

# Red Flag Quadrant 2 – Quantifying the Problem



**Matt  
Giovinazzo, CFA**

Director, Investment  
Management

**Kellen  
Foley, CFA**

Director, Investment  
Management

**Jonathan  
Coombs, CPFA**

Senior Investment  
Advisor

**Tom  
Burnor**

VP - Distribution  
Retirement Solution



**Matt  
Giovinazzo, CFA**

Director, Investment  
Management



**Kellen  
Foley, CFA**

Director, Investment  
Management



**Alex  
Kahn, CPFA**

Senior Investment  
Advisor



**Alison  
Smith**

VP - Distribution  
Retirement Solution



**Matt**  
**Giovinazzo, CFA**

Director, Investment  
Management

**Kellen**  
**Foley, CFA**

Director, Investment  
Management

**Alex**  
**Kahn, CPFA**

Senior Investment  
Advisor

**Dan**  
**Graham**

VP - Distribution  
Retirement Solution



**Matt  
Giovinazzo, CFA**

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Management

**Kellen  
Foley, CFA**

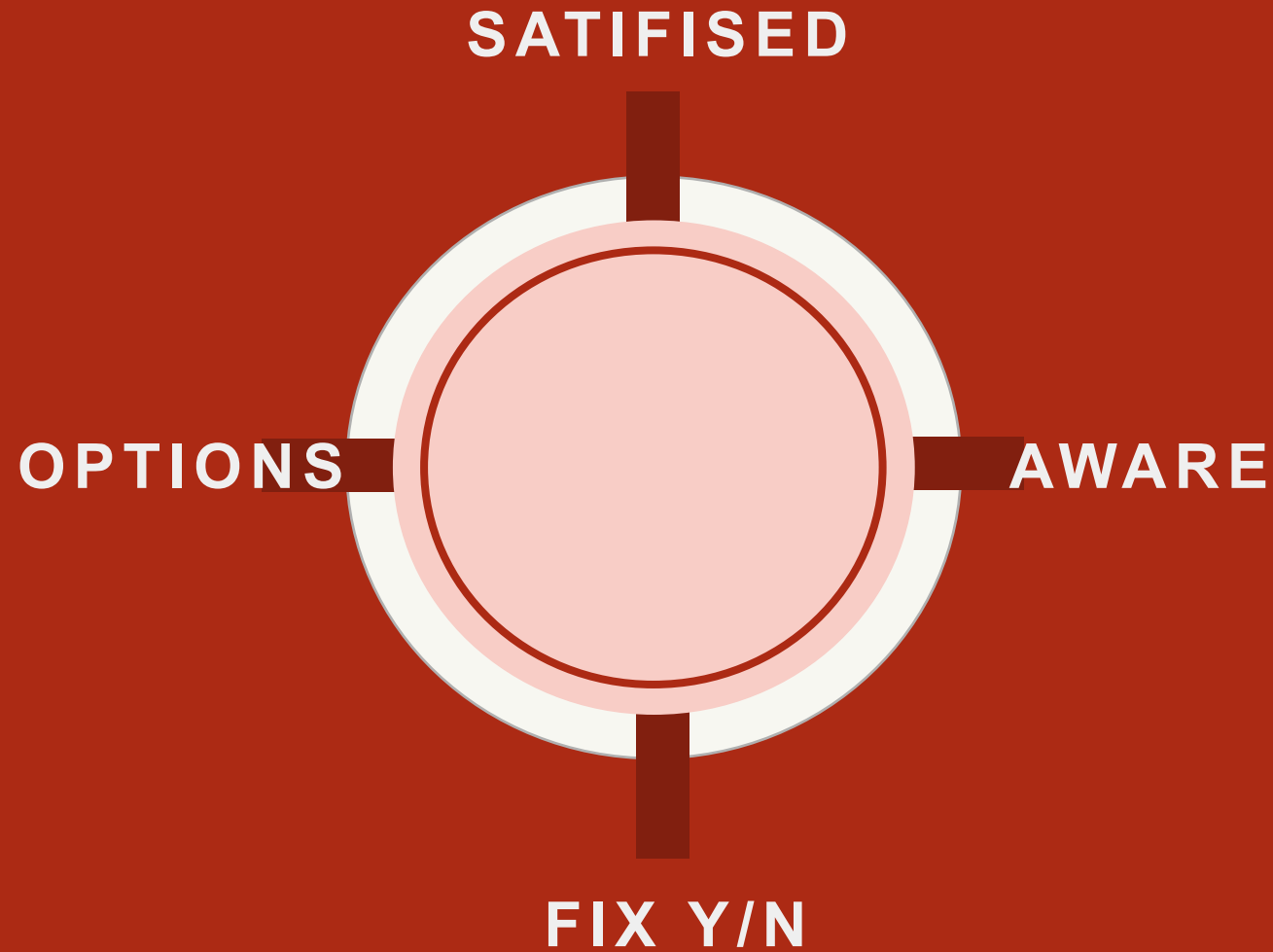
Director, Investment  
Management

**Jonathan  
Coombs, CPFA**

Senior Investment  
Advisor

**Chad  
Sturtz**

VP - Distribution  
Retirement Solution



## Red Flag – Quadrant 2

- Don't jump the compass
- Deals stall because prospects don't believe their problems are big
- Quantify the costs, consequences, and risks
- Get the commitment to fix before presenting solutions

# TACTICS



- **GENERAL INVESTMENTS**
  - Scorecard / fund consistency
  - CIT cost savings
- **LINEUP DESIGN**
  - TDF vs DIY utilization
  - DIY misallocation
- **TDFs**
  - Glidepath suitability risk
  - Participant misfit risk
- **DEFINED BENEFIT**

