



OHIO DEFERRED COMPENSATION

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM

BOARD MEETING AGENDA

March 14, 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 March 14, 2023. The Ohio DC Board meeting will be held at 9 a.m. on Tuesday March 14, 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 2022 independent financial audit scope.

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_Mfa66CIWRA60Cus5zSxrrA

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



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AGENDA *March 14, 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) • 2022 Audit Scope	9:05-9:15 a.m.
Action Items	
2. RVK Reports, separate cover (Matthias Bauer, Stephen Budinsky) • Investment Menu Design Review • Quarterly Investment Performance Analysis (12/31/2022)	9:15-10:15 a.m.
3. 2023 Budget Amendment (Paul Miller)	10:15-10:20 a.m.
4. Board Travel–NAGDCA Annual Conference (Cindy Ward)	10:20-10:25 a.m.
Discussion Items	
5. Participant Service Model (Kevin Kirkpatrick)	10:25-10:40 a.m.
6. Nationwide Contract Extension Negotiation (Kevin Kirkpatrick)	10:40-11:00 a.m.
Information Items	11:00-11:15 a.m.
7. August Meeting Date Change	
8. Service Efforts Report 2022	
9. Priority Projects Update	
10. Finance • Administrative Fund Financial Statements (Feb) • Fourth Quarter 2022 Unaudited Financial Statements	
11. Service and Marketing Update	

MINUTES

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 January 17, 2023, at 9:00 a.m.

Members present: Chair Ken Thomas; Ms. Julie Albers; Representative Richard Brown; Mr. Randy V. Desposito; Mr. James E. Kunk; Mr. Christopher Mabe; Ms. Kathleen Madden; Mr. Scott Richter; Mr. Stewart Smith; Mr. Timothy Steitz; Mr. James R. Tilling; and Mr. Steve Toth.

Also present: Mr. Kevin Kirkpatrick, Interim Executive Director, Mr. Paul D. Miller; Mr. Jason Chang, Ms. Natasha Natale, and Ms. Cindy Ward of the Ohio Public Employees Deferred Compensation Program; Mr. Matt Gill and Mr. Cedric Gaaskjolen of Nationwide, and Ms. Celia Schnupp of Perez & Morris.

Also present (via teleconference): Ms. Caroline Mills of the Attorney General's office; Ms. Felicia Hill and Ms. Penny Becker of Nationwide; Mr. Stephen Budinsky, Ms. Elise Willey and Ms. Camille Goodwin of RVK, Inc.; and Ms. Lauren Albanese of Financial Investment News.

Chair Toth called the meeting to order.

Minutes

The minutes of the November 15, 2022, Board meeting were presented.

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

All aye. The motion passed without dissent.

Action Items

Chair Toth indicated that two requests for Chair and Vice Chair nominations were received prior to the January meeting. Mr. Steitz requested to be nominated as Chair and Mr. Toth requested to be nominated as Vice Chair.

Mr. Tilling moved; Mr. Kunk seconded to nominate Mr. Steitz as Chair and Mr. Toth as Vice Chair.

Mr. Thomas asked if there would be any nominations solicited from the floor. Mr. Thomas requested to be nominated as Chair. Mr. Mabe nominated Ms. Albers as Vice Chair. Mr. Toth withdrew his request to be nominated as Vice Chair. Mr. Tilling and Mr. Kunk withdrew their motion for the nomination of Chair and Vice Chair. Discussion was held regarding how the vote for Chair would be handled. It was decided that a roll call vote would be taken, and each Trustee would verbally vote for Mr. Steitz or Mr. Thomas.

Roll call vote was taken to determine the 2023 Chair. Trustees voted verbally for Mr. Ken Thomas or Mr. Tim Steitz.

Ms. Albers	Ken	Mr. Smith	Ken
Representative Brown	Ken	Mr. Steitz	Ken
Mr. Desposito	Ken	Mr. Thomas	Ken

Mr. Kunk	Ken	Mr. Tilling	Ken
Mr. Mabe	Ken	Chair Toth	Ken
Ms. Madden	Ken		

Mr. Thomas was unanimously selected as the 2023 Chair.

Ms. Albers was selected as 2023 Vice Chair by acclamation.

(Mr. Richter entered the meeting.)

Mr. Gill reviewed the 2022 service statistics that included new records for the number of new enrollments and SMarT enrollments. He noted the addition of online withdrawals, State of Ohio auto-enrollment and the queue-to-call back feature, and the success of the December fund transition and the virtual courtyard.

Mr. Gill reported on the status of onsite or virtual face-to-face services, tactics for Service Center hiring, training, and staffing for peak call volume times, and participant and employer communications.

Mr. Gill highlighted online withdrawal enhancements, and SECURE 2.0 Act changes. Discussion was held regarding the possibility of providing the Board with the security details of the project to allow online updates to banking information, and the communication impact of the new Required Minimum Distribution (RMD) age and the elimination of the RMD on Roth accounts. Mr. Gill described the addition of XM Discover software that will assist with call quality scoring and management.

Mr. Gill reported the 2023 primary marketing campaign will continue with the theme of “Put your heart in it, Ohio,” will address topics of market volatility, financial wellness, asset retention, and it will introduce Ohio DC’s brand engagement refresh.

Discussion was held regarding the elements of the marketing and brand engagement, focusing on one-on-one services and financial wellness, simplifying the retirement savings basics, and using practical examples.

Mr. Mabe moved; Mr. Desposito seconded, to accept the Nationwide 2022 Year in Review and the 2023 Annual Service Plan as presented.

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

Roll call vote was taken:

Ms. Albers	yes	Mr. Richter	yes
Representative Brown	yes	Mr. Smith	yes
Mr. Desposito	yes	Mr. Steitz	yes
Mr. Kunk	yes	Mr. Tilling	yes
Mr. Mabe	yes	Mr. Toth	yes
Ms. Madden	yes	Chair Thomas	yes

The motion passed unanimously.

Discussion Items

Due to technical issues with the meeting room sound for virtual presentations, the agenda was moved forward until the issue could be resolved.

The Board was provided additional information on the Executive Director search in a supplemental agenda. Mr. Kirkpatrick reported that after subsequent negotiations, EFL reduced the maximum executive director search cost to \$70,000 and provided an updated engagement letter. Ohio DC General Counsel drafted a proposed contract and negotiations were started. Once the contract is finalized, EFL can begin advertising, recruiting, and identifying potential candidates. Mr. Kirkpatrick indicated the contract would be finalized within days and it is anticipated that the Executive Director position would be filled by May.

Discussion was held regarding the amount of time it has taken to begin the search. Mr. Kirkpatrick indicated there were discussions with the Chair and Vice Chair regarding whether the contract would be an action item or discussion item, and whether the preference was for the Chair to sign the contract. Chair Thomas communicated his preference that the process continues moving forward and the Board be kept updated on the process and where the position is being advertised.

Mr. Kirkpatrick reviewed the status of the existing strategic plan objectives and the comments for each objective.

Ms. Natale provided a litigation update and reported that the Ohio Deferred Compensation Program vs. LaSheila Pace, et al., matter was resolved. She reported that the three Co-Defendants provided a notarized affidavit to the Court that stated their desire that the funds at issue be equally split between the three of them. Ohio DC provided the Court with a Proposed Order, as requested by the Court at the Status Hearing. The Proposed Order was accepted, signed by the Court, which discharged Ohio DC from all liability, and disposed of the matter. A motion to waive costs for Ohio DC was filed on the basis that Ohio DC was a neutral party in the matter. The Court granted the motion and waived all costs.

Mr. Budinsky provided background information on the recent Board approved changes to the Ohio DC investment lineup and the underlying asset allocation of the Stable Value Option (SVO).

Mr. Budinsky reviewed a summary of the fund transition and the tasks performed by Ohio DC Staff, RVK, and BNY Mellon as part of the implementation process. The transfer of assets was successfully completed as of market close on December 9, 2022.

Mr. Budinsky presented a summary of changes to the underlying manager fixed maturity allocations for the SVO restructuring. The restructuring will have a two-phase implementation process in the first quarter of 2023. He reviewed the two phases that will allow for wrap contract amendments and the full redemption of assets from State Street Global Advisors. He noted the manager fee reductions that have been finalized because of the anticipated restructuring.

Mr. Mabe moved, Mr. Toth seconded to go into Executive Session at 10:31 a.m., first pursuant to §121.22(G)(6) to discuss matters involving the security of the Ohio Deferred Compensation Program and its operations, and second, pursuant to Ohio Revised Code §121.22(G)(1) to discuss the investigation of complaints against a public employee and the compensation of a public employee.

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

Roll call vote was taken:

Ms. Albers	yes	Mr. Richter	yes
Representative Brown	yes	Mr. Smith	yes
Mr. Desposito	yes	Mr. Steitz	yes
Mr. Kunk	yes	Mr. Tilling	yes
Mr. Mabe	yes	Mr. Toth	yes
Ms. Madden	yes	Chair Thomas	yes

The motion passed unanimously.

(The Board of Trustees, Mr. Kirkpatrick, Mr. Miller, Mr. Chang, Ms. Natale, and Ms. Ward remained in the meeting.)

(Ms. Schnupp entered the meeting. Mr. Kirkpatrick, Mr. Miller, Mr. Chang, Ms. Natale, and Ms. Ward left the meeting after the presentation of matters involving security.)

The meeting returned to regular session at 12:36 p.m.

(Mr. Steitz left the meeting.)

Mr. Desposito moved; Mr. Kunk seconded to amend the Interim Executive Director's compensation as reviewed and discussed in Executive Session.

Roll call vote was taken:

Ms. Albers	yes	Mr. Richter	yes
Representative Brown	yes	Mr. Smith	yes
Mr. Desposito	yes	Mr. Tilling	yes
Mr. Kunk	yes	Mr. Toth	yes
Mr. Mabe	yes	Chair Thomas	yes
Ms. Madden	yes		

The motion passed unanimously.

Information Items

No comments were made regarding the information items included in the agenda materials.

Mr. Mabe moved; Mr. Desposito seconded to adjourn the meeting at 12:37 p.m. until the next regular meeting of the Board, March 14, 2023, to be held at the Ohio Public Employees Retirement System offices, located at 277 East Town Street.

**Minutes of
OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION BOARD
SPECIAL MEETING**

A publicly noticed special 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 February 21, 2023, at 10:33 a.m.

Members present: Chair Ken Thomas; Ms. Julie Albers; Mr. Randy V. Desposito; Mr. James E. Kunk; Mr. Christopher Mabe; 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. Kevin Kirkpatrick, Interim Executive Director, Mr. Paul D. Miller; and Ms. Cindy Ward of the Ohio Public Employees Deferred Compensation Program.

Members absent: Representative Richard Brown and Senator Kirk Schuring.

Chair Thomas called the meeting to order and indicated that the Board would continue the discussions that were held at the January meeting.

Mr. Desposito moved, Mr. Tilling seconded to go into Executive Session at 10:36 a.m. pursuant to Ohio Revised Code §121.22(G)(1) to the discuss the appointment, employment, and compensation of a public employee and §121.22(G)(5) to discuss matters required to be kept confidential by state statutes.

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

Roll call vote was taken:

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

The motion passed unanimously.

(The Board of Trustees remained in the meeting.)

The meeting returned to regular session at 12:03 p.m.

(Mr. Kunk left the meeting.)

Chair Thomas indicated the Board would be voting to appoint Mr. Miller as Interim Executive Director and he thanked Mr. Kirkpatrick on behalf of the Board for his service during his time as Interim Executive Director. Mr. Kirkpatrick will continue in the position as Director of Administration.

Mr. Mabe moved; Mr. Desposito seconded to appoint Mr. Miller as Interim Executive Director and provide him with a 4% increase to his salary while he is performing the interim duties.

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

Roll call vote was taken:

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

The motion passed unanimously.

Mr. Mabe moved; Mr. Desposito seconded to pause the current Executive Director search.

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

Roll call vote was taken:

Ms. Albers	yes	Mr. Toth	no
Mr. Desposito	yes		
Mr. Mabe	yes		
Mr. Milstead	yes		
Mr. Richter	yes		
Mr. Smith	yes		
Mr. Steitz	yes		
Mr. Tilling	yes		
Chair Thomas	yes		

The motion passed 9 to 1.

Chair Thomas noted that Mr. Dan Cummings at EFL should be notified of the change in the search process and a billing for expenses incurred-to-date should be requested.

Chair Thomas reported that in March he would provide the teambuilding resources discussed by the Board.

Mr. Mabe moved; Mr. Smith seconded to adjourn the meeting at 12:08 p.m. until the next regular meeting of the Board, March 14, 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

Stewart Smith, Chair
Tim Steitz, Vice Chair
Julie Albers
Jim Kunk
Jim Tilling

FROM: Paul D. Miller, Interim Executive Director

DATE: March 14, 2023

SUBJECT: 2022 Audit Scope

Executive Summary

The Audit Committee charter calls for a minimum of two meetings per year and includes these responsibilities:

- (1) Review audit plans of the independent public accountant with specific inquiry about the extent to which the planned audit scope can be relied on to detect fraud or weaknesses of the internal controls.
- (2) Meet with the independent public accountant to review examination results and to discuss accounting issues.
- (3) Ensure appropriate action is taken regarding audit findings.

The goals of the March Audit Committee meeting are to review the actions that have been taken due to the findings of the prior audit work (3) and to plan for the upcoming audit (1). This year's audit will be the eighth performed under the contract with Rea & Associates (Rea). The meeting will provide the Committee with the opportunity to meet with Rea staff and hear about their audit procedures and scope. Zac Morris, Principal at Rea, will attend the Audit Committee meeting and present information on this year's procedures.

Background

The maximum initial contract term allowed by the Auditor of State (AOS) is five years, and Ohio DC staff worked with the AOS to first select Rea as our independent accounting firm for the 2015-2019 audit contract term. 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 at the November 2020 Board meeting. Rea's annual audit costs are shown in the table below.

<u>Initial Contract</u>		<u>Renewal Contract</u>	
2015	\$38,400	2020	\$41,920
2016	\$39,040	2021	\$42,880
2017	\$39,680	2022	\$43,840
2018	\$40,320	2023	\$44,800
2019	\$40,960	2024	\$44,800

Prior Audit Findings

The audit reports issued by Rea for the year-ending December 31, 2021, noted no significant discrepancies, material weaknesses, or reportable conditions, and Rea did not present any comments on possible improvements to our internal control systems. Accordingly, there were no required actions needed by Ohio DC staff resulting from the prior audit, and no follow up discussions with the Audit Committee.

Upcoming Audit Plans

The purpose of the March 14 Audit Committee meeting is to provide the Committee with an opportunity to discuss the terms of the audit engagement with Rea staff. Audit planning and fieldwork began the week of March 6, and final fieldwork is scheduled to begin the week of April 3. In addition to examining the financial statements and reviewing the draft Annual Report, Rea will continue to assist staff with recording GASB 68/75 transactions. Rea will also assist with the implementation of GASB 87 (Leases) for the 2022 financial statements. These transactions place expense, liability, and deferred inflow/outflow items in Ohio DC's financial statements representing our allocation of the unfunded OPERS liability and other post-employment benefits. Attached to this memo are three documents from Rea including:

- A. Audit Entrance Conference Agenda
- B. 2022 Audit Arrangement letter
- C. Pre-Audit AU-C 260 Communication With Those Charged With Governance
- D. Report on the Firm's System of Quality Control

The Audit Committee will also meet again at 8:30 a.m. prior to the scheduled May 16 Board meeting, to discuss the draft reports, audit results, findings, and recommendations.

Recommendation

Staff recommends that the Audit Committee accept and recommend to the full Board approval of the 2022 audit scope as presented by Rea & Associates.

**Ohio Public Employees Deferred Compensation Program
Audit Entrance Conference Agenda
March 14, 2023**

1. AU-C 260 Communication With Those Charged With Governance – Memorandum of agreement/Proposal
2. Audit Engagement: Scope
 - a. Investments
 - i. Confirmations
 - ii. Purchases/Sales - sample of total transactions to determine trades are at proper price
 - iii. Valuation testing
 - b. Contributions receivable:
 - i. Review of subsequent transactions by employer summarized by billed date
 - c. Participant Data
 - i. Eligibility – verification that employer is permissible entity per plan document per ORC 148.01(A)(1) from selection of employees and review of enrollment forms.
 - ii. Contributions – annualize participant enrollment forms and compare to total contributions. In addition, determine those contributions were credited to proper participant account and not in excess of any IRS limitations. Testing participant investment direction and ROI.
 - iii. Transfers – Review documentation supporting transfers in/out of the plan.
 - iv. Distributions – obtain listing of distributions by type and stratify population. Design detail testing according to various strata. This will include review of distribution request forms and qualifying events in accordance with internal procedure, participant elections and plan document.
 - d. Admin Fund
 - i. Payroll
 - ii. Non-Payroll: to include capitalized cost, travel reimbursement, and credit card transactions as well as search for unrecorded liabilities from subsequent ledgers
 - iii. Recordkeeping income
 - e. GASB update
 - i. GASB 87 (leases) – implementation for year ended 12/31/2022

February 22, 2023

Audit Committee
Ohio Public Employees Deferred Compensation Program
257 East Town St., Suite 400
Columbus, OH 43215

The Objective and Scope of the Audit of the Financial Statements

You have requested that Rea & Associates, Inc. (“Rea”, “we”, “us”, or “our”), audit Ohio Public Employees Deferred Compensation Program’s (the Program) financial statements as of and for the year ending December 31, 2022, which collectively comprise the basic financial statements. We are pleased to confirm our acceptance and our understanding of this audit engagement by means of this letter (“Arrangement Letter”).

The objectives of our audit 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 auditing standards generally accepted in the United States of America (GAAS) and *Government Auditing Standards* issued by the Comptroller General of the United States (GAS) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users made on the basis of these financial statements. 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.

The Responsibilities of the Auditor

We will conduct our audit in accordance with GAAS and GAS. Those standards require that we comply with applicable ethical requirements. As part of an audit in accordance with GAAS and GAS, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.
- 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. However, we will communicate to you in writing concerning any significant deficiencies or material weaknesses in internal control relevant to the audit of the financial statements that we have identified during the audit.
- 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, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Conclude, based on the audit evidence obtained, 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 a reasonable period of time.

Because of the inherent limitations of an audit, together with the inherent limitations of internal control, an unavoidable risk that some material misstatements may not be detected exists, even though the audit is properly planned and performed in accordance with GAAS and GAS

We will communicate to those charged with governance (a) any fraud involving senior management and fraud (whether caused by senior management or other employees) that causes a material misstatement of the financial statements that becomes known to us during the audit, and (b) any instances of noncompliance with laws and regulations that we become aware of during the audit (unless they are clearly inconsequential).

Our report(s) on internal control will include any significant deficiencies and material weaknesses in controls of which we become aware as a result of obtaining an understanding of internal control and performing tests of internal control consistent with requirements of the standards and regulations identified above. Our report(s) on compliance matters will address material errors, fraud, violations of compliance obligations, and other responsibilities imposed by state and federal statutes and regulations or assumed by contracts; and any state or federal grant, entitlement or loan program questioned costs of which we become aware, consistent with requirements of the standards and regulations identified above.

We will maintain our independence in accordance with the standards of the American Institute of Certified Public Accountants and GAS.

The Responsibilities of Management and Identification of the Applicable Financial Reporting Framework

Management is responsible for:

1. Identifying and ensuring that the Program complies with the laws and regulations applicable to its activities, and for informing us about all known violations of such laws or regulations, other than those that are clearly inconsequential;
2. The design and implementation of programs and controls to prevent and detect fraud, and for informing us about all known or suspected fraud affecting the Program involving management, employees who have significant roles in internal control, and others where the fraud could have a material effect on the financial statements; and
3. Informing us of its knowledge of any allegations of fraud or suspected fraud affecting the Program received in communications from employees, former employees, analysts, regulators, short sellers, vendors, customers or others.

Management is responsible for the preparation of the required supplementary information (RSI) which accounting principles generally accepted in the United States of America [(U.S. GAAP)] require to be presented to supplement the basic financial statements. RSI includes Management's Discussion and Analysis, and pension and other post-employment benefit schedules

As part of our engagement, we will apply certain limited procedures to the Program's RSI in accordance with auditing standards generally accepted in the United States of America. These limited procedures will consist of inquiries of management regarding 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 will 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.

Management is also responsible for the preparation of the supplementary information in accordance with (U.S. GAAP)

Management agrees to include the auditor's report on the supplementary information in any document that contains the supplementary information and indicates that the auditor has reported on such supplementary information. Management also agrees to present the supplementary information with the audited financial statements or, if the

supplementary information will not be presented with the audited financial statements, to make the audited financial statements readily available to the intended users of the supplementary information no later than the date of issuance of the supplementary information and the auditor's report thereon.

You have informed us that you intend to prepare an annual comprehensive financial report (ACFR) and submit it for evaluation by the Government Finance Officers Association's Certificate of Achievement for Excellence in Financial Reporting. Our association with the ACFR is to consist of subjecting the supplementary information presented, which includes combining and individual non-major fund financial statements and schedules, 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. The introductory and statistical sections will not be subjected to the auditing procedures applied in the audit of the basic financial statements.

The Audit Committee is responsible for informing us of its views about the risks of fraud within the Program, and its knowledge of any fraud or suspected fraud affecting the Program.

Our audit will be conducted on the basis that management and, when appropriate, those charged with governance acknowledges and understands that they have responsibility:

1. For the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America.
2. To evaluate subsequent events through the date the financial statements are issued or available to be issued, and to disclose the date through which subsequent events were evaluated in the financial statements. Management also agrees that it will not conclude on subsequent events earlier than the date of the management representation letter referred to below;
3. 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;
4. For establishing and maintaining effective internal control over financial reporting, and for informing us of all significant deficiencies and material weaknesses in the design or operation of such controls of which it has knowledge;
5. For report distribution; and
6. To provide us with:
 - a. Access to all information of which management is aware that is relevant to the preparation and fair presentation of the financial statements including information relevant to disclosures;
 - b. Draft financial statements, including information relevant to their preparation and fair presentation, when needed, to allow for the completion of the audit in accordance with the proposed timeline;
 - c. Additional information that we may request from management for the purpose of the audit; and
 - d. Unrestricted access to persons within the Program from whom we determine it necessary to obtain audit evidence.

In our connection with our audit of the financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the 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. As part of our audit process, we will request from management and, when appropriate, those charged with governance written confirmation concerning representations made to us in connection with the audit, including among other items:

1. That management has fulfilled its responsibilities as set out in the terms of this Arrangement Letter; and
2. That it believes the effects of any uncorrected misstatements aggregated by us during the current engagement and pertaining to the latest period presented are immaterial, both individually and in the aggregate, to the financial statements taken as a whole.

Reporting

We will issue a written report upon completion of our audit of the Program's financial statements. Our report will be addressed to the Audit Committee of the Program. Circumstances may arise in which our report may differ from its expected form and content based on the results of our audit. Depending on the nature of these circumstances, it may be necessary for us to modify our opinion, or add an emphasis-of-matter paragraph or other-matter paragraph to our auditor's report.

If circumstances arise relating to the condition of the Program's records, the availability of appropriate audit evidence or indications of a significant risk of material misstatement of the financial statements because of error, fraudulent financial reporting or misappropriation of assets which, in our professional judgment, prevent us from completing the audit or forming an opinion, we retain the unilateral right to take any course of action permitted by professional standards, including, but not limited to, declining to express an opinion or issue a report, or withdrawing from the engagement.

In addition to our report on the Program's financial statements, we will also issue the following reports:

1. Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with GAS;
2. An accompanying schedule of findings (if applicable).

The Program will issue a Popular Annual Financial Report for the year ended December 31, 2022. These documents will be provided to Rea prior to the issuance of the documents, subsequent to the issuance of the audit.

Records and Assistance

During the course of our engagement, we may accumulate records containing data that should be reflected in the Program's books and records. The Program will determine that all such data, if necessary, will be so reflected. Accordingly, the Program will not expect us to maintain copies of such records in our possession.

The assistance to be supplied by Program personnel, including the preparation of schedules and analyses of accounts, has been discussed and coordinated with Paul Miller, Director of Finance. The timely and accurate completion of this work is an essential condition to our completion of the audit and issuance of our audit report.

Nonaudit Services

In connection with our audit, you have requested us to perform certain nonaudit services:

- 1) GASB Consulting (GASBs 68/75/87)

GAS independence standards require that the auditor maintain independence so that opinions, findings, conclusions, judgments and recommendations will be impartial and viewed as impartial by reasonable and informed third parties. Before we agree to provide a non-audit service to the Program, we determine whether providing such a service would

create a significant threat to our independence for GAS audit purposes, either by itself or in aggregate with other non-audit services provided. A critical component of our determination is consideration of management's ability to effectively oversee the non-audit services to be performed. The Program has agreed that Paul Miller, Director of Finance possesses suitable skill, knowledge or experience and that the individual understands the GASB 68/75 consulting services to be performed sufficiently to oversee them. Accordingly, the management of the Program agrees to the following:

1. The Program has designated Paul Miller, Director of Finance, as a senior member of management who possesses suitable skill, knowledge and experience to oversee the services;
2. Paul Miller, Director of Finance, will assume all management responsibilities for subject matter and scope of the GASB consulting services;
3. The Program will evaluate the adequacy and results of the services performed; and
4. The Program accepts responsibility for the results and ultimate use of the services.

GAS further requires that we establish an understanding with the Program's management and those charged with governance of the objectives of the non-audit services, the services to be performed, the Program's acceptance of its responsibilities, the auditor's responsibilities and any limitations of the non-audit services. We believe this Arrangement Letter documents that understanding.

Other Relevant Information

In accordance with GAS, a copy of our most recent peer review report has been provided to you for your information.

Fees and Costs

The contracted cost for the 2022 audit will be a fixed, all-inclusive fee as stated in the Rea & Associates, Inc.'s response to the Ohio Auditor of State Request for Proposal (RFP). Our fee and completion of our work is based upon the following criteria:

1. Anticipated cooperation from Program personnel
2. Timely responses to our inquiries
3. Timely completion and delivery of client assistance requests
4. Timely communication of all significant accounting and financial reporting matters
5. The assumption that unexpected circumstances will not be encountered during the engagement

Use of Subcontractors and Third-Party Products

From time to time and depending upon the circumstances, we may, in our sole discretion, use qualified third-party service providers, located within or outside the United States, to assist us in providing professional services to you. In such circumstances, it may be necessary for us to disclose Personal Information or Confidential Information (as such terms are defined below) to them. Those third-party service providers we use to assist us in providing services to you are referred to herein as "Subcontractors". You hereby consent to us sharing your information, including Confidential Information and Personal Information, with these Subcontractors, within or outside of the United States; provided that such recipients are bound by written obligations of confidentiality that are as protective of your Confidential Information or Personal Information as the confidentiality terms set forth herein. You acknowledge and agree that our use of Subcontractors may involve the processing, input, disclosure, movement, transfer, and storage of your information and data outside of our technology infrastructure.

We also may provide services to you using certain third-party hardware, software, software services, managed services (including, but not limited to, web hosting, data security, data back-up, email security, or similar services subject to direct end-user or subscription agreements), applications, and equipment (collectively, “Third-Party Products”). You acknowledge that your or our use of a Third-Party Product may involve the processing, input, disclosure, movement, transfer, and storage of information provided by you to us, including Personal Information and Confidential Information, within the Third-Party Product’s infrastructure and not ours. You further acknowledge that the terms of use and service, including, but not limited to, applicable laws, set forth in the end-user license, end-user subscription agreement or other end-user agreement for such Third-Party Product, (collectively “EULAs”) will govern all obligations of such licensor relating to data privacy, storage, recovery, security, and processing within such Third-Party Product’s infrastructure, as well as, the service levels associated with such Third-Party Product. You hereby consent to the disclosure of your information, including your Confidential Information and Personal Information, to the licensors of such Third-Party Products for the purpose described herein.

You acknowledge that your or our use of Third-Party Products may be subject to limitations, delays, interruptions, errors, and other problems which are beyond our control, including, without limitation, internet outage or lack of availability related to updates, upgrades, patches, fixes, maintenance, or other issues. We will not be liable for any delays, delivery failures, or other losses or damages resulting from such issues. Nor will we be held responsible or liable for any loss, or unauthorized use or disclosure, of any information or data provided by you, including, without limitation, Personal Information provided by you, resulting from your or our use of a Third-Party Product.

Use and Ownership; Access to Audit Documentation

The Audit Documentation for this engagement is the property of Rea. For the purposes of this Arrangement Letter, the term “Audit Documentation” shall mean the confidential and proprietary records of Rea’s audit procedures performed, relevant audit evidence obtained, other audit-related workpapers, and conclusions reached. Audit Documentation shall not include custom-developed documents, data, reports, analyses, recommendations, and deliverables authored or prepared by Rea for the Program under this Arrangement Letter, or any documents belonging to the Program or furnished to Rea by the Program.

Review of Audit Documentation by a successor auditor or as part of due diligence is subject to applicable Rea policies, and will be agreed to, accounted for and billed separately. Any such access to our Audit Documentation is subject to a successor auditor signing an Access & Release Letter substantially in Rea’s form. Rea reserves the right to decline a successor auditor’s request to review our workpapers.

In the event we are required by government regulation, subpoena or other legal process to produce our documents or our personnel as witnesses with respect to our engagement for the Program, the Program will, so long as we are not a party to the proceeding in which the information is sought, reimburse us for our professional time and expenses, as well as the fees and expenses of our counsel, incurred in responding to such requests.

You acknowledge and grant your assent that representatives of the cognizant or oversight agency or their designee, other government audit staffs, and the U.S. Government Accountability Office shall have access to the Audit Documentation upon their request and that we shall maintain the Audit Documentation for a period of at least three years after the date of the report, or for a longer period if we are requested to do so by the cognizant or oversight agency. Access to the requested Audit Documentation will be provided under the supervision of Rea audit personnel and at a location designated by our firm.

Indemnification, Limitation of Liability and Claim Resolution

Because Rea will rely on the Program and its management and those charged with governance to discharge the foregoing responsibilities, the Program agrees to indemnify, hold harmless and release Rea and its partners, principals, officers, directors, employees, affiliates, subsidiaries, contractors, Subcontractors, agents, representatives, successors, or assigns from all claims, liabilities, losses and costs arising in circumstances where there has been a knowing misrepresentation by a member of the Program’s management.

The Program and Rea agree that no claim arising out, from, or relating to the services rendered pursuant to this arrangement letter shall be filed more than two years after the date of the audit report issued by Rea or the date of this arrangement letter if no report has been issued. In no event shall Rea or the Program, or any of their respective partners, principals, officers, directors, employees, affiliates, subsidiaries, contractors, subcontractors, agents, representatives, successors, or assigns (collectively, the “covered parties” and each individually, a “covered party”), be liable for the interruption or loss of business, any lost profits, savings, revenue, goodwill, software, hardware, or data, or the loss of use thereof (regardless of whether such losses are deemed direct damages), or incidental, indirect, punitive, consequential, special, exemplary, or similar such damages, even if advised of the possibility of such damages. To the fullest extent permitted by law, the total aggregate liability of the covered parties arising out of, from, or relating to this arrangement letter, or the report issued or services provided hereunder, regardless of the circumstances or nature or type of claim, including, without limitation, claims arising from a covered party’s negligence or breach of contract or warranty, or relating to or arising from a government, regulatory or enforcement action, investigation, proceeding, or fine, will not exceed the total amount of the fees paid by the Program to Rea under this arrangement letter. Notwithstanding the foregoing, nothing in this limitation of liability provision shall, or shall be interpreted or construed to, relieve the Program of its payment obligations to Rea under this arrangement letter.

Confidentiality

Rea and the Program may, from time to time, disclose Confidential Information (as defined below) to one another. Accordingly, Rea and the Program agree as the recipient of such Confidential Information (the “Receiving Party”) to keep strictly confidential all Confidential Information provided to it by the disclosing party (the “Disclosing Party”) and use, modify, store, and copy such Confidential Information only as necessary to perform its obligations and exercise its rights under this Arrangement Letter and for no other purpose or use. Except as otherwise set forth herein, the Receiving Party may only disclose the Confidential Information of the Disclosing Party to its personnel, agents, and representatives who are subject to obligations of confidentiality at least as restrictive as those set forth herein and only for the purpose of exercising its rights and fulfilling its obligations hereunder. To avoid any doubt, Rea is permitted to disclose the Program’s Confidential Information to Rea’s personnel, agents, and representatives for the purpose of maintaining compliance with applicable laws and professional, regulatory, and/or ethical standards.

As used herein, “Confidential Information” means, information in any form, oral, graphic, written, electronic, machine-readable or hard copy consisting of: (i) any nonpublic information provided by the Disclosing Party, including, but not limited to, all of its inventions, designs, data, source and object code, programs, program interfaces, know-how, trade secrets, techniques, ideas, discoveries, marketing and business plans, pricing, profit margins and/or similar information; (ii) any information that the Disclosing Party identifies as confidential; or (iii) any information that, by its very nature, a person in the same or similar circumstances would understand should be treated as confidential, including, but not limited to, this Arrangement Letter.

As used herein, the term “Confidential Information” will not include information that: (i) is publicly available at the time of disclosure by the Disclosing Party; (ii) becomes publicly available by publication or otherwise after disclosure by the Disclosing Party, other than by breach of the confidentiality obligations set forth herein by the Receiving Party; (iii) was lawfully in the Receiving Party’s possession, without restriction as to confidentiality or use, at the time of disclosure by the Disclosing Party; (iv) is provided to the Receiving Party without restriction as to confidentiality or use by a third party without violation of any obligation to the Disclosing Party; or (v) is independently developed by employees or agents of the Receiving Party who did not access or use the Confidential Information.

The Receiving Party will treat the Disclosing Party’s Confidential Information with the same degree of care as the Receiving Party treats its own confidential and proprietary information, but in no event will such standard of care be less than a reasonable standard of care. The Receiving Party will promptly notify the Disclosing Party if it becomes aware that any of the Confidential Information of the Disclosing Party has been used or disclosed in violation of this Arrangement Letter.

Notwithstanding the foregoing, in the event that the Receiving Party becomes legally compelled to disclose any of the Confidential Information of the Disclosing Party, or as may be required by applicable regulations or professional

standards, the Receiving Party will use commercially reasonable efforts to provide the Disclosing Party with notice prior to disclosure, to the extent permitted by law.

Preexisting Nondisclosure Agreements

In the event that the parties have executed a separate nondisclosure agreement and such agreement does not automatically terminate or expire upon execution of this Arrangement Letter, such agreement shall be terminated as of the effective date of this Arrangement Letter.

Personal Information

As used herein, the term “Personal Information” means any personal information that directly or indirectly identifies a natural person as may be defined by applicable privacy, data protection or cybersecurity laws, and includes, but is not limited to, nonpublic, personally identifiable information such as Social Security numbers, Social Insurance numbers, driver’s license numbers or state- or province-issued identification card numbers, credit or debit card numbers with or without any required security code, number or passwords, health information, and other personal information as defined by applicable laws, whether of the Program or the Program’s customers or other third parties.

Each party agrees that it will not transmit to the other, in any manner, (i) Personal Information that is not needed to render the services hereunder, and (ii) Personal Information that has not been encrypted. In the event you transmit to us Personal Information in an unencrypted format or via unencrypted means, you agree that we have no obligation to notify you of the foregoing.

You represent and warrant that you have provided all notices and obtained all consents required under applicable data protection laws prior to your collection, use and disclosure to us or our Subcontractors of such Personal Information and shall take reasonable steps to ensure that such Personal Information does not include irrelevant or unnecessary information about individuals.

We will use all such Program-provided Personal Information, if at all, only for the purposes described in this Arrangement Letter. The parties agree that as part of the performance of the services as described in this Arrangement Letter, and as part of the direct business relationship between the parties, we may, at our election, use the Personal Information to improve the services and for other similar internal and business purposes. We agree to maintain appropriate security measures to protect such Personal Information in accordance with applicable laws.

If we become aware of an unauthorized acquisition or use of Program-provided Personal Information, we will promptly inform you of such unauthorized acquisition or use as required by applicable laws and, upon your written request, reasonably cooperate with you at your sole cost in support of any breach notification requirements as imposed upon you by applicable laws.

Retention of Records

We will return to you all original records you provide to us in connection with this engagement. Further, in addition to providing you with those deliverables set forth in this Arrangement Letter, we will provide to you a copy of any records we prepare or accumulate in connection with such deliverables which are not otherwise reflected in your books and records without which your books and records would be incomplete. You have the sole responsibility for retaining and maintaining in your possession or custody all of your financial and nonfinancial records related to this engagement. We will not host, and will not accept responsibility to host, any of your records. We, however, may maintain a copy of any records of yours necessary for us to comply with applicable law and/or professional standards. Any such records retained by us will be subject to the confidentiality obligations set forth herein and destroyed in accordance with our record retention policies.

Termination

Your failure to make full payment of any and all undisputed amounts invoiced in a timely manner constitutes a material breach for which we may refuse to provide deliverables and/or, upon written notice, suspend or terminate our services under this Arrangement Letter. We will not be liable to you for any resulting loss, damage or expense connected with

the suspension or termination of our services due to your failure to make full payment of undisputed amounts invoiced in a timely manner.

In the event you terminate this engagement, you will pay us for all services rendered (including deliverables and products delivered), expenses incurred, and noncancelable commitments made by us on your behalf through the effective date of termination.

We will not be responsible for any delay or failure in our performance resulting from acts beyond our reasonable control or unforeseen or unexpected circumstances, such as, but not limited to, acts of God, government or war, riots or strikes, disasters, fires, floods, epidemics, pandemics or outbreaks of communicable disease, cyberattacks, and internet or other system or network outages. At your option, you may terminate this Arrangement Letter where our services are delayed more than 120 days; however, you are not excused from paying us for all amounts owed for services rendered and deliverables provided prior to the termination of this Arrangement Letter.

When an engagement has been suspended at the request of management or those charged with governance and work on that engagement has not recommenced within 120 days of the request to suspend our work, we may, at our sole discretion, terminate this Arrangement Letter without further obligation to you. Resumption of our work following termination may be subject to our client acceptance procedures and, if resumed, will require additional procedures not contemplated in this Arrangement Letter. Accordingly, the scope, timing and fee arrangement discussed in this Arrangement Letter will no longer apply. In order for us to recommence work, the execution of a new Arrangement Letter will be required.

We may terminate this Arrangement Letter upon written notice if: (i) we determine that our continued performance would result in a violation of law, regulatory requirements, applicable professional or ethical standards, or our client acceptance or retention standards.

The parties agree that those provisions of this Arrangement Letter which, by their context, are intended to survive, including, but not limited to, payment, limitations on liability, claim resolution, use and ownership, and confidentiality obligations, shall survive the termination of this Arrangement Letter.

Miscellaneous

We may mention your name and provide a general description of the engagement in our client lists and marketing materials. We also may utilize Confidential Information you have provided to us in connection with this engagement for purposes of creating benchmarking data to be used by our professionals and other clients. This benchmarking data is aggregated with data from a minimum of five other entities so that users of the data are unable to associate the data with any single entity in the database.

The Program agrees that it will not associate us with any public or private securities offering without first obtaining our consent. Therefore, the Program agrees to contact us before it includes our reports, or otherwise makes reference to us, in any public or private securities offering. Our association with an official statement is a matter for which separate arrangements may be necessary. The Program agrees to provide us with printer's proofs or masters of such offering documents for our review and approval before printing, and with a copy of the final reproduced material for our approval before it is distributed.

Our professional standards require that we perform certain additional procedures, on current and previous years' engagements, whenever a partner or professional employee leaves the firm and is subsequently employed by or associated with a client in a key position. Accordingly, you agree to compensate us for any additional costs incurred as a result of you employment of one of our partners, principals or employees.

Governing Law

This Arrangement Letter, including, without limitation, its validity, interpretation, construction, and enforceability, and any dispute, litigation, suit, action, claim, or other legal proceeding arising out of, from, or relating in any way to this Arrangement Letter, any provisions herein, a report issued or the services provided hereunder, will be governed

and construed in accordance with the laws of the State of Ohio, without regard to its conflict of law principles, and applicable U.S. federal law.

Entire Agreement

This Arrangement Letter constitutes the complete and exclusive statement of agreement between Rea and the Program, and supersedes all prior agreements, understandings, and proposals, whether oral or written, relating to the subject matter of this Arrangement Letter.

If any term or provision of this Arrangement Letter is determined to be invalid or unenforceable, such term or provision will be deemed stricken, and all other terms and provisions will remain in full force and effect.

This Arrangement Letter may be amended or modified only by a written instrument executed by both parties.

Electronic Signatures and Counterparts

Each party hereto agrees that any electronic signature of a party to this Arrangement Letter or any electronic signature to a document contemplated hereby (including any representation letter) is intended to authenticate such writing and shall be as valid, and have the same force and effect, as a manual signature. Any such electronically signed document shall be deemed (a) to be "written" or "in writing," (b) to have been signed and (c) to constitute a record established and maintained in the ordinary course of business and an original written record when printed from electronic files. Each party hereto also agrees that electronic delivery of a signature to any such document (via email or otherwise) shall be as effective as manual delivery of a manual signature. For purposes hereof, "electronic signature" includes, but is not limited to, (a) a scanned copy (as a "pdf" (portable document format) or other replicating image) of a manual ink signature, (b) an electronic copy of a traditional signature affixed to a document, (c) a signature incorporated into a document utilizing touchscreen capabilities or (d) a digital signature. This Arrangement Letter may be executed in one or more counterparts, each of which shall be considered an original instrument, but all of which shall be considered one and the same agreement. Paper copies or "printouts," of such documents if introduced as evidence in any judicial, arbitral, mediation or administrative proceeding, will be admissible as between the parties to the same extent and under the same conditions as other original business records created and maintained in documentary form. Neither party shall contest the admissibility of true and accurate copies of electronically signed documents on the basis of the best evidence rule or as not satisfying the business records exception to the hearsay rule.

Acknowledgement and Acceptance

Each party acknowledges that it has read and agrees to all of the terms and conditions contained herein. Each party and its signatory below represents that said signatory is a duly authorized representative of such party and has the requisite power and authority to bind such party to the undertakings and obligations contained herein.

Please sign and return a copy of this Arrangement Letter to indicate your acknowledgment of, and agreement with, the arrangements for our audit of the financial statements, including our respective responsibilities.

We will be pleased to respond to any questions you have about the foregoing. We appreciate the opportunity to be of service to you.

Rea & Associates, Inc.

Dublin, Ohio

Zachary L. Morris, Principal

Confirmed on behalf of Ohio Public Employees Deferred Compensation Program:

	3-14-23
Audit Committee Chair	Date

	3-14-23
Interim Executive Director/Director of Finance	Date

February 22, 2023

Those Charged With Governance
Ohio Public Employees Deferred Compensation Program
257 East Town St., Suite 400
Columbus, OH 43215

This letter is intended to communicate certain matters related to the planned scope and timing of our audit of the Ohio Public Employees Deferred Compensation Program's (the Program) financial statements and compliance as of and for the year ending December 31, 2022.

Communication

Effective two-way communication between our firm and those charged with governance is important to understanding matters related to the audit and developing a constructive working relationship.

Your insights may assist us in understanding the Program and its environment, identifying appropriate sources of audit evidence and providing information about specific transactions or events. We will discuss with you your oversight of the effectiveness of internal control and any areas where you request additional procedures to be undertaken. We expect that you will timely communicate to us any matters you consider relevant to the audit. Such matters might include strategic decisions that may significantly affect the nature, timing and extent of audit procedures, your suspicion or detection of fraud, or any concerns you may have about the integrity or competence of senior management.

We will timely communicate to you any fraud involving senior management and other known or likely fraud, noncompliance with provisions of laws, statutes, regulations, rules, provisions of contracts or grant agreements or abuse that is likely to have a material effect on the financial statements. We will also communicate illegal acts, instances of noncompliance or fraud that come to our attention (unless they are clearly inconsequential), and disagreements with management and other serious difficulties encountered in performing the audit. We also will communicate to you and to management any significant deficiencies or material weaknesses in internal control that become known to us during the course of the audit. Additionally we will communicate significant unusual transactions, matters that are difficult or contentious for which we consulted outside the engagement team, and circumstances that affect the form and content of the auditor's report. Other matters arising from the audit that are, in our professional judgment, significant and relevant to you in your oversight of the financial reporting process will be communicated to you in writing.

Independence

Our independence policies and procedures are designed to provide reasonable assurance that our firm and its personnel comply with applicable professional independence standards. Our policies address financial interests, business and family relationships, and non-audit services that may be thought to bear on independence. For example, our partners and professional employees are restricted in their ability to own a direct financial interest or a material indirect financial interest in a client or any affiliate of a client. Also, if an immediate family member or close relative of a partner or professional employee is employed by a client in a key position, the incident must be reported and resolved in accordance with firm policy. In addition, our policies prohibit us from providing certain non-attest services and require audit clients to accept certain responsibilities in connection with the provision of permitted non-attest services.

The Audit Planning Process

Our audit approach places a strong emphasis on obtaining an understanding of how your entity functions. This enables us to identify key audit components and tailor our procedures to the unique aspects of your operations. The development of a specific audit plan will begin by meeting with you and with management to obtain an understanding of business objectives, strategies, risks and performance.

As part of obtaining an understanding of your Program and its environment, we will obtain an understanding of your system of internal control. We will use this understanding to identify risks of material misstatement and noncompliance, which will provide us with a basis for designing and implementing responses to the assessed risks of material misstatement and noncompliance. We will also obtain an understanding of the users of the financial statements in order to establish an overall materiality level for audit purposes. We will conduct formal discussions among engagement team members to consider how and where your financial statements might be susceptible to material misstatement due to fraud or error or to instances of noncompliance.

The Concept of Materiality in Planning and Executing the Audit

We apply the concept of materiality in both planning and performing the audit, evaluating the effect of identified misstatements or noncompliance on the audit and the effect of uncorrected misstatements, if any, on the financial statements, forming the opinion in our report on the financial statements, and determining or reporting in accordance with *Government Auditing Standards* and other compliance reporting requirements. Our determination of materiality is a matter of professional judgment and is affected by our perception of the financial and compliance informational needs of users of the financial statements. We establish performance materiality at an amount less than materiality for the financial statements as a whole to allow for the risk of misstatements that may not be detected by the audit. We use performance materiality for purposes of assessing the risks of material misstatement and determining the nature, timing and extent of further audit procedures. Our assessment of materiality throughout the audit will be based on both quantitative and qualitative considerations. Because of the interaction of quantitative and qualitative considerations, misstatements of a relatively small amount could have a material effect on the current financial statements as well as financial statements of future periods. We will accumulate misstatements identified during the audit, other than those that are clearly trivial. At the end of the audit, we will inform you of all individual uncorrected misstatements aggregated by us in connection with our evaluation of our audit test results.

Significant Risks of Material Misstatement

Our audit of the financial statements includes the performance of risk assessment procedures in order to identify risks of material misstatement, whether due to fraud or error. As part of these risk assessment procedures, we determine whether any risks identified are a significant risk. A significant risk is an identified risk of material misstatement for which the assessment of inherent risk is close to the upper end of the spectrum of inherent risk due to the degree to which inherent risk factors affect the combination of the likelihood of a misstatement occurring and the magnitude of the potential misstatement should that misstatement occur, or that is to be treated as a significant risk in accordance with auditing standards generally accepted in the United States of America. As part of our initial risk assessment procedures, we identified the following risks as significant risks. Additional significant risks may be identified as we perform additional audit procedures.

Risk Name	Risk Description
Management override of controls	Management could manipulate, override, or improperly recognize accounts, transactions, or controls in order to commit fraudulent financial reporting, misappropriate assets or manipulate earnings.

Fraudulent revenue recognition	Management could improperly recognize revenue to present a more favorable financial position.
Implementation of GASB 87	Management could improperly calculate the lease(s) or not inventory all lease activity subject to the standard.

Our Approach to Internal Control and Compliance Relevant to the Audit

Our audit of the financial statements, including compliance, will include obtaining an understanding of internal control over financial reporting and compliance sufficient to plan the audit and determine the nature, timing and extent of audit procedures to be performed. An audit is not designed to provide assurance on internal control over financial reporting and compliance or to identify significant deficiencies or material weaknesses. Our review and understanding of the entity's internal control over financial reporting and compliance is not undertaken for the purpose of expressing an opinion on the effectiveness of internal control.

We will issue a report on internal control related to the financial statements. This report describes the scope of testing of internal control and the results of our tests of internal controls. Our report on internal control will include any significant deficiencies and material weaknesses in the system of which we become aware as a result of obtaining an understanding of internal control and performing tests of internal control consistent with the requirements of *Government Auditing Standards* issued by the Comptroller General of the United States.

We will issue a report on compliance with laws, regulations, and the provisions of contracts or grant agreements. We will report on any noncompliance that could have a material effect on the financial statements. Our report on compliance will address material errors, fraud, abuse, violations of compliance requirements, and other responsibilities imposed by state and federal statutes and regulations and assumed contracts; and any state or federal grant, entitlement or loan program questioned costs of which we become aware, consistent with the requirements of the standards identified above.

Timing of the Audit

1. Public office finalizes accounting records.	Complete
2. IPA and representatives of public office hold fieldwork entrance conference.	TBD
3. IPA begins fieldwork at public office.	03/06/2023
4. Public office completes draft of financial statements (To extent needed by IPA).	TBD
5. IPA completes fieldwork.	04/14/2023
6. IPA provides drafts of audit reports and recommendations to management.	05/03/2023
7. Public office submits in writing final responses to IPA draft documents.	05/05/2023
8. IPA and representatives of public office hold exit conference.	05/16/2023
9. IPA delivers final report in electronic PDF form to Auditor of State, Quality Assurance, Columbus, Ohio.	05/31/2023

Management's adherence to its closing schedule and timely completion of information used by us in performance of the audit is essential to timely completion of the audit.

Closing

We will be pleased to respond to any questions you have about the foregoing. We appreciate the opportunity to continue to be of service to Ohio Public Employees Deferred Compensation Program.

This communication 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.

Rea & Associates, Inc.

Dublin, Ohio

Report on the Firm's System of Quality Control

September 21, 2022

To the shareholders of
Rea & Associates, Inc.
and the National Peer Review Committee

We have reviewed the system of quality control for the accounting and auditing practice of Rea & Associates, Inc. in effect for the year ended June 30, 2022. Our peer review was conducted in accordance with the Standards for Performing and Reporting on Peer Reviews established by the Peer Review Board of the American Institute of Certified Public Accountants (Standards).

A summary of the nature, objectives, scope, limitations of, and the procedures performed in a System Review as described in the Standards may be found at www.aicpa.org/prsummary. The summary also includes an explanation of how engagements identified as not performed or reported in conformity with applicable professional standards, if any, are evaluated by a peer reviewer to determine a peer review rating.

Firm's Responsibility

The firm is responsible for designing a system of quality control and complying with it to provide the firm with reasonable assurance of performing and reporting in conformity with applicable professional standards in all material respects. The firm is also responsible for evaluating actions to promptly remediate engagements deemed as not performed or reported in conformity with professional standards, when appropriate, and for remediating weaknesses in its system of quality control, if any.

Peer Reviewer's Responsibility

Our responsibility is to express an opinion on the design of the system of quality control and the firm's compliance therewith based on our review.

Required Selections and Considerations

Engagements selected for review included engagements performed under *Government Auditing Standards*, including compliance audits under the Single Audit Act; audits of employee benefit plans; and examinations of service organizations (SOC 1 and SOC 2 engagements).

As a part of our peer review, we considered reviews by regulatory entities as communicated by the firm, if applicable, in determining the nature and extent of our procedures.

Opinion

In our opinion, the system of quality control for the accounting and auditing practice of Rea & Associates, Inc. in effect for the year ended June 30, 2022, has been suitably designed and complied with to provide the firm with reasonable assurance of performing and reporting in conformity with applicable professional standards in all material respects. Firms can receive a rating of pass, pass with deficiency(ies) or fail. Rea & Associates, Inc. has received a peer review rating of *pass*.

Bonadio & Co., LLP

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ACTION ITEMS



OHIO DEFERRED COMPENSATION

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM

MEMORANDUM

To: Board of Trustees

From: Paul D. Miller, Interim Executive Director

Date: March 14, 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. Matthias Bauer and Stephen Budinsky from RVK will lead these discussions this quarter.

The RVK *Quarterly Investment Performance Analysis* report includes performance through December 31, 2022. In addition to this, RVK is providing their periodic review of our investment options and investment lineup, including participant utilization levels (*Investment Menu Design Review*). The RVK information is provided in two separately bound reports.

Fourth Quarter Investment Performance and Activity

The large-cap US equity market, as measured by the Standard and Poor's 500 Index, gained 7.6 percent during the fourth quarter, but it was down 18.1 percent during 2022. The MSCI EAFE Index, which measures performance across foreign developed markets, rose 17.3 percent during the fourth quarter, but it was down 14.5 percent for the year. The Bloomberg US Aggregate Bond Index, a broad measure of the fixed income markets, was up 1.9 percent during the fourth quarter, but it was down 13.0 percent for the year.

Our Stable Value Option (SVO) decreased by \$37 million (0.7 percent) during the fourth quarter. The decrease was primarily the results of default Required Minimum Distributions paid in December (total Q4 withdrawals of \$105 million) and \$34 million in net rollovers out, in-service transfers, and fees, partially offset by \$33 million in new contributions, \$27 million in interest earnings, and \$42 million exchanged to the SVO from other investment options.

For 2022, the SVO had positive cash flows of \$92 million, as contributions and net exchanges in exceeded net rollovers, and withdrawals. The components of annual SVO cash flows were contributions of \$133 million, net exchanges from other investments of \$356 million, withdrawals of \$299 million, net rollovers out of the plan of \$93 million, and net fees of \$5 million. The announced SVO's annualized crediting rate was 2.05 percent in the fourth quarter of 2022 and is 2.50 percent in the first quarter 2023.

Ohio DC's other investment options (excluding the SVO) increased in value by \$651 million (up 6.0 percent) during the fourth quarter. The overall increase in these options was attributable to positive investment performance of \$741 million, new contributions of \$141 million, \$42 million exchanged to the SVO, and net distributions of \$189 million (benefit withdrawals, rollovers, in-service transfers, and fees).

For 2022, the other investment options had negative cash flows of \$385 million as withdrawals, net exchanges out, and rollovers out exceeded contributions and rollovers in. The primary drivers of cash flows from these options were \$356 million exchanged into the SVO, \$328 million in withdrawals, \$287 million in net rollovers out, \$9 million in fees and \$595 million in contributions. Finally, during 2022, the total value of the other investment options decreased by \$2.6 billion compared to a total increase of \$2.2 billion in 2021. The primary driver of the decrease in value in 2022 is the negative performance of \$3.2 billion.

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 Plan.

At the end of the third quarter 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 were at "yellow" or "closely monitor" status, which indicates that we should continue to monitor them, but no action was needed.

At the end of the fourth quarter of 2022, all our investment options are 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 indicates that we should continue to monitor them, but no action is needed at this time.

Investment Menu Design Review

Periodically (typically at the March Board meeting), our investment consultants take a broader view of our investment lineup, they check to make sure we are meeting our policies and responsibilities, and offer ideas for consideration that might improve our investment lineup. They have identified the attributes of a successful investment menu design to be one that is simplified, diversified, and cost effective.

RVK identified that “best practices” are being followed by Ohio DC in these areas:

- The investment menu complies with our Investment Policy Statement and Plan Document. Minor edits are suggested.
- A tiered investment menu offers options for:
 - “Do It For Me Investors”
 - Target date funds
 - “Do It With Me Investors”
 - Passive Investment options
 - Active Investment options
- A streamlined investment menu of options is available.
- Offerings cover the asset class spectrum.
- White-label funds are being utilized and are preferred in the future.
- Fees are controlled through cost-efficient investment alternatives.

RVK has identified potential investment menu opportunities for ongoing discussions including:

- Re-evaluate the need to offer three US Large Cap Growth funds: Fidelity Growth Company, Fidelity Contrafund, and US Large Growth Company Stock (managed by T. Rowe Price).
- Evaluate the benefits of utilizing multiple managers vs. our current practice of using a single manager strategy within our US Bond fund.

As part of the menu design review, RVK reviewed our Investment Policy Statement (IPS) and our Stable Value Option Investment Policy Statement. While the investment menu complies with our IPS, RVK has recommended some edits to our IPS, which include:

- Update the Investment Alternative table with the updated naming conventions, new passive funds, and indices.
- Change the policy terminology to require periodic reviews of policies and fees, instead of annual reviews, to allow some flexibility around Board meeting dates.
- Minor formatting items.

Fund Transition Update

As previously planned, 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. The table below summarizes these changes and was presented to participants in the third quarter newsletter, posted online at the Ohio DC website, and was in a letter mailed to all participants invested in these Vanguard funds.

Current Investment Option	Current 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%

The second transition closed the Dodge & Cox Stock mutual fund that carried a 10 basis point recordkeeping reimbursement. This reimbursement was paid to Ohio DC for performing recordkeeping services, but Ohio DC had been rebating this reimbursement back 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 the recordkeeping reimbursement, which should make the performance and fees of this option more transparent. The table below summarizes this change and was presented to participants in the third quarter newsletter, posted online at the Ohio DC website, and was in a letter mailed to all participants exchanged into the new option.

Current Investment Option	Current 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 on December 9 were the renaming of our existing white-label funds. We removed “Ohio DC” from the fund names, so participants did not think Ohio DC was managing any portion of the portfolio. In addition, the new fund names help highlight the specific asset class and investment strategy of each option. The table below summarizes these changes, was presented to participants in the third quarter newsletter, and is posted online at the Ohio DC website.

Current Name (Manager)	New 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)

Stable Value Reallocation

At the October Board meeting, reallocation within the SVO was discussed and approved. The goals of the reallocation are to close the one passive investment strategy portfolio (State Street) and move funds from the fixed maturity mandate (GSAM) to the open maturity mandates (various managers) to enhance the overall yield of the SVO.

The first portion of the SVO reallocation was completed on January 20, 2023, because it did not require wrap contract amendments. GSAM transferred \$115 million from their fixed maturing portfolios to the following open maturity portfolios: \$49 million to Jennison, \$37 million to Earnest Partners, and \$29 million to Dodge & Cox.

The second portion of the SVO reallocations is scheduled to be completed throughout March 2023. The portfolio managed by State Street Global Advisors will be closed (approximately \$390 million) and GSAM will remove another \$118 million from their fixed maturing portfolios. The proceeds will be reinvested to the following SVO portfolios:

JP Morgan	\$ 233,000,000
Payden & Rygel	122,000,000
Earnest Partners	113,000,000
Nationwide	39,000,000

Staff and RVK are working with Bank of New York Mellon (custodian) and State Street Bank and Trust Company (Transition Manager) on the movement of these funds.

Finally, GSAM plans to transfer approximately \$146 million from the fixed maturity allocation to the SVO's liquidity component (BNY Mellon Government STIF) to maintain an appropriate cash buffer following participant outflows in recent months.

Recommendation

Staff recommends the Board:

1. Accept the RVK reports as presented.
2. Approve the proposed edits to the Investment Policy Statement.



Investment Menu Design Review

Ohio Deferred Compensation Program

March 14, 2023



Agenda

1. Introduction
2. Summary of Recommendations
3. Investment Policy Statement Review
4. Investment Menu Review
5. US Large Cap Growth Equity
6. Bond Fund Structure
7. Investment Menu Utilization Review
8. Appendix
 - a) Investment Menu Utilization Continued
 - b) Custom Naming of Investment Options
 - c) Proposed IPS Redline & Clean Edits

Background

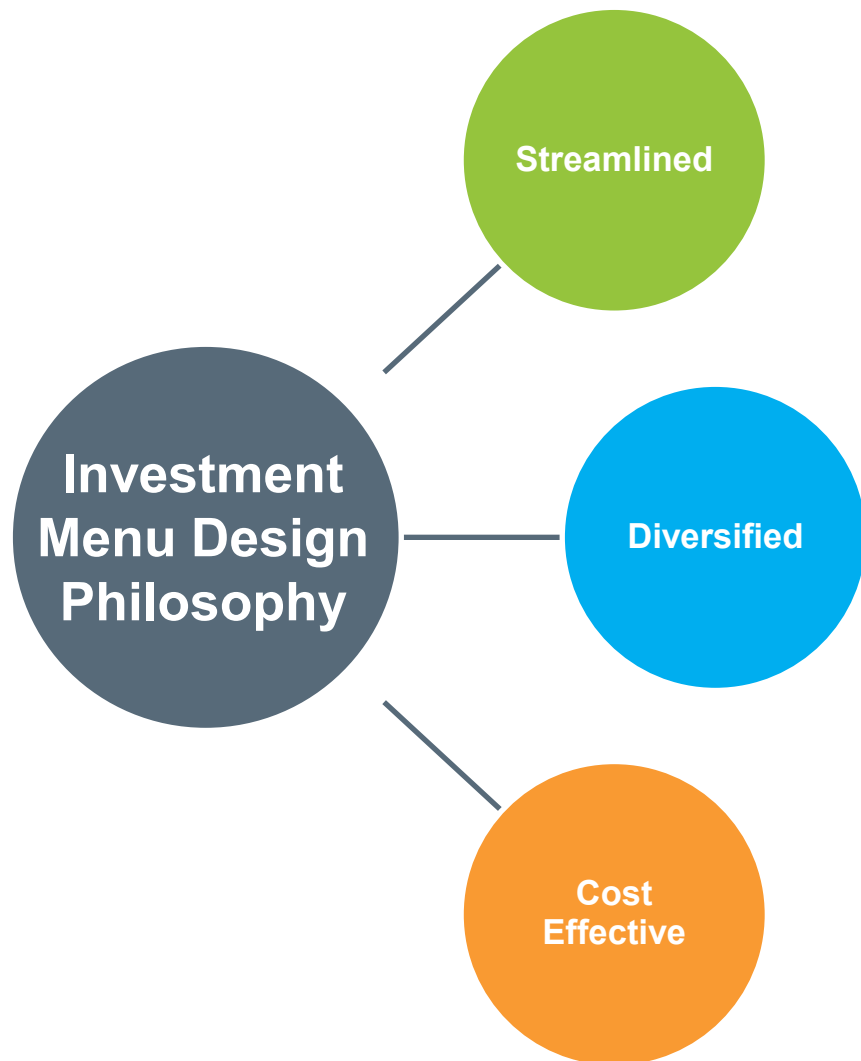
On a periodic basis, RVK recommends that plan sponsors take a deeper dive into the investment menu structure by reviewing **best practices**, **trends**, and **participant usage**.

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

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



Investment Menu Design Framework



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

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

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

¹Schlomo Benartzi and Richard H. Thaler, “Naïve Diversification Strategies in Defined Contribution Saving Plans,” The American Economic Review: Vol. 91 No. 1, March 2001.

Summary of Recommendations



Investment Menu Structure Summary

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

Investment Menu Structure Summary

Potential Areas for Further Review

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

Potential Areas for Further Review	Description
Evaluate US Equity Menu Structure	Explore the menu structure of the US equity options for further efficiencies/consolidation. Re-evaluate the decision to offer three (3) US large cap growth stock options and explore if consolidation would be beneficial to participants. RVK to conduct additional analysis and explore further with Ohio DC staff.
Evaluate Single vs. Multi-Manager Approach within Ohio DC Bond Fund	Explore if a multi-manager approach within the Ohio DC Bond Fund would provide more attractive diversification and risk-mitigation benefits to participants relative to the existing single-manager approach. RVK to conduct additional analysis and explore further with Ohio DC staff.
Continue White Labeling Existing Investment Menu Options	Continue the process of custom naming existing investment options within the Ohio DC investment menu as changes are made.

Investment Policy Statement Review



Proposed Investment Policy Statement Updates

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

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

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

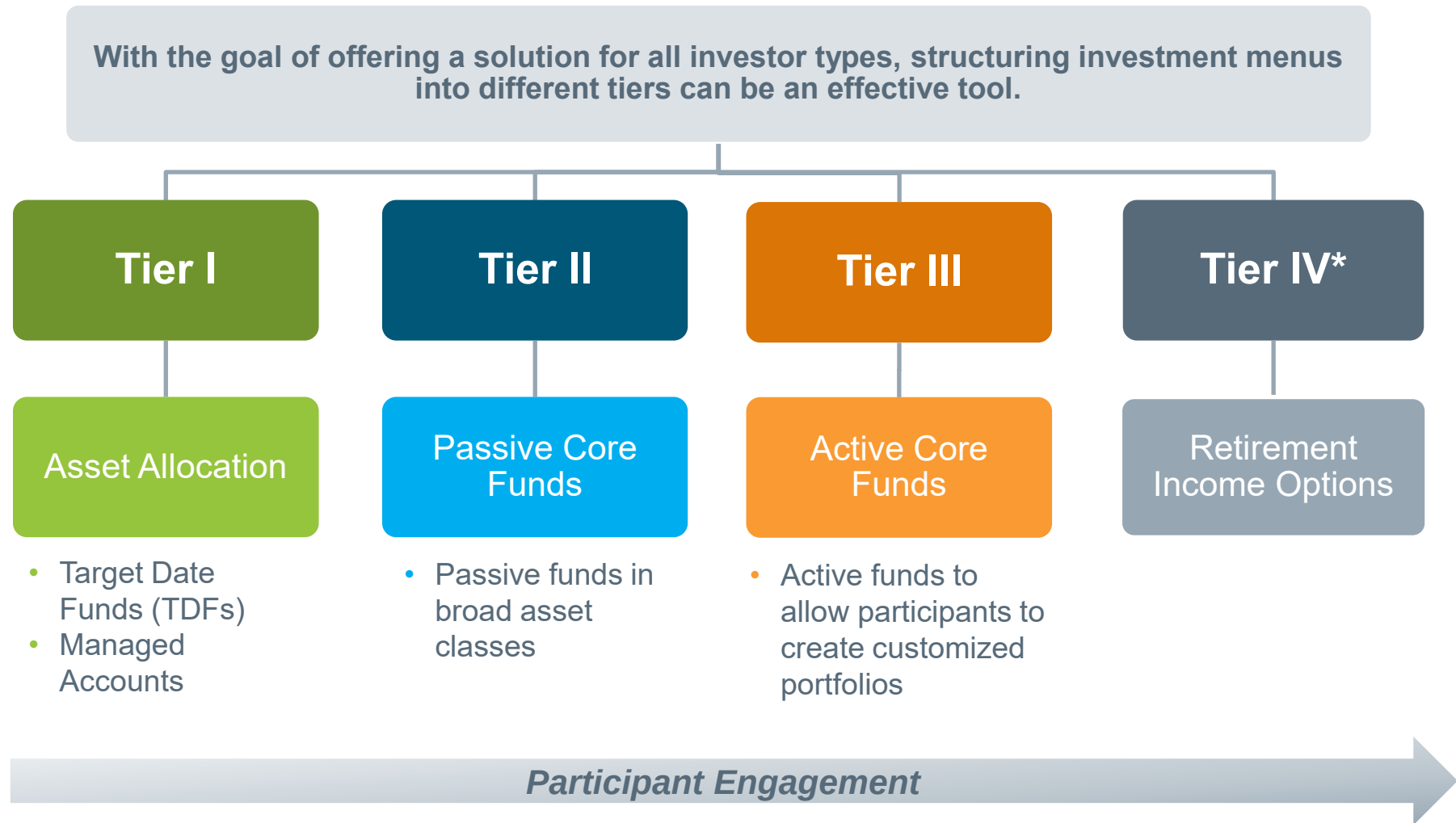
- **Section I:**
 - Update the periodicity of Policy review from annual to periodically (typically annually).
 - Remove the word “retained” as a descriptor to Consultant. (Unnecessary in context of sentence.)
- **Section III:** Update Investment Alternative table with updated naming conventions, new passive funds and indices.
- **Section VII:** Update the periodicity of Plan Fee reviews from annual to periodic (typically annual).
- Minor formatting edits

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

Investment Menu Review



Investment Menu Design Framework



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

Ohio Investment Menu

Ohio continues to offer investment options for various investor types.

A tiered Investment menu that offers options for:

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

Ohio DC Steps to Date
●
●
●
●

Ohio continues to make enhancements to the investment menu structure.

Solutions:

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

Ohio DC Steps to Date
●
●
●
●

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

Ohio Investment Menu

	Tier I Target Date Funds (TDFs) Hassle-Free TDFs	Tier II Passively Managed Options Hands-On Investing (Core Menu)	Tier III Actively Managed Options
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

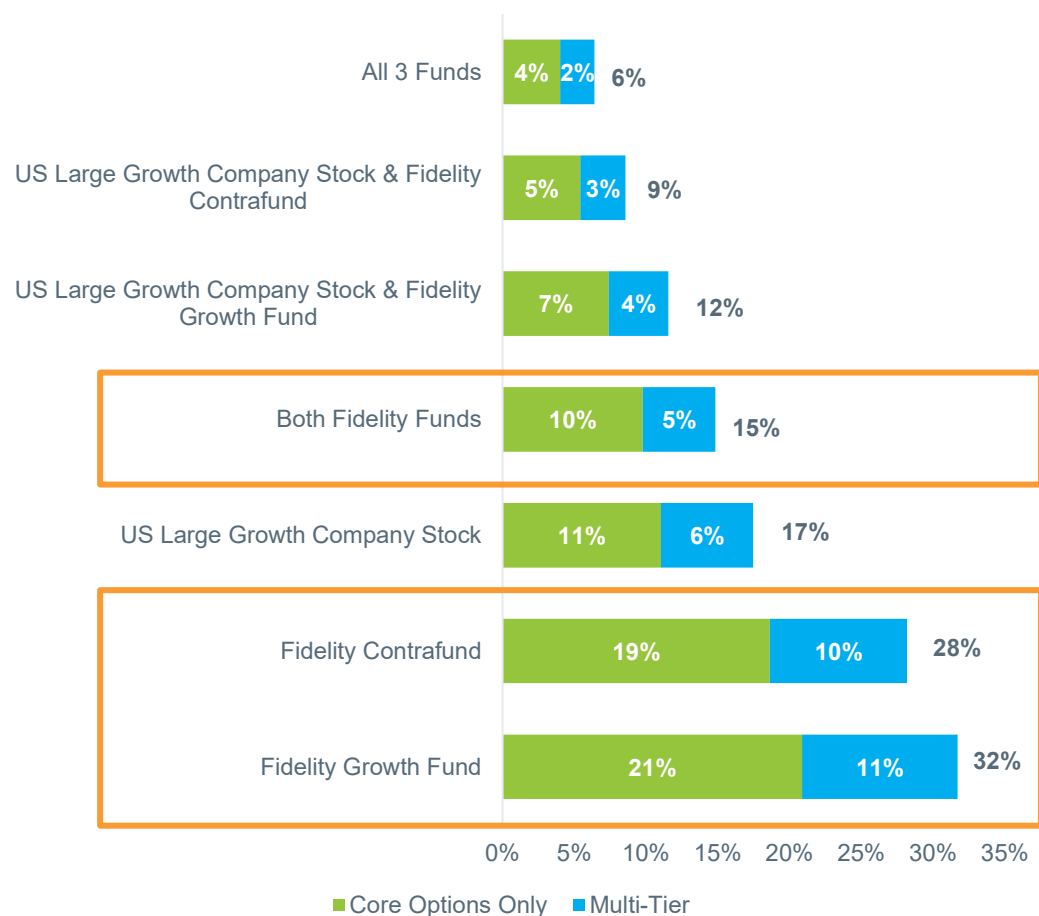
 Overlap  Style Choice

US Large Cap Growth Equity



US Large Cap Growth Equity

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

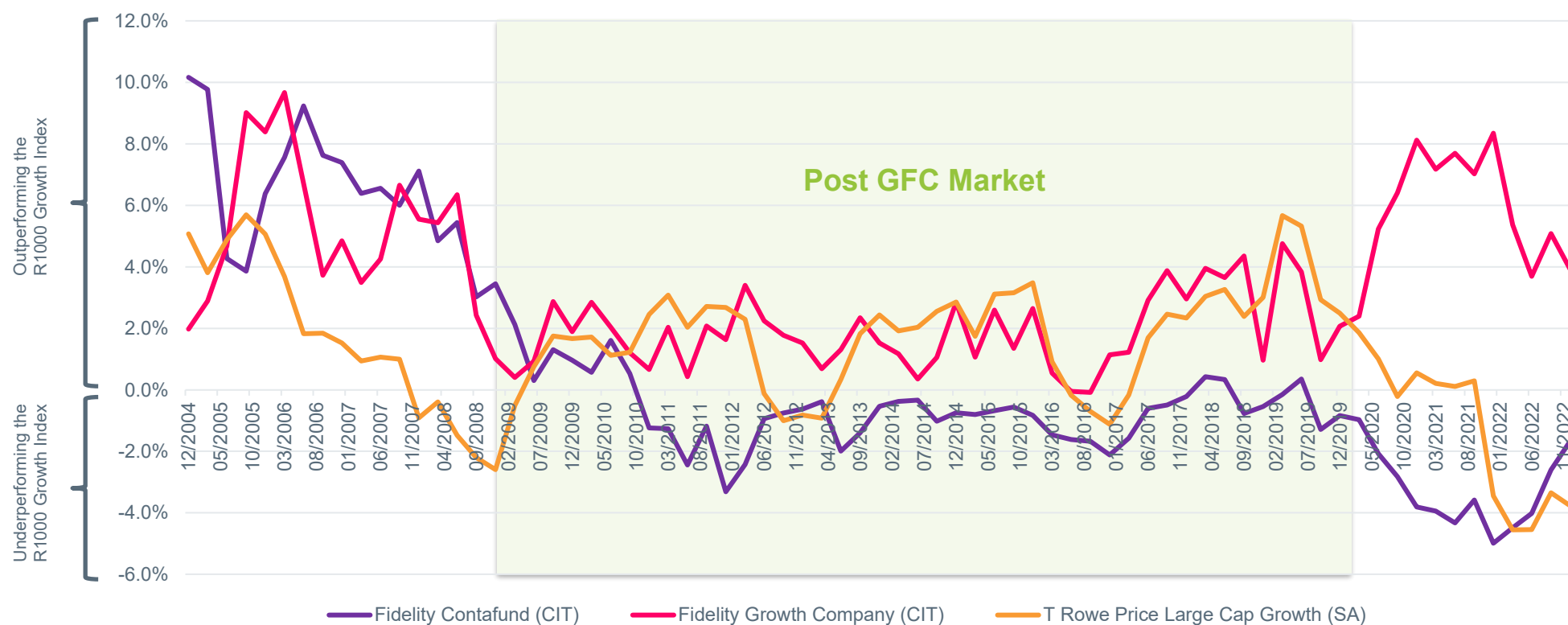


- ~30% of Ohio DC core participants (TDF+Core or Core Only) are invested in at least one of the two Fidelity large cap growth funds.
 - This translates to approximately 19% of all Ohio DC participants, roughly 47,000 individuals.
- Half of those participants (15%) are using both funds.
 - This translates to approximately 9% of all Ohio DC participants, roughly 22,000 individuals.

