STRATEGIC PLANNING MEETING AGENDA

August 15, 2023

MEMORANDUM

TO: Board of Trustees

FROM: Paul D. Miller, Interim Executive Director

SUBJECT: Ohio Deferred Compensation Strategic Planning Meeting

DATE: August 8, 2023

The Ohio Deferred Compensation–Strategic Planning meeting will be held at 9 a.m. on Tuesday August 15, 2023. A continental breakfast before the meeting will be served at 8:30 a.m. The meeting will be held in the Annex conference room 415 at the Ohio Public Employees Retirement System offices, 277 East Town Street, Columbus, Ohio.

The presentations and related discussions are expected to conclude around 2:30 p.m. The agenda materials for the meeting are enclosed.

If you need additional information about the meeting location or are unable to attend, please contact Cindy Ward, cward@ohiodc.org or 614-466-7245.

Strategic Planning Agenda
August 15, 2023
9:00 a.m.
Meeting Location: OPERS Annex—Conference Room 415

TIME	AGENDA	PRESENTER
8:30 a.m.	Continental Breakfast	
9:00 a.m.– 9:05 a.m.	Welcome and Opening Remarks *ACTION ITEM:* Review and Approve Minutes	Chair Thomas Paul Miller
9:05 a.m.– 9:20 a.m.	Strategic Plan Update *ACTION ITEM:* Remove completed strategic objectives	Kevin Kirkpatrick
9:20 a.m.– 10:05 a.m.	Strategic Objective 3-26: Asset Retention Review	Matthias Bauer Stephen Budinsky
10:05 a.m. – 10:50 a.m.	Strategic Objective 3-27: Retirement Readiness Review	Matthias Bauer Stephen Budinsky
10:50 a.m. – 11:05 a.m.	Break	
11:05 a.m. – 11:25 a.m.	*ACTION ITEM:* Fidelity Share Class Change	Paul Miller
11:25 a.m.– 12:00 p.m.	*ACTION ITEM:* Nationwide Contract Extension	Paul Miller Kevin Kirkpatrick
12:00 p.m.– 12:30 p.m.	Lunch (OPERS Cafeteria)	
12:30 a.m.– 2:00 p.m.	Administrative Staffing Review	Paul Miller
2:00 p.m.– 2:15 p.m.	Board Evaluation	Chair Thomas
2:15 p.m.– 2:30 p.m.	Future Objectives/Summarize Meeting Outcomes	Kevin Kirkpatrick
2:30 p.m.	Closing Comments and Adjournment	Chair Thomas

Information Items: Mid-Year Financial Summary and Projections—Proxy Summary Annual Report

MINUTES

Minutes of
OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION
AUDIT COMMITTEE

A publicly-noticed meeting of the Ohio Public Employees Deferred Compensation Board–Audit Committee was held at the Ohio Public Employees Retirement System offices located at 277 East Town Street, Columbus, Ohio, on May 16, 2023, at 8:30 a.m.

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

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

Member(s) absent: Ms. Julie Albers.

Committee Chair Smith called the meeting to order.

Mr. Miller indicated the Committee would be discussing the audit results and indicated the audit resulted in an unmodified clean opinion. He noted the audit memo, the auditor reports, and the Annual Comprehensive Financial Report (Annual Report) included in the agenda.

Mr. Morris summarized the audit process and described the testing of the investments, participant data, the administrative fund, and the implementation of GASB 87. Rea used a third-party pricing service to assist with the valuation testing of the investments. No testing exceptions were noted. The 2021 financial statements were restated as part of the GASB 87 implementation.

Mr. Morris confirmed that Rea issued an unmodified clean opinion on the financial statements and that there were no material weaknesses or non-compliance that needed to be reported.

Mr. Morris referenced the memo to those charged with governance and the report on government auditing standards. It was determined that GASB 97 did not apply to the Program. The audit was completed according to the established timing and scope, there were no audit adjustments made to the trial balance, uncorrected misstatements, significant issues or disagreements noted during the audit.

It was noted that REA will not issue an opinion on the Popular Annual Financial Report, but Rea would review it to confirm consistency with the Annual Report.

Mr. Morris thanked the staff for assisting with the audit work to meet the audit deadline.

Mr. Kunk moved, Mr. Steitz seconded to recommend to the full Board approval of the 2022 Annual Report and the audit reports as presented.

Roll call vote was taken:

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

The motion passed unanimously.

Mr. Kunk moved; Mr. Steitz seconded to adjourn the meeting of the Audit Committee at 8:43 a.m.

Minutes of
OHIO PUBLIC EMPLOYEES DEFERRED COMPENSATION BOARD

A publicly noticed meeting of the Ohio Public Employees Deferred Compensation Board was held at the Ohio Public Employees Retirement System offices located at 277 East Town Street, Columbus, Ohio on May 16, 2023, at 9:00 a.m.

Members present: Chair Ken Thomas; Ms. Julie Albers; Senator Louis W. Blessing, III; Representative Richard Brown; 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. Paul D. Miller, Interim Executive Director, Mr. Kevin Kirkpatrick, Ms. Natasha Natale, and Ms. Cindy Ward of the Ohio Public Employees Deferred Compensation Program; Mr. Matt Gill, Mr. Cedric Gaaskjolen, Ms. Brenda Anderson, and Mr. Scott McAllister of Nationwide, Ms. Caroline Mills and Mr. Brian Honen of the Attorney General's office; Mr. Matthias Bauer and Mr. Stephen Budinsky of RVK, Inc. (RVK); and Mr. Zac Morris of Rea & Associates (Rea).

Member(s) absent: Mr. Randy V. Desposito.

Chair Thomas called the meeting to order.

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

All aye. The motion passed without dissent.

<u>Minutes</u>

The minutes of the March 14, 2023, Audit Committee meeting, and the March 14, 2023, Board meeting were presented.

Mr. Toth moved; Mr. Richter seconded to accept and file the minutes listed above as presented.

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

Roll call vote was taken:

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

The motion passed unanimously.

<u>Committee Reports</u>

Mr. Smith, Chair of the Audit Committee, reported that the committee met with staff and Mr. Morris from Rea to discuss the results of the 2022 audit. Mr. Smith noted the audit produced a clean opinion and Rea appreciated the ease of working with the Ohio DC staff.

Mr. Smith moved; Mr. Steitz seconded to approve the 2022 Annual Report and the audit reports are presented.

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

Roll call vote was taken:

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

The motion passed unanimously.

(Senator Blessing entered the meeting.)

Mr. Miller presented the Annual Report highlights that included the audit testing and results which produced an unmodified opinion on the financial statements, no deficiencies or material weaknesses in internal controls, and a management letter was not issued. Mr. Miller presented Ohio DC's financial position, statistical highlights, 2022 major initiatives, and a summary of the audit results. The Annual Report will be sent to the Auditor of State and the Government Finance Officers Association for review and the Popular Annual Financial Report will be produced.

Action Items

Chair Thomas presented the memo regarding follow-up to the Special Board meeting in February 2023. Chair Thomas recommended the Board reaffirm two motions from that meeting.

Ms. Albers moved, Mr. Richter seconded to appoint Mr. Miller as the Interim Executive Director effective February 21, 2023, and provide him with a 4% increase in his salary while he is performing the interim duties. Mr. Kirkpatrick will continue in the position as Director of Administration.

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

Chair Thomas noted that the Executive Director position would be discussed at the August Strategic Planning meeting.

Roll call vote was taken:

Ms. Albers	yes	Mr. Smith	yes
Senator Blessing	yes	Mr. Steitz	yes
Representative Brown	yes	Mr. Tilling	yes
Mr. Kunk	yes	Mr. Toth	yes
Mr. Milstead	yes	Chair Thomas	yes
Mr. Richter	yes		

The motion passed unanimously.

Ms. Albers moved; Senator Blessing seconded to pause the 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
Senator Blessing	yes		
Representative Brown	yes		
Mr. Kunk	yes		
Mr. Milstead	yes		
Mr. Richter	yes		
Mr. Smith	yes		
Mr. Steitz	yes		
Mr. Tilling	yes		
Chair Thomas	yes		

The motion passed 10 to 1.

Mr. Budinsky reviewed the executive summary of the annual administrative fee review and noted there is no specific Board action needed.

(Mr. Mabe entered the meeting.)

Mr. Budinsky presented data on the best practices for plan fee management, and the current administrative fee policy statement. He reviewed Ohio DC's fees and expenses, administrative fund reserve balance, survey peer group characteristics, and the fee benchmarking summary. Mr. Budinsky noted that the benchmarking survey data comparisons are evaluated on a plan weighted basis.

The fee benchmarking summary included plan costs changes over time, average participant fees and costs, administrative fee models, and investment fees and allocations. Mr. Budinsky noted that Ohio DC's recordkeeping, administrative fees and expenses, and investment expenses are reasonable; and the administrative reserve fund balance remains in compliance with our Policy guidelines.

Mr. Budinsky reviewed the executive summary for the Target Date Fund Review, including best practices for monitoring and evaluating target date funds. RVK recommends retaining the BlackRock LifePath options. Mr. Budinsky presented information on the target date funds market and trends, and the Ohio DC target date fund utilization and cash flows.

Mr. Bauer presented information on the suitability of the BlackRock LifePath Index options, a summary of the LifePath investment strategy review, and a BlackRock LifePath litigation update.

(Senator Blessing left the meeting.)

Mr. Bauer reviewed BlackRock's glidepath characteristics, asset allocations, allocations benchmarked against peers, and a historical performance summary.

Discussion was held regarding BlackRock's glidepath philosophy, calculations, and design components. Mr. Bauer presented comparisons between BlackRock and the Morningstar universe of target date funds, as well as BlackRock and a smaller peer group with similar strategies. Discussion was held regarding potential BlackRock litigation carryover, potential effects of the possible government default, how the BlackRock portfolio handles market rebalancing, and how the Portfolios may react in different market environments.

Mr. Bauer presented the first quarter 2023 capital markets review and noted the market performance, the economic environment, and the treasury yield curve.

Mr. Bauer highlighted Ohio DC's asset allocation, performance, and fund monitoring summary. Stable Value Option strategies managed by Jennison and Nationwide continue to be in "yellow" status due to recent organization changes. RVK does not recommend any changes to the investment options.

Mr. Smith moved; Representative Brown seconded to accept the RVK reports as presented.

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

Roll call vote was taken:

Ms. Albers	yes	Mr. Smith	yes
Representative Brown	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.

<u>Discussion Items</u>

Mr. Kirkpatrick presented background information on Ohio DC's Unforeseeable Emergency (UE) provision that included a period for self-certified UEs in 2020 and 2021 as allowed by the CARES Act of 2020. He provided the UE withdrawal history prior to 2020 and during the self-certification periods. He noted that the SECURE 2.0 Act, Section 312, provides for an optional provision that would allow 457 plans to accept a participant's self-certification of their unforeseeable emergency.

Mr. Kirkpatrick reviewed the potential benefits of self-certified UEs and the need to set appropriate parameters to accommodate participant needs and lower the potential for abuse. Mr. Kirkpatrick presented staff's recommendation to adopt Section 312 of the SECURE 2.0 Act and allow participants to self-certify one UE Withdrawal every 90 calendar days, up to a net amount of $5,000, as soon as the administrative procedures can be implemented.

Discussion was held regarding the tax treatment of the UEs. It was noted that the IRS requires that a 10% income tax be withheld on UE withdrawals and 457 plans do not have early withdrawal penalties.

Mr. Kunk moved, Mr. Smith seconded to adopt Section 312 of the SECURE 2.0 Act and allow participants to self-certify one UE Withdrawal every 90 calendar days, up to a net amount of $5,000, as soon as the administrative procedures can be implemented.

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

Roll call vote was taken:

Ms. Albers	yes	Mr. Smith	yes
Representative Brown	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.

Discussion was held regarding participant education on the effects of taking a UE withdrawal. UE requests are made by calling the Service Center to allow for a discussion regarding the withdrawal.

Mr. Gill reported that Nationwide and staff have been working on an update to the Ohio DC brand elements. The brand was last updated in 2006. Staff and Nationwide plan to slowly roll out the changes beginning in the third quarter 2023. Mr. Gill introduced Mr. McAllister to present more details on the brand refresh project.

Mr. McAllister indicated that the brand refresh would build on the past success of Ohio DC and modernize the brand for the future. Mr. McAllister presented the revised brand attributes and communication tone, a new logo and tagline, and a complementary color palette. He explained the elements of the new logo and tagline, and how the logo will be incorporated into Ohio DC communications along with the ADA accessible color palette. Modern brand imagery (photography) will be selected to capture relatable lifestyle moments of the Ohio DC participant at different career/life stages, and object images when appropriate.

Discussion was held regarding the need to include images that depict public employees in their job roles and to address participants who may be starting their public careers at an older age. The need to segment imagery when possible and to be mindful of the images selected was noted.

(Representative Brown left the meeting.)

Discussion continued about monitoring email open and click rates, and website statistics. Mr. McAllister discussed different styles of photography aimed at representing different life stages. Samples of rebranded communications, emails, and the Ohio DC website were presented.

Mr. Gill indicated that the redesign, revisions, and reprinting costs would be completed as part of the existing Nationwide contract, but updating signage would incur a cost to Ohio DC. The new brand will be rolled out over the next 6-12 months. Nationwide staff can assist Ohio DC with the appropriate registration of the new logo.

Chair Thomas asked the Board to review the proposed Strategic Planning meeting topics and provide staff with any additional input.

Mr. Mabe moved, Mr. Toth seconded to go into Executive Session at 11:57 a.m., pursuant to Ohio Revised Code §121.22(G)(3) to discuss imminent court action.

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

Roll call vote was taken:

Ms. Albers	yes	Mr. Smith	yes
Mr. Kunk	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. Miller, Mr. Kirkpatrick, Ms. Natale, Ms. Ward, and Ms. Mills remained in the Executive Session.)

The meeting returned to regular session at 12:16 p.m.

Information Items

No discussion was held regarding the information items.

Mr. Toth moved; Mr. Tilling seconded to adjourn the meeting at 12:16 p.m. until the next regular meeting of the Board, August 15, 2023, to be held at the Ohio Public Employees Retirement System offices, located at 277 East Town Street.

STRATEGIC PLAN UPDATE

Strategic Plan Objectives Update

= Completed (recommend removal)

Goal/ Objective	Lead	Target Quarter/Year	Objective	Status	Comments

Goal #1: Provide quality participant services and promote financial literacy through effective education and clear communication.

Goal/ Objective	Lead	Target Quarter/Year	Objective	Status	Comments
1-48	KK/MG	~~1Q 2022~~ 1Q 2023	Develop the appropriate participant service model to assist with a future RFP for an enrollment, education, and service provider.	COMPLETED	Nationwide presented their annual service plan at the January meeting which highlighted the efforts to invest in services that enhance and improve the participant experience. The staffing model flexibility added to the contract has proven to be helpful in maintaining the appropriate staffing levels and has improved the opportunities to connect to participants.
1-49	KK/PM	1Q 2024	Develop a request for proposal, solicit proposals, and select a vendor to provide enrollment, education, and customer service beyond June 30, 2024.	COMPLETED	At the March meeting, the Board gave staff authority to enter into negotiations with Nationwide for an extension of the contract. Staff is negotiating a contract extension.

On Target

Potential Delay With Target

Target Delayed

Strategic Plan Objectives Update

= Completed (recommend removal)

Goal/ Objective	Lead	Target Quarter/Year	Objective	Status	Comments
Goal #2: Establish plan features and tools that encourage supplemental savings to provide income through retirement.					
2-49	KK/JC	~~4Q 2022~~ 4Q 2023	Complete Phase III of recordkeeping modernization project.		***Enhancements related to transfer check printing, PWP/ORIS live ACH validation, bank account verification workflow, and ORIS W-4P updates have been completed. Enhancements that are in progress or upcoming include: address standardization/autocomplete, enhanced PWP W-4P updates, Secure Act 2.0 updates, technology stack upgrades, and moving to platform as a service (PAAS) to further improve security, scalability, and maintainability.***
2-53	MG/JC	~~3Q 2022~~ ~~2Q 2023~~ 2Q 2024	Research strategies to obtain detailed participant information with the goal of utilizing data for future strategic goals, objectives, and service and marketing efforts.	**COMPLETED**	***Staff researched tools and strategies for gathering detailed participant data, including interviewing stakeholders for opportunities for use. Steps to leverage our existing reporting capabilities were explored. It was determined that based on current needs, the data available through ORIS reports is acceptable, and no other software is needed.***

On Target

Potential Delay With Target

Target Delayed

Strategic Plan Objectives Update

= Completed (recommend removal)

Goal/ Objective	Lead	Target Quarter/Year	Objective	Status	Comments
Goal #3: Provide suitable, diverse, cost effective investment options.					
3-26	PM/RVK	~~2Q 2022~~ ~~3Q 2022~~ 3Q 2023	Research asset retention strategies, including but not limited to self-directed brokerage window and managed account options.		***Staff developed the framework to research this topic with the assistance of Nationwide and RVK. Strategies to retain assets were researched, including the costs and benefits of alternative investment options. Details of this research will be presented at the August 2023 Strategic Planning meeting.***
3-27	PM/RVK	~~2Q 2023~~ 3Q 2023	Research retirement income strategies.		***RVK will present their research regarding retirement income strategies at the August 2023 Strategic Planning meeting.***
Goal #4: Accurately and fairly apply laws; when appropriate, advocate regulatory and legislative changes.					
Goal #5: Develop and implement prudent practices to effectively govern and administer the Plan.					
5-20	KK/PM/CW	~~3Q 2022~~ ~~3Q 2023~~ TBD	Develop an administrative staffing model to assist with maintaining new technology, participant service enhancements, and succession plans.		***Staff is currently working to determine and evaluate areas where cooperative efforts could be provided by our business partners. Information will be provided at the August 2023 Strategic Planning meeting.***

On Target

Potential Delay With Target

Target Delayed

OHIO Deferred Compensation

MEMORANDUM

TO: Board of Trustees

FROM: Paul D. Miller, Interim Executive Director
Kevin Kirkpatrick, Director of Administration

DATE: August 15, 2023

SUBJECT: Strategic Objective 2-53 – Utilizing Participant Data

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Executive Summary

At the September 2020 Board meeting, Strategic Objective 2-53, to “Research strategies to obtain detailed participant information with the goal of utilizing data for future strategic goals, objectives, and service and marketing efforts” was added to the strategic plan with a targeted completion date of second quarter 2022. It was eventually delayed until the second quarter 2024. The details provided below highlight the research performed and the conclusion to continue utilizing data from the recordkeeping system in lieu of purchasing additional software.

Staff explored a variety of potential strategies and platforms for obtaining and analyzing participant data, including Enrich, Power BI, Tableau, Advice Analytics, Google Analytics and our own recordkeeping system, ORIS. The cost of some of the software reviewed was as much as $50,000 annually.

Staff interviewed internal stakeholders, as well are our enrollment and education partner, Nationwide, to determine which data sets required for extrapolation could be used to meet the objective.

Based on those conversations, it was determined that our in-house recordkeeping system, ORIS, could provide all the participant data deemed relevant and useful in the formulation of these continued efforts. While we need our internal IT staff to create the queries that extract the data from ORIS, any such request can be fulfilled in no more than two or three business days, with no additional cost to Ohio DC. Once created, this data is contained in reports, which can be stored in ORIS and accessed real-time and on-demand by internal staff and external partners with the proper and necessary credentials for doing so.

Given Ohio DC’s current data needs, using ORIS for gathering data and providing reports is acceptable versus the time and expense of licensing third-party software to collect our data.

Recommendation

Based on the research performed and the conclusion to continue using ORIS for data reporting, staff considers Strategic Objective 2-53 to be complete. Staff recommends the Board approve the removal of this completed objective from the Strategic Plan.

ASSET RETENTION REVIEW

Asset Retention Review

Ohio Deferred Compensation Program ("Ohio DC")

August 15, 2023

Table of Contents

Introduction

Introduction & Background

- At the August 2021 Strategic Planning Meeting, RVK provided information to the Board regarding distribution trends for Ohio DC participants spanning the years 2017 - 2020.
  - The goal of the analysis was to review specific distributions types, frequencies, and destinations and review survey data collected by Nationwide in 2019 to help understand "why" participants were, or were anticipating, taking distributions from Ohio DC.
  - The review found that the most common methods elected by participants for distributing assets from Ohio DC were systematic withdrawals and lump sum distributions. Rollovers to another provider represented the largest portion of assets distributed.
  - A comparison to peer group universes indicated that Ohio DC participants were more likely to remain in Ohio DC after separating from employment than in other plans.
  - <u>Overall, the analysis found that distribution activity of Ohio DC participants to be in line with expectations</u>.

- At the meeting, the Board discussed the idea of retaining participant assets, especially the assets of participants who are at or in retirement. The Board requested that more information be provided at a future meeting.
  - A Strategic Plan Objective was added to research asset retention strategies, including but not limited to self-directed brokerage window and managed account options.

- **The purpose of today's presentation is to provide more information regarding distribution activity, review the Board's goals related to asset retention, and review strategies that may help with retaining participant assets.**

What is Asset Retention?

- With the evolving role of pensions as a significant source of retirement income, and the lengthening of the retirement phase, DC plan participants are faced with difficult decisions and market risks that can curtail successful retirement outcomes.

- “Asset retention” refers to participants deciding to keep their assets in the DC plan after leaving employment or retiring.

- Historically, DC participants tend to take their money and cash it out as a lump sum or roll it out of the plan. This is often done to consolidate accounts and make it easier to manage assets in retirement. According to the Investment Company Institute’s ongoing study of retirement account trends, the amount of total money held in IRAs typically exceeds the amount in DC plans, even when IRA annual contribution limits remain far lower than DC plan limits.

- Making the decision to stay in or move out of the plan is complex and highly individual.

RVK

Why do Plan Sponsors Want to Retain Assets?

Potential Positives

Maintain Overall Scale / Reduce Costs
DC plans are better able to control costs, including investment management and recordkeeping/administrative costs, when they achieve scale. By retaining assets, plan sponsors can leverage those assets to achieve the lowest possible costs for all participants.

Supporting Participants' Entire Retirement Journey
A plan sponsor's philosophy for the plan may include supporting participants along their entire retirement journey, not just when they are employed.

Attractive Retirement Program
Offering a retirement program that supports participants' financial wellbeing in retirement may be considered an attractive feature that encourages newly hired participants to join the plan and existing participants to increase their savings.

Better Value than Retail
Plan sponsors may believe that the retirees are better off maintaining access to an institutional retirement program than leaving for a retail investment product.

Fiduciary Standards
Plan fiduciaries should act in the best interests of participants. Plan sponsors may believe that supporting their participants who are in retirement is part of their fiduciary duty.

Workforce Management
Offering tools and resources to help participants in retirement may may make it easier for individuals to feel comfortable retiring, which can aid with workforce planning.

Potential Negatives

Additional Costs
Plan sponsors may have concern with increasing costs to all participants in order to provide new tools, communications, services, or features oriented towards terminated participants or retirees.

Administrative Burden
Plan sponsors may be reluctant to take on the additional administrative burden of helping provide services to assist retired participants.

Additional Missing Participants
Plan sponsors may be challenged in maintaining contact information for terminated or retired participants. There may be additional costs in maintaining identifying and finding missing participants and risks if contact is lost.

DCIIA. "*The Pros and Cons of Keeping Assets in DC Plans.*" May 2022. https://cdn.ymaws.com/dciia.org/resource/resmgr/resource_library/StayingInPlan_042922.pdf
Latham, Lorie, CFA. T. Rowe Price. "T. Rowe Price Insights on Retirement: What DC Plan Sponsors Prefer Retiring Participants to DO and Why It Matters." February 2019. https://www.troweprice.com/content/dam/retirement-plan-services/pdfs/insights/rfa_What_DC_Plan_Sponsors_Prefer.pdf

Why do Participants Want to Remain in the DC Plan?