# GENERAL INVESTMENTS



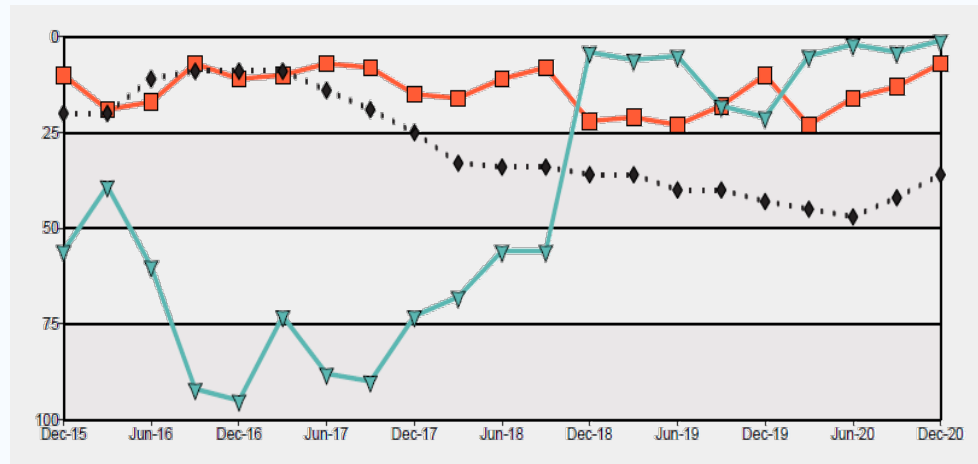
	Best Practice	RPAG	CapTrust	Sageview	Lockton	fi360	LPL	Morningstar
Measurement Periods	5 years and longer <sup>1</sup>	5 years and longer <sup>1</sup>	Less than 5 years <sup>1,3</sup>	Less than 5 years <sup>1,2</sup>	Less than 5 years <sup>1,2</sup>	5 years and longer <sup>1</sup>	Less than 5 years <sup>1,2</sup>	Less than 5 years <sup>1,2</sup>
Measurement Methods	Rolling time frames	Rolling time frames	Single time frames	Rolling time frames	Single time frames	Single time frames	Single time frames	Single time frames
Primary Scoring Method	Benchmark indexes	Benchmark indexes	Peer groups	Peer groups	Peer groups	Peer groups	Benchmark indexes	Peer groups
Secondary Scoring Method	Peer groups	Peer groups	Benchmark indexes	None	Benchmark indexes	None	Peer groups	None
Benchmark index comparisons	Style-specific indexes	Style-specific indexes	Style-specific indexes	Style-specific indexes	Style-specific indexes	Broad-based indexes	Style-specific indexes	Broad-based indexes
Peer group comparisons	Custom peer groups	Custom peer groups	Morningstar peer groups <sup>4</sup>	Morningstar peer groups <sup>4</sup>	Morningstar peer groups <sup>4</sup>	Morningstar peer groups <sup>4</sup>	Morningstar peer groups <sup>4</sup>	Morningstar peer groups <sup>4</sup>
Separate active and index fund peer groups	Yes	Yes	No	No	No	No	No	No
TDF benchmark index	Custom index	Custom index	Broad-based index	Broad-based index	Broad-based index	Broad-based index	Broad-based index	Broad-based index
TDF peer groups	Risk-based peer groups	Risk-based peer groups	Peer groups based on TDF year	Peer groups based on TDF year	Peer groups based on TDF year	Peer groups based on TDF year	Peer groups based on TDF year	Peer groups based on TDF year
TDF underlying funds scored	Yes	Yes	No	No	No	No	No	No
Qualitative Factors	Manager Tenure & Fund Expenses	Manager Tenure & Fund Expenses	Manager Tenure & Fund Expenses	Manager Tenure & Fund Expenses	Manager Tenure & Fund Expenses	Manager Tenure & Fund Expenses	Manager Tenure & Fund Expenses	No

# Describing The Benefits Of An Elite Scoring System



Returns Analysis	QTR	YTD	1 Yr	3 Yr Ann.	5 Yr Ann.	10 Yr Ann.	Since Inception	Manager Name	Manager Tenure (Years)	Fund Inception	Net Exp. Ratio	Gross Exp. Ratio
Large Cap Value R1 (Putnam Equity Income R6)	15.29	6.37	6.37	8.56	11.69	11.84	10.31	Team Managed	7.67	06/30/1977	0.29	0.29
ABC Company Focused N	21.17	17.25	17.25	12.85	13.93	11.77	10.12	John Doe	18.01	05/01/1997	1.29	1.30
Russell 1000 Value Index	16.20	2.80	2.80	6.07	9.74	10.50						
Large Cap Value Average	15.73	2.66	2.66	5.53	9.26	9.60					1.14	1.03

2 years later:



**Vs. quantifying the CCR of remaining with an inferior system**  
(that emphasizes short-term point-in-time performance)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD
AMG Yacktman Focused N	27.01	10.67	-4.09	11.29	20.03	2.88	19.13	17.25	16.45	-8.06
Putnam Large Cap Value R6	32.28	12.86	-2.77	14.00	19.14	-8.00	30.38	6.19	27.32	-2.75
Russell 1000 Value Index	32.83	13.48	-3.83	17.34	13.66	-8.27	28.54	2.80	25.18	-7.54
Large Cap Value Average	31.32	10.45	-3.22	15.02	15.39	-9.08	25.59	2.99	25.41	-5.74

# Quantify The CCR Of Not Utilizing Their Scale And Your Scale

Plan-specific  
CIT  
mapping/  
cost  
analysis

Asset Class	Assets (%)	Assets (\$)	CURRENT					Ticker/CUSIP	PROPOSED				Expense Difference	% Savings	\$ Savings	
			Fund Name	Score	Expense	Rev Share	Net Investment Cost		Fund Name	Score	Expense	Ticker/CUSIP				
Large Cap Value	4.92%	\$2,878,312	Vanguard Equity-Income Adm	9	0.19%	0.00%	0.19%	VEIRX	Vanguard Equity-Income Adm	9	0.19%	VEIRX	0.00%	0%	\$0	
Large Cap Blend - P	12.47%	\$7,295,220	Vanguard 500 Index Admiral	10	0.04%	0.00%	0.04%	VFIAX	Fidelity 500 Index	10	0.02%	FXAIX	0.02%	50%	\$1,459	
Large Cap Growth	17.18%	\$10,046,656	Fidelity Contrafund	6	0.81%	0.25%	0.56%	FCNTX	Large Cap Growth III Fund (AB)	10	0.32%	97184D741	0.24%	43%	\$24,112	
Mid Cap Value	7.96%	\$4,655,527	Fidelity Low-Priced Stock	9	0.82%	0.25%	0.57%	FLPSX	Mid Cap Value Fund (American Century)	9	0.47%	97182P142	0.10%	18%	\$4,656	
Mid Cap Blend - P	3.00%	\$1,752,690	Vanguard Mid-Cap ETF	10	0.04%	0.00%	0.04%	VO	Fidelity Mid Cap Index	10	0.03%	FSDMX	0.01%	25%	\$175	
Mid Cap Growth	4.18%	\$2,447,960	Janus Henderson Enterprise T	7	0.91%	0.25%	0.66%	JAENX	Mid Cap Growth II Fund (Janus)	7	0.48%	97184K133	0.18%	27%	\$4,406	
Small Cap Value	1.70%	\$995,018	DFA US Small Cap Value I	10	0.30%	0.00%	0.30%	DFSVX	DFA US Small Cap Value I	10	0.30%	DFSVX	0.00%	0%	\$0	
Small Cap Blend - P	0.22%	\$129,819	BNY Mellon Small Cap Stock Index Inv	6	0.50%	0.25%	0.25%	DISSX	Fidelity Small Cap Index	10	0.03%	FSSNX	0.22%	88%	\$286	
Small Cap Growth - P	1.98%	\$1,158,406	Vanguard Small-Cap Growth ETF	8	0.07%	0.00%	0.07%	VBK	Small Cap Growth Fund R1 CIT (Neuberger)	10	0.58%	97181N338	-0.51%	-729%	-\$5,908	
International Large Cap Growth	4.49%	\$2,624,757	American Funds Europacific Growth A	6	0.80%	0.25%	0.55%	AEPGX	WT EuroPacific Growth Trust	10	0.41%	97184J268	0.14%	25%	\$3,675	
Core Fixed Income	5.71%	\$3,342,723	Metropolitan West Total Return Bd M	7	0.65%	0.35%	0.30%	MWTRX	Core Bond Fund R1 CIT (Lord Abbett)	10	0.25%	97183J533	0.05%	17%	\$1,671	
Stable Value	10.56%	\$6,175,991	Federated Hermes Capital Preservation Fund RB	-	0.20%	0.00%	0.20%	140411604	Stable Value Fund R1 CIT (Putnam)	-	0.31%	97183V494	-0.11%	-55%	-\$6,794	
Target Date Funds			Vanguard Target Retirement					Score	flexPATH Index R1 Moderate				Score			
Retirement	2.10%	\$1,226,469	Vanguard Target Retirement Income Fund	8	0.08%	0.00%	0.08%	VTINX	Vanguard Target Retirement Income Fund	8	0.08%	VTINX	0.00%	0%	\$0	
2020	6.51%	\$3,805,148	Vanguard Target Retirement 2020 Fund	8	0.08%	0.00%	0.08%	VTWNX	Vanguard Target Retirement 2020 Fund	8	0.08%	VTWNX	0.00%	0%	\$0	
2025	1.58%	\$925,110	Vanguard Target Retirement 2025 Fund	8	0.08%	0.00%	0.08%	VTTVX	Vanguard Target Retirement 2025 Fund	8	0.08%	VTTVX	0.00%	0%	\$0	
2030	6.17%	\$3,610,465	Vanguard Target Retirement 2030 Fund	8	0.08%	0.00%	0.08%	VTHRXX	Vanguard Target Retirement 2030 Fund	8	0.08%	VTHRXX	0.00%	0%	\$0	
2035	2.00%	\$1,169,259	Vanguard Target Retirement 2035 Fund	8	0.08%	0.00%	0.08%	VTTHX	Vanguard Target Retirement 2035 Fund	8	0.08%	VTTHX	0.00%	0%	\$0	
2040	2.76%	\$1,615,046	Vanguard Target Retirement 2040 Fund	8	0.08%	0.00%	0.08%	VFORX	Vanguard Target Retirement 2040 Fund	8	0.08%	VFORX	0.00%	0%	\$0	
2045	0.99%	\$580,991	Vanguard Target Retirement 2045 Fund	8	0.08%	0.00%	0.08%	VTIVX	Vanguard Target Retirement 2045 Fund	8	0.08%	VTIVX	0.00%	0%	\$0	
2050	3.52%	\$2,057,972	Vanguard Target Retirement 2050 Fund	8	0.08%	0.00%	0.08%	VFIKX	Vanguard Target Retirement 2050 Fund	8	0.08%	VFIKX	0.00%	0%	\$0	
2055	0.00%	\$1,049	Vanguard Target Retirement 2055 Fund	8	0.08%	0.00%	0.08%	VFFVX	Vanguard Target Retirement 2055 Fund	8	0.08%	VFFVX	0.00%	0%	\$0	
		Allocation	Total Assets	Average Score		Weighted Net Inv Exp	Weighted Net Inv Exp \$									
		100%	\$ 58,494,588	8.0		0.28%	\$ 160,972.28									
										<b>Total Annual Savings</b>		<b>0.05%</b>		<b>\$ 27,738</b>		
										<b>Estimated Savings (5-Years)</b>		<b>\$ 153,272</b>				

