





## **Employees' Retirement Fund Board Meeting**

2026-2027 Strategic & Budget Plan



Compliant | Accountable | Transparent

**OCTOBER 14, 2025** 



# Organizational Alignment

- An Organizational alignment is the establishment of an organizations' strategy, structure, people, and processes to ensure that every activity and resource works together toward achieving shared goals and mission outcomes.
- A structured and participatory planning process engaging the Board, employees, and key stakeholders, led by experienced facilitators to build alignment and momentum.
- A refined vision, and maintaining the mission, guiding principles and values that reflect the organization's distinctiveness and future direction.
- Defined strategic Business Pillars and Initiatives aligned with stakeholder feedback and a comprehensive tracking platform.
- Increased organizational capacity to manage performance and track strategic progress using clear, actionable metrics.

## Establishing the 2026 ERF Strategic Plan



### **On Strategy**

- Founded in 2003, headquartered in Reno, Nevada, and remains an active private company.
- Small in size—approximately 5 to 19 employees focused on strategic planning and execution.
- Specializes in services like strategic planning, facilitation, OKR consulting, coaching, and organizational performance.
- Praised for being user-friendly, intuitive, and focusing teams on strategic priorities.
- Designed for a wide range of sectors, including non-profits, government agencies, healthcare, education, and financial services.
- Features scenario planning, risk management, and budgeting tools to support insightful strategic decision-making.

#### **Soaritude**

- Headquartered in Dallas, Texas, Soaritude is a brainchild of Just Work Apps, LLC.
- Founded in 2020, with a mission to use business and technology to empower people and communities.
- Offers Soaritude Templates, a Salesforce Experience Cloud accelerator
- Their platform delivers fast, modular, no-code development, reducing total cost of ownership and enabling rapid digital experience deployment.
- Manages Soaritude.io, an EdTech platform that unifies LMS, student information systems, CRM, and community engagement into a single solution.
- The EdTech platform is designed to reduce dependency on multiple systems, offering an intuitive, all-in-one, point-and-click interface that improves usability.

## **Strategic Planning Blueprint**

## **Core Purpose**

What is our noble reason for being?

## **Diagnosis**

Where are we today?

Gain Insights

Gather perspectives

Process data

## **Envisioned Future**

What does success look like?

LT Direction Setting

## Guiding Approach

How will be reach the desired outcomes?

LT Pillar & Initiatives Mapped

#### **Coordinated Action**

Who needs to do what by when to achieve our future state? SMART Goals developed by team member for measurable results

## Our Strategic Process

#### **Vision ~ Mission ~ Guiding Principles ~ Core Values**

#### **Internal Analysis**

Employees I Customers I Partners

#### **External Analysis**

Market Data & Trends I Competitive Analysis

#### **Strategy of Record**

Current Strategy I Financial + Budget

#### **Strategic Issues & SWOT by Theme**

#### Vision + Strategic Framework

#### **Business Pillars**

#### **Initiatives**

Shifts Needed | Success Measures | Milestone Roadmap

#### **Winning Strategy**

Where to Play? I How to Win? I Guiding Principles

Q1 Calibration

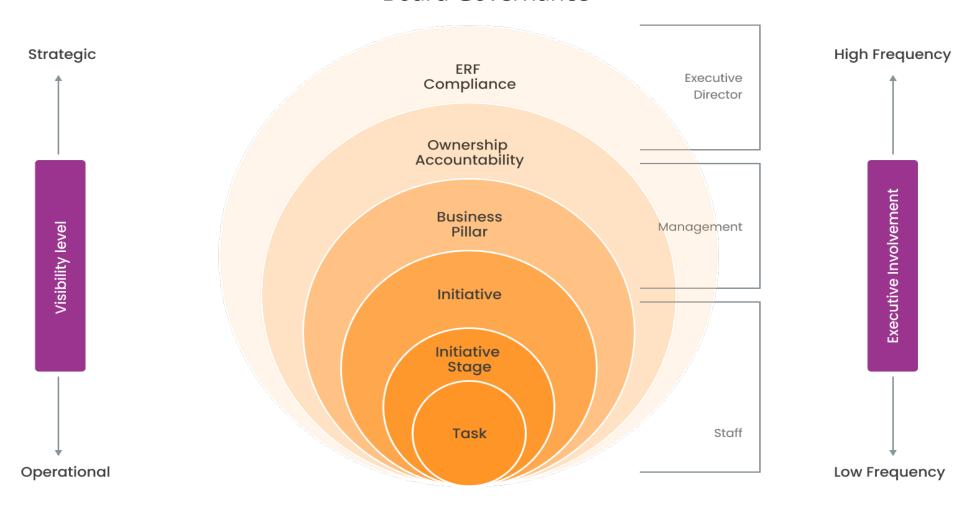
**Q2 Calibration** 

**Q3 Calibration** 

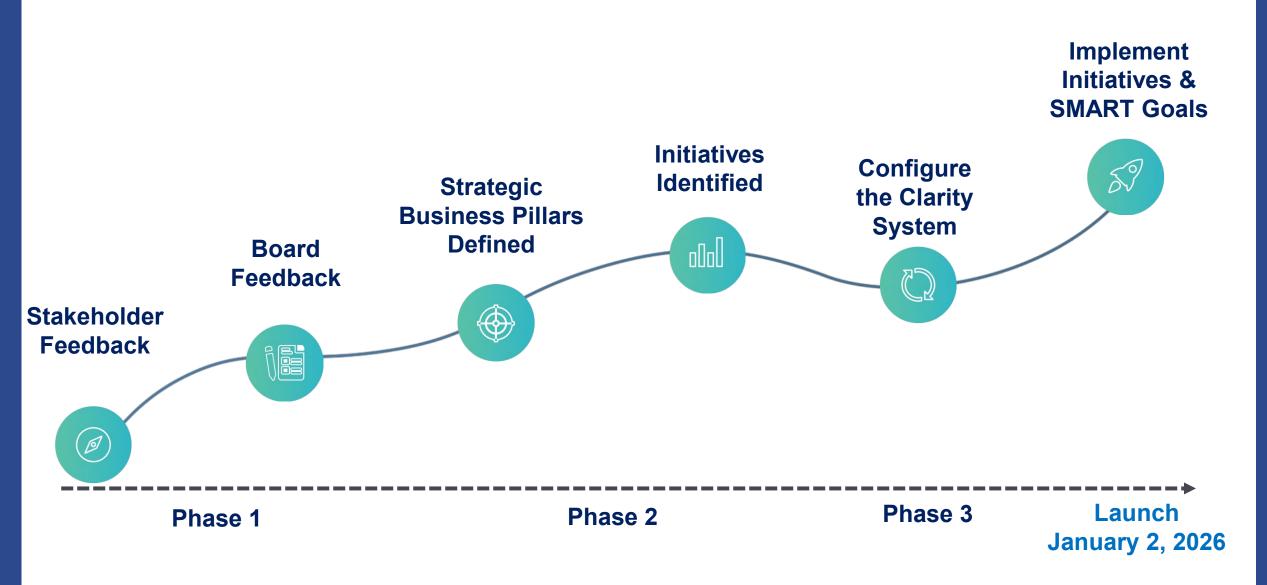
**Q4 Calibration** 

## ERF Strategic Plan Model

#### **Board Governance**



## 2026-2027 Strategic Planning Methodology



# ESTABLISHING SMART GOALS

#### **Outcomes**

- Cascade the organizational Business Pillars & Initiatives to an actionable bi-annual plan.
- Identify metrics, team and individual-level actions to support your collaborative strategies.
- Drive alignment, focus, and accountability among teams and individuals.
- Establish a process for managing the monthly/quarterly performance cycles.

#### **Key Activities**

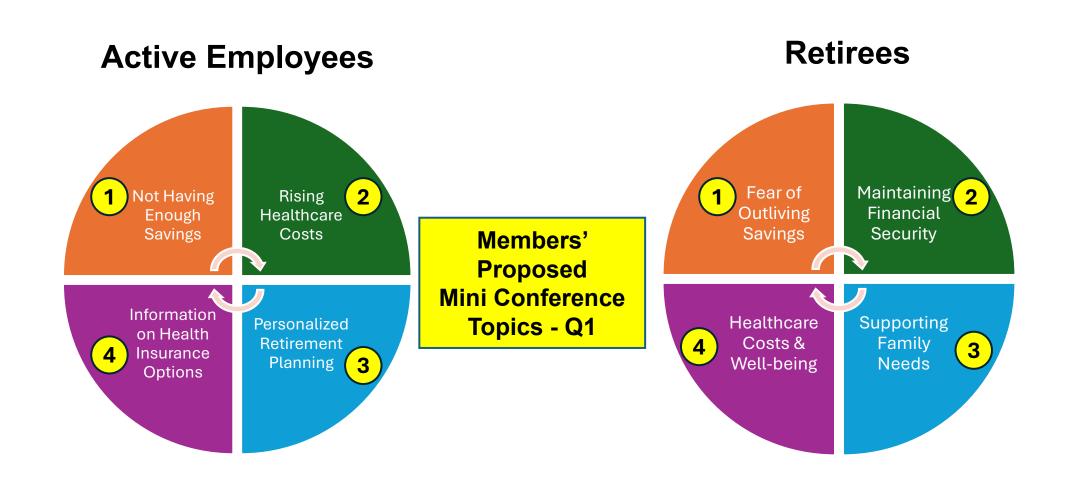
- Full day facilitated workshop to build understanding of SMART Goals for 2026.
- Drafted SMART Goals by individual team member to drive Initiative success.
- Created actionable, measurable SMART Goals that are outcome oriented.
- Established a 2026 roadmap of Initiatives to demonstrate aligned, coordinated actions.

Create actionable, measurable SMART Goals to maintain compliance with 40A, build accountability and transparency.

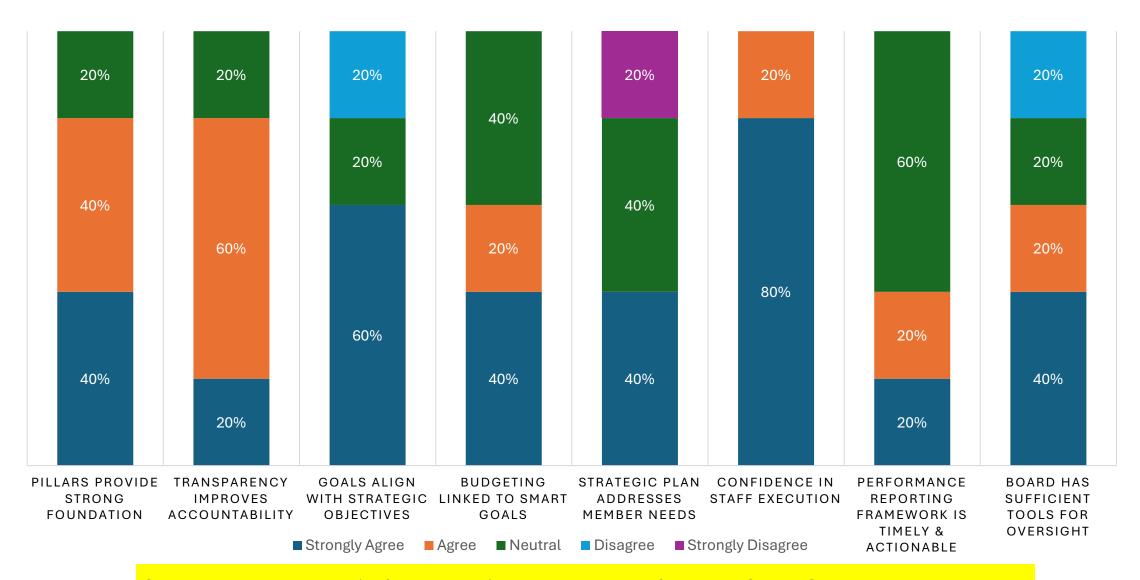
## **ERF** Employee Engagement Results

	2024	2025
Overall Satisfaction:	71%	91%
Workforce Belonging:	82%	91%
Fiscal Stability:	86%	97%
Community Responsibility:	82%	94%
Job Security:	86%	91%

## **Member Education Opportunities**



#### **BOARD INSIGHTS**



Overall, the Board consensus (5 of 7 participants) recognizes the value of the Pillars, SMART Goals, budgeting alignment, and staff execution, while highlighting areas for improvement in performance reporting and strategic planning clarity.

## 2026-2027 Strategy Plan

#### **Vision**

## To be a trusted, transparent, and highperforming retirement system

 "A Fund that secures the future of members while delivering measurable results through innovation, accountability, and service excellence."

#### **Mission**

Provide retirement benefits and superior service to advance the financial security of its members

#### **Guiding Principles**

- We are committed to excellence, quality and value in everything we do through the most effective use of our resources.
- We focus on the needs of our members and deliver consistent and timely information to our members about their retirement benefits.
- We are committed to public trust by being an ethical, sensitive, and cost-efficient organization.
- We model best practices in our industry and innovate to achieve higher standards
- We continually evaluate our business processes to support a user-friendly environment that improves member satisfaction.
- We support open communication.

#### **Core Values**

#### The ERF Staff is committed to reflecting these core values in all we say and do:

- Fulfilling fiduciary responsibilities with the utmost integrity and accountability;
- Thinking independently, respecting individuality, and working as a team;
- Encouraging open communication and collaboration;
- Continuously expanding our knowledge; and
- In all endeavors, act in an ethical, honest, and professional manner.

## 2026-2027 Business Pillars

2025 Business Objective	2026-2027 Business Pillars
Benefits Management	Benefits Management
N/A	Board Administration
Customer Service	Customer Service
Financial Management	Financial Management
Investment Management	Investment Management
Talent Management	Talent Management
Education	Member Communications
Operations Management	Technology Services

## 2026-2027 Business Pillars & Priority Initiatives

Business Pillars	Initiative I	Initiative II		
Benefits Todd	Retirement Calculations – By December 31, 2026, achieve 100% accuracy in retirement benefit calculations as verified through the consent agenda, with any identified discrepancies corrected within 2 business days.	<b>Terminated Vested –</b> By December 31, 2026, process all Term Vested employees and present to the Board within 60 days of termination. Defer 10 members monthly at 95% compliance.		
Board Administration David & Margaret	Consent Agendas – By December 31, 2026, establish 12 Board Consent Agendas and verify all calculations are 100% accurate.	<b>Board Minutes –</b> By December 31, 2026, produce all (7) Board and Committee minutes within (5) business days at the end of each month.		
Customer Service  David	Rating – By September 30, 2026, achieve and maintain a 96% satisfaction rating across all member service touchpoints (phone, email, virtual, and in-person)			
Financial Management Edward	<b>Payroll –</b> By December 31, 2026, process retirement payroll 12 times annually, each on the last business day of the month, with 99.98% accuracy.	City Invoicing & Contributions – By December 31, 2026, send 12 monthly invoices to the City of Dallas and collect 100% of ADC (Actuarially Determine Contribution)		
Investment Natalie	Rate of Return – By December 31, the ERF portfolio will achieve a net annualized return of at least 7.25% on a rolling three-year basis, net of all fees and expenses.	Portfolio Rebalancing – By December 31, 2026, the ERF Dallas Investment Team shall rebalance each asset class allocation within +/- 2% of its IPS target weight quarterly.		
Member Communications Melissa	<b>Education –</b> By Sept 30, 2026, educate 15% of active employees annually via virtual, onsite, or other outreach and update materials bi-annually for accuracy	<b>Member Satisfaction</b> – By September 30, 2026, achieve a 96% satisfaction rating from members through anonymous surveys.		
Talent Management Katie	<b>SMART Goals</b> – By December 20, 2026, ensure that 100% of ERF employees establish their key initiatives as SMART Goals in Clarity System.	<b>Performance Evaluations –</b> By December 20, 2026, ensure that 100% of ERF employees receive an annual performance evaluation, with 90% achieving a rating of "Meets Expectations" or higher, as measured by Clarity System.		
Technology Services Duc	<b>Technology Security –</b> By September 30, 2026, prevent, or report cybersecurity breaches by implementing effective detection, reporting, and escalation processes, and reduce IT operational risk by providing 100% technical redundancy for critical IT issues within 24 hours of identification.	<b>Technology Support</b> – By September 30, 2026, provide timely support for Vtech, Microsoft Tools, laptops, and servers 100% during business hours and resolve service tickets (CRM) requests within 48 hours. Escalate unresolved requests to vendor(s) after 48 hours.		

## Outcomes Based Budgeting (OBB)

Enhancing 40A Compliance, Accountability, and Transparency

## What is Outcomes Based Budgeting?

A financial planning approach that shifts focus from spending inputs to achieving measurable results.

At ERF, OBB integrates directly with the Strategic Plan and Business Pillars, ensuring every dollar supports defined outcomes.

## Benefits to ERF Board and Staff

#### 40A Compliance

- Aligns resources with statutory obligations in Dallas City Code Chapter 40A.
- Reduces compliance risks by mapping budget allocations to legal mandates.

#### Accountability

- Links budget decisions to measurable outcomes.
- Enhances Board oversight and performance visibility.
- ☐ Staff seeks the Board's approval to implement an RFP for a new accounting system.

#### Transparency

- Provides clear, easy-to-understand reports linking costs to results.
- Builds trust with members, staff, and the public.

## 2026-2027 Key Focus Areas

\$26,326,000

BUSINESS PILLARS	FY2025-26 BUDGET BY BUSINESS PILLAR	INITIATIVE	BUSINESS OWNER		
Benefits	\$ 1,234,500	<ul><li>Retirement Calculations</li><li>Terminated Vested</li></ul>	Todd Green		
Board Administration	\$ 2,898,100	<ul><li>Consent Agenda</li><li>Board Records</li></ul>	David Etheridge Margaret Lara		
Finance	\$ 2,343,400	<ul><li>Payroll</li><li>City Invoicing</li></ul>	Edward Scott		
Investment	Managers Fees \$13,870,000 Program Cost \$ 1,803,500	<ul><li>Rate of Return</li><li>Portfolio Rebalancing</li></ul>	Natalie Jenkins Sorrell		
Member Communications	\$ 704,400	<ul><li>Member Communication</li><li>Member Satisfaction</li></ul>	Melissa Harris		
Talent Management	\$ 179,300	<ul><li>Establishing Smart Goals</li><li>Performance Evaluations</li></ul>	Katie Shaw		
Technology Services	\$ 3,292,800	<ul><li>Technology Security</li><li>Technology Support</li></ul>	Duc Lam		

**TOTAL** 

| 17

## Summary

### Outcomes Based Budgeting:

- Transforms ERF financial planning into a results-driven, transparent, and accountable process.
- □ Strengthens compliance with 40A, enhances fiduciary oversight, and ensures resource alignment.
- ☐ Provides a governance mechanism that ties strategy, budgeting, and measurable outcomes together.

## **Clarity System**

David K. Etheridge | Carla Kossally

# What is the ERF Clarity System?



Strategic Alignment Platform – The Clarity System connects ERF's Business Pillars, Initiatives, SMART Goals, and Tasks into one integrated framework, ensuring every activity is aligned to the Fund's mission and City Code 40A compliance.



Real-Time Performance Tracking – By capturing outcomes in dashboards, the system provides the ERF Board and staff with real-time visibility into progress, accountability measures, and resource utilization across all service areas.



Outcome-Based Budgeting Integration – Clarity links financial planning with strategic objectives, translating ERF's budget into measurable results that highlight cost, value, and impact of each Business Pillar.



Employee Engagement & Accountability Tool – The platform ties individual performance evaluations and employee SMART Goals directly to ERF's broader strategic plan, fostering accountability, transparency, and professional growth.



Data-Driven Decision Support – By consolidating planning, operations, and reporting into a single system, Clarity equips leadership with actionable insights for informed decision-making, continuous improvement, and stakeholder confidence.

# Clarity System Integration Overview

The Clarity System is a Salesforce-driven strategic management and performance platform built in collaboration with Soaritude. It incorporates a five-level cascading framework and integrates with core ERF systems.

#### **System integrations include:**



Pension Administration



Pension Administration New Accounting
System with Board
approval.

Pension Administration



**Custodial Banking** 

Pension Benefit Information System

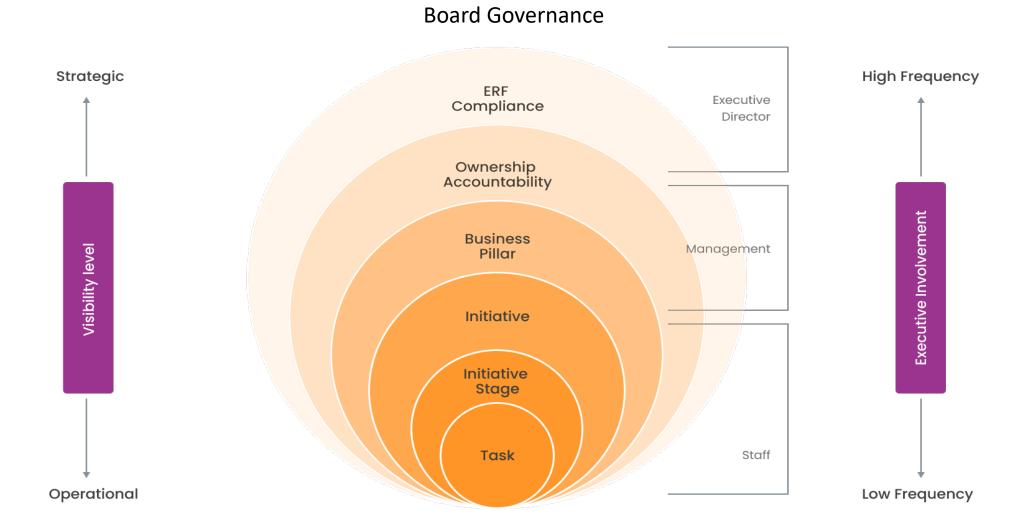
**Death Reporting** 



## A Vehicle for Transparency – The Clarity System



## **Transparency with Clarity**



## **Board & Executive Director | Strategic Visibility & Accountability**

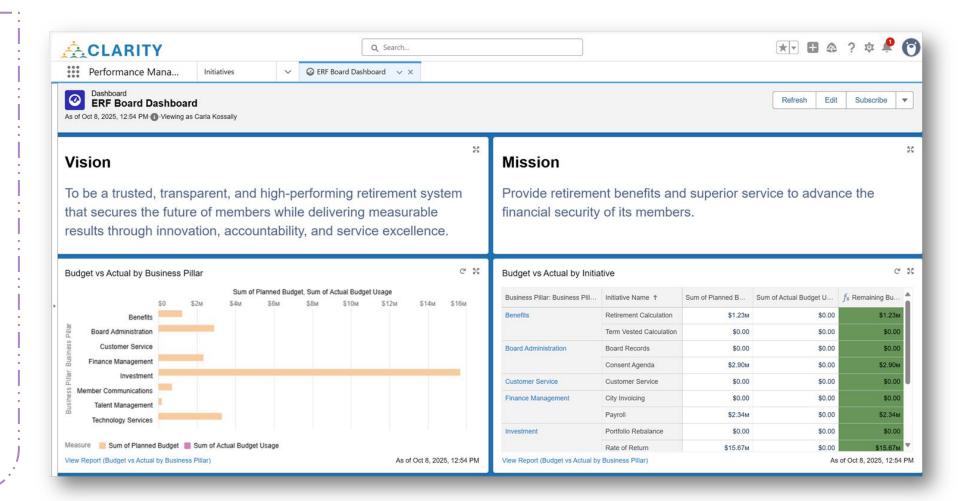
40A Compliance

Empowers data governance

Enables proactive disclosure of strategic priorities

Clear visibility into operational processes

Track KPIs and outcomes

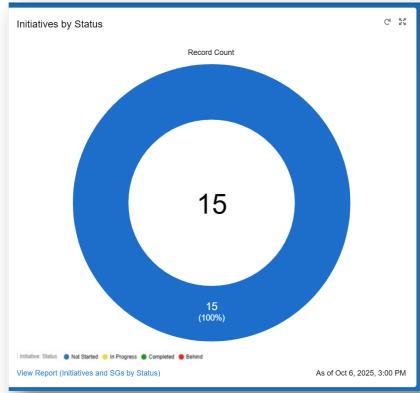


## **Management | Operational Clarity**

Integrating data-driven insights with a comprehensive view of organizational initiatives

Streamline operations by identifying and addressing process improvement opportunities

Leverage real-time KPI monitoring to drive continuous improvements in training and performance results



Initiative: Business Pillar ↑	Initiative: Initiative Name	Initiative: Status	SMART Goal
Benefits	Retirement Calculation	Not Started	Retirement Calculations – By December 31, 2026, achieve 100% accuracy in retirement benefit calculations as verified through the consent agenda, with any identified discrepancie corrected within 2 business days.
Benefits	Term Vested Calculation	Not Started	Terminated Vested – By December 31, 2026, process all Ten Vested employees and present to the Board within 60 days of termination. Defer 10 members monthly at 95% compliance.
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Finance Management	Payroll	Not Started	Payroll – By December 31, 2026, process retirement payroll 12 times annually, each on the last business day of the mont with 99% accuracy.
Finance Management	City Invoicing	Not Started	City Invoicing & Contributions – By December 31, 2026, send 12 monthly invoices to the City of Dallas and collect 100% of ADC (Actuarially Determine Contribution)
Investment	Rate of Return	Not Started	Rate of Return – By December 31, the ERF portfolio will