Potential Positives

Fiduciary Protection
DC plans require fiduciary oversight of investment performance, fees, and services. In comparison, retail IRAs generally don't have the same fiduciary requirements.

Lower Costs
DC plans generally can offer institutional investment products that have lower fees than what participants can generally find on their own in the retail market.

Familiarity
Participants may be comfortable with the features, user experience, and investments offered within their DC plan.

Simplified monitoring of one DC account
Participants may benefit from having retirement assets consolidated within a single account, which can make for easier monitoring of their asset allocation, distributions, and rebalancing.

Potential Negatives

Investment Choices
Participants might want to invest in funds that are not offered by their DC plan.

Desire for Additional Education or Advice
A participant may feel that their DC plan does not offer the educational resources or tools that they need to drawdown assets in retirement. They may also be looking for advice specific to their financial situation or goals, such as help with Social Security, Medicare, or estate planning, that the DC plan might not offer.

Account Consolidation
Participants may want to consolidate assets from various employers with assets from a spouse in order to more easily track and spend down assets, which may be easier to do with a retail product.

DCIIA. "*The Pros and Cons of Keeping Assets in DC Plans.*" May 2022. https://cdn.ymaws.com/dciia.org/resource/resmgr/resource_library/StayingInPlan_042922.pdf

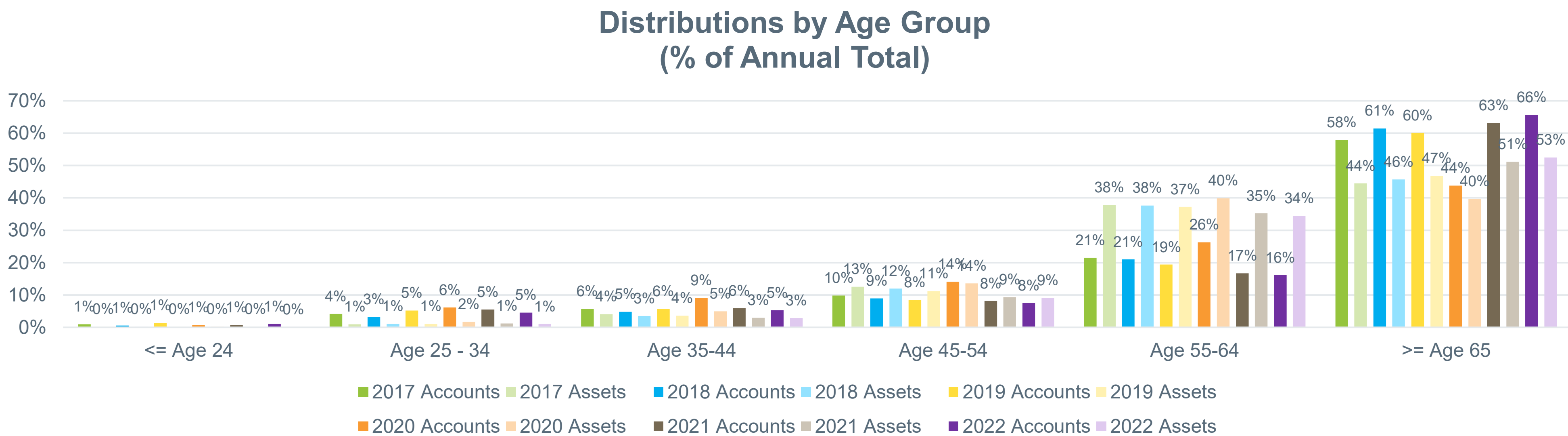
RVK

Distribution Analysis

Distribution Patterns: 2017-2022 Trends

- From 2017-2022, approximately 60% of participants with accounts requesting distributions were age 65 or older, representing ~47% of the total dollars leaving the plan. Participants age 55-64 represented ~20% of participants requesting distributions, and ~37% of the total dollar amount distributed.

- In 2020, the percentage of individuals age 65+ with a distribution decreased to 44% of total participants, likely due to the waiver of Required Minimum Distributions (RMDs) and an increase in Unforeseeable Emergency withdrawals (UEs) due to the pandemic.

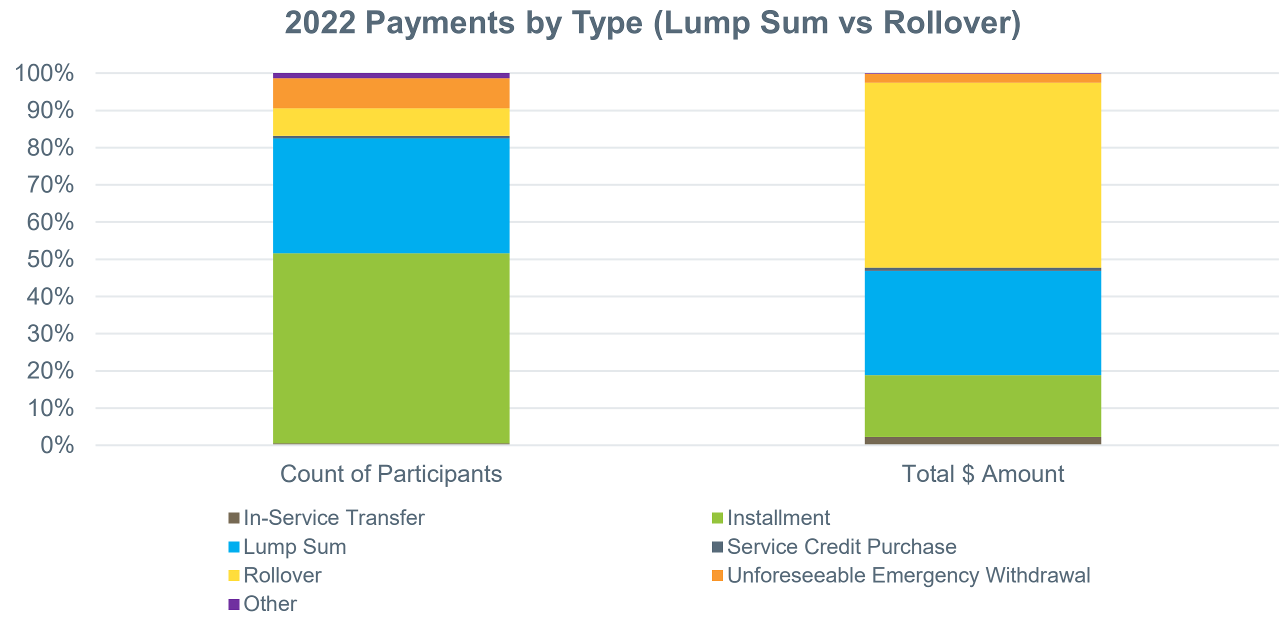


Age Group	2017		2018		2019		2020		2021		2022	
	Accounts with Distribution	Total $ Distributions	Accounts with Distribution	Total $ Distributions	Accounts with Distribution	Total $ Distributions	Accounts with Distribution	Total $ Distributions	Accounts with Distribution	Total $ Distributions	Accounts with Distribution	Total $ Distributions
<= Age 24	428	$1,210,500	253	$1,244,664	645	$1,412,235	225	$1,948,783	347	$1,571,749	525	$1,288,807
Age 25 - 34	1,792	$6,201,392	1,433	$7,455,779	2,588	$8,123,811	1,970	$12,511,480	2,834	$12,457,302	2,353	$10,092,873
Age 35-44	2,487	$26,093,397	2,154	$24,599,204	2,836	$27,305,490	2,898	$35,997,914	3,045	$31,204,018	2,727	$28,050,759
Age 45-54	4,273	$80,794,660	4,028	$84,364,667	4,253	$85,435,503	4,509	$99,589,726	4,198	$97,506,984	3,898	$88,904,554
Age 55-64	9,337	$243,259,741	9,411	$265,765,584	9,733	$284,664,187	8,447	$291,909,267	8,646	$368,521,702	8,373	$339,612,238
>= Age 65	25,163	$286,371,177	27,562	$322,695,395	30,154	$357,767,108	14,078	$290,015,474	32,649	$535,643,814	34,076	$517,249,054
All Ages	**43,480**	**$643,930,867**	**44,841**	**$706,125,293**	**50,209**	**$764,708,334**	**32,127**	**$731,972,644**	**51,719**	**$1,046,905,567**	**51,952**	**$985,198,285**

Note: 2020 distributions excludes payments categorized as tax refunds and reissued payments.
Data was provided by the Ohio DC Information Technology Department.

Distribution Patterns: All 2022 Distributions

- When broken out as cash lump sum vs. rollover distributions, rollover distributions were requested by approximately 3,200 participants (~7% of total participants requesting a payment) and ~48% of assets distributed.



	Distribution Type Breakdown (2022)			
Distribution Type	**Count of Participants**	**% of Total Participants**	**Total $ Amount**	**% of Total $ Amount**
In-Service Transfer	195	0%	$17,394,080	2%
Systematic Withdrawal	24,652	55%	$194,133,747	20%
Lump Sum	14,607	33%	$287,596,572	29%
Service Credit Purchase	256	1%	$6,699,526	1%
Rollover	3,212	7%	$468,623,867	48%
Unforeseeable Emergency Withdrawal	2,063	5%	$9,946,543	1%
Other	1,978	4%	$803,950	0%
All Distributions	**44,881**	**100%**	**$985,198,285**	**100%**

Note: Distribution type "Other" consists of Accelerated Payments and Small Balance Distributions.
Data was provided by the Ohio DC Information Technology Department.

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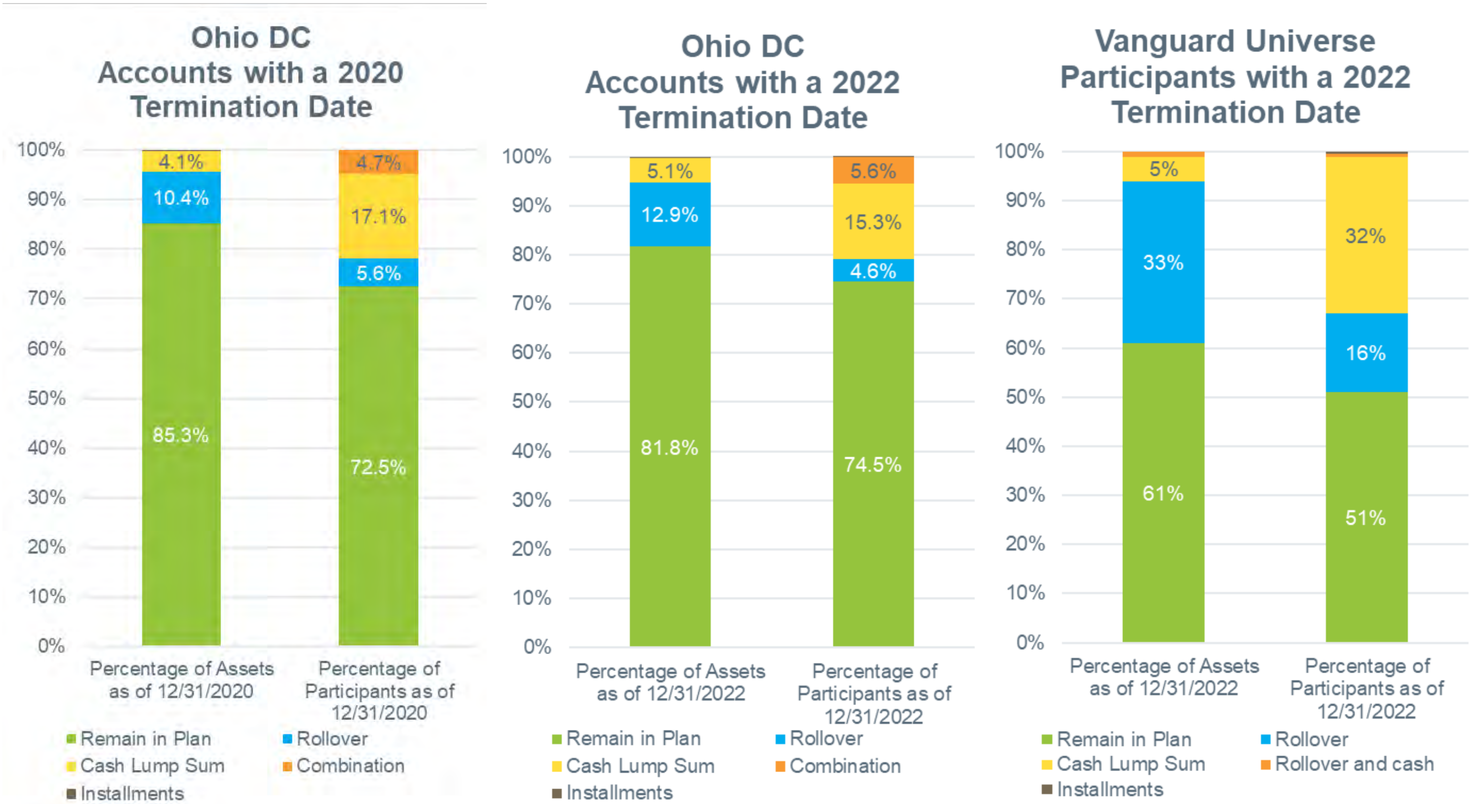
Distribution Patterns: Separated Participants

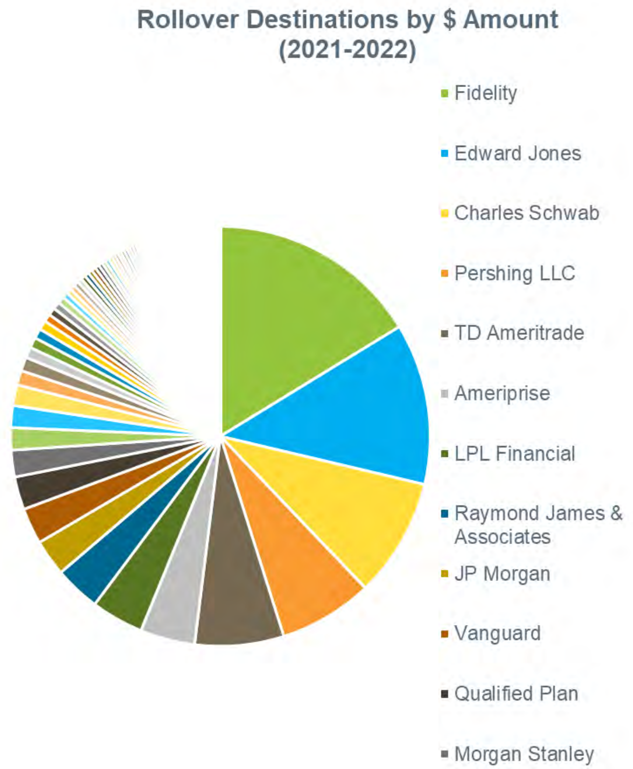
- Among Ohio DC participant accounts with a separation date in 2022, ~82% of assets and ~75% of participant accounts remained in the Program as of 12/31/2022, rather than taking a distribution. Relative to 2020 terminated participants, 2022 saw a small increase in the percentage of assets distributed, but a small decrease to the percentage of participants distributing assets.
- RVK compared the actions of Ohio DC participants with a separation date in 2022 to a peer group universe developed by Vanguard. Although the peer group represents primarily corporate plans and may not be directly comparable (e.g., some plans do not offer systematic withdrawal distributions), the universe generally show a lower percentage of assets and participants remaining in employer-sponsored DC plans by the end of the year for participants who separated that year.



Vanguard Universe data is from "How America Saves 2023" and includes 1,700 qualified plans (primarily 401(k) and 403(b) plans) encompassing 4.7 million participants for which Vanguard provides recordkeeping services. RVK's analysis generally attempted to mirror the methodology published by Alight. RVK was not able to determine precise methodology details for Vanguard, although the methodology is presumed to be similar. RVK's analysis assumes that all distributions took place at the end of the year. Participant accounts were classified into headcount categories based on an 80% threshold; if no one category had at least 80% of assets, then the account was classified as a "combination." A limited number of In-service transfers, Service Credit Purchases, and Unforeseeable Emergency Withdrawals were excluded, as were tax refunds and reissued payments. Data was provided by the Ohio DC Information Technology Department.

Distribution Patterns: Rollovers

- During the two-year period, participants requested rollovers to 254 institutions. (Qualified Plans are counted as one institution.)
- The annual total dollars of rollover outs decreased from ~$520 million in 2021 to ~$469 million in 2022, though rollovers as a portion of total Ohio DC assets increased slightly (2.6% in 2021 vs. 2.8% in 2022).
- The top 20 rollover providers by assets (listed below) received approximately 84% of rollover assets and 81% of participants, similar to RVK's analysis of 2017-2020 rollovers. The top institutions have remained relatively the same over the past six years, representing a mix of leading brokerage providers and wealth management / RIA firms.
- Overall, Nationwide IRAs represented approximately 0.25% of assets and 0.34% of participants with a rollover during 2021-2022. Nothing in the data would suggest that Nationwide representatives are inappropriately steering participants towards proprietary products.



Top Rollover Institutions (2021-2022)	Rollover $ Amount	% of Rollover $ Amount	Participants with Rollover	% of Participants with Rollover
Fidelity	$161,258,405	16.3%	897	13.9%
Edward Jones	$123,237,433	12.5%	974	15.0%
Charles Schwab	$90,912,564	9.2%	434	6.7%
Pershing LLC	$71,851,890	7.3%	460	7.1%
TD Ameritrade	$68,007,685	6.9%	415	6.4%
Ameriprise	$41,847,846	4.2%	254	3.9%
LPL Financial	$40,042,020	4.1%	263	4.1%
Raymond James & Associates	$35,089,048	3.5%	187	2.9%
JP Morgan	$27,767,069	2.8%	155	2.4%
Vanguard	$27,634,412	2.8%	147	2.3%
Qualified Plan	**$25,149,066**	**2.5%**	**333**	**5.1%**
Morgan Stanley	$20,421,113	2.1%	101	1.6%
Merrill Lynch	$16,987,386	1.7%	102	1.6%
UBS Financial Services	$16,795,492	1.7%	73	1.1%
Wells Fargo	$15,820,138	1.6%	98	1.5%
Capital Bank & Trust	$11,065,222	1.1%	89	1.4%
Allianz	$10,599,144	1.1%	78	1.2%
Stifel Financial	$8,184,846	0.8%	45	0.7%
SEI Private Trust	$8,074,899	0.8%	54	0.8%
PNC Investments	$7,471,630	0.8%	83	1.3%

Data was provided by the Ohio DC Information Technology Department.

Ohio DC's Approach to Asset Retention

Ohio DC's Goals for Asset Retention

- RVK's understanding is that Ohio DC has historically encouraged participants to keep their assets in the Program after separation (especially after retirement) and intends to do so going forward.

- **What reasons for retaining participant assets are most important to Ohio DC?**
  - ❑ Belief that Ohio DC's mission includes supporting along their entire retirement journey, not just when they are employed.
  - ❑ Maintain overall scale of Ohio DC to reduce costs for all participants.
  - ❑ Belief that Ohio DC offers a better value for participants in retirement than other products available to participants on the retail market.
  - ❑ Ohio DC's fiduciary oversight leads to better investment outcomes.
  - ❑ Supporting terminated participants and retirees makes Ohio DC more attractive overall.
  - ❑ Others?

- **What level of cost does Ohio DC believe is appropriate to retain terminated/retired participant assets?**
  - ❑ Retain all possible assets, regardless of cost to the overall Program.
  - ❑ Only retain assets that can be retained at a reasonable cost to the Program.
  - ❑ Only consider asset retention strategies that do not increase the costs of operating the Program.

- **How easy/difficult should Ohio DC make it for participants to access their savings?**
  - ❑ Ohio DC should take all possible actions to ensure that participants are aware of the consequences of taking a distribution and/or the benefits of remaining with Ohio DC before being able to process a distribution.
  - ❑ Participants should be allowed to access their savings with as little time or administrative burden as possible.

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Potential Strategies for Enhancing Asset Retention

	Additional Education Opportunities	Self-Directed Brokerage Account ("SDBA")	Managed Accounts	Retirement Income Solutions
Summary Description	• Nationwide's Service Center provides an opportunity to educate participants on Ohio DC's advantages relative to other rollover options.	• Provides participants access to a broad array of investment options outside of the core menu. • SBDA platform would be maintained by a broker-dealer.	• Fee-based service whereby a provider assumes discretion over participants' retirement portfolio, using the investments available within the Ohio DC menu.	• Holistic set of solutions that can help participants approaching and in retirement achieve better outcomes during decumulation phase
Estimated Decision Factors				
Demonstrated link to increasing asset retention	Varies	Low	Medium	Varies / TBD
Implementation Costs to Ohio DC	None	High	High	Varies / TBD
Ongoing Costs to Participants	None	Varies	Medium to High	Varies / TBD
Demonstrated link to meaningful participant utilization	Varies	Low	Low to Medium	Varies / TBD

Key: Green = Favorable likely outcome; Yellow = Moderately favorable likely outcome; Orange = Unfavorable likely outcome;
Gray = Likely outcome varies or is unknown

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Current approach to asset retention

- **Participants requesting rollover-out or transfer-out forms must call the Service Center.**
- **This provides a retention opportunity to discuss Ohio DC's advantages:**

  - ✓ Low expense ratios and admin. fees
  - ✓ Fee caps on high-balance accounts
  - ✓ Professional investment oversight
  - ✓ Highly scrutinized investment policy
  - ✓ Ohio-based Retirement Planning Specialists
  - ✓ Enrich financial wellness at no cost
  - ✓ Flexible distribution options
  - ✓ Competitive, liquid Stable Value Option

- **Participants must complete a Transfer Disclosure Statement form which is designed to show the fees paid to the receiving trustee or custodian, along with surrender charges, loads, etc.**

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OHIO Deferred Compensation *Invest in you.*

Future plans to improve asset retention

- Interviews with staff and two previous professional surveys tell us:
  - By the time participants call to request a rollover form (usually with a Financial Advisor on the line) they have already made up their minds to transfer.
  - Retention needs to begin long before assets become eligible to move.
  - Participants seek advice and consolidate with local relationships they trust.
  - Ohio DC needs to find other ways to become the expert in participants' eyes.
- More offerings of in-depth educational webinars (Tax Efficient Income, Social Security, Medicare, Women & Investing, etc.)
- Greater promotion of retirement planning expertise
- Retention conversations with every field interaction
- Develop a retention script for full lump sum withdrawals over $20k
- Increased retention communications (2023 emails and postcards)

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Ohio Deferred Compensation
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Appendix

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Self-Directed Brokerage Accounts Overview

What is a Self-Directed Brokerage Account ("SDBA")?

- A defined contribution retirement program option that allows participants access to a broad array of investment alternatives outside of a core investment menu.

What is the plan fiduciary's typical responsibility when offering an SDBA?

- Prudently select and monitor the broker-dealer who maintains the SDBA and the SDBA program / platform.
- Not responsible for monitoring the individual investments used by participants within the SDBA.
- SDBA providers generally give plan fiduciaries the opportunity to select which categories of investments can e offered. (e.g., mutual funds only.)

SDBA: From a Plan Sponsor’s Perspective

Pros:

- Allows access to unique investment options without expansive core menu.
- Helps with requests for additional investment options from a small sub-set of participants.
- Facilitates simplification of the core investment menu; a prospective benefit to all participants.