Exclusive Share Classes/Relationship Pricing



# Quantify the CCR of not utilizing THEIR scale and YOUR scale

## Este Lauder:

<https://www.plansponsor.com/lawsuit-says-plan-fiduciaries-chosen-less-expensive-cits/>

*“A clear indication of defendants’ lack of a prudent investment evaluation process was their failure to identify and select available lower cost collective trusts,”*

## Evonik:

<https://www.plansponsor.com/class-action-erisa-fiduciary-breach-lawsuit-targets-evonik/>

*“The plaintiffs also accuse the fiduciary defendants of failing to consider collective trusts, commingled accounts or separate accounts as alternatives to the mutual funds in the plan.”*

## Aegis:

<https://www.plansponsor.com/new-erisa-excessive-fee-complaint-targets-aegis-fiduciaries/>

*“The plan in question in smaller than many that have been subject to excessive fee litigation, underscoring the trend that smaller plans are also potential targets for class action suits.”*

## Philips North America – \$17m settlement:

<https://www.plansponsor.com/settlement-reached-excessive-fee-suit-one-day-lawsuit-filed/>

*“According to the complaint, the plan sponsor also failed to adequately investigate and offer non-mutual fund alternatives, such as collective trusts and separately managed accounts, to further reduce the investment expenses charged to plan participants.”*

## ManTech:

<https://www.plansponsor.com/share-class-issues-cited-mantech-erisa-lawsuit/>

*“To make matters worse, defendants failed to utilize the lowest cost share class for many of the mutual funds within the plan, and failed to consider collective trusts, commingled accounts or separate accounts as alternatives to the mutual funds in the plan, despite their lower fees,”*

## Pharmaceutical Product Development:

<https://www.plansponsor.com/lawsuit-argues-pharmaceutical-company-ignored-excessive-401k-investment-fees/>

*“The criticisms that have been launched against collective trust vehicles in the past no longer apply. Collective trusts use a unitized structure and the units are valued daily; as a result, participants invested in collective trusts are able to track the daily performance of their investments online.”*

## Anthem - \$24m settlement:

<https://www.investmentnews.com/new-401k-suit-targets-vanguard-fund-fees-65883>

*“Advisers should consider whether collective trust funds and separate accounts offer lower expenses than their mutual fund counterparts.”*

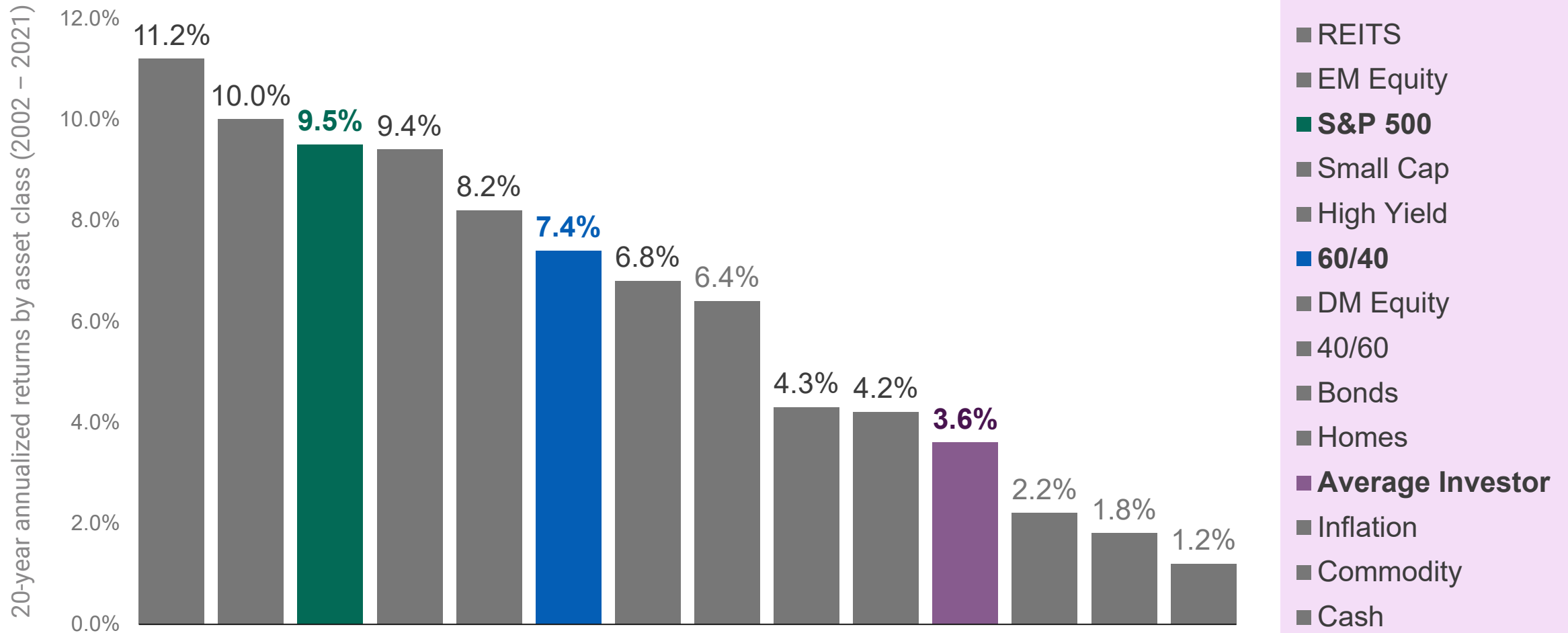
## Barrick Gold:

<https://www.plansponsor.com/barrick-gold-faces-lawsuit-401k-investment-selections/>

*“In addition, the lawsuit alleges that the defendants failed to utilize the lowest cost share class for many of the mutual funds within the plan and failed to consider collective trusts, commingled accounts or separate accounts as alternatives to the mutual funds in the plan, despite their lower fees.”*

# LINEUP DESIGN

# DIY vs. Professional Management Performance



# Quantified The Potential Impact – Now Quantify The Applicability

\_\_\_% TDF | \_\_\_% DIY

To jump the gun/compass, potential solutions:

- **Re-enrollment**
- **A solution to keep people in TDFs more (risk-based glidepaths/personalization)**



# Quantify the Number of Decisions Required from DIYers

STOCKS		New Allocation	Current Allocation
INDEXT	BlackRock Equity Index T	___%	6%
WLCGRX	Large Cap Growth Fund CI R1	___%	19%
WTLRNX	Large Cap Value Fund CI R1	___%	5%
R2INDXT	BlackRock Russell 2000 Index Fund T	___%	2%
DFFVX	DFA US Targeted Value I	___%	9%
JGSMX	JPMorgan Small Cap Growth	___%	14%
RERGX	American Funds EuroPacific	___%	14%
ACWIIMIT	BlackRock MSCI ACWI ex-US IMI Index Fund T	___%	16%
WTIXNX	International Stock Fund Class R1	___%	4%
BONDS			
DEBTWW	BlackRock U.S. Debt Index Fund W	___%	0%
WCBFRX	Core Bond Fund CI R1	___%	0%
CAPITAL PRESERVATION			
WSVABX	Putnam Stable Value Fund	___%	11%
<b>TOTAL</b>		<b>0%</b>	<b>100%</b>

**LET'S SIMPLIFY THIS TO:**

Aggressive 2035

Moderate 2035

Conservative 2035 **X**

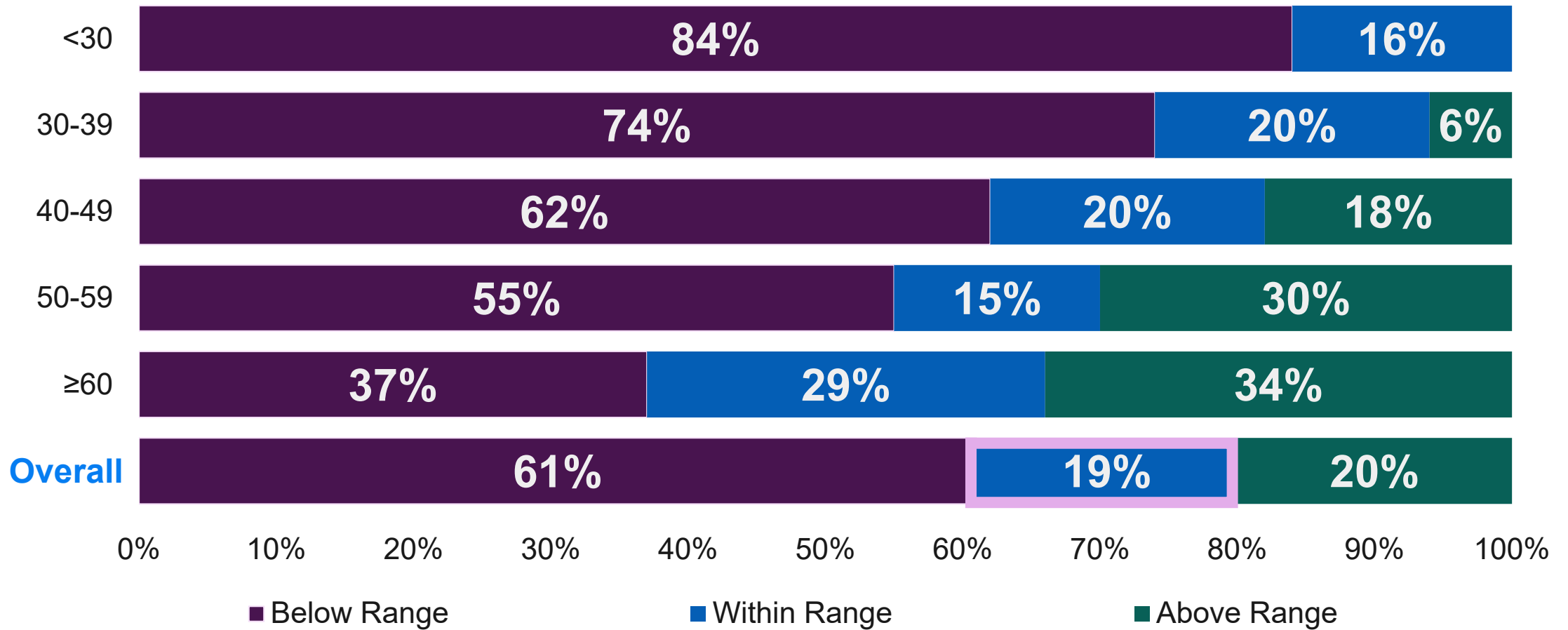
**12 FUND + 12 ALLOCATIONS = 24 DECISIONS!**



# Quantify Suitability/Appropriateness Of Allocations



Self-directed Investors Falling Within and Outside Their Target Equity Ranges



# TARGET DATE FUNDS (TDFs)

# Target Date Fund Risks

Participant Outcomes

## 1. GLIDEPATH SUITABILITY RISK

Explanation

Occurs when the plan's selected glidepath does not match the plan's design and average participant demographics.

Participant Outcomes

## 2. PARTICIPANT MISFIT RISK

Explanation

Occurs when individual participant characteristics, most importantly savings rates, differ from the average plan participant.

Participant Outcomes

## 3. UNDERLYING FUND RISK

Explanation

Occurs when the selected TDF contains a high percentage of underperforming underlying investments or is significantly restricted with replacement options due to proprietary constraints.

# Glidepath Suitability Risk

Occurs when the plan's selected glidepath does not match the plan's design and average participant demographics.

