struggled.

General Market - Global Tactical Asset Allocation (GTAA)

Global Tactical Asset Allocation (GTAA) strategies that RVK follows closely generally posted positive returns during Q1 with moderate dispersion. Almost all active managers with significant diversification underperformed a US centric blend of 60% equity and 40% fixed income during the quarter, which favored larger market cap companies globally.

First Quarter Review - Real Assets

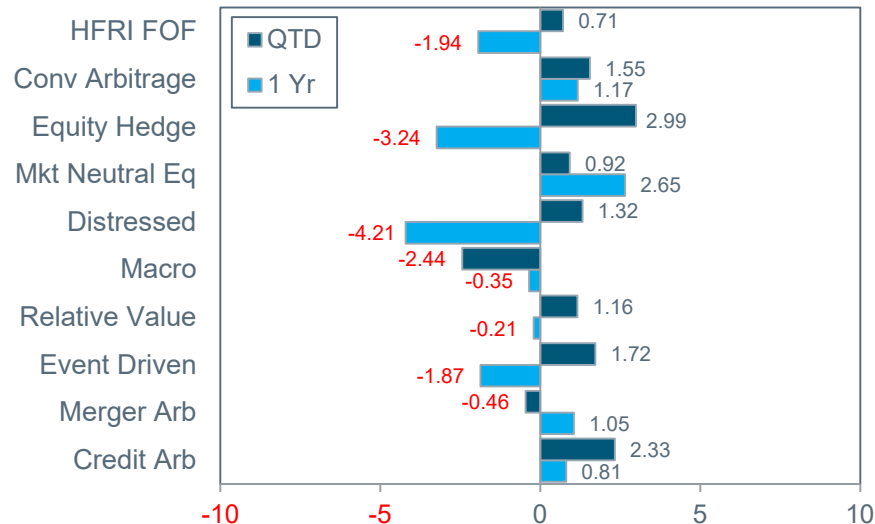
General Market - Diversified Inflation Strategies (DIS)

Diversified Inflation Strategy (DIS) managers tracked closely by RVK generally underperformed a US-centric blend of 60% equity and 40% fixed income over the quarter. Managers with larger exposures to TIPS and energy commodities, lagged peers most significantly in a quarter where strong equity performance on a global basis outperformed nearly all inflation sensitive asset classes.

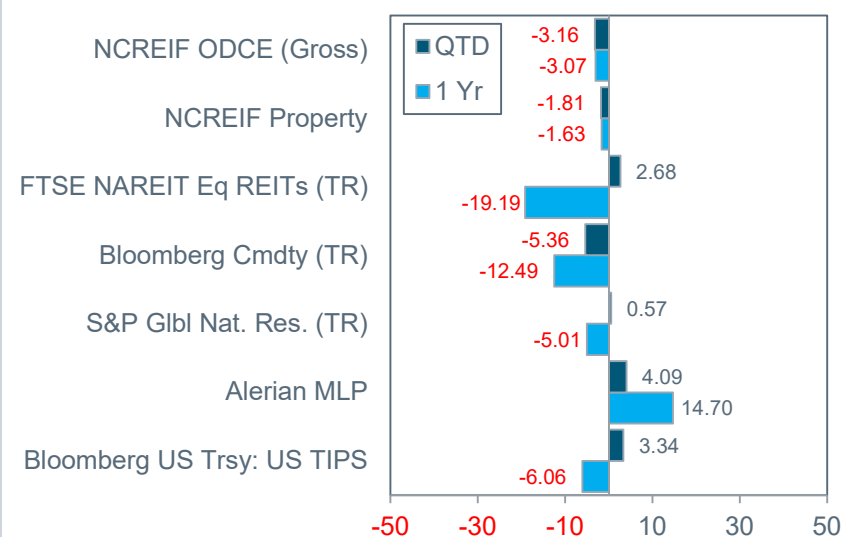
General Market - Real Estate

Core private real estate returned -3.2% in Q1 (gross of fees), as reported by the NCREIF ODCE Index. The total return comprised of 0.8% income and -4.0% price appreciation. Income returns continue to trend at the lower end of historical levels, while price appreciation continues to trend negatively. Investors of publicly traded real estate outperformed private market, delivering a Q1 total return of 1.5%, as measured by FTSE NAREIT All REIT Index.

HFRI Hedge Fund Performance (%)



Real Asset Performance (%)



Annual Asset Class Performance

As of March 31, 2023

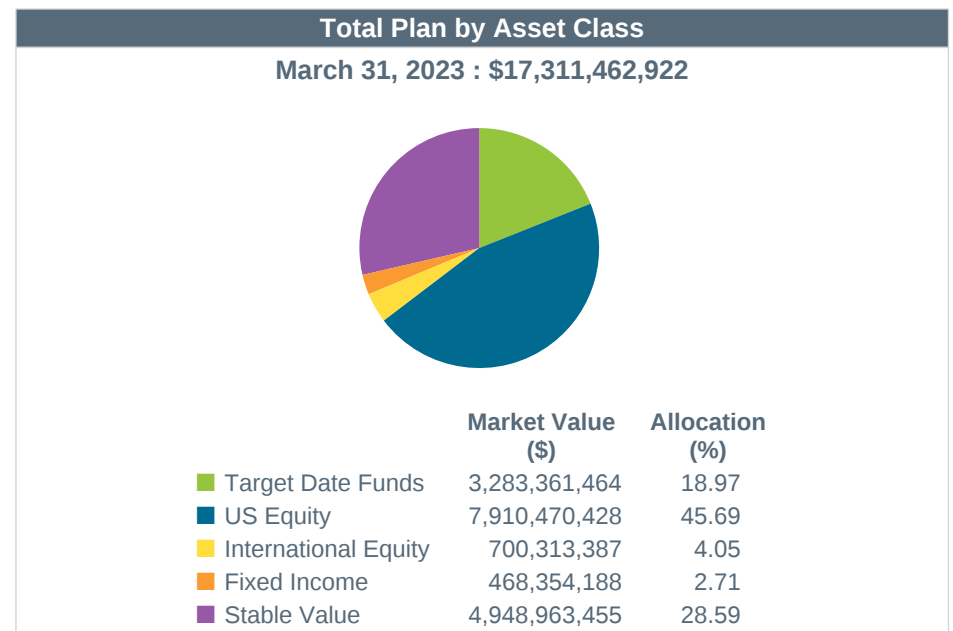
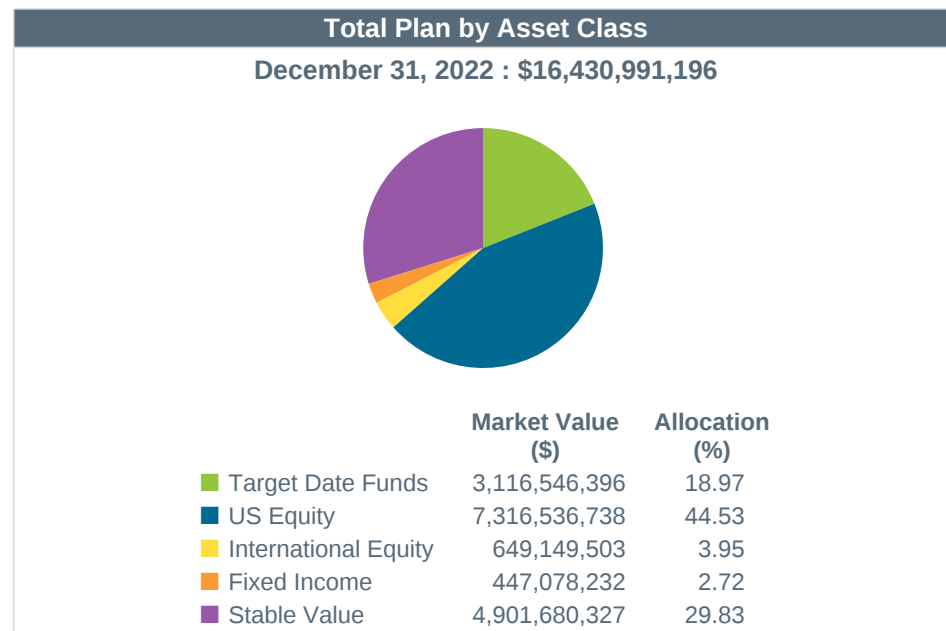
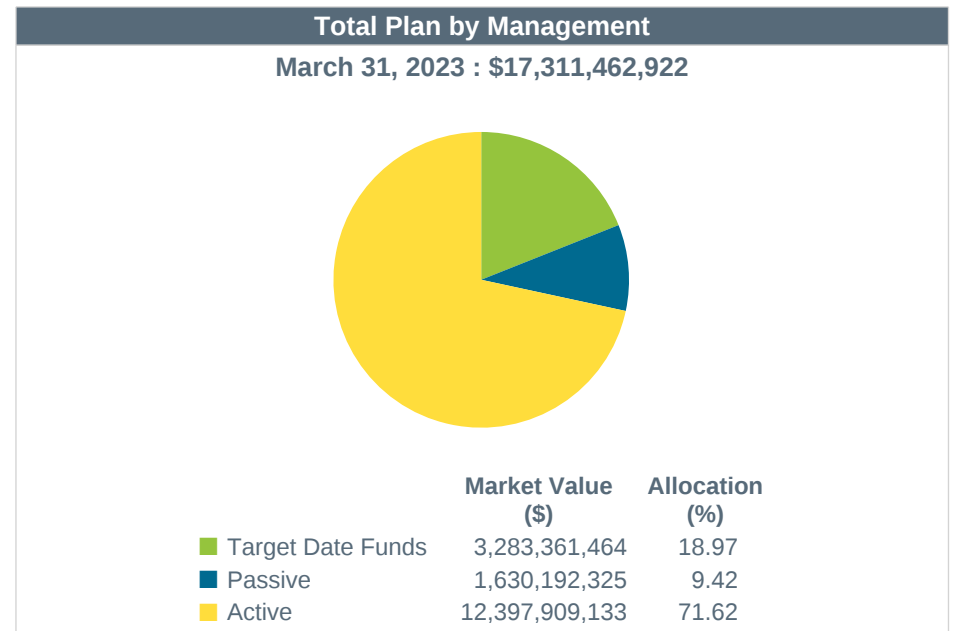
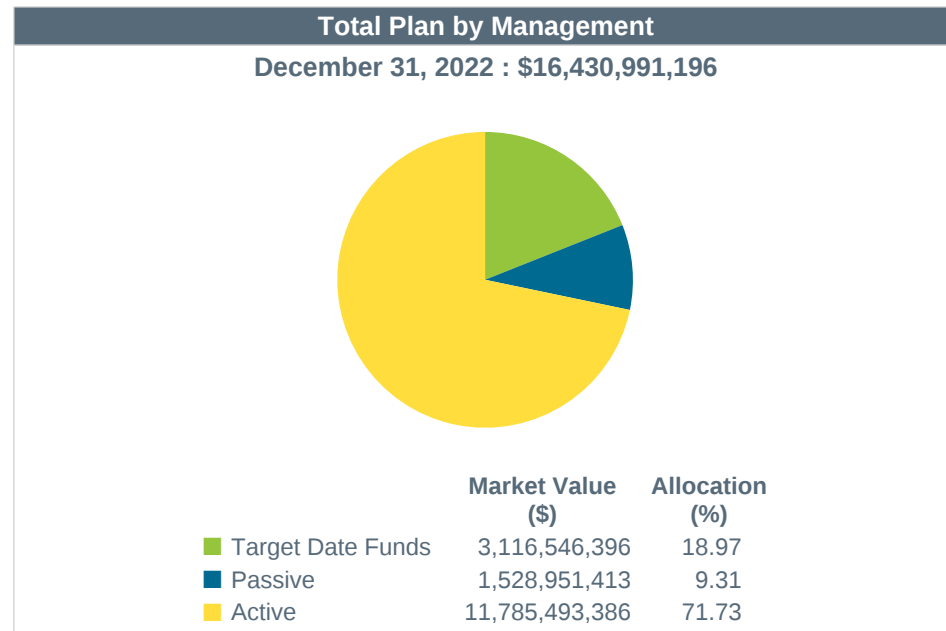
Best ↑ ↓ Worst	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD
	78.51	27.94	22.49	20.00	38.82	30.14	15.02	21.31	37.28	8.35	31.49	19.96	43.24	16.09	8.47
	58.21	26.85	15.99	18.23	32.39	19.31	9.59	17.13	33.01	1.87	26.00	18.40	28.71	7.47	7.50
	46.78	22.04	13.56	18.06	29.30	13.69	3.20	11.96	25.03	0.01	25.53	18.31	27.11	1.46	5.76
	31.78	18.88	8.29	17.32	22.78	12.50	1.38	11.77	21.83	-1.26	24.96	16.12	22.17	-5.31	4.92
	28.01	16.83	7.84	16.35	13.94	5.97	0.55	11.19	14.65	-2.08	22.01	12.34	14.82	-11.19	3.96
	27.17	16.36	4.98	16.00	8.96	4.89	0.05	8.77	10.71	-4.02	19.59	10.99	11.26	-11.85	3.57
	26.46	15.12	2.11	15.81	7.44	3.64	-0.27	8.52	7.77	-4.38	18.42	10.88	10.10	-13.01	3.34
	18.91	15.06	0.10	10.94	2.47	3.37	-0.81	6.67	7.62	-4.62	14.32	7.82	6.17	-14.45	2.96
	11.47	10.16	-4.18	8.78	0.07	2.45	-1.44	4.68	7.50	-4.68	8.72	7.51	5.96	-18.11	2.74
	11.41	7.75	-5.72	6.98	-2.02	0.04	-3.30	2.65	5.23	-11.01	8.43	7.11	5.28	-20.09	2.68
	5.93	6.54	-12.14	4.79	-2.60	-2.19	-4.41	2.18	3.54	-11.25	8.39	1.19	0.05	-20.44	1.57
	1.92	6.31	-13.32	4.21	-8.61	-4.90	-4.47	1.00	3.01	-13.79	7.69	0.67	-1.55	-21.39	1.07
	0.21	5.70	-15.94	0.11	-8.83	-4.95	-14.92	0.51	1.70	-14.57	5.34	-3.12	-2.52	-24.37	-3.16
	-29.76	0.13	-18.42	-1.06	-9.52	-17.01	-24.66	0.33	0.86	-17.89	2.28	-8.00	-2.54	-27.09	-5.36
S&P 500 - US Large Cap	R 2000 - US Small Cap	MSCI EAFE (Net) - Int'l Dev.	MSCI EAFE SC (Net) - Int'l SC	MSCI EM (Net) - Int'l Emg Mkts	Bloombrg US Agg Bond - FI	Bloombrg US Corp Hi Yield - FI	Bloombrg US Trsry US TIPS - FI	Bloombrg US Gov Credit Lng - FI	NCREIF ODCE (Gross) - Real Estate	FTSE NAREIT Eq REITs Index (TR)	HFRI FOF Comp Index - ARS	Bloombrg Cmdty (TR) - Commod.	ICE BofAML 3 Mo T-Bill - Cash Equiv		

NCREIF ODCE (Gross) performance is reported quarterly; performance is shown N/A in interim-quarter months.



Plan Performance Review

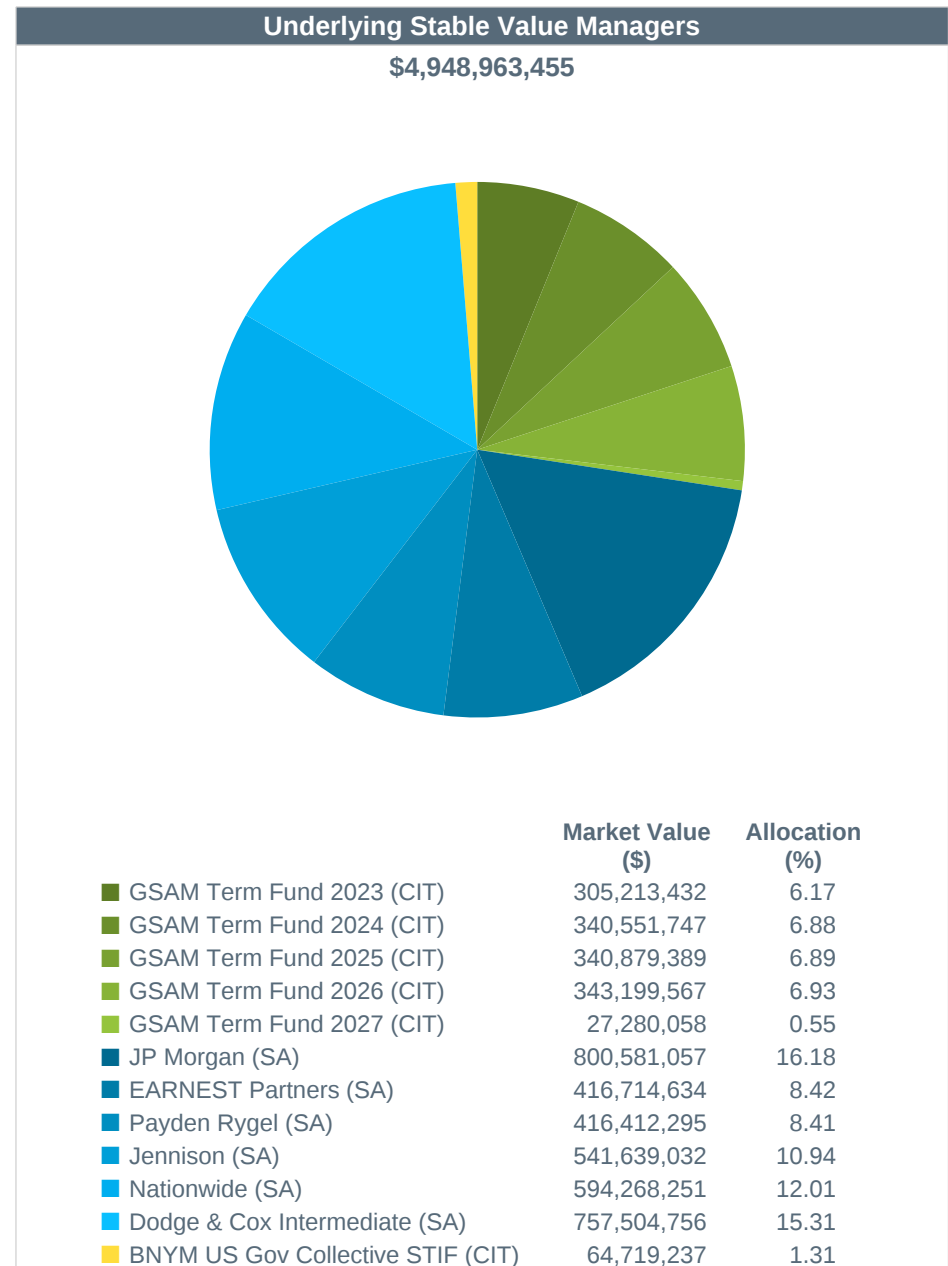
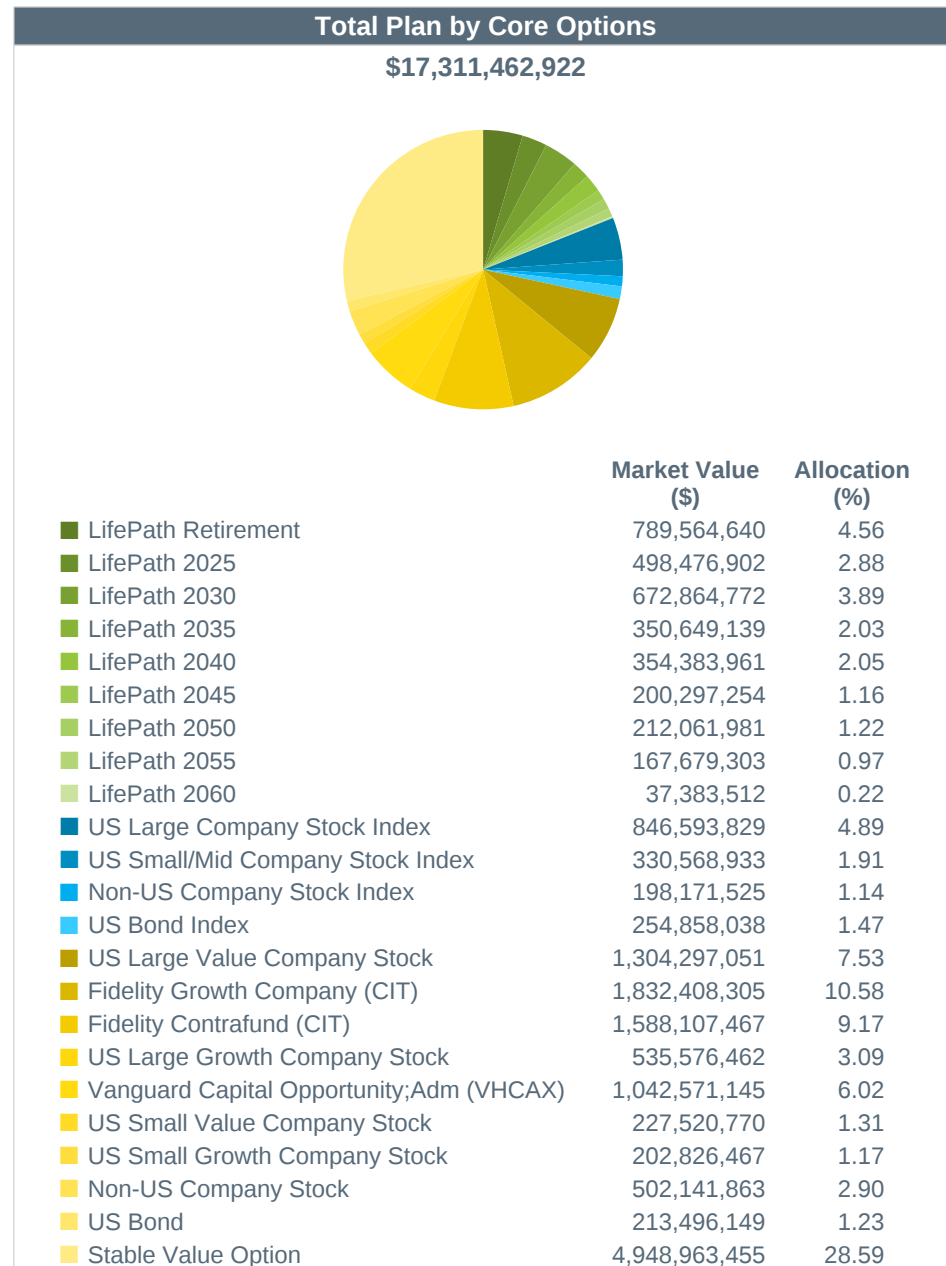




Allocations shown may not sum up to 100% exactly due to rounding.

Ohio Public Employees Deferred Compensation Program
Asset Allocation by Manager

As of March 31, 2023



Allocations shown may not sum up to 100% exactly due to rounding. The Stable Value asset allocation is provided by Goldman Sachs Asset Management and is representative of the assets' market value. Please see the addendum for information on changes to the investment managers. In 01/2023, GSAM Term Fund 2022 (CIT) was removed and GSAM Term Fund 2027 (CIT) was added as an underlying stable value manager. In 03/2023, State Street Stable Value (SA) was removed and assets were mapped to the existing stable value funds.

Ohio Public Employees Deferred Compensation Program
Asset Allocation and Performance by Fund

As of March 31, 2023

US Large Value Company Stock			
	Allocation		QTD
	Market Value (\$M)	%	
US Large Value Company Stock	1,304	100	1.49
Dodge & Cox Stock;X (DOXGX) (Target: 100%)	1,304	100	1.51

US Large Growth Company Stock			
	Allocation		QTD
	Market Value (\$M)	%	
US Large Growth Company Stock	536	100	14.51
T Rowe Price Large Cap Growth (SA) (Target 95%)	520	97	14.52
State Street Large Cap Growth Index (CIT) (Target: 5%)	15	3	14.35

US Small Value Company Stock			
	Allocation		QTD
	Market Value (\$M)	%	
US Small Value Company Stock	228	100	2.79
Westwood Small Cap Value (SA) (Target: 92.5%)	215	94	2.89
State Street Small Cap Value Index (CIT) (Target: 7.5%)	13	6	-0.58

US Small Growth Company Stock			
	Allocation		QTD
	Market Value (\$M)	%	
US Small Growth Company Stock	203	100	7.50
Westfield Small Cap Growth (SA) (Target: 65%)	133	66	7.82
Fiera Small Cap Growth (SA) (Target: 27.5%)	55	27	7.08
State Street Small Cap Growth Index (CIT) (Target: 7.5%)	14	7	6.01

Non-US Company Stock			
	Allocation		QTD
	Market Value (\$M)	%	
Non-US Company Stock	502	100	8.36
Schroders QEP Intl Value (CIT) (Target: 35%)	176	35	5.58
Arrowstreet Intl Eq ACW Ex US C (CIT) (Target: 30%)	151	30	6.88
Vanguard Intl Growth;Adm (VWILX) (Target: 35%)	176	35	12.50

Performance is shown net of fees. Allocations shown may not sum up to 100% exactly due to rounding. Actual allocations are permitted to deviate from target allocations within the documented tolerance ranges.

US Bond			
	Allocation		QTD
	Market Value (\$M)	%	
US Bond	213	100	3.40
TCW Total Return Bond Class B (CIT) (Target: 100%)	213	100	3.40

US Large Company Stock Index			
	Allocation		QTD
	Market Value (\$M)	%	
US Large Company Stock Index	847	100	7.47
State Street S&P 500 Index L (CIT) (Target: 100%)	847	100	7.49

US Small/Mid Company Stock Index			
	Allocation		QTD
	Market Value (\$M)	%	
US Small/Mid Company Stock Index	331	100	5.90
State Street Small/Mid Cap Index L (CF) (Target: 100%)	331	100	5.92

Non-US Company Stock Index			
	Allocation		QTD
	Market Value (\$M)	%	
Non-US Company Stock Index	198	100	6.90
State Street Global All Cap Equity Ex US L (CIT) (Target: 100%)	198	100	6.91

US Bond Index			
	Allocation		QTD
	Market Value (\$M)	%	
US Bond Index	255	100	3.14
State Street US Bond Index L (CIT) (Target: 100%)	255	100	3.13



Ohio Public Employees Deferred Compensation Program
Fund Monitoring Summary

As of March 31, 2023

	% of Fund	1. Underperformed During Trailing 5-Year Period?	2. Underperformed in 3 of 4 Trailing Quarters?	3. Diverged From Strategy and / or Portfolio Characteristics?	4. Adverse Change in Portfolio Manager?	5. Weak Manager Research Rating?	6. Weak Governance Rating?	Watch List Status				Number	%
								1st Quarter 2023	4th Quarter 2022	3rd Quarter 2022	2nd Quarter 2022	Participants Invested in Fund	
Passive													
LifePath Retire	100%	No	No	No	No	No (Positive)	No					21,273	8.5%
LifePath 2025	100%	No	No	No	No	No (Positive)	No					14,676	5.9%
LifePath 2030	100%	No	No	No	No	No (Positive)	No					22,322	9.0%
LifePath 2035	100%	No	No	No	No	No (Positive)	No					17,640	7.1%
LifePath 2040	100%	No	No	No	No	No (Positive)	No					19,653	7.9%
LifePath 2045	100%	No	No	No	No	No (Positive)	No					16,247	6.5%
LifePath 2050	100%	No	No	No	No	No (Positive)	No					17,921	7.2%
LifePath 2055	100%	No	No	No	No	No (Positive)	No					20,118	8.1%
LifePath 2060	100%	No	No	No	No	No (Positive)	No					11,193	4.5%
US Large Company Stock Index		N/A	N/A	No	No	No (Positive)	No					26,457	10.6%
State Street S&P 500 Index L (CIT)	100%	No	No	No	No	No (Positive)	No					-	-
US Small/Mid Company Stock Index		N/A	N/A	No	No	No (Positive)	No					24,000	9.6%
State Street Small/Mid Cap Index L (CIT)	100%	No	No	No	No	No (Positive)	No					-	-
Non-US Company Stock Index		N/A	N/A	No	No	No (Positive)	No					15,466	6.2%
State Street Global All Cap Equity Ex US L (CIT)	100%	No	No	No	No	No (Positive)	No					-	-
US Bond Index		N/A	N/A	No	No	No (Positive)	No					13,870	5.6%
State Street US Bond Index L (CIT)	100%	No	No	No	No	No (Positive)	No					-	-

Changes from the previous quarter are shown in bold.

RVK Neutral ratings include both neutral and research ratings.

N/A denotes when funds are being terminated or not enough history was available.

Passive funds must track the benchmark by 0.20% for Target Date Funds, 0.10% for US Equity, 0.30% for International Equity, and 0.10% for US Fixed Income.



Ohio Public Employees Deferred Compensation Program Fund Monitoring Summary

As of March 31, 2023

	% of Fund	1. Underperformed During Trailing 5-Year Period?	2. Underperformed in 3 of 4 Trailing Quarters?	3. Diverged From Strategy and / or Portfolio Characteristics?	4. Adverse Change in Portfolio Manager?	5. Weak Manager Research Rating?	6. Weak Governance Rating?	Watch List Status				Number	%
								1st Quarter 2023	4th Quarter 2022	3rd Quarter 2022	2nd Quarter 2022	Participants Invested in Fund	
Active													
US Large Value Company Stock		N/A	N/A	No	No	No (Positive)	No					44,373	17.8%
Dodge & Cox Stock;X (DOXGX)*	100%	No	No	No	No	No (Positive)	No					-	-
Fidelity Growth Company (CIT)	100%	No	No	No	No	No (Neutral)	No					47,096	18.9%
Fidelity Contrafund (CIT)	100%	Yes	No	No	No	No (Neutral)	No					41,496	16.6%
US Large Growth Company Stock		Yes	No	No	No	No (Positive)	No					25,828	10.4%
T Rowe Price Large Cap Growth (SA)	97%	Yes	No	No	No	No (Positive)	No					-	-
State Street Large Cap Growth Index NL (CIT)	3%	No	No	No	No	No (Positive)	No					-	-
Vanguard Capital Opportunity;Adm (VHCAX)	100%	No	No	No	No	No (Positive)	No					44,117	17.7%
US Small Value Company Stock		No	No	No	No	No (Positive)	No					18,831	7.6%
Westwood Small Cap Value (SA)	94%	No	No	No	No	No (Positive)	No					-	-
State Street Small Cap Value Index NL (CIT)	6%	No	No	No	No	No (Positive)	No					-	-
US Small Growth Company Stock		No	No	No	No	No (Positive)	No					17,563	7.0%
Westfield Small Cap Growth (SA)	66%	No	No	No	No	No (Positive)	No					-	-
Fiera Small Cap Growth (SA)	27%	No	No	No	No	No (Neutral)	No					-	-
State Street Small Cap Growth Index NL (CIT)	7%	Yes	No	No	No	No (Positive)	No					-	-
Non-US Company Stock		N/A	No	No	No	No (Positive)	No					29,309	11.8%
Schroders QEP Intl Value (CIT)	35%	No	Yes	No	No	No (Positive)	No					-	-
Arrowstreet Intl Eq ACW Ex US C (CIT)	30%	No	No	No	No	No (Positive)	No					-	-
Vanguard Intl Growth;Adm (VWILX)	35%	No	Yes	No	No	No (Positive)	No					-	-
US Bond		No	No	No	No	No (Positive)	No					15,155	6.1%
TCW Total Return Bond Class B (CIT)	100%	No	No	No	No	No (Positive)	No					-	-
Stable Value Option		No	No	No	No	No (Positive)	No					92,080	36.9%

Changes from the previous quarter are shown in bold.

RVK Neutral ratings include both neutral and research ratings.

Stable Value Option performance shown is book value. All performance is net of fees.

N/A denotes when funds are being terminated or not enough history was available.

US Small Value Company Stock and US Small Growth Company Stock were inceptioned 06/2017. Non-US Company Stock was inceptioned 09/2020.

Passive funds must track the benchmark by 0.20% for Target Date Funds, 0.10% for US Equity, 0.30% for International Equity, and 0.10% for US Fixed Income.

Stable Value Option is benchmarked against the Morningstar US CIT Stable Value Index and the 3 Year Constant Maturity Treasury Index. Both benchmarks are considered when evaluating the SVO's performance for purposes of the fund monitoring summary.

*Historical performance for Dodge & Cox Stock;X (DOXGX) is backfilled using Dodge & Cox Stock;I (DODGX).



Ohio Public Employees Deferred Compensation Program Fund Monitoring Summary

As of March 31, 2023

	% of Fund	1. Underperformed During Trailing 5-Year Period?	2. Underperformed in 3 of 4 Trailing Quarters?	3. Diverged From Strategy and / or Portfolio Characteristics?	4. Adverse Change in Portfolio Manager?	5. Weak Manager Research Rating?	6. Weak Governance Rating?	Watch List Status				In Compliance with Investment Guidelines?
								1st Quarter 2023	4th Quarter 2022	3rd Quarter 2022	2nd Quarter 2022	
Stable Value												
GSAM Term Fund 2023 (CIT)	6%	N/A	No	No	No	No (Positive)	No					Yes
GSAM Term Fund 2024 (CIT)	7%	N/A	No	No	No	No (Positive)	No					Yes
GSAM Term Fund 2025 (CIT)	7%	N/A	No	No	No	No (Positive)	No					Yes
GSAM Term Fund 2026 (CIT)	7%	N/A	No	No	No	No (Positive)	No					Yes
GSAM Term Fund 2027 (CIT)	1%	N/A	N/A	No	No	No (Positive)	No					Yes
JP Morgan (SA)	16%	No	No	No	No	No (Positive)	No					Yes
EARNEST Partners (SA)	8%	No	No	No	No	No (Positive*)	No					Yes
Payden & Rygel (SA)	8%	No	No	No	No	No (Neutral)	No					Yes
Jennison (SA)	11%	No	No	No	No	No (Positive - Closely Monitor*)	No					Yes
Nationwide (SA)	12%	No	No	No	No	No (Neutral - Closely Monitor*)	No					Yes
Dodge & Cox Intermediate (SA)	15%	No	No	No	No	No (Positive)	No					Yes

Status	Number of Criteria	Status Applied
	Less than 2	No action required
	2 to 3	On "closely monitored list"
	4	No additional allocation to the manager but current allocations can be maintained
	Greater than 4	The manager will be terminated and all invested funds re-distributed to existing managers or a new manager pending a search.

* The rating applies to Intermediate Duration Stable Value mandates only.

Changes from the previous quarter are shown in bold.

RVK Neutral ratings include both neutral and research ratings.

N/A denotes when funds are being terminated or not enough history was available.

Passive funds must track the benchmark by 0.20% for Target Date Funds, 0.10% for US Equity, 0.30% for International Equity, and 0.10% for US Fixed Income.

Criteria shown here reflect changes that occurred in the reporting time period noted above.

At the October 2022 meeting, the Board approved RVK's recommendation to place Jennison and Nationwide on closely monitored status.



Ohio Public Employees Deferred Compensation Program
Comparative Performance

As of March 31, 2023

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Hassle-Free Target Date Funds												
LifePath Retirement	4.42	4.42	-6.03	5.00	3.80	4.56	4.21	-14.61	6.97	11.99	15.67	-3.46
BlackRock LP Id Ret Lending Index	4.28	4.28	-6.11	4.97	3.76	4.47	4.14	-14.54	7.04	11.80	15.61	-3.48
Difference	0.14	0.14	0.08	0.03	0.04	0.09	0.07	-0.07	-0.07	0.19	0.06	0.02
IM Mixed-Asset Target Today (MF) Median	3.78	3.78	-5.00	4.54	3.01	3.90	3.60	-12.87	6.16	9.50	13.34	-3.57
Rank	27	27	85	38	16	25	24	81	27	7	13	46
LifePath 2025	4.72	4.72	-6.43	6.98	4.37	5.71	5.35	-15.22	9.01	12.21	18.62	-4.85
BlackRock LP Id2025 Lending Index	4.57	4.57	-6.58	6.94	4.32	5.57	5.23	-15.17	9.07	12.03	18.54	-4.90
Difference	0.15	0.15	0.15	0.04	0.05	0.14	0.12	-0.05	-0.06	0.18	0.08	0.05
IM Mixed-Asset Target 2025 (MF) Median	4.62	4.62	-5.87	7.88	4.41	5.86	5.54	-15.31	9.70	12.13	18.18	-5.23
Rank	47	47	69	78	52	57	61	47	65	49	42	39
LifePath 2030	5.26	5.26	-6.71	9.13	5.10	6.60	6.06	-15.95	11.45	12.90	20.80	-5.68
BlackRock LP Id2030 Lending Index	5.13	5.13	-6.92	9.08	5.04	6.43	5.92	-15.92	11.51	12.71	20.70	-5.76
Difference	0.13	0.13	0.21	0.05	0.06	0.17	0.14	-0.03	-0.06	0.19	0.10	0.08
IM Mixed-Asset Target 2030 (MF) Median	5.04	5.04	-6.32	9.63	4.93	6.63	6.28	-16.21	11.44	12.86	20.08	-6.32
Rank	42	42	68	66	41	52	60	46	50	50	38	34
LifePath 2035	5.75	5.75	-6.99	11.20	5.78	7.44	6.73	-16.65	13.82	13.59	22.88	-6.48
BlackRock LP Id2035 Lending Index	5.62	5.62	-7.29	11.12	5.70	7.23	6.56	-16.67	13.85	13.42	22.74	-6.58
Difference	0.13	0.13	0.30	0.08	0.08	0.21	0.17	0.02	-0.03	0.17	0.14	0.10
IM Mixed-Asset Target 2035 (MF) Median	5.59	5.59	-6.71	11.53	5.47	7.40	6.91	-17.05	13.84	14.15	22.26	-7.26
Rank	40	40	65	61	32	48	60	42	51	59	32	30
LifePath 2040	6.22	6.22	-7.24	13.09	6.37	8.18	7.31	-17.34	15.98	14.16	24.75	-7.21
BlackRock LP Id2040 Lending Index	6.10	6.10	-7.64	12.98	6.27	7.94	7.11	-17.38	15.99	13.98	24.60	-7.33
Difference	0.12	0.12	0.40	0.11	0.10	0.24	0.20	0.04	-0.01	0.18	0.15	0.12
IM Mixed-Asset Target 2040 (MF) Median	5.90	5.90	-6.95	12.96	5.86	7.97	7.38	-17.85	15.67	14.74	23.63	-7.97
Rank	32	32	70	47	23	37	52	39	39	58	18	29
LifePath 2045	6.60	6.60	-7.43	14.57	6.84	8.72	7.77	-17.88	17.74	14.85	26.06	-7.82
BlackRock LP Id2045 Lending Index	6.49	6.49	-7.88	14.44	6.72	8.45	7.54	-17.96	17.71	14.64	25.93	-7.98
Difference	0.11	0.11	0.45	0.13	0.12	0.27	0.23	0.08	0.03	0.21	0.13	0.16
IM Mixed-Asset Target 2045 (MF) Median	6.14	6.14	-7.05	13.93	6.17	8.28	7.53	-18.15	16.67	15.38	24.61	-8.19
Rank	20	20	68	18	16	23	38	43	21	57	13	38

Performance shown is net of fees, except where noted, and is product specific.



Ohio Public Employees Deferred Compensation Program
Comparative Performance

As of March 31, 2023

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Hassle-Free Target Date Funds												
LifePath 2050	6.81	6.81	-7.52	15.31	7.08	8.95	8.00	-18.20	18.69	15.22	26.64	-8.09
BlackRock LP Id2050 Lending Index	6.70	6.70	-8.01	15.16	6.95	8.68	7.78	-18.30	18.61	15.07	26.49	-8.26
Difference	0.11	0.11	0.49	0.15	0.13	0.27	0.22	0.10	0.08	0.15	0.15	0.17
IM Mixed-Asset Target 2050 (MF) Median	6.23	6.23	-7.15	14.09	6.25	8.37	7.68	-18.30	16.99	15.54	24.67	-8.54
Rank	16	16	69	2	8	16	30	46	13	55	8	38
LifePath 2055	6.86	6.86	-7.54	15.41	7.13	8.98	8.10	-18.26	18.86	15.34	26.69	-8.12
BlackRock LP Id2055 Lending Index	6.75	6.75	-8.04	15.28	7.00	8.71	7.87	-18.38	18.81	15.18	26.56	-8.29
Difference	0.11	0.11	0.50	0.13	0.13	0.27	0.23	0.12	0.05	0.16	0.13	0.17
IM Mixed-Asset Target 2055 (MF) Median	6.34	6.34	-7.11	14.19	6.29	8.42	7.81	-18.31	17.18	15.65	24.84	-8.48
Rank	20	20	69	4	5	14	30	49	16	55	9	42
LifePath 2060	6.87	6.87	-7.53	15.40	7.12	8.87	N/A	-18.27	18.84	15.33	26.68	-8.12
BlackRock LP Id2060 Lending Index	6.75	6.75	-8.04	15.28	7.00	8.71	N/A	-18.39	18.80	15.18	26.56	-8.29
Difference	0.12	0.12	0.51	0.12	0.12	0.16	N/A	0.12	0.04	0.15	0.12	0.17
IM Mixed-Asset Target 2060 (MF) Median	6.35	6.35	-7.13	14.32	6.32	8.60	N/A	-18.33	17.25	15.70	25.07	-8.49
Rank	20	20	67	7	6	26	N/A	48	17	54	10	41

Performance shown is net of fees, except where noted, and is product specific.

Ohio Public Employees Deferred Compensation Program
Comparative Performance

As of March 31, 2023

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Passive Management												
US Large Company Stock Index	7.47	7.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S&P 500 Index (Cap Wtd)	7.50	7.50	-7.73	18.60	11.19	12.42	12.24	-18.11	28.71	18.40	31.49	-4.38
Difference	-0.03	-0.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM S&P 500 Index (MF) Median	7.43	7.43	-8.01	18.25	10.83	12.04	11.78	-18.38	28.25	18.05	31.06	-4.66
Rank	26	26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
State Street S&P 500 Index L (CIT)	7.49	7.49	-7.74	18.58	11.17	12.41	12.23	-18.11	28.66	18.37	31.47	-4.41
S&P 500 Index (Cap Wtd)	7.50	7.50	-7.73	18.60	11.19	12.42	12.24	-18.11	28.71	18.40	31.49	-4.38
Difference	-0.01	-0.01	-0.01	-0.02	-0.02	-0.01	-0.01	0.00	-0.05	-0.03	-0.02	-0.03
IM S&P 500 Index (MF) Median	7.43	7.43	-8.01	18.25	10.83	12.04	11.78	-18.38	28.25	18.05	31.06	-4.66
Rank	10	10	4	6	5	2	2	2	11	14	4	9
US Small/Mid Company Stock Index	5.90	5.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell Sm Cap Compl Index	5.88	5.88	-13.25	17.86	6.50	9.65	9.19	-25.49	12.64	32.88	28.04	-9.21
Difference	0.02	0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM U.S. SMID Cap Core Equity (MF) Median	3.05	3.05	-7.02	21.13	5.93	8.29	8.09	-14.67	26.01	8.64	24.75	-12.42
Rank	10	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
State Street Small/Mid Cap Index L (CIT)	5.92	5.92	-13.15	17.91	6.54	9.69	9.25	-25.39	12.64	32.73	27.99	-9.05
Russell Sm Cap Compl Index	5.88	5.88	-13.25	17.86	6.50	9.65	9.19	-25.49	12.64	32.88	28.04	-9.21
Difference	0.04	0.04	0.10	0.05	0.04	0.04	0.06	0.10	0.00	-0.15	-0.05	0.16
IM U.S. SMID Cap Core Equity (MF) Median	3.05	3.05	-7.02	21.13	5.93	8.29	8.09	-14.67	26.01	8.64	24.75	-12.42
Rank	10	10	97	73	37	24	24	99	100	1	19	21
Non-US Company Stock Index	6.90	6.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MSCI ACW Ex US IM Index (USD) (Net)	6.56	6.56	-5.84	12.20	2.35	5.83	4.28	-16.58	8.53	11.12	21.63	-14.76
Difference	0.34	0.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM ACWI Ex US Core (MF) Median	7.30	7.30	-3.87	12.66	2.49	5.82	4.45	-16.67	8.87	13.50	22.78	-15.85
Rank	58	58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
State Street Global All Cap Equity Ex US L (CIT)	6.91	6.91	-4.73	12.85	2.62	6.12	4.55	-16.29	8.74	11.36	22.02	-14.63
MSCI ACW Ex US IM Index (USD) (Net)	6.56	6.56	-5.84	12.20	2.35	5.83	4.28	-16.58	8.53	11.12	21.63	-14.76
Difference	0.35	0.35	1.11	0.65	0.27	0.29	0.27	0.29	0.21	0.24	0.39	0.13
IM ACWI Ex US Core (MF) Median	7.30	7.30	-3.87	12.66	2.49	5.82	4.45	-16.67	8.87	13.50	22.78	-15.85
Rank	58	58	68	45	46	36	42	46	52	55	60	32

Performance shown is net of fees, except where noted, and is product specific.



Ohio Public Employees Deferred Compensation Program
Comparative Performance

As of March 31, 2023

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Passive Management												
US Bond Index	3.14	3.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bloomberg US Agg Bond Index	2.96	2.96	-4.78	-2.77	0.90	0.88	1.36	-13.01	-1.55	7.51	8.72	0.01
Difference	0.18	0.18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM U.S. Broad Market Core Fixed Income (MF) Median	3.14	3.14	-5.31	-1.85	0.85	0.99	1.32	-13.67	-1.33	8.15	8.76	-0.62
Rank	50	50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
State Street US Bond Index L (CIT)	3.13	3.13	-4.80	-2.76	0.94	0.90	1.38	-13.13	-1.62	7.67	8.74	0.03
Bloomberg US Agg Bond Index	2.96	2.96	-4.78	-2.77	0.90	0.88	1.36	-13.01	-1.55	7.51	8.72	0.01
Difference	0.17	0.17	-0.02	0.01	0.04	0.02	0.02	-0.12	-0.07	0.16	0.02	0.02
IM U.S. Broad Market Core Fixed Income (MF) Median	3.14	3.14	-5.31	-1.85	0.85	0.99	1.32	-13.67	-1.33	8.15	8.76	-0.62
Rank	51	51	23	86	40	57	44	24	63	67	51	17

Performance shown is net of fees, except where noted, and is product specific.



Ohio Public Employees Deferred Compensation Program
Comparative Performance

As of March 31, 2023

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Hands-On Investing - Active Management												
US Large Value Company Stock	1.49	1.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 1000 Val Index	1.01	1.01	-5.91	17.93	7.50	9.02	9.13	-7.54	25.16	2.80	26.54	-8.27
Difference	0.48	0.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S&P 500 Index (Cap Wtd)	7.50	7.50	-7.73	18.60	11.19	12.42	12.24	-18.11	28.71	18.40	31.49	-4.38
Difference	-6.01	-6.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM U.S. Large Cap Value Equity (MF) Median	0.15	0.15	-4.96	18.15	8.02	9.60	9.36	-6.10	25.96	3.82	26.50	-8.61
Rank	27	27	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dodge & Cox Stock;X (DOXGX)	1.51	1.51	-6.70	23.38	9.45	12.19	11.38	-7.16	31.73	7.16	24.83	-7.07
Russell 1000 Val Index	1.01	1.01	-5.91	17.93	7.50	9.02	9.13	-7.54	25.16	2.80	26.54	-8.27
Difference	0.50	0.50	-0.79	5.45	1.95	3.17	2.25	0.38	6.57	4.36	-1.71	1.20
S&P 500 Index (Cap Wtd)	7.50	7.50	-7.73	18.60	11.19	12.42	12.24	-18.11	28.71	18.40	31.49	-4.38
Difference	-5.99	-5.99	1.03	4.78	-1.74	-0.23	-0.86	10.95	3.02	-11.24	-6.66	-2.69
IM U.S. Large Cap Value Equity (MF) Median	0.15	0.15	-4.96	18.15	8.02	9.60	9.36	-6.10	25.96	3.82	26.50	-8.61
Rank	27	27	77	6	24	8	5	63	3	25	73	34
Fidelity Growth Company (CIT)	15.67	15.67	-12.72	22.27	15.35	18.80	17.39	-32.87	22.99	68.86	39.10	-4.05
Russell 1000 Grth Index	14.37	14.37	-10.90	18.58	13.66	15.01	14.59	-29.14	27.60	38.49	36.39	-1.51
Difference	1.30	1.30	-1.82	3.69	1.69	3.79	2.80	-3.73	-4.61	30.37	2.71	-2.54
Russell 3000 Grth Index	13.85	13.85	-10.88	18.23	13.02	14.60	14.16	-28.97	25.85	38.26	35.85	-2.12
Difference	1.82	1.82	-1.84	4.04	2.33	4.20	3.23	-3.90	-2.86	30.60	3.25	-1.93
IM U.S. Large Cap Growth Equity (MF) Median	13.68	13.68	-12.88	14.60	10.72	12.72	12.57	-31.30	22.39	35.62	33.26	-1.22
Rank	26	26	49	1	1	1	1	68	44	1	4	81
Fidelity Contrafund (CIT)	10.82	10.82	-10.57	15.34	10.57	13.20	12.88	-27.14	24.77	31.44	31.17	-1.81
Russell 1000 Grth Index	14.37	14.37	-10.90	18.58	13.66	15.01	14.59	-29.14	27.60	38.49	36.39	-1.51
Difference	-3.55	-3.55	0.33	-3.24	-3.09	-1.81	-1.71	2.00	-2.83	-7.05	-5.22	-0.30
S&P 500 Index (Cap Wtd)	7.50	7.50	-7.73	18.60	11.19	12.42	12.24	-18.11	28.71	18.40	31.49	-4.38
Difference	3.32	3.32	-2.84	-3.26	-0.62	0.78	0.64	-9.03	-3.94	13.04	-0.32	2.57
IM U.S. Large Cap Growth Equity (MF) Median	13.68	13.68	-12.88	14.60	10.72	12.72	12.57	-31.30	22.39	35.62	33.26	-1.22
Rank	76	76	21	37	55	36	41	17	31	74	72	59

Performance shown is net of fees, except where noted, and is product specific.



Ohio Public Employees Deferred Compensation Program
Comparative Performance

As of March 31, 2023

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Hands-On Investing - Active Management												
US Large Growth Company Stock	14.51	14.51	-14.21	14.26	10.63	14.87	14.77	-34.97	23.90	39.54	29.39	4.13
Russell 1000 Grth Index	14.37	14.37	-10.90	18.58	13.66	15.01	14.59	-29.14	27.60	38.49	36.39	-1.51
Difference	0.14	0.14	-3.31	-4.32	-3.03	-0.14	0.18	-5.83	-3.70	1.05	-7.00	5.64
IM U.S. Large Cap Growth Equity (MF) Median	13.68	13.68	-12.88	14.60	10.72	12.72	12.57	-31.30	22.39	35.62	33.26	-1.22
Rank	35	35	70	57	53	9	6	81	35	30	84	5
T Rowe Price Large Cap Growth (SA)	14.52	14.52	-14.24	14.29	10.59	14.88	14.77	-34.95	23.68	39.89	28.83	4.63
Russell 1000 Grth Index	14.37	14.37	-10.90	18.58	13.66	15.01	14.59	-29.14	27.60	38.49	36.39	-1.51
Difference	0.15	0.15	-3.34	-4.29	-3.07	-0.13	0.18	-5.81	-3.92	1.40	-7.56	6.14
IM U.S. Large Cap Growth Equity (MF) Median	13.68	13.68	-12.88	14.60	10.72	12.72	12.57	-31.30	22.39	35.62	33.26	-1.22
Rank	35	35	71	56	55	9	6	81	36	29	87	4
State Street Large Cap Growth Index NL (CIT)	14.35	14.35	-10.95	18.50	13.60	14.95	14.54	-29.18	27.54	38.45	36.35	-1.63
Russell 1000 Grth Index	14.37	14.37	-10.90	18.58	13.66	15.01	14.59	-29.14	27.60	38.49	36.39	-1.51
Difference	-0.02	-0.02	-0.05	-0.08	-0.06	-0.06	-0.05	-0.04	-0.06	-0.04	-0.04	-0.12
IM U.S. Large Cap Growth Equity (MF) Median	13.68	13.68	-12.88	14.60	10.72	12.72	12.57	-31.30	22.39	35.62	33.26	-1.22
Rank	37	37	26	9	8	8	7	29	17	34	20	56
Vanguard Capital Opportunity;Adm (VHCAX)	7.00	7.00	-5.54	18.37	9.63	13.18	13.20	-17.47	21.11	22.89	27.28	-3.70
Russell Mid Cap Grth Index	9.14	9.14	-8.52	15.20	9.07	11.24	11.17	-26.72	12.73	35.59	35.47	-4.75
Difference	-2.14	-2.14	2.98	3.17	0.56	1.94	2.03	9.25	8.38	-12.70	-8.19	1.05
IM U.S. Mid Cap Growth Equity (MF) Median	7.81	7.81	-11.66	15.07	8.67	10.85	10.69	-28.79	14.22	34.91	33.86	-5.01
Rank	71	71	8	15	23	10	1	7	17	89	91	40

Performance shown is net of fees, except where noted, and is product specific.

Ohio Public Employees Deferred Compensation Program
Comparative Performance

As of March 31, 2023

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Hands-On Investing - Active Management												
US Small Value Company Stock	2.79	2.79	-2.44	21.07	5.30	N/A	N/A	-12.37	28.02	2.17	27.48	-13.91
Russell 2000 Val Index	-0.66	-0.66	-12.96	21.01	4.55	7.86	7.22	-14.48	28.27	4.63	22.39	-12.86
Difference	3.45	3.45	10.52	0.06	0.75	N/A	N/A	2.11	-0.25	-2.46	5.09	-1.05
IM U.S. Small Cap Value Equity (MF) Median	0.68	0.68	-7.14	25.68	5.66	8.16	7.57	-11.09	31.97	3.57	21.05	-16.08
Rank	20	20	14	91	58	N/A	N/A	72	76	63	7	31
Westwood Small Cap Value (SA)	2.89	2.89	-1.85	21.22	5.53	N/A	N/A	-12.26	28.69	2.52	27.75	-13.84
Russell 2000 Val Index	-0.66	-0.66	-12.96	21.01	4.55	7.86	7.22	-14.48	28.27	4.63	22.39	-12.86
Difference	3.55	3.55	11.11	0.21	0.98	N/A	N/A	2.22	0.42	-2.11	5.36	-0.98
IM U.S. Small Cap Value Equity (MF) Median	0.68	0.68	-7.14	25.68	5.66	8.16	7.57	-11.09	31.97	3.57	21.05	-16.08
Rank	19	19	11	90	54	N/A	N/A	70	71	60	7	30
State Street Small Cap Value Index NL (CIT)	-0.58	-0.58	-12.99	20.86	4.58	7.88	7.22	-14.59	28.10	5.10	22.24	-12.83
Russell 2000 Val Index	-0.66	-0.66	-12.96	21.01	4.55	7.86	7.22	-14.48	28.27	4.63	22.39	-12.86
Difference	0.08	0.08	-0.03	-0.15	0.03	0.02	0.00	-0.11	-0.17	0.47	-0.15	0.03
IM U.S. Small Cap Value Equity (MF) Median	0.68	0.68	-7.14	25.68	5.66	8.16	7.57	-11.09	31.97	3.57	21.05	-16.08
Rank	72	72	89	93	69	61	58	97	75	32	31	23

Performance shown is net of fees, except where noted, and is product specific.

Ohio Public Employees Deferred Compensation Program
Comparative Performance

As of March 31, 2023

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Hands-On Investing - Active Management												
US Small Growth Company Stock	7.50	7.50	-8.86	18.18	8.77	N/A	N/A	-25.26	10.31	41.72	39.56	-10.43
Russell 2000 Grth Index	6.07	6.07	-10.60	13.36	4.26	8.74	8.49	-26.36	2.83	34.63	28.48	-9.31
Difference	1.43	1.43	1.74	4.82	4.51	N/A	N/A	1.10	7.48	7.09	11.08	-1.12
IM U.S. Small Cap Growth Equity (MF) Median	6.24	6.24	-11.42	15.45	6.89	10.37	9.14	-27.54	10.53	36.55	27.69	-5.57
Rank	28	28	26	23	16	N/A	N/A	35	51	36	5	78
Westfield Small Cap Growth (SA)	7.82	7.82	-8.35	17.24	8.54	N/A	N/A	-25.34	9.96	38.83	42.34	-10.52
Russell 2000 Grth Index	6.07	6.07	-10.60	13.36	4.26	8.74	8.49	-26.36	2.83	34.63	28.48	-9.31
Difference	1.75	1.75	2.25	3.88	4.28	N/A	N/A	1.02	7.13	4.20	13.86	-1.21
IM U.S. Small Cap Growth Equity (MF) Median	6.24	6.24	-11.42	15.45	6.89	10.37	9.14	-27.54	10.53	36.55	27.69	-5.57
Rank	23	23	22	34	20	N/A	N/A	36	53	42	1	78
Fiera Small Cap Growth (SA)	7.08	7.08	-9.04	22.46	10.97	N/A	N/A	-24.23	14.61	50.38	35.95	-10.29
Russell 2000 Grth Index	6.07	6.07	-10.60	13.36	4.26	8.74	8.49	-26.36	2.83	34.63	28.48	-9.31
Difference	1.01	1.01	1.56	9.10	6.71	N/A	N/A	2.13	11.78	15.75	7.47	-0.98
IM U.S. Small Cap Growth Equity (MF) Median	6.24	6.24	-11.42	15.45	6.89	10.37	9.14	-27.54	10.53	36.55	27.69	-5.57
Rank	35	35	27	6	5	N/A	N/A	28	35	25	17	77
State Street Small Cap Growth Index NL (CIT)	6.01	6.01	-10.68	13.15	4.09	8.58	8.35	-26.50	2.73	34.14	28.42	-9.42
Russell 2000 Grth Index	6.07	6.07	-10.60	13.36	4.26	8.74	8.49	-26.36	2.83	34.63	28.48	-9.31
Difference	-0.06	-0.06	-0.08	-0.21	-0.17	-0.16	-0.14	-0.14	-0.10	-0.49	-0.06	-0.11
IM U.S. Small Cap Growth Equity (MF) Median	6.24	6.24	-11.42	15.45	6.89	10.37	9.14	-27.54	10.53	36.55	27.69	-5.57
Rank	56	56	44	72	86	79	71	45	83	57	47	74

Performance shown is net of fees, except where noted, and is product specific.