## Implementation Schedule

Event	Facilitators	Date
Leadership Team Strategic Plan Retreat	OnStrategy & Soaritude	August 18, 2025
ERF Department Meeting	OnStrategy & Soaritude	August 19, 2025
Clarity System – Strategy System Upload	Soaritude & ERF	August 25, 2025
Eight (8) Week Configuration Sprints	Soaritude & ERF	July 28 - September 12, 2025
Board, Active and Retiree Feedback	OnStrategy & ERF	August 2025
Clarity System UAT Kickoff	Soaritude & ERF	September 15, 2025
Board Presentation – Clarity System	ERF & Soaritude	October 14, 2026
GOLIVE Date	ERF & Soaritude	January 2, 2026

#### **FUND SUMMARY**

	Expenditures	Approved	Approved	Amended	Proposed		Percent
	Through	Budget FY	Budget	FY 2024-25	FY 2025-26	Budget	Increase
	8/31/25	2024-25	Amendments	Budget	Budget	Variance	(Decrease)
ADMINISTRATIVE							
Salaries	\$ 4,265,153	\$ 5,113,100	\$ (150,000)	\$ 4,963,100	\$ 5,113,000	\$ 149,900	3.0%
Merits	35,046	160,000		160,000	208,000	48,000	30.0%
Service Incentive Pay	2,208	2,100		2,100	2,200	100	4.8%
Lump Sum Pay	(0)	363,000		363,000	369,100	6,100	1.7%
Pensions	978,390	1,165,700		1,165,700	1,287,000	121,300	10.4%
Flexible Benefits	362,400	362,400		362,400	383,900	21,500	5.9%
FICWA/Medicare	58,784	74,200		74,200	83,000	8,800	11.9%
Workers' Compensation	-	21,000		21,000	28,000	7,000	33.3%
Temporary Help Services	353,806	245,000	150,000	395,000	400,000	5,000	1.3%
Supplies	9,449	11,600		11,600	11,900	300	2.6%
Food Supplies	1,762	11,600		11,600	11,900	300	2.6%
Meter Postage	20,959	20,000		20,000	20,600	600	3.0%
Printing/Communication	6,760	10,000		10,000	10,300	300	3.0%
Property Insurance	10,878	11,600		11,600	11,900	300	2.6%
Liability Insurance	305,411	344,300		344,300	354,600	10,300	3.0%
Membership Dues	20,209	25,000		25,000	25,800	800	3.2%
Subscriptions	557	1,400		1,400	1,400	-	0.0%
Professional Development/Travel	203,657	250,000		250,000	252,000	2,000	0.8%
Reimbursement for Vehicle Use	-	400		400	400	-	0.0%
Data and Telecommunications Services	798,323	825,000		825,000	835,000	10,000	1.2%
Rent	545,033	660,000		660,000	679,800	19,800	3.0%
Parking and Public Transportation	4,320	5,000		5,000	5,200	200	4.0%
Legal	495,418	400,000	130,000	530,000	400,000	(130,000)	-24.5%
Accounting	45,740	50,000	,	50,000	50,000	-	0.0%
Audit	47,800	50,800		50,800	51,000	200	0.4%
Actuary	134,692	150,000		150,000	150,000	-	0.0%
Election	21,000	25,000		25,000	50,000	25,000	100.0%
Other	57,905	100,000		100,000	60,000	(40,000)	-40.0%
Total Administrative	8,785,660	10,458,200	130,000	10,588,200	10,856,000	267,800	2.5%
BENEFITS MANAGEMENT							
Disabilities/Continuations/Etc	1,123	28,000		28,000	28,000	-	0.0%
Pension Benefit Information	10,891	10,000		10,000	12,000	2,000	20.0%
Total Benefits Management	12,014	38,000	-	38,000	40,000	2,000	5.3%
INVESTMENTS MANAGEMENT							
Manager Fees	11,797,126	14,000,000	(130,000)	13,870,000	13,870,000	-	_
Investment Consultant & Services	395,265	420,000	(130,000)	420,000	441,000	21,000	5.0%
	-			•	299,000	-	
Custodial Fees	271,516	284,000		284,000		15,000	5.3%
Total Investments Management	12,463,907	14,704,000	(130,000)	14,574,000	14,610,000	36,000	0.2%
CAPITAL							
Furniture, Fixtures, Equipment	40,125	50,000		50,000	50,000	-	0.0%
Computer Equipment	65,426	120,000		120,000	120,000	-	0.0%
Total Capital	105,550	170,000	=	170,000	170,000	-	0.0%
TOTAL RECURRING	\$ 21,367,131	\$ 25,370,200	-	\$ 25,370,200	\$ 25,676,000	\$ 305,800	1.2%
NON-RECURRING							
Special Projects	374,404	650,000		650,000	650,000	-	0.0%
TOTAL BUDGET	\$ 21,741,535	\$ 26,020,200	\$ -	\$ 26,020,200	\$ 26,326,000	\$ 305,800	1.2%

#### **DISCUSSION SHEET**

## Employees' Retirement Fund Board of Trustees Meeting

October 14, 2025

**Issue:** Fiscal Year 2025-26 Budget

**Attachment:** Proposed ERF FY 2025-26 Budget

**Discussion:** The fiscal year budget is from 10/1/25 to 9/30/26. The proposed FY

2025-26 budget is \$26,326,000, which includes recurring expenditures and special projects. This represents an increase of \$305,800 compared to the FY 2024-25 amended budget. The recurring expenditures are the operating costs and investment fees of the Fund. The recurring costs for FY 2025-26 are \$25,676,000, which is an increase of \$305,800 over the prior year. This increase is primarily due to investment managers' fees, inflation and merit-

based training for succession planning.

The special projects category includes technology upgrades which are one-time costs. The proposed budget for Special Projects for FY 2025-26 is \$650,000.

#### Highlights include:

- Investment management fees remain unchanged due to lower actual costs.
- Personnel costs are budgeted to increase due to an average 3% performance-based increase in salaries. This change is in accordance with the City of Dallas estimate. Merits are increasing to provide funds for employee cross-training and to enhance the Fund's succession planning for executive-level positions. Pensions are increasing due to changes to 40A and an increase in pension obligation bond debt service. Workers' Compensation is billed by the City of Dallas and is increasing according to the City's cost allocation plan.
- Legal fees are decreasing to the original 2024-25 budget level due to receipt of the final invoice for litigation.

In summary, the net increase to the FY 2025-26 budget is \$305,800, or 1.2% higher than the FY 2024-25 budget.

**Recommendation:** Approve the proposed budget for FY 2025-26. Suggested motion for the approval is as follows: Move approval of the proposed FY

2025-26 budget totaling \$26,326,000 which is attached to this discussion sheet and authorize the Executive Director to administer the budget as noted below.

The Executive Director is authorized to expend, as required, up to 110% of each line item or \$75,000 whichever is less of the funds appropriated herein, but in no instance, is the authorization given to exceed the total budgeted for each category (Administrative, Benefits Management, Investments Management, Capital, or Special Projects) without Board approval.

The Executive Director is authorized to negotiate and sign contracts which are required in the conduct of Fund business and funds have been approved in this budget. This authorization is limited to \$75,000 per contract.

The Executive Director is authorized to pay budgeted expenses, and to further pay pensions and member refunds which are authorized by law but are not specifically included in this budget.

#### **DISCUSSION SHEET**

## Employees' Retirement Fund Board of Trustees Meeting

October 14, 2025

**Issue:** Request for Proposals – Financial Accounting Software System

Discussion:

ERF staff currently manage accounting and financial reporting functions using a combination of Quickbooks Online and Microsoft Excel spreadsheets. With additional complexity in the Investment structure, Generally Accepted Accounting Principles, and Outcome Based Budgeting, there is now a need to implement a more robust financial accounting system.

The functionality required by such a system includes:

- Budgeting at the Fund, Business Pillar, and Initiatives levels
- Budget versus actual reporting on administrative costs
- Overall fund performance reporting to include benefits and investments
- Workflow automation, to include travel and expense approvals
- Interfaces with Northern Trust, American Express, Vitech and Clarity
- Automated reconciliation processes

Implementation of an effective Financial Accounting Software System will improve transparency to the Fund's cost of providing services through a close integration with the Outcomes Based Budgeting methodology, mitigate risk by automating manual processes, and allow staff to redirect efforts towards the Board's strategic goals.

**Timeline:** RFP Issued October 20, 2025

Deadline for questions from vendors

Answers to vendor questions

Proposals due to the Fund

Staff due diligence

Staff recommendation to the Board

October 29, 2025

November 5, 2025

December 5, 2025

January 12, 2026

February 10, 2026

Recommendation: Authorize ERF Staff to release a Request for Proposal (RFP) to

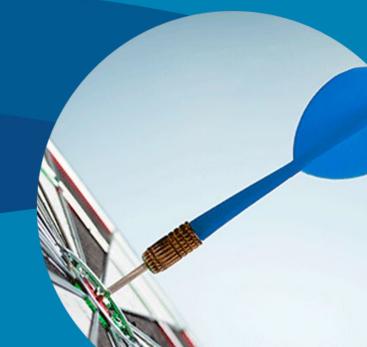
Financial Accounting Software System providers; staff may conduct due diligence with finalist recommended to the Board of Trustees at

the February 2026 meeting.



## Employees' Retirement Fund of the City of Dallas Experience Study – Preliminary Findings

Lewis Ward and Danny White October 14<sup>th</sup> 2025



## Purpose of an Experience Study

- Texas Government Code Section §802.1014 and Dallas City Charter Chapter 40-A both require an actuarial experience study be performed once every five years
- An experience study is a regularly scheduled process to analyze how experience is tracking the assumptions and identify if assumptions need updating
- Assumptions are not static and should change if necessary to better predict the expected future experience
- Thus, our analysis will address the following questions for each assumption
  - What was ERF' actual experience?
  - How does that compare with current assumptions?
  - Is a change warranted?



## **Assumptions Studied**

#### Economic assumptions

- Price inflation (CPI)
- Investment return
- Cost of Living Adjustment (COLA)
- Salary increases (for individuals)
- Payroll growth rate (for plans as a whole)

#### Demographic assumptions

- Mortality (Active Duty and Non-Duty, Post-Retirement)
- Disability (Duty and Non-Duty)
- Retirement
- Other terminations
- Other miscellaneous assumptions

#### Actuarial Methods

- Funding Method
- Asset Smoothing Method



#### **Actuarial Standards**

- Guidelines for the assumption setting process are set by the Actuarial Standards of Practice
  - ASOP #4 Measuring Pension Obligations
  - ASOP #27 Selection of Assumptions for Measuring Pension Obligations
  - ASOP #44 Selection and Use of Asset Valuation Methods



## **Actuarial Standards**

- Each Individual Assumption must satisfy the Actuarial Standard
- The set of Assumptions should be internally consistent
- The set of Assumptions as a whole must satisfy the Actuarial Standard



## **Preliminary Findings**

- In general, most of the current assumption set is reasonable
- The significant assumptions with recommended changes are:
  - Update mortality assumptions and mortality improvement scale
  - Increase rates of turnover for males and females
  - Increase in expected individual salary increases
  - Overall impact is small increase in NC% and lower UAAL
- Full detail is in the report



# Summary of Findings *Economic Assumptions*

<b>Economic Assumption</b>	Experience study observations	Recommendation
Inflation	Current assumption is 2.50%; investment consultants assumption between 2.10% and 2.70%	Maintain assumption of 2.50%
Rate of Return	For surveyed investment consultants: 10-year average compound return expectation is 7.05% 20 to 30-year average compound return expectation is 7.33% Current assumption is 7.25%	Maintain assumption of 7.25% or decrease to lower rate of 7.20%  Same recommendation for alternative asset allocations being considered
Cost of Living Adjustment	Current assumption is 2.50% for Group A and 2.20% for Group B	Maintain current assumptions
Wage Inflation	Experience shows continued pattern of wage inflation being higher than assumption after adjusting for actual inflation; current wage inflation is 3.00%	Recommend increasing wage inflation assumption to 3.25%; impacts salary increase assumption for individuals
Individual Merit and Promotion Increases	Experience shows increases warranted in first few years of service, some small increases warranted at other service levels	Recommend increases for first two years of service and 0.25% increases for a few other years of service
Payroll Growth Rate	Experience shows pattern near assumption after adjusting for membership growth; current payroll growth is equal to 3.00%	Maintain assumption of 3.0%



# Summary of Findings Demographic Assumptions

Demographic Assumption	Experience study observations	Recommendation
Post-Retirement Mortality	Recent national mortality improvements have returned to pre-COVID levels. ERF experiences more deaths than expected. Examined the possibility of using ERF experience for partial credibility.	Continue to use the current TMRS Retiree Mortality assumptions; including most recent update to multipliers and mortality improvement projection scale.
Disabled Life Mortality	There have been approximately 100 disabled retiree deaths during the study period. Not a large enough number to provide any credibility to ERF experience.	Maintain the current procedure of using the healthy mortality table set forward to reflect disability impairment with minimum rates of mortality
Active Life Mortality	Approximately 160 active deaths over the study period. Lower than assumed, but not a large enough number to provide any credibility to ERF experience.	Update to the Pub-16 General Employee tables and update the projection scale to the ultimate MP 2021 Scale
Rates of Disability	Less than 40 disabilities during the study period and less than 10 during the last 5 years. Not a large enough number to provide credibility to ERF experience. Plan design means many disabilities are not reported as such because members just take service retirement.	Update to current disability assumptions for TMRS
Rates of Retirement	Retirement experience has been generally lower than expected, but current rates are designed with some conservatism.	Make adjustments to rates to make expected outcomes more consistent with experience.
Rates of Termination	Termination rates have been lower than expected.	Make adjustments to termination rates to better reflect lower level of terminations



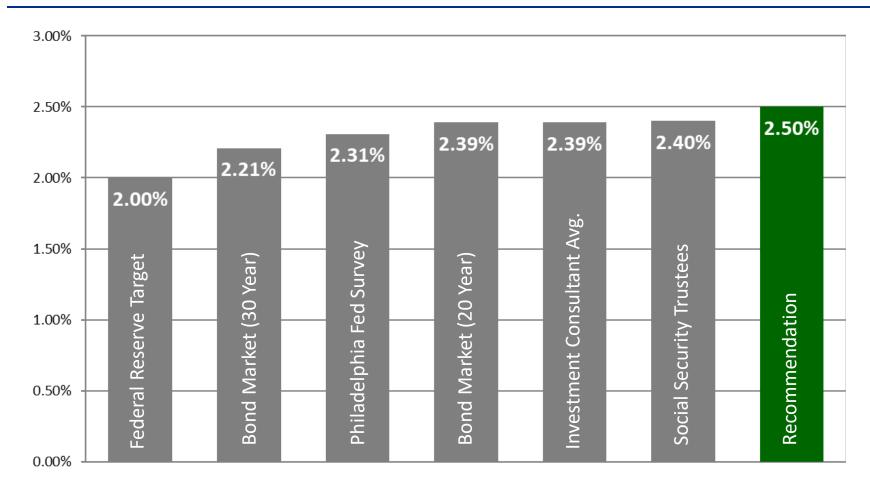
## Inflation Assumption

- The assumed inflation rate directly impacts the projected Cost of Living Adjustment provided to retirees
- The current assumption is 2.50%
- Actual inflation (measured by the CPI-U) for the last 25 years was 2.56%
  - lower than assumed each year from 2011 to 2019
  - higher than assumed each year since the year 2020



## Inflation Assumption

#### (Forward Looking Analysis)



We recommend continued use of a 2.50% inflation assumption

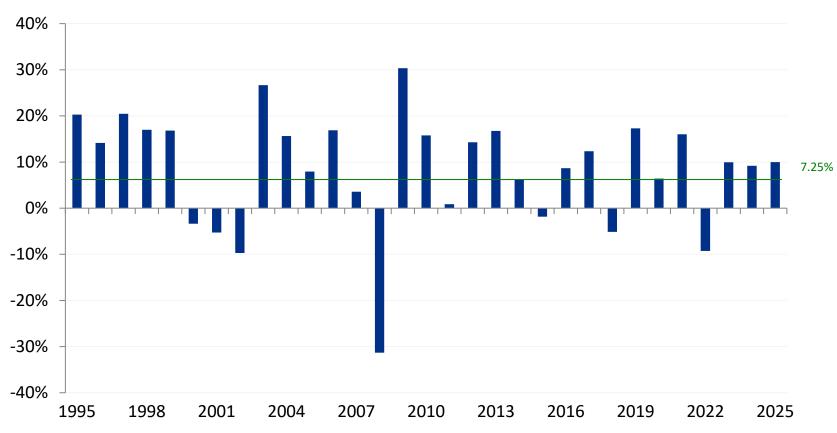


## **Investment Return Assumption**

- The investment return assumption is the most subjective and significant assumption used in an actuarial valuation
  - This assumption is used to predict what percentage of a future benefit payments will be covered by investment return and what percentage by contributions
- The current assumption is 7.25% return per annum
  - Net of investment expenses
- Assumption selection process
  - Identify a reasonable range of possible assumptions
  - Select a best-estimate from within that range
  - No single "correct" answer
- Information reviewed:
  - Historical investment performance
  - Comparison with peers
  - ERF's target asset allocation mapped to forward looking return expectations



## History of ERF Returns (Market)

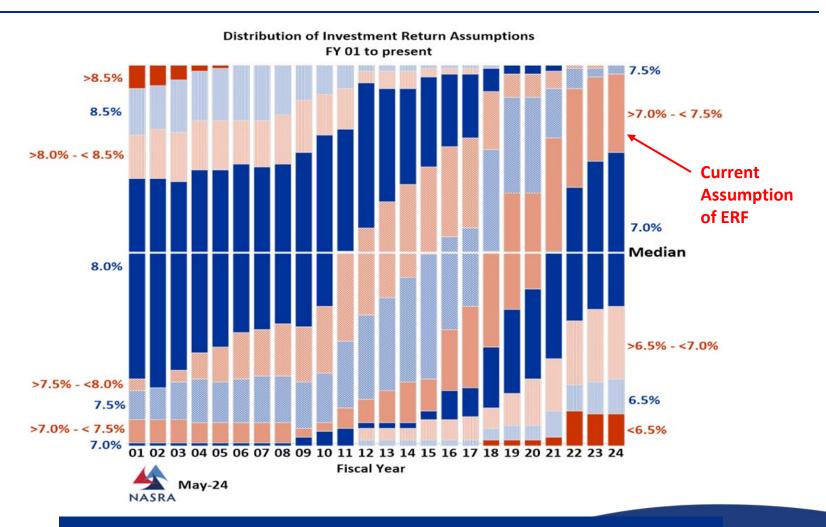


2025 return is Wilshire's year to date return for the Fund

10-year geometric average return as of 09-30-2025 (net of expenses): 7.23% 20-year geometric average return as of 09-30-2025 (net of expenses): 6.52%



## Comparison to Other Systems





Note: Comparison does not reflect differences in investment portfolios

## Forward-Looking Return Expectations

 Forward-looking returns were developed by mapping ERF's target investment allocation and most recent capital market return assumptions developed by the following investment consultants (listed in alphabetical order):

- AON

Cambridge

- NEPC

BlackRock

- JPM

Northern Trust

BNY Mellon

Meketa

- RV Kuhns

Callan

Mercer

Verus

Wilshire



## Forward-Looking Return Expectations

	•		ribution of Geon	Probability of		
	Investment		et Nominal Retu		Exceeding	
	Consultant	40th	50th	60th	7.25%	
	$\begin{array}{c} (1) \\ \end{array}$	(2)	(3)	(4)	(5)	
'	1	5.4%	6.3%	7.2%	39%	
•	2	5.3%	6.3%	7.3%	40%	
'	3	5.7%	6.7%	7.6%	44%	
'	4	5.8%	6.7%	7.7%	44%	
'	5	6.1%	7.1%	8.1%	48%	
7 to 10 Year	6	6.1%	7.1%	8.2%	49%	
Expectations	7	6.3%	7.2%	8.0%	49%	
'	8	6.2%	7.2%	8.1%	49%	
'	9	6.5%	7.4%	8.4%	52%	
	10	6.6%	7.4%	8.3%	52%	
'	11	6.6%	7.4%	8.3%	52%	
	12	6.8%	7.7%	8.5%	55%	
	1	5.4%	6.3%	7.2%	40%	
'	2	6.1%	6.9%	7.7%	46%	
•	3	6.2%	7.1%	8.1%	49%	
20 to 30 Year	4	6.4%	7.4%	8.4%	51%	
Expectations	5	6.7%	7.6%	8.4%	54%	
'	6	6.7%	7.6%	8.4%	54%	
'	7	6.6%	7.6%	8.7%	54%	
'	8	7.2%	8.2%	9.1%	60%	
7-10 Year I	Expectation Avg:	6.1%	7.0%	8.0%	48%	

7.3%

6.4%

8.3%



20-30 Year Expectation Avg:

51%

#### Investment Return Recommendation

- The average forward-looking expectation of the target asset allocation is 7.0% over the next seven to ten years and 7.3% over the next 20 to 30 years.
- Benefit payments to current members in ERF will occur over the next 70-80 years
  - Supports a focus on the longer-term expectations
- Based on this analysis, we recommend the Board either
  - Retain the current 7.25% return assumption, or
  - Decrease the return assumption to 7.20%



## Salary Increase Rates for Individuals

- Used for projecting individual member's pay and benefits
- Current assumption
  - 2.50% inflation, 0.50% productivity
  - Additional promotion and performance related increases during first 19 years of service
- Typically we review experience over the last ten-years, however the actual experience during the last four years (2021 through 2024) were atypically high, which correlates to a high inflationary time period
  - As a result, we expanded the experience reviewed to include all years back to 2011

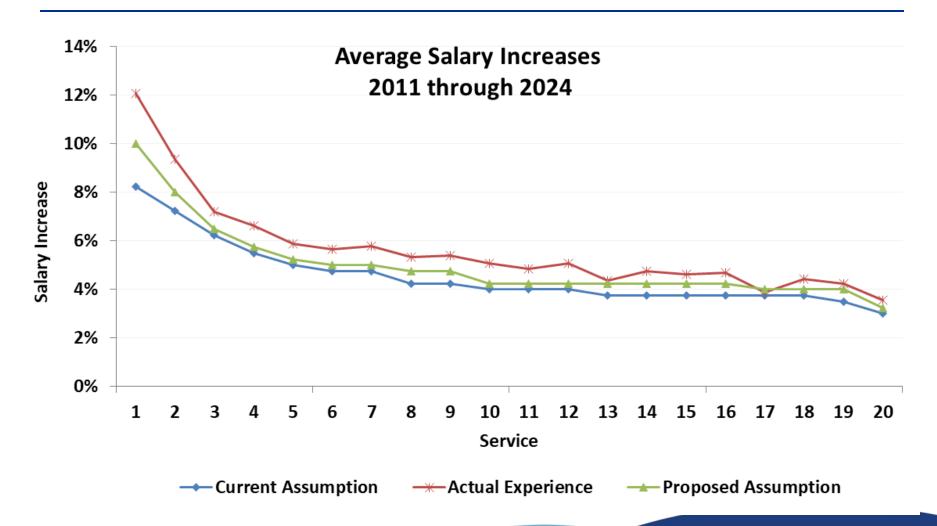


## Salary Increase Rates for Individuals

- Average increase for long-term employees (20 years of service or more) was 3.55% over the period
  - Inflation was 2.64% over the same time period, which gives an apparent productivity component of 0.91%
- We are recommending a 25 basis point increase in the productivity component to 0.75%
- Experience shows the current service-related component of the salary scale should also be increased for many different service periods
- This is a long-term assumption and it is possible that actual salary increases for the next couple years may be greater than the recommended assumption



## Salary Increase Rates by Years of Service





## Administrative Expense Assumption

- Administrative Expense Assumption for the upcoming year is that they will equal the prior year administrative expenses increased by the payroll growth rate
- For actuarially determined contribution purposes future administrative expense are assumed to increase at the payroll growth rate
  - Special adjustments may be made for depreciation expense which are not expected to be on-going
- We are recommending no change to this procedure



## Payroll Growth Rate Assumption

- Used in projected the total covered payroll on which contribution will be received, not in projecting benefits
- Current assumption is 3.00%
- Actual increases for the period from 2014 2024 have averaged 3.2% (normalized for membership changes)
  - However, inflation was higher than our 2.5% assumption
- We recommend no change in the assumption
- While the current funding policy is expected to bring ERF to a fully funded status by the end of 2054, the paying off of the UAAL is backloaded



## Post-retirement mortality (Healthy)

- Current assumption
  - 2019 Municipal Retirees of Texas Mortality Tables for males and females
  - Generational mortality improvements projected from the year 2019 using the ultimate mortality improvement rates in the MP-2019 tables
- In setting the longevity assumption, the actuary must make two decisions:
  - How long are annuitants currently living?
    - Data dependent, provided the population is large enough
  - What improvement in longevity is expected in the future?
    - Expert dependent, more subjective decisions



## Healthy Retiree Mortality

- Current tables are based on the assumptions used for the Texas Municipal Retirement Systems ("TMRS")
- TMRS recently updated their mortality assumptions
- Due to the relatively small retiree experience of ERF and given the consistency between ERF members and members in TMRS, we recommend continued use of the mortality assumption used by TMRS and that ERF adopt the new TMRS mortality assumptions



## **Healthy Retiree Mortality**

#### Male

- Proposed assumption is the current base table multiplied by 103%, with fully generational mortality improvement using the ultimate improvement rates from the MP-2021 mortality improvement scales for males (base year 2019)
- A/E ratio on ERF data of 107%
- A/E ratio at core ages (60-85) of 105%

#### Female

- Proposed assumption is the current base table multiplied by 105%, with fully generational mortality improvement using the ultimate improvement rates from the MP-2021 mortality improvement scales for females (base year 2019)
- A/E ratio on ERF data of 124%
- A/E ratio at core ages (60-85) of 130%



### Normal Retirement

- Eligibility under Tier A:
  - Unreduced
    - Age 60; or
    - Age 55 (if credited service began before May 9, 1972); or
    - Age 50, if sum of age and service is at least 78
- Analysis is based on the ten-year period ending 12/31/2024
- Current and proposed rates are gender-specific and make a distinction between members over 60 who have more/less than 18 years of service and for members in their first year of eligibility between ages 50 and 60
- Recommend small decreases in rates for males and females under age 60 to better match experience
- Recommend small increases in rates for males and females over age 60 to better match experience



## **Normal Retirement**

A/E Ratios for Retirement Experience						
Age	Ma	ale	Female			
Based	Current	Proposed Current		Proposed		
50-59 (first year eligible)	89%	94%	88%	92%		
50-59 (>1 year eligible)	95%	95% 95%		91%		
60+ (<18 yrs. of service)	85%	80%	84%	80%		
60+ (≥18 yrs. of service)	86%	87%	89%	86%		
Total	88%	87%	86%	87%		

Note: the A/E ratios for 60+ and Total are low due to 100% assumed retirement rate at age 70. The A/E ratio for Total after removing those over age 70 is 93% for males and 92% for females.