Cons:

- Additional provider relationship to monitor and oversee.
  – Decisions on allowable investments (i.e., mutual fund only, vehicle/security restrictions)
  – Additional education and reporting for participants
  – Additional monitoring of the SDBA provider
- Typically, low participant utilization rates.
- "Buyer beware" – open range of options may decrease participant diversification and/or increase participant usage of more volatile and potentially unsuitable investments. Participants may not have appropriate investment education/acumen; necessitating consideration of additional risk disclosures and communication activities.
- Potential for higher audit fees.

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SDBA: From a Participant's Perspective

Pros:

- Additional choice beyond the core investment menu.
- May allow the creation of a portfolio to meet unique needs.
- Potential access to additional proprietary research, education, and trading tools from third-party vendors.

Cons:

- Many investment options – not necessarily better options / performance; option count may be overwhelming to some users.
- Potentially less attractive pricing (versus the core menu) due to higher retail expense ratios, brokerage account fee and other transaction and miscellaneous fees.
- Typically, a two-step process for SDBA setup and funding – can lead to temporarily un-invested assets.
- Adding SDBA would likely necessitate an "equity wash" for participants moving between the Stable Value Option and the SDBA. An equity wash is a common contractual provision in stable value that requires that a participant leaving stable value be invested for a period of time (typically 90 days) in a "non-competing option." Since the landing point for a SDBA is typically a money market fund, an equity wash normally applies.

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SDBA – DC Plan Utilization

Vanguard's 2023 How America Saves Survey

- 38% of plans with 5,000 or more participants offer an SDBA (20% overall).
- Across all plans that offer an SDBA, only 1% of participants used the feature and about 1% of plan assets were invested in the SDBA.

Plan Sponsor Council of America (PSCA) 65th Annual (2023) Survey of Profit Sharing and 401(k) Plans

- 47.2% of plans with 5,000 or more participants offer an SDBA (31.6% overall).
- Across plans with 5,000 or more participants, 2.2% of plan assets were invested in the SDBA (2.3% overall).

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SDBA – DC Plan Utilization

- **Charles Schwab: The Schwab Self-Directed Brokerage Account Indicators**

  - Top mutual fund holdings among SDBA holders include S&P 500 and Total Stock market index funds, which are commonly provided on DC investment lineups, as well as popular mutual funds.

  - Top equity holdings are often large household names, such as Apple and Amazon, or companies that have seen significant growth or momentum, such as Nvidia and Tesla.

Top 10 Mutual Fund Holdings**	% MF Assets
SCHWAB S&P 500 INDEX	6.14%
SCHWAB TOTAL STOCK MARKET INDEX	3.07%
VANGUARD 500 INDEX ADMIRAL	1.58%
VANGUARD TOTAL STOCK MKT IDX ADM	1.37%
SCHWAB INTERNATIONAL INDEX	1.00%
PIMCO INCOME INSTL	0.84%
SCHWAB US AGGREGATE BOND INDEX	0.82%
SCHWAB SMALL CAP INDEX	0.75%
PFG AMERICAN FUNDS GROWTH STRATEGY R	0.73%
DODGE & COX STOCK I	0.72%

Top 10 Equity Holdings	%EQ Assets
APPLE INC	11.93%
TESLA INC	4.98%
AMAZON.COM INC	3.88%
MICROSOFT CORP	3.32%
BERKSHIRE HATHAWAY CLASS	2.31%
NVIDIA CORP	1.90%
ALPHABET INC. CLASS	1.58%
ALPHABET INC. CLASS	1.12%
COSTCO WHOLESALE CO	0.94%
EXXON MOBIL CORP	0.86%

**Top 10 Mutual Funds does not include Money Market Funds.
Charles Schwab. "The Schwab Self-Directed Brokerage Account Indicators." Quarter Ending 12/31/2022. Figures are based on all PCRA participants with a minimum balance of $5,000 and a maximum balance of $10,000,000 in their PCRA account.

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SDBA Marketplace

- The SDBA provider universe has historically been very limited. Recordkeepers have generally offered either a proprietary/white labeled product, or a third-party offering through Charles Schwab and/or TD Ameritrade.
  - With Charles Schwab's recent purchase of TD Ameritrade, recordkeepers who had been using TD Ameritrade are now generally moving to Charles Schwab's platform. At this time, an alternative third-party provider has not yet emerged.

SDBA Provider	# of Recordkeepers
Schwab PCRA	**11**
TD Ameritrade	**7**
Properitary	**4**
White Label	**2**

- Schwab PCRA is the mostly commonly available SDBA platform among recordkeepers, followed by TD Ameritrade.
- Recordkeeper proprietary options (e.g., Bank of America/Merrill Lynch & Fidelity) are not generally available on other recordkeeping platforms.
- BNY Mellon / Pershing, which provides a white labeled SDBA solution for two recordkeepers: Alight Solutions and TIAA, might represent an alternative option but there are some drawbacks (much higher expected implementation cost/risk and higher expected transactional fee levels, including exchange traded equity commissions)

Source of table: RVK marketplace research conducted in 2022

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SDBA – Summary & Next Steps

- An SDBA could be offered to Ohio DC participants as a way to offer alternative investment options for individuals who want more choice. However, an SDBA may not be used appropriately by all participants, or lead to better retirement outcomes, and investments will likely be at higher costs than current offerings.

- Based on RVK's review of the SDBA provider universe, Charles Schwab is likely the only viable option that would not require Ohio DC to build its own, more customized service. However, even adding a SDBA through Charles Schwab would represent a significant project for the Ohio DC IT Department. (Estimated to be at least a year-long project with multiple dedicated IT support resources and high product owner engagement.)

- Ohio DC had 3,212 participants and ~$469 million of assets leave in 2022 via rollovers. Based on a 5% SDBA usage rate (which would be high), adoption could have potentially led to the retention of 161 participants and $23 million in assets. Based on the average account balance, this would represent approximately $32,800 in administrative fees.

- If the Board has interest in pursuing an SDBA option further, the next step would be a more detailed overview of potential provider options, anticipated implementation costs to Ohio DC, and a draft project timeline.

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Managed Accounts Overview

- A managed account is a fee-based service whereby a service provider assumes discretion over a participants' retirement portfolio, using the investments available within the DC Plan's investment menu.

- Similar to a target date fund, managed accounts are designed to de-risk as the participant approaches retirement.

- Managed accounts are considered a **Tier 1 - "Do it for me"** option for participants who desire a more personalized experience than target date funds.

Minimal Participant Involvement	← →	Full Participant Involvement
"Do it for me" A professionally managed diversified investment portfolio where the asset allocation changes as a participant approaches retirement.	**"Do it with me"** Reviewed and approved investment options available to participants to build their own diversified investment portfolio.	**"Do it myself"** Participants must review and select the tools used to build their own diversified investment portfolio
Tier 1	Tier 2	Tier 3
Target Date Funds	Capital Preservation; Diversified Fixed Income	Self-Directed Brokerage Account
Managed Accounts	Diversified Inflation Protection; Diversified Global Equity	

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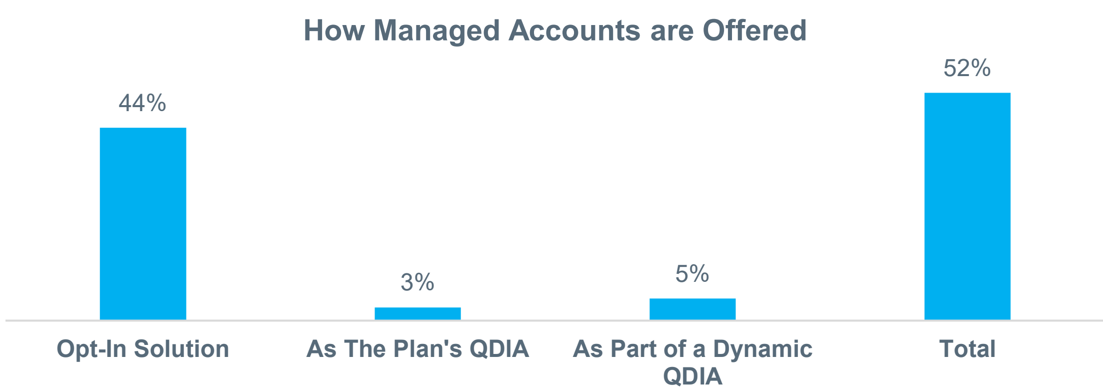
Managed Accounts - Considerations

A high-quality managed accounts service can be valuable to highly-engaged participants who are likely to benefit from the service's personalization capabilities. However, managed accounts have costs and limitations that must be carefully considered.

Advantages	Disadvantages
Personalized Investment Advice	Higher Ongoing Fees
Support for Retirees & Asset Retention	Additional Due Diligence Needed
Leveraging the Investment Menu	Challenging for Performance Evaluation
Ongoing Investment Monitoring	Ongoing Participant Engagement is a Must
More Competitive Benefit Packages	Portability Varies Across Providers
Encourages Higher Saving Rates	Typically, an 'All or Noting' Election for Participants

Managed Accounts – DC Plan Utilization

- Adoption of managed accounts is stronger among larger plans.
  - Survey data has shown that 49% of DC plan sponsors currently offer managed accounts, compared to 57% of larger plans (>5,000 participants).
- Participant utilization remains low.
  - Cerulli survey data as of year-end 2019 found that managed accounts programs oversaw 3.6% of total DC assets and were used by 2.9% of total DC participants.
  - According to Vanguard's *How American Saves,* only 9% of participants with access to a managed account use the service.
  - Across RVK DC clients that offer access to a managed account program, participant service enrollment is 7% in the median DC plan.
- Managed accounts are typically offered as an opt-in solution.
  - Cerulli found that roughly 52% of DC plan sponsors surveyed currently offer managed accounts, but only 8% offer is as part of the plan's Qualified Default Investment Alternative (QDIA).



Retirement Edge Report (Cerulli Associates, 2020 and 2022).
How America Saves (Vanguard, 2023).
RVK's Annual DC Fee Benchmarking Survey (2023). Data is as of 12/31/2022.

Managed Accounts – Marketplace Overview

- The managed accounts market is dominated by a few industry providers, with the largest five providers managing the majority of retirement plan managed account assets.

Top Managed Account Providers	Total Assets ($B) (Q2 2022)
Edelman Financial Engines	$192.0B
Morningstar Retirement Manager	$116.3B
Fidelity Personalized Planning & Advice (PP&A)	$82.1B
Alight Solutions (sub-advised by Edelman Financial Engines)	$29.5B
GuidedChoice	$5.8B

Top Providers Overview

- Edelman Financial Engines
  - Edelman Financial Engines has historically been the leading investment advisor for DC plans, on its reputation for independence and a robust investment methodology. Its high AUM is mainly driven by its large average plan size (>$200M).
- Morningstar Retirement Manager
  - Launched in 2002, this is one of the first managed account programs in the U.S. Morningstar boasts connectivity with most recordkeepers and a diverse client base across different plan sizes.
- Fidelity Personalized Planning & Advice (“PP&A”)
  - Fidelity’s proprietary managed account service started managing accounts for defined contribution plans in 2003. Unlike other top providers, PP&A is exclusively available to its recordkept clients with no immediate plans to partner with other recordkeepers.

Retirement Edge Report (Cerulli Associates, 2Q 2022).

Managed Accounts – Summary & Next Steps

- A managed accounts program could be offered to Ohio DC participants in order to provide personalized investment advice to interested participants. However, a managed accounts service is provided at meaningful additional fees to participants, requires ongoing participant engagement to be successful, and does not replicate the full suite of services provided by a wealth management advisor.

- There are several considerations regarding potential implementation by Ohio DC:
  - The Board has previously decided against offering advice services to participants. Has this stance changed?
  - Based on RVK's review of the SDBA provider universe, there are multiple Managed Accounts providers that Ohio DC could conceivably partner with. Implementation would likely have significant costs even for a limited integration approach. A greater level of integration could increase utilization and potentially improve outcomes, but it would mean even more significant costs and potentially limit Ohio DC's ability to change the managed accounts provider in the future. (Estimated to be at least a year-long project with multiple dedicated IT support resources and high product owner engagement.)

- Ohio DC had 3,212 participants and ~$469 million of assets leave in 2022 via rollovers. Based on a 10% Managed Accounts usage rate (which would be high), adoption could have potentially led to the retention of 161 participants and $23 million in assets. Based on the average account balance, this would represent approximately $65,600 in administrative fees.

- If the Board has interest in pursuing a managed accounts service further, the next step would be a more detailed overview of potential provider options, anticipated implementation costs to Ohio DC, and a draft project timeline.

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Retirement Income Solutions – A "Retirement Tier"

Spurred by an increased awareness of the shortcomings of the classic three-tiered investment menu in meeting those needs, and heightened interest in bridging this gap, plan sponsors and investment professionals are developing the concept of a "**Retirement Tier**".

A Retirement Tier encompasses a holistic set of **solutions** that can help retirees and participants approaching retirement achieve better outcomes during the decumulation phase.

Potential Solutions in a "Retirement Tier"

Tier 1 Do it For Me	Tier 2 Help me Do It	Tier 3 Leave me to It
Target Date Funds	Core Options	Brokerage Window
Professionally Managed Accounts	Guaranteed & Non-Guaranteed Solutions	Flexible Distribution Options
Hybrid Target Date Funds	Defined Benefit Credit Purchase	Retirement Tools & Calculators
Dynamic Default Investment Options	Professionally-Managed Accounts	
	Retirement Resources and Campaigns	

More Plan Sponsor Engagement ⟷ Less Plan Sponsor Engagement

Default Option	Investment Options	Education	Tools	Functionality

Retirement Income Solutions

Opportunities for Plan Sponsors

Plan sponsors and employers are uniquely positioned to help their retiring employees generate retirement income from their savings:

Resources
- Plan sponsors have more resources to carry out due diligence on retirement income solutions, meet various goals regarding protection from common risks, and minimize transaction costs and conflicts of interest.

Institutional Pricing
- Plan sponsors can significantly increase the amount of retirement income that participants might receive.

Incentives
- No economic incentive that might bias the design of a retirement income program.

Cognitive Costs
- Plan sponsors can help overcome inertia by facilitating the implementation of employees' decisions.

Products
- Some retirees may be served best by choosing a combination of retirement income generators. Plan sponsors can help by offering a limited menu of retirement income-oriented options.

Education
- Plan sponsors can improve retirees' decision-making with unbiased communications and tools on generating retirement income.

Source: The Next Evolution in Defined Contribution Retirement Plan Design, Stanford Center on Longevity, 2013.

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Retirement Income Solutions

Challenges

Plan Needs

- Identifying the types of retirement income solutions that best fit a plan's participant base can be challenging without conducting a more in-depth analysis about participants' income sources, current retirement income profiles, and spending needs.

Fiduciary obligations

- Plan sponsors need to follow prudent processes to evaluate and determine the appropriateness of retirement income solutions.
- The SECURE Act has provided new safe harbor provisions and concrete guidance on the selection of insurance companies providing annuity products to plans.

Operational and administrative considerations

- Portability has been a significant challenge to the guaranteed income product marketplace.
    - The SECURE Act has provided some relief and guidance on portability issues.
- Plan distribution options and processes must be flexible enough to accommodate the desired distribution frequency for retirees (e.g., automatic monthly withdrawals that provide a "paycheck" like experience).

Communications

- Pre-retirement communications and distribution forms may encourage participants to roll over their assets to an IRA or take a lump sum distribution.
- Retirement income solutions can be challenging to effectively describe within participant communications – often times these products require in-person discussions.
- Understanding and disclosing fees and costs can be challenging due to unique structures of various retirement income product types.

Source: DCIIA Guide to Lifetime Income Solutions, 2015

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Retirement Income – Summary & Next Steps

- A retirement income tier evaluation would start by evaluating Ohio DC’s participant base to evaluate retirement readiness to understand how participants are currently using the plan, participants’ sources of retirement savings, and current plan design features.

- RVK typically recommends a three-step process to evaluate retirement income needs. Phase 1 is being presented at today’s Board meeting, and Phase 2 and Phase 3 are expected to be presented at future meetings.

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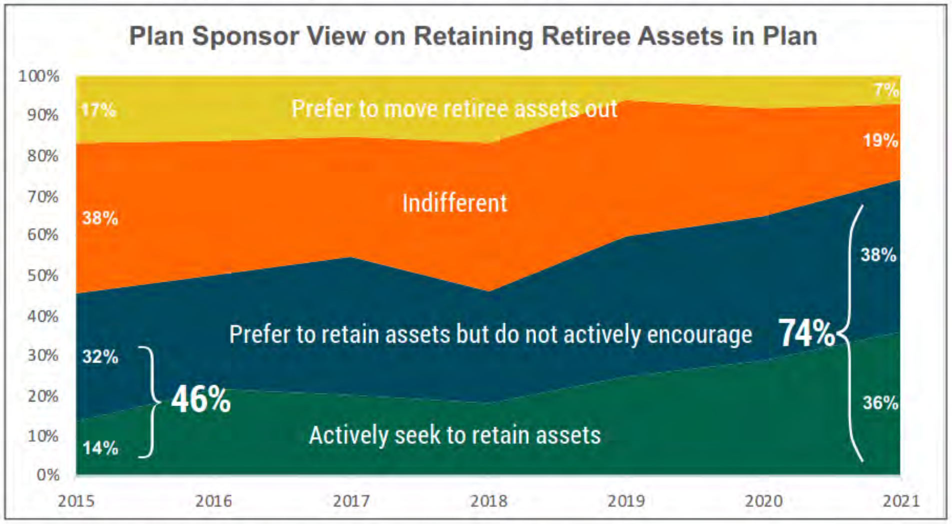
Plan Sponsor Perspectives on Asset Retention

- As defined contribution savings programs have become a more crucial way to provide income to participants in retirement, plan sponsors have begun to express more of a preference to retain assets.

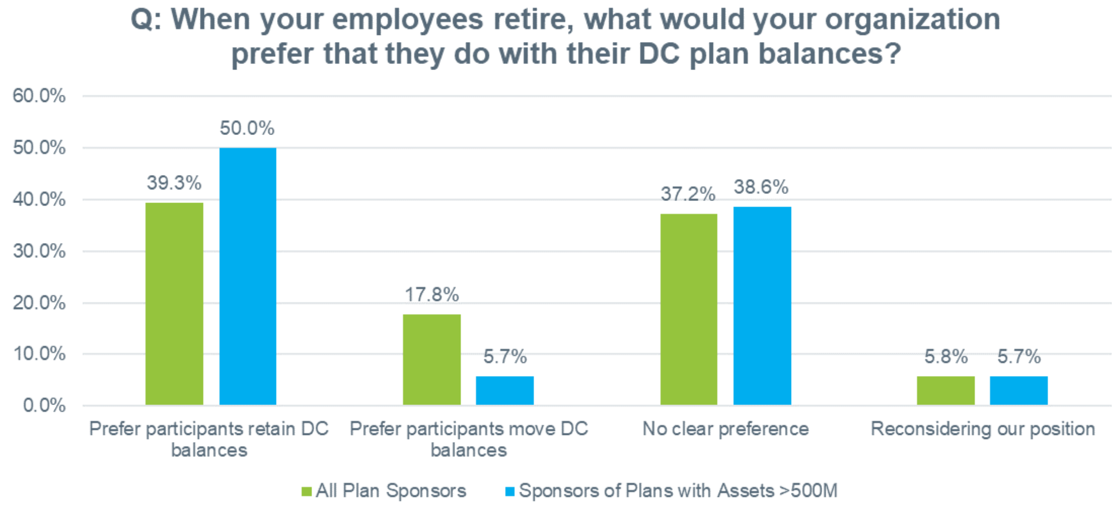
- According to research conducted by T. Rowe Price, larger plan sponsors are more likely to prefer that participants retain assets in the DC plan.

Exhibit 1

Consultants report more sponsors now actively seeking to retain retiree's assets



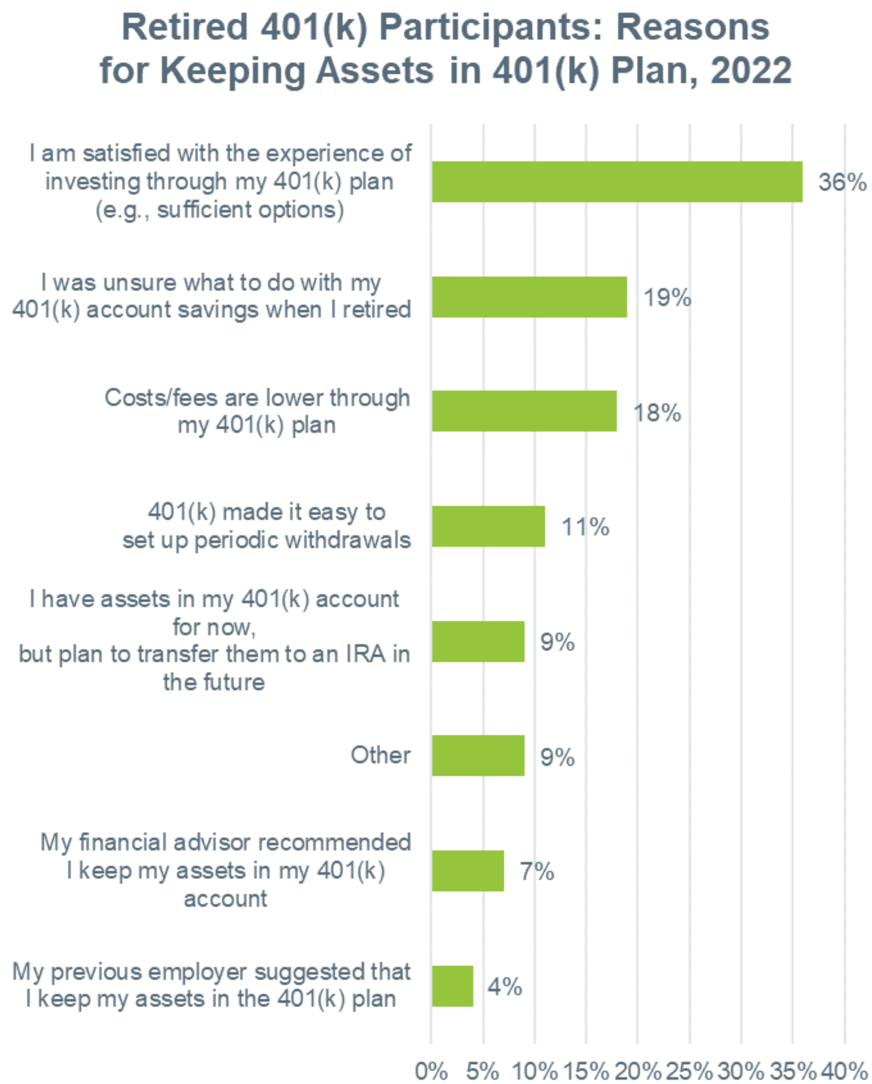
SOURCE: PIMCO, 2021 Defined Contribution Consulting Study



Latham, Lorie, CFA. T. Rowe Price. "T. Rowe Price Insights on Retirement: What DC Plan Sponsors Prefer Retiring Participants to DO and Why It Matters." February 2019. https://www.troweprice.com/content/dam/retirement-plan-services/pdfs/insights/rfa_What_DC_Plan_Sponsors_Prefer.pdf The survey contained results from 191 plan sponsors, including 88 respondents with >$500M in plan assets.

Why do Participants Decide to Retain Assets?

- According to a study published by Cerulli, participants who remain in their 401(k) plan did so due to satisfaction with the investment offering (36%), or because their DC plan had low fees (18%).
- Approximately 18% of participants remained in plan because they didn't know what else to do with their account.
- Limited to no data exists on the extent to which changes to the plan or the offering of additional products or services will cause participants to retain assets in a DC plan.