Ohio Public Employees Deferred Compensation Program
Comparative Performance

As of March 31, 2023

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Hands-On Investing - Active Management												
Non-US Company Stock	8.36	8.36	-4.59	N/A	N/A	N/A	N/A	-18.06	8.56	N/A	N/A	N/A
MSCI ACW Ex US Index (USD) (Net)	6.87	6.87	-5.07	11.80	2.47	5.86	4.17	-16.00	7.82	10.65	21.51	-14.20
Difference	1.49	1.49	0.48	N/A	N/A	N/A	N/A	-2.06	0.74	N/A	N/A	N/A
IM ACWI Ex US Core (MF) Median	7.30	7.30	-3.87	12.66	2.49	5.82	4.45	-16.67	8.87	13.50	22.78	-15.85
Rank	13	13	63	N/A	N/A	N/A	N/A	66	56	N/A	N/A	N/A
Schroders QEP Intl Value (CIT)	5.58	5.58	-5.73	14.05	1.79	4.72	3.93	-11.13	13.94	0.94	18.64	-15.32
MSCI ACW Ex US Val Index (USD) (Net)	5.16	5.16	-4.00	13.82	1.26	5.00	3.06	-8.59	10.46	-0.77	15.72	-13.97
Difference	0.42	0.42	-1.73	0.23	0.53	-0.28	0.87	-2.54	3.48	1.71	2.92	-1.35
IM ACWI Ex US Value (MF) Median	7.21	7.21	-2.74	14.41	1.58	4.45	3.16	-11.04	10.01	3.69	17.82	-16.03
Rank	100	100	79	58	30	38	31	53	15	68	35	23
Arrowstreet Intl Eq ACW Ex US C (CIT)	6.88	6.88	-1.37	19.97	7.80	10.89	N/A	-10.51	13.26	23.13	24.45	-11.43
MSCI ACW Ex US Index (USD) (Net)	6.87	6.87	-5.07	11.80	2.47	5.86	4.17	-16.00	7.82	10.65	21.51	-14.20
Difference	0.01	0.01	3.70	8.17	5.33	5.03	N/A	5.49	5.44	12.48	2.94	2.77
IM ACWI Ex US Core (MF) Median	7.30	7.30	-3.87	12.66	2.49	5.82	4.45	-16.67	8.87	13.50	22.78	-15.85
Rank	59	59	19	1	1	1	N/A	6	5	7	40	3
Vanguard Intl Growth;Adm (VWILX)	12.50	12.50	-6.81	13.48	6.53	11.26	8.79	-30.79	-0.74	59.74	31.48	-12.58
MSCI ACW Ex US Grth Index (USD) (Net)	8.59	8.59	-6.35	9.49	3.36	6.47	5.08	-23.05	5.09	22.20	27.34	-14.43
Difference	3.91	3.91	-0.46	3.99	3.17	4.79	3.71	-7.74	-5.83	37.54	4.14	1.85
IM ACWI Ex US Growth (MF) Median	9.23	9.23	-4.76	10.95	3.17	6.38	5.23	-26.63	7.93	22.75	27.84	-14.32
Rank	17	17	60	3	11	3	8	81	93	1	23	29
US Bond	3.40	3.40	-5.59	-2.29	1.24	1.19	1.61	-14.17	-1.28	9.56	8.99	0.38
Bloomberg US Agg Bond Index	2.96	2.96	-4.78	-2.77	0.90	0.88	1.36	-13.01	-1.55	7.51	8.72	0.01
Difference	0.44	0.44	-0.81	0.48	0.34	0.31	0.25	-1.16	0.27	2.05	0.27	0.37
IM U.S. Broad Market Core+ Fixed Income (MF) Median	3.23	3.23	-5.51	-1.07	1.07	1.32	1.48	-13.72	-0.94	8.58	9.33	-0.97
Rank	32	32	52	85	38	61	41	64	65	28	59	9
TCW Total Return Bond Class B (CIT)	3.40	3.40	-5.59	-2.29	1.24	1.19	1.61	-14.17	-1.28	9.56	8.99	0.38
Bloomberg US Agg Bond Index	2.96	2.96	-4.78	-2.77	0.90	0.88	1.36	-13.01	-1.55	7.51	8.72	0.01
Difference	0.44	0.44	-0.81	0.48	0.34	0.31	0.25	-1.16	0.27	2.05	0.27	0.37
IM U.S. Broad Market Core+ Fixed Income (MF) Median	3.23	3.23	-5.51	-1.07	1.07	1.32	1.48	-13.72	-0.94	8.58	9.33	-0.97
Rank	32	32	52	85	38	61	41	64	65	28	59	9

Performance shown is net of fees, except where noted, and is product specific.



Ohio Public Employees Deferred Compensation Program
Comparative Performance
Stable Value Fund

As of March 31, 2023

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Hands-On Investing - Active Management												
Stable Value Option	0.61	0.61	1.96	1.94	2.17	2.17	2.20	1.74	1.76	2.34	2.63	2.33
Stable Value Custom Benchmark	0.36	0.36	1.16	1.33	2.28	2.27	2.06	1.02	1.37	2.18	3.81	3.40
Difference	0.25	0.25	0.80	0.61	-0.11	-0.10	0.14	0.72	0.39	0.16	-1.18	-1.07
Morningstar US CIT Stable Val Index	0.64	0.64	2.12	1.98	2.15	2.08	1.98	1.88	1.76	2.24	2.51	2.23
Difference	-0.03	-0.03	-0.16	-0.04	0.02	0.09	0.22	-0.14	0.00	0.10	0.12	0.10
Term Fund												
GSAM Combined Term Fund	1.64	1.64	0.53	0.07	1.46	1.21	N/A	-3.58	-0.58	3.80	4.40	1.53
Bloomberg US Gov't Crdt 1-3 Yr Bond Index	1.51	1.51	0.26	-0.38	1.26	1.04	1.01	-3.69	-0.47	3.33	4.03	1.60
Difference	0.13	0.13	0.27	0.45	0.20	0.17	N/A	0.11	-0.11	0.47	0.37	-0.07
GSAM Term Fund 2023 (CIT)	1.16	1.16	1.57	1.15	N/A	N/A	N/A	-1.14	-0.53	5.99	6.49	N/A
Bloomberg Maturing Benchmark 2023 (SU) (Gross)	1.17	1.17	1.41	0.50	N/A	N/A	N/A	-1.37	-0.45	5.31	6.30	N/A
Difference	-0.01	-0.01	0.16	0.65	N/A	N/A	N/A	0.23	-0.08	0.68	0.19	N/A
GSAM Term Fund 2024 (CIT)	1.42	1.42	0.28	-0.09	N/A	N/A	N/A	-4.25	-1.23	6.84	N/A	N/A
Bloomberg Maturing Benchmark 2024 (SU) (Gross)	1.33	1.33	0.01	-0.52	N/A	N/A	N/A	-4.40	-1.15	6.70	N/A	N/A
Difference	0.09	0.09	0.27	0.43	N/A	N/A	N/A	0.15	-0.08	0.14	N/A	N/A
GSAM Term Fund 2025 (CIT)	1.69	1.69	-0.59	N/A	N/A	N/A	N/A	-6.49	-2.26	N/A	N/A	N/A
Bloomberg Maturing Benchmark 2025 (SU) (Gross)	1.63	1.63	-0.60	N/A	N/A	N/A	N/A	-6.36	-2.01	N/A	N/A	N/A
Difference	0.06	0.06	0.01	N/A	N/A	N/A	N/A	-0.13	-0.25	N/A	N/A	N/A
GSAM Term Fund 2026 (CIT)	2.11	2.11	-1.49	N/A	N/A	N/A	N/A	-8.33	N/A	N/A	N/A	N/A
Bloomberg Maturing Benchmark 2026 (SU) (Gross)	2.07	2.07	-1.48	N/A	N/A	N/A	N/A	-9.20	N/A	N/A	N/A	N/A
Difference	0.04	0.04	-0.01	N/A	N/A	N/A	N/A	0.87	N/A	N/A	N/A	N/A
GSAM Term Fund 2027 (CIT)	2.24	2.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bloomberg Maturing Benchmark 2026 (SU) (Gross)	2.07	2.07	-1.48	N/A	N/A	N/A	N/A	-9.20	N/A	N/A	N/A	N/A
Difference	0.17	0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Performance shown is net of fees for the underlying stable value funds.

Ohio Public Employees Deferred Compensation Program
Comparative Performance
Stable Value Fund

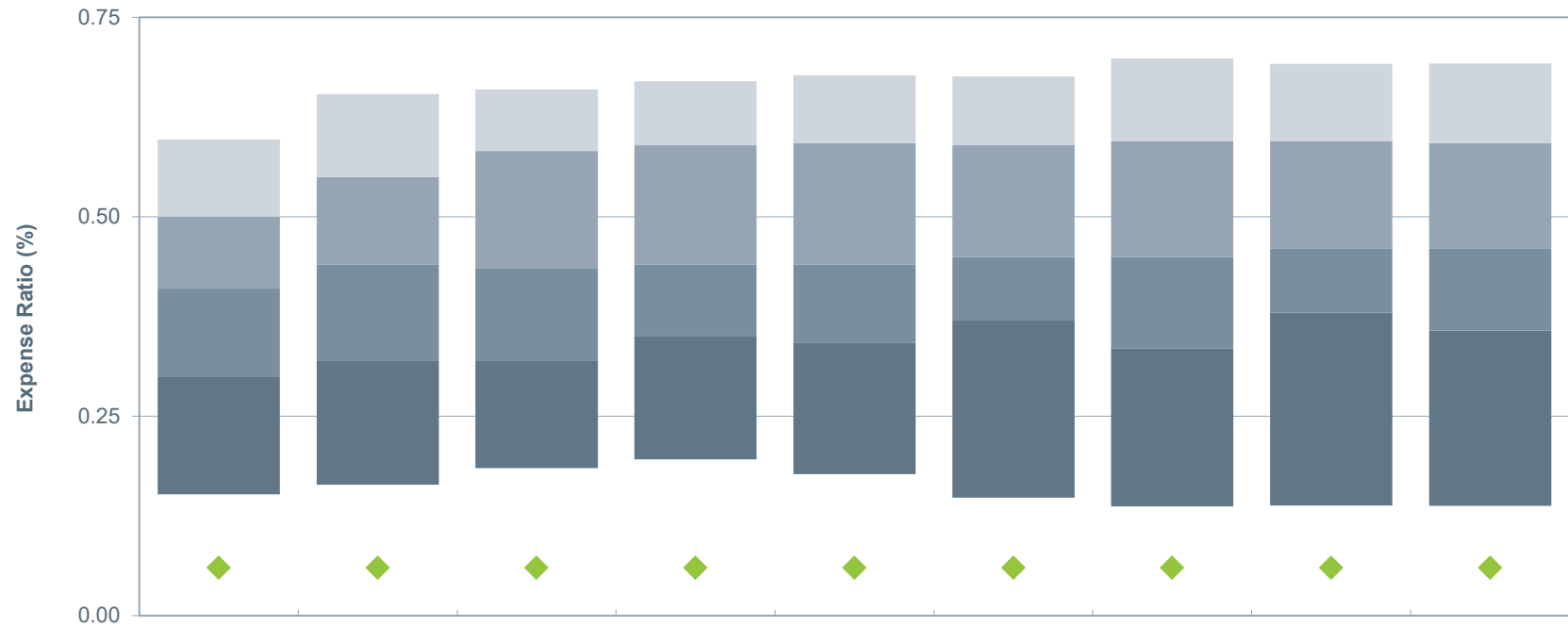
As of March 31, 2023

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Hands-On Investing - Active Management												
Open Maturity												
JP Morgan (SA)	2.67	2.67	-1.70	-0.98	1.45	1.28	1.51	-8.24	-0.95	6.06	6.57	1.02
Bloomberg US Agg Int Index*	2.39	2.39	-2.79	-1.96	1.00	0.83	1.22	-9.51	-1.29	5.60	6.67	0.92
Difference	0.28	0.28	1.09	0.98	0.45	0.45	0.29	1.27	0.34	0.46	-0.10	0.10
EARNEST Partners (SA)	2.07	2.07	-2.77	-1.42	1.05	0.95	1.29	-8.99	-0.73	5.05	6.49	1.25
Bloomberg US Agg Int Index	2.39	2.39	-2.79	-1.96	1.00	0.83	1.22	-9.51	-1.29	5.60	6.67	0.92
Difference	-0.32	-0.32	0.02	0.54	0.05	0.12	0.07	0.52	0.56	-0.55	-0.18	0.33
Payden Rygel (SA)	2.36	2.36	-2.77	-1.43	1.12	1.05	1.37	-9.21	-1.23	6.19	6.64	0.84
Bloomberg US Agg Int Index	2.39	2.39	-2.79	-1.96	1.00	0.83	1.22	-9.51	-1.29	5.60	6.67	0.92
Difference	-0.03	-0.03	0.02	0.53	0.12	0.22	0.15	0.30	0.06	0.59	-0.03	-0.08
Jennison (SA)	2.60	2.60	-2.45	-1.80	1.20	1.05	1.48	-9.42	-1.76	7.73	6.03	0.92
Bloomberg US Agg Int Index	2.39	2.39	-2.79	-1.96	1.00	0.83	1.22	-9.51	-1.29	5.60	6.67	0.92
Difference	0.21	0.21	0.34	0.16	0.20	0.22	0.26	0.09	-0.47	2.13	-0.64	0.00
Nationwide (SA)	2.14	2.14	-2.98	-1.75	0.83	0.87	1.08	-9.47	-1.13	5.35	6.27	1.09
Nationwide Custom Benchmark	2.39	2.39	-2.79	-2.02	0.81	0.69	1.01	-9.51	-1.29	5.25	6.06	1.07
Difference	-0.25	-0.25	-0.19	0.27	0.02	0.18	0.07	0.04	0.16	0.10	0.21	0.02
Dodge & Cox Intermediate (SA)	2.47	2.47	-1.96	-0.88	1.25	1.19	N/A	-8.95	-1.42	7.01	6.57	0.54
Dodge & Cox Custom Benchmark	2.39	2.39	-2.79	-2.02	0.81	0.69	1.05	-9.51	-1.29	5.25	6.06	1.07
Difference	0.08	0.08	0.83	1.14	0.44	0.50	N/A	0.56	-0.13	1.76	0.51	-0.53
STIF												
BNYM US Gov Collective STIF	1.13	1.13	2.75	0.99	1.42	1.24	0.90	1.63	0.07	0.51	2.25	1.89
FTSE 3 Mo T-Bill Index	1.12	1.12	2.61	0.95	1.40	1.20	0.85	1.50	0.05	0.58	2.25	1.86
Difference	0.01	0.01	0.14	0.04	0.02	0.04	0.05	0.13	0.02	-0.07	0.00	0.03

Performance shown is net of fees for the underlying stable value funds.

Ohio Public Employees Deferred Compensation Program
Fund Fees Peer Group Analysis

As of March 31, 2023



Fund	LifePath Retire	LifePath 2025	LifePath 2030	LifePath 2035	LifePath 2040	LifePath 2045	LifePath 2050	LifePath 2055	LifePath 2060
Peer Group	Mixed-Asset Target Today (MF)	Mixed-Asset Target 2025 (MF)	Mixed-Asset Target 2030 (MF)	Mixed-Asset Target 2035 (MF)	Mixed-Asset Target 2040 (MF)	Mixed-Asset Target 2045 (MF)	Mixed-Asset Target 2050 (MF)	Mixed-Asset Target 2055 (MF)	Mixed-Asset Target 2060 (MF)
◆ Fund Expense Ratio	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Median Expense Ratio	0.41	0.44	0.44	0.44	0.44	0.45	0.45	0.46	0.46
Percentile Rank	1	1	1	1	1	1	1	1	1
Population	27	37	36	37	36	37	35	39	36

Fund Expense Ratios are intuitively ranked (i.e., a lower expense ratio yields a better percentile rank than a higher expense ratio).
The fee peer groups consist of only institutional share classes.

Ohio Public Employees Deferred Compensation Program
Fund Fees Peer Group Analysis

As of March 31, 2023



Fund Expense Ratios are intuitively ranked (i.e., a lower expense ratio yields a better percentile rank than a higher expense ratio).
The fee peer groups consist of only institutional share classes.

Ohio Public Employees Deferred Compensation Program
Fund Fees Peer Group Analysis

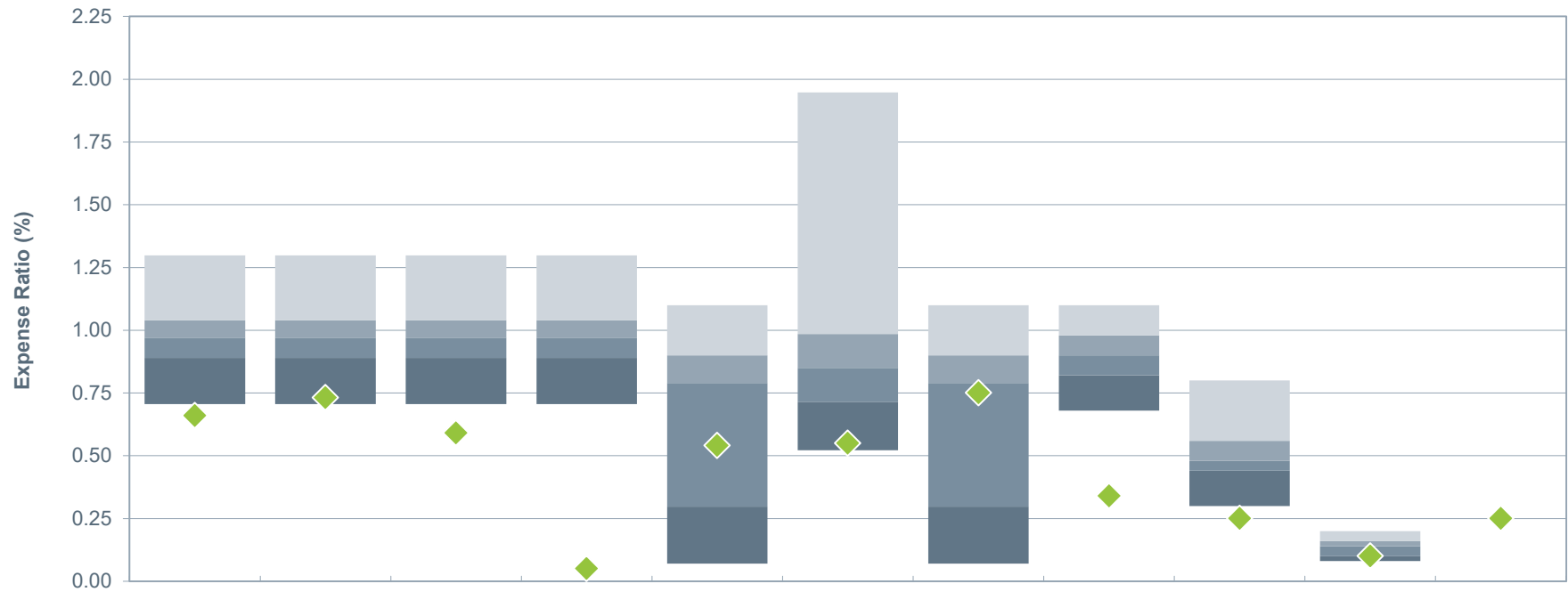
As of March 31, 2023



Fund Expense Ratios are intuitively ranked (i.e., a lower expense ratio yields a better percentile rank than a higher expense ratio).
The fee peer groups consist of only institutional share classes.

Ohio Public Employees Deferred Compensation Program
Fund Fees Peer Group Analysis

As of March 31, 2023



Fund	US Small Growth Company Stock	Westfield Small Cap Growth (SA)	Fiera Small Cap Growth (SA)	State Street Small Cap Growth Index NL (CIT)	Non-US Company Stock	Schroders QEP Intl Value (CIT)	Arrowstreet Intl Eq ACW Ex US C (CIT)	Vanguard Intl Growth;Adm (VWILX)	US Bond	Stable Value Option	Stable Value Option *
Peer Group	U.S. Small Cap Growth Equity (MF)	U.S. Small Cap Growth Equity (MF)	U.S. Small Cap Growth Equity (MF)	U.S. Small Cap Growth Equity (MF)	ACWI ex US Core (MF)	ACWI Ex US Value (MF)	ACWI ex US Core (MF)	ACWI Ex US Growth (MF)	U.S. Broad Market Core+ Fixed Income (MF)	eA US Stable Value Fixed Income	N/A
◆ Fund Expense Ratio	0.66	0.73	0.59	0.05	0.54	0.55	0.75	0.34	0.25	0.10	0.25
Median Expense Ratio	0.97	0.97	0.97	0.97	0.79	0.85	0.79	0.90	0.48	0.14	N/A
Percentile Rank	5	7	3	1	28	7	45	1	3	16	N/A
Population	149	149	149	149	44	16	44	41	79	28	N/A

Fund Expense Ratios are intuitively ranked (i.e., a lower expense ratio yields a better percentile rank than a higher expense ratio).
The fee peer groups consist of only institutional share classes. Funds with no applicable fee peer groups are denoted with an asterisk (*).
Additional information regarding the Stable Value Option fee can be found in the Addendum.

Ohio Public Employees Deferred Compensation Program
Fee Analysis

As of March 31, 2023

	Estimated Annual Fee (%)	Market Value As of 03/31/2023 (\$)	Estimated Annual Fee (\$)
Total Plan	0.25	17,311,462,922	43,410,311
LifePath Retirement	0.06	789,564,640	473,739
LifePath 2025	0.06	498,476,902	299,086
LifePath 2030	0.06	672,864,772	403,719
LifePath 2035	0.06	350,649,139	210,389
LifePath 2040	0.06	354,383,961	212,630
LifePath 2045	0.06	200,297,254	120,178
LifePath 2050	0.06	212,061,981	127,237
LifePath 2055	0.06	167,679,303	100,608
LifePath 2060	0.06	37,383,512	22,430
US Large Company Stock Index	0.01	846,593,829	84,659
State Street S&P 500 Index L (CIT)	0.01	846,593,829	84,659
US Small/Mid Company Stock Index	0.02	330,568,933	66,114
State Street Small/Mid Cap Index L (CIT)	0.02	330,568,933	66,114
Non-US Company Stock Index	0.05	198,171,525	99,086
State Street Global All Cap Equity Ex US L (CIT)	0.05	198,171,525	99,086
US Bond Index	0.02	254,858,038	50,972
State Street US Bond Index L (CIT)	0.02	254,858,038	50,972
US Large Value Company Stock	0.41	1,304,297,051	5,347,618
Dodge & Cox Stock;X (DOXGX)	0.41	1,304,297,051	5,347,618
Fidelity Growth Company (CIT)	0.35	1,832,408,305	6,413,429
Fidelity Contrafund (CIT)	0.35	1,588,107,467	5,558,376
US Large Growth Company Stock	0.32	535,576,462	1,709,560
T Rowe Price Large Cap Growth (SA)	0.32	520,234,516	1,685,560
State Street Large Cap Growth Index NL (CIT)	0.04	15,341,946	6,444
Vanguard Capital Opportunity;Adm (VHCAX)	0.36	1,042,571,145	3,753,256
US Small Value Company Stock	0.51	227,520,770	1,169,229
Westwood Small Cap Value (SA)	0.53	215,001,981	1,145,006
State Street Small Cap Value Index NL (CIT)	0.05	12,518,788	6,510
US Small Growth Company Stock	0.66	202,826,467	1,335,815
Westfield Small Cap Growth (SA)	0.73	133,336,391	975,018
Fiera Small Cap Growth (SA)	0.59	55,182,653	325,578
State Street Small Cap Growth Index NL (CIT)	0.05	14,307,423	7,154
Non-US Company Stock	0.54	502,141,863	2,703,532
Schroders QEP Intl Value (CIT)	0.55	175,749,652	966,623
Arrowstreet Intl Eq ACW Ex US C (CIT)	0.75	150,642,559	1,129,819
Vanguard Intl Growth;Adm (VWILX)	0.34	175,749,652	597,549
US Bond	0.25	213,496,149	533,740
TCW Total Return Bond Class B (CIT)	0.25	213,496,149	533,740

Starting on 1/4/2021, multi-manager separate account total fees include fixed custody fee accruals by BNY Mellon.

Ohio Public Employees Deferred Compensation Program
Fee Analysis

As of March 31, 2023

	Estimated Annual Fee (%)	Market Value As of 03/31/2023 (\$)	Estimated Annual Fee (\$)
Stable Value Option	0.25	4,948,963,455	12,614,908
GSAM Term Fund 2023 (CIT)	0.00	305,213,432	-
GSAM Term Fund 2024 (CIT)	0.00	340,551,747	-
GSAM Term Fund 2025 (CIT)	0.00	340,879,389	-
GSAM Term Fund 2026 (CIT)	0.00	343,199,567	-
GSAM Term Fund 2027 (CIT)	0.00	27,280,058	-
JP Morgan (SA)	0.11	800,581,057	890,581
EARNEST Partners (SA)	0.13	416,714,634	538,386
Payden Rygel (SA)	0.13	416,412,295	524,679
Jennison (SA)	0.12	541,639,032	671,639
Nationwide (SA)	0.10	594,268,251	615,988
Dodge & Cox Intermediate (SA)	0.10	757,504,756	757,505
BNYM US Gov Collective Short Term Investment Fund (CIT)	0.10	64,719,237	64,719

Additional information regarding the Stable Value Option fee can be found in the Addendum.

Ohio Public Employees Deferred Compensation Program
Stable Value Synthetic Wrap Fees

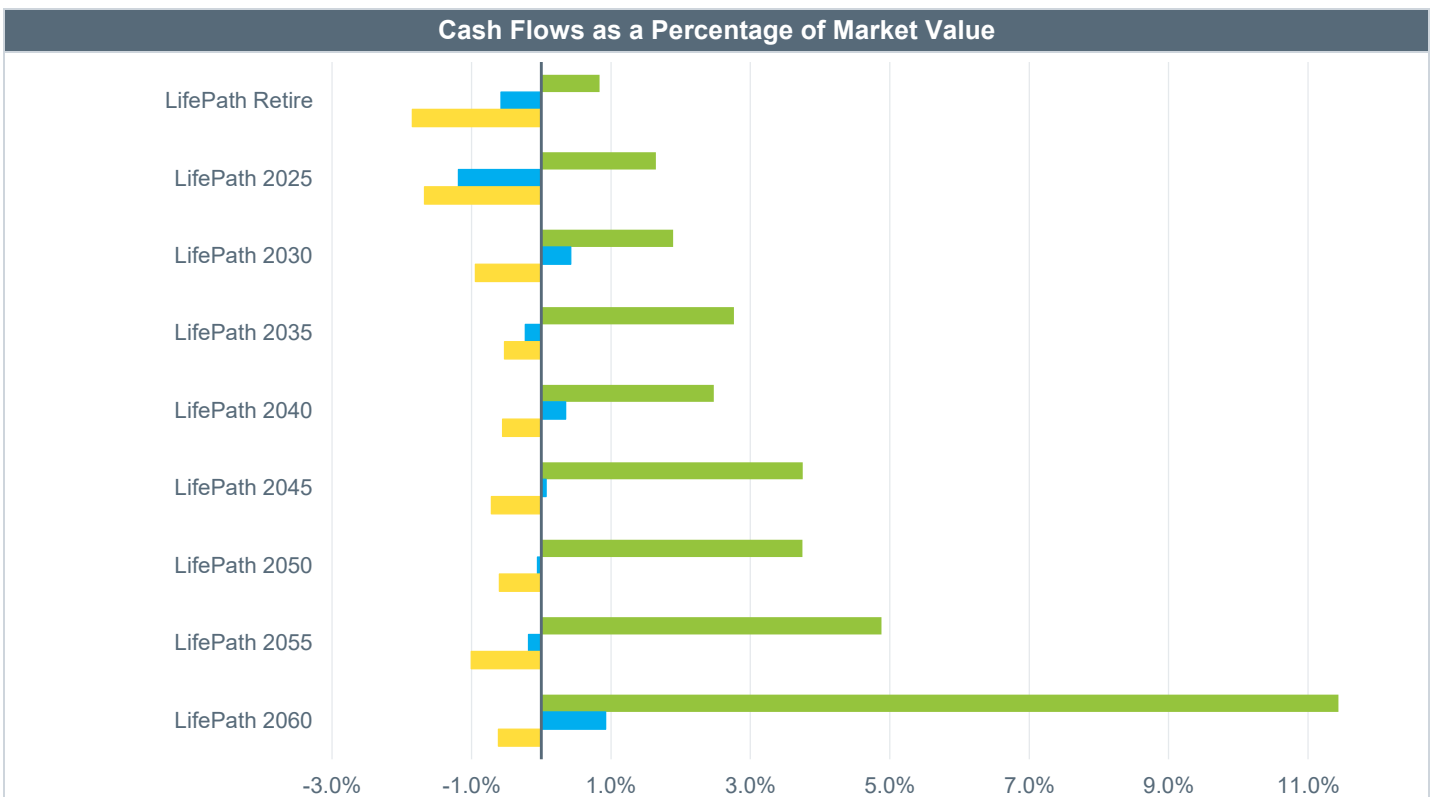
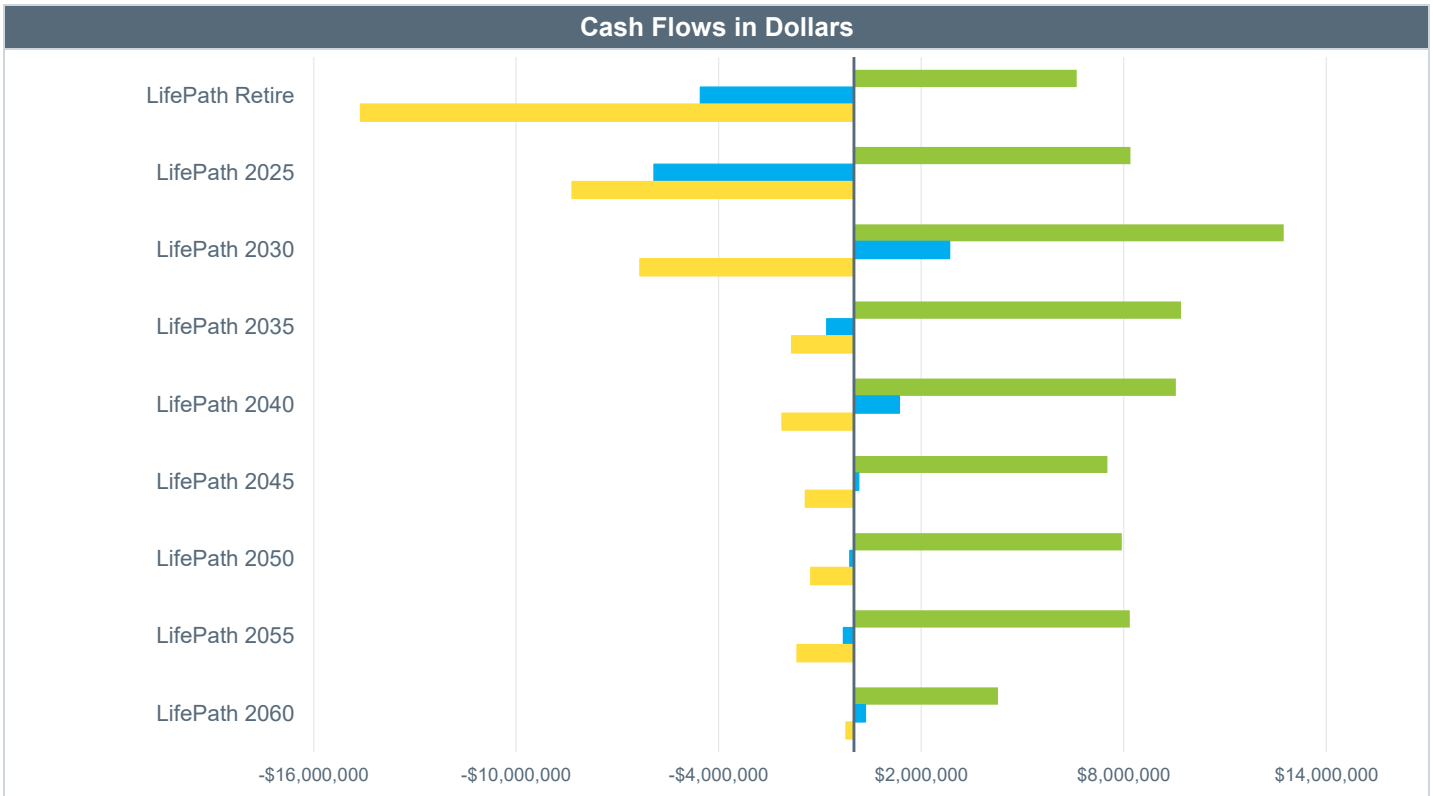
As of March 31, 2023

Issuer	Book Value	12/31/2022			3/31/2023		
		Contract Type	Fee in bps	Fee in \$	Contract Type	Fee in bps	Fee in \$
Transamerica Premier	994,728,283	Participating	15	1,493,357	Participating	15	1,492,092
Royal Bank of Canada	870,448,178	Participating	15	1,326,383	Participating	15	1,305,672
Metropolitan Life	1,114,587,595	Participating	15	1,669,231	Participating	15	1,671,881
RGA Reinsurance Co.	954,869,192	Participating	15	1,437,174	Participating	15	1,432,304
Prudential	1,258,838,092	Participating	15	1,884,315	Participating	15	1,888,257
Total	\$5,193,471,340	--	15.0	\$7,810,460	--	15.0	\$7,790,207

Wrap fees represent a weighted average allocation of book value excluding the Short Term Investment Fund.

Ohio Public Employees Deferred Compensation Program
Cash Flows by Fund TDF

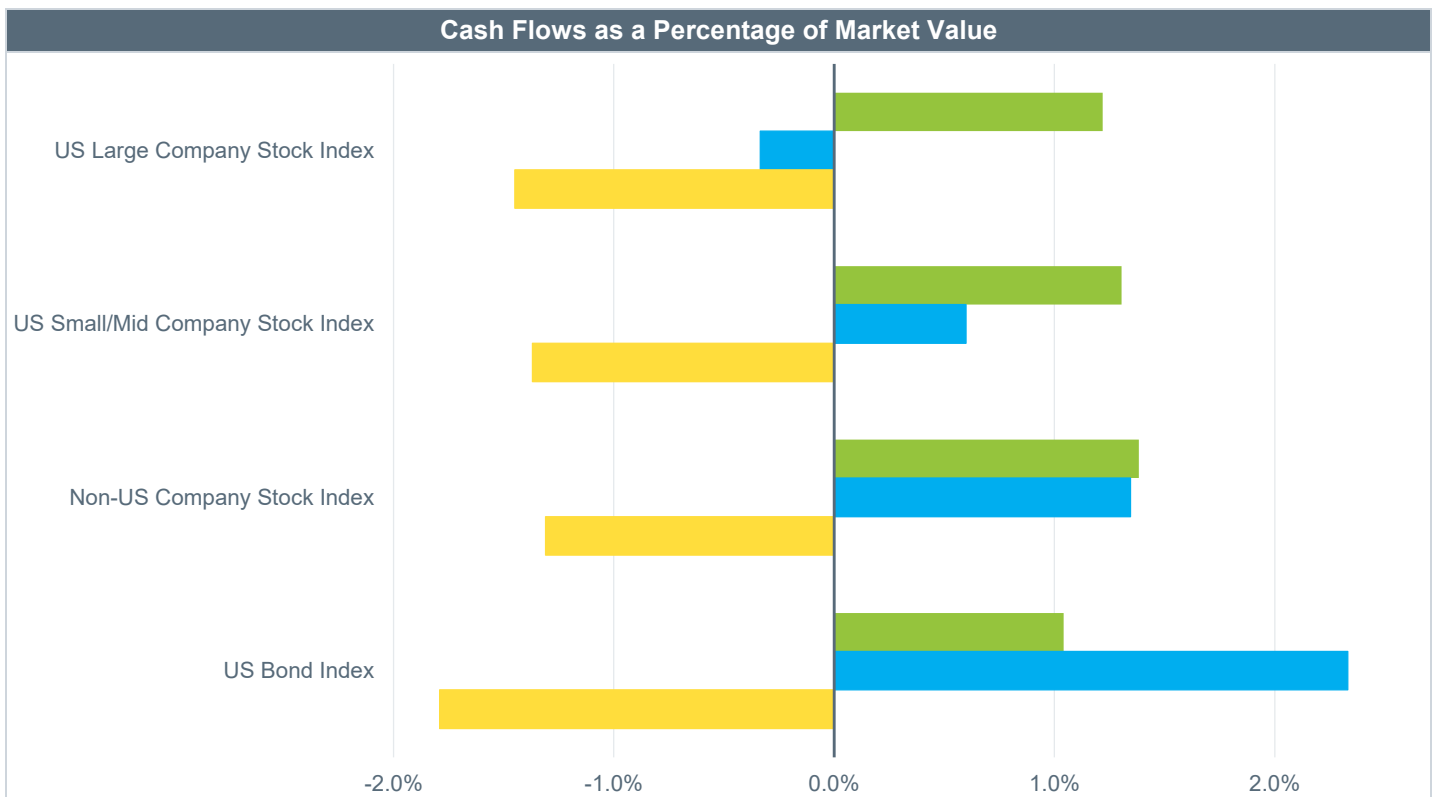
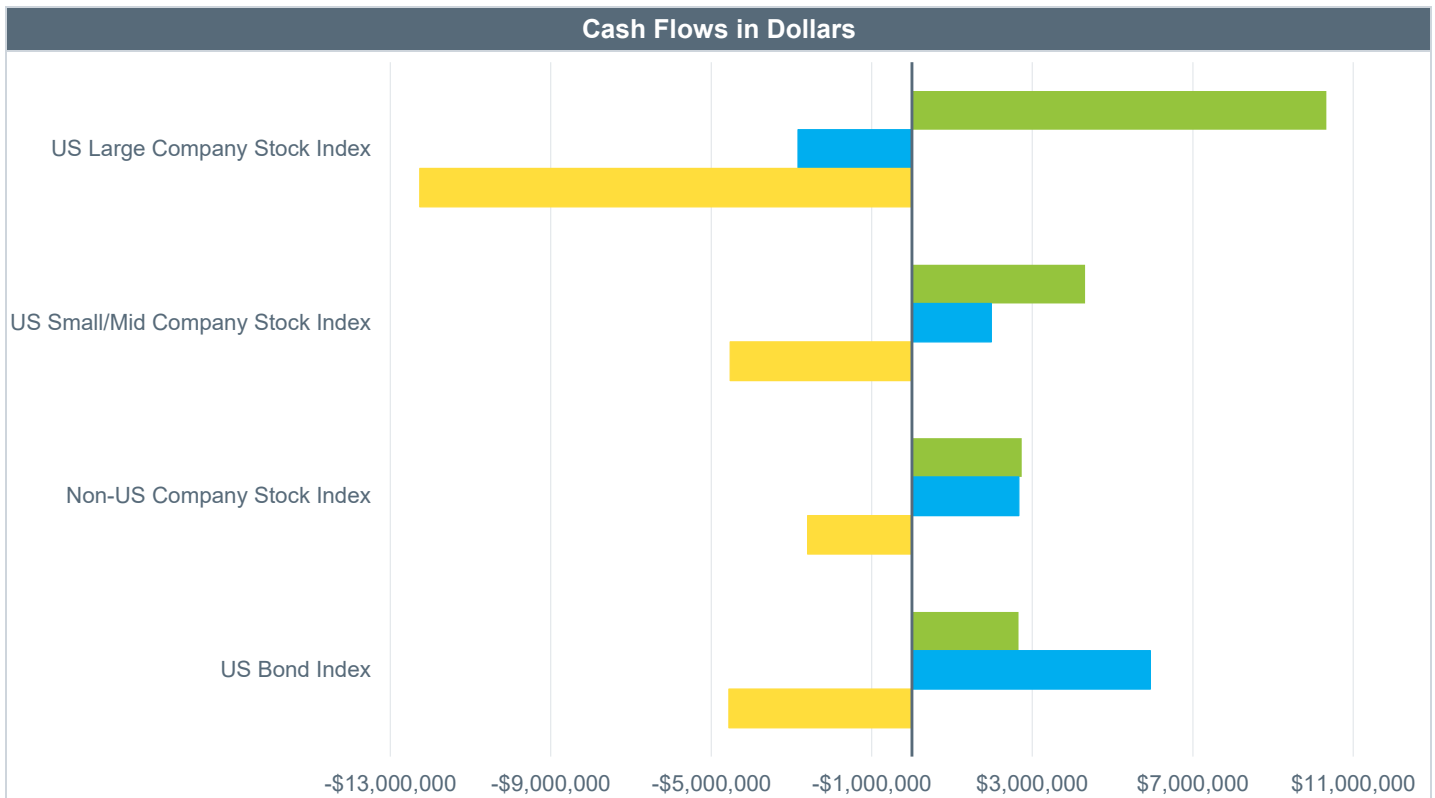
As of March 31, 2023



Key: Contributions Net Exchanges Distributions

Cash flows shown represent quarterly flows. Contributions consists of employee contributions and positive net rollovers. Distributions consists of distributions and negative rollovers.



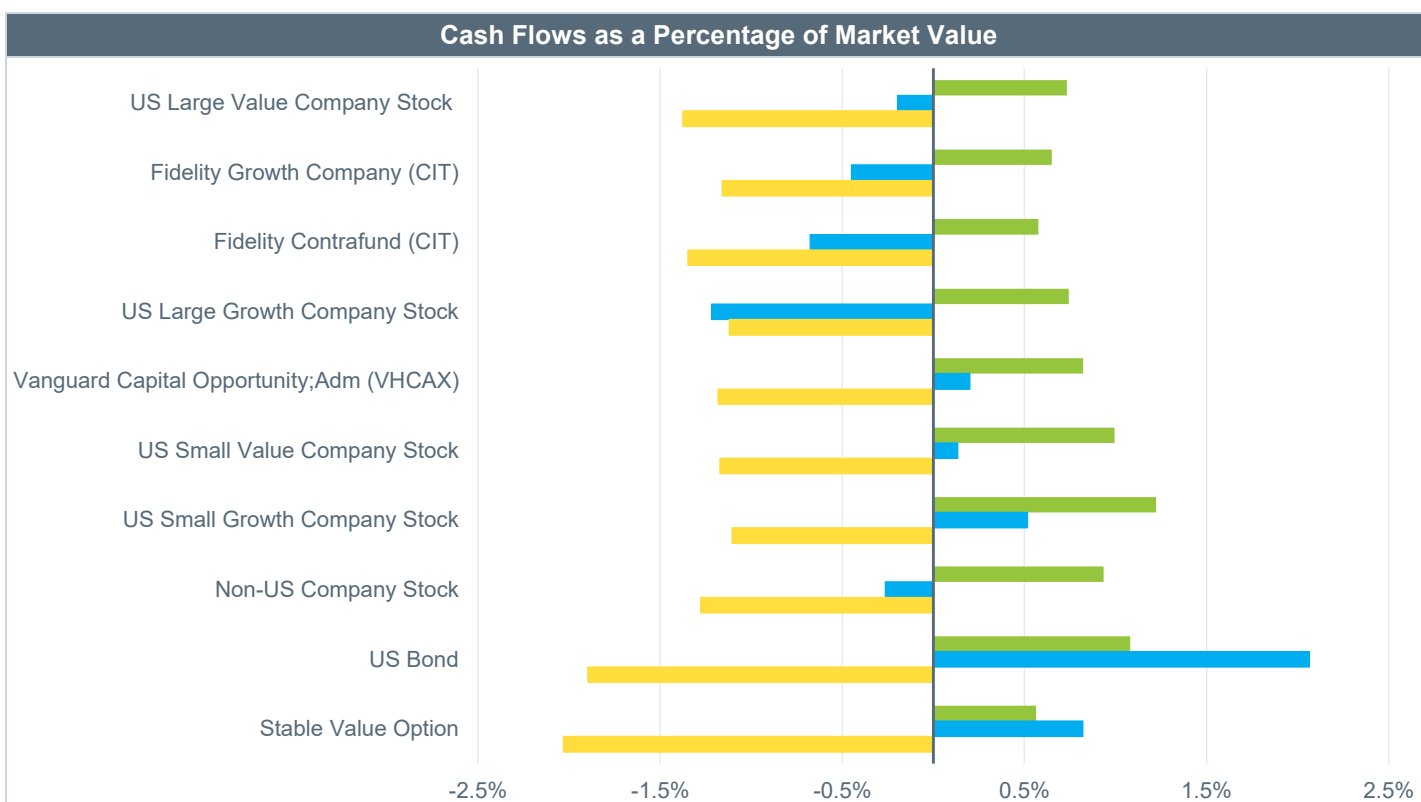
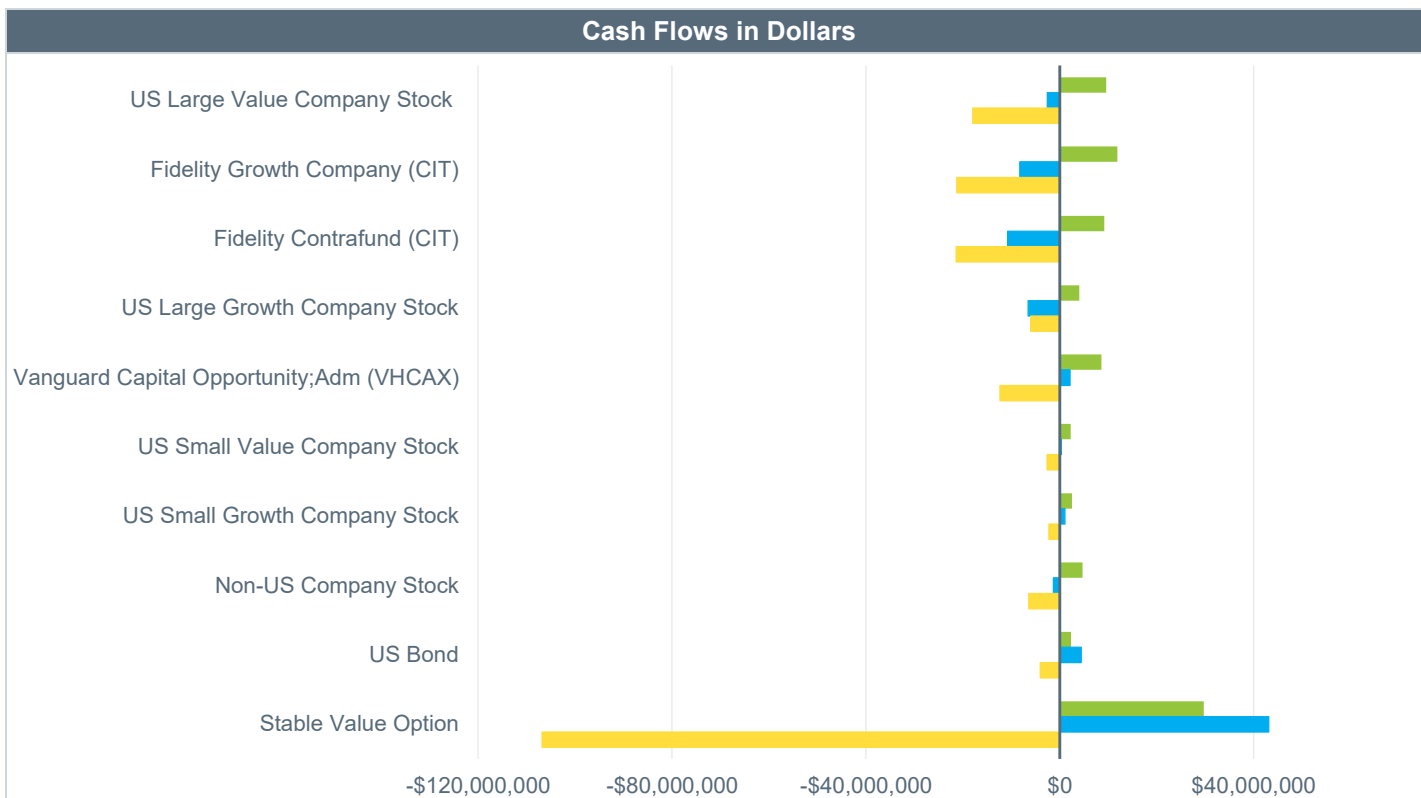


Key: ■ Contributions ■ Net Exchanges ■ Distributions

Cash flows shown represent quarterly flows. Contributions consists of employee contributions and positive net rollovers. Distributions consists of distributions and negative rollovers.

Ohio Public Employees Deferred Compensation Program
Cash Flows by Fund Active Core Line-up

As of March 31, 2023



Key: ■ Contributions ■ Net Exchanges ■ Distributions

Cash flows shown represent quarterly flows. Contributions consists of employee contributions and positive net rollovers. Distributions consists of distributions and negative rollovers.



Ohio Public Employees Deferred Compensation Program
Actual Correlation Matrix

5 Years Ending March 31, 2023

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
A	1.00													
B	0.91	1.00												
C	0.75	0.91	1.00											
D	0.81	0.96	0.97	1.00										
E	0.78	0.94	0.97	0.98	1.00									
F	0.90	0.95	0.91	0.92	0.91	1.00								
G	0.94	0.89	0.77	0.81	0.79	0.90	1.00							
H	0.90	0.93	0.90	0.90	0.90	0.95	0.93	1.00						
I	0.84	0.90	0.90	0.90	0.90	0.92	0.90	0.97	1.00					
J	0.88	0.89	0.82	0.84	0.82	0.91	0.86	0.88	0.84	1.00				
K	0.90	0.88	0.78	0.82	0.80	0.90	0.87	0.87	0.82	0.99	1.00			
L	0.22	0.40	0.48	0.48	0.51	0.38	0.25	0.34	0.33	0.46	0.45	1.00		
M	0.26	0.44	0.51	0.51	0.54	0.41	0.28	0.38	0.37	0.49	0.49	0.99	1.00	
N	0.00	0.12	0.24	0.21	0.24	0.13	0.00	0.12	0.16	0.16	0.13	0.46	0.46	1.00
A	=	US Large Value Company Stock												
B	=	US Large Company Stock Index												
C	=	Fidelity Growth Company (CIT)												
D	=	Fidelity Contrafund (CIT)												
E	=	US Large Growth Company Stock												
F	=	Vanguard Capital Opportunity;Adm (VHCAX)												
G	=	US Small Value Company Stock												
H	=	US Small/Mid Company Stock Index												
I	=	US Small Growth Company Stock												
J	=	Non-US Company Stock												
K	=	Non-US Company Stock Index												
L	=	US Bond Index												
M	=	US Bond												
N	=	Stable Value Option												

Color Legend

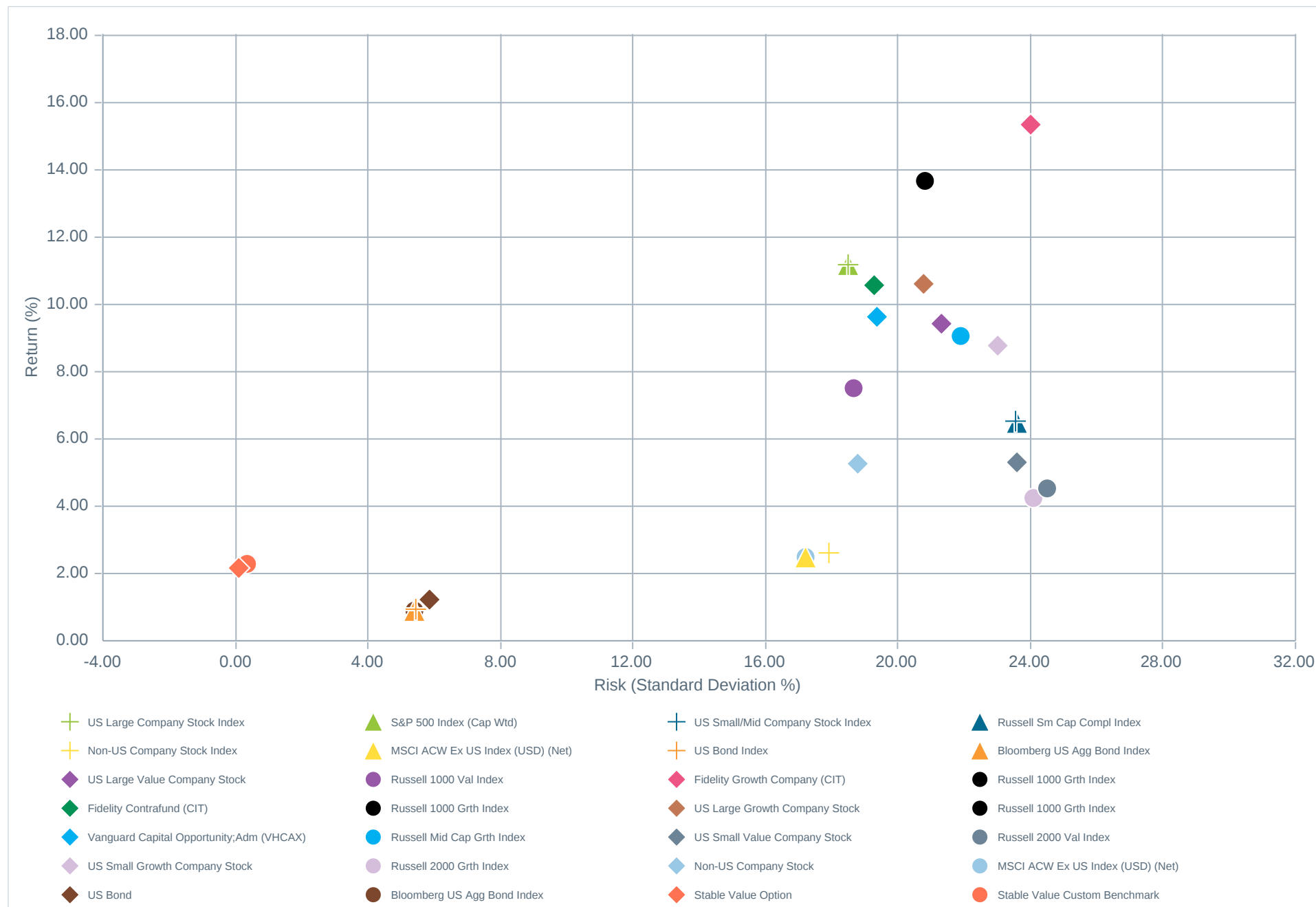
- Correlation between 1.00 and 0.90
- Correlation between 0.90 and 0.80
- Correlation between 0.80 and 0.70
- Correlation between 0.70 and 0.00
- Correlation less than 0.00

Calculation is based on monthly periodicity. Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Performance shown for Non-US Company Stock prior to 09/2020; and US Large Company Stock Index, US Small/Mid Company Stock Index, Non-US Company Stock Index, US Bond Index, and US Large Value Company Stock prior to 01/2023 is simulated and does not represent actual performance. It is an approximation of what an investor would have experienced by investing in the current underlying funds in the same proportions as the model portfolio.



Ohio Public Employees Deferred Compensation Program Risk and Return

5 Years Ending March 31, 2023



Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Performance shown for Non-US Company Stock prior to 09/2020; and US Large Company Stock Index, US Small/Mid Company Stock Index, Non-US Company Stock Index, US Bond Index, and US Large Value Company Stock prior to 01/2023 is simulated and does not represent actual performance. It is an approximation of what an investor would have experienced by investing in the current underlying funds in the same proportions as the model portfolio.