US Large Cap Growth Equity

Since the 2008 financial crisis (“GFC”), relative performance between Fidelity Growth Company and Large Growth Company Stock (T. Rowe Price) has generally been similar. More recently, Fidelity Growth Company has outperformed the R1000 Growth Index while T. Rowe Price and Fidelity Contrafund have trailed.

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



Data is as of 12/31/2022. Calculation is based on quarterly periodicity.

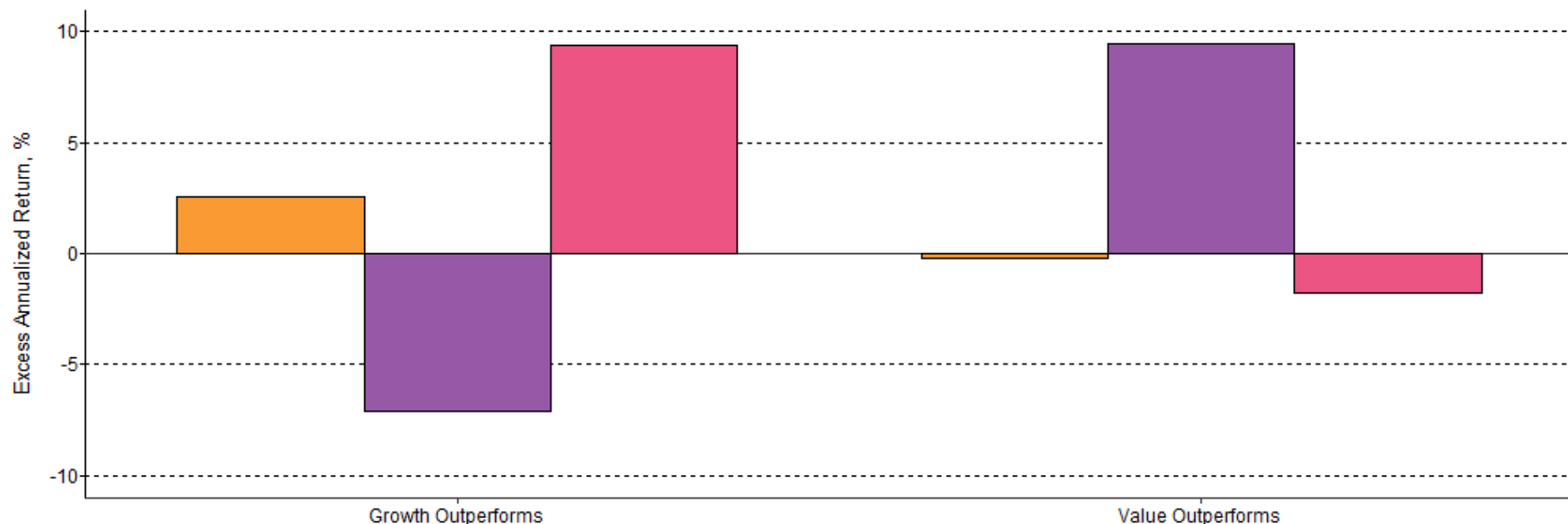
US Large Cap Growth Equity

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

As of December 2022

Benchmark: Russell 1000 Growth

Annualized Excess Returns in Past Style Led Months



■ T Rowe Price Large Cap Growth (SA) ■ Fidelity Contrafund (CIT) ■ Fidelity Growth Company (CIT)

	Annualized Excess Returns		# of Months of Style Leadership	
	Growth Outperforms	Value Outperforms	Growth Outperforms	Value Outperforms
T Rowe Price Large Cap Growth (SA)	2.54	-0.21	135	118
Fidelity Contrafund (CIT)	-7.13	9.43	233	211
Fidelity Growth Company (CIT)	9.38	-1.74	233	211

Data is shown as of 12/31/2022. Returns shown are since inception for each individual fund.

US Large Cap Growth Equity

Observations:

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

Ohio DC Large Cap Growth Manager Comparison

Funds	RVK Manager Research Ranking	Fund Type	Holdings	Active Share	Sharpe Ratio (10-year)	Consistency (Info Ratio) (10-year)	Up Markets Capture (10-year)	Down Markets Capture (10-year)	Avg. Performance Consistency vs. R 1000 G Index	Avg. Performance Consistency vs. Peers	Fees (Current Peer Ranking)
T Rowe Price	Positive	Large Cap Growth	62	57.0	0.82	0.01	99.4	98.9	80%	95%	8
Fidelity Contrafund	Neutral	Large Cap Growth	333	55.7	0.81	-0.45	90.5	93.0	0%	55%	8
Fidelity Growth Company	Neutral	Large Cap Growth	551	47.1	0.86	0.45	113.0	105.9	100%	100%	8

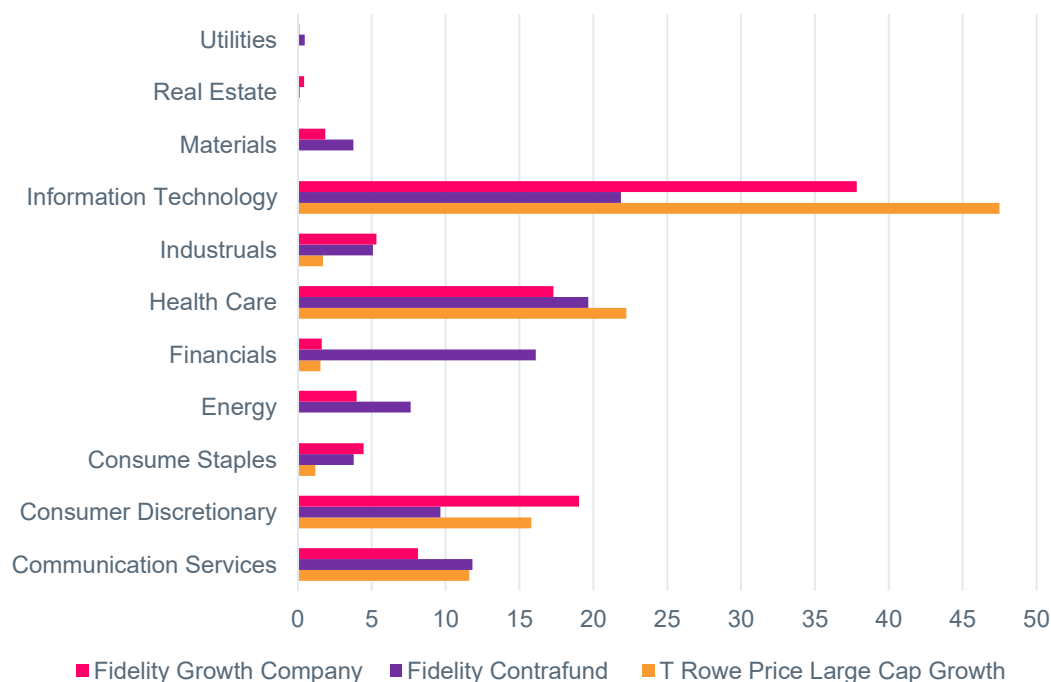
Data shown is as of 12/31/2022. All risk and return statistics are benchmarked against the Russell 1000 Growth Index and Morningstar Large Growth peer group. Avg. Performance Consistency vs. benchmark is the percentage of times the fund has exceeded the benchmark when evaluating five-year rolling performance (calculated every 12 months going back 10 years). Avg. Performance Consistency vs. peers is the percentage of times the fund has ranked better than median when evaluating five-year rolling performance (calculated every 12 months going back 10 years). Fees are benchmarked against the IM Large Cap Growth peer group.

US Large Cap Growth Equity

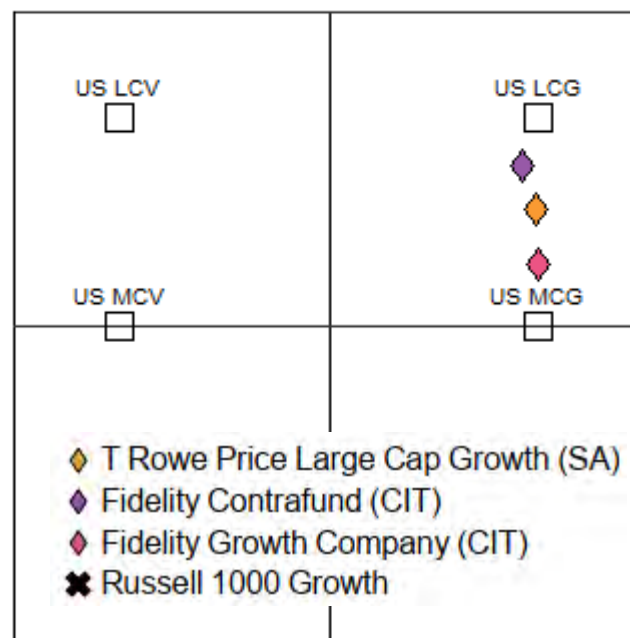
Holdings Overlap Comparison

Funds	T Rowe Price Large Cap Growth		Fidelity Contrafund		Fidelity Growth Company	
	Count of Securities	% of TRP Market Value	Count of Securities	% of Contrafund Market Value	Count of Securities	% of Growth Company Market Value
T Rowe Price Large Cap Growth (SA)			41	53.07	44	38.67
Fidelity Contrafund 3 (CIT)	41	80.99			108	49.93
Fidelity Growth Company 3 (CIT)	44	79.67	121	72.36		

Sector Weights (%)



Style Analysis - 10 Year Average



Data is shown as of 12/31/2022. In the Holdings Overlap Comparison chart, the count represents the number of overlapping securities. The percentage represents the total weight of the overlapping names. For example, of the 41 overlapping securities in the T Rowe Price portfolio compared to Fidelity Contrafund, the overlapping securities represent 80.99% of T Rowe Price's portfolio.

Bond Fund Structure



Bond Fund Structure

The Ohio DC Program provides an active fixed income investment option on the core investment menu through the white labeled “US Bond Fund.” The option currently consists of a Collective Investment Trust (“CIT”) managed by TCW.

Current Strategy:

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

Fees:

- The expense ratio for the current share class is 0.25%, ranking in the 27 percentile for similarly sized mandates. The asset minimum for current Class B share class is \$190 million. Should assets drop below \$190 million, the next least expensive share class is 0.30% for the Class C.
- Currently, Ohio DC has \$204 million in assets invested in the strategy.

Bond Fund Structure

Rationale for spreading the mandate across multiple managers:

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

Investment Menu Utilization Review



Investment Menu Demographics Summary Update

Ohio DC has seen positive improvements to participant allocations over the last 5 years.

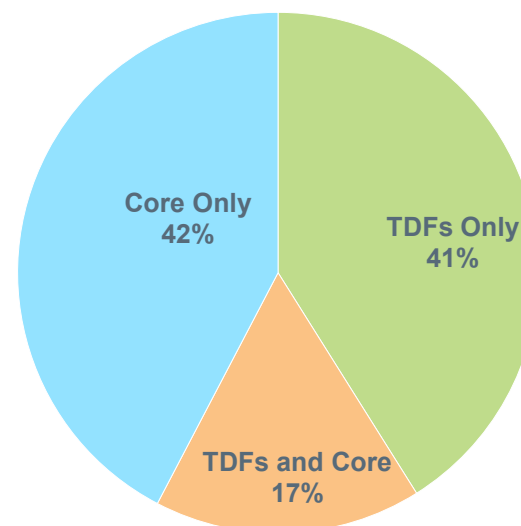
- In 2022, **47%** of participants were “appropriately”* allocated, compared to **38%** in 2017.
- Among **Target Date Fund Only** participants, the number of single target date fund users have increased from **30%** in 2017 to **40%** in 2022.

Among **TDF+Core** participants, the average equity allocations range between **48%** and **63%**, which suggests a continued preference for more risk within each age cohort.

Among **Core Only** participants, the number of single-fund core investors has generally remained steady around **20%**.

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

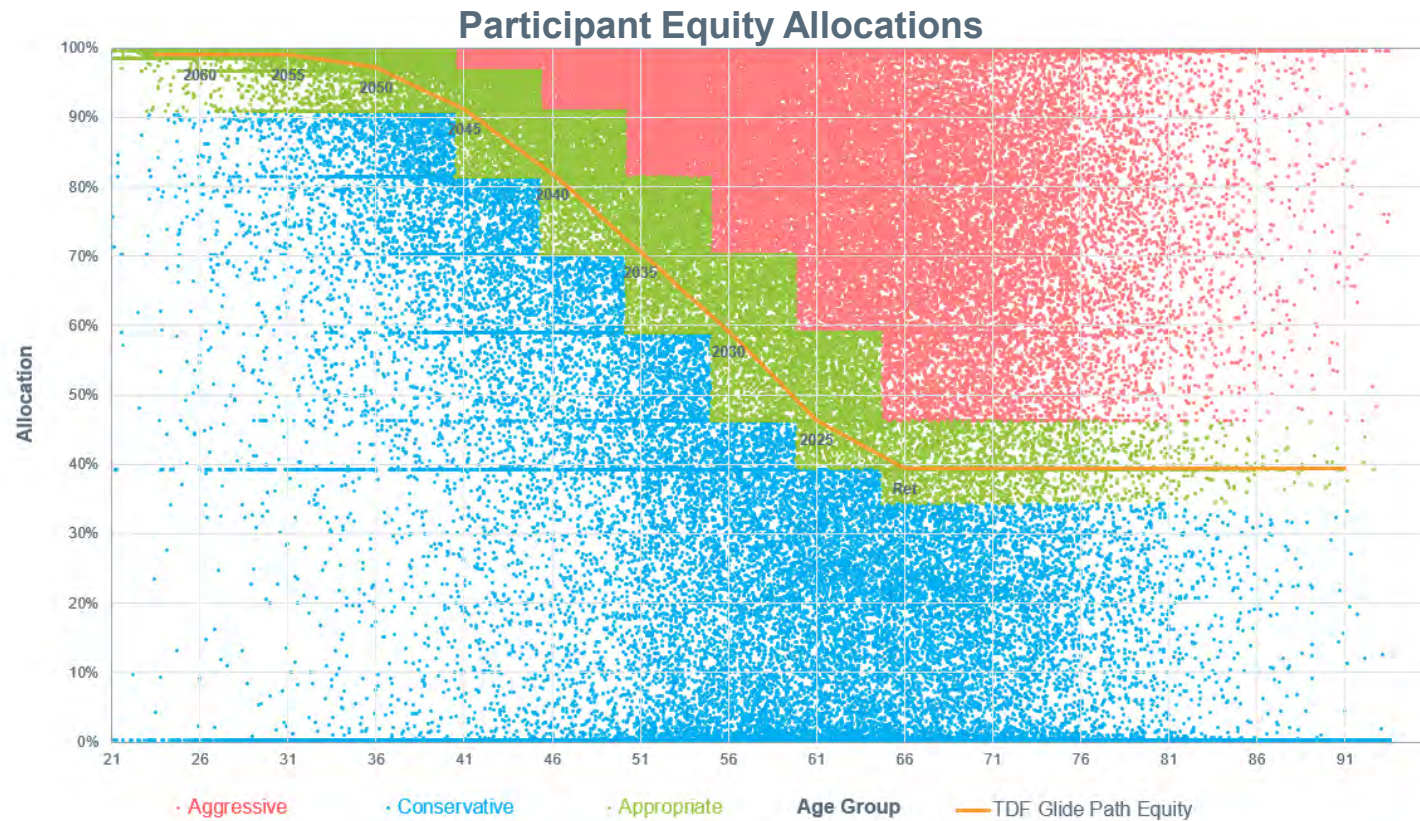
Investment Tier Utilization



* “Appropriate” asset allocation is defined as the participant having an equity allocation within 5 years of the age-appropriate target date fund equity allocation. Participant balances are as of 12/31/2022 and were sourced from the Ohio DC Information Technology Department. Percentages shown may not sum up to 100% exactly due to rounding.

Investment Menu Review Analysis

Equity Allocation



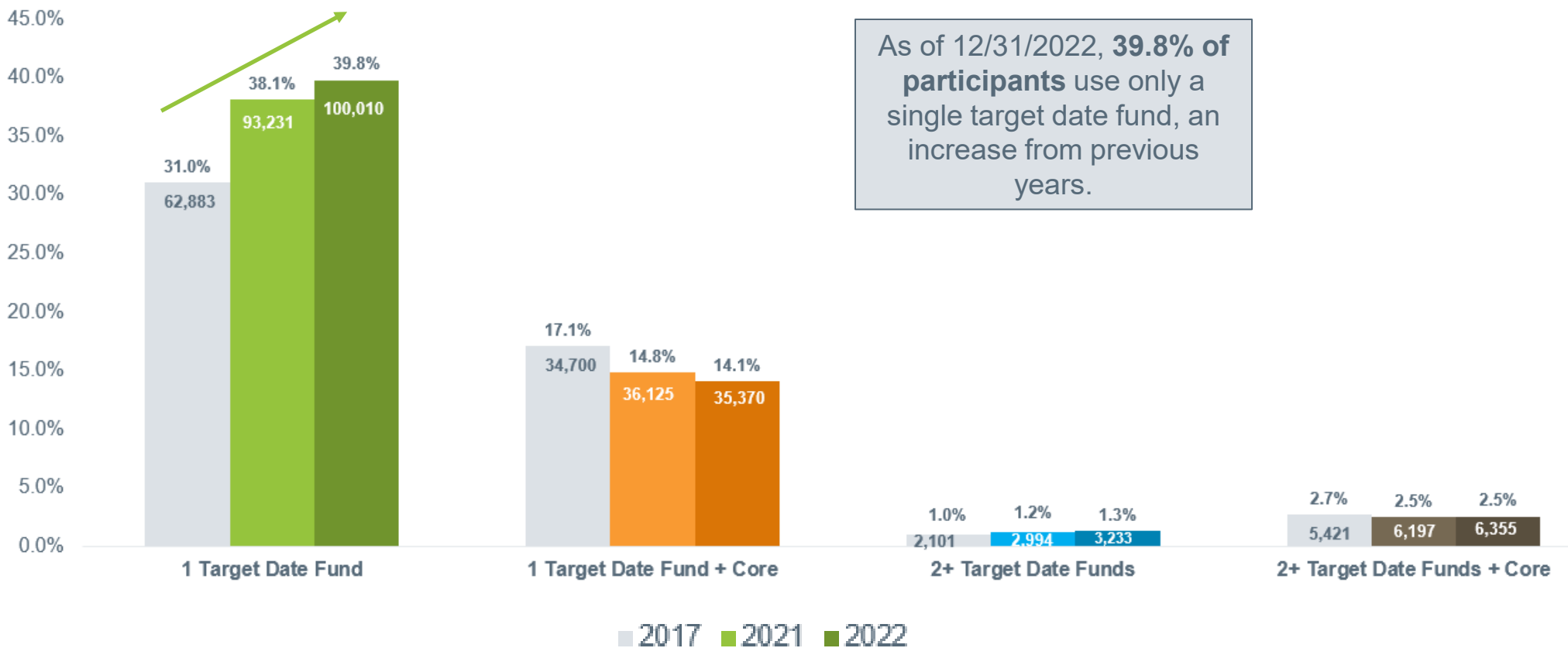
	2017	2021	2022						
	Total	Total	Total	<30	30-40	40-50	50-60	60-70	70+
Total Participants in Age Group	202,991	244,877	251,376	16,280	38,221	46,304	61,700	54,657	34,214
Participants in Aggressive Equity Range	25%	27%	25%	0%	0%	23%	35%	35%	33%
Participants in Appropriate Equity Range	38%	45%	47%	95%	88%	60%	41%	23%	10%
Participants in Conservative Equity Range	37%	28%	28%	5%	12%	17%	24%	42%	57%
Participants 100% in Equities	11%	12%	12%	6%	10%	15%	14%	10%	9%
Participants 0% in Equities	17%	17%	17%	1%	3%	5%	12%	29%	47%

Participant balances are as of 12/31/2022 and were sourced from the Ohio DC Information Technology Department. Percentages shown may not sum up to 100% exactly due to rounding.

Investment Menu Review Analysis

Target Date Fund Investors

Participant Investment Selections
Number of Participants



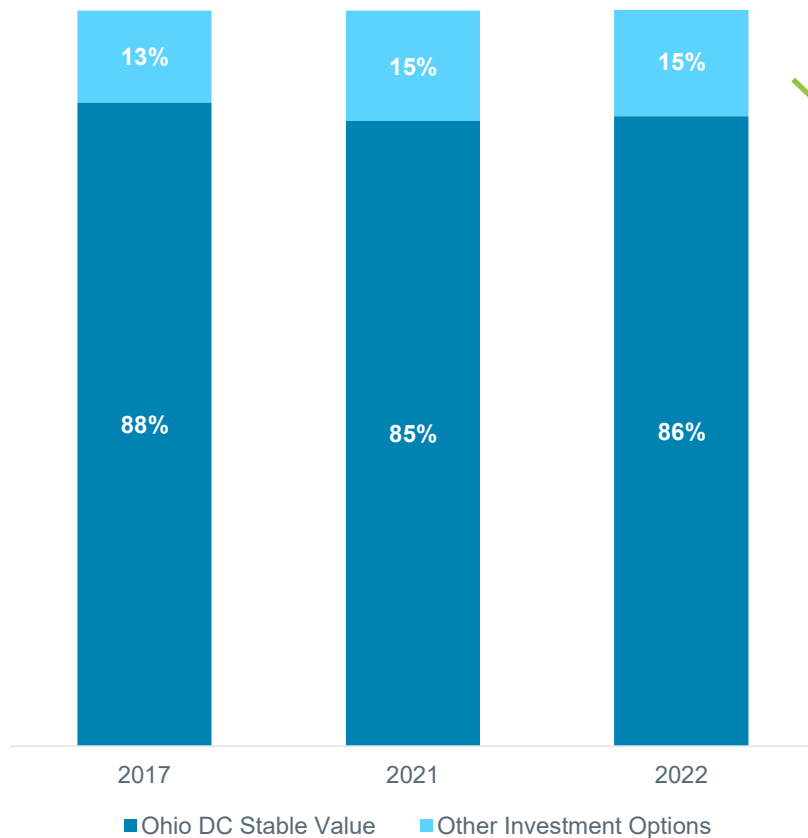
Participant balances are as of 12/31/2022 and were sourced from the Ohio DC Information Technology Department. Total Participant Population: 12/31/2022 – 251,376, 12/31/2021 – 244,877, 12/31/2017 – 202,991.

Investment Menu Review Analysis - Utilization

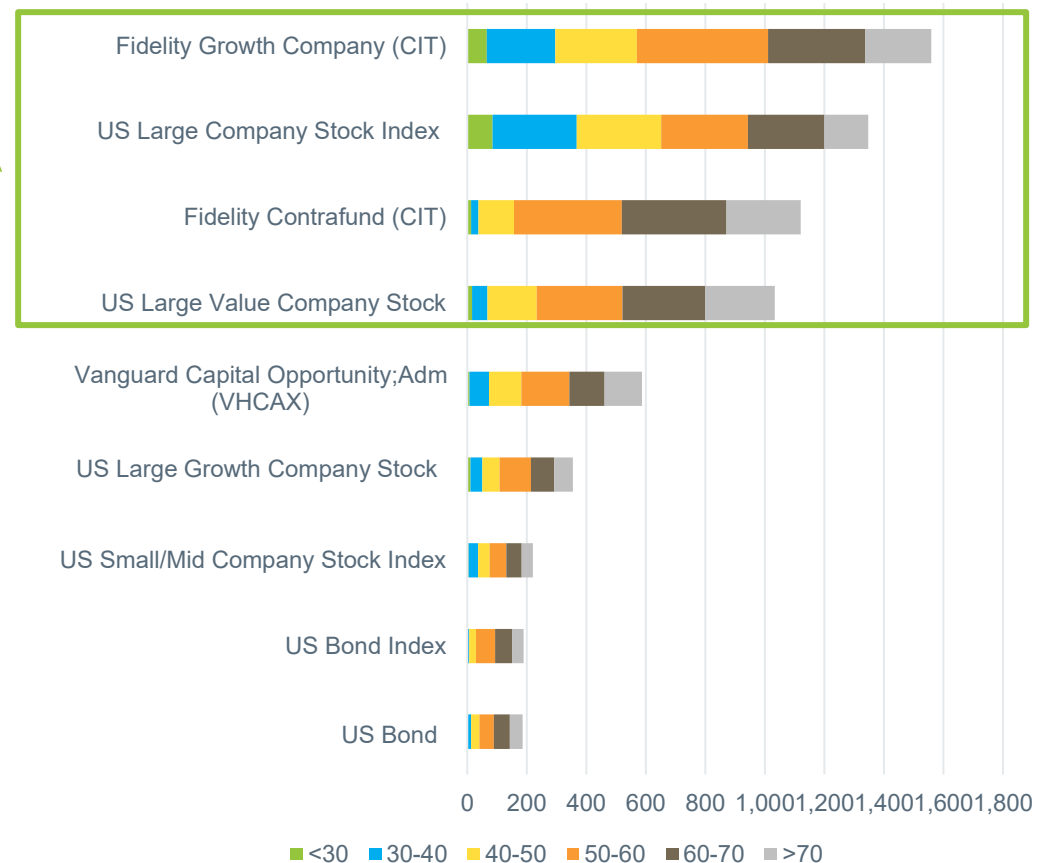
Core Investors – A Closer Look at Single-Fund Investors

- Most participants holding a single fund continue to invest in Stable Value Option. The percentage of single fund investors using the SVO decreased slightly from 88% in 2017 to 86% in 2022.
- The majority of the remaining single fund investors continue to favor active US large cap equity options.

Participants Holding a Single Fund



Top 10 Funds



Participant balances are as of 12/31/2022 and were sourced from the Ohio DC Information Technology Department. Allocations shown may not sum up to 100% exactly due to rounding.

Appendix **Investment Menu Utilization**

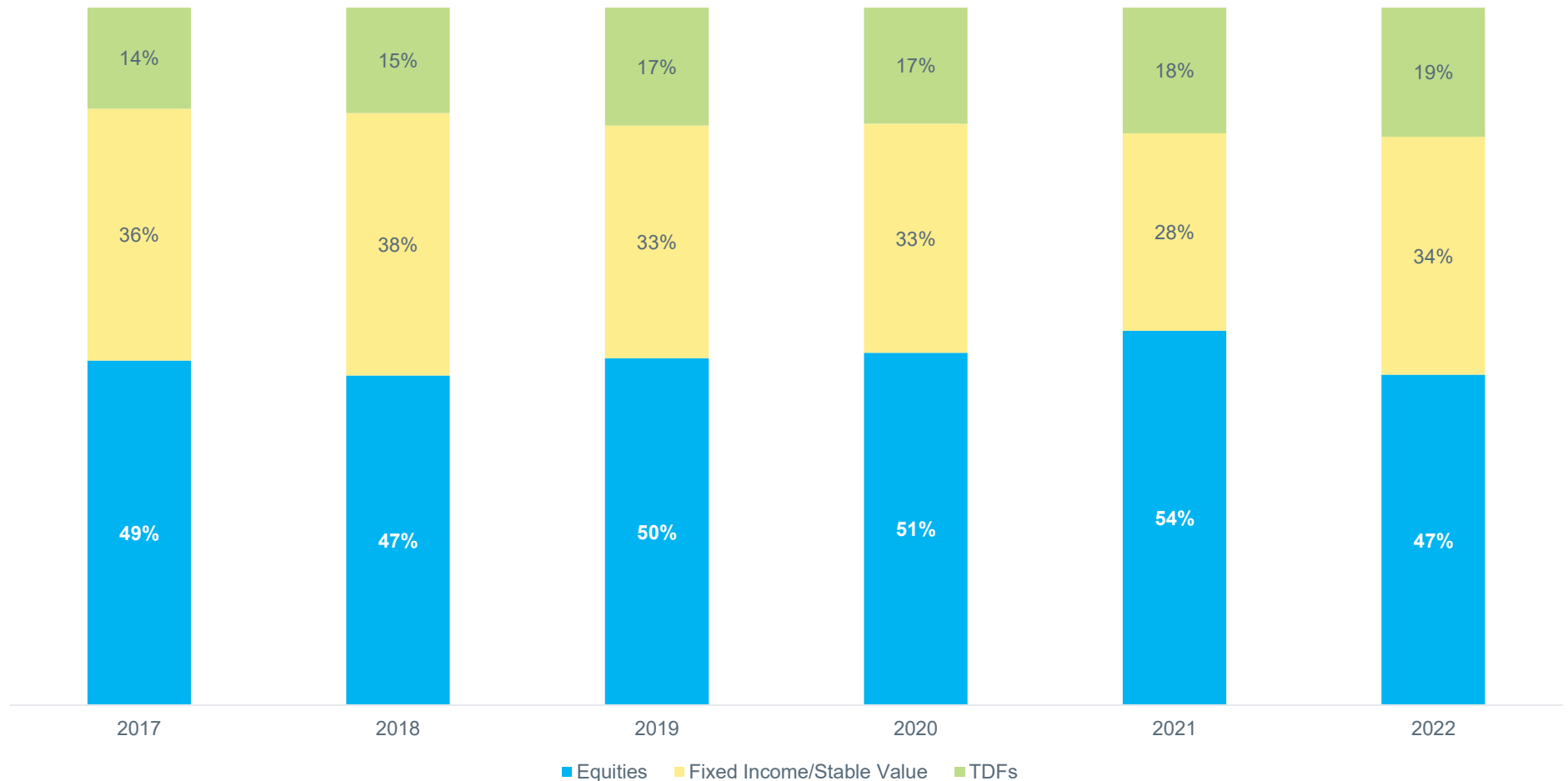


Investment Menu Review Analysis

Total Investments

Target date fund have grown from 14% of plan assets in 2017 to 19% of plan assets in 2022 while equities and fixed income/stable value declined slightly.

Total Investments



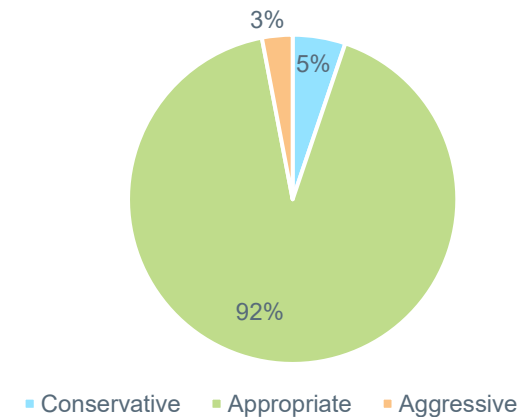
Asset allocations shown may not sum up to 100% exactly due to rounding.

Investment Menu Review Analysis

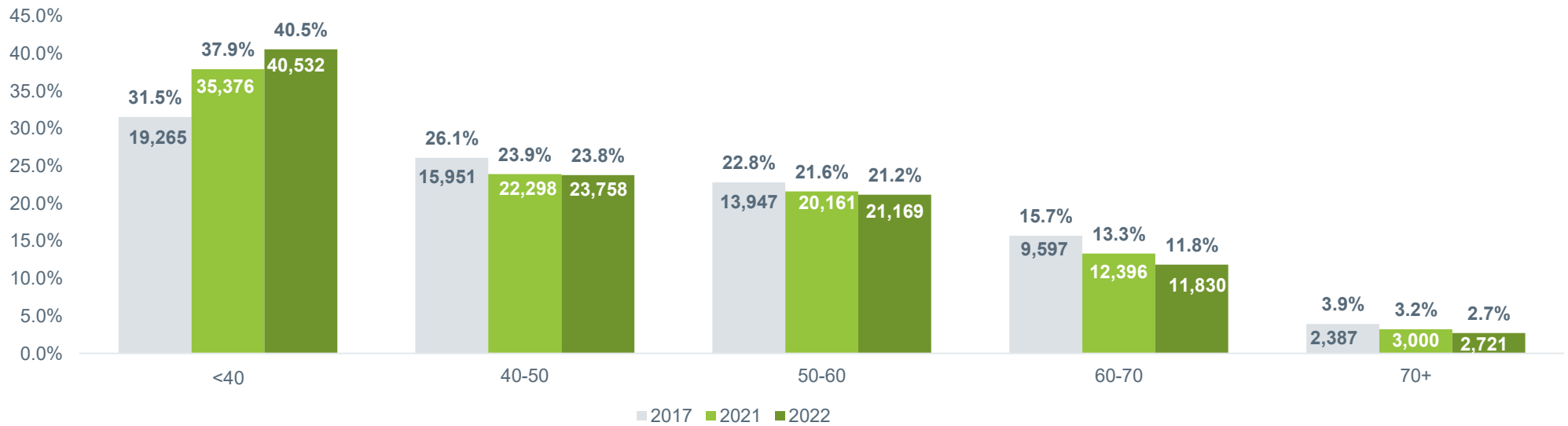
Target Date Fund Investors – Single TDF Usage

- **92%** of single fund TDF participants are invested in an “age-appropriate” fund. This is consistent with previous years.
- Of the 40% of participants invested in a single TDF, **41%** are younger than age 40.

Age Appropriate Utilization



Single TDF Participants Utilization by Age



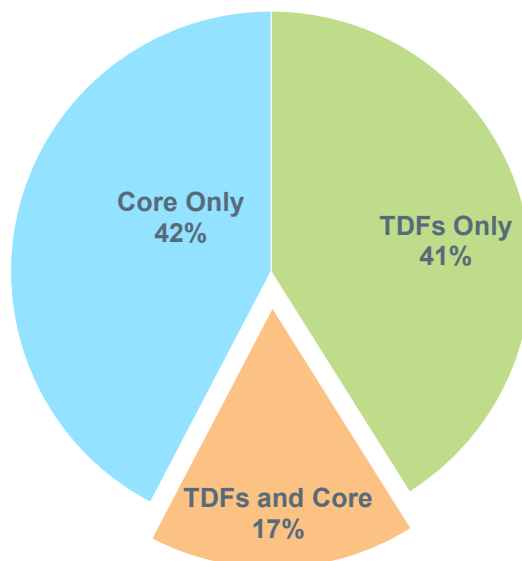
Participant balances are as of 12/31/2022 and were sourced from the Ohio DC Information Technology Department. Total Participant Population: 12/31/2022 – 251,376, 12/31/2021 – 244,877, 12/31/2017 – 202,991. Age-appropriate target date funds are defined as suitable fund vintages assuming a retirement age between 60-70, based on a participant's current age.

Investment Menu Review Analysis

Multi-Tier Investors

- Average target date fund allocations range between **25%** and **40%** across age groups.
- Average equity allocations range between **48%** and **63%**, which suggests a preference for more risk within each age cohort.

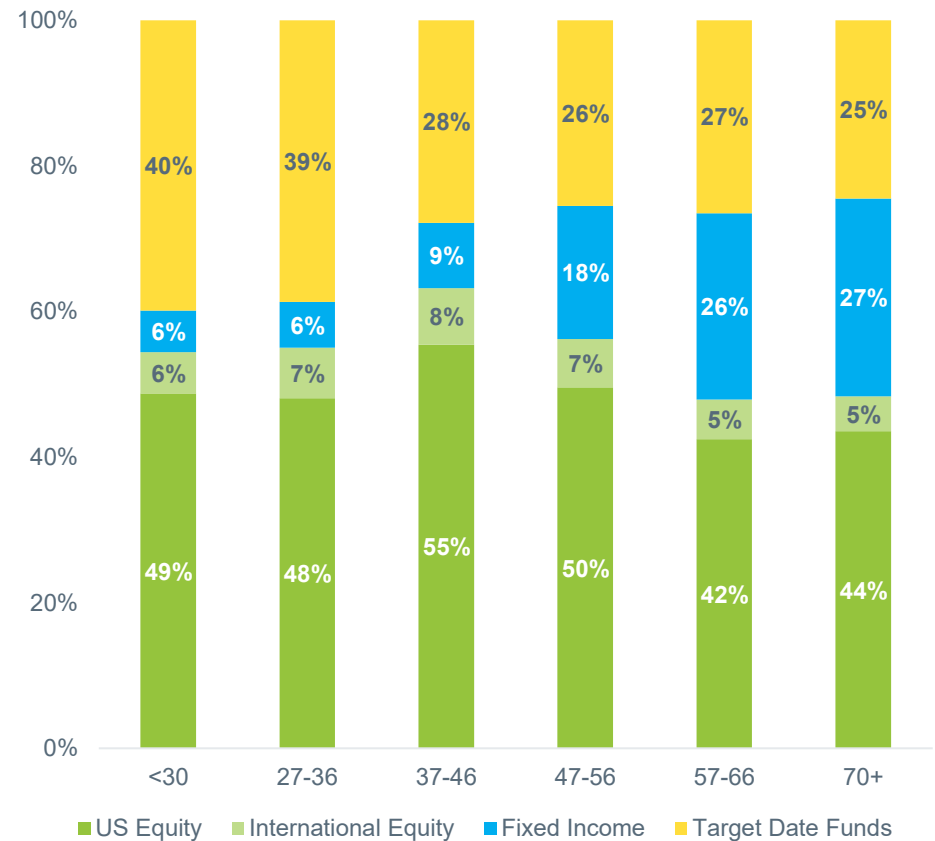
Investment Tier Utilization



One TDF + Core Options



Average Asset Allocation TDF+ Core Investors



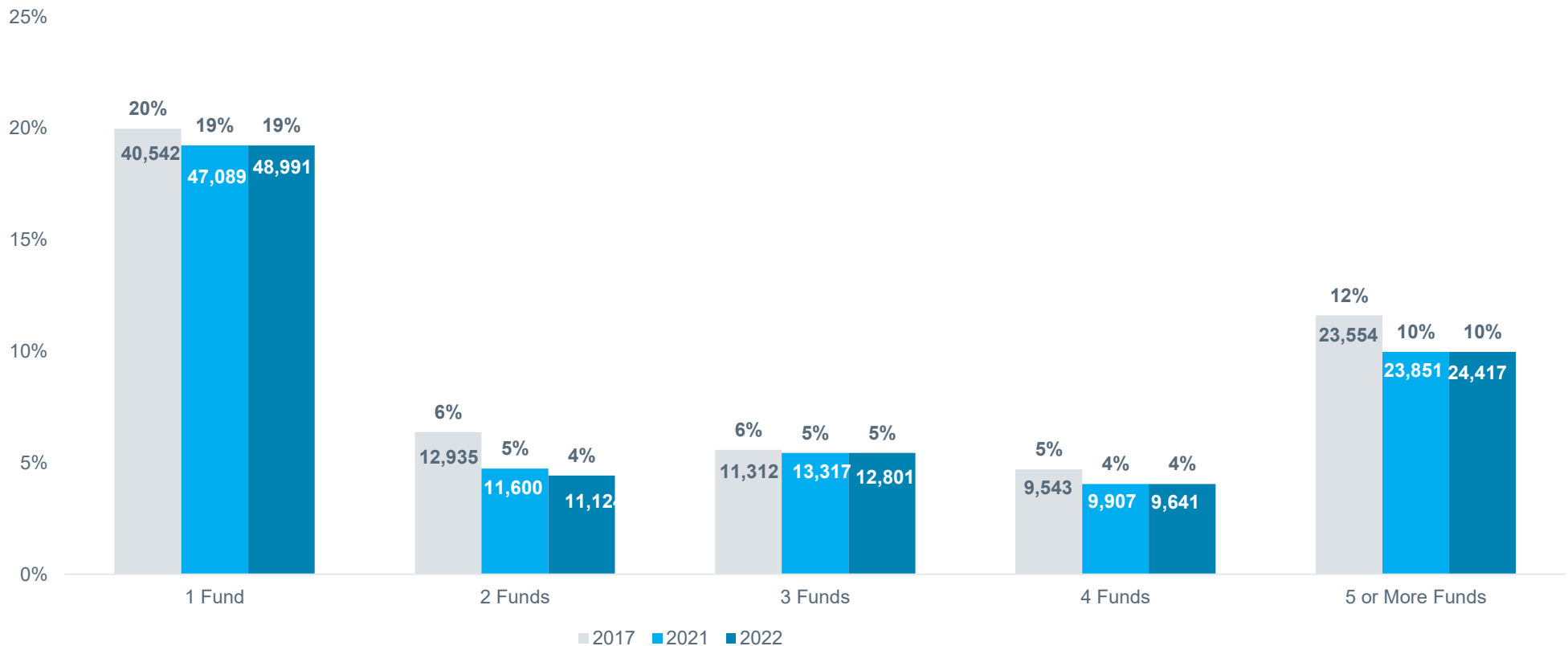
Participant balances are as of 12/31/2022 and were sourced the Ohio DC Information Technology Department. Allocations shown may not sum up to 100% exactly due to rounding.

Investment Menu Review Analysis

Core Investors

- **42%** of participants are solely invested in the core menu, a slight decrease from 48% in 2017.
- The percentage of single-fund core investors has generally remained steady around **20%**.

Count of Investment Options
(% of Core Investors)



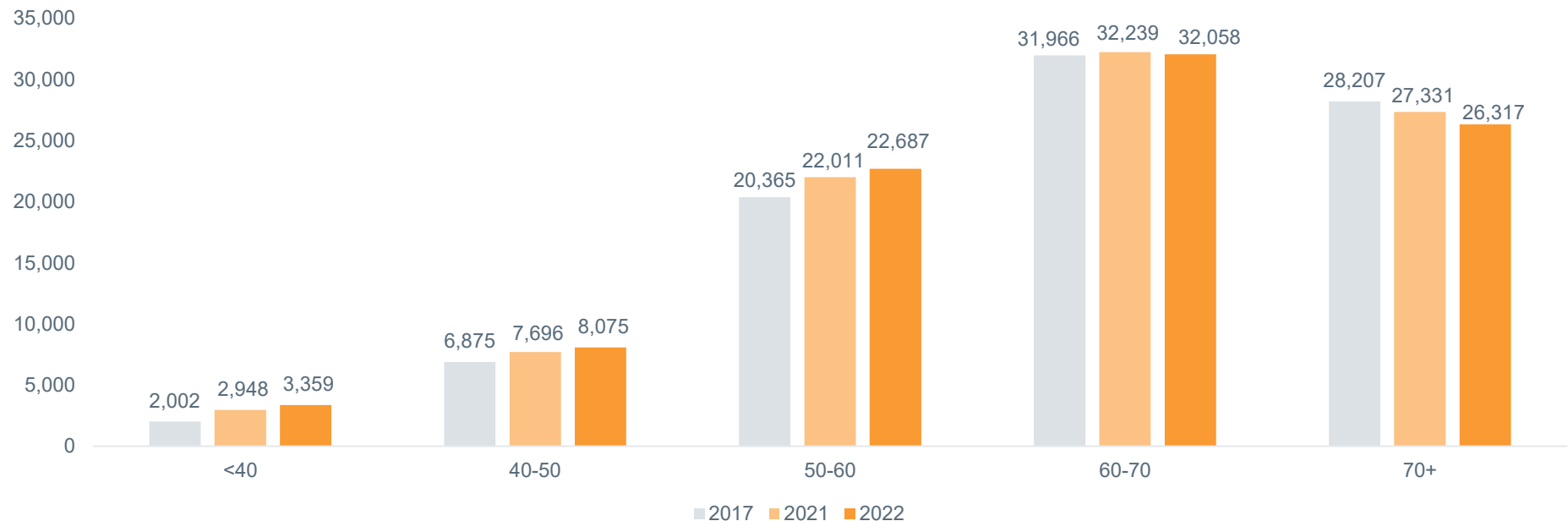
Participant balances are as of 12/31/2022 and were sourced from the Ohio DC Information Technology Department. Total Participant Population: 12/31/2022 – 251,376, 12/31/2021 – 244,877, 12/31/2017 – 202,991.

Investment Menu Review Analysis - Utilization

Core Investors – Stable Value Utilization

- A greater number of participants ages 60+ continue to invest in stable value. While the number of people investing in stable value has increased over the last four years, there has been a steady decline in participants as a percentage of the total population.

Stable Value Utilization By Age



% of Population Invested in Stable Value	Age Group					Total Population
	<40	40-50	50-60	60-70	70+	
December 31, 2022	6.2%	21.1%	49.0%	52.0%	48.1%	36.8%
December 31, 2021	6.2%	21.8%	49.8%	53.4%	48.4%	37.7%
December 31, 2017	7.5%	19.7%	39.6%	59.3%	77.8%	44.0%

Participant balances are as of 12/31/2022 and were sourced from the Ohio DC Information Technology Department. Allocations shown may not sum up to 100% exactly due to rounding.

Appendix
Custom Naming of Investment Options

Custom Funds Review

What are White Label Funds?

- Custom-named funds that have no reference to the investment manager.
- Labeling of these strategies typically includes the asset class name or investment objective.
- Constructed as either a single manager or as a multiple manager portfolio.
- Can be managed passively, actively, or a hybrid of both management styles.
- Not a new concept, this is an approach that has been used for decades.

White Label Single Manager Strategy

Vanguard Capital
Opportunity



US Small/Mid
Cap Stocks

White Label Multi-Manager Strategy

Manager A
US Large Cap
Growth

Manager B
US Large Cap
Value



US Large
Company
Stocks

White Label Funds Review

Why White Label?

- Focus participants on asset classes instead of manager selection.
- Allows for greater control of investment style and consistency.
- Increase the ease of manager substitution without participant disruption.
- Can solve capacity and manager concentration issues.
- Should not increase fees (and often paired with a fee reduction).

What Are the Considerations?

- May cause participants to feel they are losing “brand name” or “favorite” funds.
- Requires initial participant communication that may take additional efforts.
- Requires custom fund fact sheets.
- Increases initial and ongoing administrative tasks.

Ohio DC Custom Fund Names

Ohio DC has successfully launched ten funds with custom “white labeled” names to date:

- 1994: Stable Value Option (Multiple Managers)^*
- 2006: LifePath Portfolios (BlackRock)*
- 2014: US Large Growth Company Stock (T. Rowe Price)*
- 2015: US Bond (TCW)*
- 2017:
 - US Small Value Company Stock (Westwood) (2017)*
 - US Small Growth Company Stock (Westfield, Fiera) (2017)*
- 2020: Non-US Company Stock (Vanguard, Schroders, Arrowstreet)*
- 2022:
 - US Large Value Company Stock (Dodge & Cox)
 - 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)

RVK recommend continuing the process of custom naming existing investment options within the Ohio DC investment menu as appropriate. Current investment options without custom names are:

- Vanguard Capital Opportunity (VHCAX)
- Fidelity Growth Company Commingled Pool
- Fidelity Contrafund Commingled Pool

^ In 1994, the current Stable Value Option was launched as the Guaranteed Return Fund. In 2006, it was renamed as Ohio DC Stable Value Option.

* Custom name was revised in 2022.

Appendix
Proposed IPS Redline & Clean Edits

Investment Menu Design Framework

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

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

Ohio Deferred Compensation Program Investment Policy Statement

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

Women and Minority-Owned, Ohio-Based and Emerging (WMOE) Business Enterprises. The Board recognizes that the 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.

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

Adopted 12/17/1996
Last Revised 3/14~~5~~/2023~~2~~

- 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 ~~annually-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 ~~retained~~-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 alternatives 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	BlackRock LifePath FundsPortfolios (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	Vanguard Total Bond Market Index US Bond Index (State Street)	Bloomberg Float Adjusted US Aggregate Bond Index
Indexed US Large Company Stock	Not Applicable	Vanguard Institutional Index US Large Company Stock Index (State Street)	S&P 500 Index
Indexed US Small Company Stock	Not Applicable	Vanguard Extended Market Index Non-US Company Stock Index (State Street)	<u>Russell Small Cap S&P</u> Completion Index
Indexed Non-US Stock	Not Applicable	Vanguard Total International Stock Index Non-US Company Stock Index (State Street)	FTSE Global All Cap Ex US Index <u>MSCI ACW Ex US IM Index</u>
Stable Value Option	Not Applicable	Ohio DC Stable Value Option (Multiple Managers)	See Stable Value Policy
Diversified Fixed Income	Core Plus Fixed Income Mutual Fund Strategy	Ohio DC Intermediate 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) Stock	Russell 1000 Value Index
Large Company Growth Stock	Large-Cap Growth Mutual Fund Strategy	Fidelity Contrafund Fidelity Growth Company US Large Growth Company Stock Ohio DC Large Cap Growth (T. Rowe Price/ SSgA 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 Ohio-DC Small-Cap Value -(Westwood/ State Street SgA)	Russell 2000 Value Index
Small Company Growth Stock	Small-Cap Growth Mutual Fund Strategy	US Small Growth Company Stock Ohio-DC Small-Cap Growth -(Westfield/Fiera/ State Street SSgA)	Russell 2000 Growth Index
Non-US Stock	All Country World Ex US Mutual Fund Strategy	Non-US Company Ohio-DC International Stock (Arrowstreet, Schroders, Vanguard)	MSCI All Country World Ex US Index

IV. Adding New Investment Alternatives/Managers. Investment alternative or investment manager additions may be the result of a Request For Proposal (“RFP”) with public notice or Staff/Consultant search and evaluation. A formal RFP process may be waived at the discretion of the Board if doing so is determined to be in the best interests of Participants. The screening process for the initial selection of a new investment alternative or investment manager for inclusion in 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 ~~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 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 an ~~annual~~ 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 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
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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
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- 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
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- 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

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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

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	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.

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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.

PORTLAND

BOISE

CHICAGO

NEW YORK

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





Quarterly Investment Performance Analysis

Ohio Public Employees Deferred Compensation Program

Period Ended: December 31, 2022



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.

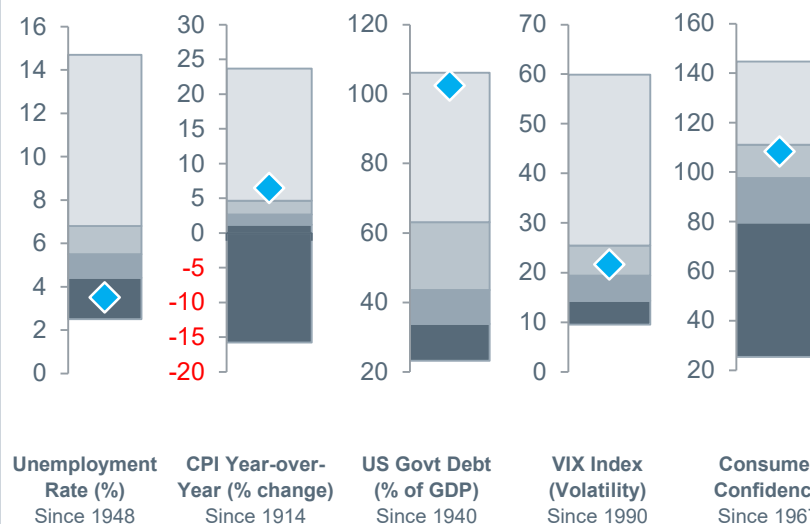
Capital Markets Review



Fourth Quarter Economic Environment

In Q4, equity and fixed income markets delivered improved results while continuing to experience elevated volatility. However, positive quarterly returns came on the tail of a significantly negative year for many investors. Regarding economic conditions, the impact of tightening monetary policy and persistent inflation, combined with supply shocks and an energy crisis in Europe, are leading to increasing odds of a global recession in 2023. On a relatively positive note, recent data indicates that the inflationary environment is showing signs of abating. Notably, the US Consumer Price Index declined for a sixth straight month in December with a reading of 6.5%, the lowest level since October 2021. In December, the FOMC did slow the pace of policy rate hikes with a 50 basis point increase, following a series of four straight 75 basis point increases. Internationally, the war in Ukraine caused an energy price shock and trade tensions continue to test economic and political relationships across multiple regions. Within emerging markets, investor attention is focused on China with some pointing to signs of a softening stance toward pandemic restrictions as reason to be optimistic regarding the country's outlook. However, these views are countered with concerns over indications of social unrest and the consolidation of power around President Xi Jinping. With all this considered, global GDP growth forecasts continue to moderate with the OECD forecasting growth of 3.1% in 2022 with an expected decline to 2.2% global GDP growth in 2023.

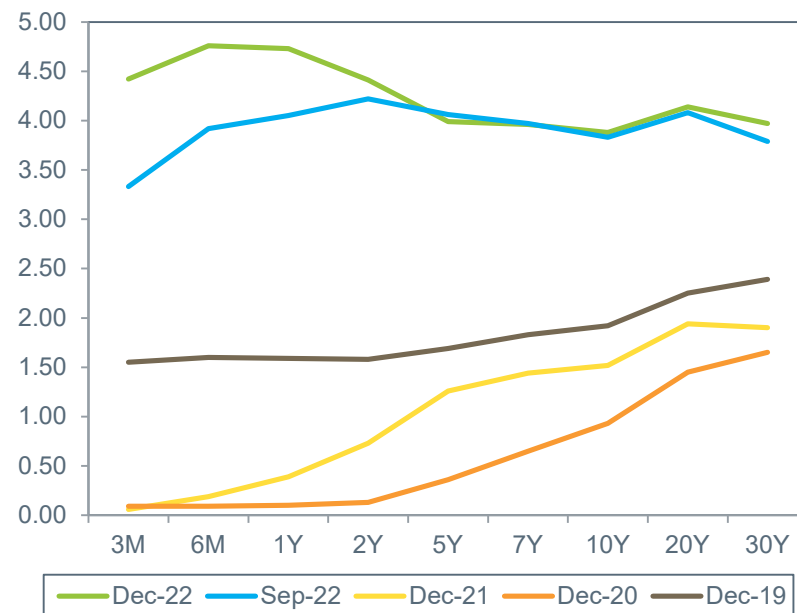
Key Economic Indicators



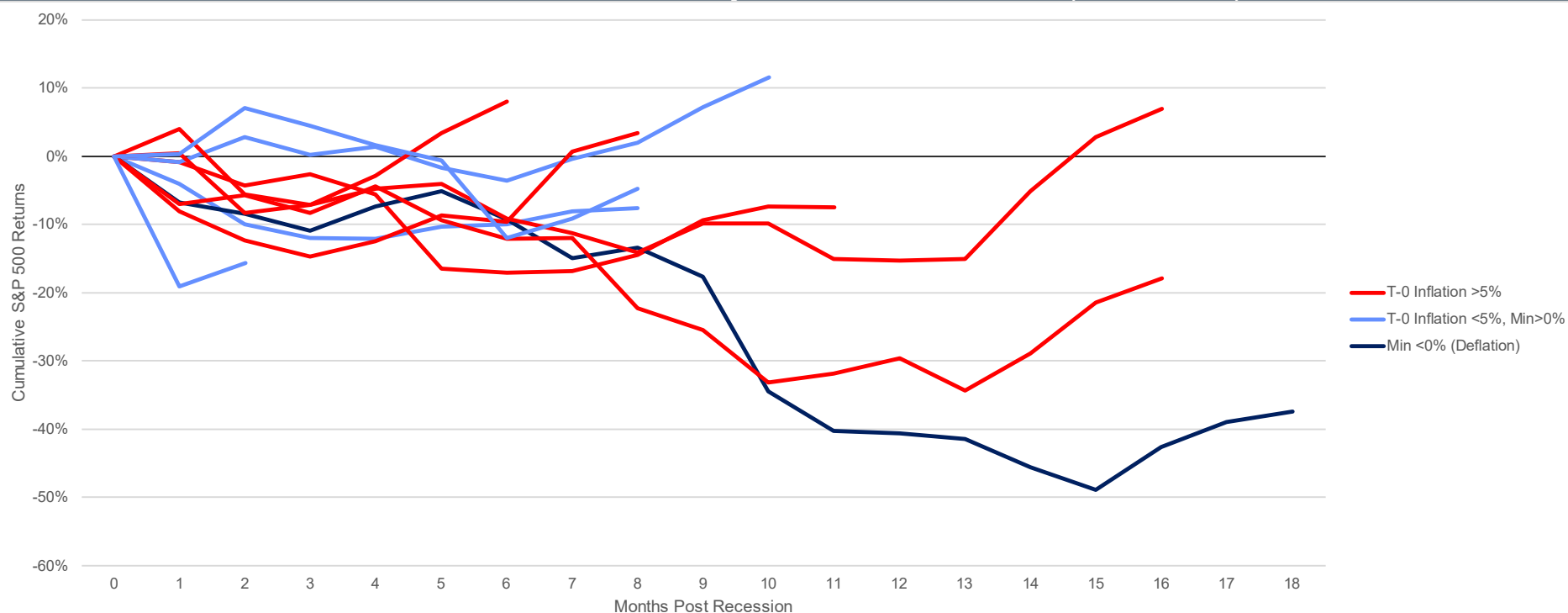
Economic Indicators	Dec-22	Sep-22	Dec-21	Dec-19	20 Yr
Federal Funds Rate (%)	4.33 ▲	3.08	0.07	1.55	1.30
Breakeven Infl. - 5 Yr (%)	2.38 ▲	2.16	2.91	1.70	1.92
Breakeven Infl. - 10 Yr (%)	2.30 ▲	2.15	2.59	1.79	2.08
CPI YoY (Headline) (%)	6.5 ▼	8.2	7.0	2.3	2.5
Unemployment Rate (%)	3.5 —	3.5	3.9	3.6	6.0
Real GDP YoY (%)	1.0 ▼	1.8	5.7	2.6	2.0
PMI - Manufacturing	48.4 ▼	50.9	58.8	47.9	53.7
USD Total Wtd Idx	121.51 ▼	127.64	115.37	114.67	103.33
WTI Crude Oil per Barrel (\$)	80.3 ▲	79.5	75.2	61.1	67.9
Gold Spot per Oz (\$)	1,824 ▲	1,661	1,829	1,517	1,160

Market Performance (%)	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	7.56	-18.11	-18.11	9.42	12.56
Russell 2000	6.23	-20.44	-20.44	4.13	9.01
MSCI EAFE (Net)	17.34	-14.45	-14.45	1.54	4.67
MSCI EAFE SC (Net)	15.79	-21.39	-21.39	-0.05	6.21
MSCI Emg Mkts (Net)	9.70	-20.09	-20.09	-1.40	1.44
Bloomberg US Agg Bond	1.87	-13.01	-13.01	0.02	1.06
ICE BofAML 3 Mo US T-Bill	0.84	1.46	1.46	1.26	0.76
NCREIF ODCE (Gross)	-4.96	7.47	7.47	8.68	10.10
FTSE NAREIT Eq REIT (TR)	5.24	-24.37	-24.37	3.68	6.53
HFRI FOF Comp	1.79	-5.25	-5.25	3.02	3.51
Bloomberg Cmdty (TR)	2.22	16.09	16.09	6.44	-1.29

Treasury Yield Curve (%)



S&P 500 Performance - Recessionary Periods and Inflation Levels (1957 - Present)



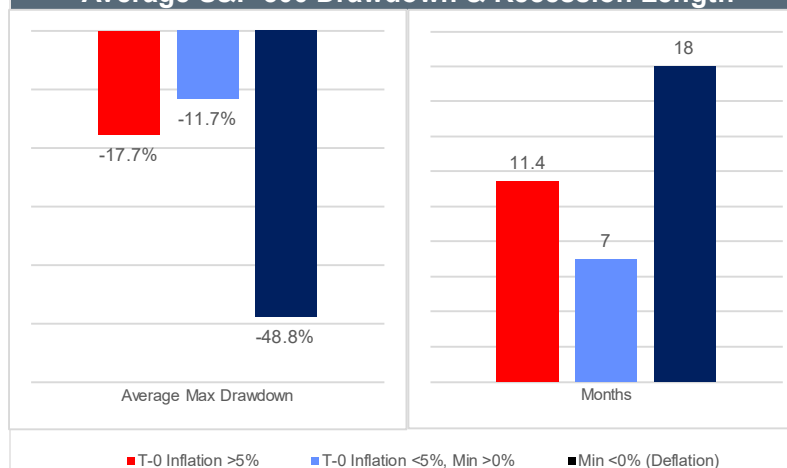
Recession Statistics

Start Date	Length Months	YoY CPI% @ T-0	Max YoY CPI%	Min YoY CPI%	Max Drawdown From T-0	Cumulative Return
9/30/1957	8	2.9	3.4	2.8	-12.0%	-7.6%
5/31/1960	10	1.6	1.6	0.9	-3.6%	11.6%
1/31/1970	11	5.9	5.9	5.0	-17.0%	-7.5%
12/31/1973	16	8.4	11.2	8.4	-34.2%	-17.9%
2/29/1980	6	13.0	13.5	12.1	-7.1%	8.0%
8/31/1981	16	9.9	9.9	4.1	-15.3%	7.0%
8/31/1990	8	5.5	6.0	4.6	-14.7%	3.4%
4/30/2001	8	3.0	3.0	1.7	-11.9%	-4.7%
1/31/2008	18	3.9	5.5	-2.0	-48.8%	-37.4%
3/31/2020	2	1.2	1.2	0.3	-19.1%	-15.7%

Averages

T-0 Inflation > 5%	11.4	8.5	9.3	6.8	-17.7%	-1.4%
T-0 Inflation < 5%, Min > 0%	7.0	2.2	2.3	1.4	-11.7%	-4.1%
Min < 0% (Deflation)	18.0	3.9	5.5	-2.0	-48.8%	-37.4%

Average S&P 500 Drawdown & Recession Length



Performance for each period begins where T-0 is equal to the start of an official recession and runs until the official end of the recession (as reported by the National Bureau of Economic Reporting).

Inflation is measured as the YoY % change in CPI. T-0 = the official recession start date.

Max and Min refer to the maximum and minimum observed YoY CPI% change during the recessionary period.

Source: RVK calculations, based on data from S&P Dow Jones Indices and FRED Database.

Fourth Quarter Review

Broad Market

US equity markets experienced a decrease in volatility in Q4 with short term spikes around CPI release dates and Fed meetings. Returns were positive across market cap and style groups in Q4. The reversal to growth seen in Q3 was short-lived, as value stocks led growth by a wide margin in Q4. Energy had its best year on record with the S&P 500 Energy Index gaining 65.72%.

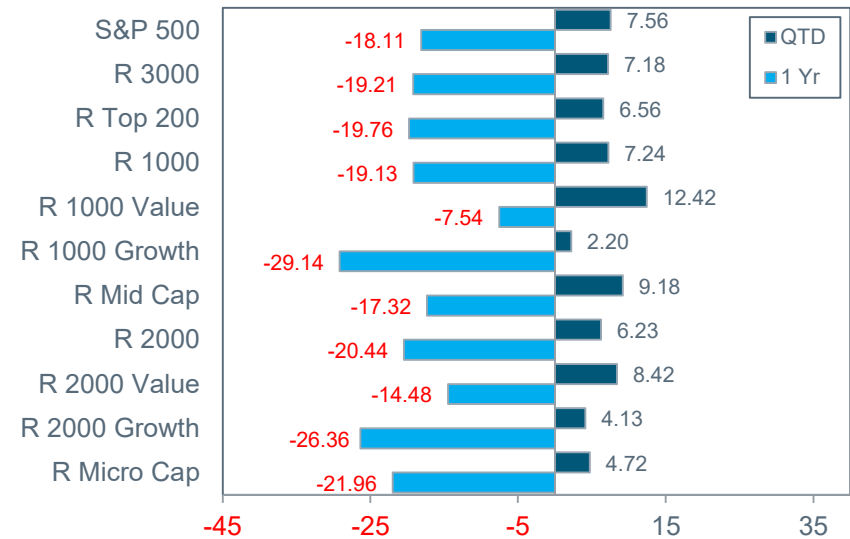
Market Cap

This year marks the worst performance of US equities across market cap groups since the GFC, and only the third time in the last 15 years that the Russell 3000 Index has generated negative returns.

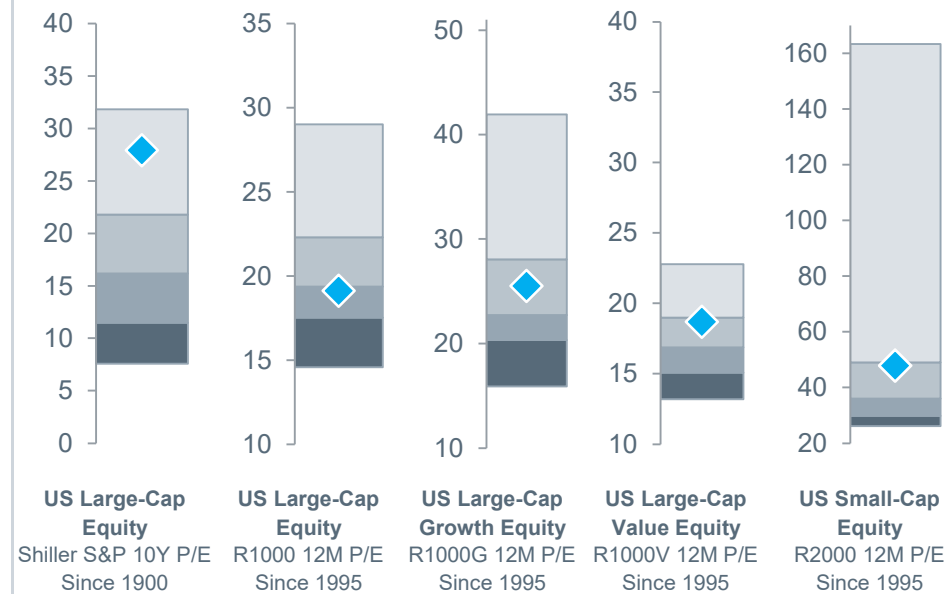
Style and Sector

Value-oriented managers had a higher success rate than core or growth managers in the small- and mid-cap spaces, while large-cap core and growth managers fared better than value managers. Growth managers across the market cap spectrum struggled to provide downside protection in 2022, while value and core managers were broadly successful.

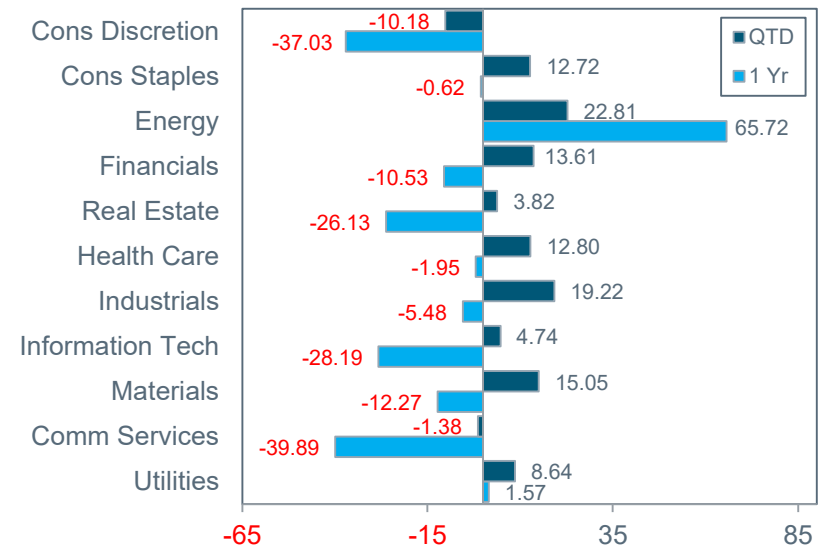
Style and Capitalization Market Performance (%)



Valuations



S&P 500 Index Sector Performance (%)



Fourth Quarter Review

Developed Markets

International developed markets meaningfully outperformed their domestic counterparts in Q4 with the MSCI EAFE Index realizing a 17.3% return for the period. Value stocks rebounded back into favor, outperforming growth in a reversal from the prior quarter, while large-cap continued its outperformance over small-cap stocks. Overall, market trends pointed to investors anticipating moderating inflation and easing of rate hikes despite the ongoing uncertainty led by the conflict in Ukraine and near-term recession fears.

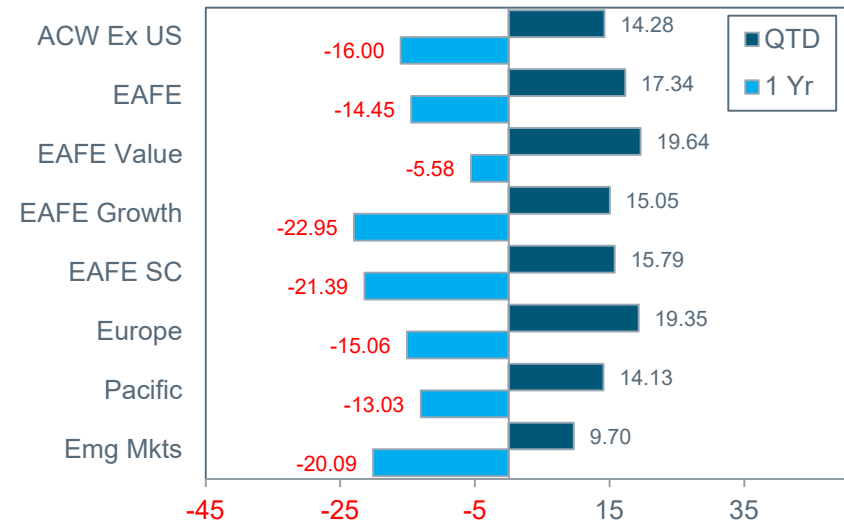
Emerging Markets

Emerging markets lagged behind developed during the quarter with the MSCI Emerging Markets Index finishing with a 9.7% return. Value stocks narrowly outperformed growth and large-cap beat small-cap.