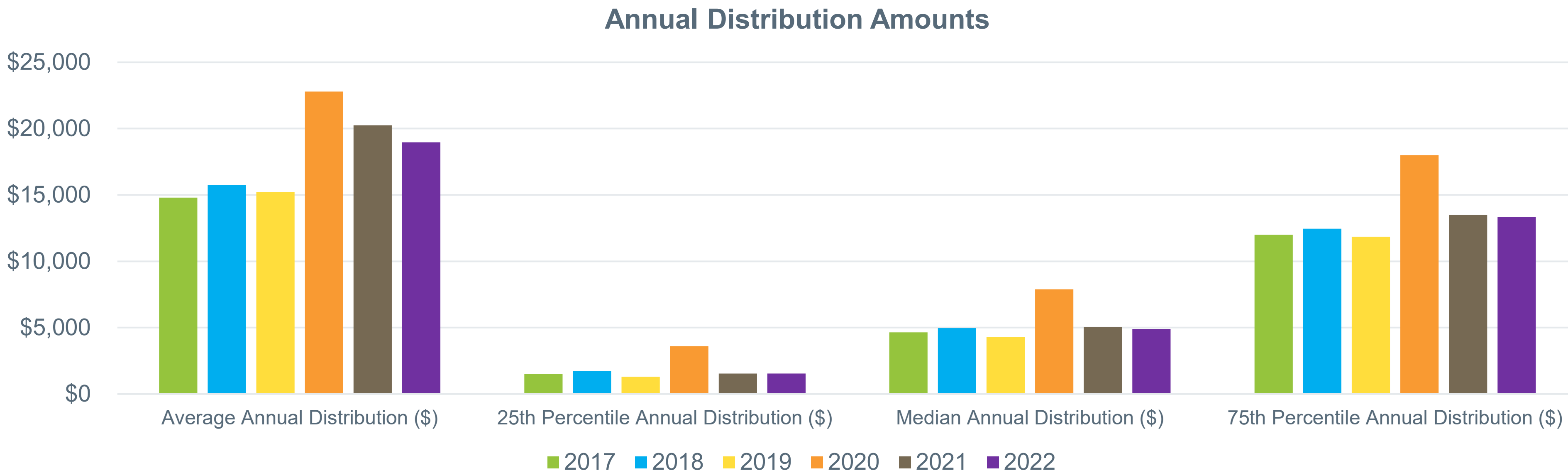
Cerulli Associates. "401(k) Plan Participant Survey". Data in Cerulli's Retirement End Investor report includes the results of a 1Q 2022 proprietary survey of 1,497 401(k) participants including both active participants and retirees. Survey results are weighted to align with U.S. population demographics. The above survey question was asked only to retired 401(k) plan participants who indicated they left their 401(k) assets in their former employer's plan. Respondents were asked to select all applicable options. "Other" includes "do not need to withdraw assets yet," "still exploring out-of-plan options," and "good in-plan fixed-income options."

Appendix

A. Self-Directed Brokerage Account Education
B. Managed Accounts Education
C. Retirement Income Education
D. Data on Asset Retention
E. Distributions Analysis Supplement

Distribution Patterns: 2017-2022 Trends

- The average and median annual payment amount increased significantly in 2020. This appears to be due to the lack of RMDs and the significant gains in equity markets in 2020.
- The average annual payment amount is greater than the 75th percentile annual payment amount due to a smaller number of large account balance participants requesting payments.

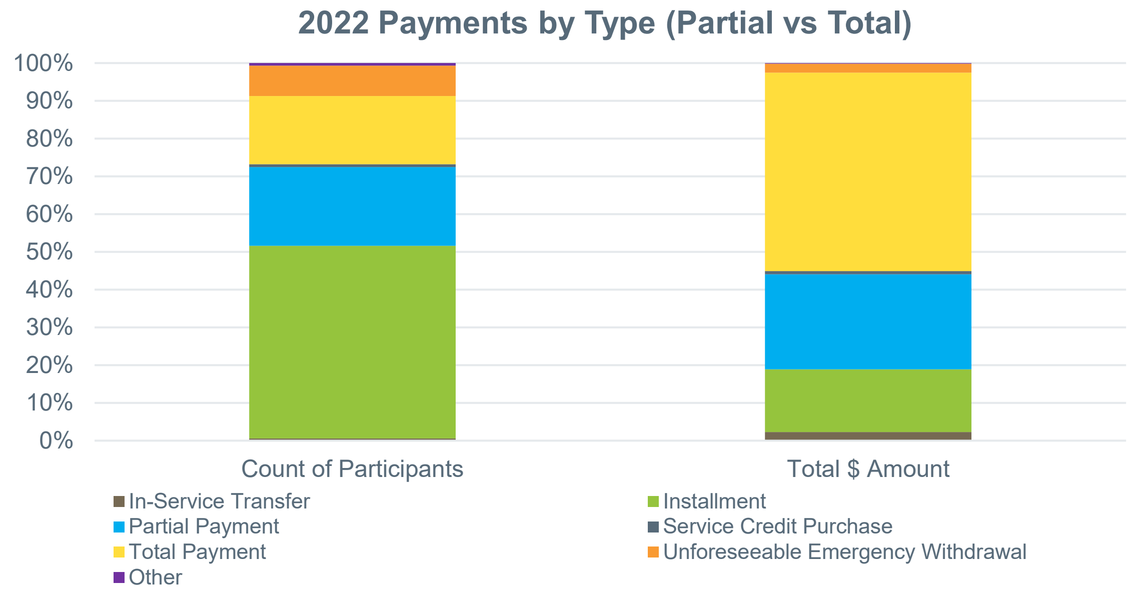


	2017	2018	2019	2020	2021	2022
Accounts Receiving a Payment	43,480	44,841	50,209	32,127	51,719	51,952
Total Payments ($)	$643,930,867	$706,125,293	$764,708,334	$731,972,644	$1,046,905,567	$985,198,285
Average Annual Distribution ($)	$14,810	$15,747	$15,231	$22,784	$20,242	$18,963
25th Percentile Annual Distribution ($)	$1,524	$1,749	$1,311	$3,600	$1,552	$1,549
Median Annual Distribution ($)	$4,651	$4,973	$4,316	$7,896	$5,042	$4,904
75th Percentile Annual Distribution ($)	$12,000	$12,464	$11,865	$17,981	$13,500	$13,341

Note: 2020 distributions excludes payments categorized as tax refunds and reissued payments.
Data was provided by the Ohio DC Information Technology Department.

Distribution Patterns: All 2022 Distributions

- Approximately 55% of participants requesting distributions during 2022 received a type of systematic withdrawal.
- The percentage of distributions categorized as "Total Payments" was 20%.



Distribution Type	Distribution Type Breakdown (2022)			
	Count of Participants	% of Total Participants	Total $ Amount	% of Total $ Amount
In-Service Transfer	195	0%	$17,394,080	2%
Systematic Withdrawal	24,652	55%	$194,133,747	20%
Partial Payment	9,320	21%	$236,117,040	24%
Service Credit Purchase	256	1%	$6,699,526	1%
Total Payment	8,974	20%	$520,103,398	53%
Unforeseeable Emergency Withdrawal	2,063	5%	$9,946,543	1%
Other	1,978	4%	$803,950	0%
All Distributions	**44,881**	**100%**	**$985,198,285**	**100%**

Note: Distribution type "Other" consists of Accelerated Payments and Small Balance Distributions.
Data was provided by the Ohio DC Information Technology Department.

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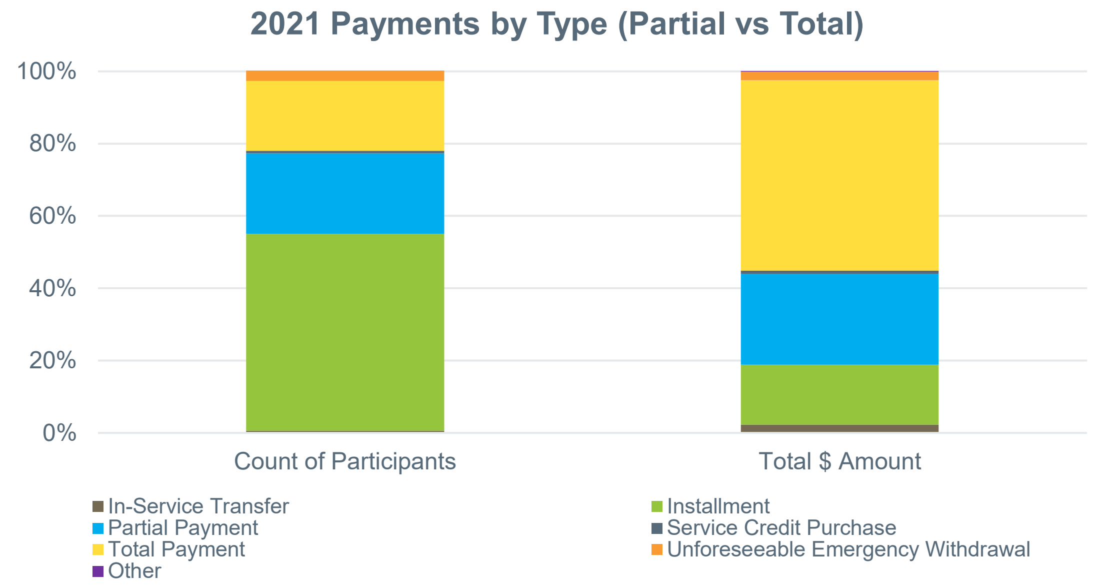
Distribution Patterns: All 2021 Distributions

- Approximately 51% of participants requesting distributions during 2021 received a type of systematic withdrawal.
- The percentage of distributions categorized as “Total Payments” was 18%.



Distribution Type	Distribution Type Breakdown (2021) Count of Participants	% of Total Participants	Total $ Amount	% of Total $ Amount
In-Service Transfer	244	1%	$23,924,424	2%
Systematic Withdrawal	23,169	51%	$173,773,476	17%
Partial Payment	9,461	21%	$263,317,547	25%
Service Credit Purchase	315	1%	$9,543,449	1%
Total Payment	8,194	18%	$549,552,158	52%
Unforeseeable Emergency Withdrawal	3,646	8%	$25,510,314	2%
Other	2,950	7%	$1,284,199	0%
All Distributions	**45,348**	**100%**	**$1,046,905,567**	**100%**

Note: Distribution type “Other” consists of Accelerated Payments and Small Balance Distributions.
Data was provided by the Ohio DC Information Technology Department.

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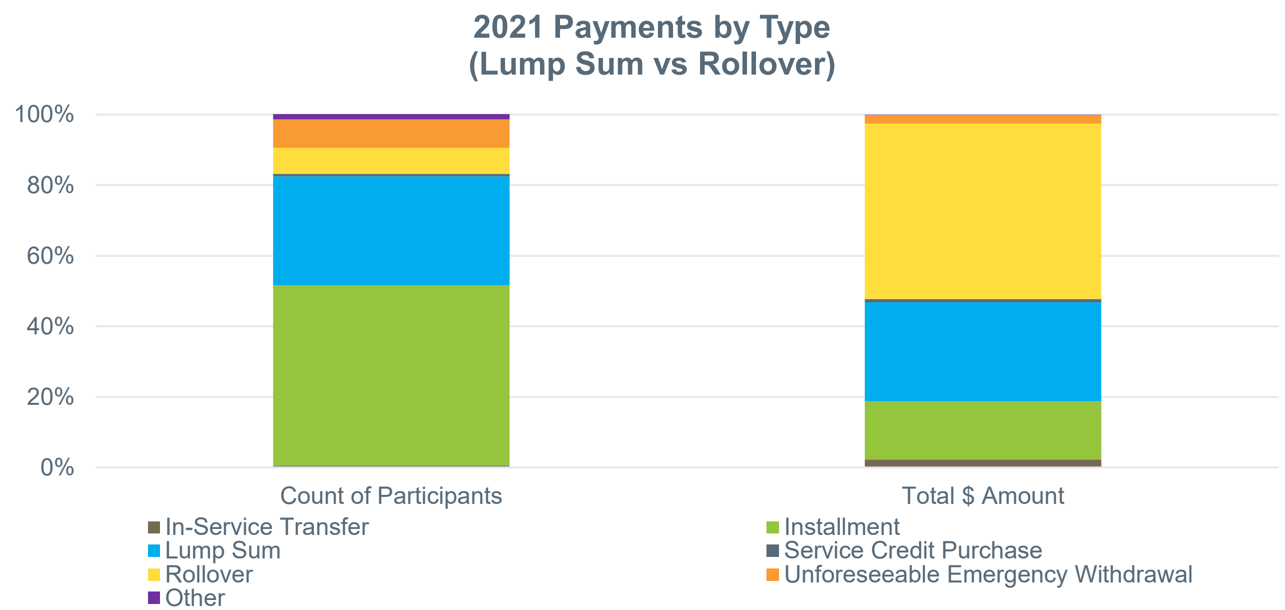
Distribution Patterns: All 2021 Distributions

- When broken out as cash lump sum vs. rollover distributions, rollover distributions were requested by approximately 3,350 participants (~7% of total participants requesting a payment) and ~50% of assets distributed.



Distribution Type	Distribution Type Breakdown (2021)			
	Count of Participants	% of Total Participants	Total $ Amount	% of Total $ Amount
In-Service Transfer	244	1%	$23,924,424	2%
Systematic Withdrawal	23,169	51%	$173,773,476	17%
Lump Sum	14,002	31%	$292,849,239	28%
Service Credit Purchase	315	1%	$9,543,449	1%
Rollover	3,350	7%	$520,020,467	50%
Unforeseeable Emergency Withdrawal	3,646	8%	$25,510,314	2%
Other	2,950	7%	$1,284,199	0%
All Distributions	**45,348**	**100%**	**$1,046,905,567**	**100%**

Note: Distribution type "Other" consists of Accelerated Payments and Small Balance Distributions.
Data was provided by the Ohio DC Information Technology Department.

Distribution Patterns: Systematic Withdrawals 2021 & 2022

- In 2021, 13,997 RMDs were processed, and 15,411 were processed in 2022.
- Of the participants who have proactively elected a systematic withdrawal framework most have selected to receive systematic withdrawals as a fixed dollar amount instead of receiving installments as a fixed annual percent of their account balance or over a fixed number of years.
- Most participants receiving systematic installment withdrawals (over 96% in 2022) have requested monthly installments.

	Participants Receiving an Installment Distribution in 2021			
Distribution Type	**Count of Participants**	**% of Total Participants**	**Total $ Amount**	**% of Total $ Amount**
Installment - Fixed Annual Percent	103	0%	$1,172,328	1%
Installment - Fixed Dollar	9,470	41%	$92,705,955	53%
Installment - Fixed Time Period	235	1%	$2,178,254	1%
Required Minimum Distribution	13,997	60%	$77,716,939	45%
All Systematic Withdrawals	**23,169**	**100%**	**$173,773,476**	**100%**

	Participants Receiving an Installment Distribution in 2022			
Distribution Type	**Count of Participants**	**% of Total Participants**	**Total $ Amount**	**% of Total $ Amount**
Installment - Fixed Annual Percent	92	0%	$1,093,092	1%
Installment - Fixed Dollar	9,589	39%	$100,678,806	52%
Installment - Fixed Time Period	207	1%	$1,797,828	1%
Required Minimum Distribution	15,411	63%	$90,564,020	47%
All Systematic Withdrawals	**24,652**	**100%**	**$194,133,747**	**100%**

Data was provided by the Ohio DC Information Technology Department.

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Distribution Patterns: Systematic Withdrawals 2022

- Almost 8,400 participants received a systematic withdrawal during 2022.
- Of the participants who have proactively elected a systematic withdrawal framework most have selected to receive systematic withdrawals as a fixed dollar amount instead of receiving installments as a fixed annual percent of their account balance or over a fixed number of years.
- The majority of participants elect for Monthly installments, consistent across all Installment types.
- Most participants receiving systematic installment withdrawals (over 96%) have requested monthly installments.

Systematic Withdrawal Types by Frequency	
Distribution Type (Frequency)	**Count of Participants**
Installment - Fixed Annual Percent	**86**
Monthly	66
Quarterly	4
Semi-Annual	2
Annual	14
Installment - Fixed Dollar Amount	**8,159**
Monthly	7,448
Quarterly	252
Semi-Annual	92
Annual	367
Installment - Fixed Time Period	**166**
Monthly	140
Quarterly	7
Semi-Annual	3
Annual	16
All Systematic Withdrawal Types	**8,388**

Data was provided by the Ohio DC Information Technology Department.

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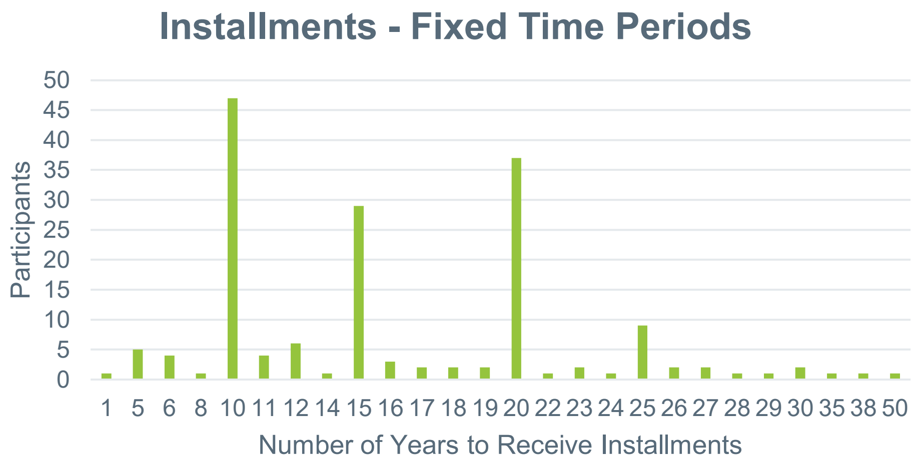
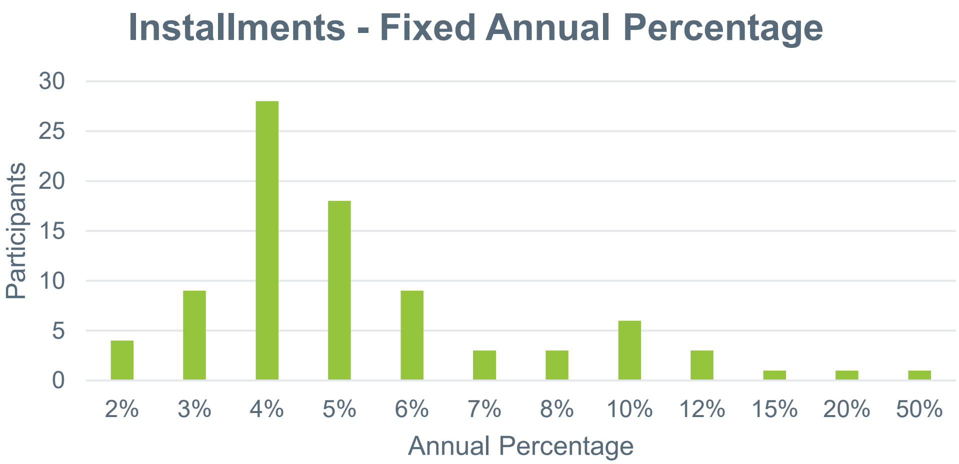
Distribution Patterns: Systematic Withdrawals 2022

- Participants with a fixed dollar systematic withdrawal are most likely to request between $250-$500 per month ($3,000-$6,000 annually).
- Participants who elect to receive systematic withdrawals on a fixed time period generally select to receive them over 10, 15, or 20 years.
- Most participants who have selected a fixed annual percentage have selected to withdraw 4% of their account annually, with 5% being the next most popular choice.

Fixed Dollar Amount	Participants Receiving a Fixed Dollar Systematic Withdrawal Frequency				
	Monthly	Quarterly	Semi-Annual	Annual	All
$100-$250	770	19	2	5	796
$250-$500	2,040	80	4	14	2,136
$500-$750	1,765	45	9	25	1,842
$750-$1,000	584	15	11	9	619
$1,000-$1,500	1,279	29	15	39	1,362
$1,500-$2,000	444	20	13	17	494
$2,000-$3,000	529	26	21	54	630
$3,000-$5,000	245	19	8	60	332
$5,000-$10,000	114	16	16	86	232
>$10,000	6	4	3	77	90
All Fixed Dollar Amounts	**7,448**	**252**	**92**	**367**	**8,141**





Data was provided by the Ohio DC Information Technology Department.

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Ohio Deferred Compensation

RETIREMENT READINESS REVIEW

Retirement Readiness Review
Phase I – Demographic Review

Ohio Deferred Compensation Program ("Ohio DC")

August 15, 2023

Agenda

1. Demographic Analysis – Introduction and Executive Summary
2. Demographic Overview – Income, Benefits, and DC Saving Patterns
3. Retirement Income Adequacy – Income Replacement Analysis for Current Retirees
4. Appendix – Assumptions, Methodology, and References

Retirement Readiness Review

RVK’s Evaluation Process

- In conducting a retirement readiness review, RVK recommends the following three-step process to evaluate the retirement income needs of Ohio Public Employees Deferred Compensation Program (“Ohio DC”) and how Ohio DC can be leveraged to support future retirees.

	Step 1 Demographic Analysis	Step 2 Retirement Income Projections	Step 3 Evaluation & Recommendations
Goals	**Understand the participant base** to distill the most relevant attributes that will inform the retirement income review analysis.	**Evaluate expected retirement outcomes** for future retirees and the impact of participants’ decisions on the outcomes.	**Evaluate the role of Ohio DC** in participants’ retirement picture and how to best support participants’ needs in retirement.
Evaluation	• Income and Saving patterns • Retirement income goal • Retirement income expectations for current retirees	• Using forward-looking simulations to understand the range of outcomes • Stress testing the retirement outcomes: impact of savings rate, investment allocations, and retirement age	• Determine Plan Objective: is it to act as a supplemental savings vehicle or an important complementary source of income? • Evaluate Ohio DC’s retirement readiness across key areas, e.g., plan functionality, tools, resources, and investment options, and understand how it compares to peers
Outcome	Create a median plan participant profile, across age groups, that would guide the rest of the evaluation.	Understand the impact of the current Ohio DC design and participants’ decisions on the expected retirement outcomes.	Create a long-term strategic plan taking gradual steps to support near-retirees’ and future retirees’ needs.

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Demographic Analysis
Introduction

- The demographic analysis is intended to provide insight into the most salient attributes of the overall participant base of Ohio DC—attributes that should inform the retirement income evaluation process.

- The analysis examines the following:
  - **Demographic Overview**
    - Employment, Income, and Benefits:
      - Examine the employment, retirement and benefit trends of State of Ohio employees
    - Ohio DC Utilization:
      - Examine the saving patterns and historical balance accumulation of participants

  - **Retirement Income Adequacy**
    - Estimate an appropriate income replacement goal for the typical State of Ohio employee.
    - Determine the main sources of income for current and future retirees such as pension benefits, Social Security*, and Ohio DC savings.
    - Evaluate the expected income replacement for the typical Ohio DC participant retiring today.

* RVK notes that State of Ohio employees do not contribute to Social Security. However, based on typical years of service, most State of Ohio employees are likely to receive some Social Security benefits in retirement.

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Demographic Analysis
Executive Summary

- In this analysis, RVK leveraged available information pertaining to the demographics and retirement income sources of the State of Ohio employees to estimate an appropriate income replacement goal for members of this cohort. Below is a key summary of our findings:

OPERS Employees	As of 12/31/2022
Population	State: **107,007** Local: **182,919** Law Enforcement and Public Safety: **7,901**
Median Salary at Separation	**$62,016**
Age at Retirement	**61 years**
Income Replacement Goal	**86%**
Essential Spending Goal	**57%**
Expected Guaranteed Income* Replacement Rate - Current Retirees	**69%**

Data sourced from the 2022 Ohio Public Employees Retirement System (OPERS) Comprehensive Annual Financial Report (2023) and the Ohio DC Program.

