

# Meeting of the Investment Advisory Council

**June 28, 2022**



# Meeting of the Investment Advisory Council

## **Item 1. Welcome/Call to Order/Approval of Minutes**

*Tere Canida, Chair*

*(See Attachments 1A – 1B)*

**Action Required**



# Meeting of the Investment Advisory Council

## Item 2. Opening Remarks/Reports

*Lamar Taylor, Interim Executive Director & CIO*

*(See Attachments 2A – 2E)*



# Meeting of the Investment Advisory Council

## Item 3. Private Equity Review

*John Bradley, Senior Investment Officer*

*Wes Bradle, Senior Portfolio Manager*

*(See Attachments 3A – 3B)*



# Private Equity Asset Class Review

John Bradley, SIO Private Equity

Investment Advisory Council

June 28, 2022



# Agenda

## **PE Policy, Benchmarking and Structure**

- Goals/Objectives
- Benchmarks
- Staffing

## **Asset Class Investment Process**

- Annual Investment Plan
- Sourcing
- Due Diligence
- Monitoring

## **Asset Class Portfolio**

- Performance/Cash Flows
- Allocations/Targets
- Portfolio Composition/Exposures

## **Asset Class Sub-Strategies**

- Buyouts/Growth Equity
- Venture Capital
- Distressed/Turnaround
- Secondary

# Private Equity Policy

- **Policy target allocation:** 6% of total fund
- **Allocation range:** 2% - 10% of total fund
- **5/31/21 allocation:** ~9.8% of total fund

## Per Policy:

Private Equity shall utilize a prudent process to maximize long-term access to attractive risk-adjusted investment opportunities through use of business partners with appropriate:

- Financial, operational and investment experience and resources
- Alignment of interests
- Transparency and repeatability of investment process, and
- Controls on leverage



# Asset Class Goals and Objectives

- Create a portfolio that outperforms both our primary and secondary benchmarks while remaining within the bounds of our asset class risk budget.
- Construct the program to avoid concentrated exposure to a particular vintage year, manager, strategy or geography.
- Establish prudent portfolio diversification while minimizing proliferation of manager relationships.



# Benchmarks

## – **Primary: MSCI ACWI IMI + 300bps premium**

- Current benchmark of the Global Equity asset class plus an illiquidity premium
- Opportunity cost benchmark

## – **Secondary: Cambridge Associates Benchmark**

- Cambridge Associates Global Private Equity and Venture Capital Index
- Peer benchmark
- Measures effectiveness of staff in selecting managers



# Staffing

## **Staff of eight investment professionals**

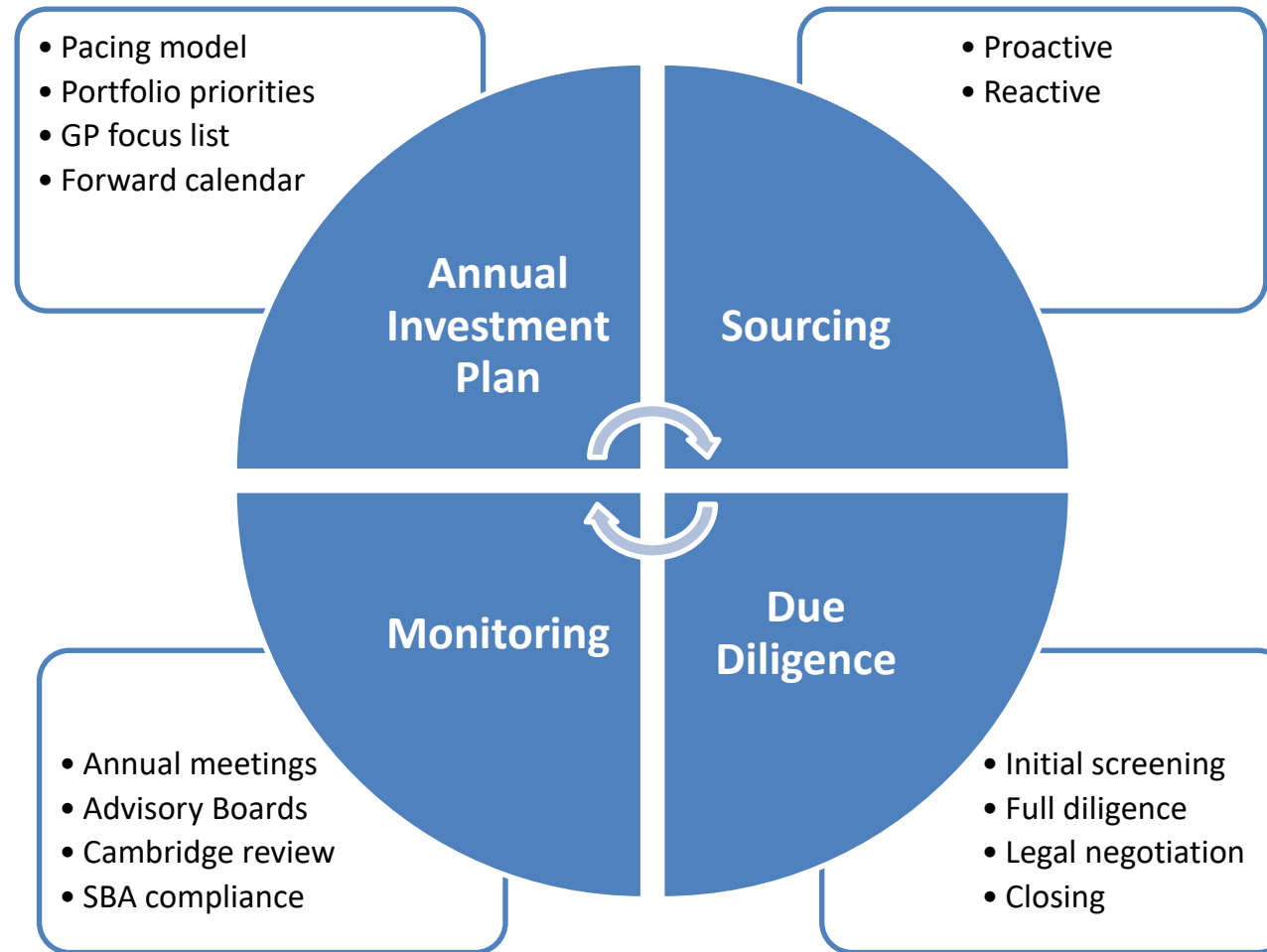
- Senior Investment Officer
- Three Senior Portfolio Managers
- One Portfolio Manager
- Three Analysts
- Administrative Assistant

## **Cambridge Associates**

- Dedicated global team of five Investment Directors and seven Associates/Analysts
- Market research
- Fund due diligence
- Operational due diligence
- Quarterly performance review
- Semi-Annual strategy review



# Private Equity Investment Process



# Private Equity Process- Annual Investment Plan

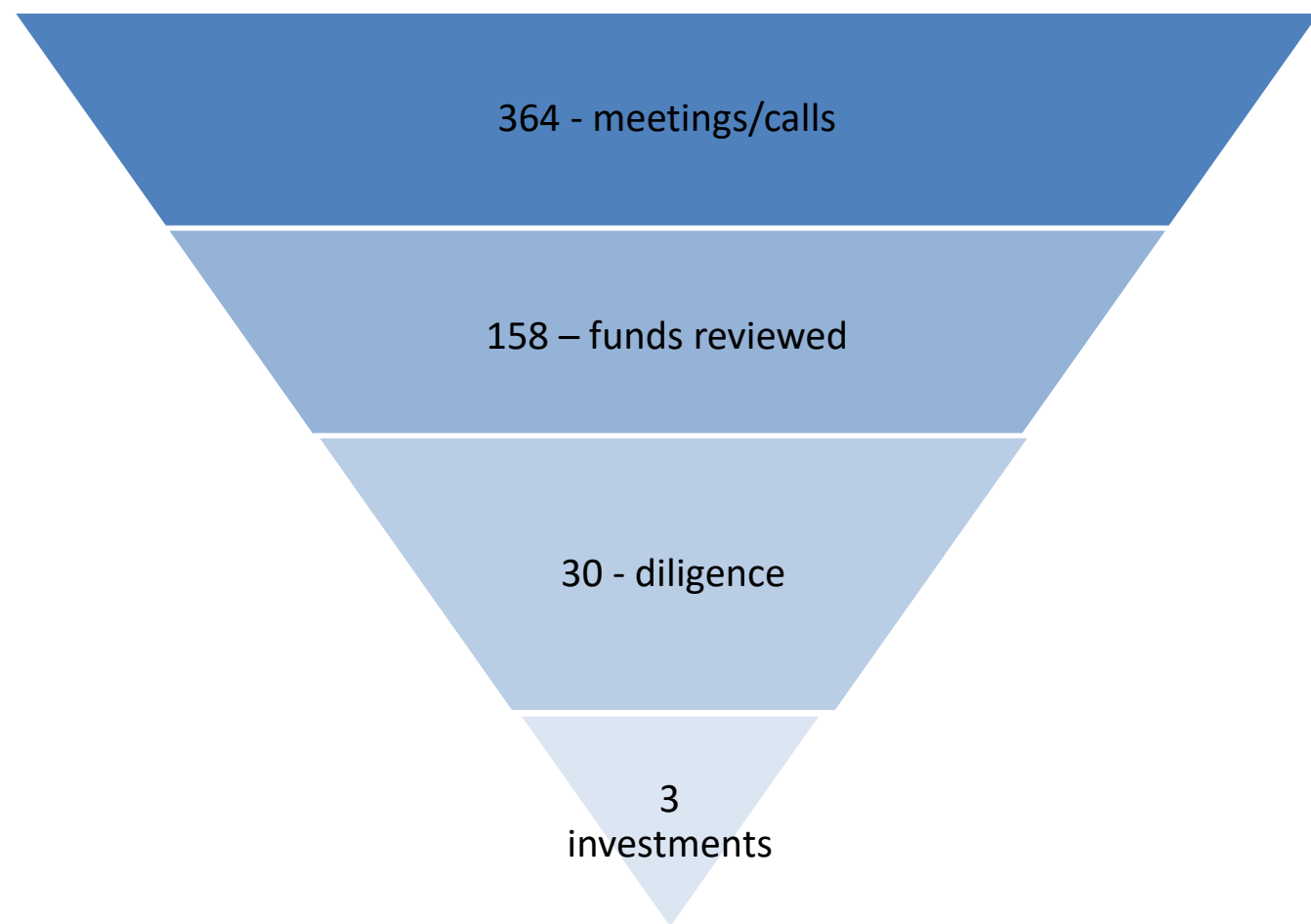
Serves as the roadmap for the future

- Inputs Include:
  - Portfolio Const. Model
  - Priority Rankings
  - Focus List
  - Forward Calendar

Geography	Large Buyout	Mid-Mkt Buyout	Small Buyout	Growth Equity	Venture Capital	Distressed / Turnaround
North America	Low Priority	Medium Priority	Medium Priority	Medium Priority	Medium Priority	High Priority
Europe	Low Priority	Medium Priority	Medium Priority	Medium Priority	Medium Priority	High Priority
Asia	Low Priority	Medium Priority	Medium Priority	Medium Priority	Medium Priority	Medium Priority
ROW	Low Priority	Low Priority	Low Priority	Low Priority	Low Priority	Low Priority

# Private Equity Process- Sourcing

- Majority of investments sourced proactively
- Invested in three funds in 2021 managed by general partners that were new to the PE program
- Sourcing activity increased in 2021

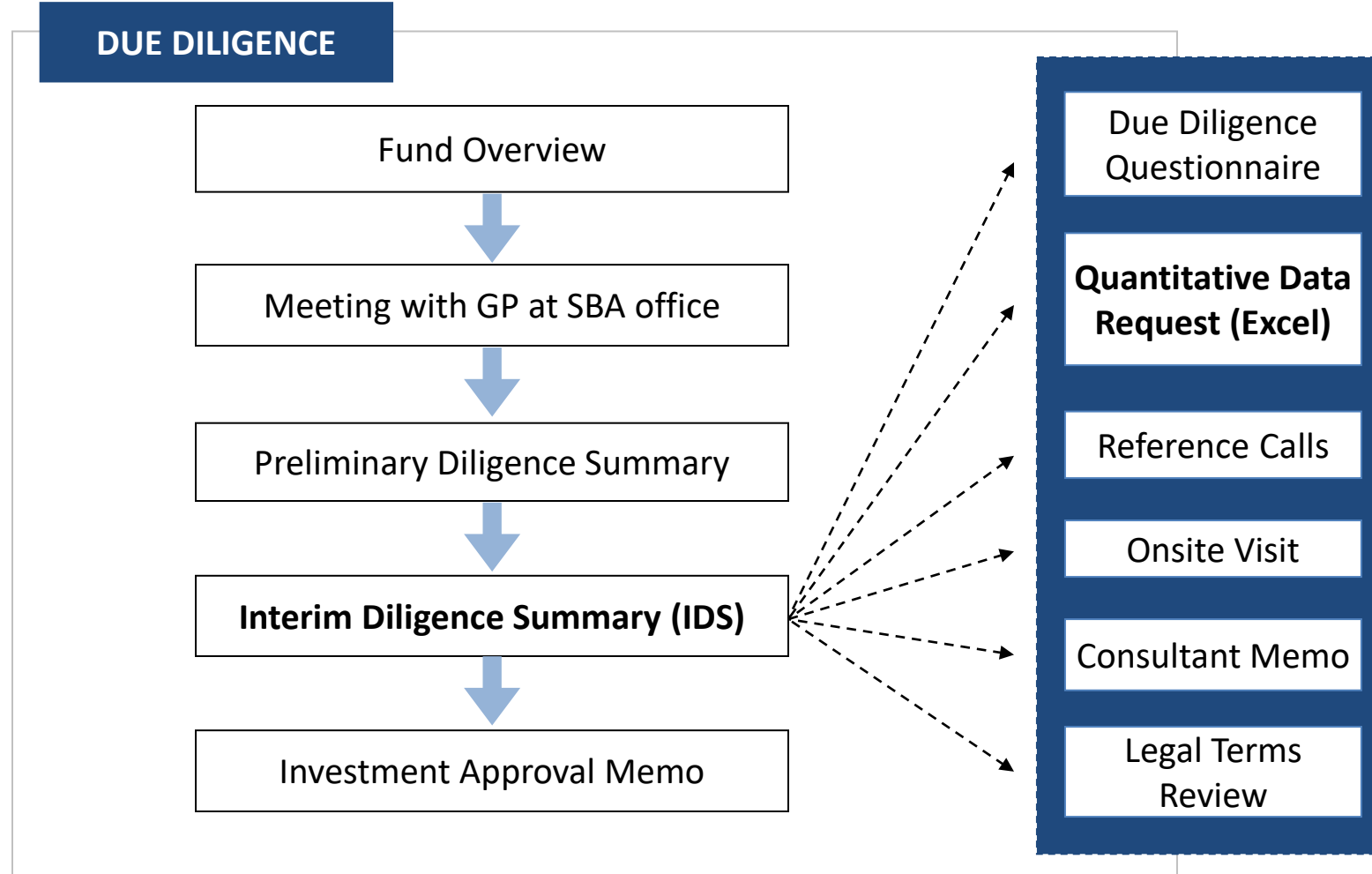


# Private Equity Process- Due Diligence

- **Goal:** leverage SBA resources and staff expertise to create an effective and consistent investment decision-making process
- **Keys to success:** people, process, and plumbing
- **Stages of Due Diligence include:**
  - Initial Screening
  - Full Diligence
  - Legal Negotiations
  - Closing



# Private Equity Process- Due Diligence (Continued)



# Private Equity Process- Monitoring

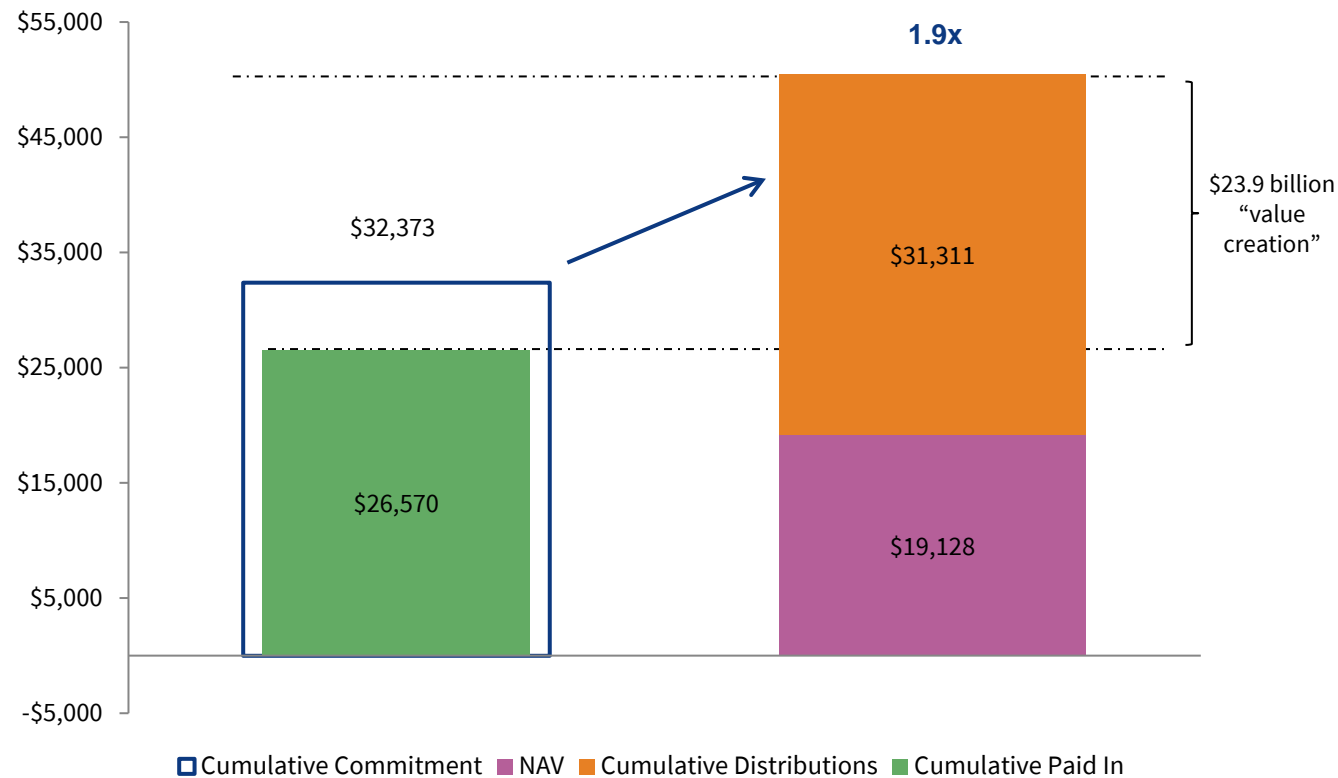
- Review of all capital calls and distributions
- Bi-weekly calls with Cambridge Associates
- Portfolio management/CRM system
- Attendance at annual meetings
- Participation on advisory boards
- Quarterly update calls
- In-person updates with GPs
- Cambridge Associates strategy meetings
- SBA Risk Management and Compliance



# Private Equity Performance

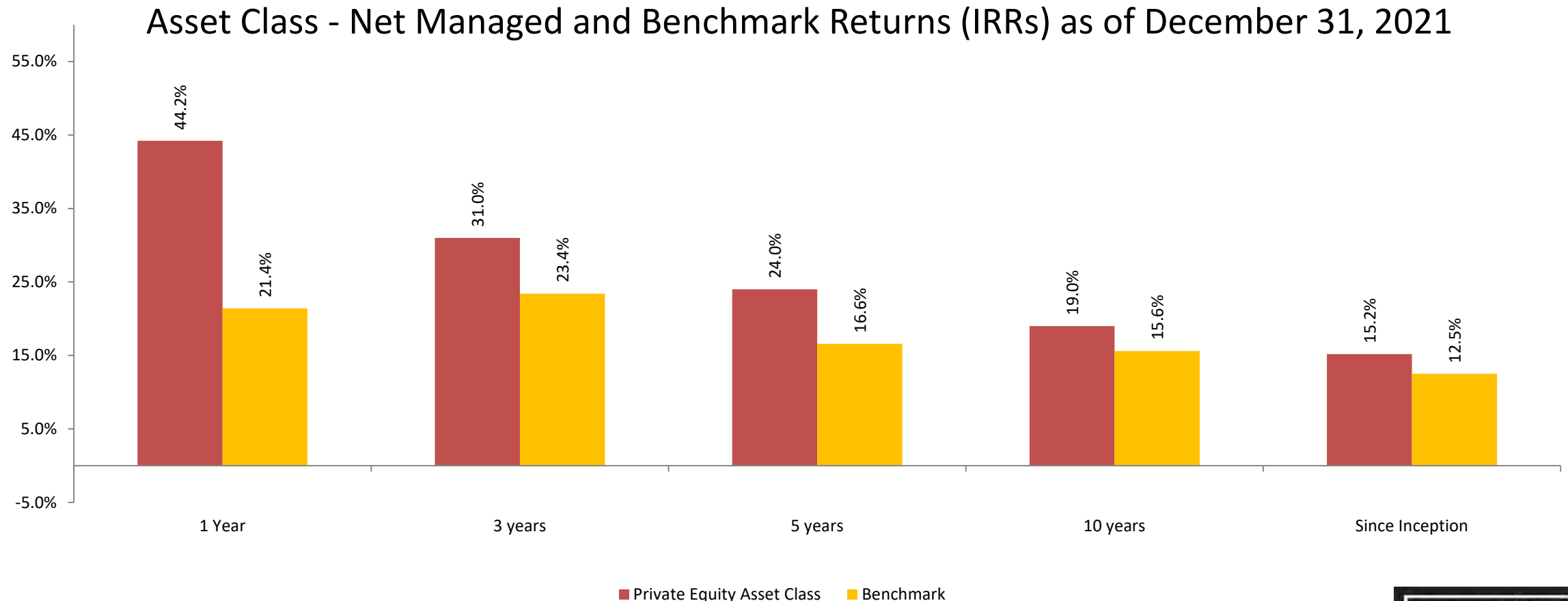
## As of December 31, 2021

Total PE Asset Class Portfolio (\$M)



- Since inception, PE class has committed over \$32b to 309 funds
- \$26.6b called to date
- \$31.3b distributed; 1.2x DPI
- \$19b in remaining value; 1.9x TVPI
- Value creation to date of \$23.9b

# Private Equity Performance



Note: Asset class IRR performance data is provided by Cambridge Associates. The PE benchmark is currently the Custom Iran- and Sudan-free ACWI IMI + 300bps. From July 2010 through June 2014 the benchmark was the Russell 3000 + 300 bps. Prior to July 2010, the benchmark was the Russell 3000 + 450 bps. Prior to November 1999, Private Equity was part of the Domestic Equities asset class and its benchmark was the Domestic Equities target index + 750 bps.

Please see Appendix for performance of the Legacy or pre-asset class portfolio.

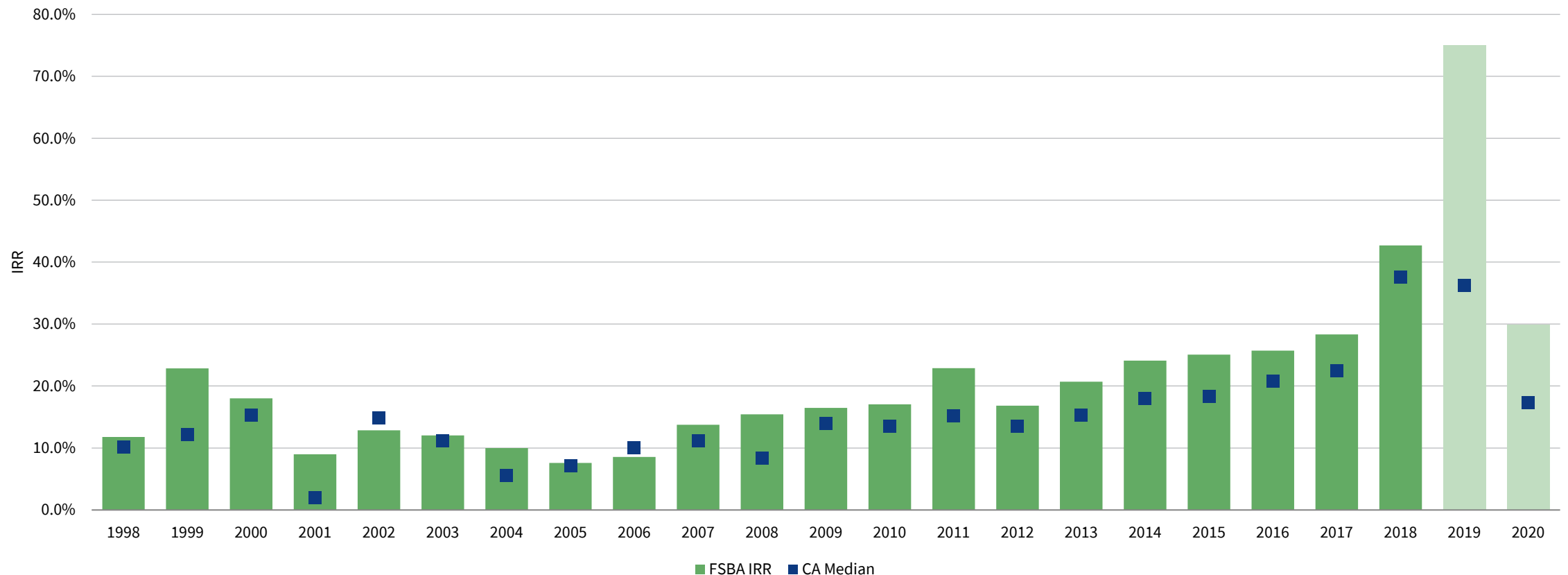


# Vintage Year Performance

As of December 31, 2021

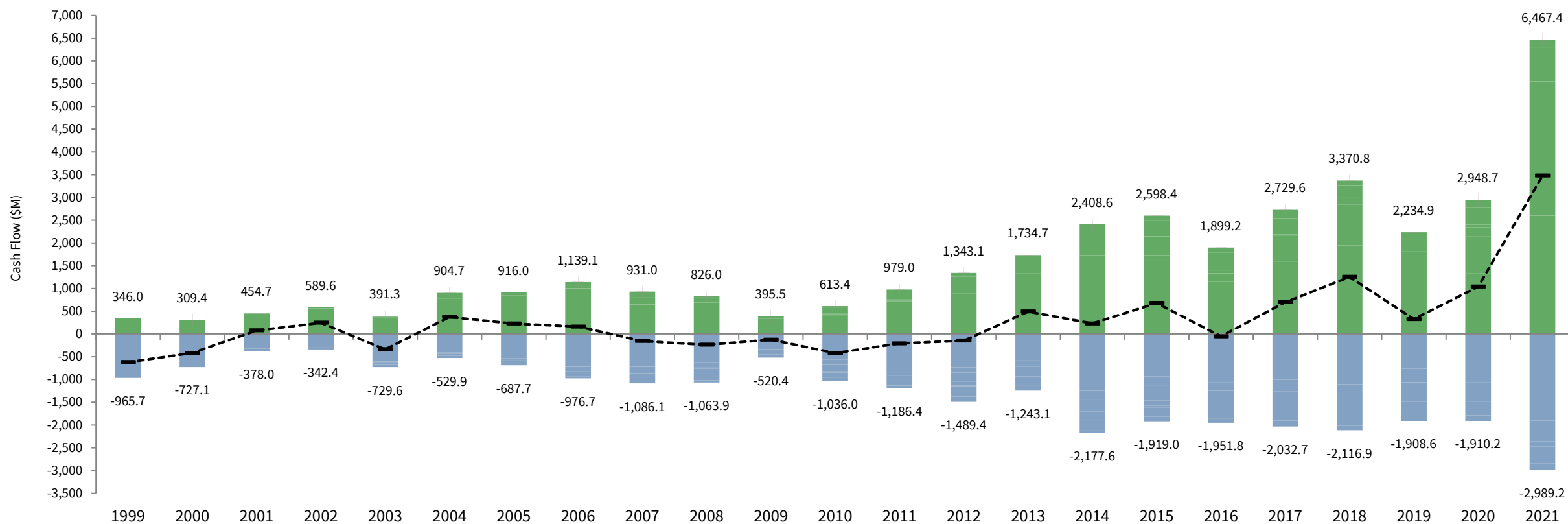
**Since inception of the asset class, the SBA has outperformed vintage year benchmarks in 21 out of 23 years (91%)**

PERFORMANCE BY VY



\*Light shading (2019,2020) indicates vintages too young to have meaningful performance

# Cash Flow History



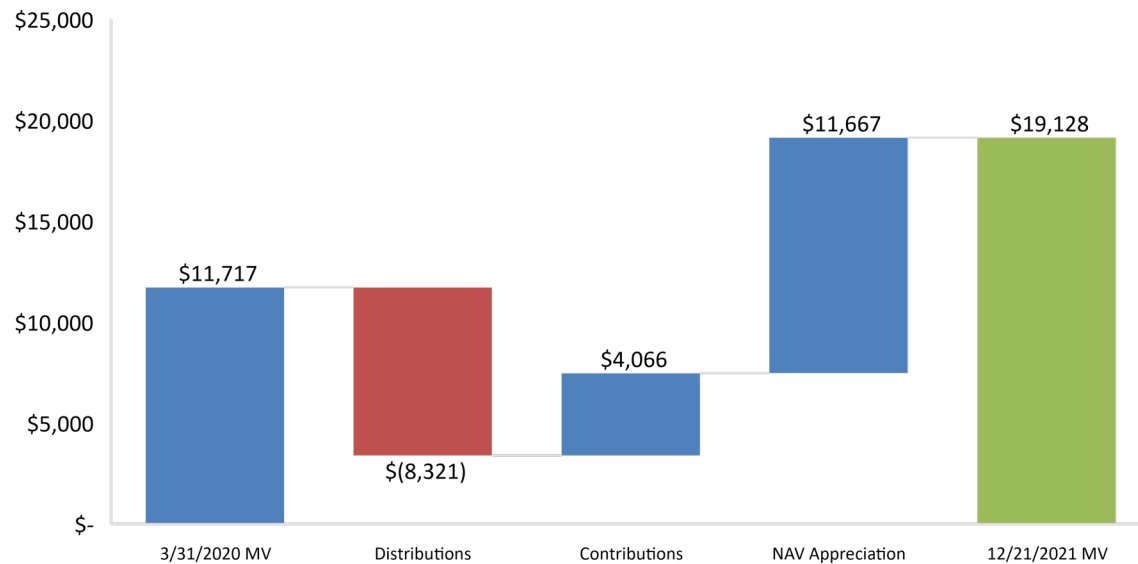
## Cash Flows (\$M)

Year:	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Net:	-417.7	76.7	247.2	-338.3	374.8	228.4	162.4	-155.1	-237.9	-124.9	-422.6	-207.4	-146.3	491.7	230.9	679.5	-52.6	696.9	1,254.0	326.3	1,038.5	3,478.2
Cum:	-2,184.7	-2,108.0	-1,860.8	-2,199.1	-1,824.3	-1,596.0	-1,433.5	-1,588.6	-1,826.5	-1,951.4	-2,374.0	-2,581.4	-2,727.7	-2,236.1	-2,005.1	-1,325.7	-1,378.3	-681.4	572.6	898.9	1,937.4	5,415.6

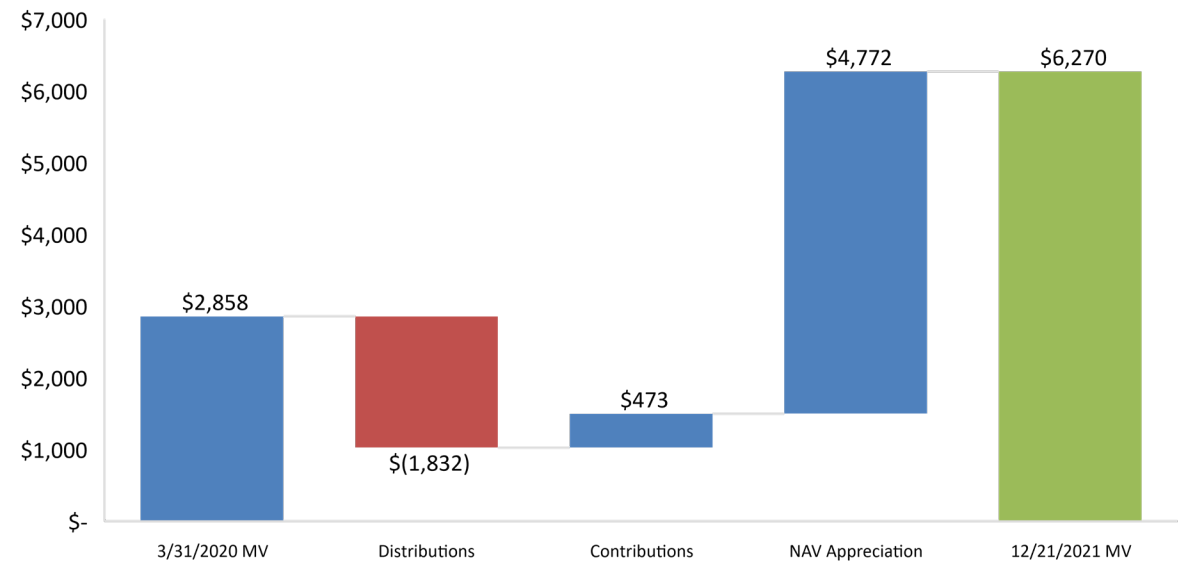
# PE Program Through the COVID-19 Pandemic (April 2020 – Dec 2021)

- PE portfolio has experienced unprecedented performance
  - Operational improvements, IPOs/public market comps, multiple expansion
- GPs selling into market strength

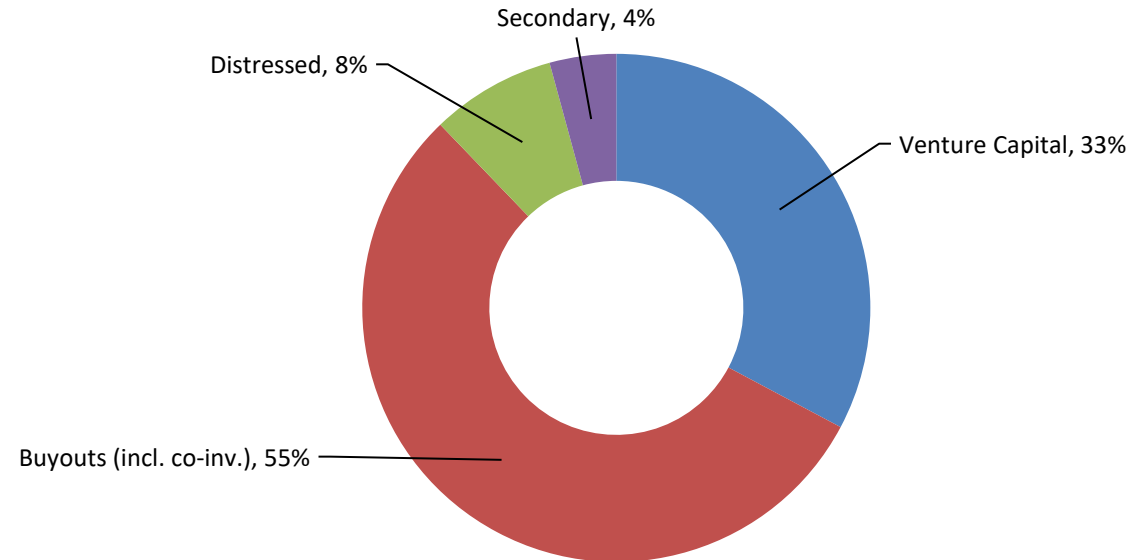
PE Portfolio Apr 2020 - Dec 2021 (\$\$ in millions)



Venture Capital Portfolio April 2020 - December 2021 (\$\$ in millions)



# Current Allocations and Targets



(\$ millions)	12/31/21 NAV	%	Total Exposure <sup>+</sup>	%	Target Allocation
Buyouts*	\$ 10,528	55%	\$ 15,163	59%	65%
Venture Capital	\$ 6,270	33%	\$ 6,782	26%	10%
Distressed	\$ 1,520	8%	\$ 2,596	10%	15%
Secondary	\$ 810	4%	\$ 1,297	5%	10%
Total	\$ 19,128		\$ 25,839		

\*Buyout sub-target: 85% funds 15% co-investments

<sup>+</sup>Total Exposure equals NAV + unfunded commitments

# Portfolio Composition

## PE Portfolio

- \$19.1b NAV (12/31/21)
- \$6.7b Unfunded
- 224 funds
- 68 GPs (48 core)

## Geographic Focus\*

- 6 - Global
- 26 - U.S.
- 10 - Europe
- 6 - Asia

## Sector Focus\*

- 30 - Generalist
- 9 - Technology
- 4 - Energy
- 1 – Financials
- 3 – Consumer/Retail
- 1 – Health Care



\*Geographic and sector focus of our 48 core managers

# GP Concentration

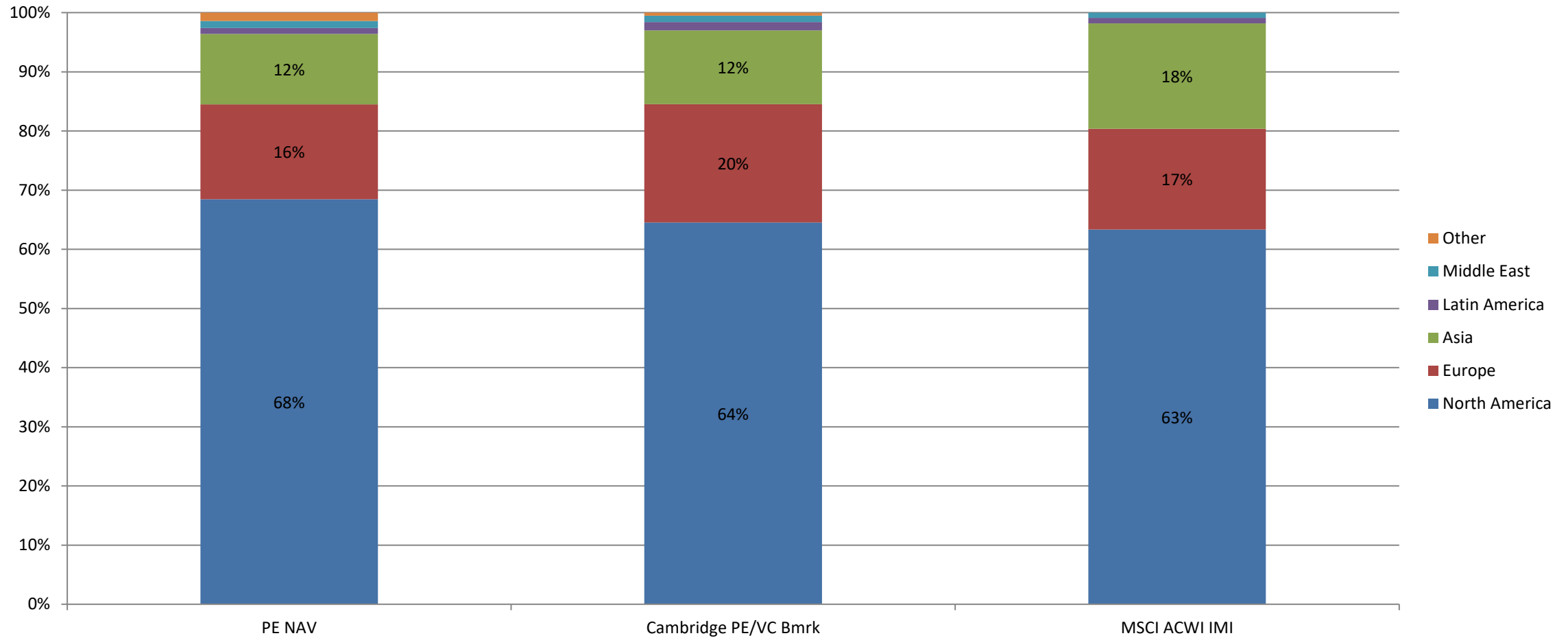
General Partner	12/31/21 NAV	% of PE Portfolio
TrueBridge Capital	2,055,584,924	11%
Lexington Partners	1,995,900,564	10%
SVB Capital	1,908,106,501	10%
Thoma Bravo	1,154,863,296	6%
Fairview Capital	922,680,258	5%
Grove Street Advisors	908,385,601	5%
Hellman & Friedman	725,829,653	4%
Tiger Iron Capital	646,171,827	3%
Asia Alternatives	622,342,626	3%
Silver Lake Partners	496,729,866	3%
<b>Total</b>	<b>\$ 11,436,595,116</b>	<b>60%</b>

- Total portfolio is diversified by GP
- Venture and tech managers make up majority of top 10 GP exposures
- The largest 10 exposures represent 60% of portfolio NAV
- Top 10 represent 32% of committed capital



# Total Geographic Exposure

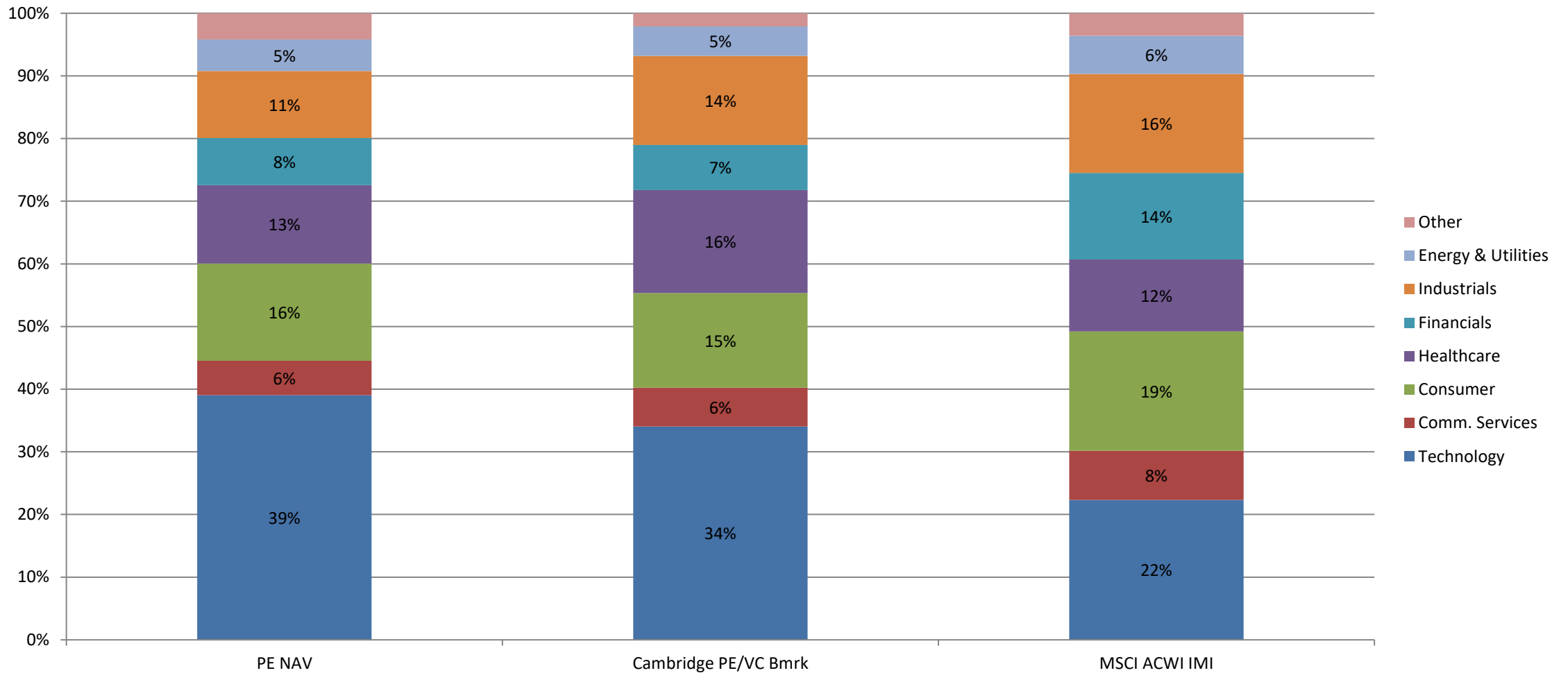
## As of December 31, 2021



Source: Cambridge Associates

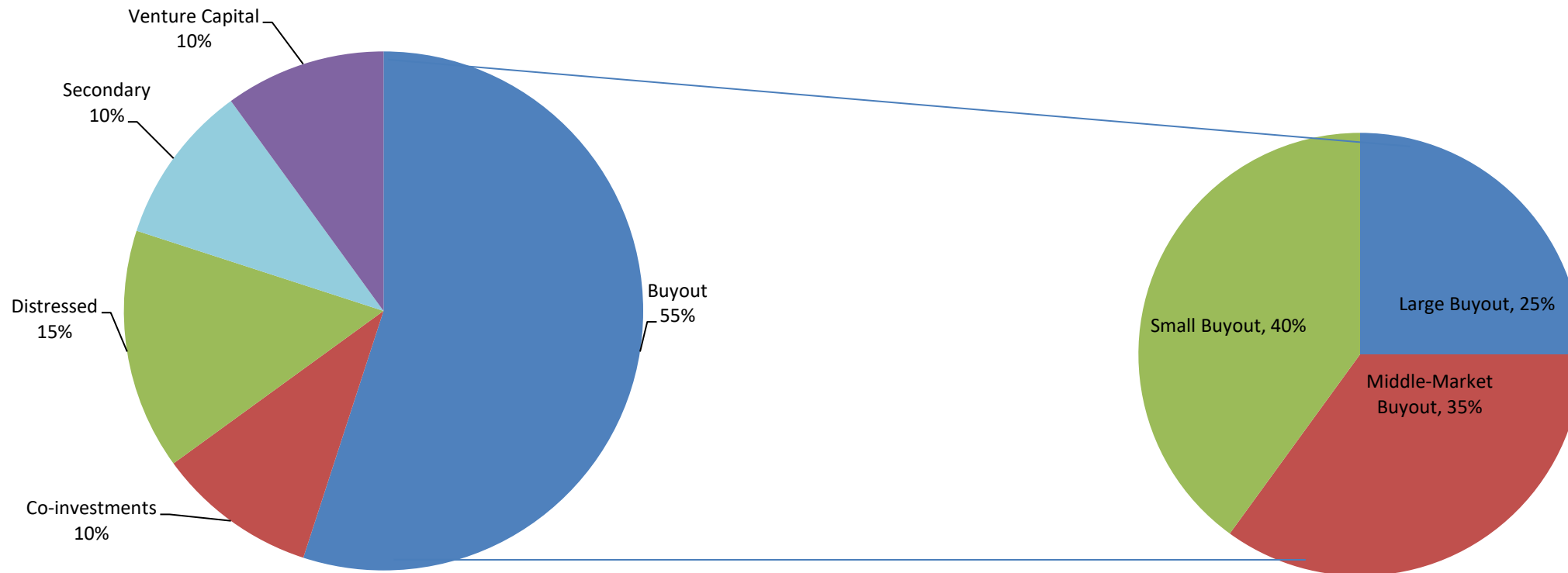
# Total Sector Exposure

## As of December 31, 2021



Source: Cambridge Associates

# Buyout/Growth Equity Portfolio Targets



# Buyout/Growth Equity Portfolio

Firm	Geographic Focus	Sector Focus
Advent International	Europe	Generalist
CVC	Europe	Generalist
Hellman & Friedman	U.S.	Generalist
Silver Lake	U.S.	Technology
Thoma Bravo	U.S.	Technology

Firm	Geographic Focus	Sector Focus
DCP	China	Generalist
Denham	U.S.	Energy
EnCap	U.S.	Energy
FS Equity	U.S.	Consumer
Francisco Partners	U.S.	Technology
Hahn & Co.	Korea	Generalist
InvestIndustrial	Europe	Generalist
MBK	Asia	Generalist
Montagu	Europe	Generalist
Stone Point	U.S.	Financials
Thoma Bravo	U.S.	Technology

Firm	Geographic Focus	Sector Focus
Accel KKR	U.S.	Technology
Arbor	U.S.	Consumer
Asia Alternatives	Asia	Generalist
Carnelian	U.S.	Energy
Deutsche Beteiligungs	Europe	Generalist
Equistone	Europe	Generalist
Falfurrias	U.S.	Generalist
Livingbridge	Europe	Generalist
NIC	Japan	Generalist
Post Oak	U.S.	Energy
Rubicon	U.S.	Technology
Summa	Europe	Generalist
TPG	Global	Generalist
Warburg Pincus	Asia	Generalist
Waterland	Europe	Generalist
WindRose	U.S.	Health Care

Large

- 5 GPs – Target of 6
- Fund sizes range from \$16b - \$25b
- Avg. EV greater than \$750m
- \$200m target commitment

Middle-Market

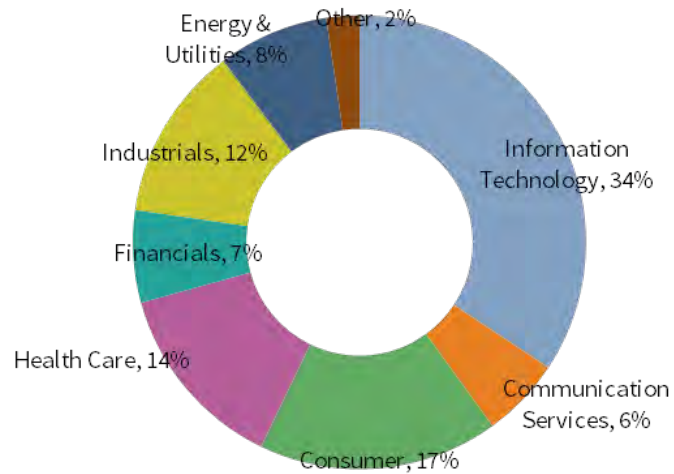
- 11 GPs – Target of 12
- Fund sizes range from \$350m-\$7.5b
- Avg. EV between \$250m-\$750m
- \$75m - \$200 target commitment

Small

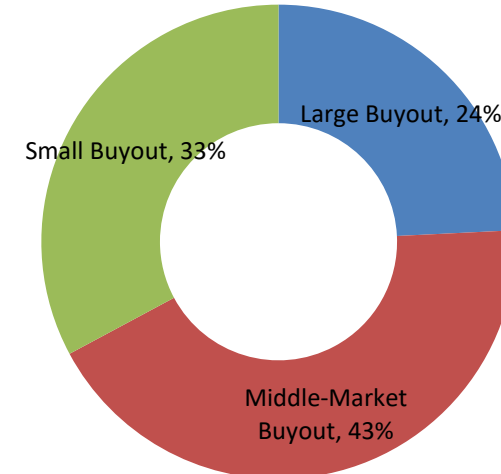
- 16 GPs – Target of 18
- Fund sizes range from \$400m - \$4.0b
- Avg. EV less than \$250m
- \$25m - \$100m target commitment

# Buyout/Growth Equity Portfolio

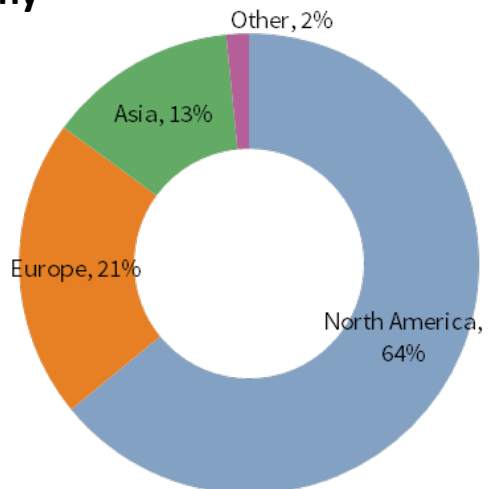
## Exposure by Sector



## Exposure by Size



## Exposure by Geography



## Portfolio Commentary

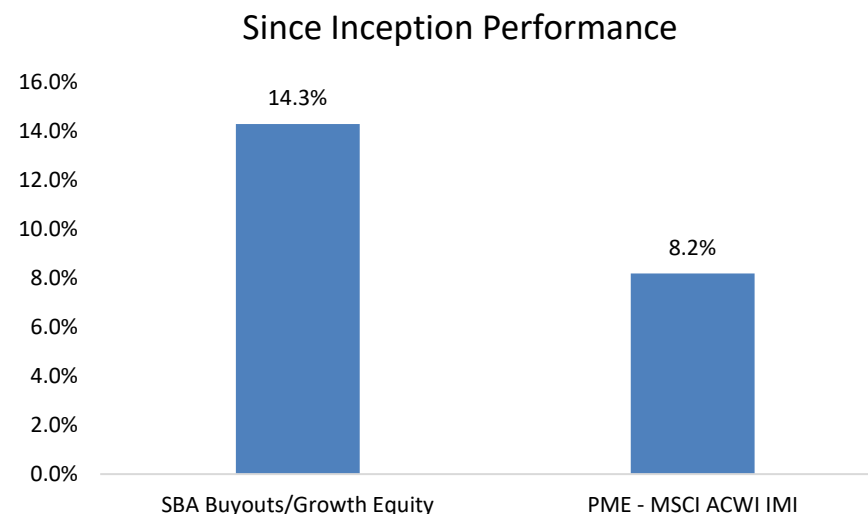
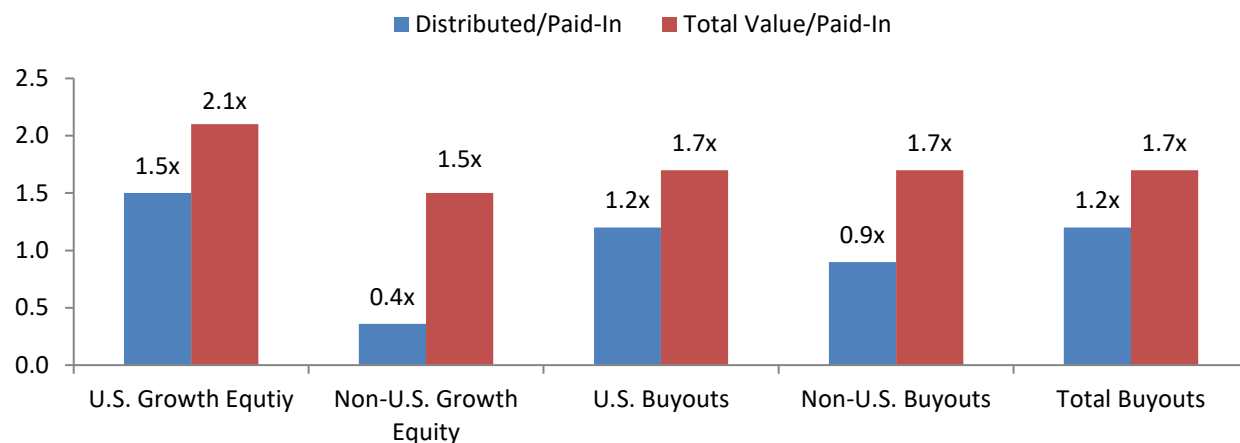
- Buyout portfolio remains tech heavy at 34%
- Manufacturing/industrial, health care, and consumer/retail represent another 43% of the portfolio
- Buyout exposure continues to shift smaller and away from large buyout
- Portfolio weighted heavily towards North America

# Buyout/Growth Equity Portfolio Performance

As of December 31, 2021

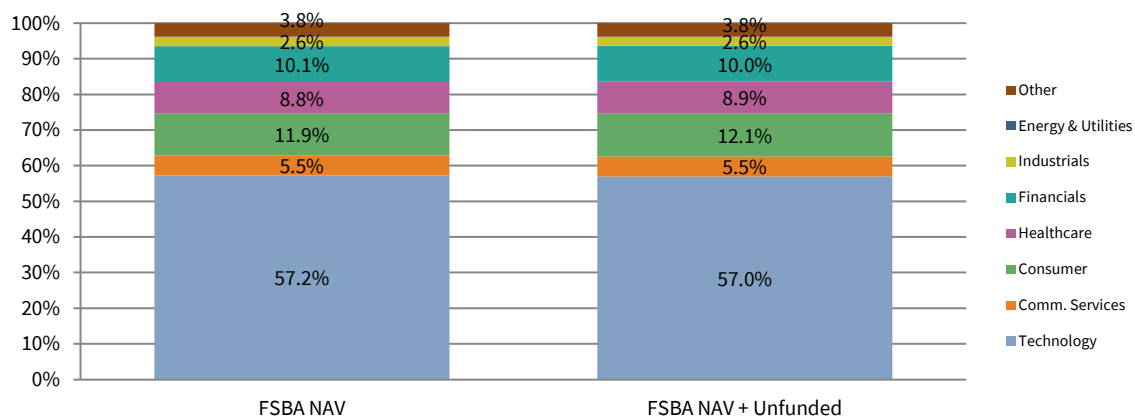
	1yr	3yr	5yr	10yr	S.I.
<b>U.S. Buyouts</b>	32.4%	24.3%	20.4%	17.5%	13.5%
<b>Non-U.S. Buyouts</b>	33.5%	26.5%	23.0%	19.1%	14.7%
<b>U.S. Growth Equity</b>	35.5%	29.2%	23.6%	19.7%	16.5%
<b>Non-U.S. Growth Equity</b>	20.9%	18.2%	16.3%	14.0%	12.2%
<b>Total Buyouts</b>	33.4%	24.4%	20.2%	17.4%	14.3%
<b>CA Benchmark (mean)</b>	28.5%	18.0%	17.0%	16.6%	18.3%
<b>CA Benchmark (median)</b>	17.6%	13.0%	14.6%	14.5%	14.2%

- Strong absolute performance
- Greater convergence between U.S. Buyouts, Non-U.S. Buyouts, and U.S. Growth Equity
- Alpha over public markets (PME) of 6.1%
- DPI of 1.2x and TVPI of 1.7x