## Savings Rates / Funding Adequacy

Average EE contribution: **7%**

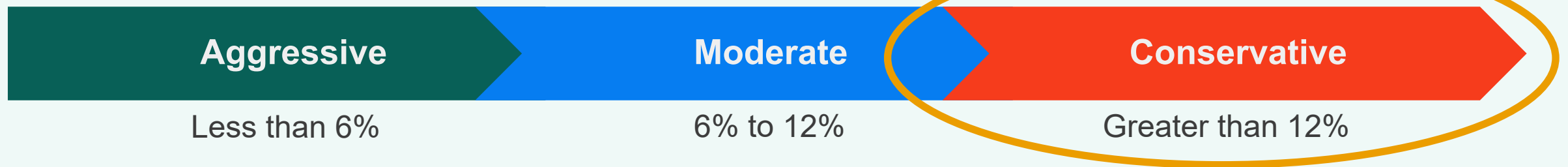
ER matching contribution: **4%**

ER profit sharing contribution: **3%**

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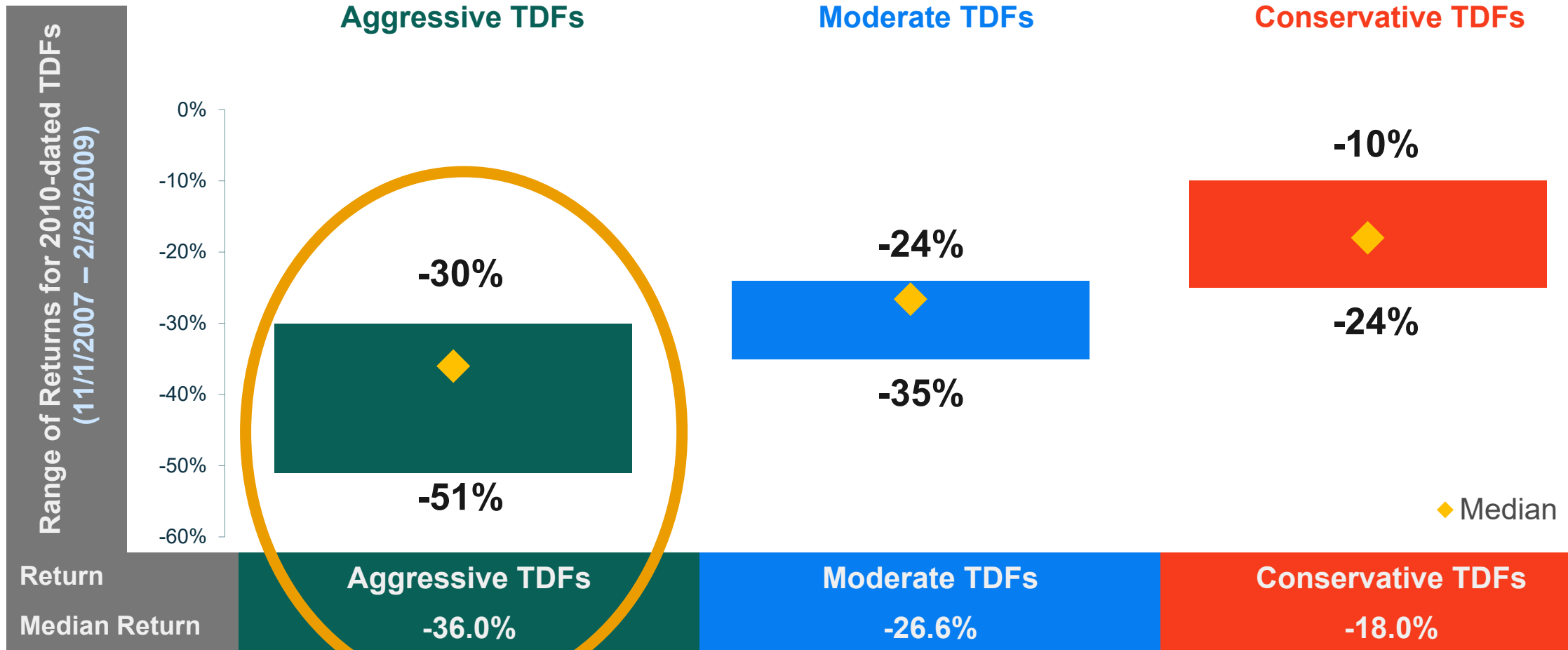
Average total contribution rate: **14%**

## Plan Risk Profile



# Pre-Retirement TDF Drawdown Risks

Aggressive TDF risk postures can lead to significant losses prior to retirement

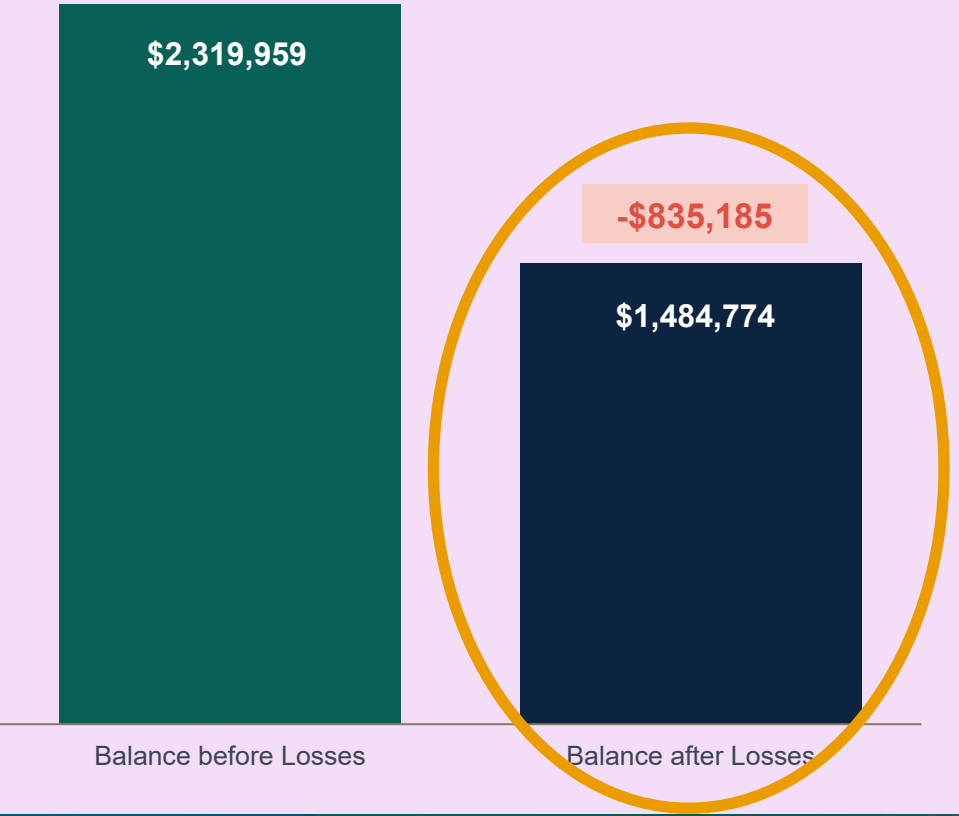
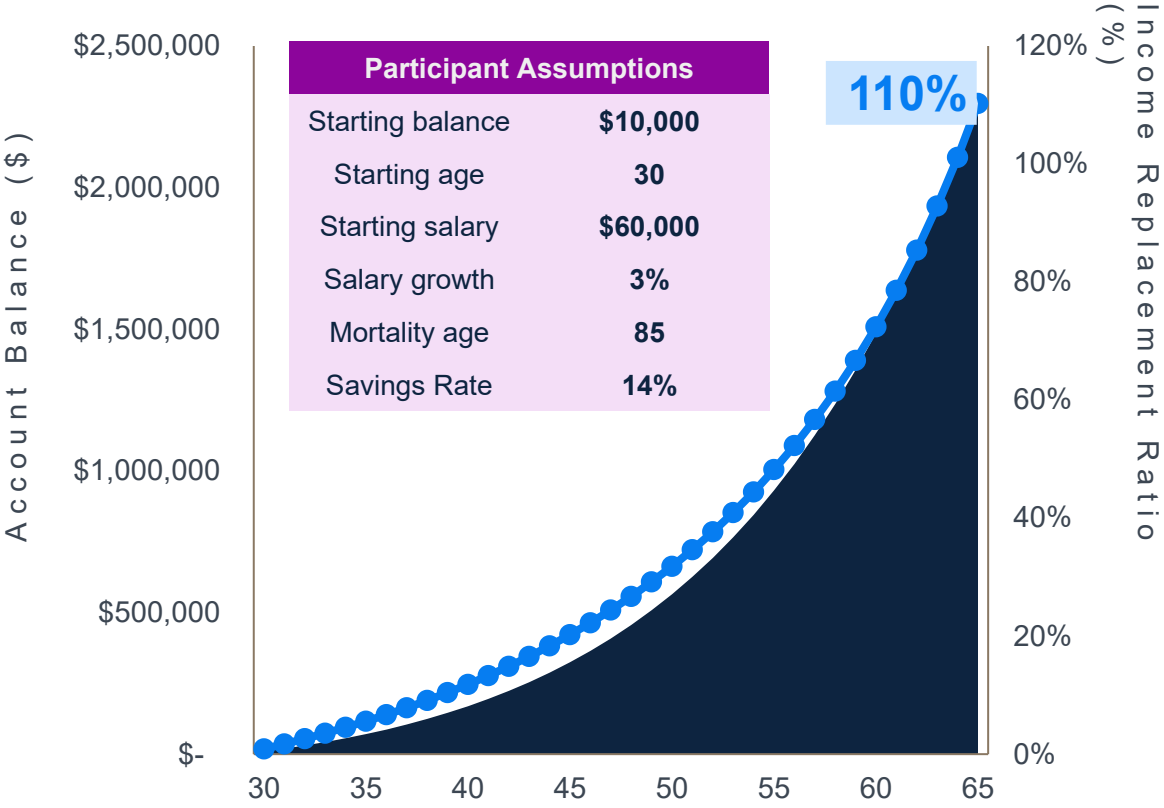