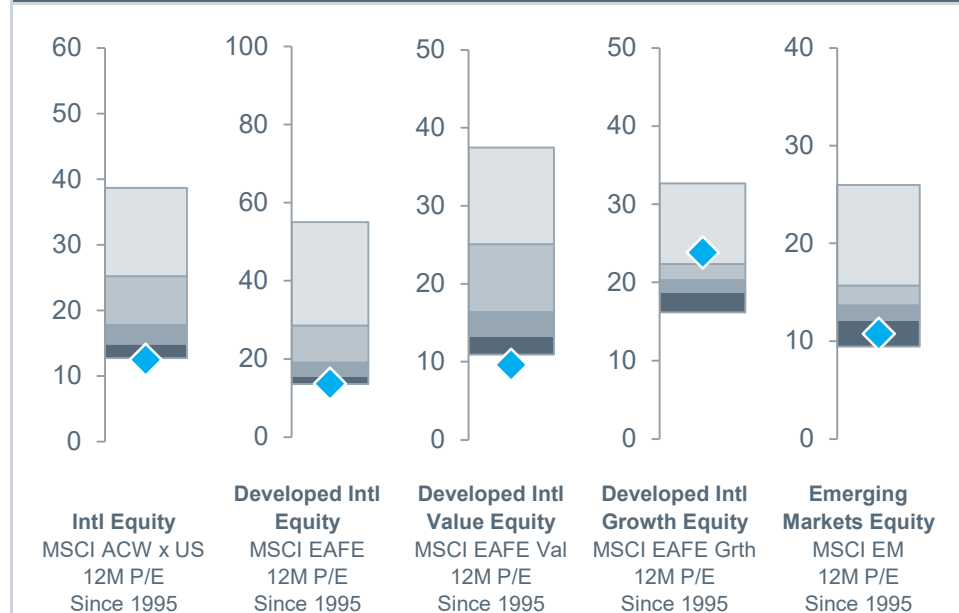
Market Cap & Style

The majority of active managers in emerging markets outperformed the index in Q4; however, active managers in international developed mostly underperformed.

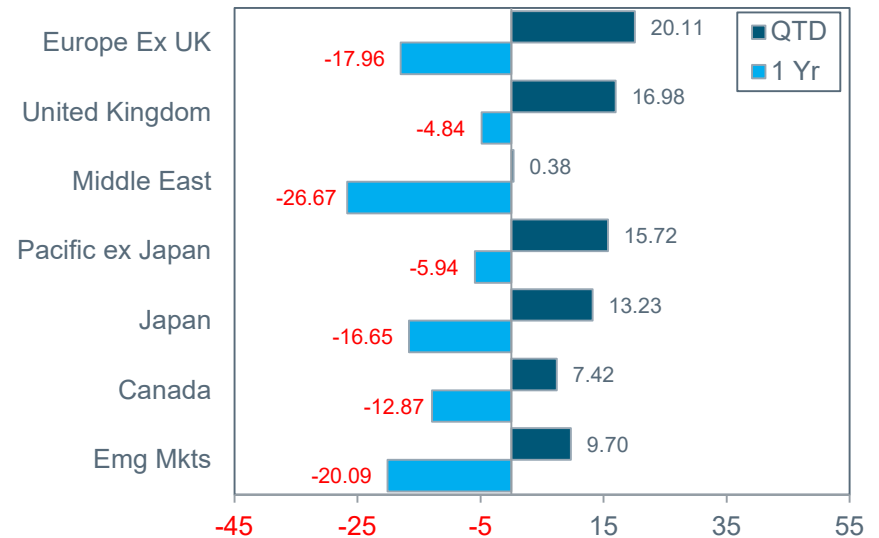
MSCI Style and Capitalization Market Performance (%)



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.

Fourth Quarter Review

Broad Market

The Bloomberg US Aggregate Index finished Q4 with a return of 1.9%, capping off a decline of -13.0% in 2022, the most negative calendar year on record for the index. The year was defined by rising interest rates, as treasury yields rose 236 basis points from 1.5% to 3.9% as measured by the 10-year US Treasury yield. The Federal Reserve aggressively hiked the Federal Funds rate in response to persistent inflation over the course of the year.

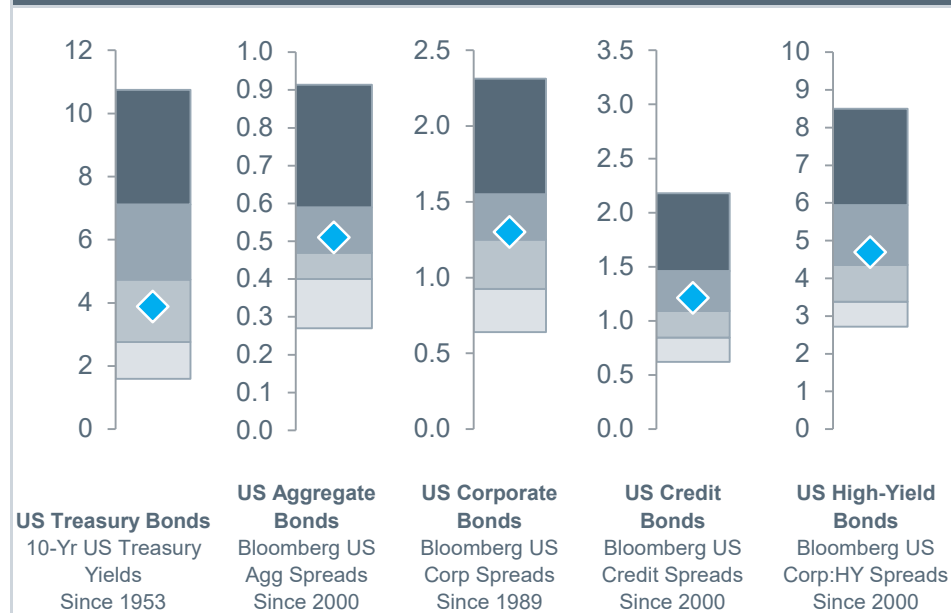
Credit Market

US investment grade corporate bonds rebounded in Q4 as low supply and softer Federal Reserve rhetoric bolstered credit markets. Non-investment grade corporate credit relatively outperformed investment grade over the year.

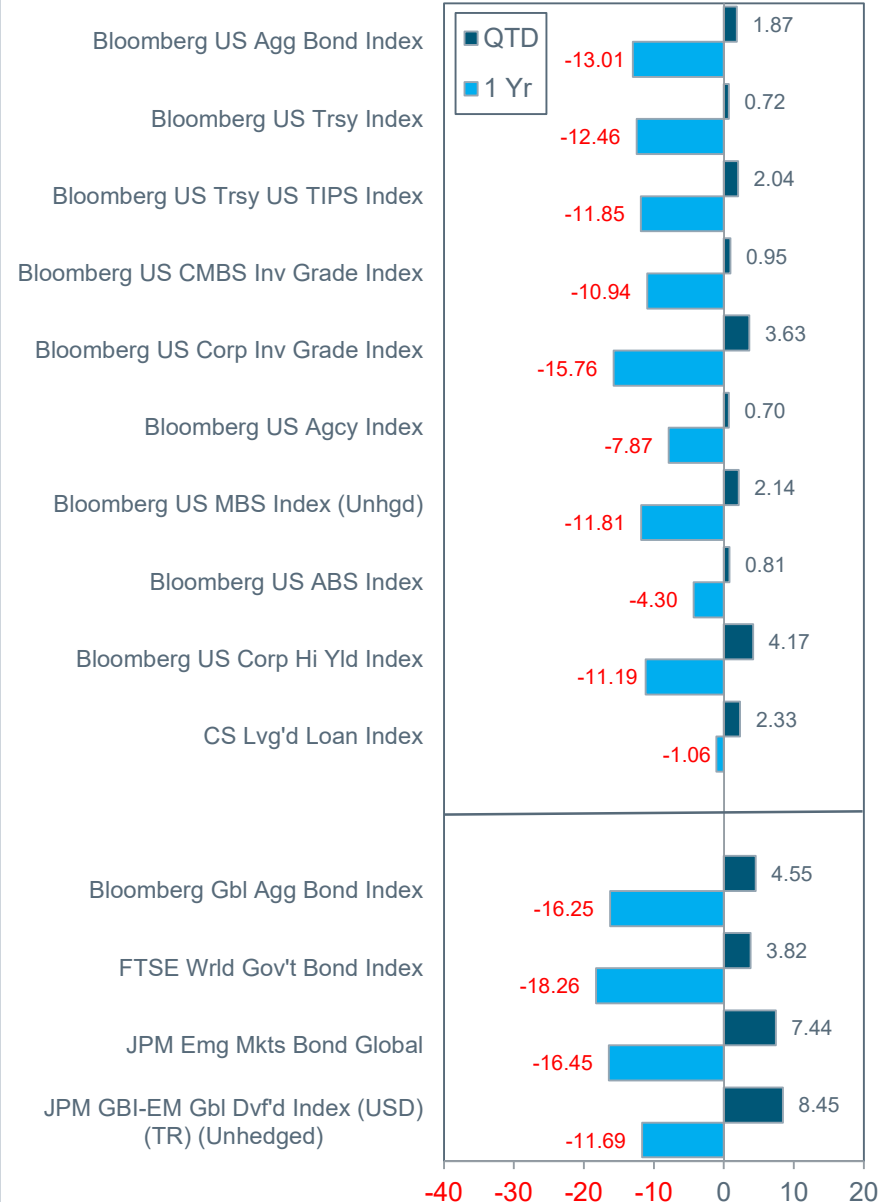
Emerging Market Debt

Conditions in global fixed income markets were defined by concerns over low growth, persistent inflation, rising interest rates, a strong US Dollar, and geopolitical conflict. The Bloomberg Global Aggregate Index returned 1.0% in Q4 and -11.2% in 2022, while the JPM EMBI Global Diversified returned 8.1% and -17.8% over these respective periods.

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.

Fourth Quarter Review - Absolute Return

General Market - Hedge Funds

Despite a highly challenging market backdrop, hedge funds broadly delivered much-needed capital preservation to institutional investors. The year also ended on a strong note given most managers were reducing leverage and overall market exposure going into Q4. The HFRI Fund-Asset-Weighted Composite Index delivered an annual return of 1.0% while its Asset-Weighted counterpart ended the year at -4.0%.

General Market - Global Tactical Asset Allocation (GTAA)

Global Tactical Asset Allocation (GTAA) strategies that RVK follows closely posted significant gains with moderate dispersion to close an otherwise challenging year. Given a strong quarter for non-US equity, as well as value-oriented equity within the US, nearly all active managers with significant diversification outperformed a US centric blend of 60% equity and 40% fixed income. The top performing long-biased GTAA strategies were those who have included meaningful market neutral idiosyncratic relative valuation exposures. While those who moderately underperformed peers benefitted from a value bias despite maintaining US equity and fixed income exposures.

Fourth Quarter Review - Real Assets

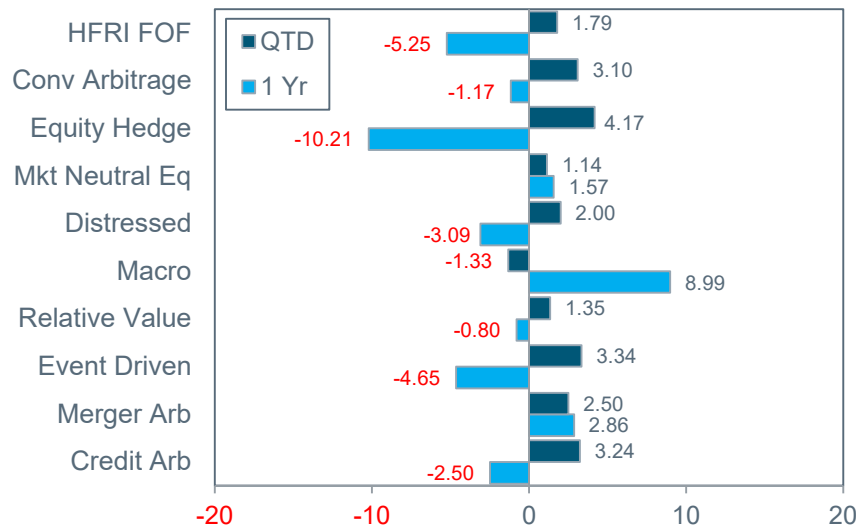
General Market - Diversified Inflation Strategies (DIS)

DIS managers tracked closely by RVK have outperformed a US-centric blend of 60% equity and 40% fixed income both year to date, and over the quarter. After responding positively to record inflationary pressures in Q1 of 2022, DIS posted losses in the second and third quarters that followed. Strong Q4 performance has materialized across the peer group, with those who rely on income-oriented investment processes and those who hold larger TIPS allocation lagging the group to a moderate degree.

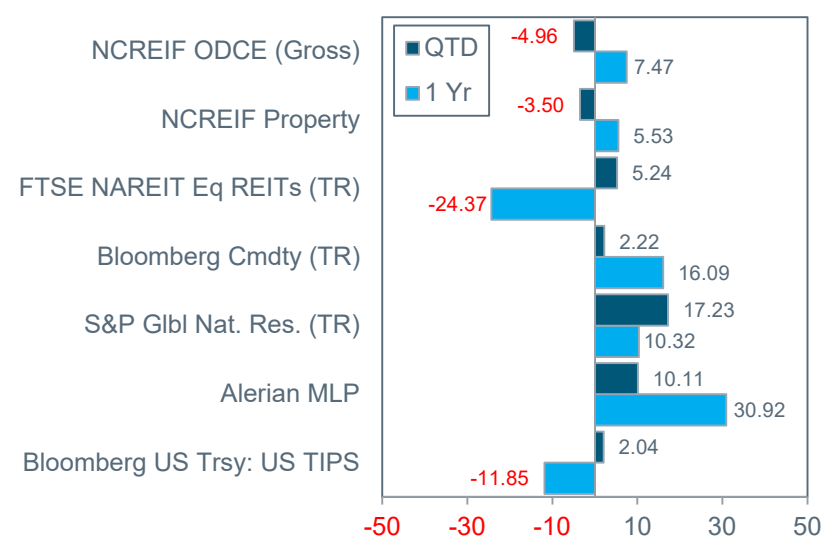
General Market - Real Estate

Core private real estate generated a negative return of -5.0% in Q4 (on a preliminary and gross of fee basis), as reported by the NFI-ODCE Index, with the total return comprising of 0.8% income and -5.8% price appreciation. Investors of publicly traded real estate significantly outperformed their private market counterparts by a meaningful margin. Publicly traded real estate delivered a fourth quarter total return of 4.5%, as measured by FTSE/NAREIT All REITs Index.

HFRI Hedge Fund Performance (%)



Real Asset Performance (%)



Annual Asset Class Performance

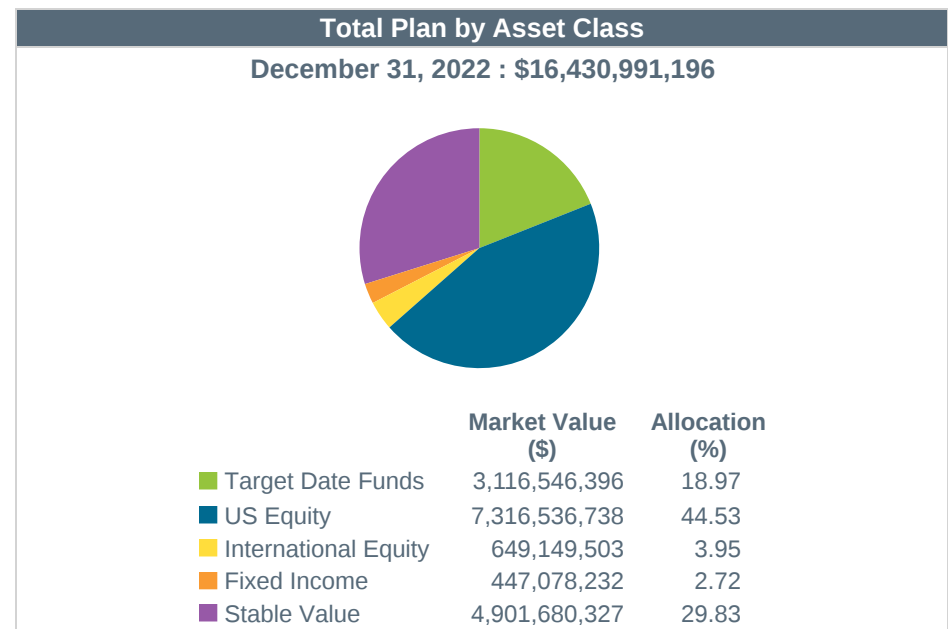
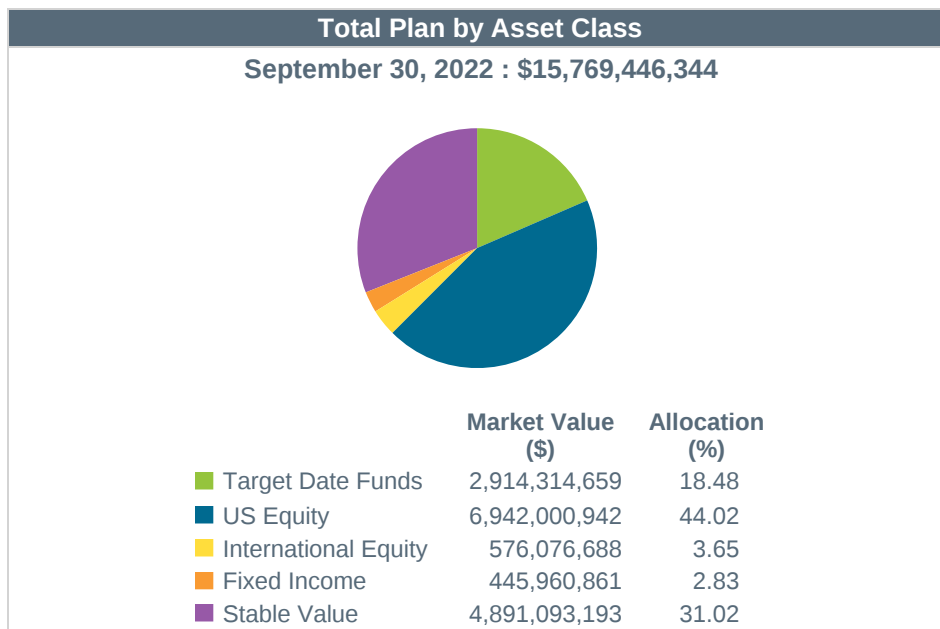
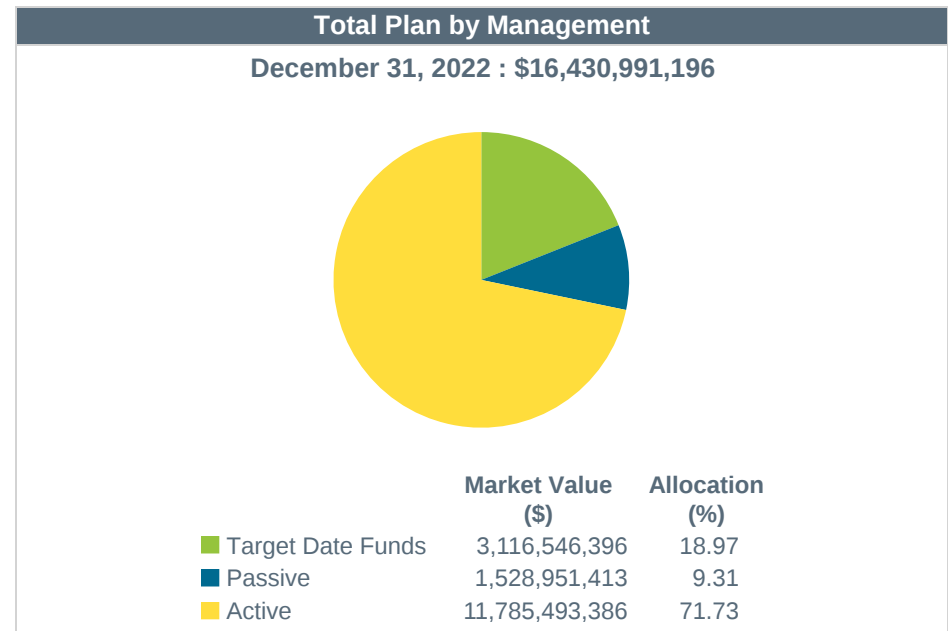
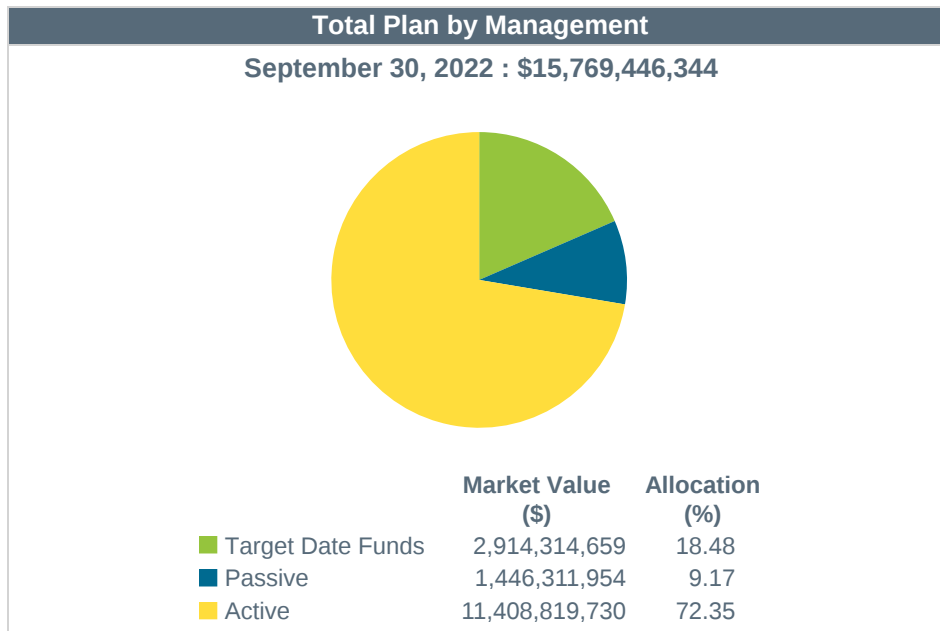
As of December 31, 2022

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	CYTD
Best ↑ <															

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

Plan Performance Review

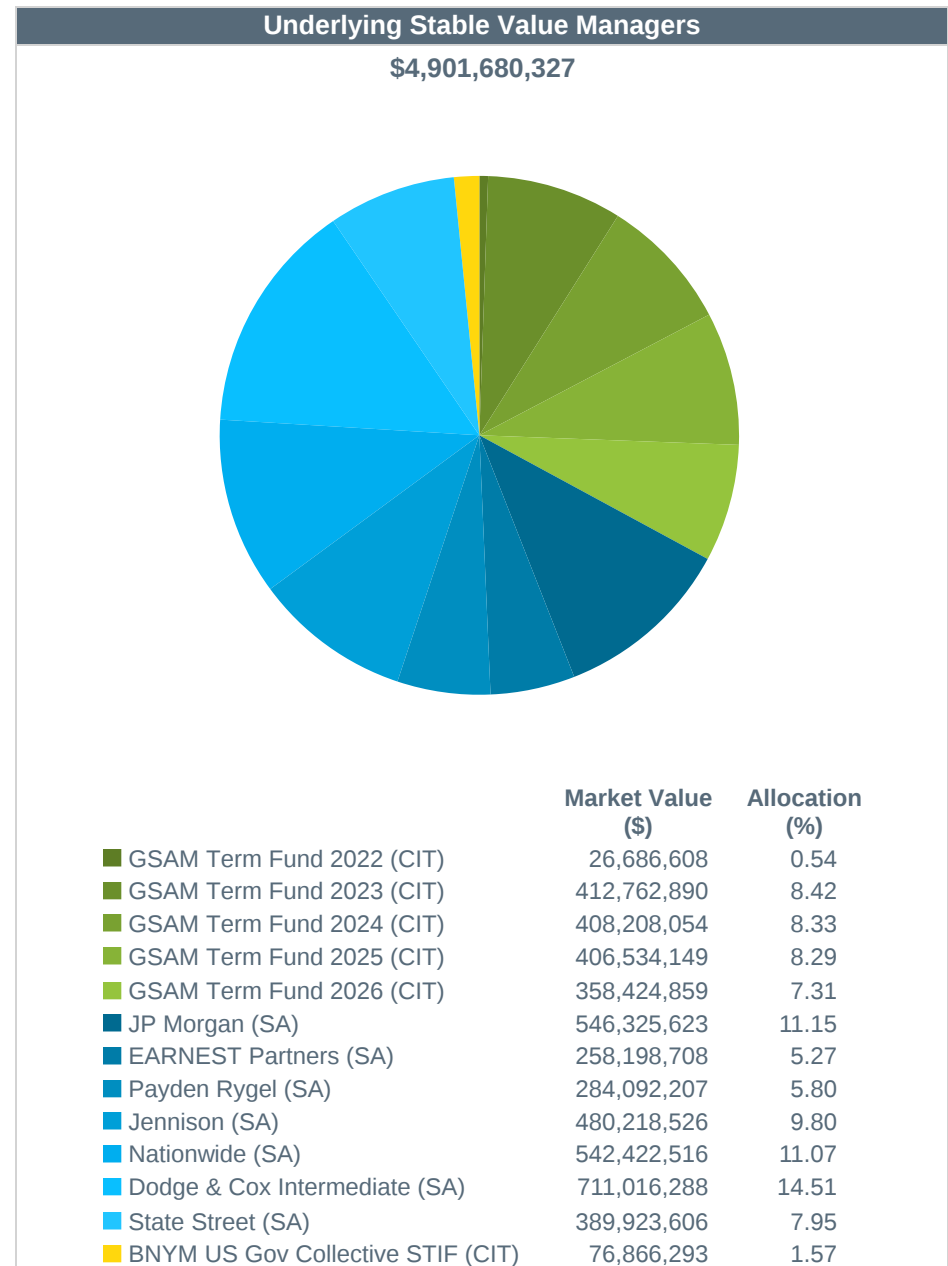
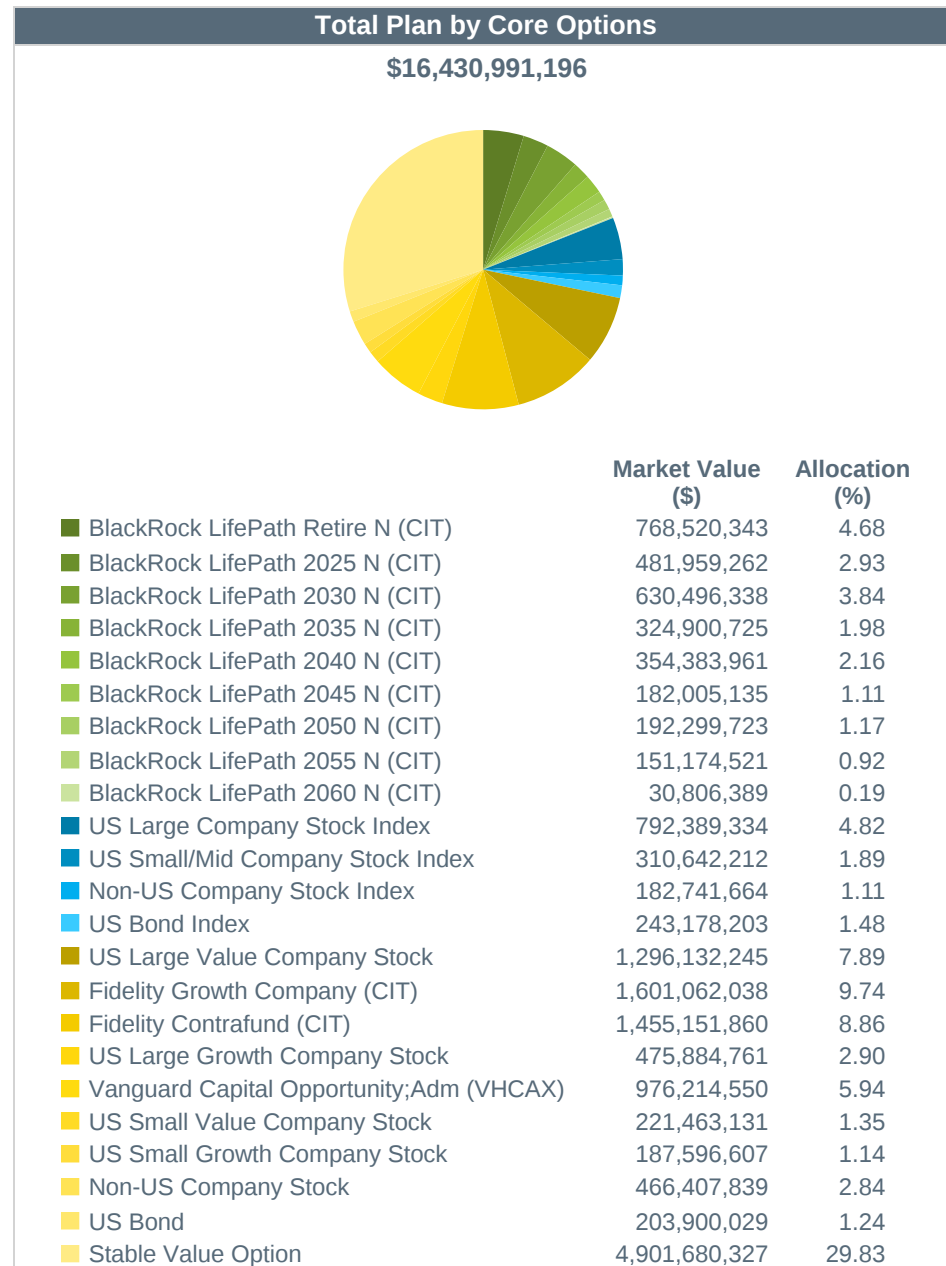




Allocations shown may not sum up to 100% exactly due to rounding.

Ohio Public Employees Deferred Compensation Program
Asset Allocation by Manager

As of December 31, 2022



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.

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

As of December 31, 2022

US Large Value Company Stock			
	Allocation		QTD
	Market Value (\$M)	%	
US Large Value Company Stock	1,296	100	N/A
Dodge & Cox Stock;X (DOXGX)	1,296	100	13.02

US Large Growth Company Stock			
	Allocation		QTD
	Market Value (\$M)	%	
US Large Growth Company Stock	476	100	0.25
T Rowe Price Large Cap Growth (SA) (Target 95%)	455	96	0.23
State Street Large Cap Growth Index (CIT) (Target: 5%)	21	4	2.18

US Small Value Company Stock			
	Allocation		QTD
	Market Value (\$M)	%	
US Small Value Company Stock	221	100	13.52
Westwood Small Cap Value (SA) (Target: 92.5%)	209	95	13.77
State Street Small Cap Value Index (CIT) (Target: 7.5%)	12	5	8.38

US Small Growth Company Stock			
	Allocation		QTD
	Market Value (\$M)	%	
US Small Growth Company Stock	188	100	4.46
Westfield Small Cap Growth (SA) (Target: 65%)	124	66	4.37
Fiera Small Cap Growth (SA) (Target: 27.5%)	52	27	4.74
State Street Small Cap Growth Index (CIT) (Target: 7.5%)	12	7	4.13

Non-US Company Stock			
	Allocation		QTD
	Market Value (\$M)	%	
Non-US Company Stock	466	100	14.32
Schroders QEP Intl Value (CIT) (Target: 35%)	163	35	14.94
Arrowstreet Intl Eq ACW Ex US C (CIT) (Target: 30%)	140	30	15.26
Vanguard Intl Growth;Adm (VWILX) (Target: 35%)	163	35	12.62

US Bond			
	Allocation		QTD
	Market Value (\$M)	%	
US Bond	204	100	2.12
TCW Total Return Bond Class B (CIT) (Target: 100%)	204	100	2.12

US Large Company Stock Index			
	Allocation		QTD
	Market Value (\$M)	%	
US Large Company Stock Index	792	100	N/A
State Street S&P 500 Index L (CIT)	792	100	7.56

US Small/Mid Company Stock Index			
	Allocation		QTD
	Market Value (\$M)	%	
US Small/Mid Company Stock Index	311	100	N/A
State Street Small/Mid Cap Index L (CF)	311	100	4.91

Non-US Company Stock Index			
	Allocation		QTD
	Market Value (\$M)	%	
Non-US Company Stock Index	183	100	N/A
State Street Global All Cap Equity Ex US CI II Lending (CF)	183	100	14.70

US Bond Index			
	Allocation		QTD
	Market Value (\$M)	%	
US Bond Index	243	100	N/A
State Street US Bond Index CI XIV Lending (CF)	243	100	1.67

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.

Ohio Public Employees Deferred Compensation Program
Fund Monitoring Summary

As of December 31, 2022

	% 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	%
								4th Quarter 2022	3rd Quarter 2022	2nd Quarter 2022	1st Quarter 2022	Participants Invested in Fund	
Passive													
BlackRock LifePath Retire N (CIT)	100%	No	No	No	No	No (Positive)	No					21,503	8.6%
BlackRock LifePath 2025 N (CIT)	100%	No	No	No	No	No (Positive)	No					14,770	5.9%
BlackRock LifePath 2030 N (CIT)	100%	No	No	No	No	No (Positive)	No					22,120	8.9%
BlackRock LifePath 2035 N (CIT)	100%	No	No	No	No	No (Positive)	No					17,303	6.9%
BlackRock LifePath 2040 N (CIT)	100%	No	No	No	No	No (Positive)	No					19,322	7.7%
BlackRock LifePath 2045 N (CIT)	100%	No	No	No	No	No (Positive)	No					15,893	6.4%
BlackRock LifePath 2050 N (CIT)	100%	No	No	No	No	No (Positive)	No					17,446	7.0%
BlackRock LifePath 2055 N (CIT)	100%	No	No	No	No	No (Positive)	No					19,629	7.9%
BlackRock LifePath 2060 N (CIT)	100%	No	No	No	No	No (Positive)	No					9,883	4.0%
US Large Company Stock Index		N/A	N/A	No	No	No (Positive)	No					26,271	10.5%
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					23,887	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					15,302	6.1%
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					13,840	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, 0.10% for US Fixed Income, and 0.10% for State Street (SA).

Ohio Public Employees Deferred Compensation Program Fund Monitoring Summary

As of December 31, 2022

	% 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	%
								4th Quarter 2022	3rd Quarter 2022	2nd Quarter 2022	1st Quarter 2022	Participants Invested in Fund	
Active													
US Large Value Company Stock		N/A	N/A	No	No	No (Positive)	No					44,277	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					46,969	18.8%
Fidelity Contrafund (CIT)	100%	Yes	No	No	No	No (Neutral)	No					41,758	16.7%
US Large Growth Company Stock		Yes	Yes	No	No	No (Positive)	No					25,890	10.4%
T Rowe Price Large Cap Growth (SA)	97%	Yes	Yes	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					44,061	17.7%
US Small Value Company Stock		No	No	No	No	No (Positive)	No					18,712	7.5%
Westwood Small Cap Value (SA)	93%	No	No	No	No	No (Positive)	No					-	-
State Street Small Cap Value Index NL (CIT)	7%	No	No	No	No	No (Positive)	No					-	-
US Small Growth Company Stock		No	No	No	No	No (Positive)	No					17,380	7.0%
Westfield Small Cap Growth (SA)	69%	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)	4%	Yes	No	No	No	No (Positive)	No					-	-
Non-US Company Stock		N/A	Yes	No	No	No (Positive)	No					29,455	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	Yes	No	No	No (Positive)	No					15,133	6.1%
TCW Total Return Bond Class B (CIT)	100%	No	Yes	No	No	No (Positive)	No					-	-
Stable Value Option		No	No	No	No	No (Positive)	No					92,496	37.1%

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, 0.10% for US Fixed Income, and 0.10% for State Street (SA).

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 December 31, 2022

	% of Fund	1.	2.	3.	4.	5.	6.	Watch List Status				In Compliance with Investment Guidelines?
		Underperformed During Trailing 5-Year Period?	Underperformed in 3 of 4 Trailing Quarters?	Diverged From Strategy and / or Portfolio Characteristics?	Adverse Change in Portfolio Manager?	Weak Manager Research Rating?	Weak Governance Rating?	4th Quarter 2022	3rd Quarter 2022	2nd Quarter 2022	1st Quarter 2022	
Stable Value												
GSAM Term Fund 2022 (CIT)	6%	No	No	No	No	No (Positive)	No					Yes
GSAM Term Fund 2023 (CIT)	8%	N/A	No	No	No	No (Positive)	No					Yes
GSAM Term Fund 2024 (CIT)	7%	N/A	Yes	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)	2%	N/A	No	No	No	No (Positive)	No					Yes
JP Morgan (SA)	11%	No	No	No	No	No (Positive)	No					Yes
EARNEST Partners (SA)	6%	No	No	No	No	No (Positive*)	No					Yes
Payden & Rygel (SA)	6%	No	No	No	No	No (Neutral)	No					Yes
Jennison (SA)	10%	No	No	No	Yes	No (Positive*)	No					Yes
Nationwide (SA)	11%	No	No	No	No	No (Neutral*)	Yes					Yes
Dodge & Cox Intermediate (SA)	14%	No	No	No	No	No (Positive)	No					Yes
State Street (SA)	8%	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, 0.10% for US Fixed Income, and 0.10% for State Street (SA).

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 December 31, 2022

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Hassle-Free Target Date Funds												
BlackRock LifePath Retire N (CIT)	4.70	-14.61	-14.61	0.76	2.70	4.26	4.06	6.97	11.99	15.67	-3.46	10.50
BlackRock LP Id Ret Lending Index	4.75	-14.54	-14.54	0.75	2.68	4.18	4.00	7.04	11.80	15.61	-3.48	10.09
Difference	-0.05	-0.07	-0.07	0.01	0.02	0.08	0.06	-0.07	0.19	0.06	0.02	0.41
IM Mixed-Asset Target Today (MF) Median	4.30	-12.87	-12.87	0.18	2.00	3.57	3.45	6.16	9.50	13.34	-3.57	8.92
Rank	29	81	81	29	23	22	26	27	7	13	46	23
BlackRock LifePath 2025 N (CIT)	5.29	-15.22	-15.22	1.22	3.20	5.31	5.35	9.01	12.21	18.62	-4.85	14.39
BlackRock LP Id2025 Lending Index	5.30	-15.17	-15.17	1.20	3.16	5.17	5.25	9.07	12.03	18.54	-4.90	13.75
Difference	-0.01	-0.05	-0.05	0.02	0.04	0.14	0.10	-0.06	0.18	0.08	0.05	0.64
IM Mixed-Asset Target 2025 (MF) Median	5.85	-15.31	-15.31	1.41	3.32	5.37	5.58	9.71	12.12	18.21	-5.23	14.95
Rank	70	47	47	59	56	54	64	66	49	43	39	60
BlackRock LifePath 2030 N (CIT)	6.44	-15.95	-15.95	1.88	3.80	6.10	6.06	11.45	12.90	20.80	-5.68	16.40
BlackRock LP Id2030 Lending Index	6.41	-15.92	-15.92	1.85	3.75	5.92	5.94	11.51	12.71	20.70	-5.76	15.63
Difference	0.03	-0.03	-0.03	0.03	0.05	0.18	0.12	-0.06	0.19	0.10	0.08	0.77
IM Mixed-Asset Target 2030 (MF) Median	6.69	-16.21	-16.21	2.03	3.77	6.07	6.34	11.46	12.85	20.13	-6.34	16.91
Rank	59	46	46	58	48	48	67	51	50	38	34	57
BlackRock LifePath 2035 N (CIT)	7.50	-16.65	-16.65	2.52	4.37	6.84	6.73	13.82	13.59	22.88	-6.48	18.34
BlackRock LP Id2035 Lending Index	7.39	-16.67	-16.67	2.47	4.29	6.62	6.58	13.85	13.42	22.74	-6.58	17.45
Difference	0.11	0.02	0.02	0.05	0.08	0.22	0.15	-0.03	0.17	0.14	0.10	0.89
IM Mixed-Asset Target 2035 (MF) Median	7.65	-17.04	-17.04	2.71	4.24	6.71	7.04	13.84	14.14	22.27	-7.27	18.72
Rank	58	42	42	59	43	43	62	51	59	32	30	58
BlackRock LifePath 2040 N (CIT)	8.50	-17.34	-17.34	3.06	4.85	7.48	7.31	15.98	14.16	24.75	-7.21	20.10
BlackRock LP Id2040 Lending Index	8.33	-17.38	-17.38	2.98	4.75	7.23	7.14	15.99	13.98	24.60	-7.33	19.10
Difference	0.17	0.04	0.04	0.08	0.10	0.25	0.17	-0.01	0.18	0.15	0.12	1.00
IM Mixed-Asset Target 2040 (MF) Median	8.44	-17.85	-17.85	3.14	4.64	7.20	7.46	15.68	14.73	23.63	-7.96	19.71
Rank	47	39	39	55	32	32	57	39	58	18	29	45
BlackRock LifePath 2045 N (CIT)	9.39	-17.88	-17.88	3.55	5.23	7.95	7.77	17.74	14.85	26.06	-7.82	21.26
BlackRock LP Id2045 Lending Index	9.17	-17.96	-17.96	3.45	5.11	7.66	7.57	17.71	14.64	25.93	-7.98	20.14
Difference	0.22	0.08	0.08	0.10	0.12	0.29	0.20	0.03	0.21	0.13	0.16	1.12
IM Mixed-Asset Target 2045 (MF) Median	8.94	-18.15	-18.15	3.44	4.89	7.42	7.63	16.69	15.35	24.60	-8.21	20.64
Rank	21	43	43	45	25	19	41	21	56	13	38	31

Performance shown is net of fees and is product specific.

Ohio Public Employees Deferred Compensation Program
Comparative Performance

As of December 31, 2022

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Hassle-Free Target Date Funds												
BlackRock LifePath 2050 N (CIT)	9.85	-18.20	-18.20	3.81	5.42	8.15	8.03	18.69	15.22	26.64	-8.09	21.66
BlackRock LP Id2050 Lending Index	9.59	-18.30	-18.30	3.70	5.29	7.85	7.83	18.61	15.07	26.49	-8.26	20.53
Difference	0.26	0.10	0.10	0.11	0.13	0.30	0.20	0.08	0.15	0.15	0.17	1.13
IM Mixed-Asset Target 2050 (MF) Median	9.17	-18.30	-18.30	3.56	4.92	7.47	7.74	17.00	15.52	24.67	-8.55	20.76
Rank	12	46	46	33	18	14	37	13	54	8	38	23
BlackRock LifePath 2055 N (CIT)	9.95	-18.26	-18.26	3.87	5.46	8.17	8.15	18.86	15.34	26.69	-8.12	21.65
BlackRock LP Id2055 Lending Index	9.69	-18.38	-18.38	3.75	5.33	7.88	7.96	18.81	15.18	26.56	-8.29	20.53
Difference	0.26	0.12	0.12	0.12	0.13	0.29	0.19	0.05	0.16	0.13	0.17	1.12
IM Mixed-Asset Target 2055 (MF) Median	9.23	-18.31	-18.31	3.57	4.95	7.56	7.86	17.19	15.61	24.82	-8.51	21.11
Rank	14	49	49	30	17	11	35	16	54	9	41	31
BlackRock LifePath 2060 N (CIT)	9.95	-18.27	-18.27	3.85	5.45	8.06	N/A	18.84	15.33	26.68	-8.12	20.79
BlackRock LP Id2060 Lending Index	9.69	-18.39	-18.39	3.75	5.32	7.88	N/A	18.80	15.18	26.56	-8.29	20.53
Difference	0.26	0.12	0.12	0.10	0.13	0.18	N/A	0.04	0.15	0.12	0.17	0.26
IM Mixed-Asset Target 2060 (MF) Median	9.26	-18.33	-18.33	3.59	4.99	7.66	N/A	17.27	15.70	25.06	-8.49	21.27
Rank	16	48	48	32	17	20	N/A	18	54	10	41	67

Performance shown is net of fees and is product specific.

Ohio Public Employees Deferred Compensation Program
Comparative Performance

As of December 31, 2022

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Passive Management												
US Large Company Stock Index	N/A	N/A	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)	7.56	-18.11	-18.11	7.66	9.42	11.48	12.56	28.71	18.40	31.49	-4.38	21.83
Difference	N/A	N/A	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	7.47	-18.38	-18.38	7.33	9.08	11.11	12.10	28.25	18.05	31.08	-4.66	21.37
Rank	N/A	N/A	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)	7.56	-18.11	-18.11	7.64	9.41	11.47	12.55	28.66	18.37	31.47	-4.41	21.83
S&P 500 Index (Cap Wtd)	7.56	-18.11	-18.11	7.66	9.42	11.48	12.56	28.71	18.40	31.49	-4.38	21.83
Difference	0.00	0.00	0.00	-0.02	-0.01	-0.01	-0.01	-0.05	-0.03	-0.02	-0.03	0.00
IM S&P 500 Index (MF) Median	7.47	-18.38	-18.38	7.33	9.08	11.11	12.10	28.25	18.05	31.08	-4.66	21.37
Rank	9	2	2	7	5	1	1	11	14	4	9	2
US Small/Mid Company Stock Index	N/A	N/A	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	4.85	-25.49	-25.49	3.70	5.33	8.65	9.89	12.64	32.88	28.04	-9.21	18.27
Difference	N/A	N/A	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	9.71	-14.67	-14.67	5.73	4.86	8.15	9.13	26.01	8.64	24.76	-12.47	13.94
Rank	N/A	N/A	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)	4.91	-25.39	-25.39	3.71	5.36	8.70	9.96	12.64	32.73	27.99	-9.05	18.28
Russell Sm Cap Compl Index	4.85	-25.49	-25.49	3.70	5.33	8.65	9.89	12.64	32.88	28.04	-9.21	18.27
Difference	0.06	0.10	0.10	0.01	0.03	0.05	0.07	0.00	-0.15	-0.05	0.16	0.01
IM U.S. SMID Cap Core Equity (MF) Median	9.71	-14.67	-14.67	5.73	4.86	8.15	9.13	26.01	8.64	24.76	-12.47	13.94
Rank	98	99	99	78	40	37	30	100	1	19	21	23
Non-US Company Stock Index	N/A	N/A	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)	14.15	-16.58	-16.58	0.20	0.85	4.84	3.98	8.53	11.12	21.63	-14.76	27.81
Difference	N/A	N/A	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	15.33	-16.52	-16.52	0.21	1.03	4.56	4.01	8.87	13.50	22.78	-15.85	27.15
Rank	N/A	N/A	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)	14.70	-16.29	-16.29	0.45	1.09	5.17	4.14	8.74	11.36	22.02	-14.63	28.09
MSCI ACW Ex US IM Index (USD) (Net)	14.15	-16.58	-16.58	0.20	0.85	4.84	3.98	8.53	11.12	21.63	-14.76	27.81
Difference	0.55	0.29	0.29	0.25	0.24	0.33	0.16	0.21	0.24	0.39	0.13	0.28
IM ACWI Ex US Core (MF) Median	15.33	-16.52	-16.52	0.21	1.03	4.56	4.01	8.87	13.50	22.78	-15.85	27.15
Rank	74	48	48	44	47	26	41	52	55	60	32	36

Performance shown is net of fees and is product specific.

Ohio Public Employees Deferred Compensation Program
Comparative Performance

As of December 31, 2022

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Passive Management												
US Bond Index	N/A	N/A	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	1.87	-13.01	-13.01	-2.71	0.02	0.89	1.06	-1.55	7.51	8.72	0.01	3.54
Difference	N/A	N/A	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	1.71	-13.66	-13.66	-2.72	-0.07	0.92	1.02	-1.33	8.16	8.76	-0.62	3.60
Rank	N/A	N/A	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)	1.67	-13.13	-13.13	-2.73	0.02	0.88	1.05	-1.62	7.67	8.74	0.03	3.55
Bloomberg US Agg Bond Index	1.87	-13.01	-13.01	-2.71	0.02	0.89	1.06	-1.55	7.51	8.72	0.01	3.54
Difference	-0.20	-0.12	-0.12	-0.02	0.00	-0.01	-0.01	-0.07	0.16	0.02	0.02	0.01
IM U.S. Broad Market Core Fixed Income (MF) Median	1.71	-13.66	-13.66	-2.72	-0.07	0.92	1.02	-1.33	8.16	8.76	-0.62	3.60
Rank	57	25	25	52	42	54	47	63	67	51	17	54

Performance shown is net of fees and is product specific.

Ohio Public Employees Deferred Compensation Program
Comparative Performance

As of December 31, 2022

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Hands-On Investing - Active Management												
US Large Value Company Stock	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 1000 Val Index	12.42	-7.54	-7.54	5.96	6.67	9.12	10.29	25.16	2.80	26.54	-8.27	13.66
Difference	N/A	N/A	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)	7.56	-18.11	-18.11	7.66	9.42	11.48	12.56	28.71	18.40	31.49	-4.38	21.83
Difference	N/A	N/A	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	12.88	-6.10	-6.10	7.19	7.50	9.75	10.51	25.96	3.82	26.50	-8.61	16.95
Rank	N/A	N/A	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)	13.02	-7.16	-7.16	9.43	8.74	11.79	12.45	31.73	7.16	24.83	-7.07	18.33
Russell 1000 Val Index	12.42	-7.54	-7.54	5.96	6.67	9.12	10.29	25.16	2.80	26.54	-8.27	13.66
Difference	0.60	0.38	0.38	3.47	2.07	2.67	2.16	6.57	4.36	-1.71	1.20	4.67
S&P 500 Index (Cap Wtd)	7.56	-18.11	-18.11	7.66	9.42	11.48	12.56	28.71	18.40	31.49	-4.38	21.83
Difference	5.46	10.95	10.95	1.77	-0.68	0.31	-0.11	3.02	-11.24	-6.66	-2.69	-3.50
IM U.S. Large Cap Value Equity (MF) Median	12.88	-6.10	-6.10	7.19	7.50	9.75	10.51	25.96	3.82	26.50	-8.61	16.95
Rank	48	63	63	9	20	7	3	3	25	73	34	29
Fidelity Growth Company (CIT)	3.21	-32.87	-32.87	11.71	13.22	15.44	16.64	22.99	68.86	39.10	-4.05	37.92
Russell 1000 Grth Index	2.20	-29.14	-29.14	7.79	10.96	12.95	14.10	27.60	38.49	36.39	-1.51	30.21
Difference	1.01	-3.73	-3.73	3.92	2.26	2.49	2.54	-4.61	30.37	2.71	-2.54	7.71
Russell 3000 Grth Index	2.31	-28.97	-28.97	7.32	10.45	12.55	13.75	25.85	38.26	35.85	-2.12	29.59
Difference	0.90	-3.90	-3.90	4.39	2.77	2.89	2.89	-2.86	30.60	3.25	-1.93	8.33
IM U.S. Large Cap Growth Equity (MF) Median	2.48	-31.30	-31.30	4.76	8.53	10.26	12.04	22.39	35.62	33.26	-1.22	29.28
Rank	41	68	68	1	3	1	1	44	1	4	81	2
Fidelity Contrafund (CIT)	4.64	-27.14	-27.14	6.11	9.00	11.34	12.72	24.77	31.44	31.17	-1.81	33.00
Russell 1000 Grth Index	2.20	-29.14	-29.14	7.79	10.96	12.95	14.10	27.60	38.49	36.39	-1.51	30.21
Difference	2.44	2.00	2.00	-1.68	-1.96	-1.61	-1.38	-2.83	-7.05	-5.22	-0.30	2.79
S&P 500 Index (Cap Wtd)	7.56	-18.11	-18.11	7.66	9.42	11.48	12.56	28.71	18.40	31.49	-4.38	21.83
Difference	-2.92	-9.03	-9.03	-1.55	-0.42	-0.14	0.16	-3.94	13.04	-0.32	2.57	11.17
IM U.S. Large Cap Growth Equity (MF) Median	2.48	-31.30	-31.30	4.76	8.53	10.26	12.04	22.39	35.62	33.26	-1.22	29.28
Rank	27	17	17	27	41	25	30	31	74	72	59	18

Performance shown is net of fees and is product specific.

Ohio Public Employees Deferred Compensation Program
Comparative Performance

As of December 31, 2022

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Hands-On Investing - Active Management												
US Large Growth Company Stock	0.25	-34.97	-34.97	3.98	8.66	11.60	14.15	23.90	39.54	29.39	4.13	38.14
Russell 1000 Grth Index	2.20	-29.14	-29.14	7.79	10.96	12.95	14.10	27.60	38.49	36.39	-1.51	30.21
Difference	-1.95	-5.83	-5.83	-3.81	-2.30	-1.35	0.05	-3.70	1.05	-7.00	5.64	7.93
IM U.S. Large Cap Growth Equity (MF) Median	2.48	-31.30	-31.30	4.76	8.53	10.26	12.04	22.39	35.62	33.26	-1.22	29.28
Rank	79	81	81	63	47	21	6	35	30	84	5	2
T Rowe Price Large Cap Growth (SA)	0.23	-34.95	-34.95	4.02	8.69	11.61	14.15	23.68	39.89	28.83	4.63	37.98
Russell 1000 Grth Index	2.20	-29.14	-29.14	7.79	10.96	12.95	14.10	27.60	38.49	36.39	-1.51	30.21
Difference	-1.97	-5.81	-5.81	-3.77	-2.27	-1.34	0.05	-3.92	1.40	-7.56	6.14	7.77
IM U.S. Large Cap Growth Equity (MF) Median	2.48	-31.30	-31.30	4.76	8.53	10.26	12.04	22.39	35.62	33.26	-1.22	29.28
Rank	79	81	81	63	46	21	6	36	29	87	4	2
State Street Large Cap Growth Index NL (CIT)	2.18	-29.18	-29.18	7.74	10.90	12.89	14.05	27.54	38.45	36.35	-1.63	30.11
Russell 1000 Grth Index	2.20	-29.14	-29.14	7.79	10.96	12.95	14.10	27.60	38.49	36.39	-1.51	30.21
Difference	-0.02	-0.04	-0.04	-0.05	-0.06	-0.06	-0.05	-0.06	-0.04	-0.04	-0.12	-0.10
IM U.S. Large Cap Growth Equity (MF) Median	2.48	-31.30	-31.30	4.76	8.53	10.26	12.04	22.39	35.62	33.26	-1.22	29.28
Rank	58	29	29	11	13	7	8	17	34	20	56	41
Vanguard Capital Opportunity;Adm (VHCAX)	8.99	-17.47	-17.47	7.09	8.53	11.57	14.14	21.11	22.89	27.28	-3.70	29.19
Russell Mid Cap Grth Index	6.90	-26.72	-26.72	3.85	7.64	9.95	11.41	12.73	35.59	35.47	-4.75	25.27
Difference	2.09	9.25	9.25	3.24	0.89	1.62	2.73	8.38	-12.70	-8.19	1.05	3.92
IM U.S. Mid Cap Growth Equity (MF) Median	5.69	-28.79	-28.79	4.14	7.49	9.51	11.07	14.22	34.91	33.86	-5.01	24.73
Rank	16	7	7	13	28	14	1	16	89	91	40	15

Performance shown is net of fees and is product specific.

Ohio Public Employees Deferred Compensation Program
Comparative Performance

As of December 31, 2022

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Hands-On Investing - Active Management												
US Small Value Company Stock	13.52	-12.37	-12.37	4.65	4.70	N/A	N/A	28.02	2.17	27.48	-13.91	N/A
Russell 2000 Val Index	8.42	-14.48	-14.48	4.70	4.13	8.23	8.48	28.27	4.63	22.39	-12.86	7.84
Difference	5.10	2.11	2.11	-0.05	0.57	N/A	N/A	-0.25	-2.46	5.09	-1.05	N/A
IM U.S. Small Cap Value Equity (MF) Median	11.70	-11.09	-11.09	6.79	4.73	8.12	8.53	31.97	3.57	21.05	-16.08	8.46
Rank	21	72	72	89	52	N/A	N/A	76	63	7	31	N/A
Westwood Small Cap Value (SA)	13.77	-12.26	-12.26	5.00	4.96	N/A	N/A	28.69	2.52	27.75	-13.84	N/A
Russell 2000 Val Index	8.42	-14.48	-14.48	4.70	4.13	8.23	8.48	28.27	4.63	22.39	-12.86	7.84
Difference	5.35	2.22	2.22	0.30	0.83	N/A	N/A	0.42	-2.11	5.36	-0.98	N/A
IM U.S. Small Cap Value Equity (MF) Median	11.70	-11.09	-11.09	6.79	4.73	8.12	8.53	31.97	3.57	21.05	-16.08	8.46
Rank	16	70	70	86	46	N/A	N/A	71	60	7	30	N/A
State Street Small Cap Value Index NL (CIT)	8.38	-14.59	-14.59	4.77	4.15	8.22	8.46	28.10	5.10	22.24	-12.83	7.99
Russell 2000 Val Index	8.42	-14.48	-14.48	4.70	4.13	8.23	8.48	28.27	4.63	22.39	-12.86	7.84
Difference	-0.04	-0.11	-0.11	0.07	0.02	-0.01	-0.02	-0.17	0.47	-0.15	0.03	0.15
IM U.S. Small Cap Value Equity (MF) Median	11.70	-11.09	-11.09	6.79	4.73	8.12	8.53	31.97	3.57	21.05	-16.08	8.46
Rank	91	97	97	87	63	48	54	75	32	31	23	56

Performance shown is net of fees and is product specific.

Ohio Public Employees Deferred Compensation Program
Comparative Performance

As of December 31, 2022

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Hands-On Investing - Active Management												
US Small Growth Company Stock	4.46	-25.26	-25.26	5.33	7.87	N/A	N/A	10.31	41.72	39.56	-10.43	N/A
Russell 2000 Grth Index	4.13	-26.36	-26.36	0.65	3.51	7.09	9.20	2.83	34.63	28.48	-9.31	22.17
Difference	0.33	1.10	1.10	4.68	4.36	N/A	N/A	7.48	7.09	11.08	-1.12	N/A
IM U.S. Small Cap Growth Equity (MF) Median	4.47	-27.54	-27.54	3.50	6.11	8.95	9.80	10.51	36.57	27.63	-5.58	20.74
Rank	51	35	35	27	21	N/A	N/A	52	36	5	78	N/A
Westfield Small Cap Growth (SA)	4.37	-25.34	-25.34	4.46	7.74	N/A	N/A	9.96	38.83	42.34	-10.52	N/A
Russell 2000 Grth Index	4.13	-26.36	-26.36	0.65	3.51	7.09	9.20	2.83	34.63	28.48	-9.31	22.17
Difference	0.24	1.02	1.02	3.81	4.23	N/A	N/A	7.13	4.20	13.86	-1.21	N/A
IM U.S. Small Cap Growth Equity (MF) Median	4.47	-27.54	-27.54	3.50	6.11	8.95	9.80	10.51	36.57	27.63	-5.58	20.74
Rank	53	36	36	37	23	N/A	N/A	53	42	1	78	N/A
Fiera Small Cap Growth (SA)	4.74	-24.23	-24.23	9.31	9.76	N/A	N/A	14.61	50.38	35.95	-10.29	N/A
Russell 2000 Grth Index	4.13	-26.36	-26.36	0.65	3.51	7.09	9.20	2.83	34.63	28.48	-9.31	22.17
Difference	0.61	2.13	2.13	8.66	6.25	N/A	N/A	11.78	15.75	7.47	-0.98	N/A
IM U.S. Small Cap Growth Equity (MF) Median	4.47	-27.54	-27.54	3.50	6.11	8.95	9.80	10.51	36.57	27.63	-5.58	20.74
Rank	47	28	28	5	6	N/A	N/A	35	25	17	77	N/A
State Street Small Cap Growth Index NL (CIT)	4.13	-26.50	-26.50	0.43	3.34	6.94	9.07	2.73	34.14	28.42	-9.42	21.88
Russell 2000 Grth Index	4.13	-26.36	-26.36	0.65	3.51	7.09	9.20	2.83	34.63	28.48	-9.31	22.17
Difference	0.00	-0.14	-0.14	-0.22	-0.17	-0.15	-0.13	-0.10	-0.49	-0.06	-0.11	-0.29
IM U.S. Small Cap Growth Equity (MF) Median	4.47	-27.54	-27.54	3.50	6.11	8.95	9.80	10.51	36.57	27.63	-5.58	20.74
Rank	56	45	45	84	85	81	71	83	57	47	73	45

Performance shown is net of fees and is product specific.

Ohio Public Employees Deferred Compensation Program
Comparative Performance

As of December 31, 2022

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Hands-On Investing - Active Management												
Non-US Company Stock	14.32	-18.06	-18.06	N/A	N/A	N/A	N/A	8.56	N/A	N/A	N/A	N/A
MSCI ACW Ex US Index (USD) (Net)	14.28	-16.00	-16.00	0.07	0.88	4.80	3.80	7.82	10.65	21.51	-14.20	27.19
Difference	0.04	-2.06	-2.06	N/A	N/A	N/A	N/A	0.74	N/A	N/A	N/A	N/A
IM ACWI Ex US Core (MF) Median	15.33	-16.52	-16.52	0.21	1.03	4.56	4.01	8.87	13.50	22.78	-15.85	27.15
Rank	83	67	67	N/A	N/A	N/A	N/A	56	N/A	N/A	N/A	N/A
Schroders QEP Intl Value (CIT)	14.94	-11.13	-11.13	0.73	0.53	4.22	3.80	13.94	0.94	18.64	-15.32	24.77
MSCI ACW Ex US Val Index (USD) (Net)	15.70	-8.59	-8.59	0.06	-0.05	4.19	2.72	10.46	-0.77	15.72	-13.97	22.66
Difference	-0.76	-2.54	-2.54	0.67	0.58	0.03	1.08	3.48	1.71	2.92	-1.35	2.11
IM ACWI Ex US Value (MF) Median	18.06	-11.04	-11.04	0.24	-0.27	3.35	2.53	10.01	3.69	17.82	-16.03	22.88
Rank	78	53	53	27	11	20	19	15	68	35	23	29
Arrowstreet Intl Eq ACW Ex US C (CIT)	15.26	-10.51	-10.51	7.66	6.58	9.62	N/A	13.26	23.13	24.45	-11.43	30.03
MSCI ACW Ex US Index (USD) (Net)	14.28	-16.00	-16.00	0.07	0.88	4.80	3.80	7.82	10.65	21.51	-14.20	27.19
Difference	0.98	5.49	5.49	7.59	5.70	4.82	N/A	5.44	12.48	2.94	2.77	2.84
IM ACWI Ex US Core (MF) Median	15.33	-16.52	-16.52	0.21	1.03	4.56	4.01	8.87	13.50	22.78	-15.85	27.15
Rank	52	6	6	2	1	1	N/A	5	7	40	3	21
Vanguard Intl Growth;Adm (VWILX)	12.62	-30.79	-30.79	3.14	4.75	9.09	7.84	-0.74	59.74	31.48	-12.58	43.16
MSCI ACW Ex US Grth Index (USD) (Net)	12.89	-23.05	-23.05	-0.40	1.49	5.17	4.68	5.09	22.20	27.34	-14.43	32.01
Difference	-0.27	-7.74	-7.74	3.54	3.26	3.92	3.16	-5.83	37.54	4.14	1.85	11.15
IM ACWI Ex US Growth (MF) Median	13.69	-26.63	-26.63	-0.30	1.70	4.86	4.87	7.93	22.75	27.84	-14.32	32.37
Rank	78	81	81	10	11	1	5	93	1	23	29	7
US Bond	2.12	-14.17	-14.17	-2.45	0.31	1.07	1.36	-1.28	9.56	8.99	0.38	3.48
Bloomberg US Agg Bond Index	1.87	-13.01	-13.01	-2.71	0.02	0.89	1.06	-1.55	7.51	8.72	0.01	3.54
Difference	0.25	-1.16	-1.16	0.26	0.29	0.18	0.30	0.27	2.05	0.27	0.37	-0.06
IM U.S. Broad Market Core+ Fixed Income (MF) Median	1.81	-13.75	-13.75	-2.46	0.10	1.17	1.20	-0.94	8.58	9.33	-0.97	4.49
Rank	29	62	62	50	40	59	38	65	28	59	9	79
TCW Total Return Bond Class B (CIT)	2.12	-14.17	-14.17	-2.45	0.31	1.07	1.36	-1.28	9.56	8.99	0.38	3.48
Bloomberg US Agg Bond Index	1.87	-13.01	-13.01	-2.71	0.02	0.89	1.06	-1.55	7.51	8.72	0.01	3.54
Difference	0.25	-1.16	-1.16	0.26	0.29	0.18	0.30	0.27	2.05	0.27	0.37	-0.06
IM U.S. Broad Market Core+ Fixed Income (MF) Median	1.81	-13.75	-13.75	-2.46	0.10	1.17	1.20	-0.94	8.58	9.33	-0.97	4.49
Rank	29	62	62	50	40	59	38	65	28	59	9	79

Performance shown is net of fees and is product specific.