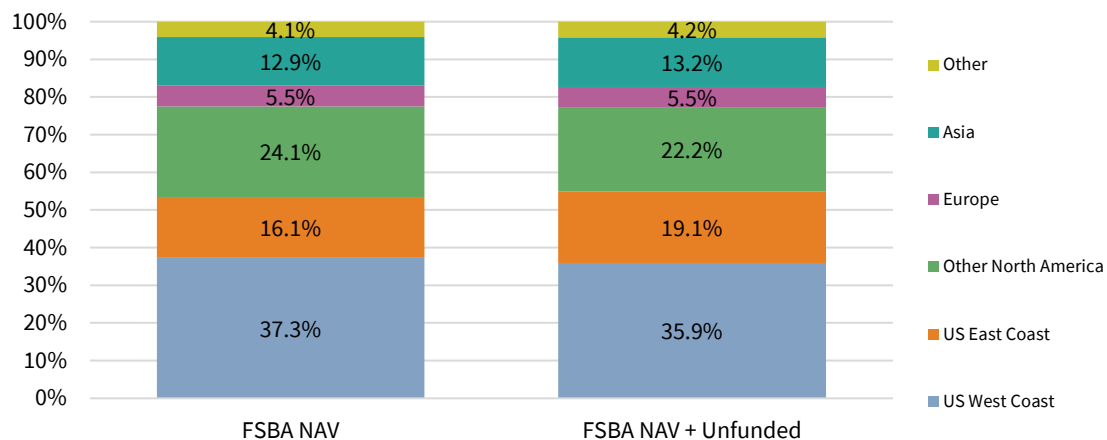
# Venture Capital Portfolio

## Exposure by Sector

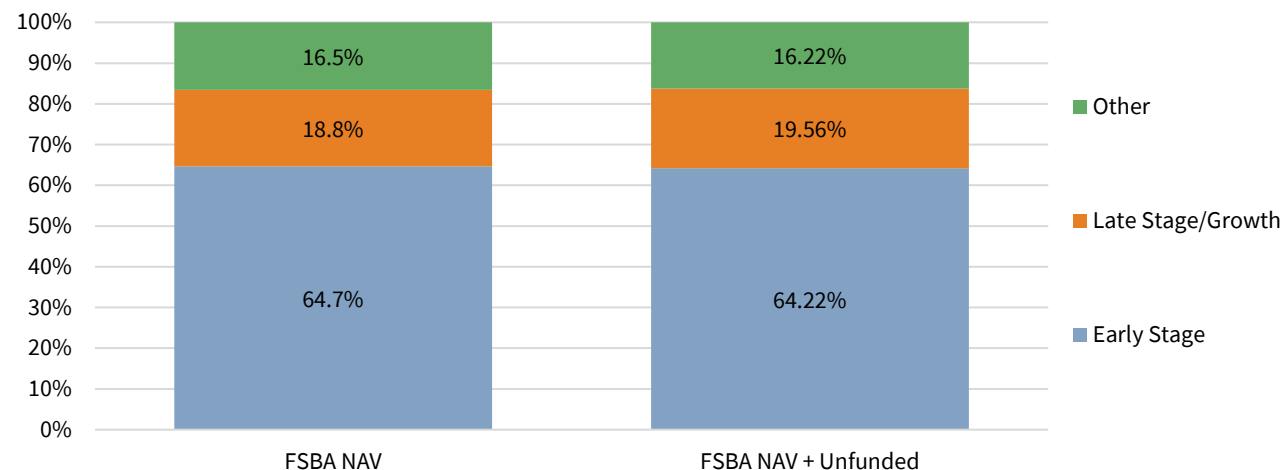


- Three active separate account/fund-of-fund relationships: TrueBridge, Silicon Valley Bank and Tiger Iron
- Majority of the venture portfolio is focused on IT
- Over half the portfolio is located in centers of innovation (Silicon Valley, Boston and NYC)
- 65% of the VC portfolio is invested in early stage companies

## Exposure by Geography



## Exposure by Stage



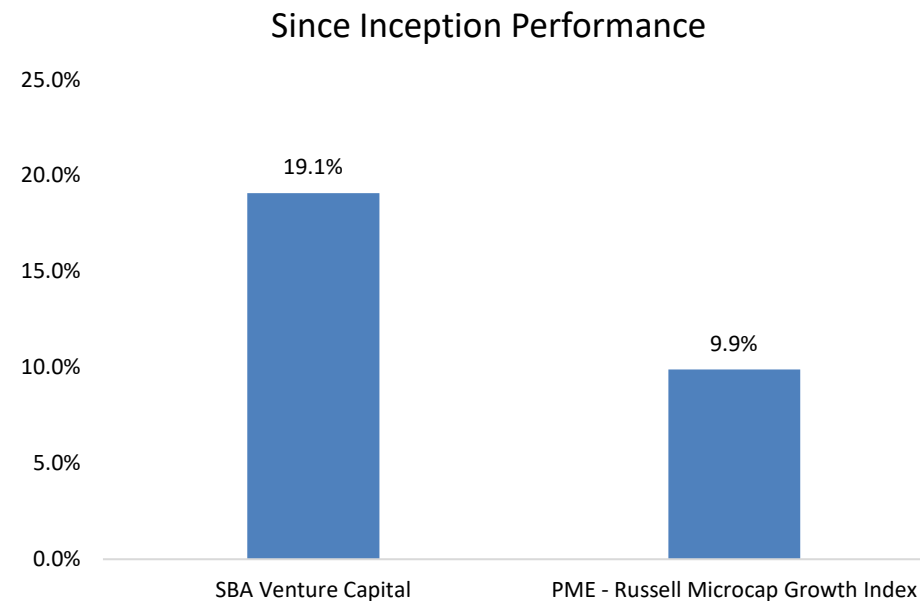
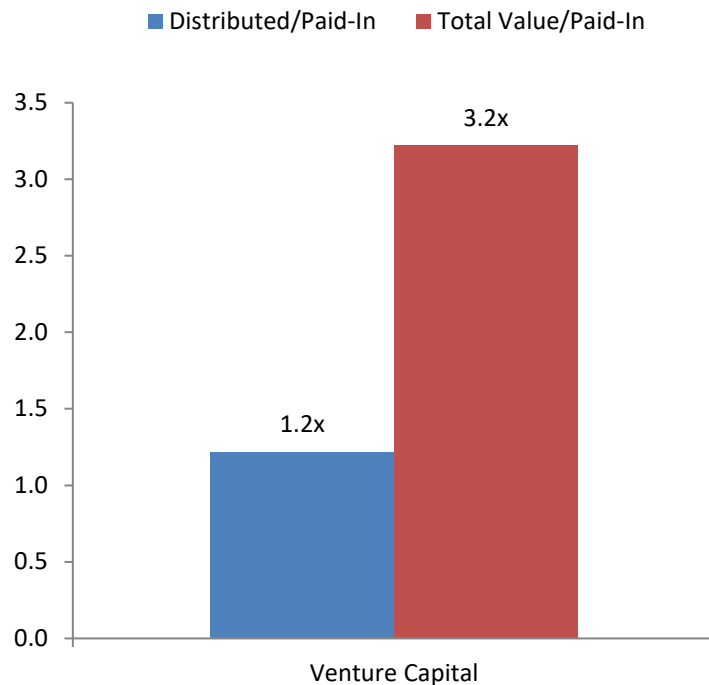
\*Exposure weightings by NAV as of 12/31/21

# Venture Capital Portfolio Performance

As of December 31, 2021

	1yr	3yr	5yr	10yr	S.I.
<b>Venture Capital</b>	75.7%	50.7%	34.5%	24.2%	19.1%
<b>CA Benchmark (mean)</b>	41.6%	25.9%	22.3%	19.5%	15.7%
<b>CA Benchmark (median)</b>	23.1%	19.2%	18.9%	16.2%	9.9%

- Overall outperformance vs. the benchmarks
- Outperformance vs. the PME by 9.2%
- Distributions (1.2x DPI) have caught up with other strategies
- 3.2x TVPI leads other strategies



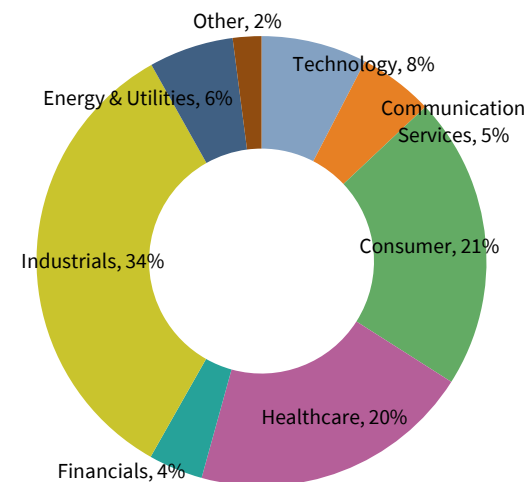


# Distressed/Turnaround Portfolio

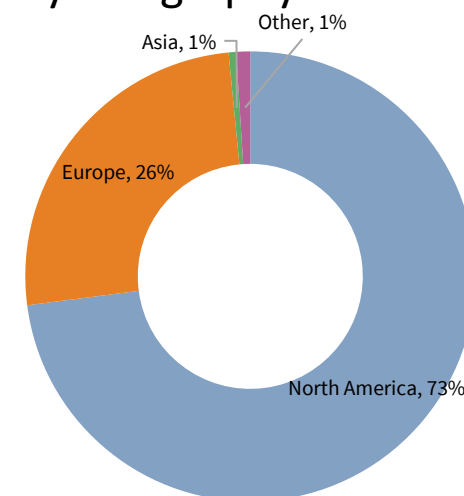
Firm	Geographic Focus
American Industrial Partners	U.S.
Atlas Holdings	U.S.
KPS Capital Partners	U.S.
LightBay	U.S.
OpCapita	Europe
Peak Rock	U.S.
Searchlight Capital Partners	U.S./Europe
Towerbrook Capital Partners	U.S./Europe
Trive Capital	U.S.

- Manufacturing/industrials, consumer/retail, and health care account for roughly 68% of the portfolio
- Focus on control and driving value through operations - not a trading strategy
- Variety of strategies represented: debt-for-control, purchasing assets out of a bankruptcy process (363 sale), out-of-court restructurings, negative EBITDA companies, carve-outs of underperforming businesses, and complex situations

Exposure by Sector



Exposure by Geography

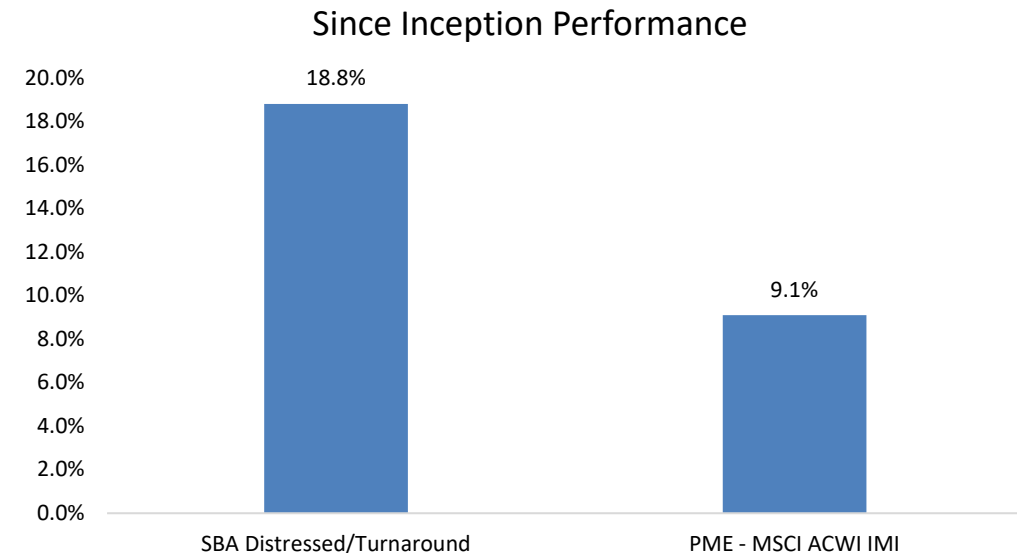
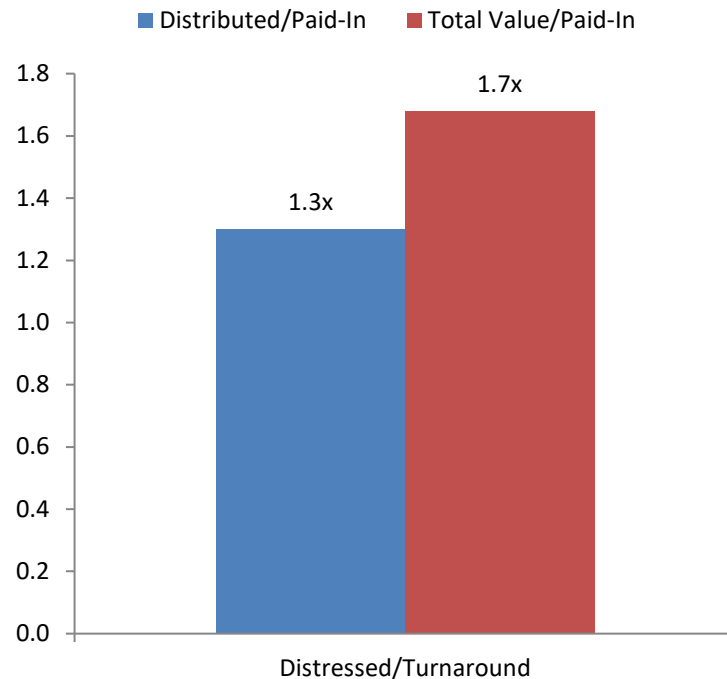


# Distressed/Turnaround Portfolio Performance

As of December 31, 2021

	1yr	3yr	5yr	10yr	S.I.
<b>Distressed/Turnaround</b>	37.2%	24.0%	17.7%	16.5%	18.8%
<b>CA Benchmark (mean)</b>	18.3%	9.5%	8.2%	14.9%	13.8%
<b>CA Benchmark (median)</b>	12.8%	8.4%	8.6%	10.1%	9.7%

- Performance rebound in 2021
- Alpha over the public markets (PME) of 9.7%
- 1.3x DPI similar to other strategies



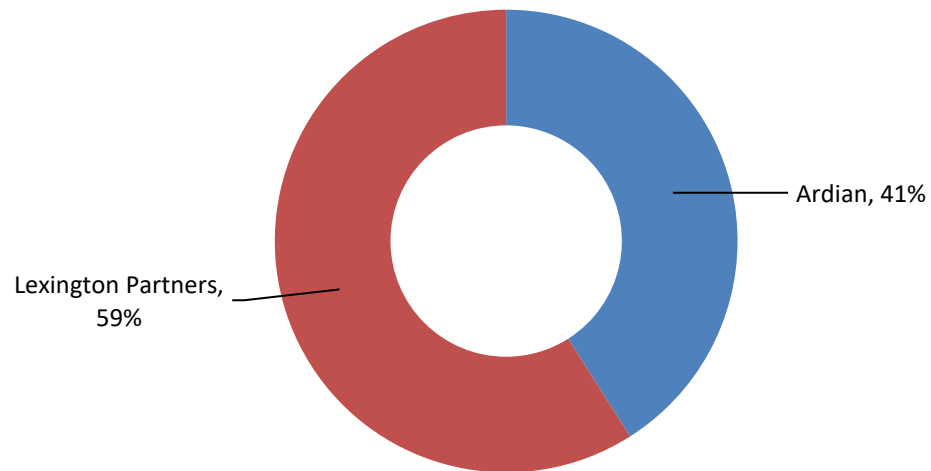
# Secondary Portfolio

As of December 31, 2021

Firm	Strategy/Market	Geographic Focus
Ardian	Large	Global
Lexington Partners	Large	Global
Aegon Asset Management	Small	US/Europe

- Highly diversified portfolio with positions in more than 1,000 underlying private equity funds
- A lot of capital has been raised by secondary GPs and it was a seller's market until recently
- Leveraging secondary relationships to operate more tactically

% of Secondary Portfolio (by NAV)

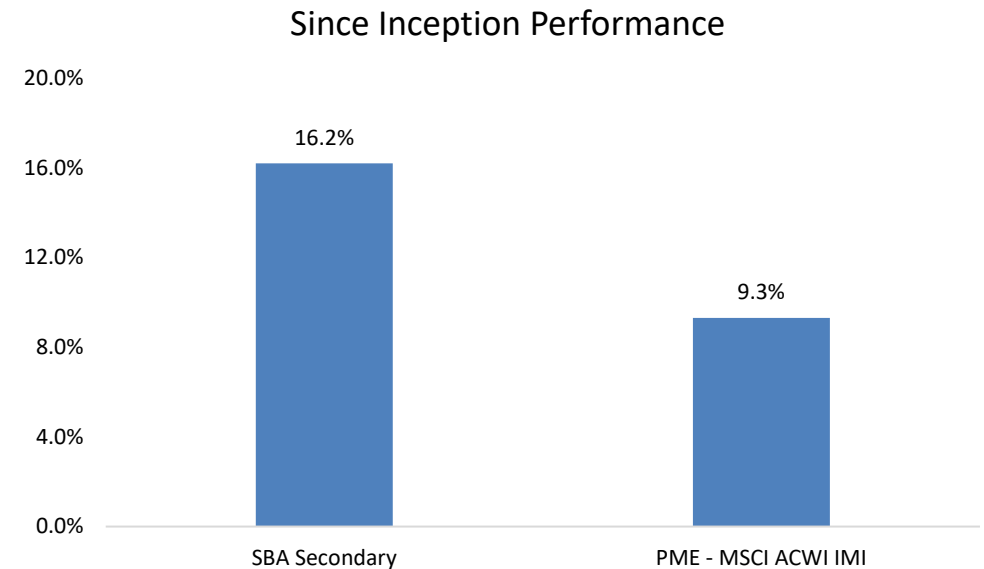
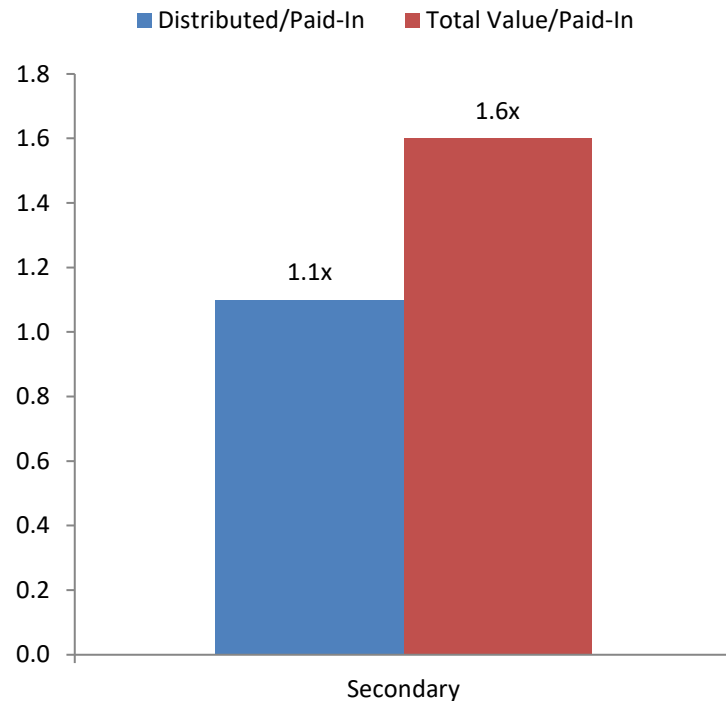


# Secondary Portfolio Performance

As of December 31, 2021

	1yr	3yr	5yr	10yr	S.I.
Secondary	34.3%	21.0%	17.7%	14.6%	16.2%
CA Benchmark (mean)	24.8%	20.3%	18.8%	18.4%	22.0%
CA Benchmark (median)	16.7%	11.7%	12.3%	11.9%	15.2%

- Performance rebounded in 2021
- Alpha over public markets (PME) of 6.9%
- DPI of 1.1x and TVPI of 1.6x



# Appendix

# Private Equity Aggregates

## Dollar-Weighted Performance (IRRs) as of December 31, 2021

	<u>Inception Date</u>	<u>Market Value (in Millions)</u>	<u>1yr</u>	<u>3yr</u>	<u>5yr</u>	<u>10yr</u>	<u>Since Inception</u>
Total Private Equity	1/27/1989	\$19,131	44.1%	31.0%	23.9%	18.4%	11.5%
Custom Iran- and Sudan-free ACWI IMI +300bps			21.4%	23.4%	16.6%	15.7%	11.3%
Private Equity Legacy Portfolio	1/27/1989	\$3	0.0%	-4.3%	-5.9%	-19.4%	3.7%
Custom Iran- and Sudan-free ACWI IMI +300bps			21.1%	28.0%	16.4%	16.8%	10.2%
Private Equity Asset Class Portfolio	8/31/2000	\$19,128	44.2%	31.0%	24.0%	19.0%	15.2%
Custom Iran- and Sudan-free ACWI IMI +300bps			21.4%	23.4%	16.6%	15.6%	12.5%

Note: Asset class IRR performance data is provided by Cambridge Associates. The PE benchmark is currently the Custom Iran- and Sudan-free ACWI IMI + 300bps. From July 2010 the benchmark was the Russell 3000 + 300 bps. Prior to July 2010, the benchmark was the Russell 3000 + 450 bps. Prior to November 1999, Private Equity was part of the Domestic Equity benchmark was the Domestic Equity target index + 750 bps.

# Private Equity Partnership Performance

## As of December 31, 2021

Private Investments Partnerships	Commitment (\$)	Current NAV (\$)	TVPI	Net IRR
3i Europartners Vb, L.P.	77,440,017	0	0.97	-0.6%
3i Growth Capital Fund, L.P.	54,440,286	0	0.93	-2.0%
ABRY Partners VII, L.P.	75,000,000	0	1.78	14.8%
ABRY Partners VIII, L.P.	75,000,000	0	1.26	10.8%
Accel-KKR Capital Partners V	50,000,000	58,014,977	1.89	35.5%
Accel-KKR Capital Partners VI, LP	45,000,000	10,915,578	0.97	NA
Accel-KKR Structured Capital Partners II, LP	25,000,000	20,602,357	2.36	32.8%
Advent International Global Private Equity VIII-D	150,000,000	200,479,794	2.18	24.5%
Advent International GPE IX Limited Partnership	150,000,000	232,465,479	2.90	109.8%
Advent International GPE VI-D, L.P.	58,000,000	0	2.09	16.6%
Advent International GPE VII-D, L.P.	102,335,815	0	1.87	13.7%
American Industrial Partners Capital Fund VI, L.P.	50,000,000	73,898,273	1.89	20.8%
American Industrial Partners Capital Fund VII, L.P.	75,000,000	54,538,415	1.03	4.7%
Apax VIII-B, L.P.	157,584,000	0	1.50	13.7%
Apollo Investment Fund IX, L.P.	200,000,000	0	1.10	10.2%
Apollo Investment Fund V, L.P.	150,000,000	0	2.66	38.8%
Apollo Investment Fund VI L.P.	200,000,000	0	1.70	9.5%
Apollo Investment Fund VII, L.P.	200,000,000	0	1.94	23.0%
Apollo Investment Fund VIII, L.P.	200,000,000	0	1.37	9.1%
Arbor Debt Opportunities Fund II, L.P.	15,000,000	8,524,269	1.00	NA
Arbor Investments V, L.P.	75,000,000	45,328,339	0.98	NA
Ardian LBO Fund VI, L.P.	98,905,446	87,683,480	1.34	10.0%
Ardian Secondary Fund VI, L.P.	150,000,000	25,292,240	1.48	12.8%

Note: Manager IRR performance data is provided by Cambridge Associates.

# Private Equity Partnership Performance

As of December 31, 2021

<u>Private Investments Partnerships</u>	<u>Commitment (\$)</u>	<u>Current NAV (\$)</u>	<u>TVPI</u>	<u>Net IRR</u>
Ares Corporate Opportunities Fund III, L.P.	100,000,000	4,515,702	2.61	21.6%
Ares Corporate Opportunities Fund IV, L.P.	200,000,000	107,067,726	2.00	16.2%
Ares Corporate Opportunities Fund V	200,000,000	200,139,611	1.34	12.3%
ASF VII, L.P.	150,000,000	100,529,670	1.62	19.6%
ASF VIII B L.P.	200,000,000	134,398,057	1.59	62.3%
Asia Alternatives FL Investor II, LP	270,000,000	281,108,089	1.35	18.5%
Asia Alternatives FL Investor III, LP	300,000,000	48,384,405	1.07	10.4%
Asia Alternatives FL Investor, LP	200,000,000	292,850,132	1.85	17.1%
Atlas Capital Resources II	20,000,000	22,423,410	1.62	18.8%
Atlas Capital Resources III, L.P.	40,000,000	35,516,844	1.62	46.4%
Atlas Capital Resources IV LP	75,000,000	0	NA	NA
AXA LBO Fund V, L.P.	76,858,858	8,979,025	1.57	11.2%
AXA Secondary Fund V, L.P.	100,000,000	795,236	1.60	16.3%
BC European Capital IX, L.P.	101,118,077	0	1.09	5.8%
Berkshire Fund IX, L.P.	110,000,000	0	1.24	22.3%
Berkshire Fund VIII, L.P.	60,000,000	0	1.70	16.1%
Blackstone Capital Partners V, L.P.	150,000,000	0	1.60	7.1%
Blackstone Capital Partners VI, L.P.	200,000,000	0	1.85	13.1%
Blackstone Capital Partners VII, L.P.	180,000,000	0	1.53	18.9%
Blackstone Capital Partners VIII L.P.	100,000,000	0	1.05	10.9%
Blue Water Energy Fund I-A, L.P.	12,500,000	11,670,354	1.03	NA
Capital Partners V, L.P.	30,000,000	23,564,686	1.35	NA
Carlyle Asia Growth Partners IV, L.P.	75,000,000	9,343,570	1.09	1.9%

Note: Manager IRR performance data is provided by Cambridge Associates.



# Private Equity Partnership Performance

As of December 31, 2021

<u>Private Investments Partnerships</u>	<u>Commitment (\$)</u>	<u>Current NAV (\$)</u>	<u>TVPI</u>	<u>Net IRR</u>
Carlyle Europe Partners III, L.P.	66,000,377	0	1.61	12.9%
Carlyle Partners III, L.P.	200,000,000	0	2.30	22.8%
Carlyle Partners IV, L.P.	75,000,000	0	2.03	13.1%
Carlyle Partners V, L.P.	200,000,000	0	1.81	13.5%
Carlyle Partners VI, L.P.	133,400,000	133,486,072	1.89	17.8%
Carlyle Partners VII	100,000,000	110,285,348	1.17	13.1%
Carnelian Energy Capital II	40,000,000	37,433,595	1.32	14.4%
Carnelian Energy Capital III, L.P.	75,000,000	58,481,250	1.34	52.9%
Carnelian Energy Capital IV, L.P.	75,000,000	0	NA	NA
Charlesbank Equity Fund IX, L.P.	105,000,000	102,511,200	1.34	20.9%
Charlesbank Equity Fund VII, L.P.	75,000,000	15,378,394	2.47	24.5%
Charlesbank Equity Fund VIII, L.P.	85,000,000	44,443,267	1.57	15.4%
Charlesbank Equity Fund X, Limited Partnership	115,000,000	26,971,219	1.02	NA
Charlesbank Equity Overage Fund X, Limited Partnership	10,000,000	3,322,870	1.06	NA
Charlesbank Fund IX Overage Allocation Program	20,000,000	19,023,744	1.39	19.4%
Charterhouse Capital Partners IX, L.P.	90,366,890	0	1.35	13.7%
Cortec Group Fund V, L.P.	50,000,000	0	4.23	30.8%
Cortec Group Fund VI, L.P.	75,000,000	0	1.24	7.9%
Cressey & Company Fund IV, L.P.	50,000,000	2,043,866	2.24	22.2%
Cressey & Company Fund V LP	75,000,000	97,795,281	2.37	
Cressey & Company Fund VI LP	100,000,000	101,361,169	1.78	
Cressey & Company Overage Fund VI LP	10,000,000	11,935,607	3.33	
CVC Capital Partners VI, L.P.	102,645,517	109,177,111	2.00	

Note: Manager IRR performance data is provided by Cambridge Associates.

# Private Equity Partnership Performance

## As of December 31, 2021

<u>Private Investments Partnerships</u>	<u>Commitment (\$)</u>	<u>Current NAV (\$)</u>	<u>TVPI</u>	<u>Net IRR</u>
CVC Capital Partners VII	102,163,598	162,721,006	1.66	35.7%
CVC Capital Partners VIII (A) L.P.	225,468,975	45,096,014	1.02	NA
CVC European Equity Partners V, L.P.	102,826,253	4,288,286	2.10	16.7%
CVE-Kauffman Fellows Endowment Fund II, L.P.	100,000,000	250,636,663	5.72	24.0%
Datadog, Inc.	70,564,685	0	1.60	371.7%
DCP Capital Partners II, L.P.	100,000,000	0	NA	NA
DCPF VI Oil and Gas Coinvestment Fund LP	50,000,000	180,487	1.60	15.9%
Denham Commodity Partners Fund VI, L.P.	100,000,000	51,458,747	1.04	1.0%
Denham Oil & Gas Fund II LP	100,000,000	0	NA	NA
Denham Oil & Gas Fund LP	100,000,000	62,417,989	1.14	6.1%
EnCap Energy Capital Fund IX, L.P.	75,000,000	36,312,437	1.31	8.3%
EnCap Energy Capital Fund VIII, L.P.	75,000,000	29,818,582	0.94	-1.5%
EnCap Energy Capital Fund X, L.P.	100,000,000	99,319,244	1.48	11.6%
EnCap Energy Capital Fund XI, L.P.	100,000,000	61,480,484	1.12	6.3%
EnCap Flatrock Midstream Fund III	50,000,000	34,662,801	1.21	8.1%
EnCap Flatrock Midstream Fund IV	65,000,000	17,130,980	1.15	6.4%
Energy Capital Partners II, L.P.	100,000,000	5,417,029	1.46	8.5%
Energy Capital Partners III, L.P.	150,000,000	89,938,777	1.38	10.2%
EnerVest Energy Institutional Fund XII, Ltd	60,000,000	110,047	0.64	-19.7%
EnerVest Energy Institutional Fund XIII, Ltd.	100,000,000	0	0.09	-93.3%
EnerVest Energy Institutional Fund XIV	100,000,000	74,640,267	1.37	8.7%
Equistone European Fund V	74,366,455	62,980,611	1.53	10.0%
Equistone Partners Europe Fund VI	88,195,865	83,402,513	1.62	30.1%

Note: Manager IRR performance data is provided by Cambridge Associates.

# Private Equity Partnership Performance

As of December 31, 2021

<u>Private Investments Partnerships</u>	<u>Commitment (\$)</u>	<u>Current NAV (\$)</u>	<u>TVPI</u>	<u>Net IRR</u>
European Private Equity Opportunities I, L.P.	49,181,385	47,586,797	1.20	9.5%
European Private Equity Opportunities II LP	75,523,436	10,497,756	0.74	-42.5%
Fairview Special Opportunities Fund II	87,000,000	296,154,013	3.68	34.3%
Fairview Special Opportunities Fund, L.P.	220,000,000	626,526,245	4.76	28.3%
Fairview Ventures Fund II, L.P.	50,000,000	0	1.34	3.9%
Fairview Ventures III, L.P.	75,000,000	0	1.83	11.8%
Falfurrias Capital Partners IV, LP	60,000,000	94,033,969	1.89	73.4%
Falfurrias Capital Partners V, LP	100,000,000	12,258,080	0.95	NA
First Reserve Fund XI, L.P.	100,000,000	107,317	0.64	-9.4%
First Reserve Fund XII, L.P.	200,000,000	7,680,903	0.52	-15.2%
Francisco Partners III, L.P.	75,000,000	0	3.44	23.8%
Francisco Partners IV, LP	75,000,000	152,374,862	3.59	34.5%
Francisco Partners V, L.P.	75,000,000	109,536,718	1.71	25.6%
Francisco Partners VI, L.P.	100,000,000	46,485,821	1.13	NA
Francisco Partners VII, L.P.	100,000,000	0	NA	NA
FS Equity Partners V, L.P.	50,000,000	0	2.10	16.1%
FS Equity Partners VI, L.P.	75,000,000	0	3.08	23.1%
FS Equity Partners VII, L.P.	100,000,000	107,629,742	1.51	11.1%
FS Equity Partners VIII, L.P.	100,000,000	67,406,345	1.35	22.5%
FSBA AAM Strategic Fund I, LP	23,000,000	10,000	1.00	NA
Gores Capital Partners II, L.P.	50,000,000	0	1.14	3.8%
Gores Capital Partners III, L.P.	125,000,000	0	1.00	-0.1%
Gores Capital Partners, L.P.	50,000,000	0	1.30	8.4%

Note: Manager IRR performance data is provided by Cambridge Associates.

# Private Equity Partnership Performance

As of December 31, 2021

<u>Private Investments Partnerships</u>	<u>Commitment (\$)</u>	<u>Current NAV (\$)</u>	<u>TVPI</u>	<u>Net IRR</u>
Green Equity Investors IV, L.P.	100,000,000	0	1.78	10.7%
Green Equity Investors V, L.P.	100,000,000	0	1.94	17.4%
Green Equity Investors VI, L.P.	190,000,000	0	1.25	12.3%
Grove Street Partners Buyout II, L.P.	230,000,000	150,962,082	1.92	16.1%
Grove Street Partners Buyout, L.P.	150,000,000	22,312,719	1.72	10.9%
Grove Street Partners Ventures II, L.P.	200,000,000	392,205,730	4.25	24.1%
Grove Street Partners Ventures III, L.P.	150,000,000	342,905,070	3.30	24.9%
Grove Street Partners Ventures, L.P.	200,000,000	0	1.56	7.2%
Hahn & Company III L.P.,	50,000,000	31,884,325	1.23	16.8%
Hellman & Friedman Capital Partners IX, L.P.	250,000,000	306,531,489	1.34	31.8%
Hellman & Friedman Capital Partners V, L.P.	75,000,000	0	2.74	29.4%
Hellman & Friedman Capital Partners VI, L.P.	100,000,000	0	1.79	12.6%
Hellman & Friedman Capital Partners VII, L.P.	200,000,000	41,135,460	3.34	25.0%
Hellman & Friedman Capital Partners VIII, L.P.	200,000,000	350,436,601	2.22	26.4%
Hellman & Friedman Capital Partners X, L.P.	250,000,000	27,726,103	0.93	NA
Hicks, Muse, Tate & Furst Equity Fund V, L.P.	25,000,000	0	1.77	21.0%
Inflexion Buyout Fund IV, L.P.	52,587,527	55,368,762	1.73	17.2%
Inflexion Enterprise Fund IV	19,982,149	23,836,708	1.71	22.8%
Inflexion Partnership Capital Fund I, L.P.	26,372,724	18,274,780	1.86	22.9%
Insight Venture Partners Growth-Buyout Coinvestment Fund, L.P.	50,000,000	0	3.75	36.6%
Insight Venture Partners IX, L.P.	75,000,000	0	3.65	32.4%
Insight Venture Partners VIII, L.P.	75,000,000	0	3.01	22.0%
Investindustrial VI, L.P.	55,802,326	69,706,997	1.62	15.9%

Note: Manager IRR performance data is provided by Cambridge Associates.

# Private Equity Partnership Performance

As of December 31, 2021

<u>Private Investments Partnerships</u>	<u>Commitment (\$)</u>	<u>Current NAV (\$)</u>	<u>TVPI</u>	<u>Net IRR</u>
Investindustrial VII L.P.	76,982,294	31,035,227	1.11	17.2%
J.H. Whitney VII, L.P.	75,000,000	0	1.92	13.0%
Kelso Investment Associates VII, L.P.	50,000,000	0	1.73	12.2%
Kelso Investment Associates VIII, L.P.	100,000,000	0	1.58	13.8%
KKR Asian Fund II, L.P.	100,000,000	62,187,514	1.33	7.3%
KKR Asian Fund III, L.P.	150,000,000	203,898,495	2.01	39.7%
KKR European Fund III, L.P.	58,757,859	0	1.05	1.8%
Kohlberg Investors V, L.P.	45,000,000	0	1.06	1.2%
Kohlberg Investors VI, L.P.	50,000,000	0	1.67	15.8%
KPS Special Situations Fund IV, L.P.	150,000,000	109,028,482	1.87	25.0%
KPS Special Situations Fund V (A), LP	200,000,000	100,519,988	1.44	48.8%
KPS Special Situations Mid-Cap Fund, LP	50,000,000	24,230,732	1.33	27.0%
KPS Special Situations Supplemental Fund III, L.P.	50,000,000	284,426	2.67	22.6%
LCP FSBA Co-Invest Account	200,000,000	165,994,337	1.85	28.7%
Lexington Capital Partners IV, L.P.	200,000,000	0	1.78	20.2%
Lexington Capital Partners IX, L.P.	250,000,000	222,988,004	1.62	86.2%
Lexington Capital Partners V, L.P.	100,000,000	398,492	1.68	18.9%
Lexington Capital Partners VI, L.P.	100,000,000	4,002,804	1.37	6.4%
Lexington Capital Partners VII, L.P.	200,000,000	37,085,254	1.68	14.2%
Lexington Capital Partners VIII, L.P.	250,000,000	187,809,795	1.70	19.9%
Lexington CIP V-F-O	200,000,000	54,783,352	1.43	80.9%
Lexington Co-Investment Partners (Pools I & II), L.P.	500,000,000	0	1.35	6.3%
Lexington Co-Investment Partners 2005 (Pool III), L.P.	500,000,000	274,223,710	2.05	17.8%

Note: Manager IRR performance data is provided by Cambridge Associates.

# Private Equity Partnership Performance

As of December 31, 2021

Private Investments Partnerships	Commitment (\$)	Current NAV (\$)	TVPI	Net IRR
Lexington Co-Investment Partners 2005 (Pools I & II), L.P.	500,000,000	42,817,666	1.46	5.4%
Lexington Co-Investment Partners 2005 Pool IV	500,000,000	710,367,803	1.84	25.3%
Lexington Co-Investment Partners II (Pools III & IV), L.P.	500,000,000	7,681,412	2.18	23.4%
Lexington Co-Investment Partners V, L.P.	600,000,000	231,927,133	1.28	NA
Lexington Middle Market Investors III, L.P.	100,000,000	55,820,802	1.83	18.8%
LightBay Investment Partners II LP	75,000,000	0	NA	NA
Lightbay Investment Partners LP	50,000,000	45,123,357	1.47	30.8%
Lindsay, Goldberg & Bessemer II, L.P.	100,000,000	0	1.48	8.0%
Lindsay, Goldberg & Bessemer III, L.P.	100,000,000	0	1.18	6.8%
Livingbridge 7 LP	82,665,124	25,537,908	0.91	NA
Livingbridge Enterprise 3 LP	32,305,168	14,226,917	1.00	-0.2%
MBK Partners Fund V, L.P.	100,000,000	31,898,488	1.26	NA
Montagu Private Equity IV, L.P.	56,819,796	12,719,873	1.65	13.8%
Montagu V	111,109,877	104,259,397	1.60	21.5%
Montagu VI L.P.	88,204,163	29,559,151	1.03	NA
New Mountain Partners II, L.P.	50,000,000	282,267	2.04	13.5%
New Mountain Partners III, L.P.	100,000,000	1,838,868	2.60	14.6%
New Mountain Partners IV, L.P.	100,000,000	0	1.59	22.1%
OpCapita Consumer Opportunities Fund II	38,251,366	42,733,534	1.51	13.1%
OpCapita Consumer Opportunities Fund III, L.P.	38,682,154	1	0.00	-100.0%
OpenView Venture Partners IV, L.P.	25,000,000	50,635,052	3.07	26.0%
OpenView Venture Partners V, L.P.	25,000,000	88,036,036	3.94	66.5%
OpenView Venture Partners VI, L.P.	30,000,000	18,467,687	1.08	14.2%

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# Private Equity Partnership Performance

## As of December 31, 2021

<u>Private Investments Partnerships</u>	<u>Commitment (\$)</u>	<u>Current NAV (\$)</u>	<u>TVPI</u>	<u>Net IRR</u>
OpenView Venture Partners VII, L.P.	20,000,000	0	NA	NA
PAI Europe V, L.P.	42,563,071	0	1.30	7.0%
Pantheon Global Secondary Fund IV, L.P.	100,000,000	9,563,961	1.61	13.2%
Pantheon Venture Partners II, L.P.	100,000,000	0	1.52	6.8%
Paul Capital Top Tier Investments II, L.P.	120,000,000	0	1.34	4.3%
Paul Capital Top Tier Investments III, L.P.	75,000,000	0	1.40	5.3%
Paul Capital Top Tier Investments IV, L.P.	100,000,000	0	2.00	13.9%
Paul Capital Top Tier Special Opportunities Fund, L.P.	12,450,000	2,445,943	0.88	-1.6%
Peak Rock Capital Credit Fund II	20,000,000	6,822,200	1.14	21.1%
Peak Rock Capital Fund II, L.P.	80,000,000	38,694,785	1.52	35.4%
Peak Rock Capital Fund III LP	125,000,000	26,488,630	1.02	NA
Permira European Fund IV, L.P.	64,037,705	0	1.56	8.3%
Permira V, LP	136,860,690	0	2.84	24.2%
Platinum Equity Capital Partners II, L.P.	75,000,000	8,969,895	1.70	12.7%
Platinum Equity Capital Partners III, L.P.	200,000,000	61,771,689	2.14	30.0%
Platinum Equity Capital Partners, L.P.	50,000,000	0	2.91	60.2%
Pomona Capital VI (Combined), L.P.	50,000,000	1,602,442	1.31	4.6%
Pomona Capital VII (Combined), L.P.	50,000,000	0	1.31	7.9%
Post Oak Energy Partners II, LP	25,000,000	27,289,337	1.50	12.6%
Post Oak Energy Partners III, LP	60,000,000	27,019,043	1.30	10.8%
Post Oak Energy Partners IV, LP	60,000,000	27,159,528	0.96	-2.0%
Providence Equity Partners VI, L.P.	50,000,000	0	1.46	7.3%
Providence Equity Partners VII, L.P.	200,000,000	0	1.61	21.2%

Note: Manager IRR performance data is provided by Cambridge Associates.

# Private Equity Partnership Performance

## As of December 31, 2021

Private Investments Partnerships	Commitment (\$)	Current NAV (\$)	TVPI	Net IRR
RCP Advisors Fund IV, L.P.	50,000,000	77,535	1.88	13.1%
RCP Advisors Fund IX, L.P.	50,000,000	54,680,167	1.89	19.6%
RCP Advisors Fund V, L.P.	50,000,000	1,264,876	1.80	14.2%
RCP Advisors Fund VI, L.P.	50,000,000	17,029,673	2.18	16.6%
RCP Advisors Fund VII, L.P.	50,000,000	33,916,126	2.26	18.7%
RCP Advisors Fund VIII, L.P.	50,000,000	50,217,303	2.19	21.2%
RCP Advisors Fund X	50,000,000	61,634,415	1.69	19.1%
Ripplewood Partners II, L.P.	100,000,000	0	1.19	6.2%
Riverside Capital Appreciation Fund 2008, L.P.	75,000,000	0	1.32	8.2%
Riverside Capital Appreciation Fund VI, L.P.	75,000,000	0	1.43	14.4%
Riverside Europe Fund IV, L.P.	49,699,937	0	1.04	1.5%
Rubicon Technology Partners II	76,000,000	108,232,082	2.29	40.9%
Rubicon Technology Partners III L.P.	100,000,000	80,463,177	1.11	16.0%
Rubicon Technology Partners L.P.	50,000,000	21,892,014	1.64	15.9%
Searchlight Capital III, L.P.	150,000,000	122,287,009	1.54	55.8%
Searchlight Partners II, L.P.	100,000,000	52,965,535	1.93	24.9%
SIF-Ascension I, L.P.	25,000,000	1,448,640	1.00	NA
Silicon Valley Bank Capital Partners III, L.P.	22,500,000	36,403,307	2.92	23.3%
Silicon Valley Bank Capital Partners IV	25,000,000	32,451,387	1.40	15.9%
Silicon Valley Bank Overage Fund	100,575,334	58,431,397	2.56	20.2%
Silicon Valley Bank SIF V, L.P.	125,000,000	305,360,773	6.15	29.0%
Silicon Valley Bank SIF V-A Opportunity, L.P.	55,000,000	228,929,930	7.56	33.1%
Silicon Valley Bank SIF VI-A	125,000,000	413,408,737	4.61	28.5%

Note: Manager IRR performance data is provided by Cambridge Associates.



# Private Equity Partnership Performance

As of December 31, 2021

Private Investments Partnerships	Commitment (\$)	Current NAV (\$)	TVPI	Net IRR
Silicon Valley Bank SIF VII, L.P.	125,000,000	394,227,322	4.08	33.8%
Silicon Valley Bank SIF VIII	100,000,000	260,255,598	3.35	45.6%
Silver Lake Partners IV, L.P.	100,000,000	211,597,480	2.91	28.8%
Silver Lake Partners V, L.P.	140,000,000	196,756,855	1.73	28.8%
Silver Lake Partners VI, L.P.	175,000,000	88,375,531	1.25	NA
Siris Partners III	75,000,000	0	1.22	8.6%
Siris Partners IV, L.P.	75,000,000	0	1.07	4.3%
Snow Phipps II, L.P.	50,000,000	0	1.37	14.6%
Strategic Investors Fund X, L.P.	75,000,000	39,641,842	1.22	40.0%
Stride Consumer Fund I, L.P.	50,000,000	3,187,730	0.75	NA
Summa Equity Fund II	29,887,712	44,418,501	1.65	85.7%
Summa Equity Fund III (No. 1) AB	48,942,236	0	NA	NA
Summit Partners Growth Equity Fund VIII-A, L.P.	125,000,000	0	1.52	32.0%
SVB Strategic Investors Fund IX, L.P.	75,000,000	113,982,882	2.05	52.6%
TA Associates XI, L.P.	100,000,000	0	1.55	19.7%
The Energy & Minerals Group Fund III, L.P.	85,000,000	45,793,812	0.64	-7.2%
The Rise Fund I, L.P.	25,000,000	29,869,167	1.65	21.9%
The Rise Fund II, L.P.	50,000,000	26,546,430	1.32	NA
Thoma Bravo Discover Fund II L.P.	75,000,000	113,364,667	1.94	41.7%
Thoma Bravo Discover Fund III, L.P.	100,000,000	78,482,511	1.05	NA
Thoma Bravo Discover Fund, L.P.	50,000,000	34,373,417	3.18	38.5%
Thoma Bravo Fund IX, L.P.	50,000,000	0	4.08	48.1%
Thoma Bravo Fund X, L.P.	100,000,000	0	4.05	39.2%

Note: Manager IRR performance data is provided by Cambridge Associates.

# Private Equity Partnership Performance

As of December 31, 2021

Private Investments Partnerships	Commitment (\$)	Current NAV (\$)	TVPI	Net IRR
Thoma Bravo Fund XI, L.P.	100,000,000	175,074,768	3.05	28.6%
Thoma Bravo Fund XIII, L.P.	150,000,000	217,593,290	1.78	47.6%
Thoma Bravo Fund XIV, L.P.	200,000,000	171,759,195	1.01	NA
Thoma Bravo Fund XV, L.P.	150,000,000	0	NA	NA
Thoma Bravo Overage Fund, L.P.	45,000,000	37,592,666	4.19	35.5%
Thoma Bravo Special Opportunities Fund II, L.P.	50,000,000	63,035,419	2.20	18.6%
Thoma Bravo XII	150,000,000	263,587,363	1.88	18.3%
Thoma Cressey Fund VIII, L.P.	50,000,000	0	2.93	18.3%
Thomas H. Lee Equity Fund V, L.P.	50,000,000	0	1.63	13.4%
Thomas H. Lee Equity Fund VI L.P.	75,000,000	0	1.89	12.3%
Tiger Iron Special Opportunities Fund II, L.P.	195,700,531	211,351,618	1.64	61.3%
Tiger Iron Special Opportunities Fund, L.P.	191,877,777	434,820,209	2.62	43.9%
TowerBrook Investors II, L.P.	75,000,000	0	1.88	9.8%
TowerBrook Investors III, L.P.	150,000,000	838,112	1.41	8.7%
TowerBrook Investors IV, L.P.	190,000,000	265,403,451	2.17	26.6%
TowerBrook Investors V, L.P.	200,000,000	108,655,210	1.12	16.0%
TPG Growth Fund II, L.P.	100,000,000	0	2.14	16.4%
TPG Growth Fund III, L.P.	100,000,000	78,242,634	1.79	22.4%
TPG Growth IV, L.P.	100,000,000	109,933,727	1.54	23.0%
TPG Growth V, L.P.	150,000,000	71,411,149	1.28	NA
TPG Partners IV, L.P.	50,000,000	0	1.89	14.3%
TPG Partners V, L.P.	100,000,000	0	1.18	2.6%
TPG Partners VI, L.P.	200,000,000	0	1.42	11.3%

Note: Manager IRR performance data is provided by Cambridge Associates.

# Private Equity Partnership Performance

## As of December 31, 2021

Private Investments Partnerships	Commitment (\$)	Current NAV (\$)	TVPI	Net IRR
Trident IX, L.P.	100,000,000	0	NA	NA
Trident V, L.P.	75,000,000	0	1.82	11.4%
Trident VI Fund, L.P.	75,000,000	84,949,903	2.28	23.7%
Trident VII, L.P.	75,000,000	122,081,537	1.77	24.8%
Trident VIII, L.P.	100,000,000	120,768,236	1.33	43.1%
Trive Capital Fund IV LP	75,000,000	7,543,959	0.92	NA
TrueBridge Capital FSA II, LLC	64,789,895	75,337,469	1.92	112.9%
TrueBridge Capital FSA, LLC	79,600,000	419,937,970	6.11	73.5%
TrueBridge Capital Partners Fund V, L.P.	100,000,000	248,086,297	2.88	69.0%
TrueBridge Capital Partners Fund VI, L.P.	100,000,000	103,224,519	1.61	95.6%
TrueBridge Capital Partners Fund VII, L.P.	75,000,000	3,415,219	0.91	NA
TrueBridge FLSBA Special Purpose, LLC	47,972,078	127,454,739	5.59	26.5%
TrueBridge Special Purpose II (F)	22,500,000	65,470,947	4.89	31.0%
Truebridge-Kauffman Fellows Endowment Fund IV	125,000,000	424,391,099	4.26	45.7%
TrueBridge-Kauffman Fellows Fund III, L.P.	125,000,000	337,630,002	3.97	24.7%
W Capital Partners III, L.P.	75,000,000	29,921,749	1.43	8.8%
Warburg Pincus China	68,000,000	95,966,182	1.70	18.5%
Warburg Pincus China-Southeast Asia II, L.P.	68,000,000	24,502,398	1.33	31.8%
Warburg Pincus Private Equity Fund XI, L.P.	200,000,000	109,573,174	1.77	12.7%
Warburg Pincus Private Equity Fund XII, L.P.	87,000,000	136,496,969	2.08	22.5%
Warburg Pincus Private Equity IX, L.P.	75,000,000	844,320	1.72	9.7%
Warburg Pincus Private Equity X, L.P.	150,000,000	3,688,491	1.80	9.5%
Waterland Private Equity Fund VII C.V.	113,659,612	105,290,271	1.53	34.5%

Note: Manager IRR performance data is provided by Cambridge Associates.

# Private Equity Partnership Performance

## As of December 31, 2021

<u>Private Investments Partnerships</u>	<u>Commitment (\$)</u>	<u>Current NAV (\$)</u>	<u>TVPI</u>	<u>Net IRR</u>
Waterland Private Equity Fund VIII C.V.	150,461,222	29,135,157	1.27	NA
Waterland Private Equity VI Overflow Feeder Fund L.P.	28,974,931	0	0.00	-100.0%
Waterland Private Equity VI, L.P.	61,110,432	57,288,907	2.23	27.5%
Wellspring Capital Partners III, L.P.	50,000,000	0	2.19	27.1%
Wellspring Capital Partners IV, L.P.	75,000,000	0	1.40	6.6%
Wellspring Capital Partners V, L.P.	150,000,000	0	1.57	16.3%
Willis Stein & Partners III, L.P.	100,000,000	0	1.01	0.1%
WindRose Health Investors V, L.P.	50,000,000	36,253,429	1.07	6.8%
WindRose Health Investors VI, L.P.	75,000,000	0	NA	NA
Wisteria Fund II Cayman, LP	36,709,035	1,468,083	0.68	NA

Note: Manager IRR performance data is provided by Cambridge Associates.



# Private Equity Partnership Performance

As of December 31, 2021

<u>Private Investments Partnerships (Legacy Portfolio)</u>	<u>Commitment (\$)</u>	<u>Current NAV (\$)</u>	<u>TVPI</u>	<u>Net IRR</u>
Corporate Partners, L.P.	149,192,410	0	2.13	12.4%
Liberty Partners Pool I	205,686,600	0	2.35	20.7%
Liberty Partners Pool II	359,789,821	0	1.61	10.7%
Carlyle Partners II, L.P.	200,000,000	0	2.30	20.1%
Centre Capital Investors II, L.P.	200,000,000	0	0.81	-4.1%
Ripplewood Partners, L.P.	100,000,000	0	1.74	13.6%
Hicks, Muse, Tate & Furst Equity Fund III, L.P.	200,000,000	0	0.89	-1.8%
Liberty Partners Pool III	506,208,481	0	1.02	0.4%
Cypress Equity Group Trust	15,000,000	0	2.15	16.1%
Thomas H. Lee Equity Fund IV, L.P.	100,000,000	0	0.87	-2.6%
Apollo Investment Fund IV, L.P.	250,000,000	0	1.52	6.8%
Hicks, Muse, Tate & Furst Equity Fund IV, L.P.	400,000,000	0	0.63	-8.8%
Willis Stein & Partners II, L.P.	40,000,000	0	0.58	-9.7%
TSG Capital Fund III, L.P.	100,000,000	0	0.54	-13.7%
Green Equity Investors III, L.P.	60,000,000	0	2.31	21.9%
Chartwell Capital Investors II, L.P.	50,000,000	0	1.34	4.7%
Liberty Partners Pool IV	195,075,745	0	0.67	-19.2%
Liberty Partners Pool V	329,664,359	0	1.14	2.7%
Liberty Partners Pool VI	595,484,687	13,000	0.86	-6.6%
Liberty Partners Pool VII	290,808,542	2,559,626	0.85	-7.1%
Liberty Partners Group II, L.P.	9,766,830	0	0.00	-100.0%

Note: Manager IRR performance data is provided by Cambridge Associates.

# Meeting of the Investment Advisory Council

## **Item 3. Private Equity Review**

*Sheila Ryan, Cambridge Associates*

*(See Attachment 3B)*



# STATE BOARD ADMINISTRATION OF FLORIDA

PRIVATE EQUITY UPDATE



# PORTFOLIO PERFORMANCE





## CA Client Private Investment Returns

FSBA consistently ranks above the median versus CA clients

	1 Year	3 Years	5 Years	10 Years
FSBA Total PE Asset Class Portfolio	56.6%	27.3%	23.4%	18.8%
Quartile Ranking	2nd	2nd	2nd	1st
FSBA PE Total Portfolio	56.6%	27.3%	23.3%	18.1%
Quartile Ranking	2nd	2nd	2nd	1st
S&P 500 AACR	29.4%	15.4%	16.2%	15.9%
MSCI ACWI AACR	27.4%	12.6%	13.2%	11.9%
Sample Size	654	625	563	470

### Prior Quarter Quartile Rankings

FSBA Total PE Asset Class Portfolio – 2Q21	2nd	2nd	2nd	1st
FSBA Total PE Asset Class Portfolio – 1Q21	1st	2nd	1st	1st
FSBA Total PE Asset Class Portfolio – 4Q20	1st	2nd	1st	1st

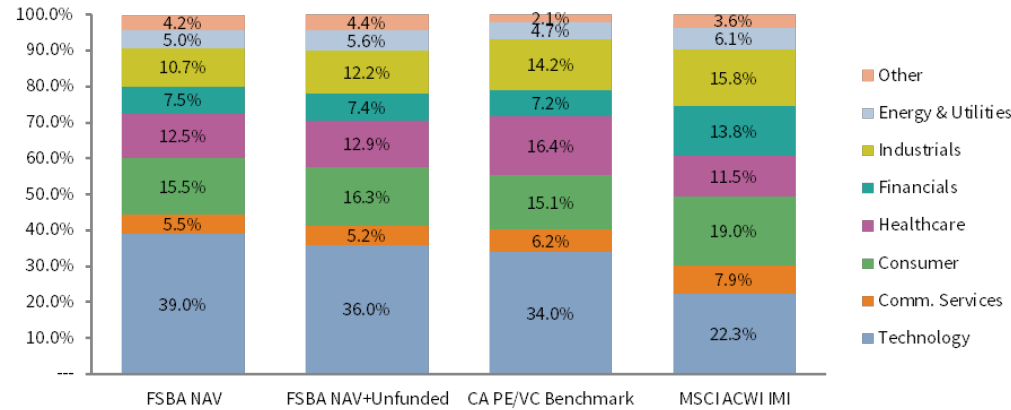
Sources: Cambridge Associates, LLC, S&P, MSCI

Notes: Data as of September 30, 2021. FSBA returns are compared to CA client returns. Client returns are End-to-End IRRs and the public index AACRs are calculated for the period ending 09/30/2021. Includes PI fund programs with a least 10 PI funds per portfolio who receive performance reports as of 09/30/2021. Terminated client returns are not included due to unavailability of data. The performance of CA's clients may be attributable to factors other than CA's advice. Similarly, client returns shown may include investments made prior to client's relationship with CA. Performance data is net of fees but has not been adjusted to reflect CA's advisory fees and other expenses that a client may incur.

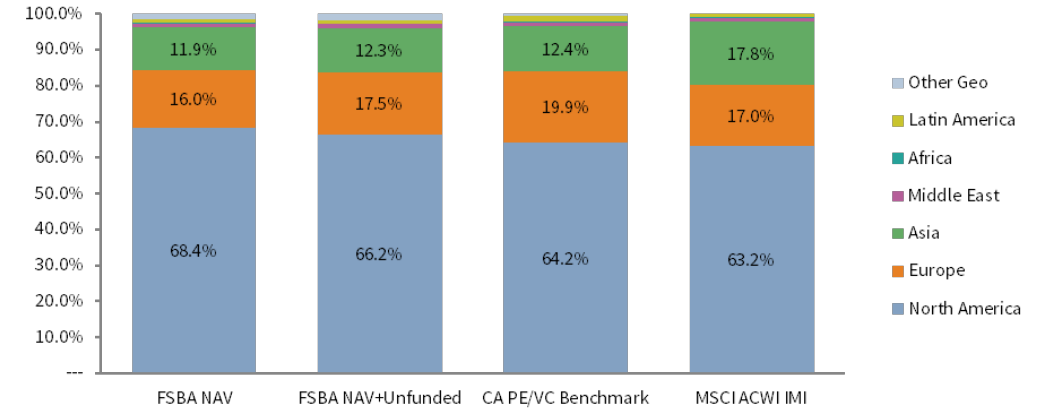
## Total Portfolio Snapshot

FSBA's portfolio is generally in line with the benchmark across sector, geography, stage and age of NAV. The program is slightly overweight to Technology and North America, while slightly underweight Health Care and Growth Equity.