* OPERS Pension and Social Security Income (estimated based on assumed years working for other eligible employers).

Demographic Analysis
Executive Summary

DC Plans	As of 12/31/2022
Median Monthly Deferrals ($)	State: **$25 - $142** Non-State: **$21 - $163**
Median Balances	State: Peaks at **$66K** (70-75 age group) Non-State: Peaks at **$51K** (70-75 age group)
Expected DC Income Replacement Rate - Current Retirees	**2%**
Expected Income Gap* - Current Retirees	**15%**

Data sourced from the 2022 Ohio Public Employees Retirement System (OPERS) Comprehensive Annual Financial Report (2023) and the Ohio DC Program.

* The expected income gap is estimated based on available information on income sources for current pre-retirees, in the 60-65 age group. Participants may have access to additional income through non-DC savings or former employers' pension plans.

Demographic Analysis

Executive Summary

- The majority of employees under OPERS belong to the State and Local divisions (**97%**) and are subject to similar benefit provisions and eligibility requirements. OPERS historically offered three pension options, but the majority of active OPERS members have selected the Traditional Pension Plan (**95%**). As such, the rest of the review focuses on State and Local employees who are members of the Traditional Pension Plan.

- For current retirees, the analysis indicates that the average retiree, across the State and Local cohorts, is expected to experience some income replacement shortfall during the retirement phase, *assuming no additional savings or pension income* beyond what was accrued during their tenure with OPERS.

- In **Phase II**, we leverage our stochastic Retirement Income Model to conduct a more comprehensive evaluation of expected retirement outcomes for younger employees joining OPERS and Ohio DC today. And we evaluate how contribution rates, investment decisions, among other factors, can alter available retirement savings for younger participants.

- We also examine retirement outcomes for near-retirees and evaluate how the length of service with OPERS, retirement age, and other changes can impact the expected retirement outcomes for older participants nearing retirement.

- This comprehensive evaluation of the impact of market investment scenarios and participant decisions on the retirement outcomes of Ohio employees can help Ohio DC examine the role that Ohio DC plays for participants, and how to best-support their needs after retirement, which we will explore further in **Phase III**.

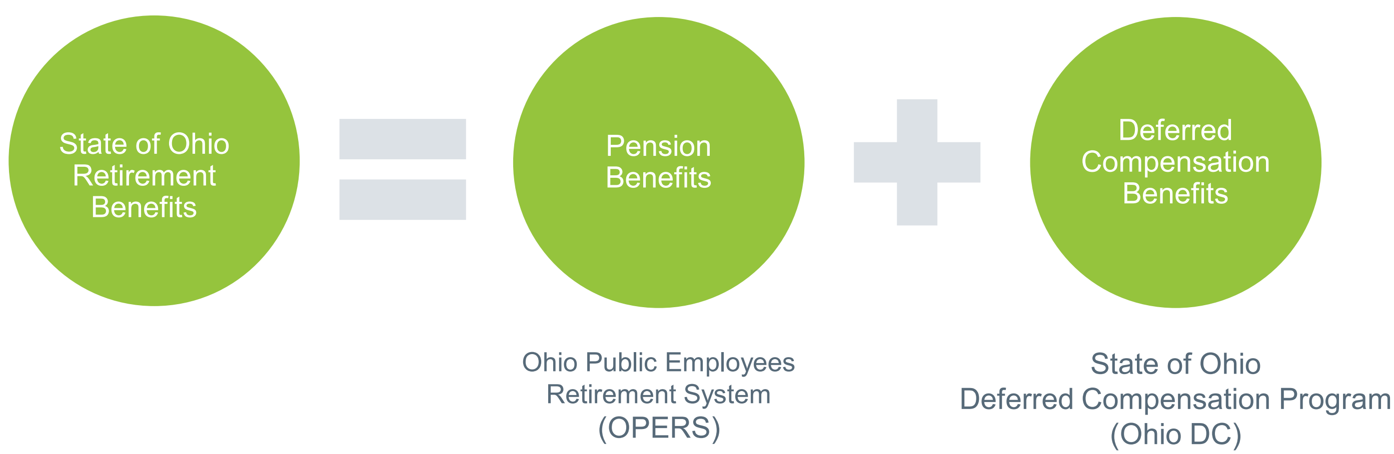
Demographic Overview

Income, Benefits, and DC Saving Patterns

Employment, Income, and Benefits

State of Ohio Retirement Benefits

- State employees are generally eligible for a defined benefit pension plan and the Ohio DC Program. Participants may have additional sources of savings outside of State benefits.
- Generally, most State employees, except those in positions subject to membership in certain other state sponsored retirement systems, are members of the Ohio Public Employees Retirement System ("OPERS"). State employees do not earn credit towards Social Security benefits.
- All public employees who are eligible to participate in one of Ohio's statutory retirement systems can contribute to Ohio DC.



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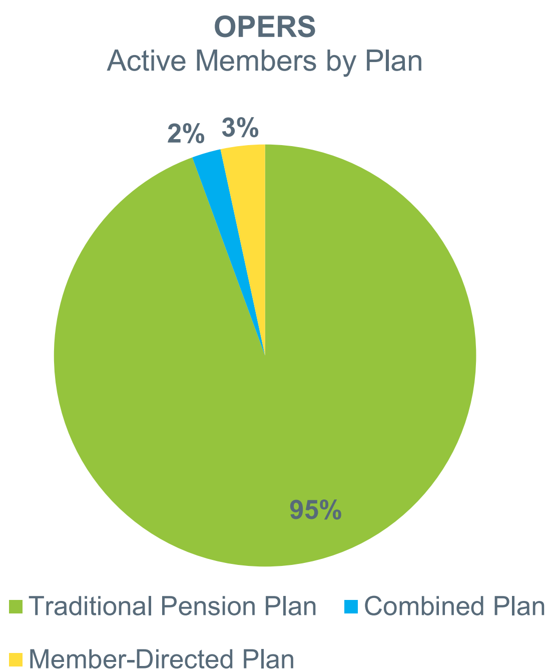
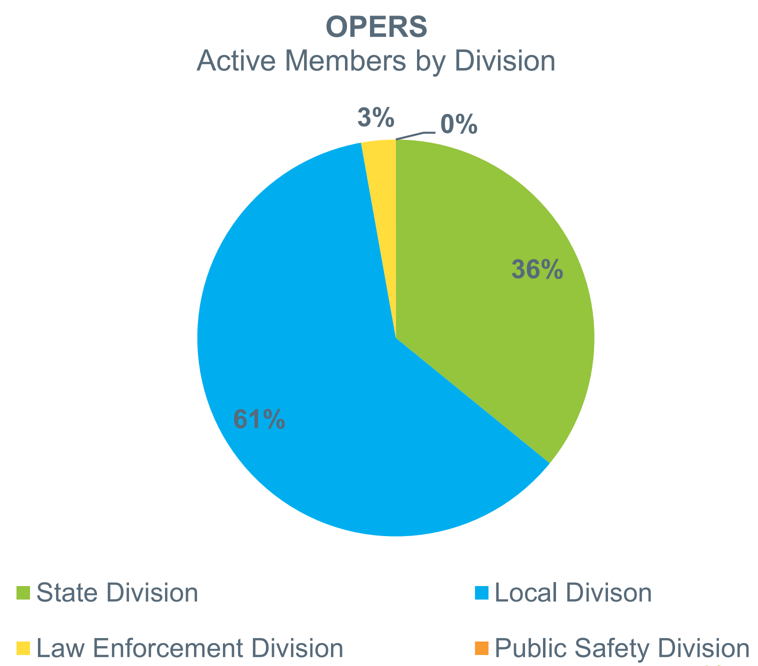
Employment, Income, and Benefits

- Historically, OPERS offered three separate pension options: the Traditional Pension Plan, a defined benefit plan; the Member-Directed Plan, a defined contribution plan; and the Combined Plan, a hybrid defined benefit/defined contribution plan (no longer available effective January 2022). **95%** of active members have selected the Traditional Pension Plan option.
- Across Ohio public employees, members of the State and Local divisions, who represent the majority of active members (**97%**), have very similar benefit provisions and eligibility requirements. The other **3%** of OPERS membership belongs to the Law Enforcement and Public Safety divisions, which have different benefit provisions.
- The rest of the review focuses on State and Local employees who are members of the Traditional Pension Plan.





Data sourced from the 2022 Ohio Public Employees Retirement System (OPERS) Comprehensive Annual Financial Report (2023) and the Ohio DC Program as of 12/31/2022.

Employment, Income, and Benefits

- Over the last ten years, there has been a modest increase in new retirees' age at retirement, from 59.9 in 2013 to 61.3 in 2022. This was coupled with an increase in average years of service at retirement, increasing from 22.5 years in 2013 to 24.6 years in 2022.

New OPERS Retirees
Traditional Pension Plan -- Key Statistics

Average

Age at Retirement	61 years
Years of Service	25 years
Final Average Salary	$62,016
Pension at Retirement	$32,646

Data sourced from the 2022 Ohio Public Employees Retirement System (OPERS) Comprehensive Annual Financial Report (2023) and the Ohio DC Program as of 12/31/2022.

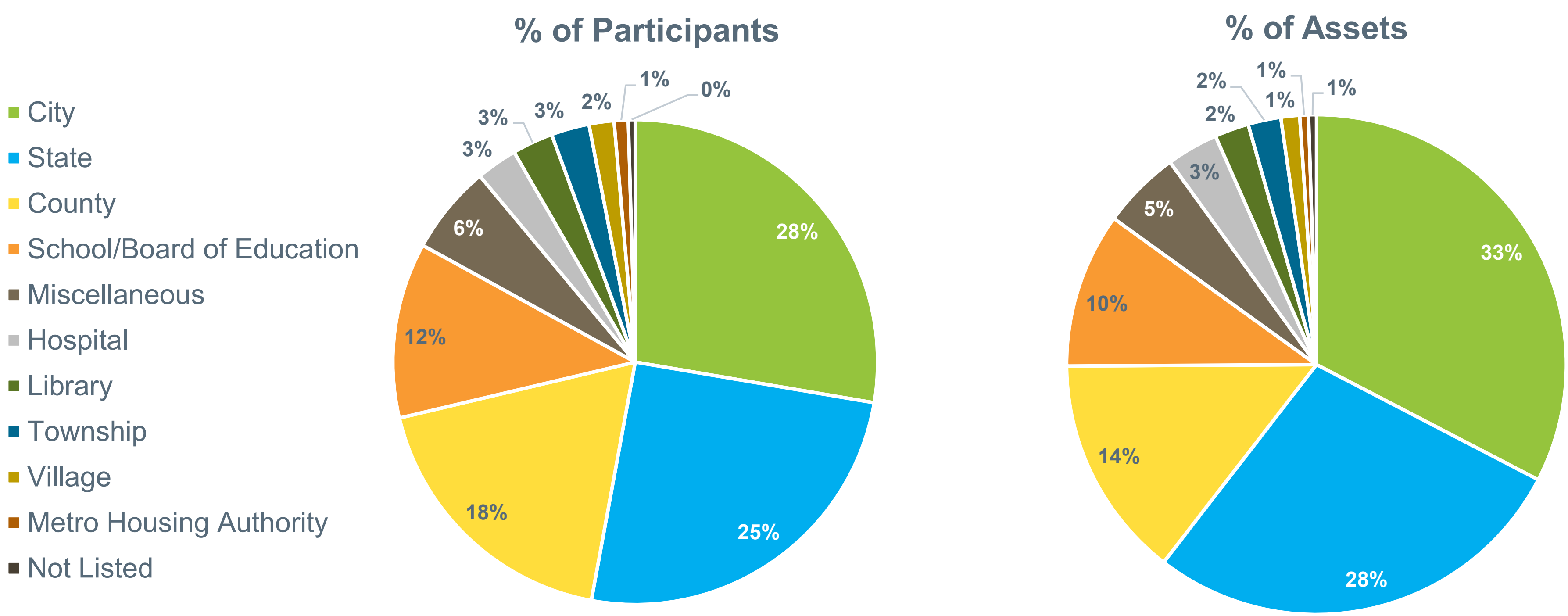
Ohio DC Program

Participant Base Overview

- As of 12/31/2022, **75%** of DC plan accounts (187,987 individuals) were held by non-State (generally Local[1]) employees, while the other **25%** (63,389 individuals) were held by State employees.
- Similarly, **73%** of Plan assets (approximately $12.1 billion) of all assets belonged to non-State employees.

All Participants

Ohio DC Program



1. While available Employer Type codes do not identify Law Enforcement and Public Safety division employees, they represent a small minority of OPERS active members.
Not listed comprises beneficiary and alternate payee accounts, as well as a small number of terminated participants without an Employer Type code.
Data is sourced from Ohio DC Program as of 12/31/2022.

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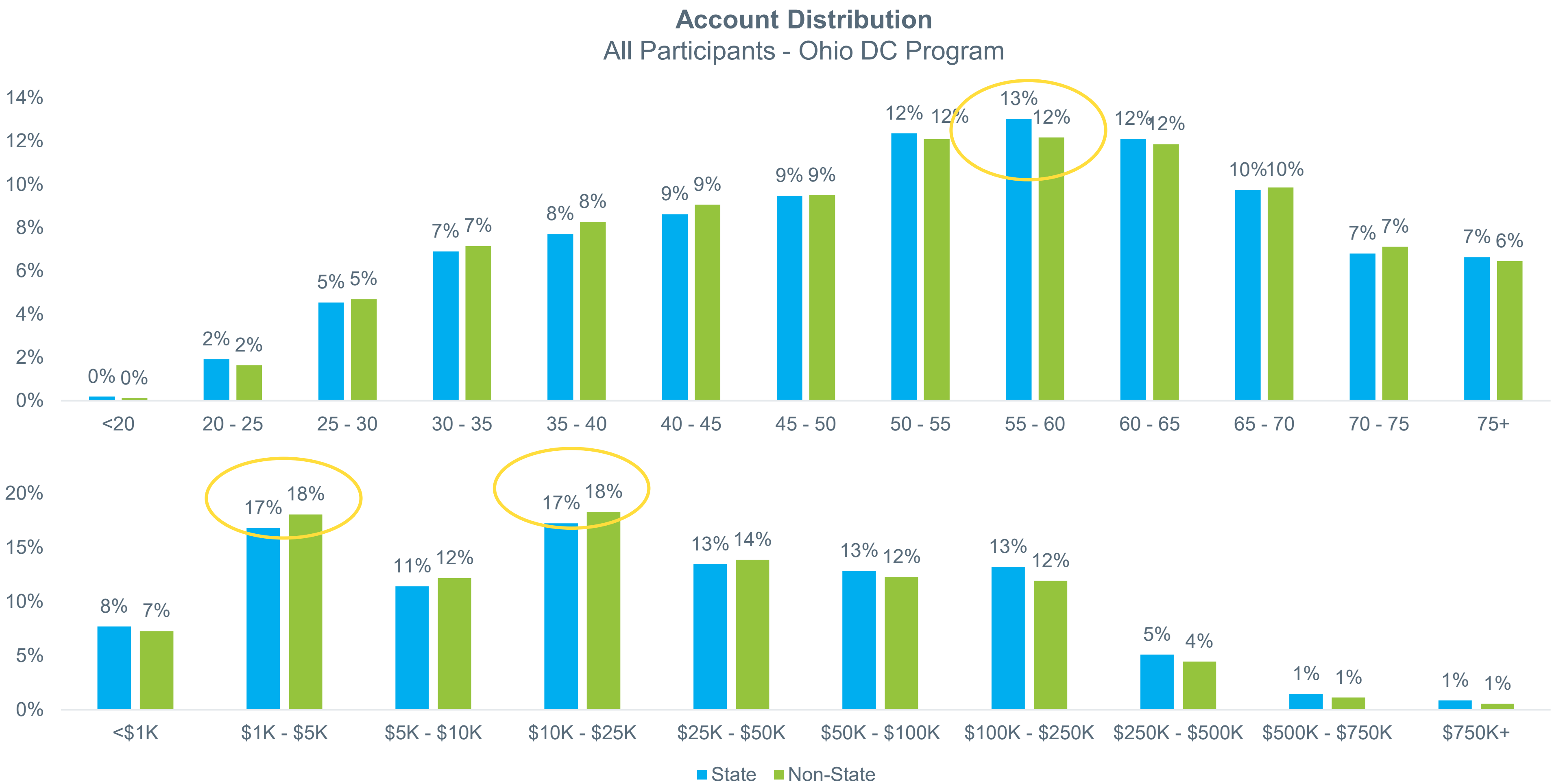
Ohio DC Program
Participation Overview

- The peak number of participants are in the **55-60** age group. As is typical in DC plans, plan participation steadily rises with age and declines as participants start to retire.
- Participant balances vary widely, with a slightly higher concentration in the **$1K-$5K** and **$10K-$25K** balance groups.

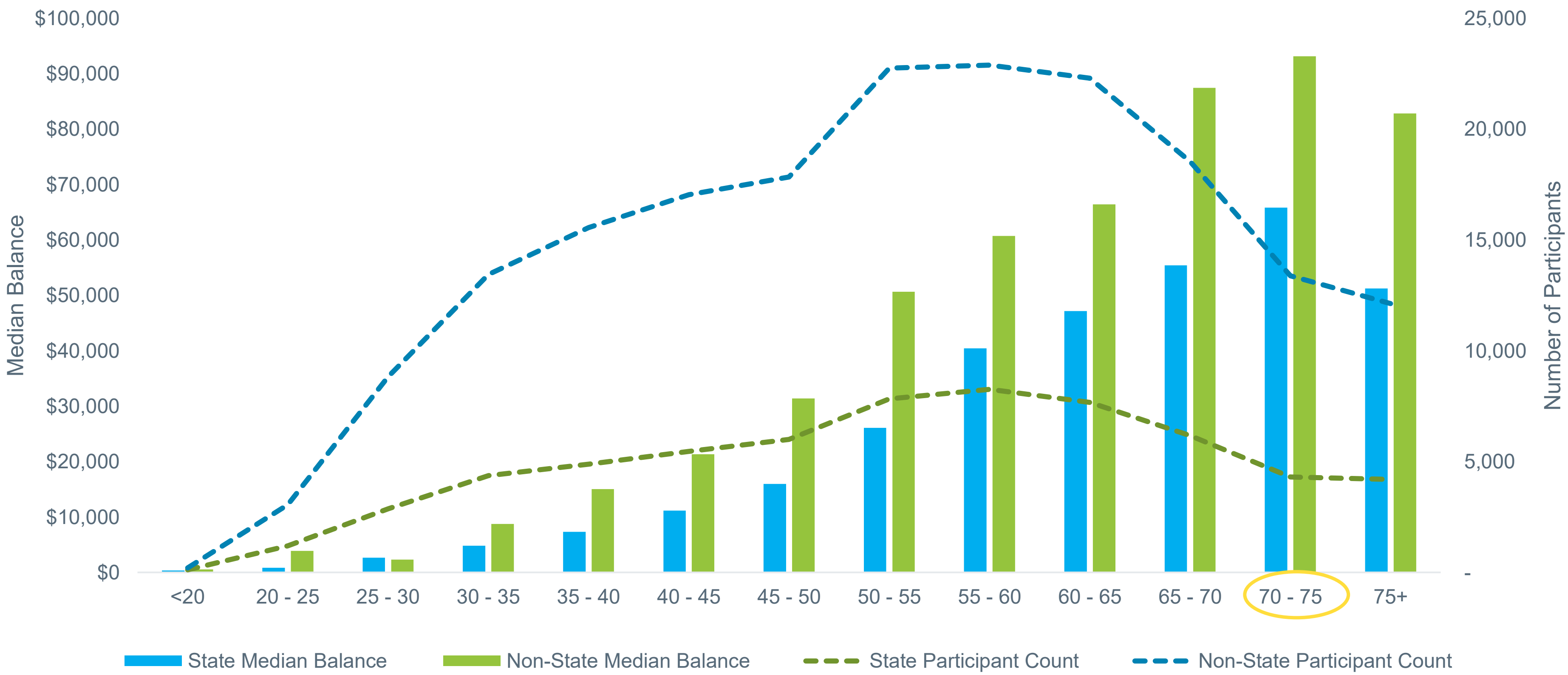


Percentages do not add up to 100% due to rounding.
Data sourced from the 2022 Ohio Public Employees Retirement System (OPERS) Comprehensive Annual Financial Report (2023) and the Ohio DC Program as of 12/31/2022.

Ohio DC Program
Balance Accumulation Overview

- Median participant balances grow steadily with age and reach their highest level at **$93,158** for Non-State and **$65,844** for State for the **70-75** age group, across working and retired participants.
- The median balance in the pre-retirement age group (50-55) is **$50,656** and **$26,119** for Non-State and State employees, respectively.

Median Balances
All Participants - Ohio DC Program



Data is sourced from Ohio DC Program as of 12/31/2022.

Ohio DC Program

2022 Employee Enrollment Activity

- Among employees who enrolled in 2022, the average deferral rate selected was $114 per bi-weekly paycheck, with a median deferral rate of $50 per bi-weekly paycheck.
- In 2022, approximately **50%** of new enrollees elected to implement a SMarT increase, up from **39%** in 2021. The median SMarT increase was **$10** annually.

Enrollment Activity (YoY)

	State		Non-State	
	2021	2022	2021	2022
Count of New Enrollments:	3,541	4,236	11,627	13,028
Avg. Initial Deferral:	$93	$73	$127	$128
Median Initial Deferral:	**$30**	**$30**	**$50**	**$55**
Count of New Enrollments with SMarT:	1,303	2,231	4,724	6,466
% of New Enrollments with SMarT:	**37%**	**53%**	**41%**	**50%**
Avg. SMarT Increase:	$21	$20	$24	$20
Median SMarT Increase:	**$10**	**$10**	**$10**	**$10**

Data is sourced from Ohio DC Program as of 12/31/2021 and 12/31/2022.

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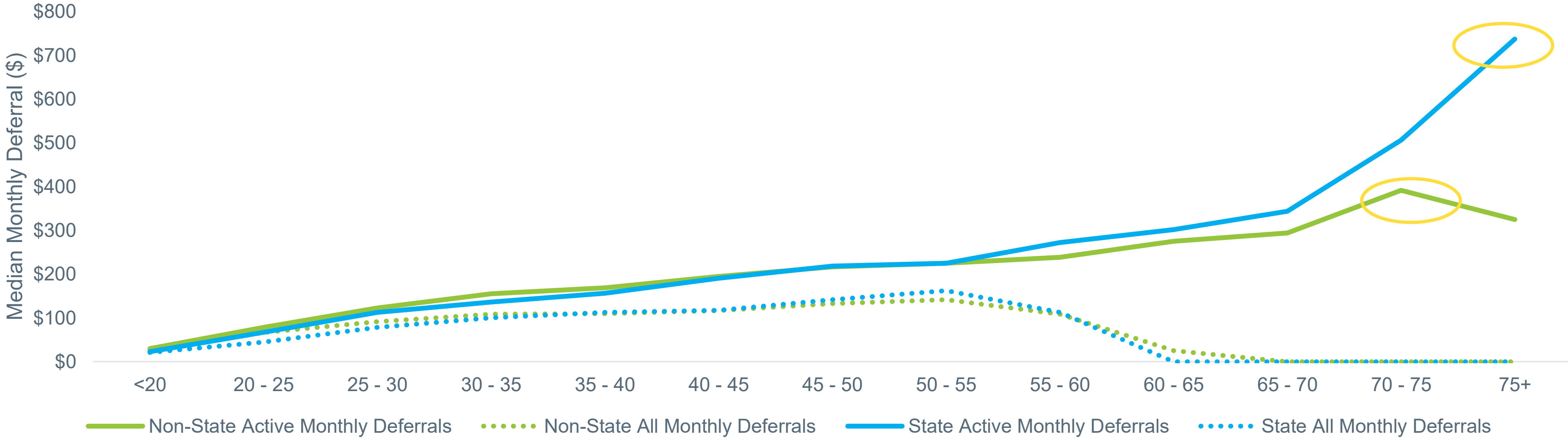
Ohio DC Program
Balance Accumulation

- Among working participants who are actively contributing to the plan, typical annual contributions range from an estimated **$23-$30** per month for the **<20** age group to **$392** and **$737** per month, respectively, for Non-State and State employees across the **70+** age groups.
- It is common to see contributions rise with age (both in absolute terms and relative to income).