Ohio Public Employees Deferred Compensation Program
Comparative Performance
Stable Value Fund

As of December 31, 2022

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Hands-On Investing - Active Management												
Stable Value Option	0.51	1.74	1.74	1.95	2.16	2.18	2.20	1.76	2.34	2.63	2.33	2.13
Stable Value Custom Benchmark	0.31	1.02	1.02	1.52	2.35	2.28	2.06	1.37	2.18	3.81	3.40	2.37
Difference	0.20	0.72	0.72	0.43	-0.19	-0.10	0.14	0.39	0.16	-1.18	-1.07	-0.24
Morningstar US CIT Stable Val Index	0.56	1.88	1.88	1.96	2.12	2.05	1.97	1.76	2.24	2.51	2.23	1.96
Difference	-0.05	-0.14	-0.14	-0.01	0.04	0.13	0.23	0.00	0.10	0.12	0.10	0.17
Term Fund												
GSAM Combined Term Fund	1.21	-3.58	-3.58	-0.16	1.07	1.13	N/A	-0.58	3.80	4.40	1.53	1.07
Bloomberg US Gov't Crdt 1-3 Yr Bond Index	0.89	-3.69	-3.69	-0.32	0.92	0.96	0.88	-0.47	3.33	4.03	1.60	0.84
Difference	0.32	0.11	0.11	0.16	0.15	0.17	N/A	-0.11	0.47	0.37	-0.07	0.23
GSAM Term Fund 2022 (CIT)	0.90	1.42	1.42	1.82	2.40	N/A	N/A	0.15	3.93	5.80	0.78	N/A
Bloomberg Maturing Benchmark 2022 (SU) (Gross)	0.93	1.29	1.29	1.69	2.25	N/A	N/A	0.09	3.72	5.28	0.95	N/A
Difference	-0.03	0.13	0.13	0.13	0.15	N/A	N/A	0.06	0.21	0.52	-0.17	N/A
GSAM Term Fund 2023 (CIT)	0.98	-1.14	-1.14	1.39	N/A	N/A	N/A	-0.53	5.99	6.49	N/A	N/A
Bloomberg Maturing Benchmark 2023 (SU) (Gross)	0.85	-1.37	-1.37	1.12	N/A	N/A	N/A	-0.45	5.31	6.30	N/A	N/A
Difference	0.13	0.23	0.23	0.27	N/A	N/A	N/A	-0.08	0.68	0.19	N/A	N/A
GSAM Term Fund 2024 (CIT)	0.97	-4.25	-4.25	0.34	N/A	N/A	N/A	-1.23	6.84	N/A	N/A	N/A
Bloomberg Maturing Benchmark 2024 (SU) (Gross)	0.72	-4.40	-4.40	0.28	N/A	N/A	N/A	-1.15	6.70	N/A	N/A	N/A
Difference	0.25	0.15	0.15	0.06	N/A	N/A	N/A	-0.08	0.14	N/A	N/A	N/A
GSAM Term Fund 2025 (CIT)	1.30	-6.49	-6.49	N/A	N/A	N/A	N/A	-2.26	N/A	N/A	N/A	N/A
Bloomberg Maturing Benchmark 2025 (SU) (Gross)	1.16	-6.36	-6.36	N/A	N/A	N/A	N/A	-2.01	N/A	N/A	N/A	N/A
Difference	0.14	-0.13	-0.13	N/A	N/A	N/A	N/A	-0.25	N/A	N/A	N/A	N/A
GSAM Term Fund 2026 (CIT)	1.70	-8.33	-8.33	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bloomberg Maturing Benchmark 2026 (SU) (Gross)	1.48	-9.20	-9.20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Difference	0.22	0.87	0.87	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

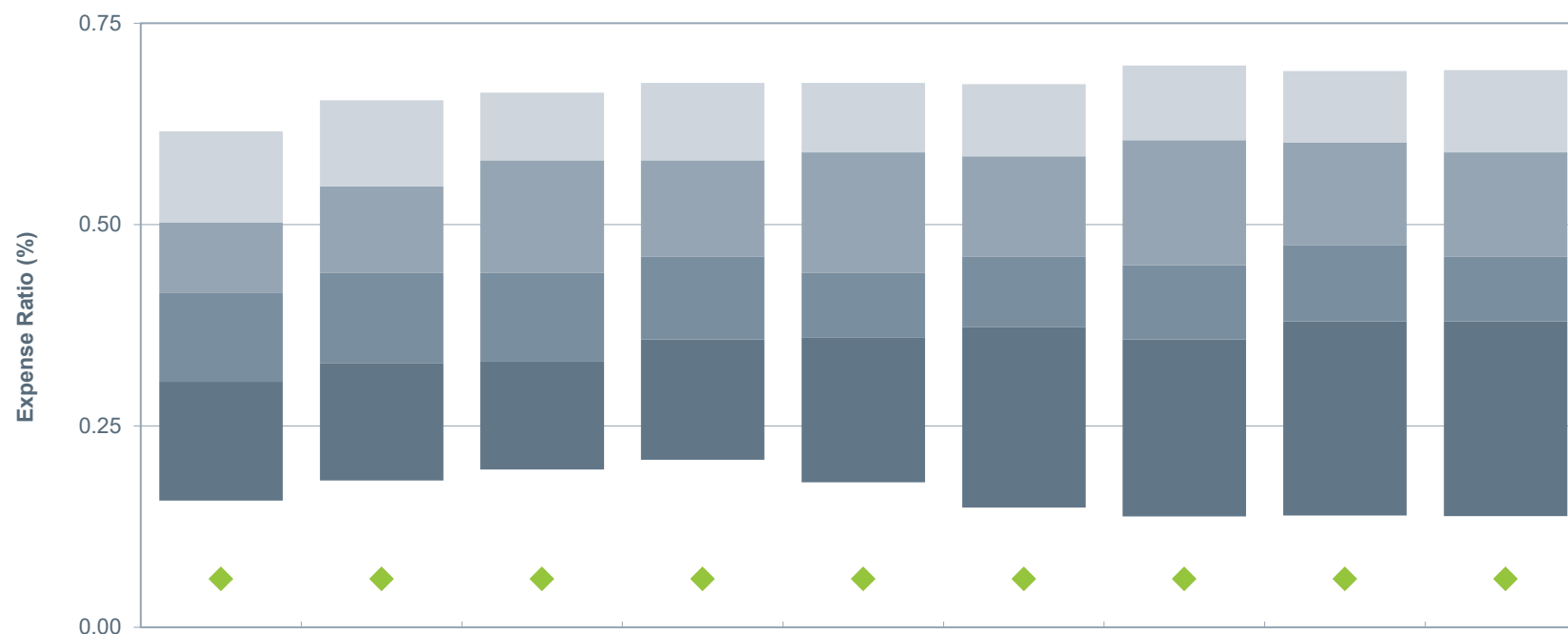
As of December 31, 2022

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Hands-On Investing - Active Management												
Open Maturity												
JP Morgan (SA)	1.25	-8.24	-8.24	-1.21	0.75	1.24	1.27	-0.95	6.06	6.57	1.02	2.49
Bloomberg US Agg Int Index*	1.72	-9.51	-9.51	-1.93	0.31	0.82	1.00	-1.29	5.60	6.67	0.92	2.27
Difference	-0.47	1.27	1.27	0.72	0.44	0.42	0.27	0.34	0.46	-0.10	0.10	0.22
EARNEST Partners (SA)	1.22	-8.99	-8.99	-1.73	0.46	0.94	1.09	-0.73	5.05	6.49	1.25	2.53
Bloomberg US Agg Int Index	1.72	-9.51	-9.51	-1.93	0.31	0.82	1.00	-1.29	5.60	6.67	0.92	2.27
Difference	-0.50	0.52	0.52	0.20	0.15	0.12	0.09	0.56	-0.55	-0.18	0.33	0.26
Payden Rygel (SA)	1.74	-9.21	-9.21	-1.62	0.48	1.01	1.14	-1.23	6.19	6.64	0.84	2.53
Bloomberg US Agg Int Index	1.72	-9.51	-9.51	-1.93	0.31	0.82	1.00	-1.29	5.60	6.67	0.92	2.27
Difference	0.02	0.30	0.30	0.31	0.17	0.19	0.14	0.06	0.59	-0.03	-0.08	0.26
Jennison (SA)	1.92	-9.42	-9.42	-1.40	0.51	1.04	N/A	-1.76	7.73	6.03	0.92	2.36
Bloomberg US Agg Int Index	1.72	-9.51	-9.51	-1.93	0.31	0.82	1.00	-1.29	5.60	6.67	0.92	2.27
Difference	0.20	0.09	0.09	0.53	0.20	0.22	N/A	-0.47	2.13	-0.64	0.00	0.09
Nationwide (SA)	1.74	-9.47	-9.47	-1.94	0.25	0.89	0.88	-1.13	5.35	6.27	1.09	2.10
Nationwide Custom Benchmark	1.72	-9.51	-9.51	-2.04	0.15	0.64	0.79	-1.29	5.25	6.06	1.07	1.93
Difference	0.02	0.04	0.04	0.10	0.10	0.25	0.09	0.16	0.10	0.21	0.02	0.17
Dodge & Cox Intermediate (SA)	2.46	-8.95	-8.95	-1.34	0.57	1.15	N/A	-1.42	7.01	6.57	0.54	2.70
Dodge & Cox Custom Benchmark	1.72	-9.51	-9.51	-2.04	0.15	0.64	0.83	-1.29	5.25	6.06	1.07	1.93
Difference	0.74	0.56	0.56	0.70	0.42	0.51	N/A	-0.13	1.76	0.51	-0.53	0.77
State Street (SA)	1.52	-8.19	-8.19	-1.22	0.75	1.02	1.08	-1.51	6.57	6.74	0.90	1.65
State Street Custom Benchmark	1.54	-8.24	-8.24	-1.26	0.73	1.03	1.08	-1.44	6.43	6.80	0.88	1.76
Difference	-0.02	0.05	0.05	0.04	0.02	-0.01	0.00	-0.07	0.14	-0.06	0.02	-0.11
STIF												
BNYM US Gov Collective STIF	0.92	1.63	1.63	0.73	1.26	1.10	0.79	0.07	0.51	2.25	1.89	0.94
FTSE 3 Mo T-Bill Index	0.87	1.50	1.50	0.71	1.25	1.05	0.74	0.05	0.58	2.25	1.86	0.84
Difference	0.05	0.13	0.13	0.02	0.01	0.05	0.05	0.02	-0.07	0.00	0.03	0.10

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 December 31, 2022

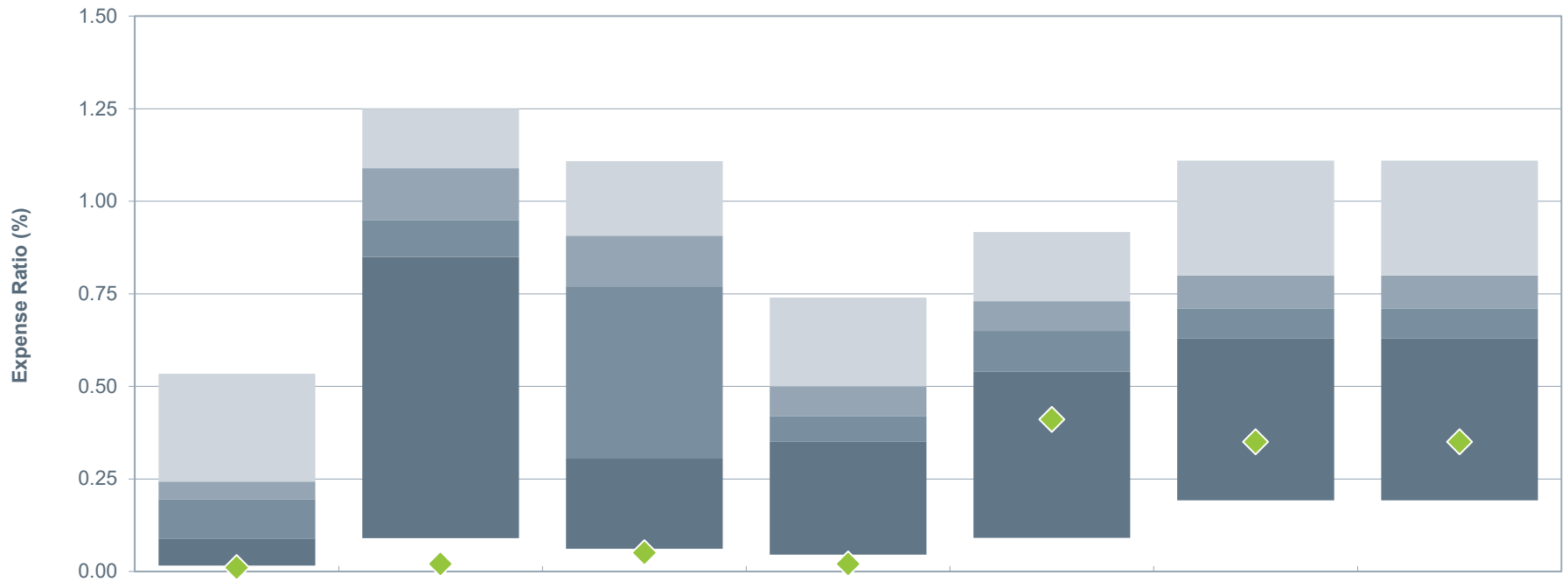


Fund	BlackRock LifePath Retire N (CIT)	BlackRock LifePath 2025 N (CIT)	BlackRock LifePath 2030 N (CIT)	BlackRock LifePath 2035 N (CIT)	BlackRock LifePath 2040 N (CIT)	BlackRock LifePath 2045 N (CIT)	BlackRock LifePath 2050 N (CIT)	BlackRock LifePath 2055 N (CIT)	BlackRock LifePath 2060 N (CIT)
Peer Group	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	0.42	0.44	0.44	0.46	0.44	0.46	0.45	0.48	0.46
Percentile Rank	1	1	1	1	1	1	1	1	1
Population	28	38	37	38	37	38	36	40	37

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 December 31, 2022



Fund	US Large Company Stock Index	US Small/Mid Company Stock Index	Non-US Company Stock Index	US Bond Index	US Large Value Company Stock	Fidelity Growth Company (CIT)	Fidelity Contrafund (CIT)
Peer Group	S&P 500 Index (MF)	U.S. SMID Cap Core Equity (MF)	ACWI Ex US Core (MF)	U.S. Broad Market Core Fixed Income (MF)	U.S. Large Cap Value Equity (MF)	U.S. Large Cap Growth Equity (MF)	U.S. Large Cap Growth Equity (MF)
◆ Fund Expense Ratio	0.01	0.02	0.05	0.02	0.41	0.35	0.35
Median Expense Ratio	0.20	0.95	0.77	0.42	0.65	0.71	0.71
Percentile Rank	4	1	3	3	15	9	9
Population	32	61	44	131	84	165	165

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

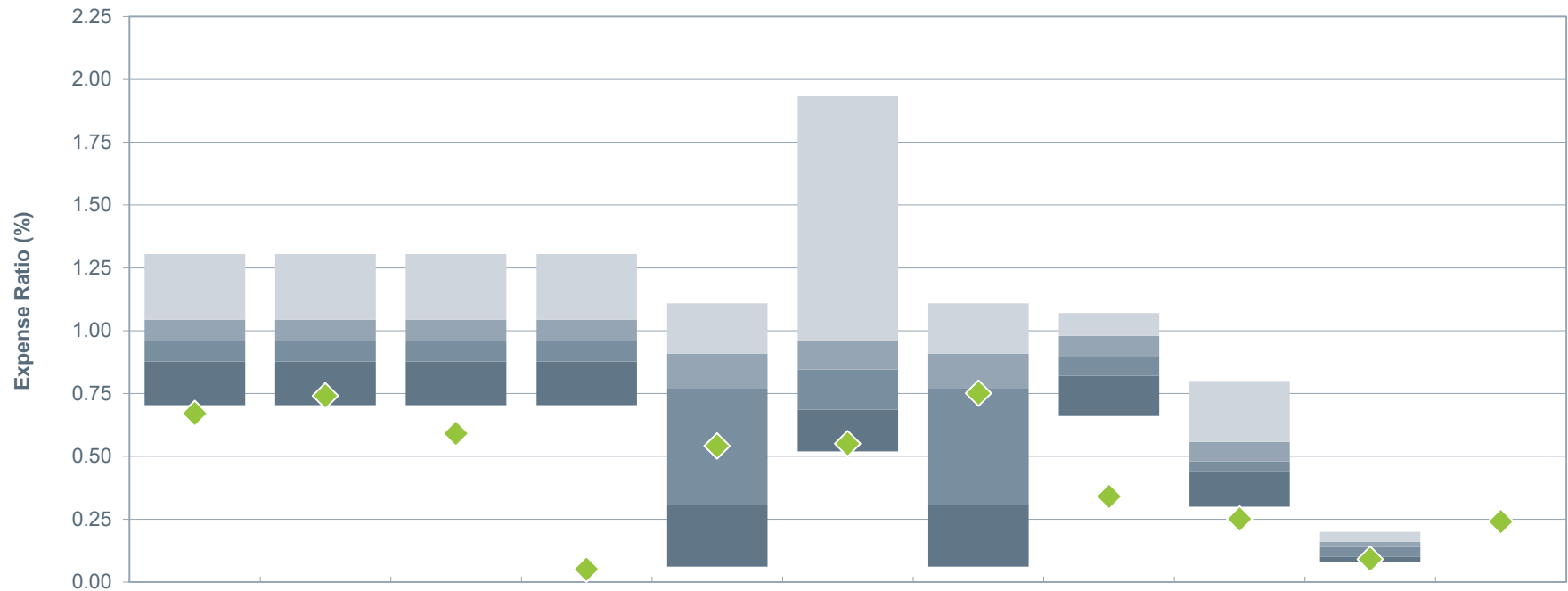
As of December 31, 2022



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 December 31, 2022



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	0.67	0.74	0.59	0.05	0.54	0.55	0.75	0.34	0.25	0.09	0.24
Median Expense Ratio	0.96	0.96	0.96	0.96	0.77	0.85	0.77	0.90	0.48	0.14	N/A
Percentile Rank	5	7	3	1	28	7	45	1	3	15	N/A
Population	148	148	148	148	44	16	44	41	78	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 December 31, 2022

	Estimated Annual Fee (%)	Market Value As of 12/31/2022 (\$)	Estimated Annual Fee (\$)
Total Fund	0.24	16,430,991,196	40,248,335
BlackRock LifePath Retire N (CIT)	0.06	768,520,343	461,112
BlackRock LifePath 2025 N (CIT)	0.06	481,959,262	289,176
BlackRock LifePath 2030 N (CIT)	0.06	630,496,338	378,298
BlackRock LifePath 2035 N (CIT)	0.06	324,900,725	194,940
BlackRock LifePath 2040 N (CIT)	0.06	354,383,961	212,630
BlackRock LifePath 2045 N (CIT)	0.06	182,005,135	109,203
BlackRock LifePath 2050 N (CIT)	0.06	192,299,723	115,380
BlackRock LifePath 2055 N (CIT)	0.06	151,174,521	90,705
BlackRock LifePath 2060 N (CIT)	0.06	30,806,389	18,484
US Large Company Stock Index	0.01	792,389,334	79,239
State Street S&P 500 Index L (CIT)	0.01	792,389,334	79,239
US Small/Mid Company Stock Index	0.02	310,642,212	62,128
State Street Small/Mid Cap Index L (CIT)	0.02	310,642,212	62,128
Non-US Company Stock Index	0.05	182,741,664	91,371
State Street Global All Cap Equity Ex US L (CIT)	0.05	182,741,664	91,371
US Bond Index	0.02	243,178,203	48,636
State Street US Bond Index L (CIT)	0.02	243,178,203	48,636
US Large Value Company Stock	0.41	1,296,132,245	5,314,142
Dodge & Cox Stock;X (DOXGX)	0.41	1,296,132,245	5,314,142
Fidelity Growth Company (CIT)	0.35	1,601,062,038	5,603,717
Fidelity Contrafund (CIT)	0.35	1,455,151,860	5,093,032
US Large Growth Company Stock	0.32	475,884,761	1,522,831
T Rowe Price Large Cap Growth (SA)	0.33	454,948,532	1,479,038
State Street Large Cap Growth Index NL (CIT)	0.04	20,936,532	8,793
Vanguard Capital Opportunity;Adm (VHCAX)	0.36	976,214,550	3,514,372
US Small Value Company Stock	0.52	221,463,131	1,151,608
Westwood Small Cap Value (SA)	0.54	209,494,660	1,128,484
State Street Small Cap Value Index NL (CIT)	0.05	11,968,471	6,224
US Small Growth Company Stock	0.67	187,596,607	1,256,897
Westfield Small Cap Growth (SA)	0.74	123,751,986	917,512
Fiera Small Cap Growth (SA)	0.59	51,576,973	304,304
State Street Small Cap Growth Index NL (CIT)	0.05	12,267,648	6,134
Non-US Company Stock	0.54	466,407,839	2,518,602
Schroders QEP Intl Value (CIT)	0.55	163,242,744	897,835
Arrowstreet Intl Eq ACW Ex US C (CIT)	0.75	139,922,352	1,049,418
Vanguard Intl Growth;Adm (VWILX)	0.34	163,242,744	555,025
US Bond	0.25	203,900,029	509,750
TCW Total Return Bond Class B (CIT)	0.25	203,900,029	509,750

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 December 31, 2022

	Estimated Annual Fee (%)	Market Value As of 12/31/2022 (\$)	Estimated Annual Fee (\$)
Stable Value Option	0.24	4,901,680,327	11,612,081
GSAM Term Fund 2022 (CIT)	0.00	26,686,608	-
GSAM Term Fund 2023 (CIT)	0.00	412,762,890	-
GSAM Term Fund 2024 (CIT)	0.00	408,208,054	-
GSAM Term Fund 2025 (CIT)	0.00	406,534,149	-
GSAM Term Fund 2026 (CIT)	0.00	358,424,859	-
JP Morgan (SA)	0.12	546,325,623	651,326
EARNEST Partners (SA)	0.14	258,198,708	355,658
Payden Rygel (SA)	0.13	284,092,207	357,956
Jennison (SA)	0.13	480,218,526	606,262
Nationwide (SA)	0.11	542,422,516	579,696
Dodge & Cox Intermediate (SA)	0.10	711,016,288	711,016
State Street (SA)	0.05	389,923,606	187,985
BNYM US Gov Collective Short Term Investment Fund (CIT)	0.10	76,866,293	76,866

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

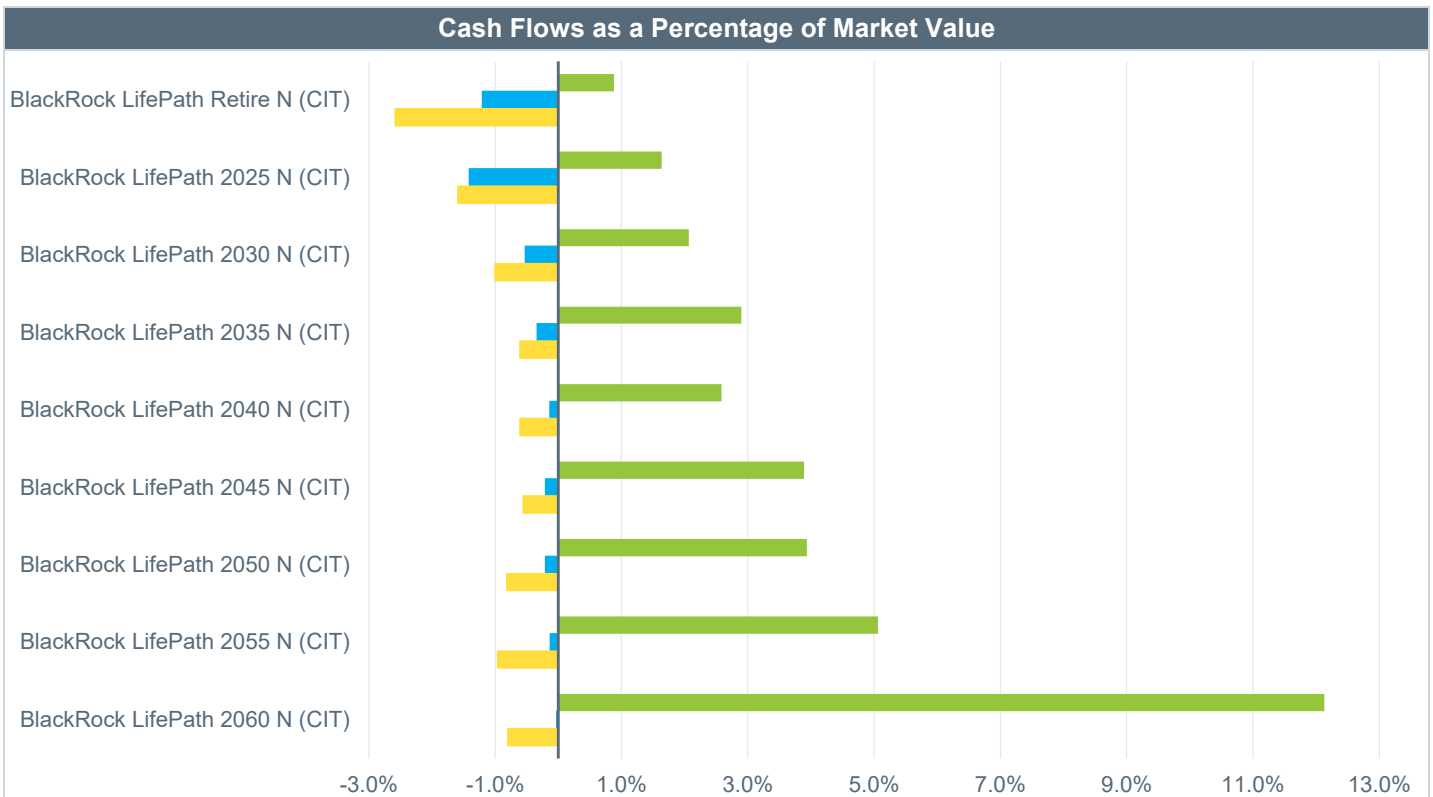
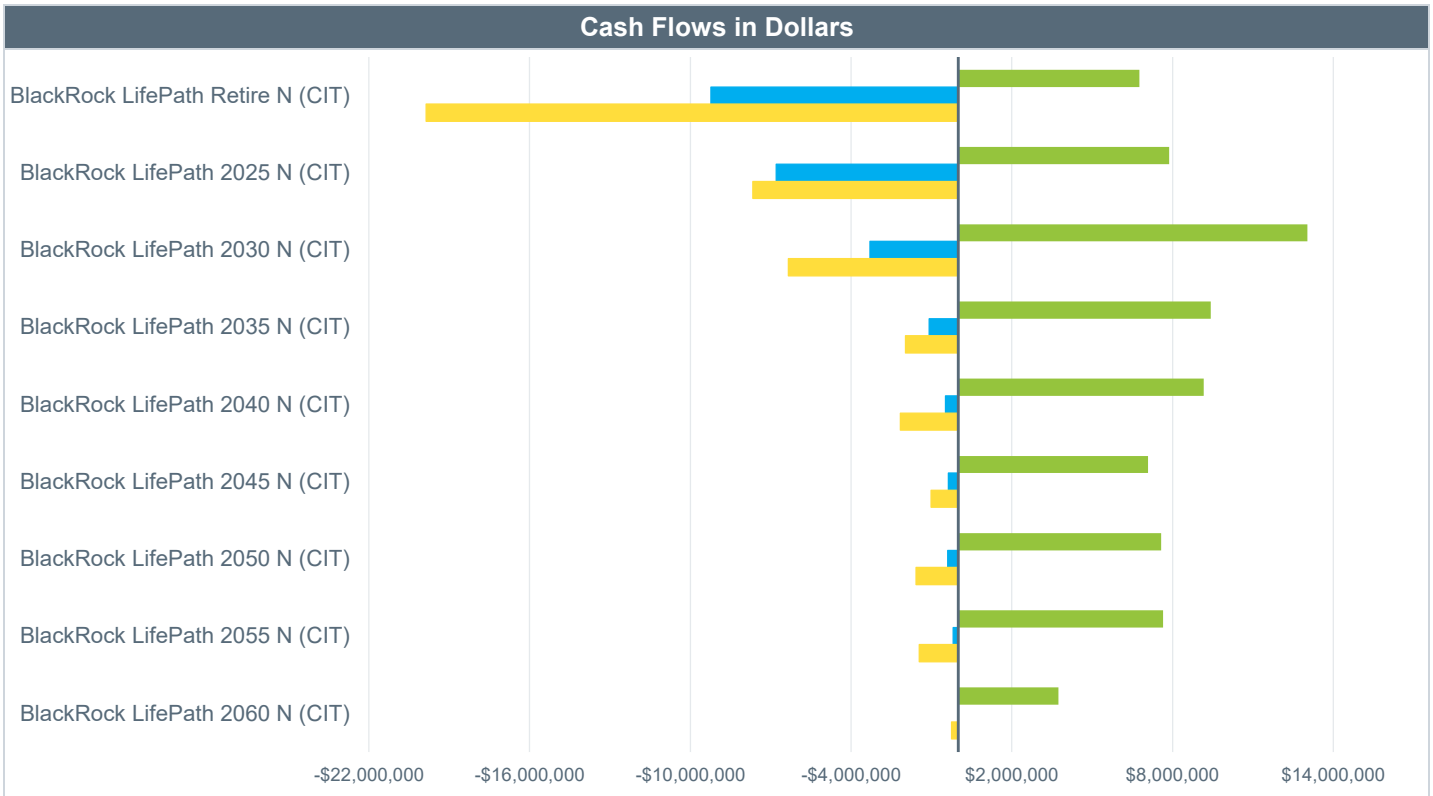
As of December 31, 2022

Issuer	Book Value	09/30/2022			12/31/2022		
		Contract Type	Fee in bps	Fee in \$	Contract Type	Fee in bps	Fee in \$
Transamerica Premier	995,571,444	Participating	15	1,486,106	Participating	15	1,493,357
Royal Bank of Canada	884,255,555	Participating	15	1,320,334	Participating	15	1,326,383
Metropolitan Life	1,112,820,722	Participating	15	1,659,732	Participating	15	1,669,231
RGA Reinsurance Co.	958,115,785	Participating	15	1,430,655	Participating	15	1,437,174
Prudential	1,256,210,116	Participating	15	1,873,361	Participating	15	1,884,315
Total	\$5,206,973,622	--	15.0	\$7,770,188	--	15.0	\$7,810,460

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 December 31, 2022



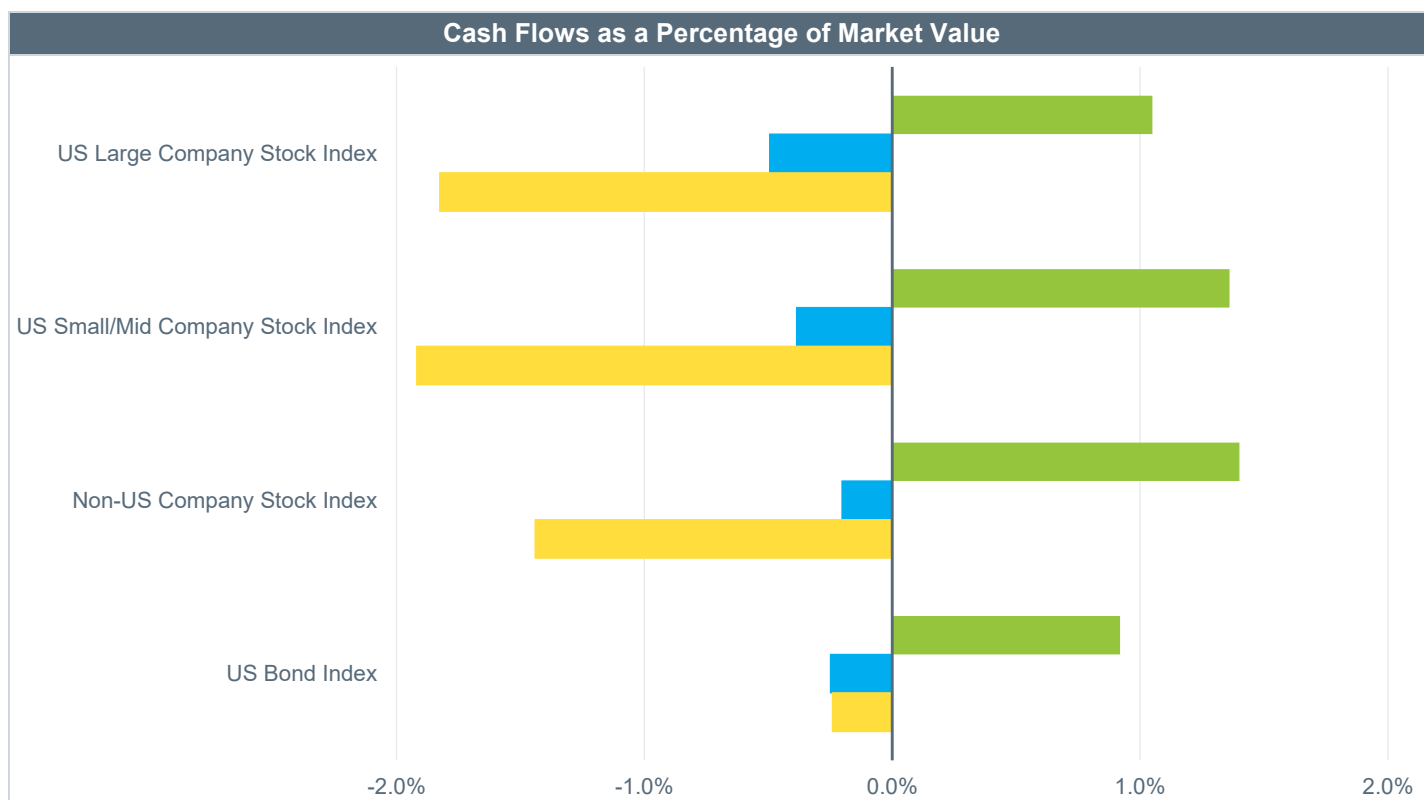
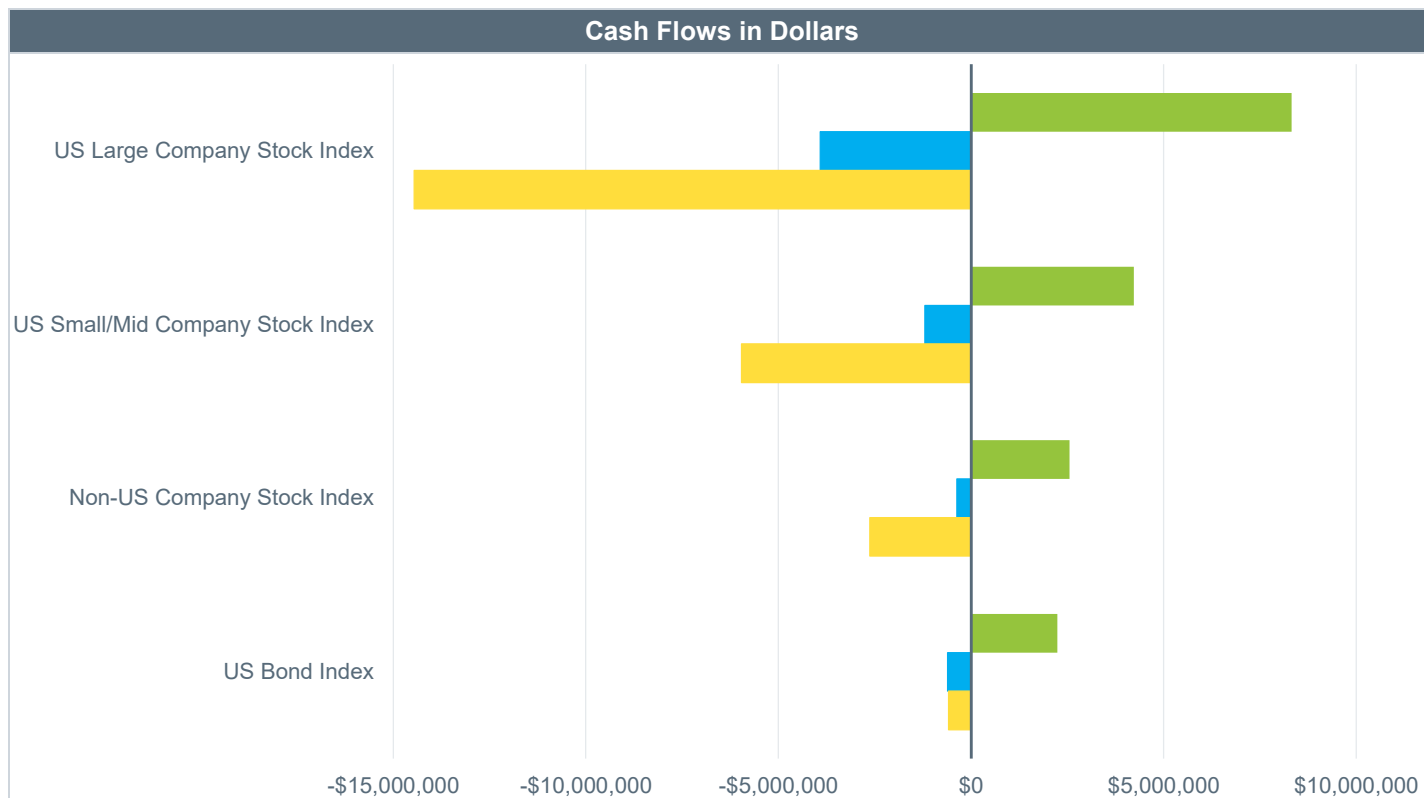
Key: ■ Contributions ■ Net Exchanges ■ Distributions

Cash flows shown represent quarterly flows. Contributions consists of employee contributions and positive net rollovers. Distributions consists of distributions and negative rollovers. Quarterly contributions and distributions shown for US Large Company Stock Index includes Vanguard Instl Idx;Ins+ (VILIX), US Small/Mid Company Stock Index includes Vanguard Ext MI;Ins+ (VEMPX), Non-US Company Stock Index includes Vanguard Tot I S;Ins + (VTPSX), and US Bond Index includes Vanguard Tot Bd;Ins (VBMPX).



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

As of December 31, 2022

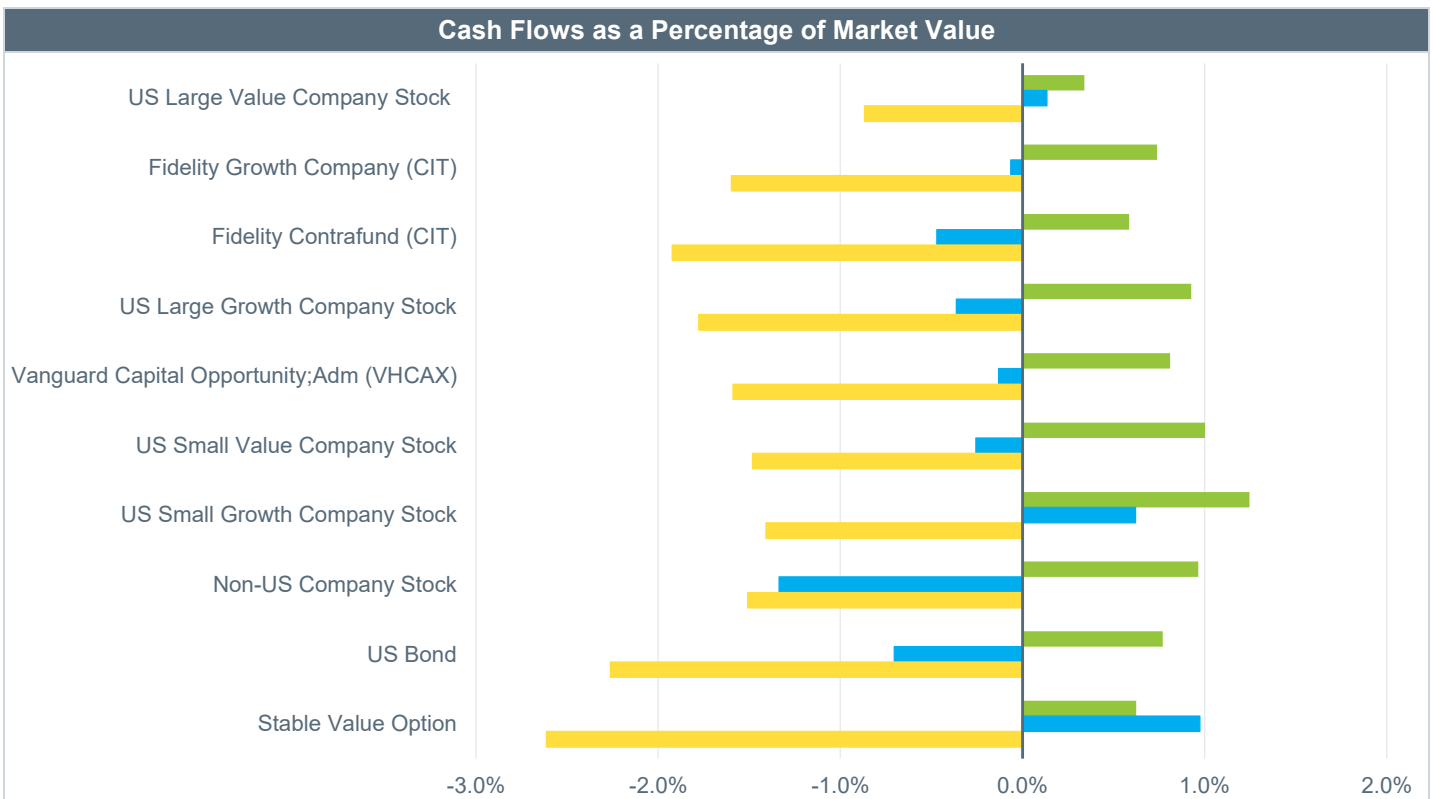
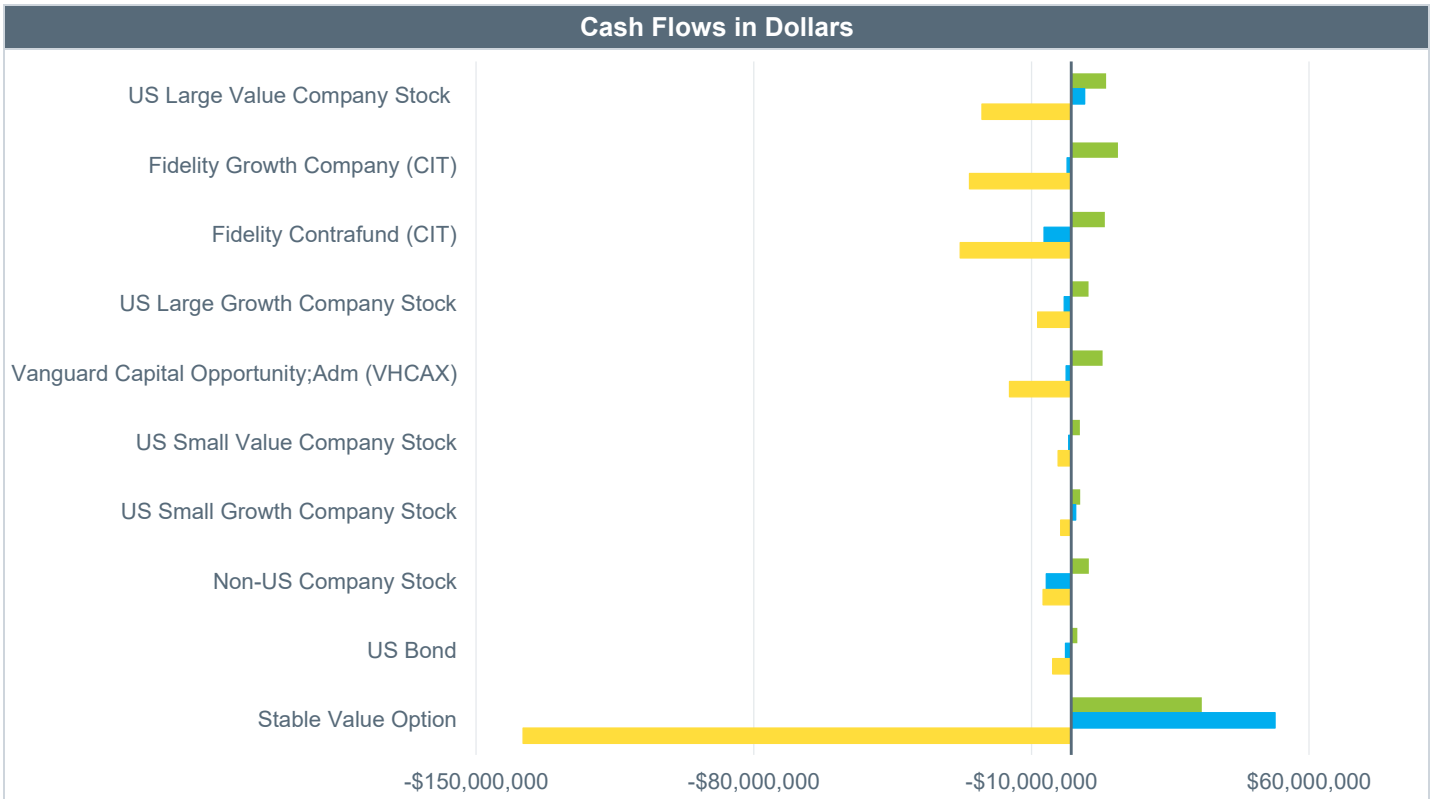


Key: ■ Contributions ■ Net Exchanges ■ Distributions

Cash flows shown represent quarterly flows. Contributions consists of employee contributions and positive net rollovers. Distributions consists of distributions and negative rollovers. Quarterly contributions and distributions shown for US Large Company Stock Index includes Vanguard Instl Idx;Ins+ (VLIIX), US Small/Mid Company Stock Index includes Vanguard Ext Ml;Ins+ (VEMPX), Non-US Company Stock Index includes Vanguard Tot I S;Ins + (VTPSX), and US Bond Index includes Vanguard Tot Bd;Ins (VBMPX).

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

As of December 31, 2022



Key: Contributions (Green), Net Exchanges (Blue), Distributions (Yellow)

Cash flows shown represent quarterly flows. Contributions consists of employee contributions and positive net rollovers. Distributions consists of distributions and negative rollovers. Quarterly contributions and distributions shown for US Large Company Stock Index includes Vanguard Instl Idx;Ins+ (VIIIX), US Small/Mid Company Stock Index includes Vanguard Ext MI;Ins+ (VEMPX), Non-US Company Stock Index includes Vanguard Tot I S;Ins + (VTPSX), and US Bond Index includes Vanguard Tot Bd;Ins (VBMPX).



Ohio Public Employees Deferred Compensation Program
Actual Correlation Matrix

5 Years Ending December 31, 2022

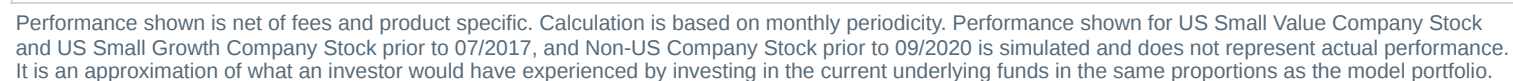
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
A	N/A													
B	N/A	N/A												
C	N/A	N/A	1.00											
D	N/A	N/A	0.97	1.00										
E	N/A	N/A	0.97	0.98	1.00									
F	N/A	N/A	0.91	0.92	0.91	1.00								
G	N/A	N/A	0.76	0.80	0.79	0.90	1.00							
H	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						
I	N/A	N/A	0.90	0.90	0.91	0.92	0.89	N/A	1.00					
J	N/A	N/A	0.81	0.84	0.82	0.91	0.86	N/A	0.84	1.00				
K	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
M	N/A	N/A	0.46	0.45	0.48	0.35	0.29	N/A	0.37	0.44	N/A	N/A	1.00	
N	N/A	N/A	0.21	0.19	0.21	0.11	0.00	N/A	0.15	0.15	N/A	N/A	0.45	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 for US Small Value Company Stock and US Small Growth Company Stock prior to 07/2017, and Non-US Company Stock prior to 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.

5 Years Ending December 31, 2022



Ohio Public Employees Deferred Compensation Program Risk and Return

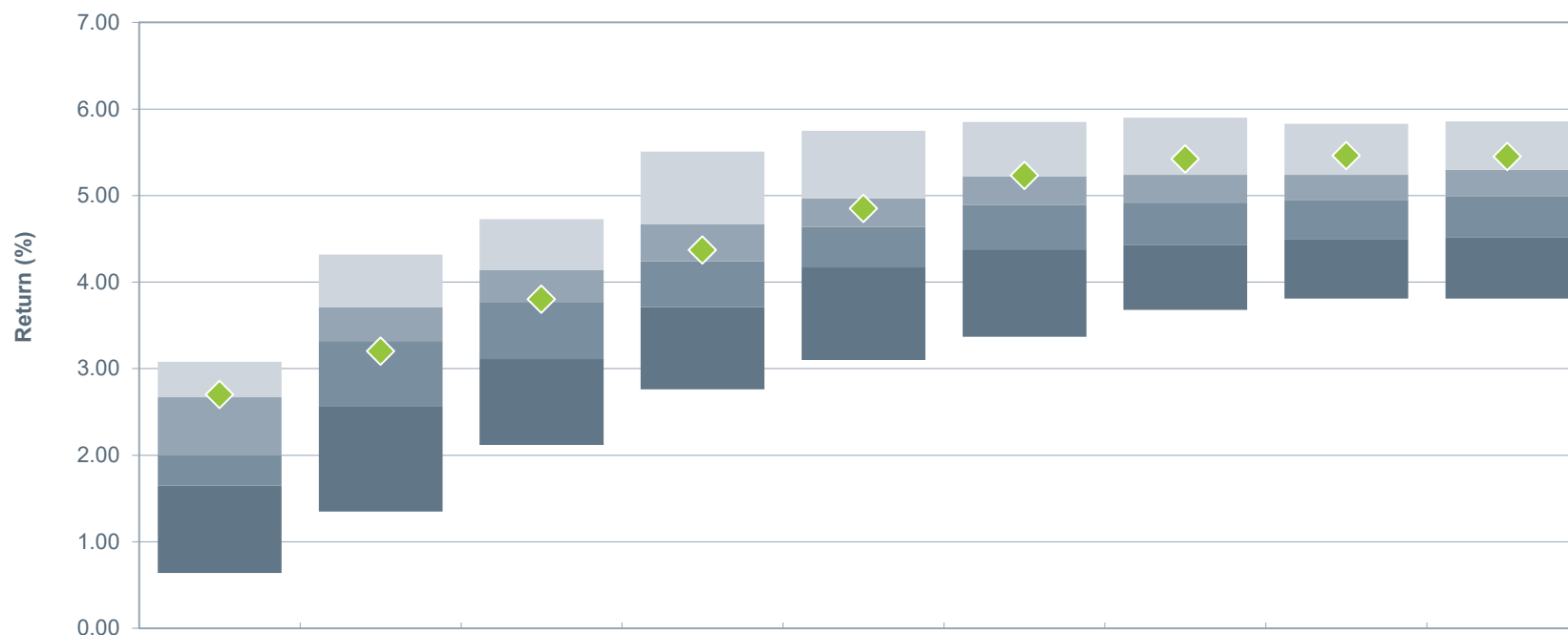
1 Year Ending December 31, 2022



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 December 31, 2022

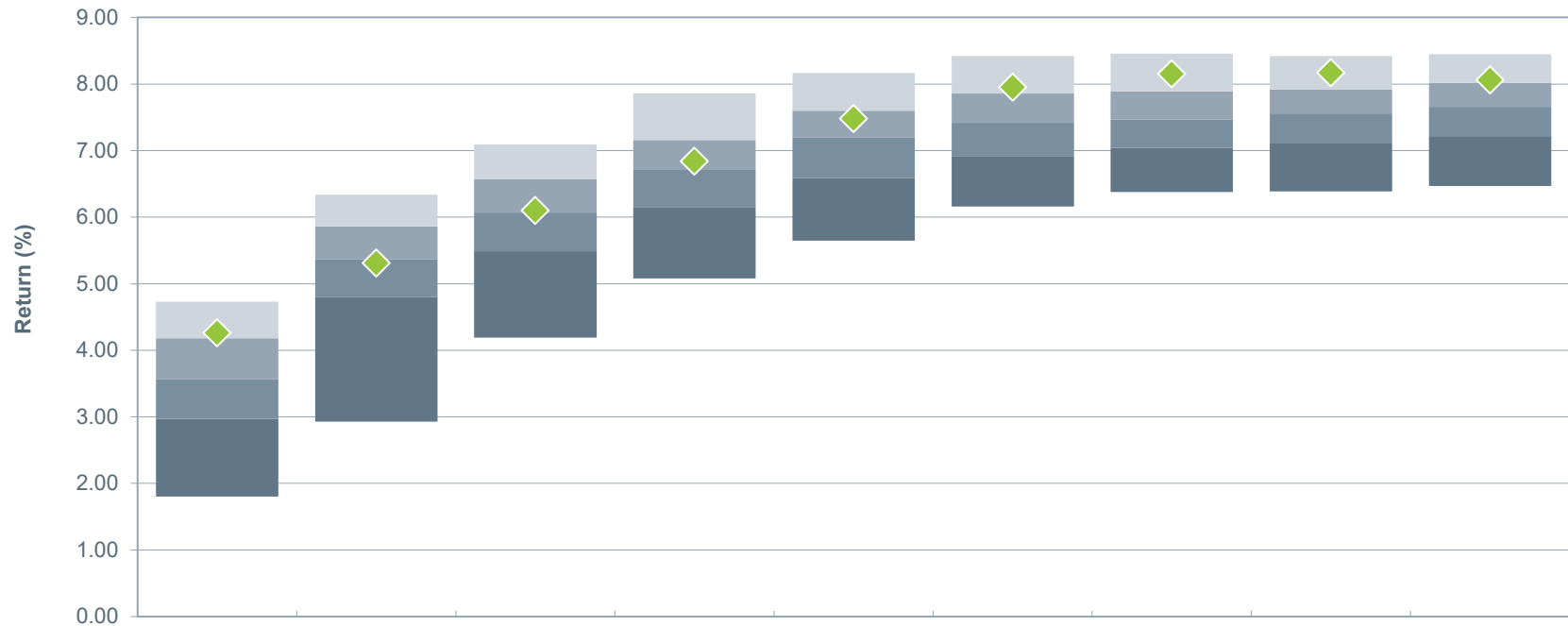


Fund	BlackRock LifePath Retire N (CIT)	BlackRock LifePath 2025 N (CIT)	BlackRock LifePath 2030 N (CIT)	BlackRock LifePath 2035 N (CIT)	BlackRock LifePath 2040 N (CIT)	BlackRock LifePath 2045 N (CIT)	BlackRock LifePath 2050 N (CIT)	BlackRock LifePath 2055 N (CIT)	BlackRock LifePath 2060 N (CIT)
Peer Group	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 Return	2.70	3.20	3.80	4.37	4.85	5.23	5.42	5.46	5.45
Median Return	2.00	3.32	3.77	4.24	4.64	4.89	4.92	4.95	4.99
Percentile Rank	23	56	48	43	32	25	18	17	17
Population	119	160	167	161	160	157	160	157	147

Performance shown is net of fees.

Ohio Public Employees Deferred Compensation Program
Performance Peer Group Analysis - 7 Years

As of December 31, 2022



Fund	BlackRock LifePath Retire N (CIT)	BlackRock LifePath 2025 N (CIT)	BlackRock LifePath 2030 N (CIT)	BlackRock LifePath 2035 N (CIT)	BlackRock LifePath 2040 N (CIT)	BlackRock LifePath 2045 N (CIT)	BlackRock LifePath 2050 N (CIT)	BlackRock LifePath 2055 N (CIT)	BlackRock LifePath 2060 N (CIT)
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 Return	4.26	5.31	6.10	6.84	7.48	7.95	8.15	8.17	8.06
Median Return	3.57	5.37	6.07	6.71	7.20	7.42	7.47	7.56	7.66
Percentile Rank	22	54	48	43	32	19	14	11	20
Population	97	131	134	132	127	128	127	125	75

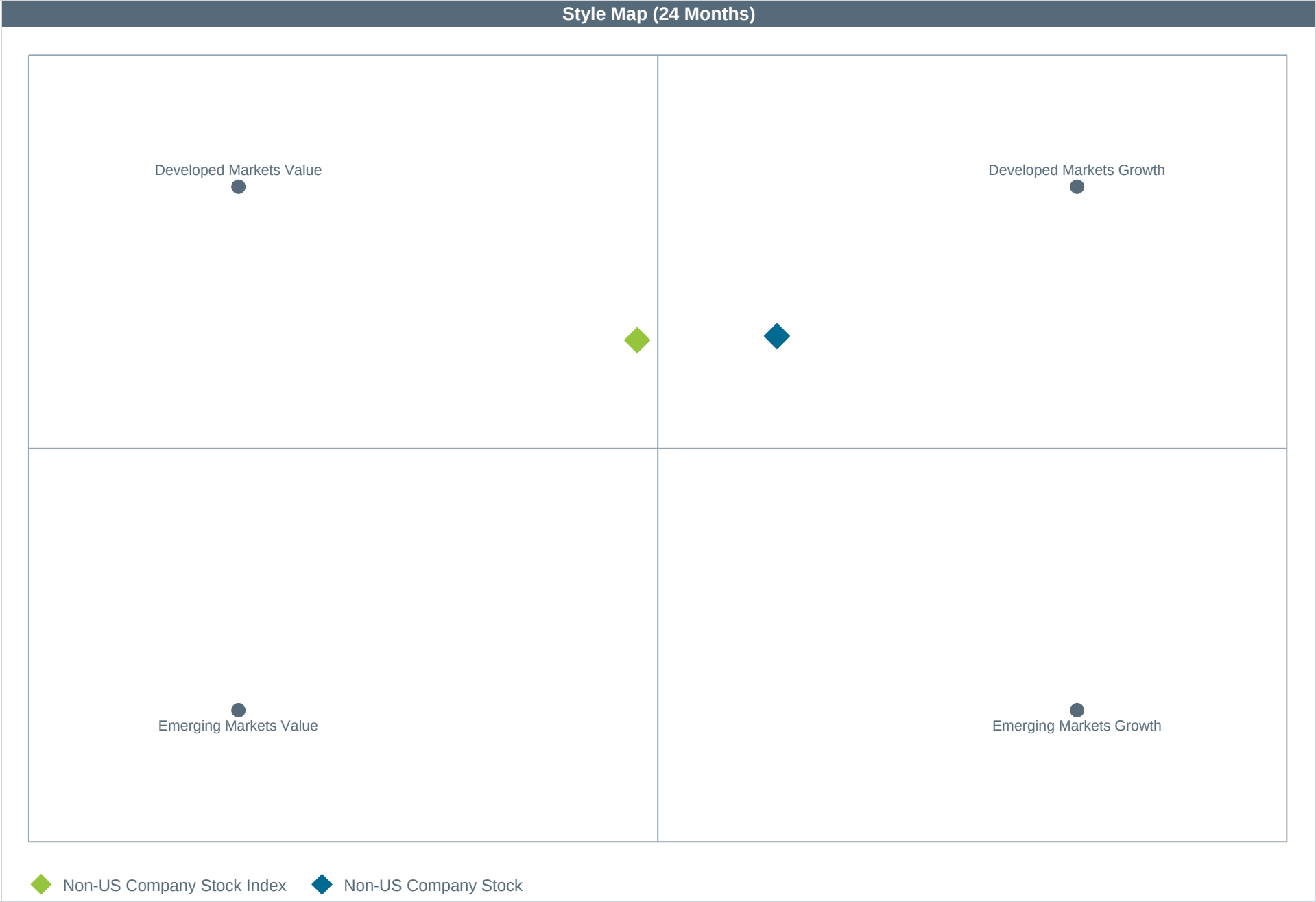
Performance shown is net of fees.

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.



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

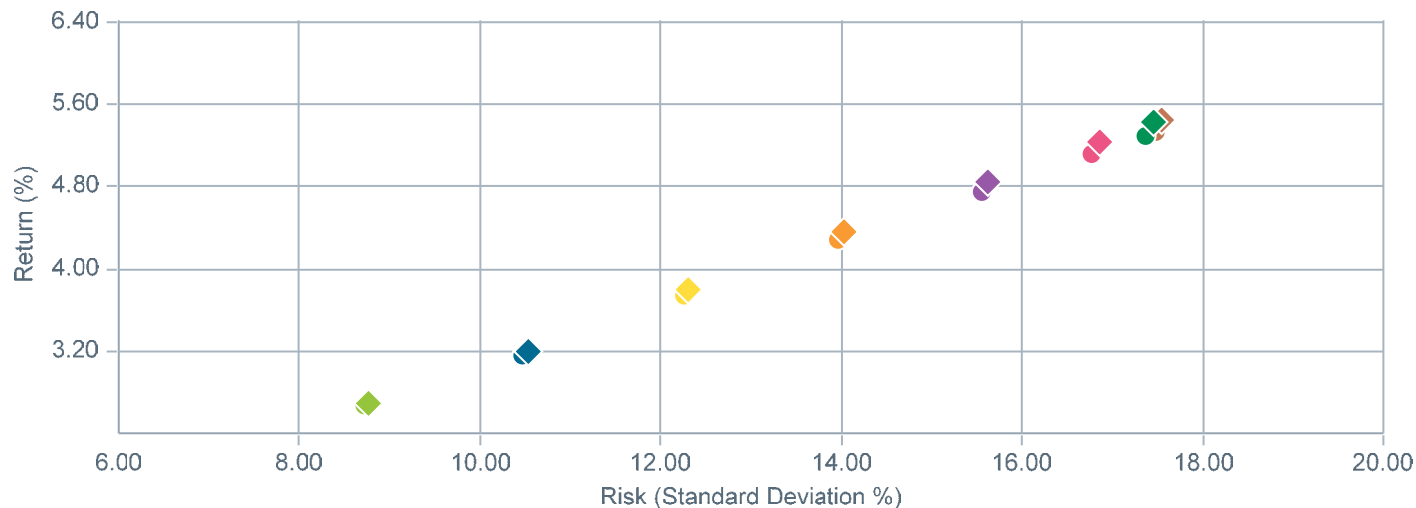


Product Profile

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%

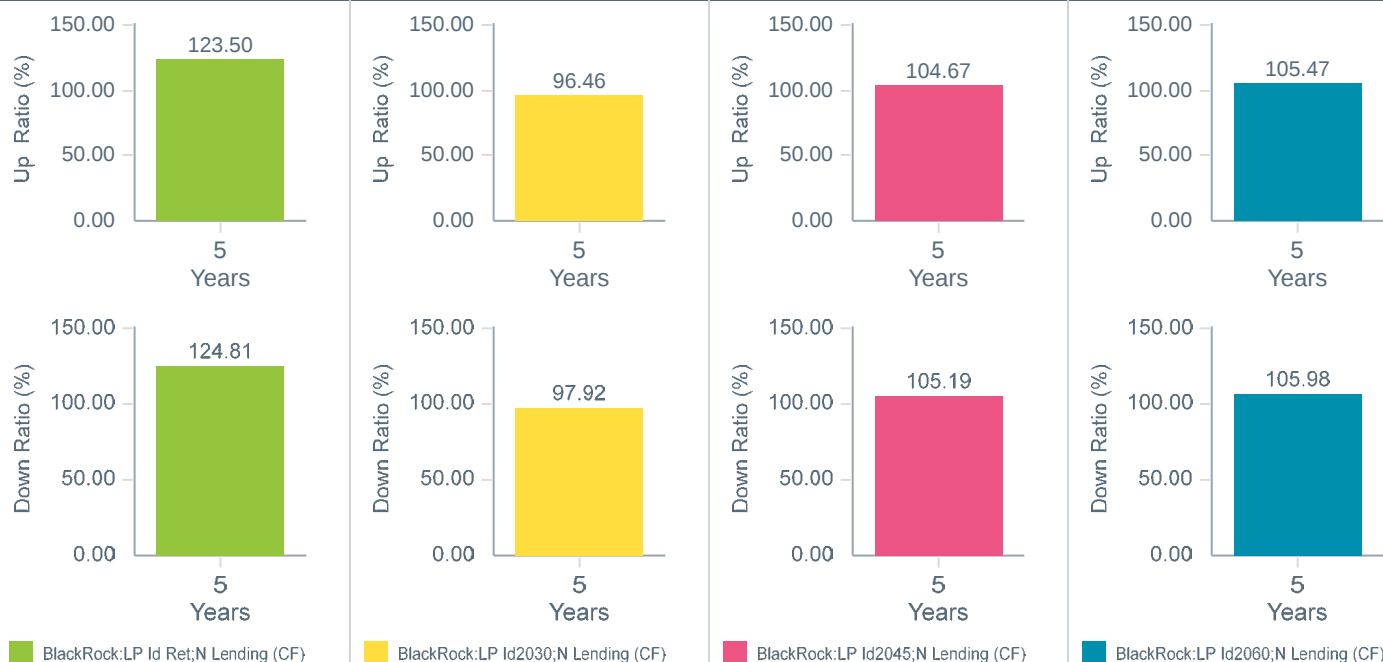
To vs. Through Glide Path: To
Equity Starting: 99%
Equity at Retirement: 40%
Equity Landing: 40%
Yrs Roll Down After Retirement: N/A

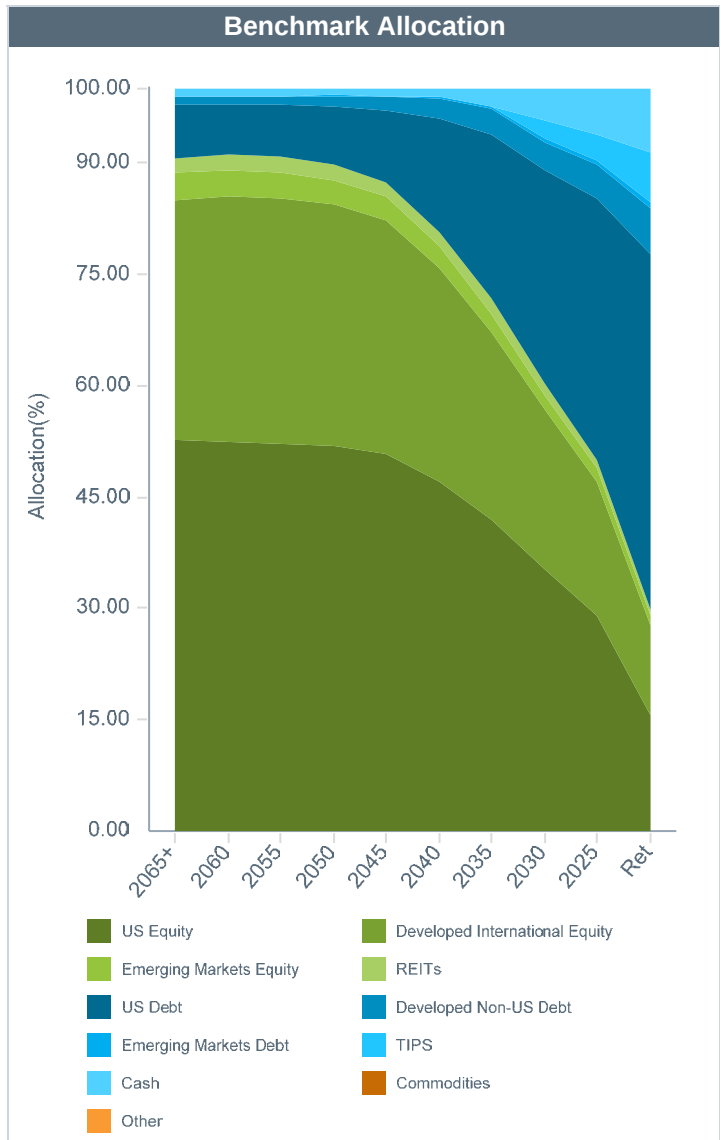
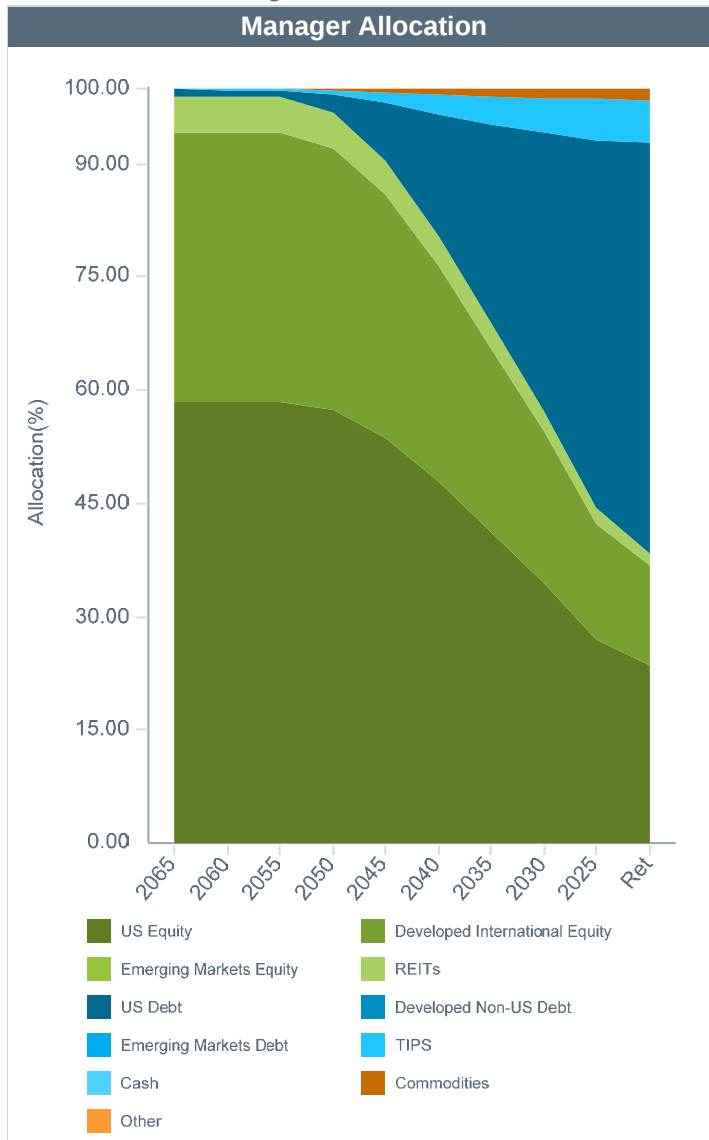
Risk & Return Scattergram - 5 Years



- BlackRock:LP Id Ret;N Lending (CF)
- BlackRock LP Id Ret Lending Index
- BlackRock:LP Id2025;N Lending (CF)
- BlackRock LP Id2025 Lending Index
- BlackRock:LP Id2030;N Lending (CF)
- BlackRock LP Id2030 Lending Index
- BlackRock:LP Id2035;N Lending (CF)
- BlackRock LP Id2035 Lending Index
- BlackRock:LP Id2040;N Lending (CF)
- BlackRock LP Id2040 Lending Index
- BlackRock:LP Id2045;N Lending (CF)
- BlackRock LP Id2045 Lending Index
- BlackRock:LP Id2050;N Lending (CF)
- BlackRock LP Id2050 Lending Index
- BlackRock:LP Id2055;N Lending (CF)
- BlackRock LP Id2055 Lending Index
- BlackRock:LP Id2060;N Lending (CF)
- BlackRock LP Id2060 Lending Index

Up/Down Market Capture Ratio (%) vs. Relevant S&P Tgt Date Idx

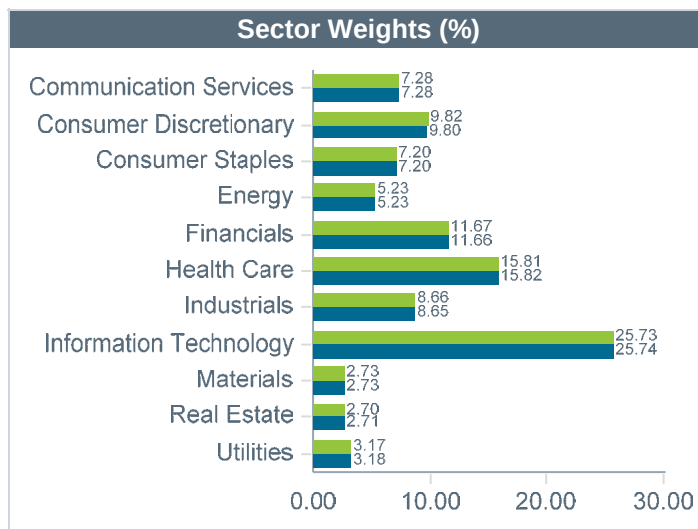
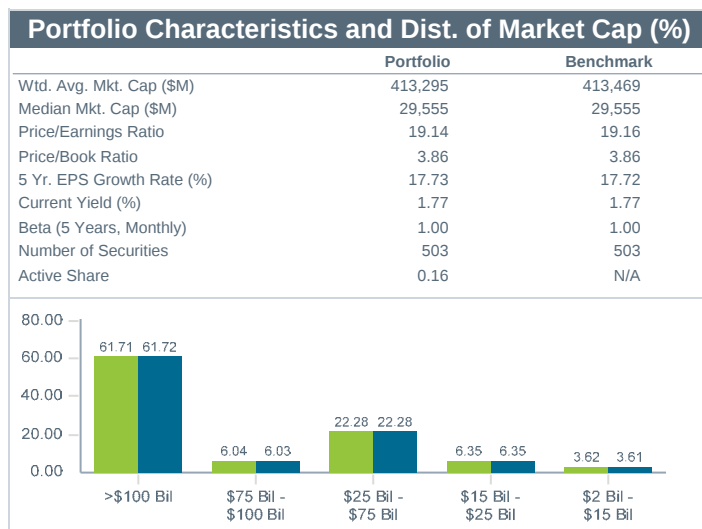
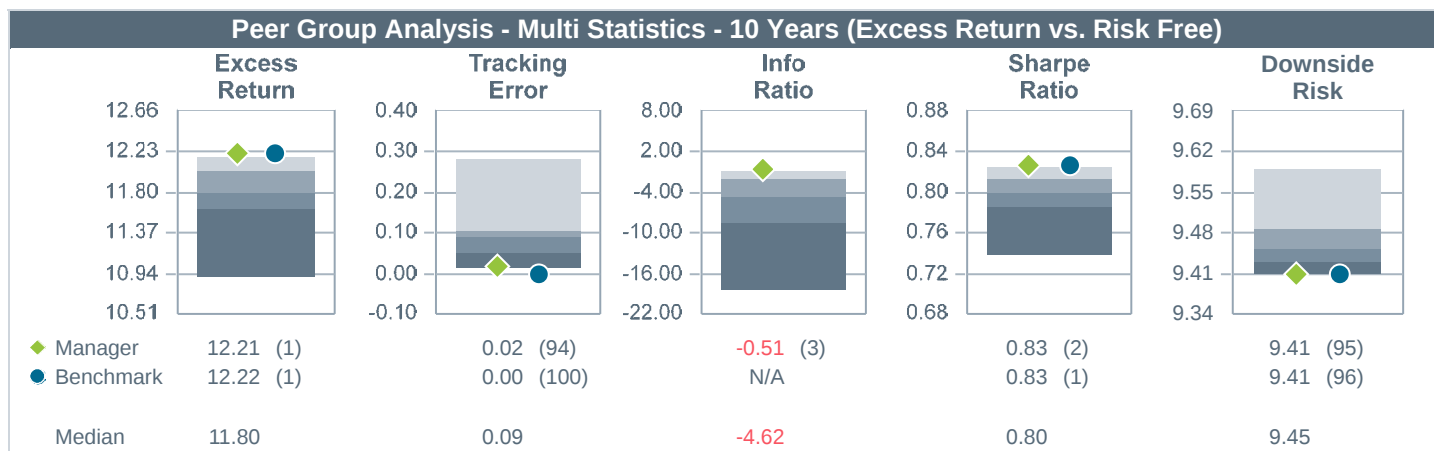
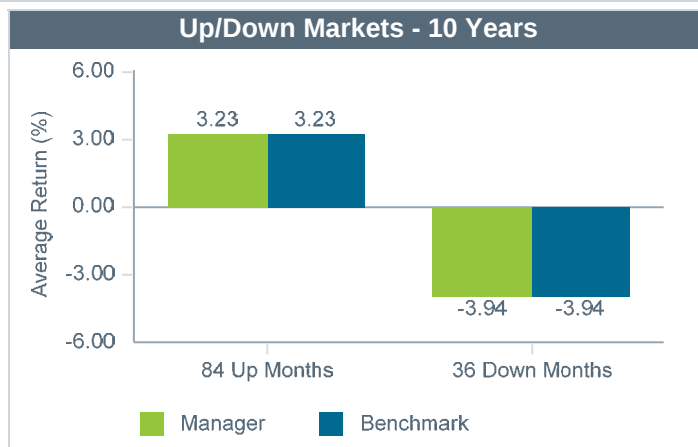
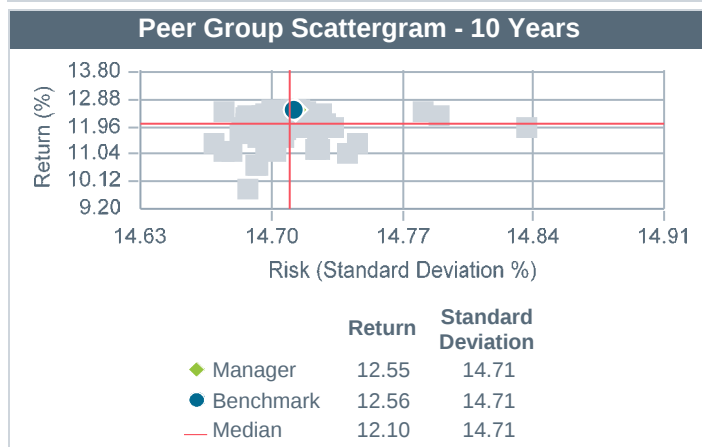




	2065	2060	2055	2050	2045	2040	2035	2030	2025	Ret
US Equity	58.44	58.44	58.41	57.31	53.78	47.87	41.26	34.44	27.03	23.64
Developed International Equity	35.73	35.69	35.68	34.82	32.24	28.60	24.31	19.94	15.30	13.21
Emerging Markets Equity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REITs	4.78	4.79	4.78	4.69	4.39	3.92	3.36	2.75	2.03	1.56
US Debt	1.04	0.92	0.86	2.51	7.70	16.30	26.35	36.93	48.76	54.34
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	0.52	1.49	2.63	3.76	4.72	5.48	5.74
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	0.08	0.15	0.40	0.67	0.97	1.22	1.41	1.51
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Equity	98.96	98.93	98.88	96.83	90.41	80.39	68.92	57.13	44.36	38.41
Difference From Benchmark	8.29	7.87	8.06	7.02	3.05	-0.12	-2.89	-2.97	-5.75	8.69
Total Fixed Income	1.04	1.04	1.04	3.02	9.19	18.93	30.10	41.66	54.23	60.08
Difference From Benchmark	-8.23	-7.83	-8.07	-7.11	-3.39	-0.50	1.97	1.80	4.38	-10.16
Total Other	0.00	0.03	0.08	0.15	0.40	0.67	0.97	1.22	1.41	1.51
Difference From Benchmark	-0.06	-0.03	0.02	0.09	0.34	0.62	0.92	1.17	1.37	1.47

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	2021	2020	2019	2018	2017
Manager	7.56	-18.11	7.64	9.41	11.47	12.55	28.66	18.37	31.47	-4.41	21.83
Benchmark	7.56	-18.11	7.66	9.42	11.48	12.56	28.71	18.40	31.49	-4.38	21.83
Difference	0.00	0.00	-0.02	-0.01	-0.01	-0.01	-0.05	-0.03	-0.02	-0.03	0.00
Peer Group Median	7.47	-18.38	7.33	9.08	11.11	12.10	28.25	18.05	31.08	-4.66	21.37
Rank	9	2	7	5	1	1	11	14	4	9	2
Population	117	117	114	111	101	89	117	116	116	115	120



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.