## **Early Retirement**

- Eligibility
  - Tier A before age 50 with 30 years service
  - Tier B sum of age and service is at least 80
- Experience: 6 actual vs. 4.7 expected (All Tier A)
  - Current A/E of 128%
- Currently assume 10% of members eligible for early retirement elect to retire
- Propose no change to current assumption
- We expect more members will elect early retirement as Group B members (i.e. post January 1, 2017 members) become retirement eligible

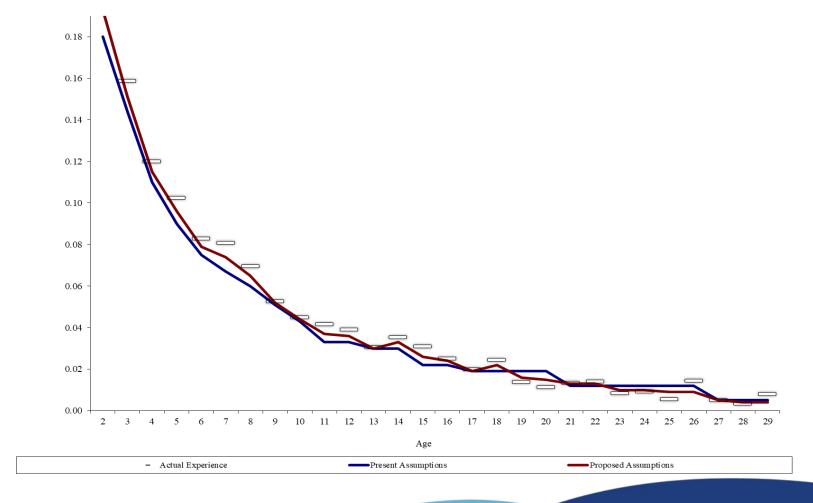


## **Termination Assumption**

- Used 10 years of experience to reflect full economic cycles (also dampens the impact of COVID)
- Current assumption is based on years of service and is gender distinct
- Actual terminations have been slightly higher than expected for males and females
- We recommend minor adjustments to the assumption to recognize some of the experience

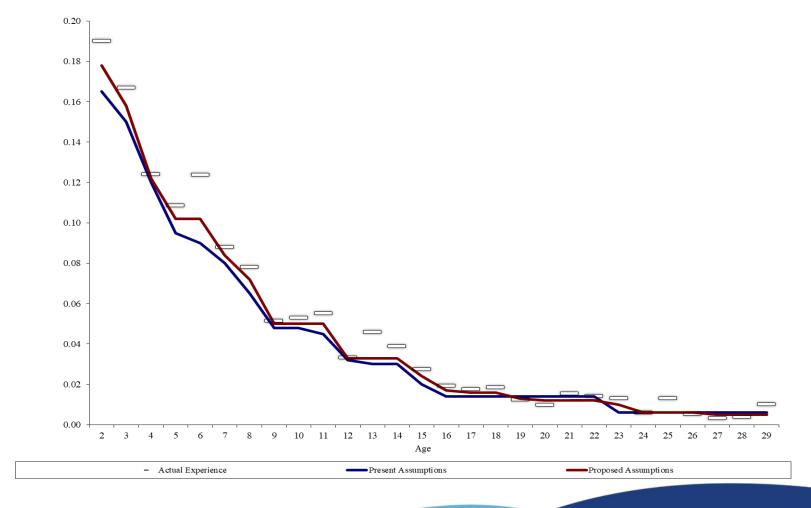


# Termination Assumption (Males)





## **Termination Assumption (Females)**





## Disability Incidence Assumption

- Few actual disabilities (and expected) during study period
- 29 total disabilities during the study period
  - However, over 80% of these occurred in 2015-2019
- Plan design may also influence the disability incidence experience
  - Members eligible for normal retirement do not show up as disabilities even if disabled
- Current assumption based on TMRS experience
- Update assumption to be consistent with newly adopted TMRS assumption
  - Minimal impact on valuation



### **Determination of Contribution Rate**

- The Actuarially Determined Contribution (ADC) rate is the total rate (member plus City) that pays the following:
  - Normal cost of the employees (including administrative expenses)
  - Debt service on Pension Obligation Bonds (POBs)
  - Payments towards the financing of the UAAL



### **Determination of Contribution Rate**

- The average normal cost rate will decline over time as the membership moves from Tier A to Tier B
  - Currently 39% of members are earning Tier A benefits
- Debt service on the POBs will end after fiscal year
   2035
- Therefore, since the ADC is the level contribution rate that finances the UAAL by a specific date, the portion of the contribution effort towards financing the UAAL will be increasing



### **Determination of Contribution Rate**

- We will use an open group projection to determine the normal costs (dollars) of current and future members
- The debt service dollars are already known
- We assumed that covered payroll will grow at the payroll growth rate
- We solve for the total contribution rate that pays the normal costs, the debt service and amortizes the UAAL over the remaining amortization period



# **Cost Impact of Preliminary Findings**

Actuarial Cost Items		Valuation December 31, 2024		xperience Study cember 31, 2024	Increase/ (Decrease)
1. Present Value of Future Benefits					
a. Active Employees	\$	2,315,952,800	\$	2,339,767,008	\$ 23,814,208
b. Inactive Members		164,273,393		163,349,445	(923,948)
c. Annuitants		3,872,845,121		3,821,147,845	(51,697,276)
d. Total	\$	6,353,071,314	\$	6,324,264,298	\$ (28,807,016)
2. Actuarial Accrued Liability	\$	5,614,481,288	\$	5,568,673,637	\$ (45,807,651)
3. Normal Cost as Percent of Pay					
a. Tier A		21.97%		22.31%	0.35%
b. Tier B		15.19%		15.27%	0.07%
c. Aggregate		18.25%		18.45%	0.20%
4. Actuarially Determined Contribution Rate		41.87%		42.07%	0.20%



# Cost Impact of Preliminary Findings (Assuming 7.20% Rate of Return)

Actuarial Cost Items		Valuation December 31, 2024		operience Study cember 31, 2024	Increase/ (Decrease)
1. Present Value of Future Benefits					
a. Active Employees	\$	2,315,952,800	\$	2,362,535,247	\$ 46,582,447
b. Inactive Members		164,273,393		164,466,733	193,341
c. Annuitants		3,872,845,121		3,836,993,715	(35,851,406)
d. Total	\$	6,353,071,314	\$	6,363,995,695	\$ 10,924,381
2. Actuarial Accrued Liability	\$	5,614,481,288	\$	5,597,952,713	\$ (16,528,575)
3. Normal Cost as Percent of Pay					
a. Tier A		21.97%		22.55%	0.58%
b. Tier B		15.19%		15.41%	0.21%
c. Aggregate		18.25%		18.63%	0.38%
4. Actuarially Determined Contribution Rate		41.87%		42.25%	0.38%



### Wilshire

Employees' Retirement Fund of the City of Dallas

Asset-Liability Study – October Update

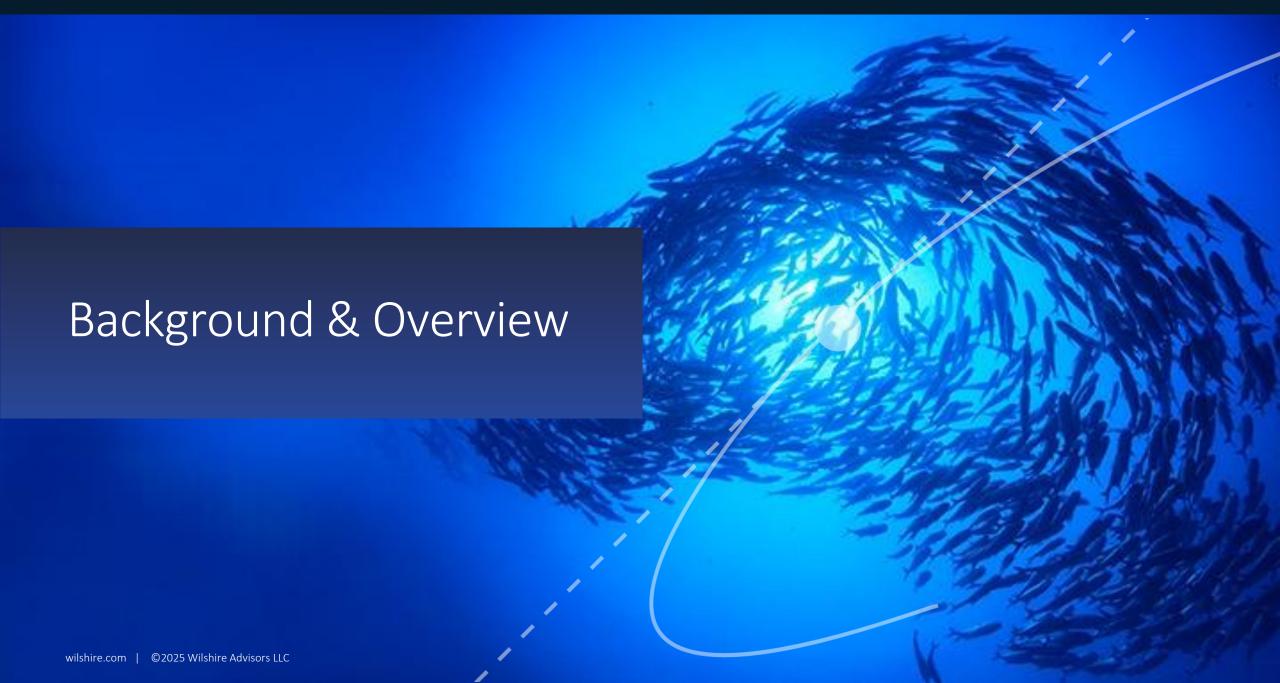
October 2025

#### Contents

- Background & Overview
- Asset Allocation Approach
- Asset Allocation Inputs
- Asset Liability Projections
- Observations & Recommendations
- Appendix

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### Wilshire



### Background & Overview

#### The asset allocation decision is the most important decision an investor can make

• The asset allocation decision drives 90% of return variability among portfolios

#### Wilshire recommends revisiting the asset allocation decision every three to five years, or sooner as market conditions warrant

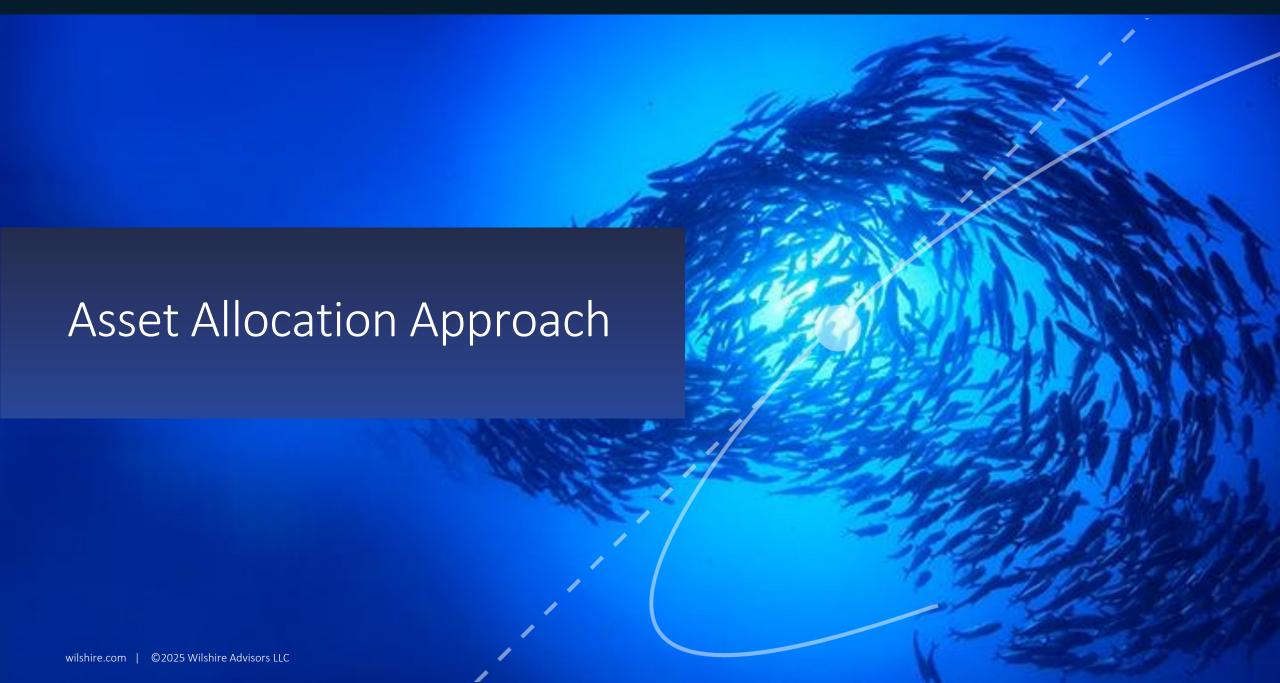
- Dallas ERF last reviewed asset allocation in April 2023
- Increased Private Equity target by 2.5%
- Added Private Credit exposure of 2.5%
- Moderately improved expected risk-adjusted portfolio return

#### What have we done to date regarding the study?

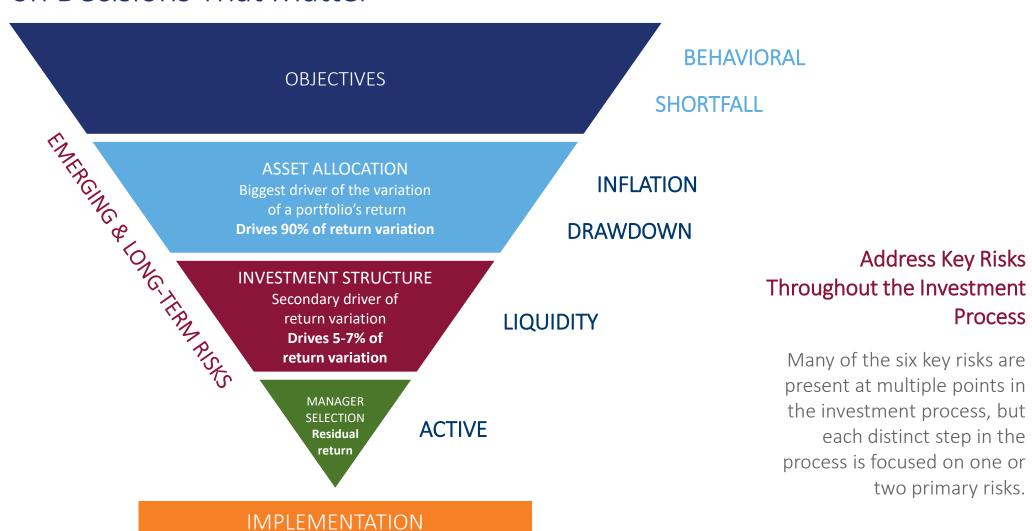
- Education for the Board on asset class return and risk expectations
- Modeled 30+ alternative policy portfolios for comparison
- Gathered updated liability information from GRS
- Today -> Have updated the Current and Proposed Numbers using June 2025 assumptions

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# Wilshire



### Focus on Decisions That Matter



### Risk Assessment Framework

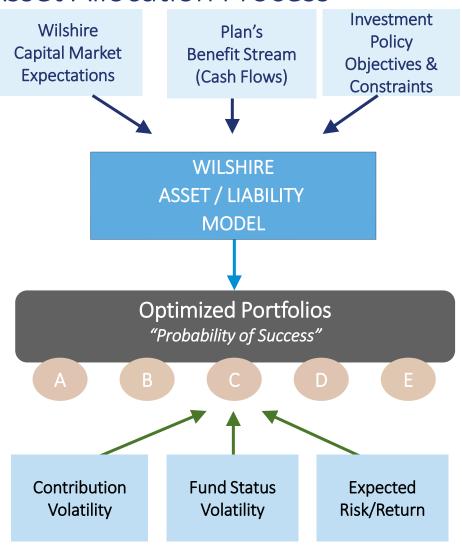
Wilshire's multi-dimensional view of risk integrates organizational and investment considerations into a comprehensive framework for evaluating strategic decisions.

- **Shortfall**: Support distributions and long-term growth
- Behavioral: Instill strong governance
- **Drawdown**: Limit portfolio losses
- **Inflation**: Preserve long-term purchasing power
- Liquidity: Balance near-term needs, long-term opportunities
- **Active**: Ensure unique exposures
- Emerging & Long-Term: Environmental, Social & Governance risks, such as externalities, intangibles and reputation may be linked to various risk lenses



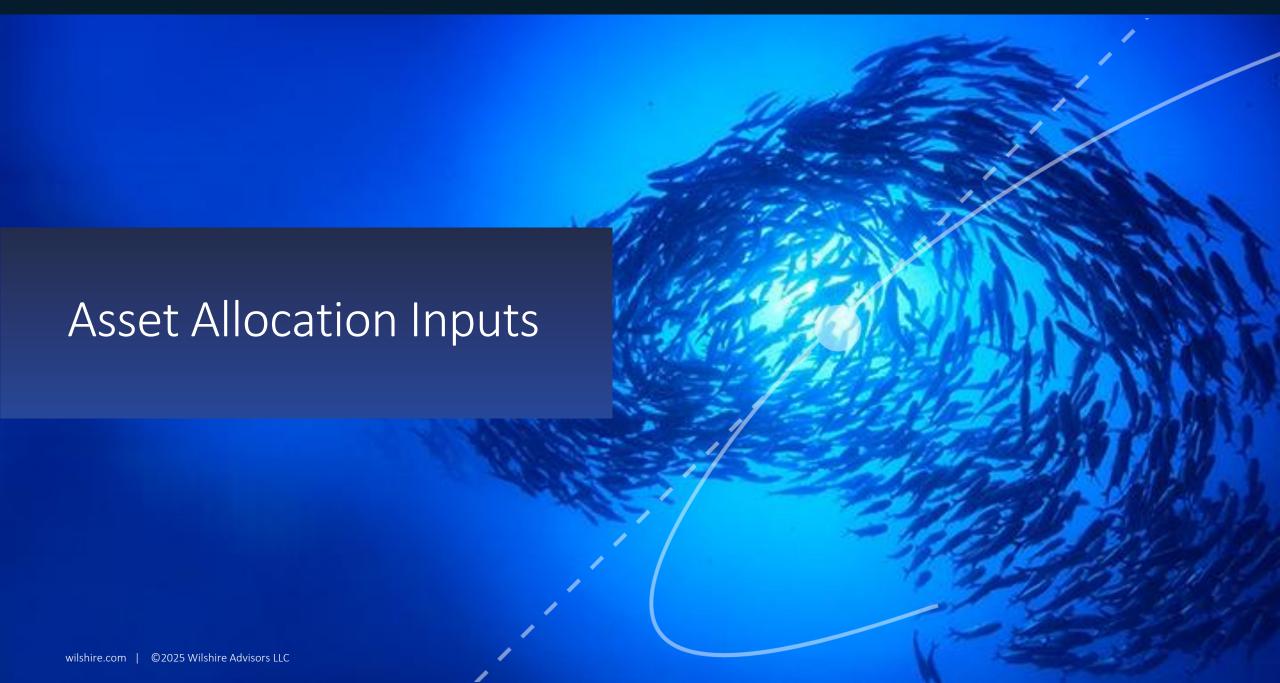
**EMERGING & LONG-TERM RISKS** 

### **Asset Allocation Process**



- Wilshire believes the mission of a defined benefit plan is to fund benefits promised to participants
- The role of asset allocation is to manage risk in order to fulfill that core mission
  - Maximize safety of promised benefits
  - Minimize cost of funding these benefits
- Wilshire's Asset Liability Model provides methodology for selecting a target portfolio that considers both goals
- Strategic asset allocation is not a guide to outperforming in every market ... but it should provide a roadmap for success over a market cycle
- Rigorously developed capital market assumptions for risk and return (see appendix)
- Given that short-term volatility is also important, we identify the impact of the asset allocation decision on funded ratios, annual contribution requirements, and other metrics

# Wilshire

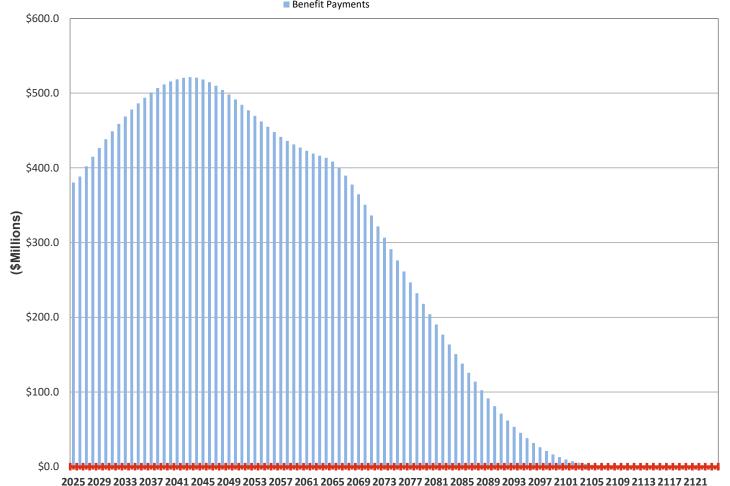


### Plan Status

	December 31, 2023	<u>December 31, 2024</u>
Asset and Liability Data (\$ - Millions)		
Market Value of Assets (MVA)	\$3,649.10	\$3,757.48
2. Actuarial Accrued Liability	<u>5,483.25</u>	<u>5,614.48</u>
3. Funded Status 1. / 2.	66.5%	66.9%
4. Unfunded Actuarial Accrued Liability (UAAL) (2 1.)	<u>1,834.15</u>	<u>1,857.00</u>
Economic Assumptions		
Discount Rate	7.25%	7.25%

- December 31, 2023, data was provided in the actuarial valuation reports by the plan actuary.
- December 31, 2024, data is an estimate provided by the plan actuary and final values may vary.

# Projected Benefit Payments



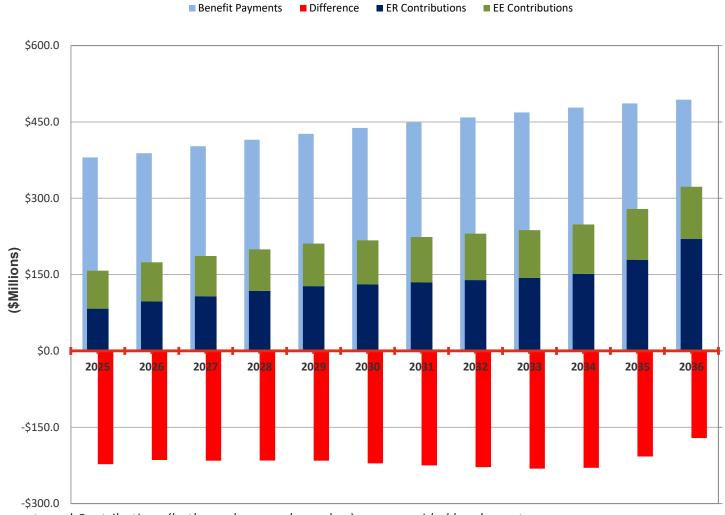
Current cash flow needs have not peaked yet

The peak in liquidity needs (cash flow provided by actuary) for the current membership is in 19 years, when projected annual benefit payments increase from \$380 million to \$521 million.