Median Contributions by Age Group
Working Participants – Ohio DC



	<20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75+
Non-State													
Non-State Active Monthly Deferrals	$30	$78	$123	$155	$169	$195	$217	$225	$238	$275	$294	$392	$325
Non-State All Monthly Deferrals	$25	$67	$92	$108	$110	$117	$133	$142	$108	$25	$0	$0	$0
State													
State Active Monthly Deferrals	$23	$67	$113	$136	$157	$190	$218	$225	$272	$302	$344	$506	$737
State All Monthly Deferrals	$21	$45	$78	$100	$113	$118	$142	$163	$113	$0	$0	$0	$0

Data is sourced from Ohio DC Program as of 12/31/2022.

Retirement Income Adequacy

Income Replacement Analysis - Current Retirees

Income Replacement Analysis

Income Replacement Goal

- An income replacement goal is the annual income after retirement, relative to income before retirement, that would be required in order to maintain a pre-retirement standard of living.

Income Replacement Goal = Required Retirement Income / Pre-Retirement Income

- The required replacement rate is generally below 100% because after retirement:
  - Income taxes typically drop, while Social Security and Medicare taxes stop entirely;
  - Saving for retirement is no longer needed; and,
  - Annual spending is expected to decline for middle- and high-income households,[1] primarily due to a reduction in housing and transportation costs.

- Widely used replacement rates are often based on consultants' plan databases or Department of Labor data on consumer spending. However, we find that plan-specific demographics should be leveraged to create better estimates that incorporate plan-specific deferral rates, salaries, state tax rates, etc.

1. Consumer Expenditure Survey – Bureau of Labor Statistics (2023).

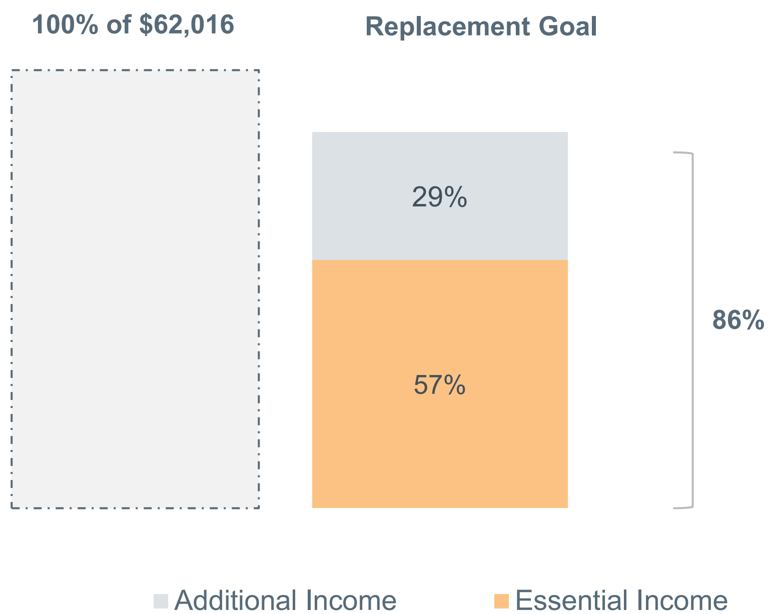
Income Replacement Analysis

OPERS Employee Assumptions

Assumed Pre-retirement Salary: $62,016[1]

Replacement Goal: We estimate an average income replacement goal of **86% of pre-retirement salary**. This represents the income needed to maintain the same pre-retirement standard of living.[2]

Basic Annual Spending: Based on the Elder Economic Security Index, the average replacement rate required to meet basic housing and spending needs in Ohio today is **57%** of the assumed final salary.[3]



Key Assumptions:

- The income replacement goal accounts for average pension and DC plan contributions; Federal, State, and local taxes; Medicare; and expected changes in spending after retirement.[4]
- For this population, the spending on healthcare is expected to increase in retirement; which is expected to offset the decrease in spending on transportation and housing.[5]
- Due to data availability, we assumed a household comprised of two individuals, with a single wage earner.[6]

1. Based on average final salary at retirement of all new retirees in 2022. Data sourced from OPERS Comprehensive Annual Financial Report as of December 31, 2022 (2023).
2. Based on estimated income replacement needs of State and Local employees nearing retirement (85%-86%) in the 60-65 age group. Please see the appendix for the replacement goal derivation.
3. Elder Economic Security Index, Ohio statewide average, annual expenses for an elder couple, owners without mortgage, National Council on Aging (NCOA), 2022.
4. Please see the appendix for the assumptions used and the replacement goal derivation.
5. Consumer Expenditure Survey – 2023.
6. An assumption of two wage earners may not alter the income replacement goal considerably, since both the numerator and denominator will increase. Studies suggest small variation in outcomes.

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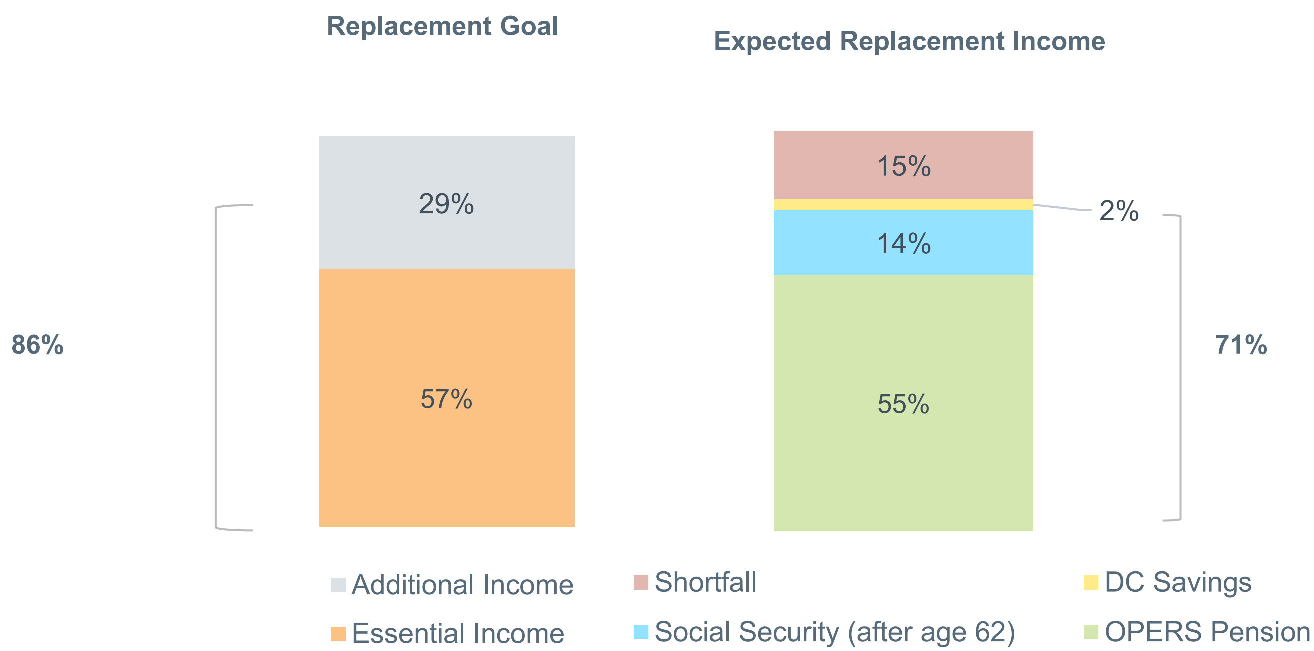
Income Replacement Analysis

- We estimated the expected replacement income for the following base case for Ohio state employees.
- Compared to an income replacement goal of **86%**, the expected income replacement rate for current retirees is **71%** (after reaching Social Security eligibility at age 62).

Base Case

Assumed Final Annual Salary	$62,016	**Years of Full Employment**	25
Retirement Age	61	**Social Security Coverage**	Partial[1]



Based on median DC balances for active participants in the 60-65 age group in the State and Non-state cohorts. Data sourced Ohio DC Program as of 12/31/2022.
Assumed pre-retirement salary based on average final salary at retirement of all new retirees in 2022. Data sourced from OPERS Comprehensive Annual Financial Report as of December 31, 2022 (2023).
1. OPERS employees do not participate in Social Security, but the analysis assumes coverage prior to joining OPERS.

Income Replacement Analysis

Social Security Income

Social Security Income

- Based on our base assumptions, the income replacement rate from Social Security at age 62 (the earliest age to receive a Social Security benefit) is **14%** for State and Local members of OPERS. Before age 62, individuals will have to rely on their pension and other income sources to meet their spending needs.
- In the analysis, we assume that prior to joining OPERS, employees worked in the private sector where they also paid Social Security tax.

Assumptions	
Retirement Age	62
Earliest Age to Receive Benefit	25
Years of Social Security Coverage	20
Social Security Income	
Average Annual Income	$8,628
Average Monthly Income	$719
Percent Income Replacement at Age 62	**14%**

1. Estimated using Social Security Online Calculator and taking into account the Windfall Elimination Provision (WEP) penalty. Prior to joining OPERS, the calculations assume that wages earned were consistent with the national Average Wage Index (AWI) (SSA.GOV, 2023).

RVK

Income Replacement Analysis

Pension & DC Plans

Pension Benefits

- Based on our base assumptions, the income replacement rate from pension is **55%** for State and Local members of OPERS.

Pension Income	
Estimated Annual Pension Benefit [1]	$34,109
Estimated Monthly Pension Benefit	$2,842
Percent Income Replacement at Retirement	**55%**

DC Plan

- Based on the typical pre-retirement DC Plan balance, and assuming an annual drawdown rate of 4%, the current income replacement rate is **2.4%**, and **1.8%**, for retired State and Local employees, respectively.

	State	Local
DC Plan Income		
Initial Account Balance at retirement [2]	$37,276	$28,303
Annual Income, 4% Drawdown	$1,491	$1,132
Estimated Monthly Income	$124	$94
Percent Income Replacement at Retirement	**2.4%**	**1.8%**

Data sourced from OPERS as of 12/31/2022.
1. Based on pension benefit formulas for State and Local employees in Transition Group B, and the assumed years of service and final salary at retirement.
2. Based on median DC balances for active participants in the 60-65 age group in the State and Non-state cohorts. Data sourced Ohio DC Program as of 12/31/2022.

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Income Replacement Analysis – Closing the Gap

- For current retirees, the analysis indicates that the average retiree, across the State and Local cohorts, is expected to experience some income replacement shortfall during the retirement phase, *assuming no additional savings or pension income* beyond what was accrued during their tenure with Ohio.

- In **Phase II**, we leverage our stochastic Retirement Income Model to conduct a more comprehensive evaluation of expected retirement outcomes for younger employees starting employment with an Ohio public entity today. And we evaluate how contribution rates, investment decisions, among other factors, can alter available retirement savings for younger participants.

- We also examine retirement outcomes for near-retirees and evaluate how the length of service with OPERS, retirement age, among other changes can impact the expected retirement outcomes for older participants nearing retirement.

Appendix:

Assumptions, Methodology, & References

State of Ohio Income Replacement Goal

	State	Local
Gross Pre-Retirement Income	**$62,016**	**$62,016**
Pre-Retirement Taxes[1]		
Federal	$2,744	$2,744
State & Local	$1,504	$1,504
Medicare	$899	$899
Disposable Income After Taxes	$56,869	$56,869
Pre-Retirement Savings		
OPERS Pension[2]	$6,202	$6,202
DC Plan	$3,623	$3,300
Pre-Retirement Spendable Income	$47,045	$47,367
Expenditure Changes at Retirement [3]	$3,480	$3,480
Required Post-Retirement Spendable Income	$50,525	$50,847
Expected Income Sources		
SS Income	$8,628	$8,628
OPERS Pension	$34,109	$34,109
Required DC Savings	$7,788	$8,110
Post-Retirement Taxes [6]		
Federal	$2,181	$2,253
State	$118	$127
Required Gross Pre-Tax Retirement Income	$52,824	$53,227
Required Replacement Ratio	**85%**	**86%**

1. Taxes are estimated for a married couple (one wage earner) filing jointly in Ohio in 2023.
2. Based on an assumed employee contribution rate of 10% for State of Ohio employees.
3. Estimated based on Bureau of Labor Statistics Consumer Expenditure Survey household spending data (2022).
4. Taxes are estimated for a married couple (retired) filing jointly in Ohio in 2023.

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Retirement Income Adequacy Methodologies

There are different approaches for estimating income adequacy:

- **Income Replacement Analysis:** This approach attempts to estimate the level of retirement income, relative to income earned before retirement, that would maintain the pre-retirement standard of living. This is the methodology used most by plan sponsors, since it requires very little participant-specific information and lends itself to comparison across plans.

- **Cost of Living Benchmarks:** There are benchmarks that were developed to estimate annual resources needed to meet basic household spending needs. We include the Elder Economic Security Index as a supplementary metric in this analysis. However, these should be viewed as a necessary minimum, not a sufficient, level of income.

- **Retirement Expenses Budgeting:** Personalized cash flow analysis that seeks to forecast individual-specific retirement needs. This is by far the best approach to plan for retirement, but it is intended for use by individuals and financial planners and not plan sponsors.

Income replacement analysis and cost of living benchmarks have embedded assumptions about retirement expenses, so they lack the customization an individual would need for comprehensive retirement planning. However, both approaches are very useful for broad plan-level evaluation and plan sponsor action, and both are utilized in this analysis.

Income Replacement Analysis

Limitations

The income replacement goal is a useful metric, but it has some limitations, mainly:

- **No one-size-fits-all**: The replacement goal is estimated for the "typical participant." Individual participants' characteristics and needs vary considerably. These rates are only meant to be a basic plan-level gauge of income adequacy and any plan-level action items.

- **Doesn't account for shocks:** The replacement goal does not account for unexpected events that may decrease contributions or increase spending needs. Therefore, the replacement goal should be perceived as a floor, or the minimum income needed to maintain standards of living.

- **Doesn't account for future policy risks**: Future changes in post-retirement tax rates, State pension benefits, and/or Social Security benefits may increase/decrease required replacement rates.

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References

- Ohio Public Employees Retirement System Comprehensive Annual Financial Report for year ended December 31, 2022.
- Bureau of Labor Statistics, Consumer Expenditure Survey – 2023.
- Elder Economic Security Index, National Council on Aging (NCOA), 2022.
- Social Security Online Benefit Calculator.
- SmartAsset.com Tax Calculators.

PORTLAND BOISE CHICAGO **NEW YORK**

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OHIO Deferred Compensation

FIDELITY SHARE CLASS CHANGE

OHIO Deferred Compensation

MEMORANDUM

To: Board of Trustees

From: Paul D. Miller, Interim Executive Director

Date: August 15, 2023

Subject: Fidelity Share Class Change

Executive Summary

Our Fidelity representative has notified us of potential fee reductions to the two Fidelity collective investment trust funds used in our investment lineup. Due to the size of our investments in these funds, we are eligible to move from Class 3 shares to Class S shares, which carry lower investment fees.

To receive the lower fee rates, Ohio DC would need to process default exchange transactions for all our participants to sell their Class 3 shares and buy Class S shares. Ohio DC can work with Fidelity, BNY Mellon, and Nationwide to coordinate an efficient timeline to complete this transition. As part of the transition, exchange confirmations would be mailed to the participants who have not opted for electronic communications. Since this fund transition was not anticipated, our 2023 budget did not include the necessary printing and postage costs, so a budget amendment would be needed for these new costs.

Background

Ohio DC currently offers the Fidelity Contrafund Class 3 collective investment trust fund as a large company stock option. As of July 31, participants had invested $1.83 billion in this fund. The current expense ratio is 35 basis points, which equates to annual investment fees of about $6.4 million. Ohio DC is now eligible to move to Class S shares with an expense ratio of 30 basis points, which would result in a $915,000 decrease in annual investment fees paid by participants.

Ohio DC currently offers the Fidelity Growth Company Class 3 collective investment trust fund as a large company stock option. As of July 31, participants had invested $2.25 billion in this fund. The current expense ratio is 35 basis points, which equates to annual investment fees of about $7.9 million. Ohio DC is now eligible to move to Class S shares with an expense ratio of 32 basis points, which would result in a $670,000 decrease in annual investment fees paid by participants.

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Since the proposed transitions are share class changes of the same investment strategy, no individual advance notification is required by our policies. Instead, advance notice will be given in our newsletter and on our website. Once the transition has been completed, an updated general notice will be placed in our next newsletter and on our website. In addition, we expect to notify about 28,290 participants by email and 49,980 by U.S. mail about the exchange transaction. The estimated cost to print and mail these notification letters will be $32,000.

Some potential milestones in the share class transitions include:

- Determine a target transition date.
- Gather new share class information to answer participant questions.
- Develop communications regarding the share class change.
- Post information on the new share class in our newsletter and on our website.
- Complete exchanges to new share class on the transition date.
- Notify participants of the exchange transaction.

Currently, a target transition date in the fourth quarter of 2023 is being considered to allow sufficient time for proper planning and communication of the transition.

Recommendations

Staff recommends Board approval to:

- Move investments in the two Fidelity collective investment trust funds from Class 3 shares to Class S shares, and
- Increase the 2023 printing and mailing budget by $32,000 to cover notification costs of these fund transitions.

OHIO Deferred Compensation

NATIONWIDE CONTRACT EXTENSION

MEMORANDUM

To: Board of Trustees

From: Paul D. Miller, Interim Executive Director
Kevin Kirkpatrick, Director of Administration

Date: August 15, 2023

Subject: Nationwide Contract Extension

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 at this time, 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 the responses, and the potential for any possible transition. Discussions were held about extending the Nationwide contract at the January and March 2023 Board meetings, and in March, the Board voted to waive the RFP requirement and enter negotiations with Nationwide for a contract extension, which includes considering alternative lengths of the extension.

Additional conversations have taken place between staff and Nationwide regarding a contract extension, and staff requested terms for one-, two-, and three-year extension periods. Nationwide has provided information, which is summarized below. Staff believes these terms are reasonable and that a contract extension can be completed by the end of 2023.

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.

Nationwide continues to receive high satisfaction scores from our participants and employers, as shown in regular surveys conducted by our independent consultant. The flexibility in the new service model incorporated into the current contract extension has provided Nationwide the ability to continue meeting enrollment and service goals for participants and employers. Staff and Nationwide would expect to keep most of the current contract terms in the proposed extension, but a complete review of the entire contract, including service levels and penalties, is warranted.

The table below shows the contract fees over the past four years (2019-2022), as well as the current contract fees through June 30, 2024. Our actual payments to Nationwide were lower than the contract totals, primarily due to staffing vacancies. The year-to-year change in contract fees is shown as "Annual Increase."

Below the current contract information are three new contract proposals that extend the contract by an additional one, two, or three years. Our previous contract extensions were done when inflation was very low (under 2 percent). With the current level of inflation being 4 to 5 percent, Nationwide has proposed annual fee increases of 5 to 6 percent depending on the length of the extension.

	2019	**2020**	**2021**	**2022**	**2023**	**2024**
Current Contract	$7,040,886	$6,908,347	$6,778,858	$6,778,858	$7,095,468	$3,626,717
Annual Increase		-1.9%	-1.9%	0.0%	4.7%	2.2%

New Contract Proposals

	2020	2020	2021	2022	2023	**2024**	**2025**
1 year @ 6%	$7,040,886	$6,908,347	$6,778,858	$6,778,858	$7,095,468	**$7,471,037**	**$3,844,320**
Annual Increase		-1.9%	-1.9%	0.0%	4.7%	**5.3%**	**2.9%**

	2020	2020	2021	2022	2023	**2024**	**2025**	**2026**
2 years @ 5.5%	$7,040,886	$6,908,347	$6,778,858	$6,778,858	$7,095,468	**$7,452,903**	**$7,862,813**	**$4,036,627**
Annual Increase		-1.9%	-1.9%	0.0%	4.7%	**5.0%**	**5.5%**	**2.7%**

	2020	2020	2021	2022	2023	**2024**	**2025**	**2026**	**2027**
3 years @ 5%	$7,040,886	$6,908,347	$6,778,858	$6,778,858	$7,095,468	**$7,434,770**	**$7,806,508**	**$8,196,834**	**$4,198,378**
Annual Increase		-1.9%	-1.9%	0.0%	4.7%	**4.8%**	**5.0%**	**5.0%**	**2.4%**

Retaining Nationwide as our Enrollment, Education and Customer Service provider and their deep institutional knowledge of the Ohio DC organization, at reasonable cost increases, with no disruption in service or learning curve, benefits all current and future participants in their quest to save for a secure retirement. Staff welcomes a renewed partnership going forward as we continue to strive toward adaptability and innovation in an ever-evolving DC marketplace.

Recommendations

Staff recommends the Board provide staff with the authority to complete negotiations on a three-year contract extension with Nationwide.

ADMINISTRATIVE STAFFING REVIEW

Administrative Staffing Model Review

Ohio DC Strategic Planning Meeting
August 15, 2023

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Agenda

- Background
- Ohio DC History
- Where we are today
- Authority
- Evaluation Project with OPERS
- Continuum of Organizational Structures
- Staff Recommendations
- Potential Purchased Services
- Our way forward–next steps

Background

- Ohio DC is a leader in the defined contribution industry.
- Plan administration has been performed by a small staff for 35 years.
- Daily recordkeeping performed for 26 years.
- Low-cost Plan provider.
- Organizational structure is unique, but has provided independence, flexibility, and the ability to keep costs low.
- During most of our history, Nationwide has been a key partner and is dedicated to Ohio DC.

Ohio DC History

- 1974 – The Ohio Public Employees Deferred Compensation Board was created by Ohio Revised Code section 145.71.
- This new code section was added to the OPERS section 145 of the Revised Code.
- The Ohio DC Board makeup is the same as OPERS with the addition of two legislators.
- The Ohio DC Board was given the same powers as the OPERS Board in 145.09 of the Revised Code.

Ohio DC History

- **1976 – Mollman Associates hired as Third-Party Administrator (TPA) to service participants.**
- **First enrollments and deferrals were made.**
- **OPERS received and deposited employer deferrals.**
- **Initial investment options included:**
  - Nationwide fixed and variable annuities
  - Life insurance
  - Disability insurance
- **Daily recordkeeping of investments done by Nationwide.**

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Ohio DC History

- Federal Revenue Act of 1978 formally created IRC 457(b) plans.
- With no internal staff, Ohio DC Board relied on a TPA for procedures, reports, and recommendations. The TPA priority was enrolling employers and participants into the plan (sales).
- Over time, the Board became disappointed with the TPA's lack of transparency, including investment commissions.
- 1987 – Board decided to hire an Executive Director and administrative staff.