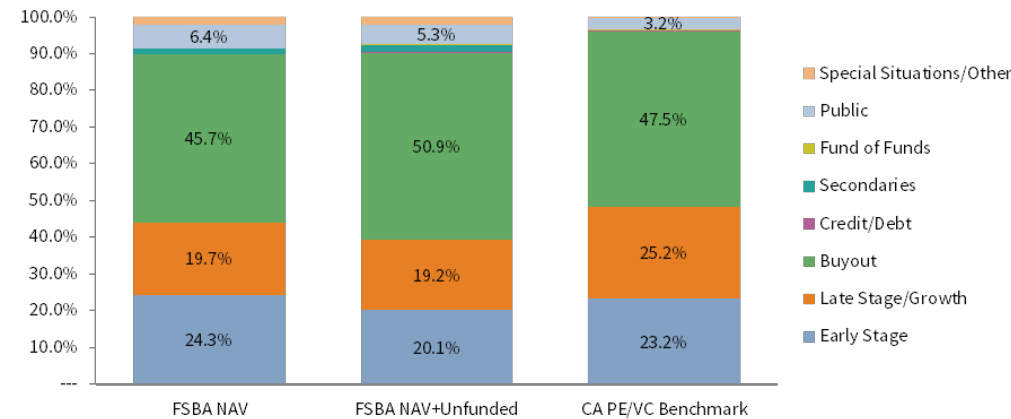
**PORTFOLIO EXPOSURES BY SECTOR**



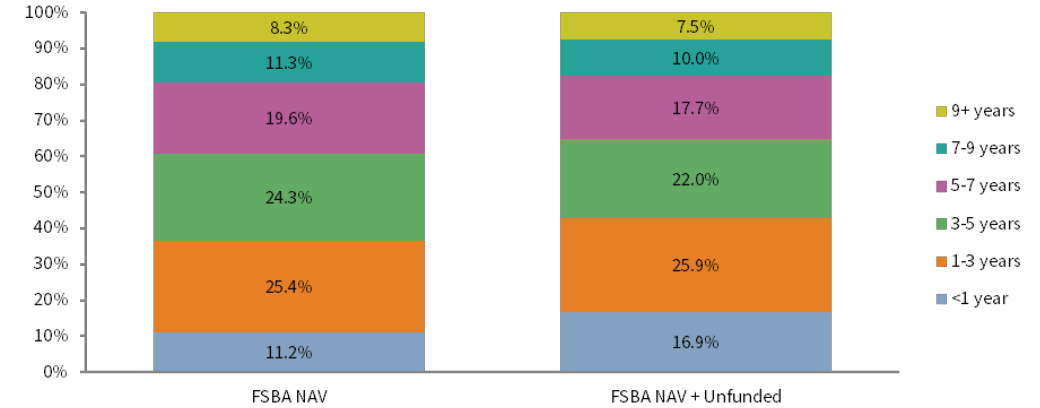
**PORTFOLIO EXPOSURES BY GEOGRAPHY**



**PORTFOLIO EXPOSURE BY STAGE**



**PORTFOLIO EXPOSURE BY AGE OF NAV**



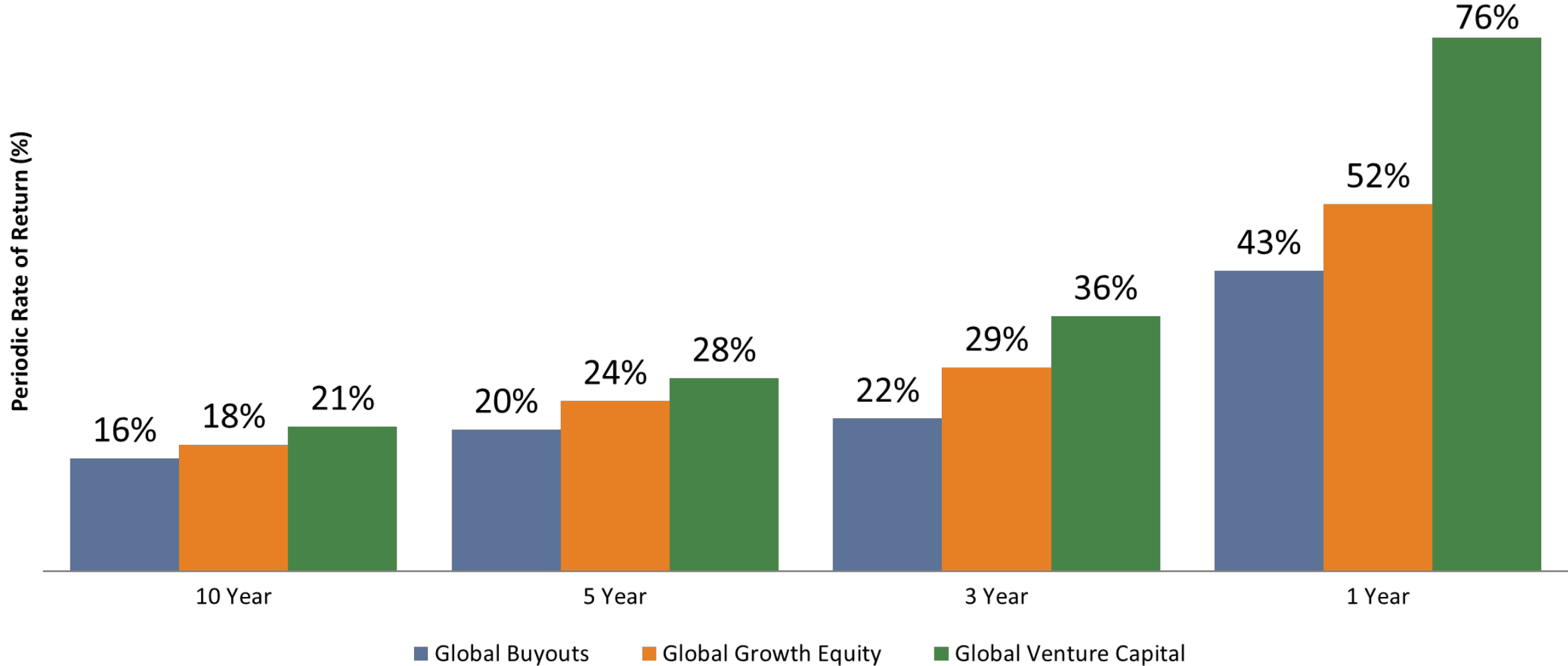
# CURRENT MARKET ENVIRONMENT



Returns have been soaring

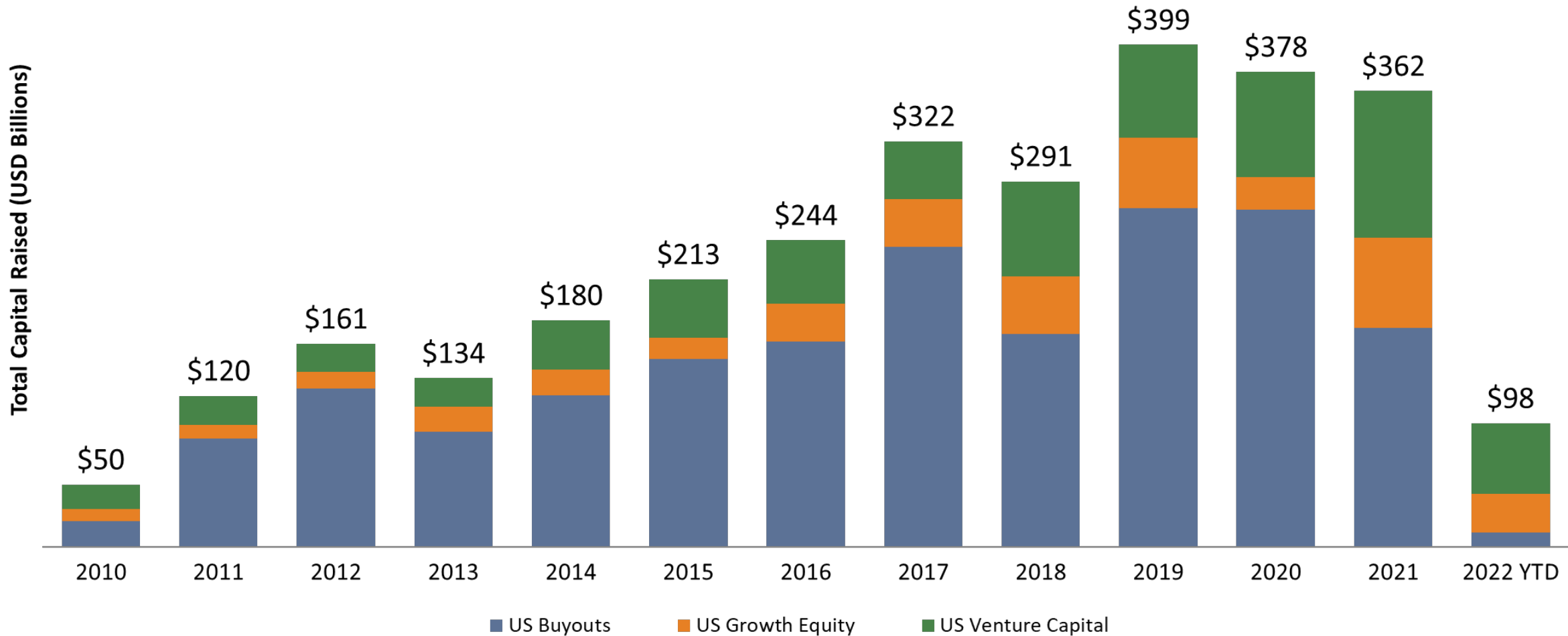
GLOBAL BUYOUTS, GROWTH EQUITY, AND VENTURE CAPITAL: PERIODIC RATES OF RETURN

As of September 30, 2021



# Fundraising in US at record Highs

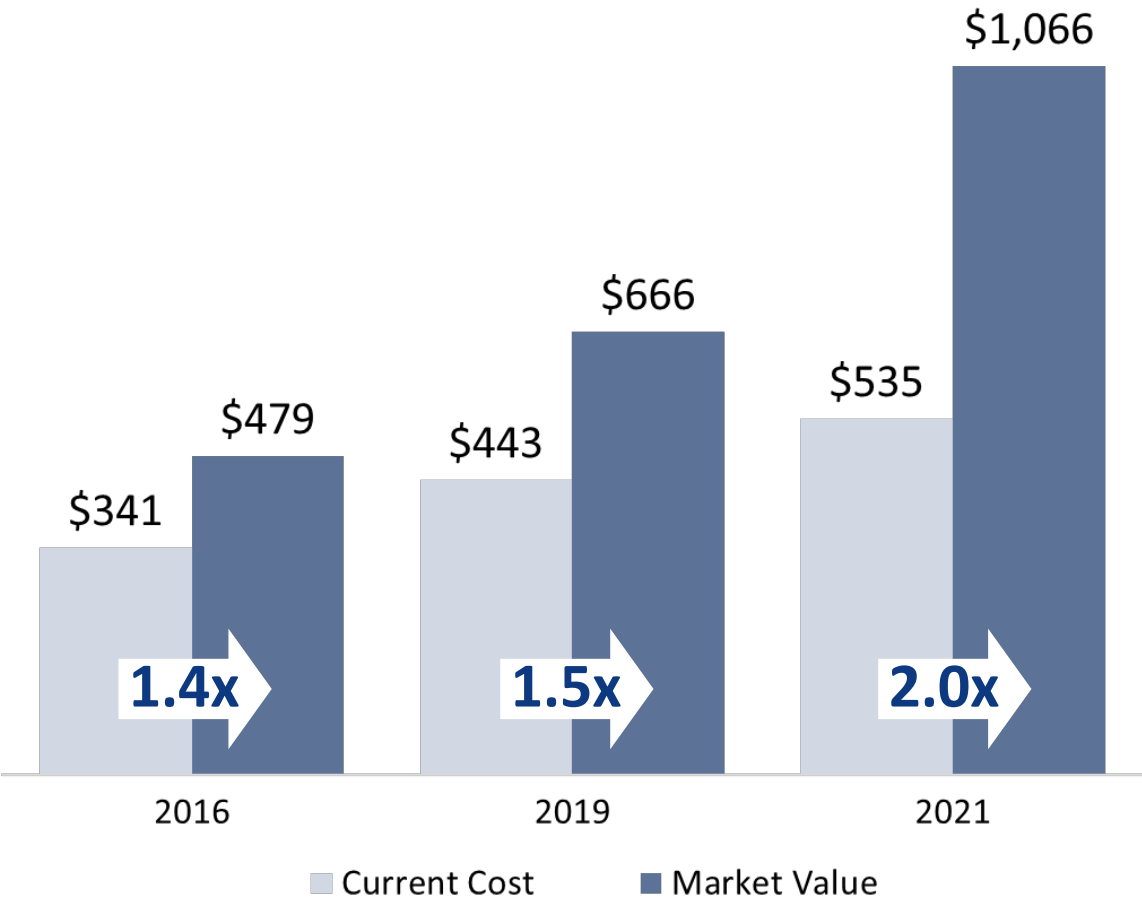
## US BUYOUTS, GROWTH EQUITY, AND VENTURE CAPITAL: ANNUAL FUNDRAISING 2010–2022 • USD



Unrealized valuations are raising return expectations

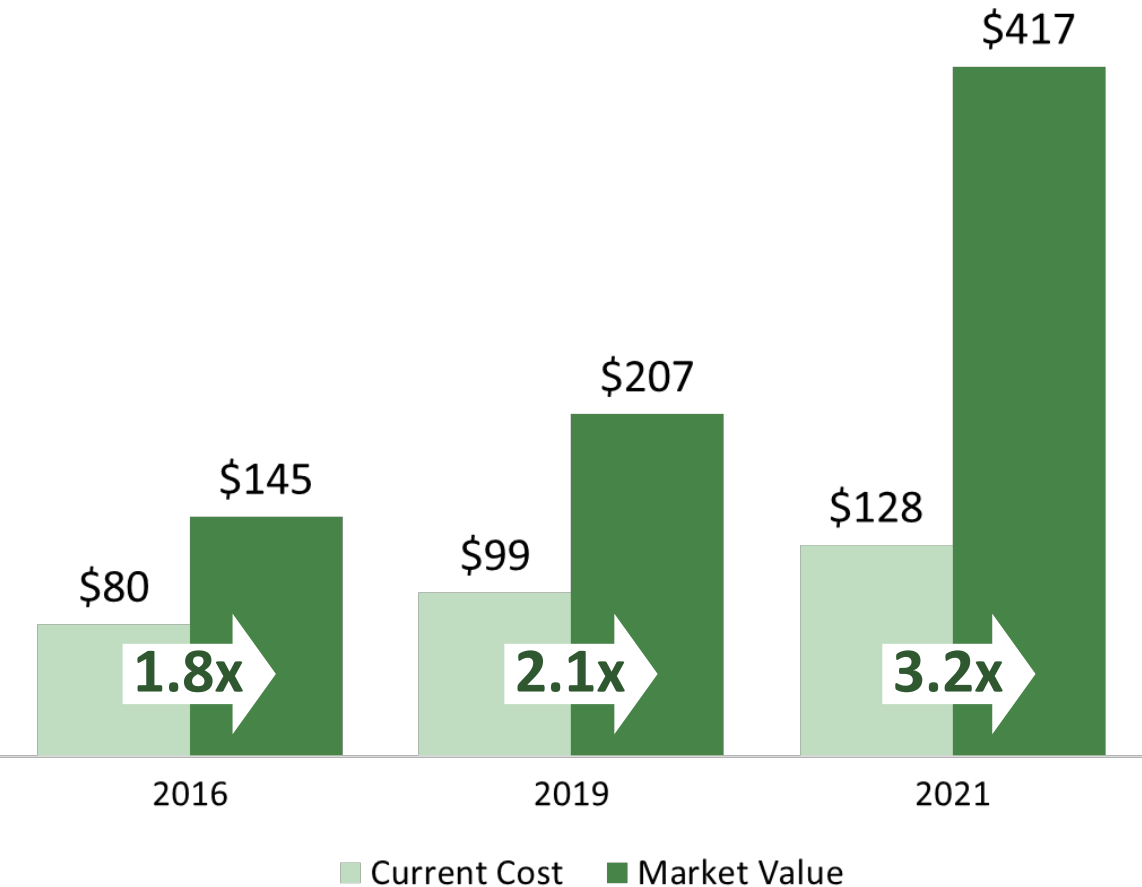
US PRIVATE EQUITY: IMPLIED RETURNS

As of September 30, 2021 • USD Billions



US VENTURE CAPITAL: IMPLIED RETURNS

As of September 30, 2021 • USD Billions

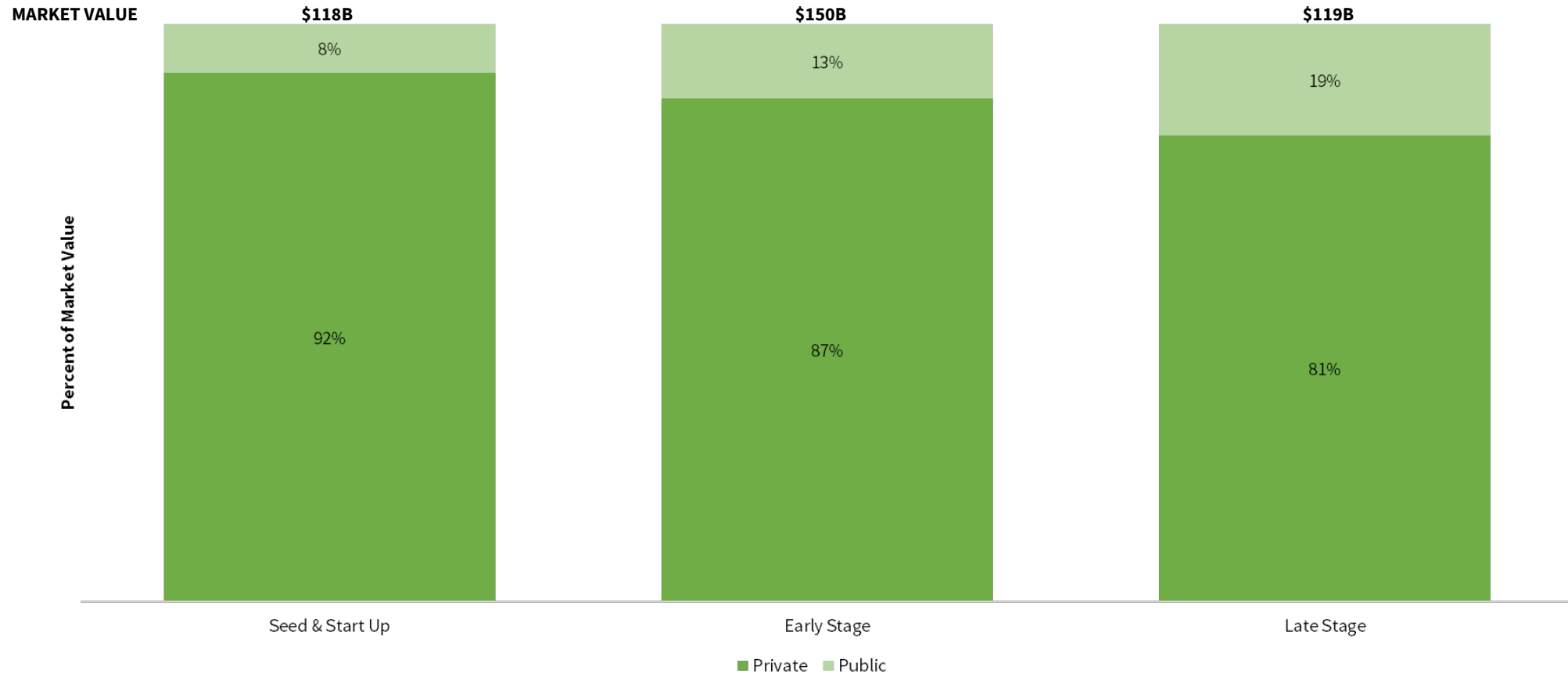


Source: Cambridge Associates LLC.  
Notes: Based on the total current cost and market value of unrealized investments made by US venture capital and US private equity funds as of each time period. Private equity includes buyout and growth equity funds. 2016 and 2019 current cost and market value are as of December 31 for each respective year. 2021 figures are as of September 31, 2021.  
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In USVC, the later the stage, the greater the public exposure

## USVC: PUBLIC AND PRIVATE MARKET VALUE EXPOSURE BY INITIAL STAGE OF INVESTMENT

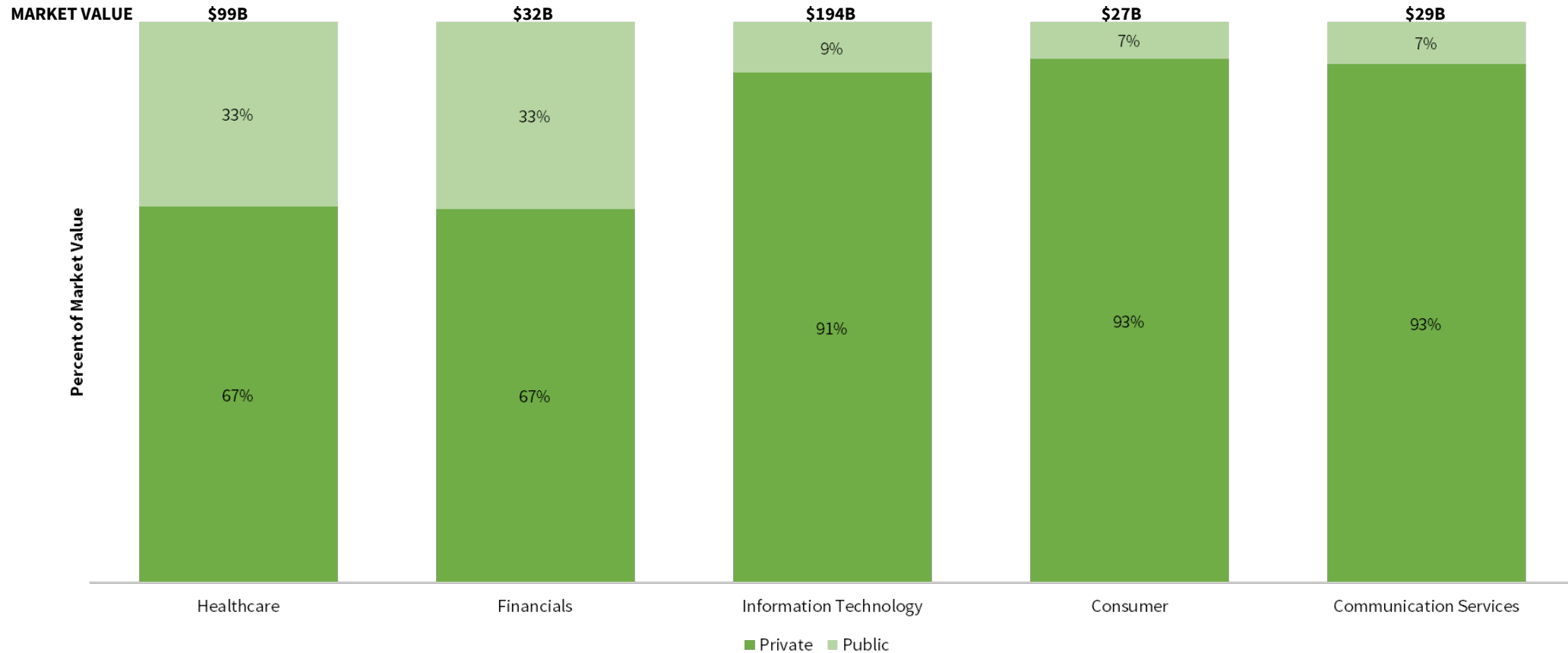
As of September 30, 2021



By sector, healthcare has the highest exposure to public companies....

## USVC: PUBLIC AND PRIVATE MARKET VALUE EXPOSURE BY SECTOR

As of September 30, 2021

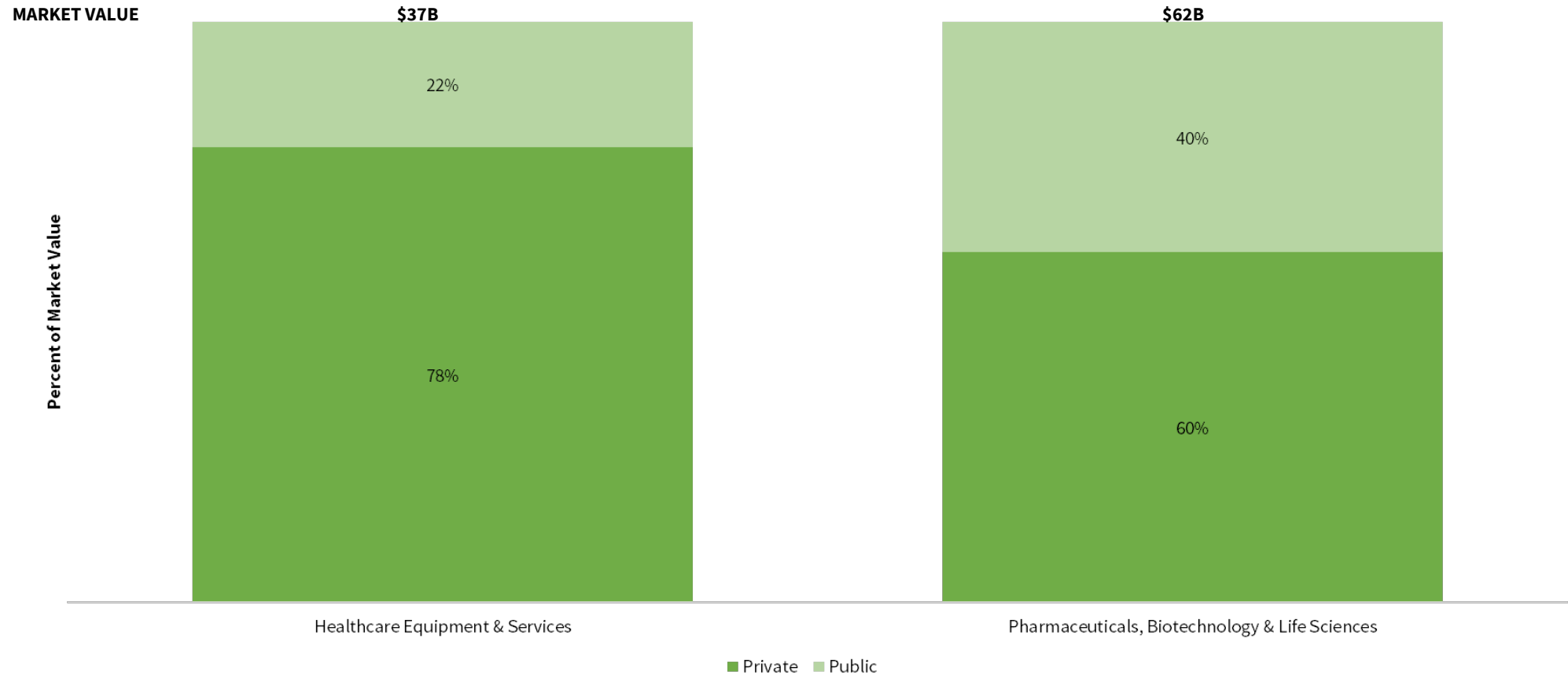




....And that exposure is mostly to biotech

## USVC HEALTHCARE: PUBLIC AND PRIVATE MARKET VALUE EXPOSURE BY INDUSTRY GROUP

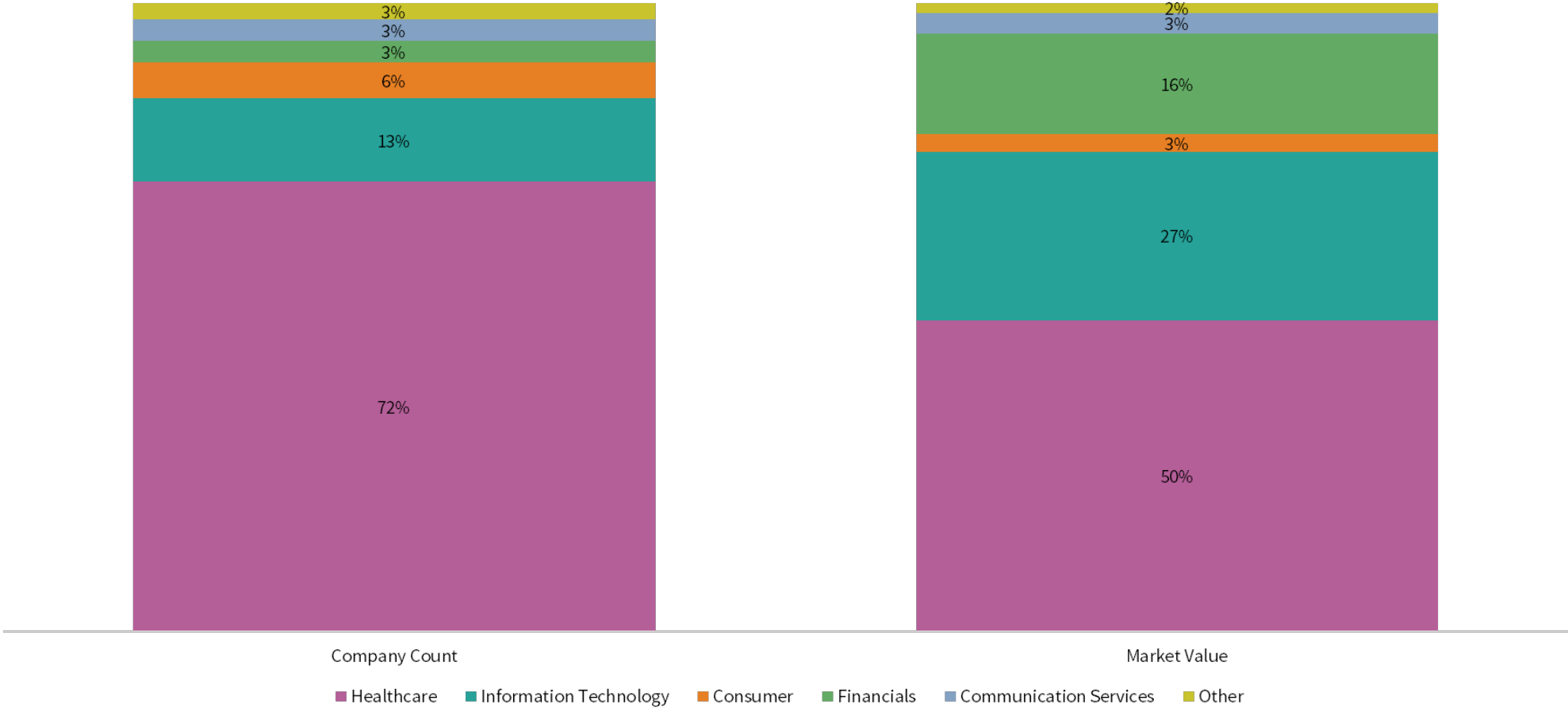
As of September 30, 2021



Within USVC, public companies are mostly healthcare

USVC: PUBLIC COMPANY EXPOSURE BY SECTOR

As of September 30, 2021



Source: Cambridge Associates LLC.  
Notes: Data represent the current market value for active companies in the US Venture Capital index; includes companies that were public as of September 30, 2021. The Global Industry Classification Standard (GICS®) was developed by and is the exclusive property and a service mark of MSCI Inc. and S&P Global Market Intelligence LLC and is licensed for use by Cambridge Associates LLC. "Consumer" includes Consumer Staples and Consumer Discretionary.

# Meeting of the Investment Advisory Council

## Item 4. Florida Growth Fund Review

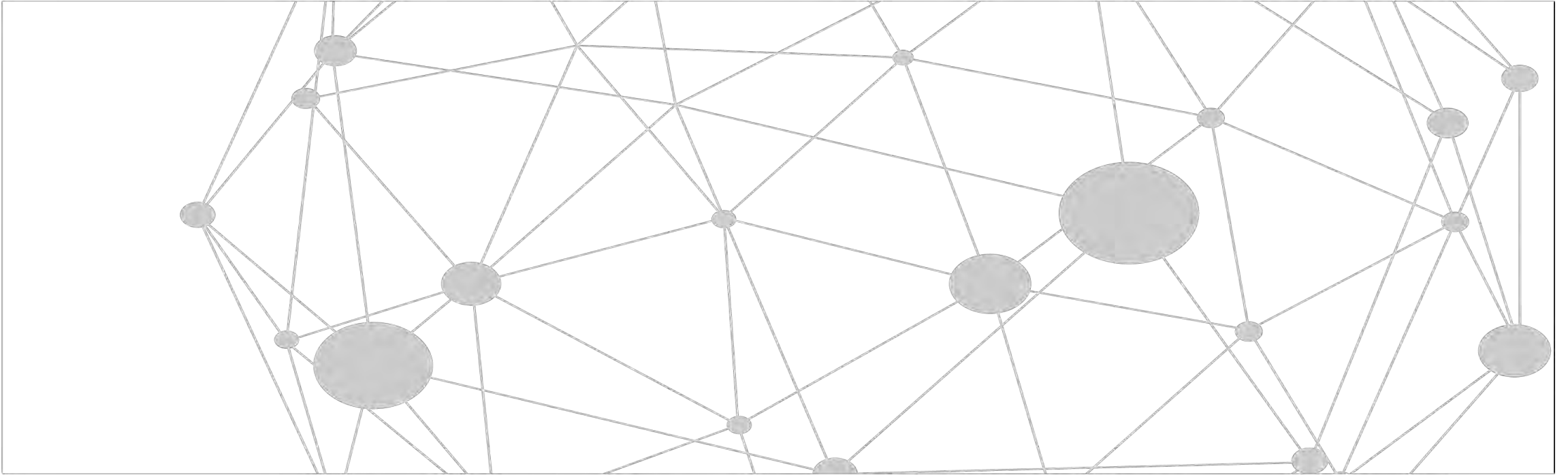
*Sheila Ryan, Cambridge Associates*

*(See Attachment 4)*



# FLORIDA GROWTH FUND PROGRAM REVIEW

FSBA IAC MEETING



## FGF Program Overview

- SBA authorized to invest up to 1.5% of net trust fund assets in technology and growth businesses either domiciled in Florida or having a principal address in Florida
- Investments can be in the form of private equity funds and/or direct co-investments
  - Fund investments require either the GP to be based in FL or investing significantly in FL
  - For co-investments, companies must be either based in or have a significant portion of their business in FL
- To date, the program is comprised of 3 funds across 6 tranches managed by 2

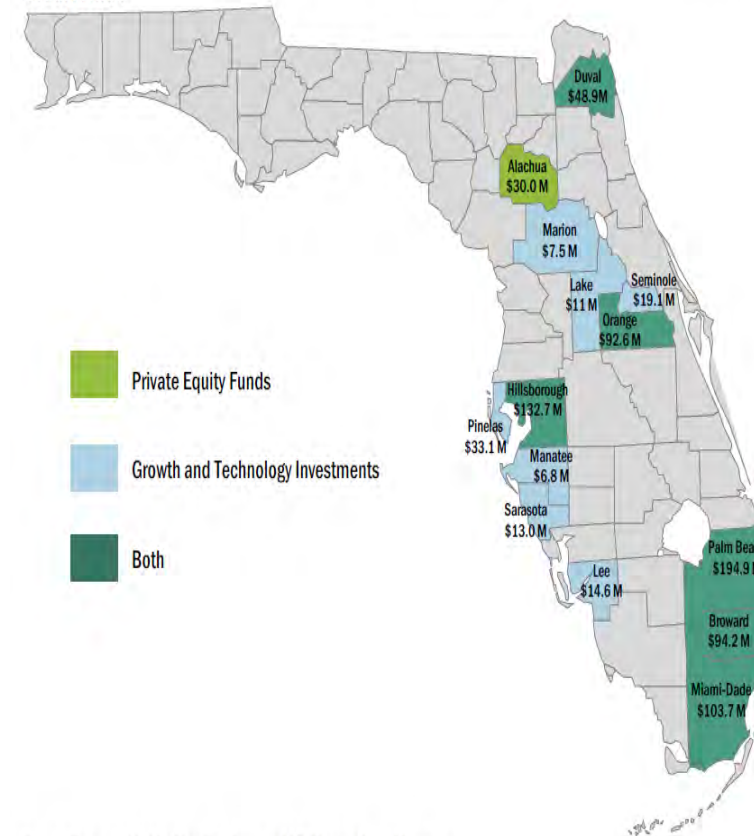
	Year Established	Fund Size at Inception (in millions)	Fund Manager
<b>Florida Growth Fund I</b>			
Tranche I	2009	\$250.0	Hamilton Lane
Tranche II	2012	\$150.0	Hamilton Lane
Credit Tranche	2014	\$100.0	Hamilton Lane
<b>Total</b>		<b>\$500.0</b>	
<b>Florida Growth Fund II</b>			
Tranche I	2015	\$250.0	Hamilton Lane
Tranche II	2019	\$125.0	Hamilton Lane
<b>Total</b>		<b>\$375.0</b>	
<b>Florida Sunshine State Fund</b>			
Tranche A	2019	\$125.0	J.P Morgan Asset Management
Tranche B	2022	\$250.0	J.P Morgan Asset Management
<b>Total</b>		<b>\$375.0</b>	

Positive impact of the FGF program to date

■ **Results as outlined in the Jan 2022 OPPAGA report**  
(reflective of data as of 6/30/21):

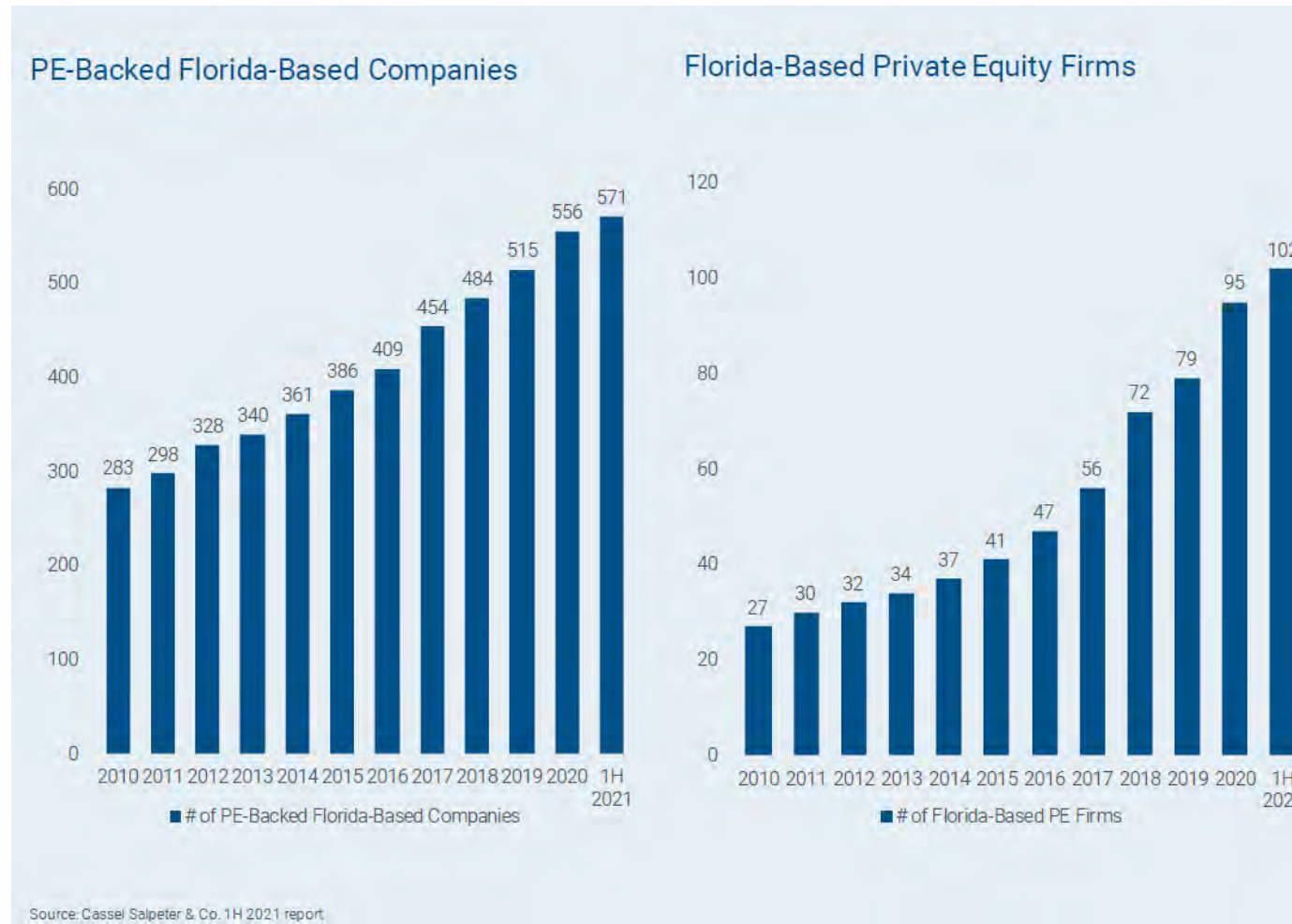
- Program has made \$809.5M investments in 69 technology and growth companies and 46 private equity funds
- 14 Florida counties included
  - Wide range from \$6.8M in Manatee County to \$194.9M in Palm Beach County
- 23,658 Florida jobs created by companies who received funds
  - Wages paid ranged from \$21K to \$118K, compares favorably to state's average wage of \$50K
- \$1.6Bn in cap ex since inception with \$88M in the last fiscal year ending 6/30/21
- \$674M+ in distributions from fund inception thru 6/30/21

The Majority of \$802.1 Million in Florida Growth Fund Program In-State Investments Are Located in Central and South Florida



Source: Data provided by Hamilton Lane and J.P. Morgan Asset Management

## Opportunity set in FL continues to grow



## Status Update

- Hamilton Lane was the sole manager of the program until 12/2018 when JP Morgan Asset Management was added
  - Adding a second manager allows the SBA to diversify the manager exposure, broaden the pipeline of opportunities and has resulted in more competitive fees
- Hamilton Lane has invested \$756 M to date, distributed \$658 M, resulting in current net exposure of \$98M, as of June 30, 2021.
  - HL has committed client capital alongside 42.5% of deals in FGF II
- JPMAM has committed its first tranche of \$125M (2019 vintage) and recently closed on a second tranche, Tranche B, for \$250M.
  - JPMAM has committed client capital alongside 85% of deals in the FSSF



## Performance

- Performance to date has been solid, however FGF I (Tranche I & II) and FGF II (Tranche I) have underperformed relative to the benchmark of Russell 2000 + 300 bps.
  - Net dollar exposure, after distributions, to FGF is ~\$98 million
- Performance for FGF II, Tranche II and FSSF remains young, given the 2019 inception date

AS OF 6/30/2021

	COMMITTED	INVESTED	REALIZED	NET MOIC	DPI	NET IRR	PME <sup>1</sup>	OUT/UNDER PERFORMANCE
FGF I - TRANCHE I (2009)	\$ 238.6	\$ 234.3	\$ 305.6	1.70	1.30	11.8%	11.8%	0.0%
FGF I - TRANCHE II (2012)	\$ 146.0	\$ 150.0	\$ 145.7	1.76	0.97	12.6%	11.4%	1.2%
CREDIT TRANCHE (2014)	\$ 106.0	\$ 103.8	\$ 98.1	1.22	0.95	8.0%	3.9%	4.1%
<b>COMBINED RESULTS - FGF I</b>	<b>\$ 490.6</b>	<b>\$ 488.1</b>	<b>\$ 549.4</b>	<b>1.61</b>	<b>1.13</b>	<b>11.7%</b>		
FGF II - TRANCHE I (2015)	\$ 236.5	\$ 208.3	\$ 107.4	1.47	0.52	12.9%	15.6%	-2.7%
FGF II - TRANCHE II (2019)	\$ 86.8	\$ 59.6	\$ 1.1	1.35	0.02	35.7%	33.0%	2.7%
<b>COMBINED RESULTS - FGF II</b>	<b>\$ 323.3</b>	<b>\$ 267.9</b>	<b>\$ 108.5</b>	<b>1.44</b>	<b>0.41</b>	<b>14.2%</b>		
COMBINED EXPOSURE	\$ 813.9	\$ 756.0	\$ 657.9					
FLORIDA SUNSHINE STATE FUND								
TRANCHE I (2019)	\$ 96.1	\$ 56.7	\$ 4.2	1.50	NM	35.1%	32.3%	2.8%

## Conclusion

- Program has been successful at achieving strategic objectives
- Current allocation represents 0.33%\* of trust assets vs. target of 1.5%, as of June 30, 2021
- The market opportunity set continues to grow as more PE firms relocate to FL
- Performance has been solid, however underperforming the PME + 300bps objective for the more seasoned FGF tranches (excluding the FGF credit tranche)
- Diversifying exposure across 2 managers has been beneficial in terms of widening exposures, differentiated deal flow, increasing GP/LP alignment, and improving fee structure



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# Meeting of the Investment Advisory Council

## Item 5. Florida Retirement System Investment Plan Review

*Dan Beard, Chief of Defined Contribution Programs*

*Mini Watson, Director of Administration*

*Walter Kelleher, Director of Educational Services*

*(See Attachment 5A)*



# **FLORIDA RETIREMENT SYSTEM (FRS) INVESTMENT PLAN and MyFRS FINANCIAL GUIDANCE PROGRAM**



# FRS INVESTMENT PLAN REVIEW

## **Office of Defined Contribution Programs**

Daniel Beard, Chief of Defined Contribution Programs

Mini Watson, Director of Administration

Walter Kelleher, Director of Educational Services

Investment Advisory Council Meeting

June 2022



# FRS PENSION PLAN AND INVESTMENT PLAN

The State of Florida offers public employees the option to participate in one of two retirement plans.

## Traditional Defined Benefit Plan- Pension

- Funded by mandatory employer and employee contributions
- Has been in existence since 1970
- Assets: \$197.7 B (as of 3/31/22)

## 401(a) Defined Contribution Plan- Investment

- Funded by mandatory employer and employee contributions
- Has been in existence since July 2002
- Assets: \$14.6 B (as of 3/31/22)



# PENSION PLAN AND INVESTMENT PLAN

- New employees, at the time of hire, choose to enroll in one of the two FRS Plans – the Pension Plan or Investment Plan.
- The Division of Retirement within the Department of Management Services is responsible for the day-to-day administration of the Pension Plan.
- The State Board of Administration (SBA) is responsible for the day-to-day administration of the Investment Plan.
  - All major components – recordkeeping, custodian services, benefit payments are outsourced as mandated by Florida Statutes.





# GOVERNANCE

- Section 121.4501 – Florida Legislature passed legislation in 2000 mandating the establishment of a defined contribution plan under the FRS. It also included provisions for an educational component for ALL FRS employees.
  - Directed that the State Board of Administration Trustees (Trustees) would be the responsible governing entity.
- Executive Director & Chief Investment Officer (ED & CIO)
  - Delegated authority by Trustees to oversee the implementation and ongoing oversight of the Investment Plan.
- Deputy Executive Director
  - Provide guidance and input on Investment Plan administration and investment funds.



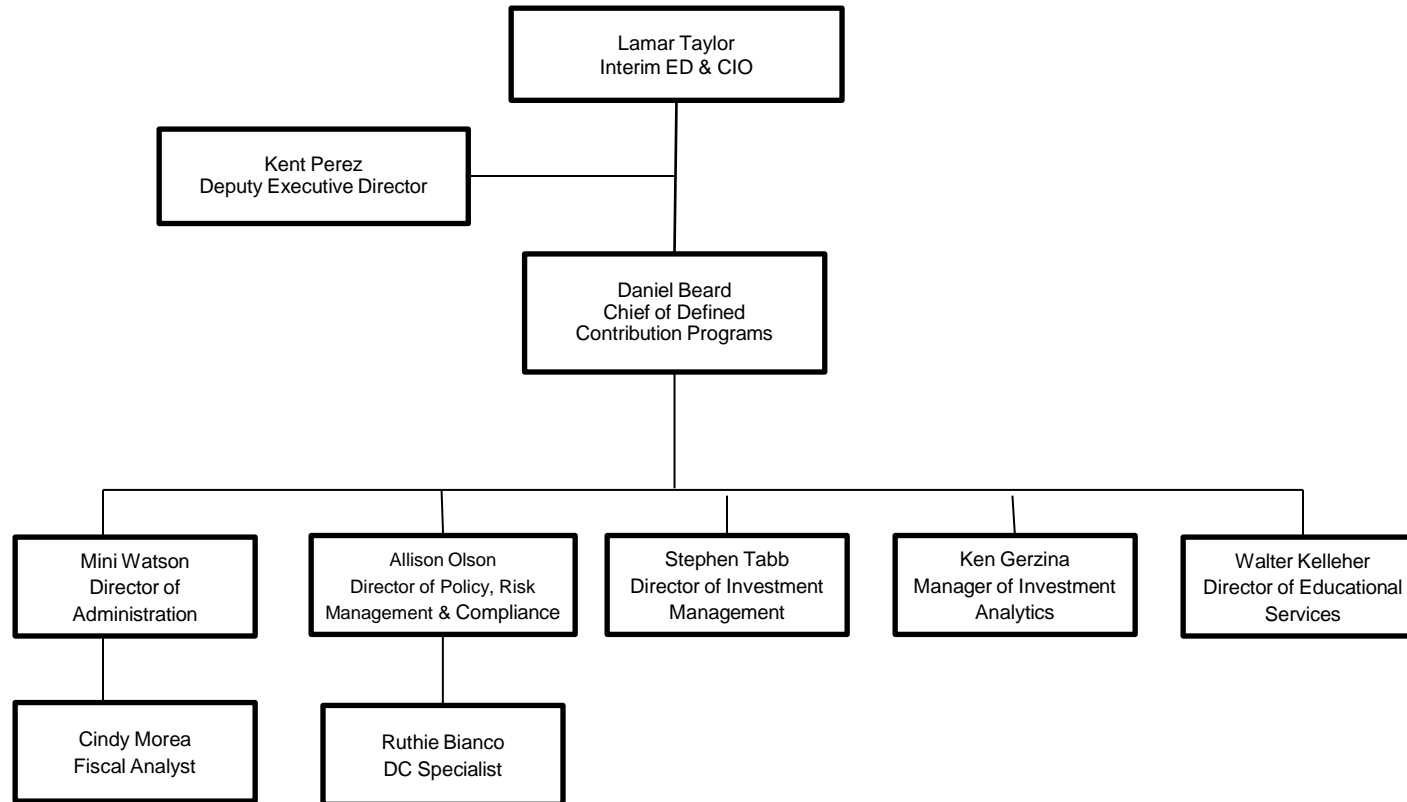
# GOVERNANCE (continued)

- Chief of Defined Contribution Programs
  - Delegated authority by ED & CIO to oversee the administrative duties and responsibilities for the contract management of all service providers for the Investment Plan and the Financial Guidance Program.
- Investment Advisory Council (IAC)
  - Sections 121.4501(12) and (14) – states role of the IAC to the Investment Plan:
    - Assist the SBA with administering the Investment Plan.
    - May provide comments on recommendations on providers and investment products.
    - Will review any proposed changes to the Investment Policy Statement and present the result of the review to the Trustees.