- Benefit payments provided by plan actuary.
- Closed group population, i.e., no new entrants assumed

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# Deterministic Cash Flow Projection



• Benefit payments and Contributions (both employer and member) were provided by plan actuary.

# Capital Market Assumptions

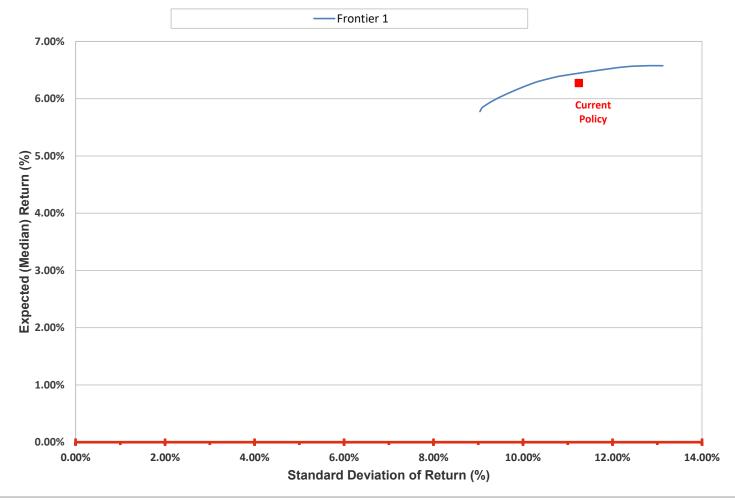
- Using Wilshire's June 30, 2025, Capital Market Assumptions
- Wilshire's asset class return, risk and correlation assumptions are developed on multi-year forward looking expected rates of return and historical risk and correlation, adjusted to incorporate recent trends
- Public market return expectations represent a passive investment in the asset class (beta). They do not reflect value added from active management (alpha).

Asset Classes	Expected Return 10 Years	Expected Return 30 Years	Risk	Cash Yield	Factor Exposure Growth	Factor Exposure Inflation	Liquidity Market Level	Liquidity Stressed Metric
Domestic Equity	4.30	6.10	17.00	1.25	8.00	-3.00	100	0
International Equity	5.30	6.60	18.00	2.95	8.00	-1.00	95	0
Global Equity	4.85	6.45	17.00	1.75	8.00	-1.95	85	0
Private Equity	6.20	7.95	29.65	0.00	14.00	-4.25	0	0
Global Low Volatility Equity	5.55	6.65	13.70	2.25	6.40	-1.20	95	0
High Yield Fixed Income	6.30	6.65	10.00	9.90	4.00	-1.00	80	0
Private Credit Basket	7.70	7.85	12.75	4.90	5.10	-1.50	0	0
Credit Opportunities	6.25	6.20	7.40	8.70	3.00	0.65	85	30
Core Fixed Income	5.05	4.90	4.75	5.75	-0.95	-2.60	100	70
REITs	5.65	6.45	17.50	3.95	6.00	1.00	90	0
Private Real Estate - Core	5.90	6.30	12.00	3.75	4.00	1.00	0	0
Private Real Estate - Value Add	7.30	8.50	17.50	1.90	3.00	1.00	0	0
MLPs	6.65	7.70	19.00	4.95	5.00	6.00	90	0
Global Public Infrastructure	5.45	6.85	17.00	3.70	5.00	3.65	90	0
Marketable Alternatives	6.30	6.50	6.05	0.00	2.50	3.00	30	0

- Growth Assets with significant growth factor exposure, high expected returns and high risk
- Defensive Growth Assets with positive growth factor exposure with moderate risk
- Defensive/Rate Sensitive Assets whose value/return is sensitive to changes in interest rates
- Real Assets/Inflation Sensitive Assets whose value/return is sensitive to inflation
- Non-Directional/Diversifying Assets with low growth and inflation factor exposure

# Asset Only Efficient Frontier

• Given the asset classes and constraints, opportunities to enhance portfolio efficiency do exist



### Portfolios Considered

<sup>&</sup>lt;sup>4</sup> Global Listed Infrastructure is constrained to be at least 25% of Total MLPs and Global Listed Infrastructure.

Asset Class	Current Policy	Optimization Constraints	Similar Return Policy	Similar Risk Policy	7.25% Return Policy
Domestic Equity	12.00%	11% - 100% <sup>1, 2</sup>	11.00%	11.00%	12.00%
International Equity	11.50%	0% - 100% <sup>1, 2</sup>	10.25%	10.25%	11.00%
Global Equity	5.00%	0% - 100% <sup>2</sup>	5.00%	5.00%	5.00%
Private Equity	<u>10.00%</u>	10% - 15%	<u>10.00%</u>	<u>12.00%</u>	<u>12.00%</u>
Total Growth Assets	38.50%		36.25%	38.25%	40.00%
Global Low Volatility Equity	10.00%	0% - 100% <sup>2</sup>	5.00%	5.00%	5.00%
High Yield Fixed Income	10.00%	0% - 10%	10.00%	10.00%	10.00%
Private Credit Basket	2.50%	0% - 2.5% / 4%	2.50%	2.50%	4.00%
Credit Opportunities	4.00%	0% - 7.5%	<u>7.50%</u>	<u>7.50%</u>	4.00%
Total Defensive Growth Assets	26.50%		25.00%	25.00%	23.00%
Core Fixed Income	<u>17.50%</u>	0% - 100%	<u>17.25%</u>	14.25%	13.00%
Total Defensive / Rate Sensitive Assets	17.50%		17.25%	14.25%	13.00%
REITS	2.50%	2.5% - 5%	2.50%	2.50%	2.50%
Private Real Estate - Core	5.00%	5% - 7.5%	5.00%	5.00%	5.00%
Private Real Estate - Value Add	2.50%	0% - 5% / 6%	5.00%	5.00%	6.00%
MLPs	3.75%	0% - 5% <sup>3, 4</sup>	3.00%	3.75%	4.25%
Global Public Infrastructure	<u>1.25%</u>	0% - 5% <sup>3, 4</sup>	<u>1.00%</u>	<u>1.25%</u>	<u>1.25%</u>
Total RA / Inflation Sensitive Assets	15.00%		16.50%	17.50%	19.00%
Marketable Alternatives	2.50%	0% - 5%	<u>5.00%</u>	<u>5.00%</u>	<u>5.00%</u>
Total Non-Directional / Diversifiers Assets	2.50%		5.00%	5.00%	5.00%
Total Assets	100.0%		100.0%	100.0%	100.0%
Expected Return - 10 Years (%)	6.15		6.26	6.32	6.35
Expected Return - 30 Years (%)	7.01		7.05	7.17	7.25
Standard Deviation of Return (%)	11.25		10.71	11.27	11.65
+/(-) in Expected Return - 10 Years (bps)			11	17	20
+/(-) in Expected Return - 30 Years (bps)			4	16	24
+/(-) in SD of Return (bps)			(54)	2	40
Sharpe Ratio	0.23		0.25	0.25	0.24

<sup>&</sup>lt;sup>1</sup> International Equity is constrained to be at most 48% of Total U.S. Equity and International Equity.

<sup>&</sup>lt;sup>2</sup> Global Low Volatility Equity is constrained to not exceed 1/4 of Total Public Equity. Public Equity is defined as U.S. Equity, Non-U.S. Equity, Global Equity & Global Low Vol. Equity.

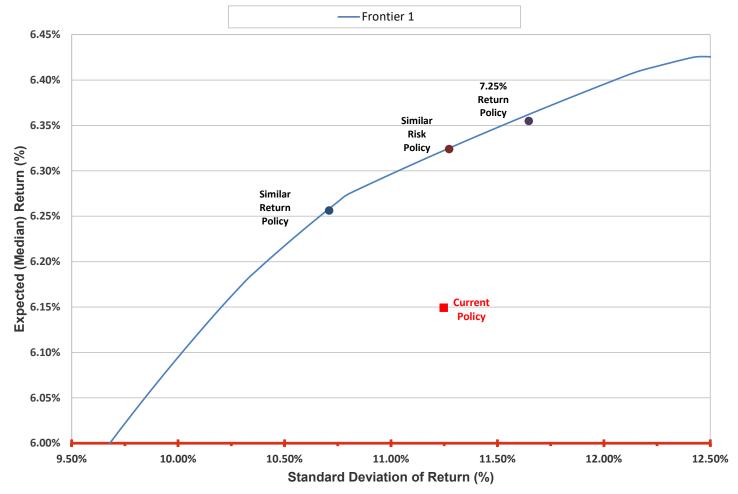
<sup>&</sup>lt;sup>3</sup> MLPs and Global Listed Infrastructure are constrained to not exceed 5%.

# Portfolios Considered

Asset Class	Current Policy	Similar Return Policy	Similar Risk Policy	7.25% Return Policy
Total Growth Assets	38.50%	36.25%	38.25%	40.00%
Total Defensive Growth Assets	26.50%	25.00%	25.00%	23.00%
Total Defensive / Rate Sensitive Assets	17.50%	17.25%	14.25%	13.00%
Total RA / Inflation Sensitive Assets	15.00%	16.50%	17.50%	19.00%
<u>Total Non-Directional / Diversifiers Assets</u>	<u>2.50%</u>	<u>5.00%</u>	<u>5.00%</u>	<u>5.00%</u>
Total Assets	100.0%	100.0%	100.0%	100.0%
Expected Return - 10 Years (%)	6.15	6.26	6.32	6.35
Expected Return - 30 Years (%)	7.01	7.05	7.17	7.25
Standard Deviation of Return (%)	11.25	10.71	11.27	11.65
Contribution to Asset Volatility (%):				
Growth	61.6	60.6	62.3	62.7
Defensive Growth	21.2	18.3	17.2	16.2
Defensive/Rate Sensitive	2.5	2.6	2.0	1.7
RA/Inflation Sensitve	13.8	16.6	16.7	17.7
Nondirectional/Diversifier	0.9	1.9	1.8	1.7
Cash Yield	3.8	4.0	3.8	3.6
Growth Factor	5.5	5.2	5.6	5.8
Inflation Factor	-1.2	-1.1	-1.0	-1.0
Liquidity				
Market	73.1	68.7	66.6	64.6
Stressed	13.5	14.3	12.2	10.3

# Asset Only Efficient Frontier

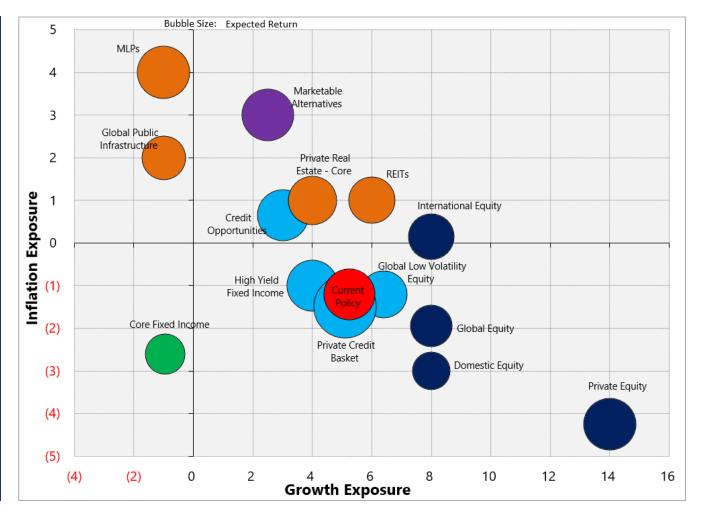
• Given the asset classes and constraints, opportunities to enhance portfolio efficiency do exist



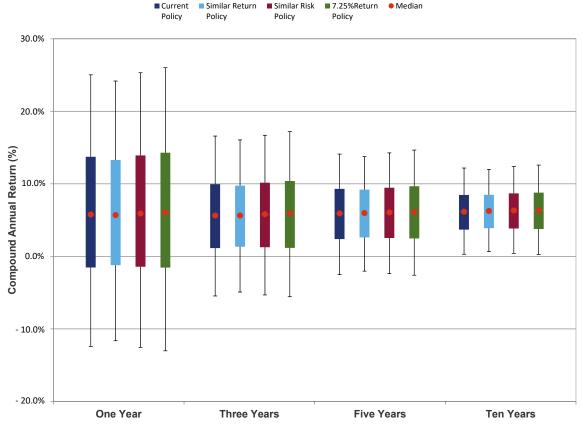
### Economic Factor Exposure – Asset Classes

Concentrated factor tilts can represent portfolio vulnerability (e.g., reliance on growth markets)

To the extent possible, a portfolio with factor neutrality is desirable for weathering unexpected future market environments



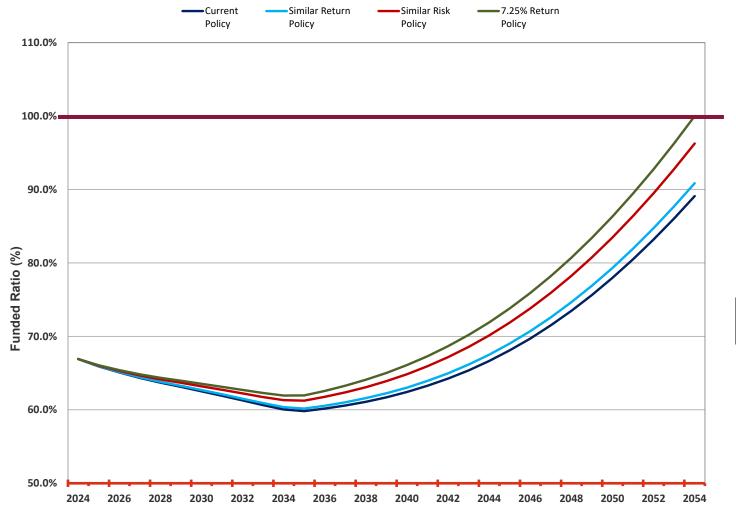
# Distribution of Returns\*



150	One Year				Three Years				Five Years				Ten Years			
(%)	Current	Similar Return	Similar Risk	7.25%Return	Current	Similar Return	Similar Risk	7.25%Return	Current	Similar Return	Similar Risk	7.25%Return	Current	Similar Return	Similar Risk	7.25%Return
	Policy	Policy	Policy	Policy	Policy	Policy	Policy	Policy	Policy	Policy	Policy	Policy	Policy	Policy	Policy	Policy
Very Optimistic	25.03	24.18	25.32	26.01	16.59	16.05	16.69	17.21	14.10	13.76	14.26	14.66	12.18	12.00	12.38	12.58
Optimistic	13.72	13.29	13.92	14.29	9.95	9.76	10.15	10.38	9.30	9.20	9.46	9.66	8.47	8.48	8.68	8.79
Median (Expected)	5.76	5.69	5.92	6.05	5.63	5.64	5.80	5.92	5.92	5.96	6.06	6.12	6.15	6.26	6.32	6.35
Pessimistic	-1.53	-1.21	-1.43	-1.55	1.14	1.33	1.26	1.17	2.39	2.61	2.52	2.46	3.68	3.89	3.84	3.77
Very Pessimistic	-12.42	-11.64	-12.55	-13.03	-5.46	-4.91	-5.31	-5.57	-2.52	-2.04	-2.37	-2.60	0.29	0.65	0.42	0.26

\*For periods longer than one year, returns are compound annual.

### AAL MVA Funded Ratio – Deterministic Projection Over 30-Years



100% Fully Funded Line Assets (MVA) were projected over the period based on the 30 Years expected returns for each policy and Liabilities were based on the Actuarial Accrued Liability (AAL) projections provided by the actuary.

Initial Funded Ratio = 66.9%

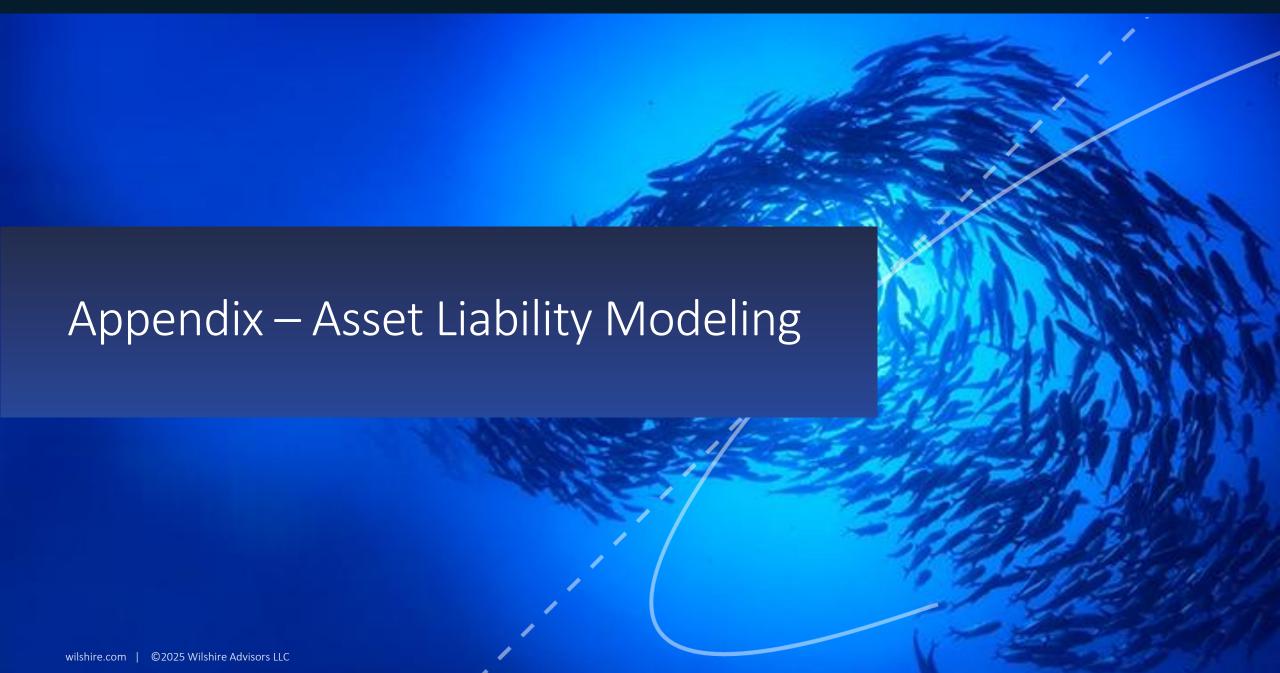
Plan's Discount Rate is 7.25%

Asset Class	Current Policy	Similar Return Policy	Similar Risk Policy	7.25% Return Policy
Total Growth Assets	38.50%	36.25%	38.25%	40.00%
Total Defensive Growth Assets	26.50%	25.00%	25.00%	23.00%
Total Defensive / Rate Sensitive Assets	17.50%	17.25%	14.25%	13.00%
Total RA / Inflation Sensitive Assets	15.00%	16.50%	17.50%	19.00%
Total Non-Directional / Diversifiers Assets	2.50%	<u>5.00%</u>	5.00%	5.00%
Total Assets	100.0%	100.0%	100.0%	100.0%
Expected Return - 10 Years (%)	6.15	6.26	6.32	6.35
Expected Return - 30 Years (%)	7.01	7.05	7.17	7.25
Standard Deviation of Return (%)	11.25	10.71	11.27	11.65

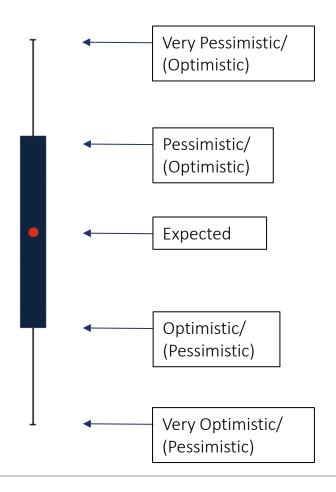
### Observations

- Markets exhibited significant volatility in 2025 and have rebounded exceptionally strongly
- Muted forward expected returns over 10-year horizon
- Modeled alternative target asset allocations can increase expected return and improve efficiency of the Policy
- Continue to build out private equity, credit, and real asset exposure
- Increasing Private Market exposure should factor in implementation considerations:
  - 7.25% portfolio decreases liquidity available in stressed environment
  - Large increases in exposures to private asset can create unintended tracking error due to the time it takes to fund those assets





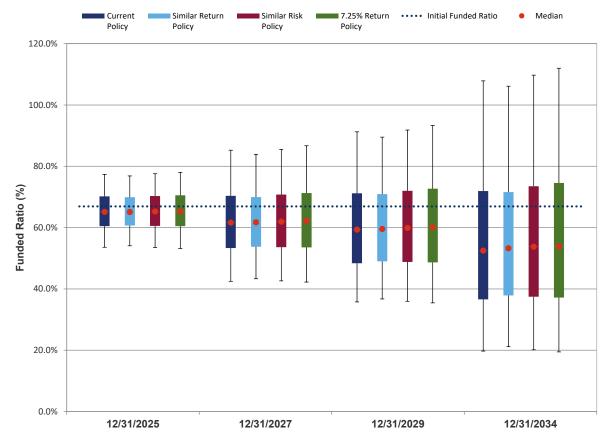
### Box and Whisker Graphs



In each year of the simulation, there are 5,000 independent economic trial results. We summarize these trial results by percentiles and use the following labeling (return and funded ratio labeling in parentheses):

- Very Pessimistic (Optimistic):95th percentile
- Pessimistic (Optimistic): 75th percentile
- Expected: 50th percentile
- Optimistic (Pessimistic): 25th percentile
- Very Optimistic (Pessimistic):5th percentile

### AAL MVA Funded Ratio



#### Shortfall Risk:

The potential for the current policy to have a lower median funded ratio than the alternative policies.

#### Drawdown Risk:

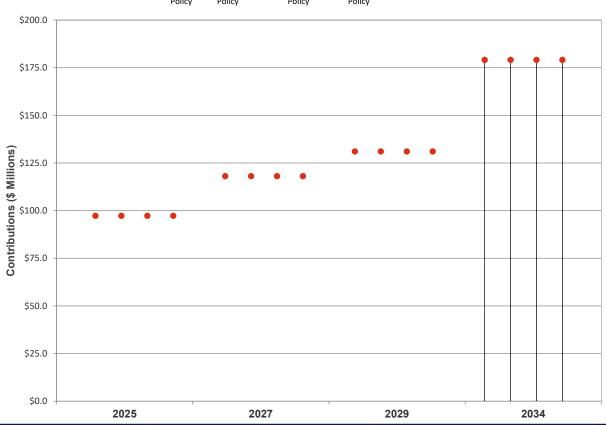
The potential for the current policy to have a lower "very pessimistic" funded ratio than the alternative policies.

Initial Funded Ratio = 66.9%

One Year Simulation (12/31/2025) reflects 6/30/2025 Fiscal Year to Date Return of 6.50%.

450	12/31/2025					12/31,	/2027			12/31	/2029		12/31/2034			
(%)	Current	Similar Return	Similar Risk	7.25% Return	Current	Similar Return	Similar Risk	7.25% Return	Current	Similar Return	Similar Risk	7.25% Return	Current	Similar Return	Similar Risk	7.25% Return
	Policy	Policy	Policy	Policy	Policy	Policy	Policy	Policy	Policy	Policy	Policy	Policy	Policy	Policy	Policy	Policy
Very Optimistic	77.39	76.84	77.57	78.01	85.24	83.88	85.53	86.69	91.25	89.52	91.84	93.30	107.88	106.12	109.75	111.98
Optimistic	70.19	69.92	70.31	70.55	70.37	69.95	70.78	71.28	71.19	70.91	72.00	72.69	71.92	71.59	73.49	74.56
Median (Expected)	65.13	65.08	65.22	65.31	61.63	61.75	61.96	62.17	59.33	59.56	59.91	60.12	52.52	53.26	53.79	53.90
Pessimistic	60.49	60.70	60.56	60.48	53.36	53.74	53.63	53.53	48.37	49.00	48.81	48.67	36.58	37.88	37.46	37.16
Very Pessimistic	53.59	54.08	53.50	53.20	42.47	43.32	42.61	42.24	35.75	36.73	35.98	35.45	19.72	21.14	20.16	19.47

# **Employer Plan Year Contributions**



#### Shortfall Risk:

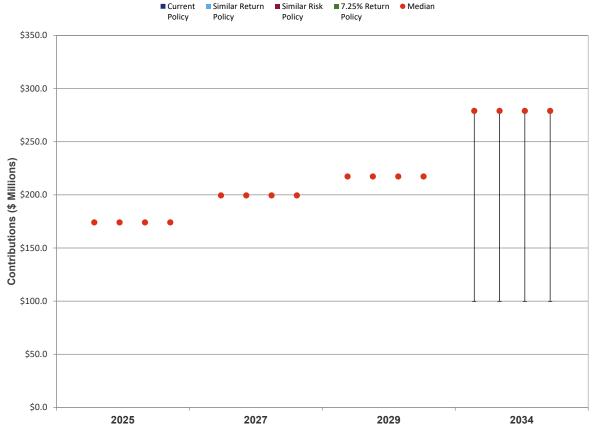
The potential for the current policy to have higher median contributions than the alternative policies.