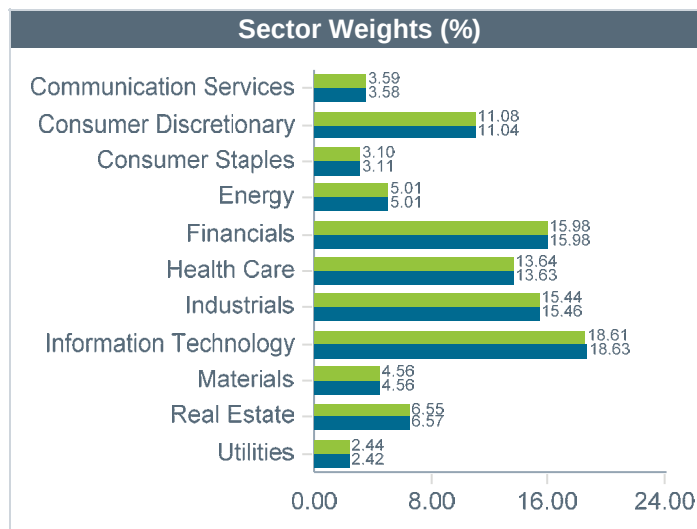
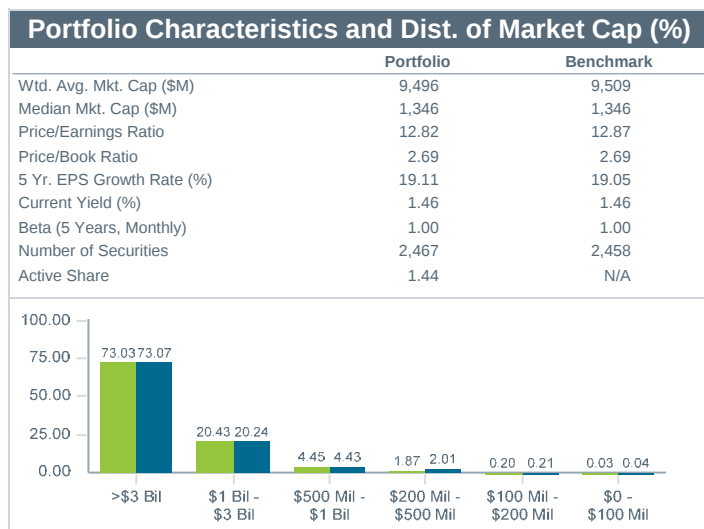
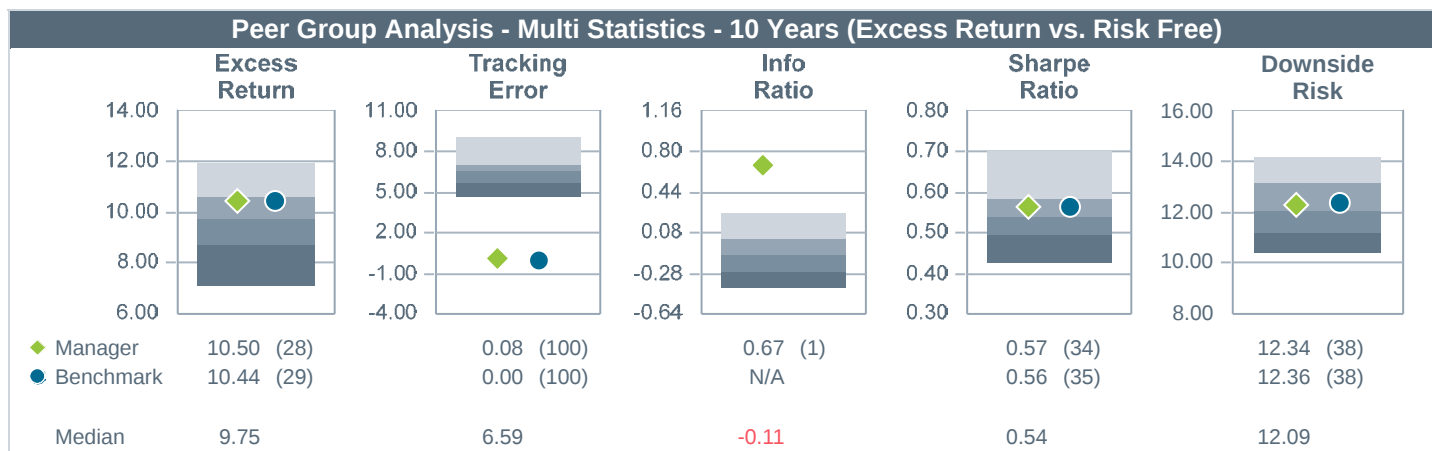
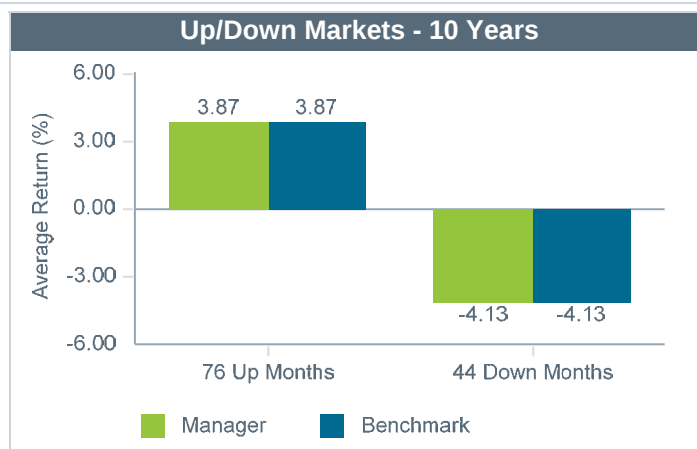
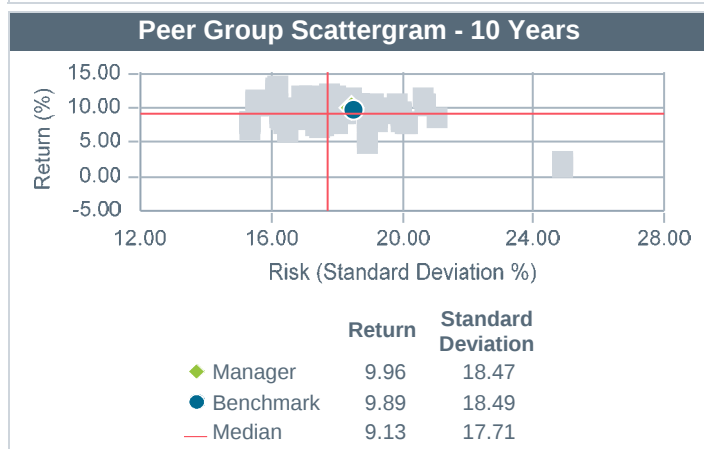
Manager: US Small/Mid Company Stock Index

As of December 31, 2022

Benchmark: Russell Sm Cap Compl Index

Peer Group: IM U.S. SMID Cap Core Equity (MF)

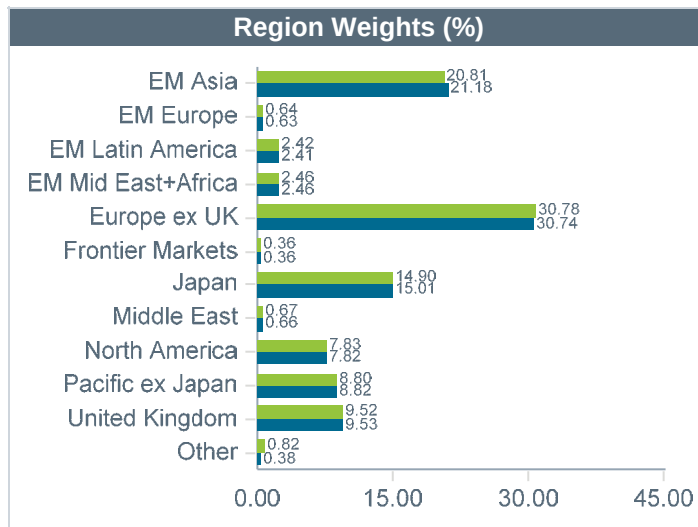
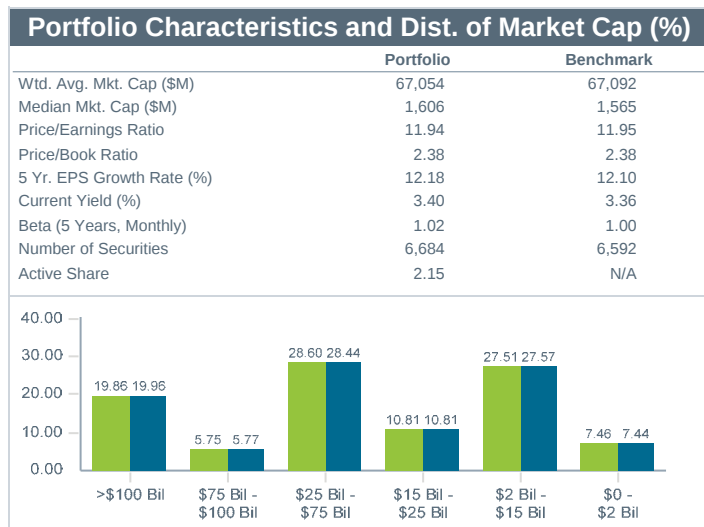
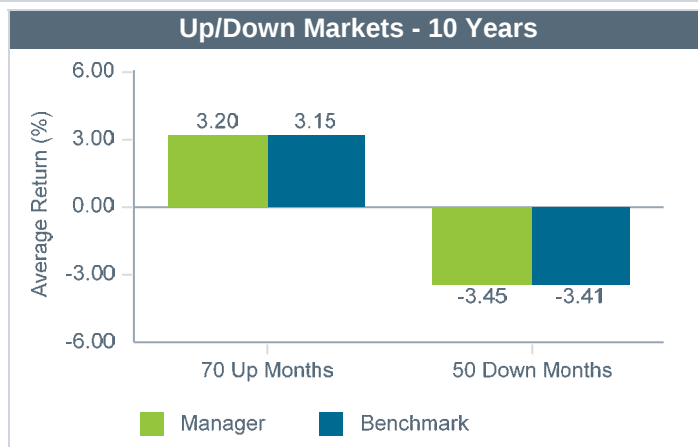
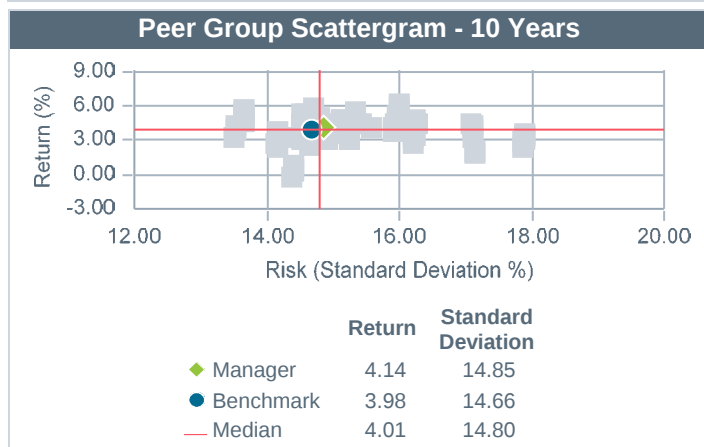
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	4.91	-25.39	3.71	5.36	8.70	9.96	12.64	32.73	27.99	-9.05	18.28
Benchmark	4.85	-25.49	3.70	5.33	8.65	9.89	12.64	32.88	28.04	-9.21	18.27
Difference	0.06	0.10	0.01	0.03	0.05	0.07	0.00	-0.15	-0.05	0.16	0.01
Peer Group Median	9.71	-14.67	5.73	4.86	8.15	9.13	26.01	8.64	24.76	-12.47	13.94
Rank	98	99	78	40	37	30	100	1	19	21	23
Population	209	208	193	177	161	124	205	215	222	228	217



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	2021	2020	2019	2018	2017
Manager	14.70	-16.29	0.45	1.09	5.17	4.14	8.74	11.36	22.02	-14.63	28.09
Benchmark	14.15	-16.58	0.20	0.85	4.84	3.98	8.53	11.12	21.63	-14.76	27.81
Difference	0.55	0.29	0.25	0.24	0.33	0.16	0.21	0.24	0.39	0.13	0.28
Peer Group Median	15.33	-16.52	0.21	1.03	4.56	4.01	8.87	13.50	22.78	-15.85	27.15
Rank	74	48	44	47	26	41	52	55	60	32	36
Population	172	172	172	172	169	130	174	185	195	198	209



Effective 12/9/2022, the white label Non-US Company Stock Index was incepted 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.



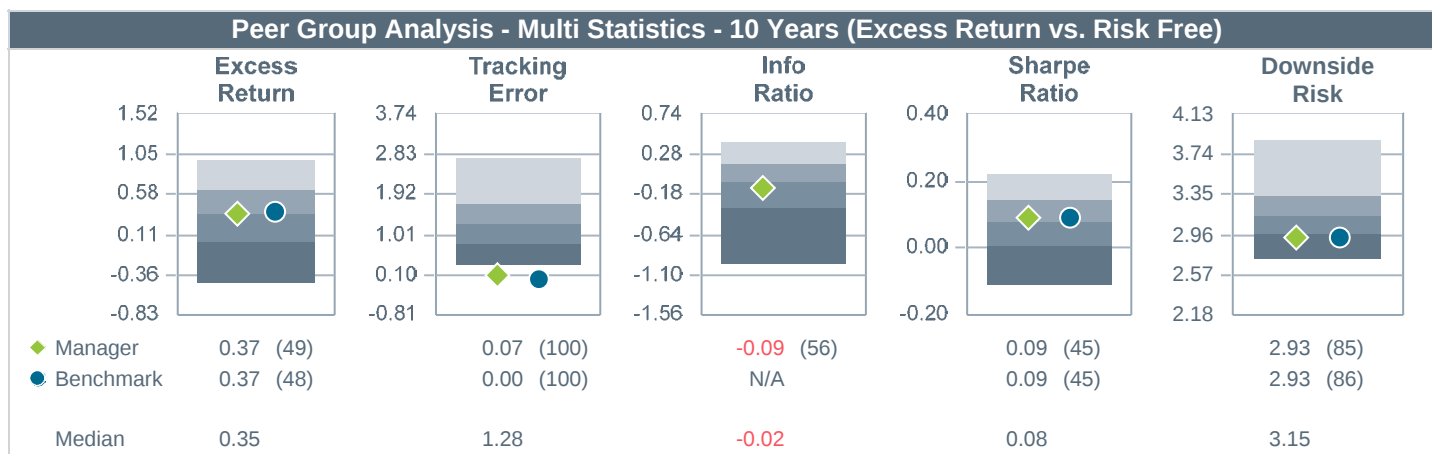
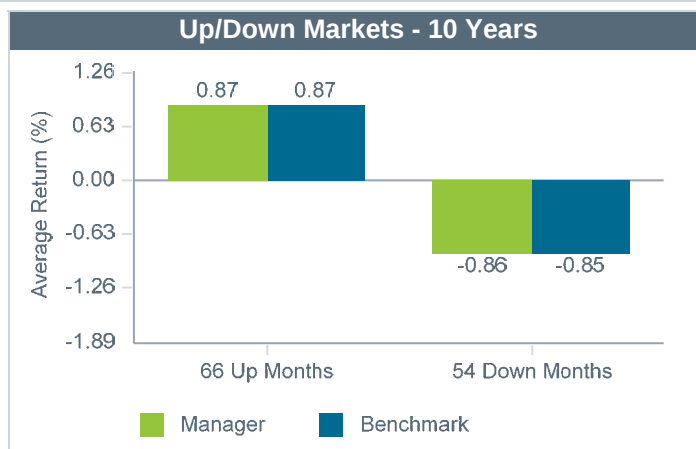
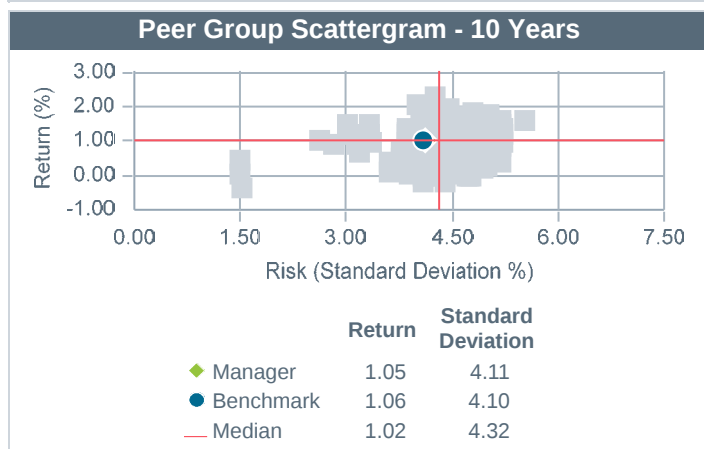
Manager: US Bond Index

As of December 31, 2022

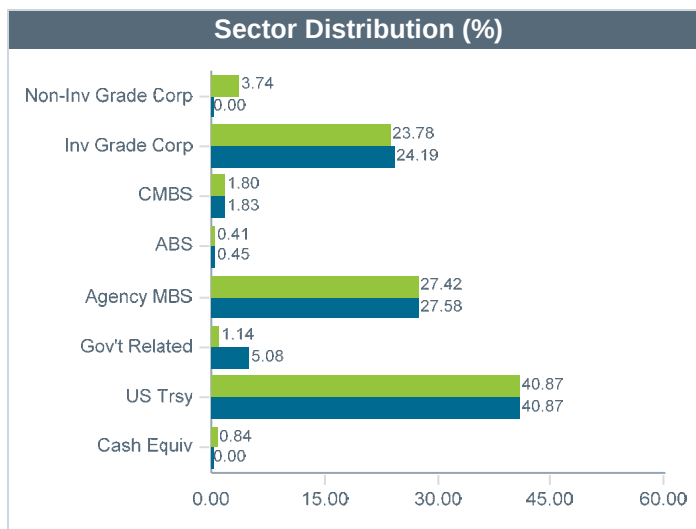
Benchmark: Bloomberg US Agg Bond Index

Peer Group: IM U.S. Broad Market Core Fixed Income (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	1.67	-13.13	-2.73	0.02	0.88	1.05	-1.62	7.67	8.74	0.03	3.55
Benchmark	1.87	-13.01	-2.71	0.02	0.89	1.06	-1.55	7.51	8.72	0.01	3.54
Difference	-0.20	-0.12	-0.02	0.00	-0.01	-0.01	-0.07	0.16	0.02	0.02	0.01
Peer Group Median	1.71	-13.66	-2.72	-0.07	0.92	1.02	-1.33	8.16	8.76	-0.62	3.60
Rank	57	25	52	42	54	47	63	67	51	17	54
Population	520	507	474	443	389	328	512	509	531	525	515



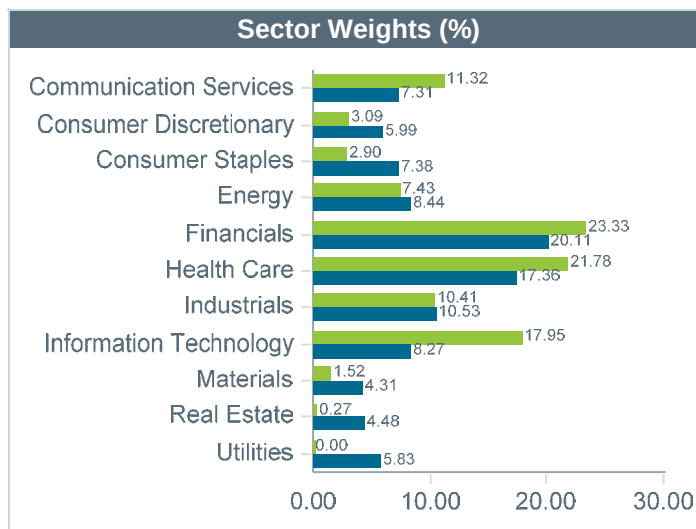
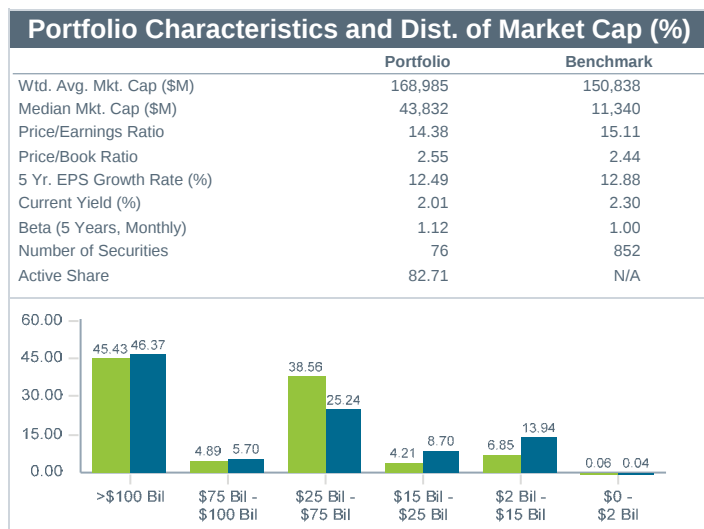
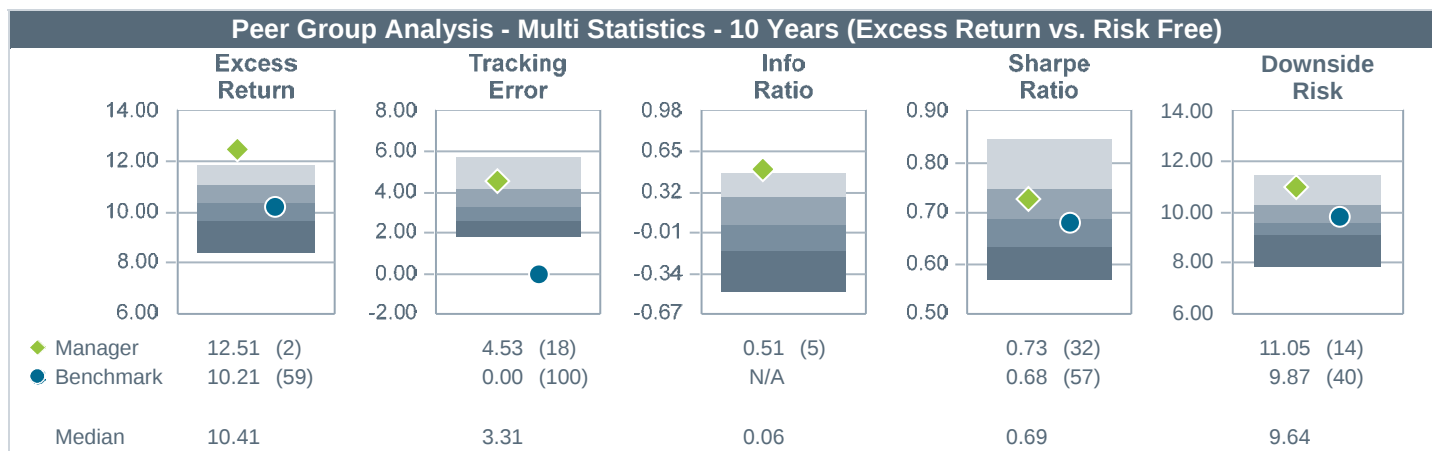
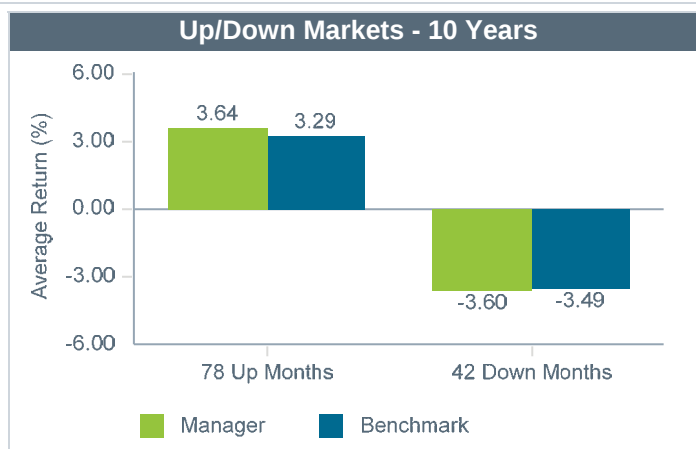
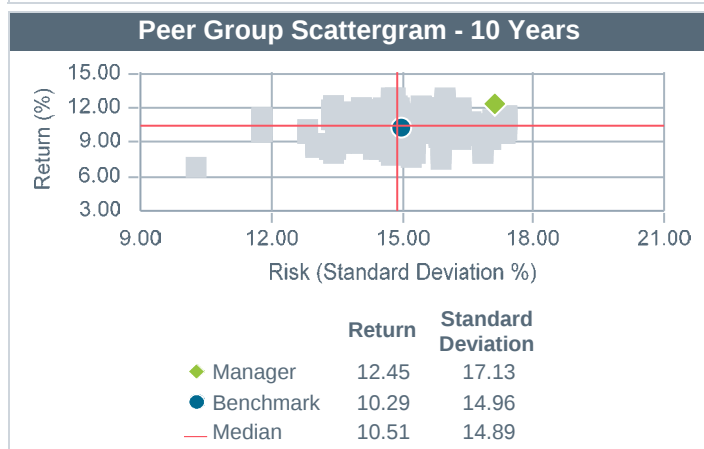
Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	6.14	6.17
Spread Duration	N/A	N/A
Avg. Maturity	8.51	8.44
Avg. Quality	Aa2	Aa1/Aa2
Yield To Maturity (%)	4.67	4.68
Coupon Rate (%)	2.74	2.69
Current Yield (%)	3.04	N/A
Holdings Count	12,713	13,133



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	2021	2020	2019	2018	2017
Manager	13.02	-7.16	9.43	8.74	11.79	12.45	31.73	7.16	24.83	-7.07	18.33
Benchmark	12.42	-7.54	5.96	6.67	9.12	10.29	25.16	2.80	26.54	-8.27	13.66
Difference	0.60	0.38	3.47	2.07	2.67	2.16	6.57	4.36	-1.71	1.20	4.67
Peer Group Median	12.88	-6.10	7.19	7.50	9.75	10.51	25.96	3.82	26.50	-8.61	16.95
Rank	48	63	9	20	7	3	3	25	73	34	29
Population	410	400	365	344	329	293	386	394	388	403	401



Effective 12/9/2022, the white label US Large Value Company Stock was incepted 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).



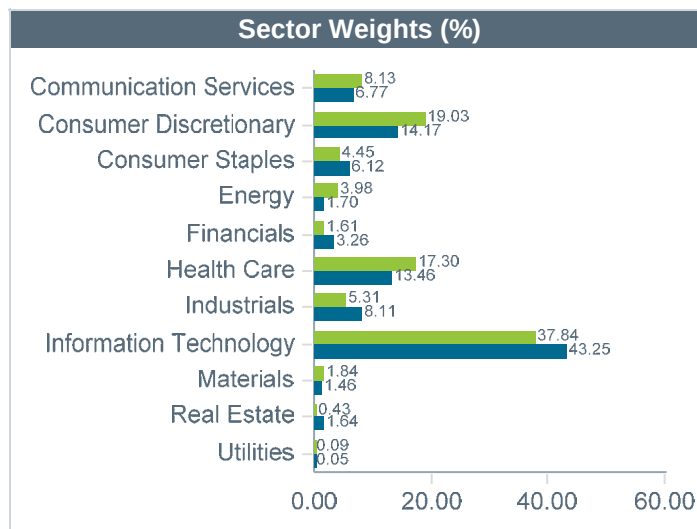
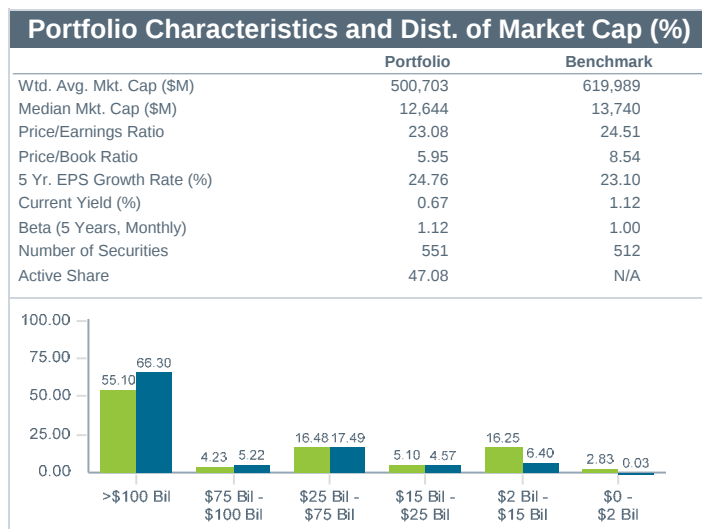
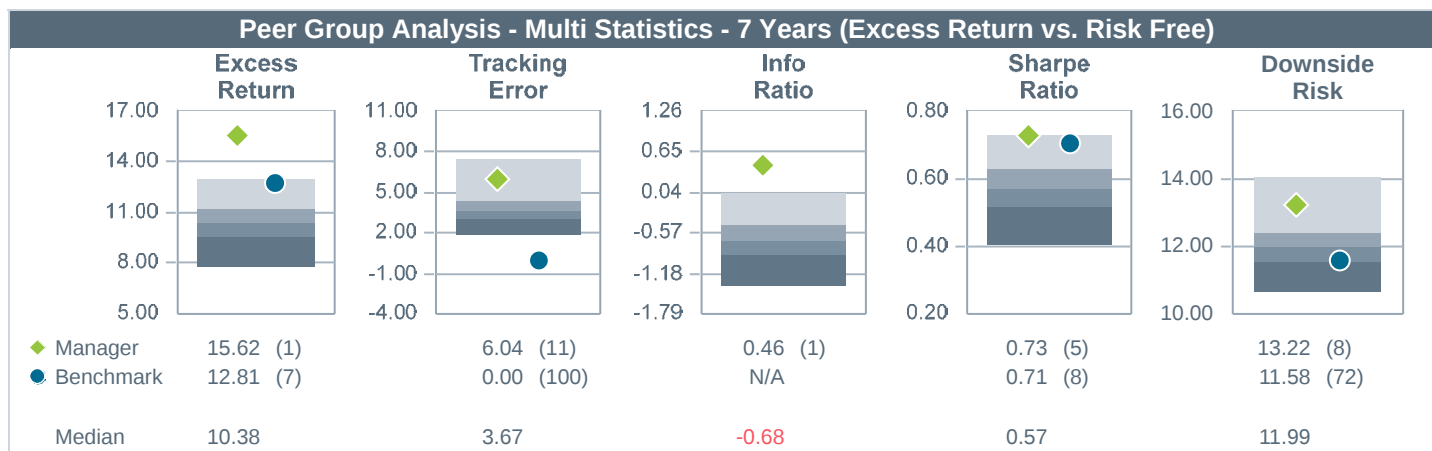
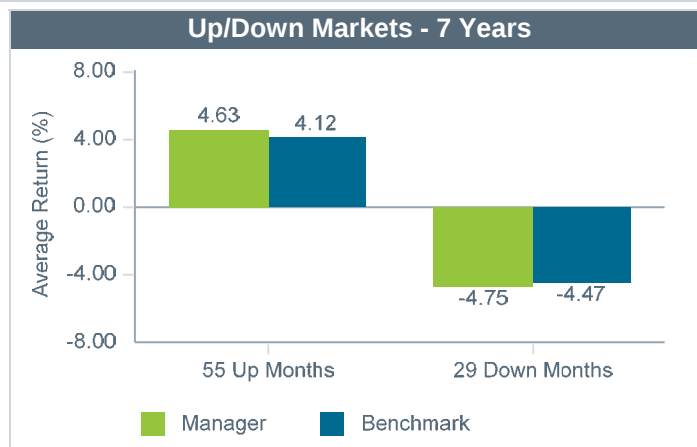
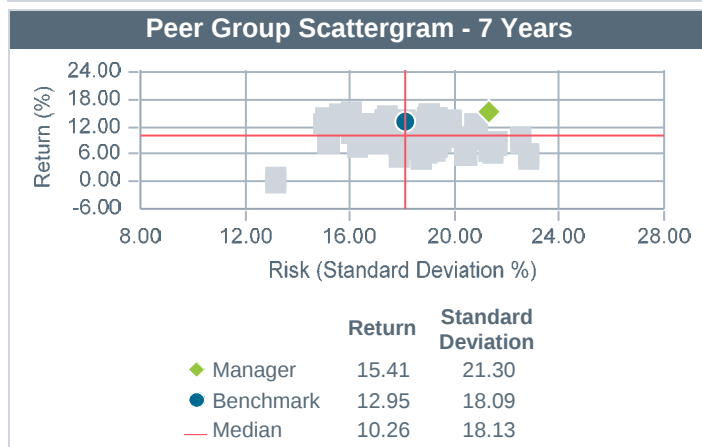
Manager: Fidelity Grth Co 3 (CIT)

As of December 31, 2022

Benchmark: Russell 1000 Grth Index

Peer Group: IM U.S. Large Cap Growth Equity (MF)

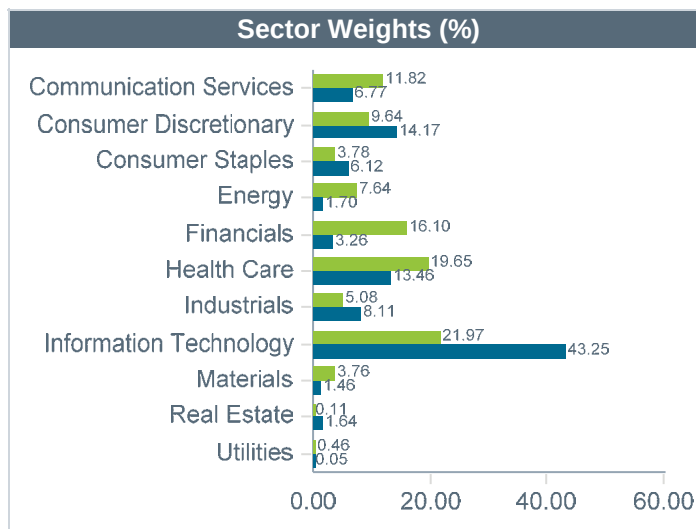
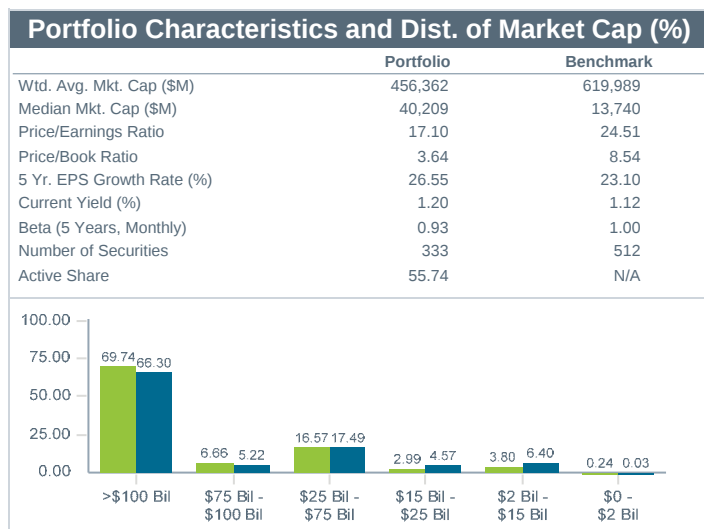
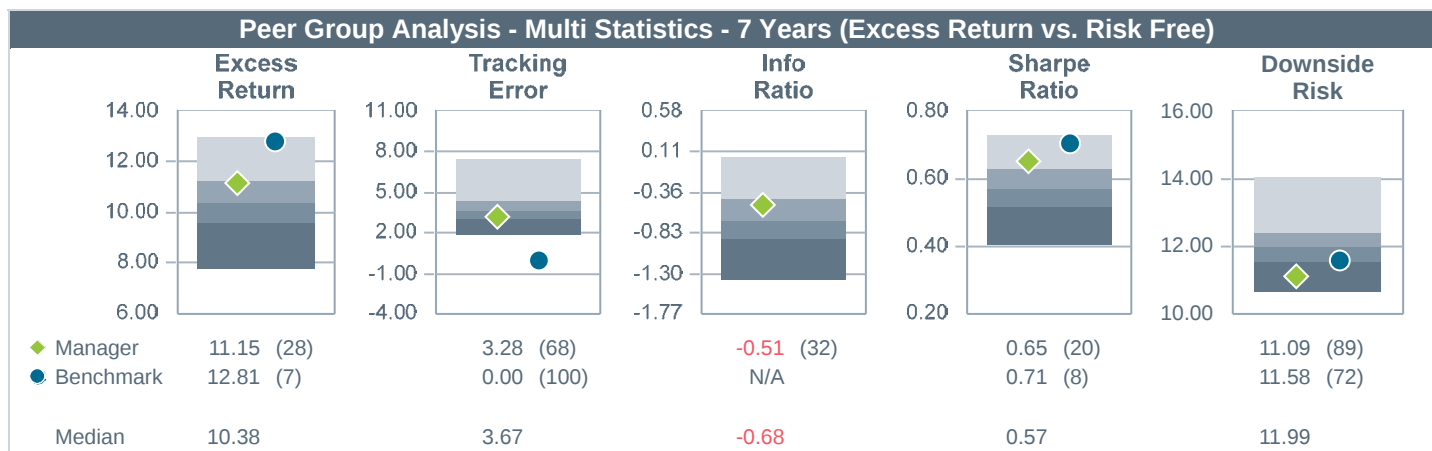
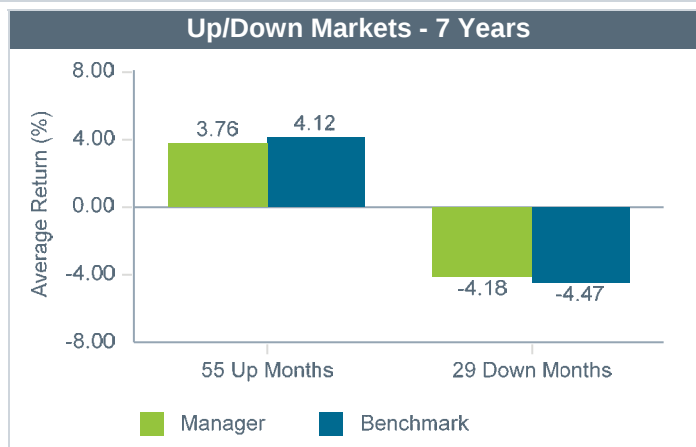
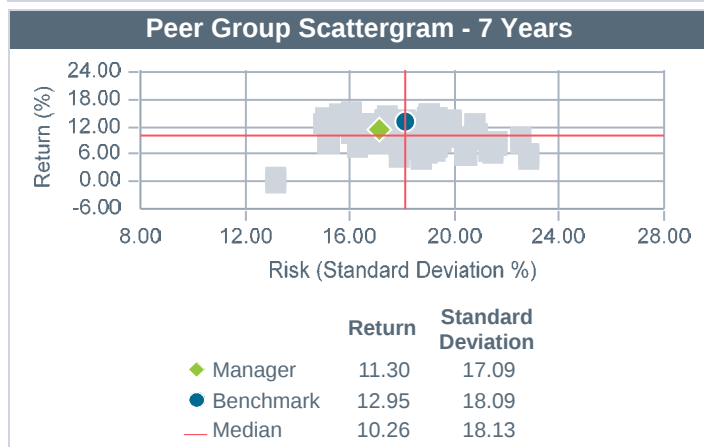
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	3.21	-32.87	11.71	13.21	15.41	N/A	22.99	68.86	39.10	-4.09	37.80
Benchmark	2.20	-29.14	7.79	10.96	12.95	14.10	27.60	38.49	36.39	-1.51	30.21
Difference	1.01	-3.73	3.92	2.25	2.46	N/A	-4.61	30.37	2.71	-2.58	7.59
Peer Group Median	2.48	-31.30	4.76	8.53	10.26	12.04	22.39	35.62	33.26	-1.22	29.28
Rank	41	68	1	3	1	N/A	44	1	4	81	3
Population	682	669	625	595	536	455	678	674	676	700	678



Performance shown is and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

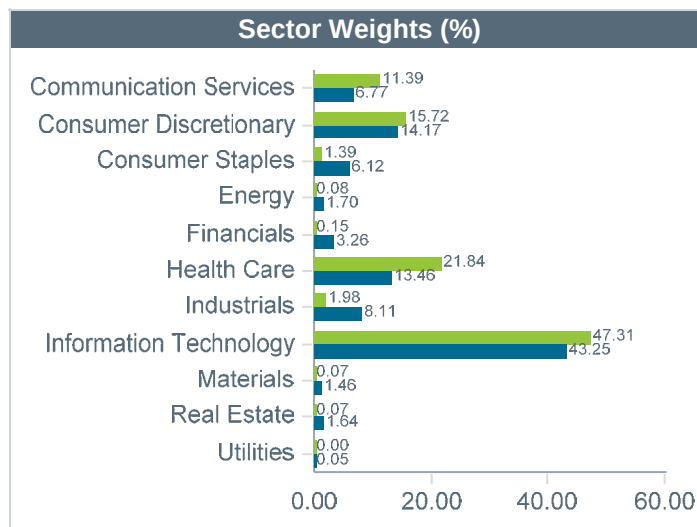
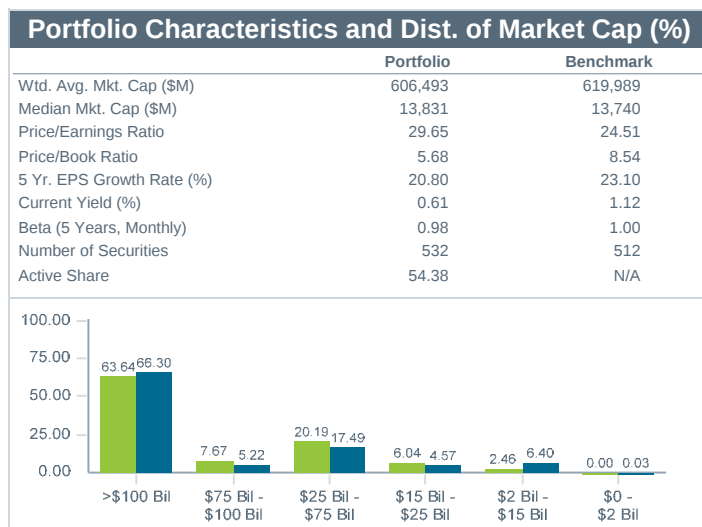
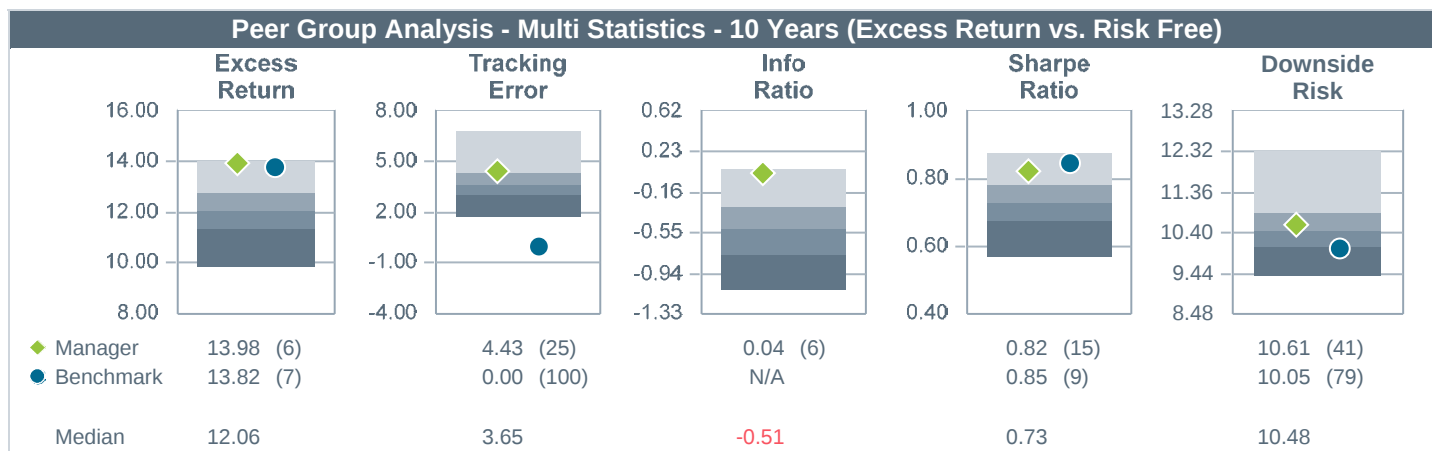
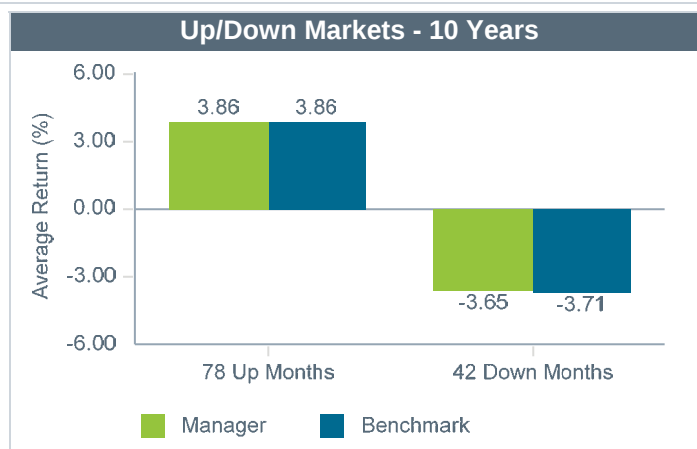
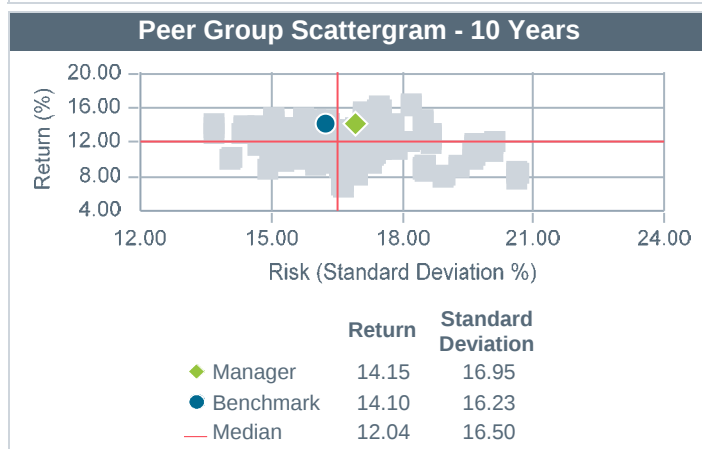


	Performance										
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	4.64	-27.14	6.11	8.99	11.30	N/A	24.77	31.44	31.17	-1.86	32.86
Benchmark	2.20	-29.14	7.79	10.96	12.95	14.10	27.60	38.49	36.39	-1.51	30.21
Difference	2.44	2.00	-1.68	-1.97	-1.65	N/A	-2.83	-7.05	-5.22	-0.35	2.65
Peer Group Median	2.48	-31.30	4.76	8.53	10.26	12.04	22.39	35.62	33.26	-1.22	29.28
Rank	27	17	27	41	25	N/A	31	74	72	59	19
Population	682	669	625	595	536	455	678	674	676	700	678



Performance shown is 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	2021	2020	2019	2018	2017
Manager	0.25	-34.97	3.98	8.66	11.60	14.15	23.90	39.54	29.39	4.13	38.14
Benchmark	2.20	-29.14	7.79	10.96	12.95	14.10	27.60	38.49	36.39	-1.51	30.21
Difference	-1.95	-5.83	-3.81	-2.30	-1.35	0.05	-3.70	1.05	-7.00	5.64	7.93
Peer Group Median	2.48	-31.30	4.76	8.53	10.26	12.04	22.39	35.62	33.26	-1.22	29.28
Rank	79	81	63	47	21	6	35	30	84	5	2
Population	682	669	625	595	536	455	678	674	676	700	678



Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

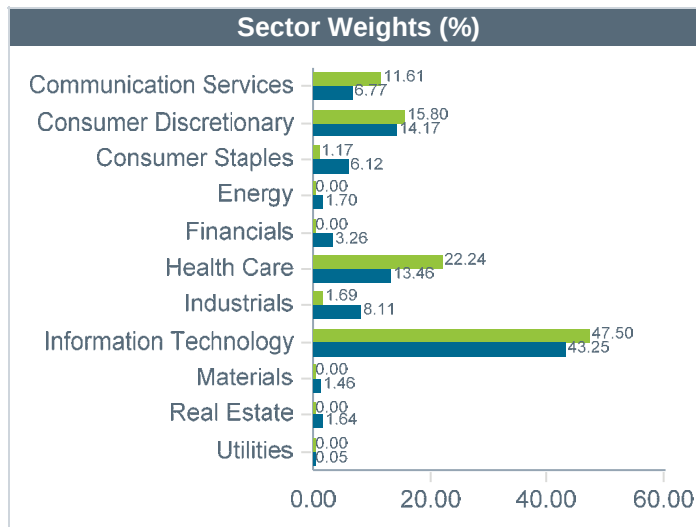
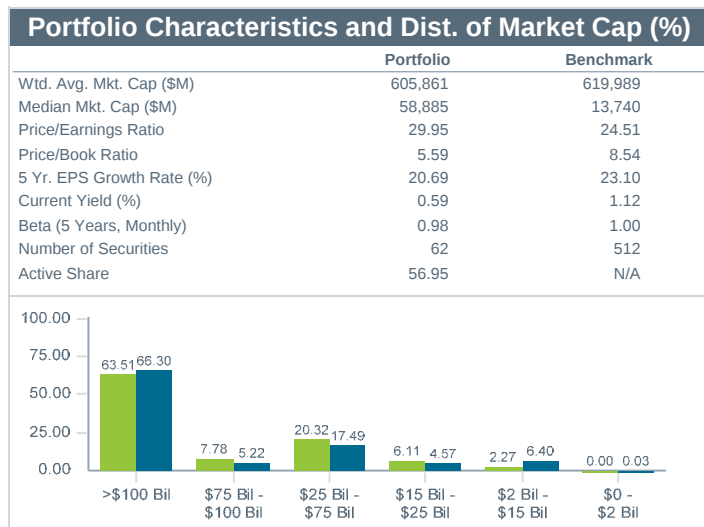
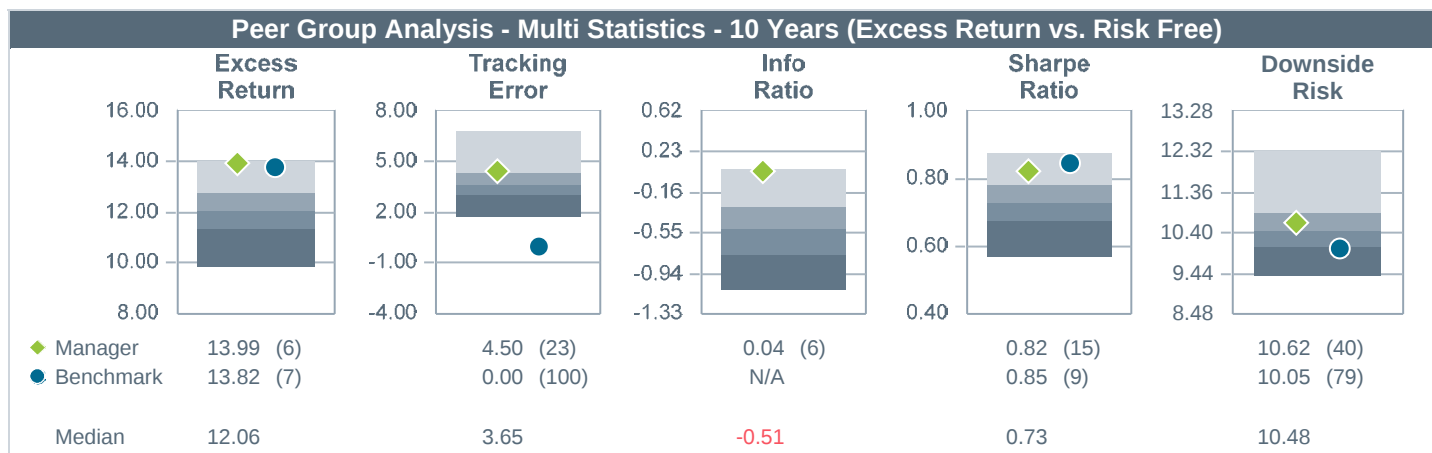
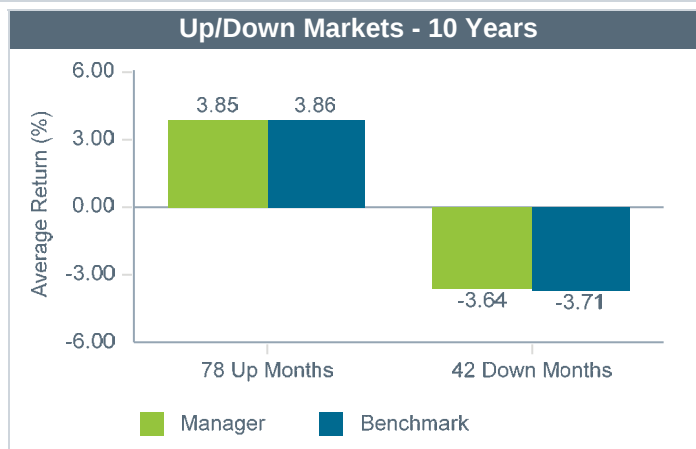
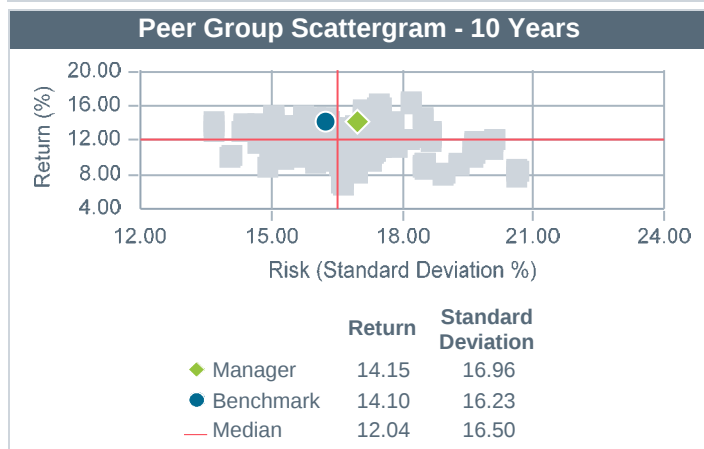
Manager: T Rowe Price Large Cap Growth (SA)

As of December 31, 2022

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	2021	2020	2019	2018	2017
Manager	0.23	-34.95	4.02	8.69	11.61	14.15	23.68	39.89	28.83	4.63	37.98
Benchmark	2.20	-29.14	7.79	10.96	12.95	14.10	27.60	38.49	36.39	-1.51	30.21
Difference	-1.97	-5.81	-3.77	-2.27	-1.34	0.05	-3.92	1.40	-7.56	6.14	7.77
Peer Group Median	2.48	-31.30	4.76	8.53	10.26	12.04	22.39	35.62	33.26	-1.22	29.28
Rank	79	81	63	46	21	6	36	29	87	4	2
Population	682	669	625	595	536	455	678	674	676	700	678



Performance shown is net of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

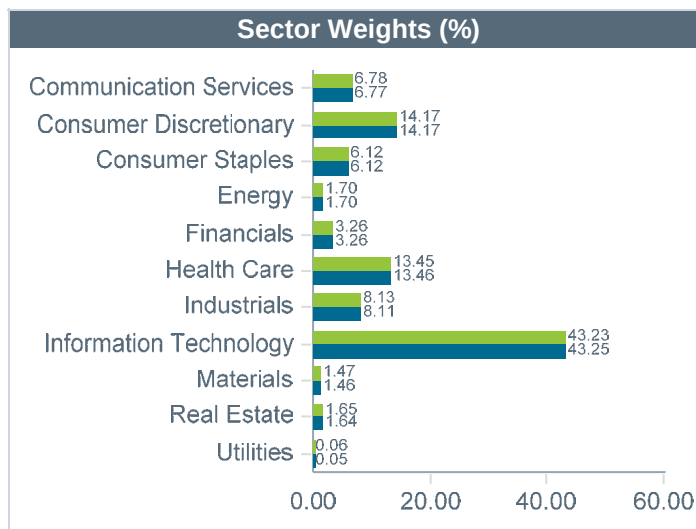
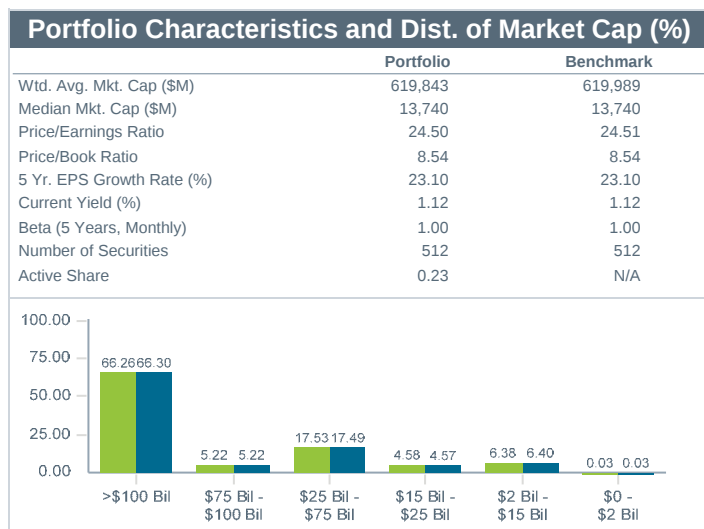
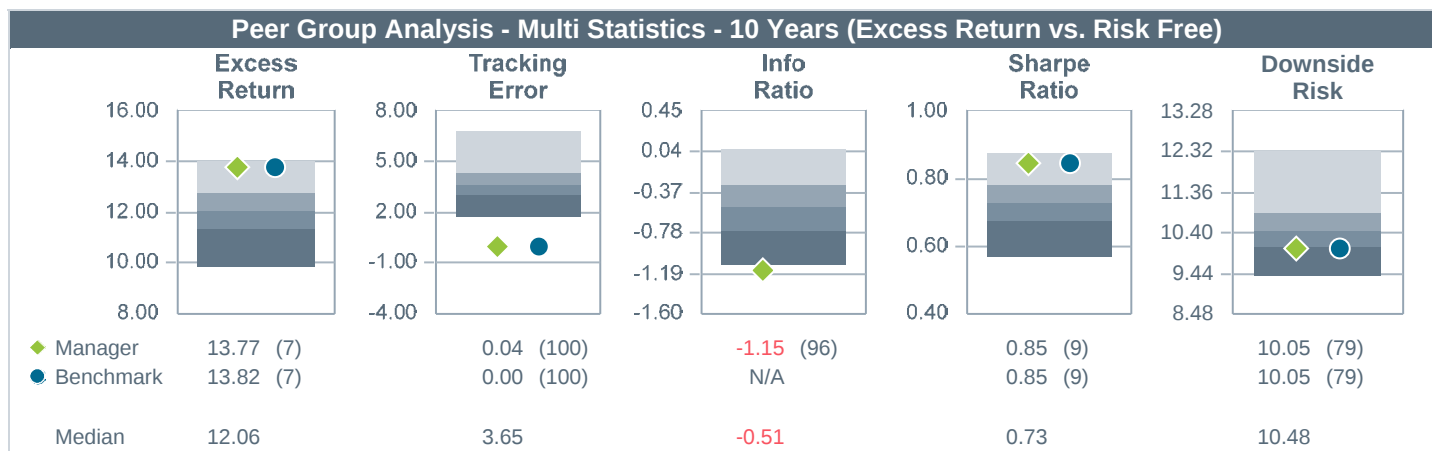
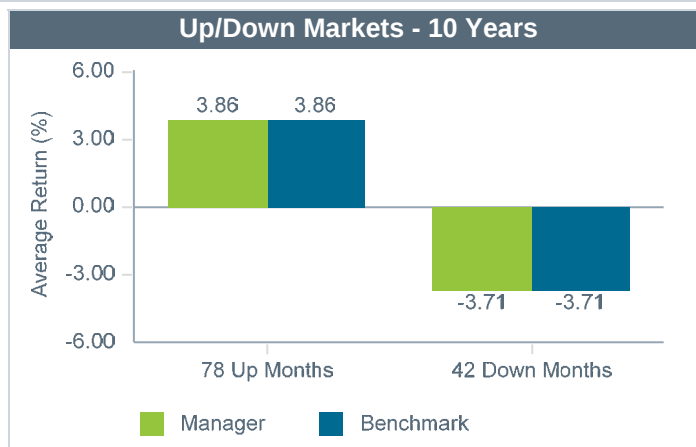
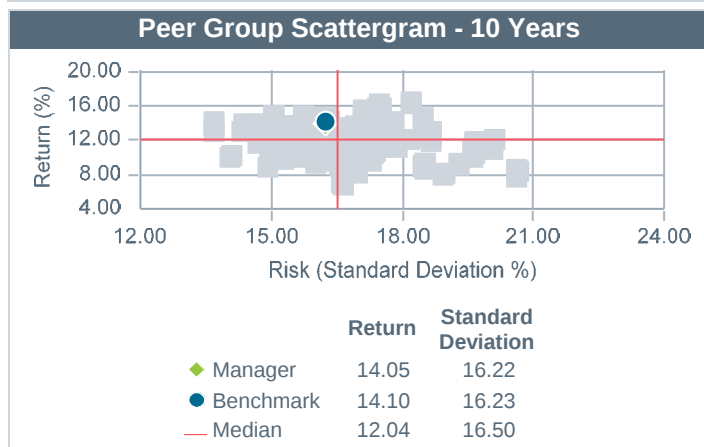
Manager: State Street Russell LCG Index C NL (CF)

As of December 31, 2022

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	2021	2020	2019	2018	2017
Manager	2.18	-29.18	7.74	10.90	12.89	14.05	27.54	38.45	36.35	-1.63	30.11
Benchmark	2.20	-29.14	7.79	10.96	12.95	14.10	27.60	38.49	36.39	-1.51	30.21
Difference	-0.02	-0.04	-0.05	-0.06	-0.06	-0.05	-0.06	-0.04	-0.04	-0.12	-0.10
Peer Group Median	2.48	-31.30	4.76	8.53	10.26	12.04	22.39	35.62	33.26	-1.22	29.28
Rank	58	29	11	13	7	8	17	34	20	56	41
Population	682	669	625	595	536	455	678	674	676	700	678



Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

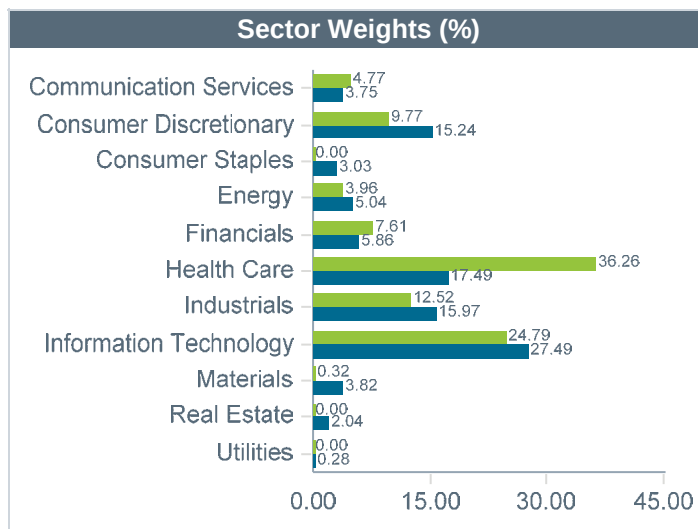
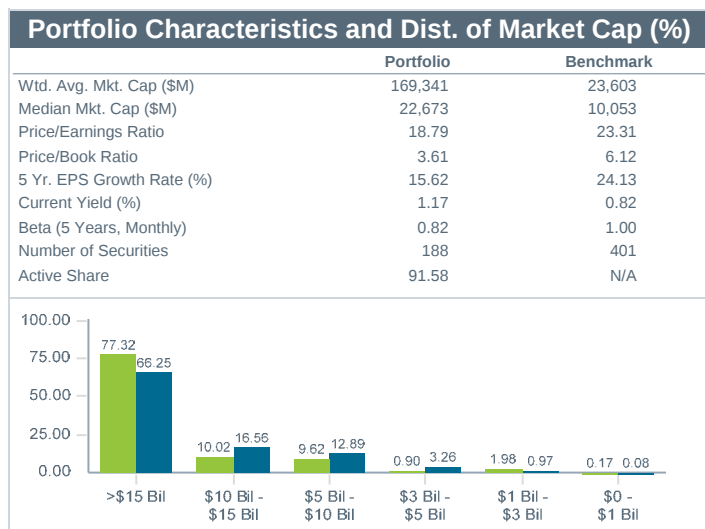
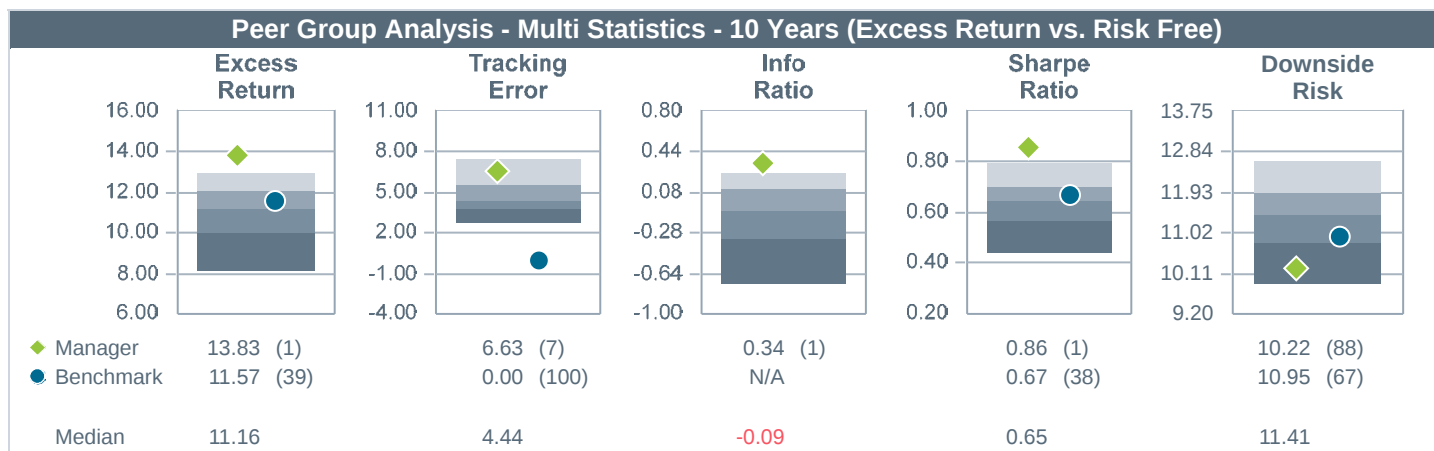
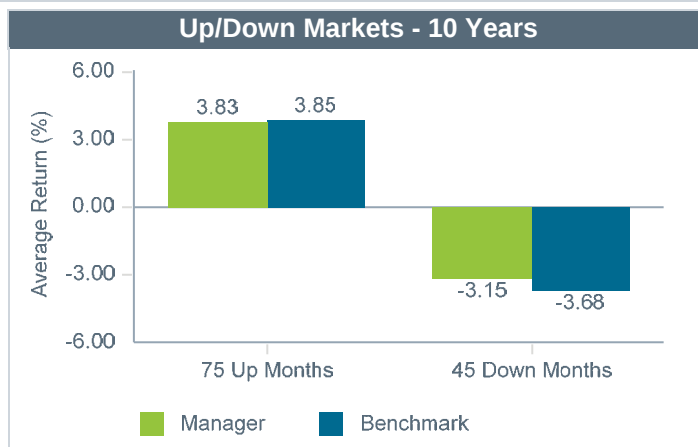
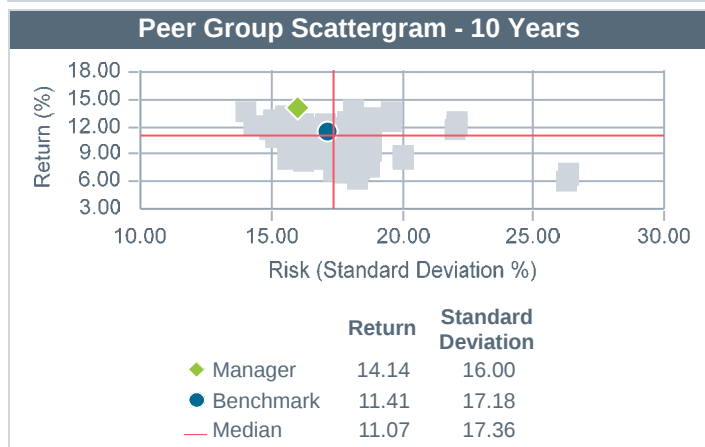
Manager: Vanguard Cap Opp;Adm (VHCAX)

As of December 31, 2022

Benchmark: Russell Mid Cap Grth Index

Peer Group: IM U.S. Mid Cap Growth Equity (MF)

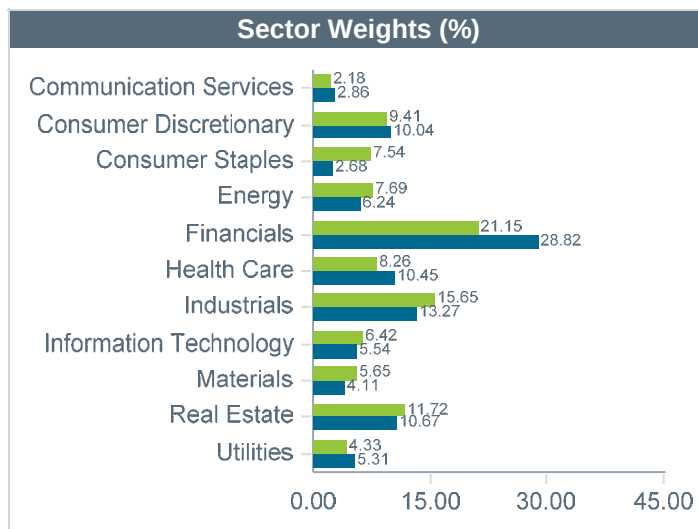
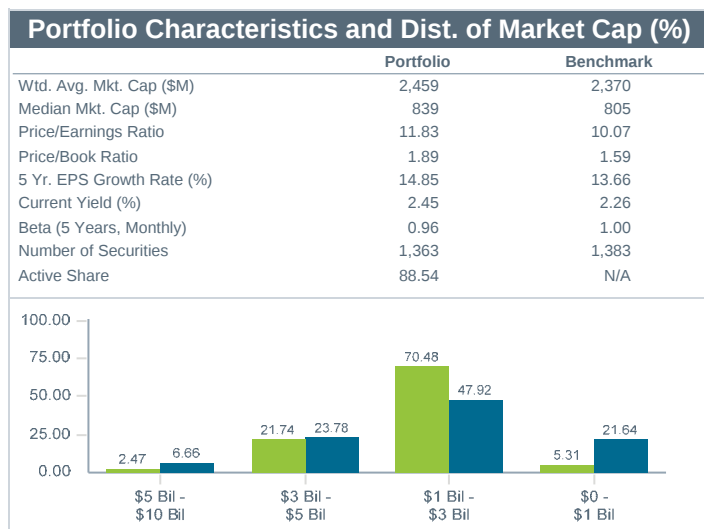
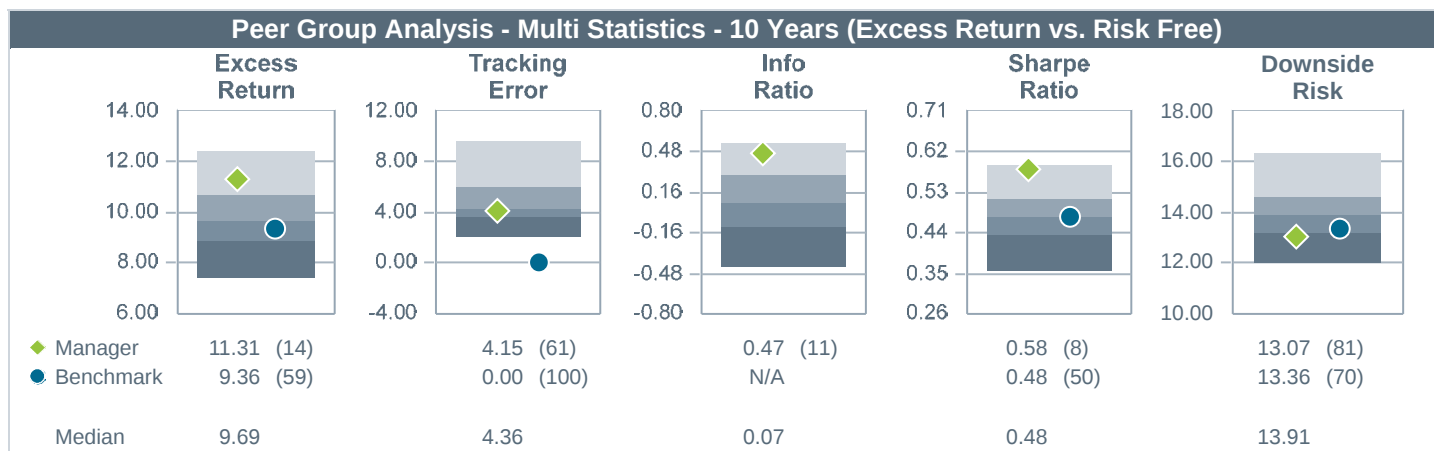
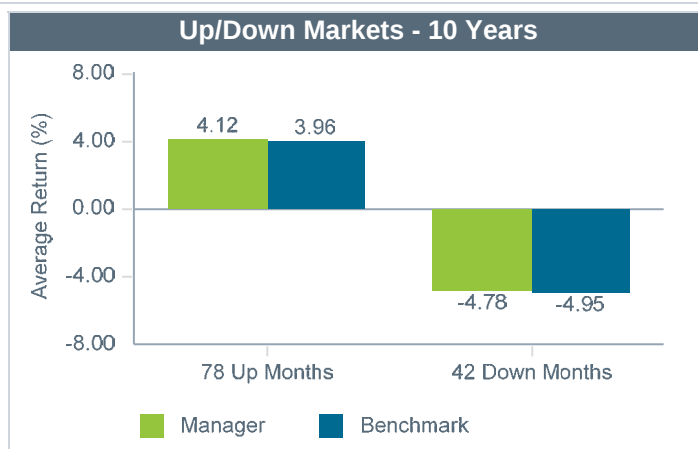
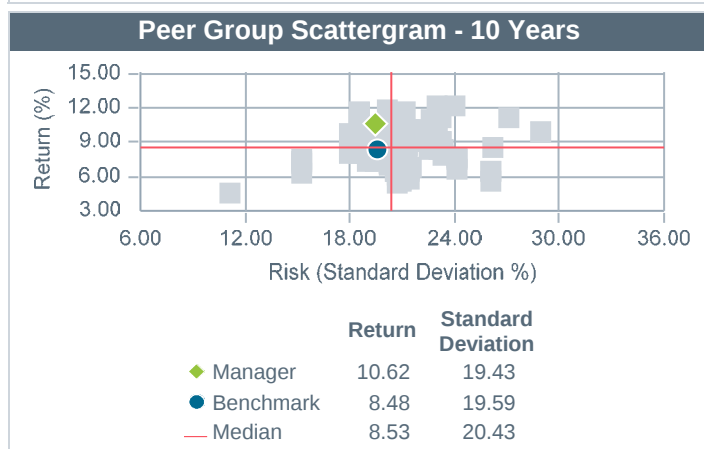
	Performance										
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	8.99	-17.47	7.09	8.53	11.57	14.14	21.11	22.89	27.28	-3.70	29.19
Benchmark	6.90	-26.72	3.85	7.64	9.95	11.41	12.73	35.59	35.47	-4.75	25.27
Difference	2.09	9.25	3.24	0.89	1.62	2.73	8.38	-12.70	-8.19	1.05	3.92
Peer Group Median	5.69	-28.79	4.14	7.49	9.51	11.07	14.22	34.91	33.86	-5.01	24.73
Rank	16	7	13	28	14	1	16	89	91	40	15
Population	291	290	258	241	222	193	289	283	288	284	274



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	2021	2020	2019	2018	2017
Manager	13.52	-12.37	4.65	4.70	9.03	10.62	28.02	2.17	27.48	-13.91	12.74
Benchmark	8.42	-14.48	4.70	4.13	8.23	8.48	28.27	4.63	22.39	-12.86	7.84
Difference	5.10	2.11	-0.05	0.57	0.80	2.14	-0.25	-2.46	5.09	-1.05	4.90
Peer Group Median	11.70	-11.09	6.79	4.73	8.12	8.53	31.97	3.57	21.05	-16.08	8.46
Rank	21	72	89	52	33	10	76	63	7	31	16
Population	228	213	197	180	167	143	205	205	219	229	217



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.