# OFFICE OF DEFINED CONTRIBUTION PROGRAMS

## Organizational Chart



# FLORIDA RETIREMENT SYSTEM

(as of March 31, 2022)

<b>Participating Employers</b> <ul style="list-style-type: none"> <li>• State Agencies – 45</li> <li>• State Universities - 12</li> <li>• County Agencies – 396</li> <li>• School Boards – 67</li> <li>• State Colleges – 28</li> <li>• Cities – 180</li> <li>• Independent Hospitals – 2</li> <li>• Special Districts – 153</li> <li>• Charter Schools – 93</li> <li>• Other – 12</li> </ul>	<b>988</b> <b>Total Employers</b>
---	--------------------------------------

Plan	Members	Retirees
Investment Plan – 1 year vesting (Defined Contribution)	272,274	174,119
Pension Plan – 8 year vesting (Defined Benefit)	452,721	473,851



# OVERVIEW OF THE INVESTMENT PLAN ADMINISTRATION

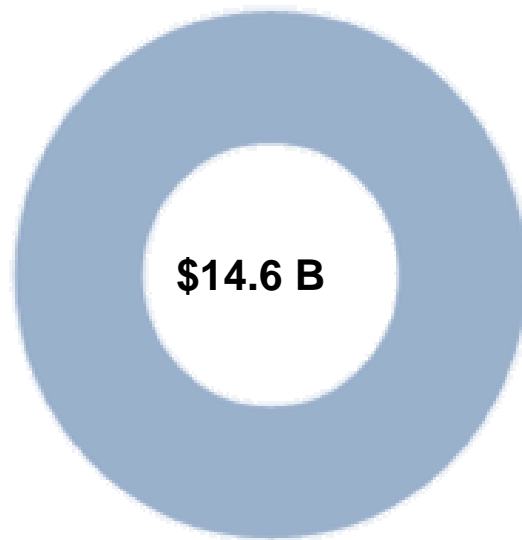
**Mini Watson**  
**Director of Administration**



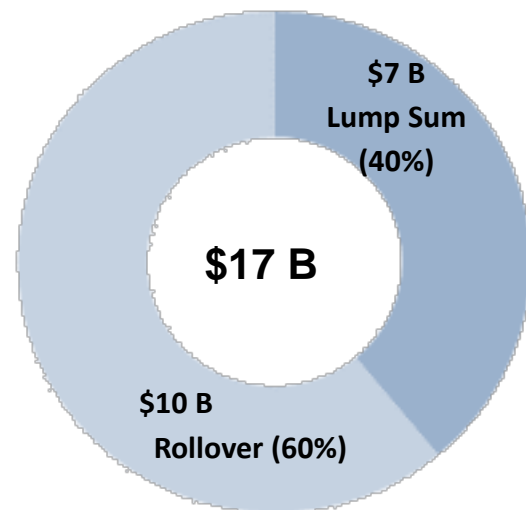
# FRS INVESTMENT PLAN SNAPSHOT

(Inception to March 31, 2022)

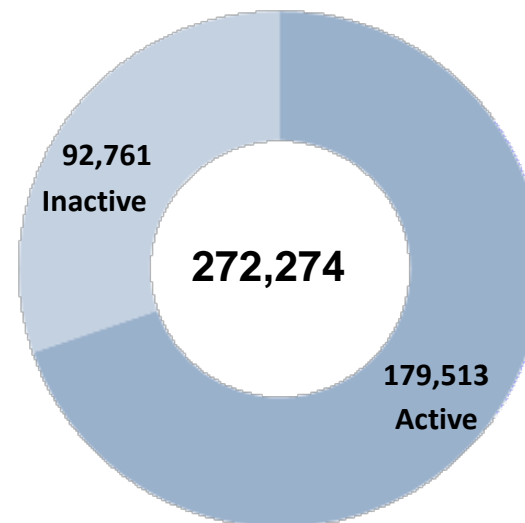
## Assets



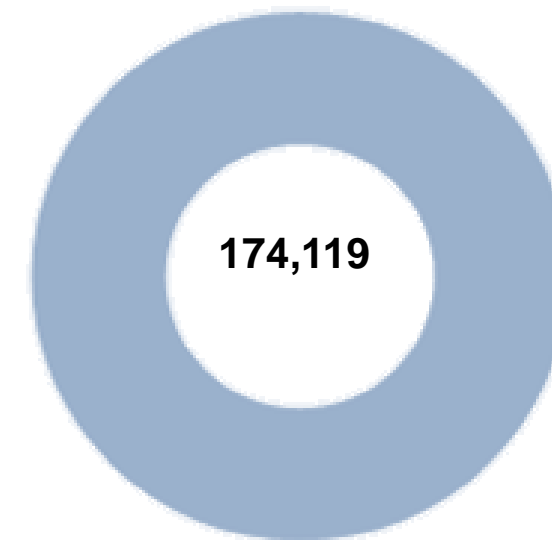
## Distributions



## Members



## Retirees



## Average Statistics

Female 64%    Male 36%

Age 46

\$53,577 balance

5 years of service



# INVESTMENT PLAN SERVICE PROVIDERS

## Alight Solutions

- FRS Plan Choice Administrator/Choice Service Provider
- Investment Plan Administrator (record keeper)
- Self Directed Brokerage Account (SDBA) provider

## BNY Mellon

- Investment Plan Custodian Bank
- Benefit Disbursements
- Custody Separate Accounts

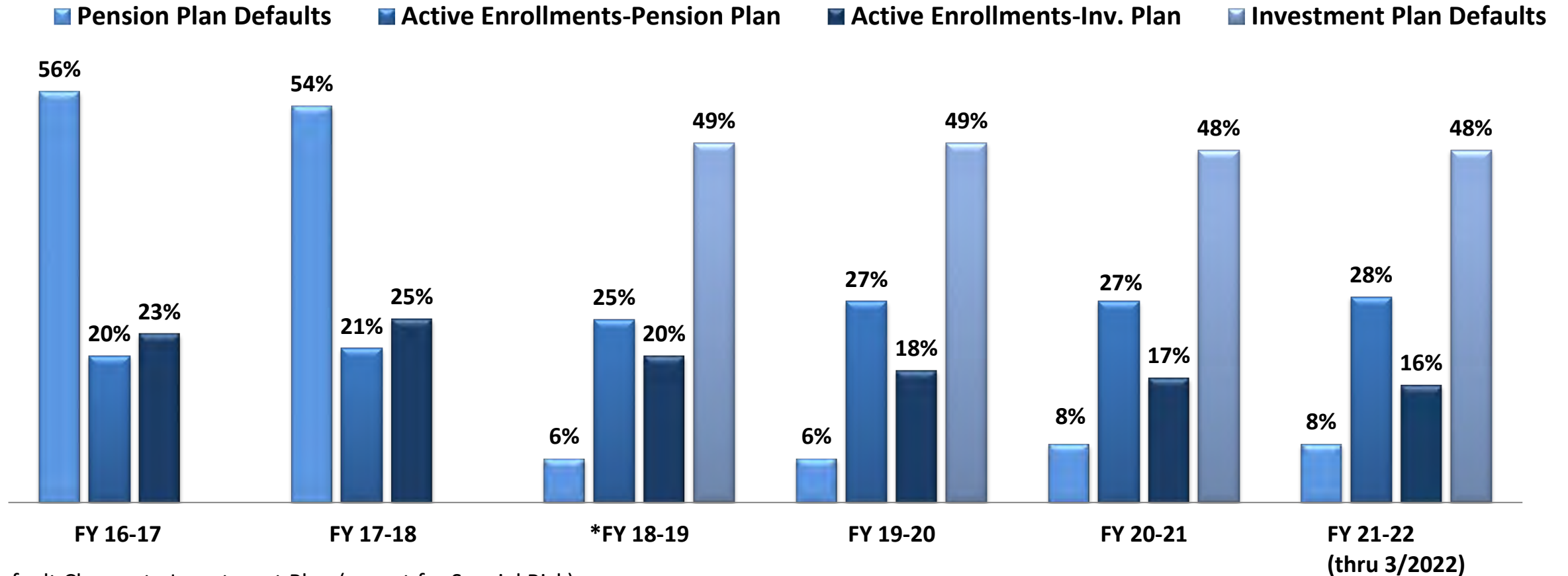
## Division of Retirement

- Pension Plan Administrator
- Retirement payroll reporting
- Health Insurance Subsidy (HIS) Program
- Disability and In-Line of Duty death benefits for the Investment Plan



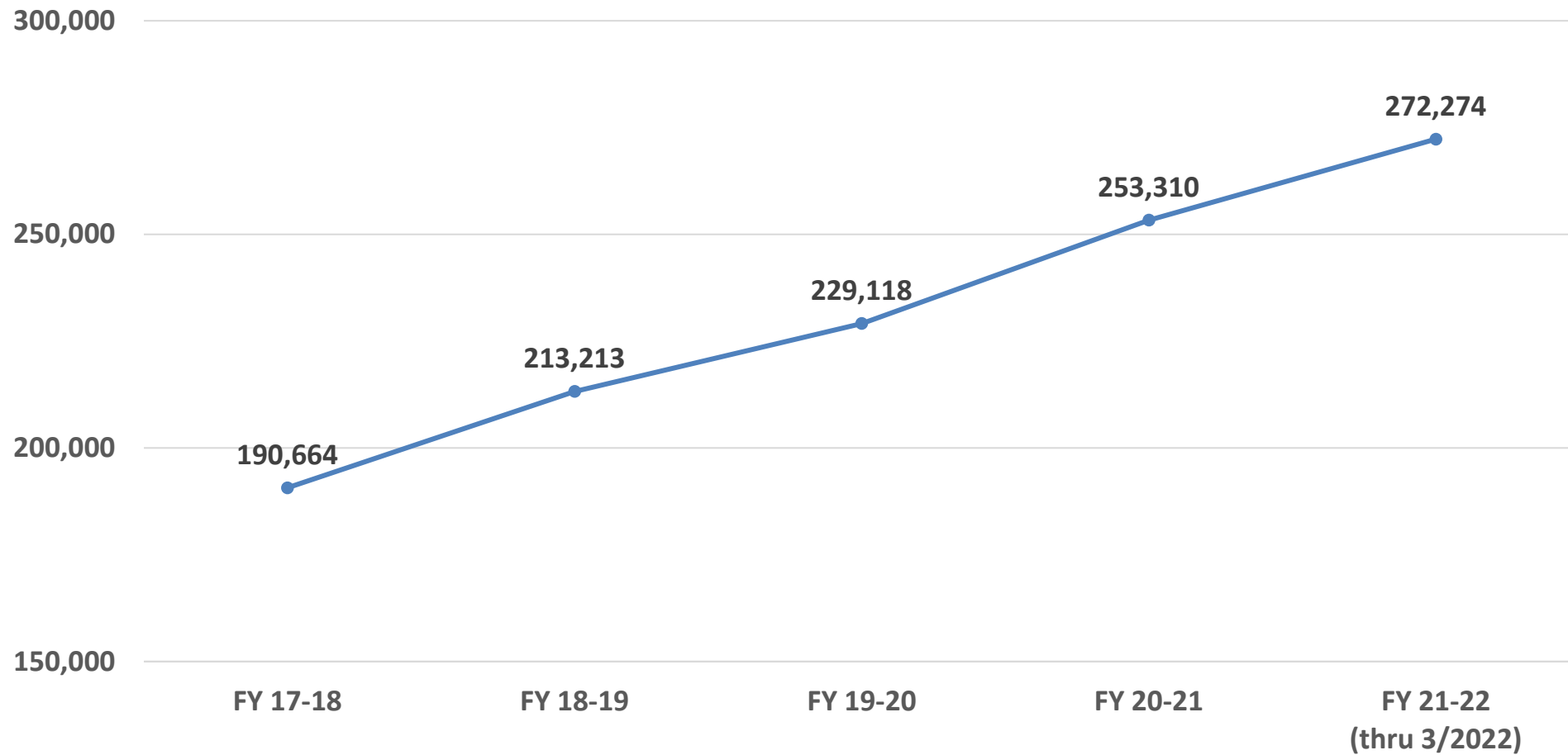
# PLAN CHOICE STATISTICS

(as of March 31, 2022)



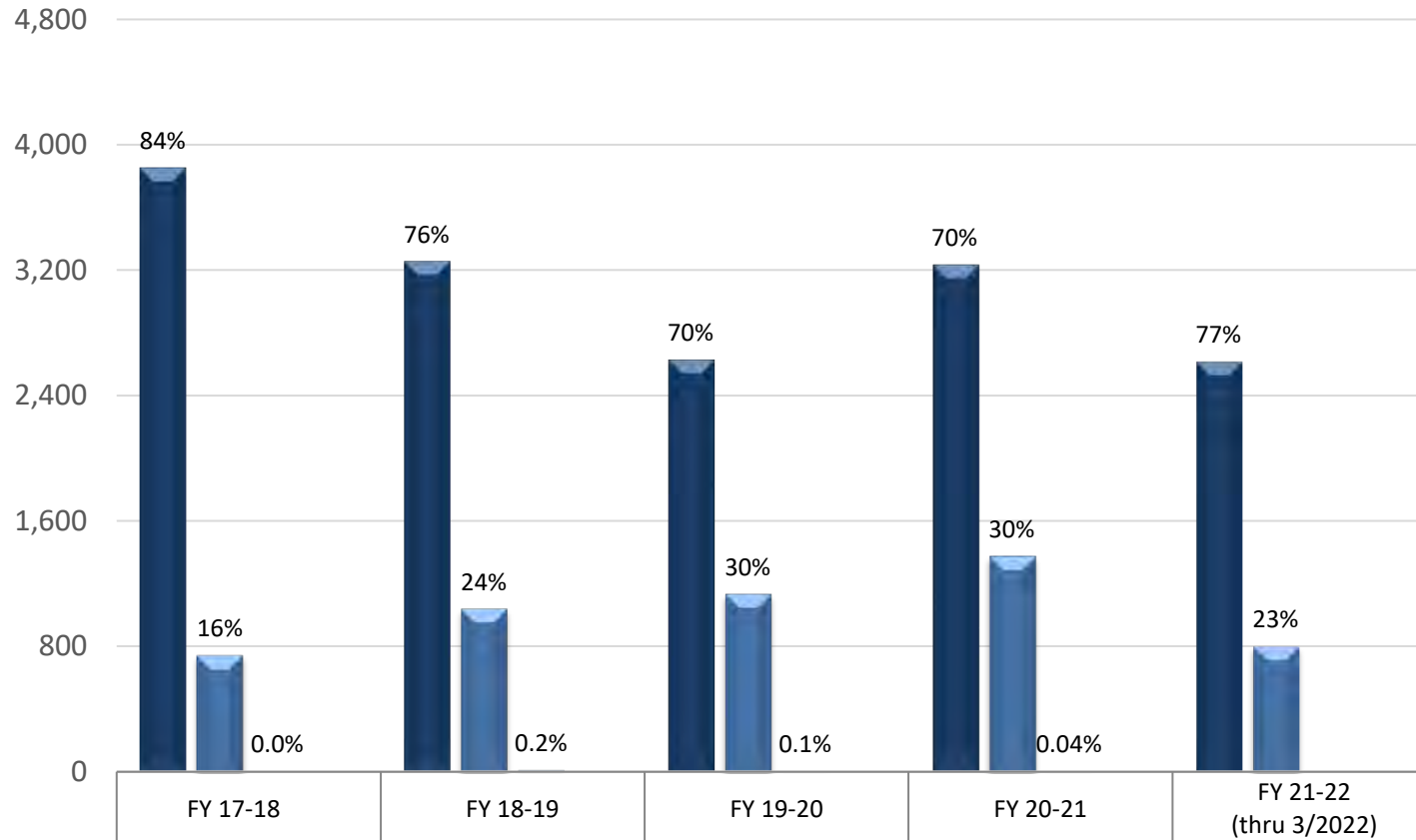


# INVESTMENT PLAN MEMBERSHIP GROWTH



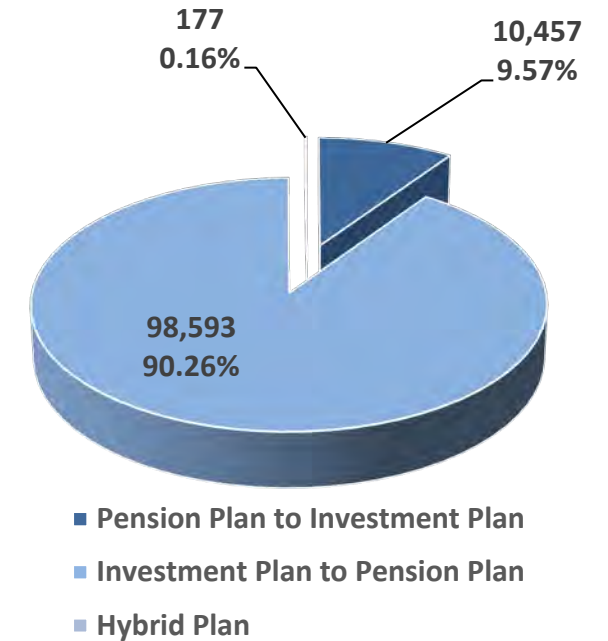
# 2<sup>nd</sup> ELECTION STATISTICS

(as of March 31, 2022)



■ Pension Plan to Investment Plan	3850	3253	2628	3231	2613
■ Investment Plan to Pension Plan	742	1036	1130	1370	796
■ Hybrid Plan	0	8	2	2	0
Total	4,592	4,297	3,760	4,603	3,409

## Inception to Date



# ADMINISTRATION STATISTICS

(July 2021 through March 2022)

## Alight Solutions

- Processed **1,760,747** member contributions postings totaling **\$483 M**
- Sent an average of **268,407** quarterly statements
- Generated **1,743,559** personalized communications
- Received **72,519** telephone calls

## BNY Mellon

- Mailed **12,093** distribution checks
- Direct deposited **41,093** distribution payments
- Assets under custody **\$14.6 B**

# REQUESTS FOR INTERVENTION

- **Total Complaints Fiscal Year to March 31, 2022: 376**
- **Total Complaints Inception (July 2002) to Date: 6,363**
- **Top 5 Reasons for Filing Complaint:**
  - Terminated Employment Prior to Election Receipt
  - Requesting 3<sup>rd</sup> Election
  - Distribution (Hardship/Emergency)
  - Dispute of First Election
  - Did Not Earn Salary/Service Credit the Month Election was Received



# OVERVIEW OF THE FINANCIAL GUIDANCE PROGRAM

**Walter Kelleher**  
**Director of Educational Services**



# FINANCIAL GUIDANCE PROGRAM SERVICE PROVIDERS

## EY

- Financial planners
- Provide unbiased financial planning guidance via telephone\chats
- Conduct retirement/financial planning workshops

## GuidedChoice

- Online personal ADVISOR SERVICE

## Alight

- Design, printing, focus groups
- Online 1<sup>st</sup> & 2<sup>nd</sup> Election Choice Services

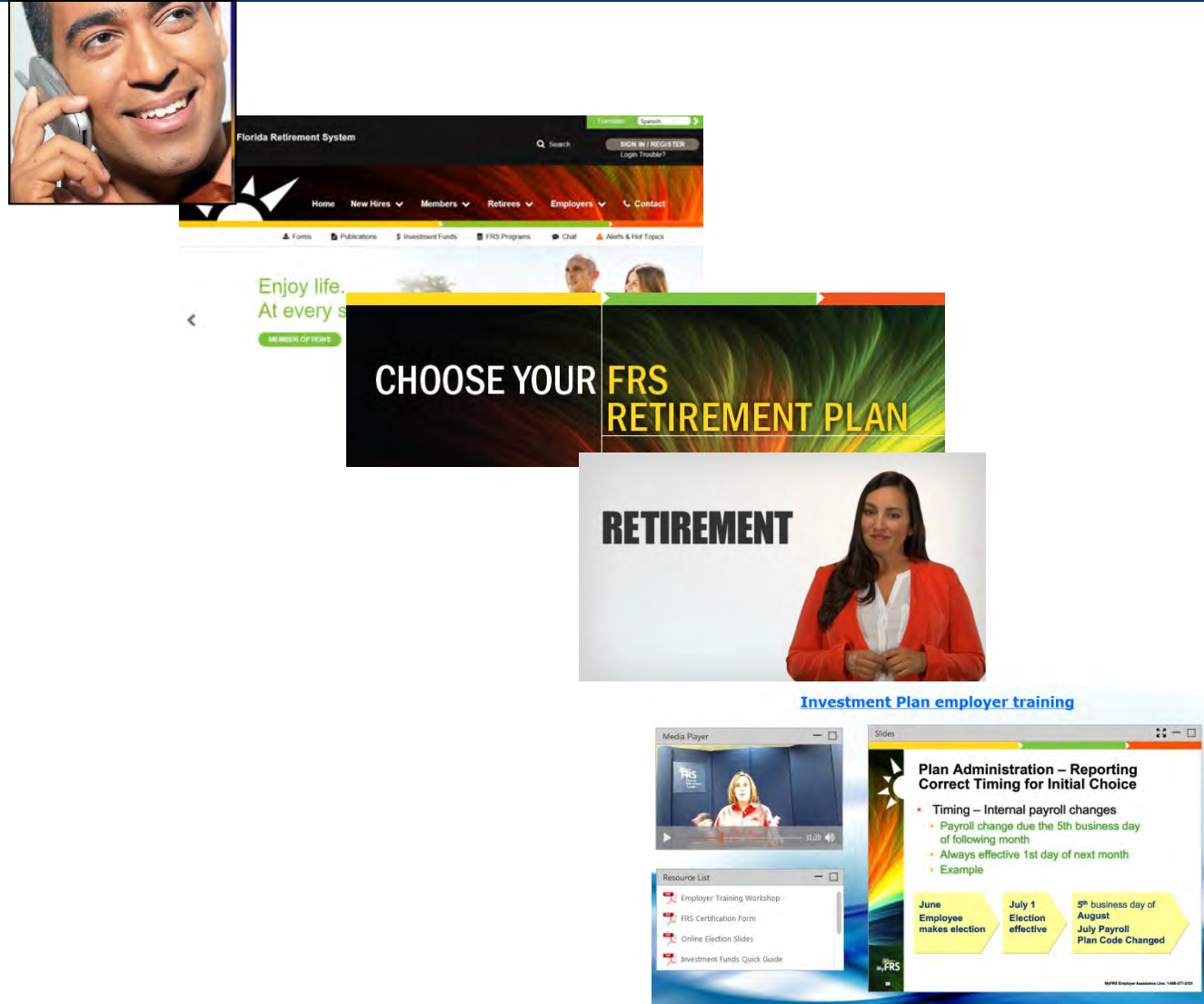
## MetLife

- Fixed lifetime annuities
- Deferred lifetime annuities (QLAC)

**The MyFRS  
Financial Guidance  
Program is  
for ALL FRS  
Pension and  
Investment Plan  
Members.**

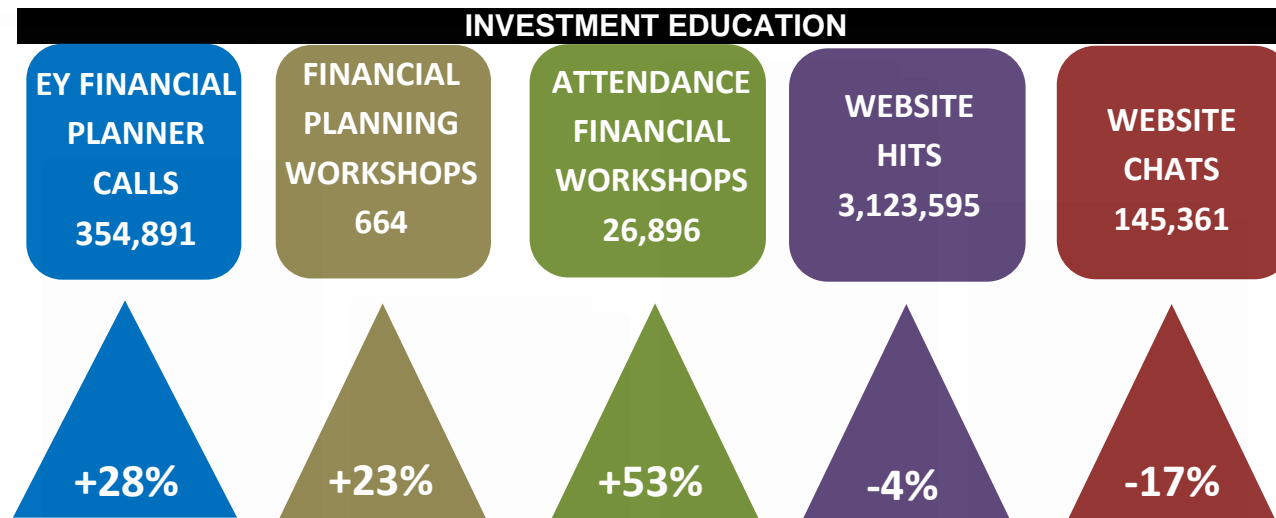
# MyFRS FINANCIAL GUIDANCE PROGRAM

- Telephone
- MyFRS.com
- Print
- Videos
- Workshops/Webcasts



# MyFRS FINANCIAL GUIDANCE PROGRAM

(April 1, 2021-March 31, 2022)



(% change from previous 12 months)

**25 Annuities purchased last 12 months - \$2.3 million**  
**193 Total Annuities purchased inception to date - \$23.8 million**





# EDUCATION HIGHLIGHTS

- **Three additional enrollment forms are now available electronically**
- **Resumption of in-person workshops**
- **MyFRS.com redesigned (April 2022)**
- **New Online Chat Provider that utilizes Artificial Intelligence (June 2022)**



# OVERVIEW OF THE INVESTMENT PLAN

## INVESTMENT FUND OPTIONS

**Daniel Beard**  
**Chief of Defined Contribution Programs**



# ASSET CLASS PERFORMANCE

(as of March 31, 2022)

	QTD	FYTD	1 Yr	3 Yr	5 Yr	Incept.
Total Fund	-4.83%	-0.60%	5.13%	10.51%	9.22%	7.41%
Stable Value	0.39%	1.22%	1.71%	2.05%	2.05%	2.02%
Inflation Protected Assets & TIPS*	1.72%	7.96%	13.15%	8.01%	6.04%	3.21%
Fixed Income	-5.64%	-5.41%	-3.41%	2.49%	2.81%	4.37%
Domestic Equities	-6.22%	1.18%	9.52%	16.82%	14.35%	11.06%
Global & International Equities	-7.23%	-7.33%	-1.63%	9.16%	8.24%	8.10%
Retirement Date Funds	-4.06%	-0.05%	5.49%	10.28%	8.94%	6.97%
Real Estate	5.03%	20.23%	26.52%	11.04%	N/A	10.07%
TF x RDFs	-5.64%	-1.20%	4.74%	10.69%	9.47%	7.79%

\*Prior to 2014, TIPS only.

Retirement Date Funds Inception July 1, 2014

TF x RDFs Inception July 1, 2014

Stable Value Fund Inception July 1, 2021

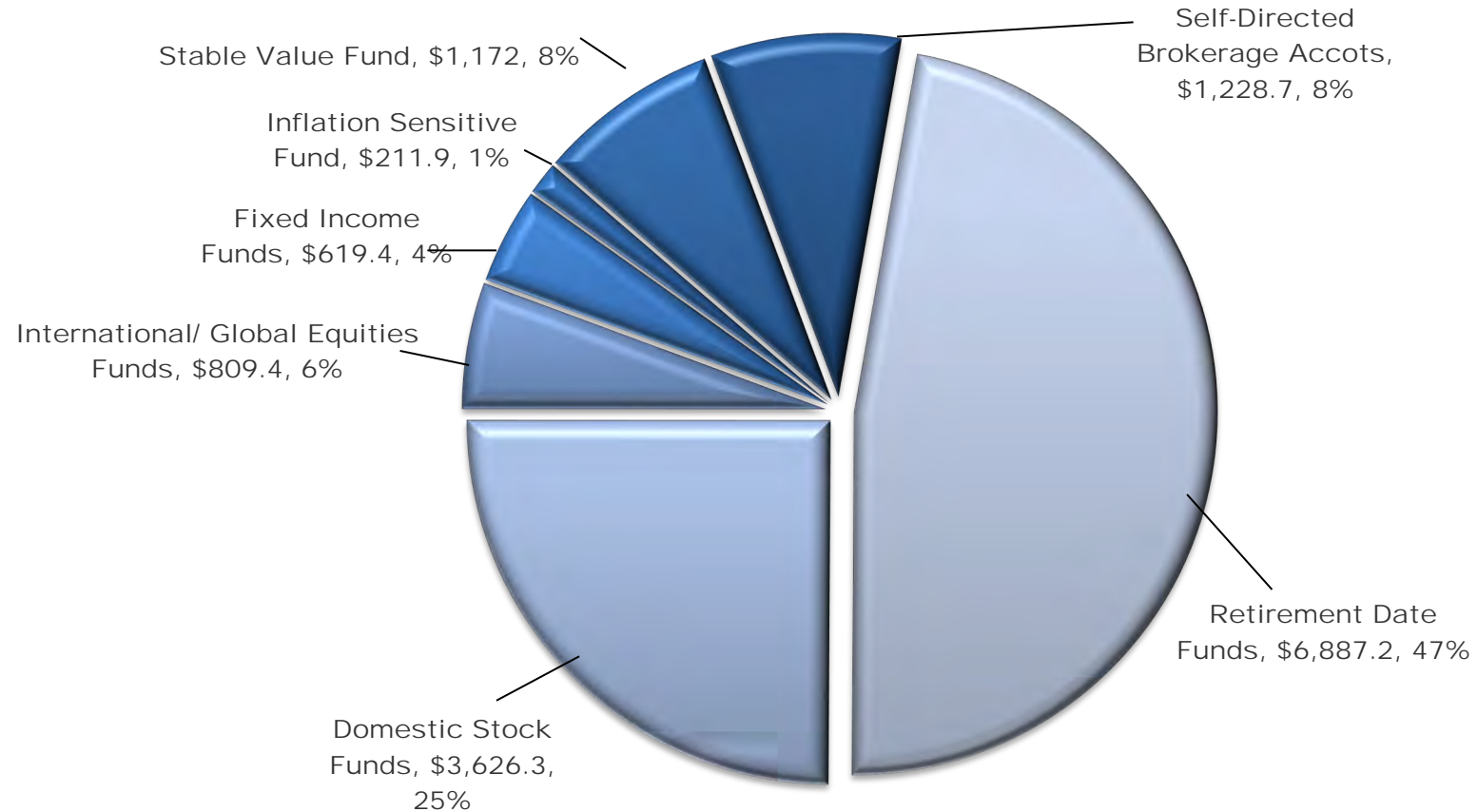
# INVESTMENT PLAN AVAILABLE FUND OPTIONS

as of March 31, 2022 (fees bps)

9 Core Funds – White Labeled	10 Target Date Funds – White Labeled
<ul style="list-style-type: none"><li>➤ FRS Stable Value Fund (.19)</li><li>➤ FRS Inflation Sensitive Fund (.36)</li><li>➤ FRS U.S. Bond Enhanced Index Fund (.05)</li><li>➤ FRS Core Plus Bond Fund (.19)</li><li>➤ FRS U.S. Stock Market Index Fund (.02)</li><li>➤ FRS U.S. Stock Fund (.35)</li><li>➤ FRS Foreign Stock Index Fund (.03)</li><li>➤ FRS Foreign Stock Fund (.46)</li><li>➤ FRS Global Stock Fund (.47)</li></ul>	<ul style="list-style-type: none"><li>➤ FRS 2060 Retirement Date Fund (2060) (.10)</li><li>➤ FRS 2055 Retirement Date Fund (2055) (.10)</li><li>➤ FRS 2050 Retirement Date Fund (2050) (.10)</li><li>➤ FRS 2045 Retirement Date Fund (2045) (.10)</li><li>➤ FRS 2040 Retirement Date Fund (2040) (.12)</li><li>➤ FRS 2035 Retirement Date Fund (2035) (.14)</li><li>➤ FRS 2030 Retirement Date Fund (2030) (.16)</li><li>➤ FRS 2025 Retirement Date Fund (2025) (.17)</li><li>➤ FRS 2020 Retirement Date Fund (2020) (.19)</li><li>➤ FRS Retirement Fund (2000) (.19)</li></ul>

# FRS INVESTMENT PLAN AUM

(by Asset Class—in \$millions, as of March 31, 2022)

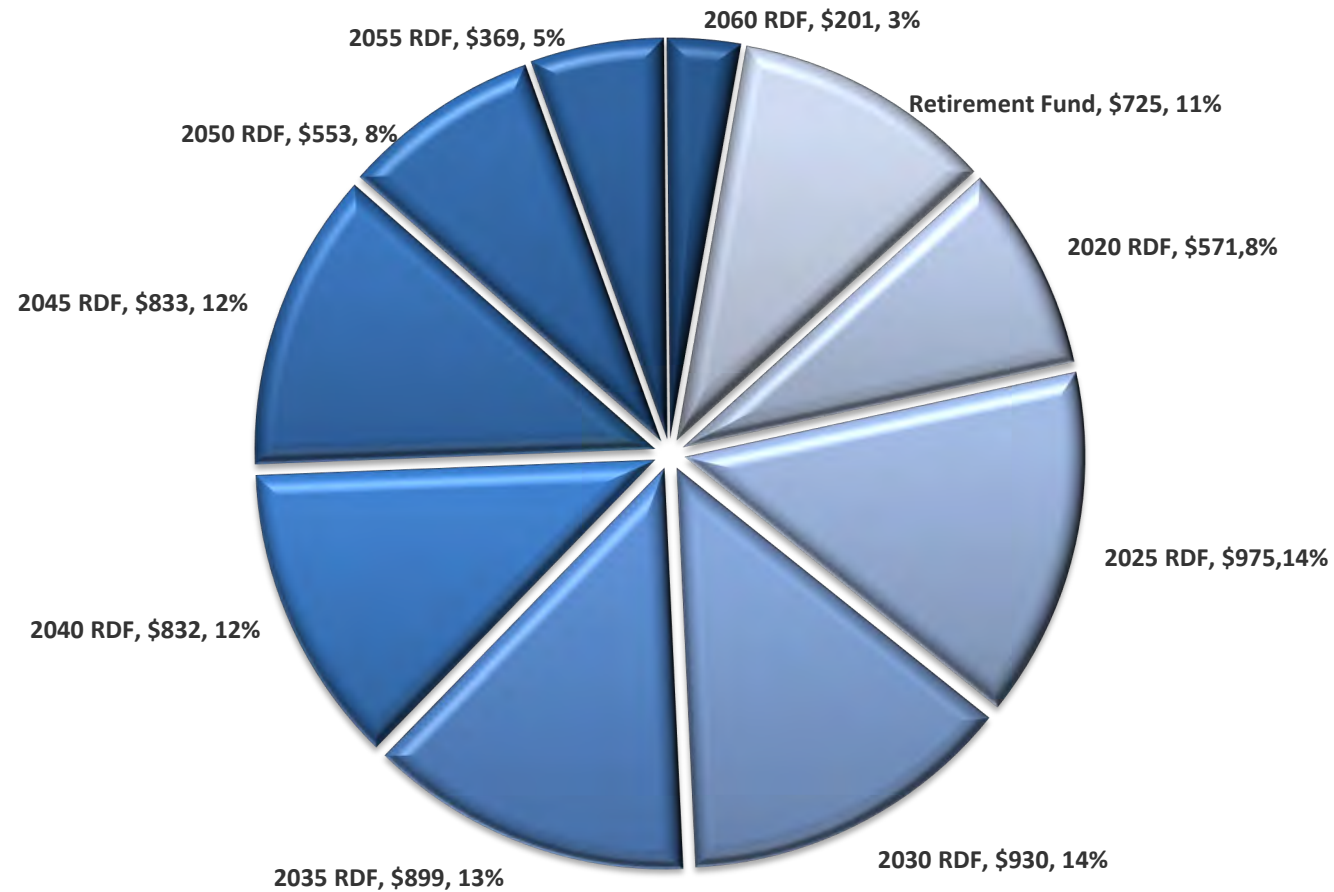


Asset allocation is a result of member investment selection



# CURRENT RETIREMENT DATE FUNDS

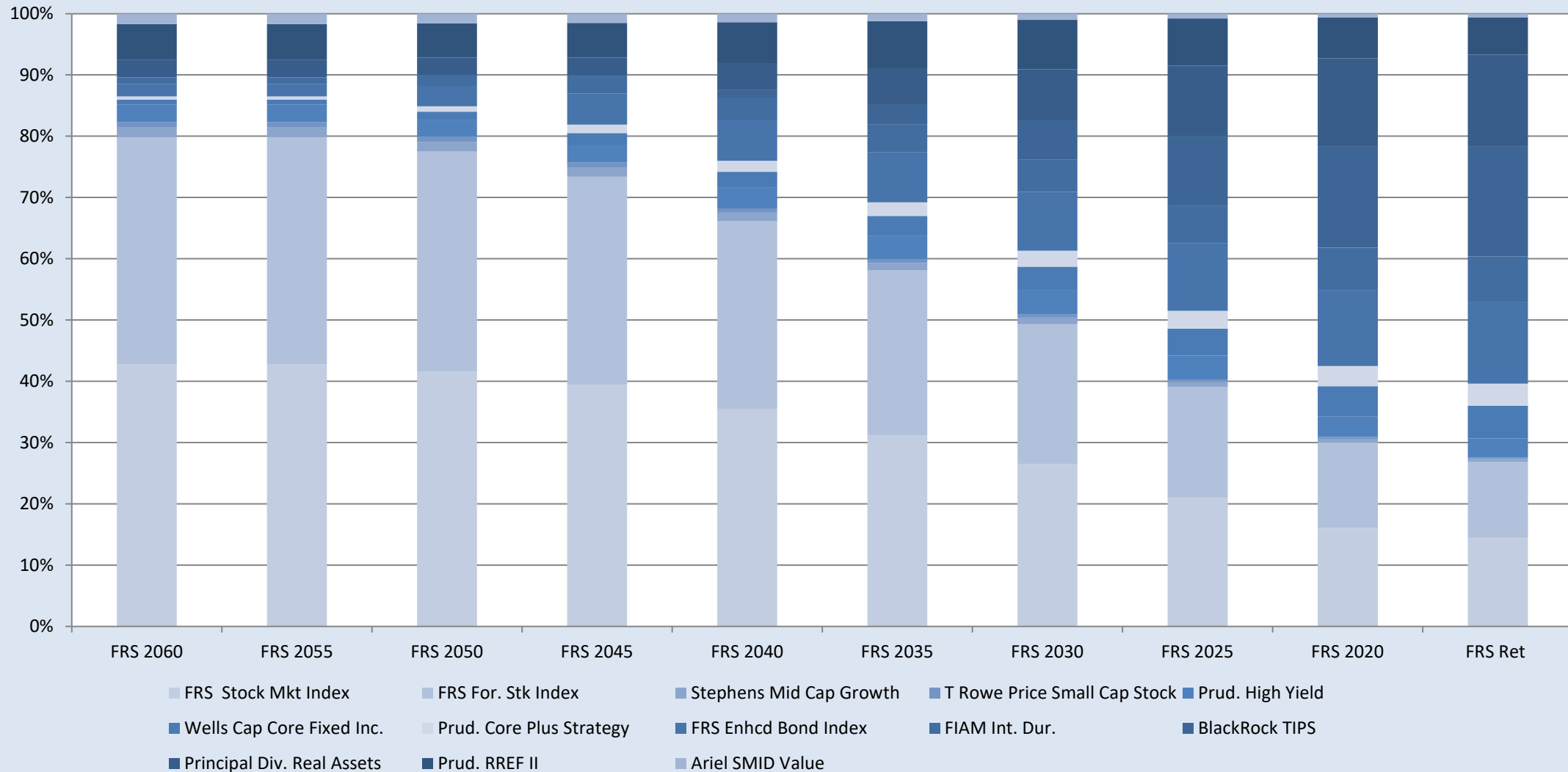
(\$ RDF Assets, % Members, as of March 31, 2022)



Asset allocation is a result of member investment selection

# FRS RETIREMENT DATE FUNDS

Investment Manager Allocations- Effective July 1, 2022



# 2022-23 INITIATIVES

## **Investment Option Updates**

- Rolldown in RDF Glidepath allocations effective July 1, 2022
- Add RDF 2065 effective July 1, 2023
- Aon Investment Consulting Investment Plan structure review 3Q22

## **Plan Administration Initiatives**

- Update Choice Service, Benefit Comparison Statement and quarterly statements to reflect increased Investment Plan contributions
- Electronic PIN reminder
- Add fund specific payment option for members at time of distribution



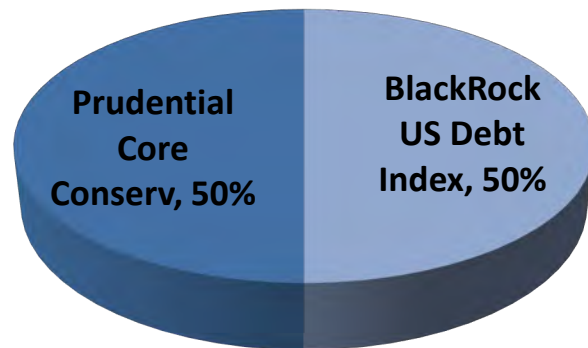


# QUESTIONS

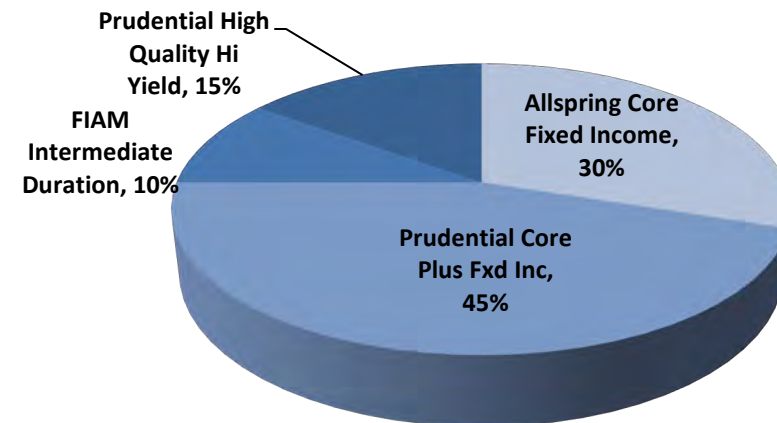
# FRS INVESTMENT PLAN MULTI-MANAGER FUNDS

(% Allocations by Investment Manager)

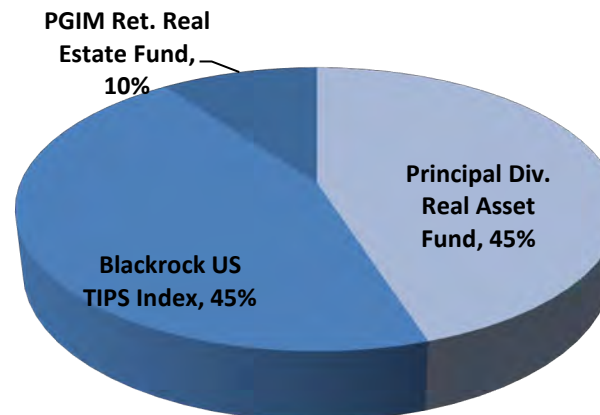
**FRS US Enhanced Bond Index Fund**



**FRS Core Plus Fixed Income Fund**

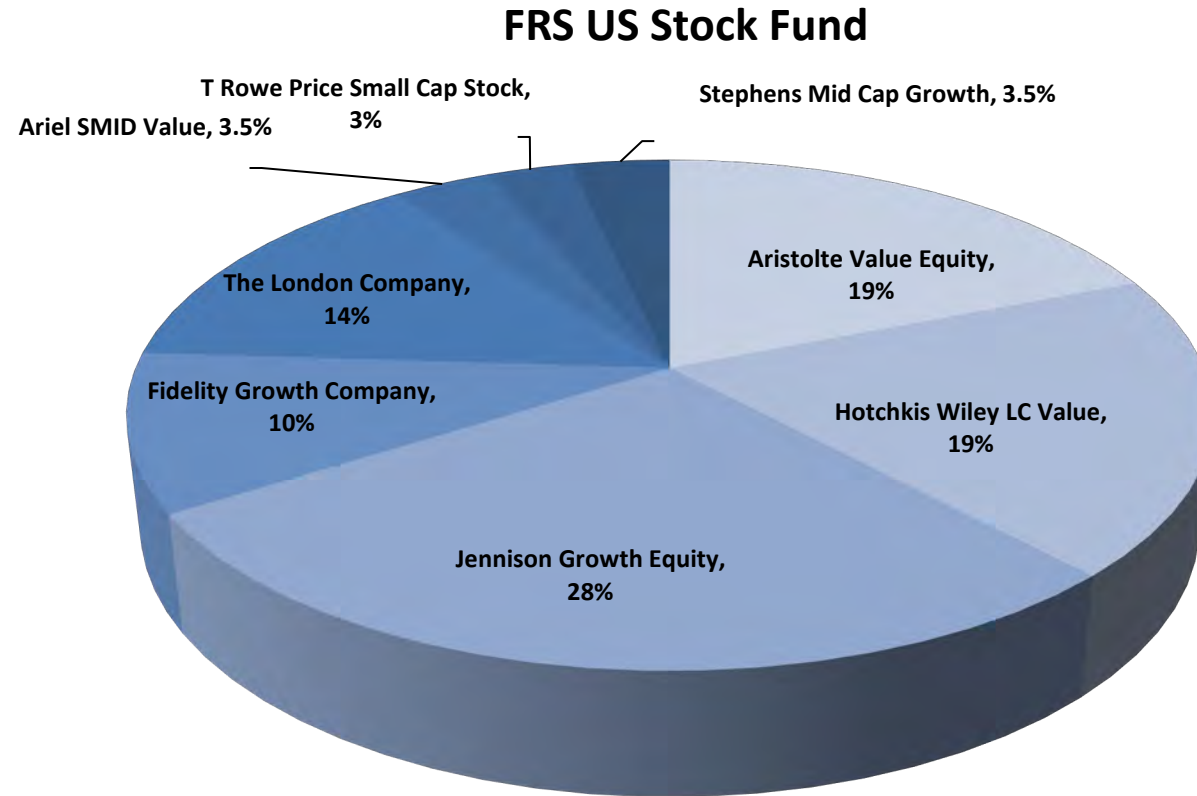


**FRS Inflation Sensitive Fund**



# FRS INVESTMENT PLAN MULTI-MANAGER FUNDS

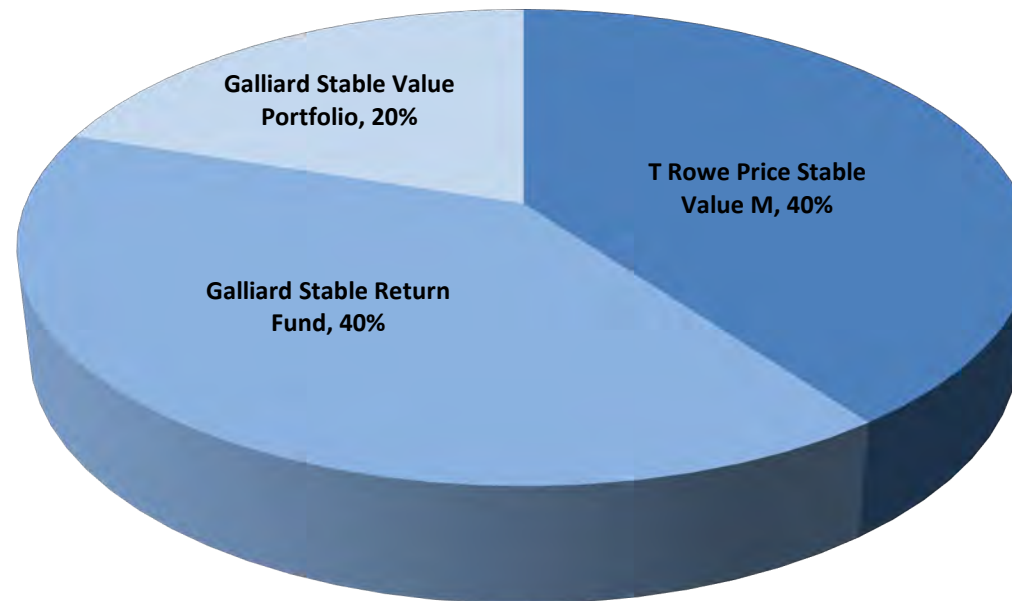
(% Allocations by Investment Manager)



# FRS INVESTMENT PLAN STABLE VALUE FUND

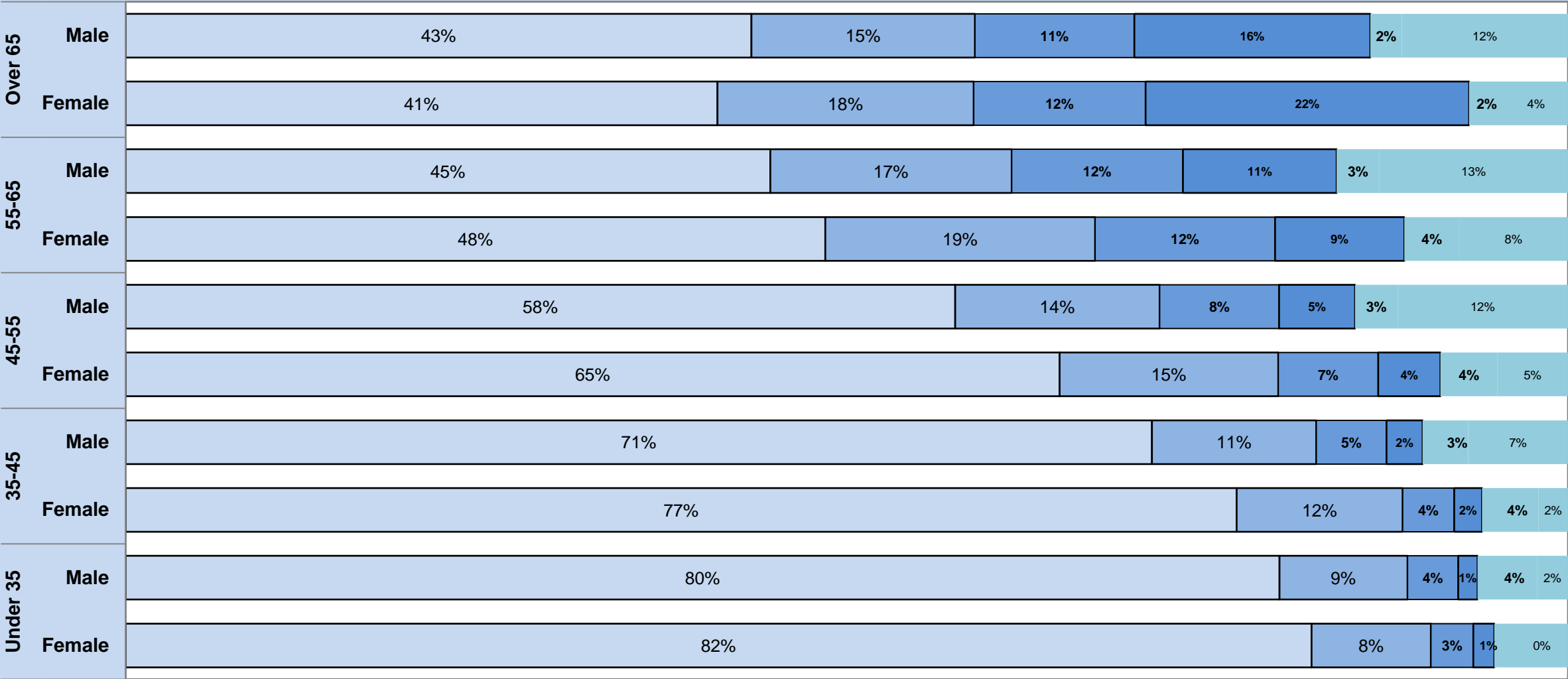
(Effective 7-1-2021- % Allocations by Investment Manager)

**FRS Stable ValueFund**



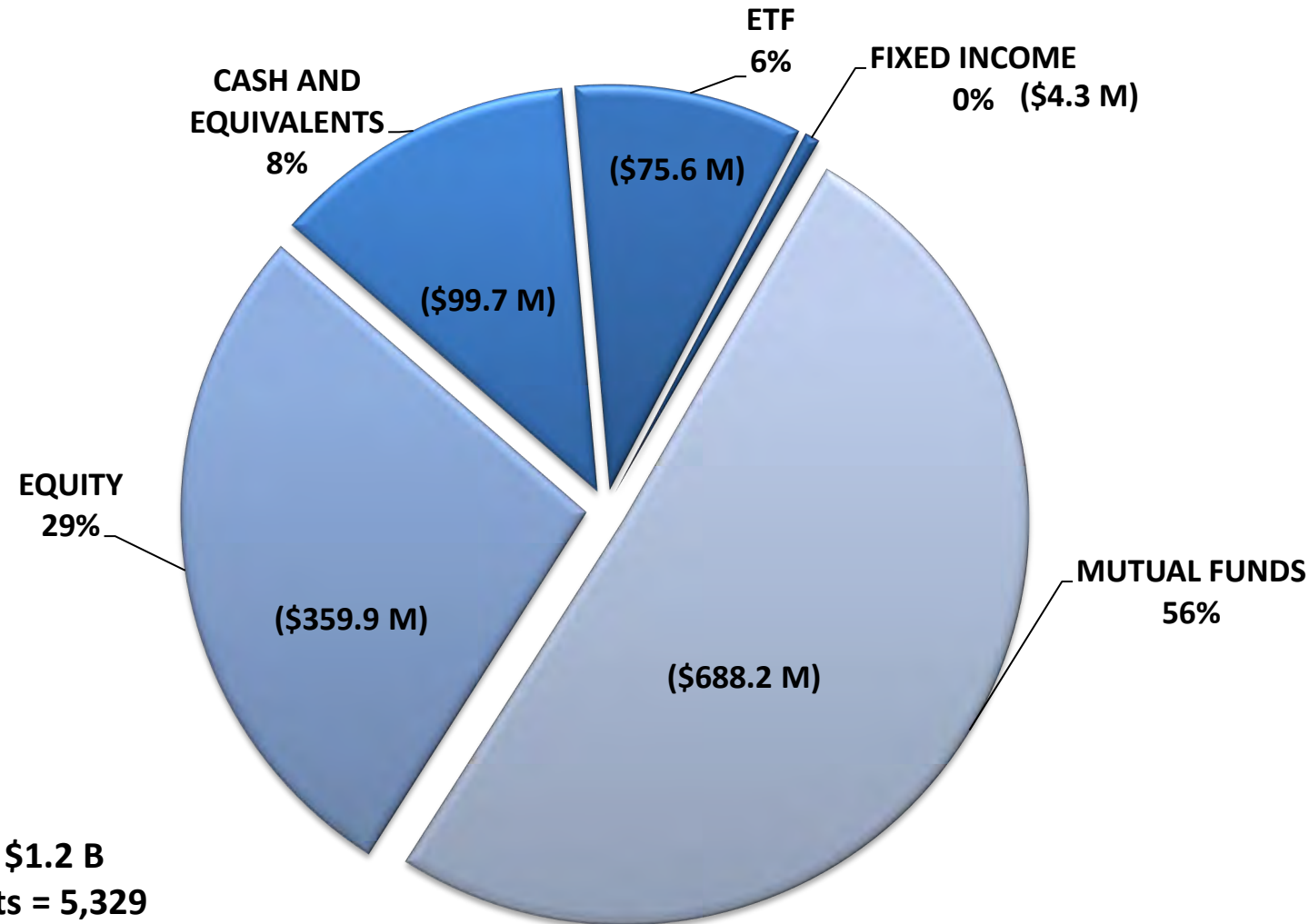
# TOTAL FUND ASSET ALLOCATION BY AGE AND GENDER

(as of March 31, 2022)



# FRS Investment Plan Self-Directed Brokerage Account

(as of March 31, 2022)



Total Assets = \$1.2 B

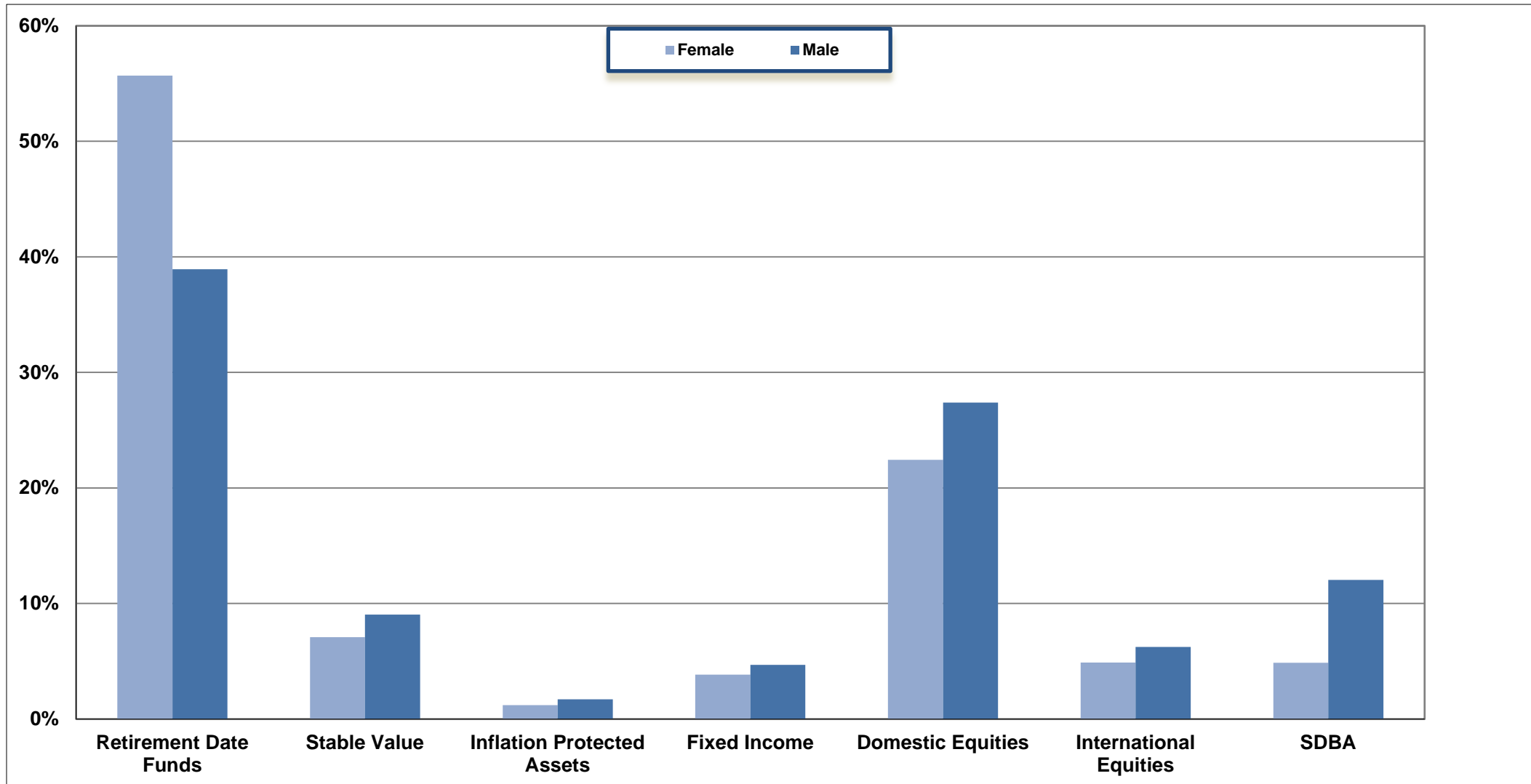
Active Accounts = 5,329

Average Account Balance = \$230,401



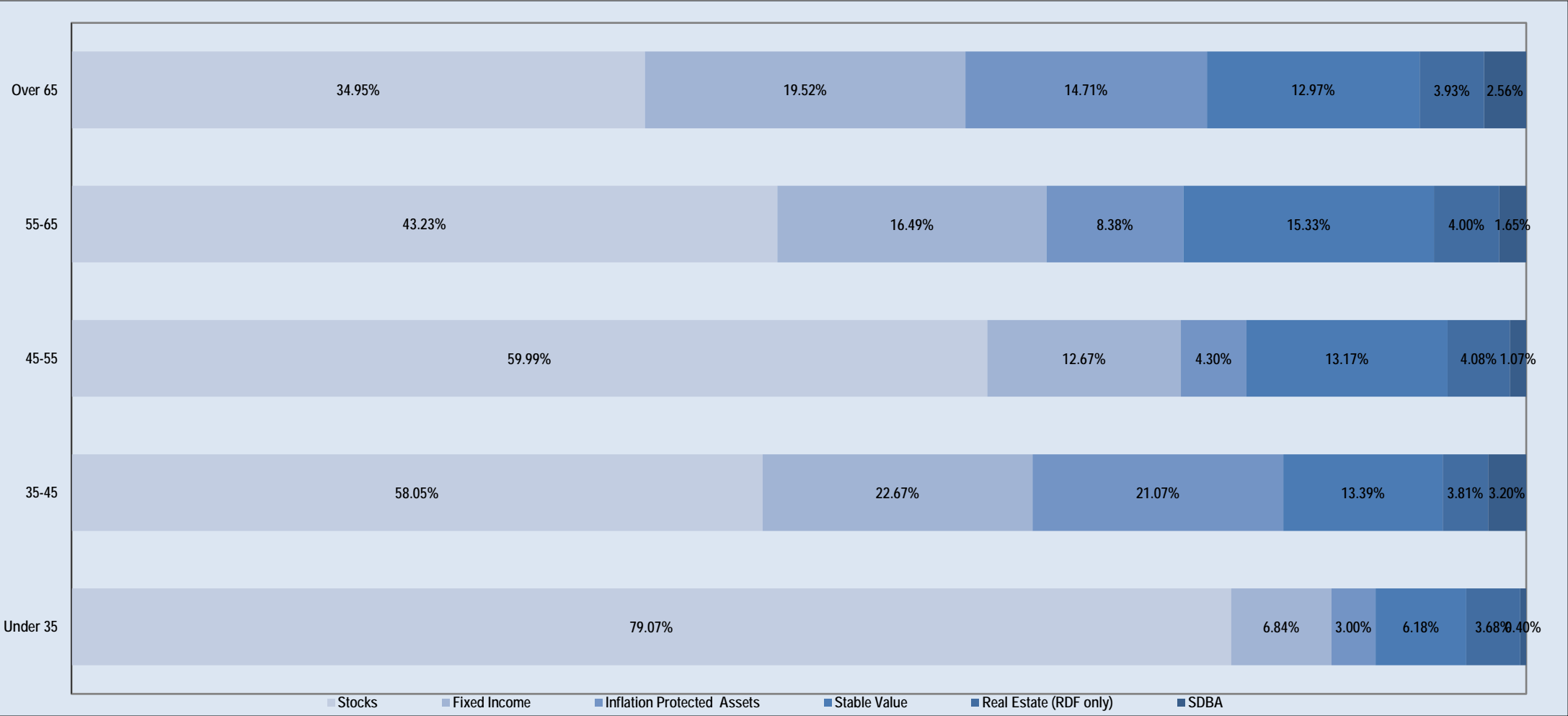
# ASSET ALLOCATION BY GENDER

(as of March 31, 2022)



# TOTAL FUND ASSET ALLOCATION BY AGE

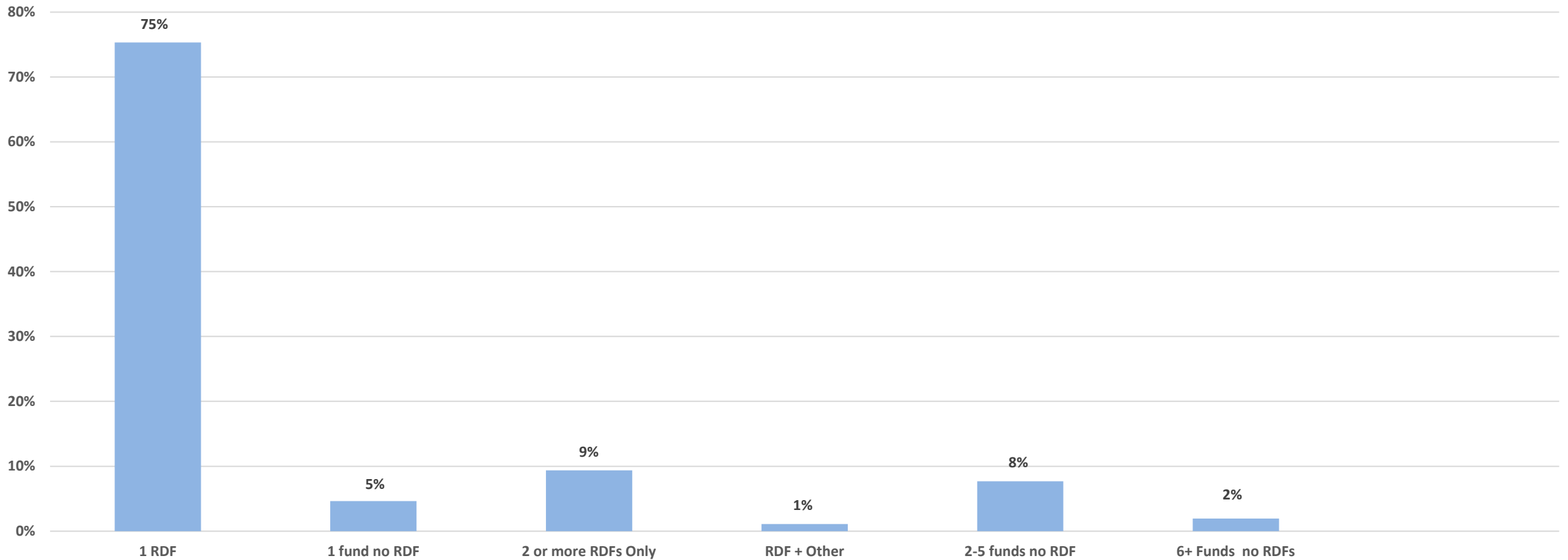
(as of March 31, 2022)