Ohio Public Employees Deferred Compensation Program Risk and Return

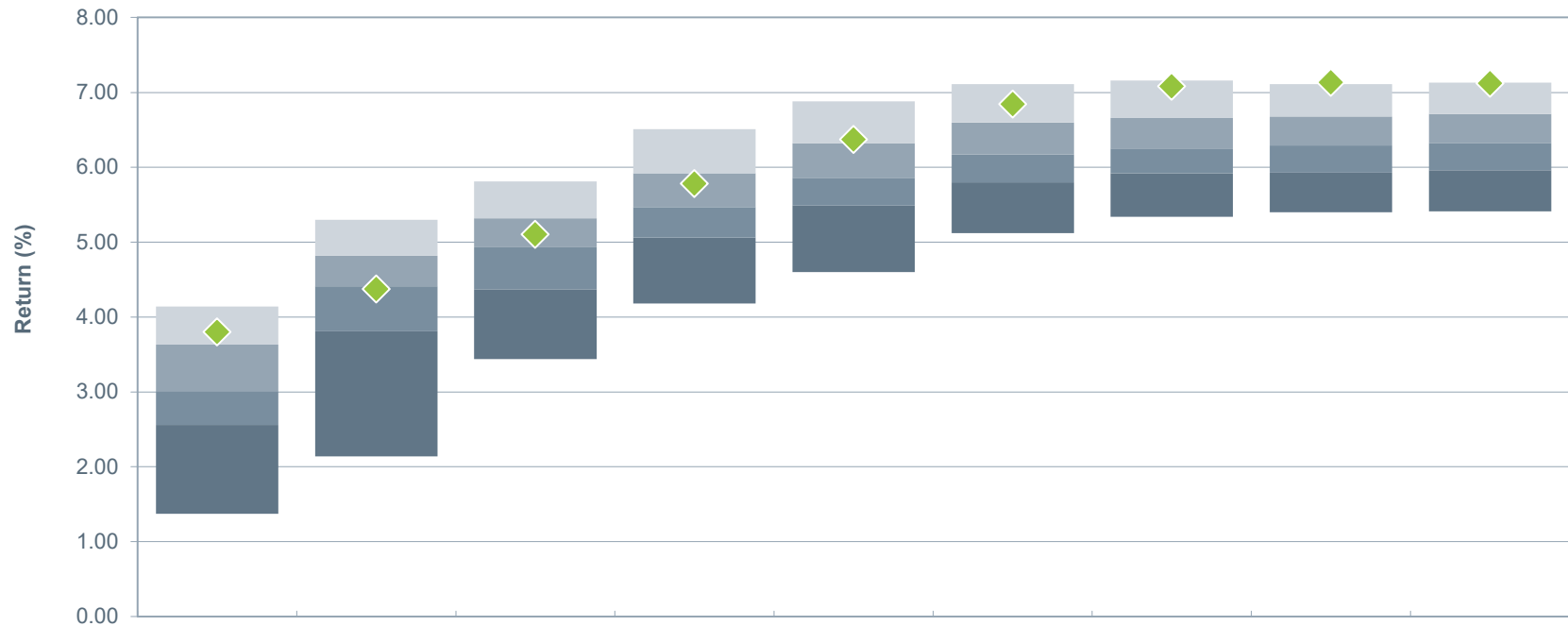
1 Year Ending March 31, 2023



Calculation is based on monthly periodicity. Funds with less history than the specified time period will not appear in the chart.

Ohio Public Employees Deferred Compensation Program
Performance Peer Group Analysis - 5 Years

As of March 31, 2023

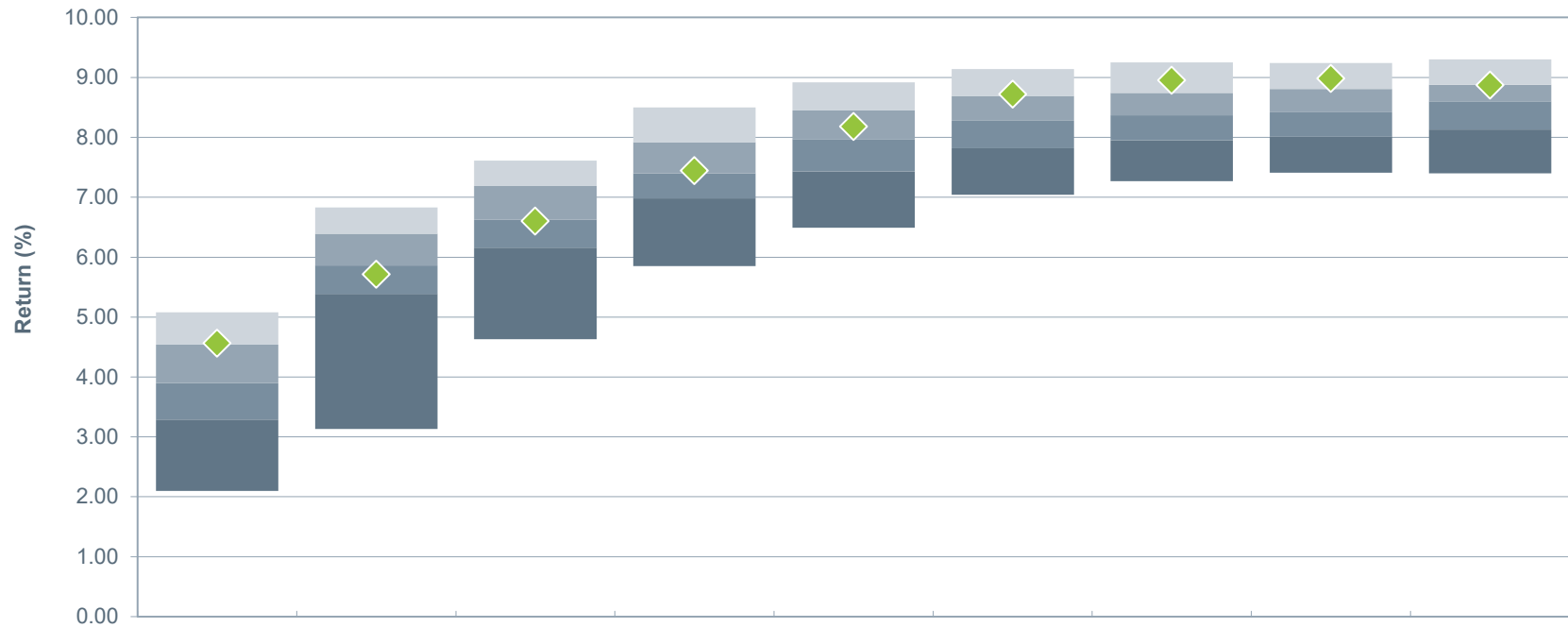


Fund	LifePath Retire	LifePath 2025	LifePath 2030	LifePath 2035	LifePath 2040	LifePath 2045	LifePath 2050	LifePath 2055	LifePath 2060
	Mixed-Asset Target Today (MF)	Mixed-Asset Target 2025 (MF)	Mixed-Asset Target 2030 (MF)	Mixed-Asset Target 2035 (MF)	Mixed-Asset Target 2040 (MF)	Mixed-Asset Target 2045 (MF)	Mixed-Asset Target 2050 (MF)	Mixed-Asset Target 2055 (MF)	Mixed-Asset Target 2060 (MF)
Peer Group									
◆ Fund Return	3.80	4.37	5.10	5.78	6.37	6.84	7.08	7.13	7.12
Median Return	3.01	4.41	4.93	5.47	5.86	6.17	6.25	6.29	6.32
Percentile Rank	16	52	41	32	23	16	8	5	6
Population	114	158	165	159	162	155	158	155	146

Performance shown is net of fees.

Ohio Public Employees Deferred Compensation Program
Performance Peer Group Analysis - 7 Years

As of March 31, 2023



Fund	LifePath Retire	LifePath 2025	LifePath 2030	LifePath 2035	LifePath 2040	LifePath 2045	LifePath 2050	LifePath 2055	LifePath 2060
	Mixed-Asset Target Today (MF)	Mixed-Asset Target 2025 (MF)	Mixed-Asset Target 2030 (MF)	Mixed-Asset Target 2035 (MF)	Mixed-Asset Target 2040 (MF)	Mixed-Asset Target 2045 (MF)	Mixed-Asset Target 2050 (MF)	Mixed-Asset Target 2055 (MF)	Mixed-Asset Target 2060 (MF)
Peer Group									
◆ Fund Return	4.56	5.71	6.60	7.44	8.18	8.72	8.95	8.98	8.87
Median Return	3.90	5.86	6.63	7.40	7.97	8.28	8.37	8.42	8.60
Percentile Rank	25	57	52	48	37	23	16	14	26
Population	97	131	134	132	127	128	127	126	92

Performance shown is net of fees.

Style Map (24 Months)



- US Large Value Company Stock
- US Large Company Stock Index
- Fidelity Growth Company (CIT)
- Fidelity Contrafund (CIT)
- US Large Growth Company Stock
- Vanguard Capital Opportunity;Adm (VHCAX)
- US Small Value Company Stock
- US Small/Mid Company Stock Index
- US Small Growth Company Stock

Calculation is based on monthly periodicity. This is a return based calculation. Performance shown for US Large Value Company Stock, US Large Company Stock Index, US Small Value Company Stock, US Small/Mid Company Stock Index, and US Small Growth Company Stock is simulated and does not represent actual performance. It is an approximation of what an investor would have experienced by investing in the current underlying funds in the same proportions as the model portfolio.

Style Map (24 Months)



◆ Non-US Company Stock Index ◆ Non-US Company Stock

Calculation is based on monthly periodicity. This is a return based calculation. Performance shown for Non-US Company Stock Index and Non-US Company Stock is simulated and does not represent actual performance. It is an approximation of what an investor would have experienced by investing in the current underlying funds in the same proportions as the model portfolio.

Investment Manager Profiles

Product Profile

Management Style: Passive

Average Passive Allocation: 100%

Inflation Focused Investments: REITs, Commodities, TIPS

Tactical Asset Allocation: Non-Discretionary

Underlying Funds Mgd By TDF Provider: 100%

To vs. Through Glide Path: To

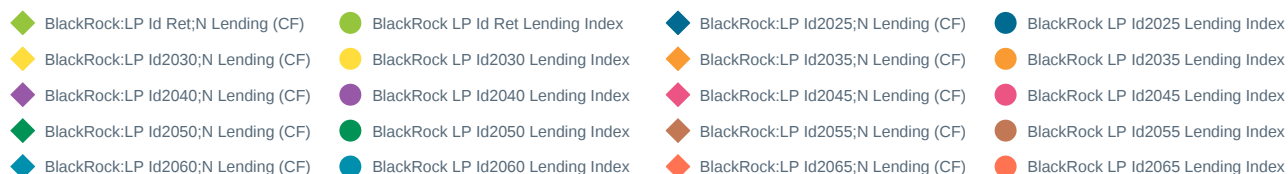
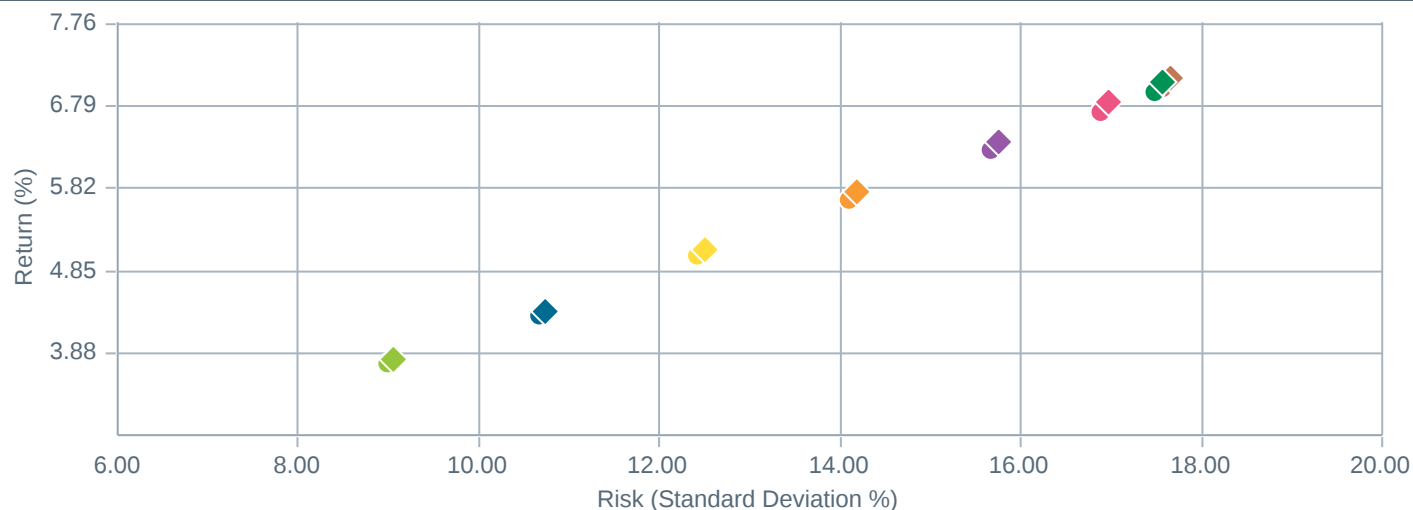
Equity Starting: 99%

Equity at Retirement: 40%

Equity Landing: 40%

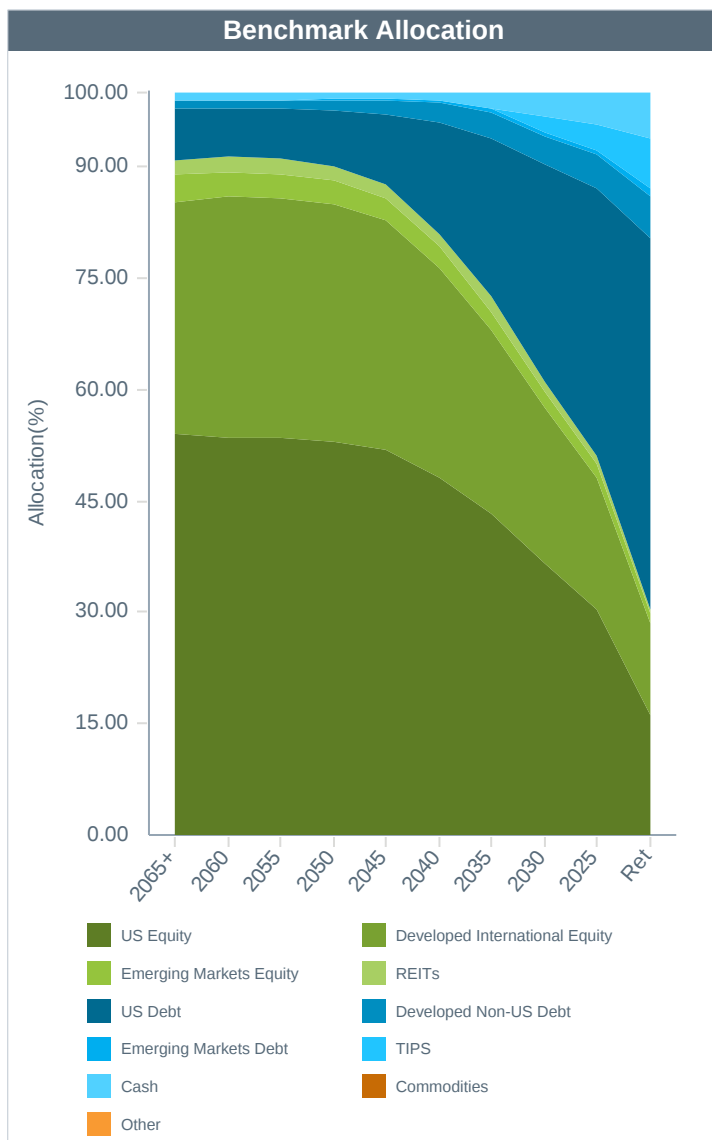
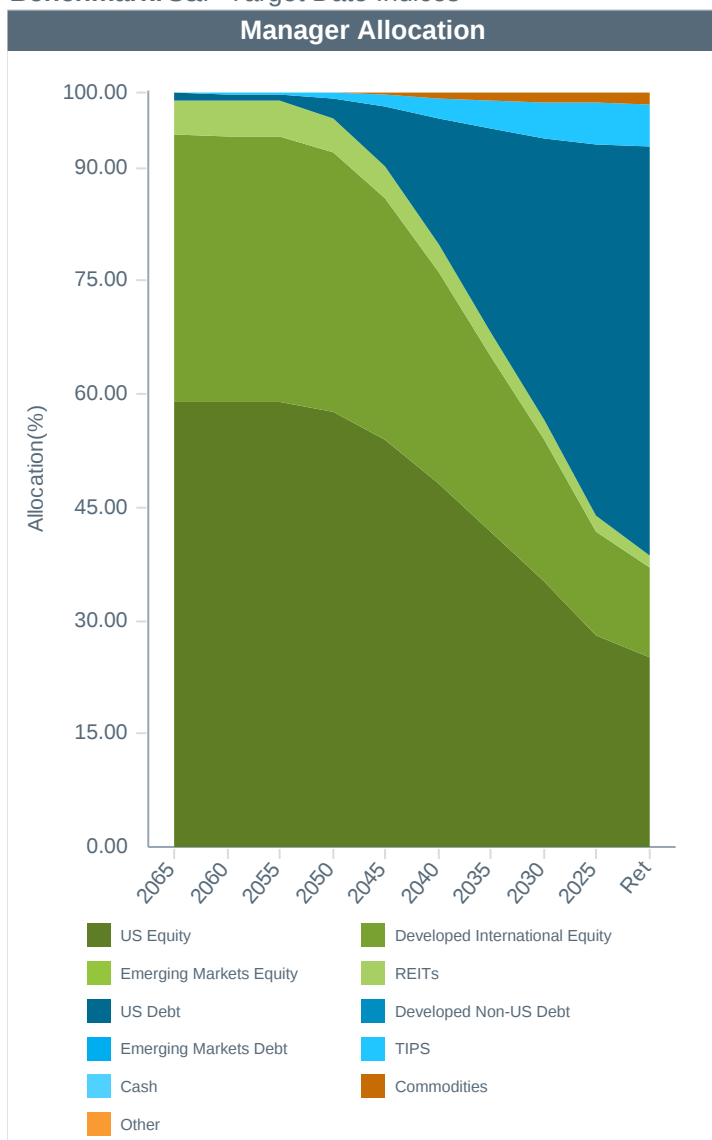
Yrs Roll Down After Retirement: N/A

Risk & Return Scattergram - 5 Years



Up/Down Market Capture Ratio (%) vs. Relevant S&P Tgt Date Idx



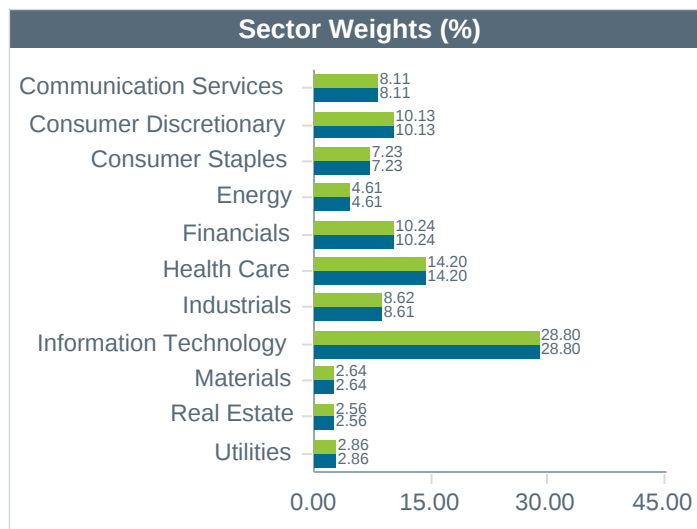
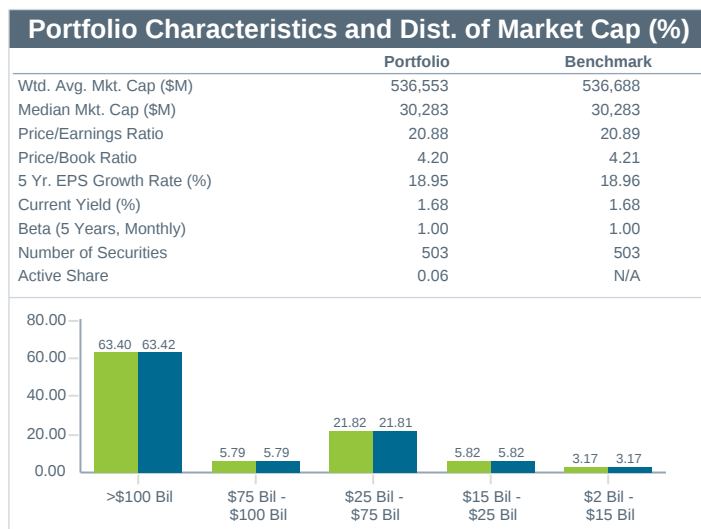
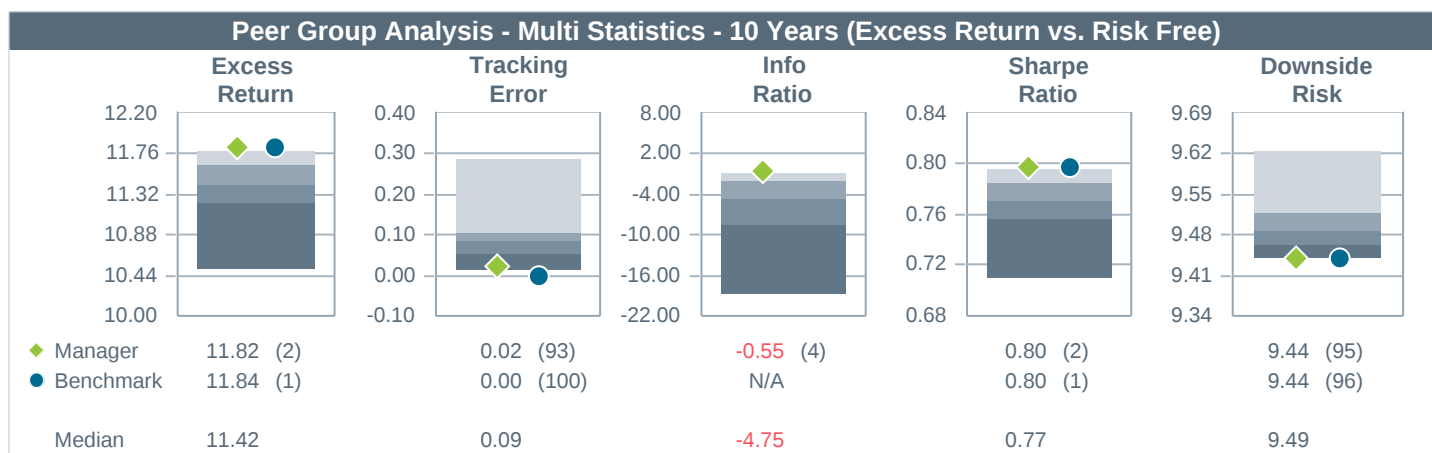
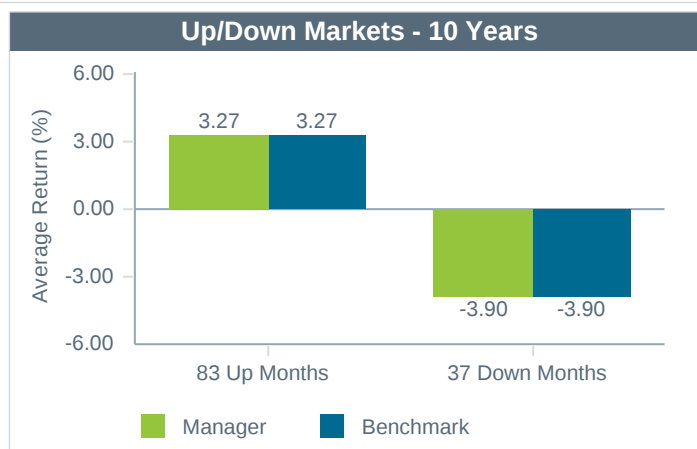
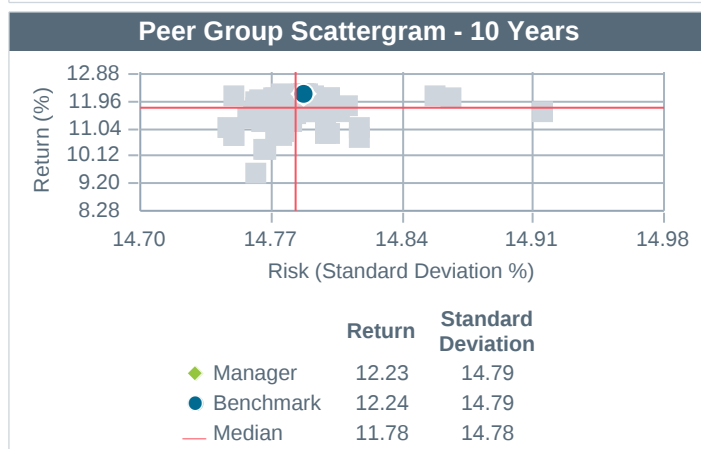


	2065	2060	2055	2050	2045	2040	2035	2030	2025	Ret
US Equity	59.01	59.00	58.97	57.68	54.09	48.24	41.84	35.27	28.12	25.20
Developed International Equity	35.32	35.29	35.27	34.42	31.79	27.87	23.30	18.71	13.74	11.81
Emerging Markets Equity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REITs	4.64	4.64	4.68	4.58	4.35	3.83	3.22	2.64	1.96	1.64
US Debt	1.03	0.91	0.85	2.62	7.86	16.73	26.89	37.42	49.25	54.12
Developed Non-US Debt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Emerging Markets Debt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TIPS	0.00	0.12	0.18	0.58	1.52	2.66	3.77	4.75	5.50	5.77
Cash	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Commodities	0.00	0.03	0.05	0.12	0.38	0.67	0.98	1.22	1.43	1.47
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Equity	98.97	98.94	98.92	96.68	90.24	79.94	68.36	56.62	43.83	38.64
Difference From Benchmark	8.00	7.58	7.79	6.56	2.50	-1.09	-4.17	-4.37	-7.24	8.17
Total Fixed Income	1.03	1.04	1.04	3.20	9.38	19.39	30.66	42.16	54.74	59.89
Difference From Benchmark	-7.94	-7.55	-7.78	-6.62	-2.82	0.48	3.24	3.20	5.85	-9.60
Total Other	0.00	0.03	0.05	0.12	0.38	0.67	0.98	1.22	1.43	1.47
Difference From Benchmark	-0.06	-0.04	-0.02	0.06	0.32	0.61	0.92	1.17	1.38	1.43

Allocations shown may not sum up to 100% exactly due to rounding. Developed International Equity allocation includes Emerging Markets Equity. Allocation to "Other" contains unmapped securities or derivatives including swaps, options, forwards/futures, and T-Bills.



Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	7.49	-7.74	18.58	11.17	12.41	12.23	-18.11	28.66	18.37	31.47	-4.41
Benchmark	7.50	-7.73	18.60	11.19	12.42	12.24	-18.11	28.71	18.40	31.49	-4.38
Difference	-0.01	-0.01	-0.02	-0.02	-0.01	-0.01	0.00	-0.05	-0.03	-0.02	-0.03
Peer Group Median	7.43	-8.01	18.25	10.83	12.04	11.78	-18.38	28.25	18.05	31.06	-4.66
Rank	10	4	6	5	2	2	2	11	14	4	9
Population	117	117	115	111	102	89	117	117	116	116	115

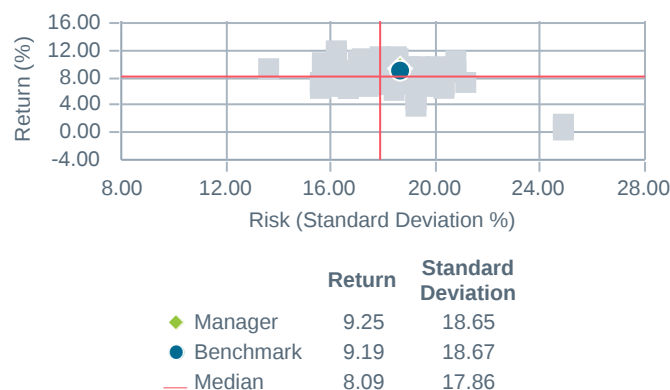
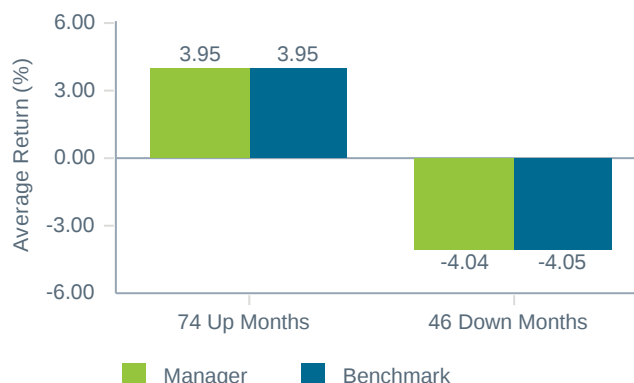
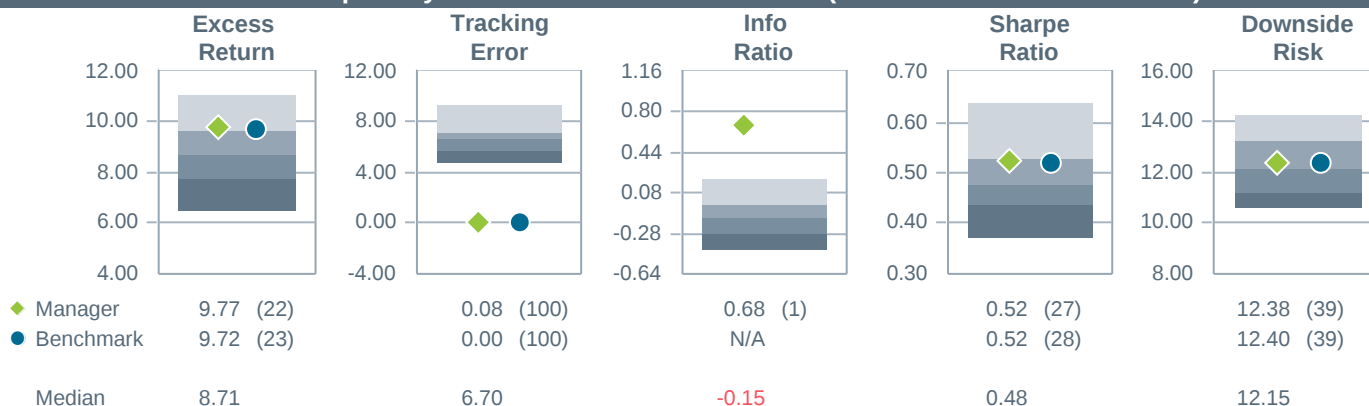


Effective 12/9/2022, the white label US Large Company Stock Index was incepted with a contemporaneous transition from the Vanguard Instl Idx;Ins+ (VIII) to the State Street S&P 500 Index Securities Lending Series Fund Class II. All returns prior to 12/31/2022 are based on the performance history of the returns for the State Street S&P 500 Index Securities Lending Series Fund Class II.

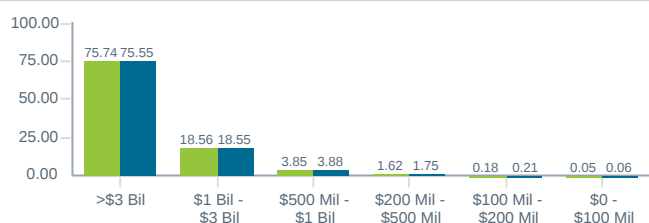
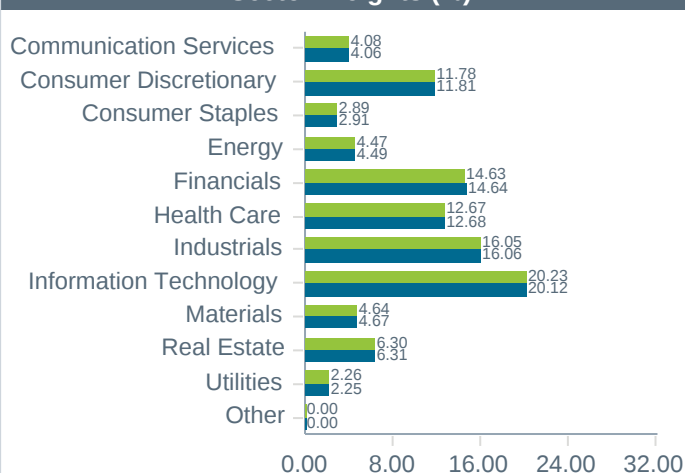


Performance

	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	5.92	-13.15	17.91	6.54	9.69	9.25	-25.39	12.64	32.73	27.99	-9.05
Benchmark	5.88	-13.25	17.86	6.50	9.65	9.19	-25.49	12.64	32.88	28.04	-9.21
Difference	0.04	0.10	0.05	0.04	0.04	0.06	0.10	0.00	-0.15	-0.05	0.16
Peer Group Median	3.05	-7.02	21.13	5.93	8.29	8.09	-14.67	26.01	8.64	24.75	-12.42
Rank	10	97	73	37	24	24	99	100	1	19	21
Population	209	209	196	178	164	125	208	205	215	222	228

Peer Group Scattergram - 10 Years

Up/Down Markets - 10 Years

Peer Group Analysis - Multi Statistics - 10 Years (Excess Return vs. Risk Free)

Portfolio Characteristics and Dist. of Market Cap (%)

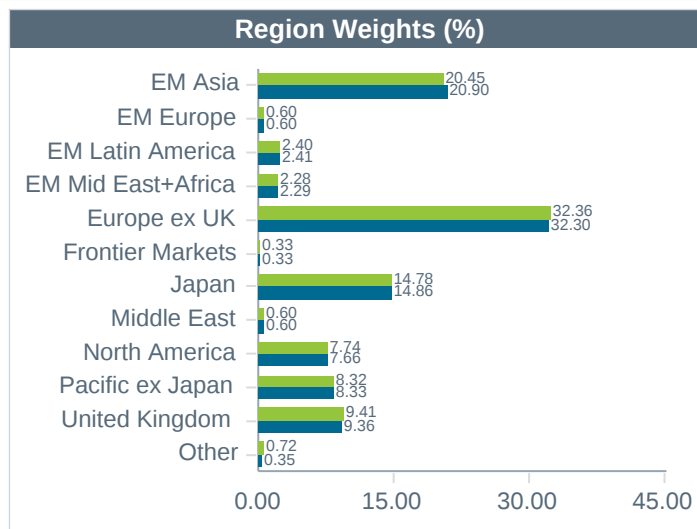
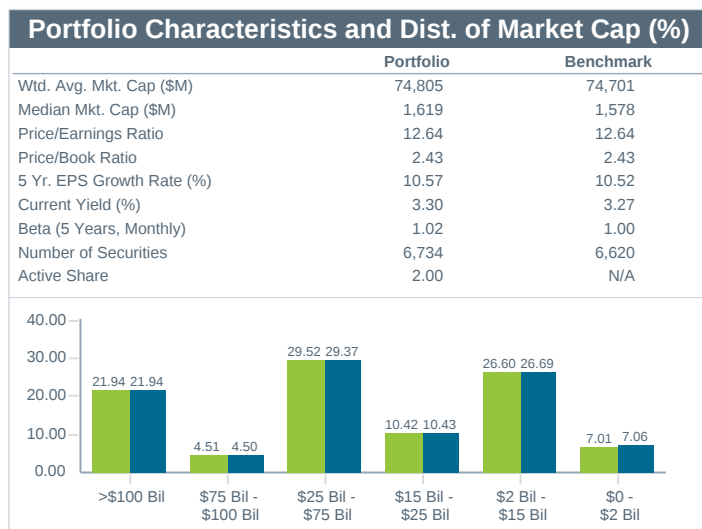
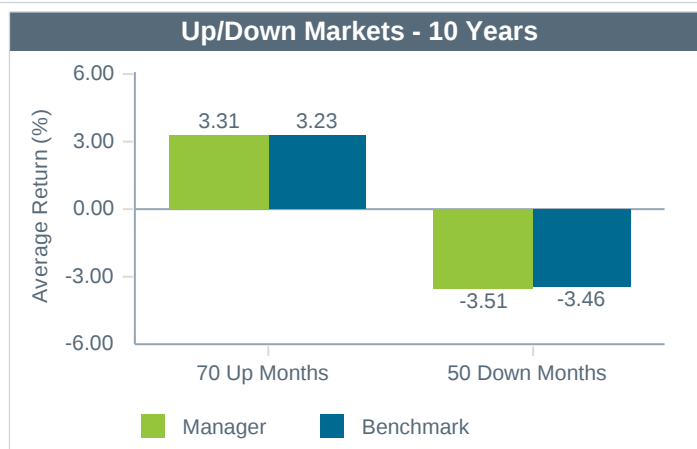
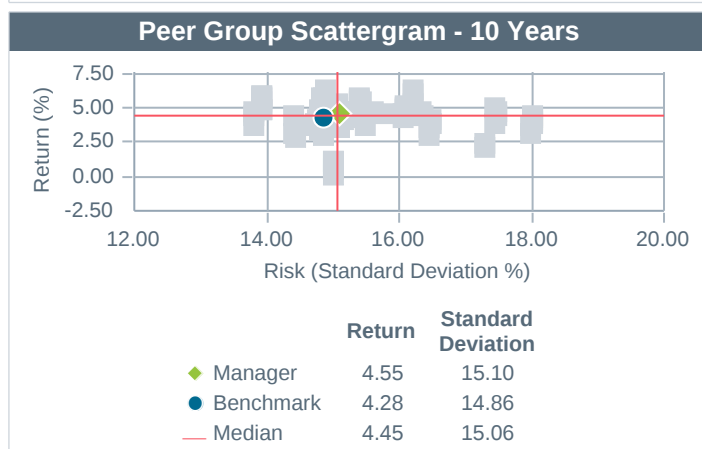
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	11,339	11,265
Median Mkt. Cap (\$M)	1,381	1,381
Price/Earnings Ratio	14.25	14.24
Price/Book Ratio	2.89	2.88
5 Yr. EPS Growth Rate (%)	16.91	16.90
Current Yield (%)	1.42	1.43
Beta (5 Years, Monthly)	1.00	1.00
Number of Securities	2,432	2,426
Active Share	1.43	N/A


Sector Weights (%)


Effective 12/9/2022, the white label US Small/Mid Company Stock Index was incepted with a contemporaneous transition from the Vanguard Ext MI/Ins+ (VEMPX) to the State Street Russell Small/Mid Cap Index Securities Lending Series Fund Class II. All returns prior to 12/31/2022 are based on the performance history of the returns for the State Street Russell Small/Mid Cap Index Securities Lending Series Fund Class II.



Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	6.91	-4.73	12.85	2.62	6.12	4.55	-16.29	8.74	11.36	22.02	-14.63
Benchmark	6.56	-5.84	12.20	2.35	5.83	4.28	-16.58	8.53	11.12	21.63	-14.76
Difference	0.35	1.11	0.65	0.27	0.29	0.27	0.29	0.21	0.24	0.39	0.13
Peer Group Median	7.30	-3.87	12.66	2.49	5.82	4.45	-16.67	8.87	13.50	22.78	-15.85
Rank	58	68	45	46	36	42	46	52	55	60	32
Population	172	172	172	172	170	130	172	174	185	195	198



Effective 12/9/2022, the white label Non-US Company Stock Index was inceptioned with a contemporaneous transition from the Vanguard Total Intl Stock Idx;Ins+ (VTPSX) to the State Street Global All Cap Equity Ex-U.S. Index Securities Lending Series Fund Class II. All returns prior to 12/31/2022 are based on the performance history of the returns for the State Street Global All Cap Equity Ex-U.S. Index Securities Lending Series Fund Class II.



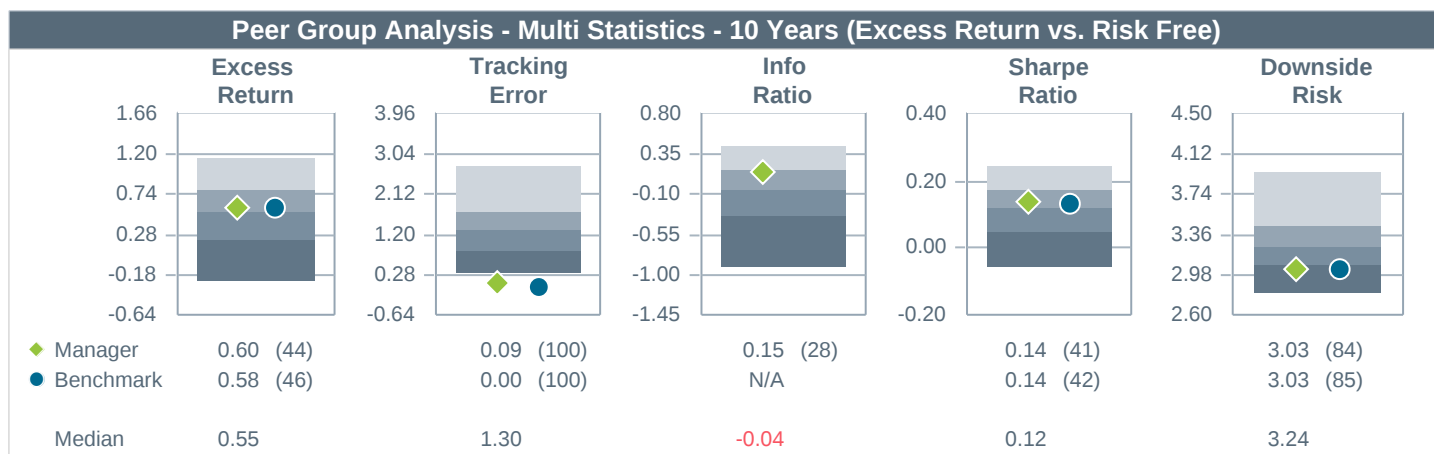
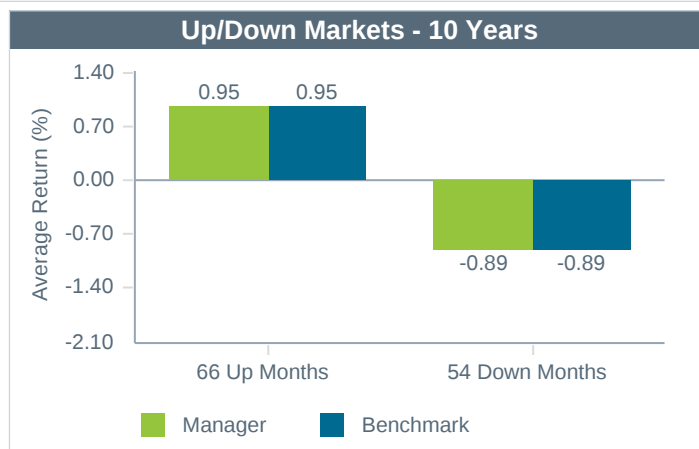
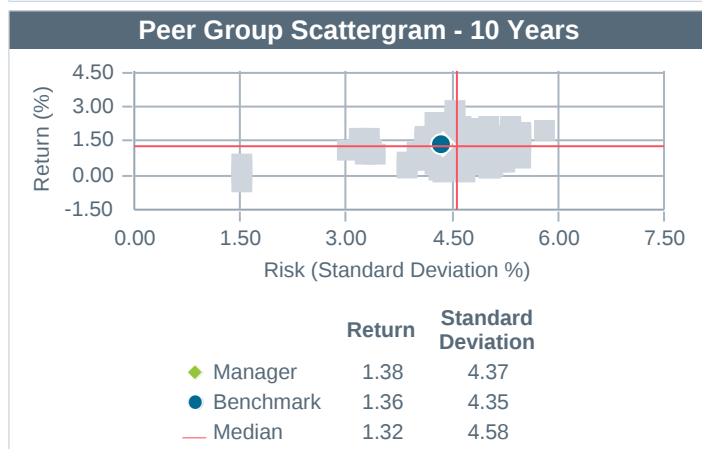
Manager: US Bond Index

As of March 31, 2023

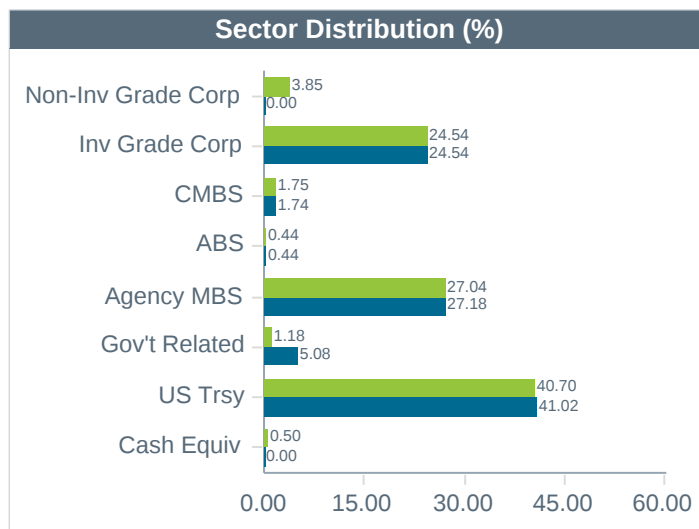
Benchmark: Bloomberg US Agg Bond Index

Peer Group: IM U.S. Broad Market Core Fixed Income (MF)

	Performance										
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	3.13	-4.80	-2.76	0.94	0.90	1.38	-13.13	-1.62	7.67	8.74	0.03
Benchmark	2.96	-4.78	-2.77	0.90	0.88	1.36	-13.01	-1.55	7.51	8.72	0.01
Difference	0.17	-0.02	0.01	0.04	0.02	0.02	-0.12	-0.07	0.16	0.02	0.02
Peer Group Median	3.14	-5.31	-1.85	0.85	0.99	1.32	-13.67	-1.33	8.15	8.76	-0.62
Rank	51	23	86	40	57	44	24	63	67	51	17
Population	520	505	474	445	393	327	507	512	509	531	525



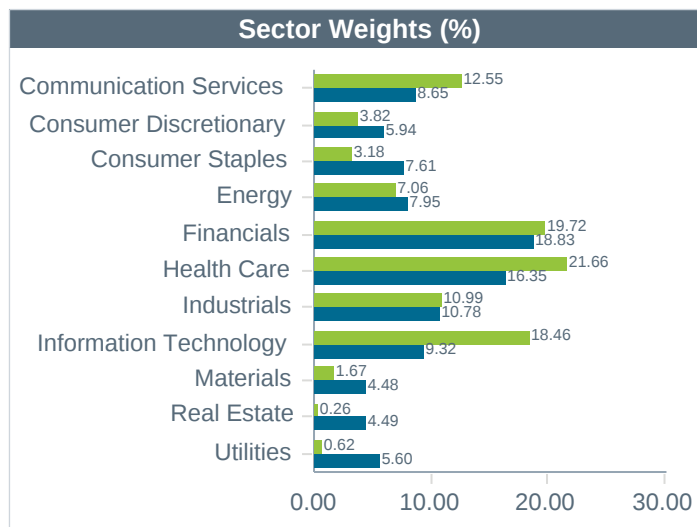
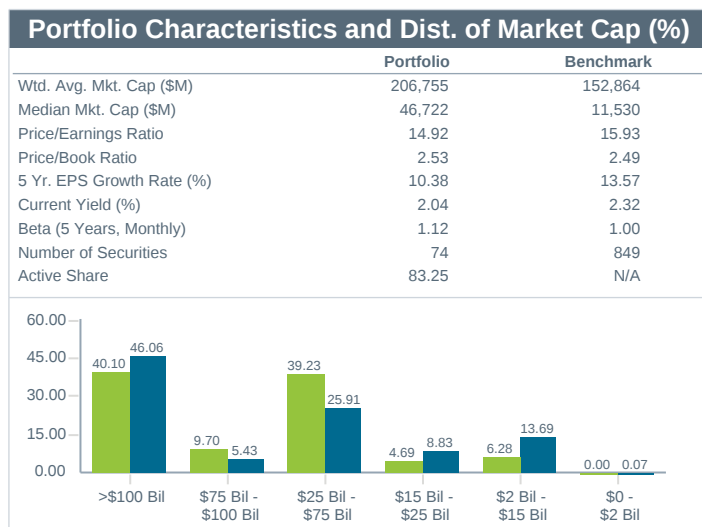
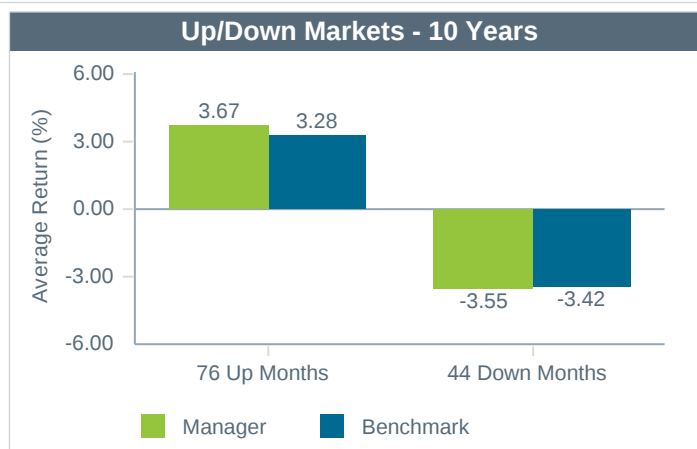
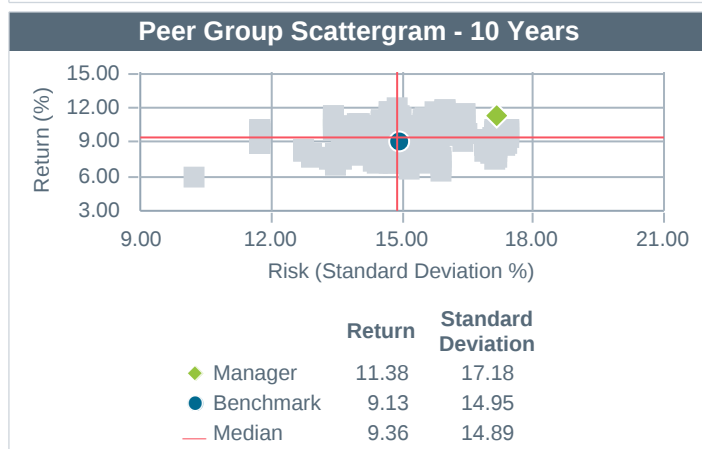
Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	6.33	6.33
Spread Duration	N/A	N/A
Avg. Maturity	8.62	8.50
Avg. Quality	Aa2	Aa1/Aa2
Yield To Maturity (%)	4.39	4.40
Coupon Rate (%)	2.91	2.79
Current Yield (%)	3.12	N/A
Holdings Count	12,910	13,278



Effective 12/9/2022, the white label US Bond Index was incepted with a contemporaneous transition from the Vanguard Total Bond Mkt Idx;Ins+ (VBMPX) to the State Street U.S. Bond Index Securities Lending Series Fund Class XIV. All returns prior to 12/31/2022 are based on the performance history of the returns for the State Street U.S. Bond Index Securities Lending Series Fund Class XIV.



Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	1.51	-6.70	23.38	9.45	12.19	11.38	-7.16	31.73	7.16	24.83	-7.07
Benchmark	1.01	-5.91	17.93	7.50	9.02	9.13	-7.54	25.16	2.80	26.54	-8.27
Difference	0.50	-0.79	5.45	1.95	3.17	2.25	0.38	6.57	4.36	-1.71	1.20
Peer Group Median	0.15	-4.96	18.15	8.02	9.60	9.36	-6.10	25.96	3.82	26.50	-8.61
Rank	27	77	6	24	8	5	63	3	25	73	34
Population	414	399	365	341	325	291	400	386	394	388	403



Effective 12/9/2022, the white label US Large Value Company Stock was inceptioned with a contemporaneous share class transition from the Dodge & Cox Stock (DODGX) to the Dodge & Cox Stock Class X (DOXGX). All returns prior to 12/31/2022 are backfilled using the returns for the Dodge & Cox Stock (DODGX).