#### Drawdown Risk:

The potential for the current policy to have higher "very pessimistic" contributions than the alternative policies.

		20	25		2027					20	29		2034			
(\$ Millions)	Current	Similar Return	Similar Risk	7.25% Return	Current	Similar Return	Similar Risk	7.25% Return	Current	Similar Return	Similar Risk	7.25% Return	Current	Similar Return	Similar Risk	7.25% Return
	Policy	Policy	Policy	Policy												
Very Pessimistic	97.3	97.3	97.3	97.3	118.1	118.1	118.1	118.1	131.1	131.1	131.1	131.1	179.2	179.2	179.2	179.2
Pessimistic	97.3	97.3	97.3	97.3	118.1	118.1	118.1	118.1	131.1	131.1	131.1	131.1	179.2	179.2	179.2	179.2
Median (Expected)	97.3	97.3	97.3	97.3	118.1	118.1	118.1	118.1	131.1	131.1	131.1	131.1	179.2	179.2	179.2	179.2
Optimistic	97.3	97.3	97.3	97.3	118.1	118.1	118.1	118.1	131.1	131.1	131.1	131.1	179.2	179.2	179.2	179.2
Very Optimistic	97.3	97.3	97.3	97.3	118.1	118.1	118.1	118.1	131.1	131.1	131.1	131.1	0.0	0.0	0.0	0.0

### **Total Plan Year Contributions**



#### Shortfall Risk:

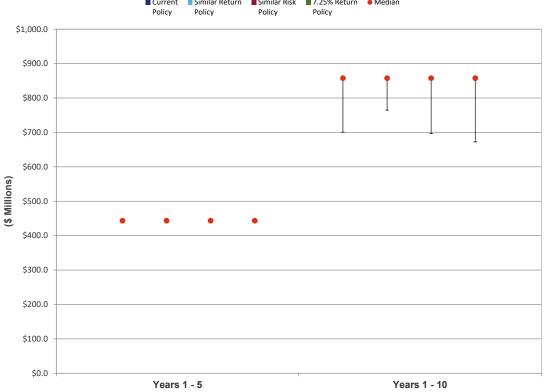
The potential for the current policy to have higher median contributions than the alternative policies.

#### Drawdown Risk:

The potential for the current policy to have higher "very pessimistic" contributions than the alternative policies.

		202	25			20	27			20	29		2034			
(\$ Millions)	Current	Similar Return	Similar Risk	7.25% Return	Current	Similar Return	Similar Risk	7.25% Return	Current	Similar Return	Similar Risk	7.25% Return	Current	Similar Return	Similar Risk	7.25% Return
	Policy	Policy	Policy	Policy												
Very Pessimistic	174.1	174.1	174.1	174.1	199.5	199.5	199.5	199.5	217.3	217.3	217.3	217.3	279.0	279.0	279.0	279.0
Pessimistic	174.1	174.1	174.1	174.1	199.5	199.5	199.5	199.5	217.3	217.3	217.3	217.3	279.0	279.0	279.0	279.0
Median (Expected)	174.1	174.1	174.1	174.1	199.5	199.5	199.5	199.5	217.3	217.3	217.3	217.3	279.0	279.0	279.0	279.0
Optimistic	174.1	174.1	174.1	174.1	199.5	199.5	199.5	199.5	217.3	217.3	217.3	217.3	279.0	279.0	279.0	279.0
Very Optimistic	174.1	174.1	174.1	174.1	199.5	199.5	199.5	199.5	217.3	217.3	217.3	217.3	99.8	99.8	99.8	99.8

# **Employer Present Value of Contributions**



		Years	1 - 5			Years	1 - 10	
(\$ Millions)	Current	Similar Return	Similar Risk	7.25% Return	Current	Similar Return	Similar Risk	7.25% Return
	Policy	Policy	Policy	Policy	Policy	Policy	Policy	Policy
Very Pessimistic	443.5	443.5	443.5	443.5	857.6	857.6	857.6	857.6
Pessimistic	443.5	443.5	443.5	443.5	857.6	857.6	857.6	857.6
Median (Expected)	443.5	443.5	443.5	443.5	857.6	857.6	857.6	857.6
Optimistic	443.5	443.5	443.5	443.5	857.6	857.6	857.6	857.6
Very Optimistic	443.5	443.5	443.5	443.5	700.7	764.7	696.2	672.3

#### Shortfall Risk:

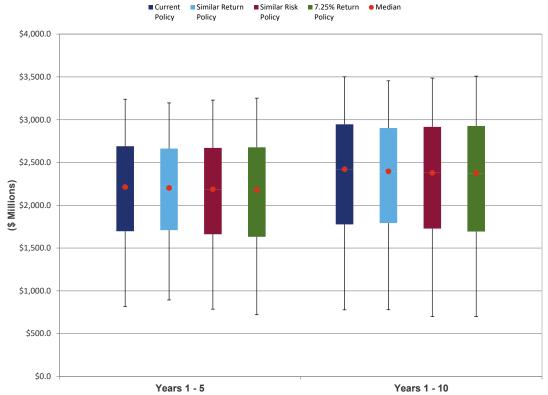
The potential for the current allocation to have higher median present value of contributions than the alternative policies.

#### Drawdown Risk:

The potential for the current allocation to have higher "very pessimistic" present value of contributions than the alternative policies.

EROA = 7.25%

### **MVA** Economic Cost



		Years	1 - 5			Years	1 - 10	
(\$ Millions)	Current	Similar Return	Similar Risk	7.25% Return	Current	Similar Return	Similar Risk	7.25% Return
	Policy	Policy	Policy	Policy	Policy	Policy	Policy	Policy
Very Pessimistic	3,239.4	3,196.9	3,229.6	3,252.4	3,501.6	3,454.8	3,486.9	3,509.7
Pessimistic	2,690.4	2,662.7	2,671.2	2,677.1	2,946.2	2,903.2	2,917.1	2,926.9
Median (Expected)	2,213.3	2,203.2	2,188.1	2,179.1	2,421.2	2,396.2	2,379.0	2,375.4
Optimistic	1,697.0	1,709.3	1,661.8	1,631.7	1,776.6	1,793.1	1,728.2	1,693.2
Very Optimistic	814.4	893.9	786.3	721.2	778.6	779.7	700.7	700.7

#### Shortfall Risk:

The potential for the current allocation to have a higher median economic cost than the alternative policies.

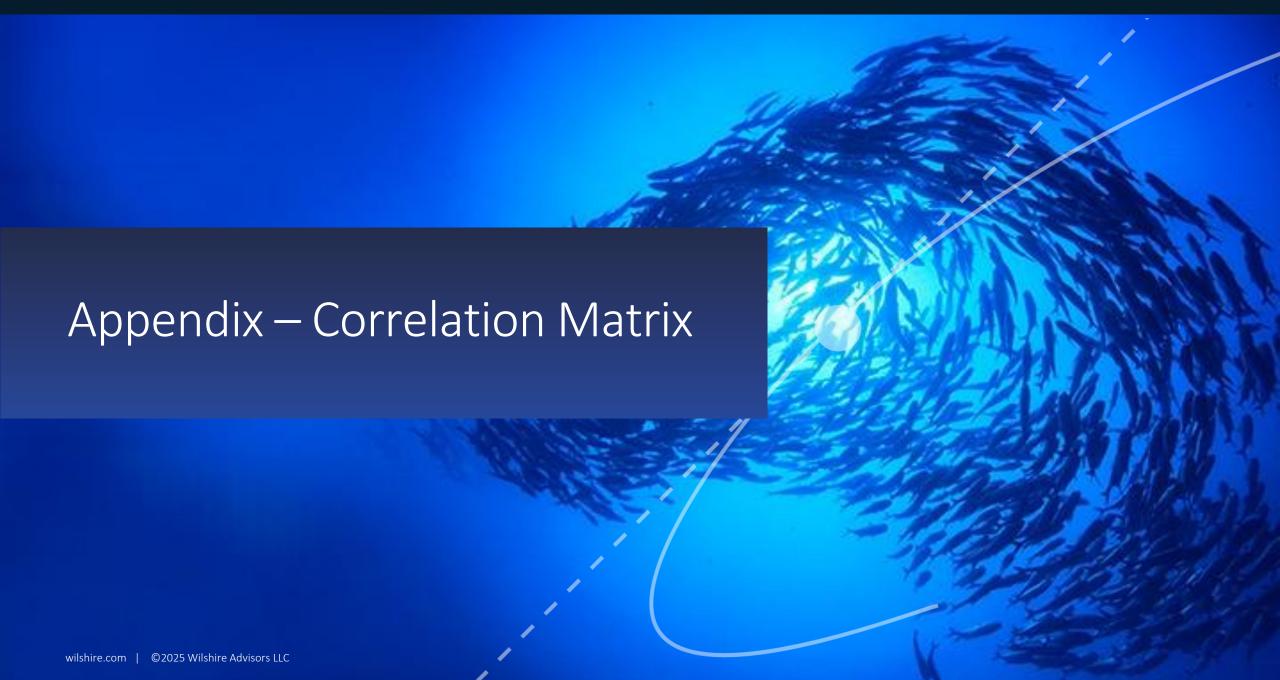
#### Drawdown Risk:

The potential for the current allocation to have a higher "very pessimistic" economic cost than the alternative policies.

FROA = 7.25%

Economic Cost is defined as the present value of contributions plus contributions necessary to fully fund the plan at the end of the projection period.

# Wilshire

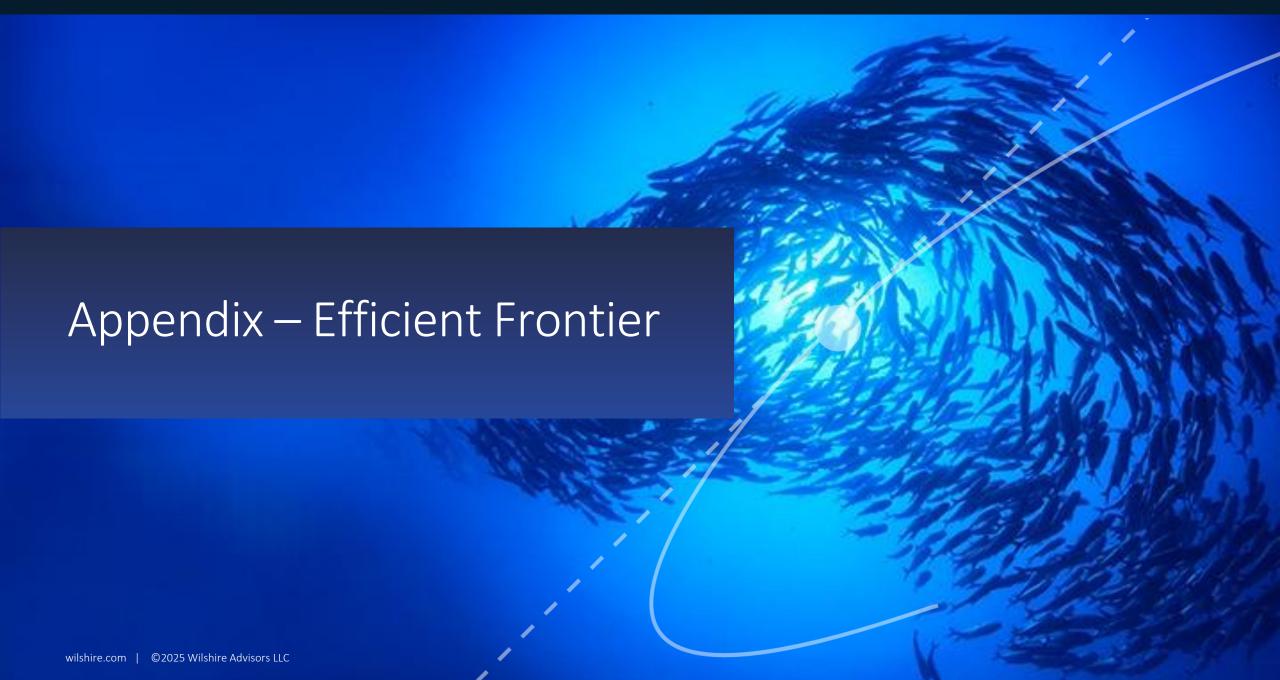


# Capital Market Assumptions

- Using Wilshire's June 30, 2025, Capital Market Assumptions
- Wilshire's asset class return, risk and correlation assumptions are developed on multi-year forward looking expected rates of return and historical risk and correlation, adjusted to incorporate recent trends
- Public market return expectations represent a passive investment in the asset class (beta). They do not reflect value added from active management (alpha).

	Domestic Equity	International Equity	Global Equity	Private Equity	Global Low Volatility Equity	High Yield Fixed Income	Private Credit Basket	Credit Opportunities	Core Fixed Income	REITS	Private Real Estate - Core	Private Real Estate - Value Add	MLPs	Global Public Infrastructure	Marketable Alternatives
Return - 10-Year (%) Return - 30-Year (%) Risk (%)	4.30 6.10 17.00	5.30 6.60 18.00	4.85 6.45 17.00	6.20 7.95 29.65	5.55 6.65 13.70	6.30 6.65 10.00	7.70 7.85 12.75	6.25 6.20 7.40	5.05 4.90 4.75	5.65 6.45 17.50	5.90 6.30 12.00	7.30 8.50 17.50	6.65 7.70 19.00	5.45 6.85 17.00	6.30 6.50 6.05
Correlations															
Domestic Equity	1.00														
International Equity	0.81	1.00													
Global Equity	0.98	0.90	1.00												
Private Equity	0.72	0.63	0.73	1.00											
Global Low Volatility Equity	0.94	0.88	0.97	0.76	1.00										
High Yield Fixed Income	0.54	0.39	0.53	0.31	0.52	1.00									
Private Credit Basket	0.68	0.55	0.68	0.44	0.67	0.76	1.00								
Credit Opportunities	0.60	0.55	0.63	0.37	0.63	0.89	0.83	1.00							
Core Fixed Income	0.27	0.13	0.21	0.30	0.19	0.24	0.23	0.26	1.00						
REITs	0.57	0.47	0.56	0.49	0.64	0.56	0.62	0.63	0.17	1.00					
Private Real Estate - Core	0.55	0.45	0.55	0.49	0.65	0.57	0.62	0.63	0.17	0.85	1.00				
Private Real Estate - Value Ad	0.50	0.40	0.49	0.46	0.59	0.54	0.59	0.60	0.17	0.70	0.85	1.00			
MLPs	0.40	0.35	0.41	0.42	0.40	0.50	0.55	0.53	0.12	0.45	0.45	0.42	1.00		
Global Public Infrastructure	0.67	0.72	0.73	0.59	0.72	0.58	0.66	0.64	0.12	0.60	0.50	0.45	0.55	1.00	
Marketable Alternatives	0.53	0.50	0.34	0.00	0.61	0.66	0.67	0.58	0.71	0.37	0.00	0.56	0.47	0.49	1.00

# Wilshire



### **Efficient Frontier Portfolios**

	Current	Optimization	Minimum	Portfolio	Portfolio	Portfolio	Portfolio	Portfolio	Portfolio	Portfolio	Portfolio	Maximum	
Asset Class	Policy	Constraints	Risk	2	3	4	5	6	7	8	9	Risk	
Domestic Equity	12.00%	11% - 100% <sup>1, 2</sup>	11.00%	11.00%	11.00%	11.00%	11.00%	11.00%	11.00%	11.00%	11.00%	12.00%	
International Equity	11.50%	0% - 100% <sup>1, 2</sup>	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	11.00%	
Global Equity	5.00%	0% - 100% <sup>2</sup>	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
Private Equity	10.00%	10% - 15%	10.00%	10.00%	10.00%	10.00%	<u>10.00%</u>	12.00%	14.00%	<u>15.00%</u>	<u>15.00%</u>	<u>15.00%</u>	
Total Growth Assets	38.50%		36.00%	36.00%	36.00%	36.00%	36.00%	38.00%	40.00%	41.00%	41.00%	43.00%	
Global Low Volatility Equity	10.00%	0% - 100% <sup>2</sup>	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	7.00%	9.00%	
High Yield Fixed Income	10.00%	0% - 10%	0.00%	1.50%	5.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	
Private Credit Basket	2.50%	0% - 2.5%	0.00%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	
Credit Opportunities	4.00%	0% - 7.5%	0.00%	7.50%	7.50%	<u>7.50%</u>	7.50%	7.50%	7.50%	7.50%	<u>7.50%</u>	<u>7.50%</u>	
Total Defensive Growth Assets	26.50%		5.00%	16.50%	20.00%	25.00%	25.00%	25.00%	25.00%	25.00%	27.00%	29.00%	
Core Fixed Income	17.50%	0% - 100%	<u>51.50%</u>	<u>35.00%</u>	28.00%	20.50%	<u>16.50%</u>	14.50%	11.50%	8.00%	4.50%	0.50%	
Total Defensive / Rate Sensitive Assets	17.50%		51.50%	35.00%	28.00%	20.50%	16.50%	14.50%	11.50%	8.00%	4.50%	0.50%	
REITs	2.50%	2.5% - 5%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	3.50%	5.00%	5.00%	
Private Real Estate - Core	5.00%	5% - 7.5%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	6.00%	7.50%	7.50%	7.50%	
Private Real Estate - Value Add	2.50%	0% - 5%	0.00%	0.00%	3.50%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
MLPs	3.75%	0% - 5% <sup>3, 4</sup>	0.00%	0.00%	0.00%	0.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	
Global Public Infrastructure	1.25%	0% - 5% <sup>3, 4</sup>	0.00%	0.00%	0.00%	0.25%	<u>1.25%</u>	1.25%	1.25%	<u>1.25%</u>	<u>1.25%</u>	<u>1.25%</u>	
Total RA / Inflation Sensitive Assets	15.00%		7.50%	7.50%	11.00%	13.50%	17.50%	17.50%	18.50%	21.00%	22.50%	22.50%	
Marketable Alternatives	2.50%	0% - 5%	0.00%	<u>5.00%</u>	5.00%	5.00%	<u>5.00%</u>	5.00%	5.00%	5.00%	5.00%	5.00%	
Total Non-Directional / Diversifiers Assets	2.50%		0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
Total Assets	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Expected Return - 10 Years (%)	6.15		5.71	5.94	6.08	6.20	6.28	6.33	6.37	6.41	6.42	6.41	
Standard Deviation of Return (%)	11.25		9.04	9.50	9.95	10.40	10.84	11.28	11.78	12.24	12.65	13.13	
+/(-) in Expected Return - 10 Years (bps)			(44)	(21)	(7)	5	13	18	22	26	27	26	
+/(-) in SD of Return (bps)			(221)	(175)	(130)	(85)	(41)	3	53	99	140	188	
Sharpe Ratio	0.23		0.24	0.25	0.25	0.25	0.25	0.25	0.24	0.23	0.23	0.22	

<sup>&</sup>lt;sup>1</sup> International Equity is constrained to be at most 48% of Total U.S. Equity and International Equity.

<sup>&</sup>lt;sup>2</sup> Global Low Volatility Equity is constrained to not exceed 1/4 of Total Public Equity. Public Equity is defined as U.S. Equity, Non-U.S. Equity, Global Equity & Global Low Vol. Equity.

<sup>&</sup>lt;sup>3</sup> MLPs and Global Listed Infrastructure are constrained to not exceed 5%.

<sup>&</sup>lt;sup>4</sup> Global Listed Infrastructure is constrained to be at least 25% of Total MLPs and Global Listed Infrastructure.





# Allowable Asset Allocation Ranges

Wilshire's Asset Allocation Committee (WAAC) maintains standard asset allocation parameters which reflect generally observed market practices for institutional asset owners. While Wilshire expects most client portfolios will fall within these asset allocation ranges. Wilshire recognizes and occasionally recommends portfolio allocations that may diverge from these general ranges based on a client's particular circumstances, goals or needs.

Asset Segment	Corporate DB	E&F						
Total Equity (Public+Private)	0% - 80%							
Private Equity (Aggregate)	0% - 15%	0% - 20%	0% - 30%					
Fixed Income (Core/High-quality - Liquid IG)	10% - 100% 10% - 50%							
Other Fixed Income/Credit (Aggregate)	0% - 25%							
Private/Illiquid Credit (Aggregate)	0% - 15%							
High Yield	0% - 10%							
Other: EMD, Loans, Convertibles	0% - 7.5%							
Total Real Assets (Public + Private)	0% - 25%							
Total Real Estate (Public + Private)	0% - 25%							
RA Other: Commodities, Gold, Infra, GLI, MLPs, O&G, Timber	0% - 5%							
Marketable Alternatives (Aggregate)	0% - 3	0% - 20%						
Cash	0% - 5%							
Leverage	0% - 20%							
Total Private/Illiquid	0% - 25%	0% - 25% 0% - 35%						

These thresholds were informed by allocation information from Greenwich Associates, and Wilshire Advisors, LLC, universe data and will be reviewed for reasonableness from time to time.

\*Last Updated 04/2024

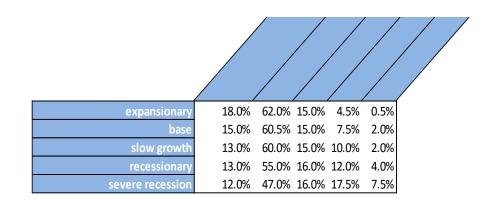
# Wilshire

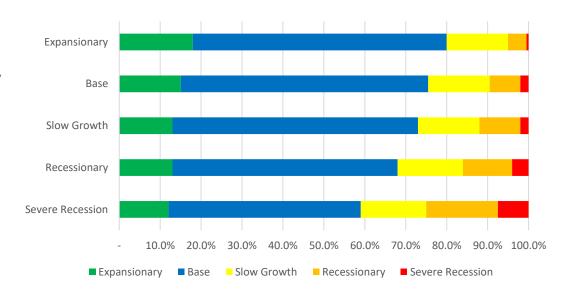


### Efficient Frontier Portfolios

Managing drawdown risk – the "uncertainty around the uncertainty"

- Most simulation models assume returns are lognormally distributed
- Though reasonable in most years, left-tail events occur more frequently than predicted
- A regime switching model can help us preexperience uncomfortable return paths that fall outside a normal distribution's field of view





# Stress Testing: Regime Assumptions

- In below trend and worse environments, the portfolio's return expectations is materially lower and the volatility is materially higher
- Volatility in the below trend and worse environments are left-skewed, i.e. negative-skewed

	US Stocks	Dev ex-US Stocks	Emg Mkt Stock	Private Equity	Cash	Core Bonds	LT Core Bonds	TIPS	High Yield Bonds	US RE Securities	Private RE	Commodities	Current Policy	Similar Return Policy	Similar Risk Policy	7.25% Return Policy
Expansionary/Above Trend Growth Return (%) Risk (%)	9.95 12.00	10.95 13.00	11.20 21.00	15.80 22.15	3.60 0.75	4.30 5.25	3.45 10.90	2.35 6.50	8.95 8.00	9.70 13.50	9.00 10.75	4.85 16.00	9.78 8.40	9.67 8.05	9.98 8.44	10.30 8.71
Baseline/Trend Growth Return (%) Risk (%)	4.60 17.00	5.60 18.00	5.85 26.00	6.45 29.65	3.60 0.75	4.95 4.75	5.15 9.90	4.35 6.00	6.30 10.00	5.70 17.50	6.55 13.95	4.85 16.00	6.15 11.25	6.26 10.71	6.32 11.27	6.35 11.65
Slow Growth/Below Trend Return (%) Risk (%)	1.95 22.00	2.95 23.00	3.20 31.00	1.80 37.15	3.60 0.75	5.25 5.75	6.00 11.90	5.35 7.50	4.95 12.00	3.70 21.50	5.30 17.15	4.85 18.00	4.46 14.70	4.68 14.02	4.61 14.78	4.50 15.22
Recessionary/Negative Growth Return (%) Risk (%)	(5.40) 27.00	(4.40) 28.00	(4.15) 36.00	(11.05) 44.65	3.60 0.75	6.15 6.75	8.35 13.90	8.10 9.00	1.30 15.00	(1. <mark>80)</mark> 27.50	1.95 21.95	4.85 21.00	(0.52) 18.28	0.01 17.52	( <mark>0.41)</mark> 18.48	(0.93) 18.93
Severe Recession/Crisis Return (%) Risk (%)	(43.40) 42.00	( <mark>42.40)</mark> 43.00	(42.15) 51.00	(50.00) 54.65	3.60 0.75	10.65 14.75	20.45 29.90	22.35 21.00	( <mark>17.70)</mark> 20.00	( <mark>30.30)</mark> 42.50	(15.65) 33.95	4.85 26.00	(23.76) 27.06	( <mark>21.68</mark> ) 25.85	(23.47) 27.13	(25.08) 27.45
Inflation Shock Return (%) Risk (%)	(10.90) 22.00	(4.90) 23.00	5.35 31.00	( <mark>18.20)</mark> 36.15	3.60 0.75	(0.60) 9.05	(9.65) 18.50	13.60 10.75	( <mark>0.20)</mark> 14.25	2.20 22.75	5.35 18.15	34.85 21.00	(3.40) 15.01	(2.67) 14.35	<mark>(2.98)</mark> 14.97	(3.73) 15.32

# Stress Testing: Regime Descriptions Regime Descriptions

- Expansionary/Above Trend Growth Regime when the economy is coming out of a recession or the economy is running above long-run capacity. Wilshire does not project the economy to remain in this regime over longer periods.
- Baseline/Trend Growth The long term expected state of the economy. Wilshire's capital market assumptions are based on this regime.
- Slow Growth/Below Trend Regime when the economy is running at less than full capacity.
- Recessionary/Negative Growth Regime when the economy has below zero growth. Wilshire expects the economy would be in a recession.
- Severe Recession/Deflation Regime when the economy defined by significantly negative growth. Wilshire does not project the economy to remain in this regime over longer periods.