Ohio DC History

- 1988 – The Copeland Company was hired to replace Mollman as a participant service agent. Primary focus was still growing the Plan (sales).
- Board received a copy of the recordkeeping software from Mollman and maintained recordkeeping of participant deferral records and insurance investments.
- Nationwide continued daily recordkeeping of fixed and variable annuities.
- 1989 – Multiple Fidelity mutual funds were added to investment menu. Fidelity performed daily recordkeeping of these investment options.

Ohio DC History

- **1994 – The fixed annuity was invested in the Nationwide general account and totaled over $1 billion. To diversify that risk, our own Guaranteed Return Option (GRO) was created. Ohio DC began daily recordkeeping of this option.**
- **New fixed income managers and wrap providers were added over time to the GRO, as the fixed annuity assets were redeemed. (In 2007, this option was renamed to the Stable Value Option.)**
- **1997 – With a staff of 20, Ohio DC consolidated the daily recordkeeping administration functions for all investments (Nationwide, Fidelity, and GRO).**

Ohio DC History

- **1999 – Nationwide replaced Copeland for Enrollment, Education and Customer Service.**
  - Nationwide and their staff did not receive sales commissions.
  - Field staff was reduced. Focus was on education and group meetings.
  - Participant website hosted by Nationwide.
- **2000 – Ohio DC Sections 145.71-145.76 of the Revised Code were moved to section 148 to be separated from the OPERS code.**
- **2002 – Nationwide variable annuities are discontinued and replaced by mutual funds.**

Ohio DC History

- **2003 – Segal Consulting performed due diligence review of administration configuration and finds it to be efficient and cost effective. Ohio DC continues to be a low-cost plan, and has successfully provided new functions for participants or employers:**
  - 2004 – Annual Participant Statements with customized projections.
  - 2004 – Rollovers into and out of the plan.
  - 2007 – Ohio Business Gateway for online employer payments.
  - 2007 – EZ enrollment form utilizing behavioral economics.
  - 2007 – SMarT automatic annual increase plan.
  - 2011 – eDelivery option.
  - 2011 – New employer website.
- **2009 – Ohio DC offices relocated to Town Street. The Board authorized the Executive Directors to negotiate the relocation and lease with OPERS.**

Ohio DC History

- **2015 – Recordkeeping modernization project began as we moved to new hardware and software technology.**
- **2016 – New participant fee schedule, including rebate of recordkeeping reimbursements.**
- **2019 – Ohio Recordkeeping Information System (ORIS) implemented.**
- **2020 – Participant website implemented and managed by Board staff.**
- **2020 – Roth 457 Option implemented, which required significant changes to the recordkeeping system.**
- **2021 – Master Custodian transitioned for all investments to BNY Mellon.**

Where we are today

- Executive Director position has been vacant since December 2022.
- Ohio DC staff remains at 21 positions (25 budgeted).
- Succession planning is needed to address the retirement eligibility of senior staff.
- Ohio DC Board decided to evaluate alternative staffing and support functions.
- In lieu of significantly increasing staff, a solution to utilize outside support for certain administrative functions is under consideration.
- Funds have been budgeted for a third-party consultant to study alternative staffing models.

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Ohio DC Organization Chart

- **Ohio Deferred Compensation** Board of Trustees
  - **Vacant** Executive Director
    - **Kevin Kirkpatrick** Director of Administration
      - **Jason Chang** Information Technology Manager
        - **Kay Turrill** Senior Analyst/Tester
        - **Stephanie McLaughlin** Senior Programmer/Analyst
        - **Venkata Kondaveeti** Senior Software Engineer
        - **Alex McCourtie** Software Engineer
        - **William Lowery** Software Engineer
        - **Vacant** Senior Technical Architect
      - **Rob Goodwin** Data Systems Supervisor
        - **Todd Painter** Data Entry Clerk
        - **Cheryl Thompson** File Technician
      - **Treasnel Gravely** Benefit Claims Coordinator
      - **Tamara Keener** Data Verification Specialist
      - **Vacant** Communications Coordinator
    - **Paul D. Miller** Interim Executive Director, Director of Finance
      - **Renee Zysk** Senior Accountant
      - **Kelly Dawson** Benefits Accountant
      - **John Norman** Accountant
      - **Anne Eing** Fiscal Specialist
      - **Matthew McNerney** Accounting Specialist
    - **Cindy Ward** Administrative Services Director
      - **Andrea Feicht** Administrative Specialist II
      - **Vacant** Administrative Specialist I
    - **Natasha Natale** General Counsel

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Authority

- **The Amended Plan Document**
  - Section 1.20 **Plan Administrator** shall mean the Board, which may designate others to perform the duties of Plan Administration.
- **Purchasing Policy adopted by the Board**
  - Sets purchasing guidelines and processes.
  - Board has discretion to waive or modify any provision of this policy, if doing so is deemed to be in the best interest of Ohio DC.
- **Budget Approval**
  - The Board sets the annual budget that allocates administrative funds as deemed appropriate and fiscally responsible.

Staffing Model Evaluation

Evaluation Project with OPERS

- Ohio DC worked collaboratively with OPERS to complete a high-level assessment of opportunities for needed support.
- Provided OPERS with a review of all major functions.
- Provided OPERS data on strengths, risks, and potential for efficiency.
- OPERS proposed continuum diagram/model options for consideration.

Continuum of Organizational Structures

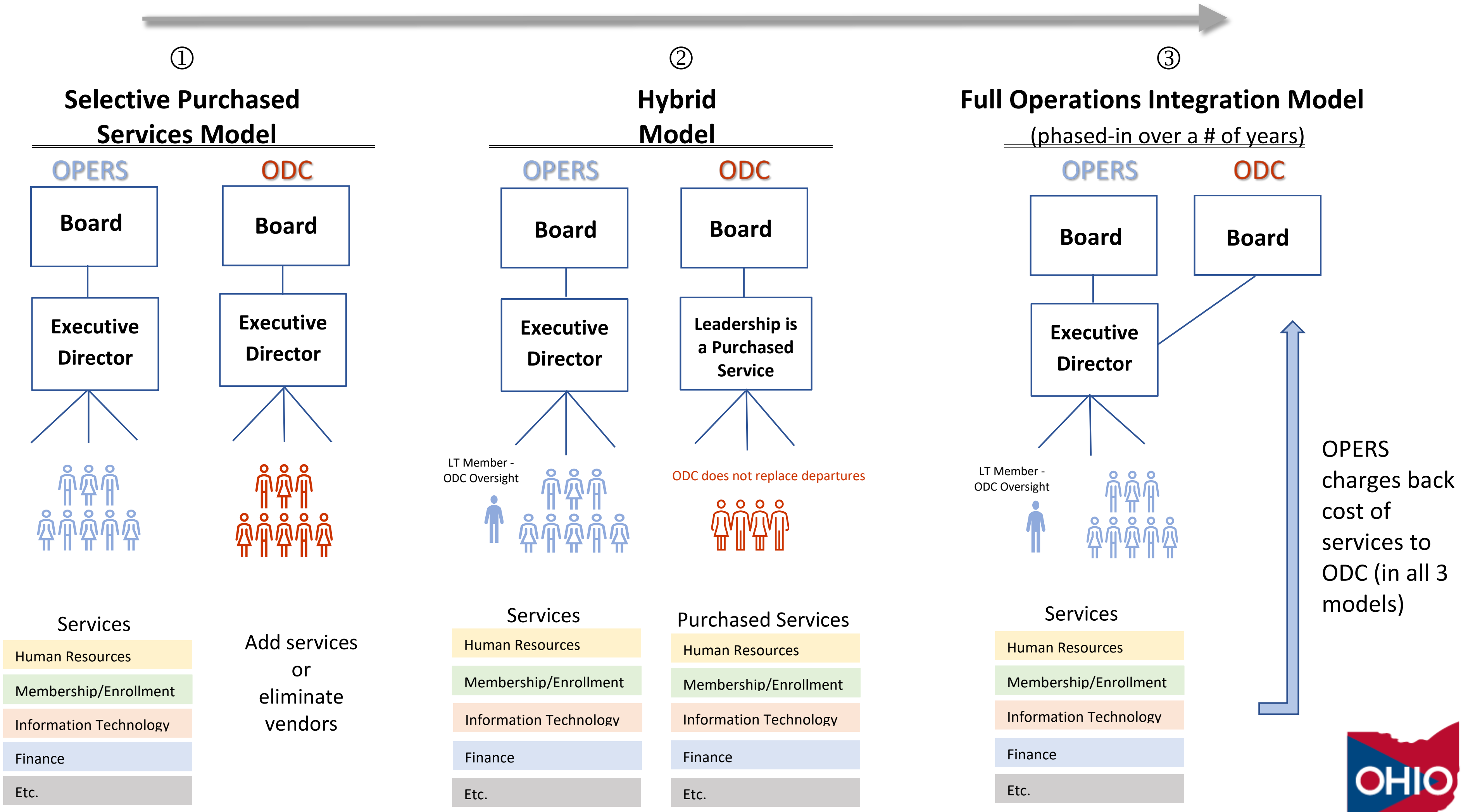
Three Models:

1. Selective Purchased Services
2. Hybrid Model
3. Full Integration of Operations

- **Ohio DC Board is distinct from the OPERS Board in all models.**
- **Leadership and staffing levels vary between models.**
- **Can begin anywhere on the continuum.**

Source: OPERS July 2023 Board Presentation

Continuum Diagram



Source: OPERS July 2023 Board Presentation

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Selective Purchased Services Model

- **Each entity retains an Executive Director.**
- **Ohio DC maintains the staffing to support its operations.**
- **Ohio DC can begin to selectively purchase services from any vendor including OPERS.**
- **Ohio DC and OPERS enter into a Service Level Agreement identifying scope, cost, and review of services purchased.**

  Example: Ohio DC purchases Human Resources services from OPERS.

Source: OPERS July 2023 Board Presentation

Hybrid Model

- No Executive Director at Ohio DC.
- Ohio DC leadership is a service purchased from OPERS.
- Ohio DC may or may not replace future employee departures.
- OPERS assigns a Leadership Team member with responsibility for oversight of Ohio DC purchased services along with their OPERS' duties.
- Ohio DC may gradually increase the functions provided by OPERS.

Source: OPERS July 2023 Board Presentation

Full Integration of Operations Model

- **Multi-year transition.**
- **Ohio DC Board determines the pace of transition.**
- **Ultimately, any remaining Ohio DC staff would transition to become OPERS employees.**
- **IT services transition would be coordinated and planned based on need, cost, complexity and timing of expiring contracts, etc.**

Source: OPERS July 2023 Board Presentation

Ohio DC Staff Recommendation

Selective Purchased Services Model

- Determine what services to purchase from OPERS in 2024.
- Board resumes Executive Director search.
- Ohio DC and OPERS determine the scope of the services and implementation timeline.
- Costs are included in the annual budget.
- Progress reports will be provided.

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Potential Purchased Services

- Human Resources
- Information Technology
- Printing/mailing
- Communications
- Internal Audit
- Other services as agreed upon

Our way forward

Next Steps

- **Determine the best option for the Ohio DC staffing model.**
  - Expand existing Ohio DC staff.

    and/or
  - Purchase services to supplement the Ohio DC staff.
- **If services are to be purchased from OPERS identify purchasing policy changes.**
- **Negotiate and budget for purchased services in 2024.**
- **Identify long-term leadership of Ohio DC.**

OHIO Deferred Compensation

BOARD EVALUATION

Ohio Deferred Compensation

BOARD EVALUATION

AT MEETING

FUTURE OBJECTIVES

OHIO Deferred Compensation

Strategic Planning
August 15, 2023

Future Strategic Objectives

Existing Objectives:

1. Goal 2, Objective 49: Complete Phase III of recordkeeping modernization project. (4Q 2023)
2. Goal 3, Objective 26: Research asset retention strategies, including but not limited to self-directed brokerage window and managed account options. (3Q 2023)
3. Goal 3, Objective 27: Research retirement income strategies. (3Q 2023)
4. Goal 5, Objective 20: Develop an administrative staffing model to assist with maintaining new technology, participant service enhancements, and succession plans. (TBD)

Additional Objective(s) for Consideration:

1. Update the internal fiduciary review every five years. (4Q 2024)
   Last completed in 2019.

Ohio Deferred Compensation

INFORMATION ITEMS

Ohio Deferred Compensation

MEMORANDUM

To: Board of Trustees

From: Paul D. Miller, Director of Finance

Date: August 15, 2023

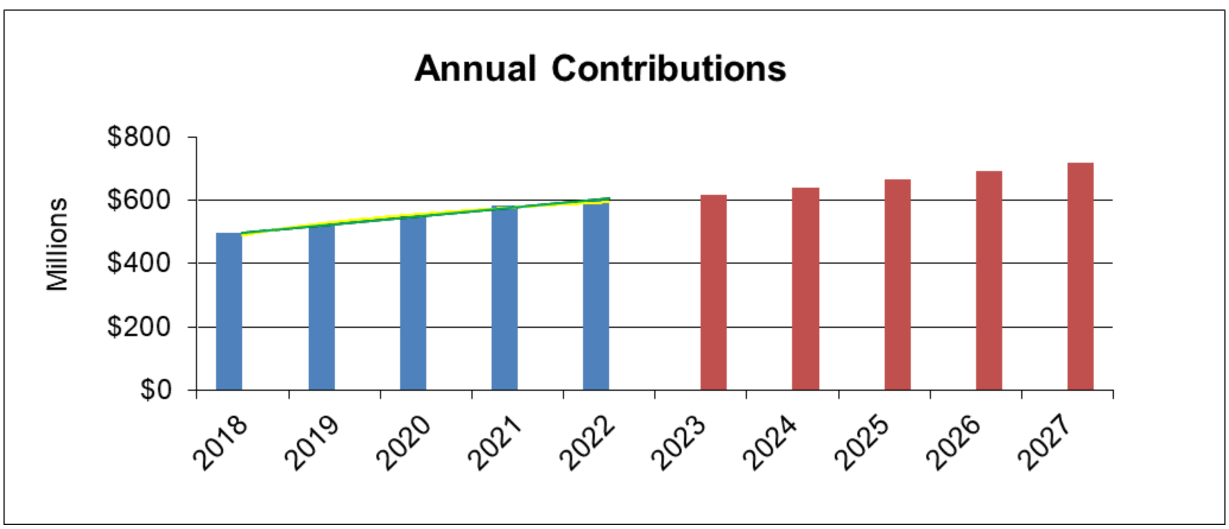
Subject: Mid-Year Financial Summary and Projections

EXECUTIVE SUMMARY

As of June 30, 2023, Ohio Deferred Compensation (Ohio DC) is midway through its fiscal year. This memo highlights the current results of the Program and Administration funds. In addition, this memo includes some 5-year financial projections to help forecast the general direction of Ohio DC and its potential funding requirements, and to provide a broad financial background in preparation for our August Strategic Planning meeting.

PROGRAM FUND ADDITIONS

As of June 30, there were 127,894 actively contributing participants versus 126,194 last June (1.3 percent increase). The IRS annual contribution limit was $22,500 and $20,500 in 2023 and 2022, respectively. Total enrollment in SMarT (automatic increase plan) is 63,403, which is an all-time high. Total payroll contributions for the first 6 months of 2023 were $309 million compared to $297 million for the first six months of last year (4 percent increase). The following graphs show five years (2018-22) of **historical data in blue** and five years (2023-27) of **projected data in red**, based on our trends and assumptions. A linear **trend line in green** reflects the tendency of our historical data.

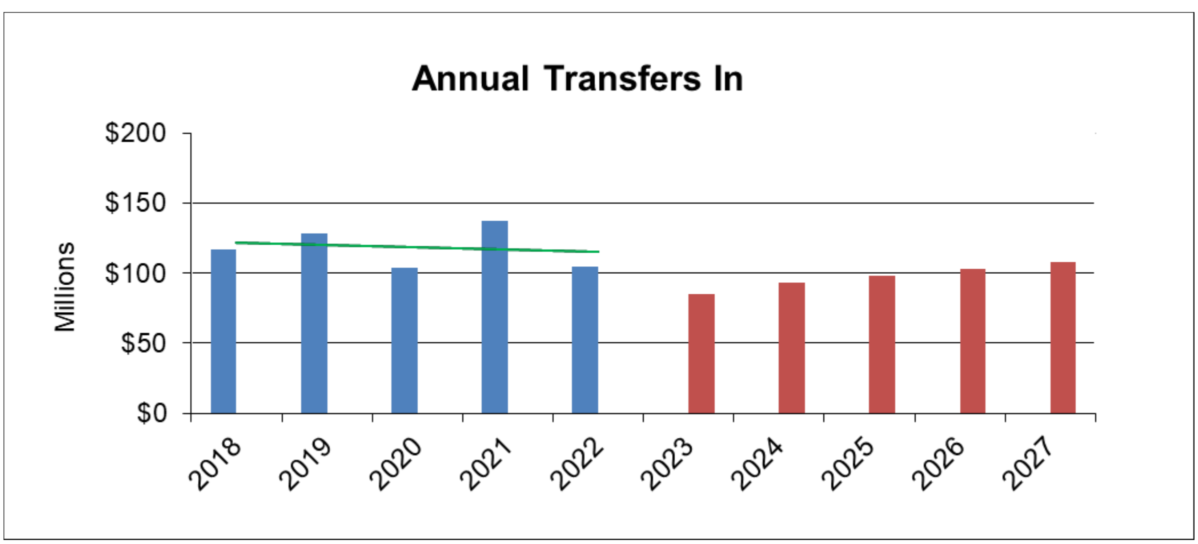


Despite the 2022 market performance, concerns about inflation, and higher interest rates, contribution growth has continued to be relatively strong. The projections in the Annual Contributions graph show a 4 percent annual increase based on current trends.

Participants allocated 15 percent of their June 2023 new payroll contributions to the Stable Value Option (SVO) and 85 percent into other investment options, which is a change from 19/81 percent allocation last June. This represents a continuing trend of participants increasing their risk allocation toward more equities, probably due to high levels of EZ/Auto enrollments going into LifePath Portfolios and the positive equity returns over the past decade. We assume that participants' ongoing investment allocations of new contributions will remain the same over the next five years.

During the first half of 2023, a small group of our participants requested an exchange among available investment options. We had 6,900 participants (2.6 percent of all accounts) request an exchange through June 2023, compared to 10,340 (4 percent of all accounts) during the same period in 2022. In the first half of 2023, participants exchanged a net of $5.3 million from the SVO to the other investment options, compared to $272.5 million exchanged into the SVO from the other options during this same period in 2022. The number and dollar amount of 2023 exchanges are down compared to 2022, likely due to the volatile market (large losses in 2022 followed by moderate gains in 2023). However, exchanges continue to remain low based on our total number of accounts, so our projections do not include large swings in asset allocations.

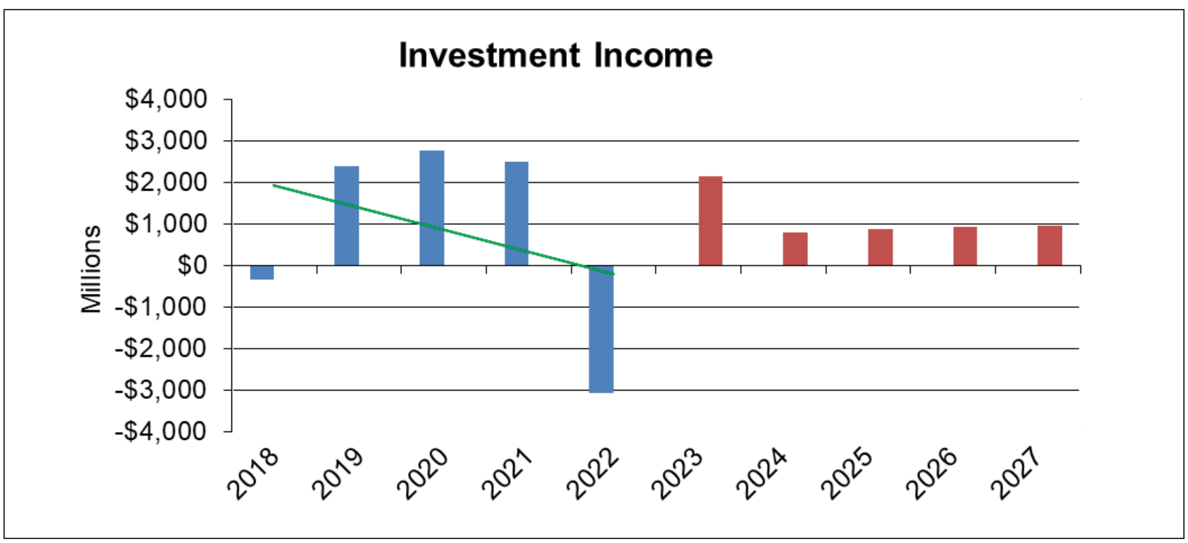
The dollar amounts transferred into Ohio DC this year are down 34.4 percent compared to last year, and the number of transfers into Ohio DC decreased by 29.7 percent compared to last year. The 6-month total for 2023 is $41.2 million compared to $62.9 in 2022. The graph below shows a general flat trend over the past five years, but that period coincided with volatile equity markets, COVID-19 servicing challenges, and terrible investment returns in 2022. Markets have rebounded in the first half of 2023, but transfers into Ohio DC have not. Our low Stable Value Option rate (versus current CD or money market rates) is probably the main reason for this trend. Our projections include a 19 percent drop in 2023, a 10 percent rebound gain in 2024, and then 5 percent annual growth thereafter.



The second quarter 2023 annualized SVO crediting rate was 2.60 percent, which is up compared to the second quarter 2022 rate of 1.60 percent. The SVO crediting rate reflects the interest rate earned by our underlying securities and is adjusted for market-to-book differences. The SVO crediting rate for the third quarter of 2023 is 2.85 percent. Stable value income for the first half of 2022 is $70 million, up 49 percent compared to the same period last year ($47 million) due to the increase in the SVO crediting rate. Our 5-year projections assume that the SVO net annual crediting rate bottomed out in 2022, and as the federal reserve has continued to raise rates, our SVO rates will also rise, but with a lag. As a result, SVO income is predicted to increase as the annual crediting rate moves towards 3.50 percent.

The stock market, as represented by Ohio DC's S&P 500 index option, had a 16.9 percent gain for the first 6 months of 2023 compared to a 16.1 percent loss over the first 6-month period of 2022. Total non-SVO investment income for the first six months of 2023 was a gain of $1.8 billion compared to a $3.3 billion loss in 2022. As of June 30, 2023, the 3-, 5-, and 10-year S&P 500 annualized returns were 14.6, 12.3, and 12.8 percent, respectively. While these returns are above historical market returns, our 5-year projections assume that non-SVO investment returns will be flat for the remainder of 2023, and then return about 5 percent annually thereafter.