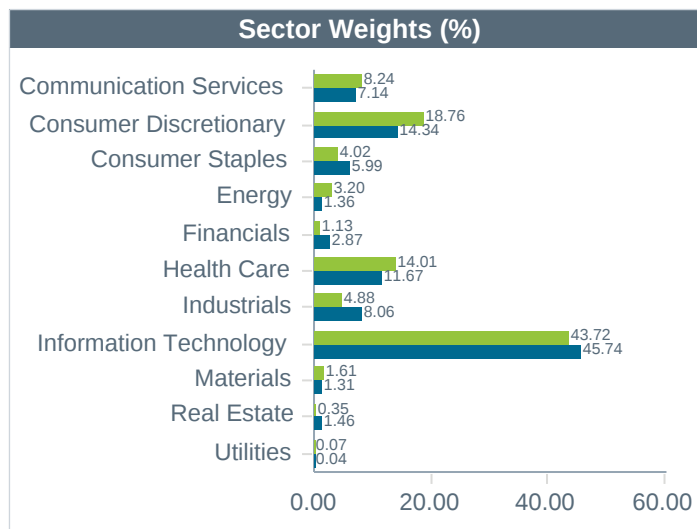
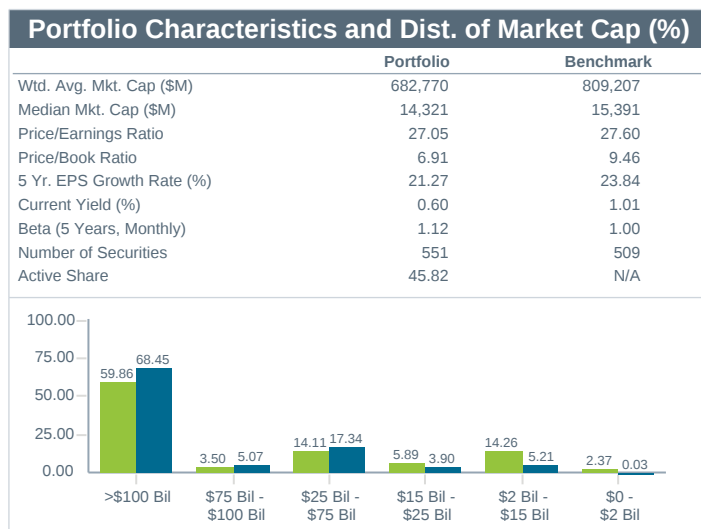
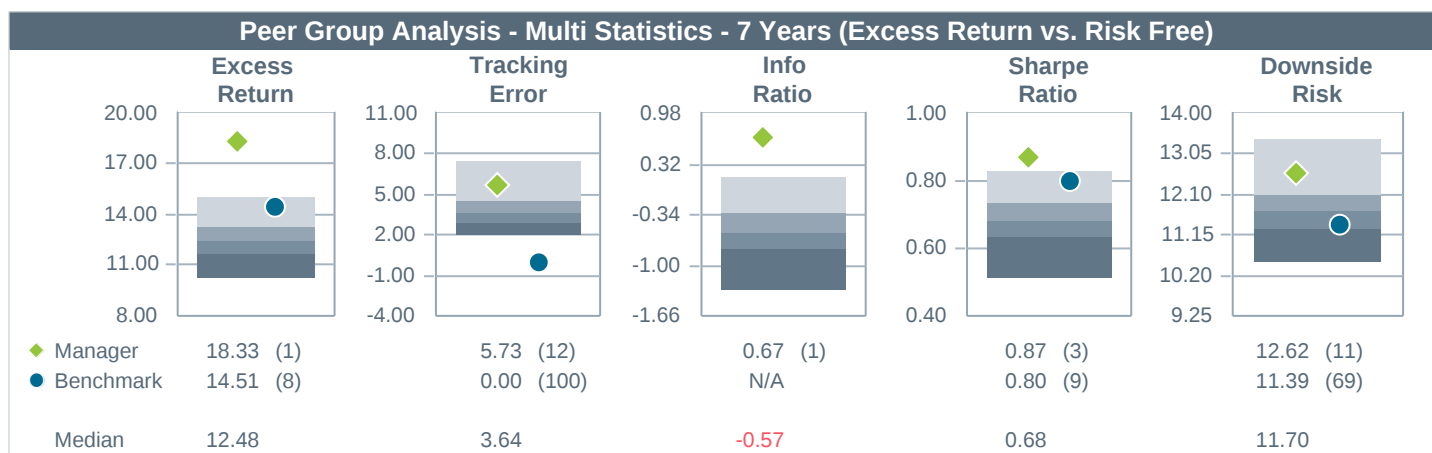
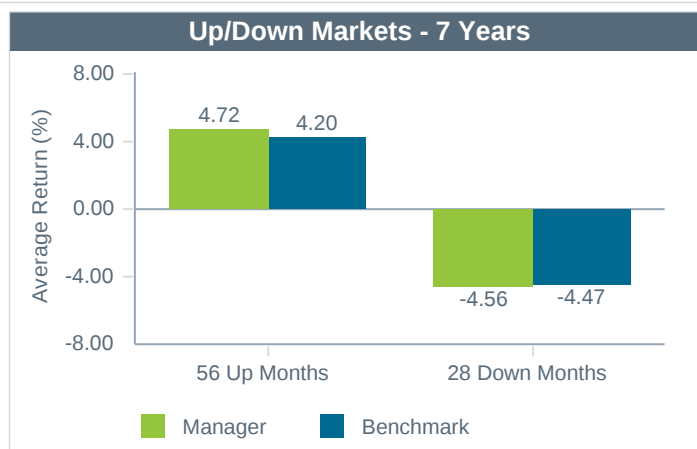
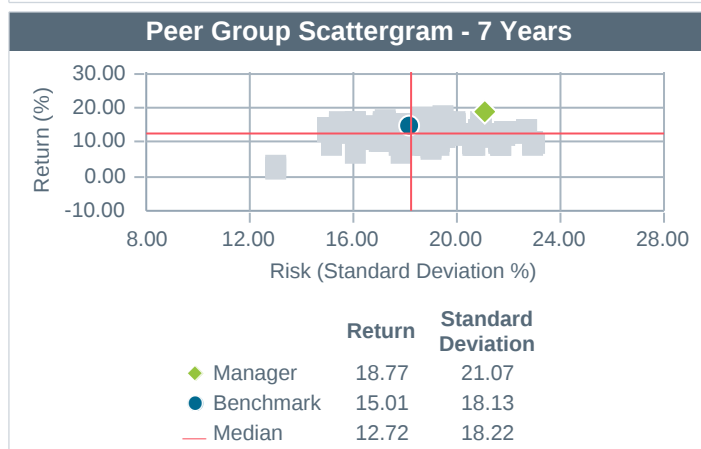
Manager: Fidelity Grth Co 3 (CIT)

As of March 31, 2023

Benchmark: Russell 1000 Grth Index

Peer Group: IM U.S. Large Cap Growth Equity (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	15.67	-12.72	22.27	15.35	18.77	N/A	-32.87	22.99	68.86	39.10	-4.09
Benchmark	14.37	-10.90	18.58	13.66	15.01	14.59	-29.14	27.60	38.49	36.39	-1.51
Difference	1.30	-1.82	3.69	1.69	3.76	N/A	-3.73	-4.61	30.37	2.71	-2.58
Peer Group Median	13.68	-12.88	14.60	10.72	12.72	12.57	-31.30	22.39	35.62	33.26	-1.22
Rank	26	49	1	1	1	N/A	68	44	1	4	81
Population	688	674	634	598	541	463	669	678	674	676	700



Performance shown is and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



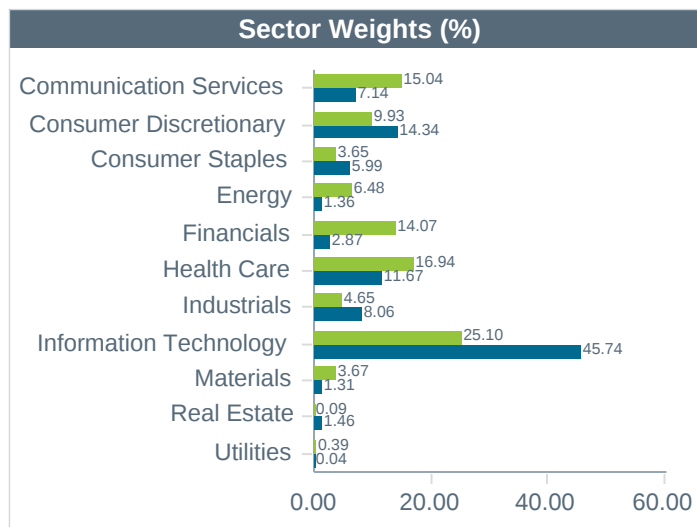
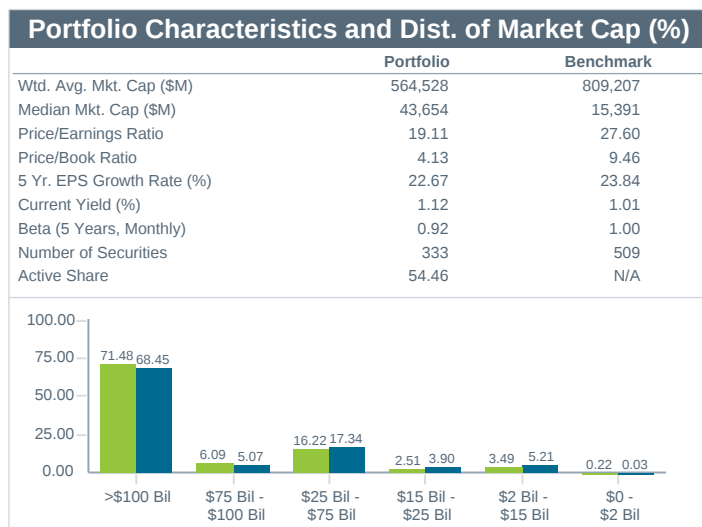
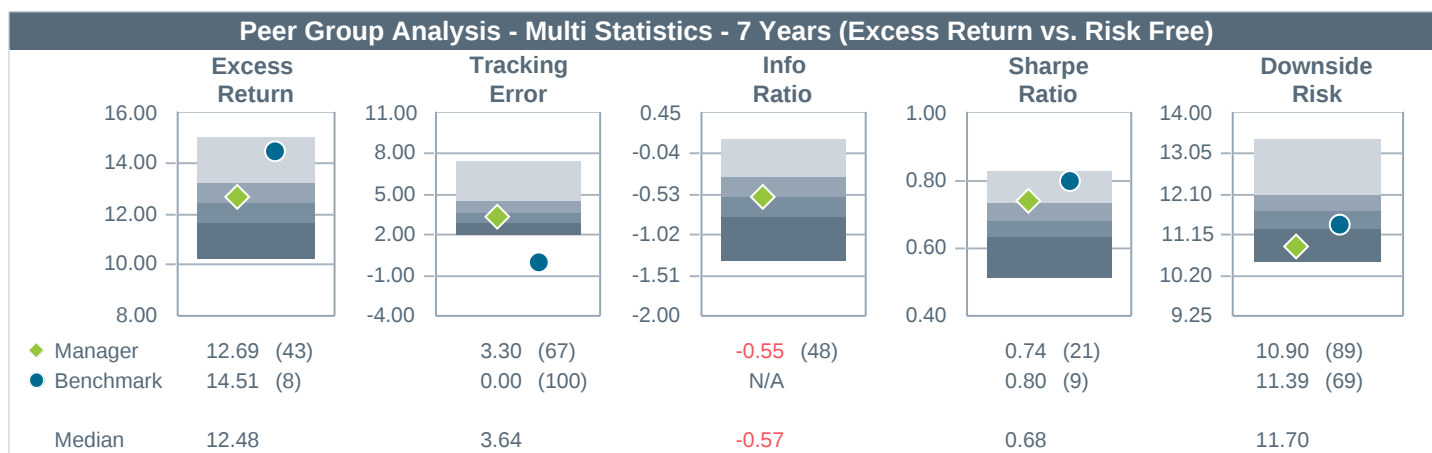
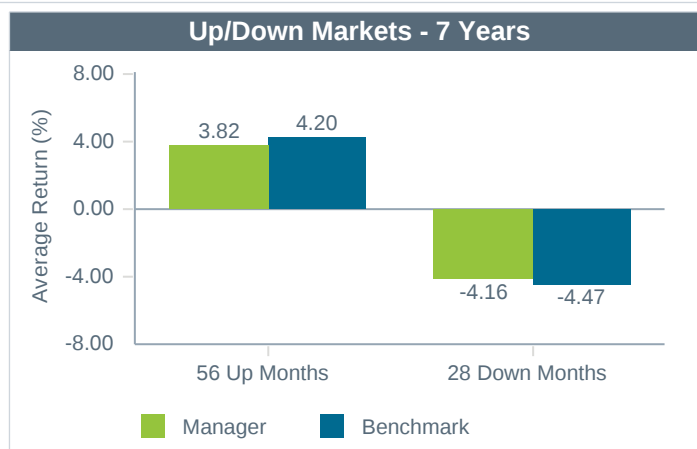
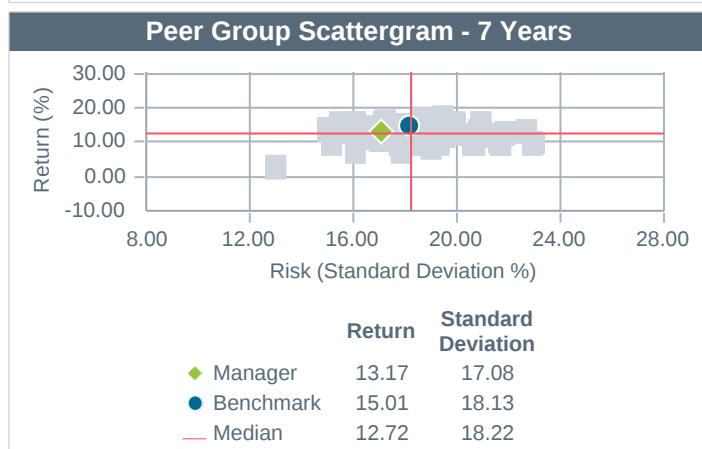
Manager: Fidelity Contrafund Class 3 (CIT)

As of March 31, 2023

Benchmark: Russell 1000 Grth Index

Peer Group: IM U.S. Large Cap Growth Equity (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	10.82	-10.57	15.34	10.57	13.17	N/A	-27.14	24.77	31.44	31.17	-1.86
Benchmark	14.37	-10.90	18.58	13.66	15.01	14.59	-29.14	27.60	38.49	36.39	-1.51
Difference	-3.55	0.33	-3.24	-3.09	-1.84	N/A	2.00	-2.83	-7.05	-5.22	-0.35
Peer Group Median	13.68	-12.88	14.60	10.72	12.72	12.57	-31.30	22.39	35.62	33.26	-1.22
Rank	76	21	37	55	37	N/A	17	31	74	72	59
Population	688	674	634	598	541	463	669	678	674	676	700



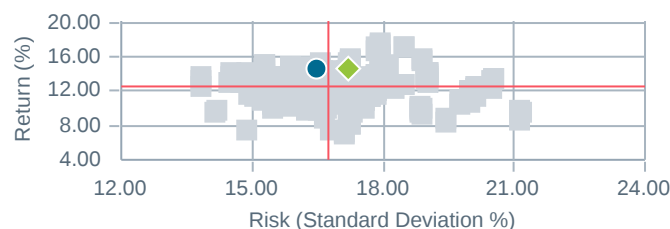
Performance shown is and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



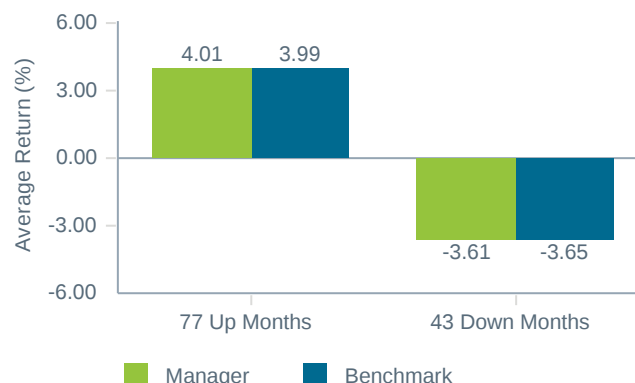
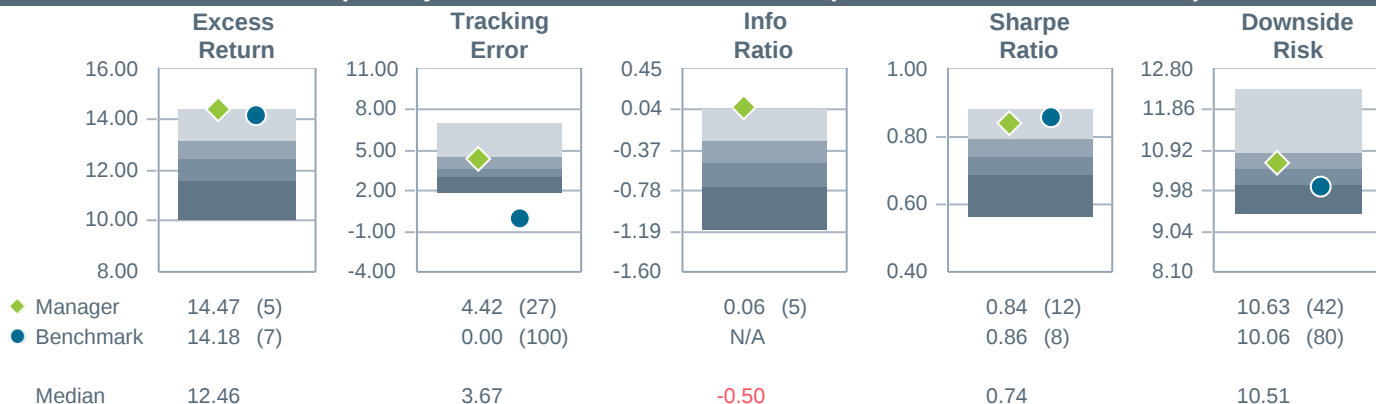
Manager: US Large Growth Company Stock
As of March 31, 2023
Benchmark: Russell 1000 Grth Index

Peer Group: IM U.S. Large Cap Growth Equity (MF)

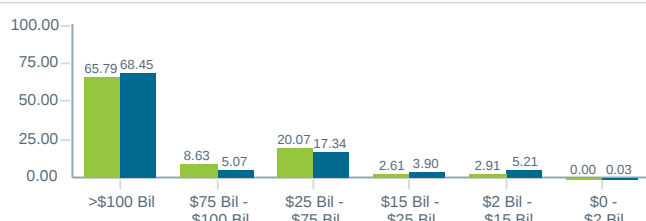
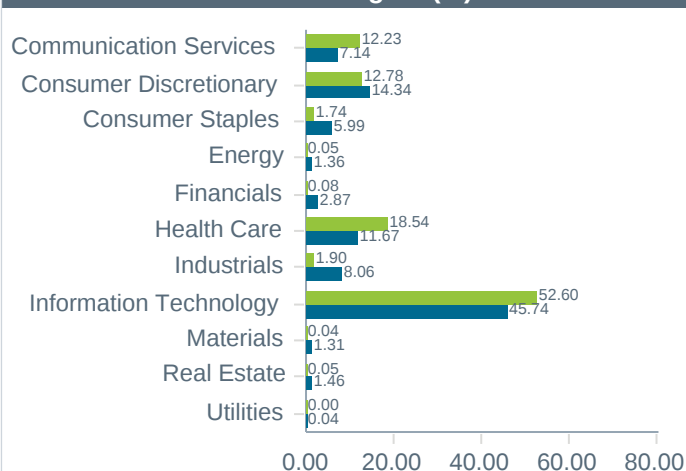
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	14.51	-14.21	14.26	10.63	14.87	14.77	-34.97	23.90	39.54	29.39	4.13
Benchmark	14.37	-10.90	18.58	13.66	15.01	14.59	-29.14	27.60	38.49	36.39	-1.51
Difference	0.14	-3.31	-4.32	-3.03	-0.14	0.18	-5.83	-3.70	1.05	-7.00	5.64
Peer Group Median	13.68	-12.88	14.60	10.72	12.72	12.57	-31.30	22.39	35.62	33.26	-1.22
Rank	35	70	57	53	9	6	81	35	30	84	5
Population	688	674	634	598	541	463	669	678	674	676	700

Peer Group Scattergram - 10 Years


	Return	Standard Deviation
◆ Manager	14.77	17.20
● Benchmark	14.59	16.45
— Median	12.57	16.75

Up/Down Markets - 10 Years

Peer Group Analysis - Multi Statistics - 10 Years (Excess Return vs. Risk Free)

Portfolio Characteristics and Dist. of Market Cap (%)

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	790,462	809,207
Median Mkt. Cap (\$M)	15,682	15,391
Price/Earnings Ratio	32.95	27.60
Price/Book Ratio	6.62	9.46
5 Yr. EPS Growth Rate (%)	22.13	23.84
Current Yield (%)	0.55	1.01
Beta (5 Years, Monthly)	0.98	1.00
Number of Securities	514	509
Active Share	51.86	N/A


Sector Weights (%)


Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



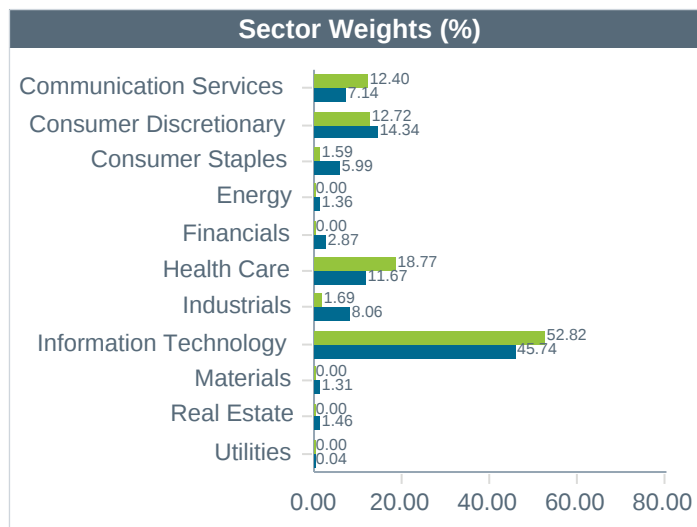
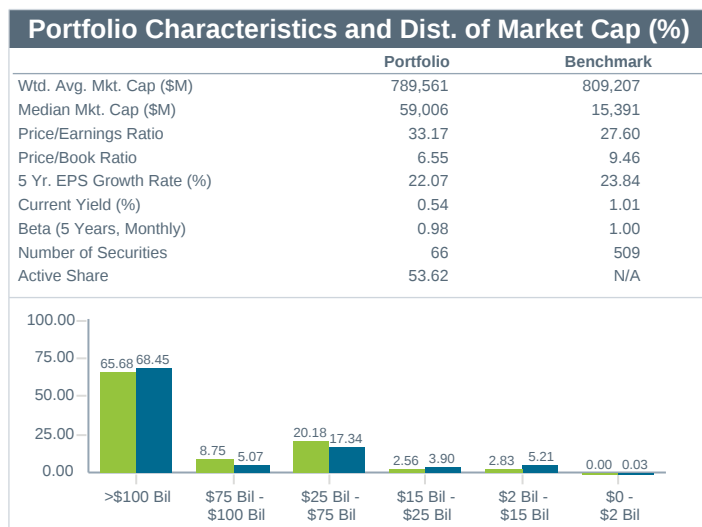
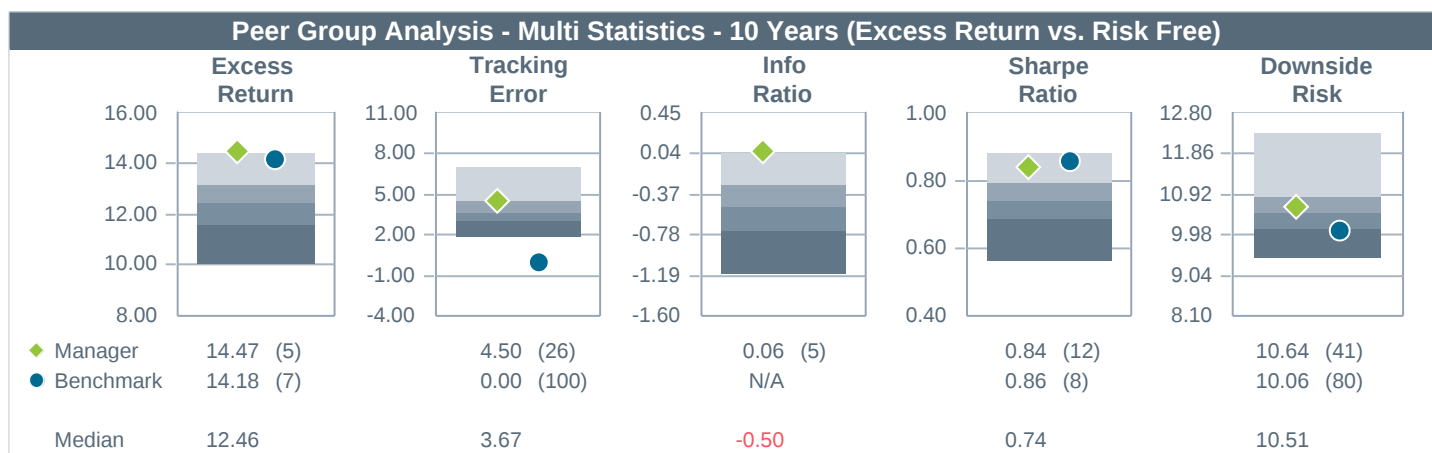
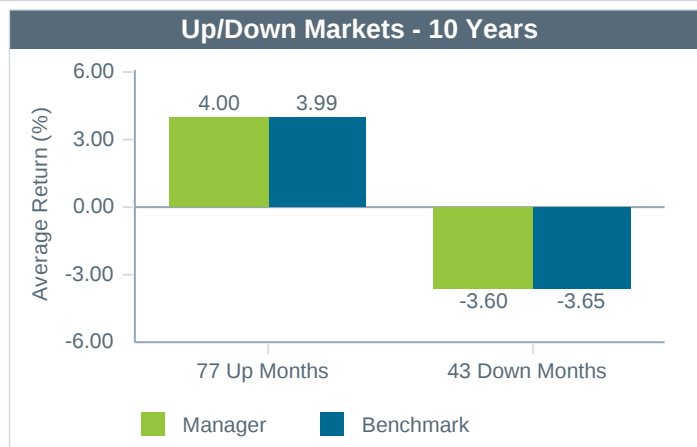
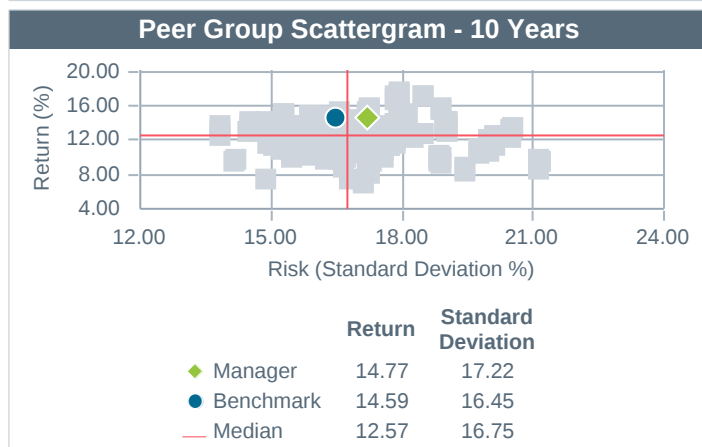
Manager: T Rowe Price Large Cap Growth (SA)

As of March 31, 2023

Benchmark: Russell 1000 Grth Index

Peer Group: IM U.S. Large Cap Growth Equity (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	14.52	-14.24	14.29	10.59	14.88	14.77	-34.95	23.68	39.89	28.83	4.63
Benchmark	14.37	-10.90	18.58	13.66	15.01	14.59	-29.14	27.60	38.49	36.39	-1.51
Difference	0.15	-3.34	-4.29	-3.07	-0.13	0.18	-5.81	-3.92	1.40	-7.56	6.14
Peer Group Median	13.68	-12.88	14.60	10.72	12.72	12.57	-31.30	22.39	35.62	33.26	-1.22
Rank	35	71	56	55	9	6	81	36	29	87	4
Population	688	674	634	598	541	463	669	678	674	676	700



Performance shown is net of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



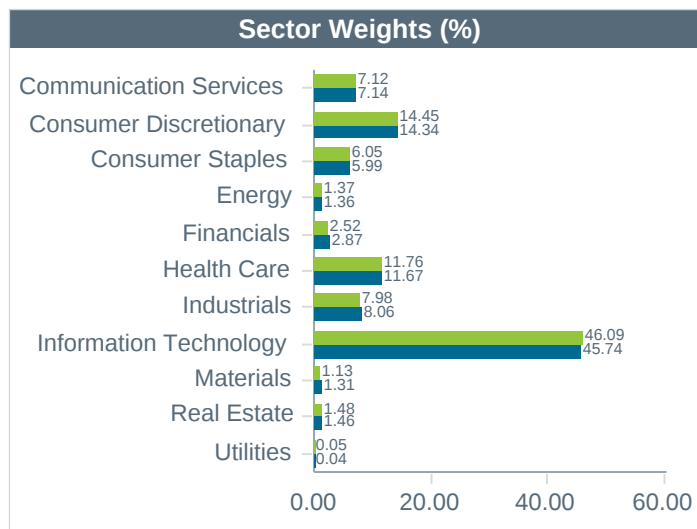
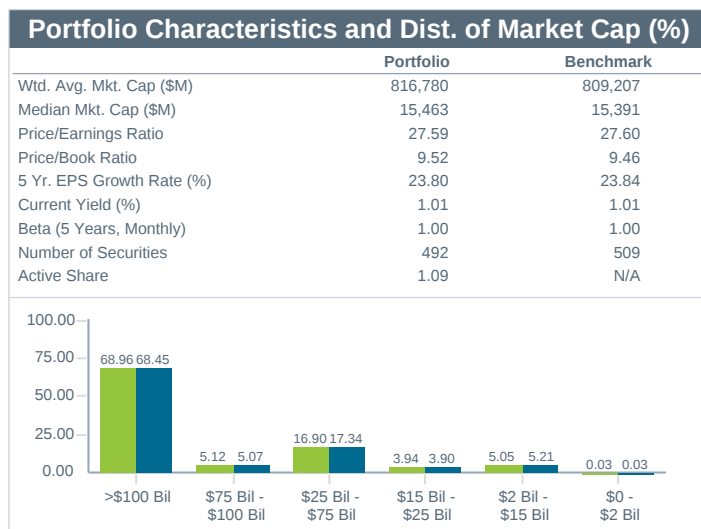
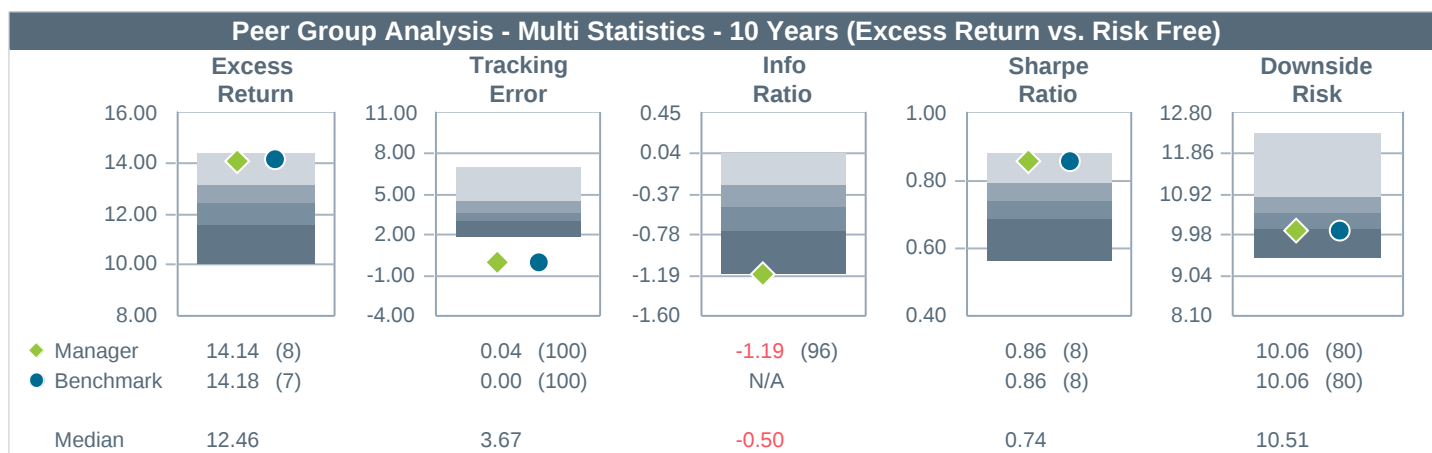
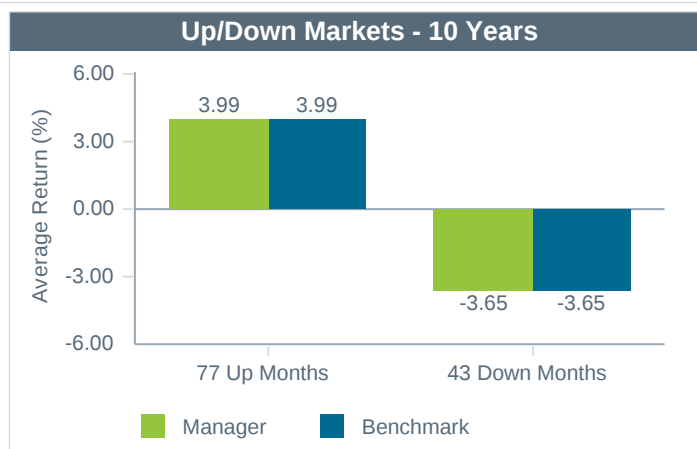
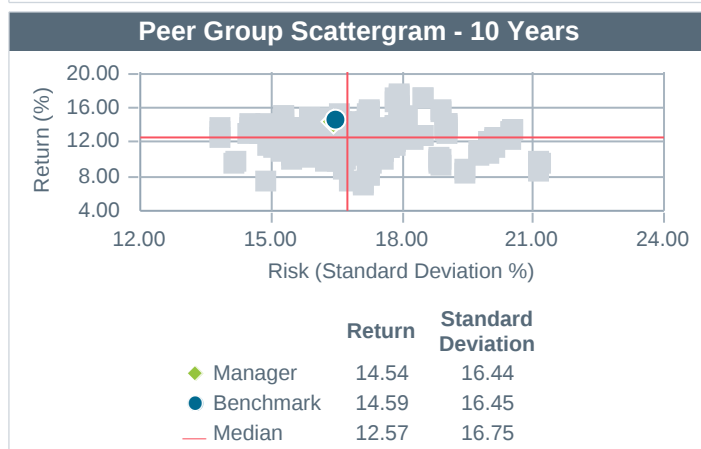
Manager: State Street Russell Lg Cap Grth Index C NL (CF)

As of March 31, 2023

Benchmark: Russell 1000 Grth Index

Peer Group: IM U.S. Large Cap Growth Equity (MF)

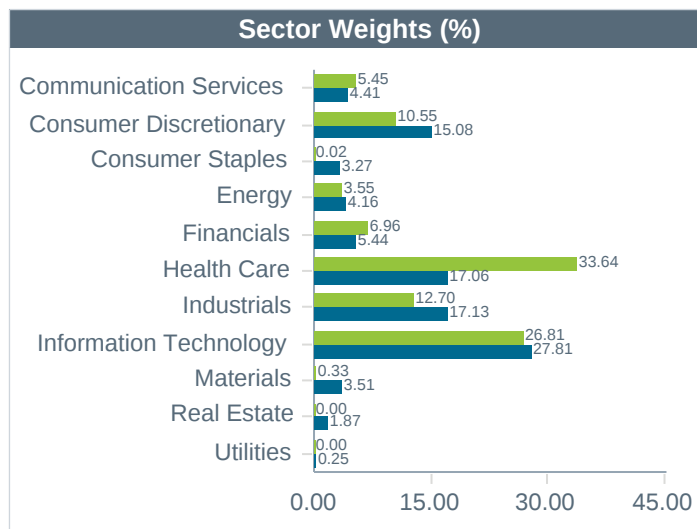
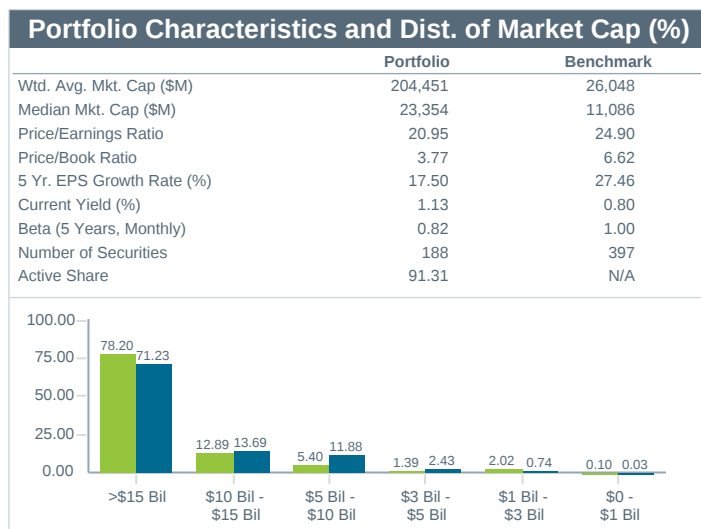
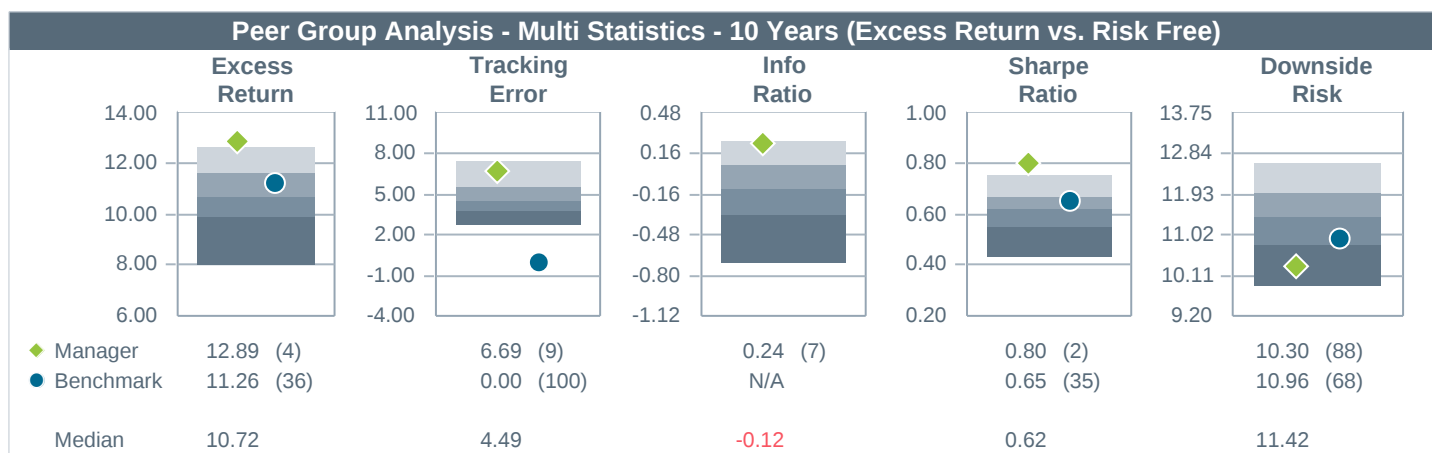
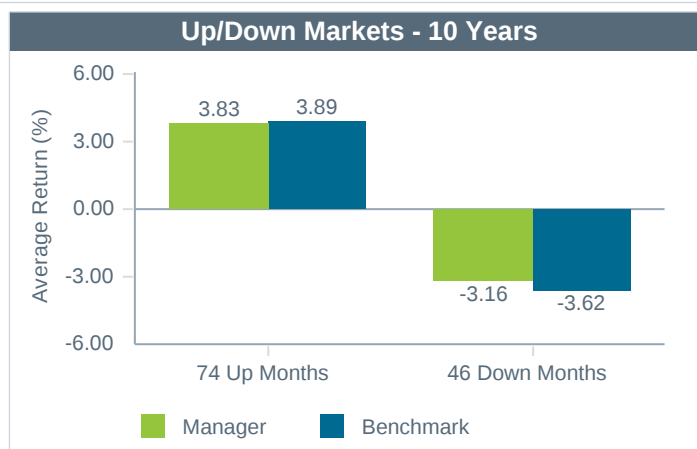
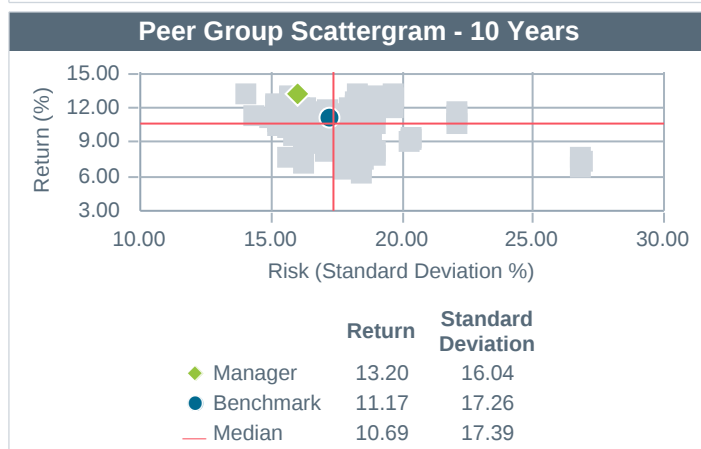
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	14.35	-10.95	18.50	13.60	14.95	14.54	-29.18	27.54	38.45	36.35	-1.63
Benchmark	14.37	-10.90	18.58	13.66	15.01	14.59	-29.14	27.60	38.49	36.39	-1.51
Difference	-0.02	-0.05	-0.08	-0.06	-0.06	-0.05	-0.04	-0.06	-0.04	-0.04	-0.12
Peer Group Median	13.68	-12.88	14.60	10.72	12.72	12.57	-31.30	22.39	35.62	33.26	-1.22
Rank	37	26	9	8	8	7	29	17	34	20	56
Population	688	674	634	598	541	463	669	678	674	676	700



Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

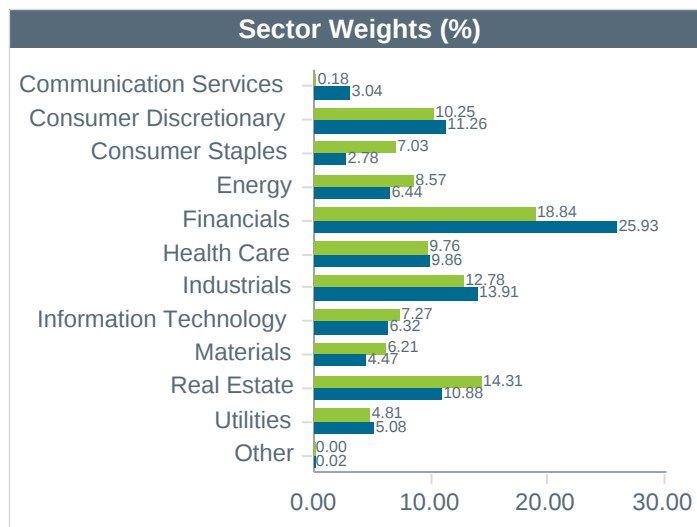
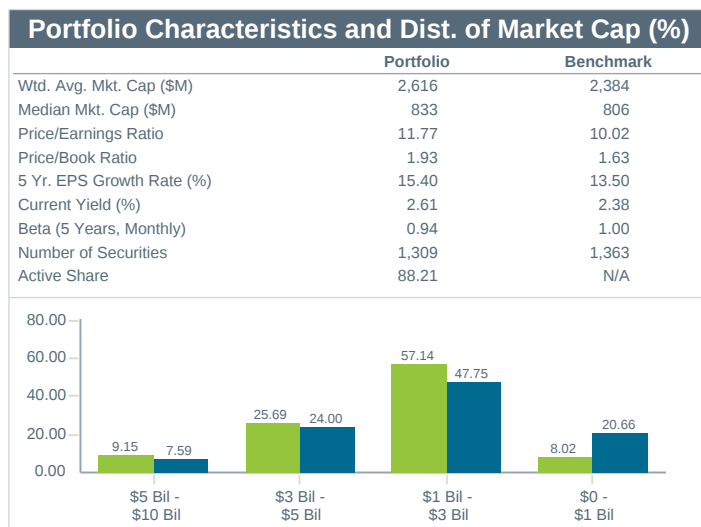
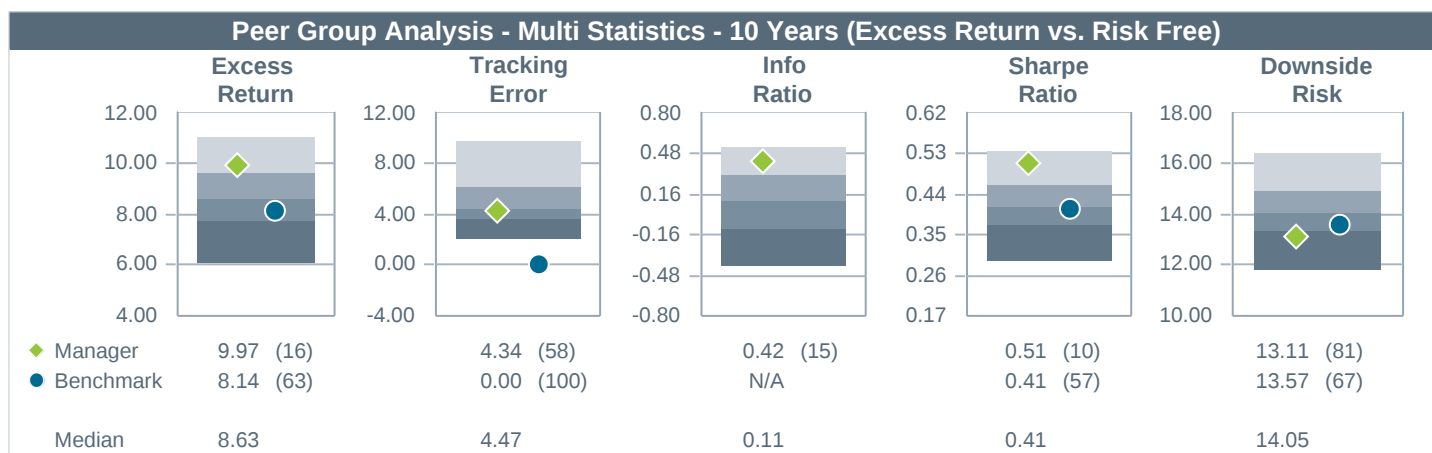
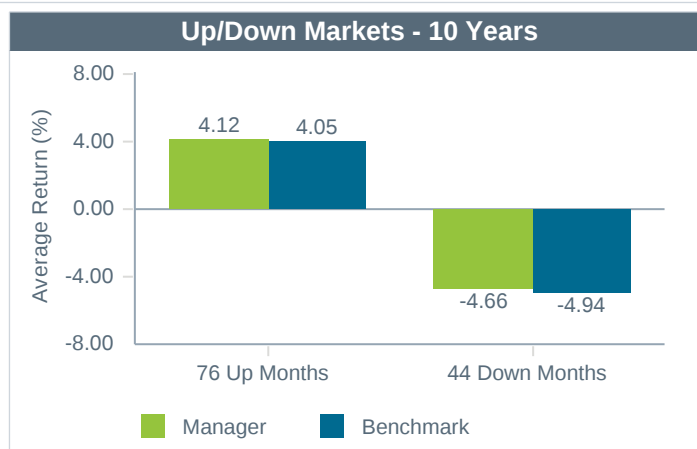
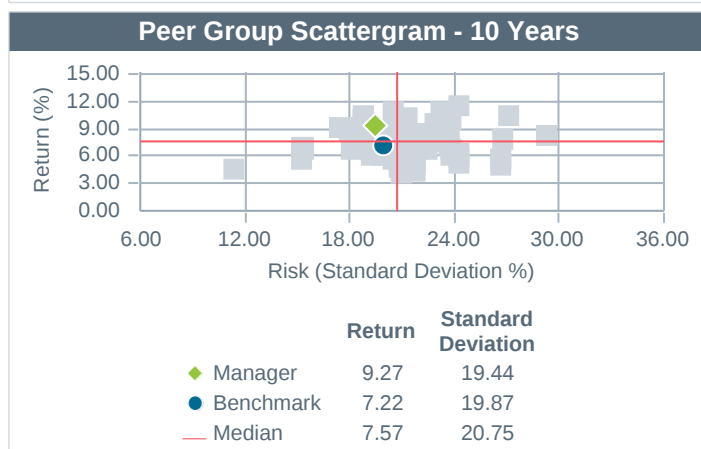


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	7.00	-5.54	18.37	9.63	13.18	13.20	-17.47	21.11	22.89	27.28	-3.70
Benchmark	9.14	-8.52	15.20	9.07	11.24	11.17	-26.72	12.73	35.59	35.47	-4.75
Difference	-2.14	2.98	3.17	0.56	1.94	2.03	9.25	8.38	-12.70	-8.19	1.05
Peer Group Median	7.81	-11.66	15.07	8.67	10.85	10.69	-28.79	14.22	34.91	33.86	-5.01
Rank	71	8	15	23	10	1	7	17	89	91	40
Population	291	290	262	248	226	197	290	289	283	288	284



Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	2.79	-2.44	21.07	5.30	9.51	9.27	-12.37	28.02	2.17	27.48	-13.91
Benchmark	-0.66	-12.96	21.01	4.55	7.86	7.22	-14.48	28.27	4.63	22.39	-12.86
Difference	3.45	10.52	0.06	0.75	1.65	2.05	2.11	-0.25	-2.46	5.09	-1.05
Peer Group Median	0.68	-7.14	25.68	5.66	8.16	7.57	-11.09	31.97	3.57	21.05	-16.08
Rank	20	14	91	58	21	11	72	76	63	7	31
Population	226	212	195	181	163	141	213	205	205	219	229



Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Performance shown for US Small Value Company Stock before 07/2017 is simulated and does not represent actual performance. It is an approximation of what an investor would have experienced by investing in the current underlying funds in the same proportions as the model portfolio.



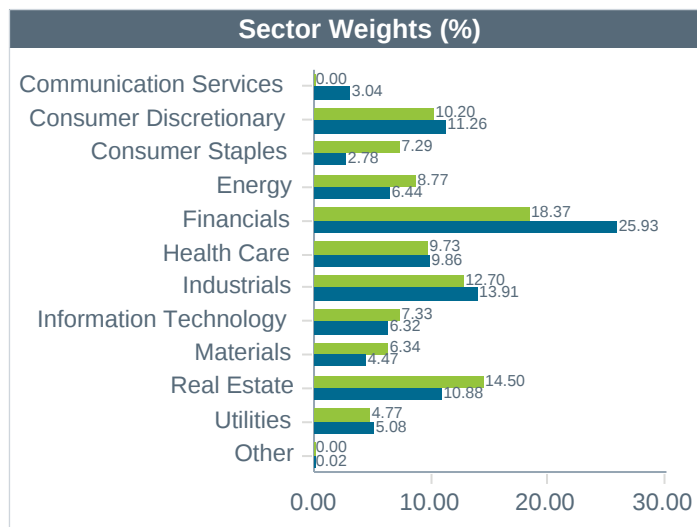
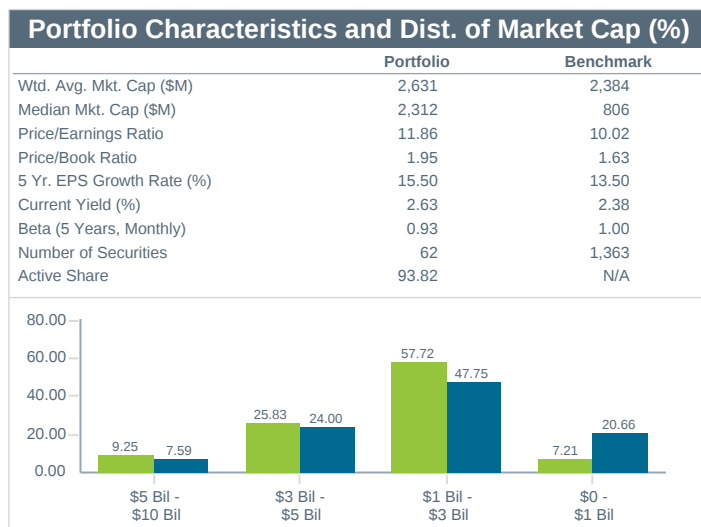
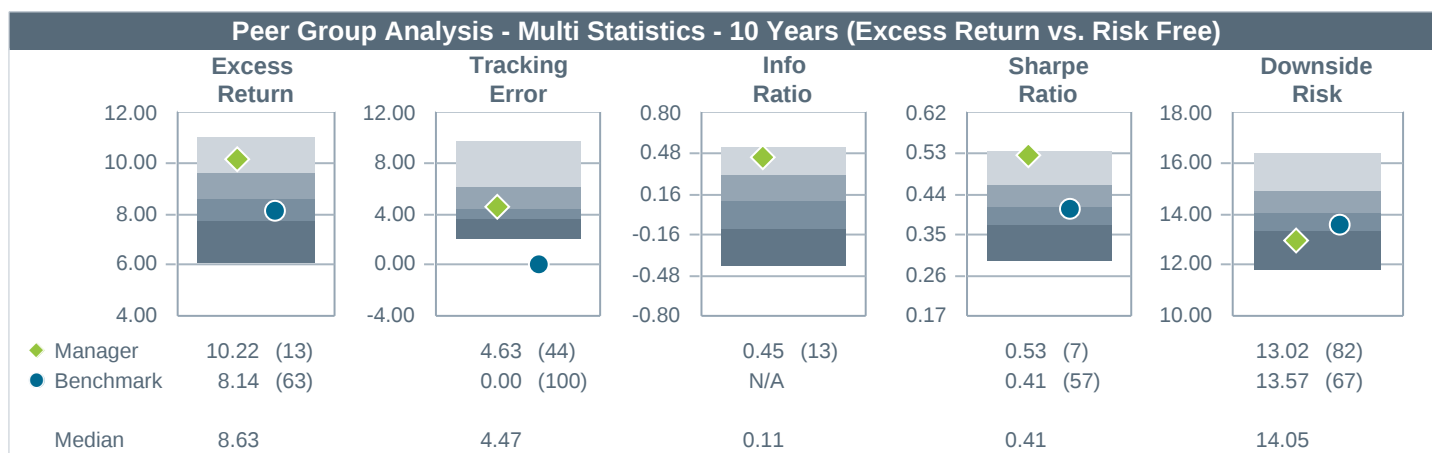
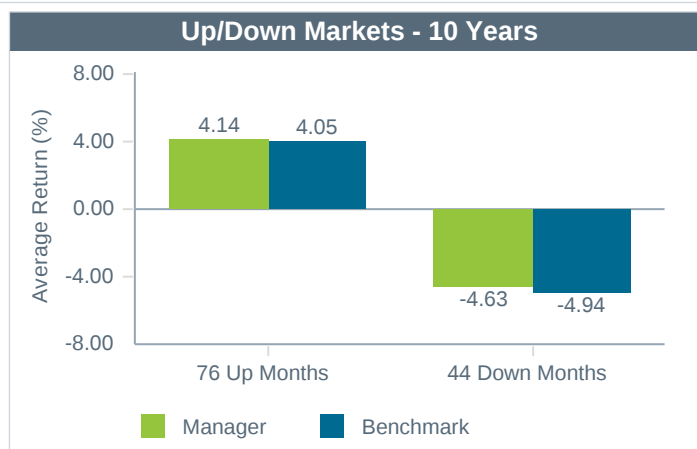
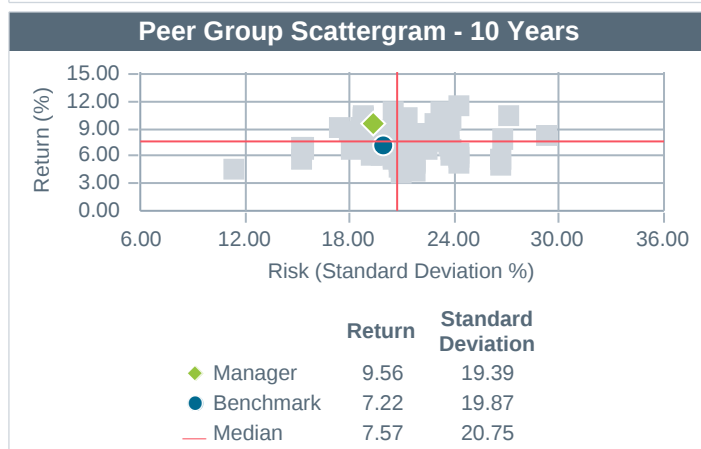
Manager: Westwood Small Cap Value (SA)

As of March 31, 2023

Benchmark: Russell 2000 Val Index

Peer Group: IM U.S. Small Cap Value Equity (MF)

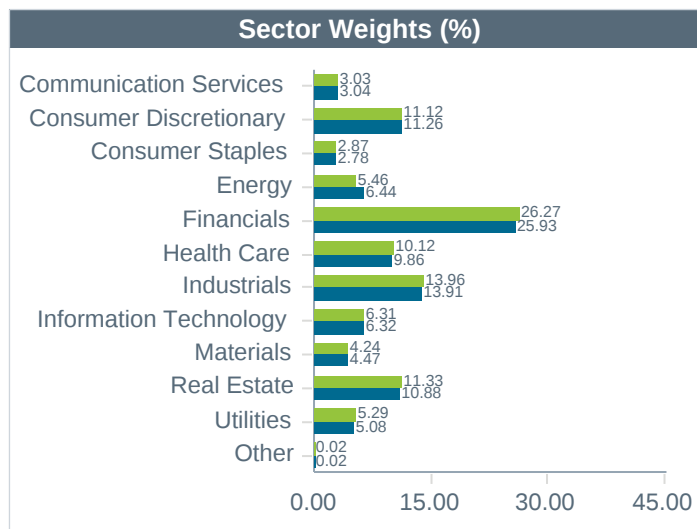
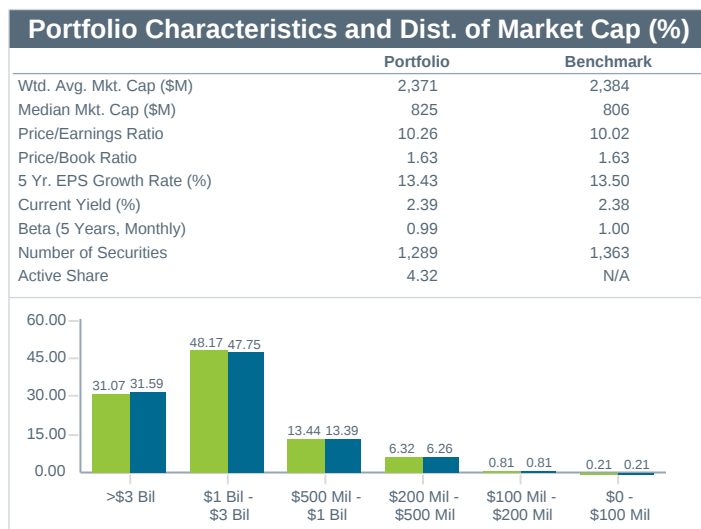
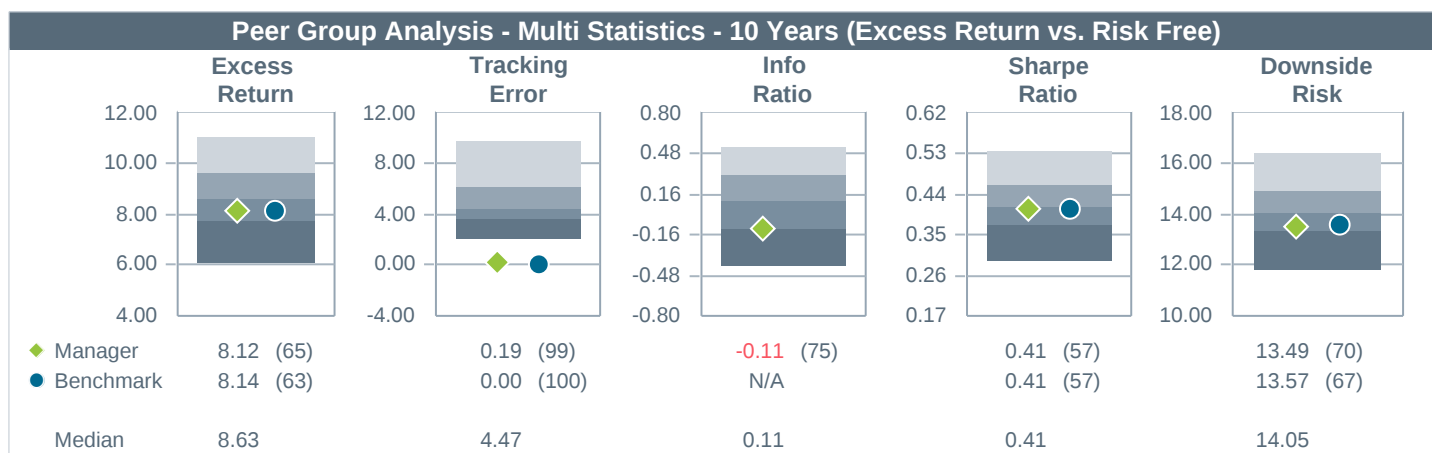
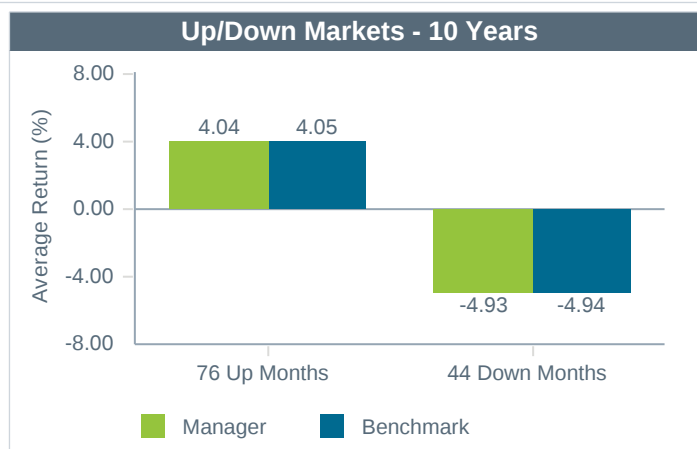
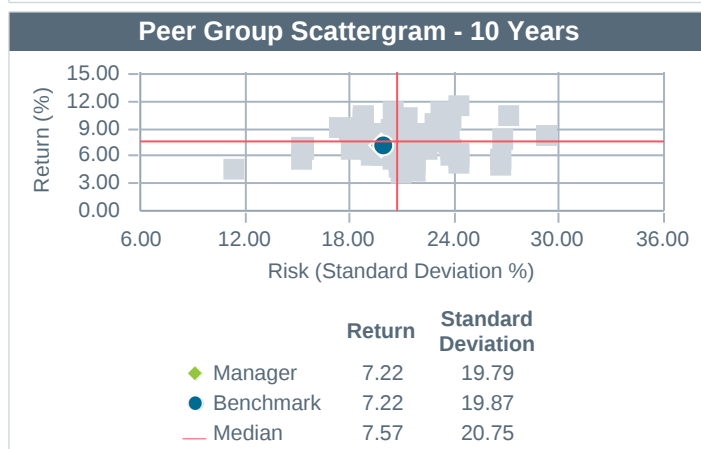
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	2.89	-1.85	21.22	5.53	9.80	9.56	-12.26	28.69	2.52	27.75	-13.84
Benchmark	-0.66	-12.96	21.01	4.55	7.86	7.22	-14.48	28.27	4.63	22.39	-12.86
Difference	3.55	11.11	0.21	0.98	1.94	2.34	2.22	0.42	-2.11	5.36	-0.98
Peer Group Median	0.68	-7.14	25.68	5.66	8.16	7.57	-11.09	31.97	3.57	21.05	-16.08
Rank	19	11	90	54	16	9	70	71	60	7	30
Population	226	212	195	181	163	141	213	205	205	219	229



Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Performance shown for Westwood Small Cap Value (SA) before 07/2017 is simulated and does not represent actual performance. It is an approximation of what an investor would have experienced by investing in a similar strategy net of current client-specific fees.