# Member Fund Selection

% of Members  
(March 31, 2022)



# Meeting of the Investment Advisory Council

## Item 5. Florida Retirement System Investment Plan Review

*Katie Comstock, Aon*

*(See Attachment 5B)*





# Florida State Board of Administration Investment Plan Structure Review

June 28, 2022

# Table of Contents

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- **Section 1: Executive Summary**
- **Section 2: FRS Investment Plan Structure Review**
- **Section 3: Appendix**



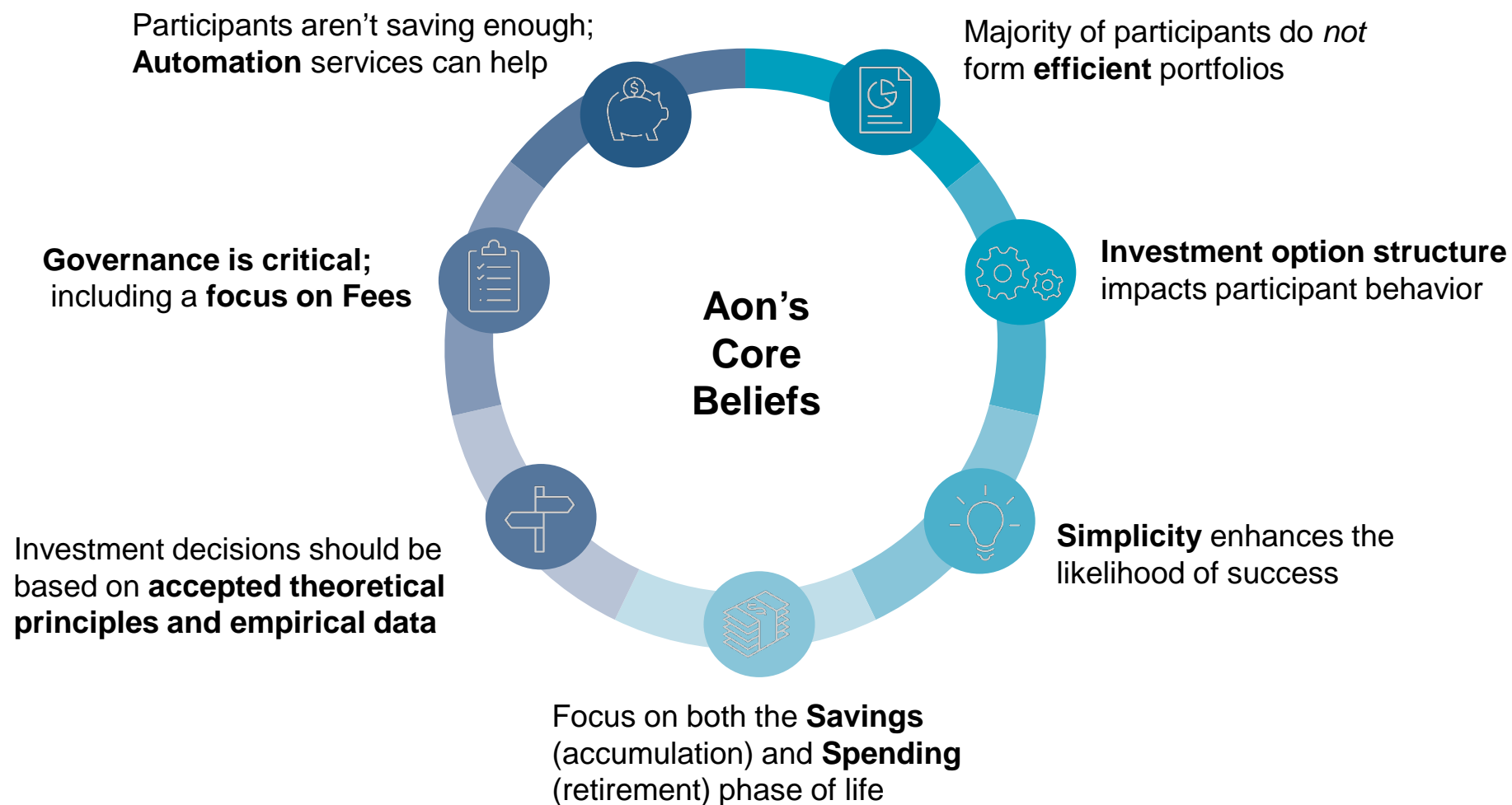
## Section 1: Executive Summary

# Introduction

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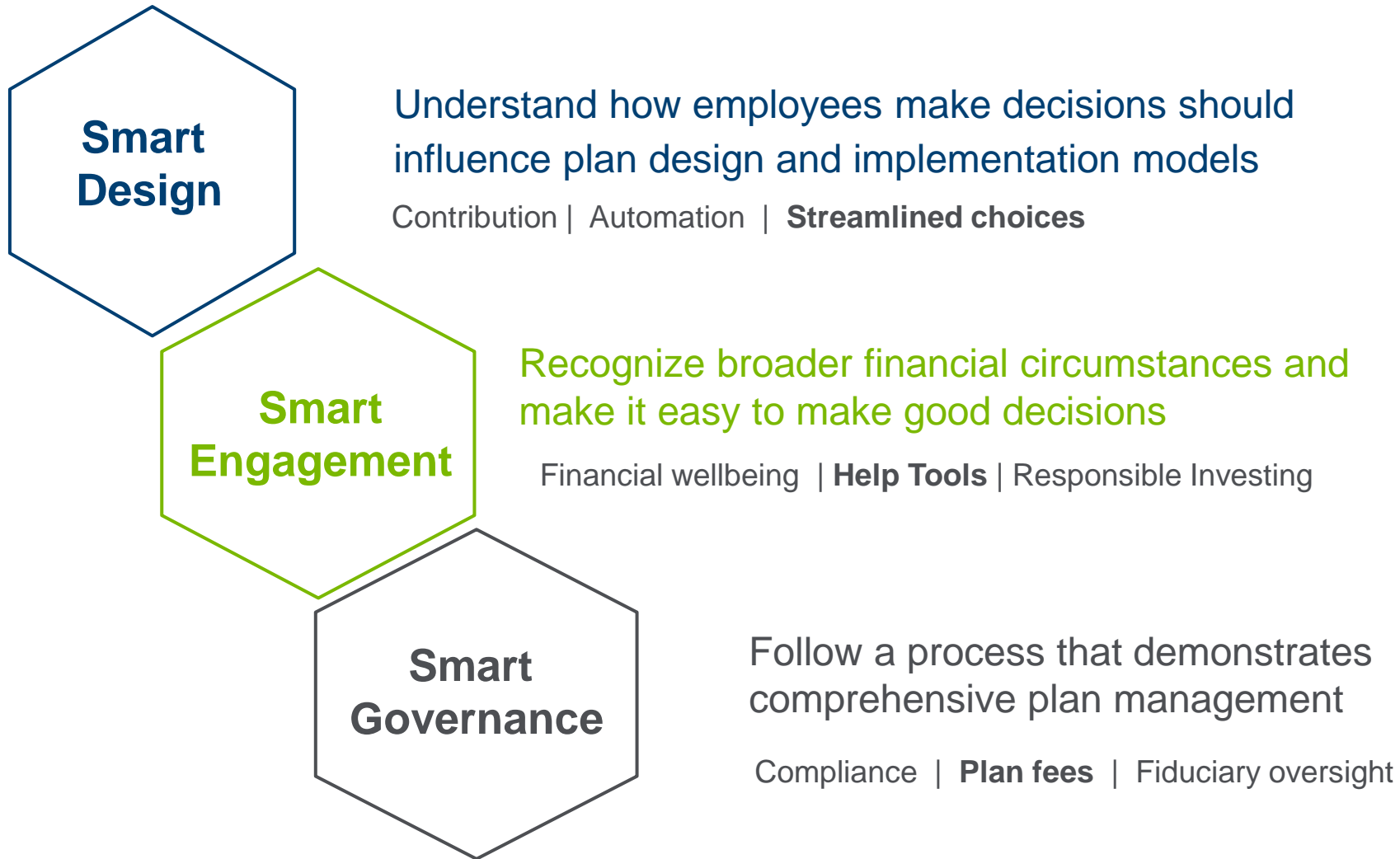
- Aon conducts an annual investment structure review of the FRS Investment Plan
- The 2022 review examines:
  - Investment plan structure
  - Investment manager fees
  - Investment performance
- Over the past few years, the FRS has made several enhancements to the Plan, including:
  - Consolidating the active bond offering into one
  - Consolidating the active U.S. Large Cap and Small/Mid Cap funds into a single active U.S. Stock Fund
  - Renaming the FRS Inflation Sensitive Fund and modifying its allocation
  - Replacing the Money Market Fund with a stable value offering
- Overall, we believe the FRS Investment Plan continues to be well-designed and in-line with industry best practices
  - No recommended changes at this time
- In the coming quarters, Aon will be conducting a deeper dive into the Investment Plan structure with a focus on additional retirement income options and white-label fund manager structuring

# Aon's Defined Contribution (DC) Philosophy



## Aon's DC Point of View: Streamlined Menu Facilitates Smart Decisions

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# 2022 Annual Investment Structure Review

## Key Observations and Take-Aways

Consideration	Observations	Take-Aways
<b>Investment Structure</b>	<ul style="list-style-type: none"> <li>Streamlined structure</li> <li>Offers custom TDFs</li> <li>Offers diversified set of options across:               <ul style="list-style-type: none"> <li>- asset type                      - risk/return</li> <li>- investment styles      - investment cost</li> </ul> </li> <li>Appropriate use of white label funds</li> <li>Offers a number of features to assist in retirement preparation</li> </ul>	<ul style="list-style-type: none"> <li>✓ Investment structure is sophisticated and aligned with best practices</li> <li>✓ Custom TDFs highly utilized, offering SBA-unique glidepath and custom portfolios that are highly efficient, cost effective and diversified across skilled managers</li> <li>✓ White-label funds provide flexibility, efficiency and significant benefit to participants</li> <li>✓ Access to investment advice and brokerage window are favorable features</li> </ul>
<b>Plan Costs</b>	<ul style="list-style-type: none"> <li>Plan's investment option fees are well-below peer group medians</li> </ul>	<ul style="list-style-type: none"> <li>✓ FRS uses size and reach to offer competitive Plan services to participants</li> <li>✓ FRS Investment Plan offers participants very competitively priced investment options</li> </ul>
<b>Performance</b>	<ul style="list-style-type: none"> <li>Performance has generally been strong across asset classes and both short and long-term time periods</li> </ul>	<ul style="list-style-type: none"> <li>✓ Actively managed options have added value over both short and long-term time periods</li> </ul>



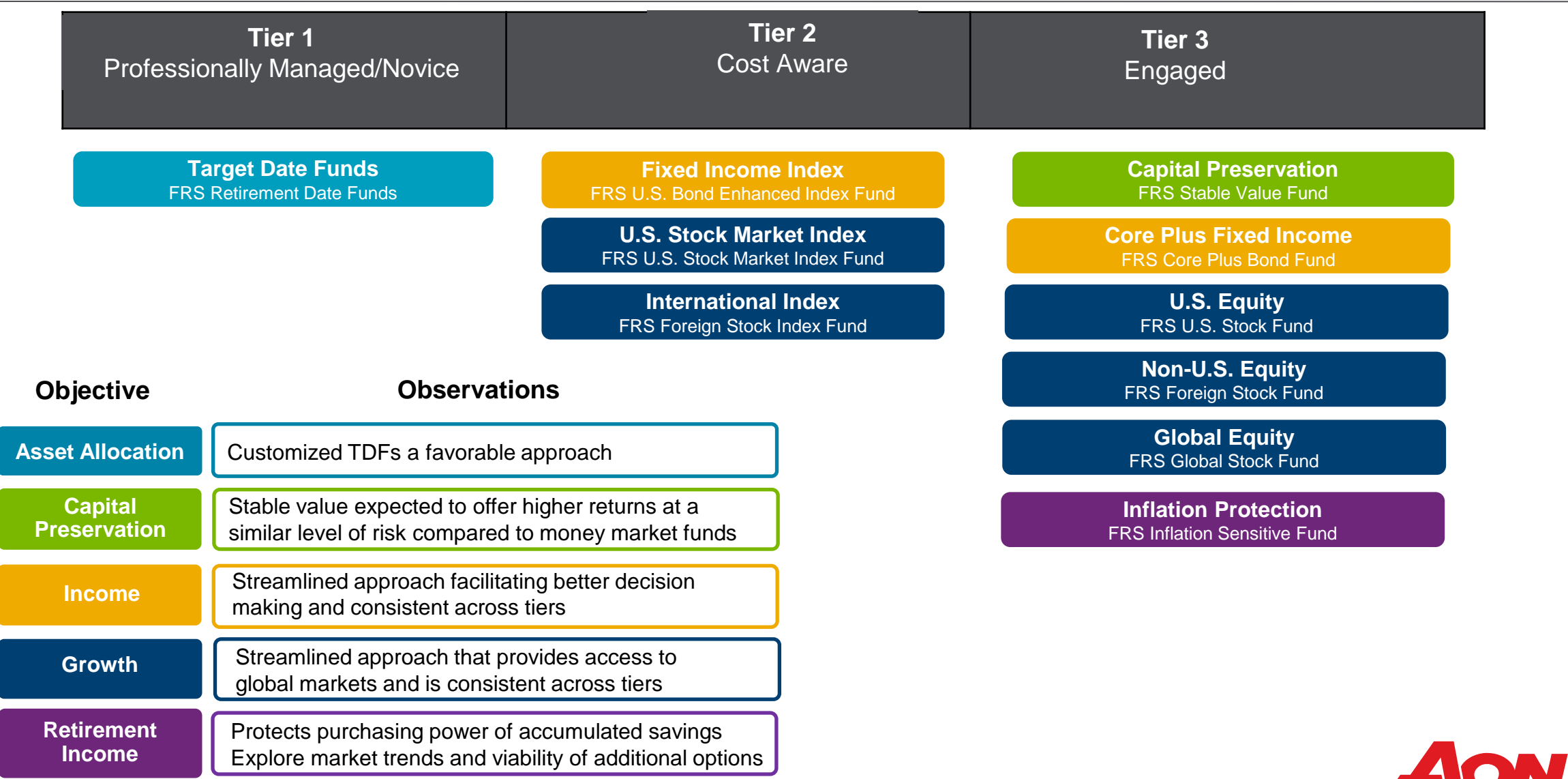
## **Section 2: FRS Investment Plan Structure Review**

# Defined Contribution Industry Investment Design Evolution

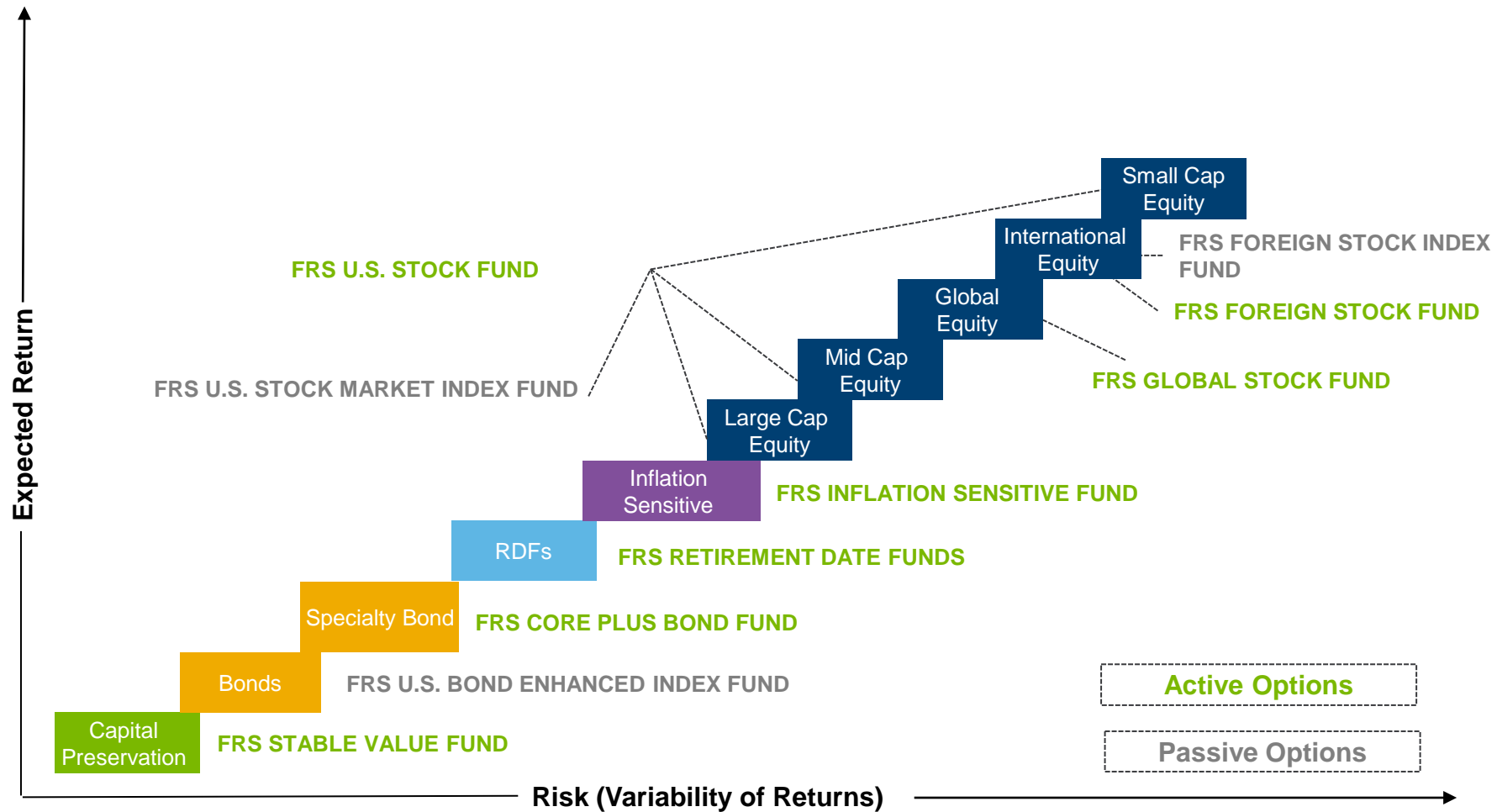
- Table below illustrates the general evolution of the DC industry's investment lineup over time
- The FRS Investment Plan has progressed over time and currently falls under a modern lineup

Objectives	Historic Lineup	Modern Lineup	Emerging Lineup
Asset Allocation	Target Date Fund (1) Balanced Funds (3)	Target Date Fund (1)	Target Date Fund (1)
Capital Preservation	Stable Value (1) Money Market (1)	Stable Value (1)	Capital Preservation (1)
Income	Core Bond /Core Plus (3)	Core Bond / Core Plus Bond (2)	Diversified Income (2)
Growth	U.S. Large Cap Growth (2) U.S. Large Cap Value (2) U.S. SMID Cap Growth (2) U.S. SMID Cap Value (2) Developed Non-U.S. (2) Emerging Markets (2)	U.S. All Cap (2)    Non-U.S. All Cap (2)	Diversified Growth (2)
Retirement Income	Retirement Income (1)	Retirement Income (1)	Retirement Income (1)

# FRS: Investment Lineup

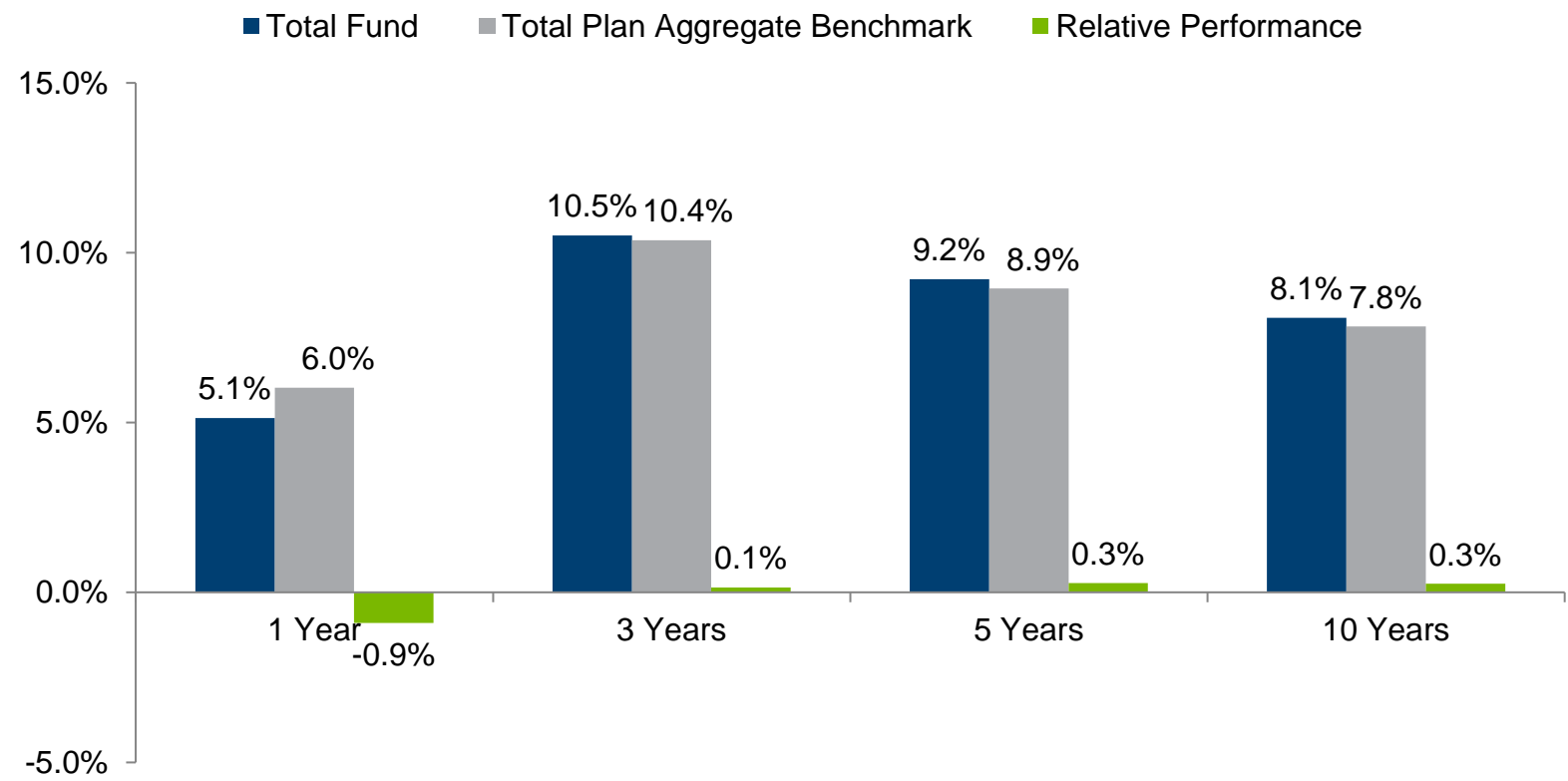


# Risk/Return Choice Spectrum



# Total Investment Plan Returns

Periods Ending 3/31/2022\*



\*Returns shown are net of fees. Aggregate benchmark returns are an average of the individual portfolio benchmark returns at their actual weights

# Investment Option Relative Returns and Ranks

		1 Year		3 Years		5 Years		10 Years	
Asset Class	Fund Option	Relative Performance	Rank	Relative Performance	Rank	Relative Performance	Rank	Relative Performance	Rank
Retirement Date Funds	FRS Retirement Fund	0.1	(1)	0.3	(1)	0.2	(3)	0.3	(30)
	FRS 2020 Retirement Date Fund	0.2	(1)	0.2	(5)	0.2	(12)	0.3	(84)
	FRS 2025 Retirement Date Fund	0.2	(1)	0.2	(19)	0.2	(19)	0.3	(62)
	FRS 2030 Retirement Date Fund	0.2	(1)	0.1	(34)	0.2	(42)	0.2	(53)
	FRS 2035 Retirement Date Fund	0.1	(4)	0.0	(59)	0.2	(61)	0.3	(51)
	FRS 2040 Retirement Date Fund	0.0	(11)	(0.0)	(75)	0.1	(72)	0.2	(70)
	FRS 2045 Retirement Date Fund	(0.2)	(23)	(0.1)	(79)	0.0	(78)	0.1	(78)
	FRS 2050 Retirement Date Fund	(0.2)	(21)	(0.1)	(75)	0.0	(69)	0.2	(88)
	FRS 2055 Retirement Date Fund	(0.1)	(18)	0.1	(73)	0.1	(74)	0.2	(82)
	FRS 2060 Retirement Date Fund	(0.1)	(13)	0.2	(88)	--	--	--	--
Stable Value	FRS Stable Value Fund	--	--	--	--	--	--	--	--
Real Assets	FRS Inflation Sensitive Fund	0.0	--	0.7	--	0.2	--	0.2	--
Fixed Income	FRS U.S. Bond Enhanced Index Fund	(0.0)	(40)	0.1	(66)	0.1	(62)	0.1	(59)
	FRS Core Plus Bond Fund	0.4	(18)	0.5	(32)	0.5	(18)	0.5	(18)
Domestic Equity	FRS U.S. Stock Market Index Fund	0.0	(33)	0.1	(24)	0.1	(26)	0.1	(17)
	FRS U.S. Stock Fund	(5.9)	(72)	--	--	--	--	--	--
Int'l / Global Equity	FRS Foreign Stock Index Fund	(0.7)	(44)	0.0	(41)	0.1	(35)	0.2	(35)
	FRS Foreign Stock Fund	(7.9)	(72)	0.8	(36)	1.2	(24)	1.8	(21)
	FRS Global Stock Fund	(3.3)	(58)	3.9	(14)	4.0	(10)	3.1	(11)

Note: Relative returns shown above are net of fees. The returns for the Retirement Date Funds, Inflation Sensitive Fund, and Core Plus Fixed Income Fund use prehire data for all months prior to 7/1/2014, actual live data is used thereafter. The U.S. Stock Fund and the Stable Value Fund were inceptioned into the Plan in 2020 and 2021, respectively.

## Expense Ratio Review

- The below table provides a comparison of the investments in the Plan versus investments of similar size and mandate
- The investment options in the Plan all have reasonable fees compared to similar alternatives
- FRS Investment Plan appropriately uses its size and scale to integrate managers and reduce costs across the core funds and target date funds

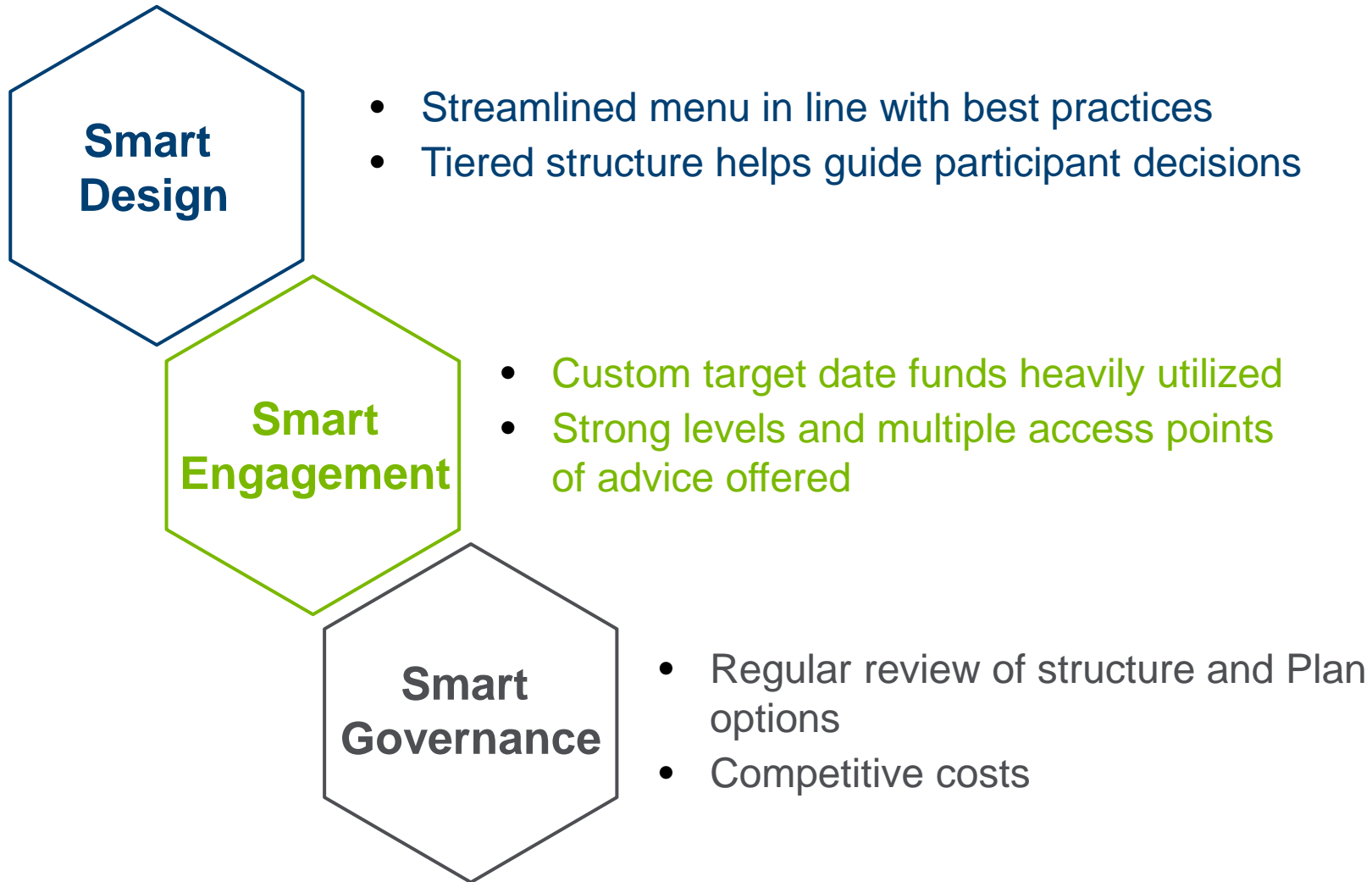
Investment Option	Expense Ratio	Peer Median <sup>1</sup>
FRS Retirement Funds	0.10% - 19%	0.27% - 0.43%
FRS Stable Value Fund	0.19%	0.44%
FRS Inflation Sensitive Fund	0.36%	0.35%
FRS U.S. Bond Enhanced Index Fund	0.05%	0.05%
FRS Core Plus Bond Fund	0.19%	0.45%
FRS U.S. Stock Market Index Fund	0.02%	0.04%
FRS U.S. Stock Fund	0.35%	0.87%
FRS Foreign Stock Index Fund	0.03%	0.11%
FRS Foreign Stock Fund	0.46%	0.85%
FRS Global Stock Fund	0.47%	0.90%

<sup>1</sup> Source: Aon's annual mutual fund expense analysis as of 12/31/2020. Dollar weighted median shown for passive mandates.



## Investment Plan Summary

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## Section 3: Trends and Looking Ahead

# Private Equity in Defined Contribution Plans

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- We believe private equity can improve participant outcomes if structured appropriately
- Most appropriate implementation would be within custom target date or custom white-label funds
- Prefer to see product and administrative/operational development and guidance on governance
- We continue to monitor the landscape and consider viability of PE within the FRS Investment Plan

## Benefits

- **Enhanced return** above public equity
- **Skill-based return** offers diversified sources of return and alpha
- **Long-term time horizon** aligns with most participants' objectives

## Challenges

- **Fee sensitivity** – higher and performance-based fees are often unfamiliar to participants
- **Liquidity and vehicle structure** are not conducive to the typical daily liquid options offered in DC plans
- **PE cash flow management** can be difficult given the nature of PE investing
- **Inability to rebalance** multi-asset portfolios due to illiquid vehicles
- **Size and access** may reduce potential benefits of private equity investing
- **Performance reporting** is lagged and IRRs are preferred

## Retirement Income – Turning DC Assets into Income

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Retirement programs need to go beyond accumulating wealth by creating income to last a lifetime

### Income Needs are Increasing

Increasing pressure on individuals to fund retirement income because:

- Fewer employers paying for retirement programs coupled with increasing out-of-pocket retiree medical costs
- Changes in Social Security likely, since current benefits are projected to be unsustainable after ~2033 (based on current laws)

### Longevity Risk Being Recognized

Need for lifetime income in retirement becoming more visible due to:

- Increasing life expectancies
- Reduced income level and increased lump sum availability from private pensions
- Growing savings in defined contribution plans and product availability

### The Business Case is Real

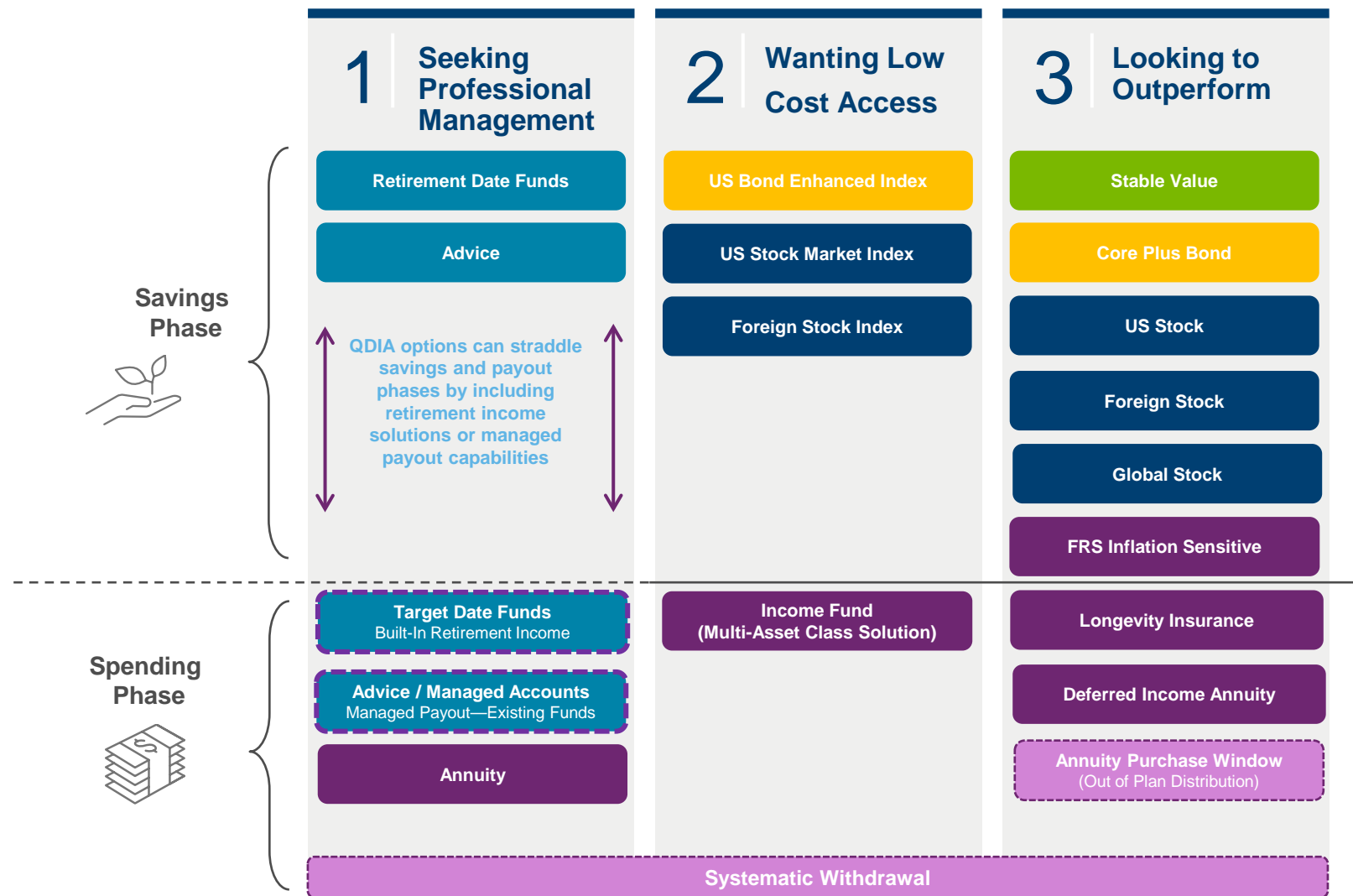
Organizations see a growing need to:

- Address participant needs as a plan fiduciary
- Facilitate retirement to address workforce management concerns
- Support broader employee messages about financial wellness

# Smart Design: Tiered Investment Menu Across Spending Phase

## Objective

- Asset Allocation
- Capital Preservation
- Income
- Growth
- Retirement Income





## Section 3: Appendix

## FRS Asset Allocation as of 3/31/2022

	Market Value (\$)	Percent of Total (%)	Participant Count
<b>Tier I: Target Date Funds</b>	<b>\$6,887</b>	<b>47.3%</b>	<b>238,491</b>
FRS U.S. Bond Enhanced Index Fund	\$238	1.6%	14,707
FRS U.S. Stock Market Index Fund	\$1,594	10.9%	39,611
FRS Foreign Stock Index Fund	\$286	2.0%	19,955
<b>Tier II: Index Funds</b>	<b>\$2,118</b>	<b>14.6%</b>	<b>74,273</b>
FRS Stable Value Fund	\$1,172	8.1%	17,980
FRS Inflation Sensitive Fund	\$212	1.5%	11,641
FRS Core Plus Bond Fund	\$382	2.6%	16,916
FRS U.S. Stock Fund	\$2,033	14.0%	38,007
FRS Foreign Stock Fund	\$170	1.2%	14,080
FRS Global Stock Fund	\$353	2.4%	16,335
<b>Tire III: Actively Managed Options</b>	<b>\$4,321</b>	<b>29.7%</b>	<b>114,959</b>
<b>Tier IV: Self-Directed Brokerage Account</b>	<b>\$1,229</b>	<b>8.4%</b>	<b>5,331</b>
<b>Total Plan</b>	<b>\$14,555</b>	<b>100.0%</b>	<b>433,054</b>

## Investment Category Returns and Ranks

Periods Ending 3/31/2022*	1-Year		3-Years		5-Years		10-Years	
<b>Stable Value**</b> <i>FTSE 3 Month T-Bill</i>	--	--	--	--	--	--	--	--
<b>Real Assets***</b> <i>FRS Custom Real Assets Index</i>	<b>13.1</b> 13.1	--	<b>8.0</b> 7.4	--	<b>6.0</b> 5.8	--	<b>3.0</b> 2.7	--
<b>Fixed Income</b> <i>Total Bond Index</i>	<b>-3.4</b> -3.7	<b>(16)</b> (27)	<b>2.5</b> 2.0	<b>(21)</b> (47)	<b>2.8</b> 2.4	<b>(15)</b> (40)	<b>2.9</b> 2.5	<b>(21)</b> (45)
<b>Domestic Equity</b> <i>Total U.S. Equities Index</i>	<b>9.5</b> 11.6	<b>(54)</b> (38)	<b>16.8</b> 17.3	<b>(40)</b> (35)	<b>14.4</b> 14.5	<b>(38)</b> (36)	<b>13.8</b> (13.7)	<b>(25)</b> (26)
<b>International/Global Equity</b> <i>Total Int'l / Global Equities Index</i>	<b>-1.6</b> -0.1	<b>(42)</b> (33)	<b>9.2</b> 8.6	<b>(26)</b> (33)	<b>8.2</b> 7.5	<b>(21)</b> (29)	<b>7.5</b> 6.7	<b>(19)</b> (30)

\*Returns shown are net of fees

\*\*The Stable Value Fund was inception into the Plan in 2021.

\*\*\*The returns for the Real Assets composite uses prehire data for all months prior to 7/1/2014, actual live data is used thereafter.

Note: Composite returns for the Retirement Date Funds and the SDBA are unavailable.



# Meeting of the Investment Advisory Council

## Item 6. Florida PRIME™ Review

*Glenn Thomas, Lewis, Longman, Walker*

*(See Attachment 6A)*



# Meeting of the Investment Advisory Council

## Item 6. Florida PRIME™ Best Practices Review

*Katie Comstock, Aon*

*(See Attachment 6B)*





# Florida PRIME™ Best Practices Review

# State Board Administration of Florida

June 28, 2022

**Aon**

Investment advice and consulting services provided by Aon Investments USA Inc., an Aon Company.



## Introduction

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- An annual review of Florida PRIME is required under Florida state law to determine whether the management of the Fund is aligned with best practices
- Aon's 2022 annual review includes the following:
  - Update on 2022 participant survey
  - Florida PRIME Business Case Review Update
  - Money Market Reform Update
  - Annual Investment Policy Statement (IPS) review
- Florida PRIME continues to be managed in a manner consistent with best practices and in consideration of participants' best interests

## 2022 Best Practices Review: Key Take-Aways

### Business Plan Update

- FL PRIME business case review initiated in late 2019
- Put on hold early 2020 due to COVID-19 pandemic
- Re-engaged in Fall 2021 and prioritized commercial banking relationship before exploring additional outsourcing opportunities
- ITN for banking relationship expected to be completed in June 2022

### Money Market Reform Update

- SEC proposed amendments to Rule 2a-7 (covering money market funds) 12/21
- Florida PRIME governed by GASB\*; though, historically has been managed *mostly* in line with the SEC's Rule 2a-7
- Aon, Federated and the SBA continue to stay apprised of developments and guidance from GASB on impact to Florida PRIME management

### IPS Review

- Florida PRIME IPS has continually been updated according to latest GASB guidance and in line with best practices
- Aon continues to find the IPS to be comprehensive and appropriate for the management and oversight of Florida PRIME

\*Governmental Accounting Standards Board

## Key Proposed SEC Money Market Reforms\*

Increase Liquidity Requirements	<ul style="list-style-type: none"><li>• Increase daily liquid assets from 10% to 25% of total assets</li><li>• Increase weekly liquid assets from 30% to 50% of total assets</li></ul>
Remove Liquidity Fee and Redemption Gate Provisions	<ul style="list-style-type: none"><li>• Proposed amendment would remove the fee and gate provisions from rule 2a-7</li><li>• Current rules allow MMFs to impose a liquidity fee of up to 2% or temporarily suspend redemptions (i.e., impose a “gate”), if certain liquidity thresholds are breached</li></ul>
Adopt Swing Pricing Requirements	<ul style="list-style-type: none"><li>• Swing pricing would adjust a MMF’s current NAV such that the transaction price effectively passes on costs stemming from shareholder redemptions to redeeming shareholders.</li><li>• Currently, redemption and trading costs are borne by the remaining investors in the MMF</li></ul>

- Proposed amendments published on Federal Register in February 2022 and public comment period closed in April 2022
- Given differing characteristics of prime MMFs and external investment pools, the proposed reforms may have minimal impacts on management of Florida PRIME\*\*
- Anticipate time for SEC to process comments, as well as guidance from GASB once any final decisions are made
- Aon, Federated and the SBA continue to monitor the path of the amendments and potential impact on Florida PRIME

\*SEC.gov | SEC Proposes Amendments to Money Market Fund Rules

\*\*U.S. LGIPs Unlikely to be Affected by Money Market Fund Reform (fitchratings.com)

# Meeting of the Investment Advisory Council

## Item 6. Florida PRIME™ Review

*Amy Michaliszyn, Federated Hermes*

*Luke Raffa, Federated Hermes*

*Paige Wilhelm, Federated Hermes*

*(See Attachment 6C)*

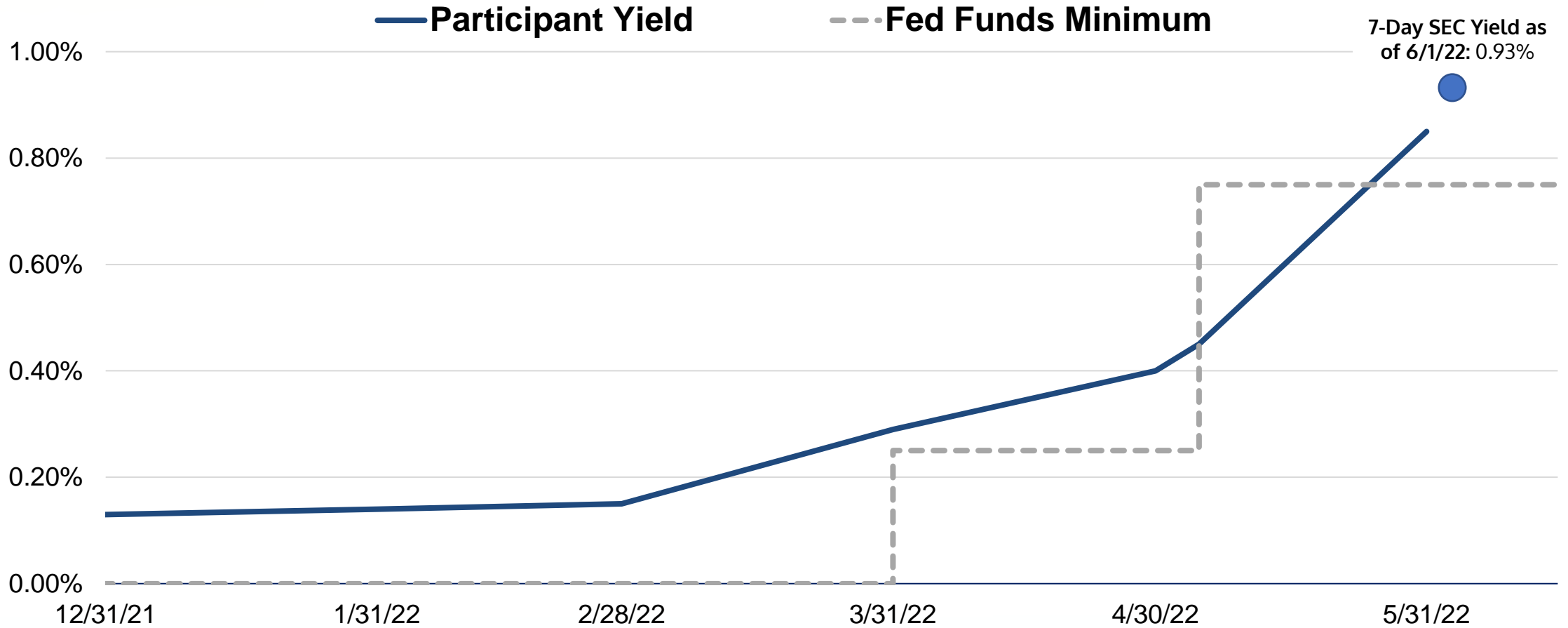


# 2022 Investment Advisory Council Meeting



# Federated Hermes Partnership

Pool Summary	Federated Hermes Team	Services
<p>\$20.2 billion</p> <p>743 Participants</p> <p>1,383 Accounts</p> <p><i>(as of 3/31/22)</i></p>	<p><b>Paige Wilhelm</b> Senior Vice President Senior Portfolio Manager</p> <p><b>Amy Michaliszyn</b> Executive Vice President</p> <p><b>Luke Raffa, CFA</b> Senior Sales Representative</p>	<ul style="list-style-type: none"><li>• Portfolio Management</li><li>• Participant Outreach</li><li>• Marketing Support</li></ul>



Source: Federated Hermes, Federal Reserve  
Past performance is no guarantee of future results.

## Participant Outreach

- **Direct Conversations:**
  - Targeted calling effort engaging participants and prospects
  - Education on rising rates and their effect on the pool
- **Expanding our footprint with new opportunities around the state:**
  - City of Jacksonville
  - Miami-Dade County
  - North Broward Hospital District
  - University of South Florida
  - Santa Fe College
- **Conference Attendance with sponsorships and exhibits throughout the year**

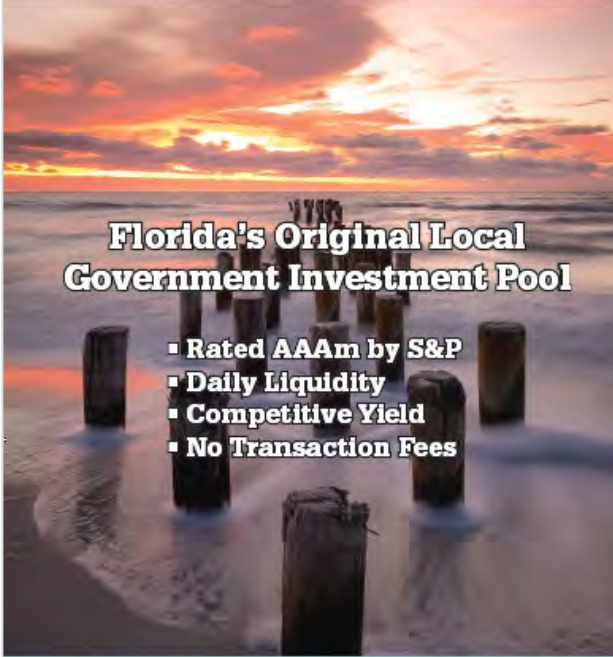

## Marketing Support

- **Regular Commentaries:**
  - Weekly market commentaries from Paige Wilhelm
  - Timely updates on topics including:
    - Fed hikes
    - Pool positioning
    - Inflation
- **Monthly Newsletters**
- **Quarterly Reviews**

# Supporting Local Florida Organizations



Throughout the past year, ads for Florida PRIME were featured in the FACC directory, FCCMA directory and the FASBO publication.

The conference signage showcasing Florida PRIME was also enhanced:



**Florida's Original Local Government Investment Pool**



- Rated AAAm by S&P
- Daily Liquidity
- Competitive Yield
- No Transaction Fees

Sponsored by  Investment management by 

The advertisement features a background image of a sunset over water with several wooden pilings in the foreground. The Florida PRIME logo is at the top. The text "Florida's Original Local Government Investment Pool" is centered. Below it is a bulleted list of features. At the bottom, it says "Sponsored by" followed by the SBA Florida logo, and "Investment management by" followed by the Federated Hermes logo.

**Florida's Premier Cash Management Solution**

- Used by Over 700 Public Entities
- Managed by a Leading Investment Manager




Sponsored by  Investment management by 

The advertisement features a background image of a sun shining through trees over a body of water. The Florida PRIME logo is at the top. The text "Florida's Premier Cash Management Solution" is centered. Below it is a bulleted list of features. At the bottom, it says "Sponsored by" followed by the SBA Florida logo, and "Investment management by" followed by the Federated Hermes logo.

# 2022 Conference Sponsorships

Dates	Description	City	Participation
1/26/22-1/28/22	Winter COBA Conference	Orlando	Sponsor
3/9/22-3/11/22	FCCC Winter Conference <b>NEW</b>	Panama City Beach	Exhibitor
5/25/22-5/27/22	COBA Conference <b>NEW</b>	Lake Mary	Sponsor
6/1/22-6/4/22	FCCMA Annual Conference	Orlando	Sponsor
6/6/22-6/10/22	FSFOA Summer Conference	St. Augustine	Sponsor
6/13/22-6/16/22	FASD Annual Conference	Orlando	Exhibitor
6/25/22-6/29/22	Annual FGFOA Conference	Orlando	Sponsor
8/11/22-8/13/22	FLC Annual Conference	Hollywood	Exhibitor
11/14/22-11/17/22	FSFOA Fall Conference	Orlando	Sponsor

# Competitor Analysis

	7-Day Net Yield as of 6/1/22	Full Fee	Manager	Pool AUM
	0.93%	3.15 bps	Federated Hermes	\$20.6 billion as of 2/28/22
	0.90%	17 bps	PFM Asset Management	\$1.7 billion as of 2/28/22
	0.85%	15 bps	Public Trust Advisors	\$5.0 billion as of 12/31/21*

\*AUM for FL Class is based on its most recent annual report disclosure

# Florida PRIME Portfolio Review



# Year in Review

March 31, 2022

The reporting period saw an extraordinary shift in the Federal Reserve's approach to inflation.

In spring of 2021, the majority of the U.S. adult population had received at least one dose of a Covid-19 vaccination. This, and declining new cases of infection, resulted in many state and local governments lifting most mandated restrictions implemented to stem the pandemic, employers began to rehire workers and consumer activity returned. As the pace of consumer spending grew due to pent-up demand and elevated savings, some economists and analysts became concerned that inflation might accelerate. Yet Fed policymakers said any increase would be "transitory" and kept the fed funds target range at 0-0.25% and its asset-buying program intact.

Fall brought new issues that complicated Fed policy. After the suspension of the federal debt ceiling expired in August, political wrangling over raising the spending limit intensified in Congress. The emergence of a highly transmissible strain of Covid-19 named delta disrupted supply-chains and slowed the economic recovery. The former pushed prices further upward, arguing for removal of accommodation, while the latter argued for the opposite. A compromise of sorts came with the Fed's announcement it likely would taper the amount of its asset-purchases within the year.

After extended brinkmanship by lawmakers over the debt ceiling forced the Treasury to rely on its cash balance and other measures, Democrats passed a bill in December that authorized \$2.5 trillion in new borrowing. This action righted a modest dislocation in the front end of the Treasury yield curve. Citing the improved economy and robust labor market, in November Fed officials

started the prolonged process of removing accommodation by trimming the amount of monthly asset purchases.

As the calendar flipped to 2022, the Fed signaled it was ready to normalize monetary policy to rein in inflation that had begun to rise significantly. An even more contagious Covid-19 variant, omicron, swept across the U.S. in January and February before receding in March. The wave weighed on already stressed supply chains, helping to drive annualized inflation to multi-decade highs. This was stoked by rising wages due to a general labor shortage and the Russian invasion of Ukraine that caused the price of crude oil and other commodities to surge. Realizing that they had misjudged inflation, the Fed announced a 25 basis-point hike of the fed funds target range in March, shifting it to 0.25-0.50%, and projected as many as six more quarter-percentage-point hikes through the course of the year, though the futures market anticipated larger increases. While a flight-to-quality due to the Ukrainian war depressed yields at the front end of the Treasury curve, yields on longer-dated securities sharply steepened. The reporting period concluded with widespread concern inflation would continue to soar and that aggressive Fed action could push the economy into recession.

At the end of the reporting period, yields on 1-, 3-, 6- and 12-month U.S. Treasuries were 0.12%, 0.51%, 1% and 1.57%, respectively; the 1-, 3-, 6- and 12-month Bloomberg Short-Term Bank Yield Index rates (BSBY) were 0.39%, 0.89%, 1.37% and 1.97%, respectively; and the 1-, 3-, 6- and 12-month London interbank offered rates were 0.44%, 0.96%, 1.49% and 2.17%, respectively.



# Liquidity Market Commentary

June 1, 2022

The cautious and shrewd way Federal Reserve policymakers communicate can put diplomats to shame. But the success of their decisions in the coming months will depend upon how well they listen.

Managing monetary policy in the midst of a global pandemic has been, and remains extraordinarily difficult. No one can deny that. But the Fed's response to mounting inflation in the last several quarters showed it wanted to stick to its new paradigm in the face of facts. If you recall, in August of 2020, it recast its policy framework to allow inflation to exceed 2% as long as the labor market is strong. Officials not only viewed rising prices in 2021 as "transient," but also a positive after years of undershooting 2%.

While telegraphing 50 basis-point hikes in the next two FOMC meetings, minutes from the last meeting and recent official speeches suggest the committee might pause to assess their impact. In other words, they will—and should—return to making decisions based on data in the fight against inflation without inducing a recession. Policymakers have to listen to what the economy is telling them on a scale much smaller and a timeframe much shorter than they prefer. This is no time for long-view academic studies.

Reports already indicate that this economy might be more responsive to

shifts in monetary policy than traditionally expected. The housing market, consumer outlook and industrial production are cooling off. It is not unreasonable to think that supply-chain bottlenecks and energy prices exacerbated by China's shutdown and the war in Ukraine could improve by the fall. Data dependency is a cliché that completely applies here.

What of investors? The bond market seems to be declaring victory over inflation and the stock market is betting on the worst-case scenario. Investors in the short end of the Treasury yield curve are acting more rationally, although the supply/demand imbalance, especially in the front end, has caused it to trade much lower in yield.

In addition to the supply/demand imbalance, the flight-to-safety trade has depressed Treasury yields further. Yields on prime instruments are a different story, offering attractive spreads over Treasuries. Contrast this with deposit products. Administered rates have not budged much because banks still are flush with cash and don't want deposits—especially now that the cost of lending is increasing. The money markets are in a good place, and a good place for investment. Cash is an asset class again.