### **Asset Allocation Evolution**

The evolution of asset allocation



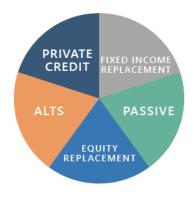




Age of 60/40 1980s-2000



Barbell Portfolio 2001–2020



Replacement Now

Source: Apollo Chief Economist





# Why Introduce Factors?

- Risk Assessment: Including factors within the asset allocation process provides an opportunity to measure asset class (and portfolio) exposures to key economic factors
- **Economic Efficiency:** If the underlying economic activity that drives asset performance can be identified, perhaps it can be used to assist in building economically-efficient portfolios
- Portfolio Stability: Macroeconomic risk factors when separated from the valuation component inherent in investment pricing – may exhibit more stable correlations and, therefore, can better inform the allocation process

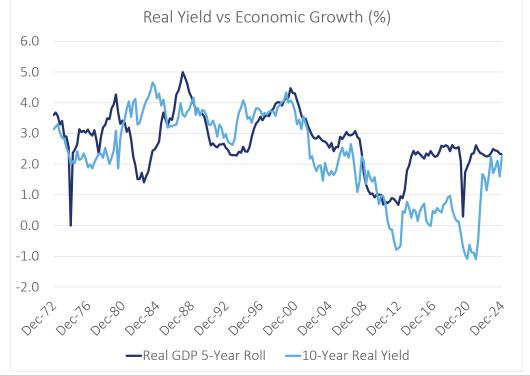
# **Growth Proxy**

Interest rates contain information and can reflect economic factors

 Nominal yields aggregate two important and distinct sources of economic information – real yields and expected inflation

Disaggregating these factors should prove beneficial in developing a set of

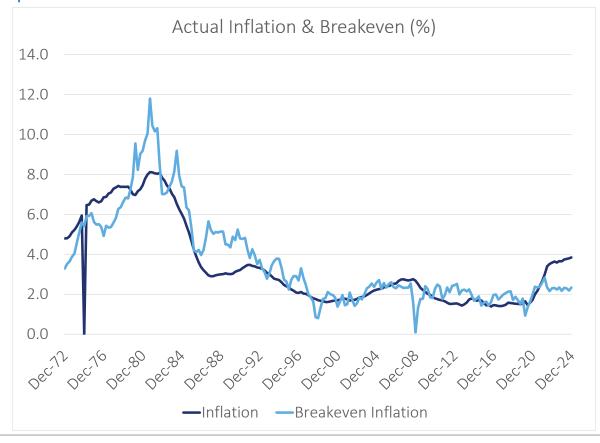
factors with improved explanatory power



Data Source: Bloomberg

# Inflation Proxy

- Breakeven inflation is the market's expectation for inflation
- Tends to follow closely with actual, recent inflation and can act as a timely signal of trends in consumer prices



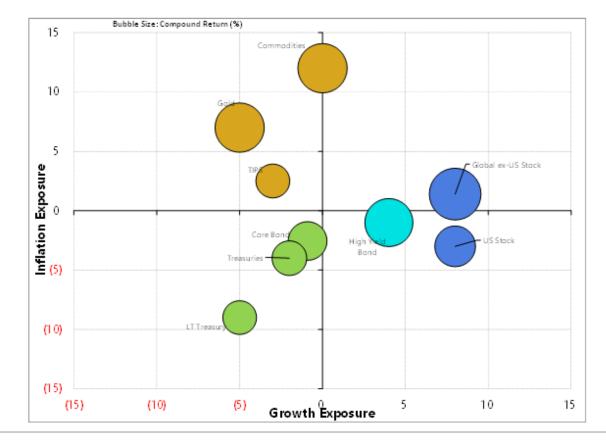
Data Source: Bloomberg

# Wilshire's Approach

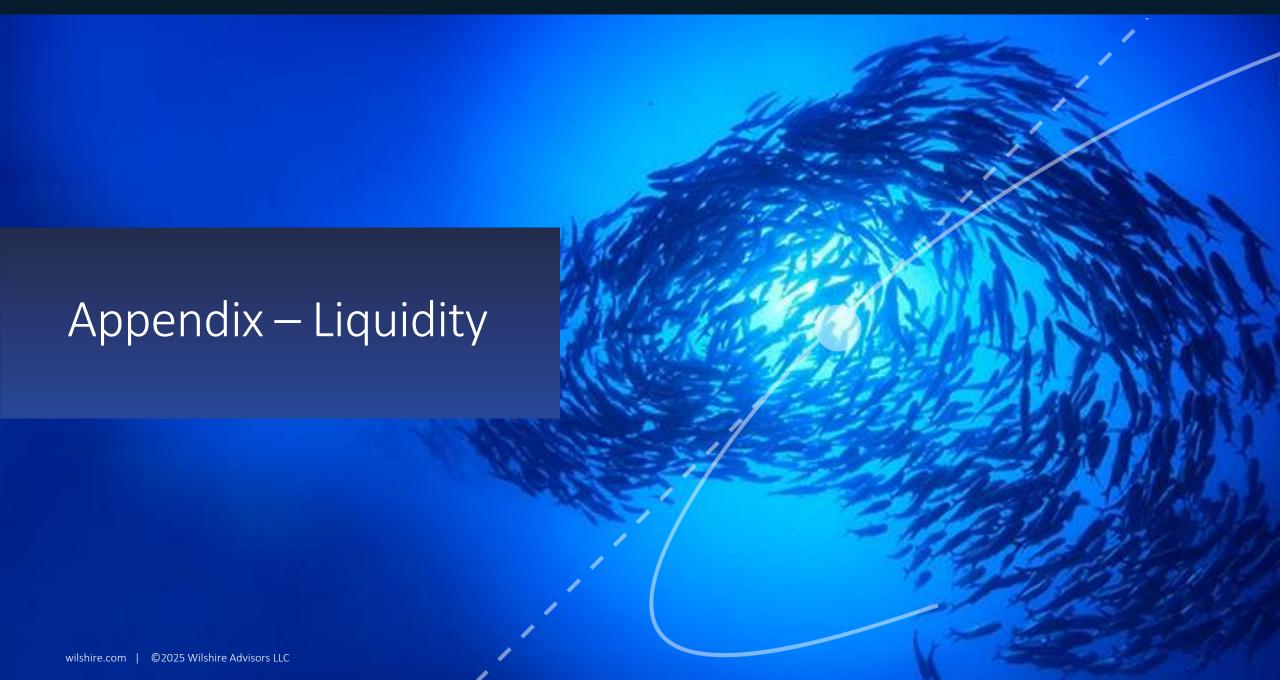
• Employ a 2-factor regression model (growth and inflation) to formulate factor assumptions

Growth proxy is enhanced by high yield bond spreads to better capture shifts in

growth forecasts



# Wilshire

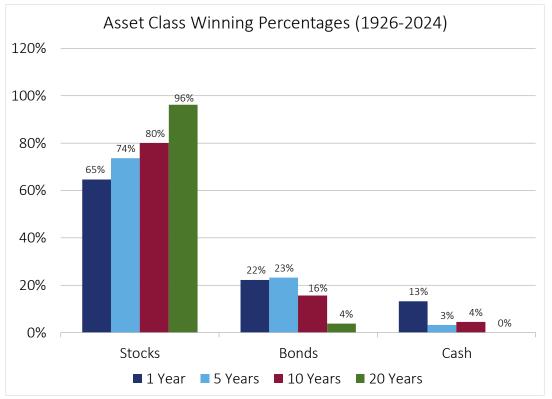


# Liquidity Risk: What Are The Consequences?

Default/Insolvency is the most severe outcome from having insufficient liquidity, but...

There are many other, more likely, disruptive impacts that a lack of liquidity can impose on an investment portfolio

- Liquidity breaches can rob an investor of their biggest advantage: a long-term investment horizon
- The timing and price of such sales dictated by liquidity needs rather than by explicit investment rationale
- Can destroy portfolio value and effectively strip a portfolio from its ability to recover from market sell-offs



# Wilshire Liquidity Metric

Wilshire's Liquidity Metric framework has two levels:

- Market Level of Liquidity
- Stressed Level of Liquidity

#### Market Level of Liquidity

- Quantified on scale from 0% (low liquidity) to 100% (high liquidity)
- Designed to capture general notion of marketable versus private/off-market transactions
  - Marketable asset classes typically reflect a 90% or 100%
  - Private asset classes reflect 0%
- Goal is to reflect the tradability of assets, which is helpful in connecting these values back to our definitional framework (i.e., to quantify the differences between Convertible Liquidity and Delayed Liquidity)

# Wilshire Liquidity Metric

Wilshire's Liquidity Metric framework has two levels:

- Market Level of Liquidity
- Stressed Level of Liquidity

#### **Stressed Liquidity Metric**

Includes a penalty process to reflect the loss in practical liquidity due to asset class volatility and sensitivity to particular economic environments

#### Penalty components:

- 1. Growth Penalty:
  - Impacts asset classes with vulnerability to slowing growth
  - Recognizes the hit to liquidity that can occur during growth related bear markets
- 2. Inflation Penalty:
  - Impacts asset classes with vulnerability to rising inflation
  - Recognizes the hit to liquidity that can occur during inflation driven bear markets
- 3. Volatility Penalty:
  - Impacts higher volatility asset classes
  - Recognizes the hit to liquidity that can occur from any form of volatility

# Wilshire Stressed Liquidity Metric

#### Stressed Level of Liquidity Metric

	Market	Liquidity	Penalty Con	nponents	Applied	Stressed
Asset Class	Liquidity	Growth	Inflation	Volatility	Penalty	Liquidity
US Equity	100	50		24	50	0
Dev ex-US Equity	100	50		26	50	0
EM Equity	90	50		40	50	0
Private Equity	0	50		40	0	0
Cash Equivalents	100				0	100
Core Bonds	100		8		8	86
High Yield Bonds	80	40		10	40	0
US Real Estate Securities	90	50		24	50	0
Private Real Estate	0	50		18	0	0
Commodities	90			20	20	55

Applied Penalty = Min(Max(Growth + Inflation, Volatility), Market Liquidity)

Stressed Liquidity \* = Market Liquidity - (1.75 x Applied Penalty)

\* If less than 20, Stressed Liquidity is assumed to be 0

# Important Information

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#### **OVERVIEW**

LPGP Connect Private Debt Los Angeles brings together LPs and GPs from the global private credit market to look at the latest developments and market trends. Join over 40 industry leading speakers to learn how the market is maturing and where the best opportunities can be found today and in the future.

The conference agenda has been designed to give investors an in depth look at the most up to date issues and concerns for investment groups who currently invest in the asset class and those that are looking to learn more and navigate the many opportunities on offer.

#### ASSET ALLOCATION COMPARISON

#### **SEPTEMBER 30, 2025**

		04 - 5 - 1 - 1	A.II	% Difference		Prior Period
	Maulint Value	% of Total	Allocation	from	Dries Devied Medical Value	% of Total
F	Market Value	Fund	Policy	Allocation	Prior Period Market Value	Fund
Equity	24 060 067 27	0.00			25 075 292 06	0.8
CHANNING CAPITAL	34,960,067.37	0.88			35,075,383.96	
SYSTEMATIC	60,578,010.56	1.53			59,865,855.03	1.5
Total Small Cap	95,538,077.93	2.41			94,941,238.99	2.4
T. ROWE PRICE	183,823,128.62	4.64			177,747,022.82	4.5
Total Domestic/Enhanced equity	183,823,128.62	4.64			177,747,022.82	4.5
NTGI S&P 500 EQUITY INDEX	190,693,918.62	4.81			183,980,481.31	4.69
Total Index	190,693,918.62	4.81			183,980,481.31	4.6
Total Domestic	470,055,125.17	11.86	12.00	-0.14	456,668,743.12	11.6
ACADIAN	121,071,246.06	3.05			144,267,117.63	3.68
AQR CAPITAL	159,665,383.55	4.03			153,332,780.28	3.9
ATIVO	34,134,337.44	0.86			33,547,783.97	0.8
BAILLIE GIFFORD	82,097,194.03	2.07			, ,	2.3
					93,094,571.80	-
EARNEST PARTNERS	100,592,951.02	2.54			117,765,565.71	3.0
Total International	497,561,112.10	12.55	11.50	1.05	542,007,819.39	13.8
ARIEL	49,465,849.69	1.25			47,899,632.83	1.2
NTAM ACWI IMI	63,202,070.43	1.59			61,079,484.79	1.5
WELLINGTON MGMT	118,759,897.72	3.00			115,400,814.49	2.9
Total Global Equity	231,427,817.84	5.84	5.00	0.84	224,379,932.11	5.7
ACADIAN-LVG	200,159,341.42	5.05	2.30	,	198,360,774.12	5.0
	, ,	4.84			, ,	4.8
BLACKROCK	191,817,618.03	-			190,803,250.04	_
SANCTIONED ASSET PORTFOL	79,627.76	0.00	40.00	0.44	79,627.46	0.0
Total Global Low Volatility Equity	392,056,587.21	9.89	10.00	-0.11	389,243,651.62	9.9
FAIRVIEW CAPITAL	113,832,142.00	2.87			113,871,507.00	2.90
GROSVENOR GCM - CFIG	154,167,034.00	3.89			155,053,394.00	3.9
HAMILTON LANE	88,970,437.00	2.24	40.00	0.00	85,520,799.00	2.13
Total Private Equity	356,969,613.00	9.01	10.00	-0.99	354,445,700.00	9.0
Total Equity	1,948,070,255.32	49.15	48.50	0.65	1,966,745,846.24	50.12
Fixed Income						
GARCIA HAMILTON	202,266,482.71	5.10			199,655,866.72	5.09
NTAM AGG BOND INDEX FUND	206,548,146.44	5.21			204,284,734.68	5.2
WELLINGTON-CORE BOND	211,844,769.71	5.34			209,138,880.39	5.33
Total Core Fixed Income	620,659,398.86	15.66	17.50	-1.84	613,079,481.79	15.6
			17.50	-1.04		
BLACKROCK-HY	202,177,174.22	5.10			200,575,125.67	5.1
OAKTREE	207,254,142.28	5.23			204,966,619.82	5.2
Total High Yield	409,431,316.50	10.33	10.00	0.33	405,541,745.49	10.3
NEUBERGER BERMAN	165,503,775.75	4.18			173,322,655.81	4.42
Total Credit Opportunities	165,503,775.75	4.18	4.00	0.18	173,322,655.81	4.4
SILVER POINT - DOIP II	2,522,076.00	0.06			3,119,512.00	0.0
MGG STRUCTURED SOLUTIONS	6,047,728.00	0.15			5,499,284.00	0.14
VISTA CREDIT PARTNERS FUND IV	2,092,420.00	0.05			2,092,420.00	0.0
Total Private Credit	10,662,224.00	0.27	2.50	-2.23	10,711,216.00	0.2
Total Fixed Income	1,206,256,715.11	30.43	34.00	-3.57	1,202,655,099.09	30.6
	1,200,230,713.11	30.43	34.00	-3.37	1,202,033,039.03	30.0
Real Assets					-	
ADELANTE CAPITAL	48,856,224.18	1.23		`	48,612,157.29	1.2
CENTERSQUARE-SL	49,616,571.05	1.25			49,192,641.41	1.2
Total REITS	98,472,795.23	2.48	2.50	-0.02	97,804,798.70	2.4
ATLANTIC TRUST	76,298,480.27	1.92			76,761,007.19	1.9
HARVEST FUND	83,482,020.19	2.11			82,386,508.73	2.1
COHEN & STEERS	52,232,148.76	1.32			50,526,021.13	1.2
Total Global Listed Infratructure	212,012,649.22	5.35	5.00	0.35	209,673,537.05	5.3
AEW PARTNERS	41,103,752.00	1.04			42,112,511.00	1.0
BRASA CAPITAL MGMT	19,940,486.00	0.50			19,940,486.00	0.5
HEITMAN	71,482,290.47	1.80			71,482,290.47	1.8
INVESCO	47,419,314.89	1.20			47,419,314.89	1.2
INVESCO - SL	73,605,293.00	1.86			73,605,293.00	1.8
LONG WHARF CAPITAL	10,608,951.00	0.27			10,144,093.00	0.2
VIRTUS REAL ESTATE CAP	51,687,633.00	1.30			51,687,633.00	1.3
Total Real Estate	315,847,720.36	7.97	7.50	0.47	316,391,621.36	8.0
	626,333,164.81	15.80	15.00	0.80	623,869,957.11	15.9
	020,333,104.01	13.00	15.00	0.00	023,003,337.11	10.9
Total Real Assets						
Diversifying Strategies						1.4
Diversifying Strategies DAVIDSON KEMPNER INST PTRS	57,073,277.00	1.44			56,616,230.00	1.4
Diversifying Strategies DAVIDSON KEMPNER INST PTRS HUDSON BAY CAPITAL	57,073,277.00 55,809,047.00	1.41			56,616,230.00 55,075,729.00	1.40
Diversifying Strategies DAVIDSON KEMPNER INST PTRS			2.50	0.35		1.4
Diversifying Strategies DAVIDSON KEMPNER INST PTRS HUDSON BAY CAPITAL Total Marketable Alternatives	55,809,047.00 <b>112,882,324.00</b>	1.41 2.85			55,075,729.00 <b>111,691,959.00</b>	1.4 2.8
Diversifying Strategies DAVIDSON KEMPNER INST PTRS HUDSON BAY CAPITAL Total Marketable Alternatives Total Diversifying Strategies	55,809,047.00 112,882,324.00 112,882,324.00	1.41 2.85 2.85	2.50 2.50	0.35 0.35	55,075,729.00 111,691,959.00 111,691,959.00	1.4 2.8 2.8
Diversifying Strategies DAVIDSON KEMPNER INST PTRS HUDSON BAY CAPITAL Total Marketable Alternatives	55,809,047.00 <b>112,882,324.00</b>	1.41 2.85			55,075,729.00 <b>111,691,959.00</b>	1.4 2.8

TOTAL FUND \$ 3,963,612,672.04 100.00 \$ 3,924,151,473.86 100.00

 Market Value YE 2024
 \$3,843,436,988.55
 Change from YE 2024:
 Market Value Variance

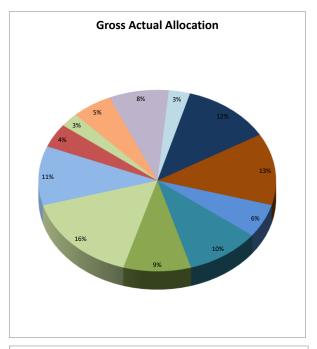
 Change from YE 2024:
 \$ 120,175,683.49

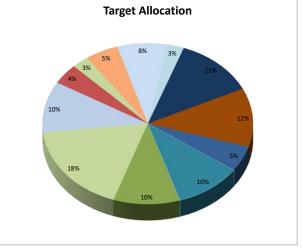
 Change from prior month:
 \$ 39,461,198.18