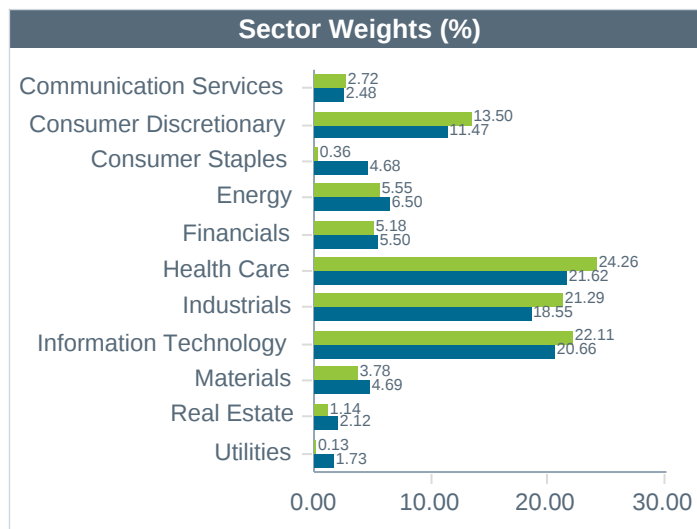
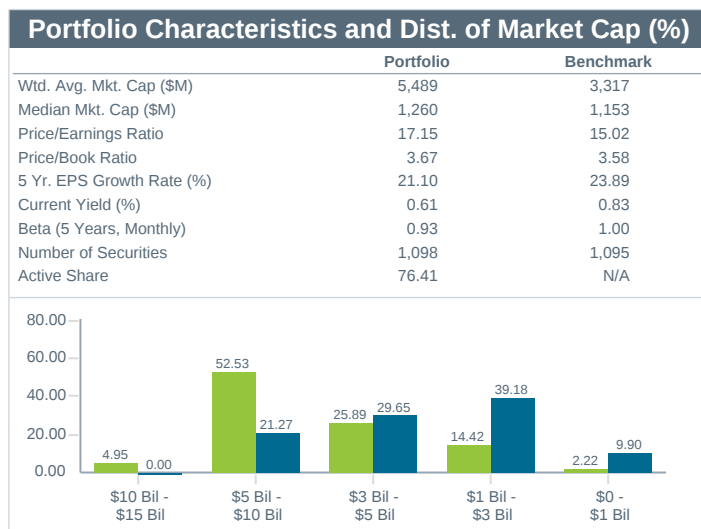
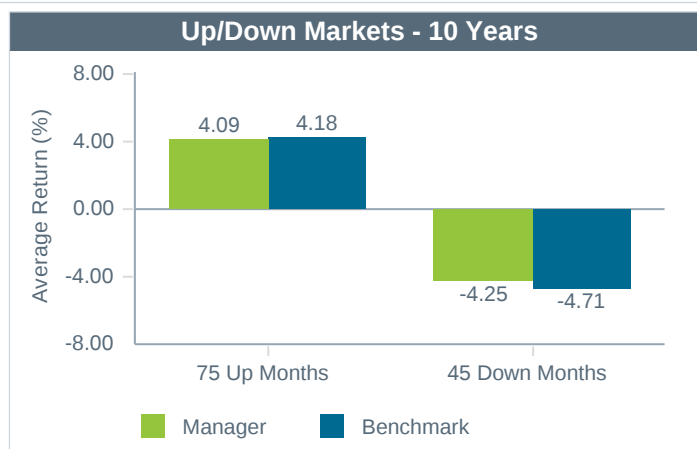
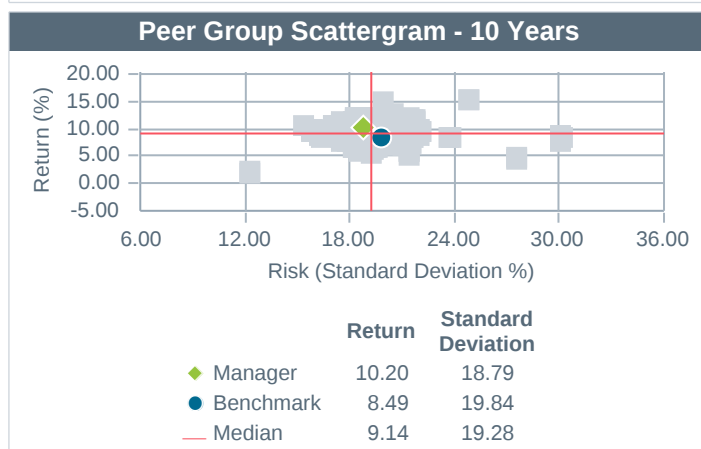
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	-0.58	-12.99	20.86	4.58	7.88	7.22	-14.59	28.10	5.10	22.24	-12.83
Benchmark	-0.66	-12.96	21.01	4.55	7.86	7.22	-14.48	28.27	4.63	22.39	-12.86
Difference	0.08	-0.03	-0.15	0.03	0.02	0.00	-0.11	-0.17	0.47	-0.15	0.03
Peer Group Median	0.68	-7.14	25.68	5.66	8.16	7.57	-11.09	31.97	3.57	21.05	-16.08
Rank	72	89	93	69	61	58	97	75	32	31	23
Population	226	212	195	181	163	141	213	205	205	219	229



Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Manager: US Small Growth Company Stock
As of March 31, 2023
Benchmark: Russell 2000 Grth Index
Peer Group: IM U.S. Small Cap Growth Equity (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	7.50	-8.86	18.18	8.77	11.41	10.20	-25.26	10.31	41.72	39.56	-10.43
Benchmark	6.07	-10.60	13.36	4.26	8.74	8.49	-26.36	2.83	34.63	28.48	-9.31
Difference	1.43	1.74	4.82	4.51	2.67	1.71	1.10	7.48	7.09	11.08	-1.12
Peer Group Median	6.24	-11.42	15.45	6.89	10.37	9.14	-27.54	10.53	36.55	27.69	-5.57
Rank	28	26	23	16	34	26	35	51	36	5	78
Population	518	508	489	456	389	331	503	513	519	518	519



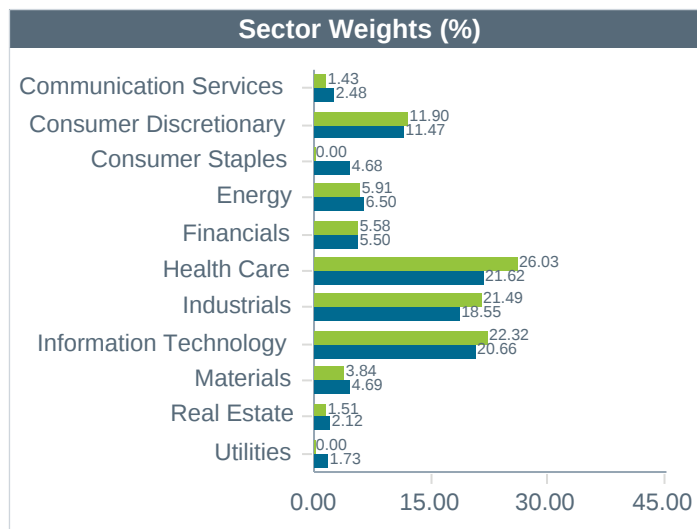
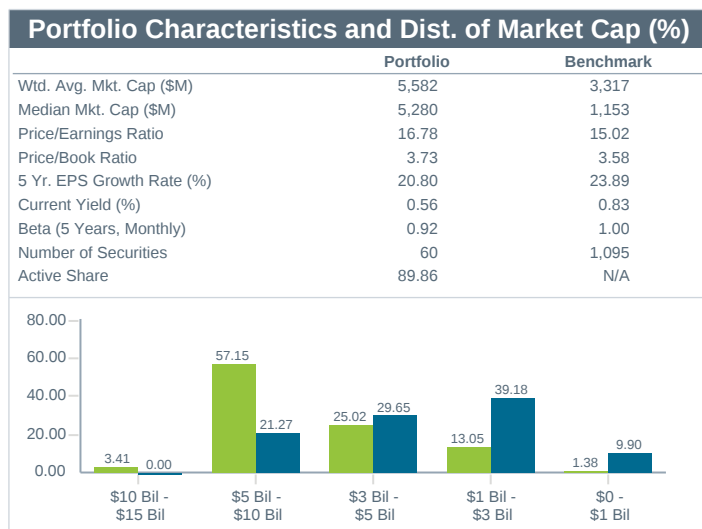
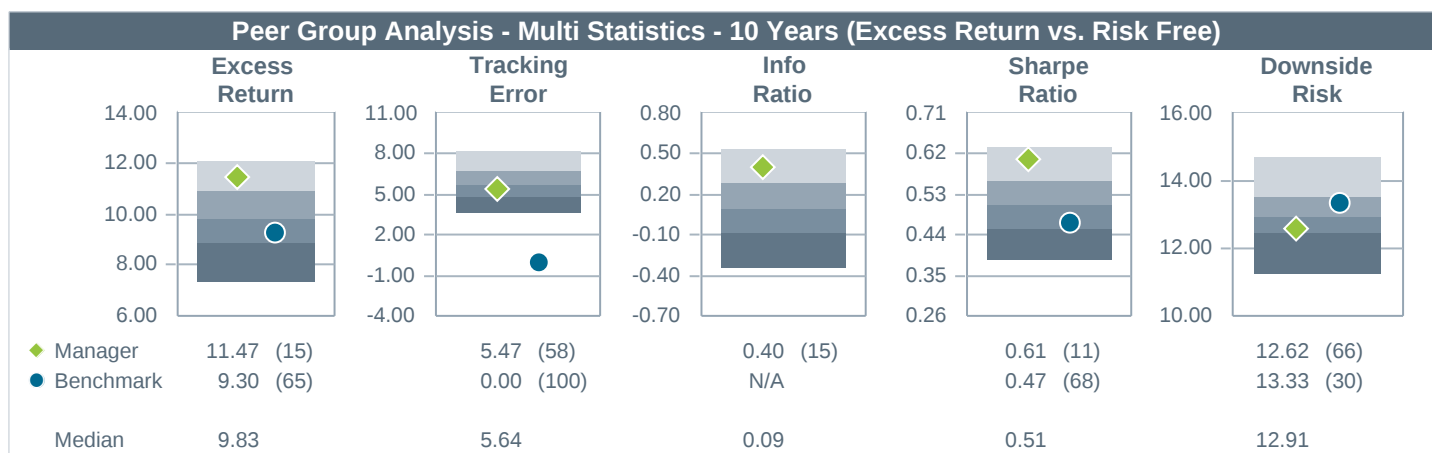
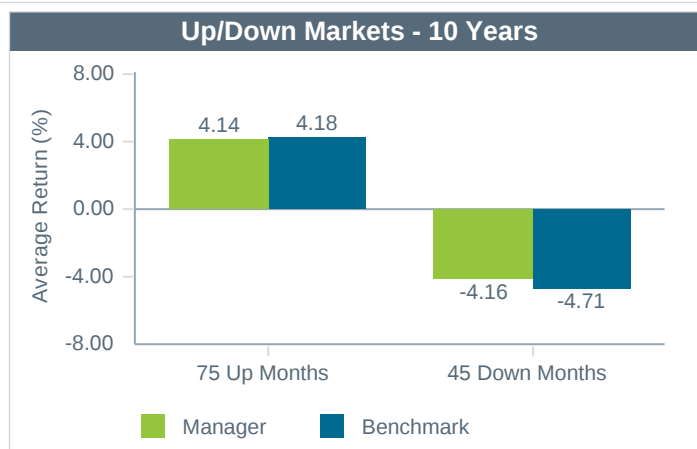
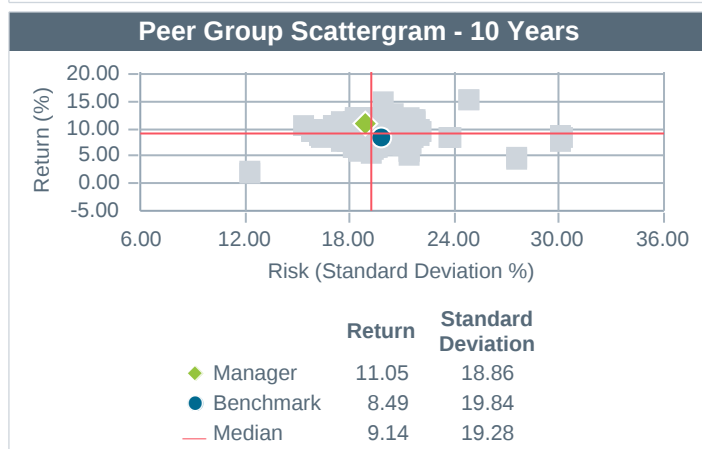
Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Performance shown for US Small Growth Company Stock before 07/2017 is simulated and does not represent actual performance. It is an approximation of what an investor would have experienced by investing in the current underlying funds in the same proportions as the model portfolio.



Manager: Westfield Small Cap Growth (SA)
Benchmark: Russell 2000 Grth Index
Peer Group: IM U.S. Small Cap Growth Equity (MF)

As of March 31, 2023

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	7.82	-8.35	17.24	8.54	12.30	11.05	-25.34	9.96	38.83	42.34	-10.52
Benchmark	6.07	-10.60	13.36	4.26	8.74	8.49	-26.36	2.83	34.63	28.48	-9.31
Difference	1.75	2.25	3.88	4.28	3.56	2.56	1.02	7.13	4.20	13.86	-1.21
Peer Group Median	6.24	-11.42	15.45	6.89	10.37	9.14	-27.54	10.53	36.55	27.69	-5.57
Rank	23	22	34	20	22	12	36	53	42	1	78
Population	518	508	489	456	389	331	503	513	519	518	519



Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Performance shown for Westfield Small Cap Growth (SA) before 07/2017 is simulated and does not represent actual performance. It is an approximation of what an investor would have experienced by investing in a similar strategy net of current client-specific fees.



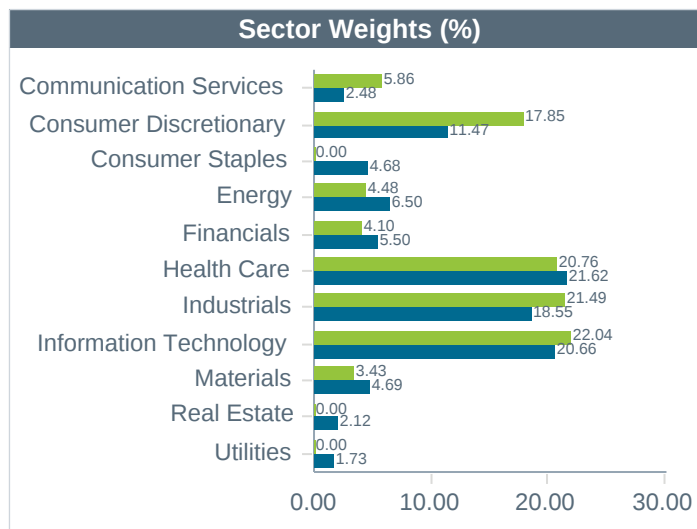
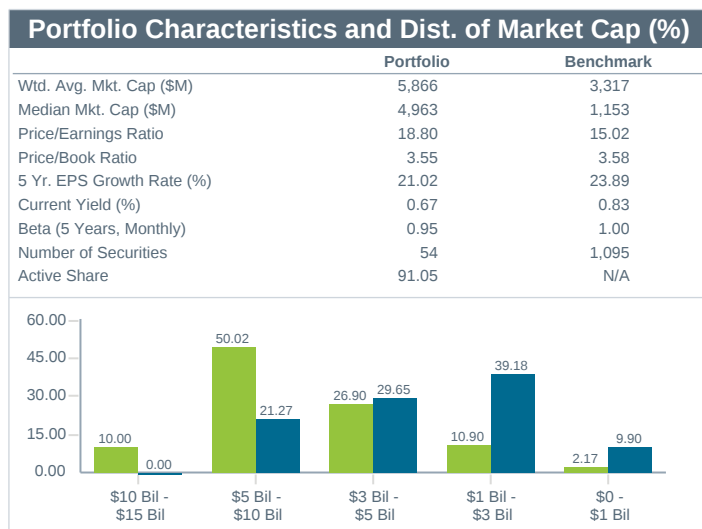
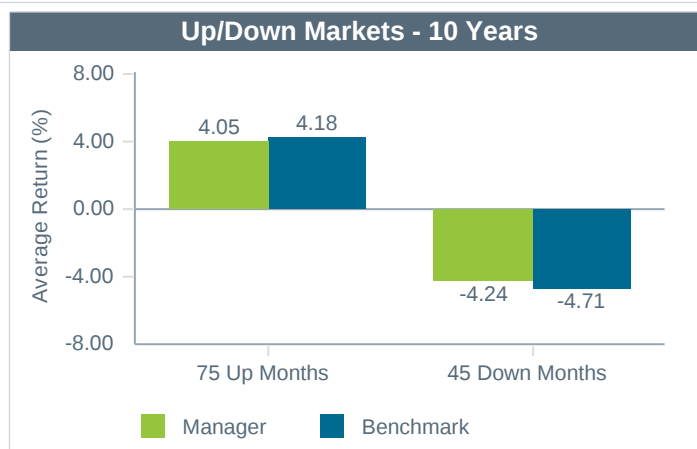
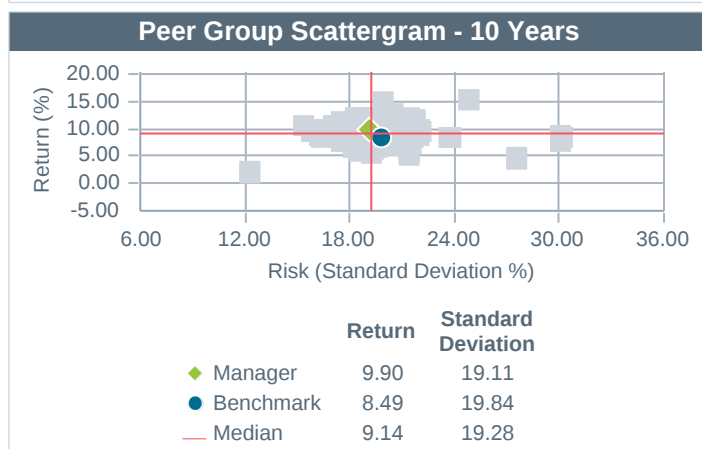
Manager: Fiera Small Cap Growth (SA)

As of March 31, 2023

Benchmark: Russell 2000 Grth Index

Peer Group: IM U.S. Small Cap Growth Equity (MF)

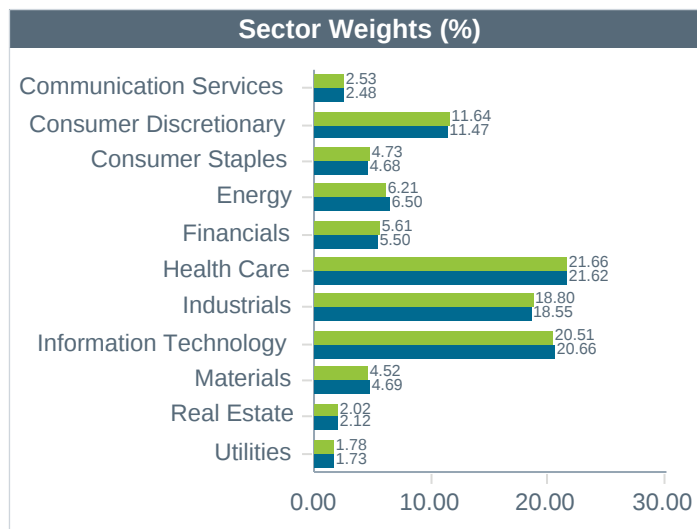
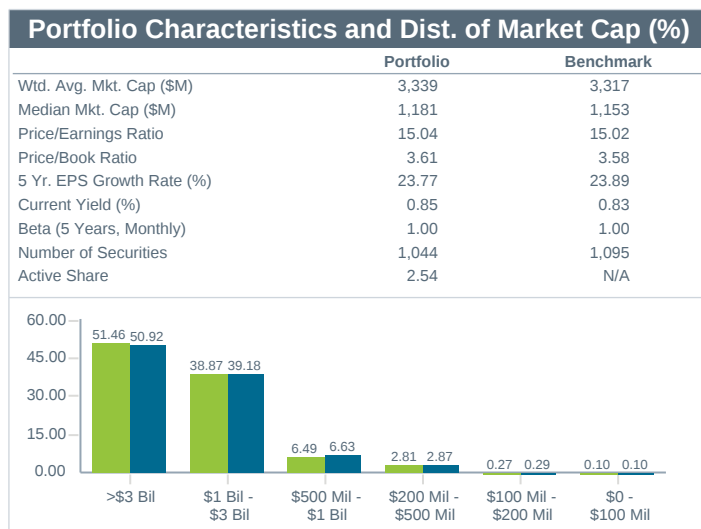
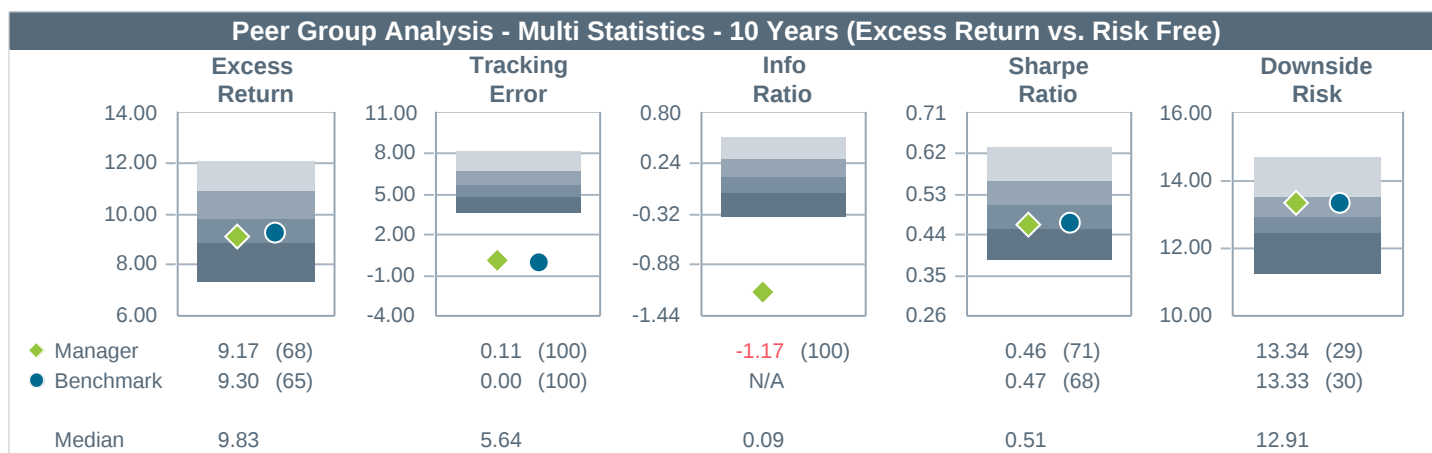
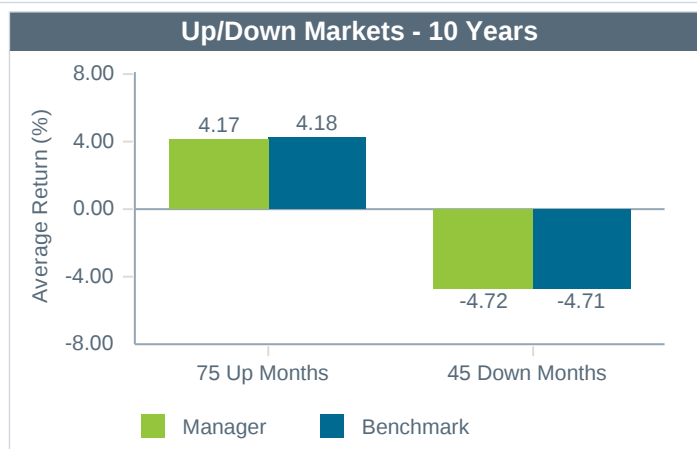
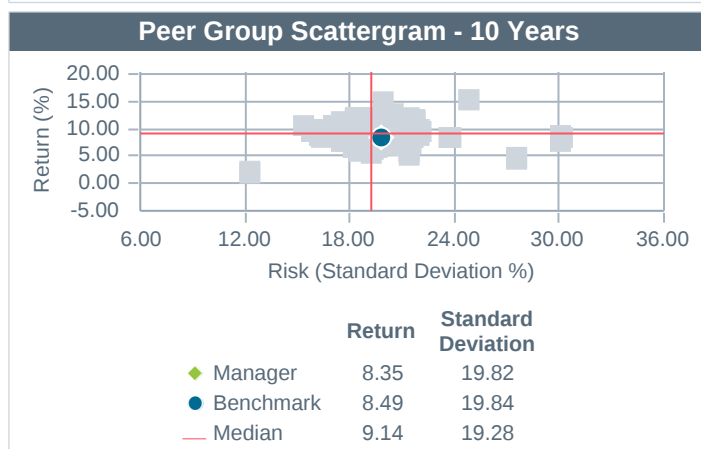
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	7.08	-9.04	22.46	10.97	10.71	9.90	-24.23	14.61	50.38	35.95	-10.29
Benchmark	6.07	-10.60	13.36	4.26	8.74	8.49	-26.36	2.83	34.63	28.48	-9.31
Difference	1.01	1.56	9.10	6.71	1.97	1.41	2.13	11.78	15.75	7.47	-0.98
Peer Group Median	6.24	-11.42	15.45	6.89	10.37	9.14	-27.54	10.53	36.55	27.69	-5.57
Rank	35	27	6	5	45	34	28	35	25	17	77
Population	518	508	489	456	389	331	503	513	519	518	519



Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Performance shown for Fiera Small Cap Growth (SA) before 07/2017 is simulated and does not represent actual performance. It is an approximation of what an investor would have experienced by investing in a similar strategy net of current client-specific fees.



Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	6.01	-10.68	13.15	4.09	8.58	8.35	-26.50	2.73	34.14	28.42	-9.42
Benchmark	6.07	-10.60	13.36	4.26	8.74	8.49	-26.36	2.83	34.63	28.48	-9.31
Difference	-0.06	-0.08	-0.21	-0.17	-0.16	-0.14	-0.14	-0.10	-0.49	-0.06	-0.11
Peer Group Median	6.24	-11.42	15.45	6.89	10.37	9.14	-27.54	10.53	36.55	27.69	-5.57
Rank	56	44	72	86	79	71	45	83	57	47	74
Population	518	508	489	456	389	331	503	513	519	518	519

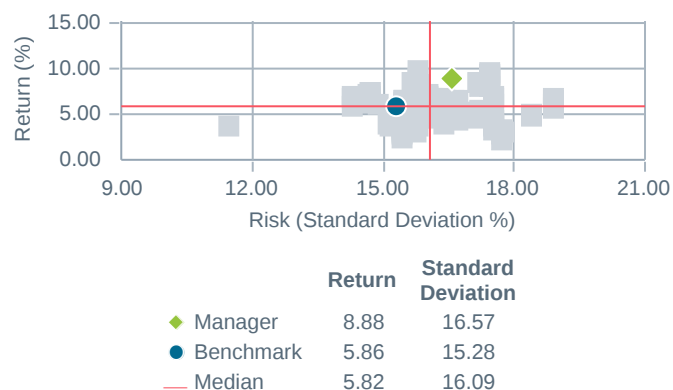
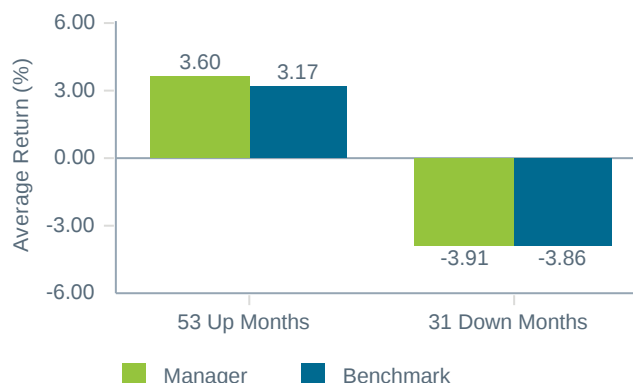


Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



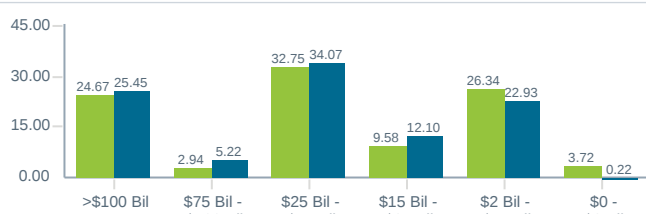
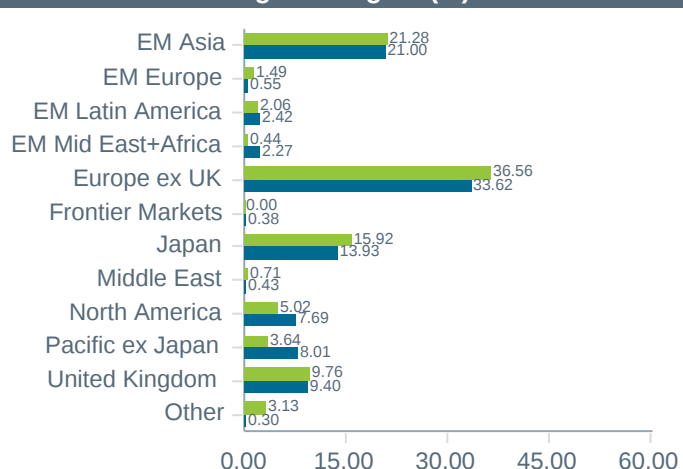
Manager: Non-US Company Stock
As of March 31, 2023
Benchmark: MSCI ACW Ex US Index (USD) (Net)
Peer Group: IM ACWI Ex US Core (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	8.36	-4.59	15.63	5.28	8.88	N/A	-18.06	8.56	25.26	24.83	-13.13
Benchmark	6.87	-5.07	11.80	2.47	5.86	4.17	-16.00	7.82	10.65	21.51	-14.20
Difference	1.49	0.48	3.83	2.81	3.02	N/A	-2.06	0.74	14.61	3.32	1.07
Peer Group Median	7.30	-3.87	12.66	2.49	5.82	4.45	-16.67	8.87	13.50	22.78	-15.85
Rank	13	63	9	9	5	N/A	66	56	6	37	9
Population	172	172	172	172	170	130	172	174	185	195	198

Peer Group Scattergram - 7 Years

Up/Down Markets - 7 Years

Peer Group Analysis - Multi Statistics - 7 Years (Excess Return vs. Risk Free)

Portfolio Characteristics and Dist. of Market Cap (%)

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	100,737	86,264
Median Mkt. Cap (\$M)	4,863	8,946
Price/Earnings Ratio	9.51	12.78
Price/Book Ratio	2.87	2.46
5 Yr. EPS Growth Rate (%)	17.85	10.49
Current Yield (%)	3.30	3.28
Beta (5 Years, Monthly)	1.08	1.00
Number of Securities	1,240	2,262
Active Share	62.96	N/A


Region Weights (%)


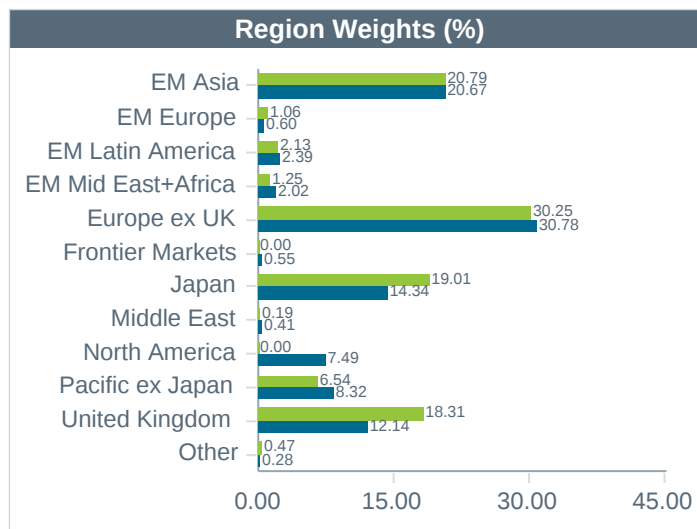
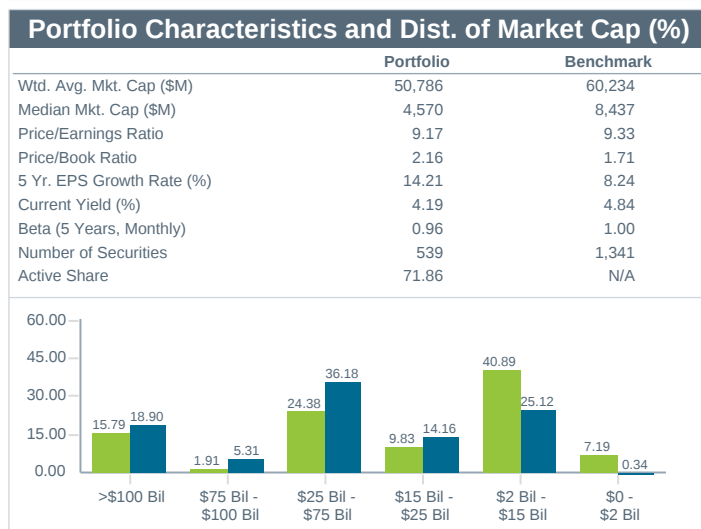
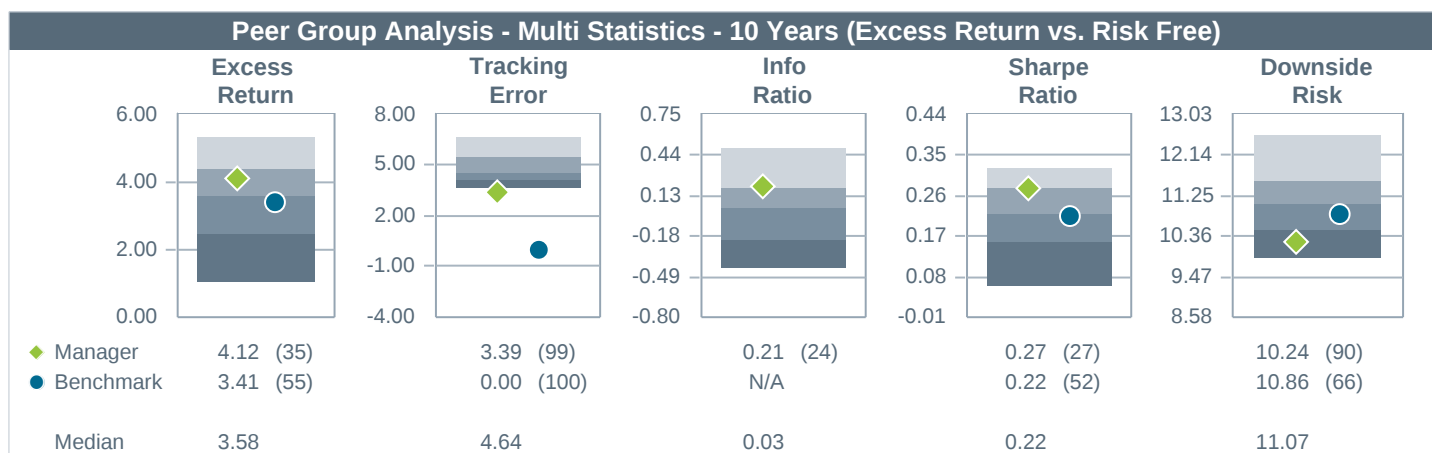
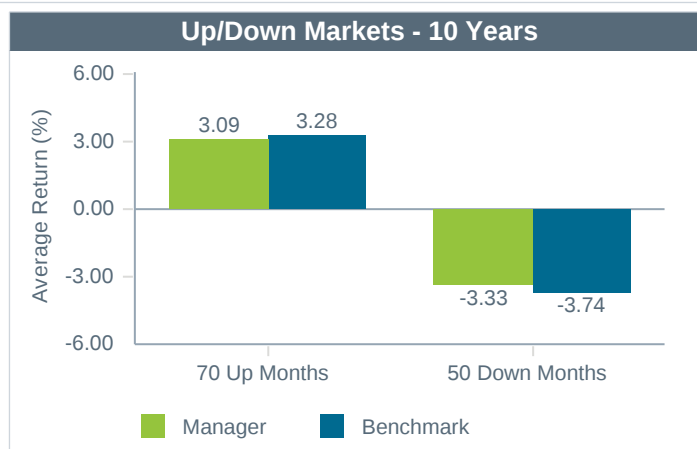
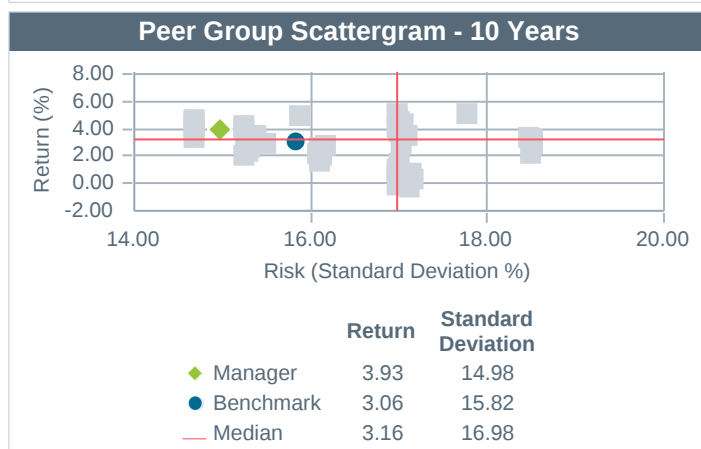
Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Performance shown for Non-US Company Stock before 09/2020 is simulated and does not represent actual performance. It is an approximation of what an investor would have experienced by investing in the current underlying funds in the same proportions as the model portfolio.



Manager: Schroders QEP Intl Val (CIT)
Benchmark: MSCI ACW Ex US Val Index (USD) (Net)
Peer Group: IM ACWI Ex US Value (MF)

As of March 31, 2023

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	5.58	-5.73	14.05	1.79	4.72	3.93	-11.13	13.94	0.94	18.64	-15.32
Benchmark	5.16	-4.00	13.82	1.26	5.00	3.06	-8.59	10.46	-0.77	15.72	-13.97
Difference	0.42	-1.73	0.23	0.53	-0.28	0.87	-2.54	3.48	1.71	2.92	-1.35
Peer Group Median	7.21	-2.74	14.41	1.58	4.45	3.16	-11.04	10.01	3.69	17.82	-16.03
Rank	100	79	58	30	38	31	53	15	68	35	23
Population	62	62	62	62	57	46	62	62	67	68	68



Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



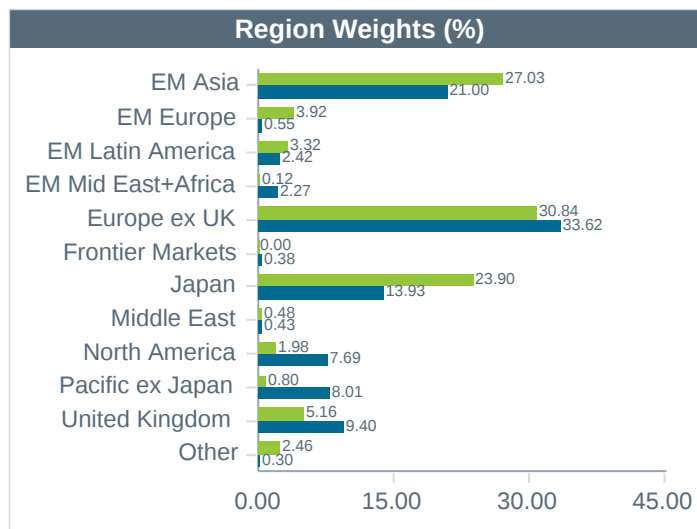
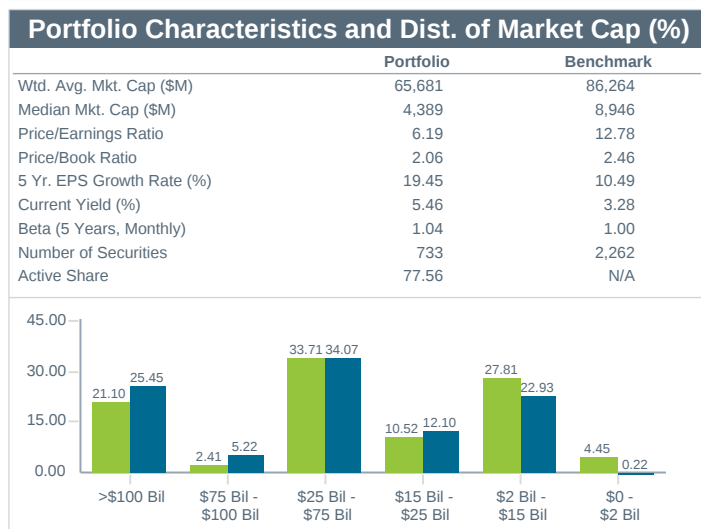
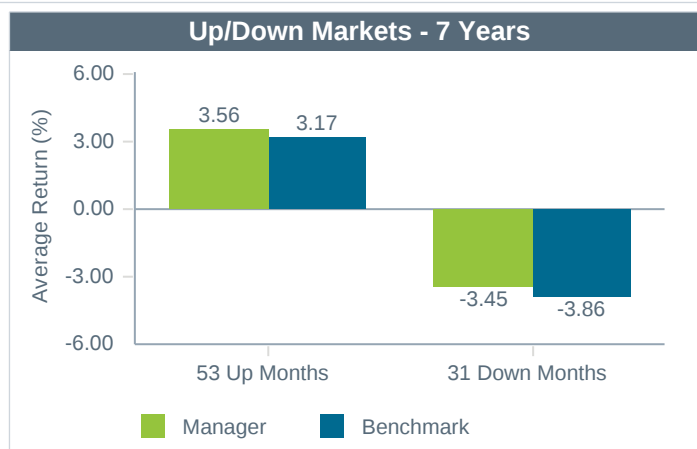
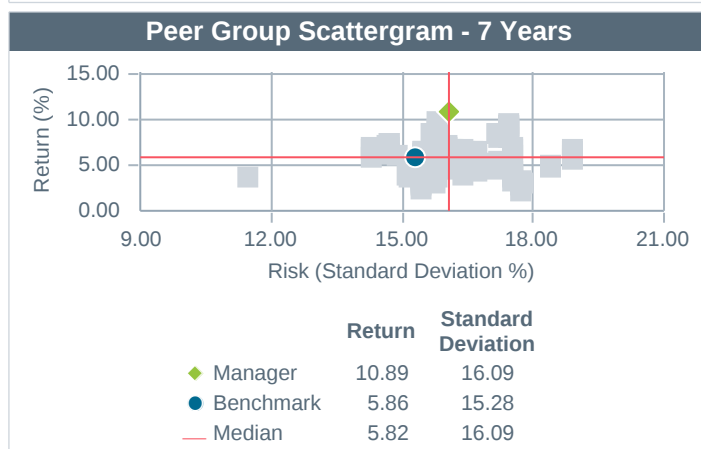
Manager: Arrowstreet Intl Eq ACW Ex US C (CIT)

As of March 31, 2023

Benchmark: MSCI ACW Ex US Index (USD) (Net)

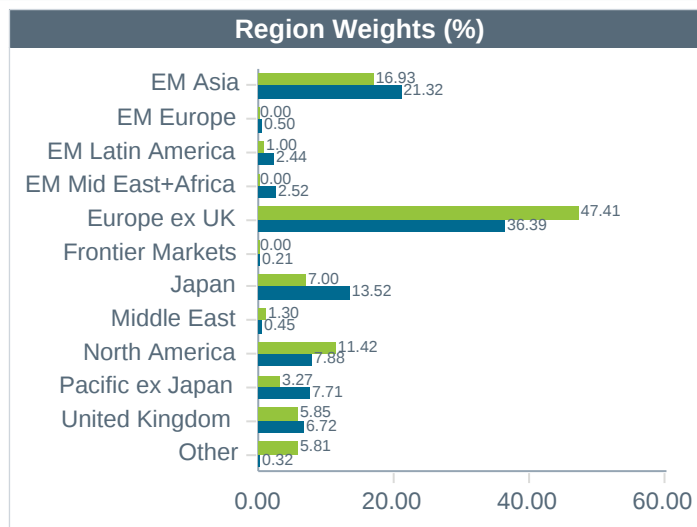
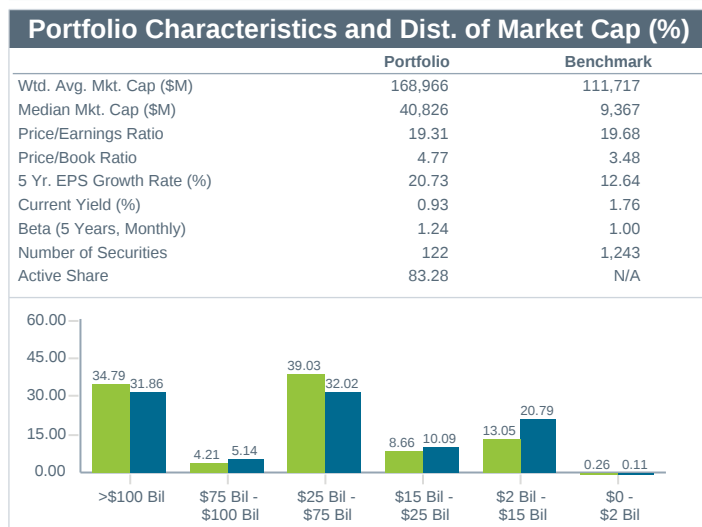
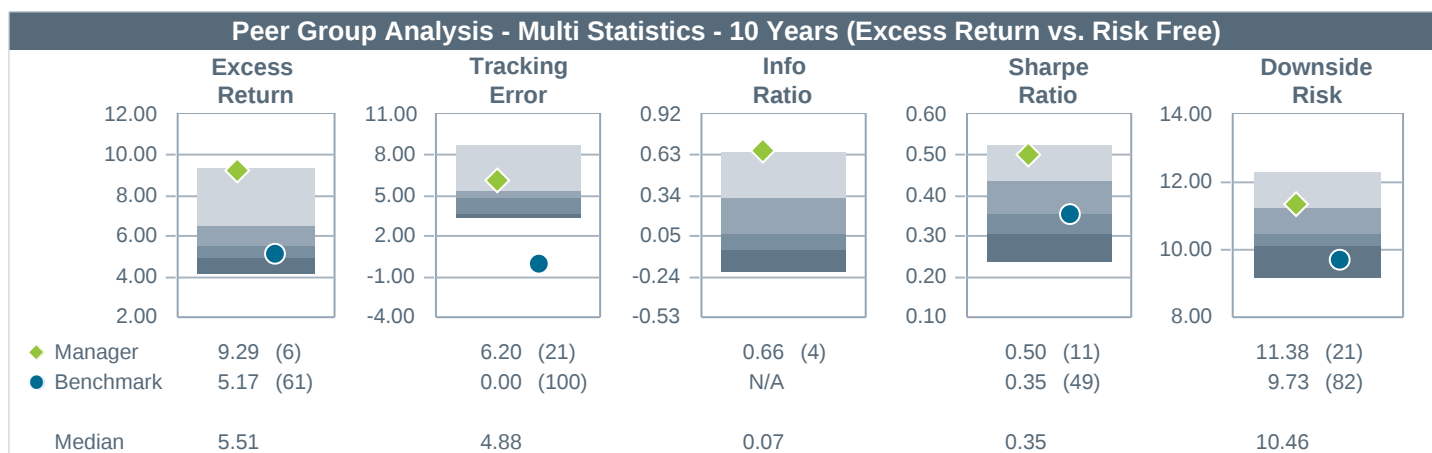
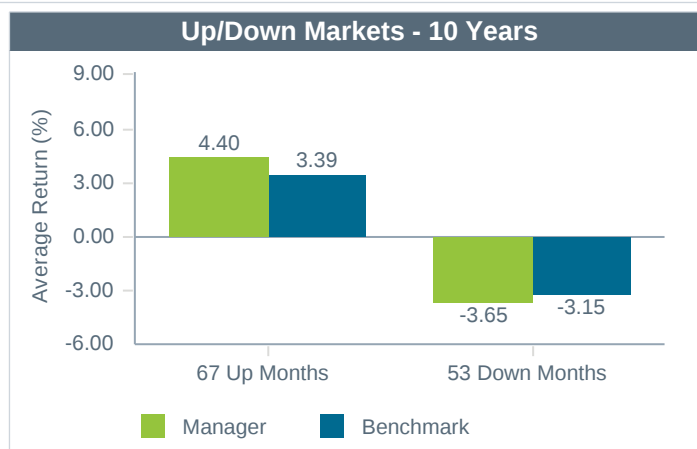
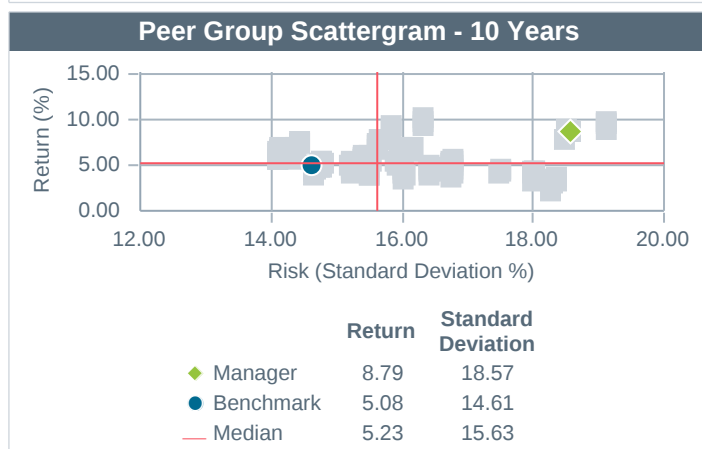
Peer Group: IM ACWI Ex US Core (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	6.88	-1.37	19.97	7.80	10.89	N/A	-10.51	13.26	23.13	24.45	-11.43
Benchmark	6.87	-5.07	11.80	2.47	5.86	4.17	-16.00	7.82	10.65	21.51	-14.20
Difference	0.01	3.70	8.17	5.33	5.03	N/A	5.49	5.44	12.48	2.94	2.77
Peer Group Median	7.30	-3.87	12.66	2.49	5.82	4.45	-16.67	8.87	13.50	22.78	-15.85
Rank	59	19	1	1	1	N/A	6	5	7	40	3
Population	172	172	172	172	170	130	172	174	185	195	198



Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	12.50	-6.81	13.48	6.53	11.26	8.79	-30.79	-0.74	59.74	31.48	-12.58
Benchmark	8.59	-6.35	9.49	3.36	6.47	5.08	-23.05	5.09	22.20	27.34	-14.43
Difference	3.91	-0.46	3.99	3.17	4.79	3.71	-7.74	-5.83	37.54	4.14	1.85
Peer Group Median	9.23	-4.76	10.95	3.17	6.38	5.23	-26.63	7.93	22.75	27.84	-14.32
Rank	17	60	3	11	3	8	81	93	1	23	29
Population	170	170	170	170	160	121	170	170	170	172	176

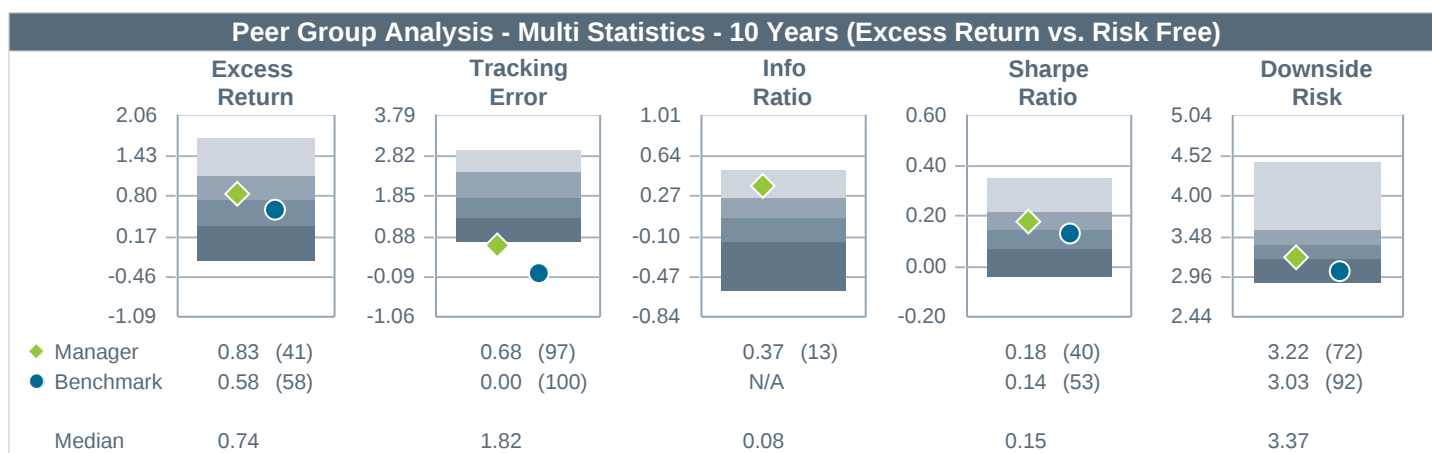
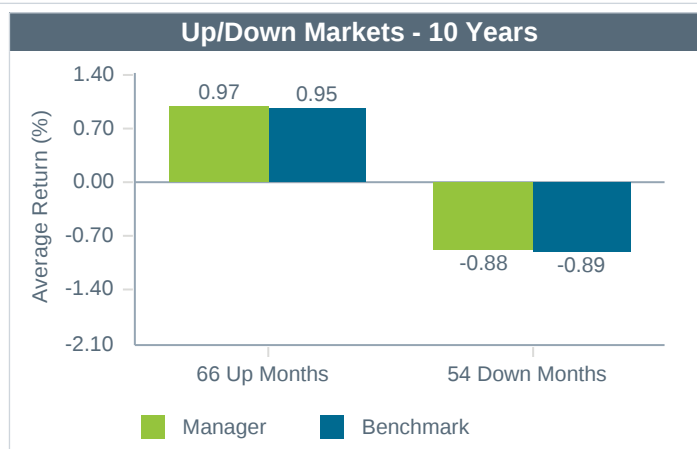
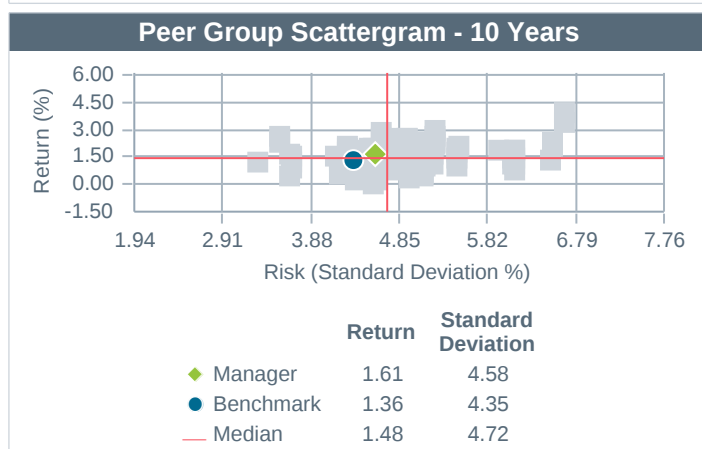


Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Fund allocation to "Other" consists of Argentina.

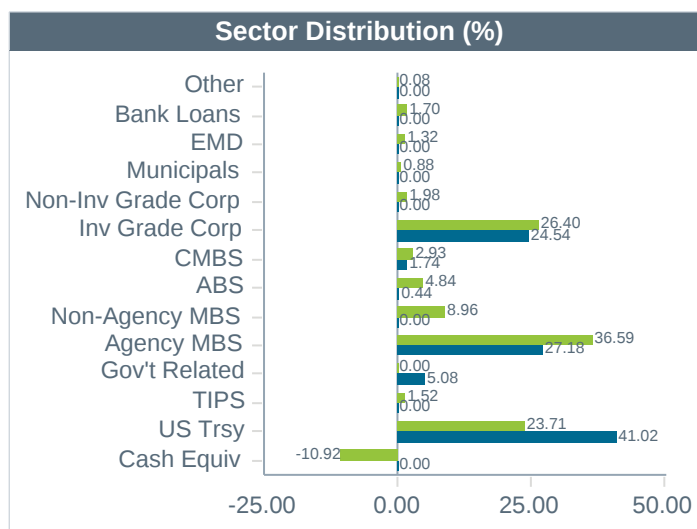
Manager: US Bond
As of March 31, 2023
Benchmark: Bloomberg US Agg Bond Index

Peer Group: IM U.S. Broad Market Core+ Fixed Income (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	3.40	-5.59	-2.29	1.24	1.19	1.61	-14.17	-1.28	9.56	8.99	0.38
Benchmark	2.96	-4.78	-2.77	0.90	0.88	1.36	-13.01	-1.55	7.51	8.72	0.01
Difference	0.44	-0.81	0.48	0.34	0.31	0.25	-1.16	0.27	2.05	0.27	0.37
Peer Group Median	3.23	-5.51	-1.07	1.07	1.32	1.48	-13.72	-0.94	8.58	9.33	-0.97
Rank	32	52	85	38	61	41	64	65	28	59	9
Population	329	320	295	261	222	177	318	312	308	307	285



Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	6.89	6.33
Spread Duration	4.77	N/A
Avg. Maturity	7.74	8.50
Avg. Quality	Aa2	Aa1/Aa2
Yield To Maturity (%)	N/A	4.40
Coupon Rate (%)	3.94	2.79
Current Yield (%)	3.72	N/A
Holdings Count	894	13,278



Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Allocation to Other includes Equity, Swaps, & Options.