Source: Morningstar Direct, as of 30 June 2019.  
 Conservative, Moderate and Aggressive TDFs are classified utilizing the NFP TDF Risk Index  
 Past performance is no guarantee of future results. Indexes are unmanaged and one cannot invest directly in an index.

# Impact on Participants

Significant losses prior to retirement make well-funded retirement balances under-funded




**Retirement Balances and Income Replacement Ratios** **Balances Before and After -36% Down Market Losses**



Savings and retirement balances before and after losses examples are for illustrative purposes only and are not indicative of any investment. The median return for aggressively managed TDFs during the financial crisis (11/1/2007 to 3/1/2009) was used as a proxy for potential losses. Past performance is no guarantee of future results. Indexes are unmanaged and one cannot invest directly in an index.

# Additional Workforce Costs

Participants that are forced to delay retirement frequently create additional workforce costs

Inputs	Average new hire employee <sup>1</sup>	Retirement-age employee <sup>2</sup>	Average annual cost of delayed retirement
Average age	37 years	64 years	-
Wages	\$59,228	\$84,480	\$25,252
Healthcare	\$5,293	\$12,017	\$6,724
Workers Compensation	\$290	\$654	\$364
			
<b>Total</b>	<b>\$64,811</b>	<b>\$97,151</b>	<b>\$32,340</b>
Plan Assumptions and Costs			
Number of retirement-age employees			10
Average annual cost of delayed retirement(s)			\$323,400
<b>Average 5-year cost of delayed retirement(s)</b>			<b>\$1,617,000</b>

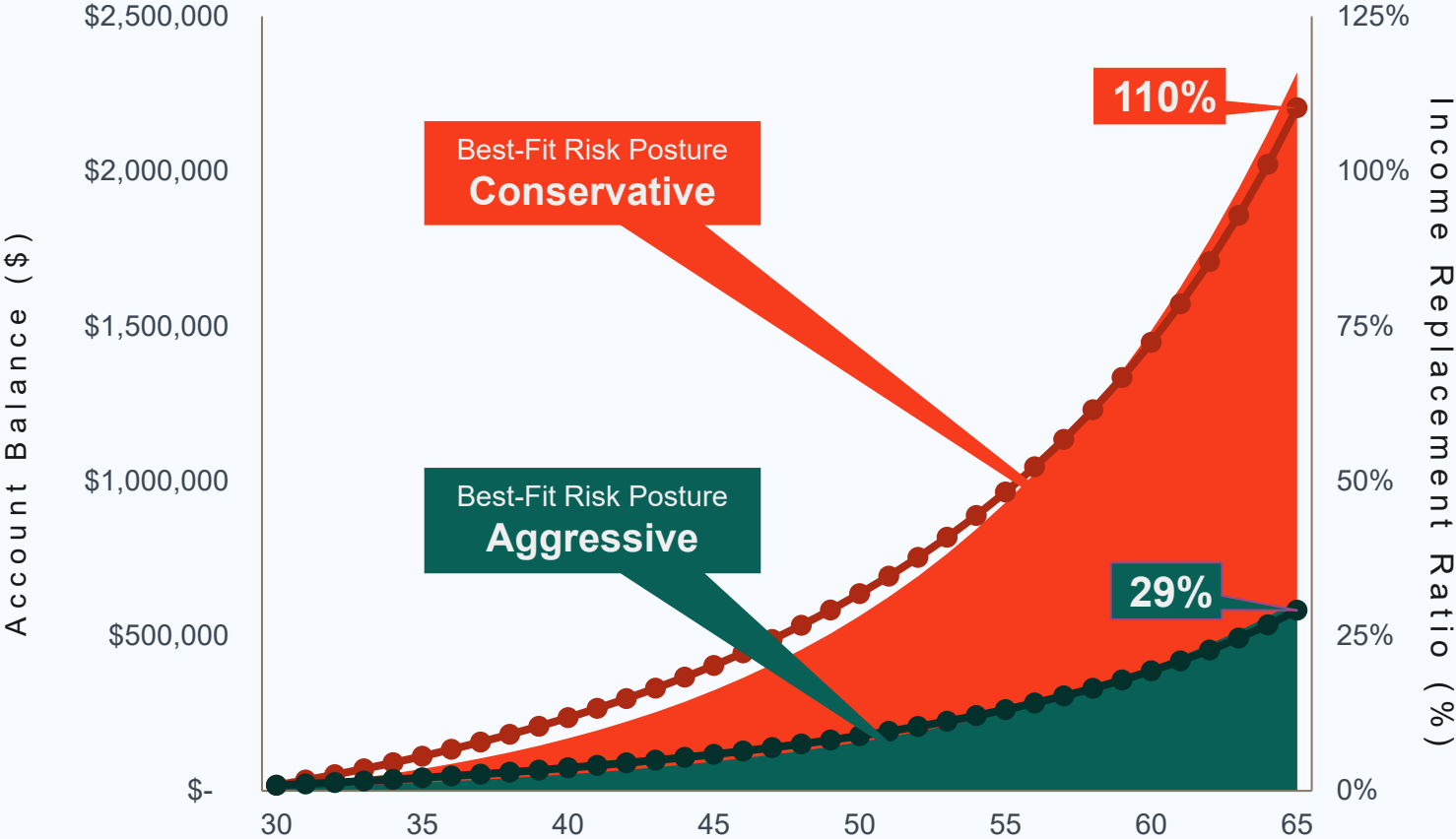
<sup>1</sup> Qualified replacement age, wages and health care costs are the average of all company employees between the ages of 25 and 50 in the workforce.

<sup>2</sup> Retirement-age employee age, wages and health care costs are the average of all company employees between the ages of 60 and 70 in the workforce.

Hypothetical example for illustrative purposes only. The target date is the approximate date when investors plan to start withdrawing their money. Generally, the asset allocation of each fund will change on an annual basis with the asset allocation becoming more conservative as the fund nears the target retirement date.

# Participant Misfit Risk

Occurs when individual participant characteristics differ from the average plan participant.