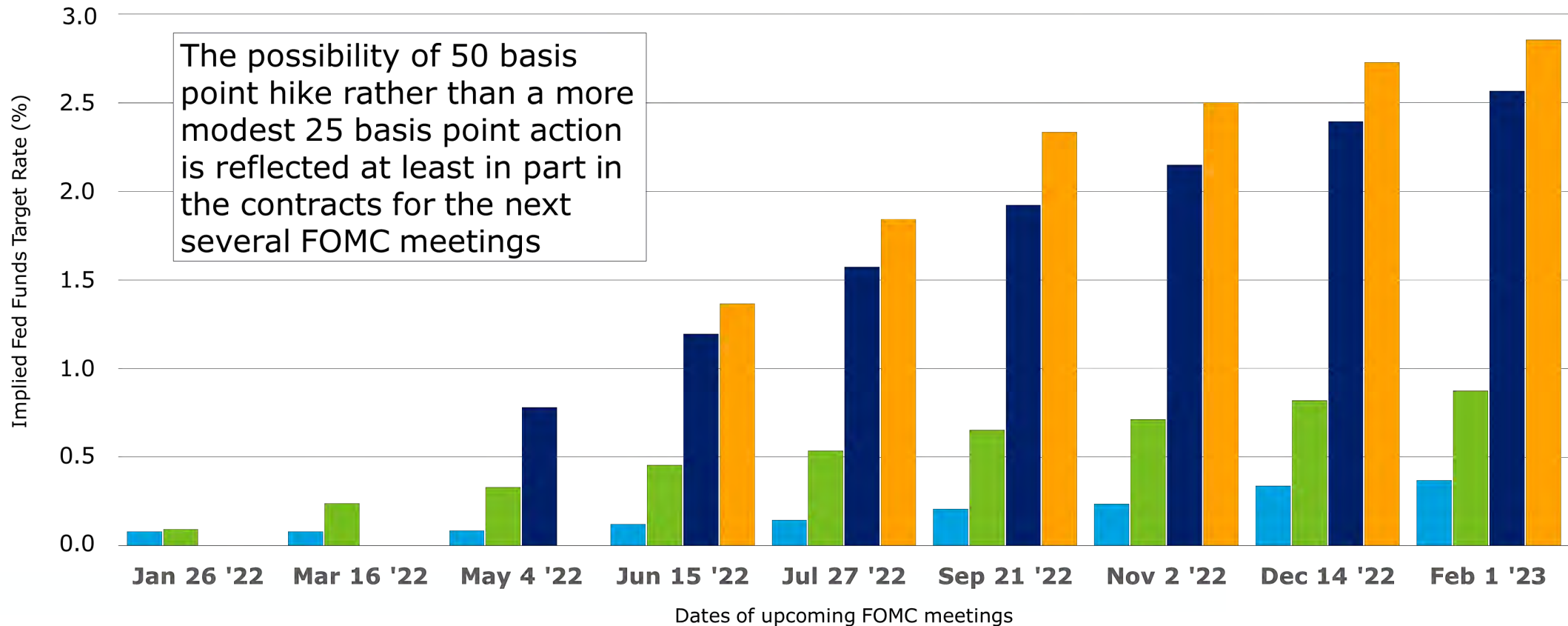
In light of the anticipated rate hikes, we kept the weighted average maturity (WAM) of the pool in a target range of 25-35 days in May.

# Aggressive monetary policy action now anticipated

Amid intensified price pressures and a tight labor market the Fed could reach– and move beyond- a neutral stance by late 2022

## Tightening expectations as reflected in the Fed Funds Futures Contracts

■ 9/30/21 ■ 12/31/21 ■ 3/31/22 ■ 5/15/2022



Source: Bloomberg

# Quantitative tightening plans

Little initial material impact to the front end

## From March FOMC meeting minutes we learned:

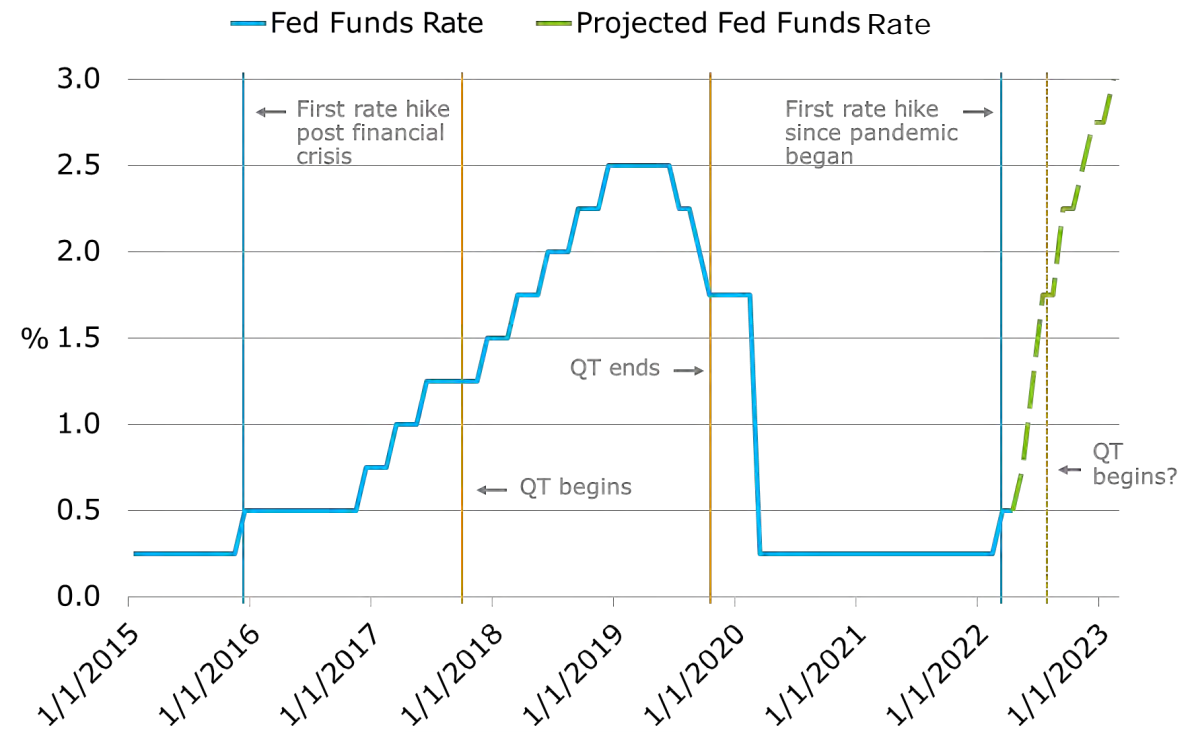
- Fed plans to start QT sooner
- Balance sheet roll offs will be subject to caps phased in over a 3-month period
- The Fed will not let the entire \$326 billion of Treasury Bills roll off and will use bills to ensure the cap for Treasuries is met every month, a disappointing announcement for money market investors

## From May's meeting:

- The Fed delivered on the anticipated 50 bps rate increase bringing the federal funds range to 0.75%-1.00%
- The Fed will passively reduce its balance sheet starting June 1<sup>st</sup> with a cap of \$30 billion Treasuries and \$17.5 billion mortgage-backed securities per month
- In September, caps will ramp up to \$60 billion and \$35 billion respectively

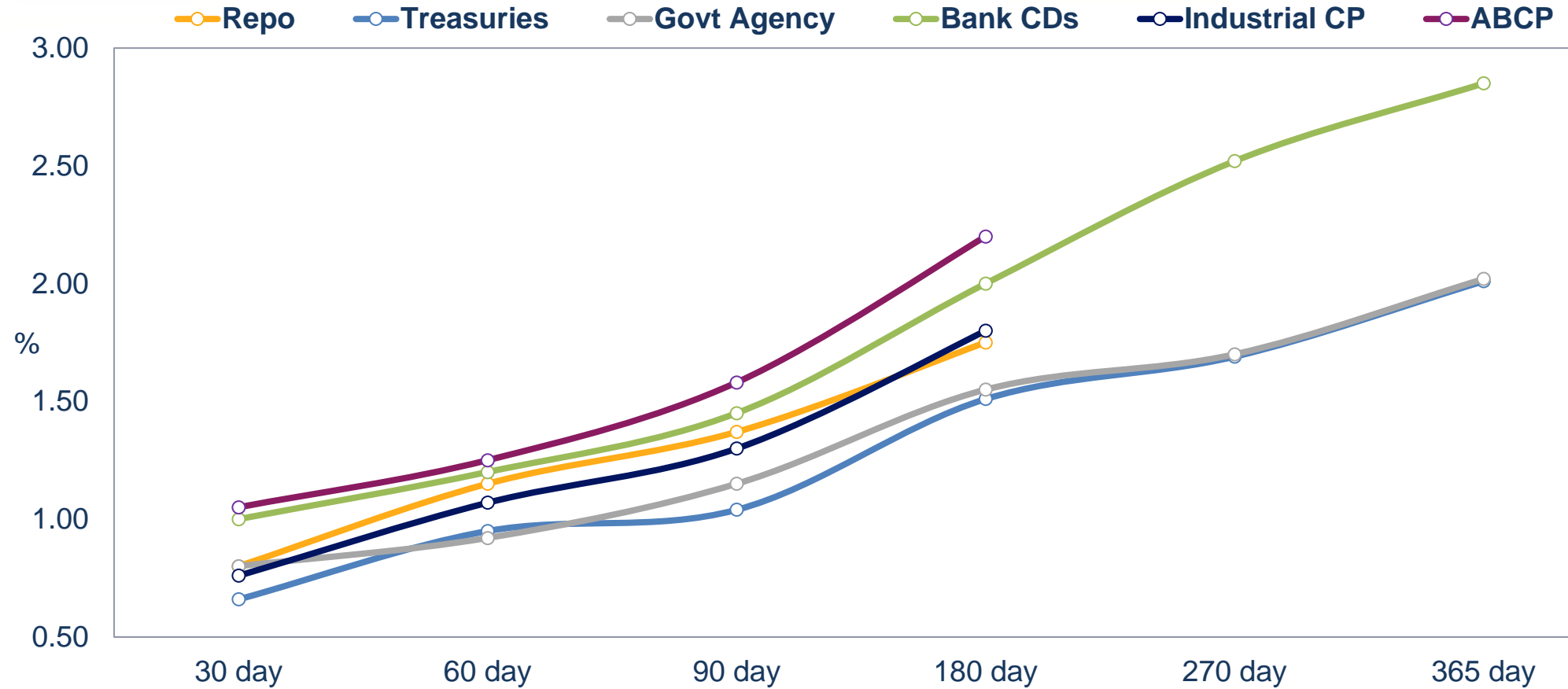
## Quantitative tightening (QT) and rate hikes

The Fed has signaled that it intends to start QT more quickly following the first rate hike than it did in the 2010s.



# Current Yields

As of 5/31/22

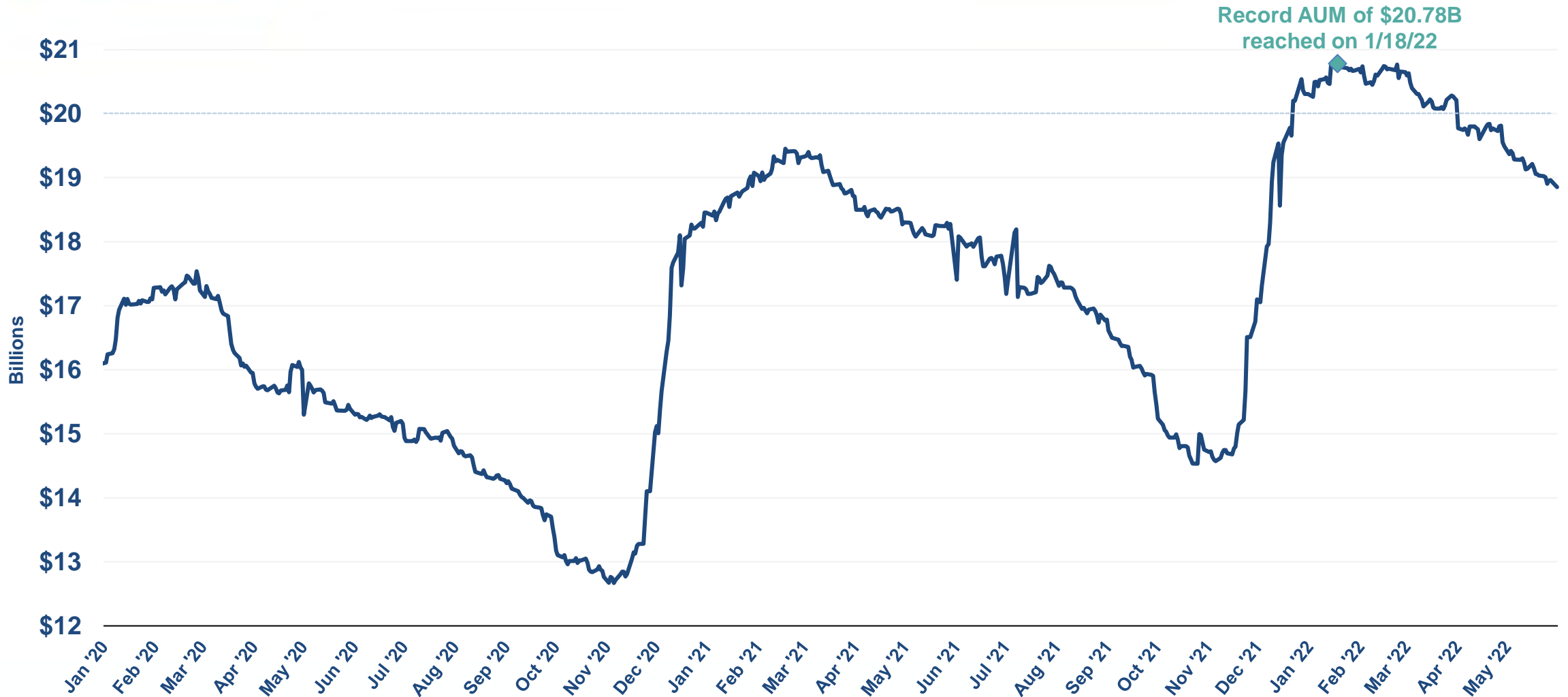


Source: Bloomberg

Past performance is no guarantee of future results. This chart is for illustrative purposes only.

# Daily Assets

1/1/20 – 5/31/22

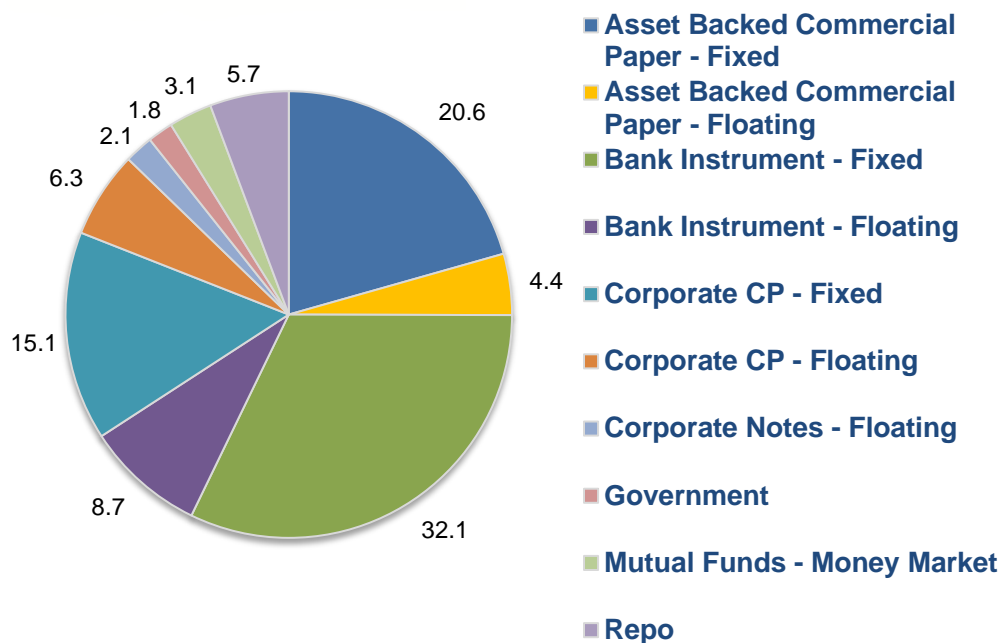




# Portfolio Characteristics

Period Ending 3/31/22

## Portfolio Composition (%)



## Top Country Exposure

	%
United States	27.6
Canada	23.1
Japan	13.0
Netherlands	9.9
Australia	9.2
France	8.1
Germany	4.9
United Kingdom	1.0
Luxembourg	0.8
Switzerland	0.7
Sweden	0.6
Norway	0.5
Finland	0.4

**Total** **100.0**

## Top 10 Holdings (ex Repo)

	%
Australia & New Zealand Banking Group, Melbourne	4.9
ABN Amro Bank NV	4.9
DZ Bank AG Deutsche Zentral-Genossenschaftsbank	4.9
Cooperatieve Rabobank UA	4.9
Canadian Imperial Bank of Commerce	4.8
Bank of Montreal	4.7
Toronto Dominion Bank	4.7
Bank of Nova Scotia, Toronto	4.6
Mizuho Financial Group, Inc.	4.5
Societe Generale, Paris	4.5

**Total:** **47.4%**

## Credit Quality

<b>A-1+</b>	64.4%
<b>A-1</b>	35.6%

## Effective Maturity Schedule

1-7 days	8-30 days	31-90 days	91-180 days	181+ days
65.5%	8.1%	18.9%	3.7%	3.7%

## Weighted Average Maturity (WAM)

26 days

## Weighted Average Life (WAL)

71 days



# Performance vs. Index

Period Ending 3/31/22

Performance Data (%) as of 3/31/22								
	1-month	3-month	1-year	3-years	5-years	10-years	Since Jan. 1996	7-Day SEC Yield (as of 6/1/22)
Annualized Net Participant Yield <sup>1</sup>	0.29%	0.19%	0.13%	0.89%	1.30%	0.82%	2.39%	0.93%
S&P AAA/AA Rated GIP All 30-Day Net Index <sup>2</sup>	0.10%	0.06%	0.04%	0.75%	1.09%	0.62%	2.18%	
<i>Above (Below) Benchmark</i>	<i>0.19%</i>	<i>0.13%</i>	<i>0.09%</i>	<i>0.14%</i>	<i>0.21%</i>	<i>0.20%</i>	<i>0.21%</i>	
<i>iMoneyNet MFR First Tier Instl Avg (Net)</i>	0.00	(0.01)	0.00	0.67	1.02	0.57	N/A	0.66%

<sup>1</sup> Net of fees. Participant yield is calculated on a 365-day basis and includes adjustments for expenses and other accounting items to reflect realized earnings by participants.

<sup>2</sup> Net of fees.

Notes: Annualized 1-month and 3-month performance figures





# Stress Test Results

as of 3/31/22

## Stress Testing Board Summary Report for Florida Local Government Investment Pool A

Date of Stress Tests:	31-Jan	28-Feb	31-Mar
Shadow NAV at Time of Tests:	0.99991	0.99978	0.99958

Pct of Shares Redeemed	Redemptions Only					
	Stress NAV			Weekly Liquidity		
	Jan	Feb	Mar	Jan	Feb	Mar
0%	0.99991	0.99978	0.99958	41.97%	43.93%	47.31%
10%	0.99990	0.99975	0.99953	35.53%	37.70%	41.46%
20%	0.99988	0.99972	0.99947	30.00%	30.00%	34.15%
30%	0.99987	0.99968	0.99940	30.00%	30.00%	30.00%
40%	0.99985	0.99963	0.99930	30.00%	30.00%	30.00%

Pct of Shares Redeemed	Change in Interest Rates						Credit Event						Floater Spread Widening					
	Stress NAV			Weekly Liquidity			Stress NAV			Weekly Liquidity			Stress NAV			Weekly Liquidity		
	Jan	Feb	Mar	Jan	Feb	Mar	Jan	Feb	Mar	Jan	Feb	Mar	Jan	Feb	Mar	Jan	Feb	Mar
0%	0.99862	0.99879	0.99869	41.97%	43.93%	47.31%	0.99930	0.99921	0.99882	41.97%	43.93%	47.31%	0.99957	0.99938	0.99895	41.97%	43.93%	47.31%
10%	0.99847	0.99866	0.99855	35.53%	37.70%	41.46%	0.99922	0.99912	0.99869	35.53%	37.70%	41.46%	0.99953	0.99931	0.99883	35.53%	37.70%	41.46%
20%	0.99827	0.99849	0.99837	30.00%	30.00%	34.15%	0.99912	0.99901	0.99853	30.00%	30.00%	34.15%	0.99947	0.99923	0.99869	30.00%	30.00%	34.15%
30%	0.99803	0.99827	0.99813	30.00%	30.00%	30.00%	0.99900	0.99887	0.99832	30.00%	30.00%	30.00%	0.99939	0.99912	0.99850	30.00%	30.00%	30.00%
40%	0.99770	0.99798	0.99782	30.00%	30.00%	30.00%	0.99883	0.99868	0.99804	30.00%	30.00%	30.00%	0.99929	0.99897	0.99826	30.00%	30.00%	30.00%

Test	% of Orig. Portfolio Stressed		
	Jan	Feb	Mar
Redemptions Only	0.0%	0.0%	0.0%
Change in Int. Rates	95.5%	93.2%	92.2%
Credit Event	70.1%	63.8%	65.4%
Floater Spread Widening	12.7%	15.2%	23.3%
Combination	95.5%	93.2%	92.2%

Pct of Shares Redeemed	Combination					
	Stress NAV			Weekly Liquidity		
	Jan	Feb	Mar	Jan	Feb	Mar
0%	0.99768	0.99783	0.99732	41.97%	43.93%	47.31%
10%	0.99743	0.99759	0.99702	35.53%	37.70%	41.46%
20%	0.99710	0.99729	0.99665	30.00%	30.00%	34.15%
30%	0.99669	0.99690	0.99617	30.00%	30.00%	30.00%
40%	0.99613	0.99638	0.99554	30.00%	30.00%	30.00%





# Stress Test Footnotes

as of 3/31/22

## Escalation Procedures:

Based on Federated's procedures, as of 6/30/2016, Counsel to the Independent Directors or Trustees will receive notification from the Adviser upon the occurrence of the following events in a Rule 2a-7 money market fund: (1) any deviation between the NAV and the market based NAV in excess of \$0.0040 per share or (2) Weekly Liquid assets drop below 30%.

## Assessment of Pool's Ability to Withstand Events Reasonably Likely to Occur During the Following Year:

Unless highlighted above for further discussion, the Adviser has determined that the pool is structured in such a way that the occurrence of the events, described more fully above, which the Adviser believes are reasonably likely to occur during the next 12 months would not result in the pool's Weekly Liquid Assets falling below 10% or a pool failing to minimize principal volatility.

## Test Descriptions:

Unusual Redemption Activity: Resulting NAV & liquidity levels following redemptions equal to 40% in 10% increments

Change in Interest Rates: Resulting NAV & liquidity levels following a change in rates of 1.25%.

Credit Event: Banks widen by 0.50%, and Travel and Leisure spreads widen by 0.25%

Floater Spread Widening: Resulting NAV & liquidity levels following a widening of floater spreads off of the applicable index of 0.50%

Combination: Change in Interest Rates, Credit Event, and Floater Spread Widening combined.

## Redemption Funding Method:

Redemptions - Sell Daily Liquidity down to 0 percent then Weekly Liquidity down to 30 percent then based on Final Maturity Date

# Meeting of the Investment Advisory Council

## **Item 7. Review of Florida PRIME Investment Policy Statement**

*Lamar Taylor, Interim Executive Director & CIO*

*(See Attachments 7A-7B)*

**Action Required**



# Meeting of the Investment Advisory Council

## **Item 8. Review changes to Florida Retirement System Pension Plan Investment Policy Statement**

*Lamar Taylor, Interim Executive Director & CIO*

*(See Attachments 8A-8B)*

**Action Required**



# Meeting of the Investment Advisory Council

## Item 9. Global Equity Asset Class Review

*Tim Taylor, Senior Investment Officer*



# Investment Advisory Council

## Global Equity Update

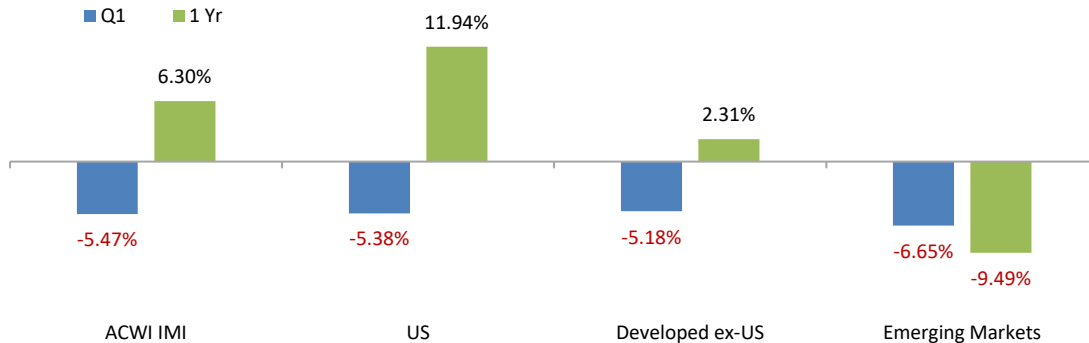
Tim Taylor, Senior Investment Officer

June 28, 2022

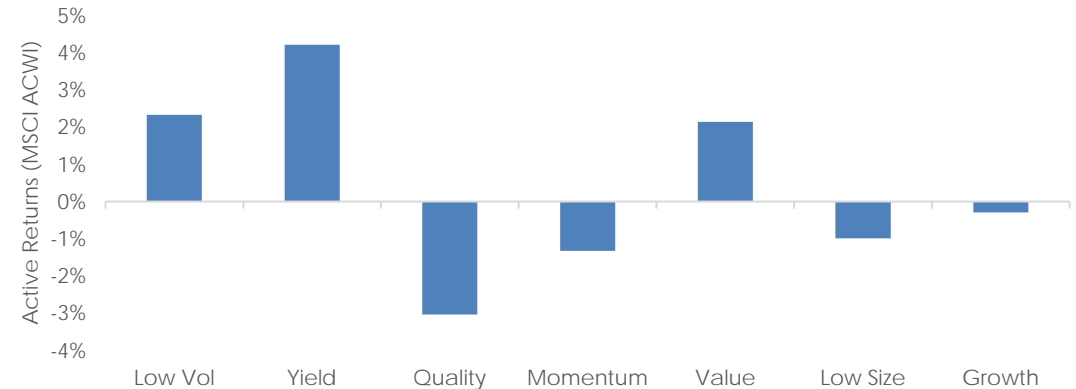


# Q1 2022 Equity Market Environment

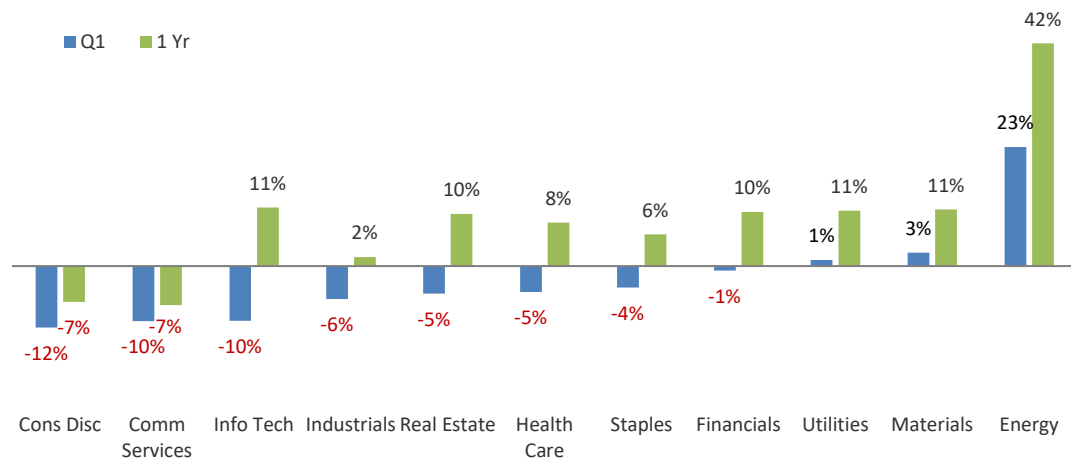
## Global Markets Decline in Q1



## Low Vol, Yield, and Value Factors Outperformed



## Energy Sector the Clear Leader



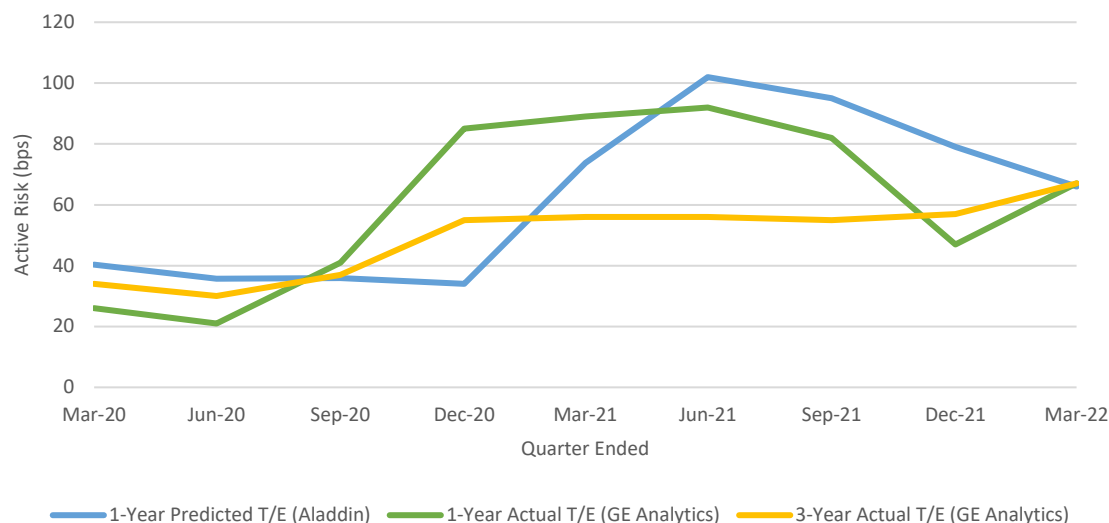
## Q1 2022 Global Market Dynamics

- Equity markets began 2022 on a negative note, with markets down across-the-board.
- Investors were focused on inflation, rising interest rates and Central Bank tightening, even before Russia's unexpected invasion of Ukraine.
- In Q1 2022 Energy soared as everything else slumped. Consumer Discretionary, Communication Services and Information Technology all declined considerably.
- Company earnings generally met expectations, yet the highest multiple stocks were rerated.
- Russia closed its local stock exchange to foreigners in late February, and MSCI and other index providers removed Russia from its global benchmarks shortly thereafter.

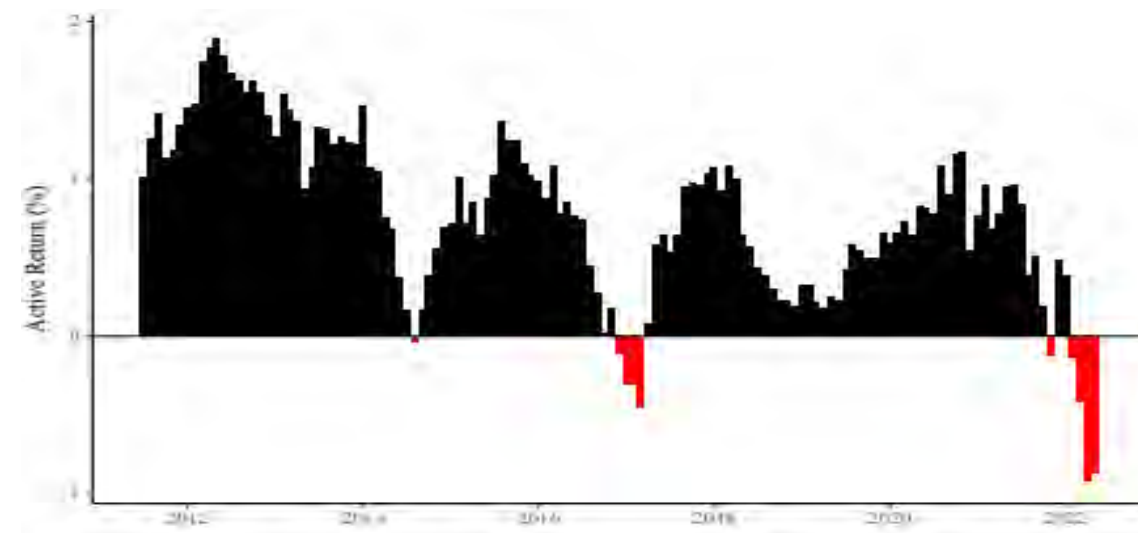
# Aggregate Performance Summary

Total Global Equity	EMV (\$M)	Q1 '22	FYTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr	SI
<b>Asset Class Return</b>	\$102,550	-6.34%	-1.93%	5.43%	13.68%	11.71%	9.91%	10.55%	11.45%
vs Target		-5.40%	-0.76%	6.35%	13.55%	11.40%	9.55%	10.00%	10.79%
Excess Return		-0.95%	-1.17%	-0.92%	0.14%	0.31%	0.36%	0.55%	0.66%
Tracking Error					0.67%	0.57%	0.57%	0.55%	0.55%
Return/Risk (IR)					0.15%	0.46%	0.54%	0.87%	1.05%

Realized active risk increased in Q1 2022



Global Equity has outperformed the benchmark, net of fees, in 121 of 131 rolling one-year periods



Note: All returns through 3/31/2022. Inception 7/1/10. Benchmark is Custom Iran Sudan Free MSCI ACWI IMI Index. Realized Risk is compared to prior 1 year Predicted Risk.

# Active Strategy Performance Summary

Excess Returns by Aggregate						Q1 2022 Commentary
Active Strategy Group	% of Asset Class	Q1 2022	1 Year	3 Year	5 Year	Recent Performance Drivers
Foreign Developed Large Cap	20%	-2.85%	-3.94%	0.70%	1.23%	Underweights to deeper value stocks, Energy and Banks detracted. A sharp rerating of holdings that soared during the pandemic also negatively impacted performance. A consistent focus on quality and stability did not prove beneficial.
Emerging Markets	11%	-0.05%	-0.24%	1.67%	0.54%	Exposure to value stocks and an underweight to Chinese technology holdings were positive. However the repricing of Russian holdings to essentially zero weighed heavy on performance.
Dedicated Global	10%	-1.48%	-3.56%	-3.41%	-1.83%	Growth- and quality-oriented managers struggled during the quarter as expensive growth/quality sold off more than shorter duration stocks. Managers focused on value and dividend-yielding stocks outperformed.
Foreign Developed Small Cap	4%	-2.14%	-1.25%	-0.36%	-0.54%	Underperformance was driven by exposure to quality- and growth-focused securities, with some relief provided by managers with value elements in their portfolios.
US Small Cap	2%	-0.19%	7.18%	2.31%	1.67%	Quality factors were a headwind, as was an Energy underweight. Value factor exposures and an underweight to Pharma/Biotech were beneficial.
US Large Cap	2%	-0.19%	2.28%	-0.71%	-0.69%	Lower quality and commodity stocks fared best, areas where this aggregate is typically underweight. Being below benchmark to Energy was a significant detractor. Positive contributors included an IT underweight.
Total Active Aggregate	50%	-1.91%	-1.88%	-0.05%	0.19%	

Note: All returns through 3/31/2022. Excess returns are relative to strategy group benchmark. Weights are relative to total equity assets under management.



# Update on Initiatives

## **Provide Alpha**

- Funded a new US Small Cap Strategy in Q1 2022.
- Continuing to identify and research non-traditional opportunistic strategies that add alpha and/or diversification to the Global Equity asset class (e.g. thematic, currency, regional).
- Asset class structure review to be completed by a consultant, with the summary to be included in Global Equity's presentation at the September IAC meeting.

## **Provide Liquidity**

- Global Equity continues to be a significant provider of liquidity to support beneficiary payments.
- Raised \$1 billion in Q1 2022 and \$8.3 billion for calendar year 2021. Global Equity provided \$21.3 billion of liquidity from 2019 to 2021.



# Meeting of the Investment Advisory Council

## **Item 9. Fixed Income Asset Class Review**

*Katy Wojciechowski, Senior Investment Officer*



# State Board of Administration

## **Fixed Income Update**

**Katy Wojciechowski**

**Senior Investment Officer Fixed Income**

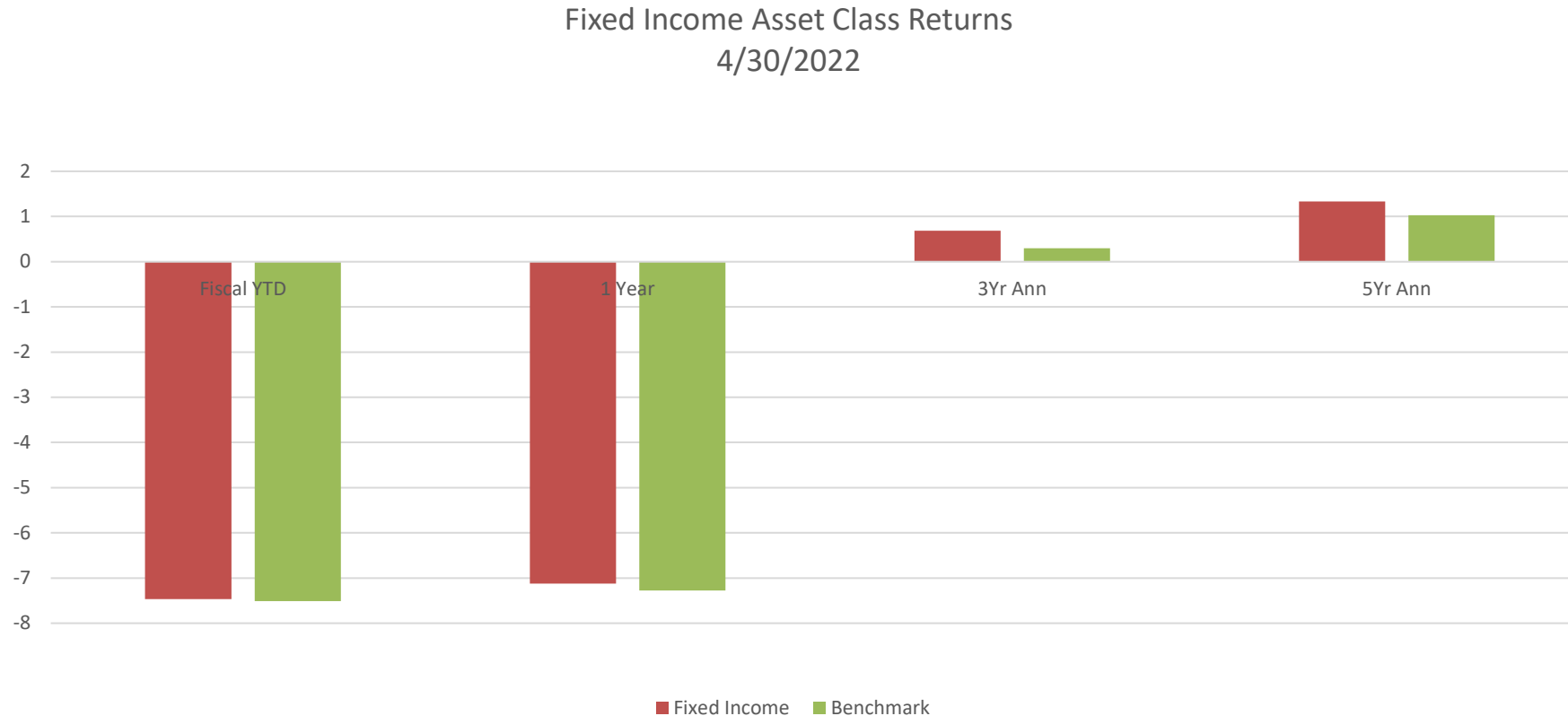
**Investment Advisory Council**

**June 28, 2022**



# Asset Class Portfolio Performance

Asset class outperformed Benchmark over ALL time periods with low risk and high Information Ratio. For FYTD ended 4/30/22, FI produced returns of (7.41%), for an outperformance of 0.10%



# Fixed Income Review and Outlook- June 2022

## **12 Month Returns for the Fixed Income benchmark –**

- Bloomberg Intermediate Aggregate through 4/30/2022 were (7.2743%).
- **Benchmark returns fiscal YTD are (7.51%), while asset class returns are (7.47%), for an outperformance of 0.04%.**

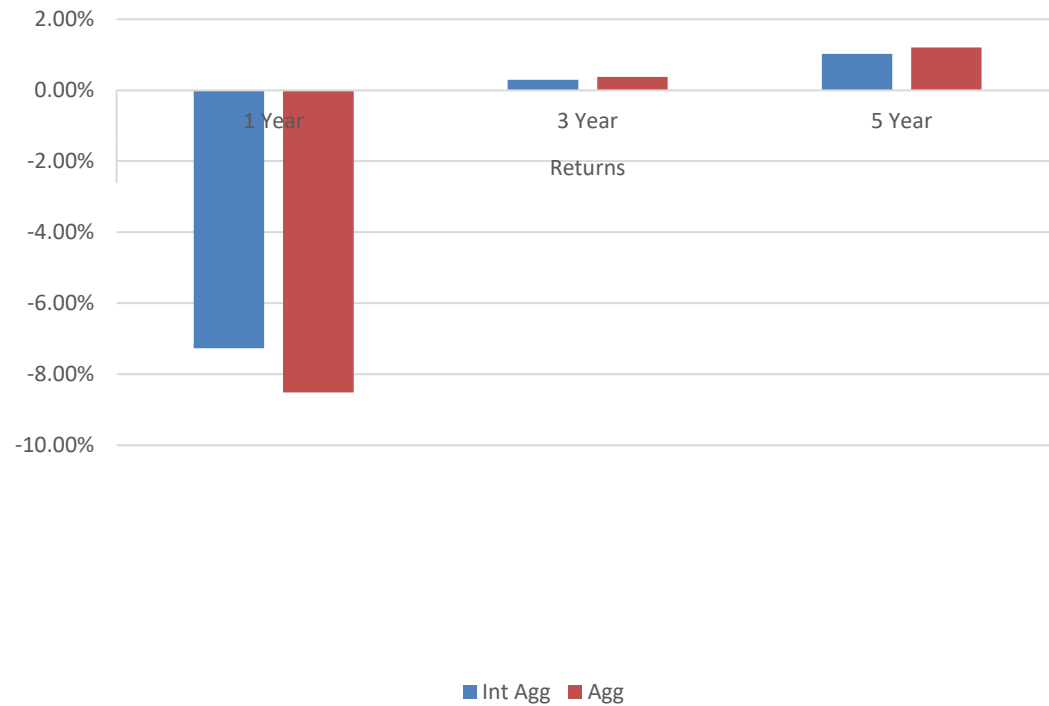
Annual Absolute and Excess Returns were negative for all spread sectors, as spreads widened on inflation fears.

- **Ten-year Treasury yields rose from 1.51% to 2.94% YTD through 4/30/2022. Yield on the entire Benchmark is now 3.16% with a 4.63yr duration.**
- Yield on the broader Barclay's Aggregate is 3.30% with a duration of 6.53yrs.

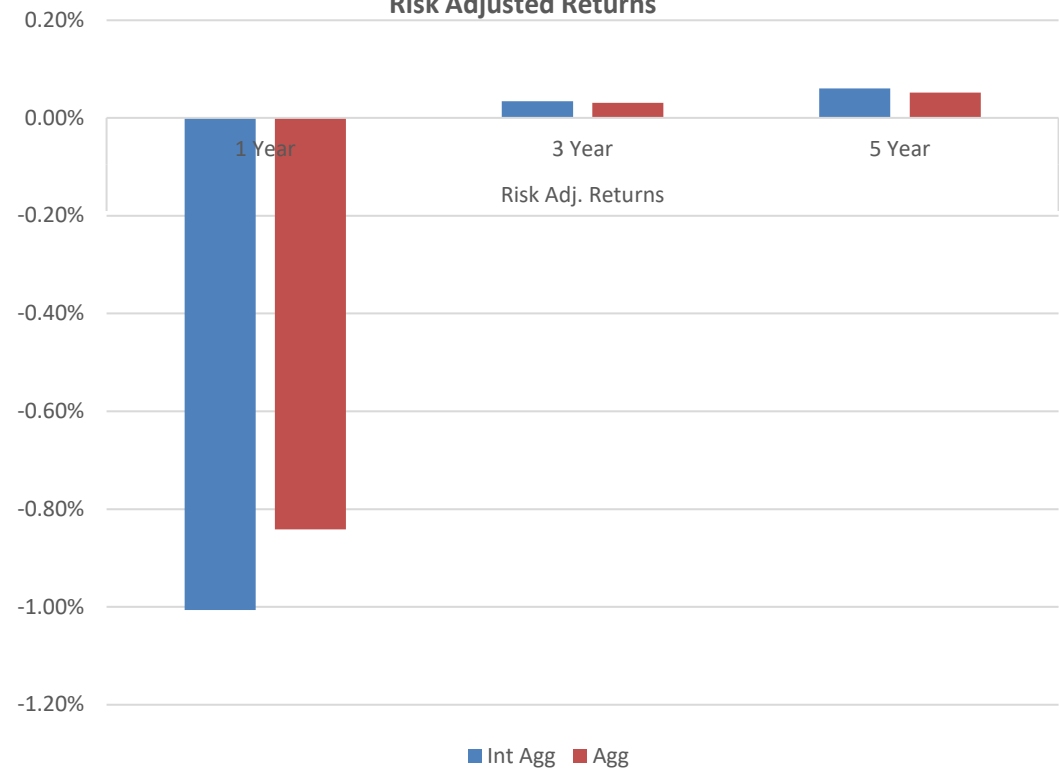
# Benchmark Comparison

as of April 30, 2022

Benchmark Returns

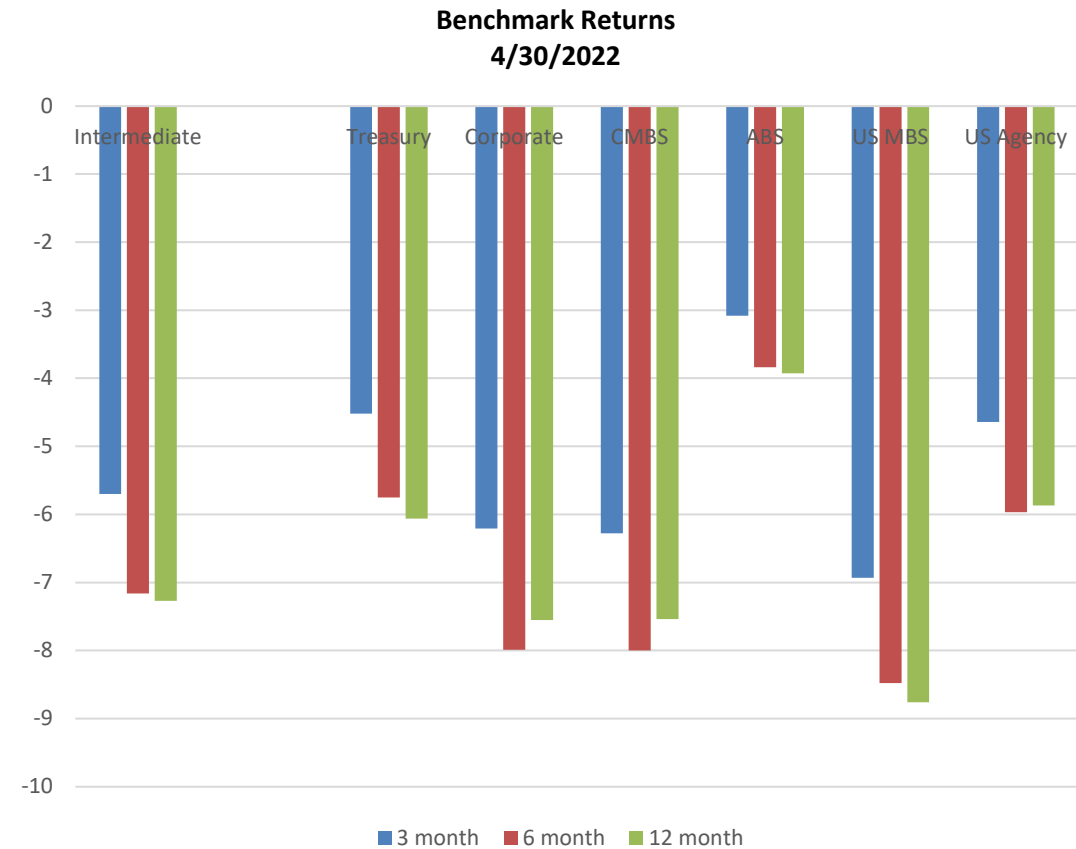


Risk Adjusted Returns



# Fixed Income Review- June 2022

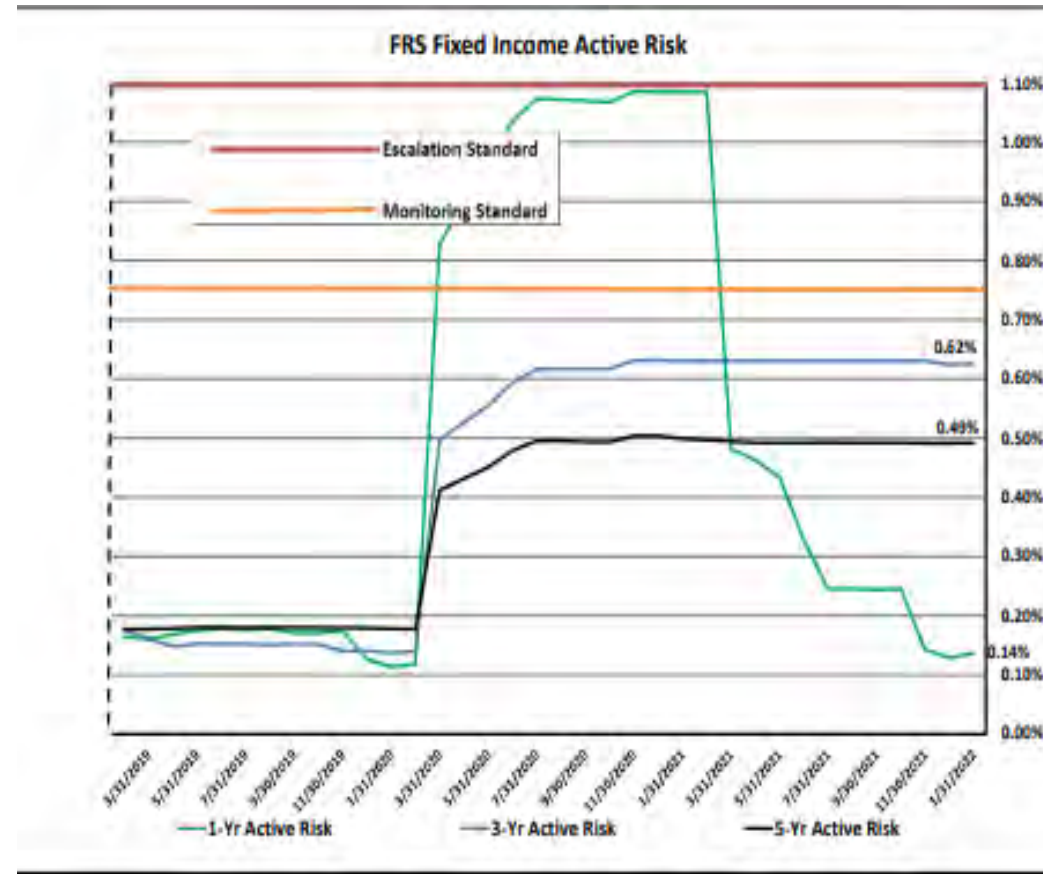
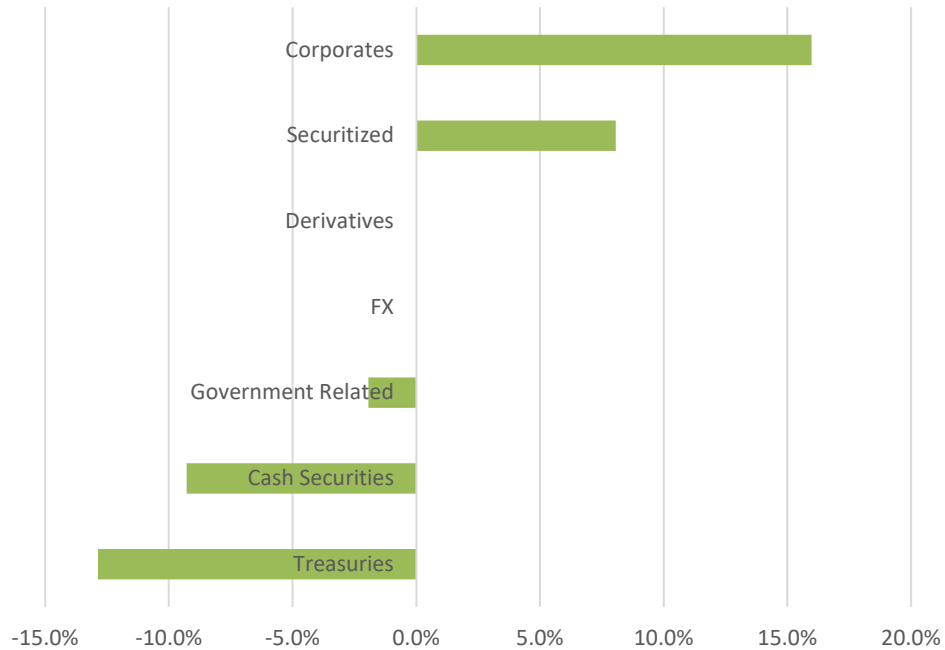
Fixed Income offers slightly more “income” at wider spreads



# Fixed Income Review June 2022

Portfolio continues to overweight Spread Product

Fixed Income Sector Allocation 3/31/2022





# Fixed Income Review June 2022

Expanded Risk Budget and increased Active Allocation

Add exposure to out of benchmark structured products or other in a dedicated strategy

***Continuing to research opportunities outside of our benchmark, barbeling liquidity with yield***

Consider opportunity to reduce risk to a rising rate environment, inflation, within overall allocation

***Increase allocation to Short Duration Credit manager?***

Execute on tactical opportunities in out of Benchmark sectors – Core Plus opportunities

***Continuing to discuss opportunities ex-US, off benchmark, given limited opportunities in US Fixed Income. Considering derivative opportunities to increase ability to be nimble***

# Meeting of the Investment Advisory Council

## **Item 9. Real Estate Asset Class Review**

*Steve Spook, Senior Investment Officer*



# Real Estate Update

Steve Spook  
Senior Investment Officer

Investment Advisory Council Meeting  
June 28, 2022



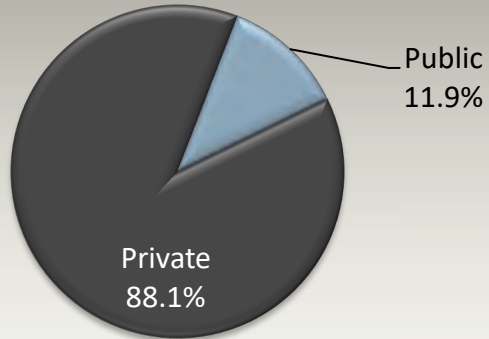
# Quarterly Highlights: Real Estate

Market Overview	Performance Summary
<ul style="list-style-type: none"> <li>• Indices continue record setting performance. ODCE 1-year 28.5% as of 3/31/2022.</li> <li>• Appreciation is strongly bifurcated with industrial, residential and alternatives the leading performers. Retail and office continue to be out of favor.</li> <li>• Surging interest rates are leading to a repricing of asset values. Best estimates are 0-10% decline.</li> <li>• Negative leverage in high growth sectors for first time since GFC.</li> <li>• Supply/demand fundamentals still imply strong rent growth for most sectors.</li> </ul>	<ul style="list-style-type: none"> <li>• Total Asset Class               <ul style="list-style-type: none"> <li>• 1 year: 23.3% (Benchmark 21.8%)</li> <li>• 3 year: 10.5% (Benchmark 9.1%)</li> </ul> </li> <li>• Contributors – 1 year               <ul style="list-style-type: none"> <li>• Principal Investments selection: Office/Retail/Industrial</li> <li>• Principal Investments allocation: Retail Underweight/Alternatives Overweight</li> <li>• Externally Managed drivers: Core Industrial/Core Diversified/REITs</li> </ul> </li> <li>• Detractors – 1 year               <ul style="list-style-type: none"> <li>• Principal Investments selection: Multifamily</li> <li>• Principal Investments: Office Overweight/Industrial Underweight</li> <li>• Externally Managed detractors: Europe retail</li> </ul> </li> </ul>
Risks and Issues to Consider	Opportunities and Priorities
<ul style="list-style-type: none"> <li>• Interest rates</li> <li>• Inflation – Consumer buying power and construction costs</li> <li>• Remote work</li> <li>• Regulatory risk</li> <li>• Growth of ecommerce</li> </ul>	<ul style="list-style-type: none"> <li>• Increase industrial/living/alternatives allocation</li> <li>• Decrease office/retail exposure</li> <li>• Master Credit Facility</li> <li>• Co-investments</li> </ul>