#### Asset Allocation: Actual vs. Target

**SEPTEMBER 30, 2025** 

EQUITY CHANNING CAPITAL SYSTEMATIC Total Small Cap T. ROWE PRICE Total Domestic/Enhanced equity NTGI S&P 500 EQUITY INDEX Total Domestic/Enhanced equity Total Domestic/Enhanced equity NTGI S&P 500 EQUITY INDEX Total Domestic/Enhanced equity NTGI S&P 500 EQUITY INDEX Total Domestic/Enhanced equity NTGI S&P 500 EQUITY INDEX Total Domestic Total Domestic 190,693,918.62 190,693,918.62 190,693,918.62 110,055,125.17 ACADIAN ACR CAPITAL ACADIAN ACR CAPITAL ARIEL ARIEL NTAM ACWI IMI SWELLINGTON MGMT Total International ARIEL NTAM ACWI IMI SWELLINGTON MGMT Total Global Equity ACADIAN-LVG ENAMINATION CAPITAL ACADIAN-LVG ENAMINATION TOTAL Global Equity ACADIAN-LVG ENAMINATION TOTAL Global Equity ACADIAN-LVG ENAMINATION TOTAL EQUITY FAIRVIEW CAPITAL GROSVENOR GCM - CFIG HAMILTON LANE Total Private Equity TOTAL EQUITY FIXED INCOME GARCIA HAMILTON TOTAL EQUITY FIXED INCOME GARCIA HAMILTON TOTAL EQUITY TOTAL EQUITY FIXED INCOME GARCIA HAMILTON TOTAL EQUITY TOTAL EQUITY FIXED INCOME GARCIA HAMILTON TOTAL EQUITY TOTAL EQUITY FIXED INCOME BLACKROCK-HY OAKTREE Total Right Yield NEUBERGER BERMAN TOTAL Credit Opportunistic SILVER POINT - DOIP II  MGG STRUCTURED SOLUTIONS VISTA CREDIT PARTNERS FUND IV TOTAL Fixed Income REAL ESTATE CENTERSOUARE-SL Total Fixed Income REAL ESTATE CENTERSOUARE-SL Total REITS TOTAL REITS ATLANTIC TRUST HARVEST FUND COHEN & STEERS TOTAL Global Listed Infratructure ACMY PARTNERS BRASA CAPITAL MGMT TOTAL Real Estate TOTAL Real Estate Total Real Assets  DAVIDSON KEMPNER INST PTRS  TOTAL REAL ESTATE CENTERSOUARE-SL TOTAL Real Estate TOTAL			% Difference
EQUITY CHANNING CAPITAL SYSTEMATIC Total Small Cap T. ROWE PRICE Total Domestic/Enhanced equity NTGI S&P 500 EQUITY INDEX Total Index Total Domestic AGRAPITAL AGRAPIT	Actual	Target	from
CHANNING CAPITAL   34,960,067.37   60,578,010.58   70,078,01	cation	Allocation	Allocation
TOTAL Small Cap T. ROWE PRICE Total Domestic/Enhanced equity NTGI S&P 500 EQUITY INDEX Total Index Total Domestic ACADIAN ACR CAPITAL ARIEL GIFFORD EARNEST PARTNERS Total International ARIEL GIFFORD EARNEST PARTNERS Total International ARIEL GIFFORD EARNEST PARTNERS Total International ARIEL GIFFORD EARNEST TOTAL Global Equity ACADIAN-LVG BLACKROCK SANCTIONED ASSET PORTFOL Total Global Low Volatility Equity FARVIEW CAPITAL GROSVENOR GCM - CFIG HAMILTON LANE Total Private Equity TOTAL EQUITY FIXED INCOME GARCIA HAMILTON NTAM AGG BOND INDEX FUND WELLINGTON-CORE BOND Total Core Fixed Income BLACKROCK-HY OAKTREE Total High Yield NEUBERGER BERMAN Total Frivate Credit Total Friv			
Total Domestic/Enhanced equity  Total Domestic/Enhanced equity  NTGI S&P 500 EQUITY INDEX  Total Index  Total Domestic  Total Domestic  Total Domestic  ACADIAN  ACR CAPITAL  ACADIAN  ACR CAPITAL  ATIVO  BALLIE GIFFORD  EARNEST PARTNERS  Total International  ARIEL  NTGI Global Equity  ACADIAN-LVG  BLACKROCK  BLACKROCK  Total Global Lquity  ACADIAN-LVG  BLACKROCK  SANCTIONED ASSET PORTFOL  Total Global Low Volatility Equity  FAIRVIEW CAPITAL  GROSVENDR GCM - CFIG  HAMILTON LANE  TOTAL EQUITY  FIXED INCOME  GARCIA HAMILTON  NTAM AGB BOND INDEX FUND  WELLINGTON-CORE BOND  TOTAL EQUITY  FIXED INCOME  BLACKROCK-HY  OAKTREE  Total High Yield  NEUBERGER BERMAN  Total Credit Opportunistic  Total Fixed Income  BLACKROCK-HY  OAKTREE  Total High Yield  NEUBERGER BERMAN  Total Credit Opportunistic  Total Fixed Income  REAL ESTATE  CENTERSOUARE-SL  Total Global Listed Infratructure  AB, 49, 615, 710, 52  AB, 47, 728, 53  Total Real Estate  Tota	0.88		
T. ROWE PRICE  Total Domestic/Enhanced equity  NTGI S&P 500 EQUITY INDEX  Total Index  Total Domestic  Total Domestic  Total Domestic  190,693,918.62  190,693,918.62  190,693,918.62  110,055,125.17  ACADIAN  ACR CAPITAL  ACADIAN  ACR CAPITAL  ARIEL  ARIEL  ARIEL  NTAM ACWI IMI  WELLINGTON MGMT  Total Global Equity  ACADIAN-LVG  BLACKROCK  SANCTIONED ASSET PORTFOL  Total Global Low Volatility Equity  FAIRVIEW CAPITAL  GROSVENOR GCM - CFIG  HAMILTON LANE  Total Private Equity  TOTAL EQUITY  FIXED INCOME  GARCIA HAMILTON  NTAM AGG BOND INDEX FUND  WELLINGTON-CORE BOND  Total Core Fixed Income  BLACKROCK-HY  OAKTREE  Total High Yield  NEUBERGER BERMAN  Total Credit Opportunistic  SILVER POINT - DOIP II  MGG STRUCTURED SOLUTIONS  VISTA CREDIT PARTNERS FUND IV  Total Private Credit  Total Fixed Income  REAL ESTATE  CENTERSQUARE-SL  Total Global Listed Infratructure  AEW PARTNERS  Total Global Listed Infratructure  AEW PARTNERS  Total Real Estate  CENTERSQUARE-SL  Total Real Estate  Total Real Estate  CENTERSQUARE-SL  Total Real Estate  Total Real Estate  CENTERSQUARE SL  Total Real Estate  CENTERSQUARE SL  Total Real Estate  CENTERSQUARE SL  Total Real Estate  Total Real Estate  CENTERSQUARE SL  Total Real Estate  Total Real Estate  CENTERSQUARE SL  Total Real Estate  CENTERSQUARE SL  Total Real Estate  CENTERSQUARE SL  Total Real Estate  Total Real Estate  CENTERSQUARE SL  Total Real Estate  CENTERSQUARE SL  Total Real Estate  Total Real Estate  CENTERSQUARE SL  Total Real Estate  CENTERSQUARE SL  Total Real Estate  Total Real Assets  DAVIDSON KEMPNER INST PTRS  Total Real Estate  Total Real Assets	1.53		
Total Domestic/Enhanced equity   183,823,128.62   190,693,918.62   190,693,918.62   190,693,918.62   190,693,918.62   190,693,918.62   190,693,918.62   190,693,918.62   190,693,918.62   190,693,918.62   170,000,000,000,000,000,000,000,000,000,	2.41		
NTGI S&P 500 EQUITY INDEX   199,693,918.62   190,693,918.62   190,693,918.62   190,693,918.62   190,693,918.62   190,693,918.62   190,693,918.62   190,693,918.62   190,693,918.62   190,693,918.62   190,693,918.62   190,693,918.62   190,693,918.62   190,693,918.62   190,693,918.62   190,693,918.62   190,693,918.62   120,712,46.06   120,712,46.06   120,712,46.06   120,712,46.06   120,712,46.06   120,712,46.06   120,712,46.06   120,712,46.06   120,712,46.06   120,712,46.06   120,712,46.06   120,712,46.06   120,712,46.06   120,712,46.06   120,712,41.00   120,92,951.02	4.64 4.64		
Total Index	4.81		
ACADIAN ACR CAPITAL ACRIL BIFFORD EARNEST PARTNERS Total International ARIEL ACRIC TOTAL Global Equity ACADIAN-LVG BLACKROCK ACRIC ACR	4.81		
ACADIAN ACR CAPITAL ACROCK BALLIE GIFFORD EARNEST PARTNERS  Total International ARIEL ACKROCK Total Global Equity ACADIAN-LVG BLACKROCK BLACKROCK ACADIAN-LVG BLACKROCK-HY ACADIAN-LVG ACADIAN-LVG BLACKROCK-HY ACADIAN-LVG ACADIAN-LVG BLACKROCK BRACACHAL MIMITA BLACKROCK-HY ACADIAN-LVG BLA	11.86	12.00	-0.1
ARR CAPITAL ATIVO ATIVO BAILLIE GIFFORD EARNEST PARTNERS Total international ARIEL AGRIEL AGRIEL AGRIEL TOTAL GIObal Equity ACADIAN-LVG BLACKROCK SANCTIONED ASSET PORTFOL TOTAL GIObal Low Volatility Equity FAIRVIEW CAPITAL GROSVENOR GCM - CFIG HAMILTON LANE TOTAL EQUITY TOTAL EQUITY FIXED INCOME GARCIA HAMILTON NTAM AGG BOND INDEX FUND NTAM AGG BOND INDEX FUND TOTAL Core Fixed Income BLACKROCK-HY OAKTREE TOTAL High Yield NEUBERGER BERMAN TOTAL CORE BOND TOTAL CORE BOND TOTAL CORE GOND TOTAL EQUITY TOTAL FIXED INCOME BLACKROCK-HY OAKTREE TOTAL High Yield NEUBERGER BERMAN TOTAL CORE BOND TOTAL FIXED INCOME SILVER POINT - DOIP II MGG STRUCTURED SOLUTIONS VISTA CREDIT PARTNERS FUND IN TOTAL FIXED INCOME REAL ESTATE CENTERSQUARE-SL TOTAL GIObal Listed Infratructure AEW PARTNERS BRASA CAPITAL MGMT HEITMAN TOTAL Real Estate TOTAL Real Assets  DAVIDSON KEMPNER INST PTRS  57,073,277.00	3.05	72.00	-0.1
ATIVO BAILLIE GIFFORD EARNEST PARTNERS  Total International ARIEL ARIA ARIEL ARIEL ARIEL ARIA ARIA ARIA ARIA ARIA ARIA ARIA ARI	4.03		
ARIEL ARIEL ARIEL NTAM ACWI IMI WELLINGTON MGMT  Total Global Equity ACADIAN-LVG BLACKROCK SANCTIONED ASSET PORTFOL Total Global Low Volatility Equity FAIRVIEW CAPITAL GROSVENOR GCM - CFIG HAMILTON LANE TOTAL EQUITY FIXED INCOME GARCIA HAMILTON NTAM AGG BOND INDEX FUND TOTAL EQUITY TOTAL GOOD TOTAL EQUITY TOTAL GOOD TOTAL EQUITY FIXED INCOME GARCIA HAMILTON TOTAL EQUITY TOTAL Fivete Equity TOTAL EQUITY FIXED INCOME GARCIA HAMILTON TOTAL EQUITY FIXED INCOME GARCIA HAMILTON TOTAL EQUITY FIXED INCOME GARCIA HAMILTON TOTAL CORE BOND TOTAL Fivete Income BLACKROCK-HY OAKTREE TOTAL High Yield NEUBERGER BERMAN TOTAL CORE Fixed Income BLACKROCK-HY OAKTREE TOTAL High Yield NEUBERGER BERMAN TOTAL CORE FIXED INCOME TOTAL FIVETE TOTAL HIGH YIELD NOW TOTAL FIVETE TOTAL HIGH YIELD AND TOTAL FIVETE TOTA	0.86		
ARIEL  ARIEL  NTAM ACWI IMI  WELLINGTON MGMT  Total Global Equity  ACADIAN-LVG BLACKROCK SANCTIONED ASSET PORTFOL Total Global Low Volatility Equity FAIRVIEW CAPITAL  GROSVENOR GCM - CFIG HAMILTON LANE  Total Private Equity TOTAL EQUITY FIKED INCOME GARCIA HAMILTON NTAM AGG BOND INDEX FUND WELLINGTON-CORE BOND BLACKROCK-HY OAKTREE Total High Yield NEUBERGER BERMAN Total Credit Opportunistic  SILVER POINT - DOIP II  MGG STRUCTURED SOLUTIONS VISTA CREDIT PARTNERS FUND IV Total Private Credit Total Fixed Income REAL ESTATE CENTERSQUARE-SL Total Global Listed Infratructure APP ARTNERS BRASA CAPITAL MGMT Total Real Estate Total Real Assets Total Real Assets  DAVIDSON KEMPNER INST PTRS  57,073,277.00	2.07		
ARIEL  ARIEL  ARIACWI IMI  WELLINGTON MGMT  Total Global Equity  ACADIAN-LVG BLACKROCK BLACKROCK  Total Global Low Volatility Equity FAIRVIEW CAPITAL  GROSVENOR GCM - CFIG HAMILTON LANE  TOTAL EQUITY  FIXED INCOME  GARCIA HAMILTON TOTAL EQUITY  FIXED INCOME  GARCIA HAMILTON TOTAL EQUITY  TOTAL EQUITY  FIXED INCOME  GARCIA HAMILTON TOTAL EQUITY  TOTAL EQUITY  FIXED INCOME  GARCIA HAMILTON TOTAL EQUITY  FIXED INCOME  GARCIA HAMILTON TOTAL Core Fixed Income BLACKROCK-HY OAKTREE  Total High Yield  NEUBERGER BERMAN Total Credit Opportunistic  SILVER POINT - DOIP II  MGG STRUCTURED SOLUTIONS VISTA CREDIT PARTNERS FUND IV Total Fixed Income  REAL ESTATE  CENTERSOUARE-SL Total Global Listed Infratructure AEW PARTNERS BRASA CAPITAL  TOTAL Real Estate Total Real Assets  DAVIDSON KEMPNER INST PTRS  57,073,277.00	2.54	l	
NTAM ACWI IMI   G3, 202, 070.43   118, 759, 897.72   231, 427, 817.84   ACADIAN-LVG   191, 817, 618.03   79,627.76   7043 (Global Low Volatility Equity   392,056,587.21   13,832,142.00   154,167.034.00   88,970,437.00   154,167.034.00   88,970,437.00   154,167.034.00   88,970,437.00   154,167.034.00   88,970,437.00   154,167.034.00   88,970,437.00   154,167.034.00   154,167.0	12.55	11.50	1.0
WELLINGTON MGMT	1.25		
Total Global Equity   231,427,817.84     ACADIAN-LVG   BLACKROCK   200,159,341.42     BLACKROCK   79,627.76     Total Global Low Volatility Equity   191,817,618.03     SANCTIONED ASSET PORTFOL   79,627.76     Total Global Low Volatility Equity   113,832,142.00     FAIRVIEW CAPITAL   113,832,142.00     GROSVENOR GCM - CFIG   184,970,255.32     FAIRVIEW CAPITAL   113,832,142.00     HAMILTON LANE   154,167,034.00     HAMILTON LANE   154,167,034.00     HAMILTON   154,870,255.32     FIXED INCOME   200,266,482.71     NTAM AGG BOND INDEX FUND   200,6548,146.44     WELLINGTON-CORE BOND   201,6482.71     NTAM AGG BOND INDEX FUND   200,6548,146.44     WELLINGTON-CORE BOND   201,844,769.71     Total Core Fixed Income   620,659,398.86     BLACKROCK-HY   202,177,174.22     207,254,142.28   207,254,142.28     207,254,142.28   207,254,142.28     207,254,142.28   207,254,142.28     207,254,142.28   207,254,142.28     207,254,142.28   207,254,142.28     309,341,316.50     NEUBERGER BERMAN   165,503,775.75     SILVER POINT - DOIP II   2,522,076.00     MGG STRUCTURED SOLUTIONS   6,047,728.00     VISTA CREDIT PARTNERS FUND IV   2,092,420.00     Total Fixed Income   1,206,256,715.11     REAL ESTATE   49,616,571.05     REAL ESTATE   76,298,480.27     HARVEST FUND   83,482,020.19     COHEN & STEERS   76,298,480.27     HARVEST FUND   70 all Global Listed Infratructure   212,012,649.22     AEW PARTNERS   83,482,020.19     COHEN & STEERS   71,732,200     SILVER POINT   1940,486.00     1940,486.00	1.59 3.00		
ACADIAN-LVG BLACKROCK SANCTIONED ASSET PORTFOL Total Global Low Volatility Equity FAIRVIEW CAPITAL GROSVENOR GCM - CFIG HAMILTON LANE Total Private Equity TOTAL EQUITY FIXED INCOME GARCIA HAMILTON NTAM AGG BOND INDEX FUND WELLINGTON-CORE BOND Total Core Fixed Income BLACKROCK-HY OAKTREE Total High Yield NEUBERGER BERMAN Total Credit Opportunistic SILVER POINT - DOIP II MGG STRUCTURED SOLUTIONS VISTA CREDIT PARTNERS FUND IV Total Frivate Credit Total Fixed Income REAL ESTATE CENTERSQUARE-SL Total Global Listed Infratructure AEW PARTNERS BRASA CAPITAL MGMT HEITMAN Total Real Estate Total Real Estate CLONG WHARF CAPITAL VIRTUS REAL ESTATE  Total Real Estate Total Real Estate Total Real Estate Total Global Listed Infratructure AEW PARTNERS SILVER POINT - DOIP II ROBERS CAPITAL MGMT TOTAL GROUP SILVER SALVER	3.00 5.84	5.00	0.8
BLACKROCK   191,817,618.03   79,627.76   79,627.77	5.05	5.00	0.0
SANCTIONED ASSET PORTFOL   Total Global Low Volatility Equity   113,832,142.00   154,167,034.00   154,167,137,037,037,037,037,037,037,037,037,037,0	4.84		
FAIRVIEW CAPITAL  GROSVENDR GCM - CFIG  HAMILTON LANE  Total Private Equity  TOTAL EQUITY  FIXED INCOME  GARCIA HAMILTON  NTAM AGG BOND INDEX FUND  WELLINGTON-CORE BOND  Total Core Fixed Income  BLACKROCK-HY  OAKTREE  Total High Yield  NEUBERGER BERMAN  Total Credit Opportunistic  SILVER POINT - DOIP II  MGG STRUCTURED SOLUTIONS  VISTA CREDIT PARTNERS FUND IV  Total Fixed Income  REAL ESTATE  CENTERSQUARE-SL  Total Global Listed Infratructure  AEW PARTNERS  BRASA CAPITAL MGMT  HEITMAN  TOTAL GREAI Estate  Total Real Estate  LONG WHARF CAPITAL  VIRTUS REAL ESTATE CAP  Total Real Estate  Total Real Assets	0.00		
SCAPE   SCAP	9.89	10.00	-0.
HAMILTON LANE   Total Private Equity   356,969,913.00   TOTAL EQUITY   1,948,070,255.32   TOTAL EQUITY   200,548,146.44   200,6548,146.44   200,6548,146.44   200,6548,146.44   211,844,769,71   220,6549,381.86   202,177,174.22   207,254,142.28   202,1254,142.28   202,1254,142.28   207,254,142.28   209,241,228   209,241,228   209,241,231.65   209,241,231.65   209,241,231.65   209,241,231.65   209,241,231.65   209,242.00	2.87		
Total Private Equity   356,969,613.00	3.89 2.24		
TOTAL EQUITY FIXED INCOME  GARCIA HAMILTON NTAM AGG BOND INDEX FUND  Total Core Fixed Income BLACKROCK-HY OAKTREE  Total High Yield NEUBERGER BERMAN TOtal Credit Opportunistic  SILVER POINT - DOIP II  MGG STRUCTURED SOLUTIONS VISTA CREDIT PARTNERS FUND IV Total Fixed Income  REAL ESTATE CENTERSQUARE-SL Total Global Listed Infratructure AEW PARTNERS TOTAL Global Listed Infratructure AEW PARTNERS BRASA CAPITAL MGMT HEITMAN INVESCO INVESCO - SL LONG WHARF CAPITAL VIRTUS FALL ESTATE  Total Real Estate Total Real Estate Total Real Estate Total Real Estate Total Real Estate Total Real Estate Total Real Estate Total Global Listed Infratructure AEW PARTNERS TOTAL GROWN TOTAL PARTNERS TOTAL GROWN TOTAL PARTNERS TOTAL GROWN TOTAL PARTNERS TOTAL REAL ESTATE TOTAL REAL	9.01	10.00	-0.9
FIXED INCOME   GARCIA HAMILTON   202,266,482,71   NTAM AGG BOND INDEX FUND   206,548,146,44   211,844,769,71   206,548,146,44   211,844,769,71   202,264,142,28   202,254,142,28   202,254,142,28   207,254,142,142,142,142,142,142,142,142,142,14	49.15	48.50	0.
NTAM AGG BOND INDEX FUND   206,548,146.44   211,844,769.71   214,844,769.71   214,844,769.71   214,844,769.71   214,844,769.71   216,644,769.71   216,644,769.71   216,644,769.71   216,644,769.71   216,644,769.71   226,0549,398.86   202,177,174.22   207,254,142.28   409,431,316.50   165,503,775.75   276,000,77		10.00	
WELLINGTON-CORE BOND   Total Core Fixed Income   E20,559,398.86	5.10		
Total Core Fixed Income   620,659,398.86	5.21		
BLACKROCK-HY OAKTREE Total High Yield NEUBERGER BERMAN Total Credit Opportunistic SILVER POINT - DOIP II MGG STRUCTURED SOLUTIONS VISTA CREDIT PARTNERS FUND IV Total Private Credit Total Fixed Income REAL ESTATE CENTERSQUARE-SL Total REITS ATLANTIC TRUST HARVEST FUND COHEN & STEERS Total Global Listed Infratructure AEW PARTNERS BRASA CAPITAL MGMT HEITMAN HEITMAN TOTAL REITS ATLANTIC TRUST ACADE ACCOUNTY TO A STEERS TOTAL GLOBAL LISTED TOTAL MGMT HEITMAN HEITMAN TOTAL REITS ATLANTIC TRUST ACADE ACCOUNTY TO A STEERS TOTAL GLOBAL LISTED TOTAL	5.34		
OAKTREE Total High Yield 409,431,316.50 165,503,775.75 Total Credit Opportunistic 165,503,775.75	15.66	17.50	-1.8
Total High Yield   409,431,316.50	5.10		
NEUBERGER BERMAN	<u>5.23</u> 10.33	10.00	0.:
Total Credit Opportunistic   165,503,775.75	4.18	70.00	0
SILVER POINT - DOIP	4.18	4.00	0.
MGG STRUCTURED SOLUTIONS   6,047,728.00			
VISTA CREDIT PARTNERS FUND IV	0.06		
Total Private Credit   10,662,224.00   1,206,256,715.11     REAL ESTATE   49,616,571.05     SEAL ESTATE   49,616,571.05     SEAL ESTATE   70tal REITS   76,228,480.27     HARVEST FUND   83,482,020.19     COHEN & STEERS   70tal Global Listed Infratructure   212,012,649.22     AEW PARTNERS   41,103,752.00     BRASA CAPITAL MGMT   19,940,486.00     HEITMAN   71,482,290.47     INVESCO   47,419,314.89     INVESCO   51,687,633.00     Total Real Estate   10,608,951.00     Total Real Assets   626,333,164.81     DAVIDSON KEMPNER INST PTRS   57,073,277.00	0.15		
Total Fixed Income  REAL ESTATE  CENTERSQUARE-SL  Total REITS  ATLANTIC TRUST HARVEST FUND COHEN & STEERS  Total Global Listed Infratructure  AEW PARTNERS  BRASA CAPITAL MGMT HEITMAN TIMESCO 19,940,486.00 HEITMAN 17,482,290.47 INVESCO 47,419,314,89 INVESCO SL LONG WHARF CAPITAL VIRTUS REAL ESTATE CAP Total Real Estate Total Real Assets  DAVIDSON KEMPNER INST PTRS  52,025,773,277.00  4,2419,314,89 10,608,951.00 51,687,633.00 51,687,6	0.05		
REAL ESTATE  CENTERSQUARE-SL  Total REITS  49,616,571.05  98,472,795.23  ATLANTIC TRUST  76,298,480.27  76,298,480.27  76,298,480.27  83,482,020.19  52,232,148.76  212,012,649.22  AEW PARTNERS  BRASA CAPITAL MGMT  HEITMAN  19,940,486.00  19,940,486.00  19,940,486.00  19,940,486.00  11,482,290.47  10,108,098,51.00  10,608,951.00  10,608,951.00  51,687,633.00  10,608,951.00  51,687,633.00  10,608,951.00  51,687,633.00  10,608,951.00  51,687,633.00  10,608,951.00  51,687,633.00  10,608,951.00  51,687,633.00  51,687,633.00  51,687,633.00  51,687,633.00  51,687,633.00  51,687,633.00  51,687,633.00  51,687,633.00  51,687,633.00  51,687,673,277.00	0.27	2.50	-2.
AUDITION   AUDITION   AUDITION   AUDITION   AUDITION	30.43	34.00	-3.
Total REITS   98,472,795.23	1.25		
HARVEST FUND	2.48	2.50	-0.0
COHEN & STEERS  Total Global Listed Infratructure  AEW PARTNERS  BRASA CAPITAL MGMT  HEITMAN  19,940,486.00  19,940,486.00  19,940,486.00  19,940,486.00  19,940,486.00  19,940,486.00  19,940,486.00  19,940,486.00  10,688,951.00  10,688,951.00  10,688,951.00  10,688,951.00  51,687,633.00  10,688,951.00  51,687,633.00  10,688,951.00  51,687,633.00  10,688,951.00  51,687,633.00  10,688,951.00  51,687,633.00  10,688,951.00  51,687,633.00  10,688,951.00  51,687,633.00  51	1.92		
Total Global Listed Infratructure	2.11		
AEW PARTNERS BRASA CAPITAL MGMT HEITMAN 19,940,486.00 71,482,290.47 INVESCO 47,419,314.89 INVESCO SL LONG WHARF CAPITAL VIRTUS REAL ESTATE CAP Total Real Estate Total Real Assets  DAVIDSON KEMPNER INST PTRS 41,103,752.00 19,040,400 11,603,752.00 11,608,951.00 51,687,633.00 315,847,720.36 626,333,164.81	1.32	5.00	
BRASA CAPITAL MGMT HEITMAN 19,940,486.00 71,482,290.47 INVESCO 47,419,314.89 73,605,293.00 LONG WHARF CAPITAL LONG WHARF CAPITAL VIRTUS REAL ESTATE CAP Total Real Assets  DAVIDSON KEMPNER INST PTRS 19,940,486.00 71,482,290.47 10,608,951.00 51,687,633.00 315,847,720.36 626,333,164.81	5.35 1.04	5.00	0
HEITMAN 71,482,290.47   INVESCO 47,419,314.89   INVESCO - SL 73,605,293.00   LONG WHARF CAPITAL 10,608,951.00   51,687,633.00   51,687,633.00   315,847,720.36   Total Real Assets 626,333,164.81    DAVIDSON KEMPNER INST PTRS 57,073,277.00	0.50		
INVESCO - SL  LONG WHARF CAPITAL  VIRTUS REAL ESTATE CAP  Total Real Estate  Total Real Assets  DAVIDSON KEMPNER INST PTRS  73,605,293.00 10,608,951.00 51,687,720.36 626,333,164.81	1.80		
LONG WHARF CAPITAL 10,608,951.00 51,087,033.00 10,0	1.20		
VIRTUS REAL ESTATE CAP 51,687,633.00 315,847,720.36 Total Real Assets 626,333,164.81  DAVIDSON KEMPNER INST PTRS 57,073,277.00	1.86		
Total Real Estate   315,847,720.36	0.27		
Total Real Assets   626,333,164.81	1.30 7.97		
	15.80	15.00	0.
	1.44		
	1.41		
Total Diversifying Strategies 112,882,324.00	2.85	2.50	0.:
CASH ACCOUNT 70,070,212.80	1.77		





# Wilshire

# ERF of the City of Dallas

Monthly Investment Summary

# Monthly Index Performance Periods Ended September 30, 2025

			Performance	(%) Net of Fees		
	1	\(T_0	1	3	5	10
	Month	YTD	Year	Years	Years	Years
U.S. Equity						
FT Wilshire 5000 Index	3.46	14.45	17.46	24.14	15.97	14.89
S&P 500 Index	3.65	14.83	17.60	24.94	16.47	15.30
FT Wilshire 4500 Index	1.13	7.43	8.72	15.86	12.61	10.59
MSCI USA Minimum Volatility Index	1.36	8.40	5.94	14.87	10.16	11.32
U.S. Equity by Size/Style						
FT Wilshire U.S. Large Cap Index	3.79	15.48	18.76	25.38	16.44	15.53
FT Wilshire US Large Cap Growth Index	5.14	18.37	26.87	33.12	18.11	18.65
FT Wilshire US Large Cap Value Index	2.25	12.65	10.77	17.76	14.45	12.17
FT Wilshire U.S. Small Cap Index	0.70	6.84	7.92	16.23	12.69	10.74
FT Wilshire US Small Cap Growth Index	1.02	6.67	9.27	16.64	9.21	10.98
FT Wilshire US Small Cap Value Index	0.42	7.05	6.58	15.82	16.09	10.28
FT Wilshire U.S. Micro Cap Index	4.31	11.66	14.75	12.73	11.63	9.32
  Non-U.S. Equity (USD)						
MSCI AC World ex USA (Net)	3.60	26.02	16.45	20.67	10.26	8.23
MSCI ACWI ex USA Minimum Volatility Index (Net)	-0.07	15.47	8.36	14.49	7.44	6.65
MSCI EAFE (Net)	1.91	25.14	14.99	21.70	11.15	8.17
MSCI Emerging Markets (Net)	7.15	27.53	17.32	18.21	7.02	7.99
MSCI AC World ex USA Small Cap (Net)	2.15	25.54	15.93	19.36	9.97	8.37
U.S. Fixed Income						
Blmbg. U.S. Aggregate Index	1.09	6.13	2.88	4.93	-0.45	1.84
Blmbg. U.S. Treasury: Long	3.09	5.64	-3.47	0.43	-7.79	-0.11
Blmbg. U.S. Long Corporate Index	3.17	7.56	0.89	7.24	-1.98	3.33
Blmbg. U.S. TIPS Index	0.43	6.87	3.79	4.88	1.42	3.01
Blmbg. U.S. Credit Index	1.44	6.90	3.65	6.87	0.33	3.00
Blmbg. U.S. Corp: High Yield Index	0.82	7.22	7.41	11.09	5.55	6.17
Morningstar LSTA U.S. Leveraged Loan	0.44	4.63	7.00	9.85	6.96	5.47