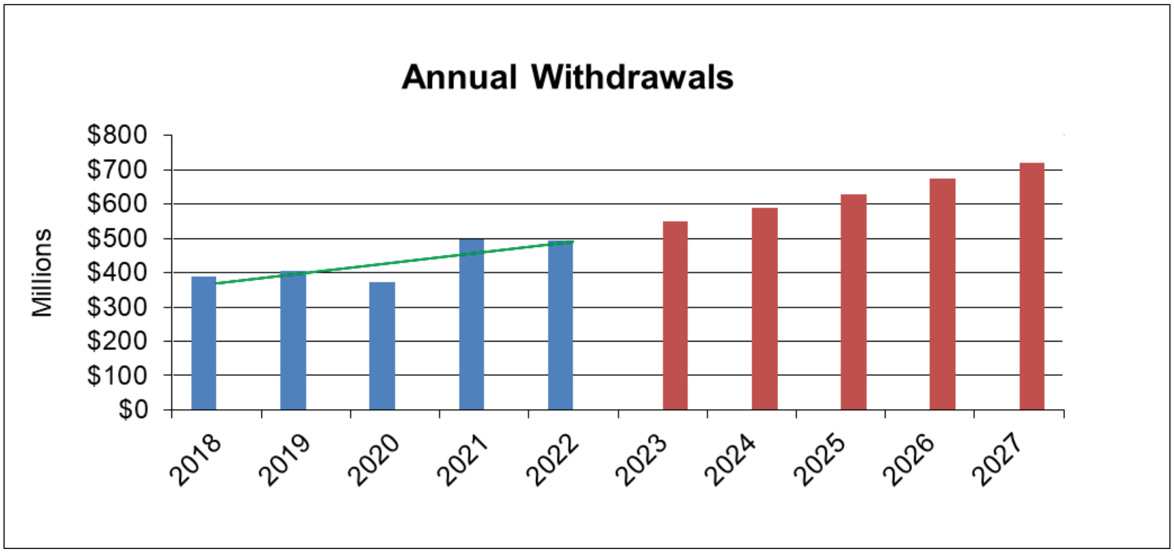
The 2023 RVK capital market assumptions forecast 4 percent annualized returns for US aggregate fixed income, 6.75 percent annualized returns for large/mid cap U.S. equities, and 8.5 percent annualized returns on international equity (large/mid equity). Our five-year projected fixed income and projected equity returns are somewhat conservative compared with RVK's assumptions.



The graph shows historical investment income from all investment options and projected amounts for the next 5 years. The 5-year trend line reflects performance that has varied greatly over the period and is severely impacted by the historical losses of 2022. Our investment income assumptions are based on future annual equity earnings of 5.0 percent, and SVO income earning about 3.5 percent annually.

PROGRAM FUND DEDUCTIONS

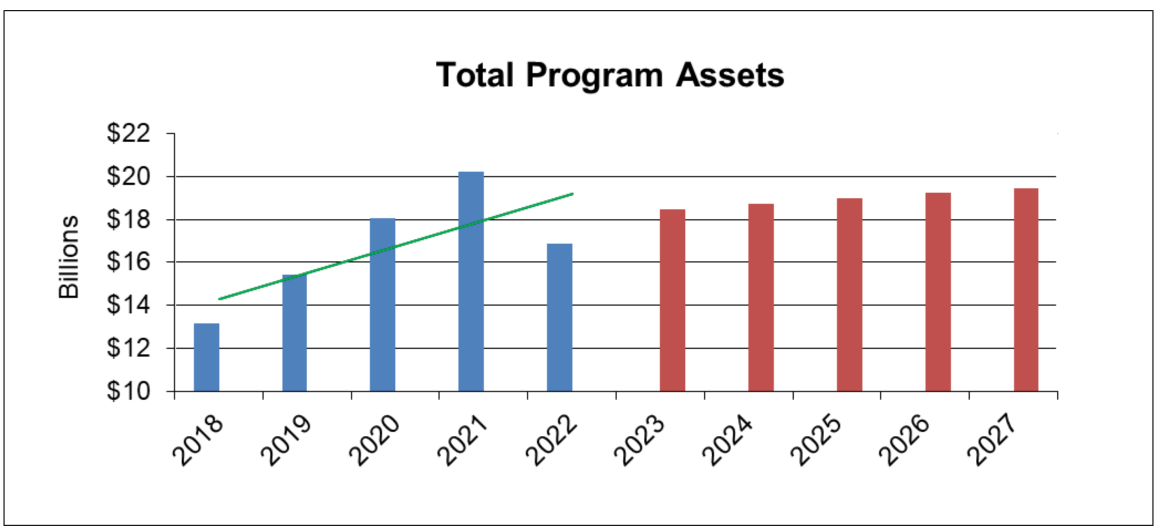
Participant benefit withdrawals were $226 million during the first 6 months of 2023, an 8.2 percent increase over the $209 million withdrawn in 2022. The number of participants taking withdrawals increased by 1.5 percent, so the average amount withdrawn has increased between years. Total annual withdrawals for 2023 are expected to increase 11.3 percent as compared to 2022 based on current year trends. Our projections include withdrawals growing 7 percent annually thereafter.



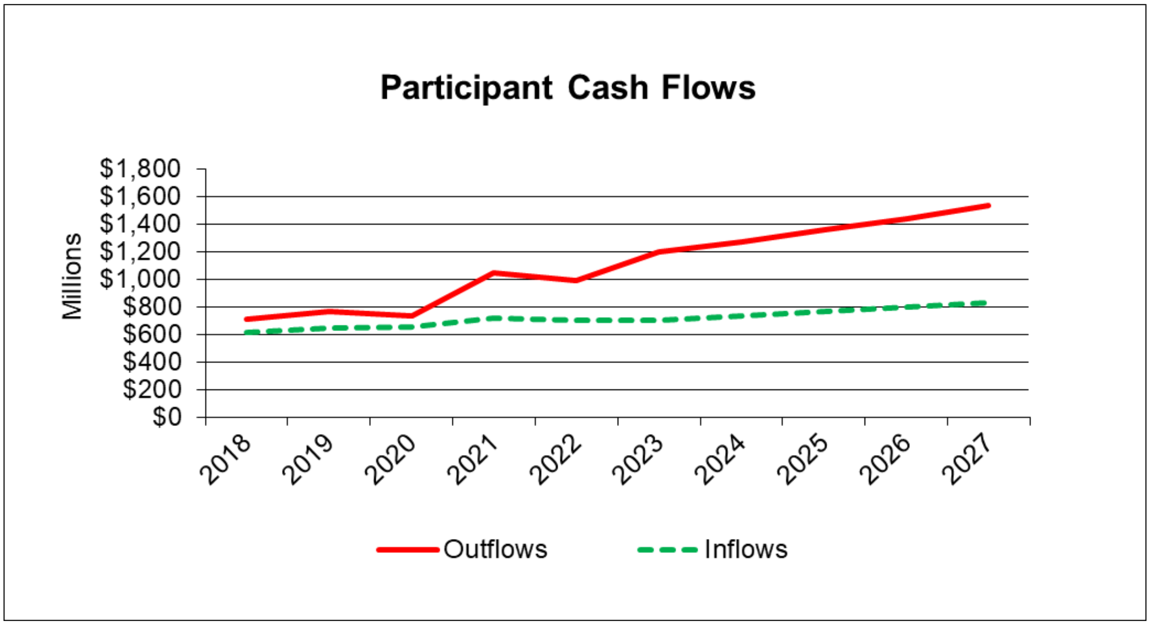
Data for the first 6 months of 2023, compared to 2022, shows rollovers out increased by $80.9 million or 35.9 percent, in-service transfers out increased by $0.7 million or 6.3 percent, and purchased service credit increased by $0.3 million or 6.6 percent. Combined, the three types of transfers are trending up by 34.0 percent year-to-date. The following graph shows historical annual transfers out of Ohio DC (combined rollovers out, in-service transfers, and purchased service credit), and projected amounts for the next 5 years. Transfers during 2023 are projected to go up 30.8 percent from 2022 based on current year trends, after decreasing 11 percent in 2022 due to market volatility/losses. Future projections include a 6 percent annual increase thereafter.

PROGRAM FUND SUMMARY

During the first 6 months of 2023, total assets increased $1.67 billion. New payroll contributions were less than benefit withdrawals and net transfers (rollovers), so Ohio DC experienced net negative cash flows of $206 million for the period (compared to negative cash flows of $93 million the first 6 months of 2022). Net SVO earnings of $70 million and non-SVO investment earnings of $1.8 billion were the source of the increase in total assets.



We expect future negative net cash flows from participant activity (withdrawals and transfers will exceed contributions) of $490-$706 million annually. After a $2.1 billion rebound gain in 2023, we project investment income will be $810 million to $865 million annually thereafter. The net of these two factors will fuel a slow growth in total assets shown in the graph above. Assets are projected to grow from $18.5 billion at the end of 2023 to $19.5 billion by the end of 2027.



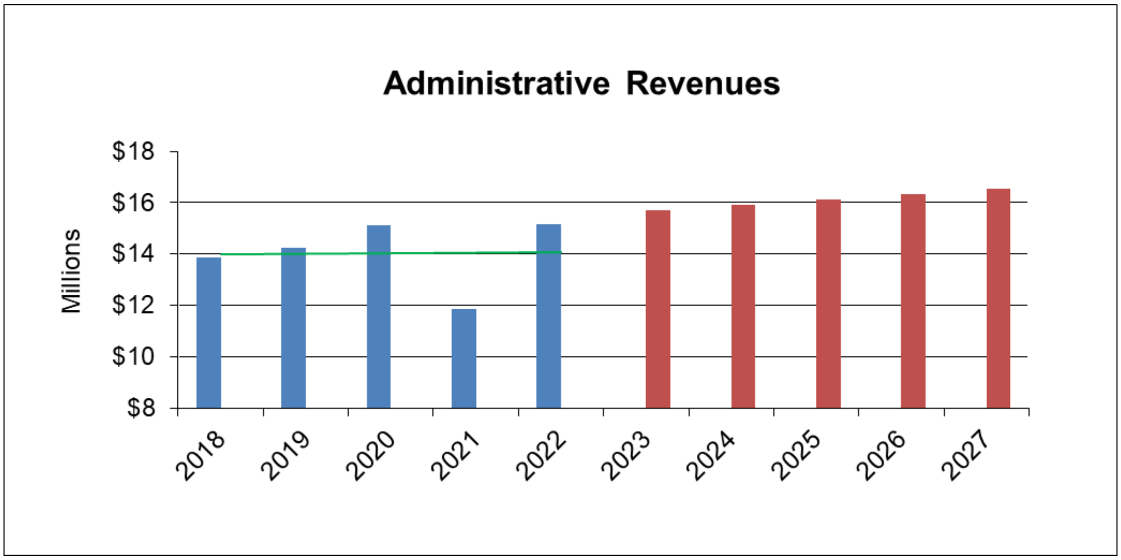
The graph above shows 5 years of historical and 5 years of projected participant cash flows. Until 2013, annual cash flows in exceeded cash flows out, resulting in positive net cash flows and a sustained long-term growth in assets. For the next several years through 2020, we experienced negative cash flows, but at less than $100 million annually. Since 2021 and projected into the future, our net cash outflows are growing much faster than inflows, resulting in an increasing net negative cash flow each year. However, if Plan assets earn a reasonable rate of return, the investment earnings should offset the net negative cash flows, and total assets will continue to grow.

ADMINISTRATIVE FUND REVENUES

Administrative fund revenues for the first half of 2023 were $8.1 million, compared to our budget of $7.6 million and $7.8 million received in the first half of 2022. Beginning in 2016, Ohio DC implemented an administrative fee structure to level fees across our investment options. Administrative fees are 0.14 percent of participant investment balances, but accounts under $5,000 have their fees waived, and each participant's fee is capped at $55 per quarter. The net administrative fee rate realized after the waiver and cap is approximately 0.085 percent (or 8.5 basis points).

As of June 30, total participant account values were $18.5 billion, which is much higher than the $16.9 billion projected in our annual budget. Our 5-year projections include average annual growth in participant assets of about $250 million after the current year surge. Higher participant account values will produce higher revenues, but not on a direct one-to-one basis. Since some participant accounts have waived or capped fees, growth in those account balances does not produce additional administrative revenues. Our projected average annual growth in assets might translate to an additional $200,000 in annual revenue in future years. If operating expenses or capital project costs change in the future, we can adjust the administrative fee formula to manage cash needs accordingly.

The administrative revenues graph below shows historical administrative fees collected and projected administrative fees for the next 5 years based on continuation of our current fee structure. The upward trend forecast for administrative revenues is the same general trend as total assets. The dip in 2021 revenues was due to a one-quarter fee holiday granted to participants to lower Ohio DC's cumulative fund reserves.



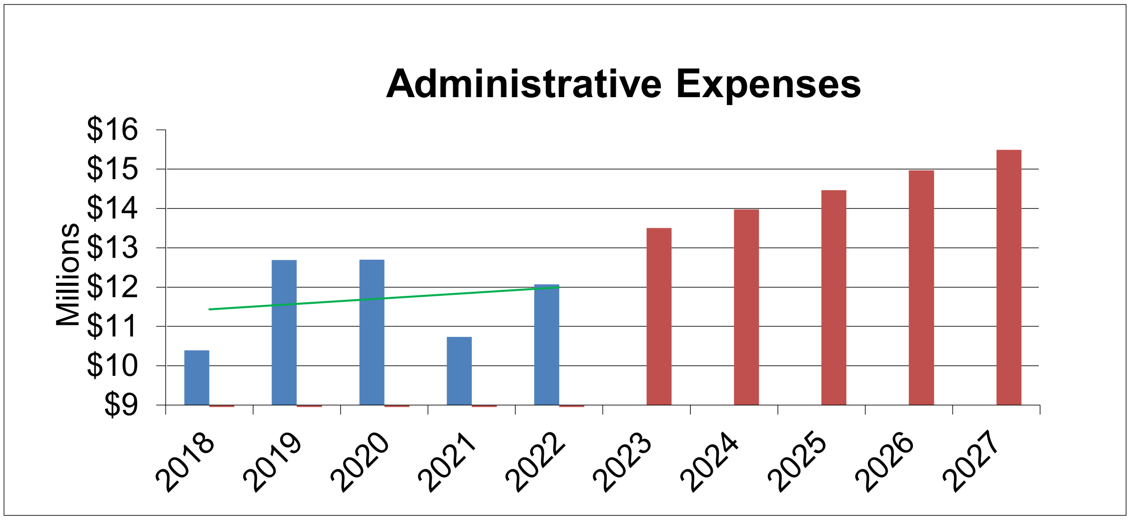
Our cash reserves earn some interest income, whether invested in money market accounts, certificates of deposit, or commercial paper. Interest rates on these investments bottomed out and have moved up considerably over the past year. Interest income is expected to provide about $800,000 annually to the administrative revenues discussed above.

ADMINISTRATIVE FUND EXPENSES

Customer service, our largest expense item, represents about 50 percent of the annual expense budget. As of June 30, 2023, Nationwide completed its 24th year of providing enrollment, education, and customer service to Ohio DC. Year-to-date customer service expense is about $21,000 or 0.6 percent over budget due to staffing levels being slightly higher than budgeted. The current Nationwide contract extension runs until June 30, 2024, and historical fee increases have averaged about 2.5 percent annually. Our projected expenses include a 3.5 percent annual increase through 2027.

Ohio DC staff salaries and benefits represent about 24 percent of the total 2023 expense budget, and these two expense categories are currently 18.8 and 13.4 percent under budget, respectively. Several budgeted positions are unfilled, and the corresponding benefits are not due.

The following graph shows historical administrative expenses and projections through 2027. Projected expenses include Nationwide contractual expenses for customer service, which do not include any changes to current staffing levels. We project other administrative expenses to increase by 3.5 percent annually from 2023 to 2027.



There are some unknown administrative expense factors still to be determined as we approach completion of the recordkeeping modernization project. Retirements and hiring/training employees with new skills that match the new system architecture could affect our staffing. At this time, we do not anticipate material changes to the total expense budget.

ADMINISTRATIVE FUND SUMMARY

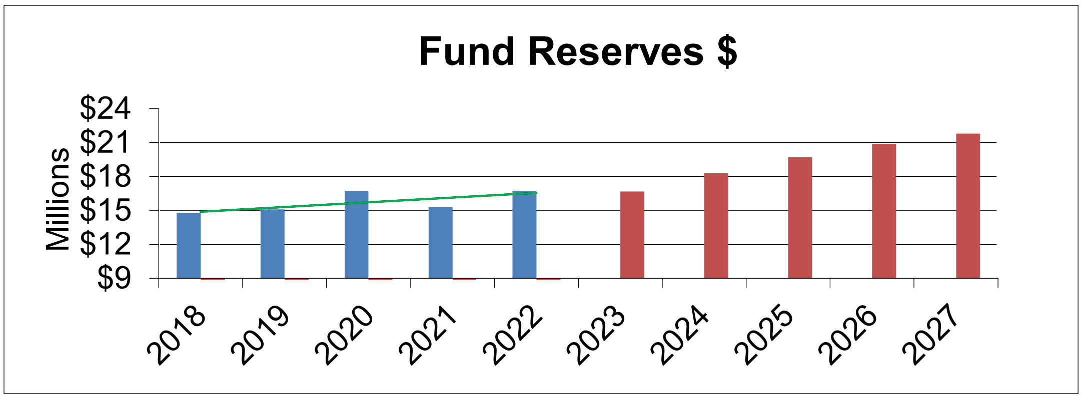
Through June 30, total revenues are 6.8 percent more than budget due to higher participant assets producing higher revenues than forecasted. Total expenses are 8 percent less than budget, primarily due to Ohio DC staff vacancies impacting salaries and benefits. For the first 6 months of 2023, we budgeted excess revenues over expenses of $0.5 million, but actual results were $1.6 million in excess revenues over expenses.

CAPITAL EXPENDITURES

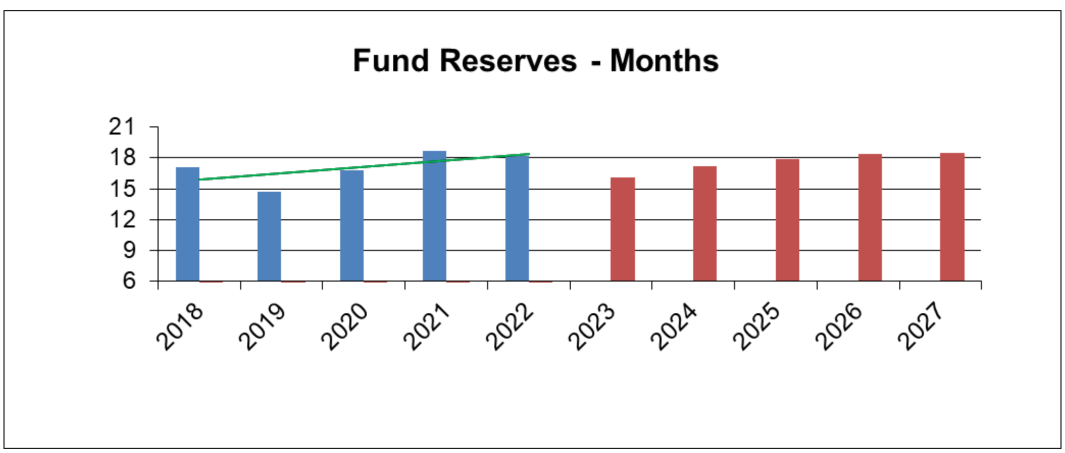
The total capital expenditure budget for 2023 is $2,982,000, which is predominantly the $2,936,000 budgeted for the recordkeeping modernization project. Based on cost updates from the Peraton project manager, we expect the recordkeeping modernization project to be within budget in 2023. At this time, we expect the annual budget for the Peraton consulting team to decrease in 2024, as we wind down the large remaining outstanding projects associated with the recordkeeping modernization project and move more into system maintenance and improvements, which could cost us $1,500,000 annually.

FUND RESERVES

Our fund reserve goal is to maintain 6-18 months of expenses in reserve. As of June 30, 2023, our fund reserve is 16.2 months of expenses, which is near the top of the target range. We expect the fund reserve to remain relatively flat and be at 16.1 months of expenses at the end of 2023. Our projections show fund reserves steadily increasing due to increasing plan assets and the recordkeeping modernization project wind-down. Based on our projections, fund reserves are expected to grow above what is needed to meet our current ongoing needs. If stock market performance and net cash flows continue their current trends, our fees may need to be adjusted.



The graph below shows the number of months of expenses held in our fund reserves and projected reserves through 2027. Our projections show that fund reserves could grow beyond the policy maximum, even with the current market downturn, and some fee adjustment might be appropriate before 2027. As a result, the Board may need to consider expanding services vs. reducing or restructuring fees or offering a fee holiday as actual results are recorded.



CONCLUSION

Total participant account values dropped significantly in 2022 due to the market downturn, but they have rebounded considerably in the first half of 2023 beyond our budget expectations. We are now projecting flat markets for the remainder of 2023 and then low asset growth for the next five years. Cash outflows are expected to exceed cash inflows, so any growth in total assets will be determined by investment performance. Administrative revenues are tied to participant account values and will vary accordingly. Administrative expenses are expected to continue to increase because of the higher inflationary environment. The primary modernization project has been completed, but additional phases (improvements and modifications) remain in process and are planned into the future. Fund reserves are expected to be near the policy maximum and the Board may need to consider adjusting the fee structure and/or expanding services after the market stabilizes.

MEMORANDUM

TO: Board of Trustees

FROM: Paul Miller, Interim Executive Director

DATE: August 15, 2023

RE: 2022-2023 Proxy Summary Annual Report

Executive Summary

The Board Proxy Policy authorizes the Executive Director to vote proxies on behalf of Ohio DC, assigns proxy voting responsibilities pertaining to the underlying securities held within a separate investment account to a third party, and establishes general guidelines for voting. The policy also requires that the Executive Director submit an annual report to the Board summarizing compliance with the policy. Since the last report in August 2022, Ohio DC has not received any proxies to vote on. Ohio DC has let its contract with Glass Lewis expire, which had previously provided research and assistance with proxy voting.

Three of our separate account managers did not make any material changes to their voting guidelines, though T. Rowe Price's Proxy Voting Policies and Procedures document was updated. Westfield Capital Management Company made material policy changes, incorporating revisions from its vendor, Institutional Shareholder Services, adopting two new policies and ten changes to guidelines with a focus on clarifying and/or enhancing how proxy proposals should be evaluated in relation to board accountability. Outside of T. Rowe Price, which is noted below, proxies voted by our separate account managers appear to have been voted in accordance with their guidelines.

Proxy Voting Summary

Since the last annual report, Ohio DC did not receive or directly vote on any proxies.

Proxy Voting by Separate Account Managers

The Proxy Policy allows the Executive Director to assign proxy voting responsibilities pertaining to the underlying securities held within a separate investment account to a third party.

There are currently four separate account managers within three white label funds that vote proxies on behalf of Ohio DC participants:

- **Ohio DC Large Cap Growth fund –** T. Rowe Price began managing a large-cap growth separate account for Ohio DC in August 2014.

- **Ohio DC Small Cap Value fund –** Westwood Management Corporation began managing a small-cap value separate account for Ohio DC in mid-2017.

- **Ohio DC Small Cap Growth fund –** Westfield Capital Management Company and Fiera Capital began co-managing a small-cap growth separate account for Ohio DC in mid-2017.

Separate Account Manager Proxy Voting Summary

	Vendor(s)	Proxy Voting Policy	Recent Material Policy Changes	Date of Latest Policy Changes	Provided Actual Proxy Voting Record	Allowance to Vote Differently from Vendor[1]	Voted Differently than Vendor[1]	Voting Aligned with Guidelines
T. Rowe Price	Institutional Shareholder Services (ISS)	Yes	No	2023[3]	Yes	Yes	No	No[4]
Westwood	Broadridge; Glass Lewis[2]	Yes	No	2018	Yes	Yes	Yes	Yes
Westfield	ISS	Yes	Yes	2023	Yes	Yes	Yes	Yes
Fiera	ISS	Yes	No	2021	Yes	Yes	No	Yes

[1] Investment managers may vote differently from vendor recommendations if they believe it is in the best interest of their clients to do so.

[2] Westwood uses Broadridge for its proxy voting services and Glass Lewis for proxy research.

[3] T. Rowe Price made updates to their Policy and Procedures document in 2023, but they were immaterial in nature.

[4] There were votes which differed from proxy voting guidelines. Portfolio Managers have the discretion to Vote Opposite Policy (VOP) and provide their rationale upon doing so. VOPs do not constitute noncompliance.