# Real Estate Portfolio Sector Allocation

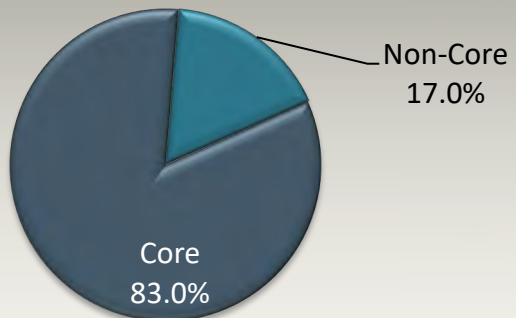
as of December 31, 2021

Total RE Portfolio



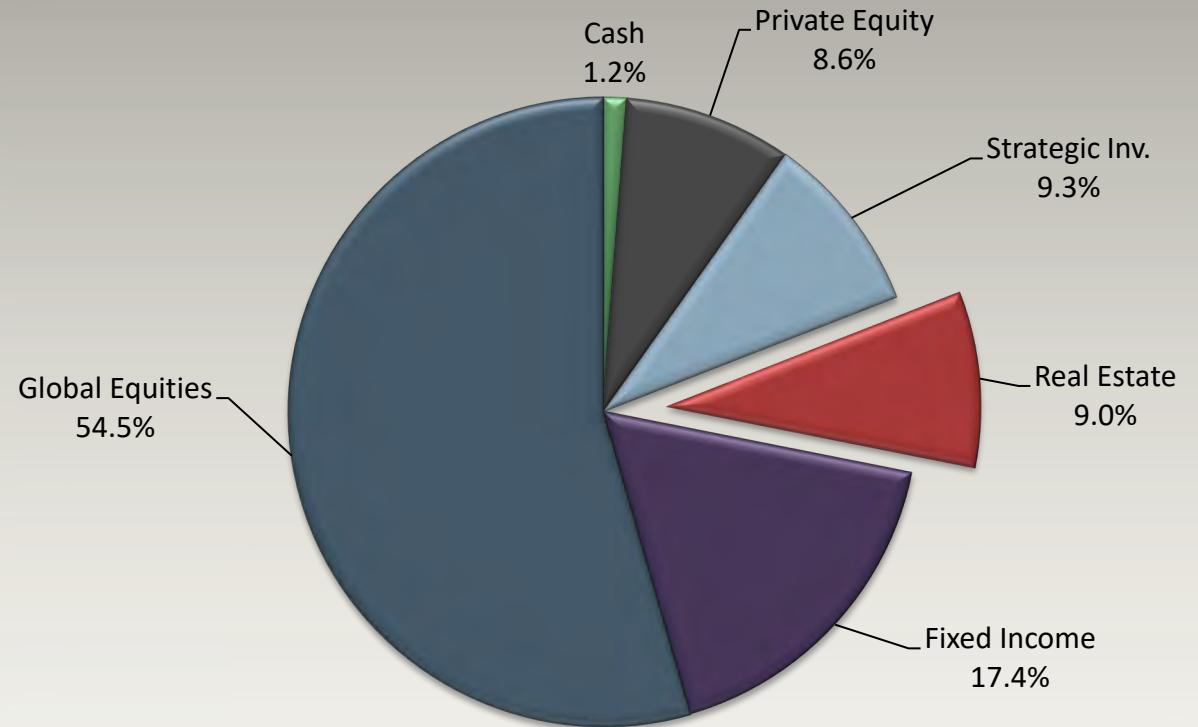
Total RE Portfolio \$19.5M

Private Market



Total Private Portfolio \$17M

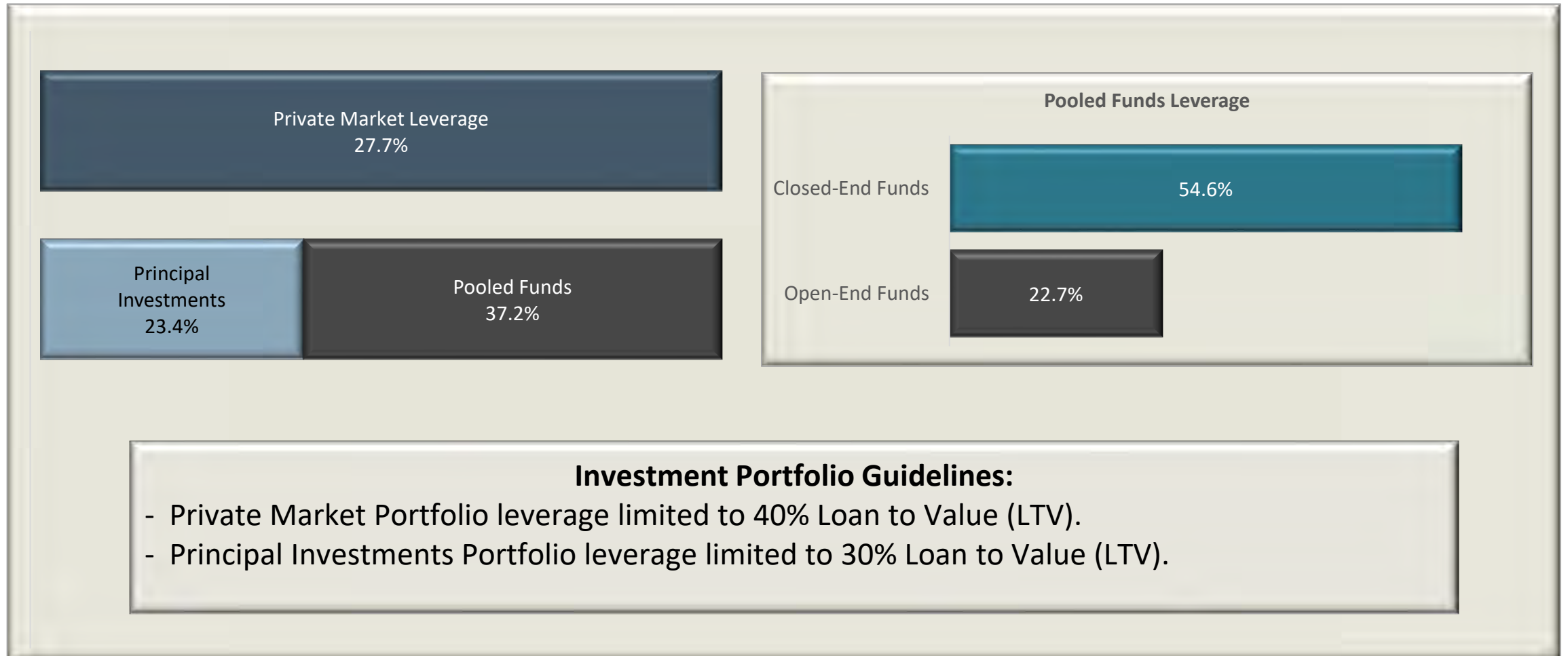
Florida Retirement System  
Defined Benefit Fund



Total FRS \$206,437M

# Private Market Leverage

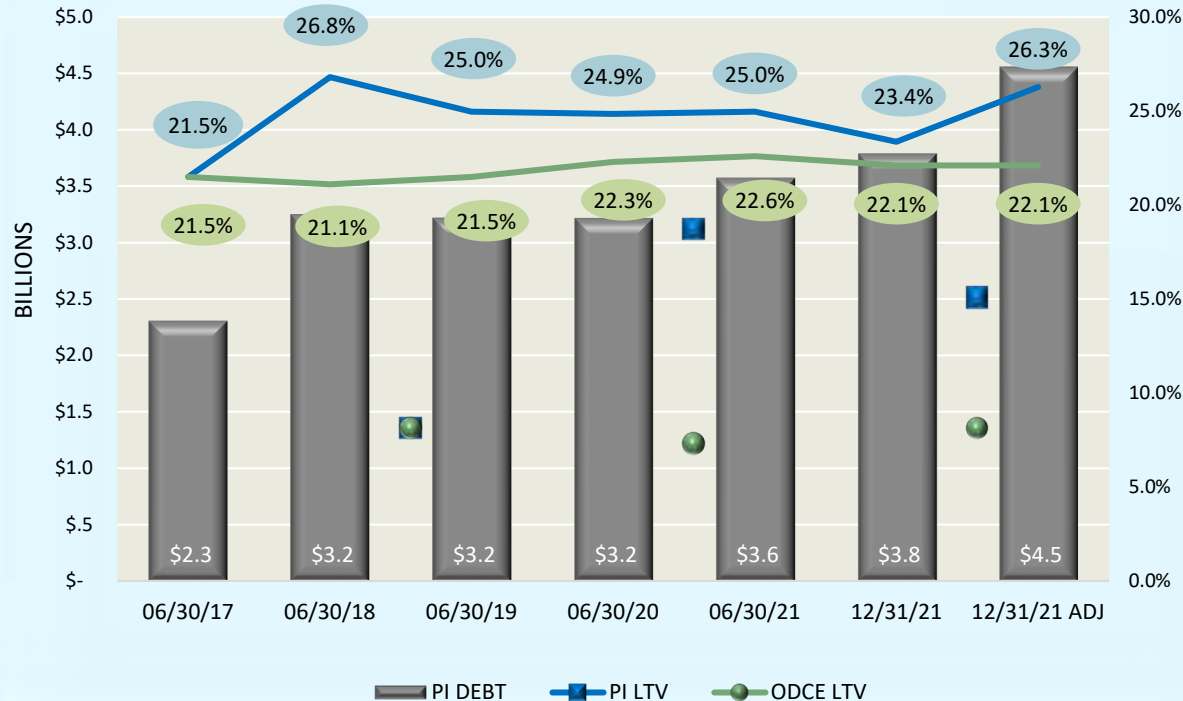
as of December 31, 2021



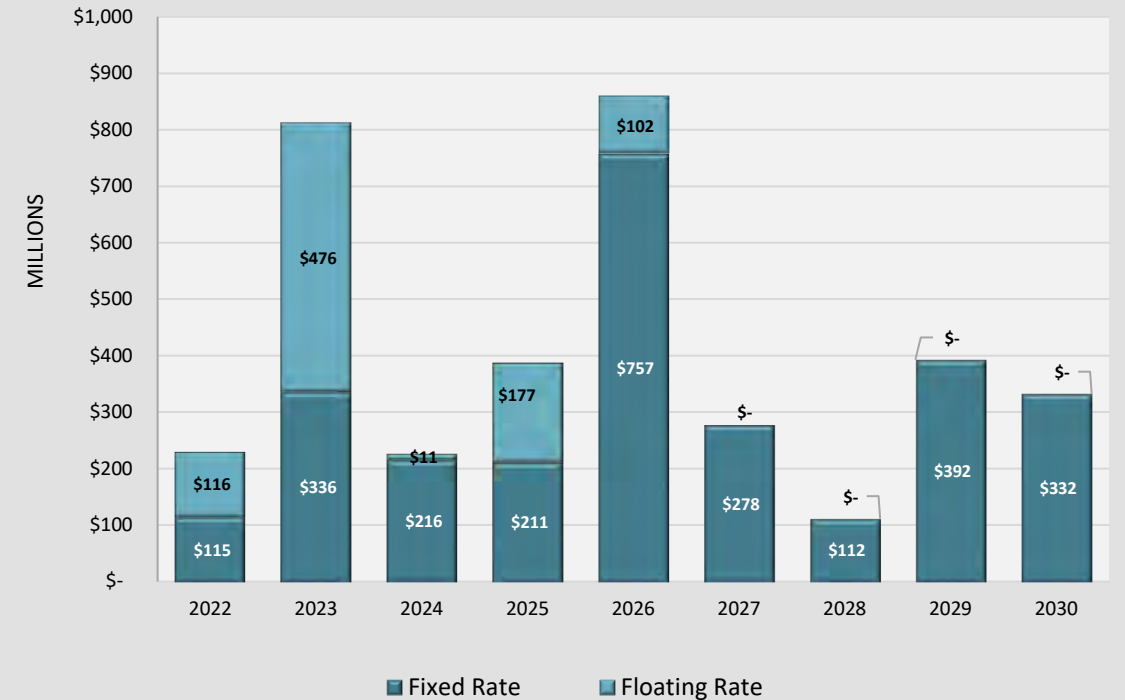
# Principal Investments Leverage

as of December 31, 2021

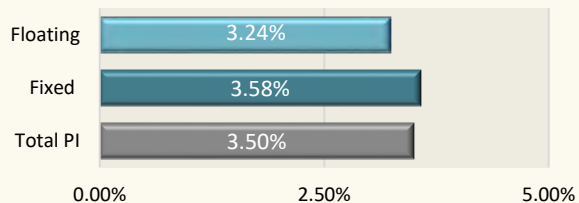
## PI 5 YR LEVERAGE



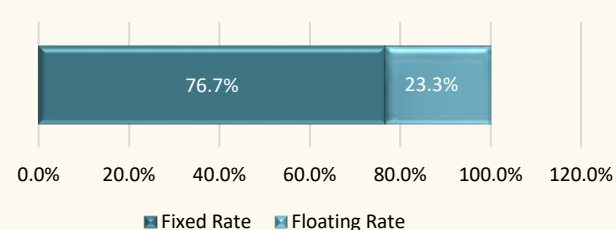
## DEBT MATURITIES



## WEIGHTED AVG COST OF DEBT



## DEBT DIVERSIFICATION



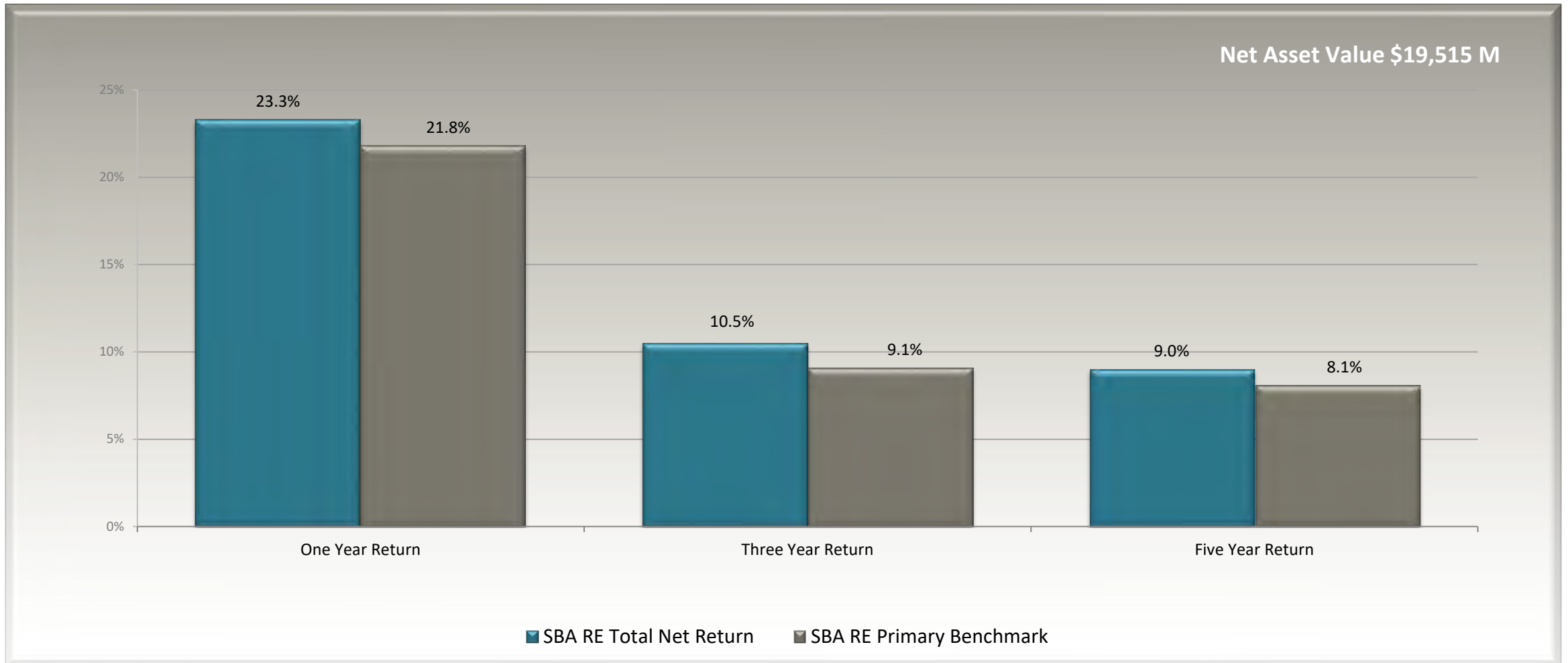
## Investment Portfolio Guidelines

- Portfolio Leverage limited to 30% Loan To Value (LTV)
- Individual Asset Level limited to 50% LTV
- JV Individual Asset limited to 70% LTV
- Nonrecourse to the SBA

PI NAV at 12/31/21: \$12.3 billion

# Total Real Estate Portfolio Performance

as of December 31, 2021

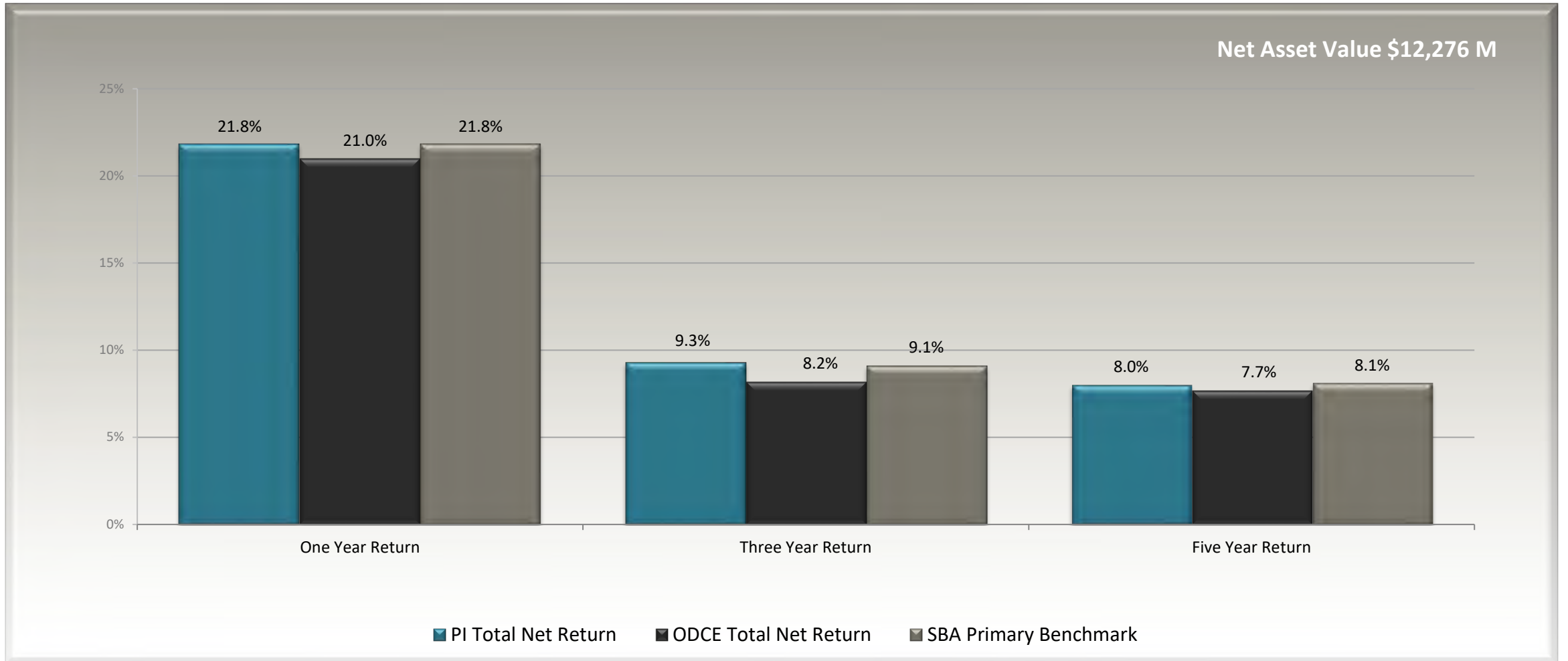


Source: The Townsend Group



# Principal Investments Performance

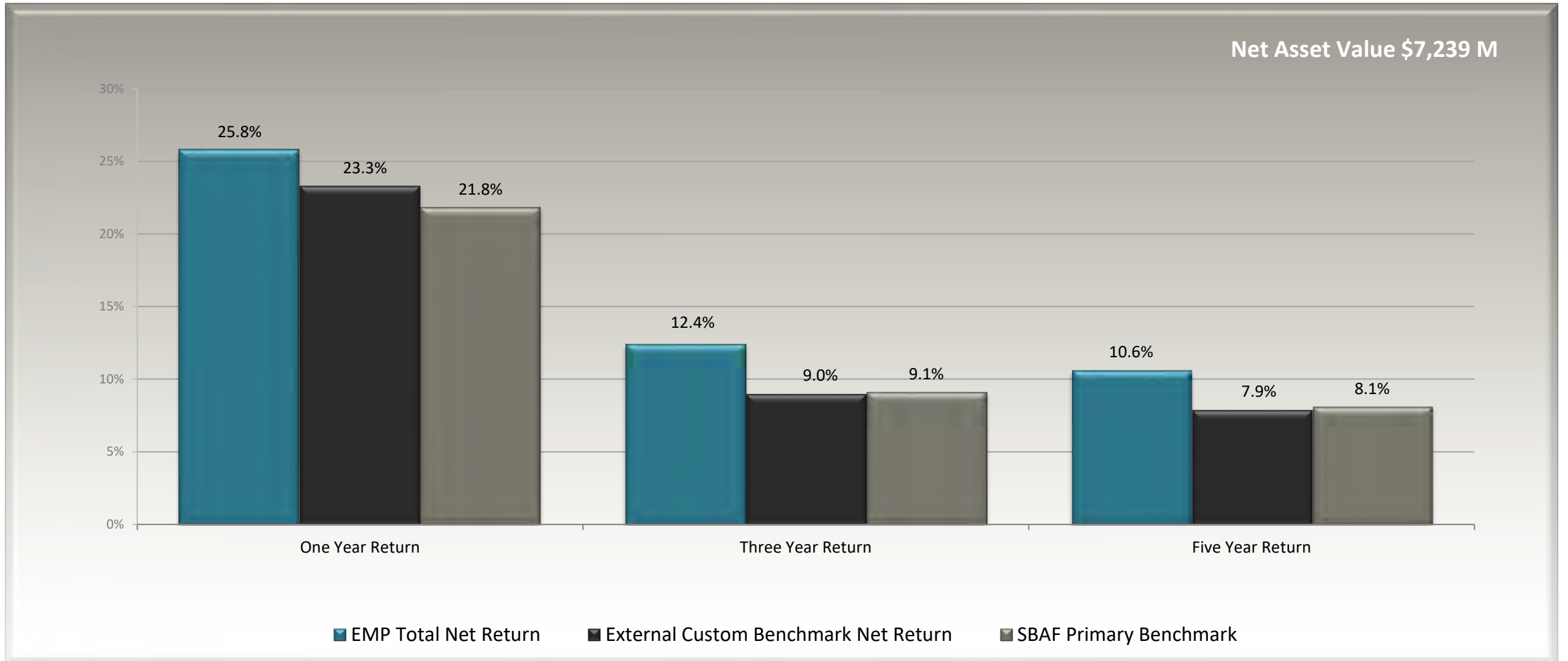
as of 12/31/2021



Source: The Townsend Group

# Externally Managed Portfolio Performance

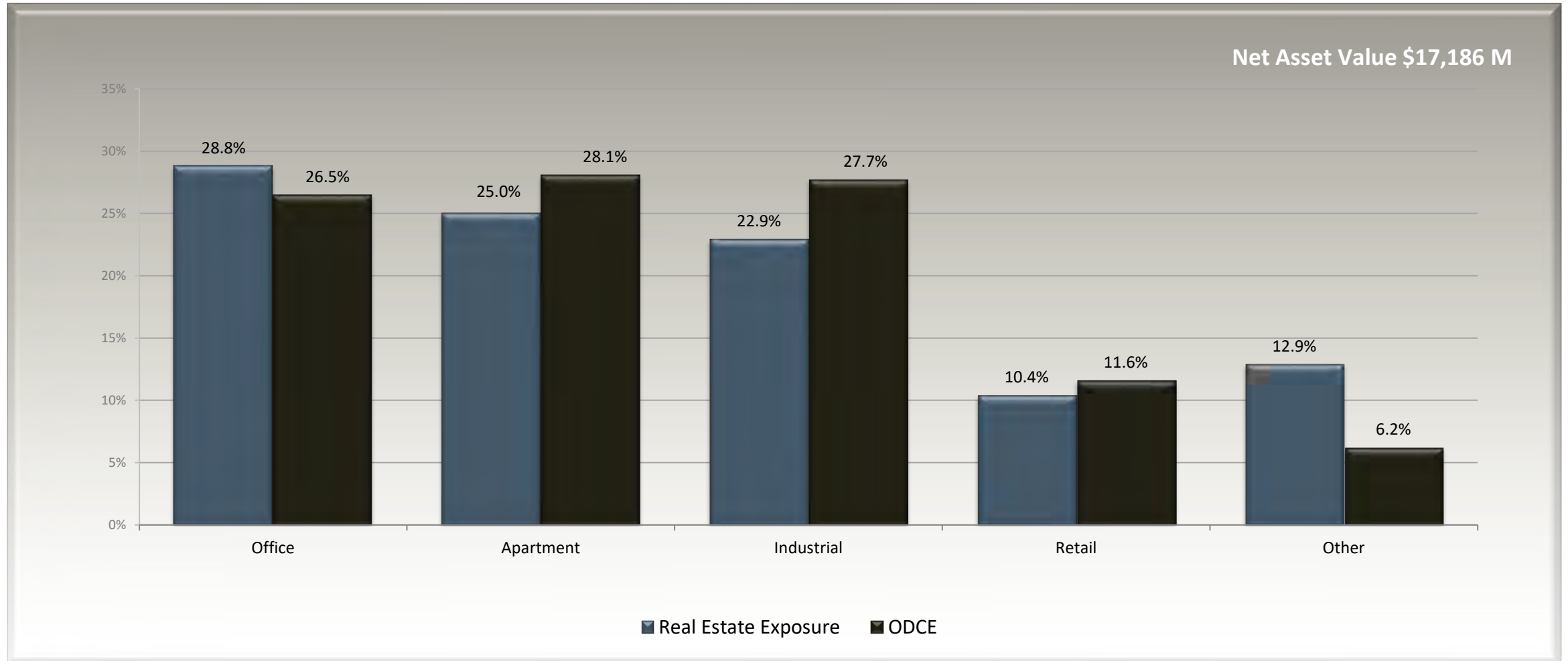
as of 12/31/2021



Source: The Townsend Group

# Private Market Property Type Diversification

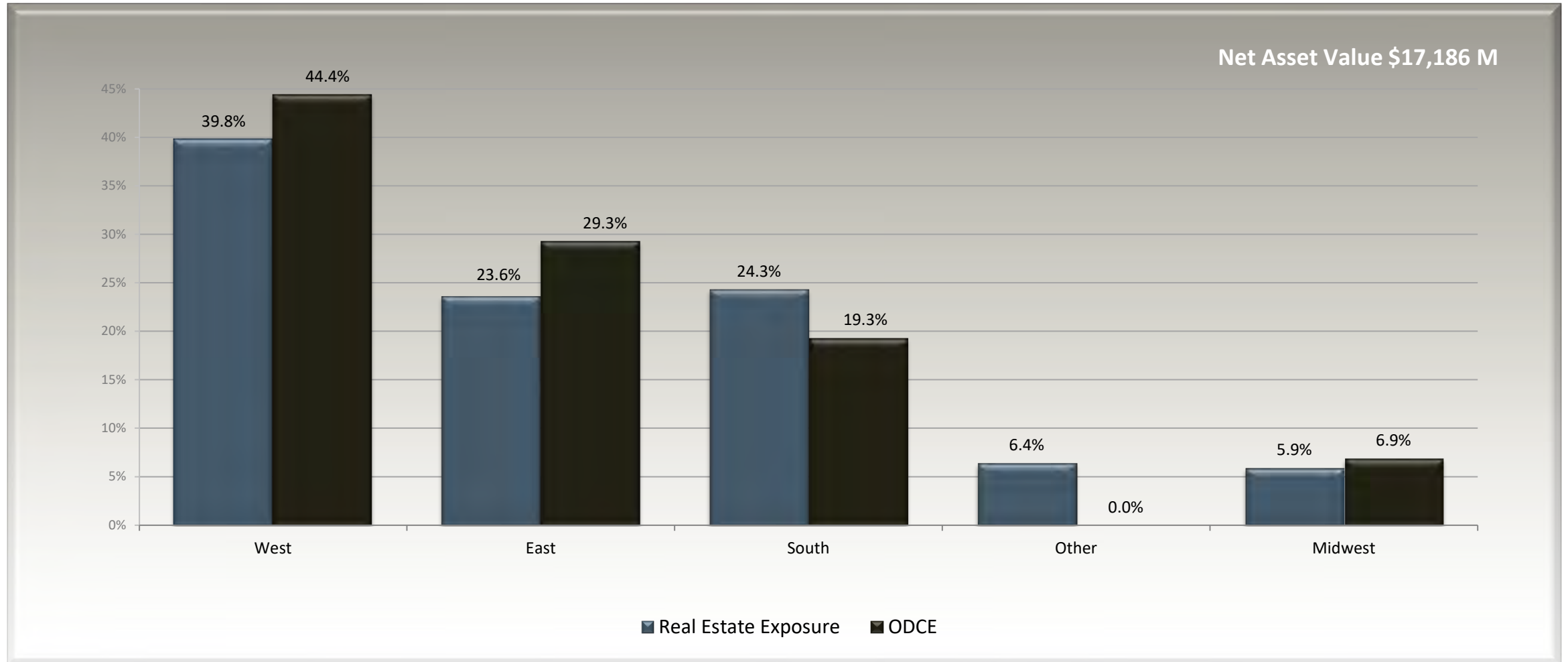
as of 12/31/2021



Source: The Townsend Group

# Private Market Geographic Diversification

as of 12/31/2021



Source: The Townsend Group

# Recent Activity

(Since Last IAC Report)

Principal Investments	Externally Managed
<b>Acquisitions (Price/Equity)</b> <ul style="list-style-type: none"><li>Industrial \$488 million/\$276 million</li><li>Cold Storage \$156 million/\$57 million</li><li>Self Storage \$158 million/\$80 million</li><li>Multifamily \$171 million/\$69 million</li></ul> <b>Dispositions (Price/Equity)</b> <ul style="list-style-type: none"><li>Retail \$104 million/\$104 million</li><li>Student Housing \$34 million/\$19 million</li></ul>	<b>New Commitments</b> <ul style="list-style-type: none"><li>Europe Residential Co-investment \$40 million</li></ul> <b>Redemptions</b> <ul style="list-style-type: none"><li>REIT Recovery Separate Account \$255 million</li></ul>

# Meeting of the Investment Advisory Council

## Item 9. Strategic Investments Asset Class Review

*Trent Webster, Senior Investment Officer*



# State Board of Administration

## **Strategic Investments Asset Class Review**

Trent Webster

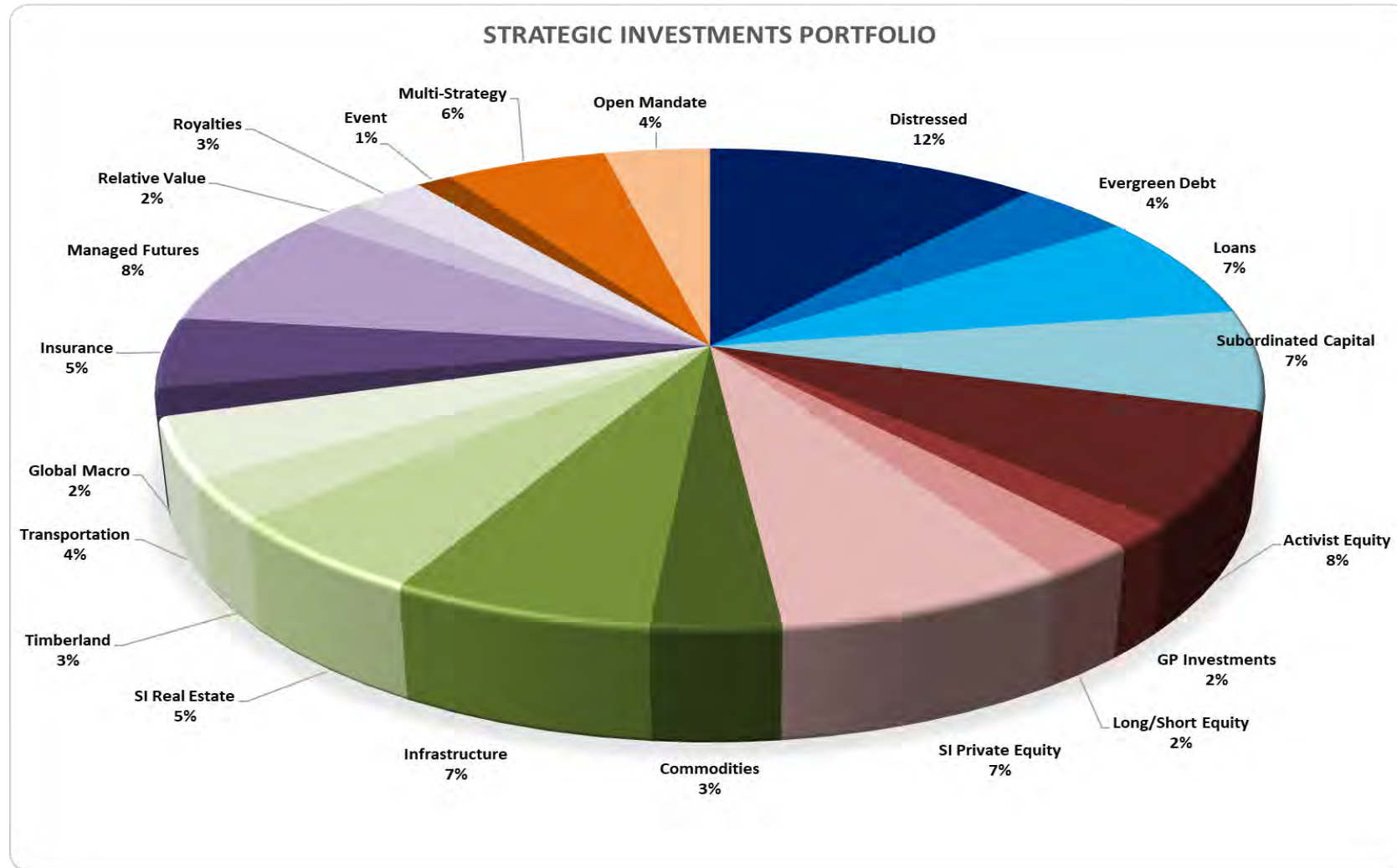
Senior Investment Officer – Strategic Investments

Investment Advisory Council Meeting

June 28, 2022

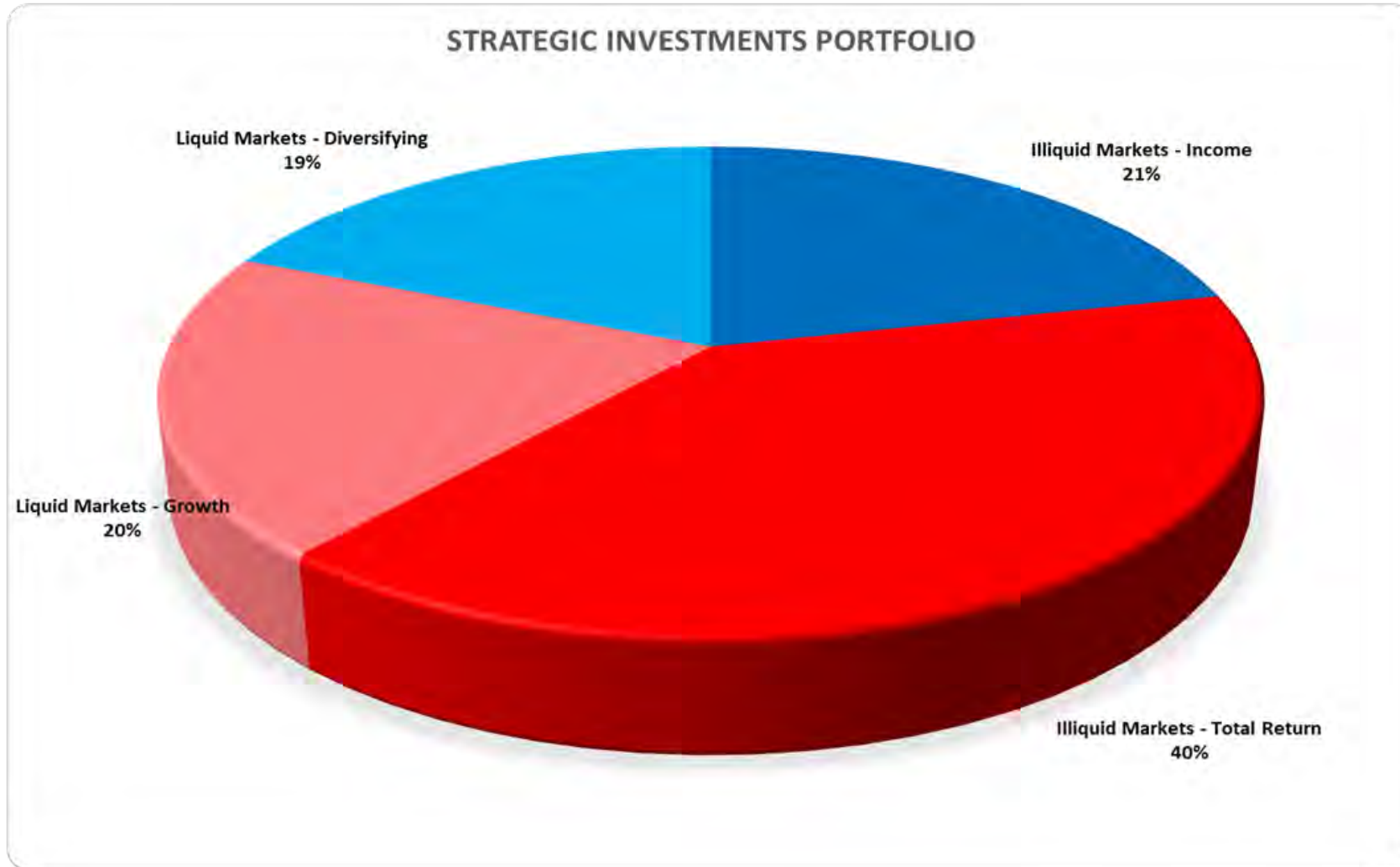


# Portfolio

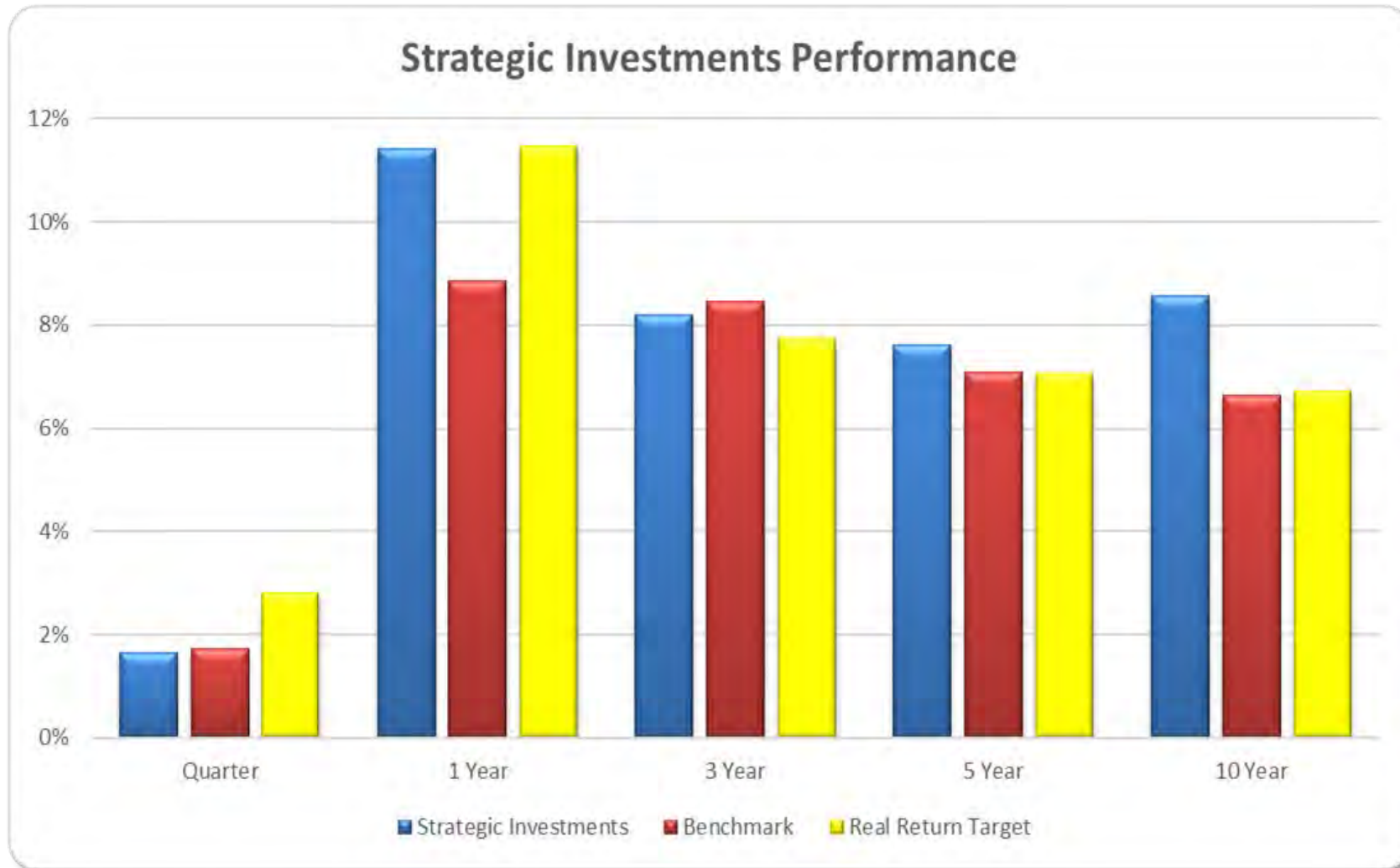




# Portfolio



# Performance



# Recent Activity

- Quarterly cash outflow of \$374 million
- Fiscal year cash outflow of \$497 million
- Three funds totaling \$230 million closed during the last quarter
- Eight funds totaling \$1.48 billion closed quarter-to-date
- Fifteen funds totaling \$2.385 billion closed this fiscal year
- Five funds totaling \$700 million in the pipeline

# Pipeline

- Three Debt funds – Two Loan, one Distressed
- One Real Asset funds – One Commodities
- One Diversifying Strategies fund – Open Insurance
  
- One new relationship
- Five private markets strategies
- No hedge funds

# Current Investment Themes

- Credit portfolio should do well absent a severe recession
  - \$3 billion in unfunded commitments
  - Floating rate performing loans hedges interest rate risk
  - High coupons insulate interest rate risk somewhat
- Real Assets should continue to perform
  - Commodities markets booming
  - Timberland prices rising
- Hedge funds have generated positive returns year-to-date
- Insurance markets dislocated

# Meeting of the Investment Advisory Council

## Item 10. Major Mandate Performance Review

*Katie Comstock, Aon*

*(See Attachment 10)*





# State Board of Administration of Florida

## Major Mandate Review First Quarter 2022

# Table of Contents

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1. Executive Summary
2. Pension Plan Review
3. Investment Plan Review
4. CAT Fund Review
5. Florida PRIME Review
6. Appendix



## Executive Summary

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- The major mandates each produced generally strong returns relative to their respective benchmarks over both short- and long-term time periods ending March 31, 2022.
- The Pension Plan outperformed its Performance Benchmark over the trailing one-, three-, five-, ten-, and fifteen-year periods.
  - Over the trailing five-year period, Global Equity and Private Equity were the leading contributors to relative returns, though all major asset classes outperformed their benchmarks
  - Over the trailing three, five and ten-year periods, the Pension Plan's return ranked in line with or above the median plan in the TUCS Top Ten Defined Benefit Plan universe.
- The FRS Investment Plan outperformed the Total Plan Aggregate Benchmark over the trailing three-, five-, and ten-year periods.
- The CAT Funds' performance is strong over long-term periods, outperforming the benchmark over the trailing five- and ten-year periods.
- Florida PRIME has continued to outperform its benchmark over both short- and long-term time periods.

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## Pension Plan: Executive Summary

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- The Pension Plan assets totaled \$197.7 billion as of March 31, 2022, which represents a \$8.7 billion decrease since last quarter.
- The Pension Plan, when measured against the Performance Benchmark, outperformed over the trailing one-, three-, five-, ten-, and fifteen- year periods.
- Relative to the Absolute Nominal Target Rate of Return, the Pension Plan outperformed over the trailing three, five and ten-year time periods.
- The Pension Plan is well-diversified across six broad asset classes, and each asset class is also well-diversified.
  - Public market asset class investments do not significantly deviate from their broad market-based benchmarks, e.g., sectors, market capitalizations, global regions, credit quality, duration, and security types.
  - Private market asset classes are well-diversified by vintage year, geography, property type, sectors, investment vehicle/asset type, and investment strategy.
  - Asset allocation is monitored on a daily basis to ensure that the actual asset allocation of the Pension Plan remains close to the long-term policy targets set forth in the Investment Policy Statement.
- Aon Investment Consulting and SBA staff revisit the plan design annually through informal and formal asset allocation and asset liability reviews.
- Adequate liquidity exists within the asset allocation to pay the monthly obligations of the Pension Plan consistently and on a timely basis.

## FRS Pension Plan Change in Market Value Periods Ending 3/31/2022

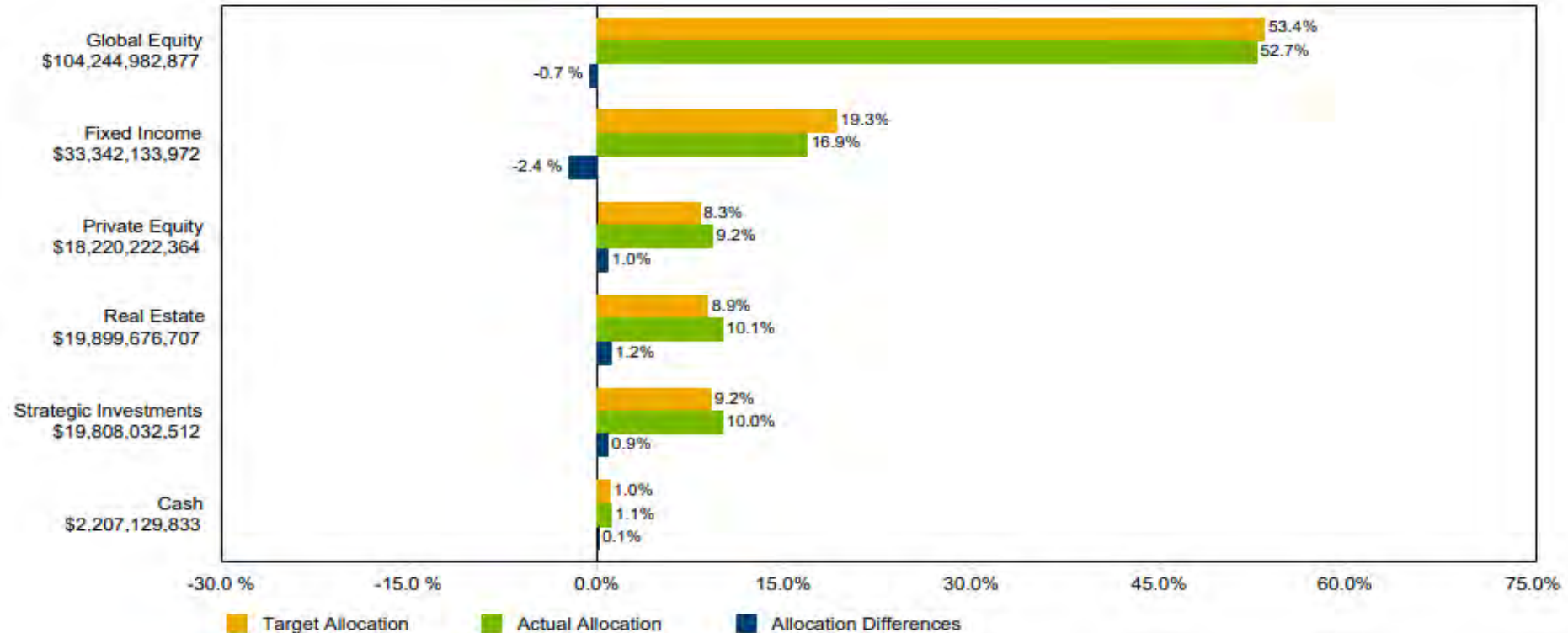
Summary of Cash Flows		
	First Quarter	Fiscal YTD*
<b>Beginning Market Value</b>	\$206,437,287,703	\$199,600,498,385
<b>+/- Net Contributions/(Withdrawals)</b>	\$(1,817,149,131)	\$(5,810,614,082)
<b>Investment Earnings</b>	\$6,897,960,308	\$3,932,293,962
<b>= Ending Market Value</b>	\$197,722,178,265	\$197,722,178,265
<b>Net Change</b>	\$(8,715,109,438)	\$(1,878,320,120)

\*Period July 2021 – March 2022

## Asset Allocation as of 3/31/2022

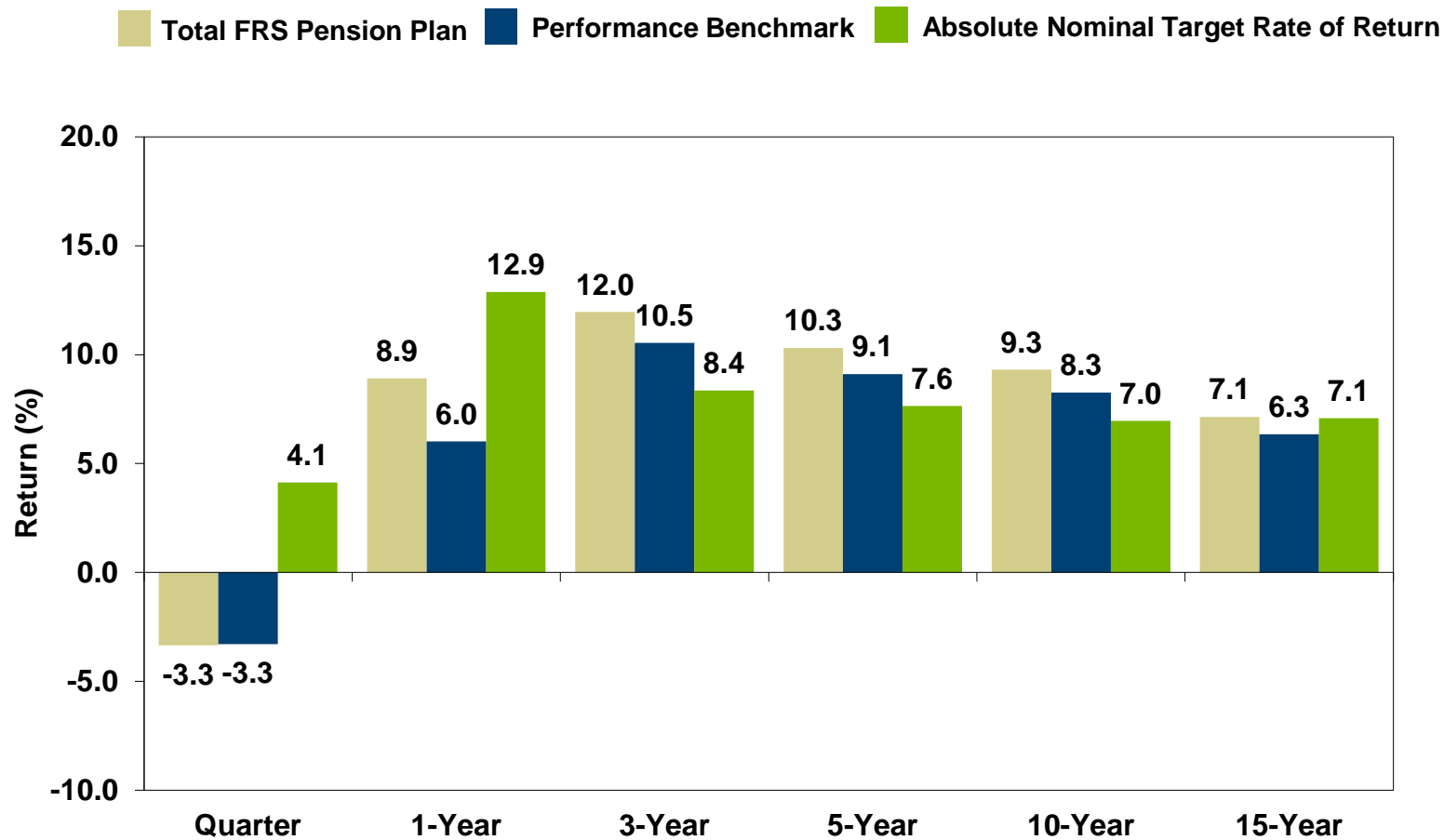
Total Fund Assets = \$197.7 Billion

	Market Value (\$)	Current Allocation (%)	Target Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)
Total Fund	197,722,178,265	100.0	100.0		
Global Equity	104,244,982,877	52.7	53.4	45.0	70.0
Fixed Income	33,342,133,972	16.9	19.3	10.0	26.0
Private Equity	18,220,222,364	9.2	8.3	2.0	10.0
Real Estate	19,899,676,707	10.1	8.9	4.0	16.0
Strategic Investments	19,808,032,512	10.0	9.2	0.0	16.0
Cash	2,207,129,833	1.1	1.0	0.3	5.0



# FRS Pension Plan Investment Results

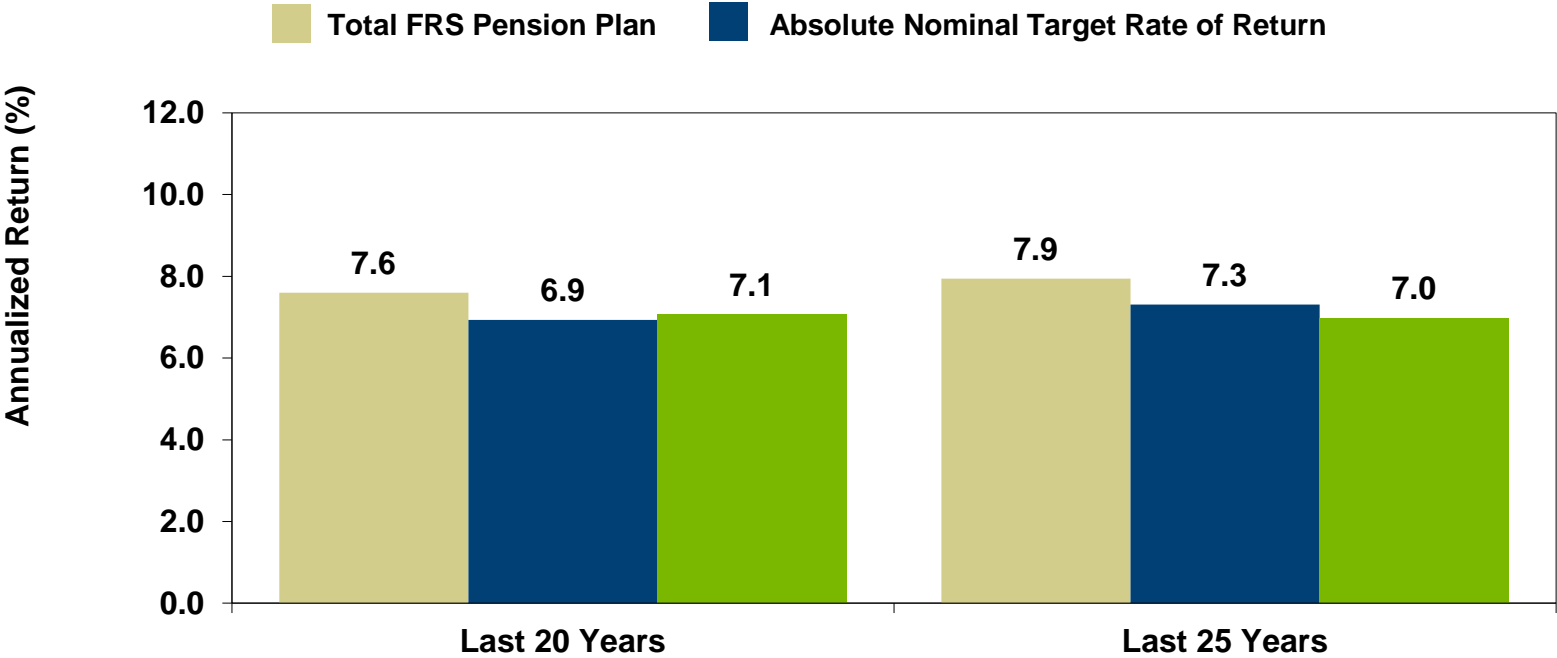
## Periods Ending 3/31/2022



# FRS Pension Plan Investment Results

## Periods Ending 3/31/2022

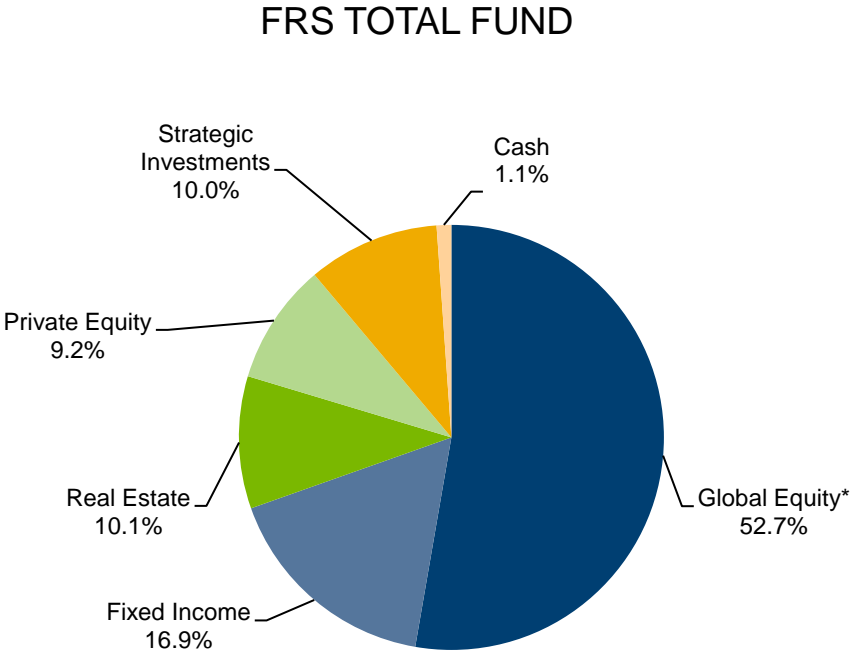
### Long-Term FRS Pension Plan Performance Results vs. SBA's Long-Term Investment Objective



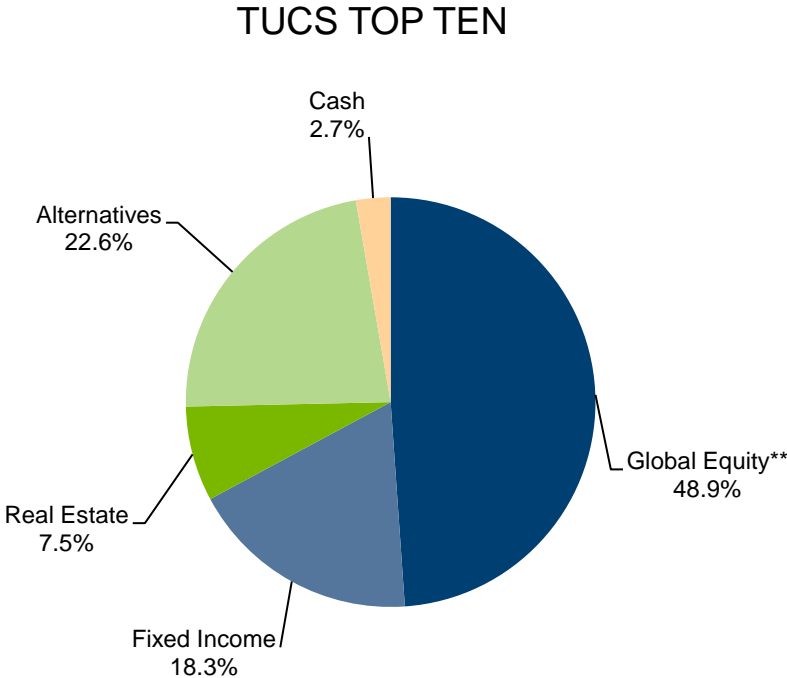
# Comparison of Asset Allocation (TUCS Top Ten)

## As of 3/31/2022

### FRS Pension Plan vs. Top Ten Defined Benefit Plans



\*Global Equity Allocation: 27.0% Domestic Equities; 18.2% Foreign Equities; 6.5% Global Equities; 1.0% Global Equity Liquidity Account. Percentages are of the Total FRS Fund.