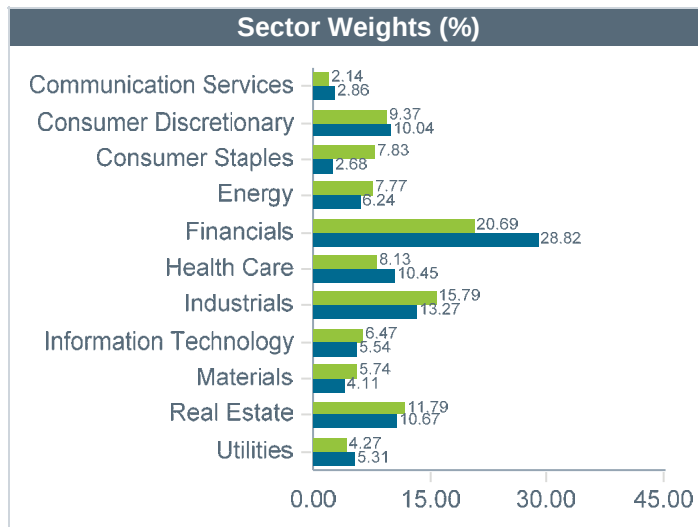
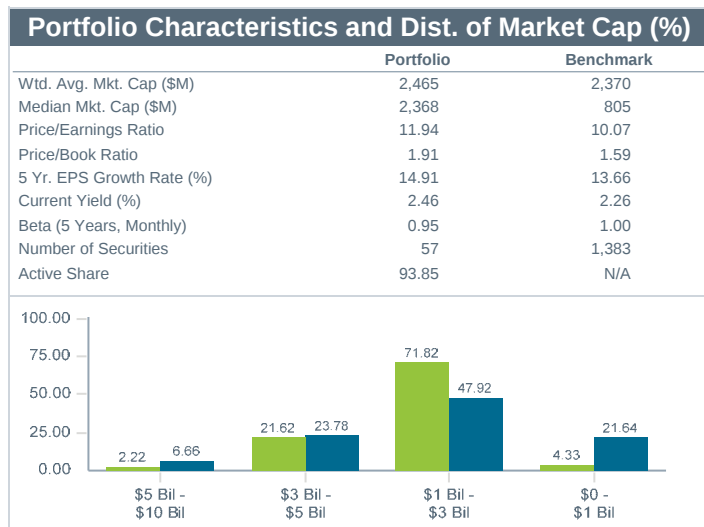
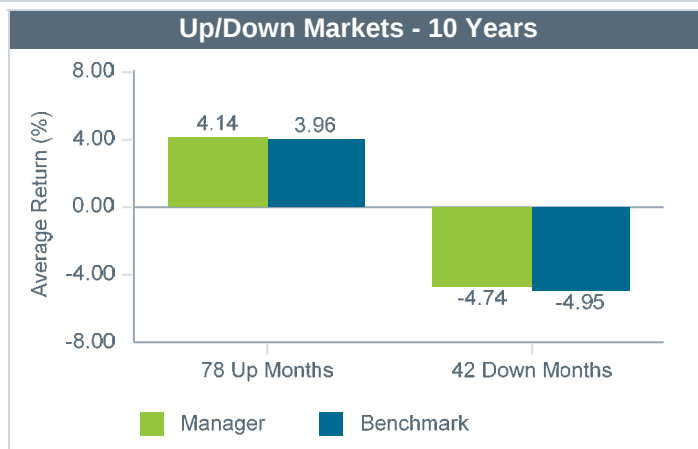
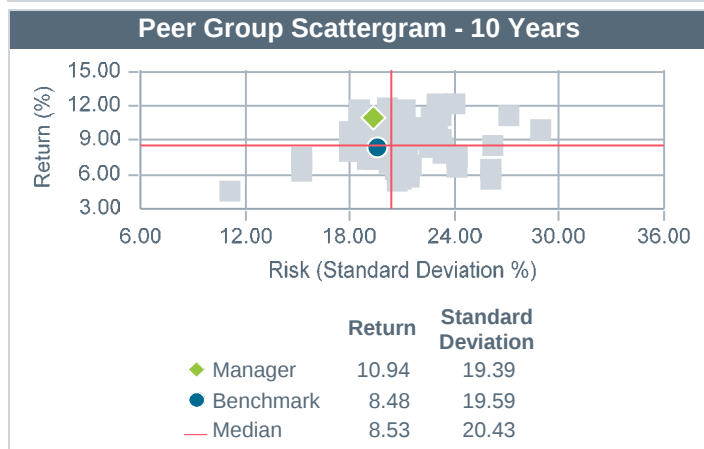
Manager: Westwood Small Cap Value (SA)

As of December 31, 2022

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	2021	2020	2019	2018	2017
Manager	13.77	-12.26	5.00	4.96	9.28	10.94	28.69	2.52	27.75	-13.84	13.19
Benchmark	8.42	-14.48	4.70	4.13	8.23	8.48	28.27	4.63	22.39	-12.86	7.84
Difference	5.35	2.22	0.30	0.83	1.05	2.46	0.42	-2.11	5.36	-0.98	5.35
Peer Group Median	11.70	-11.09	6.79	4.73	8.12	8.53	31.97	3.57	21.05	-16.08	8.46
Rank	16	70	86	46	28	9	71	60	7	30	13
Population	228	213	197	180	167	143	205	205	219	229	217



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.



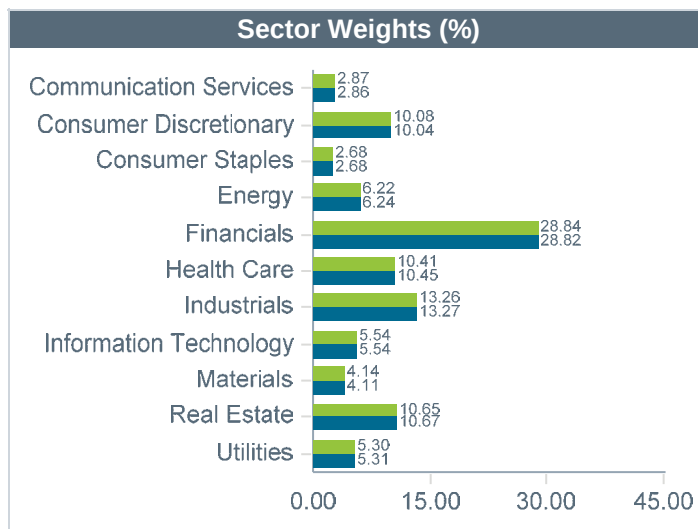
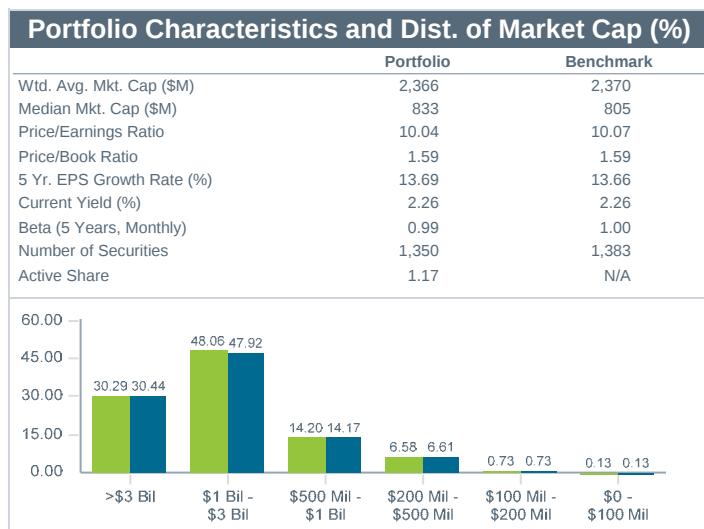
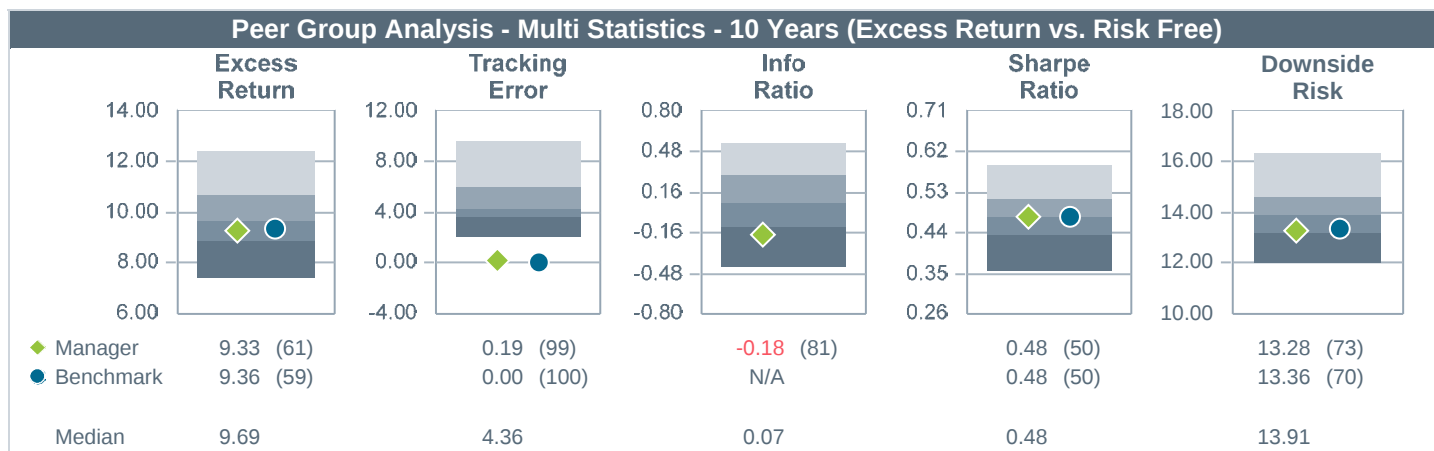
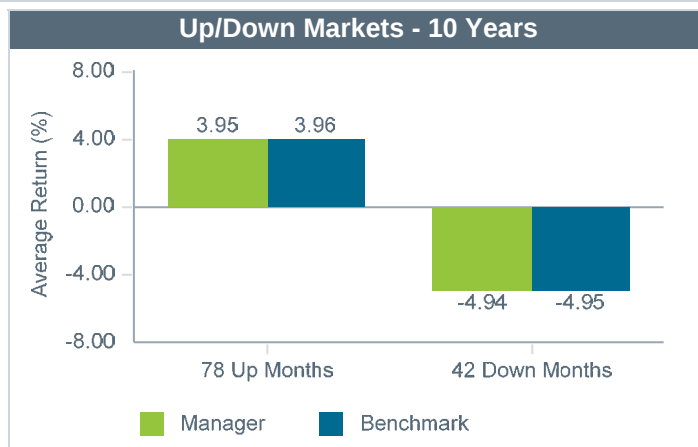
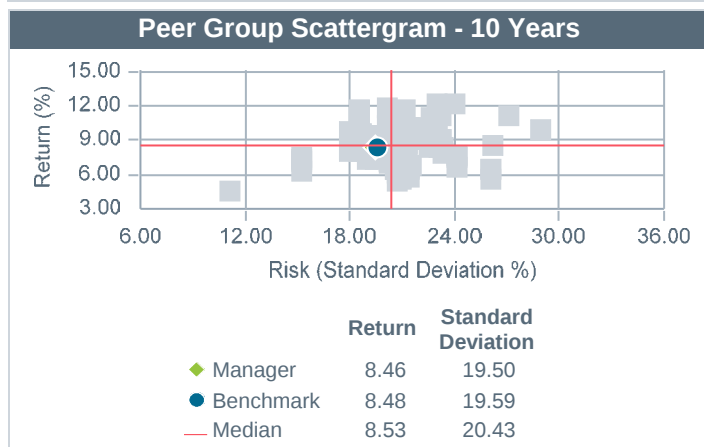
Manager: State Street Russell SCV Index C NL (CF)

As of December 31, 2022

Benchmark: Russell 2000 Val Index

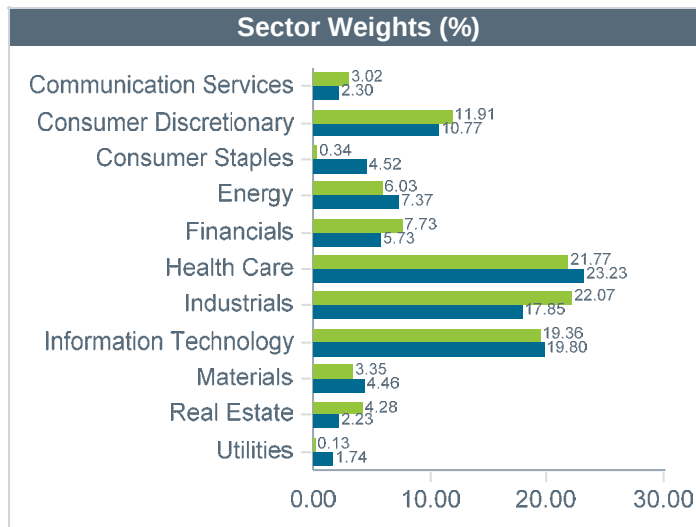
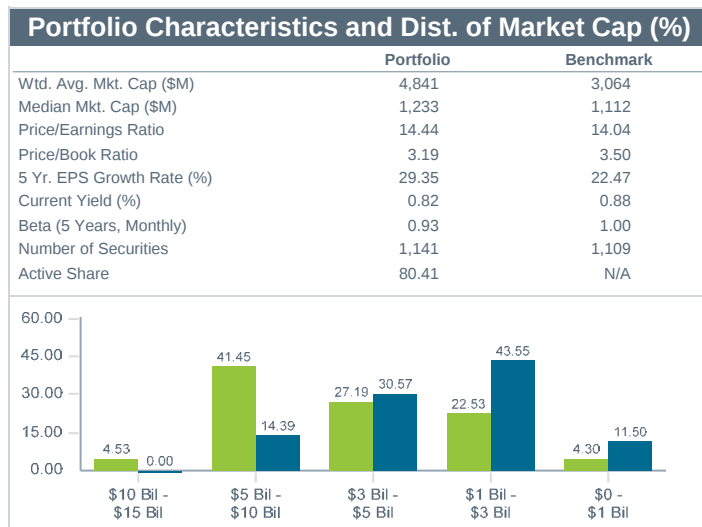
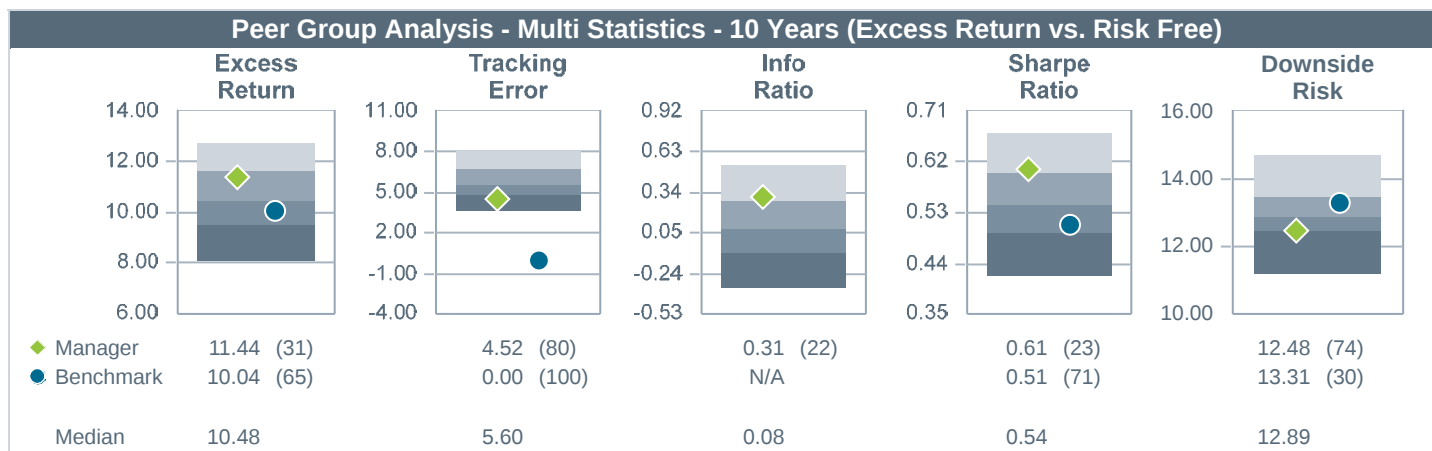
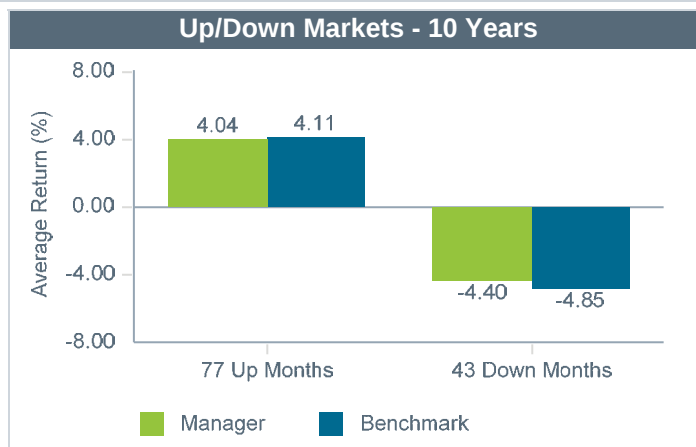
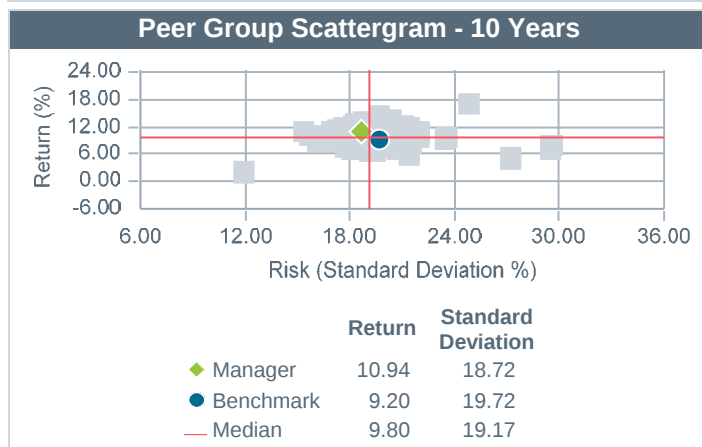
Peer Group: IM U.S. Small Cap Value Equity (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	8.38	-14.59	4.77	4.15	8.22	8.46	28.10	5.10	22.24	-12.83	7.99
Benchmark	8.42	-14.48	4.70	4.13	8.23	8.48	28.27	4.63	22.39	-12.86	7.84
Difference	-0.04	-0.11	0.07	0.02	-0.01	-0.02	-0.17	0.47	-0.15	0.03	0.15
Peer Group Median	11.70	-11.09	6.79	4.73	8.12	8.53	31.97	3.57	21.05	-16.08	8.46
Rank	91	97	87	63	48	54	75	32	31	23	56
Population	228	213	197	180	167	143	205	205	219	229	217



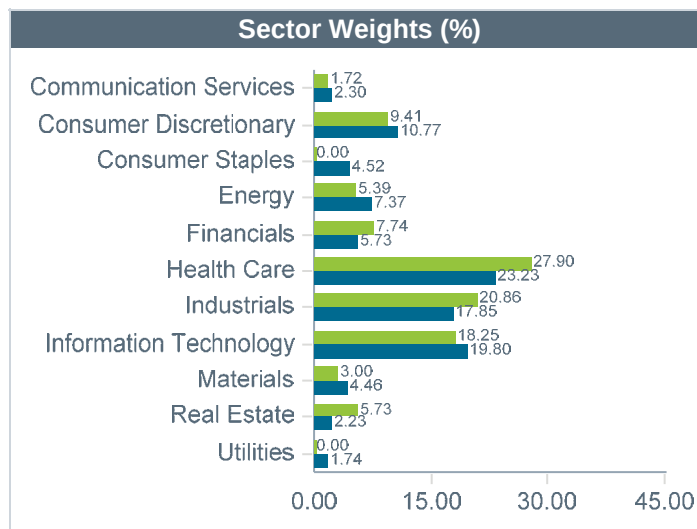
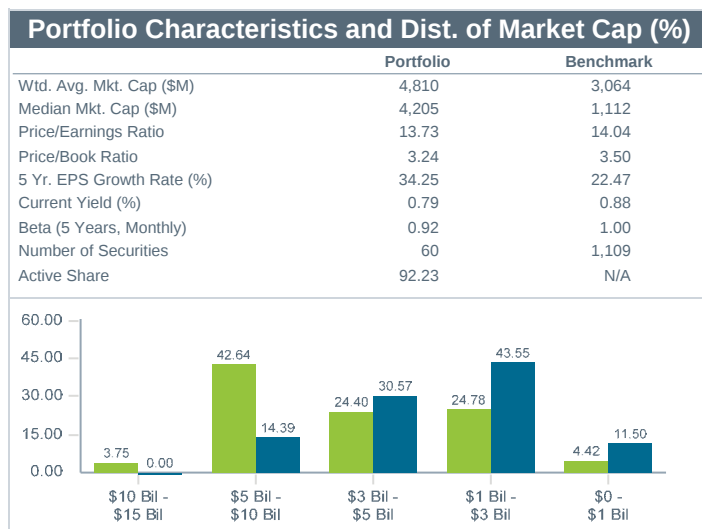
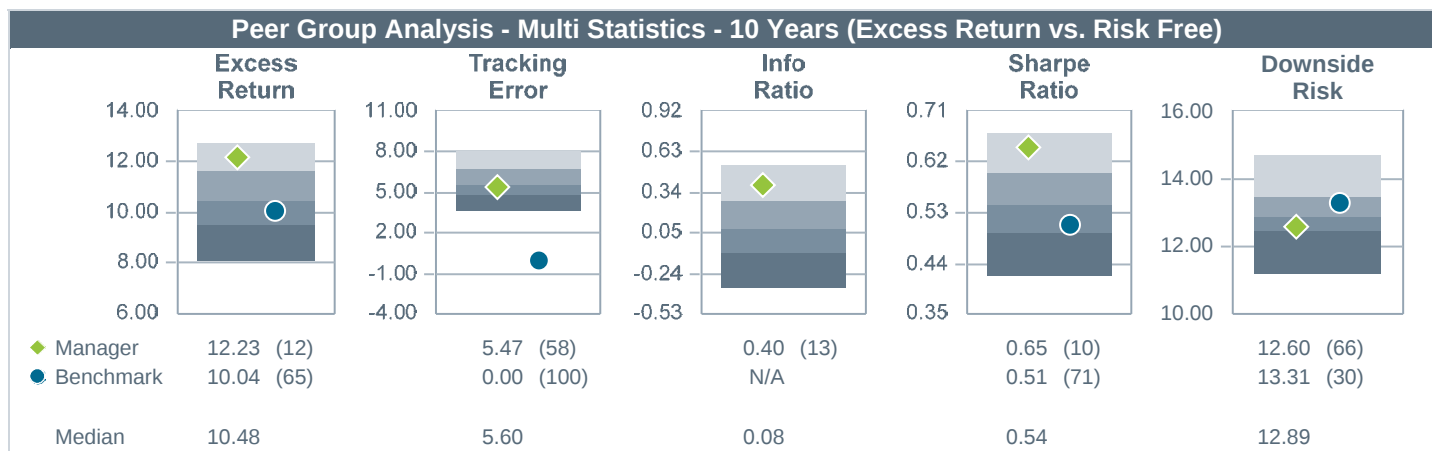
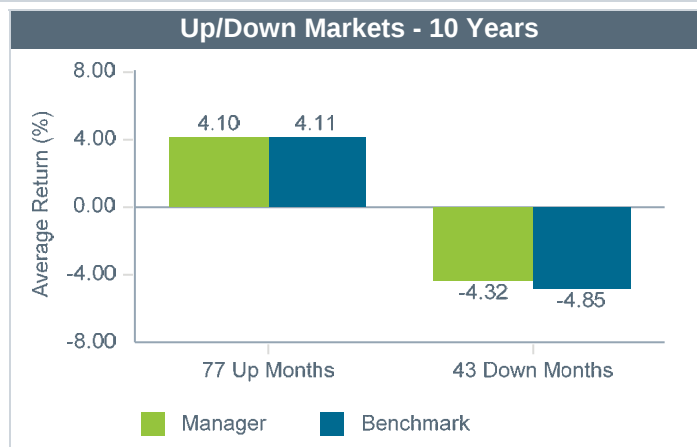
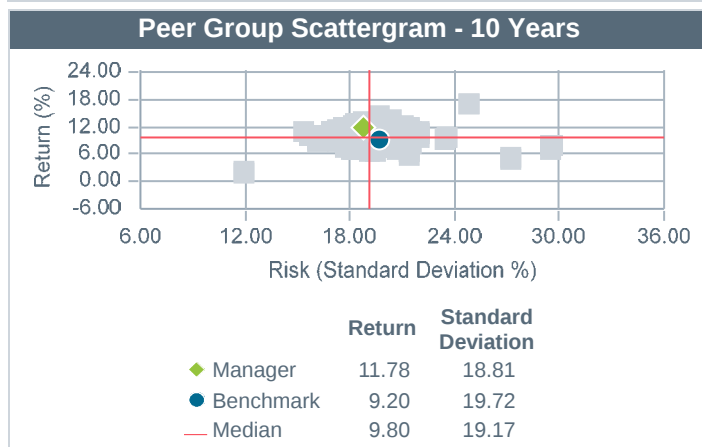
Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

	Performance										
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	4.46	-25.26	5.33	7.87	9.14	10.94	10.31	41.72	39.56	-10.43	20.60
Benchmark	4.13	-26.36	0.65	3.51	7.09	9.20	2.83	34.63	28.48	-9.31	22.17
Difference	0.33	1.10	4.68	4.36	2.05	1.74	7.48	7.09	11.08	-1.12	-1.57
Peer Group Median	4.47	-27.54	3.50	6.11	8.95	9.80	10.51	36.57	27.63	-5.58	20.74
Rank	51	35	27	21	47	25	52	36	5	78	52
Population	513	503	487	449	386	330	513	519	518	519	488



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.

	Performance										
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	4.37	-25.34	4.46	7.74	9.93	11.78	9.96	38.83	42.34	-10.52	25.10
Benchmark	4.13	-26.36	0.65	3.51	7.09	9.20	2.83	34.63	28.48	-9.31	22.17
Difference	0.24	1.02	3.81	4.23	2.84	2.58	7.13	4.20	13.86	-1.21	2.93
Peer Group Median	4.47	-27.54	3.50	6.11	8.95	9.80	10.51	36.57	27.63	-5.58	20.74
Rank	53	36	37	23	26	11	53	42	1	78	27
Population	513	503	487	449	386	330	513	519	518	519	488



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.

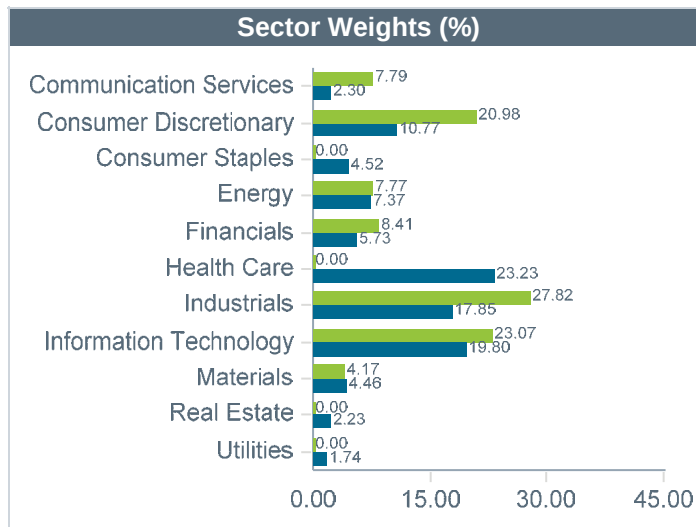
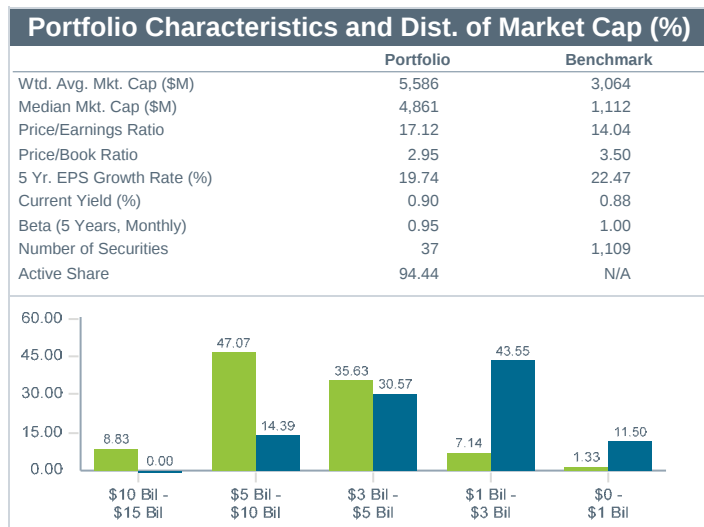
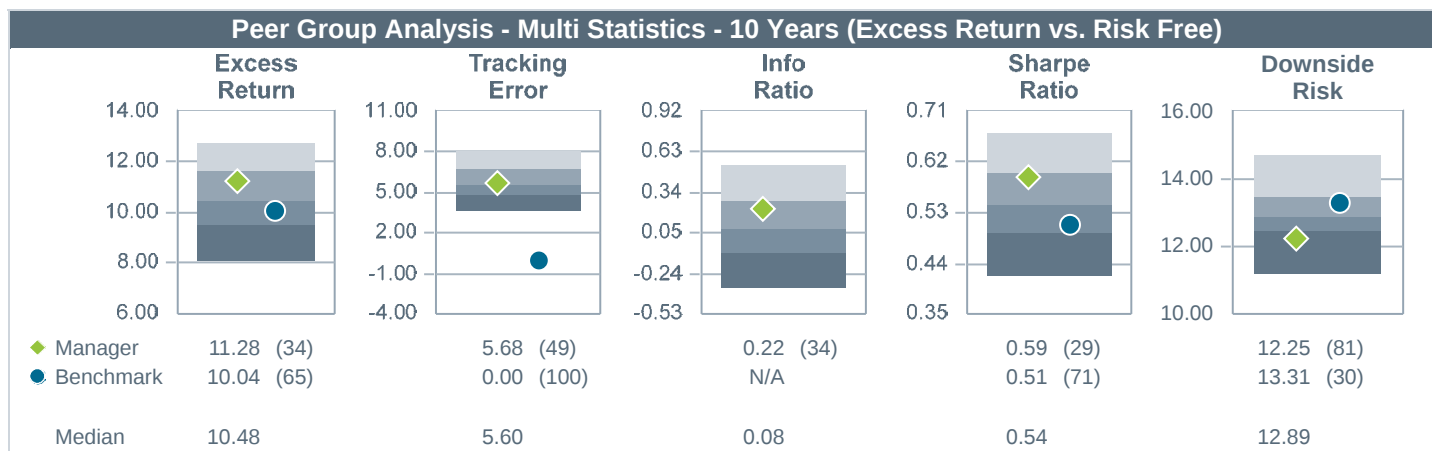
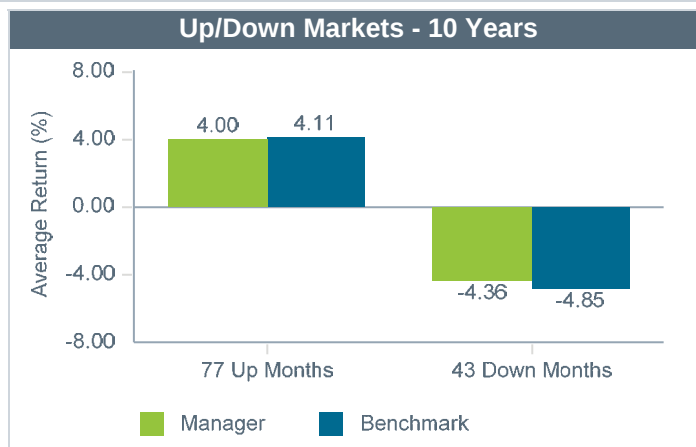
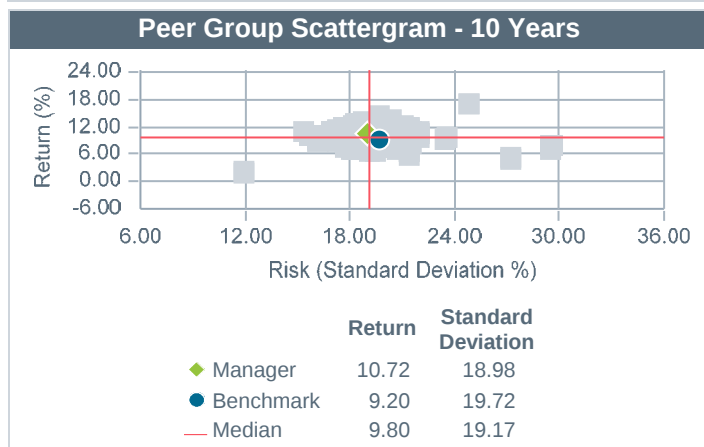
Manager: Fiera Small Cap Growth (SA)

As of December 31, 2022

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	2021	2020	2019	2018	2017
Manager	4.74	-24.23	9.31	9.76	8.61	10.72	14.61	50.38	35.95	-10.29	11.35
Benchmark	4.13	-26.36	0.65	3.51	7.09	9.20	2.83	34.63	28.48	-9.31	22.17
Difference	0.61	2.13	8.66	6.25	1.52	1.52	11.78	15.75	7.47	-0.98	-10.82
Peer Group Median	4.47	-27.54	3.50	6.11	8.95	9.80	10.51	36.57	27.63	-5.58	20.74
Rank	47	28	5	6	57	32	35	25	17	77	91
Population	513	503	487	449	386	330	513	519	518	519	488



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.



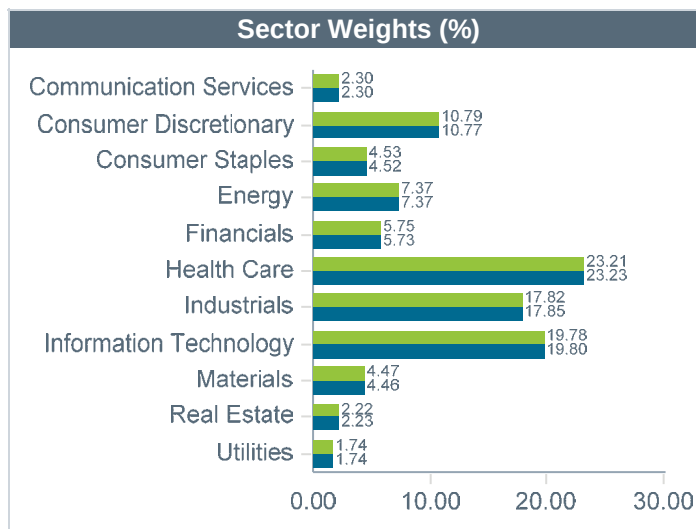
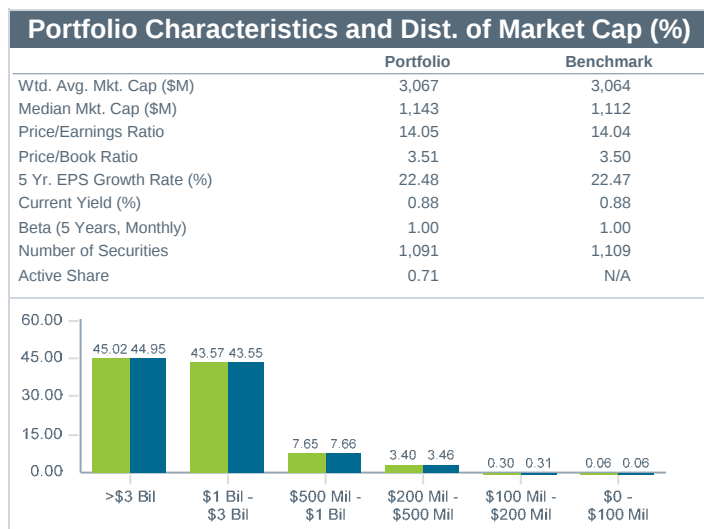
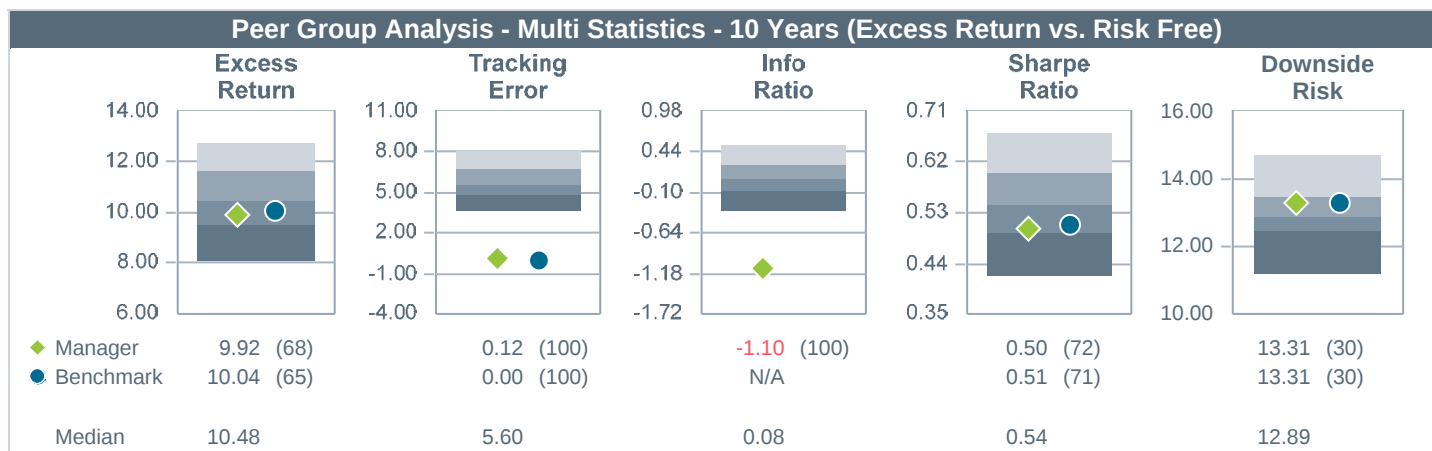
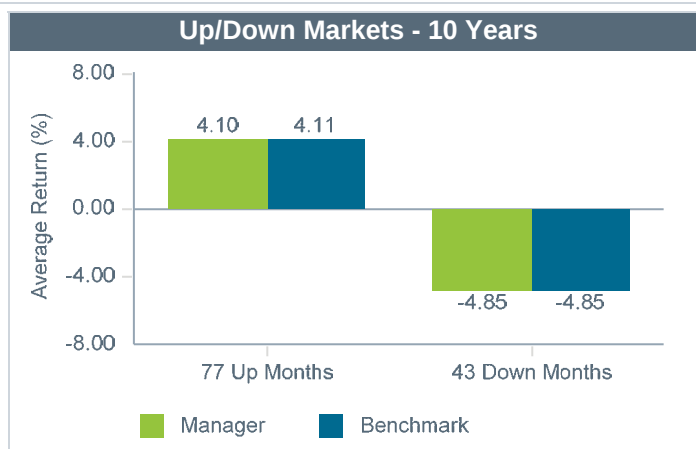
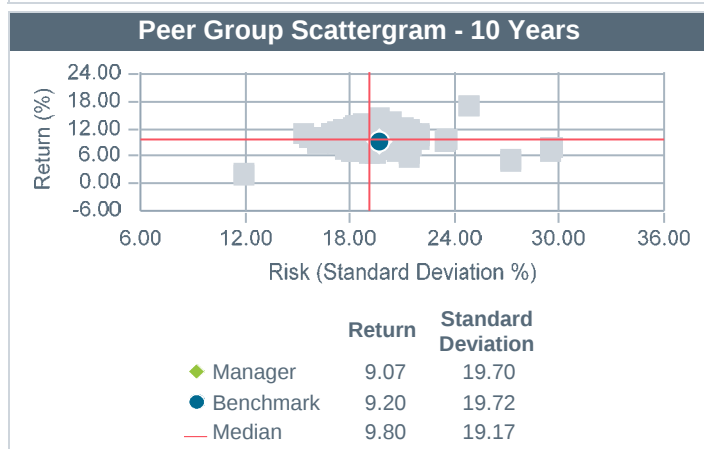
Manager: State Street Russell SCG Index C NL (CF)

As of December 31, 2022

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	2021	2020	2019	2018	2017
Manager	4.13	-26.50	0.43	3.34	6.94	9.07	2.73	34.14	28.42	-9.42	21.88
Benchmark	4.13	-26.36	0.65	3.51	7.09	9.20	2.83	34.63	28.48	-9.31	22.17
Difference	0.00	-0.14	-0.22	-0.17	-0.15	-0.13	-0.10	-0.49	-0.06	-0.11	-0.29
Peer Group Median	4.47	-27.54	3.50	6.11	8.95	9.80	10.51	36.57	27.63	-5.58	20.74
Rank	56	45	84	85	81	71	83	57	47	73	45
Population	513	503	487	449	386	330	513	519	518	519	488



Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



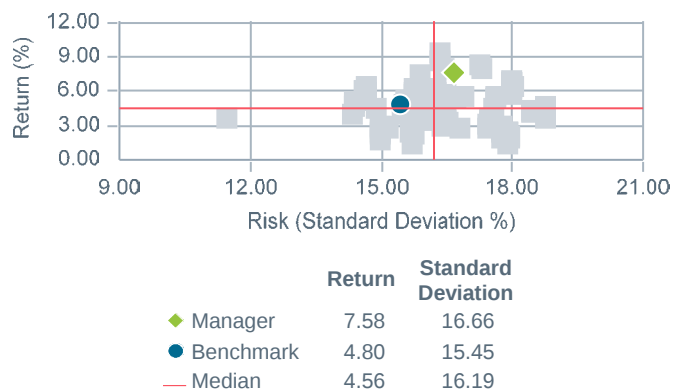
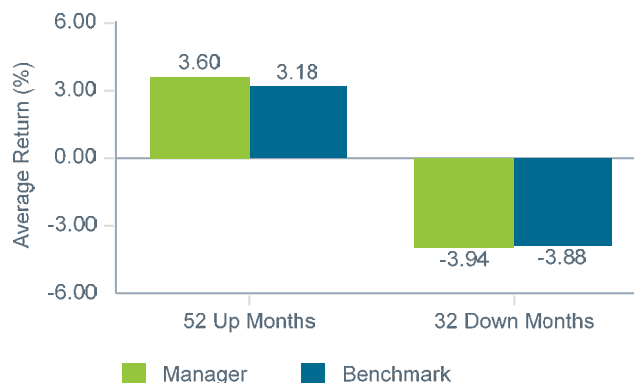
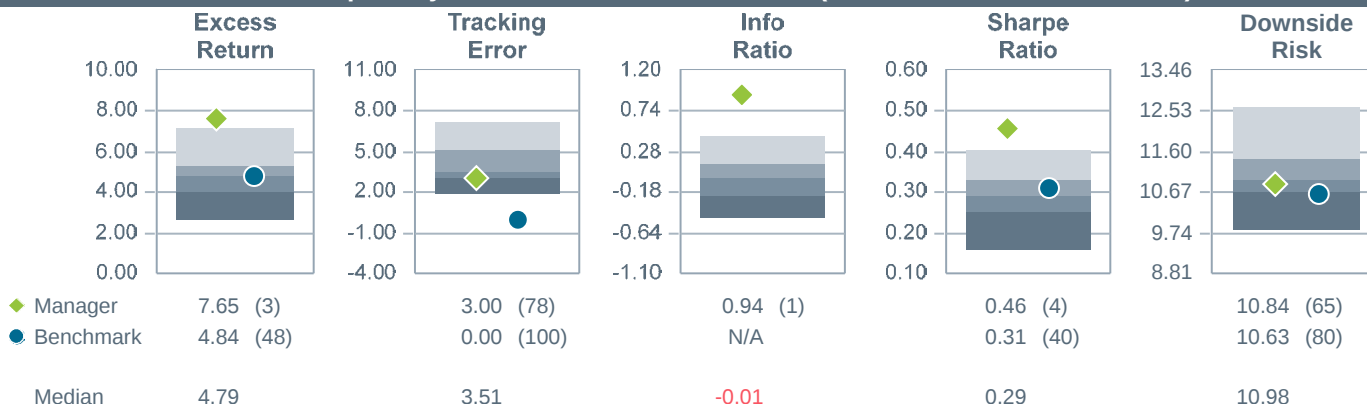
Manager: Non-US Company Stock

As of December 31, 2022

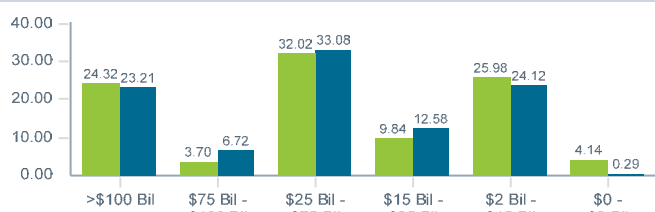
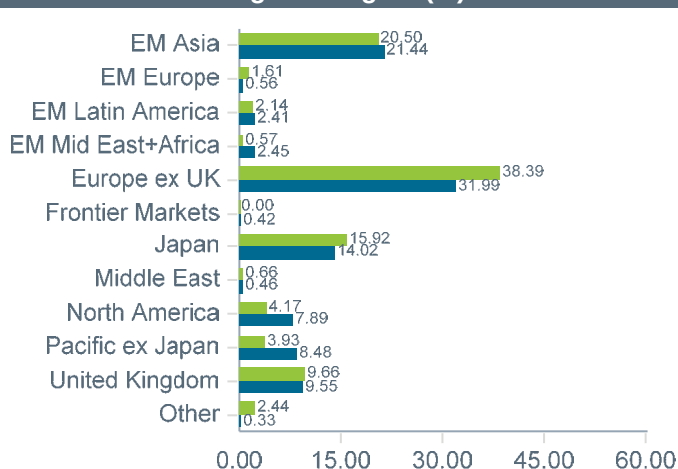
Benchmark: MSCI ACW Ex US Index (USD) (Net)

Peer Group: IM ACWI Ex US Core (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	14.32	-18.06	3.67	3.86	7.58	N/A	8.56	25.26	24.83	-13.13	32.61
Benchmark	14.28	-16.00	0.07	0.88	4.80	3.80	7.82	10.65	21.51	-14.20	27.19
Difference	0.04	-2.06	3.60	2.98	2.78	N/A	0.74	14.61	3.32	1.07	5.42
Peer Group Median	15.33	-16.52	0.21	1.03	4.56	4.01	8.87	13.50	22.78	-15.85	27.15
Rank	83	67	9	8	3	N/A	56	6	37	9	6
Population	172	172	172	172	169	130	174	185	195	198	209

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 (%)

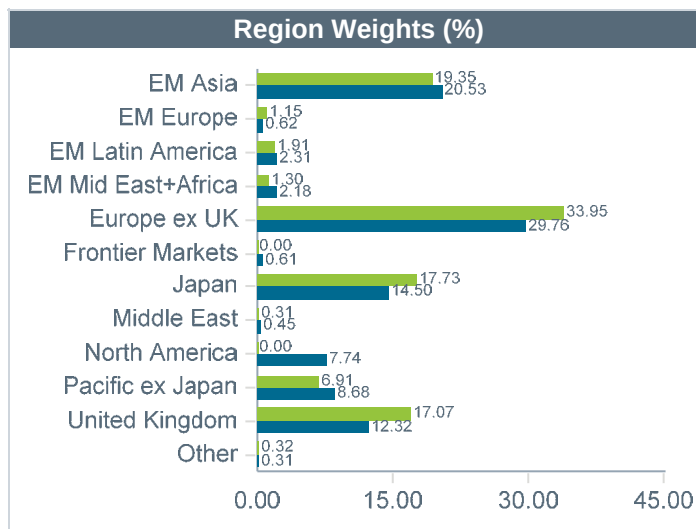
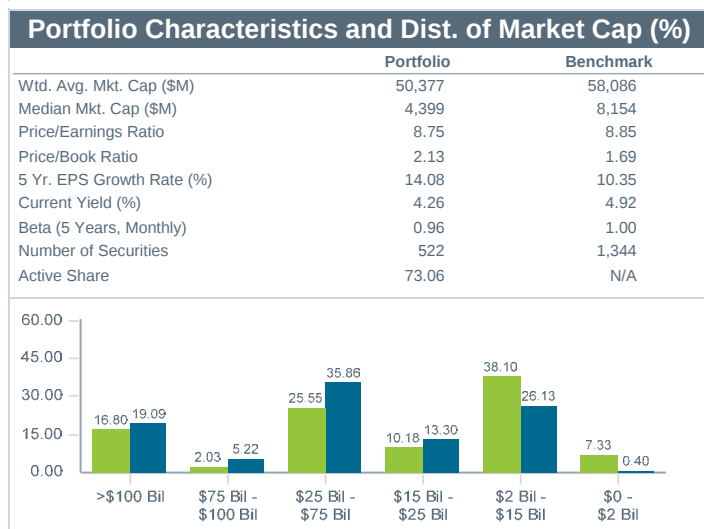
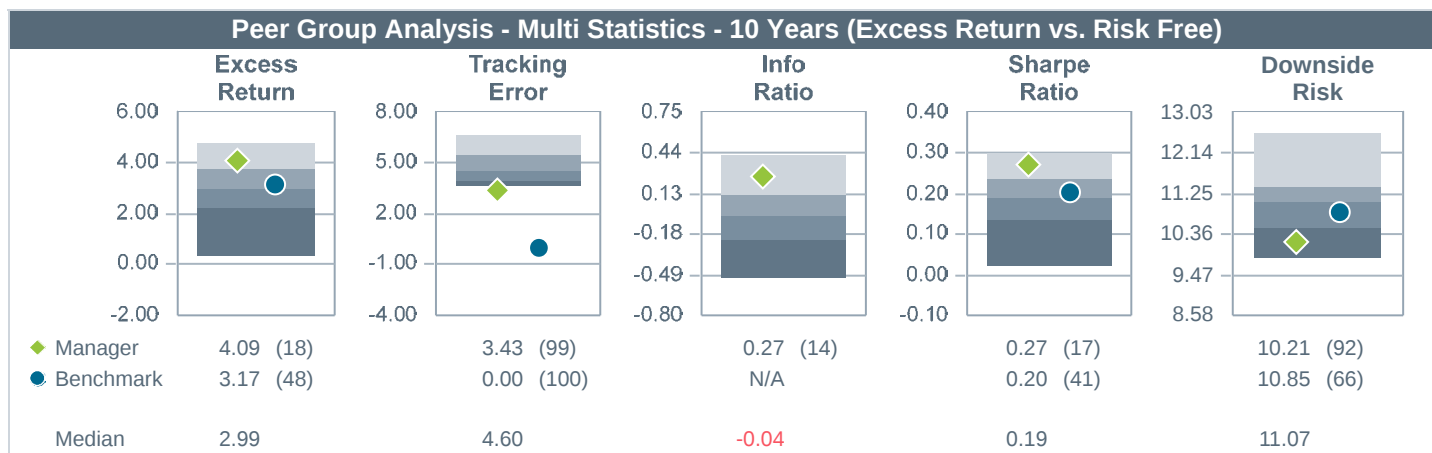
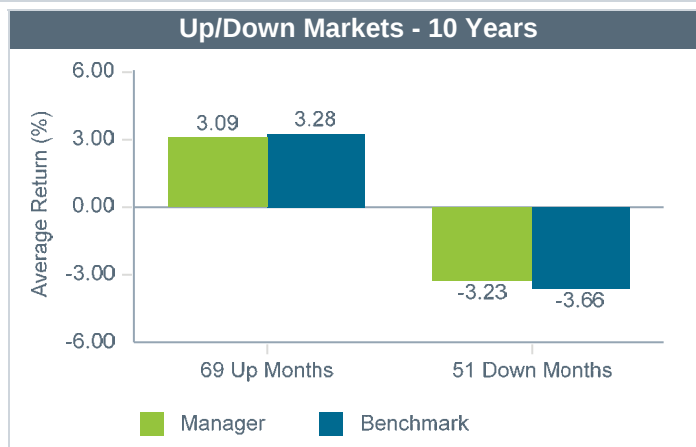
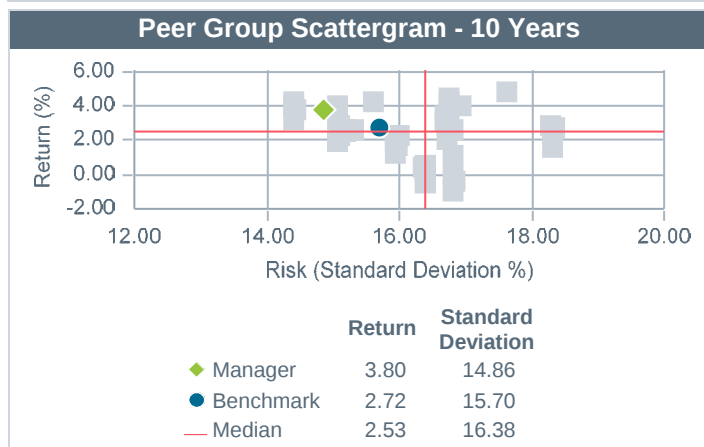
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	86,034	77,663
Median Mkt. Cap (\$M)	5,027	8,629
Price/Earnings Ratio	9.02	12.19
Price/Book Ratio	2.70	2.42
5 Yr. EPS Growth Rate (%)	16.22	12.16
Current Yield (%)	3.50	3.38
Beta (5 Years, Monthly)	1.08	1.00
Number of Securities	1,226	2,261
Active Share	62.84	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.



Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	14.94	-11.13	0.73	0.53	4.22	3.80	13.94	0.94	18.64	-15.32	24.77
Benchmark	15.70	-8.59	0.06	-0.05	4.19	2.72	10.46	-0.77	15.72	-13.97	22.66
Difference	-0.76	-2.54	0.67	0.58	0.03	1.08	3.48	1.71	2.92	-1.35	2.11
Peer Group Median	18.06	-11.04	0.24	-0.27	3.35	2.53	10.01	3.69	17.82	-16.03	22.88
Rank	78	53	27	11	20	19	15	68	35	23	29
Population	62	62	62	62	57	44	62	67	68	68	72



Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

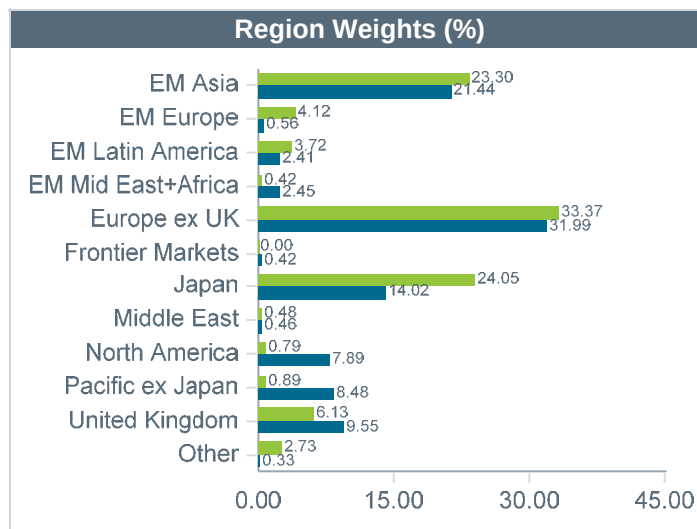
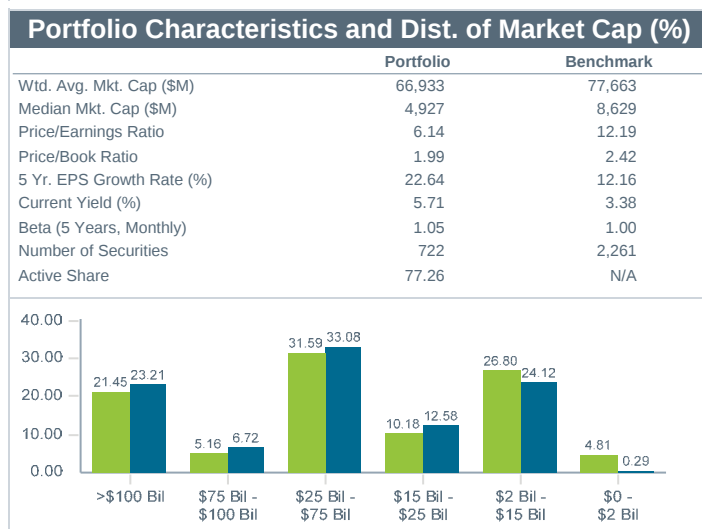
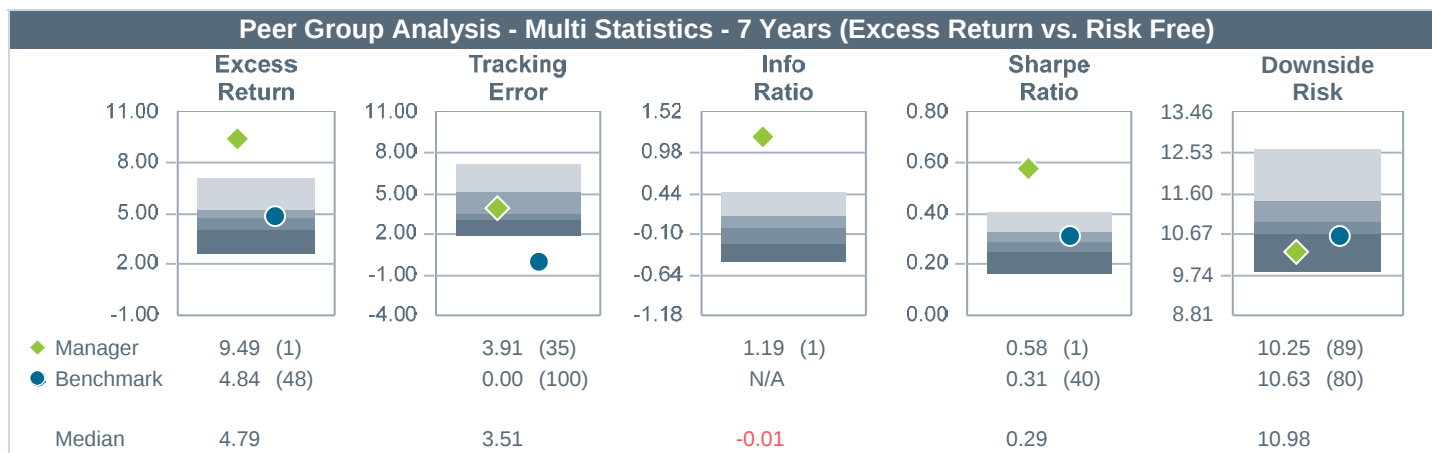
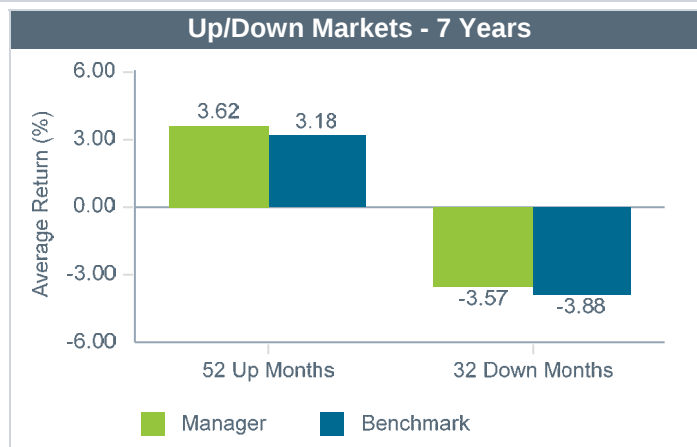
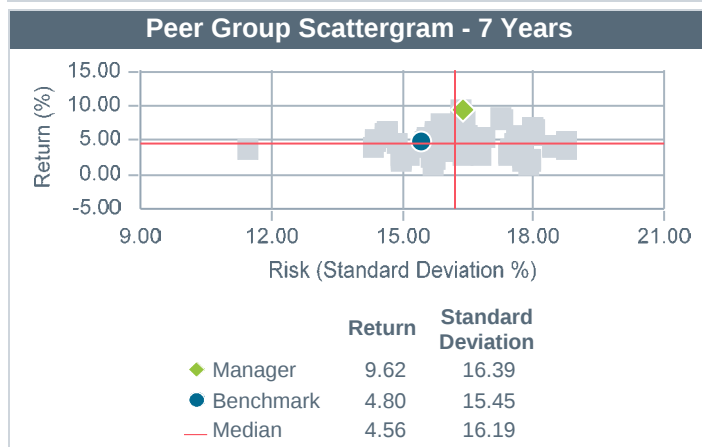
Manager: Arrowstreet Intl Eq ACW Ex US C (CIT)

As of December 31, 2022

Benchmark: MSCI ACW Ex US Index (USD) (Net)

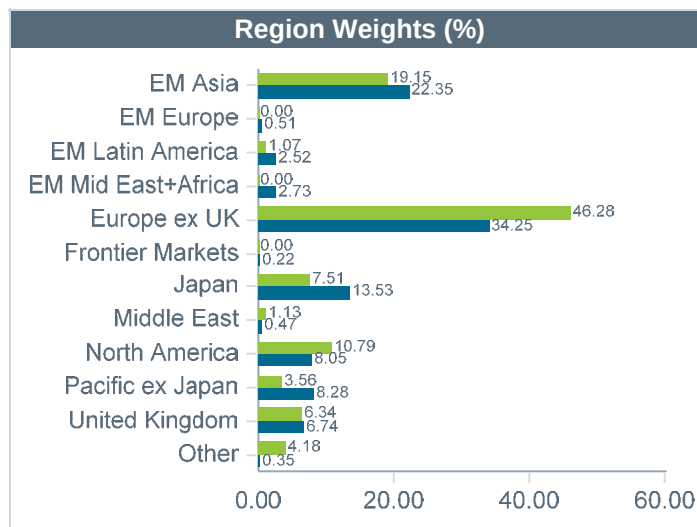
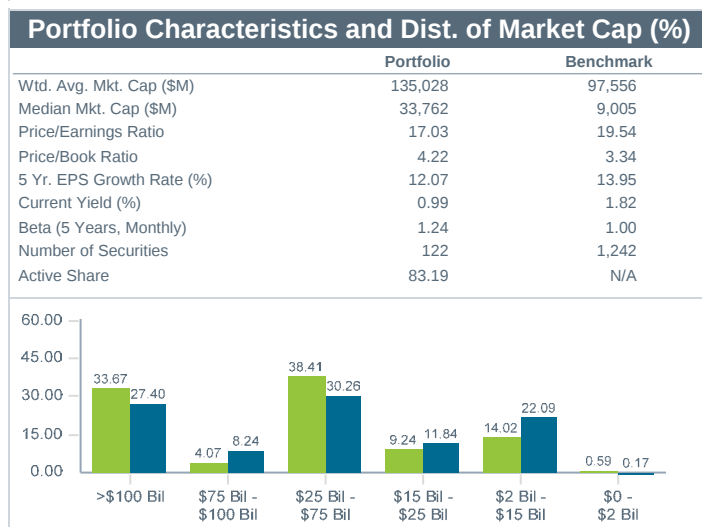
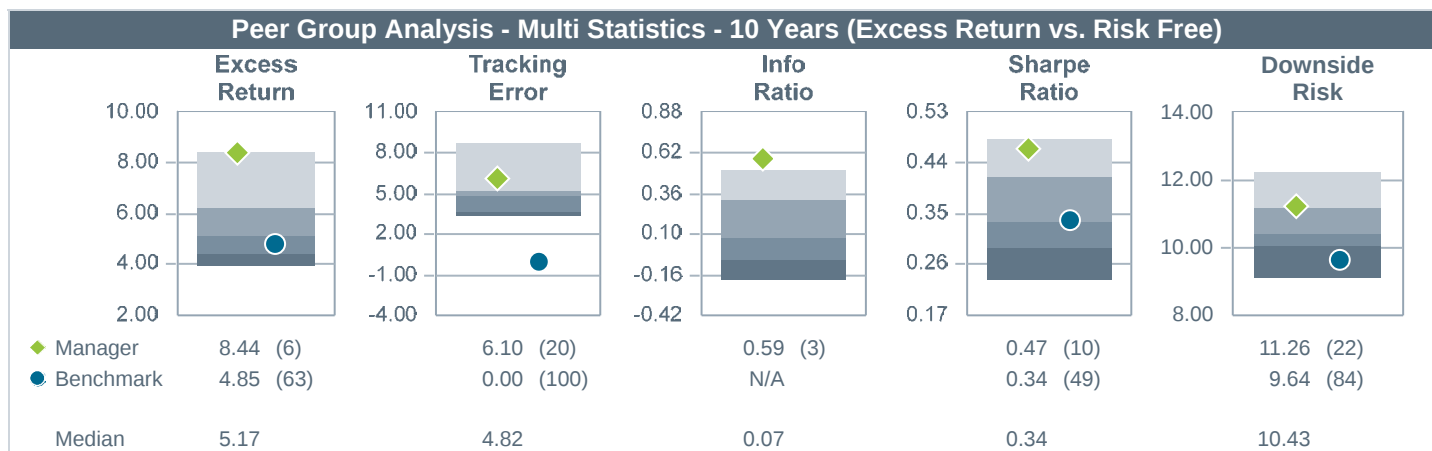
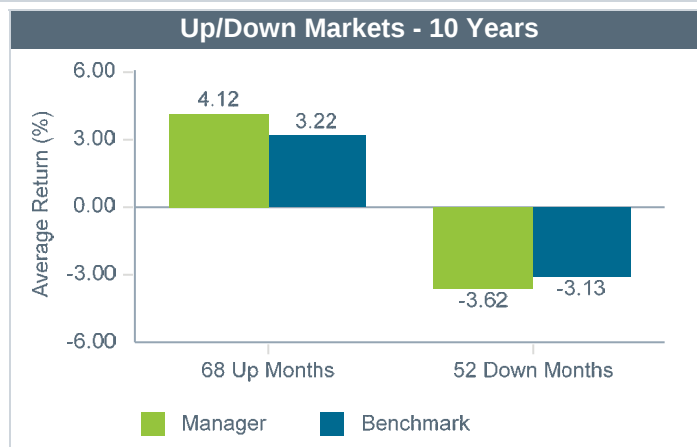
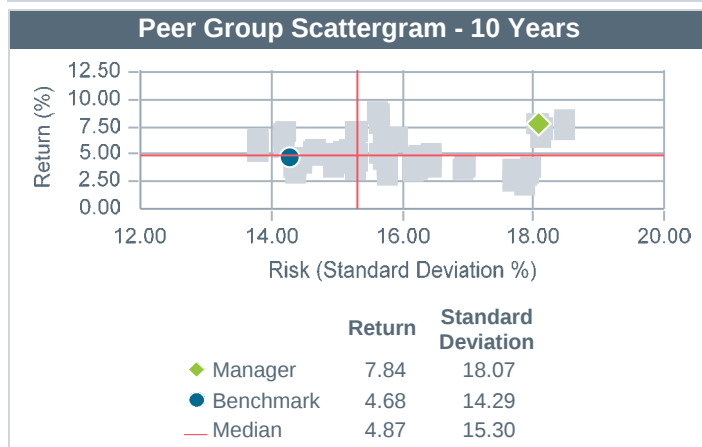
Peer Group: IM ACWI Ex US Core (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	15.26	-10.51	7.66	6.58	9.62	N/A	13.26	23.13	24.45	-11.43	30.03
Benchmark	14.28	-16.00	0.07	0.88	4.80	3.80	7.82	10.65	21.51	-14.20	27.19
Difference	0.98	5.49	7.59	5.70	4.82	N/A	5.44	12.48	2.94	2.77	2.84
Peer Group Median	15.33	-16.52	0.21	1.03	4.56	4.01	8.87	13.50	22.78	-15.85	27.15
Rank	52	6	2	1	1	N/A	5	7	40	3	21
Population	172	172	172	172	169	130	174	185	195	198	209