Manager: Stable Value Option
As of March 31, 2023
Benchmark: Stable Value Custom Benchmark

Peer Group: Morningstar US CIT Stable Value

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	0.61	1.96	1.94	2.17	2.17	2.20	1.74	1.76	2.34	2.63	2.33
Benchmark	0.36	1.16	1.33	2.28	2.27	2.06	1.02	1.37	2.18	3.81	3.40
Difference	0.25	0.80	0.61	-0.11	-0.10	0.14	0.72	0.39	0.16	-1.18	-1.07
Peer Group Median	0.65	2.15	2.00	2.17	2.13	2.00	1.93	1.73	2.25	2.53	2.18
Rank	65	88	63	50	29	19	73	43	37	26	35
Population	16	16	16	16	16	16	18	18	18	18	18

Peer Group Analysis		Portfolio Characteristics		Top Wrap Providers (%)			
Return (%)			Portfolio	Benchmark			
		Effective Duration	3.64	N/A	Prudential	23.90	
		Avg. Quality	Aa2	N/A	Metropolitan Life	21.20	
		Crediting Rate	2.44	N/A	Transamerica Premier	18.90	
		Market To BV (%)	94.12	N/A	Royal Bank of Canada	16.60	
					RGA	18.20	
					Cash/Cash Equivalents	1.20	

Effective Duration	Crediting Rate	Market to Book Value (%)

Sector Distribution (%)	Duration Distribution (%)	Credit Quality Distribution (%)
■ Manager ■ Benchmark	■ Manager ■ Benchmark	■ Manager ■ Benchmark

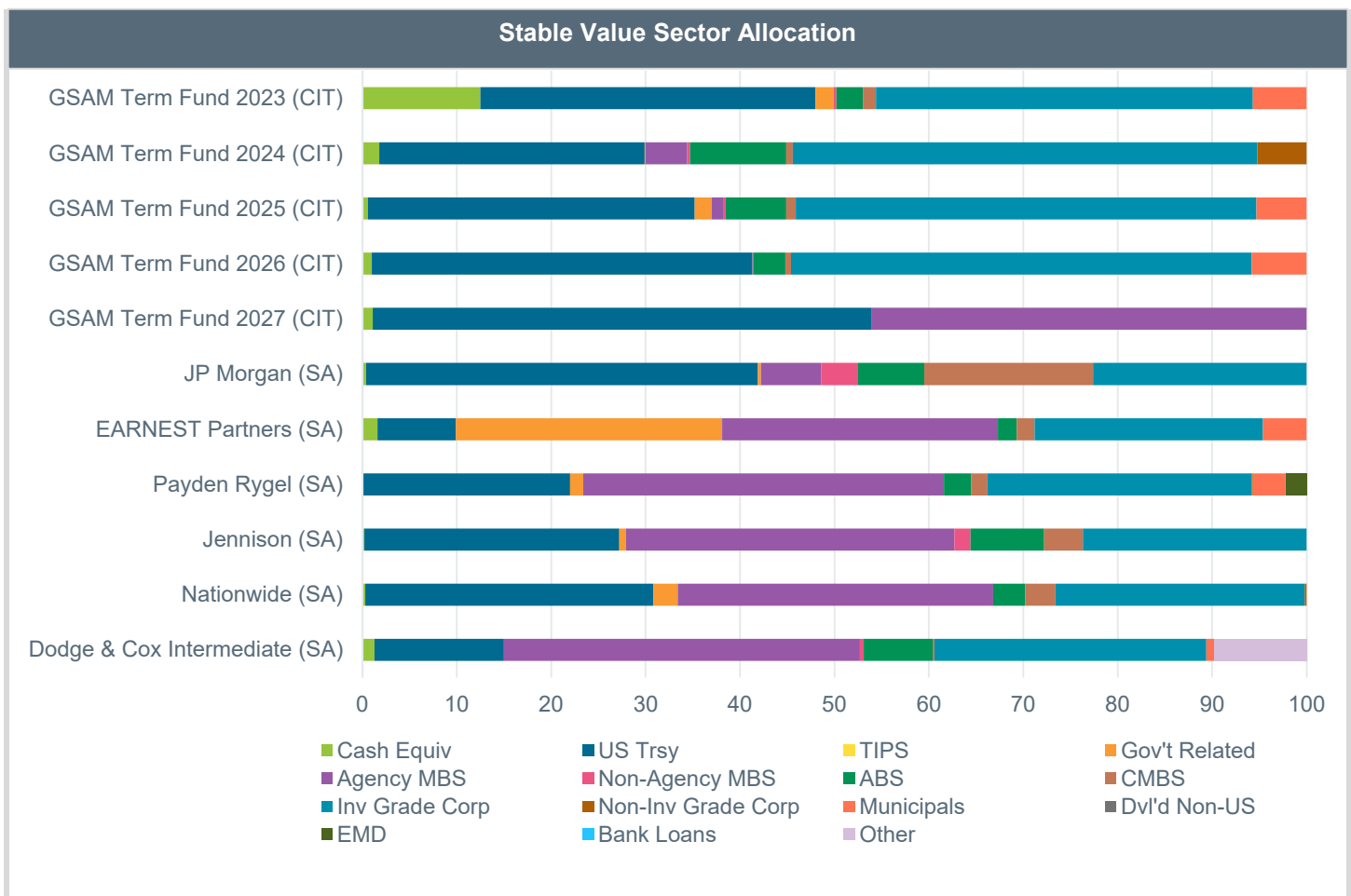
Performance shown is net of fees. Calculation is based on monthly periodicity. Benchmark portfolio characteristics and sector distribution data is currently unavailable. Allocation to "Other" consists of Yankees. Benchmark data is not yet available as of 3/31/2023.



Ohio Public Employees Deferred Compensation Program
Stable Value Characteristics

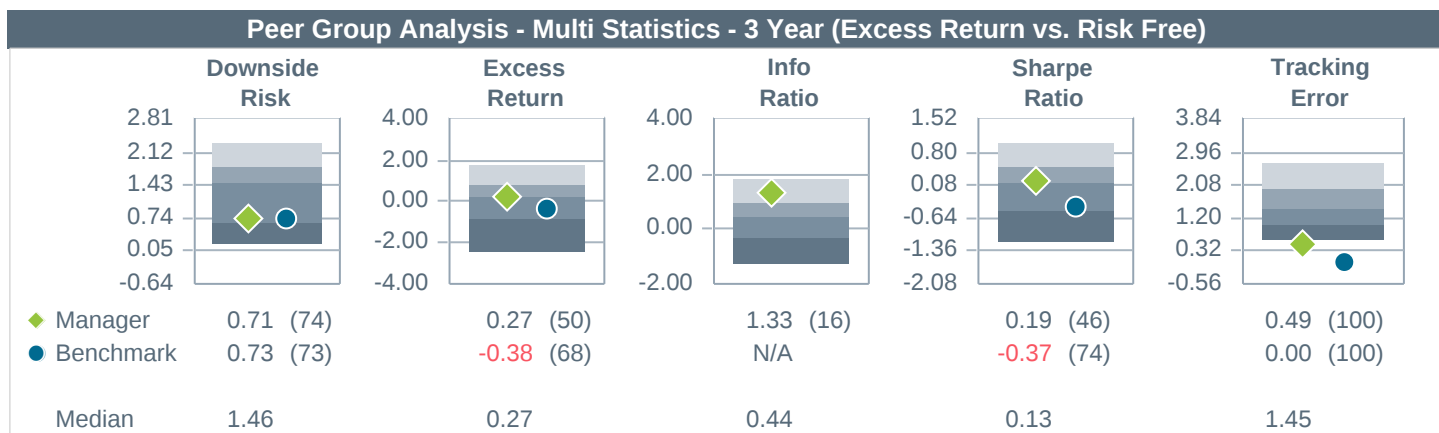
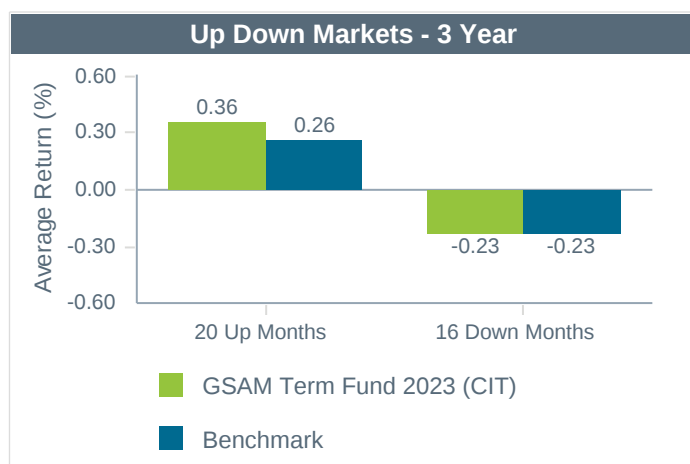
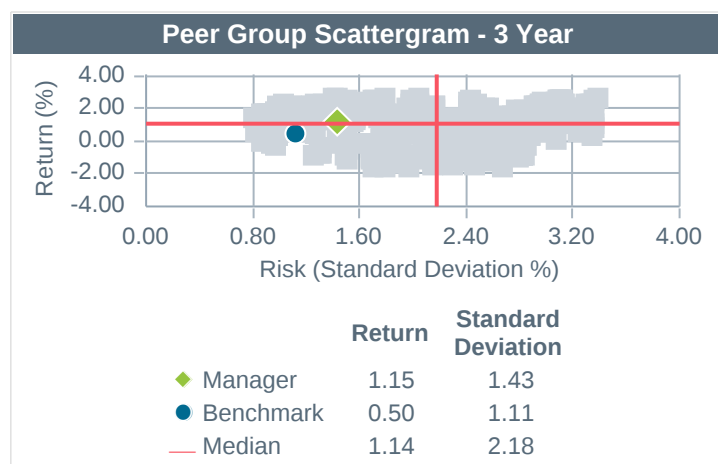
As of March 31, 2023

Stable Value Funds	Effective Duration	Market Value	Actual Percentage	Permissible Range %
GSAM Term Fund 2023 (CIT)	0.28	\$305,213,432	6.17%	
GSAM Term Fund 2024 (CIT)	1.19	\$340,551,747	6.88%	
GSAM Term Fund 2025 (CIT)	2.12	\$340,879,389	6.89%	
GSAM Term Fund 2026 (CIT)	3.04	\$343,199,567	6.93%	
GSAM Term Fund 2027 (CIT)	3.96	\$27,280,058	0.55%	
Fixed Maturity	1.74	\$1,357,124,193	27.42%	20% - 40%
JP Morgan (SA)	4.56	\$800,581,057	16.18%	
EARNEST Partners (SA)	4.34	\$416,714,634	8.42%	
Payden Rygel (SA)	4.53	\$416,412,295	8.41%	
Jennison (SA)	4.47	\$541,639,032	10.94%	
Nationwide (SA)	4.70	\$594,268,251	12.01%	
Dodge & Cox Intermediate (SA)	4.02	\$757,504,756	15.31%	
Open Maturity	4.42	\$3,527,120,025	71.27%	50% - 80%
Short Term Investment Fund		\$64,719,237	1.31%	
Liquidity Buffer		\$64,719,237	1.31%	0% - 10%
Total	3.64	\$4,948,963,455	100.00%	



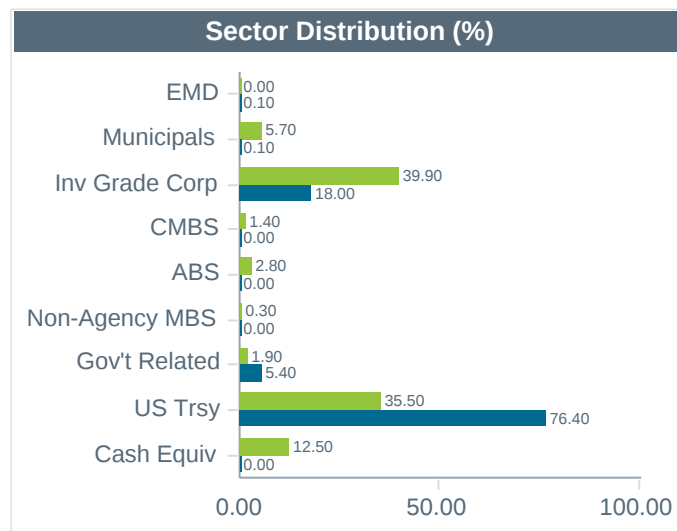
Allocations shown may not sum up to 100% exactly due to rounding. Underlying market values were provided by Goldman Sachs Asset Management. Allocation to "Other" consists of Yankees.

Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	1.16	1.16	1.57	1.15	N/A	N/A	N/A	-1.14	-0.53	5.99	6.49	N/A
Benchmark	1.17	1.17	1.41	0.50	N/A	N/A	N/A	-1.37	-0.45	5.31	6.30	N/A
Difference	-0.01	-0.01	0.16	0.65	N/A	N/A	N/A	0.23	-0.08	0.68	0.19	N/A
Peer Group Median	1.50	1.50	0.09	1.14	1.27	1.23	0.99	-3.88	-0.06	3.11	3.82	1.20
Rank	87	87	25	50	N/A	N/A	N/A	28	73	2	2	N/A
Population	671	671	644	601	526	462	376	644	655	650	654	633



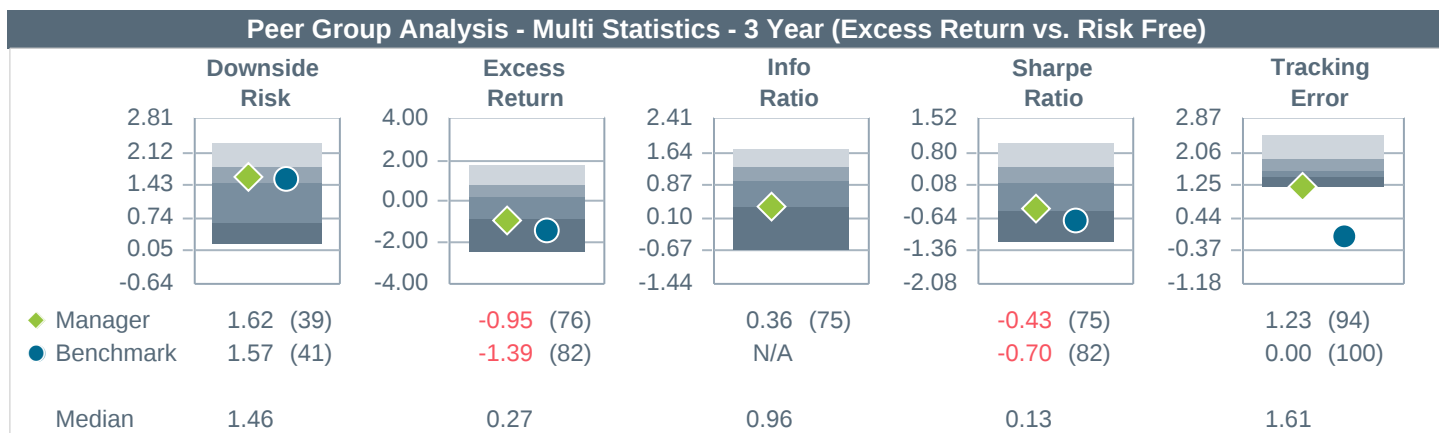
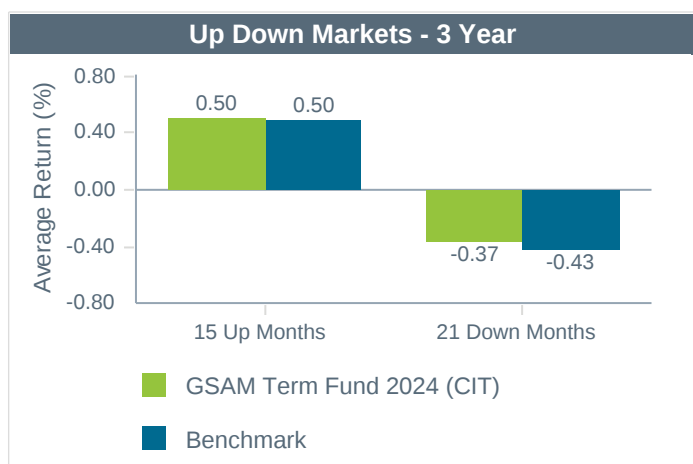
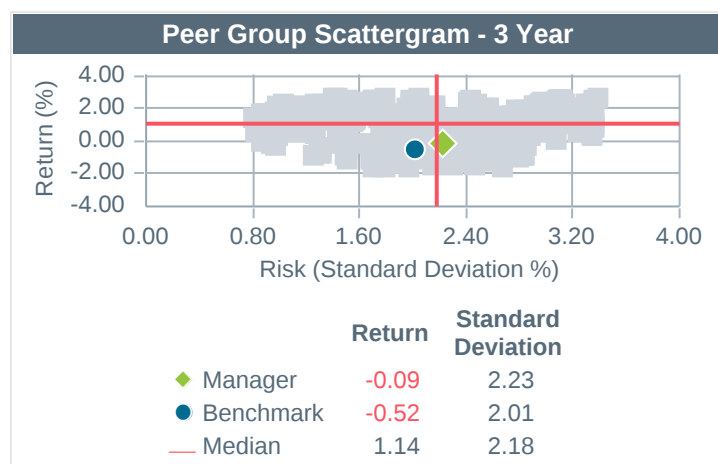
Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	N/A	N/A
Avg. Quality	Aa2	Aa1
Coupon Rate (%)	N/A	N/A
Current Yield (%)	N/A	N/A
Effective Duration	0.28	0.42
Yield To Maturity (%)	5.03	N/A
Holdings Count	N/A	N/A

Top Wrap Providers (%)	
Metropolitan Life	13.52
RGA	21.34
Royal Bank of Canada	35.26
Transamerica Premier	16.23



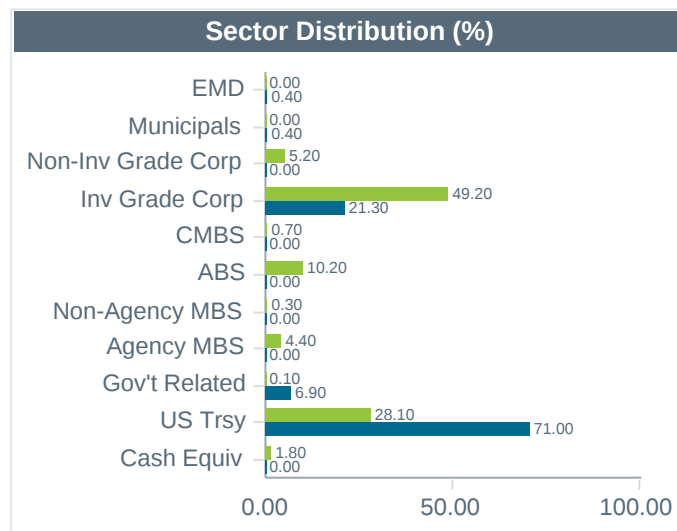
Performance shown is net of fees, except where noted. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	1.42	1.42	0.28	-0.09	N/A	N/A	N/A	-4.25	-1.23	6.84	N/A	N/A
Benchmark	1.33	1.33	0.01	-0.52	N/A	N/A	N/A	-4.40	-1.15	6.70	N/A	N/A
Difference	0.09	0.09	0.27	0.43	N/A	N/A	N/A	0.15	-0.08	0.14	N/A	N/A
Peer Group Median	1.50	1.50	0.09	1.14	1.27	1.23	0.99	-3.88	-0.06	3.11	3.82	1.20
Rank	60	60	42	76	N/A	N/A	N/A	59	92	1	N/A	N/A
Population	671	671	644	601	526	462	376	644	655	650	654	633



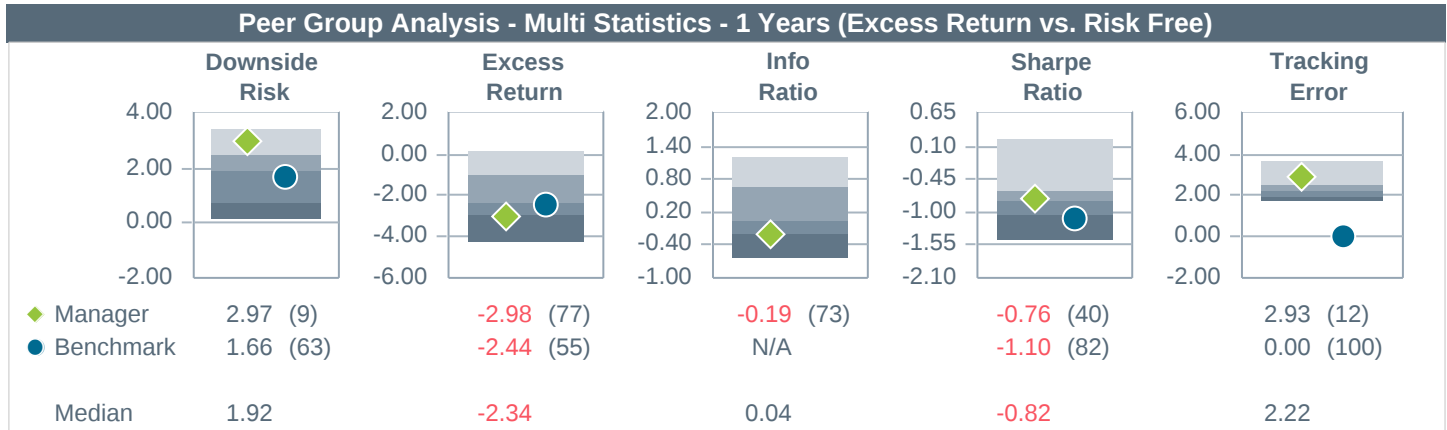
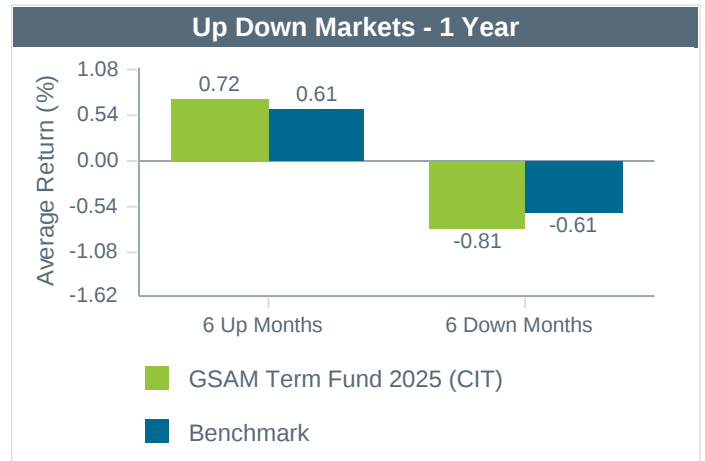
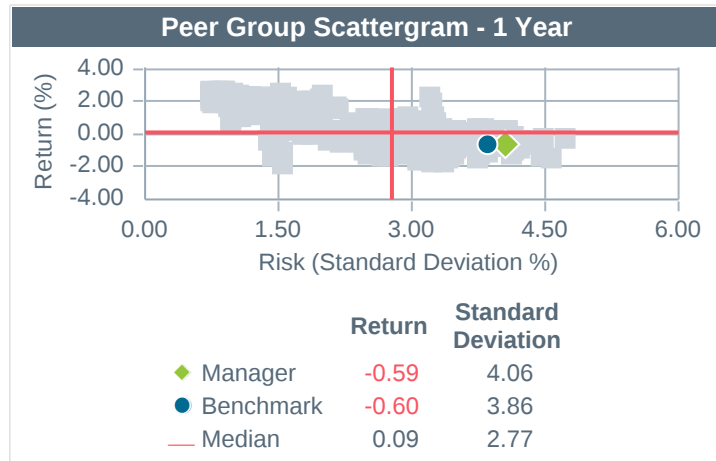
Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	N/A	N/A
Avg. Quality	Aa3	Aa1
Coupon Rate (%)	N/A	N/A
Current Yield (%)	N/A	N/A
Effective Duration	1.19	1.23
Yield To Maturity (%)	5.03	N/A
Holdings Count	N/A	N/A

Top Wrap Providers (%)	
Metropolitan Life	13.71
RGA	21.53
Royal Bank of Canada	34.47
Transamerica Premier	16.46



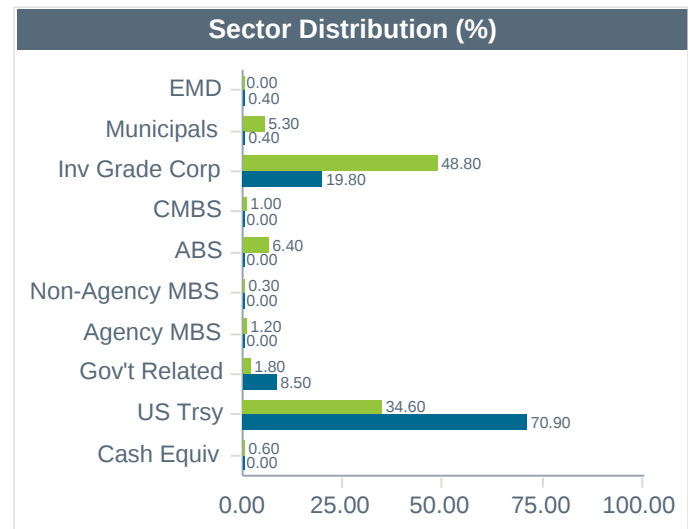
Performance shown is net of fees, except where noted. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	1.69	1.69	-0.59	N/A	N/A	N/A	N/A	-6.49	-2.26	N/A	N/A	N/A
Benchmark	1.63	1.63	-0.60	N/A	N/A	N/A	N/A	-6.36	-2.01	N/A	N/A	N/A
Difference	0.06	0.06	0.01	N/A	N/A	N/A	N/A	-0.13	-0.25	N/A	N/A	N/A
Peer Group Median	1.50	1.50	0.09	1.14	1.27	1.23	0.99	-3.88	-0.06	3.11	3.82	1.20
Rank	28	28	78	N/A	N/A	N/A	N/A	96	100	N/A	N/A	N/A
Population	671	671	644	601	526	462	376	644	655	650	654	633



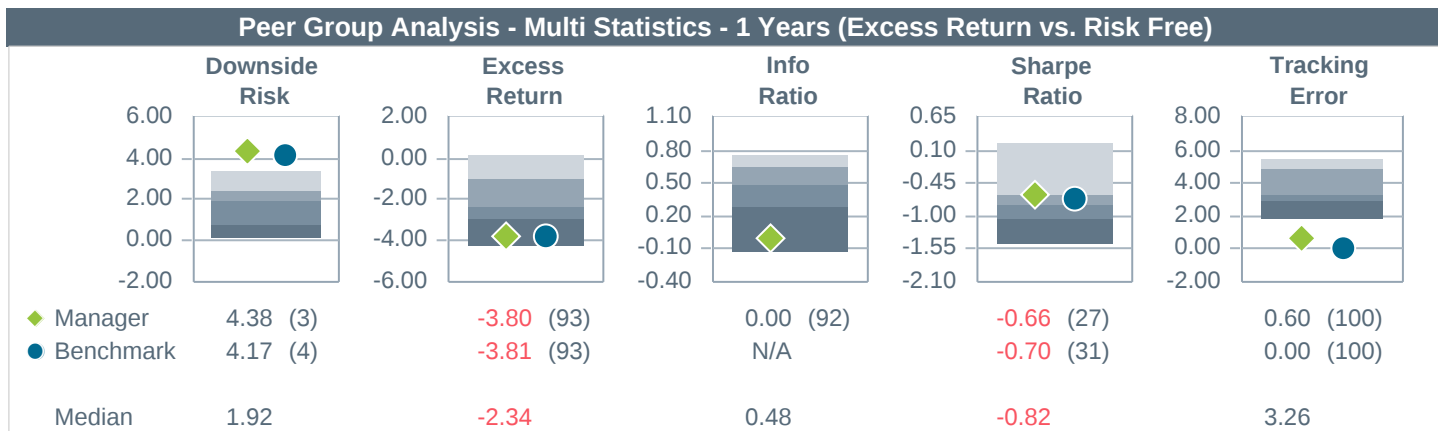
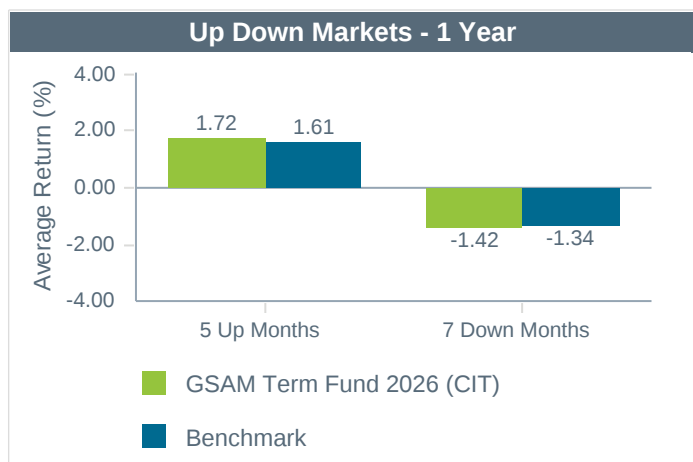
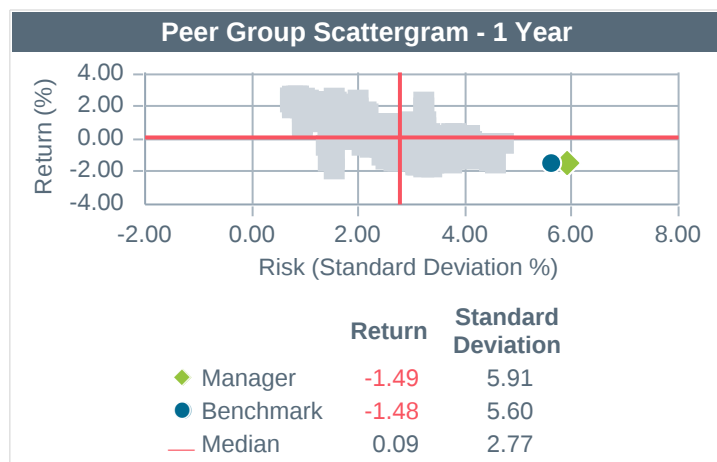
Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	N/A	N/A
Avg. Quality	Aa3	Aa1
Coupon Rate (%)	N/A	N/A
Current Yield (%)	N/A	N/A
Effective Duration	2.12	1.23
Yield To Maturity (%)	4.69	N/A
Holdings Count	N/A	N/A

Top Wrap Providers (%)	
Metropolitan Life	13.69
RGA	21.49
Royal Bank of Canada	34.60
Transamerica Premier	16.40



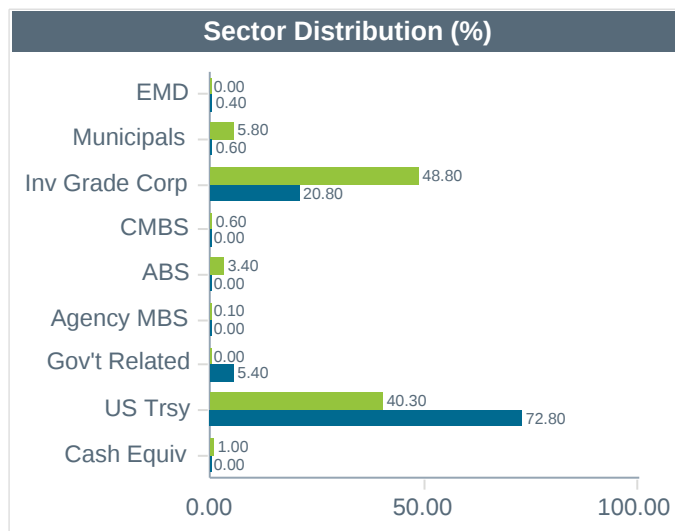
Performance shown is net of fees, except where noted. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	2.11	2.11	-1.49	N/A	N/A	N/A	N/A	-8.33	N/A	N/A	N/A	N/A
Benchmark	2.07	2.07	-1.48	N/A	N/A	N/A	N/A	-9.20	N/A	N/A	N/A	N/A
Difference	0.04	0.04	-0.01	N/A	N/A	N/A	N/A	0.87	N/A	N/A	N/A	N/A
Peer Group Median	1.50	1.50	0.09	1.14	1.27	1.23	0.99	-3.88	-0.06	3.11	3.82	1.20
Rank	5	5	94	N/A	N/A	N/A	N/A	99	N/A	N/A	N/A	N/A
Population	671	671	644	601	526	462	376	644	655	650	654	633



Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	N/A	N/A
Avg. Quality	Aa3	Aa1
Coupon Rate (%)	N/A	N/A
Current Yield (%)	N/A	N/A
Effective Duration	3.04	3.04
Yield To Maturity (%)	4.45	N/A
Holdings Count	N/A	N/A

Top Wrap Providers (%)	
Metropolitan Life	14.00
RGA	23.41
Royal Bank of Canada	34.59
Transamerica Premier	15.32



Performance shown is net of fees, except where noted. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

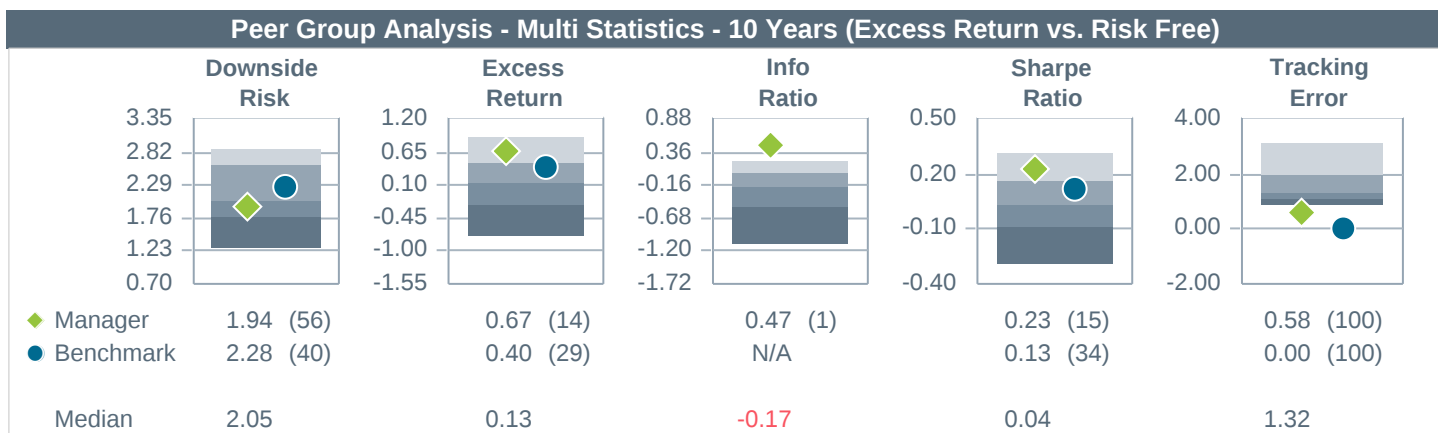
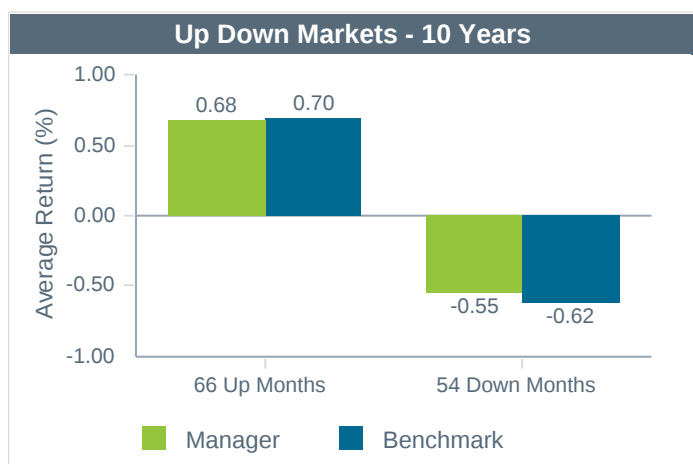
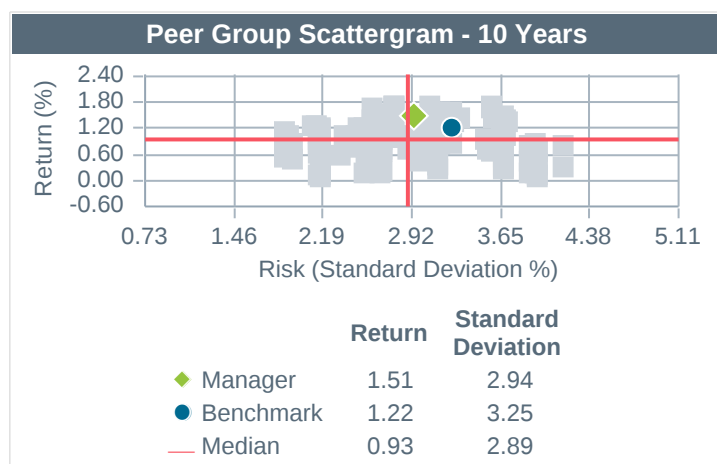
Manager: JP Morgan (SA)

As of March 31, 2023

Benchmark: Bloomberg US Agg Int Index*

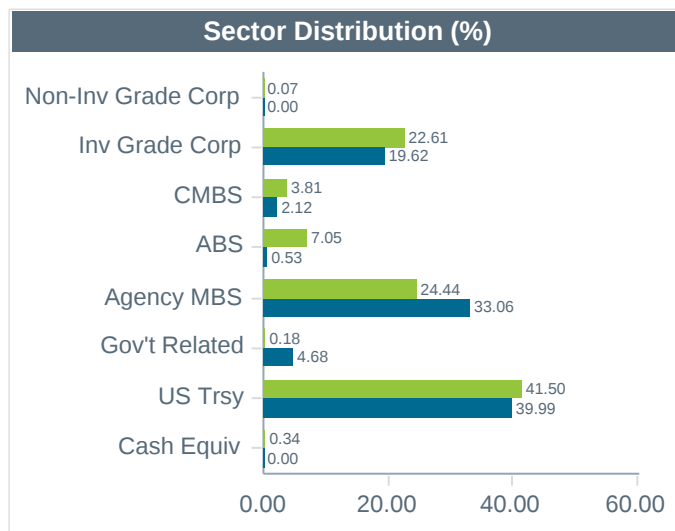
Peer Group: IM U.S. Intermediate Duration Fixed Income (MF)

Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	2.67	2.67	-1.70	-0.98	1.45	1.28	1.51	-8.24	-0.95	6.06	6.57	1.02
Benchmark	2.39	2.39	-2.79	-1.96	1.00	0.83	1.22	-9.51	-1.29	5.60	6.67	0.92
Difference	0.28	0.28	1.09	0.98	0.45	0.45	0.29	1.27	0.34	0.46	-0.10	0.10
Peer Group Median	2.08	2.08	-1.71	-0.58	1.09	0.87	0.93	-7.17	-0.85	5.57	5.30	0.64
Rank	19	19	50	63	24	27	13	65	56	39	15	26
Population	257	257	246	227	211	193	166	246	243	241	242	228



Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	5.06	5.35
Avg. Quality	Aa2	Aa1/Aa2
Coupon Rate (%)	3.24	2.61
Current Yield (%)	3.18	N/A
Effective Duration	4.56	4.55
Spread Duration	2.34	4.49
Yield To Maturity (%)	4.49	4.36
Holdings Count	923	9,949

Top Wrap Providers (%)	
Metropolitan Tower Life	70.17
Royal Bank of Canada	29.83



Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



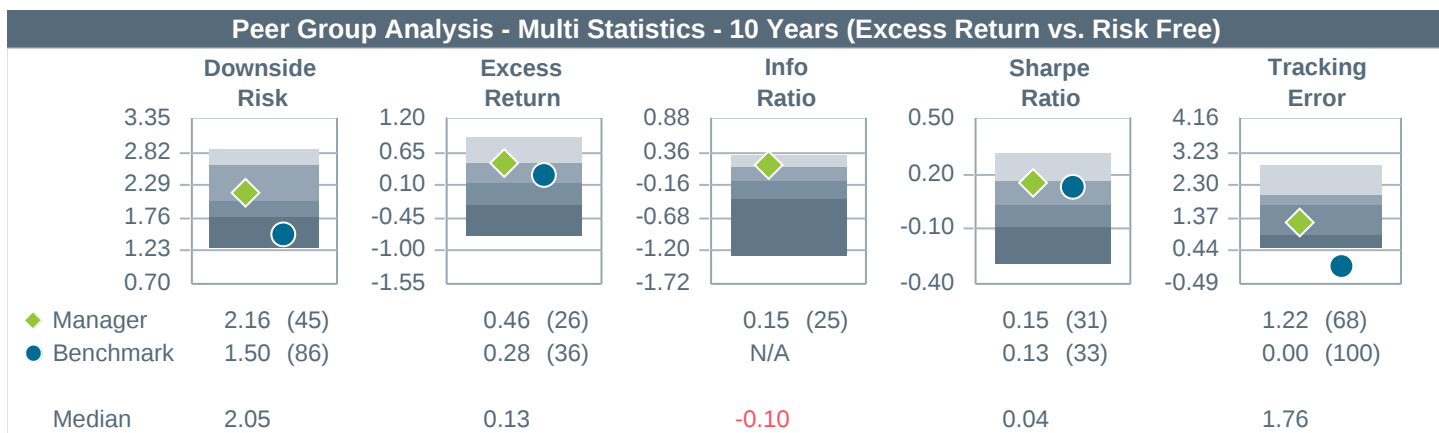
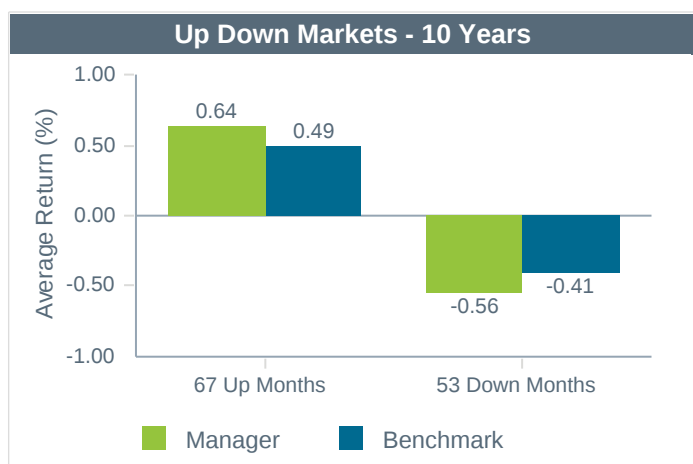
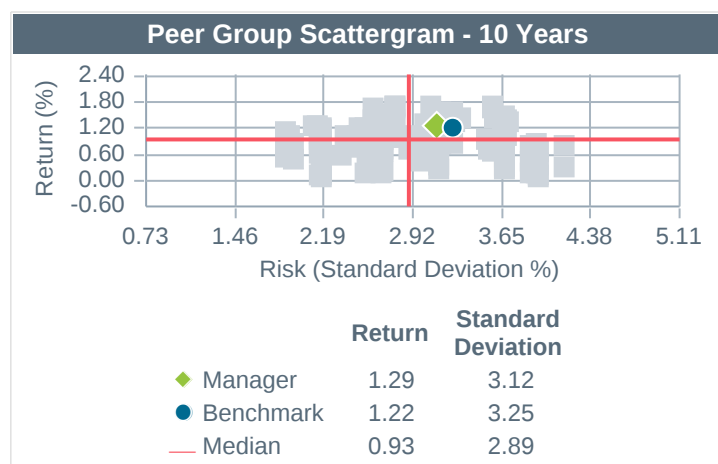
Manager: EARNEST Partners (SA)

As of March 31, 2023

Benchmark: Bloomberg US Agg Int Index

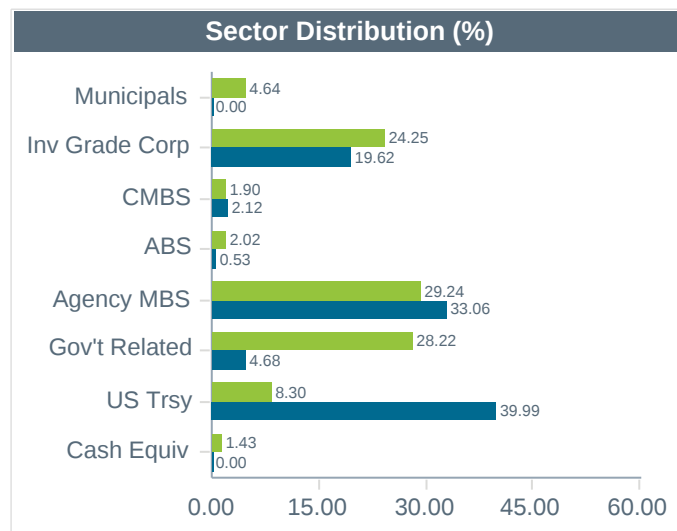
Peer Group: IM U.S. Intermediate Duration Fixed Income (MF)

Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	2.07	2.07	-2.77	-1.42	1.05	0.95	1.29	-8.99	-0.73	5.05	6.49	1.25
Benchmark	2.39	2.39	-2.79	-1.96	1.00	0.83	1.22	-9.51	-1.29	5.60	6.67	0.92
Difference	-0.32	-0.32	0.02	0.54	0.05	0.12	0.07	0.52	0.56	-0.55	-0.18	0.33
Peer Group Median	2.08	2.08	-1.71	-0.58	1.09	0.87	0.93	-7.17	-0.85	5.57	5.30	0.64
Rank	52	52	69	68	53	46	26	69	46	65	17	13
Population	257	257	246	227	211	193	166	246	243	241	242	228



Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	5.44	5.35
Avg. Quality	Aa2	Aa1/Aa2
Coupon Rate (%)	3.57	2.61
Current Yield (%)	3.75	N/A
Effective Duration	4.34	4.55
Spread Duration	3.80	4.49
Yield To Maturity (%)	4.90	4.36
Holdings Count	N/A	9,949

Top Wrap Providers (%)	
Metropolitan Tower Life	72.08
Transamerica Premier	27.92



Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



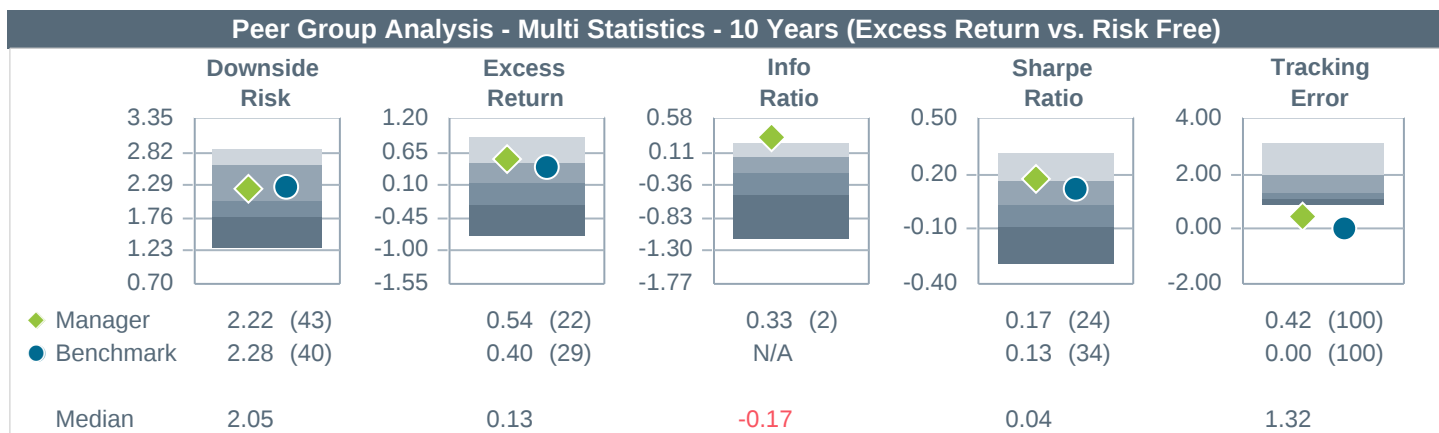
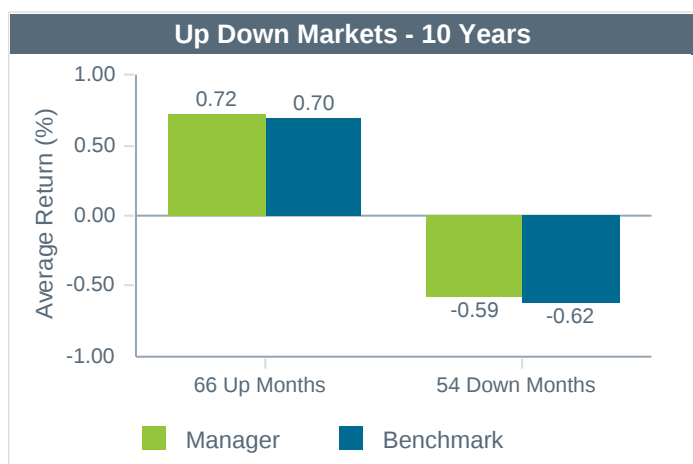
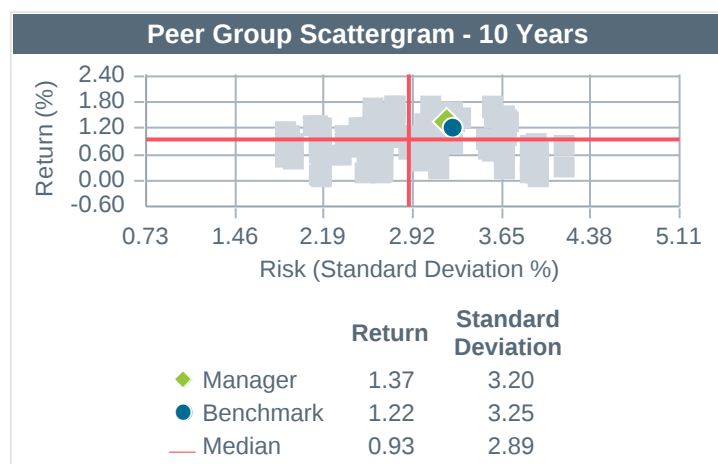
Manager: Payden & Rygel (SA)

As of March 31, 2023

Benchmark: Bloomberg US Agg Int Index

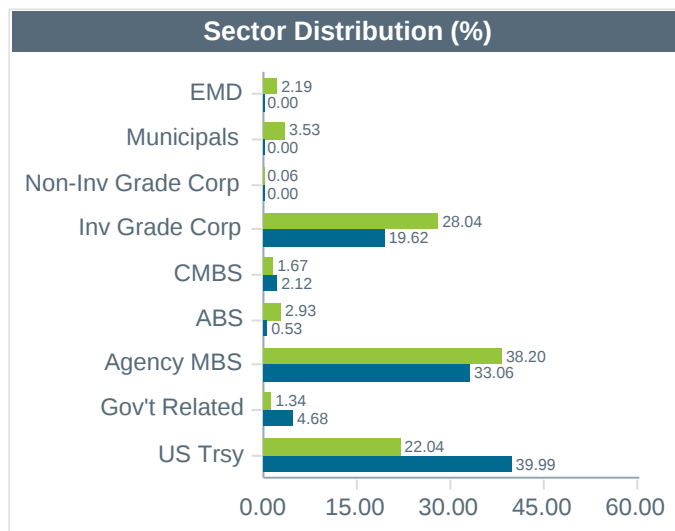
Peer Group: IM U.S. Intermediate Duration Fixed Income (MF)

Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	2.36	2.36	-2.77	-1.43	1.12	1.05	1.37	-9.21	-1.23	6.19	6.64	0.84
Benchmark	2.39	2.39	-2.79	-1.96	1.00	0.83	1.22	-9.51	-1.29	5.60	6.67	0.92
Difference	-0.03	-0.03	0.02	0.53	0.12	0.22	0.15	0.30	0.06	0.59	-0.03	-0.08
Peer Group Median	2.08	2.08	-1.71	-0.58	1.09	0.87	0.93	-7.17	-0.85	5.57	5.30	0.64
Rank	38	38	69	69	48	40	22	70	66	35	13	38
Population	257	257	246	227	211	193	166	246	243	241	242	228



Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	5.93	5.35
Avg. Quality	Aa2	Aa1/Aa2
Coupon Rate (%)	3.73	2.61
Current Yield (%)	3.78	N/A
Effective Duration	4.53	4.55
Spread Duration	3.73	4.49
Yield To Maturity (%)	4.66	4.36
Holdings Count	N/A	9,949

Top Wrap Providers (%)	
RGA	69.96
Royal Bank of Canada	30.04



Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



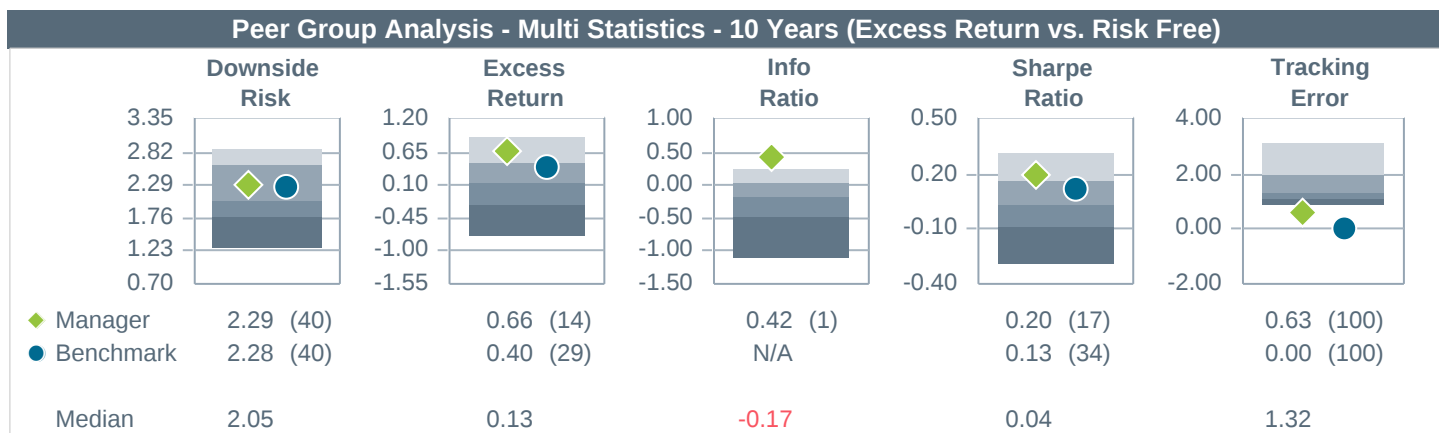
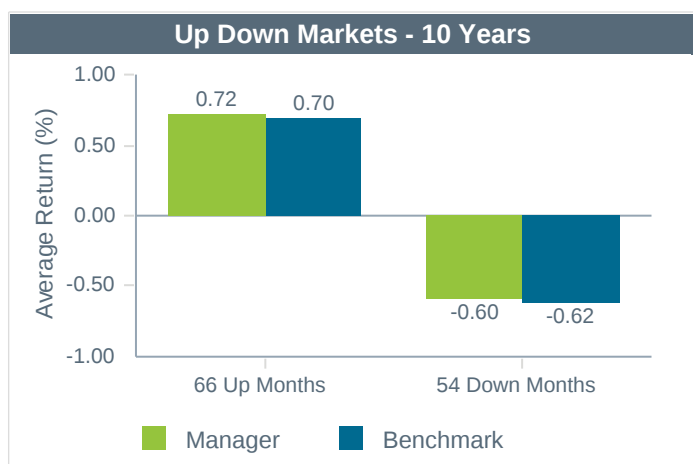
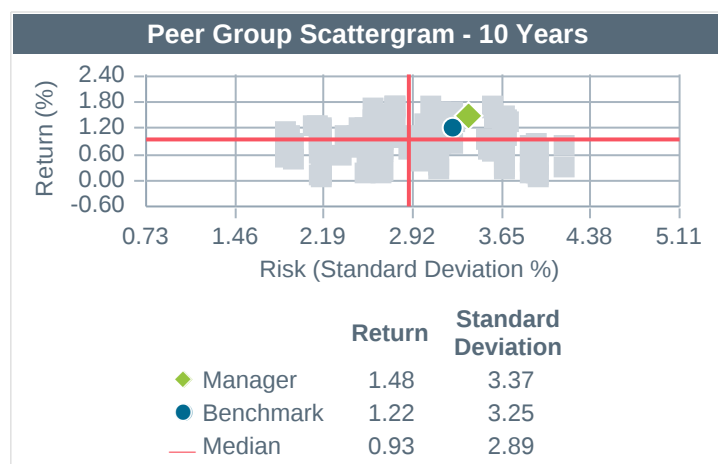
Manager: Jennison (SA)

As of March 31, 2023

Benchmark: Bloomberg US Agg Int Index

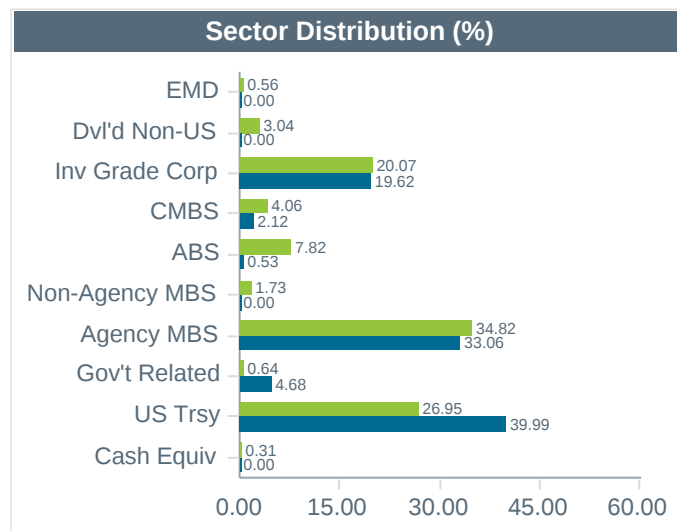
Peer Group: IM U.S. Intermediate Duration Fixed Income (MF)

Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	2.60	2.60	-2.45	-1.80	1.20	1.05	1.48	-9.42	-1.76	7.73	6.03	0.92
Benchmark	2.39	2.39	-2.79	-1.96	1.00	0.83	1.22	-9.51	-1.29	5.60	6.67	0.92
Difference	0.21	0.21	0.34	0.16	0.20	0.22	0.26	0.09	-0.47	2.13	-0.64	0.00
Peer Group Median	2.08	2.08	-1.71	-0.58	1.09	0.87	0.93	-7.17	-0.85	5.57	5.30	0.64
Rank	22	22	67	74	42	40	14	72	86	4	35	31
Population	257	257	246	227	211	193	166	246	243	241	242	228



Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	5.66	5.35
Avg. Quality	Aaa	Aa1/Aa2
Coupon Rate (%)	3.23	2.61
Current Yield (%)	3.46	N/A
Effective Duration	4.47	4.55
Spread Duration	3.14	4.49
Yield To Maturity (%)	N/A	4.36
Holdings Count	N/A	9,949

Top Wrap Providers (%)	
Prudential	100.00



Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



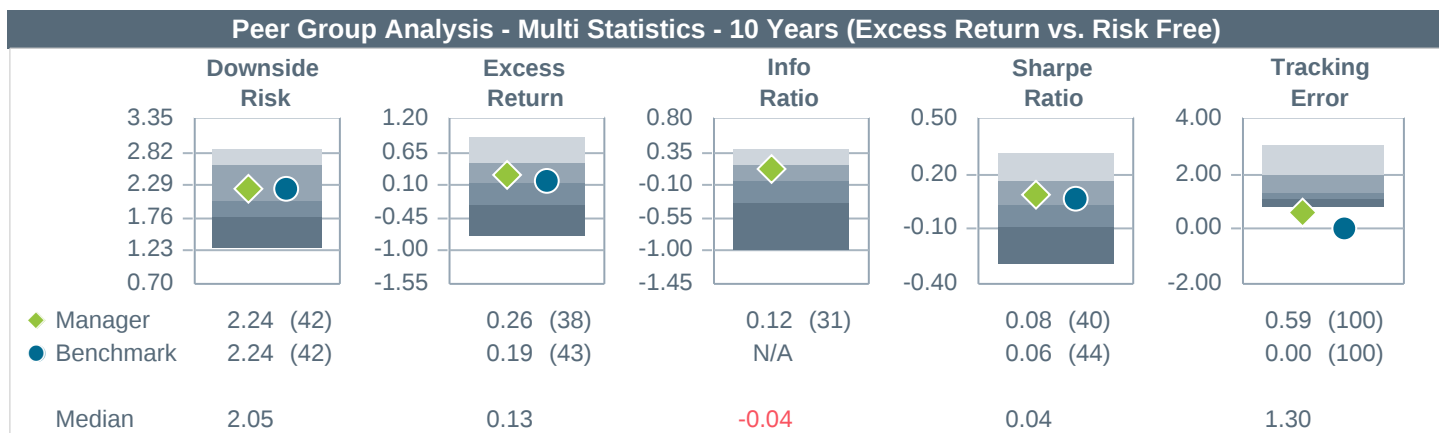
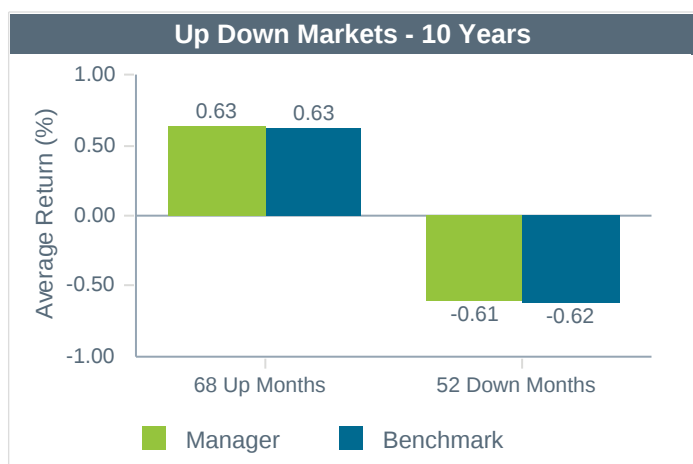
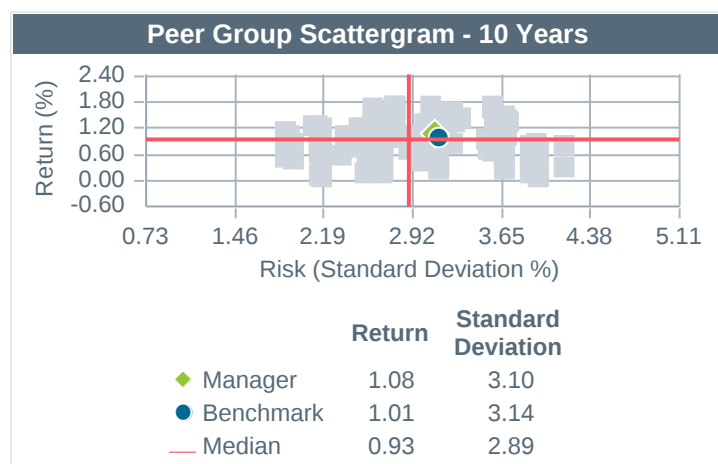
Manager: Nationwide (SA)

As of March 31, 2023

Benchmark: Nationwide Custom Benchmark

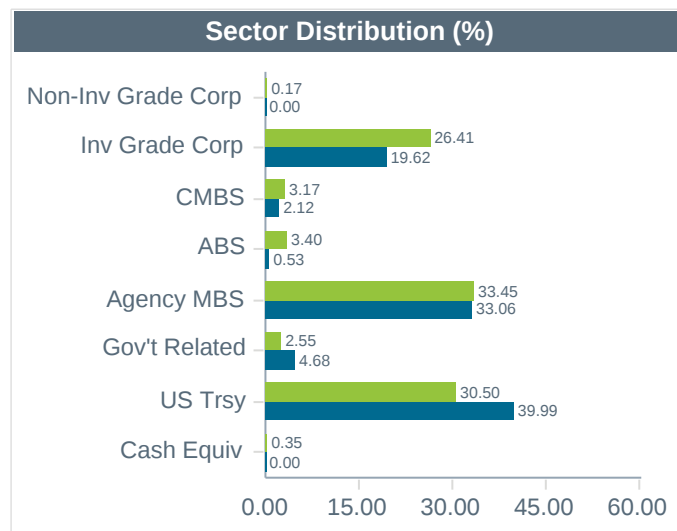
Peer Group: IM U.S. Intermediate Duration Fixed Income (MF)

Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	2.14	2.14	-2.98	-1.75	0.83	0.87	1.08	-9.47	-1.13	5.35	6.27	1.09
Benchmark	2.39	2.39	-2.79	-2.02	0.81	0.69	1.01	-9.51	-1.29	5.25	6.06	1.07
Difference	-0.25	-0.25	-0.19	0.27	0.02	0.18	0.07	0.04	0.16	0.10	0.21	0.02
Peer Group Median	2.08	2.08	-1.71	-0.58	1.09	0.87	0.93	-7.17	-0.85	5.57	5.30	0.64
Rank	46	46	72	73	63	50	39	72	63	56	25	22
Population	257	257	246	227	211	193	166	246	243	241	242	228



Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	12.08	5.35
Avg. Quality	Aa2	Aa1/Aa2
Coupon Rate (%)	2.78	2.61
Current Yield (%)	4.65	N/A
Effective Duration	4.70	4.55
Spread Duration	2.89	4.49
Yield To Maturity (%)	4.40	4.36
Holdings Count	264	9,949

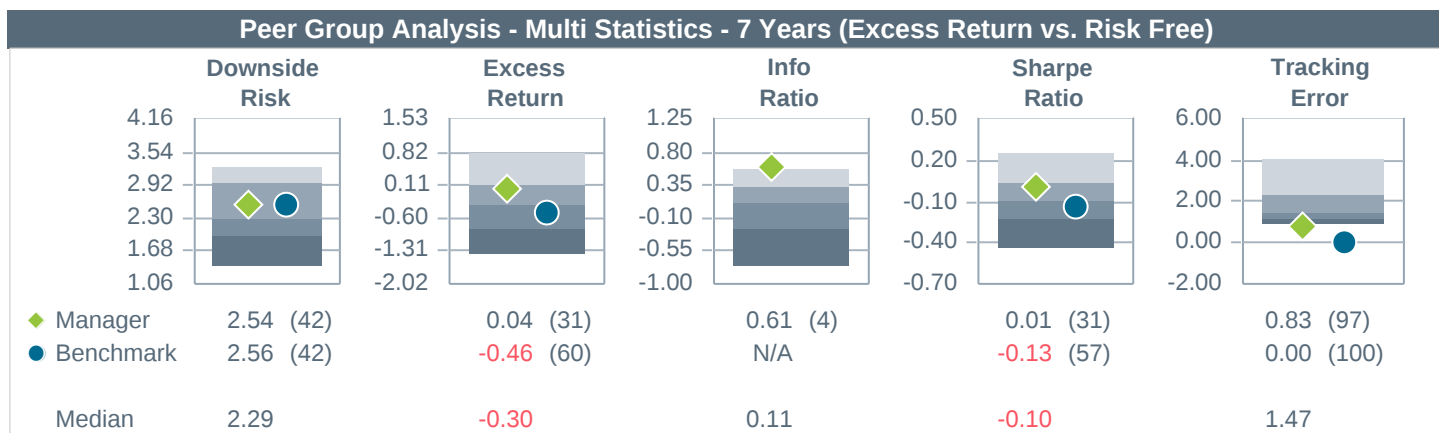
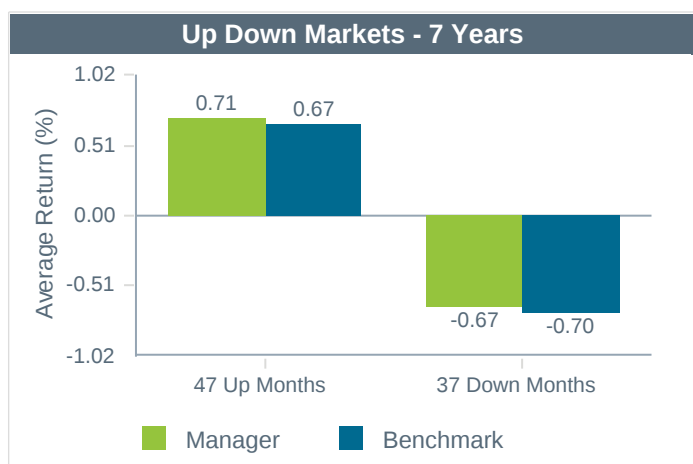
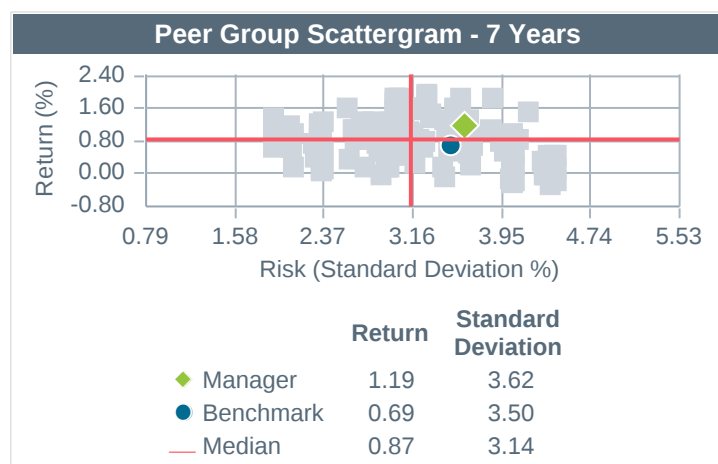
Top Wrap Providers (%)	
Transamerica Premier	100.00



Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

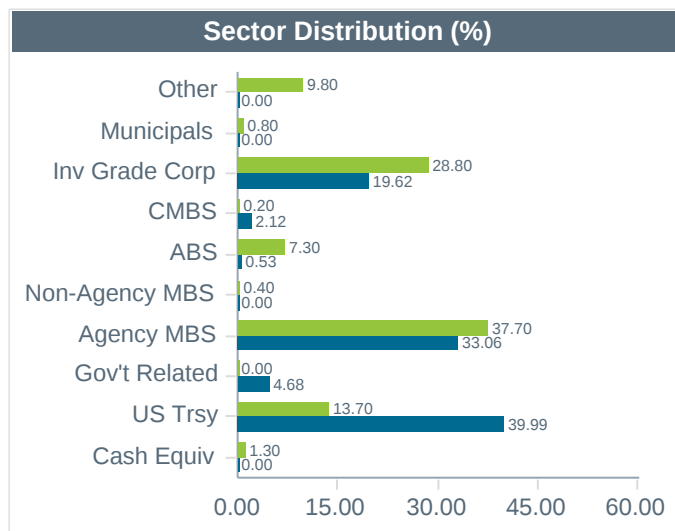


Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	2.47	2.47	-1.96	-0.88	1.25	1.19	N/A	-8.95	-1.42	7.01	6.57	0.54
Benchmark	2.39	2.39	-2.79	-2.02	0.81	0.69	1.05	-9.51	-1.29	5.25	6.06	1.07
Difference	0.08	0.08	0.83	1.14	0.44	0.50	N/A	0.56	-0.13	1.76	0.51	-0.53
Peer Group	2.08	2.08	-1.71	-0.58	1.09	0.87	0.93	-7.17	-0.85	5.57	5.30	0.64
Rank	28	28	57	59	38	32	N/A	69	77	17	15	56
Population	257	257	246	227	211	193	166	246	243	241	242	228



Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	N/A	5.35
Avg. Quality	Aa3	Aa1/Aa2
Coupon Rate (%)	N/A	2.61
Current Yield (%)	N/A	N/A
Effective Duration	4.02	4.55
Spread Duration	N/A	4.49
Yield To Maturity (%)	4.85	4.36
Holdings Count	N/A	9,949

Top Wrap Providers (%)	
Prudential	60.26
RGA	39.74



Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.
 Allocation to "Other" consists of Yankees.

Investment Policy Statements



Ohio Public Employees Deferred Compensation Program Investment Policy Statement

Adopted 12/17/1996

Last Revised 3/14/2023

- 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"), 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 investment consultant ("Consultant"). Any changes the Consultant recommends will be discussed with 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 the Program.

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

- Although the Program is not subject to Employee Retirement Income Security Act of 1974 ("ERISA"), the Program intends to generally follow the fiduciary best practices of ERISA when feasible.
- 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 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 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 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 the Program. Participants are responsible for the allocation of their assets among the investment alternatives in 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 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 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:

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 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 Option	Not Applicable	Stable Value Option (Multiple Managers)	See Stable Value Policy
Diversified Fixed Income	Core Plus Fixed Income Mutual Fund Strategy	US Bond (TCW)	Bloomberg US Aggregate Bond Index
Large Company Value Stock	Large-Cap Value Mutual Fund Strategy	US Large Value Company Stock (Dodge & Cox)	Russell 1000 Value Index
Large 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 Company Stock	Mid-Cap Growth Mutual Fund Strategy	Vanguard Capital Opportunity	Russell Mid-Cap Growth Index
Small Company Value Stock	Small-Cap Value Mutual Fund Strategy	US Small Value Company Stock (Westwood/State Street)	Russell 2000 Value Index
Small 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
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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 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 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 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, 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 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
	GREEN	Less than 2	No action.
	YELLOW	2 to 3	The Board may place the investment alternative or investment manager on a "closely monitored list".
	ORANGE	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.
	RED	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 the 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 the Program's other investment alternatives prior to the termination date. Assets that are not directed by participants will be transferred or "mapped" to the 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 the 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 Program participants may fail to make investment choices for their Program 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.

Ohio Public Employees Deferred Compensation Program
Stable Value Option Investment Policy Statement
Adopted 12/16/97 and Revised Through 10/19/2022

The purpose of this statement is to establish the investment policy for the management of the Stable Value Option assets of the Ohio Public Employees Deferred Compensation Program ("Ohio DC" or the "Program"). The Board assumes the responsibility for establishing this investment policy, the purpose of which is to guide the investment of assets within the Stable Value Option. The investment policy describes the degree of investment risk the Board deems appropriate.

General

This policy will be reviewed periodically by the Program's staff ("Staff") and investment consultant ("Consultant"). Any changes the Consultant recommends will be discussed with Staff and presented to the Board for final approval.

In addition, the Consultant will be evaluated by the Staff and Board periodically concerning their work on the Stable Value Option.

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

- Stable Value Option investment managers ("Managers") 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 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 the Program.
- The Board, in consultation with the Consultant and Staff, will select and retain Managers in the Stable Value Option after satisfactory review of such factors such as perceived skill, trading practices, product importance, product fit, organizational and ownership structure, fees, and the investment record.

Investment Objective

The Stable Value Option seeks to provide a stable principal value and a competitive level of interest income by investing in a diversified portfolio of high-quality investment contracts and other high-quality fixed income instruments. Over longer periods of time, performance of the Stable Value Option is expected to exceed the 3 Year Constant Maturity Treasury Index, net of fees as well as meeting or exceeding the performance of the Morningstar US CIT Stable Value Index on a gross of fees basis.

Investment Strategy

The Stable Value Option may invest in benefit-responsive general and separate account GIC contracts, BIC contracts, "synthetic" GIC contracts (i.e., wrap contracts), (collectively, "Stable Value Contracts"), short-term investments, and other fixed income instruments that are provided by product issuers which meet the Stable Value Option's credit quality standards.

Within the Stable Value Option, investments will be segmented between a liquidity buffer, fixed maturity structure, and an open maturity structure as defined below:

- Liquidity buffer – will accept ongoing contributions and transfers remitted to the Stable Value Option and provide the first source of liquidity for all Stable Value Option withdrawals. Within the liquidity buffer, the Stable Value Option will primarily invest in short-term investment funds or money market instruments, but it may also invest in high-quality buffer Stable Value Contracts that provide same-day liquidity for withdrawals.
- Fixed maturity structure – will emphasize a laddered maturity structure of investments to generate periodic cash flow that may be used to replenish the Liquidity Buffer. Stable Value Contracts in the fixed maturity structure will pay qualified withdrawals on a net pro-rata basis after the depletion of the liquidity buffer.

Within the fixed maturity structure, the Stable Value Option will invest primarily in investments which have average maturities at the time of issuance of less than five years.

The fixed maturity structure will normally pursue a laddered maturity structure, whereby the dollar-weighted average duration of the structure will be no more than 3.5 years. To avoid the adverse impact of future reinvestment risk, the fixed maturity structure will target a fairly equal ladder of maturities.

- Open maturity structure – may maintain both active and passive investment management benchmarked against the Bloomberg Intermediate Aggregate Bond Index or the Bloomberg Intermediate Government/Credit Index. A passive core allocation may be maintained replicating the characteristics of the underlying index (subject to constraints by the wrap contract(s)). An actively managed component will be benchmarked against the Bloomberg Intermediate Aggregate Bond Index with the selected Managers exercising investment discretion with respect to yield curve positioning, sector allocation, and security selection. The active Managers will have investment discretion to utilize non-dollar investments as well as high yield investments within agreed upon constraints.
- Stable value wrap contracts used in the open maturity structure will pay qualified withdrawals on a net pro-rata basis after the depletion of the liquidity buffer.

Portfolio Structure and Rebalancing Policy

The Board, in consultation with the Consultant, Staff, and stable value roll-up manager (Roll-Up Manager), will periodically review and evaluate the portfolio structure. The Staff shall, on an ongoing basis in accordance with market fluctuations and participant cash flow experience, rebalance the Stable Value Option portfolio so as to remain within the range of permitted allocations. The table below summarizes the permissible ranges.

Mandate	Permissible Ranges
Fixed Maturity	20% to 40%
Open Maturity	50% to 80%
Liquidity Buffer	0% to 10%

It is recognized that a strategic long-run asset allocation plan implemented in a consistent and disciplined manner will be a material determinant of the crediting rate. As a result, a systematic decision rule based procedure for determining target allocations and rebalancing shall be implemented as discussed below.

- The Board delegates to the Staff and the Consultant, in consultation with the Roll-Up Manager, the responsibility for monitoring to ensure that the Stable Value Option's asset allocation remains within the permissible ranges, determining appropriate target allocations, implementing rebalancing as needed, and reporting the current targets and any rebalancing activities to the Board at the periodic Stable Value Option review.
- The Staff, in consultation with the Roll-Up Manager, will make quarterly observations of the market values of each mandate, participant cash flows, market dynamics, among other factors. Based on these observations, Staff, in consultation with the Roll-Up Manager and Consultant, will be responsible for adjusting the current target allocations as needed and/or rebalancing each mandate back to its respective target allocation whenever that mandate falls outside the established range.
- The Roll-Up Manager will monitor the overall duration of the Stable Value Option and seek to keep the overall duration no more than 4 years with a cap of 3.5 years for the fixed maturity component. The Roll-Up Manager will notify Staff and the Consultant if the duration of the Stable Value Option goes outside of this target range.
- Rebalancing will first use normal cash flows where practical and secondarily be accomplished through reallocation of assets between mandates.
- The Staff and Consultant, in consultation with the Roll-Up Manager (with respect to obtaining wrap contract coverage for the Managers), will recommend individual Manager funding levels within the open maturity segment for Board approval.

Insurance and other Institution Diversification and Credit Quality Restrictions

The following diversification limits will apply to Stable Value Contracts held within the Stable Value Option at time of purchase.

- The allocation to any one wrap contract issuer or separate account GIC issuer shall not exceed one-third (33%) of the Stable Value Option's assets. In addition, the Stable Value Option's allocation to any single issuer of general account GIC contracts shall not exceed 5% of the Stable Value Option's assets.
- The Stable Value Option will seek to limit its aggregate exposure to insurance company general account contracts to no more than 25% of Stable Value Option assets.

Insurance companies issuing Stable Value Contracts must meet the following credit quality guidelines at time of purchase:

- Fitch, Moody's and Standard and Poor's ratings such that:
 - There are ratings from at least two of the three rating services;
 - The weighted-average of such ratings must be A- (A3 Moody's) or better; and
 - No rating shall be below A- (A3 Moody's)

Banks and other financial institutions issuing Stable Value Contracts must meet the following guidelines at time of purchase:

- Fitch, Moody's and Standard and Poor's ratings such that:
 - There is an A (A2 Moody's) or better senior unsecured debt rating from one of the three rating services;

- The weighted-average of such ratings must be A- (A3 Moody's) or better; and
- No rating shall be below A- (A3 Moody's).

Synthetic Contracts

Assets underlying each wrap contract or separate account GIC contract must meet the following guidelines:

- Stable Value Option assets may be invested in Government, Government Agency, mortgage backed, asset backed and corporate debt securities, and other securities included in the Bloomberg Intermediate Aggregate Bond Index. Mortgage backed securities would include collateralized mortgage obligations (CMOs), Real Estate Mortgage Investment Conduits (REMICs), and Commercial and Residential Mortgage Backed Securities (CMBS and RMBS). Private placements and 144a debt securities are permissible. Derivatives, including but not limited to, futures and swaps are permissible.
- Securities rated below BBB-/Baa3 may not exceed 10% of Stable Value Option assets within a portfolio. In addition, no more than 1% of a portfolio's assets may be invested in any single high yield (below BBB-/Baa3) issuer.
- The average quality of the Stable Value Option's assets within a portfolio will be A- (A3 Moody's) or better.
- No more than 5% of the Stable Value Option's assets within a portfolio may be invested with any one corporate issuer.
- Investments in non-dollar fixed income securities may not exceed 20% of the assets allocated to the Stable Value Option structure.
- If any security is downgraded below these policy guidelines, or such downgrade causes a portfolio to fall out of compliance with these guidelines, the Manager will notify Staff, the Roll-Up Manager, and Consultant about the development with a recommended next step. The Manager will be encouraged to sell the security within an appropriate period of time taking into consideration liquidity and market conditions and an appropriate level of prudence to ensure the portfolio is not adversely affected.

Cash Investments

The Stable Value Option's cash investments fund must meet the following guidelines:

- Must be invested in money market instruments or commingled funds which invest in money market instruments which are issued by the U.S. Government or U.S. Government agencies, repurchase agreements which are collateralized by such securities, non-governmental securities rated P-1 by Moody's or A-1 by Standard & Poor's or their equivalents, or deposits with investment grade banks meeting the Bank Credit Quality Guidelines referenced above.

Manager Reporting Requirements

- Managers will provide the necessary reports and statements as requested by Staff, Consultant, and the Roll-Up Manager, to conduct their due diligence, reporting, and analyses by the 15th business day of the following month. In addition, a discussion of the portfolio's recent strategy and expected future strategy and demonstration of compliance with guidelines must be included in this package.

- Managers must reconcile quarterly accounting, transaction, and asset summary data with custodian reports and communicate and resolve any significant discrepancies with the custodian. If requested by Staff, Managers must also send a copy of the reconciliation to Staff by the 15th business day of the following month subsequent to quarter end.
- Managers will meet with the Staff and/or Consultant as often as determined necessary by the Board. Managers will also provide the Staff with proof of liability and fiduciary insurance coverage of the at least \$5 million, in writing, as requested.
- Managers will keep the Staff, Consultant, and Board apprised of relevant information regarding its organization, personnel, and investment strategy. The firm will notify Staff within one business day of any change in the lead personnel assigned to manage the account.

Women and Minority-Owned, Ohio-Based and Emerging (WMOE) Business Enterprises

The Board recognizes that the Ohio Public Employees Deferred Compensation Program 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.

The Staff and Consultant are asked 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 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 final approval. The Board requests that the Staff and Consultant report fully what specific criteria were relaxed with reasons upon delivery of the search materials.

Performance Guidelines and Manager Monitoring

On a periodic (typically annual) basis, the Stable Value Option's performance will be evaluated against the following two metrics:

- Exceed the 3 Year Constant Maturity Treasury Index, net of fees.
- Meet or exceed the Morningstar US CIT Stable Value Index, gross of fees.

On a quarterly basis, the Consultant will prepare for the Staff and Board a performance assessment of each individual Manager employed, confirmation of compliance with individual Manager guidelines, and the asset positioning of the overall Stable Value Option. In addition, Staff, in conjunction with the Consultant, will report to the Board material changes in underlying Managers' talent, process, philosophy, and fee levels with recommendations for change as needed.

Fund Monitoring Policy

The Board acknowledges that, from time to time, there may be the need to replace an existing Manager with a new Manager within the open maturity portion of the Stable Value Option. The Board has developed the following Fund Monitoring methodology to help govern decisions to terminate an existing Manager.

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

- The Manager has underperformed its benchmark over the most recent trailing five-year period
- The Manager has underperformed its benchmark in three of the four most recent calendar quarters
- The Manager's investment strategy and/or portfolio characteristics have materially diverged from its designated style
- Adverse change in the 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
	GREEN	Less than 2	No action.
	YELLOW	2 to 3	The Board may place the Manager on a "closely monitored list".
	ORANGE	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 manager and decide within 180 days whether to terminate the Manager or continue to closely monitor.
	RED	Greater than 4	The Board will evaluate terminating the investment Manager and moving all invested balances to another investment Manager or new investment Manager as soon as administratively possible.

It is expected that investment Managers will not be reactivated once a status change occurs and the process to terminate begins. However, the Board retains the discretion to re-evaluate 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 terminate an investment Manager 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.

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

Addendum & Glossary



Ohio DC Program – Historical Changes

Changes

Implemented White Label Funds

2014 – Ohio DC Large-Cap Growth (T. Rowe Price)
 2015 – Ohio DC Intermediate Bond (TCW)
 2017 – Ohio DC Small-Cap Value (Westwood Capital)
 2017 – Ohio DC Small-Cap Growth (Westfield Capital and Fiera Capital)
 2020 – Ohio DC International Stock (Arrowstreet, Schroder, and Vanguard)
 2022 – Non-US Company Stock Index (State Street), US Small/Mid Company Stock Index (State Street), US Large Company Stock Index (State Street), US Bond Index (State Street), US Large Value Company Stock (Dodge & Cox)

Investment Manager Changes

2014 – Replaced Janus Twenty with T. Rowe Price
 2015 – Replaced PIMCO Total Return with TCW (Ohio DC Intermediate Bond)
 2017 – Replaced Hartford Small Company with Westwood Capital
 2017 – Replaced FPA Capital with Westfield Capital and Fiera Capital
 2018 – Reduced passive management and restructured the active managers within the SVO
 2019 – LifePath Funds: Added 2060 fund and merged 2020 fund into Retirement fund
 2020 – Replaced Vanguard Intl Growth and Templeton Foreign with Ohio DC International Stock
 2020 – Replaced Vanguard Small Cap Idx with Vanguard Ext MI
 2022 – Replaced Vanguard Instl Idx;Ins+ (VLIIX) with US Large Company Stock Index (with management by State Street S&P 500 Index Securities Lending Series Fund Class II); Replaced Vanguard Ext MI;Ins+ (VEMPX) with US Small/Mid Company Stock Index (with management by State Street Russell Small/Mid Cap Index Securities Lending Series Fund Class II); Replaced Vanguard Total Intl Stock Idx;Ins+ (VTPSX) with Non-US Company Stock Index (with management by State Street Global All Cap Equity Ex-U.S. Index Securities Lending Series Fund Class II); Replaced Vanguard Total Bond Mkt Idx;Ins+ (VBMPX) with US Bond Index (with management by State Street U.S. Bond Index Securities Lending Series Fund Class XIV).
 2023 – Removed State Street Stable Value (SA) and assets were mapped to existing stable value managers

Ohio DC Program – Historical Changes

Changes	
Share Class and Investment Vehicle Changes	2015 – Vanguard Total Bond Mkt Index: moved to Instl Plus share class 2016 – LifePath Funds: moved to L share class 2016 – Fidelity Growth Company and Fidelity Contrafund: moved to CITs 2017 – Templeton Foreign: moved to R6 shares 2018 – LifePath Funds: moved to N share class 2018 – Fidelity Growth Company and Fidelity Contrafund: moved to CIT Class 3 2022 – Dodge & Cox Stock (DODGX) was moved to the Dodge & Cox Stock Class X (DOXGX) which removed shareholder servicing revenue.
Recordkeeping / Administration / Other	2013 – Four employers implemented auto enrollment 2018 – Developed new Morningstar fund profiles 2019 – Transitioned Recordkeeping System and launched new website 2020 – Roth contribution option added 2020 – BNY Mellon selected as custodian

General Comments

- RVK began monitoring the assets of the Ohio Public Employees Deferred Compensation Program as of 03/01/2017. Prior historical data was provided by the previous investment consultant and investment managers.
- BNY Mellon began providing custody, accounting, and performance services to the Ohio Public Employees Deferred Compensation Program effective 01/04/2021.
- The Stable Value Option fee shown represents total fees and is comprised of Investment Advisory Fees (0.024% Stable Value Management and 0.079% Investment Management) and Operating Fees (0.148% Wrap Contracts and 0.004% Trust and Custody of Securities).

Performance Comments

- Performance shown is net of fees, except where noted, and product specific.
- BlackRock LifePath N Lending (CIT) TRD Suite performance prior to fund inception consists of BlackRock LifePath F Lending (CIT) TRD Suite net of BlackRock LifePath N Lending (CIT) TRD Suite's expense ratio.
- Fidelity Growth Company (CIT) performance prior to fund inception consists of Fidelity Growth Company (FDGRX).
- Fidelity Contrafund (CIT) performance prior to fund inception consists of Fidelity Contrafund (FCNTX).
- Historical performance for US Large Growth Company Stock was provided by Aon Hewitt.
- Performance shown for US Large Growth Company Stock, US Small Value Company Stock, US Small Growth Company Stock, and Non-US Company Stock is provided by State Street as custodian through Q4 2020. Reported performance represents holding period returns experienced by the participants.
- Starting Q1 2021, performance shown for US Large Growth Company Stock, US Small Value Company Stock, US Small Growth Company Stock, and Non-US Company Stock are calculated by BNY Mellon using Modified Dietz Time Weighted Rate of Return Methodologies and may not tie to holding period returns reported elsewhere.

Ohio Custom Fund Name

LifePath Retire
LifePath 2025
LifePath 2030
LifePath 2035
LifePath 2040
LifePath 2045
LifePath 2050
LifePath 2055
LifePath 2060
US Large Company Stock Index
State Street S&P 500 Index L (CIT)
US Small/Mid Company Stock Index
State Street Small/Mid Cap Index L (CIT)
Non-US Company Stock Index
State Street Global All Cap Equity Ex US L (CIT)
US Bond Index
State Street US Bond Index L (CIT)
US Large Value Company Stock
Dodge & Cox Stck;X (DOXGX)
Fidelity Growth Company (CIT)
Fidelity Contrafund (CIT)
US Large Growth Company Stock
T Rowe Price Large Cap Growth (SA)
State Street Large Cap Growth Index NL (CIT)
Vanguard Capital Opportunity;Adm (VHCAX)
US Small Value Company Stock
Westwood Small Cap Value (SA)
State Street Small Cap Value Index NL (CIT)
US Small Growth Company Stock
Westfield Small Cap Growth (SA)
Fiera Small Cap Growth (SA)
State Street Small Cap Growth Index NL (CIT)
Non-US International Stock
Schroders QEP Intl Value (CIT)
Arrowstreet Intl Eq ACW Ex US C (CIT)
Vanguard Intl Growth;Adm (VWILX)
US Bond
TCW Total Return Bond Class B (CIT)
Stable Value Option

Standard Fund Name

BlackRock:LP Id Ret;N Lending (CF)
BlackRock:LP Id2025;N Lending (CF)
BlackRock:LP Id2030;N Lending (CF)
BlackRock:LP Id2035;N Lending (CF)
BlackRock:LP Id2040;N Lending (CF)
BlackRock:LP Id2045;N Lending (CF)
BlackRock:LP Id2050;N Lending (CF)
BlackRock:LP Id2055;N Lending (CF)
BlackRock:LP Id2060;N Lending (CF)
US Large Company Stock Index
State Street S&P 500 Index CI II Lending (CIT)
US Small/Mid Company Stock Index
State Street Russell Small/Mid Cap Index CL II Lending (CIT)
Non-US Company Stock Index
State Street Global All Cap Equity Ex US CI II Lending (CIT)
US Bond Index
State Street US Bond Index CI XIV Lending (CIT)
US Large Value Company Stock
Dodge & Cox Stck;X (DOXGX)
Fidelity Grth Co 3 (CIT)
Fidelity Contrafund Class 3 (CIT)
US Large Growth Company Stock
T Rowe Price Large Cap Growth (SA)
State Street Russell LCG Index C NL (CIT)
Vanguard Cap Opp;Adm (VHCAX)
US Small Value Company Stock
Westwood Small Cap Value (SA)
State Street Russell SCV Index C NL (CIT)
US Small Growth Company Stock
Westfield Small Cap Growth (SA)
Fiera Small Cap Growth (SA)
State Street Russell SCG Index C NL (CIT)
Non-US International Stock
Schroders QEP Intl Value (CIT)
Arrowstreet Intl Eq ACW Ex US C (CIT)
Vanguard Intl Gro;Adm (VWILX)
US Bond
TCW Total Return Bond Class B (CIT)
Stable Value Option

Manager Transition Comments

- In 06/2017, Templeton Foreign;Adm (TFFAX) transitioned into Templeton Foreign;R6 (FTFGX).
- In 06/2017, Hartford Small Company;IA (HIASX) transitioned into US Small Growth Company Stock.
- In 06/2017, FPA Capital (FPPTX) transitioned into US Small Value Company Stock.
- In 06/2017, State Street Large Cap Growth Index (CIT) was added as a liquidity component to US Large Growth Company Stock.
- In 10/2017, Fidelity Growth Company 1 (CIT) transitioned into Fidelity Growth Company 2 (CIT).
- In 10/2017, Fidelity Contrafund 1 (CIT) transitioned into Fidelity Contrafund 2 (CIT).
- In 03/2018, GSAM Term Fund 2017 (CIT) was removed and GSAM Term Fund 2022 (CIT) was added as an underlying stable value manager.
- In 12/2018, Fidelity Growth Company 2 (CIT) transitioned into Fidelity Growth Company 3 (CIT).
- In 12/2018, Fidelity Contrafund 2 (CIT) transitioned into Fidelity Contrafund 3 (CIT).
- In 01/2019, Traditional GIC expired. Additionally, GSAM Term Fund 2018 (CIT) was removed and GSAM Term Fund 2023 (CIT) was added as an underlying stable value manager.
- In 12/2019, BlackRock LifePath 2020 N (CIT) rolled into BlackRock LifePath Retire N (CIT) and BlackRock LifePath 2060 N (CIT) was added to the fund lineup.
- In 03/2020, GSAM Term Fund 2019 (CIT) was removed and GSAM Term Fund 2024 (CIT) was added as an underlying stable value manager.
- In 09/2020, assets from Vanguard Intl Growth;Adm (VWILX) and Templeton Foreign;R6 (FTFGX) were mapped to Non-US Company Stock; and assets from Vanguard Small Cap Idx;Ins+ (VSCPX) were mapped to Vanguard Ext MI;Ins+ (VEMPX).
- In 03/2021, GSAM Term Fund 2020 (CIT) was removed and GSAM Term Fund 2025 (CIT) was added as an underlying stable value manager.
- In 03/2022, GSAM Term Fund 2021 (CIT) was removed and GSAM Term Fund 2026 (CIT) was added as an underlying stable value manager.
- In 12/2022, Assets from Vanguard Instl Idx;InsP (VILIX), Vanguard Ext MI;Ins+ (VEMPX), Vanguard Tot I S;Ins + (VTPSX), Vanguard Tot Bd;Ins+ (VBMPX) were transitioned to US Large Company Stock Index, US Small/Mid Company Stock Index, Non-US Company Stock Index, and US Bond Index, respectively.
- In 12/2022, Ohio DC Large-Cap Growth, Ohio DC Small-Cap Value, Ohio DC Small-Cap Growth, Ohio DC International Stock, Ohio DC Stable Value, and Ohio DC Intermediate Bond were renamed to US Large Growth Company Stock, US Small Value Company Stock, US Small Growth Company Stock, Non-US Company Stock, Stable Value Option and US Bond, respectively.
- In 01/2023, GSAM Term Fund 2022 (CIT) was removed and GSAM Term Fund 2027 (CIT) was added as an underlying stable value manager.
- In 03/2023, State Street Stable Value (SA) was removed and assets were mapped to the existing stable value funds.

Index Comments

- Stable Value Custom Benchmark consists of ICE BofAML 3 Mo US T-Bill Index+1.5% through 08/2021; and the 3 Year Constant Maturity Treasury Index thereafter.
- Bloomberg US Agg Int Index* (JP Morgan Custom Benchmark) consists of Bloomberg US Agg Bond Index prior to 12/2009; Bloomberg US Agg Int Index thereafter.
- Nationwide Custom Benchmark consists of 15% ICE BofAML Mortgage Master Index, 30% ICE BofAML US Corp & Gov't 1-10 Yr Index, and 55% ICE BofAML 1-5 Yr US Corp Gov't Index through 06/2005; 100% Bloomberg US Agg Int Index through 01/2014; 60% Bloomberg US Agg Int Index and 40% Bloomberg Stable Inc Mkt Index through 09/2020; and Bloomberg US Int Agg Index thereafter.
- Dodge & Cox Custom Benchmark consists of 60% Bloomberg US Int Agg Index and 40% Bloomberg Stable Inc Mkt Index through 09/2020; and Bloomberg US Int Agg Index thereafter.
- Bloomberg Maturing Benchmarks are a series of custom declining duration benchmarks consisting of a subset of widely-used Bloomberg fixed income indices. Prior to 01/2016, the first 36 months consists of 60% US government sector (Treasury and Agency issues), 20% corporate and non-corporate credit sectors, and 20% securitized sectors (residential mortgage-backed securities, commercial mortgage-backed securities, and asset-backed securities); the final 24 months consists of a gradual evolution towards the Bloomberg Short-Term Gov't/Corp Index. Since 01/2016, the first 36 months consists of 75% US government sector and 25% corporate and non-corporate credit sectors; the final 24 months consists of a gradual evolution towards the Bloomberg Short-Term Gov't/Corp Index.

BlackRock:LP Id;N Lending (CF) Index Compositions

As of March 31, 2023

BlackRock LP Ret Lending Index consists of 20.7% Russell 1000 Index, 3.1% Russell 2000 Index, 13.0% MSCI ACW Ex US IM Index (USD) (Net), 20.1% Bloomberg US Gov't Int Trm Bond Index, 6.8% Bloomberg US Gov't Lng Trm Bond Index, 7.7% Bloomberg US Crdt Int Trm Index, 3.5% Bloomberg US Lng Crdt Index, 0.0% FTSE 3 Mo T-Bill Index, 5.8% Bloomberg US Trsy US TIPS Index, 16.2% Bloomberg US Sec: MBS, ABS, & CMBS Index, 1.6% FTSE EPRA/NAREIT Dvl'd Index (USD) (Net), and 1.6% Bloomberg Cmdty Index (TR).

BlackRock LP 2025 Lending Index consists of 24.2% Russell 1000 Index, 2.9% Russell 2000 Index, 15.1% MSCI ACW Ex US IM Index (USD) (Net), 15.9% Bloomberg US Gov't Int Trm Bond Index, 7.1% Bloomberg US Gov't Lng Trm Bond Index, 7.4% Bloomberg US Crdt Int Trm Index, 3.9% Bloomberg US Lng Crdt Index, 0.0% FTSE 3 Mo T-Bill Index, 5.5% Bloomberg US Trsy US TIPS Index, 14.6% Bloomberg US Sec: MBS, ABS, & CMBS Index, 2.0% FTSE EPRA/NAREIT Dvl'd Index (USD) (Net), and 1.5% Bloomberg Cmdty Index (TR).

BlackRock LP 2030 Lending Index consists of 32.2% Russell 1000 Index, 2.3% Russell 2000 Index, 19.8% MSCI ACW Ex US IM Index (USD) (Net), 10.2% Bloomberg US Gov't Int Trm Bond Index, 5.5% Bloomberg US Gov't Lng Trm Bond Index, 5.4% Bloomberg US Crdt Int Trm Index, 4.9% Bloomberg US Lng Crdt Index, 0.0% FTSE 3 Mo T-Bill Index, 4.8% Bloomberg US Trsy US TIPS Index, 11.0% Bloomberg US Sec: MBS, ABS, & CMBS Index, 2.7% FTSE EPRA/NAREIT Dvl'd Index (USD) (Net), and 1.3% Bloomberg Cmdty Index (TR).

BlackRock LP 2035 Lending Index consists of 39.5% Russell 1000 Index, 1.8% Russell 2000 Index, 24.2% MSCI ACW Ex US IM Index (USD) (Net), 6.0% Bloomberg US Gov't Int Trm Bond Index, 4.1% Bloomberg US Gov't Lng Trm Bond Index, 3.8% Bloomberg US Crdt Int Trm Index, 4.7% Bloomberg US Lng Crdt Index, 0.0% FTSE 3 Mo T-Bill Index, 3.8% Bloomberg US Trsy US TIPS Index, 7.9% Bloomberg US Sec: MBS, ABS, & CMBS Index, 3.3% FTSE EPRA/NAREIT Dvl'd Index (USD) (Net), and 1.0% Bloomberg Cmdty Index (TR).

BlackRock LP 2040 Lending Index consists of 46.6% Russell 1000 Index, 1.3% Russell 2000 Index, 28.4% MSCI ACW Ex US IM Index (USD) (Net), 2.5% Bloomberg US Gov't Int Trm Bond Index, 2.6% Bloomberg US Gov't Lng Trm Bond Index, 1.9% Bloomberg US Crdt Int Trm Index, 4.5% Bloomberg US Lng Crdt Index, 0.0% FTSE 3 Mo T-Bill Index, 2.7% Bloomberg US Trsy US TIPS Index, 4.9% Bloomberg US Sec: MBS, ABS, & CMBS Index, 3.9% FTSE EPRA/NAREIT Dvl'd Index (USD) (Net), and 0.7% Bloomberg Cmdty Index (TR).

BlackRock LP 2045 Lending Index consists of 52.7% Russell 1000 Index, 1.0% Russell 2000 Index, 32.2% MSCI ACW Ex US IM Index (USD) (Net), 0.1% Bloomberg US Gov't Int Trm Bond Index, 0.7% Bloomberg US Gov't Lng Trm Bond Index, 0.1% Bloomberg US Crdt Int Trm Index, 4.6% Bloomberg US Lng Crdt Index, 0.0% FTSE 3 Mo T-Bill Index, 1.6% Bloomberg US Trsy US TIPS Index, 2.3% Bloomberg US Sec: MBS, ABS, & CMBS Index, 4.4% FTSE EPRA/NAREIT Dvl'd Index (USD) (Net), and 0.4% Bloomberg Cmdty Index (TR).

BlackRock LP 2050 Lending Index consists of 56.4% Russell 1000 Index, 1.0% Russell 2000 Index, 34.6% MSCI ACW Ex US IM Index (USD) (Net), 0.0% Bloomberg US Gov't Int Trm Bond Index, 0.1% Bloomberg US Gov't Lng Trm Bond Index, 0.0% Bloomberg US Crdt Int Trm Index, 2.5% Bloomberg US Lng Crdt Index, 0.0% FTSE 3 Mo T-Bill Index, 0.6% Bloomberg US Trsy US TIPS Index, 0.0% Bloomberg US Sec: MBS, ABS, & CMBS Index, 4.7% FTSE EPRA/NAREIT Dvl'd Index (USD) (Net), and 0.2% Bloomberg Cmdty Index (TR).

BlackRock LP 2055 Lending Index consists of 57.6% Russell 1000 Index, 1.0% Russell 2000 Index, 35.5% MSCI ACW Ex US IM Index (USD) (Net), 0.0% Bloomberg US Gov't Int Trm Bond Index, 0.0% Bloomberg US Gov't Lng Trm Bond Index, 0.0% Bloomberg US Crdt Int Trm Index, 0.8% Bloomberg US Lng Crdt Index, 0.0% FTSE 3 Mo T-Bill Index, 0.2% Bloomberg US Trsy US TIPS Index, 0.0% Bloomberg US Sec: MBS, ABS, & CMBS Index, 4.8% FTSE EPRA/NAREIT Dvl'd Index (USD) (Net), and 0.1% Bloomberg Cmdty Index (TR).

BlackRock LP 2060 Lending Index consists of 57.6% Russell 1000 Index, 1.1% Russell 2000 Index, 35.5% MSCI ACW Ex US IM Index (USD) (Net), 0.0% Bloomberg US Gov't Int Trm Bond Index, 0.0% Bloomberg US Gov't Lng Trm Bond Index, 0.0% Bloomberg US Crdt Int Trm Index, 0.9% Bloomberg US Lng Crdt Index, 0.0% FTSE 3 Mo T-Bill Index, 0.1% Bloomberg US Trsy US TIPS Index, 0.0% Bloomberg US Sec: MBS, ABS, & CMBS Index, 4.8% FTSE EPRA/NAREIT Dvl'd Index (USD) (Net), and 0.0% Bloomberg Cmdty Index (TR).

BlackRock LP 2065 Lending Index consists of 57.6% Russell 1000 Index, 1.1% Russell 2000 Index, 35.6% MSCI ACW Ex US IM Index (USD) (Net), 0.0% Bloomberg US Gov't Int Trm Bond Index, 0.0% Bloomberg US Gov't Lng Trm Bond Index, 0.0% Bloomberg US Crdt Int Trm Index, 1.0% Bloomberg US Lng Crdt Index, 0.0% FTSE 3 Mo T-Bill Index, 0.0% Bloomberg US Trsy US TIPS Index, 0.0% Bloomberg US Sec: MBS, ABS, & CMBS Index, 4.8% FTSE EPRA/NAREIT Dvl'd Index (USD) (Net), and 0.0% Bloomberg Cmdty Index (TR).

Allocations shown are updated annually and may not sum up to 100% exactly due to rounding.



Glossary

Active Return - The difference between the investment manager/composite performance relative to the performance of an appropriate market benchmark.

Active Share - Measures the degree to which the holdings of a fund differ from the holdings of the benchmark. Active share is calculated by taking the sum of the absolute value of the differences of the weight of each holding in the fund versus the weight of each holding in the benchmark and dividing by two.

Alpha - A measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. It is a measure of the portfolio's historical performance not explained by movements of the market or a portfolio's non-systematic return.

Alpha Ratio - A measure of a portfolio's non-systematic return per unit of downside risk. It is measured by dividing the alpha of a portfolio by the downside risk. The non-systematic return is a measure of a portfolio's historical performance not explained by movements of the market.

Average Quality - Bond quality ratings are reported using the investment managers' and the index providers' preferred rating agency. *Average Quality for managers unable to provide this statistic is instead provided by Morningstar; if unavailable on Morningstar, it has been estimated using a credit quality distribution provided by the manager.* There are two primary rating agencies in the US. *Moody's* assigns ratings on a system that employs up to four symbols (consisting of letters and numbers), such as, Aaa, Aa2, etc., with Aaa being the highest or safest rating. *Standard & Poor's (S&P)* employs a system that uses + and - along with letters, such as AAA, AA+, etc. The two rating agencies' systems are summarized below:

<u>S&P</u>	<u>Moody's</u>	<u>Explanation</u>	<u>S&P</u>	<u>Moody's</u>	<u>Explanation</u>
Higher Credit Quality – Investment Grade			Lower Credit Quality – Below Investment Grade		
AAA	Aaa	Prime/Highest credit quality	BB+	Ba1	Speculative/Low credit quality
AA+	Aa1	High credit quality	BB	Ba2	
AA	Aa2		BB-	Ba3	
AA-	Aa3		B+	B1	Highly speculative
A+	A1	Upper-medium credit quality	B	B2	
A	A2		B-	B3	
A-	A3		CCC+	Caa1	Substantial credit/default risk
BBB+	Baa1	Lower-medium credit quality	CCC	Caa2	Extremely speculative
BBB	Baa2		CCC-	Caa3	
BBB-	Baa3		CC	Ca	Vulnerable to default
			C	Ca	
			D	C	In default

Beta - A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of a portfolio's non-diversifiable or systematic risk.

Book Value Return - Used by stable value and Guaranteed Investment Contracts (GIC) investments that are not valued daily. Book value returns are calculated based on the crediting rate set by the fund and guaranteed by the insurance wrap provider.

Box Plots - A graphical representation of the distribution of observations. From top to bottom, the four boxes represent the spread between the maximum value and the minimum value in each quartile. A quartile represents the values that divide the observations into four quarters (i.e., 1st quartile, 2nd quartile, 3rd quartile, and 4th quartile). The median observation is where the 2nd quartile and 3rd quartile meet.

Buy and Hold Attribution - At the beginning of the time period under analysis, the manager and benchmark portfolios are broken down into segments (i.e., styles, sectors, countries, and regions) based on the desired type of attribution. The formula assumes zero turn-over to the manager and benchmark portfolios throughout the period and calculates the segment returns ("buy and hold returns") to arrive at performance attribution. Due to portfolio turnover, buy and hold attribution may not accurately represent quarterly performance relative to the benchmark. Country, region, sector, and style allocations are as of the date one quarter prior to the reporting date, and the returns shown are for those segments throughout the quarter reported. Due to disclosure guidelines set by each investment manager, equity characteristics shown are as of the most recent date available. The following is the methodology for segment classification:

Sector - Attribution is calculated using the Global Industry Classification Standard (GICS), which is a detailed and comprehensive structure for sector and industry analysis. Stocks are classified by their primary sector as defined by S&P Capital IQ data. Attribution to "other" is the result of securities based in industries that do not fit into any GICS classification.

Country/Region - Attribution is calculated using the Morgan Stanley Capital International (MSCI) region standards. Stocks are classified by their domicile country/region, as defined by S&P Capital IQ data, and thus may differ from the classification of the investment manager and/or index provider. Attribution to "other" is the result of securities based in countries/regions that do not fit into any MSCI classification.

Style - Stocks are classified into the following style boxes: large/mid/small vs. growth/neutral/value. Stocks are classified along large/mid/small categories at the time of the Russell index rebalancing, using the index market cap boundaries as cutoff points. Stocks are classified along growth/neutral/value categories at the time of the Russell index rebalancing, using the price/book ratio as supplied by S&P Capital IQ. Stocks in the Russell 3000 Index portfolio are sorted by price/book ratio; names with the highest price/book ratio that make up 1/3 of the total market capitalization are assigned to the growth category, and names that make up the subsequent 1/3 of the total market capitalization are assigned to the neutral category, while the balance of the names are assigned to the value category. Stocks are unclassified when there is not enough data to determine a size and style metric.

Portfolio Characteristics and Buy and Hold Attribution reports utilize product-specific data for all mutual funds and commingled funds.

Capital Markets Review -

Breakeven Inflation - Measures the expected inflation rate at each stated maturity by taking the difference between the real yield of the inflation-linked maturity curve and the yield of the closest nominal Treasury maturity.

Consumer Confidence - Measures domestic consumer confidence as defined by the degree of optimism on the state of the economy that consumers express through saving and spending.

Consumer Price Index (CPI) - Measures the change in the price level of consumer goods and services.



Glossary

- Federal Funds Rate** - The interest rate at which a depository institution lends funds maintained at the Federal Reserve to another depository institution overnight. It is one of the most influential interest rates in the US economy, since it affects monetary and financial conditions, which in turn have a bearing on key aspects of the broad economy including employment, growth and inflation.
- Option-Adjusted Spread** - Measures the flat spread of an index or bond to the Treasury yield curve after removing the effect of any embedded options.
- Purchasing Managers Index (PMI)** - Measures economic activity by surveying purchasing managers on a monthly basis as to whether business conditions have improved, worsened, or stayed the same.
- Real Gross Domestic Product (Real GDP)** - An inflation-adjusted measure that reflects the value of all goods and services produced by an economy in a given year.
- Unemployment Rate** - The percentage of the total labor force that is unemployed but actively seeking employment.
- US Dollar Total Weighted Index** - Measures the value of the US Dollar relative to a basket of other world currencies. It is calculated as the weighted geometric mean of the dollar's value versus the EUR, GBP, CAD, SEK, CHF, and JPY.
- VIX** - Measures the implied volatility of S&P 500 Index options by looking at the market's expectation of the S&P 500 Index volatility over the next 30 day period. Commonly referred to as the "fear index" or the "fear gauge."
- Consistency** - The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. The higher the consistency figure, the more value a manager has contributed to the product's performance.
- Convexity** - A measure of the shape of the curve that describes the relationship between bond prices and bond yields.
- Correlation** - A statistical measure of the relationship between asset class returns. A value of 1.00 is a perfect correlation; that is, the asset classes always move in the same direction. A value of -1.00 indicates a perfect negative correlation, in which the asset classes always move in opposite directions of each other. A value of 0 indicates there is no relationship between the direction of returns of the two asset classes. Correlation calculations only consider the direction of changes relative to two variables and not the magnitude of those changes.
- Coupon Rate** - The percentage rate of interest paid on a bond or fixed income security; it is typically paid twice per year.
- Current Yield** - The annual income of a security divided by the security's current price.
- Down Market Capture** - Down market by definition is negative benchmark return and down market capture represents the ratio in % terms of the average portfolios return over the benchmark during the down market period. The lower the value of the down market capture the better the product's performance.
- Downside Risk** - A measure similar to standard deviation that focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative returns for the selected periodicity. The higher the factor, the riskier the product.
- Earnings Per Share** - It is backward looking, calculated using the one year current EPS divided by the one year EPS five years ago.
- Effective Duration** - The approximate percentage change in a bond's price for a 100 basis point change in yield.
- Excess Return vs. Market** - Average of the monthly arithmetic difference between the manager's return and the benchmark return over a specified time period, shown on an annualized basis.
- Excess Return vs. Risk Free** - Average of the monthly arithmetic difference between the manager's return and the risk-free return (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise) over a specified time period, shown on an annualized basis.
- Excess Risk** - A measure of the standard deviation of a portfolio's performance relative to the risk-free return.
- Expense Ratios** - Morningstar is the source for mutual fund expense ratios.
- Indices** - All indices and related information are considered intellectual property and are licensed by each index provider. The indices may not be copied, used, or distributed without the index provider's prior written approval. Index providers make no warranties and bear no liability with respect to the indices, any related data, their quality, accuracy, suitability, and/or completeness.
- Information Ratio** - Measured by dividing the active rate of return by the tracking error. The higher the information ratio, the more value-added contribution by the manager.
- Market Capitalization** - The total dollar market value of a company's outstanding shares.
- Market to Book Value** - A ratio of the market value of all fund assets relative to the book value of those assets for a stable value fund. Wrap contracts provide for the payment of individual participant benefits at book value under normal circumstances.
- Market Value Return** - The returns associated with the underlying assets of a portfolio used to support the book value return provided to investors. For stable value investments, the market value return is representative of the performance of the portfolio as a daily-valued investment, but is purely for illustrative purposes. The investor instead earns the stated book value return.
- Modified Duration** - The approximate percentage change in a bond's price for a 100 basis point change in yield, assuming the bonds' expected cash flows do not change.
- Mutual Fund Performance** - Whenever possible, manager performance is extended for any share class that does not have 10 years of history. Using Morningstar's methodology, a single ticker within the same fund family (often the oldest share class) is chosen to append historical performance.

Glossary

Peer Groups -

Investment Manager Peer Groups - RVK utilizes Investment Metrics' Peer Groups for investment manager peer comparison and ranking. The Investment Metrics Peer Group database includes performance and other quantitative data for over 840 investment management firms and 29,000 investments products, across more than 160 standard peer groups. Mutual Fund Peer Groups are net of fees.