\*\*Global Equity Allocation: 32.1% Domestic Equities; 16.8% Foreign Equities.

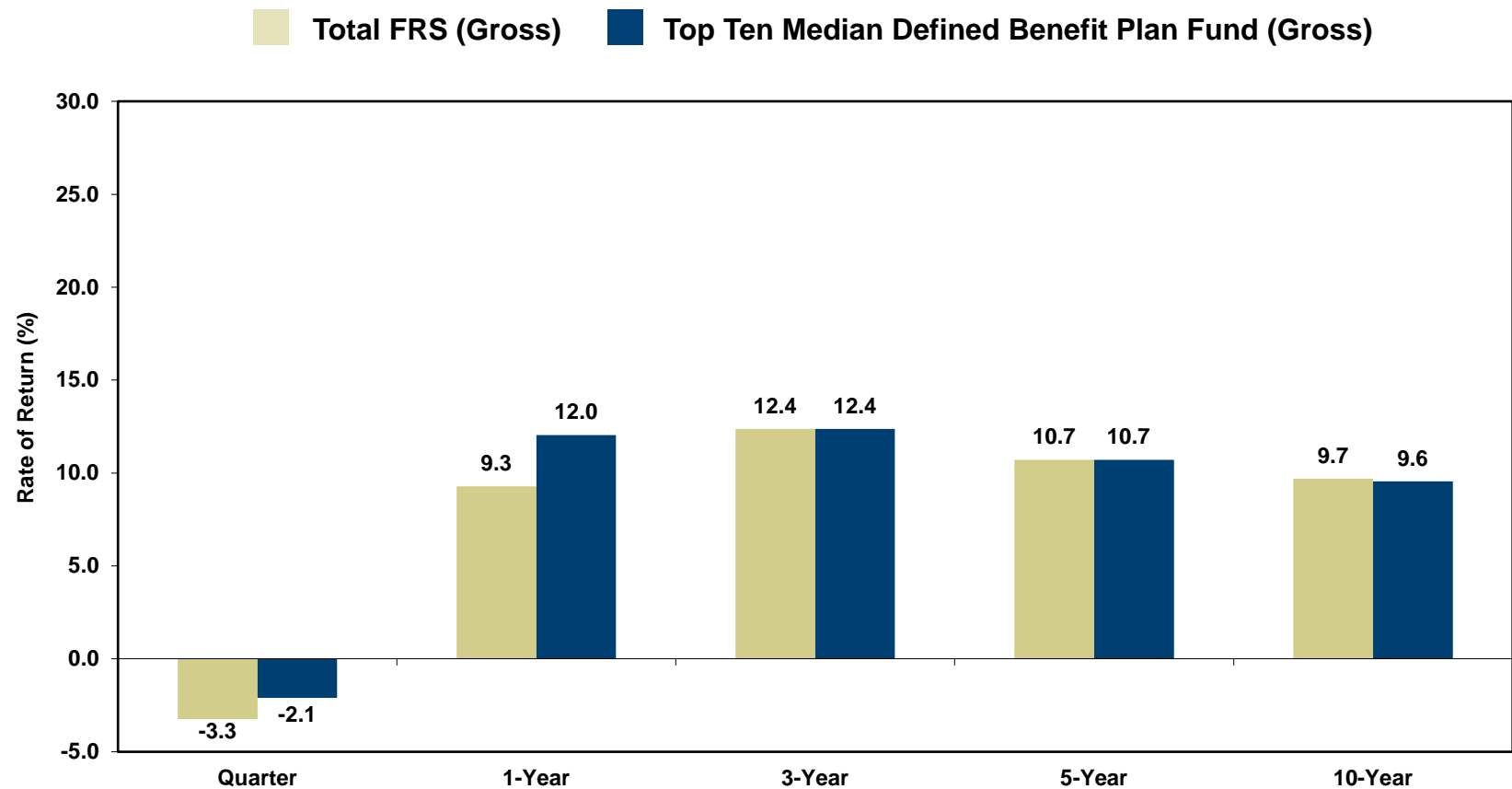
Note: The TUCS Top Ten Universe AA data is as of 4Q'21 as final 1Q'22 data was not finalized at the time of this report. The data set includes \$2,042.4 billion in total assets. The median fund size was \$196.7 billion and the average fund size was \$204.2 billion.

Note: Due to rounding, percentage totals displayed may not sum perfectly.



# FRS Results Relative to TUCS Top Ten Defined Benefit Plans

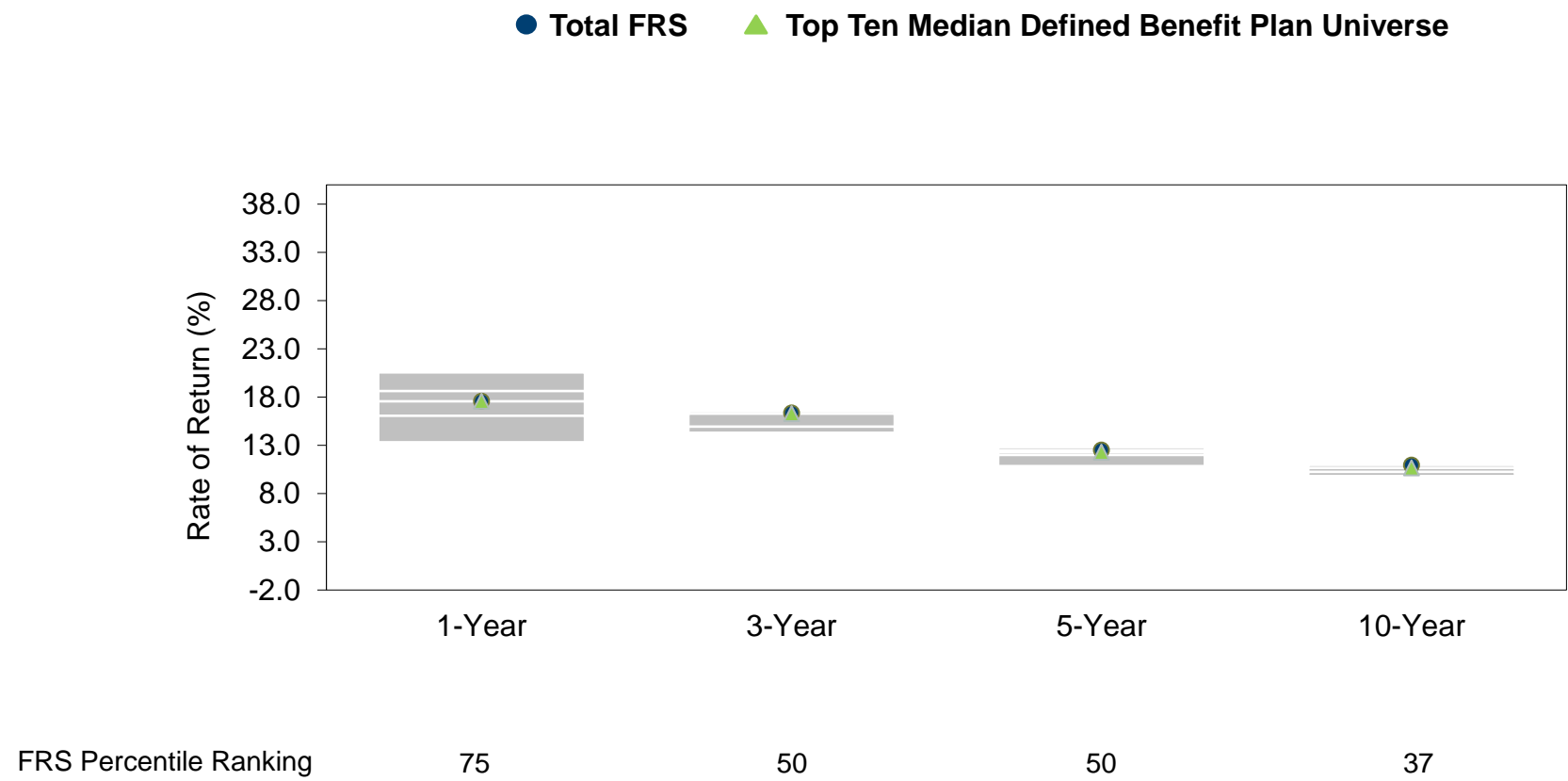
## Periods Ending 3/31/2022



Note: The TUCS Top Ten Universe includes \$2,063.3 billion in total assets. The median fund size was \$197.7 billion and the average fund size was \$206.3 billion.

# Top Ten Defined Benefit Plans FRS Universe Comparison (TUCS)

## Periods Ending 3/31/2022



Note: The TUCS Top Ten Universe includes \$2,063.3 billion in total assets. The median fund size was \$197.7 billion and the average fund size was \$206.3 billion.

## Investment Plan: Executive Summary

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- The FRS Investment Plan outperformed the Total Plan Aggregate Benchmark over the trailing three-, five-, and ten-year periods. This suggests strong relative performance of the underlying fund options in which participants are investing.
- The FRS Investment Plan's total expense ratio is in line with peer defined contribution plans, based on year-end 2021 data. The total FRS Investment Plan expense ratio includes investment management fees, as well as administration, communication and education costs. Communication and education costs are not charged to FRS Investment Plan members; however, these and similar costs may be charged to members of plans within the peer group.
- Management fees are lower than the median as represented by Morningstar's mutual fund universe for every investment category.
- The FRS Investment Plan offers an appropriate number of fund options that span the risk and return spectrum.
- The Investment Policy Statement is revisited periodically to ensure that the structure and guidelines of the FRS Investment Plan are appropriate, taking into consideration the FRS Investment Plan's goals and objectives.

# Total Investment Plan Returns & Cost

## Periods Ending 3/31/2022\*

	One-Year	Three-Year	Five-Year	Ten-Year
<b>FRS Investment Plan</b>	<b>5.1%</b>	<b>10.5%</b>	<b>9.2%</b>	<b>8.1%</b>
<i>Total Plan Aggregate Benchmark**</i>	<i>6.0%</i>	<i>10.4%</i>	<i>8.9%</i>	<i>7.8%</i>
FRS Investment Plan vs. Total Plan Aggregate Benchmark	(0.9)	0.1	0.3	0.3

## Periods Ending 12/31/2020\*\*\*

	Five-Year Average Return****	Five-Year Net Value Added	Expense Ratio
<b>FRS Investment Plan</b>	<b>10.1%</b>	<b>0.2%</b>	<b>0.27%*****</b>
<i>Peer Group</i>	<i>10.0</i>	<i>0.2</i>	<i>0.27</i>
FRS Investment Plan vs. Peer Group	0.1	0.0	0.00

\*Returns shown are net of fees.

\*\*Aggregate benchmark returns are an average of the individual portfolio benchmark returns at their actual weights.

\*\*\*Source: 2021 CEM Benchmarking Report. Peer group for the Five-Year Average Return and Value Added represents the U.S. Median plan return based on the CEM 2021 Survey that included 136 U.S. defined contribution plans with assets ranging from \$72 million to \$68.7 billion. Peer group for the Expense Ratio represents a custom peer group for FSBA of 18 DC plans including corporate and public plans with assets between \$3.4 - \$28.4 billion.

\*\*\*\*Returns shown are gross of fees.

\*\*\*\*\*The total FRS Investment Plan expense ratio includes investment management fees, as well as administration, communication and education costs. These latter costs are not charged to FRS Investment Plan members; however, these and similar costs may be charged to members of plans within the peer group utilized above.

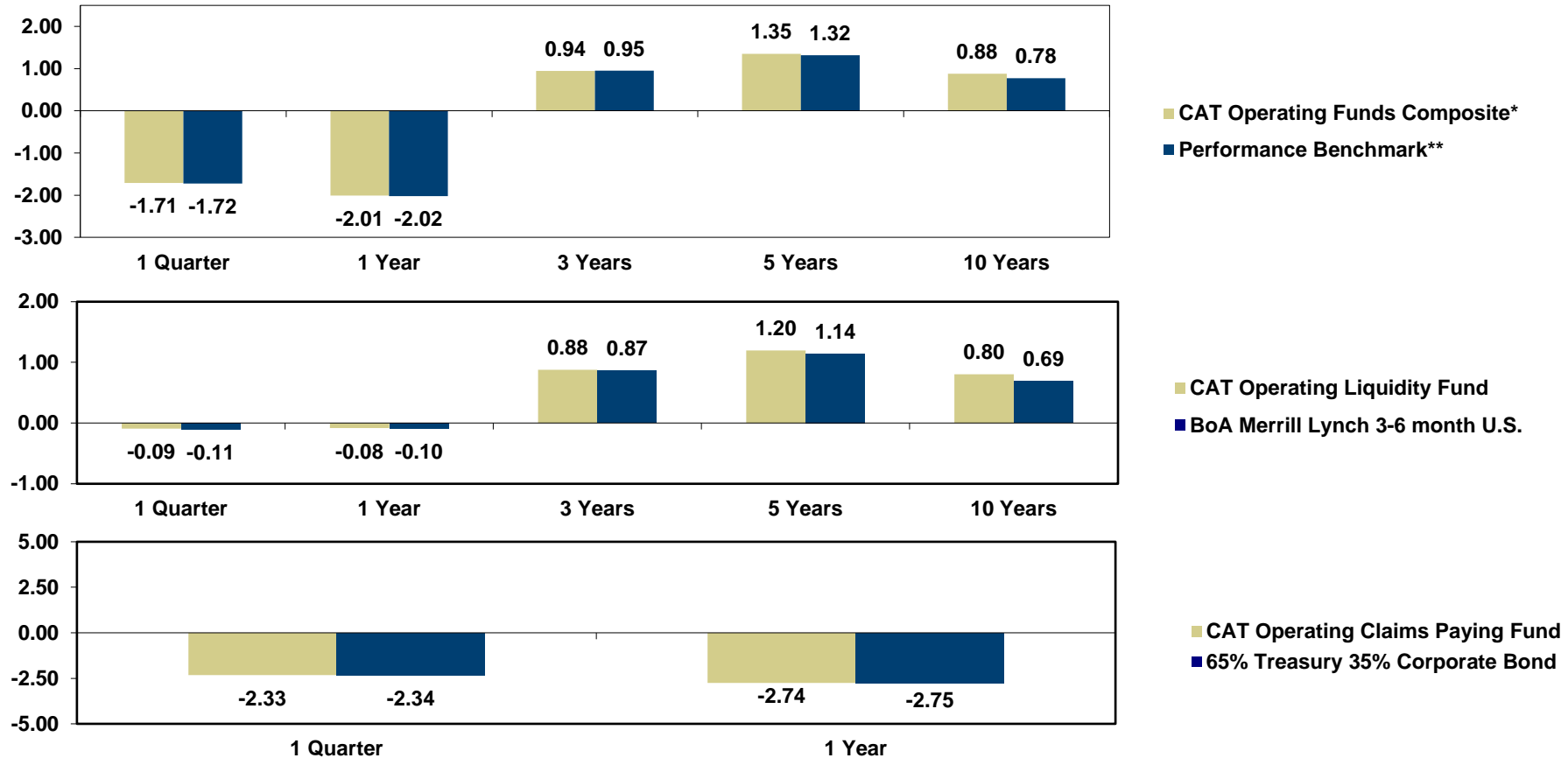
## CAT Fund: Executive Summary

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- Returns on an absolute basis continue to be modest given the current low interest rate environment.
- All CAT Funds are adequately diversified across issuers within the short-term bond market.
- The Investment Portfolio Guidelines appropriately constrain the CAT Funds to invest in short-term and high-quality bonds to minimize both interest rate and credit risk.
- Adequate liquidity exists to address the cash flow obligations of the CAT Funds.
- The Investment Portfolio Guidelines are revisited periodically to ensure that the structure and guidelines of the CAT Funds are appropriate, taking into consideration the CAT Funds' goals and objectives.
- Over long-term periods, the relative performance of the CAT Operating Funds has been favorable as they have outperformed the Performance Benchmark over the trailing five- and ten-year time periods.

# CAT Operating Funds Investment Results

## Periods Ending 3/31/2022



\*CAT Operating Funds: Beginning March 2008, the returns for the CAT Operating Funds reflect marked-to-market returns. Prior to that time, cost-based returns are used. Beginning February 2018, the CAT Operating Funds were split into two different sub funds, the CAT Fund Operating Liquidity Fund and the CAT Fund Operating Claims Paying Fund. Performance for each sub fund is shown below.

\*\*Performance Benchmark: Effective January 1, 2021, the CAT Fund Operating Liquidity Fund is benchmarked to the Bloomberg U.S. Treasury Bills 3-6 Months & U.S. Treasury Bills 6-9 Months Custom Blend Index. This benchmark is comprised of 60% of 3-6 month U.S. Treasury Bills and 40% 6-9 month U.S. Treasury Bills. Beginning February 2018, the CAT Fund Operating Liquidity Fund was benchmarked to the B of A Merrill Lynch 3-6 Month U.S. Treasury Bill Index. Effective January 1, 2021, the CAT Operating Claims Paying Fund is benchmarked to the Bloomberg U.S. Treasury 1-3 Years & Corporate AA+ ex 144A with Reg S Custom Blend Index. This benchmark is comprised of 65% 1-3 year U.S. Treasury and 35% of 1-3 year Corporate AA or better excluding 144A and Reg S securities. Beginning February 2018, the CAT Fund Operating Claims Paying Fund benchmark is a blend of 35% of the Bank of America Merrill Lynch 1-3 Year AA U.S. Corporate Bond Index and 65% of Bank of America Merrill Lynch 1-3 Year U.S. Treasury Index. Additional benchmark history can be found in the appendix.

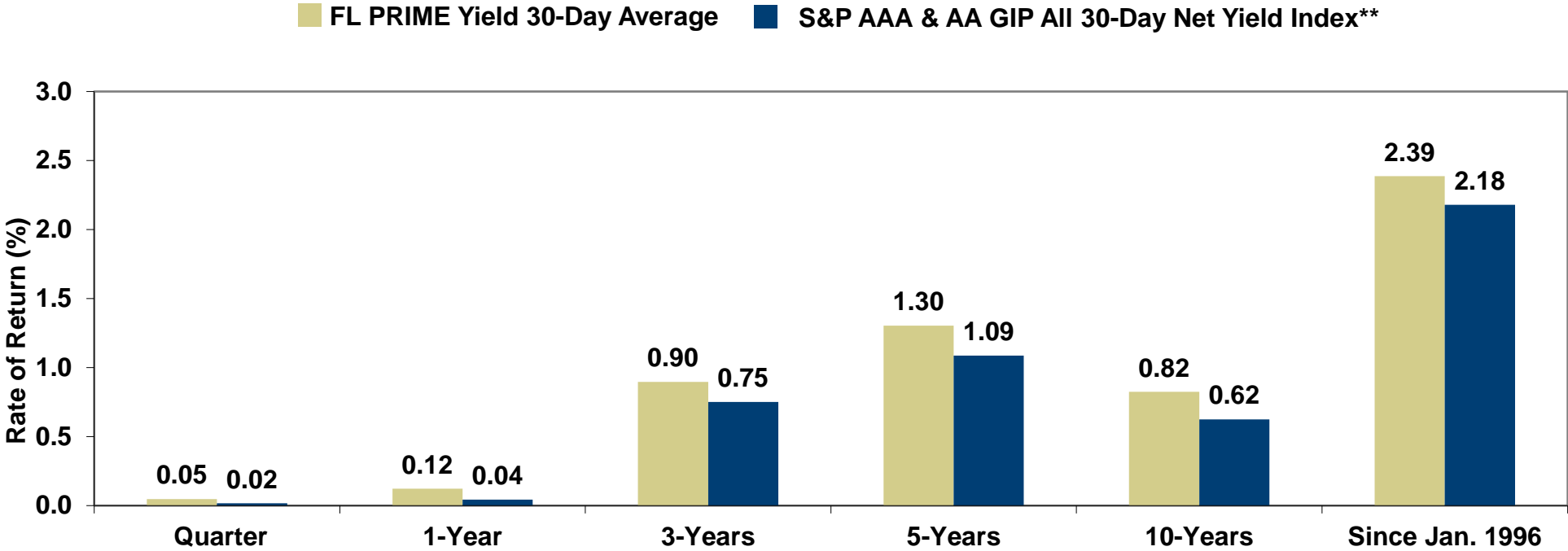
## Florida PRIME: Executive Summary

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- The purpose of Florida PRIME is safety, liquidity, and competitive returns with minimal risk for participants.
- The Investment Policy Statement appropriately constrains Florida PRIME to invest in short-term and high quality bonds to minimize both interest rate and credit risk.
- Florida PRIME is adequately diversified across issuers within the short-term bond market, and adequate liquidity exists to address the cash flow obligations of Florida PRIME.
- Performance of Florida PRIME has been strong over short- and long-term time periods, outperforming its performance benchmark during the quarter and over the trailing one-, three-, five-, and ten-year time periods.
- As of March 31, 2022, the total market value of Florida PRIME was \$20.2 billion.
- Aon Investments USA Inc., in conjunction with SBA staff, compiles an annual best practices report that includes a full review of the Investment Policy Statement, operational items, and investment structure for Florida PRIME.

# Florida PRIME Investment Results

## Periods Ending 3/31/2022



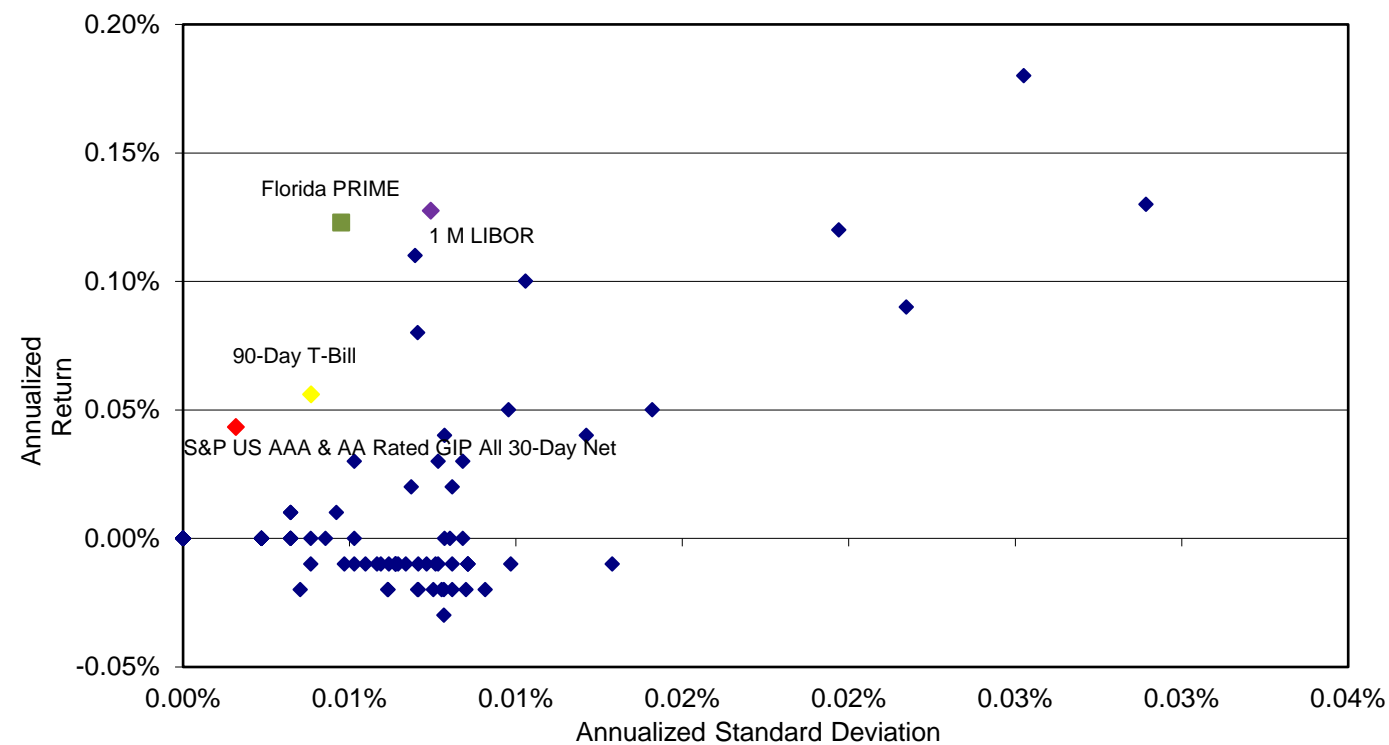
\*Returns less than one year are not annualized.

\*\*S&P AAA & AA GIP All 30-Day Net Yield Index for all time periods shown.

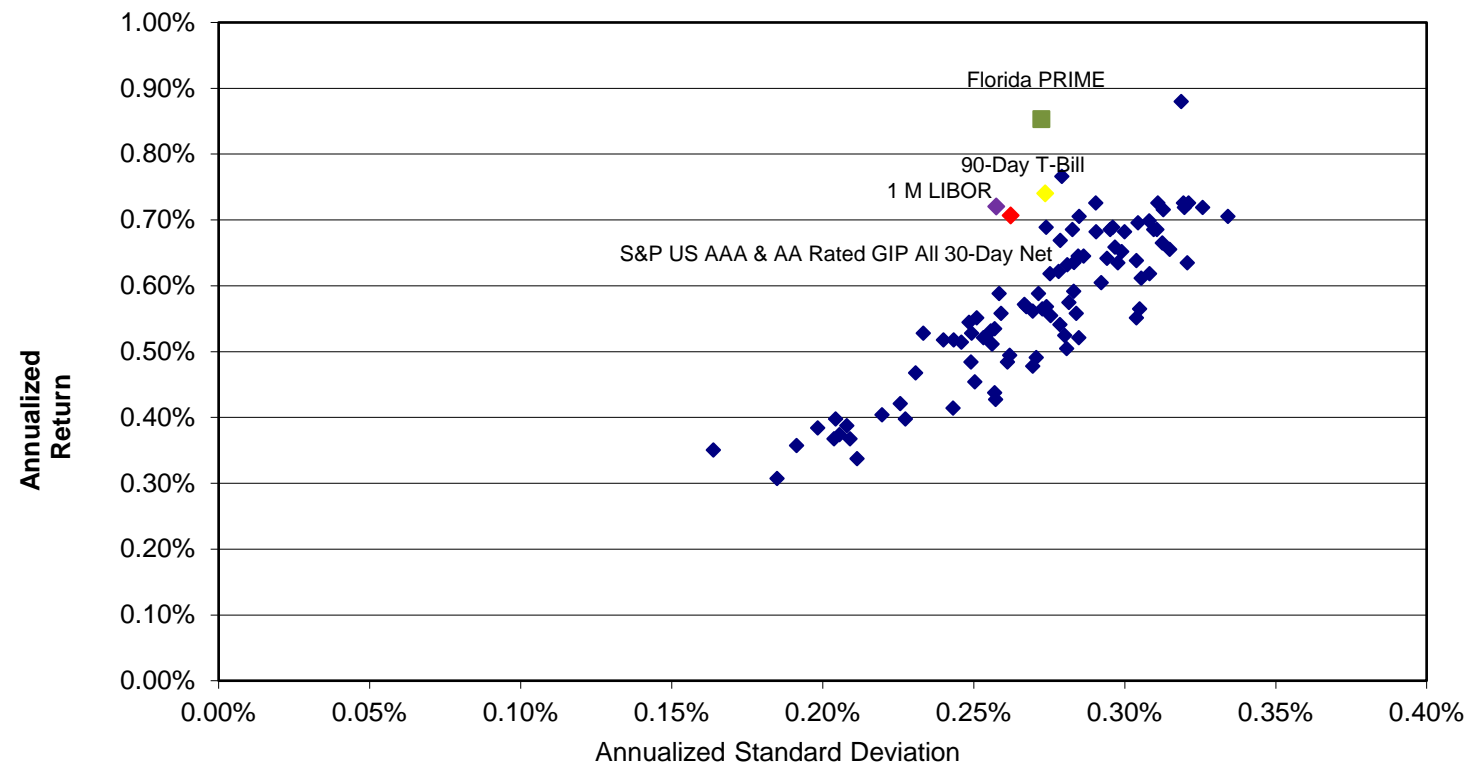


# Florida PRIME Risk vs. Return

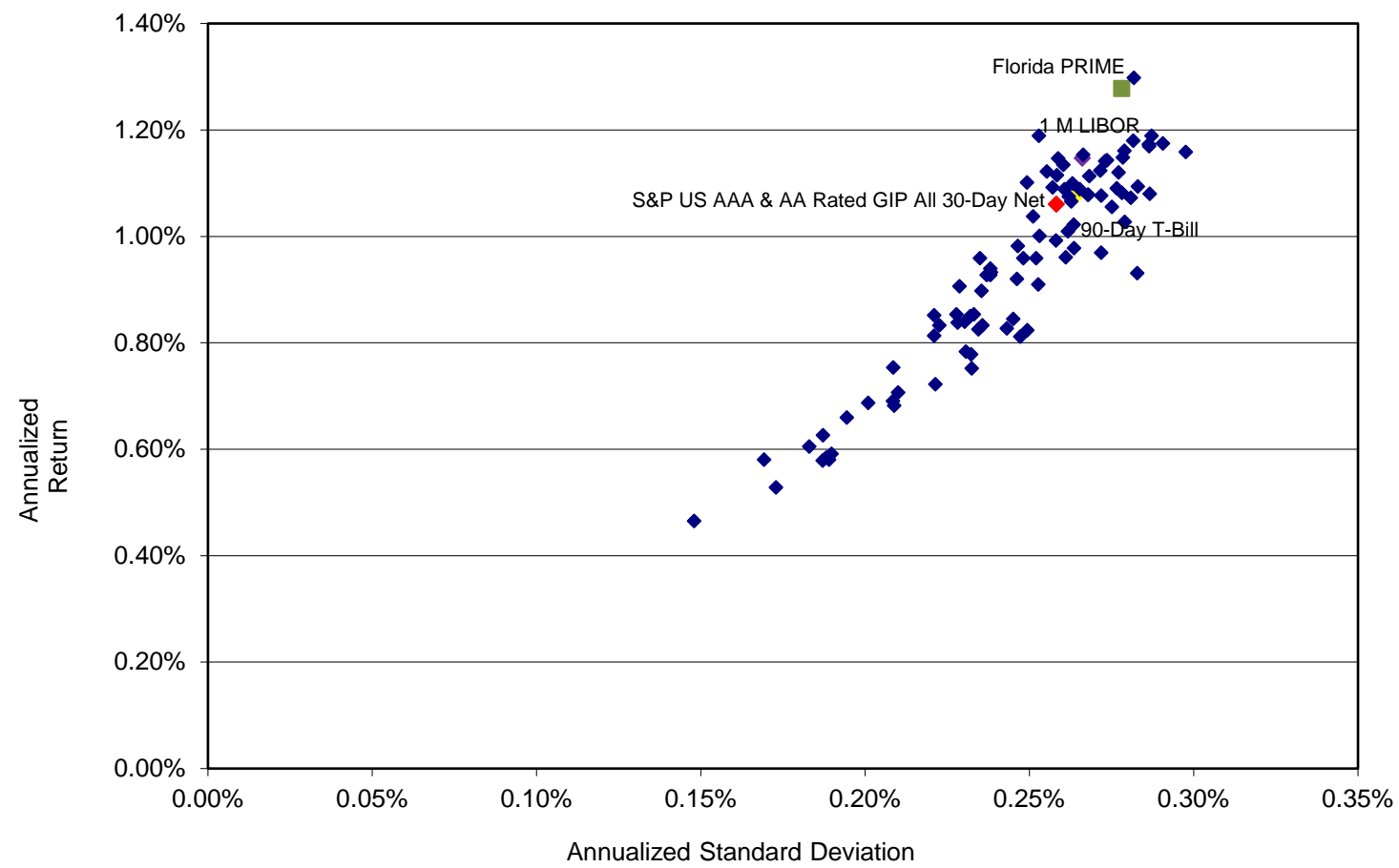
## 1 Years Ending 3/31/2022



# Florida PRIME Risk vs. Return 3 Years Ending 3/31/2022

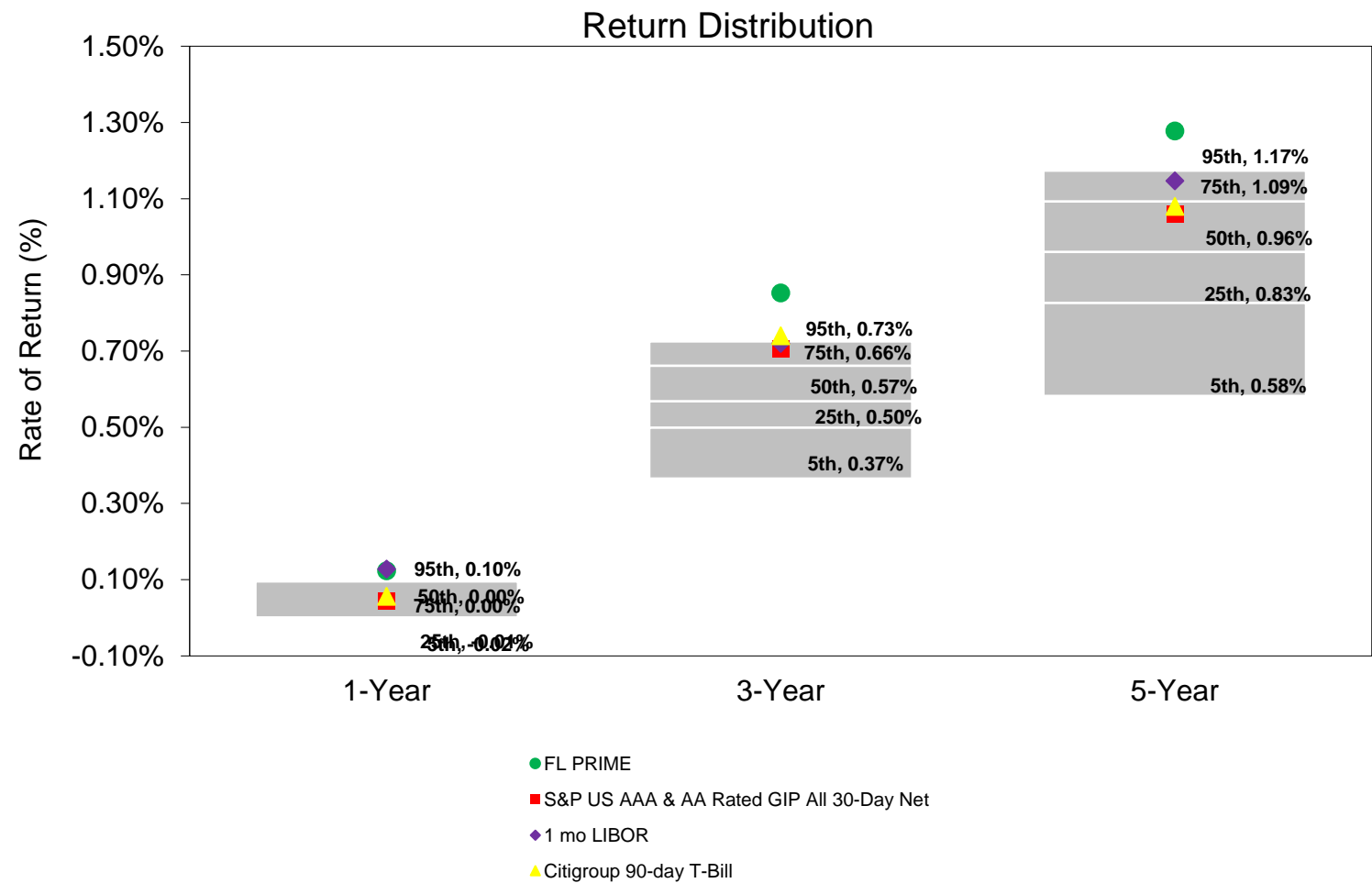


# Florida PRIME Risk vs. Return 5 Years Ending 3/31/2022



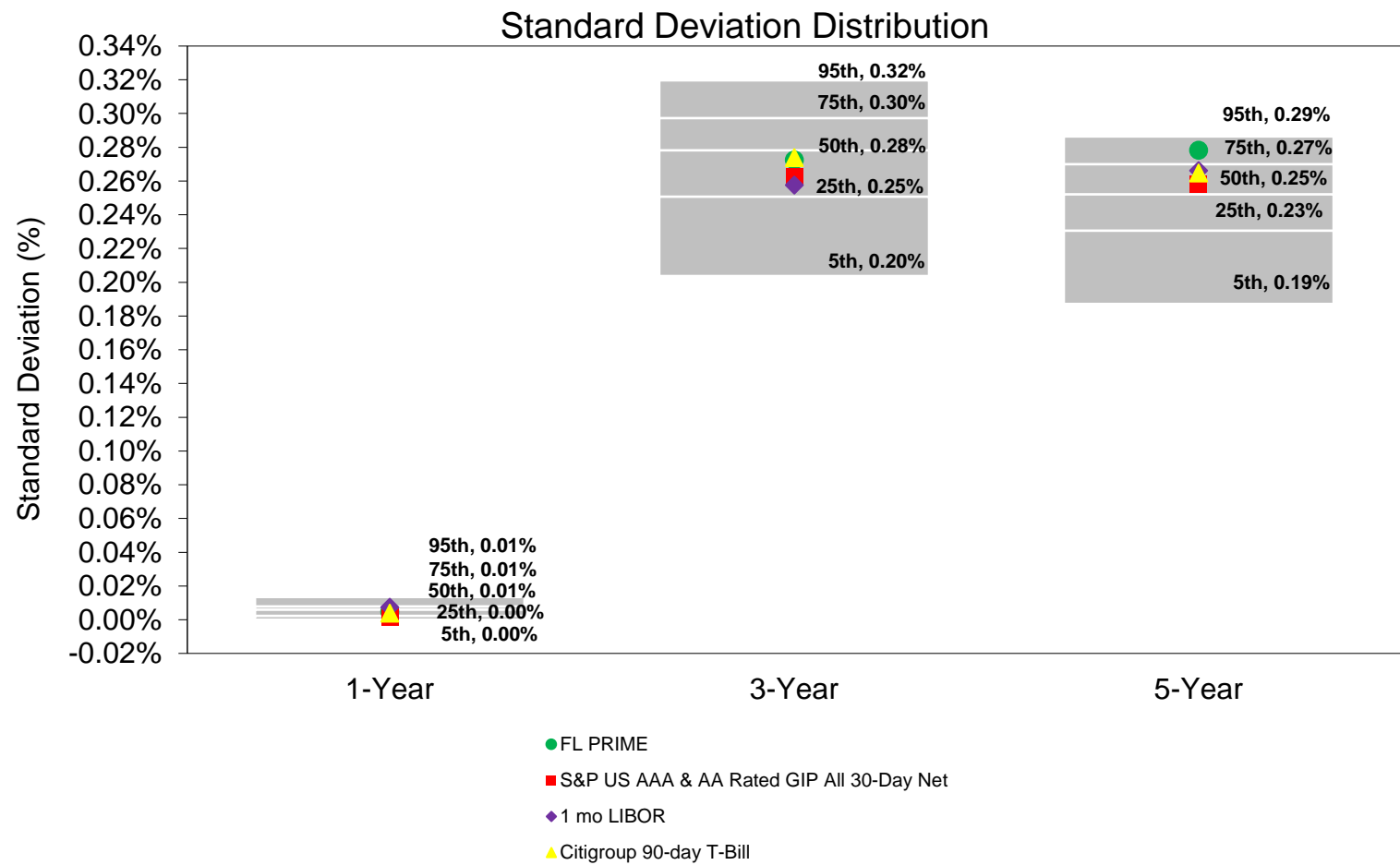
# Return Distribution

## Periods Ending 3/31/2022



# Standard Deviation Distribution

## Periods Ending 3/31/2022



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# Appendix

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## FRS Investment Plan Costs

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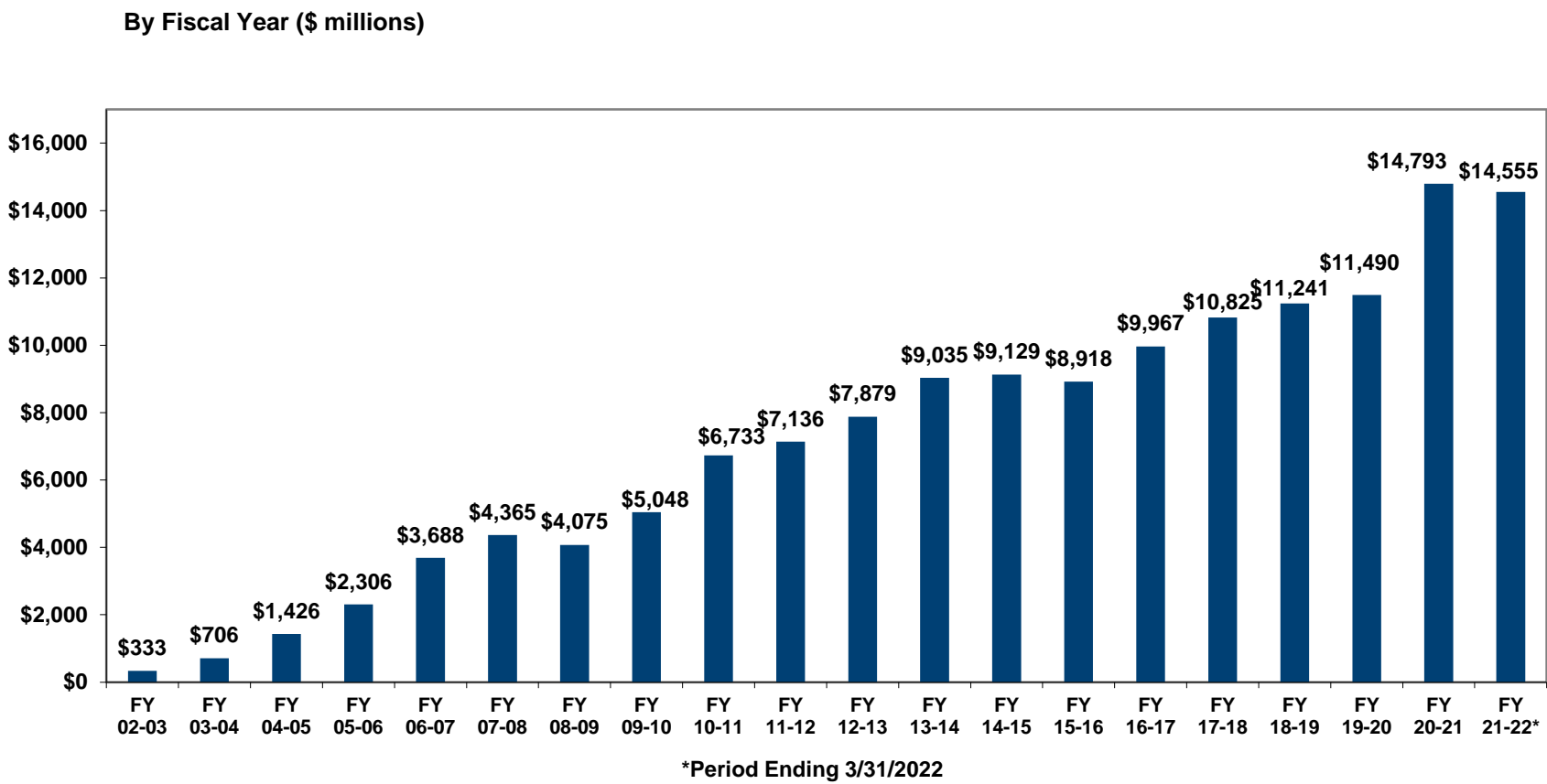
Investment Category	Investment Plan Fee*	Average Mutual Fund Fee**
Domestic Equity	0.20%	0.87%
International Equity	0.31%	0.95%
Diversified Bonds	0.14%	0.45%
Target Date	0.14%	0.45%
Stable Value	0.19%	0.24%
Inflation Protected Securities	0.36%	0.35%

\*Average fee of multiple products in category as of 3/31/2022.

\*\*Source: Aon's annual mutual fund expense analysis as of 12/31/2020.

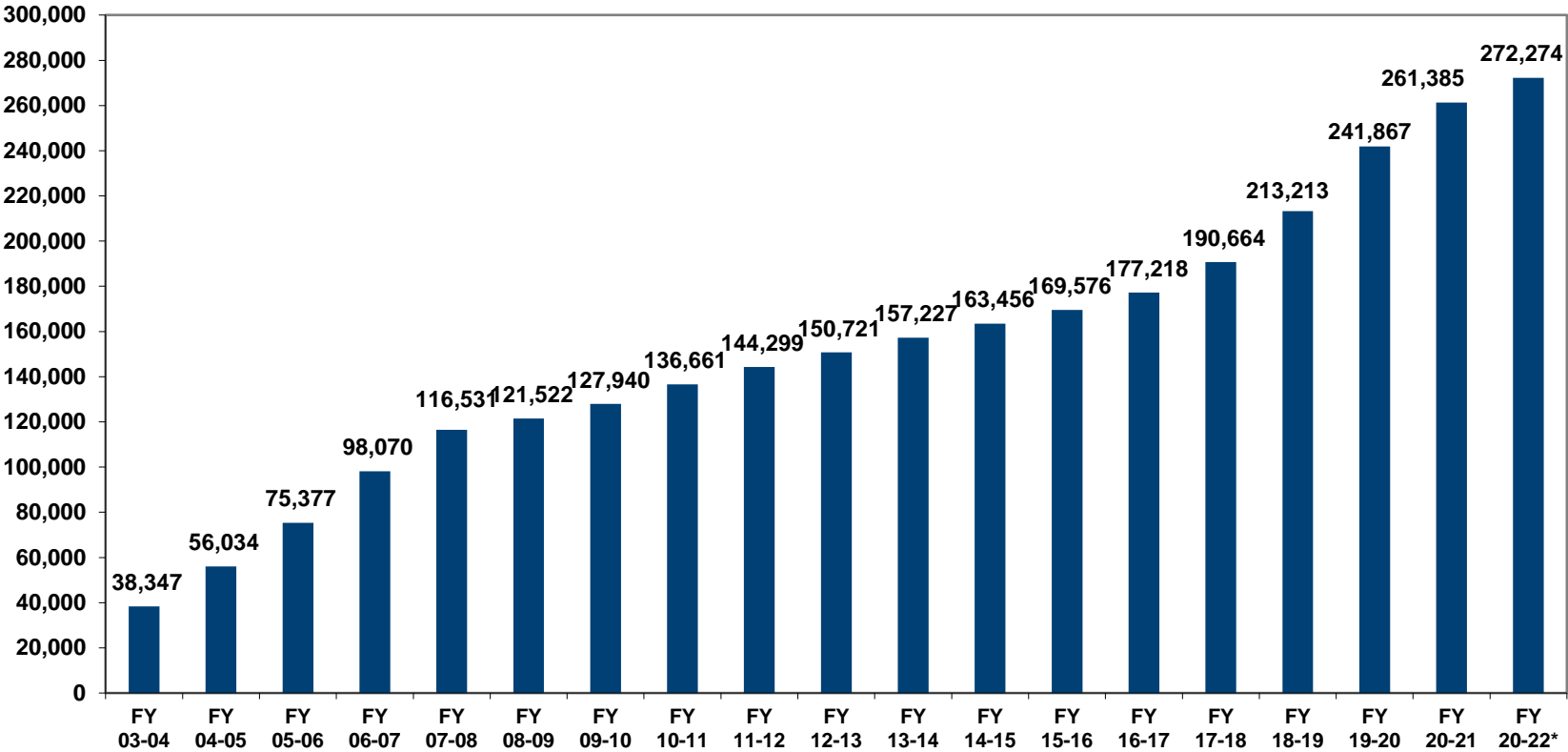


# Investment Plan Fiscal Year End Assets Under Management



Source: Investment Plan Administrator

# Investment Plan Membership



\* Period Ending 3/31/2022

Source: Investment Plan Administrator

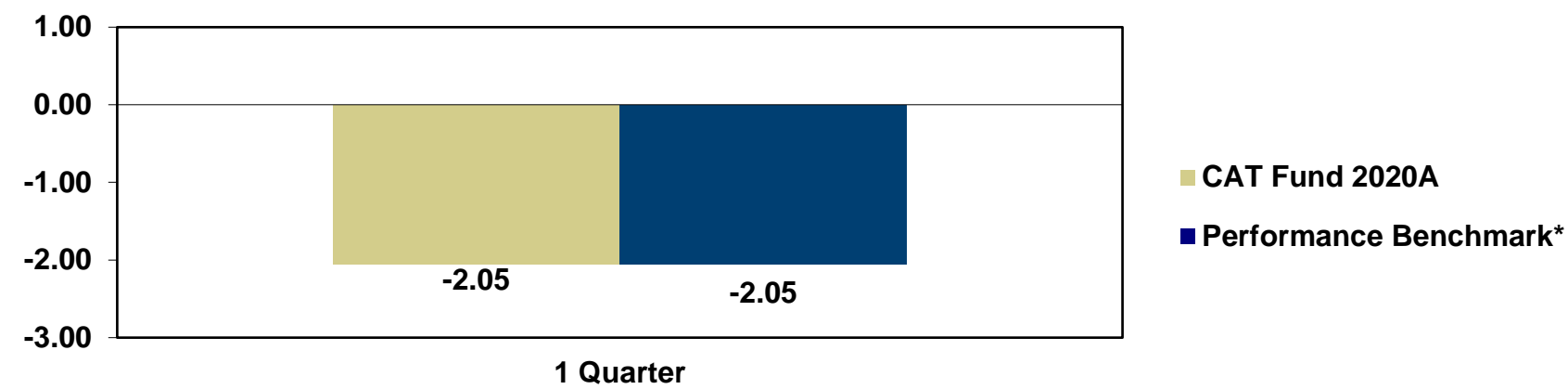
# Florida Hurricane Catastrophe Funds Background and Details

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- The purpose of the Florida Hurricane Catastrophe Fund (FHCF) is to provide a stable, ongoing and timely source of reimbursement to insurers for a portion of their hurricane losses.
- The CAT Operating Funds, along CAT 2020 A Fund are internally managed portfolios.
  - CAT 2013 A Fund was liquidated during 4Q 2020
  - CAT 2016 A Fund was liquidated during 3Q 2021
- As of March 31, 2022, the total value of:
  - The CAT Operating Funds was \$13.0 billion
  - The CAT 2020 A Fund was \$3.4 billion
- History of the CAT Funds Benchmarks: *Beginning February 2018, the CAT Fund Operating Liquidity Fund was benchmarked to the B of A Merrill Lynch 3-6 Month U.S. Treasury Bill Index, and the CAT Fund Operating Claims Paying Fund benchmarked to a blend of 35% of the Bank of America Merrill Lynch 1-3 Year AA U.S. Corporate Bond Index and 65% of Bank of America Merrill Lynch 1-3 Year U.S. Treasury Index. Beginning January 2021, the CAT Fund Operating Liquidity Fund was benchmarked to Bloomberg U.S. Treasuries Bills 3-6 Months & U.S. Treasury Bills 6-9 Months Custom Blend Index. This benchmark is comprised of 60% off the 3-6 month U.S. Treasury Bills and 40% 6-9 month U.S. Treasury Bills., and the CAT Fund Operating Claims Paying Fund is benchmarked Bloomberg U.S. Treasury 1-3 Years & Corporate AA+ ex 144A Reg S Custom Blend Index. This benchmark is comprised of 65% 1-3 year Treasury and 35% of 1-3 year Corporate AA or better excluding 144A and Reg S Securities.*

# CAT 2020 A Funds Investment Results

## Periods Ending 3/31/2022



\*Performance Benchmark: The CAT 2020A Fund is benchmarked to itself.

# CAT Operating Funds Characteristics

## Period Ending 3/31/2022

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<b>Maturity Analysis</b>	
1 to 30 Days	3.67%
31 to 60 Days	4.44
61 to 90 Days	5.88
91 to 120 Days	4.79
121 to 150 Days	0.00
151 to 180 Days	10.22
181 to 270 Days	2.84
271 to 365 Days	2.31
366 to 455 Days	9.51
>= 456 Days	56.34
<b>Total % of Portfolio:</b>	<b>100.00%</b>

<b>Bond Rating Analysis</b>	
AAA	72.40%
AA	15.72
A	11.88
Baa	0.00
Other	0.00
<b>Total % of Portfolio</b>	<b>100.00%</b>

# CAT 2020 A Fund Characteristics

## Period Ending 3/31/2022

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<b>Maturity Analysis</b>	
1 to 30 Days	0.08%
31 to 60 Days	0.00
61 to 90 Days	0.00
91 to 120 Days	0.00
121 to 150 Days	1.75
151 to 180 Days	1.75
181 to 270 Days	4.51
271 to 365 Days	13.41
366 to 455 Days	13.23
>= 456 Days	65.27
<b>Total % of Portfolio:</b>	100.00%

<b>Bond Rating Analysis</b>	
AAA	64.33%
AA	18.87
A	16.80
Baa	0.00
Other	0.00
<b>Total % of Portfolio</b>	100.00%

## Florida PRIME Characteristics

### Quarter Ending 3/31/2022

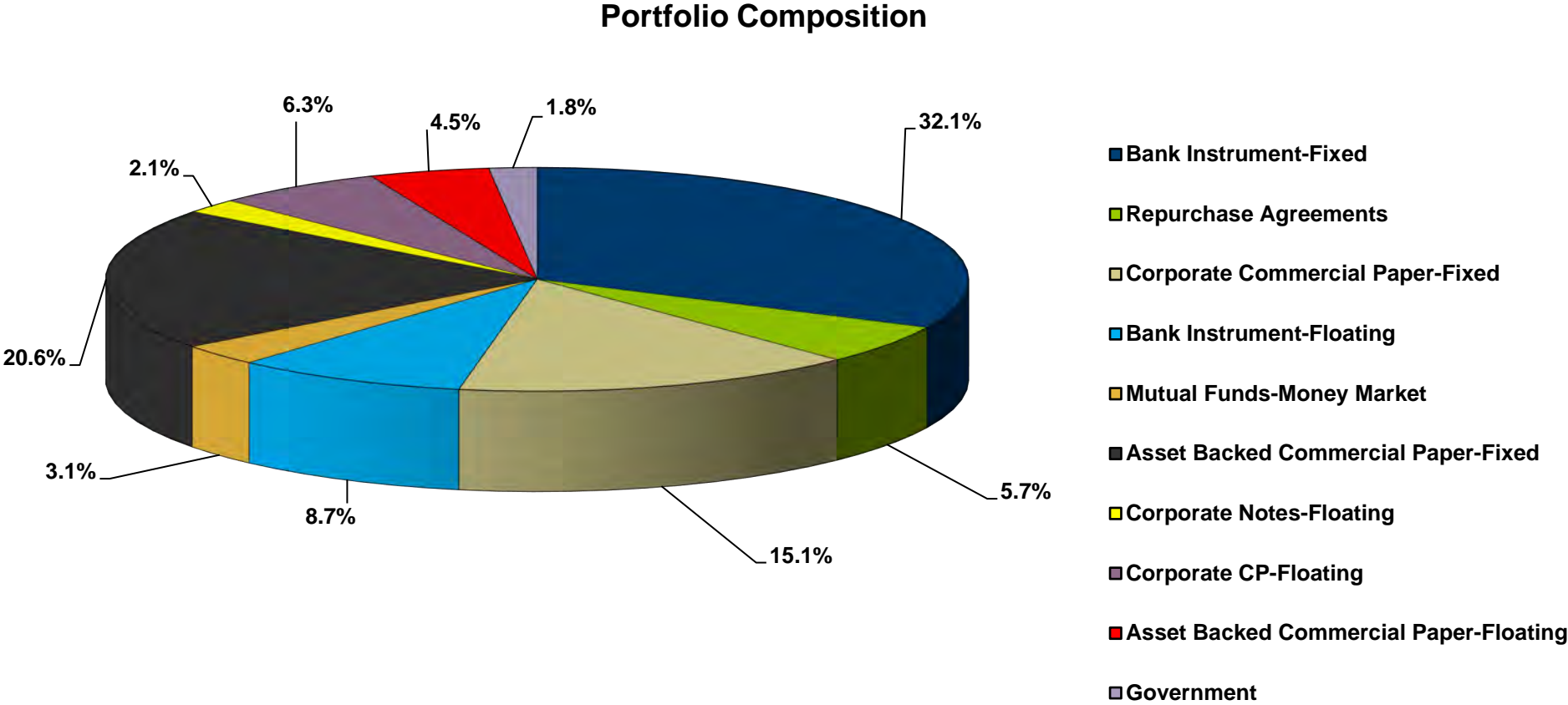
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Cash Flows as of 3/31/2022	First Quarter	Fiscal YTD*
Opening Balance	\$20,304,787,448	17,441,698,421.00
Participant Deposits	\$5,784,861,452	24,713,720,027.00
Gross Earnings	\$11,590,423	24,350,272.00
Participant Withdrawals	(\$5,887,241,898)	(\$21,963,113,123)
Fees	(\$1,607,226)	(\$4,265,398)
Closing Balance (3/31/2022)	\$20,212,390,210	\$20,212,390,210
<b>Change</b>	<b>(\$92,397,238)</b>	<b>\$2,770,691,789</b>

\*Period July 2021 – March 2022

# Florida PRIME Characteristics

## Quarter Ending 3/31/2022





## Florida PRIME Characteristics

### Period Ending 3/31/2022

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Effective Maturity Schedule	
1-7 Days	65.5%
8 - 30 Days	8.1%
31 - 90 Days	18.9%
91 - 180 Days	3.7%
181+ Days	3.8%
<b>Total % of Portfolio:</b>	<b>100.0%</b>

S & P Credit Quality Composition	
A-1+	64.4%
A-1	35.6%
<b>Total % of Portfolio:</b>	<b>100.0%</b>

# Meeting of the Investment Advisory Council

## **Item 11. Audience Comments/2022 Meeting Dates/Closing Remarks/Adjourn**

*Tere Canida, Chair*

*(See Attachment 11)*