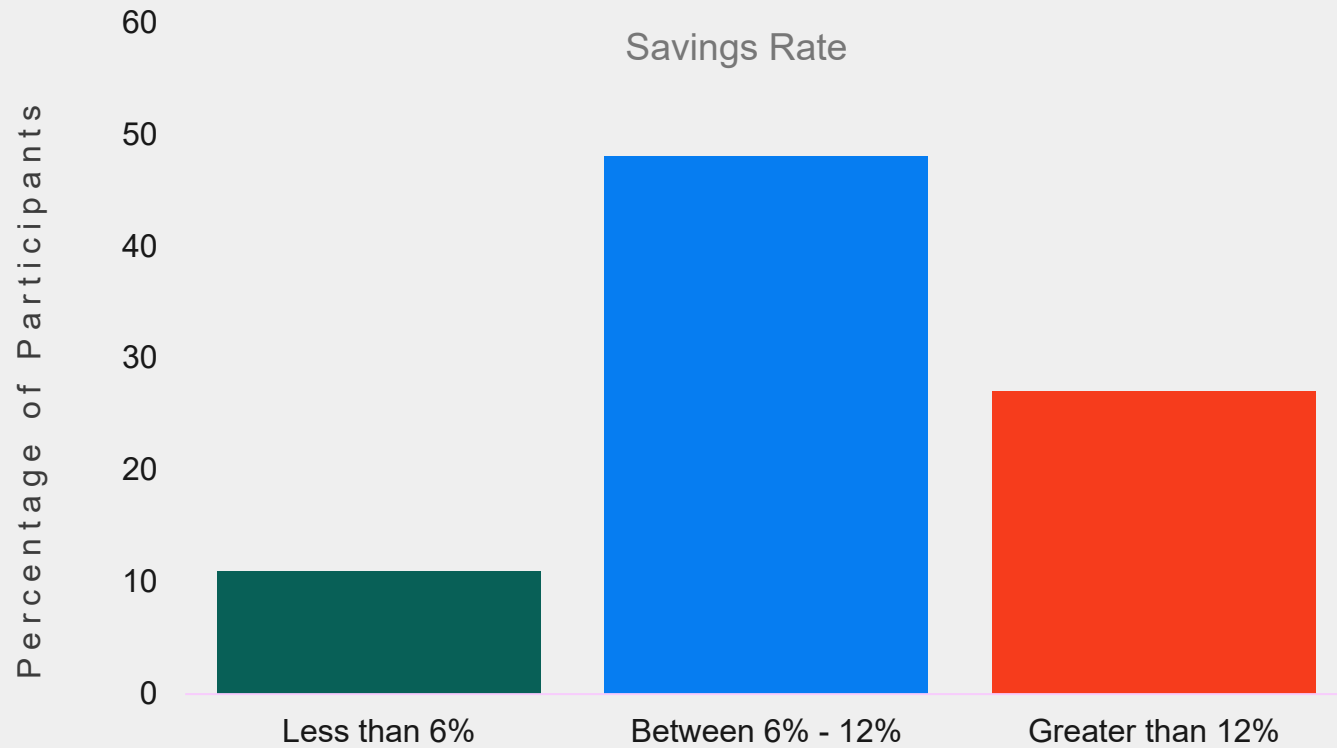


Participant Assumptions	
Starting balance	\$10,000
Starting age	30
Starting salary	\$60,000
Salary growth	3%
Mortality age	85
<b>Average saver rate</b>	<b>14%</b>
<b>Low saver rate</b>	<b>3%</b>

Savings example is for illustrative purposes only and is not indicative of any investment.  
 Source for TDF returns: Morningstar Direct, as of 30 June 2019.  
 NFP TDF Risk Index is used to classify TDFs as Conservative, Moderate or Aggressive  
 Past performance is no guarantee of future results. Indexes are unmanaged and one cannot invest directly in an index.



# Participant Misfit Calculator



Savings Rate	Less than 6%	Between 6% - 12%	Greater than 12%	Misfit Risk
% of Participants	14%	59%	27%	86%
# of Participants	11	48	22	70

1. Findings of Morningstar white paper: <https://www.morningstar.com/lp/stop-guessing>



## INPUTS

Select Incumbent Glidepath	<b>AGGRESSIVE</b>	Value Added Calculation Assumption
TDF Assets \$	\$9,000,000	
<b>SAVINGS RATE</b>		
Less than 6%	11	0.125% Value added for 10% improvement in asset allocation fit (one glidepath risk level) <sup>1</sup>
Between 6% - 12%	48	
Greater than 12%	22	

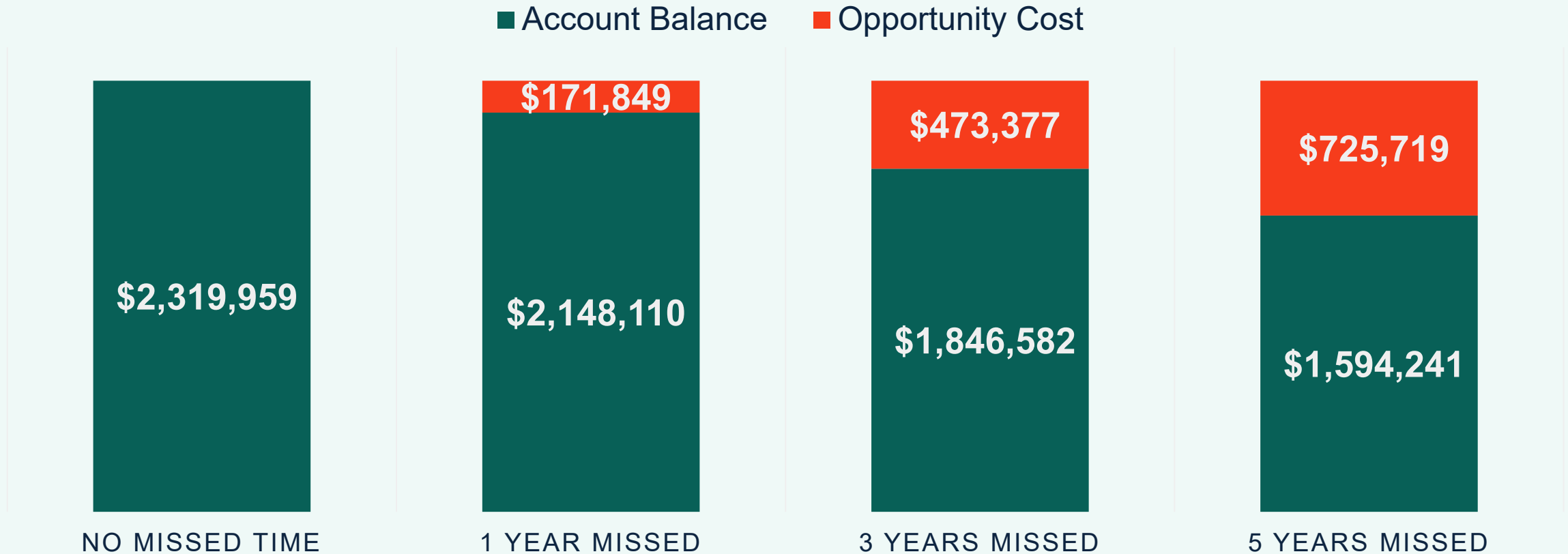
**BEST-FIT GLIDEPATH: MODERATE**

VALUE ADDED (PLAN-LEVEL SUITABILITY)	
Immediate (Year 1)	Cumulative (Over 5 Years)
\$5,139	\$28,396
<b>0.06%</b>	

VALUE ADDED (RISK-BASED GLIDEPATHS)	
Immediate (Year 1)	Cumulative (Over 5 Years)
\$9,722	\$53,721
<b>0.11%</b>	

# Potential Impact of Lost Time in Market

Participants who panic sell out of the TDF may lose valuable time invested in the market that can have detrimental effects on their overall savings.