Percentile Rankings - Percentile rank compares an individual fund's performance with those of other funds within a defined peer group of managers possessing a similar investment style. Percentile rank identifies the percentage of a fund's peer group that has a higher return (or other comparative measurement) than the fund being ranked. Conversely, 100 minus the individual fund's ranking will identify the percentage of funds within the peer group that have a lower return than the fund being ranked.

1 - Highest Statistical Value

100 - Lowest Statistical Value

Example: American Funds AMCP;R-4 (RAFEX) is ranked in the 4th percentile within the IM US Equity Large-Cap Growth Funds (MF) Peer Group for the Sharpe Ratio. Within the IM US Equity Large-Cap Growth Funds peer group, 4% of the other funds performed better than American Funds AMCP;R-4 (RAFEX), while 96% of the funds performed worse.

Performance Methodology - Performance shown is provided by the investment managers and is annualized for periods greater than one year.

Portfolio Characteristics - Due to disclosure guidelines set by each investment manager, portfolio characteristics shown are as of the most recent date available.

Price to Earnings Ratio - The ratio valuing a company's current share price relative to its trailing 12-month per-share earnings (EPS).

R-Squared - The percentage of a portfolio's performance explained by the behavior of the appropriate benchmark. High R-Squared means a higher correlation of the portfolio's performance to the appropriate benchmark.

Return - Compounded rate of return for the period.

Risk Free Benchmark - ICE BofAML 3 Mo US T-Bill Index unless specified otherwise.

Sector Allocation - Negative fixed income sector allocation reflects manager's use of derivatives, short selling, or interest rate swaps.

Sharpe Ratio - Represents the excess rate of return over the risk-free return (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise), divided by the standard deviation of the excess return to the risk free asset. The result is the absolute rate of return per unit of risk. The higher the value, the better the product's historical risk-adjusted performance.

Simple Alpha - The difference between the manager's return and the benchmark's return.

Spread Duration - The approximate percentage change in a bond's price for a 100 basis point change in its spread over a Treasury of the same maturity.

Standard Deviation - A statistical measure of the range of a portfolio's performance. The variability of a return around its average return over a specified time period.

Time Period Abbreviations - **QTD** - Quarter-to-Date. **CYTD** - Calendar Year-to-Date. **FYTD** - Fiscal Year-to-Date. **YOY** - Year Over Year.

Tracking Error - A measure of the standard deviation of a portfolio's performance relative to the performance of an appropriate market benchmark.

Treynor Ratio - Similar to Sharpe ratio, but focuses on beta rather than excess risk (standard deviation). Treynor ratio represents the excess rate of return over the risk-free rate (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise) divided by the beta. The result is the absolute rate of return per unit of risk. The higher the value, the better the product's historical risk-adjusted performance.

Up Market Capture - Up market by definition is positive benchmark return and up market capture represents the ratio in % terms of the average portfolio's return over the benchmark during the up market period. The higher the value of the up market capture the better the product's performance.

Yield to Maturity - The rate of return achieved on a bond or other fixed income security assuming the security is bought and held to maturity and that the coupon interest paid over the life of the bond will be reinvested at the same rate of return. The 30-Day SEC Yield is similar to the Yield to Maturity and is reported for mutual funds.

Yield to Worst - The bond yield calculated by using the worst possible yield taking into consideration all call, put, and optional sink dates.

Follow-Up Items





Memorandum

To	Ohio Deferred Compensation Program ("Ohio DC")
From	RVK, Inc. ("RVK")
Subject	Jennison and Nationwide "Closely Monitored" Status Update
Date	March 31, 2023

Jennison

Jennison announced on September 20, 2022, the immediate departure of Co-CIO Itai Lourie from the firm. This marked an abrupt departure from prior communication regarding pending senior leadership changes at Jennison in preparation for the anticipated retirement of Tom Wolfe, Head of Fixed Income. Mr. Wolfe will now delay his retirement from December 2022 to December 2023 following Mr. Lourie's departure. Additionally, Jake Gaul will remain as the sole CIO and will assume the title of Head of Fixed Income effective Q4 2023.

At the recommendation of RVK, Jennison was placed on "Closely Monitored" status at the Ohio DC Board Meeting on October 19, 2022. RVK will continue monitoring the firm for additional organizational changes and impacts on the firm as a result of this senior investment professional departure.

Subsequent Monitoring & Communications Log

Period Ending	RVK Updates
Q1 2023	RVK met with Jennison to further discuss recent developments. The team has remained stable, with no material departures since Mr. Lourie left the firm in September 2022. Although Jennison has experienced some outflows, they have been relatively minor in size. No other developments have occurred that raise any additional concerns at this time.

Nationwide

Throughout 2022, Nationwide announced a series of organizational changes that as a whole warrant closer monitoring moving forward. The primary concern is key person risk regarding Corsan Maley, the sole portfolio manager responsible for the Ohio DC Stable Value mandate at Nationwide (35 years of experience). While Mr. Maley is supported by the resources of the firm broadly, there continues to be minimal dedicated stable value resources in addition to unclear succession planning should Mr. Maley retire. This risk was heightened following the departure of Steve Hall in 2022, assistant portfolio manager to Mr. Maley.

Additional organizational changes include the retirement of Tom Powers, Leader of Fixed Income, and the resulting promotion of Brad Beman to lead all Fixed Income after 1.5 years at the firm. Further changes in the background include ongoing alterations to the Nationwide investment process to integrate ESG factors, and back-office system alterations to simplify and



enhance existing architecture.

At the recommendation of RVK, Nationwide was placed on “Closely Monitored” status at the Ohio DC Board Meeting on October 19, 2022. RVK will continue monitoring the firm following the series of organizational changes to ensure continuity of the investment process and capabilities dedicated to the Ohio DC Stable Value mandate.

Subsequent Monitoring & Communications Log

Period Ending	RVK Updates
Q1 2023	RVK met with Nationwide to further discuss recent developments. As previously announced, Mark Bursinger, Leader of Client Advisory Services, retired in January 2023. Jill Phlegar, who has led Enterprise Portfolio Management (EPM) since 2015, has since accepted the position vacated by Mr. Bursinger’s departure. Leo Svoboda, who has led the Liquid Alternatives team since 2017, has subsequently accepted the EPM leadership position. In addition, as previously announced, Ric Gwin, Chief Investment Risk Officer, retired effective December 31, 2022. In April 2023, Nationwide announced that Lisa Cadotte, previously Vice President of Financial Planning & Analysis at Northwestern Mutual, has been brought on to replace Mr. Gwin effective April 17, 2023. Nationwide spent time evaluating the role and considered making changes, but ultimately decided to keep the position the same. RVK continues to monitor developments at Nationwide and will provide updates as appropriate.

PORTLAND

BOISE

CHICAGO

NEW YORK

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DISCUSSION ITEMS

Self-Certified Unforeseeable Emergency Withdrawals

Paul D. Miller

Kevin Kirkpatrick



OHIO DEFERRED
COMPENSATION

Account Balance Access Options

- Ohio DC does not offer loans
- Small Balance Distribution
- Unforeseeable Emergency (UE) Withdrawal

Acceptable UEs

- Allowable events which may be considered a UE:
 - Medical bills not covered by insurance for the participant, the participant's spouse, the participant's beneficiary, the participant's beneficiary's spouse or legal dependents
 - Lost wages due to illness or accident for the participant or the participant's spouse
 - Automobile accident, damage to the participant's home or theft of the participant's property
 - Foreclosure
 - Eviction
 - Funeral costs
 - Divorce or separation



OHIO DEFERRED
COMPENSATION

Pre-Pandemic UE Withdrawal History

	2018	2019
Total Number	2,727	2,757
Average Per Month	227	230
Total Amount	\$9,494,000	\$9,106,000
Average UE	\$3,481	\$3,303



OHIO DEFERRED
COMPENSATION

CARES Act of 2020 (Coronavirus-Related Distributions)

- Ohio DC allowed participants to self-certify their UE from April 2020 – July 2021
- Allowed self-certified amounts
 - April – May 2020 - \$5,000 net
 - June – December 2020 - \$10,000 net
 - January – July 2021 - \$5,000 net
- Allowed self-certified frequency
 - Monthly



OHIO DEFERRED
COMPENSATION

Self-Certified UE Withdrawal History

	April – May 2020	June – December 2020	January – July 2021
Total Number	781	7,240	4,714
Average Per Month	391	1,034	673
Total Amount	\$3,523,000	\$51,116,000	\$21,826,000
Average UE	\$4,511	\$7,060	\$4,630



SECURE 2.0 Act, Section 312

- SECURE 2.0 Act signed into law December 29, 2022
- Bill contains mix of mandatory and optional provisions for DC plans
- Section 312, which is optional, allows 457 plans to accept a participant's self-certification of their Unforeseeable Emergency



Self-Certified UE Withdrawal History

- Ohio DC self-certified limits covered a vast majority of UE Withdrawals during self-certified period:
- April – May 2020 - \$5,000 net
 - Covered 95% of UE Withdrawals
- June – December 2020 - \$10,000 net
 - Covered 99.6% of UE Withdrawals
- January – July 2021 - \$5,000 net
 - Covered 97% of UE Withdrawals



OHIO DEFERRED
COMPENSATION

Benefits of Self-Certified UE Withdrawals

- Reduce number of UE Withdrawal Applications requiring detailed review, allowing participants to receive money faster
 - Net amount of \$5,000 would have covered 86% of UE Withdrawals from 2020 – 2022 (not including self-certified periods)
- Self-certified frequency cap can be instituted to potentially deter abuse
- Any potential increase in workload due to greater number of UE Withdrawal requests would be offset by the reduced workload in reviewing and approving the requests

Recommendation

- Adopt Section 312 of SECURE 2.0 Act to allow participants to self-certify one UE Withdrawal:
 - Every 90 calendar days
 - Up to a net amount of \$5,000
- Availability as soon as administrative procedures can be implemented
- Any UE Withdrawal for a larger amount or greater frequency would still be available, but only if accompanied by required documentation



OHIO DEFERRED COMPENSATION

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM

MEMORANDUM

TO: Board of Trustees

FROM: Paul D. Miller, Interim Executive Director
Kevin Kirkpatrick, Director of Administration

DATE: May 16, 2023

SUBJECT: Self-Certified Unforeseeable Emergency Withdrawals

Executive Summary

The SECURE 2.0 Act of 2022 contains an optional provision, Section 312, providing 457 plans with the ability to allow participants to self-certify their Unforeseeable Emergency (UE) Withdrawals without providing the typically required documentation pertaining to the specific UE. While the adoption of this optional provision could lead to a greater number of distributions and dollars withdrawn from Ohio DC, it could also provide a more satisfactory participant experience, allowing them to receive the funds needed to satisfy their emergency quicker than the existing process.

Ohio DC previously allowed participants to self-certify their UE Withdrawals, from April 2020 through July 2021, due to the CARES Act of 2020. The number of UE Withdrawals and the amount of money withdrawn increased versus similar periods when documentation of a UE was required, but the effects of the COVID-19 pandemic caused a lot of unforeseeable emergencies for participants and everyone worldwide. We believe the increased number and dollar amounts of these UE Withdrawals had more to do with the volume of unforeseeable emergencies suffered by our participants versus the easier access to their account balances.

Staff has analyzed data related to periods in which UE Withdrawals required documentation and during the time of self-certification due to the CARES Act. During the previous self-certification period, a cap was placed on both the amount of money a participant could self-certify at any given time and the frequency with which they could take a self-certified UE Withdrawal. Based on that analysis, staff recommends adopting Section 312 of the SECURE 2.0 Act and allowing participants to self-certify a UE Withdrawal for up to a net amount of \$5,000 every 90 calendar days. Any UE Withdrawal for a larger amount or a greater frequency would still be available, but participants would be required to submit documentation.

Background

Since Ohio DC does not offer loans, generally the only way participants are able to access their account balances prior to separating from the employer is through a 457 plan provision which allows for account distributions due to Unforeseeable Emergencies. Examples of allowable events that may be considered an Unforeseeable Emergency include:

- Medical bills not covered by insurance for the participant, the participant's spouse, the participant's beneficiary, the participant's beneficiary's spouse or legal dependents
- Lost wages due to illness or accident for the participant or the participant's spouse
- Automobile accident, damage to the participant's home or theft of the participant's property
- Foreclosure
- Eviction
- Funeral costs
- Divorce or separation

To meet the IRS requirement, participants must provide documentation of the UE and a distribution may only be made for the amount sufficient to satisfy the documented immediate need.

The UE Withdrawal Application is not located on the Ohio DC website, which requires participants to contact the Service Center. That provides the Service Center an opportunity to educate participants about the purpose of their Ohio DC accounts, but also walk them through what does and doesn't constitute a UE and the documentation necessary for each. The UE process can be a lengthy and frustrating process for the participant to gather and submit the correct documents.

The latest statistics show UE Withdrawals account for about five percent of monthly phone calls (715 in March 2023) received by the Service Center. About one-third of these requests come from participants with smaller account balances that have yet to meet the threshold of paying fees to Ohio DC (\$5,000).

During 2018 and 2019 (pre-pandemic), we saw about 2,700 UE Withdrawals each year, with \$9.5 million in UE withdrawals in 2018 and \$9.1 million in 2019, for a per-UE-Withdrawal average of just under \$3,500.

UE Withdrawals in 2018 and 2019

	<u>2018</u>	<u>2019</u>
Total Number	2,727	2,757
Average Per Month	227	230
Total Amount	\$9,494,000	\$9,106,000
Average UE	\$3,481	\$3,303

On March 27, 2020, the Coronavirus Aid, Relief and Economic Security (CARES) Act was signed into law. Coronavirus-Related Distributions (CRD) was an optional provision of the CARES Act. Due to the extensive recordkeeping modifications necessary for these distributions, the Board modified the UE withdrawal process and allowed Ohio DC participants to self-certify their Unforeseeable Emergencies for the period of April 2020 through July 2021.

- From April 2020 through May 2020, Ohio DC allowed participants to self-certify up to a net amount of \$5,000 from their account balances each month.
- From June 2020 through December 2020, Ohio DC allowed participants to self-certify up to a net amount of \$10,000 from their account balances each month.
- From January 2021 through July 2021, Ohio DC allowed participants to self-certify up to a net amount of \$5,000 from their account balances each month again.

Both the number of UE Withdrawals and amount requested greatly increased during this period.

UE Withdrawals During Self-Certify Period

	<u>April – May 2020</u>	<u>June – December 2020</u>	<u>January – July 2021</u>
Total Number	781	7,240	4,714
Average Per Month	391	1,034	673
Total Amount	\$3,523,000	\$51,116,000	\$21,826,000
Average UE	\$4,511	\$7,060	\$4,630

The 16-month self-certify withdrawal period saw UE Withdrawals (including amounts above the self-certified limit) total \$76,466,000.

Although this increased ease of withdrawal led to a vast amount of money leaving the Program, it coincided with a pandemic, which caused unforeseeable emergencies for people worldwide.

The self-certified caps set by Ohio DC during this period were exceptionally prudent in meeting the needs of participants:

- The self-certified amount of a net of \$5,000 in April and May 2020 covered 95% of all UE Withdrawals during that period.
- The self-certified amount of a net of \$10,000 in June through December 2020 covered 99.6% of all UE Withdrawals during that period.
- The self-certified amount of a net of \$5,000 in January through July 2021 covered 97% of all UE Withdrawals during that period.

Though Ohio DC allowed UE Withdrawals to be self-certified monthly for these amounts, it was rare for participants to have taken excessive numbers of UE Withdrawals. Of the 2,525 participants who took multiple UE Withdrawals during the 16-month self-certify period, there were 7,557 UE Withdrawals, averaging just under three UE Withdrawals per participant.

If the Board adopts Section 312 of the SECURE 2.0 Act and allows participants to self-certify a UE Withdrawal up to a net amount of \$5,000, it will drastically reduce the number of UE Withdrawal Applications that require a detailed review by both Service Center and Board Office staff. Not including the UE self-certified period afforded by the CARES Act, a net amount of \$5,000 would have covered 86 percent of all UE Withdrawals from 2020–2022.

To weigh against the potential of participants abusing the increased ease of taking withdrawals, a self-certified frequency cap can be instituted. Staff believes a 90-day cap would accommodate participant needs and lower the potential for abuse.

Any UE Withdrawal for a larger amount of a net of \$5,000 or a greater frequency than 90 days would still be available, but only if accompanied by the required documentation.

The time and effort of participants, Service Center staff, and Board Office staff necessary to undertake the process by which participants request UE Withdrawals before receiving a payment from their accounts to cover their needs would be greatly minimized. Any potential increase in workload due to the likely greater number of UE Withdrawal requests received would be offset by the reduced workload in reviewing and approving the requests which are either equal to or less than the imposed dollar amount or frequency caps.

Recommendation

Staff recommends the Board adopt Section 312 of the SECURE 2.0 Act and allow participants to self-certify one UE Withdrawal every 90 calendar days, up to a net amount of \$5,000, as soon as the administrative procedures can be implemented.

MEMORANDUM

To: Paul Miller, Interim Executive Director
From: Matt Gill, Nationwide Program Director
Subject: Ohio DC Brand Refresh
Date: 5/16/2023

Executive Summary

Nationwide's marketing team engaged with Board staff in the fall of 2022 to discuss an Ohio DC Brand Refresh Project. The last time the Board and Nationwide reviewed and refreshed the Ohio DC brand was in 2006. The goals of this project focus on the following parameters:

- Bring a modern and simplified approach to the brand while maintaining its iconic and distinctive elements
- Show that Ohio DC is evolving as many years have passed since its last brand refresh
- Convey that Ohio DC is staying current in today's financial world and conforming to the way participants consume information

Scott McAllister from Nationwide will attend the May meeting to provide additional information on the Brand Refresh Project to the Board.

Background

There are numerous benefits of a successful brand strategy, including:

- Clarification of Ohio DC's identity (distinguish from competitors)
- Identification of competitive advantages in communications
- Greater clarity of vision
- Attraction and retention of high-quality employees
- Connection with engaged, focused employees that represent and demonstrate the brand identity

Nationwide's marketing team has had ongoing meetings with Ohio DC staff to discuss brand elements. We agreed that we want participants to know that Ohio DC is in touch with today's evolving financial world by modernizing its look and feel. As we approach the brand refresh, we still want participants to recognize the longevity and strength of Ohio DC. Brand updates will be subtle, yet noticeable enhancements that show that Ohio DC is up-to-date.

An important part of the brand is how the audience feels about Ohio DC. We want participants to feel that Ohio DC is a brand they can trust with their retirement savings. The brand should aspire to have participants see Ohio DC as established and recognizable. Participants should see that Ohio DC takes its brand history and stability seriously as it looks to the future and modernizes itself. Ohio DC is the same plan they can trust regardless of market, economic, or societal changes.

Using the brand strategy from 2006 as a baseline, Nationwide and Ohio DC staff agreed on important brand character attributes. When target audiences think about Ohio Deferred Compensation, we want the following attributes to come to mind:

- Helpful – I know that Ohio DC will help me make smart financial decisions every step of the way on my path to retirement readiness.
- Authentic – I can tell that Ohio DC respects hard-working public-sector employees like me. They communicate in a relatable way and don't talk down to me.
- Empowering - Ohio DC has helped me see my own potential and motivated me to set goals. I'm excited to stick with the plan and watch my savings grow over time.
- Assuring - I trust Ohio DC to protect my savings and make decisions based on what's best for me. It feels good knowing I have a partner I can count on.
- Clear - I appreciate that Ohio DC simplifies the complex world of retirement planning, making it easier for me to understand.
- Adaptive - I'm confident that Ohio DC is keeping pace with the times. I see them innovate and modernize to make sure I have up-to-date information and the latest tools.
- Representative - My colleagues are Ohioans from all walks of life and at every career stage. I like that Ohio DC takes care to reflect the rich diversity of our state in the materials I see.

Nationwide and staff have already produced sample logo updates, a new tagline, an expanded color palette, and modern imagery to support the brand. Development is ongoing and will take time to fully launch the brand refresh due to the number of materials to update. The process has already identified all affected marketing materials, forms, presentations, webinars, web pages, correspondence, and signage that will need to be updated. Since these materials are already part of a semi-annual review and update process, there will be no cost to Ohio DC to modernize these items. All the project work, the cost of revisions, and reprinting costs are being completed as part of the existing contract with Nationwide which includes marketing support. There will be a few items that will incur a cost to Ohio DC such as indoor and outdoor signage. It is estimated these costs would be roughly \$15,000. However, these are not expenses that need to be incurred immediately since the refresh project could take 6-12 months to complete.

Conclusion

Nationwide and staff will continue the implementation of the Ohio DC Brand Refresh Project as presented, so that work can begin with third quarter participant communications.



OHIO DEFERRED COMPENSATION

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM

MEMORANDUM

TO: Board of Trustees

FROM: Paul D. Miller, Interim Executive Director

DATE: May 16, 2023

SUBJECT: Proposed 2023 Strategic Planning Meeting Agenda

Executive Summary

Staff is seeking Board input and direction in preparation of the Strategic Planning meeting agenda. This meeting is scheduled for Tuesday, August 15, at 9 a.m.

Background

The Strategic Planning meeting is usually a four- to five-hour meeting. Staff have several suggested topics for the Board to consider. After reviewing the topics and receiving Board input, we will ask for consensus as to which topics should be placed on the agenda.

Strategic topics for consideration are:

- Research Asset Retention Strategies (RVK)
- Research Retirement Income Strategies (RVK)
- Administrative Staffing Model
- Nationwide Contract Extension Update
- SECURE 2.0 Act

Other topics may include:

- Annual Board Self-Evaluation
- State of Ohio Auto Enrollment Results
- Strategic Plan Update

Staff will prepare a final agenda and related materials based on input from the Board.



OHIO DEFERRED
COMPENSATION

**EXECUTIVE SESSION
TO DISCUSS
IMMINENT COURT ACTION

AT MEETING**

INFORMATION ITEMS

Strategic Plan Objectives Update

Goal/ Objective	Lead	Target Quarter/Year	Objective	Status	Comments
Goal #1: Provide quality participant services and promote financial literacy through effective education and clear communication.					
1-48	KK/MG	4Q 2022 1Q 2023	Develop the appropriate participant service model to assist with a future RFP for an enrollment, education, and service provider.	**COMPLETED**	<i>Nationwide presented their annual service plan at the January meeting which highlighted the efforts to invest in services that enhance and improve the participant experience. The staffing model flexibility added to the contract has proven to be helpful in maintaining the appropriate staffing levels and has improved the opportunities to connect to participants.</i>
1-49	KK/PM	1Q 2024	Develop a request for proposal, solicit proposals, and select a vendor to provide enrollment, education, and customer service beyond June 30, 2024.	**COMPLETED**	<i>At the March meeting, the Board gave staff authority to enter into negotiations with Nationwide for an extension of the contract. Staff is negotiating a contract extension.</i>



On Target



Potential Delay With Target



Target Delayed

Strategic Plan Objectives Update

Goal/ Objective	Lead	Target Quarter/Year	Objective	Status	Comments
Goal #2: Establish plan features and tools that encourage supplemental savings to provide income through retirement.					
2-49	KK/JC	4Q 2022 4Q 2023	Complete Phase III of recordkeeping modernization project.		<i>Enhancements related to transfer check printing, PWP live ACH validation, bank account verification workflow, and basic W-4P updates have been completed. Enhancements that are in progress or upcoming include: ORIS live ACH validation, address standardization/autocomplete, enhanced W-4P updates, Secure Act 2.0 updates, technology stack upgrades, and moving to platform as a service (PAAS) to further improve security, scalability, and maintainability.</i>
2-53	MG/JC	3Q 2022 2Q 2023 2Q 2024	Research strategies to obtain detailed participant information with the goal of utilizing data for future strategic goals, objectives, and service and marketing efforts.		Staff began researching tools and strategies for gathering detailed participant data, including interviewing stakeholders for opportunities for use. Additionally, steps to leverage the application's existing reporting capabilities are being explored. This objective was reprioritized due to other significant IT projects.

 On Target

 Potential Delay With Target

 Target Delayed

Strategic Plan Objectives Update

Goal/ Objective	Lead	Target Quarter/Year	Objective	Status	Comments
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Goal #3: Provide suitable, diverse, cost effective investment options.

3-26	PM/RVK	2Q 2022 3Q 2022 3Q 2023	Research asset retention strategies, including but not limited to self-directed brokerage window and managed account options.		Staff has developed the framework to research this topic with the assistance of Nationwide and RVK. Strategies to retain assets will be researched, including the costs and benefits of alternative investment options, and presented at the August Strategic Planning meeting in 2023.
3-27	PM/RVK	2Q 2023 3Q 2023	Research retirement income strategies.		RVK has will present their research regarding retirement income strategies at the August 2023 Strategic Planning meeting.

Goal #4: Accurately and fairly apply laws; when appropriate, advocate regulatory and legislative changes.

Goal #5: Develop and implement prudent practices to effectively govern and administer the Plan.

5-20	KK/PM/CW	3Q 2022 3Q 2023 TBD	Develop an administrative staffing model to assist with maintaining new technology, participant service enhancements, and succession plans.		The new executive director will review the current administrative staffing model and determine the next steps to identify the appropriate future model. <i>Staff is currently working to determine areas where cooperative efforts could be provided by our business partners.</i>
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On Target



Potential Delay With Target



Target Delayed



OHIO DEFERRED COMPENSATION

BOARD UPDATE

APRIL 2023

Upcoming Meeting Schedule

May Audit Committee Meeting

The May Audit Committee meeting will be held on **Tuesday May 16, 2023 at 8:30 a.m.** Audit Committee members are Stewart Smith, Chair; Tim Steitz, Vice Chair; Julie Albers; Jim Kunk; and Jim Tilling. The Committee will review the Annual Comprehensive Financial Report and the results of the 2022 independent financial audit with the auditors from Rea & Associates.

May Board Meeting

The May Board meeting will be held on **Tuesday, May 16, 2023, at 9 a.m.**

August Strategic Planning Meeting

The August Strategic Planning meeting will be held on **Tuesday, August 15.** The meeting will **begin at 9 a.m.** and is expected to **conclude around 3 p.m.**

You can review the Strategic Plan Objectives Update [here](#).

NAGDCA Annual Conference

The 2023 National Association of Government Defined Contribution Administrators (NAGDCA) Annual Conference will be held October 8-11 in Seattle, Washington. Registration opens in May and the discounted conference in-person registration fee is \$700 and is due by August. There is also a virtual option for \$250.

You can review information regarding the conference and the agenda [here](#).

Cindy Ward will assist Board members with registration and travel arrangements. Please contact Cindy if you plan to attend.

2022 Financial Disclosure Statement Filing Deadline is May 15, 2023

Your 2022 Financial Disclosure Statement is required to be filed on or before Monday, May 15, 2023, with the Ohio Ethics Commission. In February, Cindy Ward emailed you a summary of the expenses paid on your behalf by Ohio DC.

You are registered at the Ohio Ethics Commission as a “dual filer,” because of your appointment on the OPERS Board or your capacity as a public employee. In the past, Ohio DC Board members have filed under OPERS or their primary employer.



2022 Participant & Employer Satisfaction Surveys

In April of 2022, Ohio DC staff issued an RFP for a Participant and Employer Satisfaction Survey Provider. Based on the RFP responses, staff determined that telephone surveys are no longer industry practice and have become very costly. Telephone surveys were eliminated from the scope of services and the fall data collection began in October 2022.

The data was aggregated and presented to our management team and Nationwide by CFR in February 2023. Despite the changes in survey methodology for the fall period, the 2022 survey results show participant satisfaction with Nationwide is in the 100th percentile, compared to the Investments industry benchmark. If you have established an account, you can view the full participant and employer survey reports on the Board site [here](#).

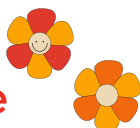
SECURE 2.0 Act

Staff have implemented two mandatory provisions of the SECURE 2.0 Act which were effective in 2023:

- Section 107, which increased the RMD age from 72 to 73 (and will increase to age 75 effective in 2033)
- Section 306, which eliminated the “first day of the month” rule

At the May Board meeting, staff will present information about the optional provision of Section 312, which allows for self-certification of unforeseeable emergency withdrawals. Topics of discussion will be the adoption of the provision and, if so, a cap on the amount which can be self-certified and the frequency of said self-certified withdrawals.

See the [next page](#) for the
March 2023 | Ohio DC Statistics



Take Note >>>



We continue to see usage of the Enrich Financial Wellness platform. Newsletter, email, and website promotions for Enrich continue to drive new Enrich enrollments. To date, 12,801 participants have signed up for the Enrich Financial Wellness program.

State of Ohio Automatic Enrollment

To date, we have received 3,419 valid new hire records from the State. There are 986 records still pending due to the 90-day opt-out period. Therefore, 2,433 records have been processed.

Currently, 270 (11.1%) people have opted out, 814 (33.5%) have enrolled on their own to begin contributions sooner, and 1,349 (55.4%) new accounts have been created.

Roth457

To date, 563 employers have adopted the Roth 457 Option and 7,242 participants have enrolled.

Annual Investment Consultant Evaluation

Ohio DC's Investment Policy states that the investment consultant will be **reviewed annually** concerning their work on both the investment options and the Stable Value Option. The purpose of the review is to provide feedback to the consultant and determine if the consultant will be considered for future investment reviews. Staff is preparing this evaluation and will send it to Board members after the May Board meeting.

March 2023 | Ohio DC Statistics

MONTHLY MARKET PERFORMANCE

	March	YTD
Large Company Stocks	▲ 3.67%	▲ 7.50%
Small/Mid Company Stocks	▼ -2.77%	▲ 5.92%
Non-US Stocks	▲ 2.13%	▲ 6.91%
Total Bond Market	▲ 2.54%	▲ 3.13%

Monthly Perf.

\$369
million

YTD Perf.

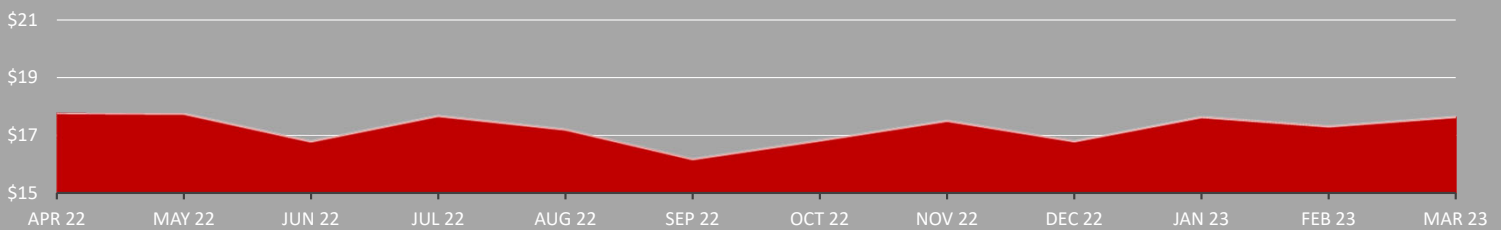
\$926
million

MONTH END ASSET ALLOCATION

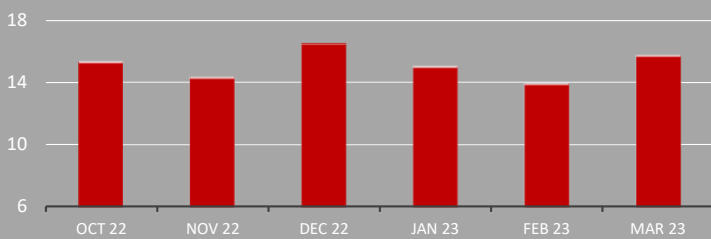
Core
70%

SVO
30%

TOTAL ASSETS (in billions)



MONTHS OF EXPENSE IN CASH RESERVES



KEY INDICATORS

	March	YTD
Enrollments		
2023	1,793	5,207
2022	1,773	4,543
% Change	▲ 1.1%	▲ 14.6%

Unforeseeable Emergencies (in millions)

2023	\$ 0.9	\$ 2.1
2022	\$ 0.8	\$ 2.1
% Change	▲ 2.7%	▼ -3.1%

Applications Processed:

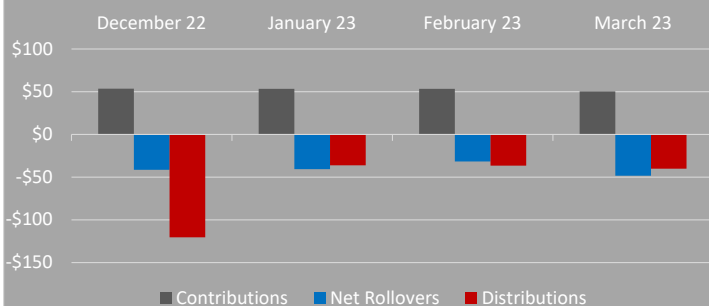
281

Applications Approved:

265

Approval %
94.3%

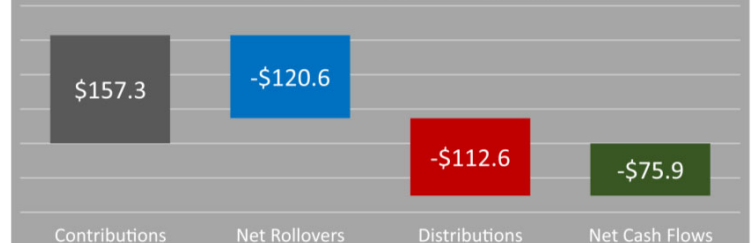
MONTHLY CASH FLOWS (in millions)



2022 YTD NET CASH FLOWS (in millions)



2023 YTD NET CASH FLOWS (in millions)



Financial data is unaudited and reflects the cash basis of accounting.

Strategic Plan Objectives Update

<i>Goal/ Objective</i>	<i>Lead</i>	<i>Target Quarter/Year</i>	<i>Objective</i>	<i>Status</i>
Goal #1: Provide quality participant services and promote financial literacy through effective education and clear communication.				
1-48	KK/MG	4Q 2022 1Q 2023	Develop the appropriate participant service model to assist with a future RFP for an enrollment, education, and service provider.	**COMPLETED**
1-49	KK/PM	1Q 2024	Develop a request for proposal, solicit proposals, and select a vendor to provide enrollment, education, and customer service beyond June 30, 2024.	**COMPLETED** <i>Staff is negotiating a contract extension</i>
Goal #2: Establish plan features and tools that encourage supplemental savings to provide income through retirement.				
2-49	KK/JC	4Q 2022 4Q 2023	Complete Phase III of recordkeeping modernization project.	
2-53	MG/JC	3Q 2022 2Q 2023 2Q 2024	Research strategies to obtain detailed participant information with the goal of utilizing data for future strategic goals, objectives, and service and marketing efforts.	

 On Target

 Potential Delay With Target

 Target Delayed

Strategic Plan Objectives Update

<i>Goal/ Objective</i>	<i>Lead</i>	<i>Target Quarter/Year</i>	<i>Objective</i>	<i>Status</i>
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Goal #3: Provide suitable, diverse, cost effective investment options.

3-26	PM/RVK	2Q-2022 3Q-2022 3Q 2023	Research asset retention strategies, including but not limited to self-directed brokerage window and managed account options.	
3-27	PM/RVK	2Q-2023 3Q 2023	Research retirement income strategies.	

Goal #4: Accurately and fairly apply laws; when appropriate, advocate regulatory and legislative changes.

Goal #5: Develop and implement prudent practices to effectively govern and administer the Plan.

5-20	KK/PM/CW	3Q-2022 3Q-2023 TBD	Develop an administrative staffing model to assist with maintaining new technology, participant service enhancements, and succession plans.	
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 On Target

 Potential Delay With Target

 Target Delayed

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM
ADMINISTRATIVE FUND
COMPARATIVE BALANCE SHEETS (UNAUDITED)

	<u>April 30, 2023</u>	<u>April 30, 2022</u>
<u>ASSETS</u>		
<i>CURRENT ASSETS:</i>		
PETTY CASH	\$50	\$50
CHECKING ACCOUNT	335,253	456,518
MONEY MARKET ACCOUNT	4,321,412	2,940,152
SHORT TERM INVESTMENTS	10,971,085	11,382,421
ACCOUNTS RECEIVABLE / PREPAYS	2,418,165	2,384,447
TOTAL CURRENT ASSETS	18,045,965	17,163,589
<i>FIXED ASSETS:</i>		
RECORDKEEPING MODERNIZATION	1,601,047	852,474
ORIS - PWP	17,189,289	15,527,565
FURNITURE AND FIXTURES	251,832	251,832
OFFICE EQUIPMENT	147,831	147,831
IBM AS/400	2,869	2,869
LEASE ASSET	2,209,807	2,209,807
LEASEHOLD IMPROVEMENTS	46,551	46,551
TOTAL FIXED ASSETS	21,449,226	19,038,927
LESS ACCUMULATED DEPRECIATION	(4,309,125)	(2,943,464)
NET FIXED ASSETS	17,140,101	16,095,463
<i>LONG TERM ASSETS:</i>		
UNCLAIMED PARTICIPANT BENEFIT PAYMENTS	509,769	309,009
TOTAL LONG TERM ASSETS	509,769	309,009
TOTAL ASSETS	<u>\$35,695,834</u>	<u>\$33,568,061</u>
<u>LIABILITIES & FUND BALANCE</u>		
<i>CURRENT LIABILITIES:</i>		
ACCOUNTS PAYABLE	\$139,768	\$99,563
HEALTH INSURANCE RESERVE	168,551	206,953
ACCRUED EXPENSES	472,167	454,792
REBATES DUE TO PROGRAM FUND	-	201,946
SHORT-TERM LEASE LIABILITY	226,836	213,658
TOTAL CURRENT LIABILITIES	1,007,322	1,176,912
<i>LONG TERM LIABILITIES:</i>		
UNCLAIMED BENEFIT PAYMENT LIABILITY	501,264	308,744
LONG-TERM LEASE LIABILITY	1,557,073	1,783,909
TOTAL LONG TERM LIABILITIES	2,058,337	2,092,653
TOTAL LIABILITIES	<u>3,065,659</u>	<u>3,269,565</u>
<i>FUND BALANCE:</i>		
BEGINNING OF YEAR	31,441,956	29,194,005
CURRENT YEAR SURPLUS (DEFICIT)	1,188,218	1,104,492
TOTAL FUND BALANCE	<u>32,630,174</u>	<u>30,298,496</u>
TOTAL LIABILITIES & FUND BALANCE	<u>\$35,695,834</u>	<u>\$33,568,061</u>

NOTE: CERTAIN ACCRUAL ADJUSTMENTS HAVE BEEN OMITTED

**OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM
ADMINISTRATIVE FUND
FUND RESERVE CALCULATION**

	<u>2023</u>	<u>2022</u>
Annual Expense Budget **	<u><u>\$13,110,197</u></u>	<u><u>\$12,358,000</u></u>
Average Monthly Expense Budget	<u><u>\$1,092,516</u></u>	<u><u>\$1,029,833</u></u>
	<u>April 30, 2023</u>	<u>April 30, 2022</u>
CHECKING ACCOUNT	\$335,253	\$456,518
MONEY MARKET ACCOUNT	4,321,412	2,940,152
SHORT TERM INVESTMENTS	<u>10,971,085</u>	<u>11,382,421</u>
NET CASH RESERVES	<u><u>\$15,627,750</u></u>	<u><u>\$14,779,092</u></u>
Number of Months Expense in Reserve	<u><u>14.3</u></u>	<u><u>14.4</u></u>

The fund reserve policy was updated in July 2012 and seeks to retain a fund reserve equal to six to eighteen months of operating expense.

**The annual expense budget is adjusted for the impact of non-cash depreciation.

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM
ADMINISTRATIVE FUND
MONTHLY AND YEAR-TO-DATE REVENUES AND EXPENSES, WITH BUDGET COMPARISONS

	MONTH OF April 2023			YEAR-TO-DATE 2023		
	<u>ACTUAL</u>	<u>BUDGET</u>	<u>VARIANCE</u>	<u>ACTUAL</u>	<u>BUDGET</u>	<u>VARIANCE</u>
PARTICIPANT FEES	\$1,280,118	\$1,219,179	\$60,939	\$5,146,086	\$4,870,628	\$275,458
INTEREST INCOME	64,728	40,792	23,936	278,339	152,367	125,973 *
TOTAL REVENUE	1,344,845	1,259,970	84,875	5,424,425	5,022,994	401,431
SALARIES	154,893	276,994	(122,101)	612,978	735,065	(122,087) *
BENEFITS	24,734	77,639	(52,905)	186,943	253,241	(66,298) *
INFORMATION TECHNOLOGY (IT)	57,836	60,352	(2,516)	152,285	241,407	(89,122) *
INSURANCE	0	0	0	151,951	150,104	1,847
HIRING AND RECRUITING	(13)	750	(763)	405	3,000	(2,595)
RENT	14,310	14,393	(83)	57,240	57,572	(332)
PRINTING	0	1,191	(1,191)	11,556	10,708	848
POSTAGE/DELIVERY	60,903	58,032	2,871	197,033	197,464	(430)
BOARD MEMBERS	26	725	(699)	795	3,280	(2,485)
EDUCATION/LICENSE/TRAVEL	806	2,221	(1,415)	4,902	8,883	(3,982)
STATEMENTS	70	30,000	(29,930)	50,256	87,300	(37,044) *
PROFESSIONAL FEES	108,109	116,824	(8,715)	188,479	280,273	(91,795) *
PARTICIPANT ADJUSTMENTS	(27,800)	400	(28,200)	(27,368)	1,600	(28,968) *
BANK FEES	15,600	14,250	1,350	64,654	57,000	7,654
MISCELLANEOUS	3,714	3,215	499	10,526	12,858	(2,332)
OPERATING EXPENSES	413,189	656,986	(243,797)	1,662,636	2,099,756	(437,120)
DEPRECIATION AND AMORTIZATION	0	0	0	292,250	309,412	(17,162)
TOTAL OPERATING EXPENSES	413,189	656,986	(243,797)	1,954,886	2,409,168	(454,282)
NRS COMPENSATION	479,941	483,855	(3,914)	2,201,026	2,199,441	1,585
OCCUPANCY COSTS	13,000	13,000	0	52,000	52,000	0
FINANCIAL WELLNESS	6,967	6,967	0	27,867	27,867	0
DEPRECIATION	0	0	0	429	214	214
TOTAL CUSTOMER SERVICE EXPENSE	499,907	503,822	(3,914)	2,281,321	2,279,522	1,799
TOTAL EXPENSES	913,097	1,160,808	(247,711)	4,236,207	4,688,690	(452,483)
NET REVENUES OVER EXPENSES	\$431,749	\$99,163	\$332,586	\$1,188,218	\$334,304	\$853,914

CERTAIN ACCRUAL ADJUSTMENTS HAVE BEEN OMITTED

A (\$) VARIANCE INDICATES ACTUAL AMOUNTS ARE LOWER THAN BUDGETED.

PARTICIPANT ADJUSTMENT EXPENSE INCLUDES COSTS TO PROCESS PBHG SETTLEMENT DISTRIBUTIONS.

* = SEE ATTACHED EXPLANATION OF YTD VARIANCE OVER \$10,000 AND 10% FROM BUDGET.

**OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM
ADMINISTRATIVE FUND
YEAR-TO-DATE VARIANCE ANALYSIS OVER \$10,000 AND 10% FROM BUDGET**

	<u>MONTH OF April 2023</u>			<u>YEAR-TO-DATE 2023</u>		
	<u>ACTUAL</u>	<u>BUDGET</u>	<u>VARIANCE</u>	<u>ACTUAL</u>	<u>BUDGET</u>	<u>VARIANCE</u>
INTEREST INCOME	\$64,728	\$40,792	\$23,936	\$278,339	\$152,367	\$125,973
	Changes in the interest rate environment have lead to higher yields on new investments. Additionally, the duration of our short-term investments allowed our portfolio to maintain a higher weighted average return than expected. These two factors have resulted in higher than expected interest income.					
SALARIES	\$154,893	\$276,994	(\$122,101)	\$612,978	\$735,065	(\$122,087)
	Salaries are lower than budgeted due to several open positions that were budgeted to be filled for the entire year.					
BENEFITS	\$24,734	\$77,639	(\$52,905)	\$186,943	\$253,241	(\$66,298)
	Benefits are lower than budgeted due to several open staff positions that were budgeted to be filled for the entire year. Additionally, lower than expected health claims have been incurred this year. Our reserve for future health claims is around \$168,000 at month-end.					
INFORMATION TECHNOLOGY	\$57,836	\$60,352	(\$2,516)	\$152,285	\$241,407	(\$89,122)
	This variance is due to the fact that the 2023 budget was distributed evenly among twelve months. The budget includes some projects related to Security that are scheduled for later in the year.					
STATEMENTS	\$70	\$30,000	(\$29,930)	\$50,256	\$87,300	(\$37,044)
	Variance is due to timing. Statement expenses were paid on May 1 in the amount of \$29,000, bringing this line item back into expectation for the year.					
PROFESSIONAL FEES	\$108,109	\$116,824	(\$8,715)	\$188,479	\$280,273	(\$91,795)
	Most of this variance is due to \$70,000 being budgeted for Executive Director search, only \$10,000 was billed.					
PARTICIPANT ADJUSTMENTS	(27,800)	400	(28,200)	(27,368)	1,600	(28,968)
	During 2023, net participant account adjustments have resulted in income to Ohio DC.					

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM
PROGRAM FUND--QUARTERLY STATEMENT
STATEMENTS OF PLAN NET POSITION AVAILABLE FOR BENEFITS
(UNAUDITED)

	March 31 2023	March 31 2022
<u>ASSETS</u>		
INVESTMENTS	\$17,661,753,274	\$19,087,974,152
CONTRIBUTIONS RECEIVABLE AND HELD FOR INVESTMENT	7,653,355	12,669,793
TOTAL ASSETS	<u>17,669,406,629</u>	<u>19,100,643,945</u>
<u>LIABILITIES</u>		
ACCOUNTS PAYABLE (RECEIVABLE)	3,768,435	4,607,795
TOTAL LIABILITIES	<u>3,768,435</u>	<u>4,607,795</u>
PLAN NET POSITION AVAILABLE FOR BENEFITS	<u><u>\$17,665,638,193</u></u>	<u><u>\$19,096,036,149</u></u>

Note: Certain accrual adjustments/combining entries have been omitted.

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM
PROGRAM FUND--QUARTERLY STATEMENT
STATEMENT OF CHANGES IN ASSETS AVAILABLE FOR PROGRAM BENEFITS
(UNAUDITED)

	Three Months ended March 31, 2023	Three Months ended March 31, 2022
<u>ADDITIONS:</u>		
EMPLOYEE CONTRIBUTIONS	\$151,366,083	\$148,226,626
NET GAIN (LOSS) ON VARIABLE INVESTMENTS	893,729,610	(1,081,627,733)
STABLE VALUE INTEREST INCOME	34,418,011	23,258,858
INVESTMENT EXPENSES	(3,233,002)	(3,088,262)
TRANSFERS FROM OTHER PLANS	18,830,803	33,894,455
 TOTAL ADDITIONS	 \$1,095,111,505	 (\$879,336,056)
 <u>DEDUCTIONS:</u>		
DISTRIBUTIONS TO PARTICIPANTS	\$113,520,302	\$110,820,136
TRANSFERS TO OTHER PLANS	139,545,606	116,107,733
PURCHASE SERVICE CREDIT	2,206,329	1,708,316
ADMINISTRATIVE FEES	3,861,679	3,827,485
 TOTAL DEDUCTIONS	 \$259,133,915	 \$232,463,669
 CHANGE IN NET POSITION	 \$835,977,590	 (\$1,111,799,725)
 PLAN NET POSITION AVAILABLE FOR BENEFITS:		
BEGINNING OF YEAR	16,829,660,603	20,207,835,874
 ENDING OF PERIOD	 \$17,665,638,193	 \$19,096,036,149

Note: Certain accrual adjustments/combining entries have been omitted.

MEMORANDUM

To: Paul Miller, Interim Executive Director
From: Matt Gill, Nationwide Program Director
Subject: Service and Marketing Update
Date: 5/16/2023

The purpose of this memorandum is to highlight the service and marketing activities that have occurred over the last two months. This summary has been organized into a format consistent with Ohio DC's strategic goals. The marketing checklist for 2023 attached to this report shows highlighted activities that were completed in March and April.

I. Provide quality participant services and promote financial literacy through effective education and clear communication.

During the past two months, the Service Center received 21,205 calls, which is an 11% decrease over the same period last year. All Field Account Executives are publicizing telephone and virtual meetings through Microsoft Teams. The majority of events are completed in-person instead of over the phone or computer. Field Account Executives are also conducting more group webinars than in previous years, combining in-person visits with remote multi-employer meetings.

Enrollments over the last two months totaled 2,716; up 3% from the same period last year. State auto-enrollment, which was not available last March or April, represents 17% of total enrollments. While many of these auto-enrolled individuals would have eventually enrolled through a traditional process, the process appears to be successful with an average of 262 people per month being auto-enrolled. SMarT plan enrollments were also up 8% from the same period last year.

II. Establish plan features and tools that encourage supplemental savings to provide income through retirement.

The total events attended by Field Account Executives were 5% higher than last year at this time. Retirement Planning Specialist contacts were up 98% from the same period last year, mostly due to increased webinar and presentation activities. Service Center staff continues to operate in a hybrid schedule with work-from-home privileges for those who have proven their productivity to be equal or greater to those working in the office. Contractors continue to work in the office more frequently, allowing a better opportunity to retain new associates, learn from each other, and ultimately provide better information to Ohio DC participants.

III. Provide suitable, diverse, cost-effective investment options.

No investment changes were made during the first two months of the year. The Service Center and Field Account Executives continue to answer many participant questions about the fund changes in December. Participants are still calling in expressing frustration about the loss of ticker symbols, as well as dividend and capital gains distributions that can no longer be seen on statements because they are occurring at the fund level rather than the individual account level.

IV. Accurately and fairly apply laws; when appropriate, advocate regulatory and legislative changes.

Legislative Update

IRS Issues RMD Reporting Relief

On March 7, the IRS issued Notice 2023-23, which provides penalty relief for IRA issuers that incorrectly notified IRA owners who will attain age 72 in 2023 that they have required minimum distribution (RMD) obligations for 2023. This issue arises because of the change that SECURE 2.0 made to the RMD starting age and the short timeframe that providers had to react to that statutory change. The relief is conditioned on the IRA issuer notifying the owner no later than April 28, 2023, that no RMD is required for 2023.

Biden Vetoes Effort to Overturn DOL ESG Rule

On March 20, President Biden exercised his first veto to strike down H. J. Res. 30, a Congressional Review Act procedure to overturn the recently finalized Labor Department rule titled “Prudence and Loyalty in Selecting Plan Investments and Exercising Shareholder Rights.” Commonly referred to as the ESG Rule, the rule reverses a Trump-era rule and clarifies that ERISA plan fiduciaries may consider climate change and other environmental, social, and governance (ESG) factors when they make investment decisions and when they exercise shareholder rights, including voting on shareholder resolutions and board nominations, among other provisions. The final rule is effective as of January 30, 2023. Congress does not have the necessary votes to overturn the veto, meaning the final rule will remain in effect

Biden Releases Fiscal Year 2024 Budget

On March 9, President Biden released the outline of his administration's budget request for the 2024 fiscal year (FY 2024), which begins October 1, 2023.

Importantly, the President's budget is primarily a political messaging document and will not become law. Still, the document provides an outline of the White House's priorities. Additional details regarding the various tax provisions are available in the Treasury's "Green Book." A few notable tax provisions include:

- Corporate Rate Increase to 28%
- Top Individual Rate Increase to 39.6% — See Green Book Page 77
- Individual Minimum Tax on Wealth Individuals — See Green Book Page 82
- Net Investment Income Tax — See Green Book Pages 72-75
- Retirement Provisions from Build Back Better — See Green Book Pages 85-92
 - \$10 million cap on IRA and DC plan accumulations
 - Eliminating all Roth conversions for high-income taxpayers
 - Eliminating backdoor Roth contributions
 - \$1 million cap on deductibility executive compensation under Section 162(m)
- Capital Gains Taxed as Ordinary Income — See Green Book Page 79.

V. Develop and implement prudent practices to effectively govern and administer the plan.

The Service Center held training on Good Friday while the stock market was closed. Activities included:

- Annual fraud training
- Call quality measurement through XM Discover software
- Processing of paperwork in good order and timelines
- Retirement Planning Specialist services and appointments
- Career development and expectations for Field Account Executives
- Stable Value interest rate
- Investment offerings, dividends, and capital gains

Items highlighted in yellow were completed since the last Board meeting.

2023 Marketing Checklist

	<u>Target Date</u>	<u>Completed Date</u>
<u>Employer Emails</u>		
Employer Newsletter Notification (Communication Mgr.)	June	
Employer webinar #1 (Communication Mgr.)	March	March
Employer webinar #2 (Communication Mgr.)	October	
<u>Participant Emails</u>		
Quarterly Newsletter	January	January
Promotional email Q1	January	January
Webinar Wednesday announcement - February	February	February
eDelivery reminder email	February	February
Early Saver eNewsletter 1	March	March
Webinar Wednesday announcement - March	March	March
Retiree newsletter 1	March	March
Enrich promotion Q1	March	March
Webinar Wednesday announcement - April	April	April
Quarterly Newsletter	April	April
Promotional email Q2	April	April
Webinar Wednesday announcement - May	May 10	
Beneficiary clean-up email	May 17	
Webinar announcement for Tax Efficient Retirement Income	May 23	
Beneficiary clean-up email	May 24	
Webinar Wednesday announcement - June	June 7	
Cybersecurity awareness reminder to establish profile	June 14	
Enrich promotion Q2	June 28	
Webinar Wednesday announcement - July	July 6	
Quarterly Newsletter	July 13	
Webinar announcement for Medicare Planning	July 25	
Promotional email Q3	July 26	
Webinar Wednesday announcement - August	August 9	
Stay In Plan email	August 16	
Beneficiary clean-up email	August 23	
Beneficiary clean-up email	August 30	
Webinar Wednesday announcement - September	September 6	
Early Saver eNewsletter 2	September 7	
Approaching Retirement & Beyond the Basics webinar	September 13	
Enrich promotion Q3	September 27	
Retired Minds Want to Know webinar	September 27	
Retiree newsletter 2	September 28	
Enrich Your Financial Wellness webinar	October 4	
RMD management email	October 5	
Quarterly Newsletter	October 11	
Promotional email Q4 - Stay the Course	October 25	
Webinar Wednesday announcement - November	November 8	
Webinar Wednesday announcement - December	November 29	
New Deferral Limits	December 1	
Enrich promotion Q4	December 20	
Placeholder	TBD	
<u>Web Banners</u>		
RMD, Campaign banner	January	January
Campaign banner, RMD	February	February
Campaign banner, SMarT	March	March
Campaign banner (Enrich), SMarT	April	April
To be determined each month	May	

	<u>Target Date</u>	<u>Completed Date</u>
To be determined each month	June	
To be determined each month	July	
To be determined each month	August	
To be determined each month	September	
To be determined each month	October	
To be determined each month	November	
To be determined each month	December	

Physical Mailings

C Status Participant Letter to be sent by Board Office	February	
C Status Participant Letter to be sent by Board Office	May	
Stay In Plan postcard	August 15	

Newsletter articles - Front Page

Put Your Heart in it Ohio - Market Volatility	January	January
Put Your Heart in it Ohio - Financial Wellness	April	April
Potential Brand Refresh Campaign	July	
Potential Brand Refresh Campaign	October	

Webinars

Webinar Wednesday - 9:00am Approaching Retirement	February	February
Webinar Wednesday - 9:00am Approaching Retirement; Beyond Basics	March	March
Employer Webinar	March	March
Webinar Wednesday - 9:00am. Retired Minds Want to Know	April	April
Webinar Wednesday - 9:00am Approaching Retirement	May 31	
New Webinar Series - Tax Efficient Retirement Income	June 14	
Webinar Wednesday - 9:00am Approaching Retirement; Beyond Basics	June 28	
Webinar Wednesday - 9:00am. Retired Minds Want to Know	July 26	
New Webinar Series - Medicare Planning	August 16	
Webinar Wednesday - 9:00am Approaching Retirement	August 30	
Webinar Wednesday - 9:00am Approaching Retirement; Beyond Basics	September 27	
NRSM - 9:00am Approaching Retirement	October 4	
NRSM - 11:30am Approaching Retirement	October 4	
NRSM - 9:00am Approaching Retirement Beyond the Basics	October 11	
NRSM - 11:30am Approaching Retirement Beyond the Basics	October 11	
NRSM - 9:00am Retired Minds Want to Know	October 18	
NRSM - 11:30am Retired Minds Want to Know	October 18	
NRSM - 9:00am Enrich Your Financial Wellness	October 25	
NRSM - 11:30am Enrich Your Financial Wellness	October 25	
Employer Webinar	October 26	
Webinar Wednesday - 9:00am Approaching Retirement; Beyond Basics	November 29	
Webinar Wednesday - 9:00am. Retired Minds Want to Know	December 20	

Staff Training & Development

National Sales Meeting for field staff	January	January
President's Day internal staff training meeting	February	February
Associate development plans	March	March
Good Friday internal staff training day	April	April
Juneteenth training meeting	June 19	
Firm element training	September	
Field staff training meeting #2	November	
iDrive development	Monthly	
Small group training	Monthly	
Field staff conference calls	Monthly	
Service Center team huddle	Every other Tuesday	
Field representative team huddle	Every Tuesday	

	<u>Target Date</u>	<u>Completed Date</u>
<u>Miscellaneous</u>		
Annual fraud awareness/training	April	April
Call center disaster recovery exercise	Ongoing	
Semi-annual marketing audit	June/December	
Training manual/videos updated online	Monthly	