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	2021	2020	2019	2018	2017
Manager	12.62	-30.79	3.14	4.75	9.09	7.84	-0.74	59.74	31.48	-12.58	43.16
Benchmark	12.89	-23.05	-0.40	1.49	5.17	4.68	5.09	22.20	27.34	-14.43	32.01
Difference	-0.27	-7.74	3.54	3.26	3.92	3.16	-5.83	37.54	4.14	1.85	11.15
Peer Group Median	13.69	-26.63	-0.30	1.70	4.86	4.87	7.93	22.75	27.84	-14.32	32.37
Rank	78	81	10	11	1	5	93	1	23	29	7
Population	170	170	170	170	152	121	170	170	172	176	188



Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

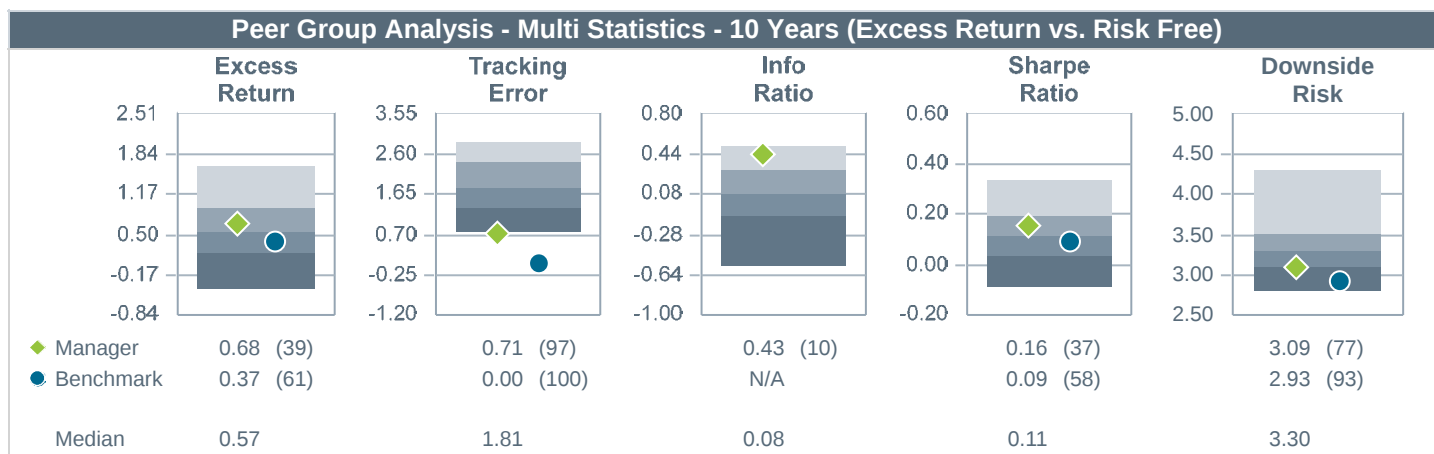
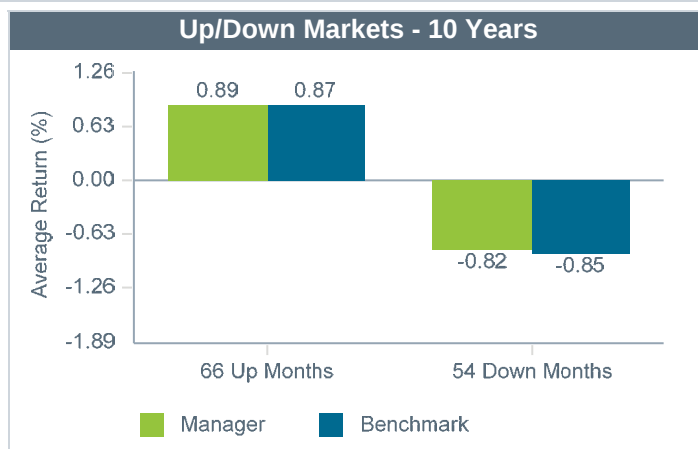
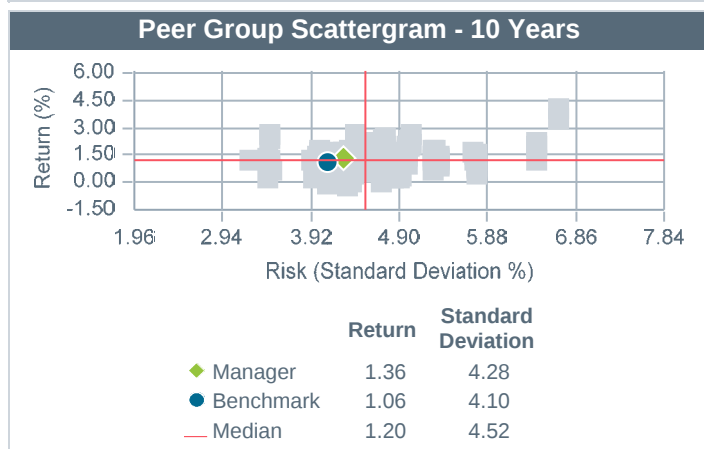
Manager: US Bond

As of December 31, 2022

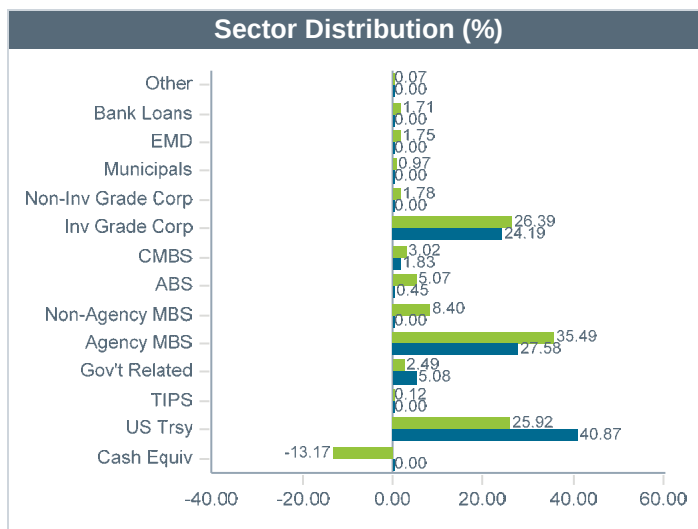
Benchmark: Bloomberg US Agg Bond Index

Peer Group: IM U.S. Broad Market Core+ Fixed Income (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	2.12	-14.17	-2.45	0.31	1.07	1.36	-1.28	9.56	8.99	0.38	3.48
Benchmark	1.87	-13.01	-2.71	0.02	0.89	1.06	-1.55	7.51	8.72	0.01	3.54
Difference	0.25	-1.16	0.26	0.29	0.18	0.30	0.27	2.05	0.27	0.37	-0.06
Peer Group Median	1.81	-13.75	-2.46	0.10	1.17	1.20	-0.94	8.58	9.33	-0.97	4.49
Rank	29	62	50	40	59	38	65	28	59	9	79
Population	328	316	291	255	204	174	312	308	307	285	267



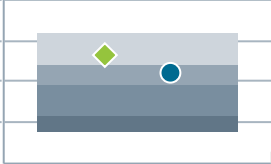
Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	6.80	6.17
Spread Duration	4.72	N/A
Avg. Maturity	8.16	8.44
Avg. Quality	Aa2	Aa1/Aa2
Yield To Maturity (%)	4.91	4.68
Coupon Rate (%)	3.10	2.69
Current Yield (%)	3.51	N/A
Holdings Count	905	13,133

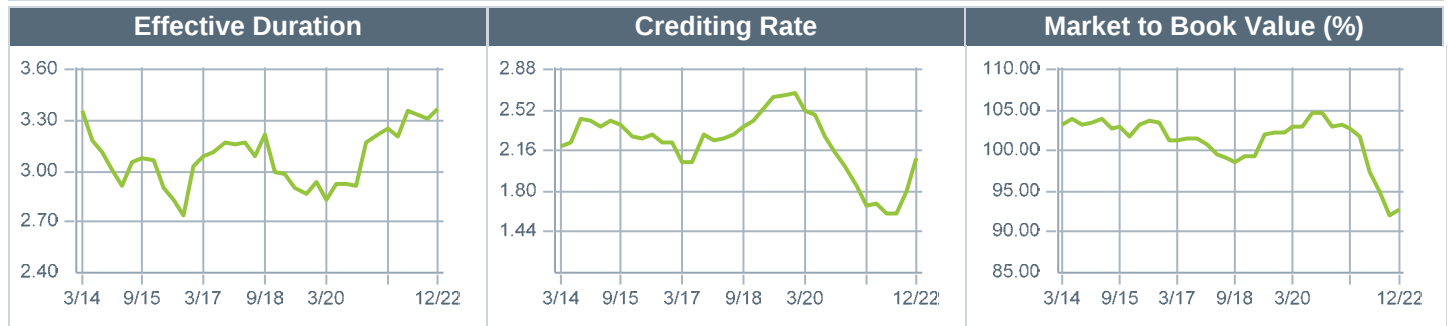


Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Allocation to Other includes Equity, Swaps, & Options.



Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	0.51	1.74	1.95	2.16	2.18	2.20	1.76	2.34	2.63	2.33	2.13
Benchmark	0.31	1.02	1.52	2.35	2.28	2.06	1.37	2.18	3.81	3.40	2.37
Difference	0.20	0.72	0.43	-0.19	-0.10	0.14	0.39	0.16	-1.18	-1.07	-0.24
Peer Group Median	0.57	1.97	1.96	2.15	2.09	1.97	1.75	2.26	2.53	2.23	1.97
Rank	88	83	58	49	22	18	49	42	30	39	22
Population	16	16	16	16	16	15	16	16	16	16	16

Peer Group Analysis		Portfolio Characteristics			Top Wrap Providers (%)		
Return (%)							
	10 Years						
	◆ Manager	2.20 (18)	Effective Duration	3.37	N/A	Prudential	23.80
	● Benchmark	2.06 (31)	Avg. Quality	Aa2	N/A	Metropolitan Life	21.10
	Median	1.97	Crediting Rate	2.10	N/A	Transamerica Premier	18.80
		Market To BV (%)	92.77	N/A	Royal Bank of Canada	16.70	
					RGA	18.10	
					Cash/Cash Equivalents	1.50	

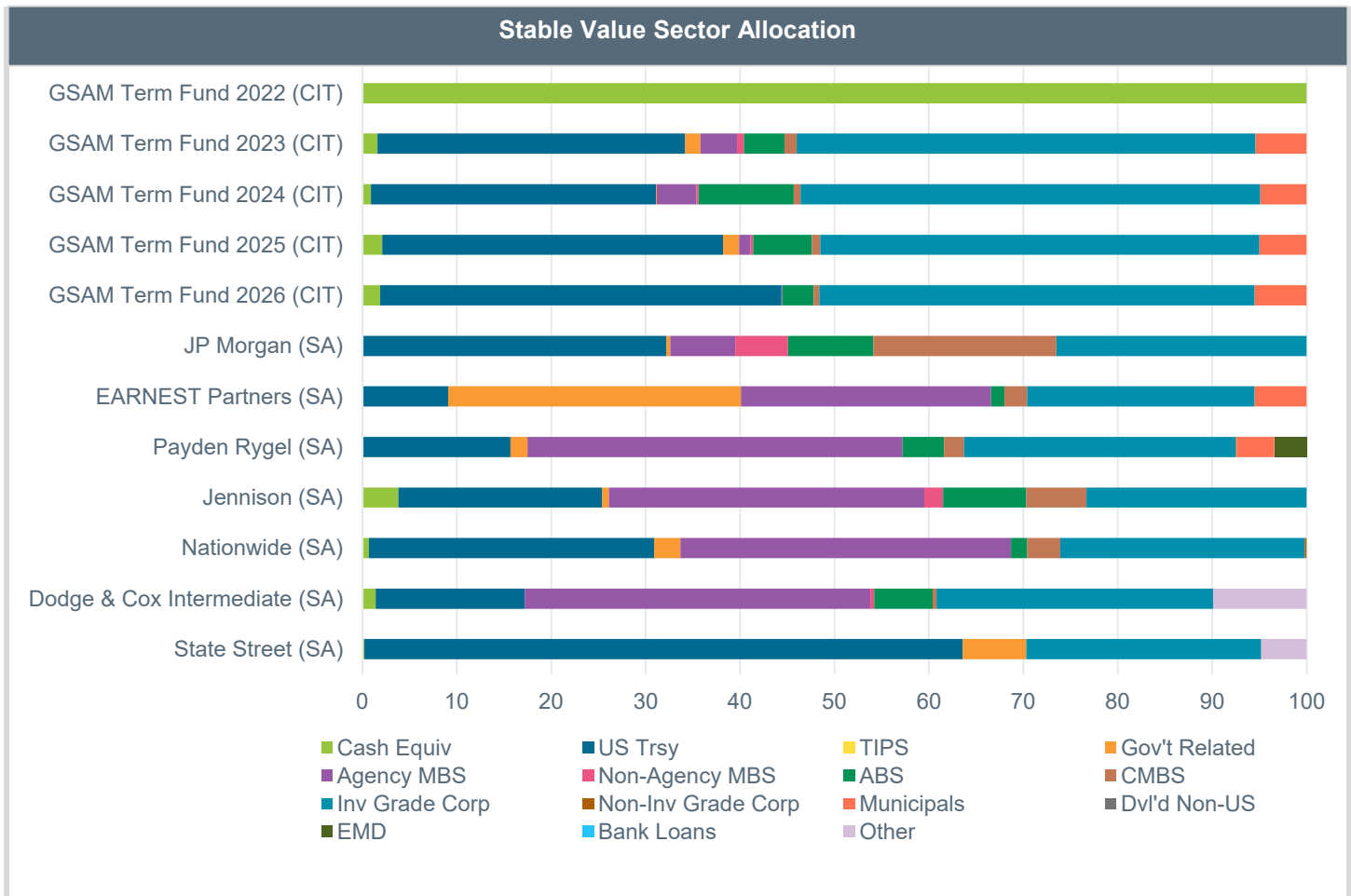


Performance shown is net of fees. Calculation is based on monthly periodicity. Benchmark portfolio characteristics and sector distribution data is currently unavailable. Allocation to "Other" consists of Yankees.

Ohio Public Employees Deferred Compensation Program
Stable Value Characteristics

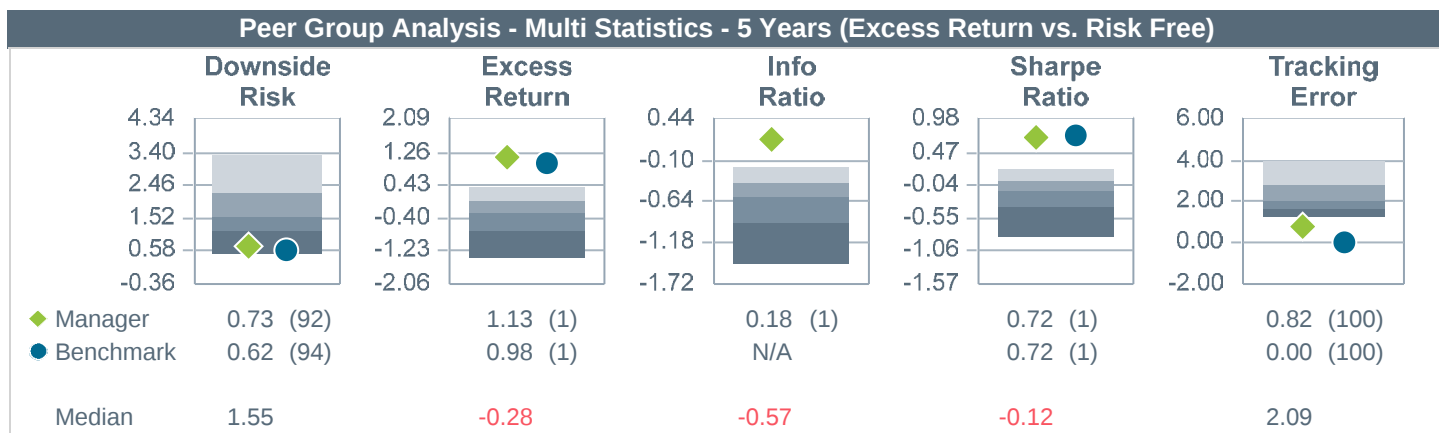
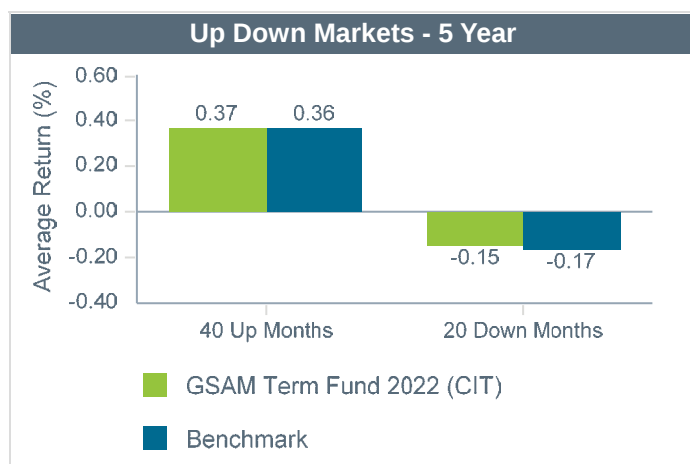
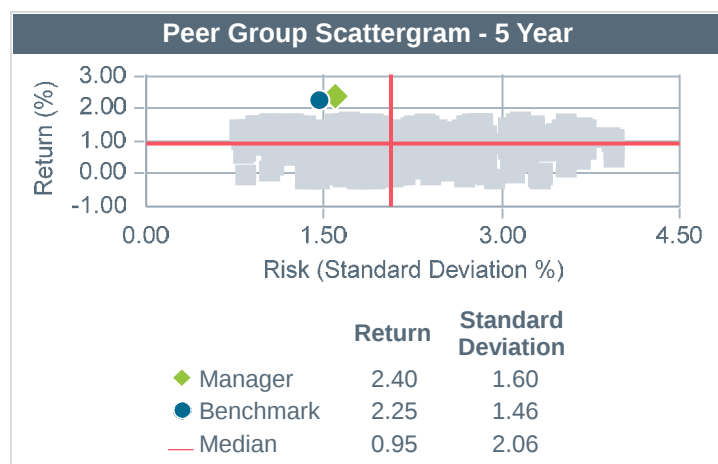
As of December 31, 2022

Stable Value Funds	Effective Duration	Market Value	Actual Percentage	Permissible Range %
GSAM Term Fund 2022 (CIT)	0.01	\$26,686,608	0.54%	
GSAM Term Fund 2023 (CIT)	0.58	\$412,762,890	8.42%	
GSAM Term Fund 2024 (CIT)	1.40	\$408,208,054	8.33%	
GSAM Term Fund 2025 (CIT)	2.34	\$406,534,149	8.29%	
GSAM Term Fund 2026 (CIT)	3.30	\$358,424,859	7.31%	
Fixed Maturity	1.83	\$1,612,616,560	32.90%	20% - 40%
JP Morgan (SA)	4.37	\$546,325,623	11.15%	
EARNEST Partners (SA)	4.23	\$258,198,708	5.27%	
Payden Rygel (SA)	4.52	\$284,092,207	5.80%	
Jennison (SA)	4.45	\$480,218,526	9.80%	
Nationwide (SA)	4.36	\$542,422,516	11.07%	
Dodge & Cox Intermediate (SA)	3.94	\$711,016,288	14.51%	
State Street (SA)	3.78	\$389,923,606	7.95%	
Open Maturity	4.22	\$3,212,197,474	65.53%	50% - 70%
Short Term Investment Fund		\$76,866,293	1.57%	
Liquidity Buffer		\$76,866,293	1.57%	0% - 10%
Total	3.37	\$4,901,680,327	100.00%	



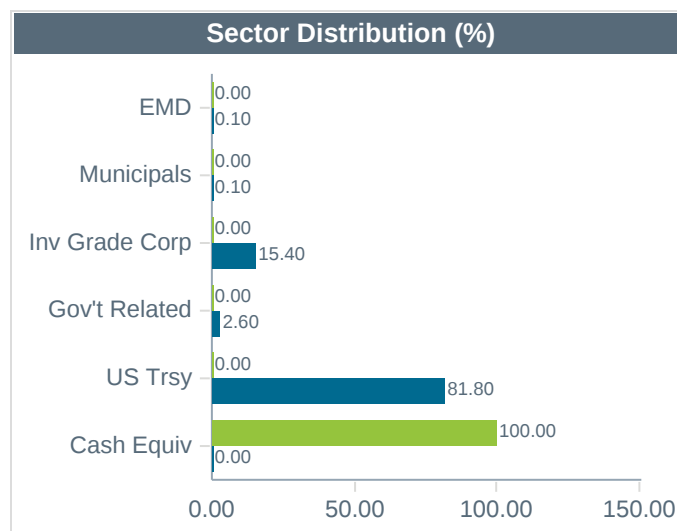
Allocations shown may not sum up to 100% exactly due to rounding. Underlying market values were provided by Goldman Sachs Asset Management. Allocation to "Other" consists of Yankees.

Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	0.90	1.42	1.42	1.82	2.40	N/A	N/A	0.15	3.93	5.80	0.78	N/A
Benchmark	0.93	1.29	1.29	1.69	2.25	N/A	N/A	0.09	3.72	5.28	0.95	N/A
Difference	-0.03	0.13	0.13	0.13	0.15	N/A	N/A	0.06	0.21	0.52	-0.17	N/A
Peer Group Median	1.00	-3.87	-3.87	-0.17	0.95	1.09	0.85	-0.06	3.11	3.82	1.20	1.33
Rank	62	3	3	1	1	N/A	N/A	33	24	5	76	N/A
Population	667	645	645	597	526	458	372	656	651	655	634	599



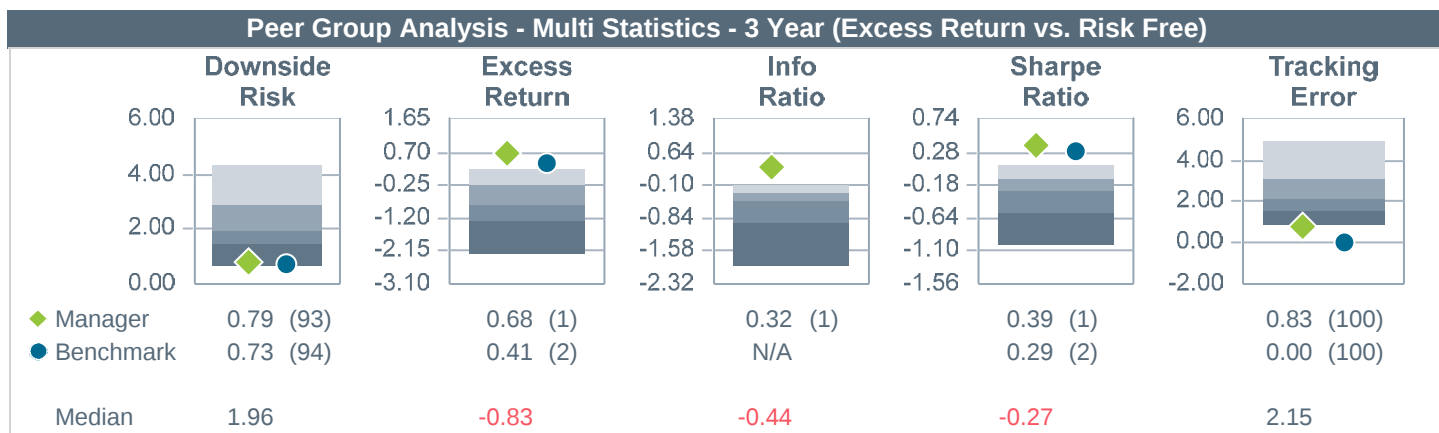
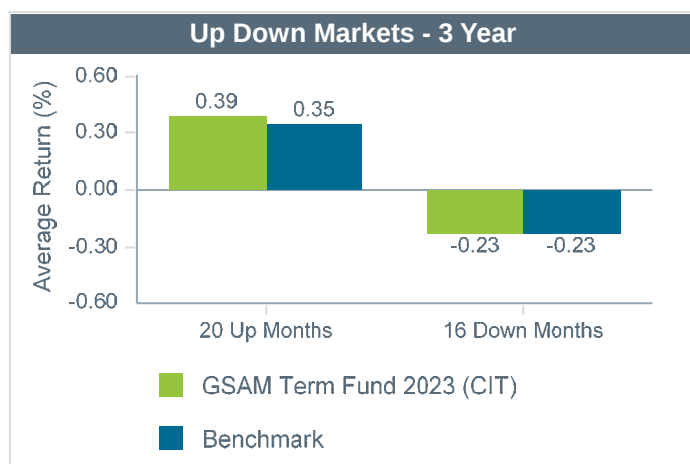
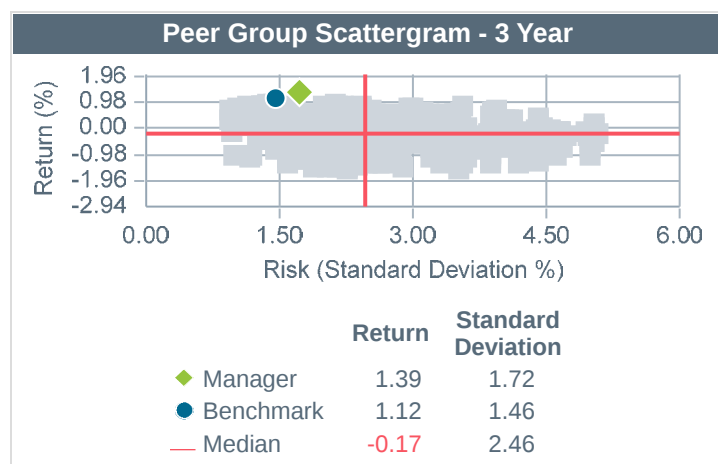
Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	N/A	N/A
Avg. Quality	Aaa	Aaa
Coupon Rate (%)	N/A	N/A
Current Yield (%)	N/A	N/A
Effective Duration	0.01	N/A
Yield To Maturity (%)	4.33	N/A
Holdings Count	N/A	N/A

Top Wrap Providers (%)	
Metropolitan Life	16.41
RGA	25.64
Royal Bank of Canada	32.16
Transamerica Premier	10.63



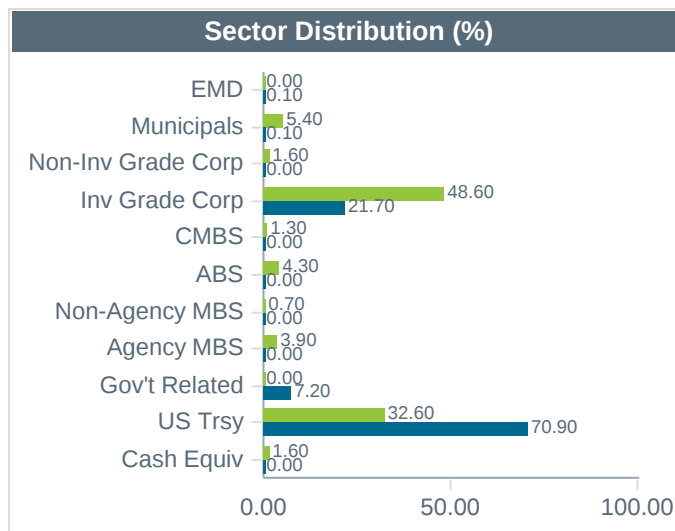
Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	0.98	-1.14	-1.14	1.39	N/A	N/A	N/A	-0.53	5.99	6.49	N/A	N/A
Benchmark	0.85	-1.37	-1.37	1.12	N/A	N/A	N/A	-0.45	5.31	6.30	N/A	N/A
Difference	0.13	0.23	0.23	0.27	N/A	N/A	N/A	-0.08	0.68	0.19	N/A	N/A
Peer Group Median	1.00	-3.87	-3.87	-0.17	0.95	1.09	0.85	-0.06	3.11	3.82	1.20	1.33
Rank	53	28	28	1	N/A	N/A	N/A	73	2	2	N/A	N/A
Population	667	645	645	597	526	458	372	656	651	655	634	599



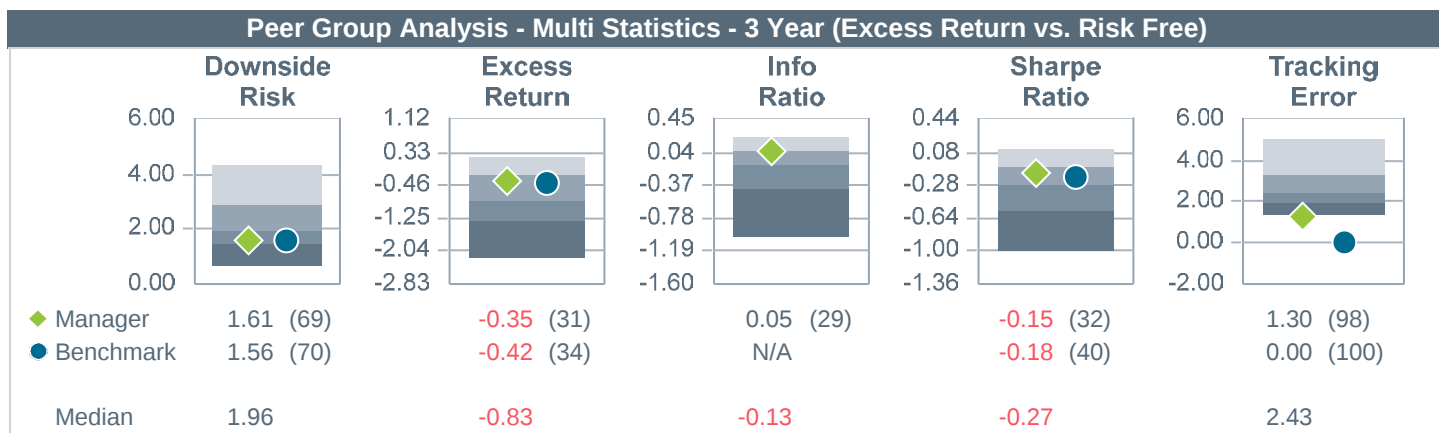
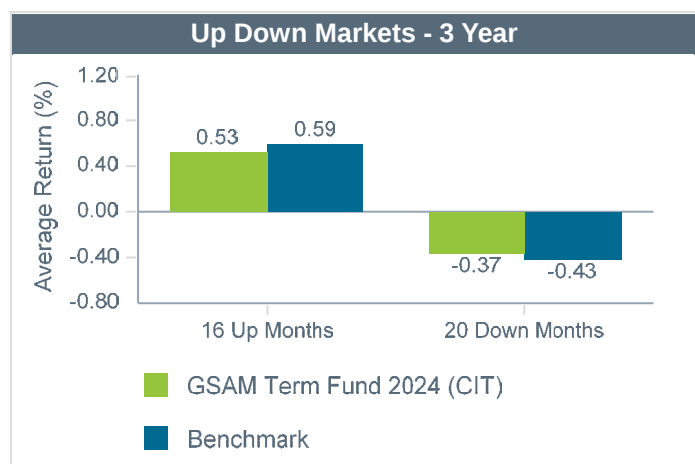
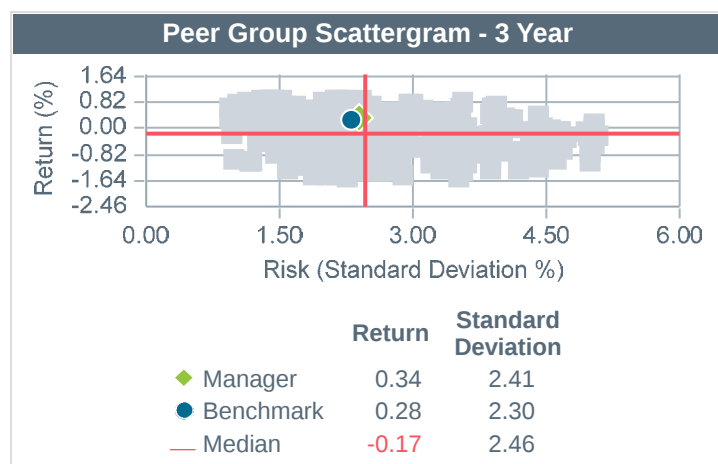
Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	N/A	N/A
Avg. Quality	Aa2	Aa1
Coupon Rate (%)	N/A	N/A
Current Yield (%)	N/A	N/A
Effective Duration	0.58	0.53
Yield To Maturity (%)	4.93	N/A
Holdings Count	N/A	N/A

Top Wrap Providers (%)	
Metropolitan Life	13.49
RGA	19.45
Royal Bank of Canada	39.22
Transamerica Premier	13.49



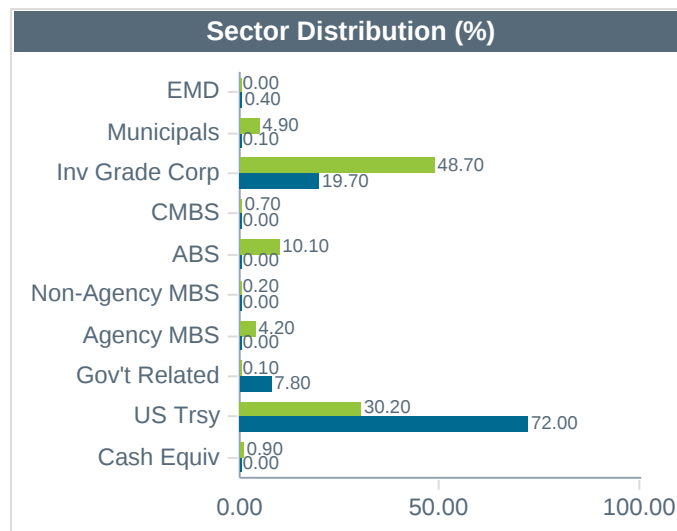
Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	0.97	-4.25	-4.25	0.34	N/A	N/A	N/A	-1.23	6.84	N/A	N/A	N/A
Benchmark	0.72	-4.40	-4.40	0.28	N/A	N/A	N/A	-1.15	6.70	N/A	N/A	N/A
Difference	0.25	0.15	0.15	0.06	N/A	N/A	N/A	-0.08	0.14	N/A	N/A	N/A
Peer Group Median	1.00	-3.87	-3.87	-0.17	0.95	1.09	0.85	-0.06	3.11	3.82	1.20	1.33
Rank	56	58	58	31	N/A	N/A	N/A	92	1	N/A	N/A	N/A
Population	667	645	645	597	526	458	372	656	651	655	634	599



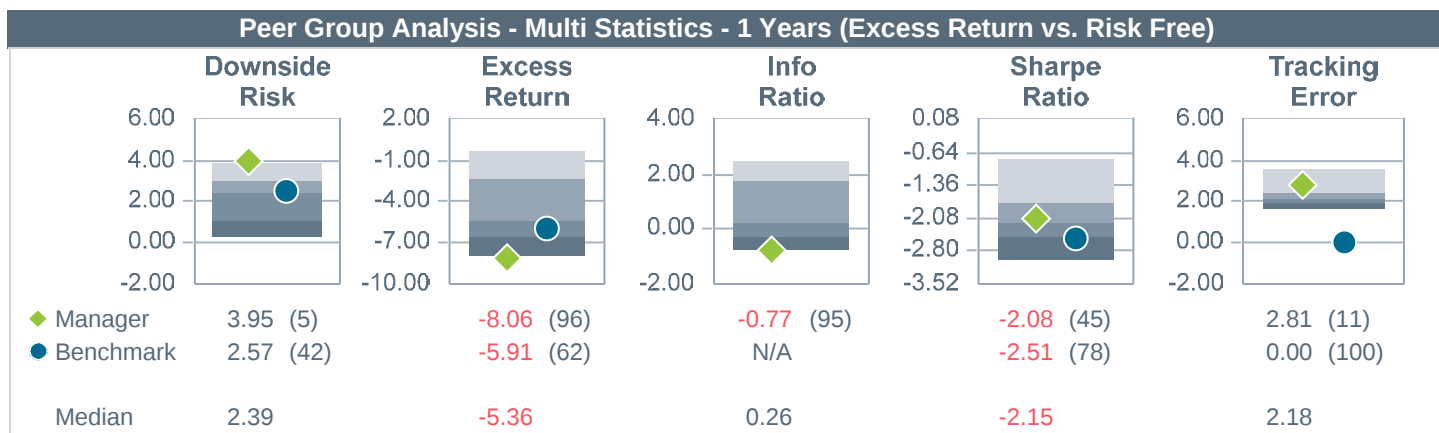
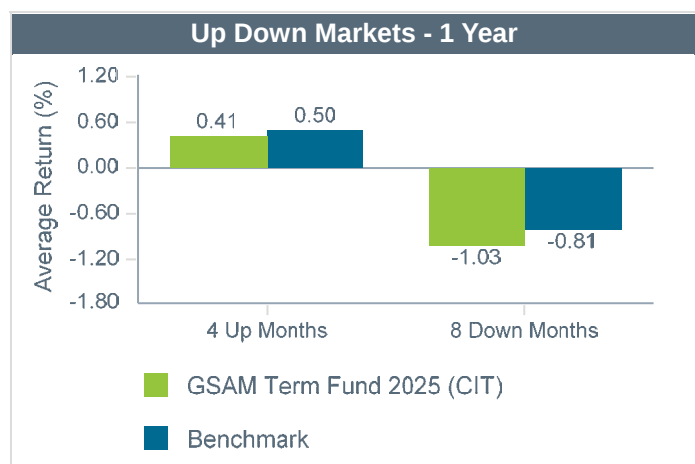
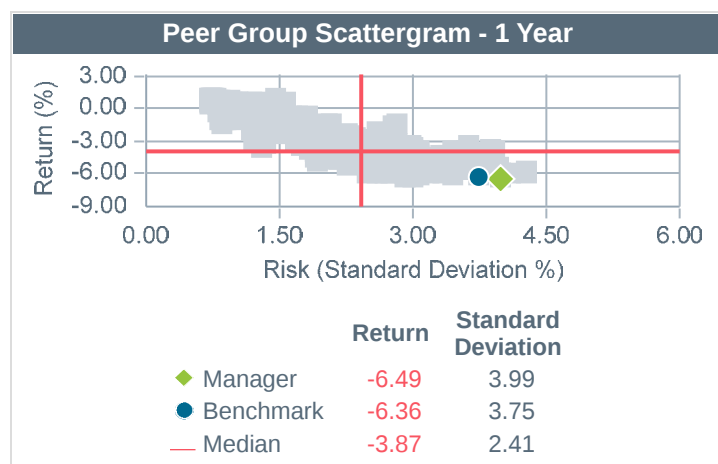
Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	N/A	N/A
Avg. Quality	Aa3	Aa1
Coupon Rate (%)	N/A	N/A
Current Yield (%)	N/A	N/A
Effective Duration	1.40	1.45
Yield To Maturity (%)	5.09	N/A
Holdings Count	N/A	N/A

Top Wrap Providers (%)	
Metropolitan Life	13.53
RGA	19.48
Royal Bank of Canada	39.10
Transamerica Premier	13.54



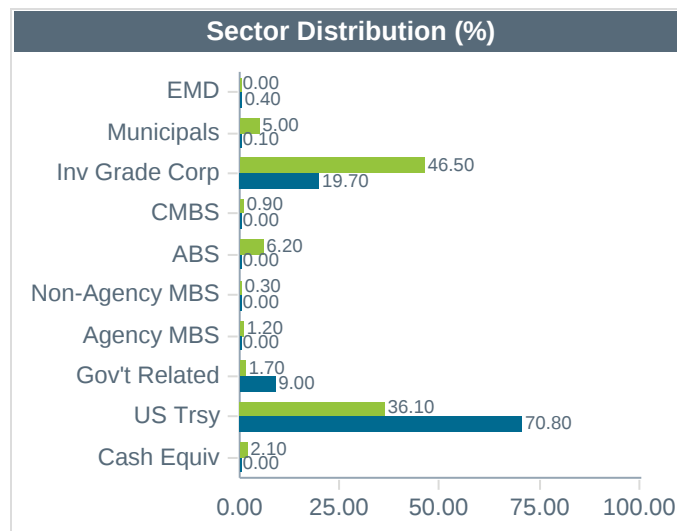
Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	1.30	-6.49	-6.49	N/A	N/A	N/A	N/A	-2.26	N/A	N/A	N/A	N/A
Benchmark	1.16	-6.36	-6.36	N/A	N/A	N/A	N/A	-2.01	N/A	N/A	N/A	N/A
Difference	0.14	-0.13	-0.13	N/A	N/A	N/A	N/A	-0.25	N/A	N/A	N/A	N/A
Peer Group Median	1.00	-3.87	-3.87	-0.17	0.95	1.09	0.85	-0.06	3.11	3.82	1.20	1.33
Rank	20	96	96	N/A	N/A	N/A	N/A	100	N/A	N/A	N/A	N/A
Population	667	645	645	597	526	458	372	656	651	655	634	599



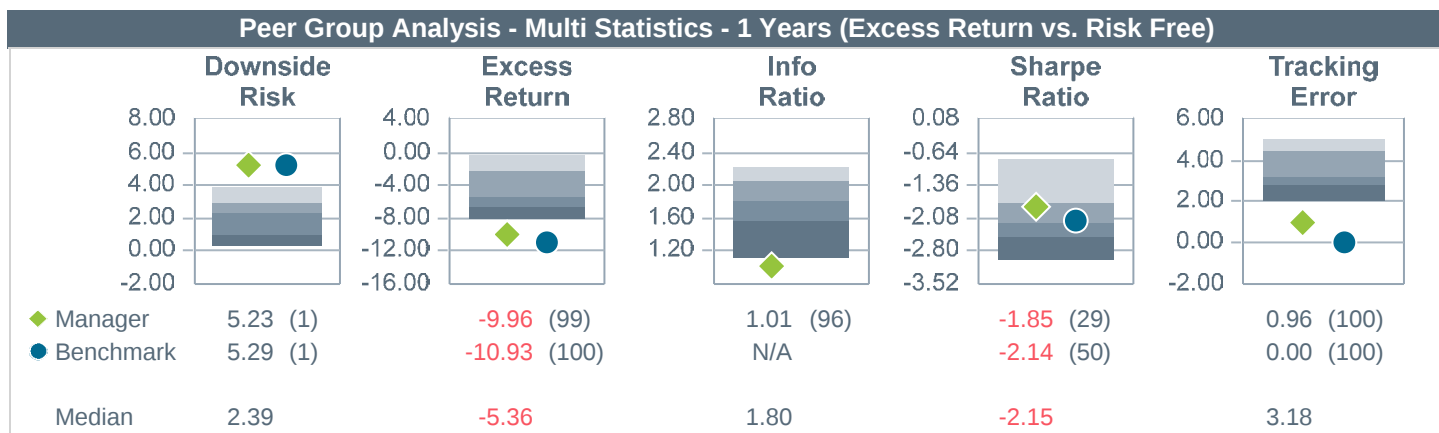
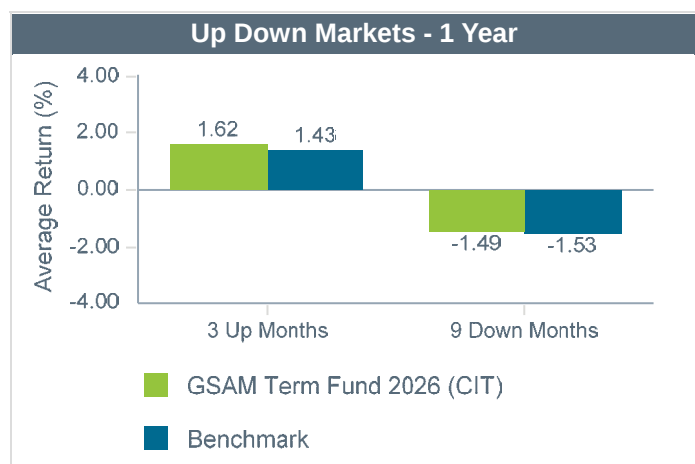
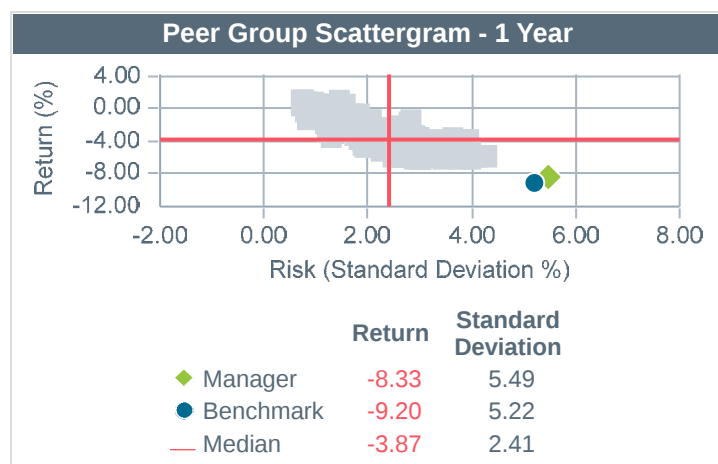
Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	N/A	N/A
Avg. Quality	Aa2	Aa1
Coupon Rate (%)	N/A	N/A
Current Yield (%)	N/A	N/A
Effective Duration	2.34	1.45
Yield To Maturity (%)	4.88	N/A
Holdings Count	N/A	N/A

Top Wrap Providers (%)	
Metropolitan Life	13.54
RGA	19.48
Royal Bank of Canada	39.10
Transamerica Premier	13.52



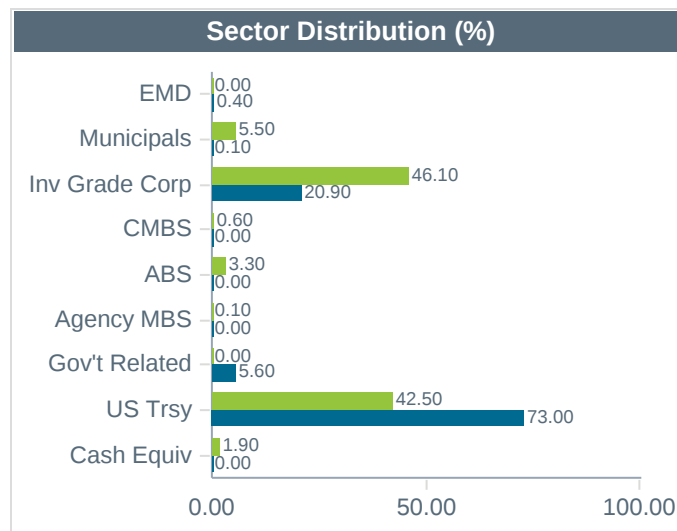
Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	1.70	-8.33	-8.33	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benchmark	1.48	-9.20	-9.20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Difference	0.22	0.87	0.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Peer Group Median	1.00	-3.87	-3.87	-0.17	0.95	1.09	0.85	-0.06	3.11	3.82	1.20	1.33
Rank	6	99	99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Population	667	645	645	597	526	458	372	656	651	655	634	599



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	3.30	3.31
Yield To Maturity (%)	4.69	N/A
Holdings Count	N/A	N/A

Top Wrap Providers (%)	
Metropolitan Life	15.66
RGA	23.94
Royal Bank of Canada	33.91
Transamerica Premier	11.26



Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

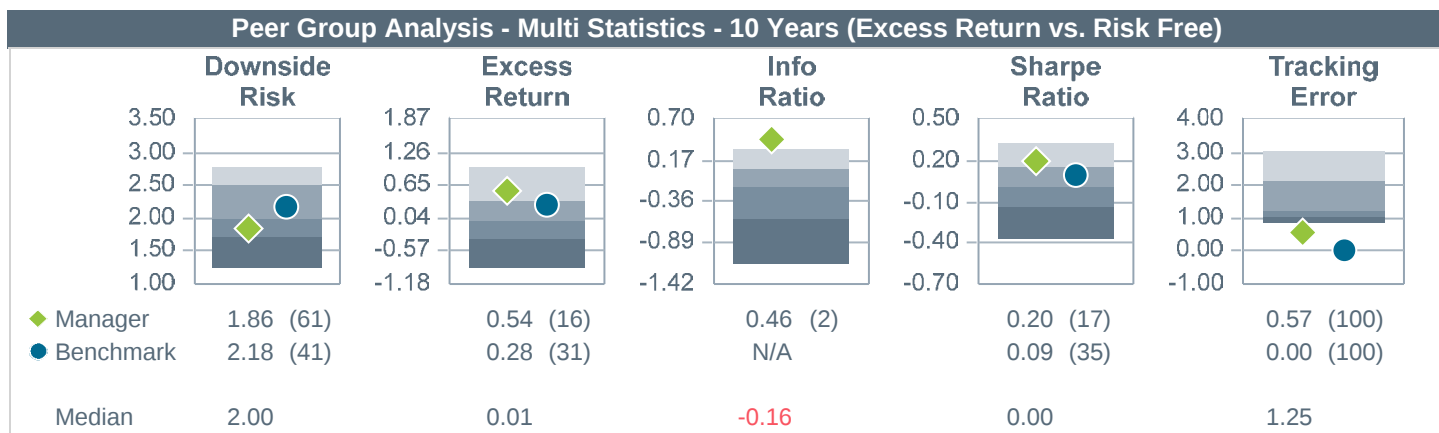
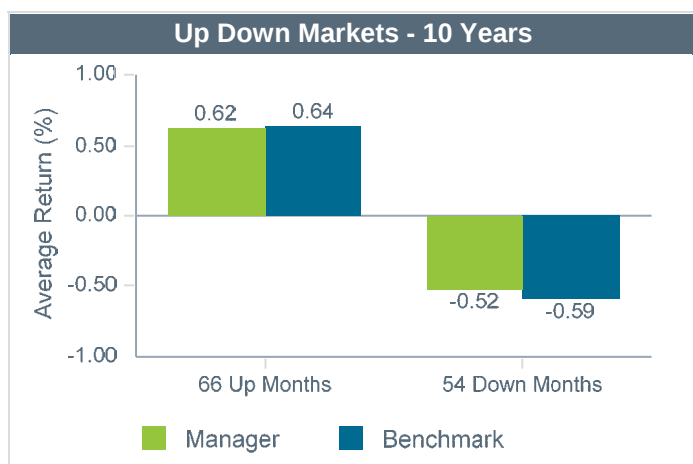
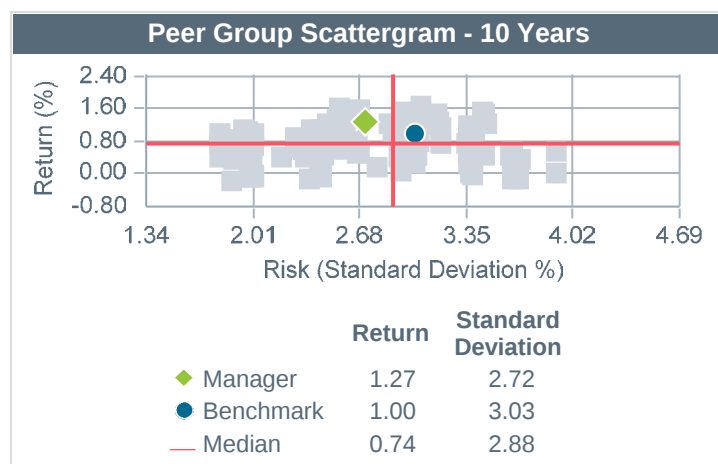
Manager: JP Morgan (SA)

As of December 31, 2022

Benchmark: Bloomberg US Agg Int Index*

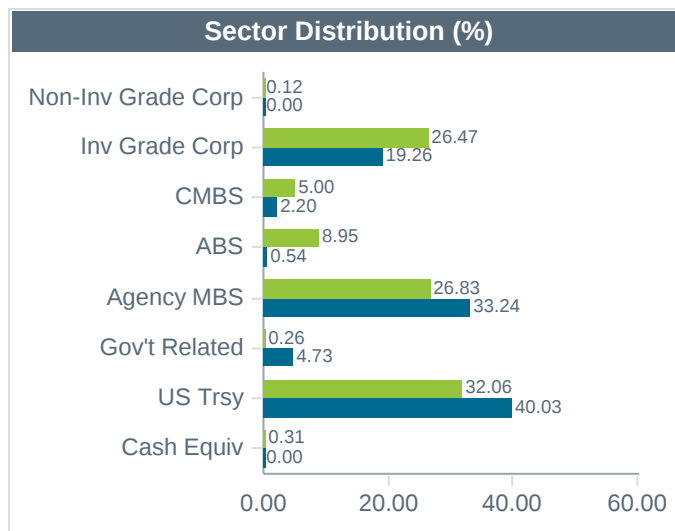
Peer Group: IM U.S. Intermediate Duration Fixed Income (MF)

Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	1.25	-8.24	-8.24	-1.21	0.75	1.24	1.27	-0.95	6.06	6.57	1.02	2.49
Benchmark	1.72	-9.51	-9.51	-1.93	0.31	0.82	1.00	-1.29	5.60	6.67	0.92	2.27
Difference	-0.47	1.27	1.27	0.72	0.44	0.42	0.27	0.34	0.46	-0.10	0.10	0.22
Peer Group Median	1.27	-6.97	-6.97	-0.94	0.52	0.81	0.74	-0.84	5.57	5.30	0.64	1.69
Rank	54	65	65	60	37	26	16	56	39	15	26	11
Population	254	246	246	228	211	194	165	243	241	242	228	220



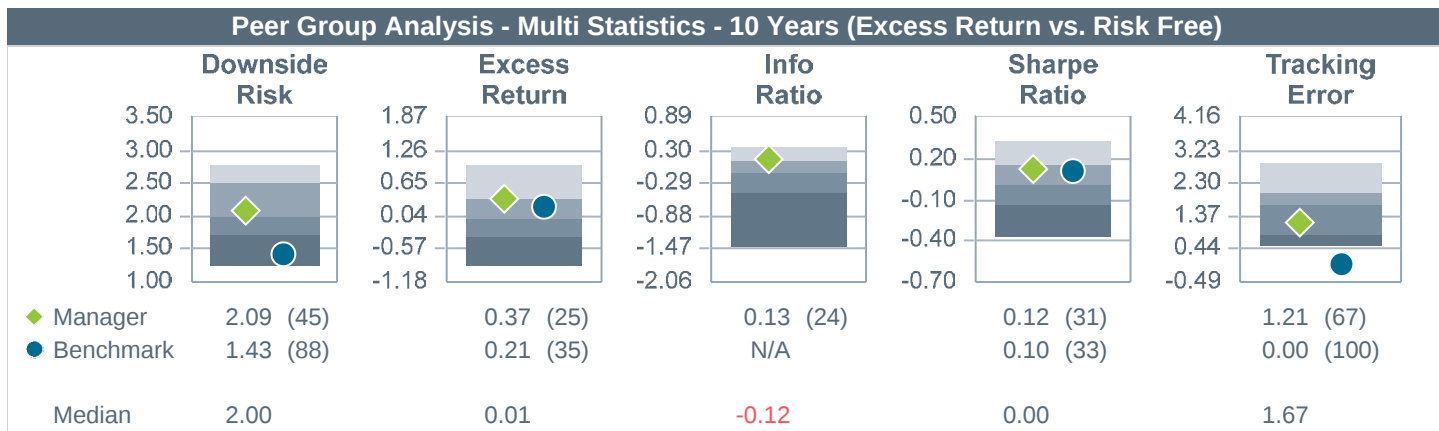
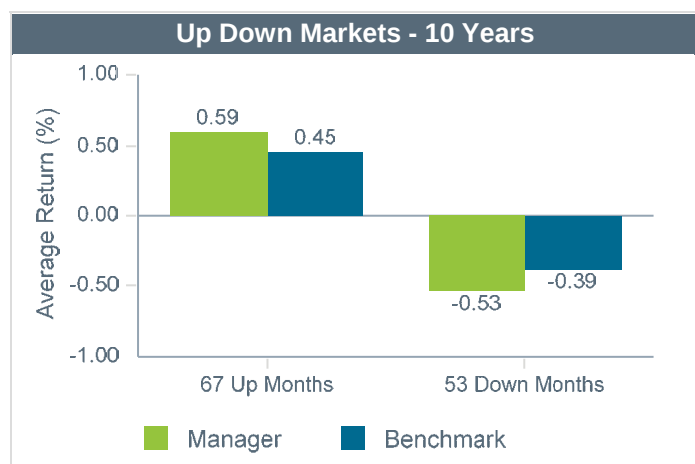
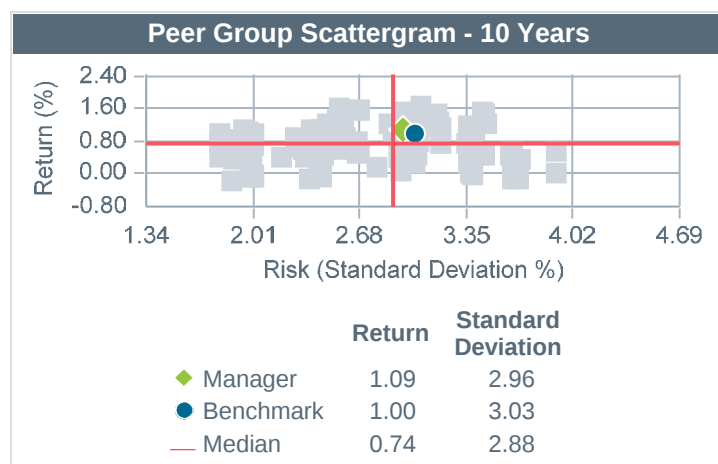
Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	4.90	5.44
Avg. Quality	Aa2	Aa1/Aa2
Coupon Rate (%)	2.68	2.49
Current Yield (%)	2.78	N/A
Effective Duration	4.37	4.50
Spread Duration	2.45	4.47
Yield To Maturity (%)	4.92	4.63
Holdings Count	881	9,868

Top Wrap Providers (%)	
Met Tower Life	100.00



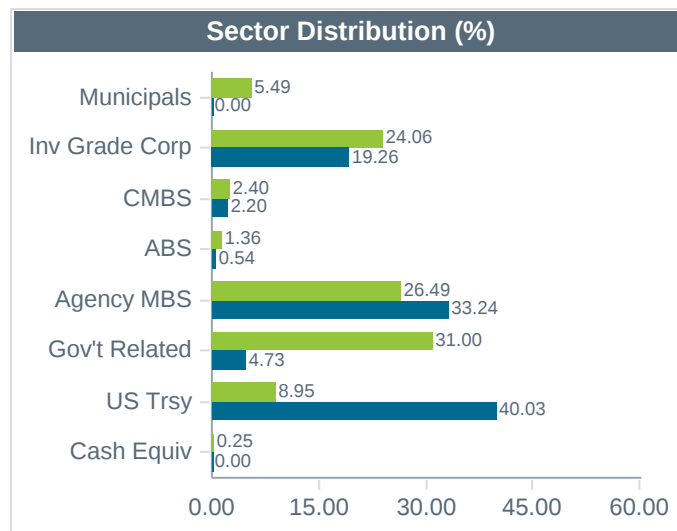
Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	1.22	-8.99	-8.99	-1.73	0.46	0.94	1.09	-0.73	5.05	6.49	1.25	2.53
Benchmark	1.72	-9.51	-9.51	-1.93	0.31	0.82	1.00	-1.29	5.60	6.67	0.92	2.27
Difference	-0.50	0.52	0.52	0.20	0.15	0.12	0.09	0.56	-0.55	-0.18	0.33	0.26
Peer Group Median	1.27	-6.97	-6.97	-0.94	0.52	0.81	0.74	-0.84	5.57	5.30	0.64	1.69
Rank	56	69	69	73	54	42	26	46	65	17	13	10
Population	254	246	246	228	211	194	165	243	241	242	228	220



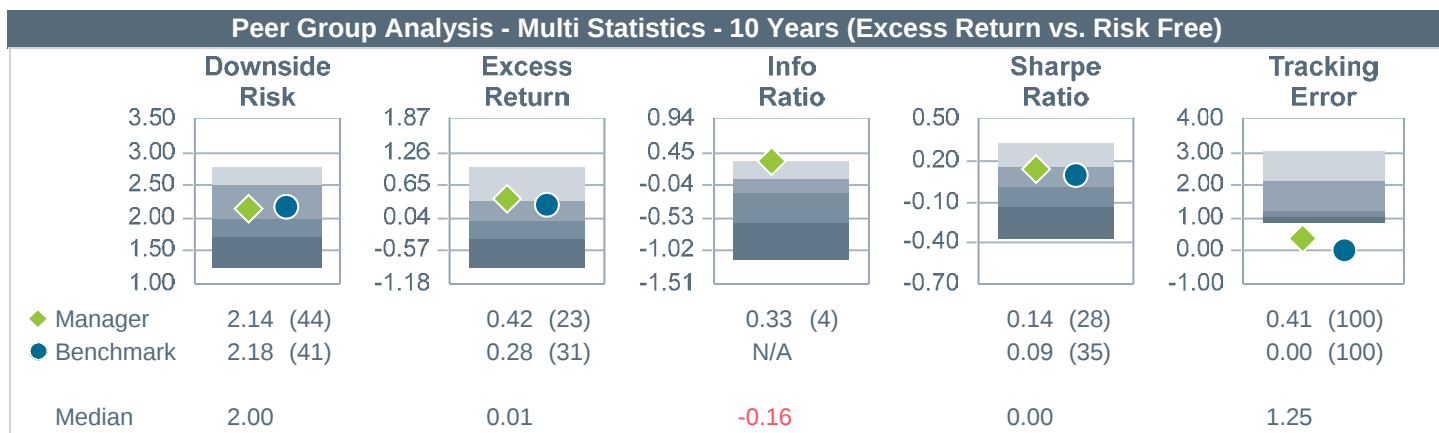
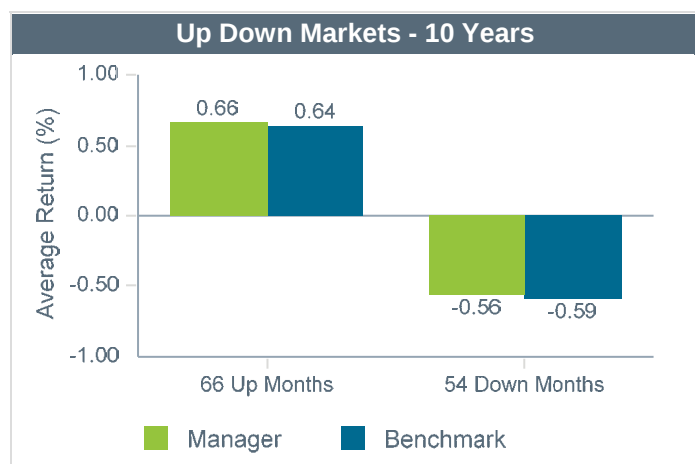
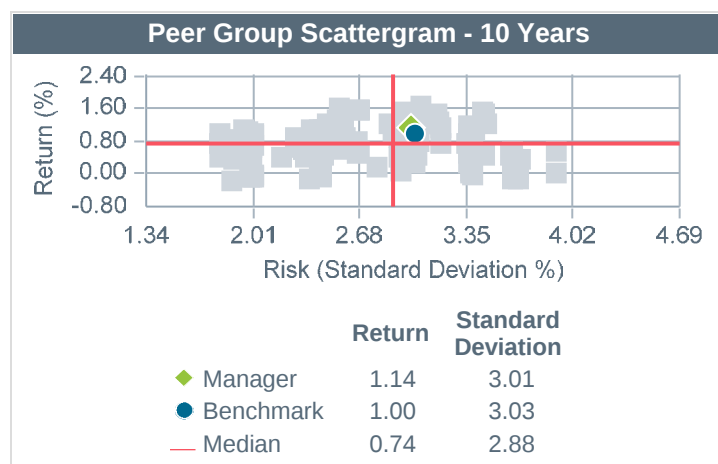
Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	5.28	5.44
Avg. Quality	Aa2	Aa1/Aa2
Coupon Rate (%)	3.21	2.49
Current Yield (%)	3.41	N/A
Effective Duration	4.23	4.50
Spread Duration	3.47	4.47
Yield To Maturity (%)	4.75	4.63
Holdings Count	N/A	9,868

Top Wrap Providers (%)	
Met Tower Life	100.00

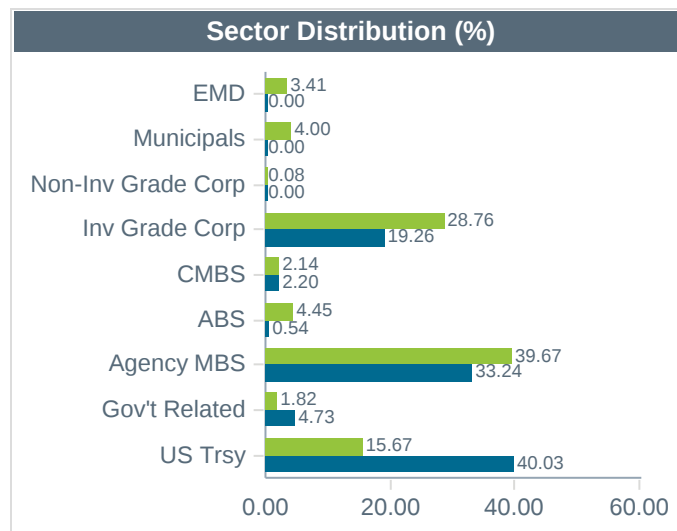


Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	1.74	-9.21	-9.21	-1.62	0.48	1.01	1.14	-1.23	6.19	6.64	0.84	2.53
Benchmark	1.72	-9.51	-9.51	-1.93	0.31	0.82	1.00	-1.29	5.60	6.67	0.92	2.27
Difference	0.02	0.30	0.30	0.31	0.17	0.19	0.14	0.06	0.59	-0.03	-0.08	0.26
Peer Group Median	1.27	-6.97	-6.97	-0.94	0.52	0.81	0.74	-0.84	5.57	5.30	0.64	1.69
Rank	24	70	70	72	53	42	24	66	35	13	38	10
Population	254	246	246	228	211	194	165	243	241	242	228	220



Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	6.07	5.44
Avg. Quality	Aa2	Aa1/Aa2
Coupon Rate (%)	3.44	2.49
Current Yield (%)	3.60	N/A
Effective Duration	4.52	4.50
Spread Duration	3.96	4.47
Yield To Maturity (%)	5.00	4.63
Holdings Count	N/A	9,868
Top Wrap Providers (%)		
RGA	100.00	



Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

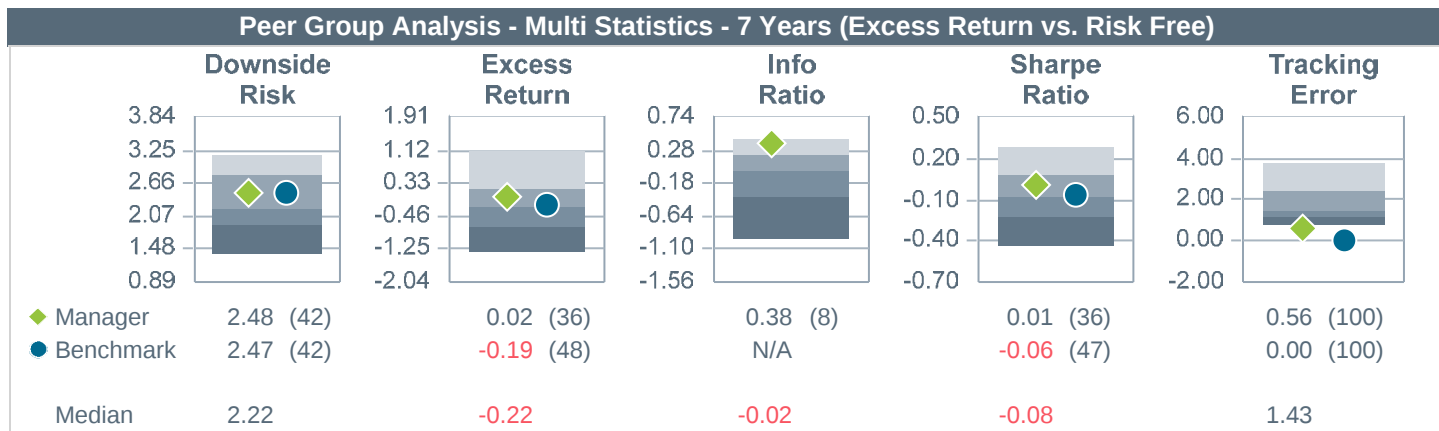
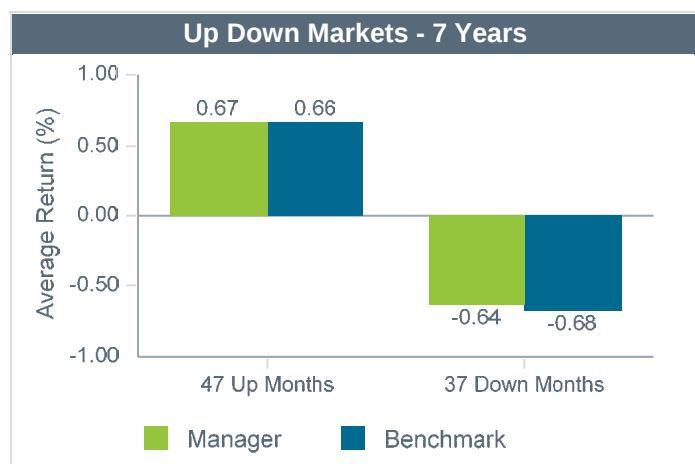
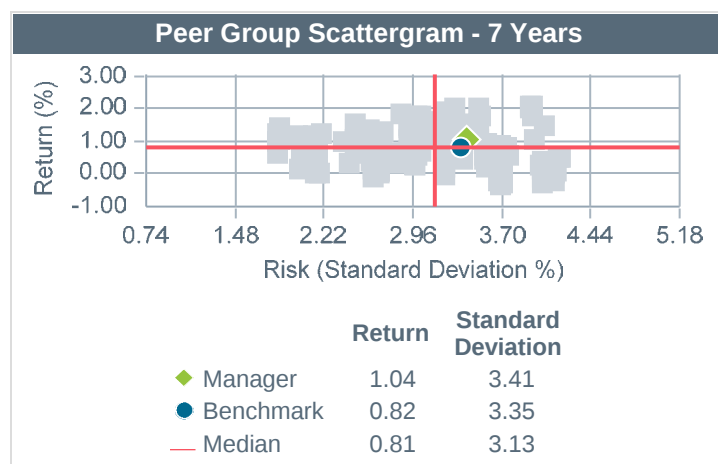
Manager: Jennison (SA)