Dallas Total Fund Periods Ended September 30, 2025

			Per	formar	nce (%)	Net of F	ees		Allocati	on
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Global Equity Composite	3.14	6.05	17.24	16.20	21.09	12.04	10.07	9/1/2012	231,427,818	5.8
Global Low Volatility Composite	0.72	1.56	12.53	9.72	15.58	9.67	8.27	7/1/2015	392,022,155	9.89
Domestic Equity Composite	2.93	8.15	12.30	14.45	21.94	16.54	10.76	1/1/1990	470,055,125	11.8
International Equity Composite	2.90	5.99	27.88	20.54	22.27	11.42	6.21	1/1/1990	497,552,242	12.5!
Fixed Income Composite	1.09	2.06	6.31	2.62	5.02	-0.09	4.29	10/1/1995	620,660,335	15.60
High Yield Composite	0.89	2.75	7.19	7.24	10.86	5.63	6.24	1/1/1997	409,847,951	10.3
Credit Opportunities Composite	1.02	2.97	7.33	8.27	11.65	5.11	5.62	2/1/2016	165,503,776	4.18
Private Credit Composite	0.00	1.32	4.14	11.34			13.86	6/1/2024	10,662,224	0.2
Total Real Estate Composite	0.21	1.32	2.01	1.30	0.61	6.54	6.35	1/1/1990	414,320,516	10.4
Global Listed Infrastructure Composite	1.12	1.06	7.16	12.91	19.95	24.07	7.39	1/1/2012	212,012,649	5.3
Private Equity Composite	0.61	0.34	2.16	3.66	1.14	12.24	12.23	6/1/2009	356,969,613	9.0:
Marketable Alternatives Composite	1.07	3.06	6.62	10.41	7.84		7.84	10/1/2022	112,882,324	2.8
Managed Short Term Composite	0.33	1.06	3.16	4.36	4.78	2.98	2.90	1/1/1990	70,070,213	1.7
Dallas Total Fund Policy Index	1.46 1.94	3.27 4.36	9.98 10.91	9.06 10.22	11.54 14.14	8.95 9.37	8.79 9.40	1/1/1985	3,963,986,940	100.0

Domestic Equity
Periods Ended September 30, 2025

		nth         Quarter         YTD         Year         Years         Years         Inception         Date           19         9.91         5.65         4.67         14.87         15.25         10.46         8/1/200           11         12.39         10.39         10.76         15.21         11.56         9.09           33         8.51         5.39         5.06         14.23         13.20         7.18         12/1/200           01         12.60         9.04         7.88         13.56         14.59         7.32         6/1/200           63         9.39         5.56         4.81         13.30         12.06         9.22         6/1/200           42         7.53         13.48         16.68         25.89         17.20         11.50         4/1/200							Allocati	on
	1 Month		YTD	_	_			Inception Date	Market Value \$	%
Systematic Financial	1.19	9.91	5.65	4.67	14.87	15.25	10.46	8/1/2003	60,578,011	12.89
Russell 2000 Index	3.11	12.39	10.39	10.76	15.21	11.56	9.09			
Channing Conital	0.22	0 E1	E 20	E 06	14.22	12 20	710	12/1/2012	34 060 067	7.44
Channing Capital	-0.33							12/1/2013	34,960,067	7.44
Russell 2000 Value Index	2.01	12.60	9.04	7.88	13.56	14.59	7.32			
Domestic Equity Small Cap Composite	0.63	9.39	5.56	4.81	13.30	12.06	9.22	6/1/2003	95,538,078	20.32
T. Rowe Price	3.42	7.53	13.48	16.68	25.89	17.20	11.50	4/1/2006	183,823,129	39.11
S&P 500 Index	3.65	8.12	14.83	17.60	24.94	16.47	10.91			
Northern Trust S&P 500 (Lending)	3.65	8.12	14.82	17.59	24.91	16.47	11.18	1/1/1995	190,693,919	40.57
S&P 500 Index	3.65	8.12		17.60	24.94	16.47	11.14	, ,		
Domostic Equity Composite	2.02	0 1 5	12.20	14 45	21.04	16 54	10.76	1/1/1000	470 OFF 125	100.00
Domestic Equity Composite Custom Benchmark <sup>1</sup>	2.93	8.15	12.30		21.94	<b>16.54</b> 15.97	10.76	1/1/1990	470,055,125	100.00
	3.46	8.24	14.45		24.15		11.00			
Domestic Equity Blended Benchmark <sup>2</sup>	3.49	9.00	13.91	16.15	21.64	14.93				

<sup>&</sup>lt;sup>1</sup> Domestic Equity Composite Custom Benchmark: FT Wilshire 5000 (2Q99-Present); S&P 500 (1Q90-1Q99)

<sup>&</sup>lt;sup>2</sup> Blended Benchmark is a target-weighted blend of individual manager benchmarks. For comparison purposes only and does not roll into Total Fund Policy.

International Equity
Periods Ended September 30, 2025

			Perf	ormar	nce (%)	Net of	Fees		Allocati	ion
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Acadian International	3.42	8.53	31.46	25.38	21.80	13.54	8.79	4/1/1989	121,071,241	24.33
Custom Benchmark <sup>1</sup>	2.15	6.68	25.54	15.93	19.36	9.97	6.30			
Ativo International	1.75	5.56	29.27	19.81	21.29	9.81	6.15	1/1/2018	34,134,337	6.86
MSCI EAFE (Net)	1.91	4.77	25.14	14.99	21.70	11.15	6.74			
AQR Capital Management	4.10	7.29	31.49	23.82	24.96	12.04	5.16	4/1/2006	159,623,339	32.08
Custom Benchmark <sup>2</sup>	3.60	6.89	26.02	16.45	20.67	10.26	4.55			
Baillie Gifford	0.00	-0.32	17.57		19.24	3.99	7.10	4/1/2019	82,097,194	16.50
MSCI AC World ex USA (Net)	3.60	6.89	26.02	16.45	20.67	10.26	8.48			
Baillie Gifford - Sanctioned Assets									33,179	0.01
Earnest Partners	3.33	6.49	26.83	20.80	21.94	14.93	10.77	4/1/2019	100,592,951	20.22
MSCI AC World ex USA (Net)	3.60	6.89	26.02	16.45	20.67	10.26	8.48			
International Equity Composite	2.90	5.99	27.88	20.54	22.27	11.42	6.21	1/1/1990	497,552,242	100.00
Custom Benchmark <sup>3</sup>	3.39	6.86	25.97	16.39	20.50	10.22	5.18			

<sup>&</sup>lt;sup>1</sup> Acadian Custom Benchmark: MSCI ACWI x-US Small Cap (3Q09-Present); MSCI EAFE Small Cap (4Q99-2Q09); S&P/Citigroup Eur/Pac EMI Index (2Q96-3Q99); MSCI EAFE (2Q89-1Q96)

<sup>&</sup>lt;sup>2</sup> AQR Custom Benchmark: MSCI ACWI x-US (2Q10-Present); MSCI EAFE (1Q06-1Q10)

<sup>&</sup>lt;sup>3</sup> International Equity Composite Custom Benchmark: MSCI ACWI x-US IMI (2Q10-Present); MSCI ACWI x-US (1Q99-1Q10); Wilshire Non-US/Non-SA (2Q96-4Q98; MSCI EAFE (4Q89-1Q96)

## **Private Equity Summary**

#### Periods Ended as of September 30, 2025

	Month-End Market Value	Commitment Value	Drawn Down Capital	Cash Distributions	Inception Date	IRR Since Inception	TVPI Multiple <sup>1</sup>
Hamilton Lane Secondary Fund II	4,589	25,000,000	22,058,532	31,298,964	Jul-09	13.4%	1.4
Hamilton Lane Secondary Fund III	164,832	30,000,000	23,372,292	29,807,176	Nov-12	8.7%	1.3
Hamilton Lane Secondary Fund IV	8,757,525	30,000,000	25,907,343	30,952,910	Mar-17	14.0%	1.5
Hamilton Lane Secondary Fund V	46,049,138	65,000,000	43,128,993	22,309,049	Mar-20	13.7%	1.6
Hamilton Lane Secondary Fund VI-A	15,110,043	30,000,000	13,478,933	2,978,825	Feb-23	30.4%	1.3
Hamilton Lane Fund VII Composite	7,723,801	50,000,000	45,600,834	58,945,119	Jan-10	5.1%	1.5
Hamilton Lane Fund VIII (Global)	11,160,509	30,000,000	22,270,594	22,006,680	Nov-12	6.1%	1.5
GCM Grosvenor - Partnership, L.P.	18,167,470	75,000,000	95,722,822	141,900,528	Jun-11	13.8%	1.7
GCM Grosvenor - Partnership II, L.P. (2014)	27,347,260	60,000,000	73,566,185	85,410,872	Jul-14	13.3%	1.5
GCM Grosvenor - Partnership II, L.P. (2015)	62,047,705	55,000,000	49,450,168	16,236,253	Dec-15	12.7%	1.6
GCM Grosvenor - Partnership II, L.P. (2017)	30,022,823	30,000,000	32,380,286	17,644,180	Jan-18	11.2%	1.5
GCM Grosvenor - Advance Fund, L.P.	8,682,411	10,000,000	7,575,041	345,493	Jun-21	7.9%	1.2
GCM Grosvenor - Partnership II, L.P. (2022)	7,899,365	20,000,000	7,070,263	5,461	May-22	7.0%	1.1
Fairview Capital - Lone Star Fund I	48,911,992	40,000,000	33,903,847	21,600,300	Aug-15	11.9%	2.1
Fairview Capital - Lone Star Fund II	34,154,802	30,000,000	23,900,777	8,195,837	Dec-18	12.7%	1.8
Fairview Capital - Lone Star Fund III - A	21,473,247	25,000,000	20,511,666	1,135,551	Apr-21	2.9%	1.1
Fairview Capital - Lone Star Fund III - B	3,701,699	20,000,000	4,173,406	-	Dec-22	-20.7%	0.9
Fairview Capital - Private Markets Fund VI	5,590,402	10,000,000	5,586,841	210,556	Apr-22	2.5%	1.0
Total Private Equity Composite	356,969,613	635,000,000	549,658,821	490,983,754	Jul-09	12.0%	1.5

Public Market Equivalent (PME) <sup>2</sup> 757,424,352 17.7%

<sup>&</sup>lt;sup>1</sup> Total Value to Paid-in Capital ("TVPI") multiple calculation = (market value + distributions) / capital called

<sup>&</sup>lt;sup>2</sup> The Public Market Equivalent (PME) approach creates a hypothetical investment vehicle that mimics the private equity composite cash flows. The performance difference between the PME vehicle and the private equity portfolio is determined by their net asset value (NAV) at the end of the benchmarking period. The performance of the "public market" is simulated using the monthly Wilshire 5000 index returns, plus a 300 BPs annual hurdle rate.

# Private Real Estate Summary

Periods Ended as of September 30, 2025

	Month-End Market Value	Commitment Value	Drawn Down Capital	Cash Distributions	Inception Date	IRR Since Inception	TVPI Multiple <sup>1</sup>
Invesco II	73,605,293	65,188,333	65,188,333	19,614,151	Jan-14	4.4%	1.4
Total Direct Private Real Estate	73,605,293	65,188,333	65,188,333	19,614,151	Jan-14	4.4%	1.4
	Month-End Market Value	Commitment Value	Drawn Down Capital	Cash Distributions	Inception Date	IRR Since Inception	TVPI Multiple
Heitman America Real Estate Trust	71,482,290	75,000,000	88,210,161	113,968,716	Dec-10	6.3%	2.1
Invesco Core Real Estate USA	47,419,315	75,000,000	76,921,500	114,913,039	Oct-10	9.7%	2.1
Total Core Private Real Estate	118,901,605	150,000,000	165,131,661	228,881,755	Oct-10	8.2%	2.1
	Month-End Market Value	Commitment Value	Drawn Down Capital	Cash Distributions	Inception Date	IRR Since Inception	TVPI Multiple
AEW Partners Real Estate Fund IX	32,149,143	45,000,000	38,222,222	13,735,303	Mar-21	5.8%	1.2
AEW PIX MM Co-Invest	4,430,376	10,000,000	5,460,377	1,460,161	Nov-21	0.3%	1.1
AEW PIX Oakland Park Co-Invest	4,524,233	5,000,000	5,000,000	764,960	Feb-22	1.1%	1.1
Virtus Real Estate Capital III	51,687,633	43,281,585	44,340,405	5,459,897	Jan-21	8.0%	1.3
Brasa Real Estate Fund II	19,940,486	20,000,000	19,681,894	1,133,526	Jul-22	3.2%	1.1
Long Wharf Real Estate Partners VII	10,608,951	20,000,000	13,564,121	3,426,328	Mar-23	-0.3%	1.0
Total Value-Add Private Real Estate	123,340,822	143,281,585	126,269,019	25,893,078	Jan-21	5.7%	1.2

<sup>&</sup>lt;sup>1</sup> Total Value to Paid-in Capital ("TVPI") multiple calculation = (market value + distributions) / capital called

# Private Credit Summary

Periods Ended as of September 30, 2025

	Month-End Market Value	Commitment Value	Drawn Down Capital	Cash Distributions	Inception Date	IRR Since Inception	TVPI Multiple <sup>1</sup>
Silver Point DOF II	2,522,076	20,000,000	2,702,822	693,438	May-24	20.4%	1.2
MGG Structured Solutions	6,047,728	20,000,000	6,017,584	276,615	Jul-24	6.0%	1.1
Vista Credit Partners Fund IV	2,092,420	20,000,000	2,000,727		Jul-25	4.6%	1.0
<b>Total Private Credit Composite</b>	8,569,804	40,000,000	8,720,406	970,053	May-24	11.4%	1.1

<sup>&</sup>lt;sup>1</sup> Total Value to Paid-in Capital ("TVPI") multiple calculation = (market value + distributions) / capital called

Global Equity
Periods Ended September 30, 2025

			Perf		Allocati	ion				
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Ariel Global	3.27	4.84	19.80	15.11	17.07	11.46	8.41	1/1/2018	49,465,850	21.37
MSCI AC World Index (Net)	3.62	7.62	18.44	17.27	23.12	13.54	10.67			
MSCI AC World Index Value (Net)	2.25	6.13	17.68	12.14	18.51	13.45	7.31			
NT ACWI IMI Fund MSCI AC World IMI Index (Net)	<b>3.48</b> 3.44	<b>7.77</b> 7.67		<b>17.26</b> 16.79			<b>17.26</b> 16.79	10/1/2024	63,202,070	27.31
Wellington MSCI AC World Index (Net)	<b>2.91</b> 3.62	<b>5.65</b> 7.62		<b>15.96</b> 17.27	<b>23.79</b> 23.12	<b>11.83</b> 13.54	<b>11.82</b> 10.94	9/1/2012	118,759,898	51.32
Global Equity Composite MSCI AC World Index (Net)	<b>3.14</b> 3.62	<b>6.05</b> 7.62		<b>16.20</b> 17.27	<b>21.09</b> 23.12	<b>12.04</b> 13.54	<b>10.07</b> 10.94	9/1/2012	231,427,818	100.00

Global Low Volatility
Periods Ended September 30, 2025

			Perf	ormar	nce (%)	Net of	Fees		Allocati	on
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Acadian Global Low Vol.	0.91	1.90	14.26	12.48	17.89	11.41	8.66	7/1/2015	200,158,131	51.06
MSCI AC World Index (Net)	3.62	7.62	18.44	17.27	23.12	13.54	10.53			
MSCI AC World Minimum Volatility Index (Net)	0.49	1.07	10.50	6.64	12.88	7.59	7.56			
Acadian Global Low Vol - Sanctioned Assets									46,406	0.01
BlackRock Global Low Vol.	0.53	1.21	10.82	6.99	13.28	7.94	7.87	7/1/2015	191,817,618	48.93
MSCI AC World Minimum Volatility Index (Net)	0.49	1.07	10.50	6.64	12.88	7.59	7.56			
Global Low Volatility Composite	0.72	1.56	12.53	9.72	15.58	9.67	8.27	7/1/2015	392,022,155	100.00
MSCI AC World Minimum Volatility Index (Net)	0.49	1.07	10.50	6.64	12.88	7.59	7.56			

Real Estate

Periods Ended September 30, 2025

			Perf	ormar	nce (%)	Net of	Fees		Allocation	
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Adelante Capital Management	0.50	1.50	3.91	-0.92	10.82	9.62	9.01	10/1/2001	48,856,224	49.61
Adelante Blended Policy <sup>1</sup>	1.12	4.77	4.51	-0.70	11.34	9.46	9.11			
CenterSquare	0.86	4.54	4.00	-1.58	11.39	9.99	7.63	6/1/2018	49,616,571	50.39
CenterSquare Blended Policy <sup>1</sup>	1.12	4.77	4.51	-0.70	11.34	9.46	6.69			
REIT Composite	0.68	3.01	3.96	-1.25	11.10	9.81	9.13	10/1/2001	98,472,795	100.00
REIT Composite Blended Policy <sup>1</sup>	1.12	4.77	4.51	-0.70	11.34	9.46	9.11			

<sup>&</sup>lt;sup>1</sup> Blended Policy: Wilshire U.S. Real Estate Securities Index (Inception-4Q24); FTSE NAREIT Equity REIT Index (1Q25-Present)

Global Listed Infrastructure
Periods Ended September 30, 2025

			Perf	ormar	nce (%)	Net of	Fees		Allocati	ion
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
CIBC	-0.60	-0.80	3.55	16.48	25.34	32.34	9.84	1/1/2012	76,298,480	35.99
CIBC Policy <sup>1</sup>	1.60	1.31	6.46	20.80	30.47	37.43	7.12			
Harvest Fund Advisors MLP	1.33	0.33	6.44	18.24	23.97	32.65	9.91	1/1/2012	83,482,020	39.38
Harvest Policy <sup>2</sup>	1.60	1.31	6.46	20.80	30.47	37.43	7.12			
C&S Global Listed Infrastructure	3.38	5.18	14.19	6.29	12.68	8.88	8.88	10/1/2020	52,232,149	24.64
FTSE Global Core Infrastructure 50/50 (Net)	1.95	3.80	13.45	6.94	11.45	8.53	8.53			
Global Listed Infrastructure Composite	1.12	1.06	7.16	12.91	19.95	24.07	7.39	1/1/2012	212,012,649	100.00
Global Listed Infrastructure Benchmark <sup>3</sup>	1.69	1.93	8.23		25.72	30.30	5.06			

<sup>&</sup>lt;sup>1</sup> CIBC Policy: Alerian Midstream Energy Index (5/24-Present); Alerian MLP Index (1Q12-4/24)

<sup>&</sup>lt;sup>2</sup> Harvest Policy: Alerian Midstream Energy Index (5/24-Present); Alerian MLP Index (1Q12-4/24)

<sup>&</sup>lt;sup>3</sup> Global Listed Infrastructure Benchmark: 75% Alerian Midstream Energy Index / 25% FTSE Global Core Infrastructure 50/50 (5/24-Present) 75% Alerian MLP / 25% FTSE Global Core Infrastructure 50/50 (4Q20-4/24); Alerian MLP (1Q12-3Q20)

Fixed Income *Periods Ended September 30, 2025* 

			Perf	ormar	nce (%)	Net of	Fees		Allocati	on
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Garcia Hamilton	1.31	2.22	7.01	2.30	4.59	-0.35	2.26	11/1/2013	202,266,483	32.59
Blmbg. U.S. Aggregate Index	1.09	2.03	6.13	2.88	4.93	-0.45	2.05			
NT Aggregate Bond Index	1.11	2.03	6.15	2.92			2.92	10/1/2024	206,548,146	33.28
Blmbg. U.S. Aggregate Index	1.09	2.03	6.13	2.88			2.88			
Wellington Core Bond	0.87	1.94	5.86	2.68	5.59		3.49	7/1/2022	211,845,662	34.13
Blmbg. U.S. Aggregate Index	1.09	2.03	6.13	2.88	4.93		2.99			
Fixed Income Composite	1.09	2.06	6.31	2.62	5.02	-0.09	4.29	10/1/1995	620,660,335	100.00
Blmbg. U.S. Aggregate Index	1.09	2.03	6.13	2.88	4.93	-0.45	4.32			

Opportunistic Credit
Periods Ended September 30, 2025

			Perf	ormar	nce (%)	Net of	Fees		Allocatio	n
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Neuberger Berman	1.02	2.97	7.33	8.27	11.65	5.11	5.62	2/1/2016	165,503,776	
Custom Benchmark <sup>1</sup>	0.99	2.97	7.43	7.60	11.09	4.97	5.68			

<sup>&</sup>lt;sup>1</sup> Custom Benchmark: 33% Morningstar LSTA U.S. Leveraged Loan Index / 33% ICE BofA U.S. High Yield Constrained Index / 33% JPM EMBI Global Diversified

High Yield Periods Ended September 30, 2025

			Perf	ormar	nce (%)	Net of	Fees		Allocati	on
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Oaktree Capital Management	0.97	2.93	7.04	6.96	10.73	5.64	6.37	2/1/1997	207,641,895	50.66
FTSE High Yield Cash Pay	0.77	2.40	7.13	7.36	11.11	5.65	6.50			
BlackRock	0.81	2.57	7.33	7.52	11.00	5.62	6.09	10/1/2006	202,206,056	49.34
FTSE High Yield Cash Pay	0.77	2.40	7.13	7.36	11.11	5.65	6.38			
High Yield Composite	0.89	2.75	7.19	7.24	10.86	5.63	6.24	1/1/1997	409,847,951	100.00
FTSE High Yield Cash Pay	0.77	2.40	7.13	7.36	11.11	5.65	6.51			

Marketable Alternatives
Periods Ended September 30, 2025

			Perf	ormar	nce (%)	Net of	Fees		Allocation	
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Davidson Kempner	0.81	2.81	7.36	11.09	8.24		8.24	10/1/2022	57,073,277	50.56
HFRI Event-Driven Total Index	1.75	5.64	7.38	11.58	10.43		10.43			
Hudson Bay Capital HFRI Relative Value Total Index	<b>1.33</b> 0.80	<b>3.32</b> 2.48	<b>5.88</b> 5.21	<b>9.74</b> 7.99	<b>7.44</b> 7.37		<b>7.44</b> 7.37	10/1/2022	55,809,047	49.44
Marketable Alternatives Composite Marketable Alternatives Policy <sup>1</sup>	<b>1.07</b> 1.28	<b>3.06</b> 4.05	<b>6.62</b> 6.30	<b>10.41</b> 9.79	<b>7.84</b> 8.91		<b>7.84</b> 8.91	10/1/2022	112,882,324	100.00

<sup>&</sup>lt;sup>1</sup> Marketable Alternatives Policy: 50% HFRI Event-Driven Total Index / 50% HFRI Relative Value Total Index

Cash
Periods Ended September 30, 2025

		Performance (%) Net of Fees Allocation								
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Cash Account	0.33	1.06	3.16	4.36	4.78	2.98	3.20	1/1/1988	70,070,213	100.00
Managed Short Term Composite	0.33	1.06	3.16	4.36	4.78	2.98	2.90	1/1/1990	70,070,213	100.00

# At A Glance

#### For period ended September 30, 2025

	20	)24		20	)25	
Retirements	This Month		YTD	This Month		YTD
Age	11		145	20		144
Service	2		13	1		8
Rule of 78	7		73	9		<b>72</b>
QDRO	<u>0</u>		<u>1</u>	<u>0</u>		<u>7</u>
Total	20		232	30		231
Disability Retirements						
Service	0		0	0		0
Non-service	<u>0</u>		<u>0</u>	<u>0</u>		<u>0</u>
Total	0		0	0		0
Benefits Paid	\$ 28,863,783.06	\$	261,512,443.37	\$ 30,081,833.05	\$	268,247,224.10
Refunds Number of refunds	\$ 675,312.17 88	\$	8,926,692.72 760	\$ 1,296,504.92 75	\$	11,456,999.63 633
*Contributions	\$ 12,004,412.93	\$	112,566,418.31	\$ 18,486,610.31	\$	123,261,847.86

	Retirees &	bers on reco	ru at IIIOIII	in enu	Her B
	beneficiaries	Disabilities	Actives	Tier A Actives	Actives
Jan	8,022	118	8,113	3,077	5,036
Feb	8,033	117	8,160	3,046	5,114
Mar	8,049	117	8,190	3,036	5,154
April	8,062	117	8,185	2,988	5,197
May	8,078	117	8,143	2,963	5,180
June	8,086	117	8,206	2,936	5,270
July	8,092	117	8,220	2,904	5,316
Aug	8,094	117	8,234	2,882	5,352
Sep	8,118	117	8,189	2,850	5,339
Oct					
Nov					

Dec