Savings example is for illustrative purposes only and is not indicative of any investment.  
Source for TDF returns: Morningstar Direct, as of 30 June 2019.  
NFP TDF Risk Index is used to classify TDFs as Conservative, Moderate or Aggressive  
Past performance is no guarantee of future results. Indexes are unmanaged and one cannot invest directly in an index.

# Underlying Fund Risk

Occurs when the selected TDF contains a high percentage of underperforming component investments or is significantly restricted with replacement options due to proprietary constraints.

Average underlying fund score	6.7
Percentage of underlying funds scoring watch list or below	42%
Number of underlying funds not scored	3
Number of active managers	1
Number of underlying funds utilized within the portfolio	22
Number of funds managed by TDF family (within asset classes utilized in TDF)	52
Pool of potential replacement candidates	30
Number of replacement candidates per asset class	1.5
Replacement candidate average score	8.1
Independent 3(38) oversight	No

For illustrative purposes only.

**“Do you understand the principal strategies and risks of the fund, or of any underlying asset classes or investments that may be held by the TDF?”**  
- Department of Labor

# Now ponder your business . . .

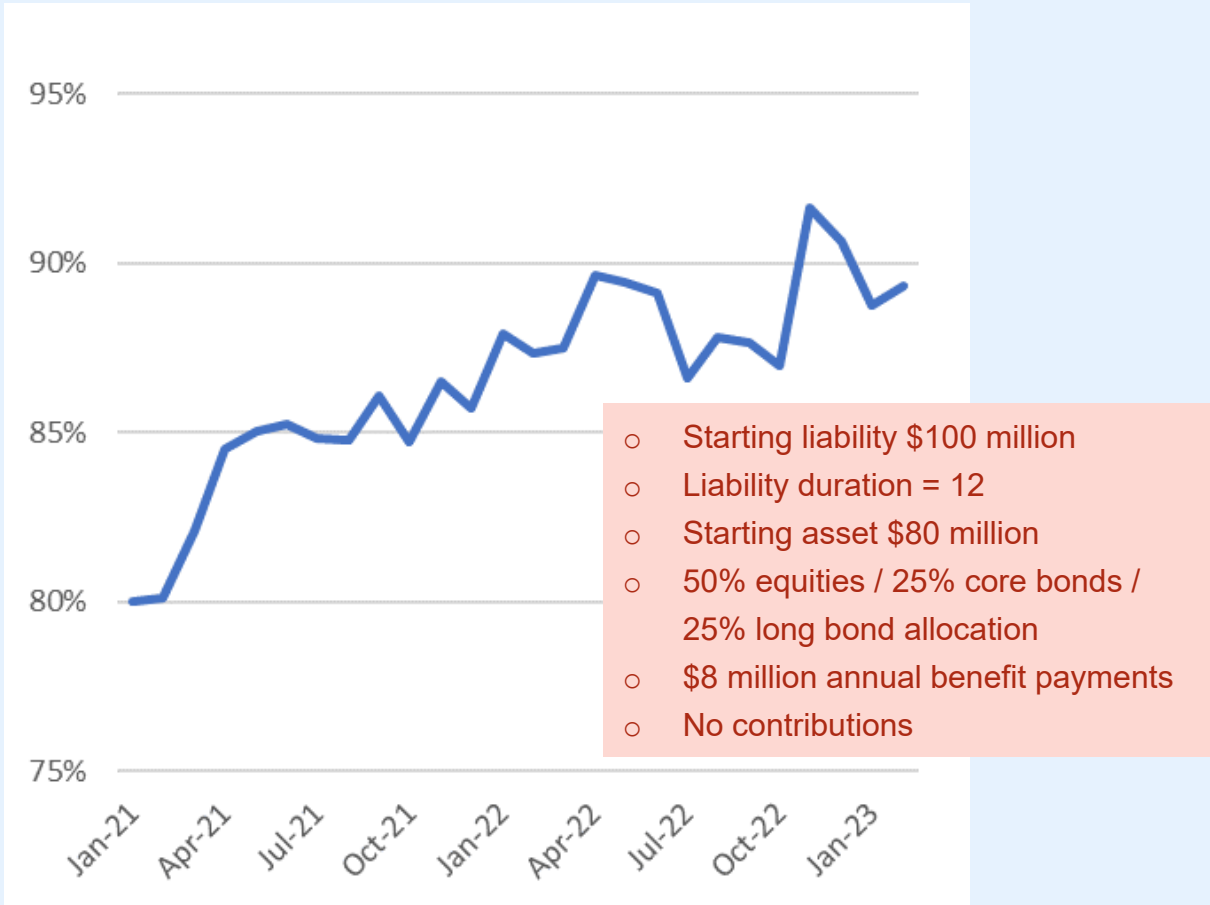
What are the costs, consequences, and risks, of **YOU** remaining status quo?



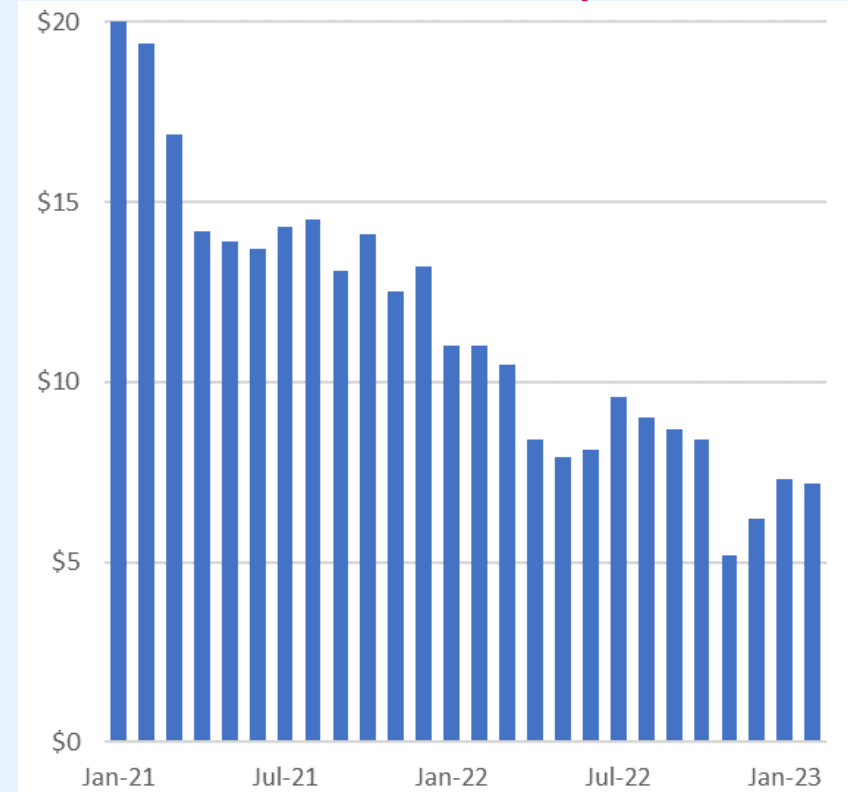
# Funding Ratio Report – Sample Plan

Traditional Asset Allocation

### Market Value Funding Ratio



### Unfunded Liability



**TIME TO REDUCE RISK?**

# A New Paradigm For Risk Management?

Past successful strategies may no longer be optimal in the new environment.

	Jan. 1, 2021	Jan. 31, 2023
Funding Ratios	Lower	Higher
S&P 500 Index	3,750	4,075
10-year Treasury	0.9%	3.5%
Gov't Policy	Growth Accommodation	Anti-inflation/recession
Equity Outlook	Bullish	Uncertain
Bond Yields	Low and stagnant	High and Uncertain
Overall Risk Level	Lower	Higher

# THANK YOU