As of December 31, 2022

Benchmark: Bloomberg US Agg Int Index

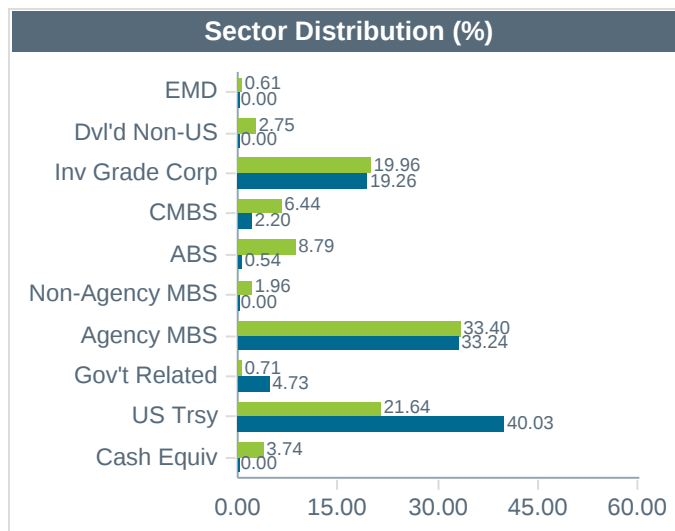
Peer Group: IM U.S. Intermediate Duration Fixed Income (MF)

Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	1.92	-9.42	-9.42	-1.40	0.51	1.04	N/A	-1.76	7.73	6.03	0.92	2.36
Benchmark	1.72	-9.51	-9.51	-1.93	0.31	0.82	1.00	-1.29	5.60	6.67	0.92	2.27
Difference	0.20	0.09	0.09	0.53	0.20	0.22	N/A	-0.47	2.13	-0.64	0.00	0.09
Peer Group Median	1.27	-6.97	-6.97	-0.94	0.52	0.81	0.74	-0.84	5.57	5.30	0.64	1.69
Rank	9	72	72	66	51	38	N/A	86	4	35	31	17
Population	254	246	246	228	211	194	165	243	241	242	228	220



Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	5.97	5.44
Avg. Quality	Aaa	Aa1/Aa2
Coupon Rate (%)	3.18	2.49
Current Yield (%)	3.61	N/A
Effective Duration	4.45	4.50
Spread Duration	3.23	4.47
Yield To Maturity (%)	N/A	4.63
Holdings Count	N/A	9,868

Top Wrap Providers (%)	
Prudential	100.00



Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



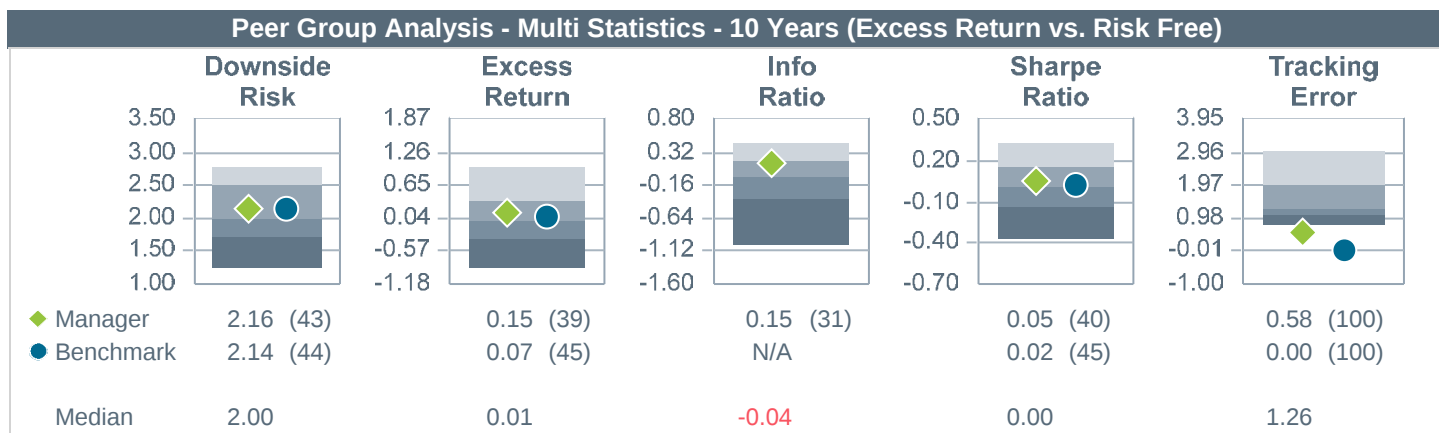
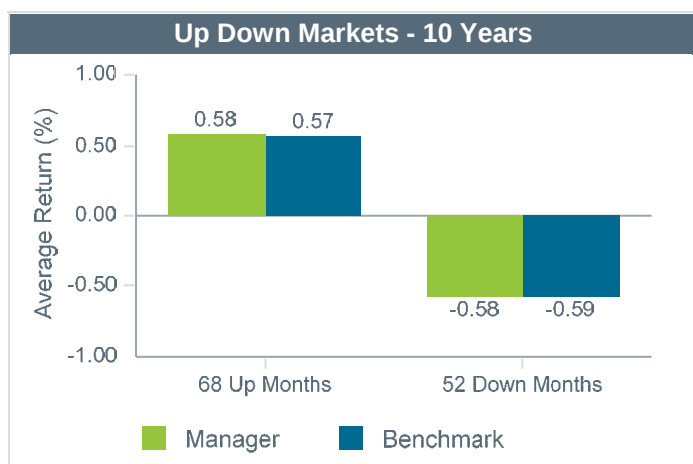
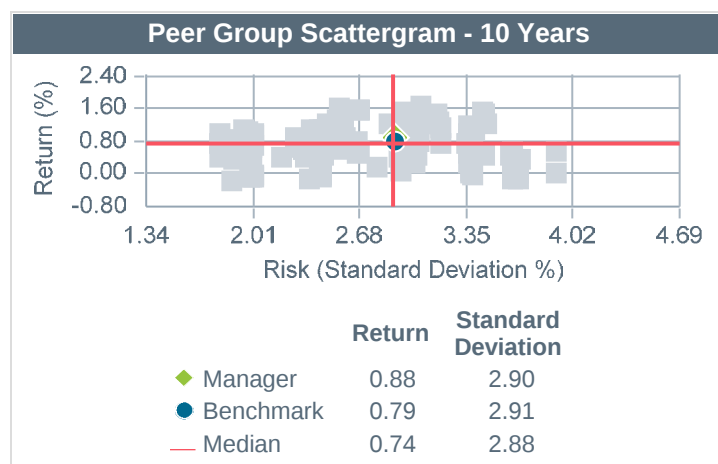
Manager: Nationwide (SA)

As of December 31, 2022

Benchmark: Nationwide Custom Benchmark

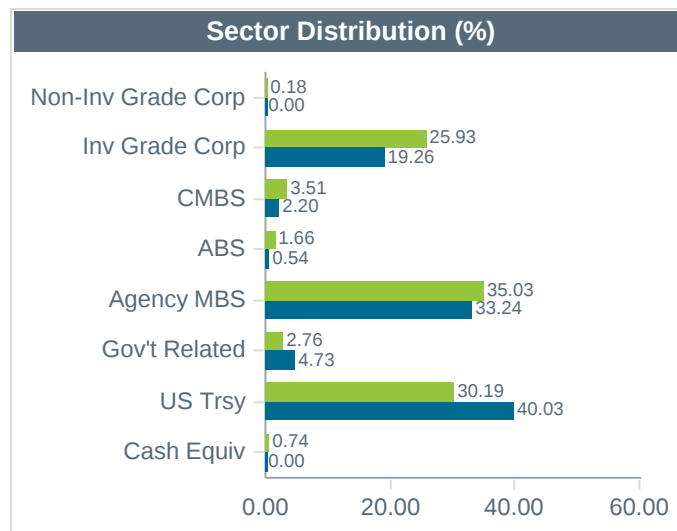
Peer Group: IM U.S. Intermediate Duration Fixed Income (MF)

Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	1.74	-9.47	-9.47	-1.94	0.25	0.89	0.88	-1.13	5.35	6.27	1.09	2.10
Benchmark	1.72	-9.51	-9.51	-2.04	0.15	0.64	0.79	-1.29	5.25	6.06	1.07	1.93
Difference	0.02	0.04	0.04	0.10	0.10	0.25	0.09	0.16	0.10	0.21	0.02	0.17
Peer Group Median	1.27	-6.97	-6.97	-0.94	0.52	0.81	0.74	-0.84	5.57	5.30	0.64	1.69
Rank	22	72	72	77	61	45	40	63	56	25	22	33
Population	254	246	246	228	211	194	165	243	241	242	228	220



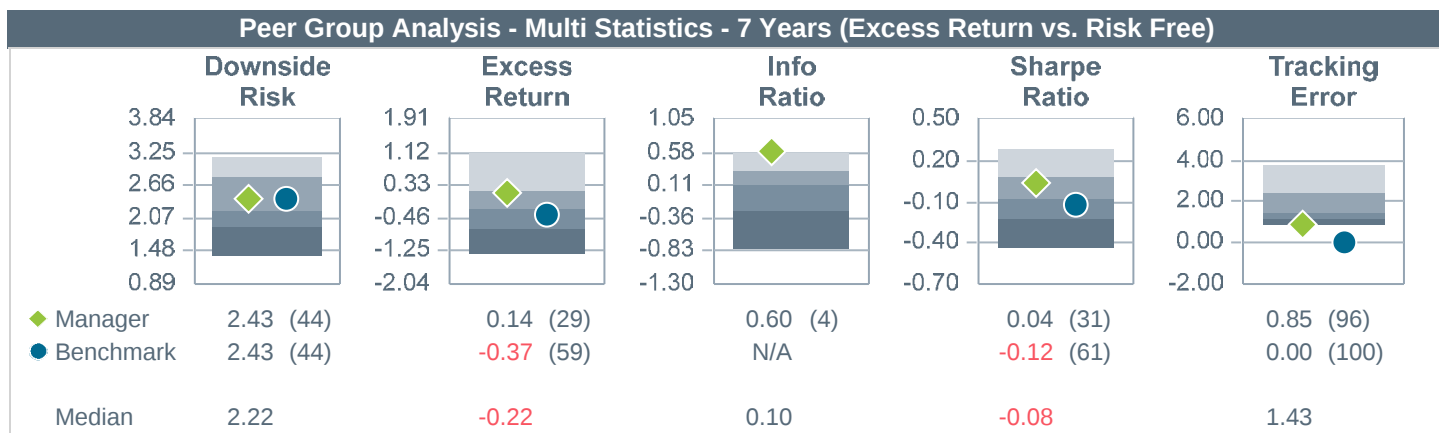
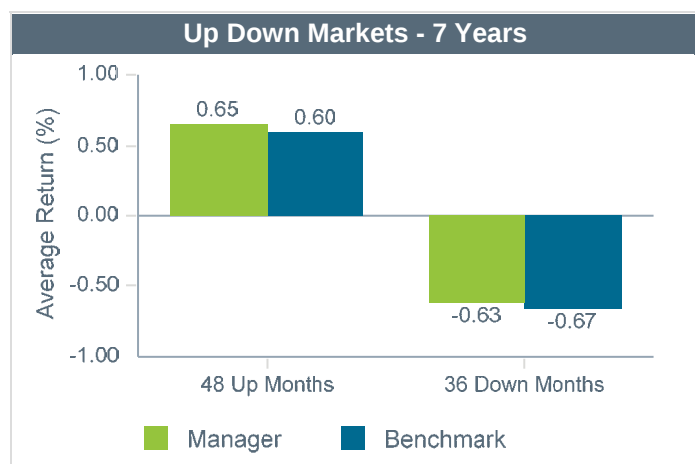
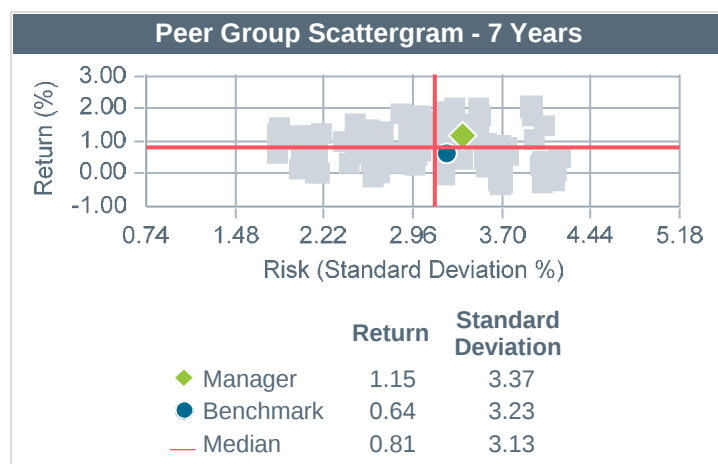
Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	12.17	5.44
Avg. Quality	Aa2	Aa1/Aa2
Coupon Rate (%)	2.59	2.49
Current Yield (%)	4.89	N/A
Effective Duration	4.36	4.50
Spread Duration	3.02	4.47
Yield To Maturity (%)	4.89	4.63
Holdings Count	225	9,868

Top Wrap Providers (%)	
Transamerica Premier	100.00



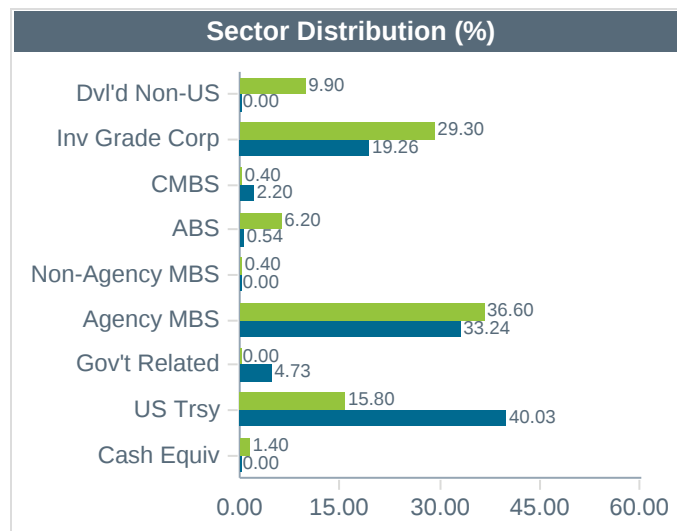
Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	2.46	-8.95	-8.95	-1.34	0.57	1.15	N/A	-1.42	7.01	6.57	0.54	2.70
Benchmark	1.72	-9.51	-9.51	-2.04	0.15	0.64	0.83	-1.29	5.25	6.06	1.07	1.93
Difference	0.74	0.56	0.56	0.70	0.42	0.51	N/A	-0.13	1.76	0.51	-0.53	0.77
Peer Group	1.27	-6.97	-6.97	-0.94	0.52	0.81	0.74	-0.84	5.57	5.30	0.64	1.69
Rank	4	69	69	64	48	30	N/A	77	17	15	56	8
Population	254	246	246	228	211	194	165	243	241	242	228	220



Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	N/A	5.44
Avg. Quality	Aa3	Aa1/Aa2
Coupon Rate (%)	N/A	2.49
Current Yield (%)	N/A	N/A
Effective Duration	3.94	4.50
Spread Duration	N/A	4.47
Yield To Maturity (%)	5.07	4.63
Holdings Count	N/A	9,868

Top Wrap Providers (%)	
Prudential	62.65
RGA	37.35



Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.
 Allocation to "Other" consists of Yankees.

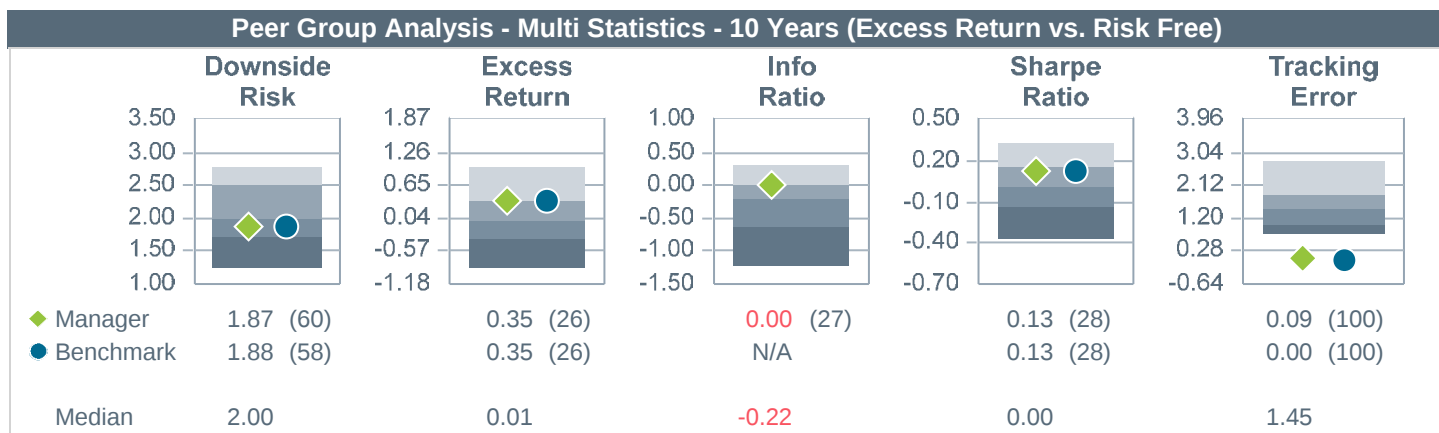
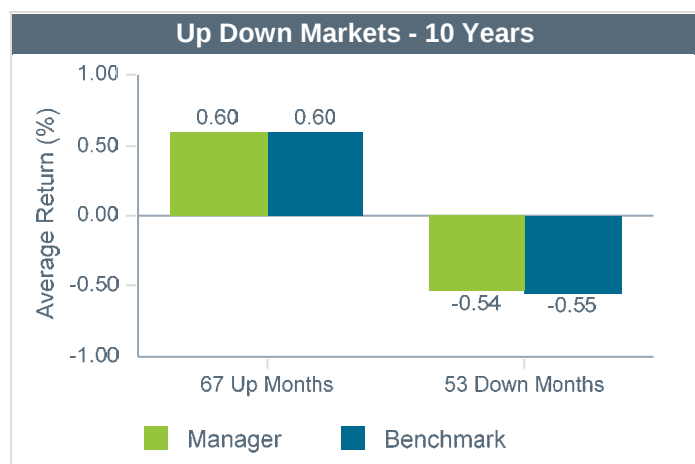
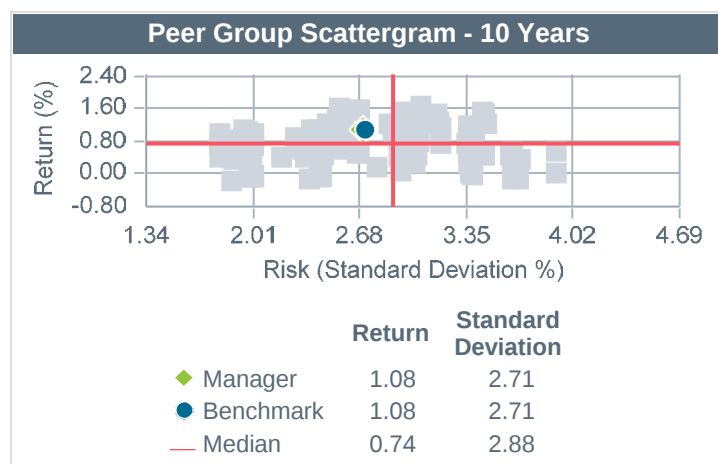
Manager: State Street (SA)

As of December 31, 2022

Benchmark: State Street Custom Benchmark

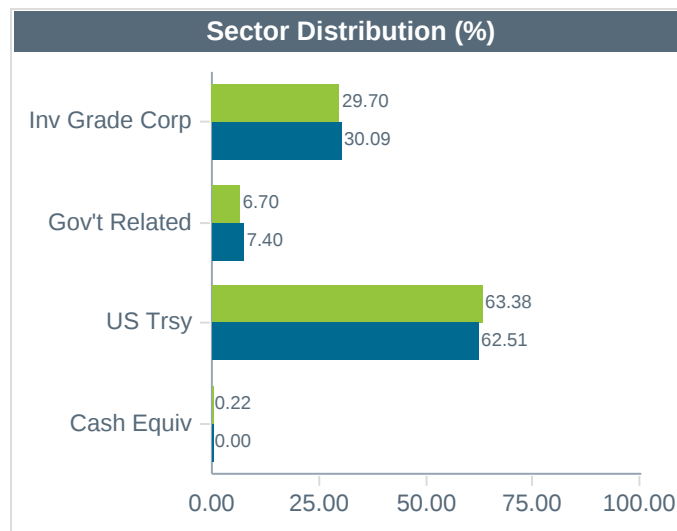
Peer Group: IM U.S. Intermediate Duration Fixed Income (MF)

Performance												
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	1.52	-8.19	-8.19	-1.22	0.75	1.02	1.08	-1.51	6.57	6.74	0.90	1.65
Benchmark	1.54	-8.24	-8.24	-1.26	0.73	1.03	1.08	-1.44	6.43	6.80	0.88	1.76
Difference	-0.02	0.05	0.05	0.04	0.02	-0.01	0.00	-0.07	0.14	-0.06	0.02	-0.11
Peer Group Median	1.27	-6.97	-6.97	-0.94	0.52	0.81	0.74	-0.84	5.57	5.30	0.64	1.69
Rank	34	64	64	61	37	41	27	79	26	12	33	52
Population	254	246	246	228	211	194	165	243	241	242	228	220



Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	4.17	4.26
Avg. Quality	AA2	Aa1/Aa2
Coupon Rate (%)	2.12	2.32
Current Yield (%)	N/A	N/A
Effective Duration	3.78	3.83
Spread Duration	N/A	3.90
Yield To Maturity (%)	4.55	4.57
Holdings Count	1,071	5,628

Top Wrap Providers (%)	
Royal Bank of Canada	58.01
Transamerica Premier	42.00



Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Investment Policy Statements



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

Adopted 12/17/96

Last Revised 3/15/2022

- 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 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 retained 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 alternatives 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	BlackRock LifePath Funds	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	Vanguard Total Bond Market Index	Bloomberg Float-Adjusted US Aggregate Bond Index
Indexed US Large Company Stock	Not Applicable	Vanguard Institutional Index	S&P 500 Index
Indexed US Small Company Stock	Not Applicable	Vanguard Extended Market Index	S&P Completion Index
Indexed Non-US Stock	Not Applicable	Vanguard Total International Stock Index	FTSE Global All Cap Ex US Index
Stable Value Option	Not Applicable	Ohio DC Stable Value Option	See Stable Value Policy
Diversified Fixed Income	Core Plus Fixed Income Mutual Fund Strategy	Ohio DC Intermediate Bond (TCW)	Bloomberg US Aggregate Bond Index
Large Company Value Stock	Large-Cap Value Mutual Fund Strategy	Dodge & Cox Stock	Russell 1000 Value Index
Large Company Growth Stock	Large-Cap Growth Mutual Fund Strategy	Fidelity Contrafund Fidelity Growth Company Ohio DC Large-Cap Growth (T. Rowe Price/SSgA)	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	Ohio DC Small-Cap Value (Westwood/SSgA)	Russell 2000 Value Index
Small Company Growth Stock	Small-Cap Growth Mutual Fund Strategy	Ohio DC Small-Cap Growth (Westfield/Fiera/SSgA)	Russell 2000 Growth Index

Non-US Stock	All Country World Ex US Mutual Fund Strategy	Ohio DC International 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 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 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 an 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+ (VILIX) 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).

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 0.065% Investment Management) and Operating Fees (0.146% 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

BlackRock LifePath Retire N (CIT)
BlackRock LifePath 2025 N (CIT)
BlackRock LifePath 2030 N (CIT)
BlackRock LifePath 2035 N (CIT)
BlackRock LifePath 2040 N (CIT)
BlackRock LifePath 2045 N (CIT)
BlackRock LifePath 2050 N (CIT)
BlackRock LifePath 2055 N (CIT)
BlackRock LifePath 2060 N (CIT)
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 Indx;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.

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.
- State Street Custom Benchmark consists of Bloomberg US Agg Int Index through to 09/2011; 50% Bloomberg US Agg Int Index and 50% Bloomberg Stable Inc Mkt Index through 05/2013; 75% Bloomberg US Agg Int Index and 25% Bloomberg Stable Inc Mkt Index through 01/2014; 60% Bloomberg US Agg Int Index and 40% Bloomberg Stable Inc Mkt Index through 09/2017; Bloomberg US Gov't Crdt Int Trm Bond 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 December 31, 2022**

BlackRock LP Ret Lending Index consists of 20.8% Russell 1000 Index, 3.5% Russell 2000 Index, 12.5% MSCI ACW Ex US IM Index (USD) (Net), 54.2% Bloomberg US Agg Bond Index, 0.0% FTSE 3 Mo T-Bill Index, 5.8% Bloomberg US Trsy US TIPS 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 25.6% Russell 1000 Index, 3.0% Russell 2000 Index, 16.1% MSCI ACW Ex US IM Index (USD) (Net), 46.4% Bloomberg US Agg Bond Index, 0.0% FTSE 3 Mo T-Bill Index, 5.4% Bloomberg US Trsy US TIPS Index, 2.2% FTSE EPRA/NAREIT Dvl'd Index (USD) (Net), and 1.5% Bloomberg Cmdty Index (TR).

BlackRock LP 2030 Lending Index consists of 32.7% Russell 1000 Index, 2.2% Russell 2000 Index, 21.5% MSCI ACW Ex US IM Index (USD) (Net), 34.9% Bloomberg US Agg Bond Index, 0.0% FTSE 3 Mo T-Bill Index, 4.6% Bloomberg US Trsy US TIPS Index, 2.8% FTSE EPRA/NAREIT Dvl'd Index (USD) (Net), and 1.2% Bloomberg Cmdty Index (TR).

BlackRock LP 2035 Lending Index consists of 39.5% Russell 1000 Index, 1.5% Russell 2000 Index, 26.7% MSCI ACW Ex US IM Index (USD) (Net), 24.3% Bloomberg US Agg Bond Index, 0.0% FTSE 3 Mo T-Bill Index, 3.6% Bloomberg US Trsy US TIPS Index, 3.4% FTSE EPRA/NAREIT Dvl'd Index (USD) (Net), and 1.0% Bloomberg Cmdty Index (TR).

BlackRock LP 2040 Lending Index consists of 45.8% Russell 1000 Index, 1.0% Russell 2000 Index, 31.6% MSCI ACW Ex US IM Index (USD) (Net), 14.6% Bloomberg US Agg Bond Index, 0.0% FTSE 3 Mo T-Bill Index, 2.4% Bloomberg US Trsy US TIPS Index, 4.0% FTSE EPRA/NAREIT Dvl'd Index (USD) (Net), and 0.7% Bloomberg Cmdty Index (TR).

BlackRock LP 2045 Lending Index consists of 50.6% Russell 1000 Index, 1.0% Russell 2000 Index, 35.8% MSCI ACW Ex US IM Index (USD) (Net), 6.4% Bloomberg US Agg Bond Index, 0.0% FTSE 3 Mo T-Bill Index, 1.4% Bloomberg US Trsy US TIPS 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 53.5% Russell 1000 Index, 1.0% Russell 2000 Index, 38.2% MSCI ACW Ex US IM Index (USD) (Net), 2.0% Bloomberg US Agg Bond Index, 0.0% FTSE 3 Mo T-Bill Index, 0.4% Bloomberg US Trsy US TIPS Index, 4.7% FTSE EPRA/NAREIT Dvl'd Index (USD) (Net), and 0.1% Bloomberg Cmdty Index (TR).

BlackRock LP 2055 Lending Index consists of 54.2% Russell 1000 Index, 1.0% Russell 2000 Index, 38.9% MSCI ACW Ex US IM Index (USD) (Net), 0.8% Bloomberg US Agg Bond Index, 0.0% FTSE 3 Mo T-Bill Index, 0.2% Bloomberg US Trsy US TIPS Index, 4.8% FTSE EPRA/NAREIT Dvl'd Index (USD) (Net), and 0.0% Bloomberg Cmdty Index (TR).

BlackRock LP 2060 Lending Index consists of 54.2% Russell 1000 Index, 1.0% Russell 2000 Index, 38.9% MSCI ACW Ex US IM Index (USD) (Net), 0.9% Bloomberg US Agg Bond Index, 0.0% FTSE 3 Mo T-Bill Index, 0.1% Bloomberg US Trsy US TIPS 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 54.3% Russell 1000 Index, 1.0% Russell 2000 Index, 38.9% MSCI ACW Ex US IM Index (USD) (Net), 1.0% Bloomberg US Agg Bond Index, 0.0% FTSE 3 Mo T-Bill Index, 0.0% Bloomberg US Trsy US TIPS Index, 4.8% FTSE EPRA/NAREIT Dvl'd Index (USD) (Net), and 0.0% Bloomberg Cmdty Index (TR).

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.

PORTLAND

BOISE

CHICAGO

NEW YORK

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OHIO DEFERRED COMPENSATION

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM

MEMORANDUM

To: Board of Trustees

From: Paul D. Miller, Interim Executive Director

Date: March 14, 2023

Subject: 2023 Budget Amendment

Executive Summary

At the November 2022 meeting, the Board approved the 2023 operating budget, which had been developed over the preceding months. During that time, Christina Elliott had announced her pending resignation as Executive Director. Therefore, no consultant fees were included in the 2023 budget for an executive recruiter.

At the November 2022 meeting, the Board discussed whether to conduct a search on their own or to hire a consultant. The Board decided to reengage EFL to coordinate the search process. This decision was approved at the November meeting pending final negotiations and due diligence. On January 18, 2023, the negotiated contract was signed, which included a flat fee of \$58,000 and potential reimbursement of expenses up to \$12,000.

Since the Executive Director position will be vacant for several months in 2023, we will be under budget for salary expenses and can reduce that expense line item by the \$70,000 needed for the search. Therefore, the \$70,000 can be added to the professional fees budget for the EFL search without increasing the overall expense budget.

Recommendations

Staff recommends the Board approve a \$70,000 increase to the professional fees budget and a \$70,000 decrease to the salary budget.



OHIO DEFERRED COMPENSATION

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM

MEMORANDUM

TO: Board of Trustees

FROM: Paul Miller, Interim Executive Director
Cindy Ward, Administrative Services Director

DATE: March 14, 2023

SUBJECT: Board Travel–NAGDCA Annual Conference

Executive Summary

The 2023 National Association of Government Defined Contribution Administrators (NAGDCA) Annual Conference will be held October 8-11 in Seattle, Washington. NAGDCA represents the nation's public sector defined contribution plan administrators. Staff has found that the NAGDCA Annual Conference is the best forum for 457 plan information and education. For more information regarding NAGDCA or to review the conference agenda, visit [NAGDCA.org](https://www.nagdca.org).

The discounted conference registration fee will be \$700 and is due in August. In addition, there will be hotel and other travel-related costs. The registration and hotel block will open in April. Hotel reservations can only be made as part of the registration process.

The Board Travel Policy states that all Board travel must be approved in advance by the Board, except for travel in the regular course of Board meetings, committee meetings, or other regular Board business. When a conference is under consideration for Board member attendance, the Board typically passes a single motion approving travel and attendance for any Board member who requests to participate.

The 2023 budget includes sufficient travel expenses for several Board and staff members to attend this conference. Cindy Ward will assist Board members with registration and travel arrangements. Please contact Cindy if you plan to attend or have any questions about reimbursable expenses.

Recommendation

Staff recommends the Board approve travel and registration for any Board member interested in attending the 2023 NAGDCA Annual Conference.

DISCUSSION ITEMS



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: March 14, 2023

SUBJECT: Participant Service Model

Executive Summary

In March 2021, due to the impact of COVID-19 on the participant service model, the Board approved a contract amendment that combined base and incentive compensation for 2021 and removed the position type and required number of customer service positions from the contract. Nationwide was still required to manage staffing levels to stay within their contracted budget and get approval from the Executive Director for ongoing reallocation of staff.

At the August 2021 Strategic Planning meeting, staff presented a service model review detailing adjustments that had been made to the service delivery model and the need to monitor and assess the ongoing service needs. Strategic Objective 1-48, to “Develop the appropriate participant service model to assist with a future RFP for an enrollment, education, and service provider,” was added to the Strategic Plan in 2021.

In addition, the Board approved a two-year contract extension in August 2021, to allow staff and Nationwide additional time to maintain staffing flexibility and evaluate the changing service model landscape. The two-year contract extension continued the terms of the March 2021 amendment into 2022 and for the additional two-year extension until June 30, 2024.

For the past two years, the pandemic has changed the way many participants do business with Ohio DC. Nationwide has been able to shift the responsibilities of specific positions to help shoulder the load of participant inquiries and create efficiencies in outreach.

Staff believes 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 with participants. This is validated by the continued high scores tracked by our third-party survey provider regarding Nationwide’s services to our participants.

Background

Nationwide has served as Ohio DC's Enrollment, Education, and Customer Service provider since 1999. The current contract resulted from an RFP issued in 2013 with a new five-year contract starting in July 2014. The contract has been extended twice for an additional five years.

Over the past 20+ years, the number of positions in the service model has evolved over time. We saw an increase and then decrease in the field presence and Retirement Planning Specialists (RPS), and an ongoing increase to the number of Service Center positions.

Prior to 2021, the type of position and the number of staff in each position was specified in the contract. Because of this, Board action was required any time a change in the number of staff in each position was requested. This contract feature created additional challenges and work for staff and Nationwide to track individual position vacancies and adjust monthly compensation paid to Nationwide.

Under the current contract, the position type and required number of customer service positions are no longer specified. This has provided Nationwide the flexibility to adjust staffing quickly as customer service needs changed. Nationwide is still required to manage staffing levels to stay within the annual staffing budget approved by the Board and to get the approval from the Executive Director for ongoing reallocation of staff.

To continue meeting the needs of our participants, the Nationwide service model has undergone the following shifts related to its staffing:

Nationwide no longer allows walk-ins to the office. Instead, appointments must be made to meet with an RPS. This change has allowed Nationwide to reduce the number of RPS positions needed to meet participant demand. RPS staff will answer phones, respond to emails, and conduct webinars during lulls in demand. These positions have become a jack-of-all-trades, while maintaining their increased licenses to provide a specialized service to participants. Also, due to the switch to appointment scheduling, Nationwide may suspend RPS services during times they are needed to meet an anticipated increase in participant inquiries.

Field Account Executives have similar flexibility to provide assistance during high-volume participant demand by performing Service Center functions. This flexibility allows for Nationwide to slow the constant hiring and training of Level I staff who would normally perform this function. It ensures the fluctuations of staff attrition and participant demand remains more fluid and manageable.

A scorecard was developed to manage accountability in 2021 (when incentive compensation was discontinued), and Nationwide reviews the scorecard monthly with staff. In addition, participant satisfaction surveys continue twice per year to gain participant feedback on service levels. Participant satisfaction scores remain at the acceptable threshold and are still compared to the contract's previous goals to validate that Nationwide's service, under the changing service staffing model, has not negatively impacted participants.

Based on survey results, Nationwide continues to do an outstanding job servicing our participants. They have shifted diligently from a staffing model in which they focused on increased participant enrollments, SMarT enrollments, and worksite visits to a staffing model in which customer service satisfaction has become the primary focus. There is no longer as much of a balancing act required in terms of staffing to contract-specified levels to meet participant demand particularly during months of high-volume participant contact and constant attrition.

Recommendation

Staff recommends the Board 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.



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: March 14, 2023

SUBJECT: Nationwide Contract Extension Negotiation

Executive Summary

The current Nationwide Enrollment, Education, and Customer Service contract is a two-year contract that expires on June 30, 2024. Without an extension, the next Request for Proposal (RFP) process should begin immediately, allowing time for the creation of the document, the solicitation of responses, the evaluation and scoring of said responses, and the potential for any possible transition. At the January 2023 Board meeting, staff reported on the status of Strategic Objective 1-49, to “Develop a request for proposal, solicit proposals, and select a vendor to provide enrollment, education, and customer service beyond June 30, 2024.” Staff indicated that in March, they would be recommending a contract extension to allow time for a new Executive Director to be hired and be familiar with Ohio DC before issuing the RFP. The Ohio DC Purchasing Policy gives the Board discretion to waive or modify any provision of this policy, if doing so is deemed to be in the best interest of Ohio DC.

In February, the search for a new Executive Director was paused for an indeterminate time. Issuing an RFP is prudent given public perception and the ability to ensure services rendered are provided at a competitive rate. Given the ongoing familiarity and working relationship staff has with Nationwide over the past two decades, and the success of the new service model, it would be sensible to consider a contract extension. Staff believes it is important to focus our collective efforts on maintaining the high level of success of participant enrollments and contributions versus diverting staff attention to develop and solicit responses to an RFP, especially until a new Executive Director can provide input.

Preliminary conversations have taken place between staff and Nationwide regarding Nationwide’s receptiveness toward a contract extension, which was affirmative. Therefore, staff is requesting the Board’s approval to enter into negotiations with Nationwide for a contract extension. If approved, staff intends to bring a contract extension recommendation to the Board at a future meeting.

Background

Nationwide has served as Ohio DC’s Enrollment, Education, and Customer Service provider since 1999. The current contract resulted from an RFP issued in 2013. An initial five-year contract became effective on July 1, 2014. In 2018, due to the impending retirement of Ohio

DC's Executive Director, Keith Overly, a three-year extension that ran through June 30, 2022, was approved by the Board. In 2021, due to the COVID-19 pandemic disrupting the service model previously in place, a two-year extension that runs through June 30, 2024, was approved by the Board. This extension revised the service model staffing, eliminated incentive compensation provided to Nationwide, and instituted an accountability scorecard to monitor various measures of success.

Staff and Nationwide have had the opportunity to review and observe the success provided through the flexibility inherent in the new service model incorporated into the previous contract extension. As referenced in the Service Efforts Report 2022, dated January 31, 2023, Nationwide has succeeded in surpassing three of the five incentives by which they were previously measured (participant satisfaction surveys, increasing the number of participant accounts, and increasing the number of participants enrolled in the SMarT Plan). Nationwide fell just shy of the other two previously contracted incentives (combined in-person and virtual work-site visits, and Service Center call statistics). While these incentives were excised in the most recent two-year extension, given the flattening of the curve in COVID-19 cases and an ostensible "return to normalcy" having taken place, discussions about including contract incentives versus the accountability scorecards can be held.

Recommendation

Staff recommends the Board 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.

INFORMATION ITEMS



OHIO DEFERRED COMPENSATION

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM

MEMORANDUM

TO: Board of Trustees

FROM: Paul Miller, Interim Executive Director

DATE: March 14, 2023

SUBJECT: August Board Meeting Date Change

Normally, the Ohio DC Strategic Planning meeting is held on a Monday to allow for an extended meeting time, and to avoid conflict with the OPERS Board meetings. Currently, OPERS is not planning to have a Board meeting in August 2023.

Staff sent out a communication to the Board in January about moving the August meeting from Monday to Tuesday. It was determined that moving the August Strategic Planning meeting to **Tuesday, August 15** will be beneficial for staff and the Board of Trustees. The August meeting will begin at 9 a.m. and is expected to conclude around 3 p.m.

Please make a note of this change on your calendars.



OHIO DEFERRED COMPENSATION

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM

MEMORANDUM

To: Board of Trustees

From: Paul D. Miller, Interim Executive Director

Date: March 14, 2023

Subject: Service Efforts Report 2022

Executive Summary

This Service Efforts Report summarizes current and historical data and is presented to the Board as a review of Ohio DC's activities in 2022. The following information represents a summary of the service efforts by Nationwide and the Board staff during 2022. Nationwide is responsible for enrollment, education, and customer service. The Board staff is responsible for daily recordkeeping functions, including investing payroll contributions, paying benefits, communications, compiling quarterly and annual statements, and overall administration.

The information below generally shows the current year activity compared to the prior three years to identify short-term trends. It has been an eventful four-year period encompassing market gains (S&P 500) of 31 percent in 2019, the COVID-19 pandemic, and market losses of 18 percent in 2022.

During this period, "hybrid work from home" became the norm for many participants and employers (including Ohio DC and Nationwide), which resulted in new avenues and challenges to communicating the benefits of deferred compensation to Ohio's public employees. Despite these challenges, our volume of service activities have increased over this period.

Nationwide Results

A five-year service contract with Nationwide was effective on July 1, 2014. Two subsequent contract amendments have extended the contract through June 30, 2024. Because of COVID-19's impact on the Nationwide service model, it was nearly impossible for Nationwide to have a fair opportunity to earn incentive compensation in 2021. Therefore, the Board determined that 90% of available incentive compensation would be merged into base compensation for 2021 and for the remainder of the contract. The new incentive compensation arrangement removes explicit financial incentives, but staff continues to monitor these service goals. This model seems to be working well in that it allows staff and Nationwide to focus on the overarching service goals without Nationwide having a narrower focus on their incentive compensation:

1. Nationwide held 7,404 combined in-person and virtual work-site visits, which is 98.7% of their goal of 7,500 visits. Nationwide normally (pre-COVID-19) met this goal and was staffed to meet it in 2022, but they didn't meet this goal due to many employers being unwilling to host our staff or participants working from home. Due to the impact of the pandemic and the revised contract, Nationwide suspended tracking key client sites, which had an initial goal of 2,500.

2. Service Center call statistics (average speed answered, abandoned call rate, and busy signals) were met during the last seven months of 2022.
3. An outside consulting firm completed participant satisfaction surveys through two survey periods in 2022. This year's survey results show that Nationwide met the satisfaction standards for survey goals for the Service Center and meetings with Account Representatives in both survey periods. In addition, survey results show that the Ohio DC participant website received high satisfaction scores, too.
4. The Nationwide contract previously contained a goal for increasing the number of participant accounts, which encourages both new enrollments and retention of existing accounts. Nationwide increased participant accounts by 8,634 in 2022 versus 7,271 in 2021.
5. The final goal was to increase the number of participants enrolled in the SMarT Plan. Nationwide had 13,957 SMarT enrollments in 2022 compared to 12,992 in 2021.

There are several contractual performance standards regarding telephone service, meetings with Account Executives and Retirement Planning Specialists, participant enrollment/retention, and disaster recovery. Nationwide met these contract performance standards in 2022, so there were no compensation reductions.

During the past year, Nationwide experienced turnover in several positions, which resulted in adjustments to their compensation. In addition, the amended contract allows Nationwide the flexibility to staff the Service Center based on their current needs and not a contractual agreement for specific positions. This arrangement allows Nationwide to hire staff up to the contract maximum. Staffing below the contract maximum leads to reductions in compensation to Nationwide. For 2022, Nationwide's compensation was reduced by \$218,900 for vacant positions compared to reductions of \$449,900 in 2021 and \$128,700 in 2020.

Contribution Activity

Historically, new enrollments generally trended with the stock markets, but with some time lag. The U.S. stock market experienced positive performance in eight of the past ten years with 2018 and 2022 being the negative years. Using the markets as a new enrollment indicator for 2022 predicted that large market gains in 2021 helped drive new enrollments up in 2022. New enrollments in 2022 were 17,805, an all-time high. However, large market losses in 2022 could negatively impact new enrollments in future years. New enrollments over the past four years were:

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
New Enrollments	15,210	13,280	15,970	17,805

The number of actively contributing participants at year end have generally risen year-to-year since the 2008 financial crisis. Despite the high level of new enrollments in 2022, the number of actively contributing participants remained relatively flat due to the continued retirement of the baby boomer generation. The number of actively contributing participants at year-end for the past four years were:

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Number Actively Contributing	123,380	124,380	125,610	125,400

The SMarT Plan is an automatic annual increase feature that encourages participants to build a better retirement savings balance. Since Ohio DC added the SMarT option to our EZ enrollment form and online enrollment process, we have seen significant gains. At the end of 2022, 45 percent of actively contributing participants are enrolled in SMarT.

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Number enrolled in SMarT	44,040	47,890	52,530	56,890

Despite some of our challenges, we continue to maintain and see some increases in the number of contributing employees and number of participants increasing their contributions through SMarT. These positive trends offset the negative market news of 2022 and helped encourage participants to contribute 3.9 percent more during 2022 than in 2021. The total amounts contributed over the past four years were:

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Annual Contributions	\$522,070,000	\$552,547,000	\$578,271,000	\$600,975,000

The IRS can change the maximum annual contribution limits based on inflation statistics. The limits for the past four years are shown below:

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Regular Annual Limit	\$19,000	\$19,500	\$19,500	\$20,500
Age 50+ Annual Limit	25,000	26,000	26,000	27,000
Catch-Up Annual Limit	38,000	39,000	39,000	41,000

The regular annual contribution limit increases by \$500 increments based on inflation, which resulted in increased limits in 2019, 2020, and 2022. Higher inflation in 2022 resulted in unusually higher increases to the annual limits in 2023 (\$22,500, \$30,000, and \$45,000, respectively).

Rollovers Out

Annual rollover out activity has trended through up and down cycles over the years. These transactions have often followed the stock market, because financial planners use high market performance to lure participants from Ohio DC. We saw a decrease in rollovers during 2020, probably due to COVID-19 and social distancing. The amount and number of rollovers out increased in 2021, up 60 percent from 2020. The number of rollovers out transactions in 2022 were comparable to 2021 levels, but the dollar amount rolled out declined by 10 percent, probably due to account balances being lower because of negative market performance in 2022. Rollover out results for the past four years were:

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Amount	\$328,680,000	\$323,284,000	\$519,311,000	\$468,112,000
Number	3,450	2,900	3,980	3,900

Rollovers In

Generally, rollover in volume had trended slightly up over time. When we had notable events, such as pension reform or market corrections/surges, rollover in volume has varied more (up or down). While the number of rollovers in slightly decreased during 2020 and 2021, rollover in amounts in 2021 were up 35.8 percent compared to 2020 due to larger average rollovers. With the down markets in 2022, we saw a 11 percent decrease in the number of rollovers in processed, and a 24 percent decrease in the amounts rolled in. Rollover in results for the past four years were:

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Amount	\$121,055,000	\$97,816,000	\$132,865,000	\$101,526,000
Number	2,060	1,940	1,830	1,620

In-Service Transfers Out

In-service transfers out allow public employees to move their account balances between alternative 457 plans offered by their employer prior to termination. Although there are more providers competing for these participant accounts now, the number of these transactions has been decreasing over the past three years. With COVID-19 issues keeping Ohio DC and other plan sponsors out of many workplaces, it is not unusual to see these volumes drop since the start of the pandemic. The total dollar and number of in-service transfers out of Ohio DC for the past four years were:

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Amount	\$23,282,000	\$16,530,000	\$23,924,000	\$17,394,000
Number	430	270	250	200

In-Service Transfers In

In-service transfers in also allow our participants to move between alternative 457 plans offered by their employer prior to termination. Over the longer term, there has not been a lot of this activity (only averaging about three to seven transactions per month). The volume of transaction type has been trending down over the past few years, but it took a significant drop due to the COVID-19 issues discussed above. The total dollar amounts and number of in-service transfers into Ohio DC for the past four years were:

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Amount	\$4,882,000	\$2,851,000	\$4,408,570	\$2,845,000
Number	90	60	50	40

Purchase of Service Credit

Participants can use funds in their deferred compensation accounts to purchase service credit (time) from the Ohio pension plans. Since the Ohio pension reforms in 2012, purchase of service credit activity has averaged around \$8 million per year, but more recently, the number of transactions is trending down. The results for the past four years were:

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Amount	\$8,617,000	\$7,828,000	\$9,543,000	\$6,700,000
Number	410	420	360	300

Withdrawals

Participants have flexibility in electing a withdrawal option after termination and flexibility in changing their withdrawal option as often as needed thereafter. The number of participants starting to withdraw, and the dollar amount of their withdrawals, have generally trended upward over the years.

During 2020, Congress enacted federal legislation that waived the requirements for participants to take Required Minimum Distributions (RMDs). Accordingly, the number and dollar amount of withdrawals dropped in 2020.

Additionally, federal legislation allowed temporary additional latitude for in-service withdrawals, which Ohio DC administered through our Unforeseeable Emergency (UE) policy. RMDs were reinstated during 2021, and the UE policy was reverted to Ohio DC's pre-pandemic policy in the summer of 2021. Ohio DC processed 2,840 UEs in 2022 totaling \$9.9 million compared to 5,840 UEs in 2021 totaling \$25.5 million, and 8,630 UEs in 2020 totaling \$56.6 million.

The withdrawal results for the past four years were:

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Amount	\$403,270,000	\$370,832,000	\$492,870,000	\$491,496,000
Number	46,950	29,000	47,950	48,350
Participants starting payout	13,000	6,600	12,400	12,450

Investment Exchanges

Of our total 261,700 participant accounts, only 14,900 made exchanges between investment options during 2022, which represents only 6 percent of our total population (vs. 7 percent exchanged in 2021). This means that about 94 percent of our participants did not rebalance or otherwise adjust their investment allocations during the past year.

Because an increasing number of our participants use our LifePath target-date funds (now 18.5 percent of all assets), which automatically rebalance, we expect continued low exchange levels in the future. Our exchange counts do not include default exchanges, which are required when an investment option is closed or transferred to a lower-cost share class.

Overall exchange volume was low across our participant base and the number of exchange transactions decreased in 2021 and 2022 after increasing dramatically in 2020. The total number of participant investment exchange transactions in each of the past four years were:

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Number of exchanges	21,800	41,100	30,200	23,000

Although the markets have generally returned positive results prior to 2022, our participants continue to move out of the stock market options and into the safety of the Stable Value Option (SVO) on a net annual basis. Higher balances from these market gains, aging baby boomers, and increased daily market volatility have encouraged a more conservative investment strategy for older participants. The political and market volatility of 2020, as well as COVID-19, encouraged a spike of exchanges into the SVO during 2020. Some calming of those factors lowered the amount exchanged into the SVO during 2021, but increased market volatility and market losses in 2022 pushed higher exchanges into SVO again. The net annual amounts of investment exchanges into the SVO were:

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Net exchanged into the SVO	\$162,760,00	\$529,537,000	\$63,293,000	\$355,662,000

Priority Projects Update as of March 2023

Administration

Annual Audit/Annual Report

The December 31, 2022, financial statements and Annual Report will be presented at the May Board meeting and then submitted to the Auditor of State and GFOA for their review. The Annual Report will then be posted to the participant and employer websites. The 2021 Annual Report is currently posted to the participant and employer websites.

Popular Annual Financial Report (PAFR)

The 2022 PAFR will be developed using the data from the 2022 Annual Report and sent to GFOA for review. The 2021 PAFR is posted to the participant and employer websites.

Nationwide Contract

Nationwide Service Plan

The Nationwide Service Plan was presented and approved at the January 2023 Board meeting. The monthly marketing checklist and scorecard will be reviewed in the monthly Nationwide/Ohio DC staff meetings and all items are on track to be completed.

Participant and employer satisfaction surveys

As of December 2022, survey scores remained generally positive, despite market volatility and significant investment menu changes last year. A survey update was made for the final survey period in 2022 to align questions with the service model. In addition, the survey methodology has changed. Surveys are no longer being conducted by phone. All future surveys will be initiated through email invitations. According to Communications for Research, recent changes to the order and structure of questions to be in line with other financial service firms research methodology will likely result in lower benchmark for scores compared to historical results.

Retirement Planning Specialist (RPS) services

Face-to-face appointments in the Service Center resumed in June 2021 with services occurring in-person and over the phone/virtual environment. RPS are expanding webinar offerings in 2023 and partnering with OPERS to conduct weekly webinars.

Information Technology and Security

IT Staffing

There are currently two Board approved open IT positions, which have proven more difficult to fill than previously believed. Staff has initiated the assistance of a recruiting agency to aid in this effort. As we fill the open positions, we will further evaluate what level of ongoing staffing will be required.

Wind down strategy to disconnect from Peraton

Phase III of the project (online withdrawals) is now scheduled to be completed in December 2023. An RFP for a 3-year maintenance contract of the application will be put out in early 2024 to procure continued staff augmentation for IT. Additional projects have been planned to continue enhancing the application with new features to optimize the application's environment, streamline processes, and provide new features to participants.

Document Management System RFP

The Document Management System RFP was issued on August 1, 2022, with a proposal deadline of September 16, 2022. We received five proposals; however, a decision was made to cancel the RFP and delay the implementation of the Document Management System to focus on other high priority objectives. Tentatively, this RFP will be reissued again in the second half of 2023.

Annual security audit and quarterly vulnerability scans

During 2022, four quarterly vulnerability scans, penetration testing, and the annual security assessment were completed. A report of the findings was presented at the November 2022 Board meeting. The findings have been prioritized and are being reviewed as part of the 2023 risk committee calendar. The committee will oversee the completion and review of these items.

Information Security Risk Assessment (ISRA)

Plante Moran has completed the 2022 ISRA. A final report was reviewed with the Board at the November meeting.

IT Strategic Plan

An IT Strategic Plan was completed in 2021, and staff is working to develop an execution strategy to implement these recommendations over the next 3 years.

Business Continuity and Disaster Recovery Plan (BC/DRP)

A new BC/DRP was completed in 2021 and updates to reflect updated business processes in 2023 are in progress. NetGain, a local technology company, was selected to provide disaster recovery relocation services, and staff has worked with NetGain to configure and test disaster recovery capabilities.

Participant and Employer Communications/Education

Financial Wellness Program

The Enrich Financial Wellness platform has been offered to all participants since August 2021. Email promotions to participants to discover the benefits of Enrich are being sent quarterly. To date, over 12,500 participants have signed up for the Enrich financial wellness program.

State of Ohio Auto Enrollment

The State of Ohio Auto Enrollment was launched on July 6, 2022. As of March 1, 2023, Ohio DC has received 3,114 valid new hire records from the State. There are 1,032 records still pending due to the 90-day opt-out period, so 2,082 records have been processed. Currently, 223 (10.7%) people have opted out, 739 (35.5%) have enrolled on their own to begin contributions sooner, and 1,120 (53.8%) new accounts have been created.

2023 National Retirement Security Month (NRSRM) strategy

We will promote October's NRSRM to our participants and employers through a variety of communication channels. We will publish information on our employer website, participant website, Employer newsletter and multiple emails. The bulk of contacts during October will likely be through the heavily promoted webinars. During these webinars, we will also promote the Enrich financial wellness program.

Roth 457 Option

The Roth 457 option continues to be promoted to employers and participants through the *Focus* newsletter, Employer newsletter, targeted emails to both employers and participants, RPS and Account Executive interactions, and the participant and employer websites and webinars. A Roth 457 option PowerPoint presentation has been developed for Field Account Executives to present to employers. As of March 1, 2023, we have 554 employers who have adopted Roth 457 and 6,630 Roth accounts.

Social Media Strategy

This is currently on hold due to staffing changes.

Participant Services

Annual statements

The 2022 Annual Statements were mailed in January 2023. In late 2022, Annual Statements were added to eDelivery. An annual postage savings of over \$36,000 was realized due to this change.

Quarterly statements and newsletters

The 2022 quarterly statements and newsletters were mailed/emailed on time. Statement messaging has been provided to promote SMarT, eDelivery, and Enrich. Changes were made to the quarterly statement layout after the fund transitions in December 2022. Investment options are now organized by asset class, instead of alphabetically.

Key employer worksites visits

Field Account Executives have developed a hybrid approach to servicing employers and participants using whichever method the employer prefers. During the summer of 2022, most events occurred in-person at the worksites.

Investments

Research opportunities for manager fee reductions

The fund transition to move the four passive investment options from Vanguard to State Street was completed successfully. The resulting change is estimated to save participants about \$266,000 annually in investment management fees. Several participant communications were provided and programming to ORIS and the participant website was completed.

Fund share classes without recordkeeping rebates

Dodge & Cox launched a rebate-free investment option for the Dodge & Cox Stock fund in May 2022. The transition to the rebate-free option was completed in December 2022. Several participant communications were provided and programming to ORIS and the participant website was completed.

Stable Value Option passive management

At the October 2022 meeting, the Board approved RVK's recommendation to close the passively managed Stable Value Option portfolio (State Street) and reallocate the assets among our existing SVO managers. This transition is scheduled for March 2023.

Involvement in professional/industry organizations

Stable Value Investment Association Board of Trustees

Paul Miller was appointed to a three-year term as a plan sponsor representative to the SVIA Board of Trustees beginning in January 2021.

Legislative

Federal legislation

The SECURE 2.0 Act was signed by President Biden on December 29, 2022. Staff is reviewing the act provisions that apply to 457(b) defined contribution plans and developing an implementation plans for the mandatory provisions. NAGDCA's lobbyist continues to monitor federal legislation and provides updates and information to member programs.

Diversity, Equity, and Inclusion

Investment Manager Questionnaire

The original investment manager questionnaire has been fully adopted by NAGDCA. A working group was developed that contained both industry and plan sponsor members. The original questionnaire was then broken out into three separate tools. One dedicated to ESG, another dedicated to cybersecurity, and the final one dedicated to DEI data. We are currently working with RVK to narrow down the questionnaires even more to ensure we get both quantitative and qualitative data that we can track.

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM
ADMINISTRATIVE FUND
COMPARATIVE BALANCE SHEETS (UNAUDITED)

	<u>February 28, 2023</u>	<u>February 28, 2022</u>
<u>ASSETS</u>		
<i>CURRENT ASSETS:</i>		
PETTY CASH	\$50	\$50
CHECKING ACCOUNT	430,272	\$658,349
MONEY MARKET ACCOUNT	2,978,355	2,088,056
SHORT TERM INVESTMENTS	10,931,283	11,356,137
ACCOUNTS RECEIVABLE / PREPAYS	3,194,203	2,595,451
TOTAL CURRENT ASSETS	17,534,163	16,698,043
<i>FIXED ASSETS:</i>		
RECORDKEEPING MODERNIZATION	1,146,320	279,449
ORIS - PWP	17,189,289	15,527,565
FURNITURE AND FIXTURES	251,832	251,832
OFFICE EQUIPMENT	147,831	136,031
IBM AS/400	2,869	2,869
LEASEHOLD IMPROVEMENTS	46,551	46,551
TOTAL FIXED ASSETS	18,784,692	16,244,297
LESS ACCUMULATED DEPRECIATION	(3,475,269)	(2,424,463)
NET FIXED ASSETS	15,309,423	13,819,834
<i>LONG TERM ASSETS:</i>		
UNCLAIMED PARTICIPANT BENEFIT PAYMENTS	375,398	313,418
TOTAL LONG TERM ASSETS	375,398	313,418
TOTAL ASSETS	<u>\$33,218,986</u>	<u>30,831,293</u>
<u>LIABILITIES & FUND BALANCE</u>		
<i>CURRENT LIABILITIES:</i>		
ACCOUNTS PAYABLE	\$91,570	\$59,548
HEALTH INSURANCE RESERVE	166,681	183,026
ACCRUED EXPENSES	479,811	529,531
REBATES DUE TO PROGRAM FUND	0	203,019
TOTAL CURRENT LIABILITIES	738,062	975,124
<i>LONG TERM LIABILITIES:</i>		
UNCLAIMED BENEFIT PAYMENT LIABILITY	371,130	313,367
TOTAL LONG TERM LIABILITIES	371,130	313,367
TOTAL LIABILITIES	<u>1,109,192</u>	<u>1,288,491</u>
<i>FUND BALANCE:</i>		
BEGINNING OF YEAR	31,557,235	29,252,354
CURRENT YEAR SURPLUS (DEFICIT)	552,558	290,448
TOTAL FUND BALANCE	<u>32,109,793</u>	<u>29,542,802</u>
TOTAL LIABILITIES & FUND BALANCE	<u>\$33,218,985</u>	<u>\$30,831,293</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>\$12,358,000</u></u>	<u><u>\$12,200,700</u></u>
Average Monthly Expense Budget	<u><u>\$1,029,833</u></u>	<u><u>\$1,016,725</u></u>
	<u>February 28, 2023</u>	<u>February 28, 2022</u>
CHECKING ACCOUNT	<u>\$430,272</u>	<u>\$658,349</u>
MONEY MARKET ACCOUNT	<u>2,978,355</u>	<u>2,088,056</u>
SHORT TERM INVESTMENTS	<u><u>10,931,283</u></u>	<u><u>11,356,137</u></u>
NET CASH RESERVES	<u><u>\$14,339,910</u></u>	<u><u>\$14,102,542</u></u>
Number of Months Expense in Reserve	<u><u>13.9</u></u>	<u><u>13.9</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 FEBRUARY 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	\$1,188,290	\$1,136,006	\$52,284	\$2,362,655	\$2,392,680	(\$30,025)
INTEREST INCOME	32,446	37,192	(4,746)	80,022	74,383	5,638
TOTAL REVENUE	1,220,736	1,173,198	47,538	2,442,677	2,467,063	(24,387)
SALARIES	146,588	196,373	(49,785)	232,321	314,197	(81,877) *
BENEFITS	53,438	62,200	(8,761)	96,980	113,402	(16,422) *
INFORMATION TECHNOLOGY (IT)	34,428	60,352	(25,923)	62,656	120,704	(58,048) *
INSURANCE	4,283	0	4,283	152,100	150,104	1,996
HIRING AND RECRUITING	235	750	(515)	235	1,500	(1,265)
RENT	14,310	14,393	(83)	28,620	28,786	(166)
PRINTING	6,033	1,191	4,842	11,556	8,326	3,230
POSTAGE/DELIVERY	63,820	58,032	5,788	134,452	133,680	772
BOARD MEMBERS	26	725	(699)	26	1,640	(1,614)
EDUCATION/LICENSE/TRAVEL	2,505	2,221	284	3,543	4,442	(899)
STATEMENTS	50,186	0	50,186	50,186	57,300	(7,114)
PROFESSIONAL FEES	18,000	9,750	8,250	68,469	101,199	(32,730) *
PARTICIPANT ADJUSTMENTS	0	400	(400)	432	800	(368)
BANK FEES	13,100	14,250	(1,150)	26,200	28,500	(2,300)
MISCELLANEOUS	6,032	3,215	2,818	4,520	6,429	(1,909)
OPERATING EXPENSES	412,986	423,852	(10,865)	872,298	1,071,009	(198,712)
DEPRECIATION AND AMORTIZATION	0	0	0	0	0	0
TOTAL OPERATING EXPENSES	412,986	423,852	(10,865)	872,298	1,071,009	(198,712)
NRS COMPENSATION	498,842	485,385	13,457	977,888	968,475	9,413
OCCUPANCY COSTS	13,000	13,000	0	26,000	26,000	0
FINANCIAL WELLNESS	6,967	6,967	0	13,933	13,933	0
DEPRECIATION	0	0	0	0	0	0
TOTAL CUSTOMER SERVICE EXPENSE	518,808	505,352	13,457	1,017,821	1,008,408	9,413
TOTAL EXPENSES	931,794	929,203	2,591	1,890,119	2,079,418	(189,298)
NET REVENUES OVER EXPENSES	\$288,942	\$243,995	\$44,947	\$552,558	\$387,646	\$164,912

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 FEBRUARY 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>
SALARIES	\$146,588	\$196,373	(\$49,785)	\$232,321	\$314,197	(\$81,877)
	Salaries are lower than budgeted due to several open positions that were budgeted to be filled for the entire year.					
BENEFITS	\$53,438	\$62,200	(\$8,761)	\$96,980	\$113,402	(\$16,422)
	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 \$167,000 at month-end.					
INFORMATION TECHNOLOGY	\$34,428	\$60,352	(\$25,923)	\$62,656	\$120,704	(\$58,048)
	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.					
PROFESSIONAL FEES	\$18,000	\$9,750	\$8,250	\$68,469	\$101,199	(\$32,730)
	Variance is due to lags in billing from consulting firms.					

OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION PROGRAM
PROGRAM FUND--QUARTERLY STATEMENT
STATEMENTS OF PLAN NET POSITION AVAILABLE FOR BENEFITS
(UNAUDITED)

	December 31 2022	December 31 2021
<u>ASSETS</u>		
INVESTMENTS	\$16,824,352,123	\$20,200,511,769
CONTRIBUTIONS RECEIVABLE AND HELD FOR INVESTMENT	14,755,392	8,321,397
TOTAL ASSETS	<u>16,839,107,515</u>	<u>20,208,833,166</u>
<u>LIABILITIES</u>		
ACCOUNTS PAYABLE (RECEIVABLE)	9,451,685	997,291
TOTAL LIABILITIES	<u>9,451,685</u>	<u>997,291</u>
PLAN NET POSITION AVAILABLE FOR BENEFITS	<u><u>\$16,829,655,830</u></u>	<u><u>\$20,207,835,874</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)

	Twelve Months ended December 31, 2022	Twelve Months ended December 31, 2021
<u>ADDITIONS:</u>		
EMPLOYEE CONTRIBUTIONS	\$602,349,851	\$583,381,511
NET GAIN (LOSS) ON VARIABLE INVESTMENTS	(3,176,439,300)	2,405,273,010
STABLE VALUE INTEREST INCOME	105,084,980	104,113,462
INVESTMENT EXPENSES	(12,628,287)	(13,154,039)
TRANSFERS FROM OTHER PLANS	104,965,825	137,519,233
TOTAL ADDITIONS	(\$2,376,666,930)	\$3,217,133,177
<u>DEDUCTIONS:</u>		
DISTRIBUTIONS TO PARTICIPANTS	\$494,069,158	\$495,667,695
TRANSFERS TO OTHER PLANS	485,606,333	543,608,116
PURCHASE SERVICE CREDIT	6,699,526	9,543,449
ADMINISTRATIVE FEES	15,138,097	11,903,748
TOTAL DEDUCTIONS	\$1,001,513,114	\$1,060,723,007
CHANGE IN NET POSITION	(\$3,378,180,044)	\$2,156,410,170
PLAN NET POSITION AVAILABLE FOR BENEFITS:		
BEGINNING OF YEAR	20,207,835,874	18,051,425,704
ENDING OF PERIOD	\$16,829,655,830	\$20,207,835,874

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: 3/14/2023

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 January and February.

I. Provide quality participant services and promote financial literacy through effective education and clear communication.

During the past two months, the Service Center received 25,146 calls, which is a 9% 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 3,414; up 23% from the same period last year. When accounting for State auto-enrollment, which was not available last January or February, enrollments were still up 8%. SMarT plan enrollments were also up 15% 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 50% higher than last year at this time. 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.

IV. Accurately and fairly apply laws; when appropriate, advocate regulatory and legislative changes.

Legislative Update

Lawmakers ask GAO to review retirement plan data privacy

On December 20, then-HELP Committee Chair Sen. Patty Murray (D-WA) and Education and Labor Committee Chair Bobby Scott (D-VA) sent a request to the U.S. Government Accountability Office (GAO) to examine the need for federal data privacy laws for retirement plans. Among the reasons for the request, the lawmakers said, are the rise in data collected by retirement plan fiduciaries, service providers and advisers about plan participants and beneficiaries; the increase in the cross-selling of non-plan products and services; and arguments made in a recent lawsuit that plan participant and beneficiary data is a plan asset.

Congresswoman reintroduces financial exploitation bill

On January 26, Rep. Ann Wagner (R-MO) reintroduced the Financial Exploitation Prevention Act. The bill would give the financial industry better tools to address suspected financial exploitation and abuse of seniors and those with mental and physical disabilities. The bill, which was first introduced in 2021, requires the SEC to report recommendations for legislative and regulatory changes to Congress on how to combat financial exploitation of seniors and vulnerable adults. The bill also permits a registered open-ended investment company or transfer agent for that company, including mutual funds, to delay the redemption period of any redeemable security if it was reasonably believed that such redemption was requested through the financial exploitation of a security holder who is a senior or an individual unable to protect their own interests.

States challenge final DOL ESG rule

On January 26, 25 states (led by Texas) sued to halt the implementation of the Department of Labor's recently finalized "Prudence and Loyalty in Selecting Plan Investments and Exercising Shareholder Rights" rule. Commonly referred to as the ESG Rule, the final rule reverses the 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. The final rule was to have gone into effect on January 30, 2023.

Florida prohibits ESG investments in state's deferred comp plan

On January 23, Florida's Chief Financial Officer issued a directive barring asset managers within Florida's deferred compensation program from investing participants' compensation in financial products associated with environmental, social and governance (ESG) standards. The Florida Deferred Compensation Plan is the supplemental retirement plan for employees of the State of Florida. Earlier, on January 17, Florida Gov. Ron DeSantis and Trustees of the State Board of Administration (SBA) formally approved measures to the Florida Retirement System Pension Plan policy and SBA corporate governance proxy voting guidelines to clearly define the factors that fiduciaries are to consider in investment decisions, ensuring that ESG is prohibited from consideration.

V. Develop and implement prudent practices to effectively govern and administer the plan.

The Service Center held training on President's Day while the stock market was closed. Activities included:

- Planning for additional webinars with Retirement Planning Specialists as hosts
- Conducting associate engagement exercises and a review of the 2022 engagement survey
- Completing four hours of FINRA and Nationwide continuing education courses

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.)	April	
Employer webinar #1 (Communication Mgr.)	March 30	
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 1	
Webinar Wednesday announcement - March	March 8	
Retiree newsletter 1	March 15	
Enrich promotion Q1	March 22	
Webinar Wednesday announcement - April	April 5	
Quarterly Newsletter	April 11	
Promotional email Q2	April 26	
Check termination status of non-contributing participants	TBD	
Webinar Wednesday announcement - May	May 10	
Beneficiary clean-up email	May 17	
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	
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	
Placeholder	TBD	
<u>Web Banners</u>		
RMD, Campaign banner	January	January
Campaign banner, RMD	February	February
Campaign banner, SMaT	March	
To be determined each month	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

Stay In Plan postcard	August 15
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Newsletter articles - Front Page

Put Your Heart in it Ohio - Market Volatility	January	January
Put Your Heart in it Ohio - Financial Wellness	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 29	
Employer Webinar	March 30	
Webinar Wednesday - 9:00am. Retired Minds Want to Know	April 26	
Webinar Wednesday - 9:00am Approaching Retirement	May 31	
Webinar Wednesday - 9:00am Approaching Retirement; Beyond Basics	June 28	
Webinar Wednesday - 9:00am. Retired Minds Want to Know	July 26	
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	
Good Friday internal staff training day	April 7	
Field staff training meeting #1	May	
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	
Annual fraud awareness/training	April	

	<u>Target Date</u>	<u>Completed Date</u>
<u>Miscellaneous</u>		
Call center disaster recovery exercise	Ongoing	
Semi-annual marketing audit	June/December	
Training manual/videos updated online	Monthly	