Investment Performance Review Period Ending December 31, 2022

## Washoe County 457 & 401a Plans



AndCo Consulting | (844) 44-ANDCO | AndCoConsulting.com

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On behalf of everyone at AndCo, we want to <u>Thank You</u> for the opportunity to serve you and for the trust you place in us! We take our role as your consultant and trusted advisor seriously and will continue working hard to maintain your confidence.

Looking back at the year, we would like to provide a brief update on where we stand as a firm. 2022 marked the 22nd straight year of revenue growth for the firm and we advise on approximately \$90 billion in client assets as of December 31st. We reinvested 100% of our net profits back into the organization so we can continue to evolve and adapt within a market environment that is constantly changing and challenging. As we have stated in previous updates, we do not believe the "status quo" is an effective strategy and we are convicted in our belief that a firm not focused on moving forward in our industry is moving backward.

To execute on our commitment to evolve and continue to enhance the organization, we made additional personnel and technology investments in 2022. Specifically, we hired a Chief Information Officer (Bharat Kumta) after a national search led by a specialized executive recruiting firm. We believe technology is going to drive successful firms in our industry and we plan to invest heavily within this business function to support digital transformation. We also integrated a new Chief Human Resources Officer (Stacie Runion) through a national search led by an executive recruiter. We believe our firm's most important asset is our people, so we need to ensure we have the right leadership team in HR to focus on that asset. We also hired team members in Finance, Human Resources, Consulting, Research, Solutions & Growth, Technology and Performance & Reporting. These personnel investments focused on further enhancing functional areas, departmental service levels, and narrowing potential gaps. We also continued to invest in our proprietary software system to compile and share information firmwide to better serve our clients more effectively and efficiently. Finally, we engaged several outside consulting firms to help us better assess and invest in areas within our firm we believe will drive value for our clients going forward. Some examples include working with an outside group to evaluate and enhance our Operational Due Diligence efforts with investment managers and a separate group to help us review and analyze our current Discretionary Services offerings and how to make this service stronger for our clients.

As we start 2023, we are 93 team members strong with plans to grow. We are targeting several new positions for the year as we thoughtfully continue to invest in our firm to provide the quality services you expect from AndCo. These talent enhancements cover multiple functions and departments at AndCo including Consulting, Research, Performance & Reporting, Marketing, Technology and Compliance. While adding additional resources to a firm our size is a significant investment, it is one we embrace due to the impact we believe it will have on our ability to continue serving our clients at a high level and will push us closer to our vision of being a transformational organization viewed as the leader in our industry. We thoughtfully grow while helping to ensure that service will not suffer at AndCo at the expense of growth. Rather, we utilize growth to enhance our value proposition and overall service to our valued clients.

At the beginning of each year, we also discuss the AndCo partnership and, when earned, announce new partners.

This year I am thrilled to share three new team members were named partners at AndCo – Jon Breth, Tyler Grumbles and Brooke Wilson. Jon has been with AndCo for 11-years and Tyler has been with AndCo for 15-years. Jon and Tyler are both members of our Consulting Department. Brooke was recently promoted to Executive Director of our Performance & Reporting Department and has been with AndCo 7-years. We could not be happier for Jon, Tyler, and Brooke or more grateful for the contributions they have made to AndCo since joining the firm. Jon, Tyler, and Brooke represent what it means to be an AndCo team member, and we are honored and fortunate to have them as partners at our firm.

While three new members will be added to the partnership in 2023, we will also be losing one valuable team member. Donna Sullivan retired on December 31, 2022. Donna joined AndCo at its inception in September of 2000. Donna has been integral in the success of the firm and for many years was the glue that held everything together. Her contributions and sacrifices are too many to reference in this letter. While we are extraordinarily excited for her and the next chapter of her life, she will be greatly missed as a partner and team member. We will be honoring Donna and her legacy with the Donna Sullivan Believe Award. This award will be given each year to the team member at AndCo that best demonstrates their belief in AndCo's Mission, Vision, and Values. Donna believed in what AndCo stood for before anyone else did, and she carried that belief for 23 years. Thank you, Donna!

With the addition of Jon, Tyler, and Brooke, and Donna's retirement, we now have 15 partners representing various functions and departments at AndCo. Our growing partnership group provides great perspective and insight which continues to strengthen AndCo and reaffirm our belief that 100% employee management is vital to the long-term success of our organization. We have great team members at AndCo and this partnership group will continue to expand as we move forward.

In closing, we know that 2022 was a dramatically different environment for investing as compared to 2021, with record high inflation and double-digit losses in both equity AND fixed income assets - all resulting in challenging client portfolio results. Please know our team works tirelessly to provide the advice and guidance you need regardless of the market environment. Our name, AndCo, reminds us of who we work for every day - "Our Client" &Co. You are first in our service model. As we continue to discuss strategic decisions and reinvestments regarding our firm, please know that our decisions are filtered through the following question: "How does this keep our clients' interests first?" If it doesn't meet this standard, we don't do it - it's that simple.

Thank you again for your valued partnership and the opportunity to serve you. Happy New Year!

Mike Welker, CFA® CEO

## **Organizational Chart**

## PARTNERSHIP

Mike Welker, CFA® **Jason Purdy** Jon Breth. CFP® **Brian Green** Brooke Wilson, CIPM<sup>®</sup> Kerry Richardville, CFA<sup>®</sup> Bryan Bakardjiev, CFA® Kim Spurlin, CPA **Steve Gordon Dan Johnson Trov Brown, CFA®** Dan Osika, CFA® Tyler Grumbles, CFA<sup>®</sup>. Evan Scussel, CFA®, CIPM<sup>®</sup>, CAIA<sup>®</sup> CAIA®

**Jacob Peacock, CPFA** 

## LEADERSHIP & MANAGEMENT

Mike Welker, CFA® CEO

**Bharat Kumta** CIO

Bryan Bakardjiev, CFA® COO

Evan Scussel, CFA®, **CAIA®** Executive Director of Research

**Kim Spurlin, CPA** CFO

Sara Searle

Stacie Runion CHRO

Steve Gordon Solutions & Growth Director

**Troy Brown, CFA® Executive Director** of Consultina

## INVESTMENT POLICY COMMITTEE

Bryan Bakardjiev, CFA Mike Welker. CFA®

Executive Director of **Dan Johnson** 

**Consulting Director** 

Consulting Director

Jacob Peacock, CPFA **Consulting Director** 

Jason Purdy I.T. Director

**Molly Halcom** Solutions & Growth

Director

**Philip Schmitt Research Director** 

Sara Searle

**Trov Brown, CFA®** 

**Rachel Brignoni, MHR** People & Culture Director Annette Bidart

Ian Jones

CONSULTING

Brad Hess, CFA®, CPFA **Brendon Vavrica, CFP® Brian Green** Chris Kuhn, CFA®, CAIA® **Christiaan Brokaw, CFA® Dave West, CFA® Doug Anderson, CPFA Frank Burnette Gwelda Swillev** 

**James Ross** Jeff Kuchta, CFA®, CPFA Jennifer Brozstek Jennifer Gainfort, CFA®, **CPFA** John Mellinger John Thinnes, CFA®, CAIA®, CPFA Jon Breth, CFP® **Jorge Friguls, CPFA** Justin Lauver, Esg. Kerry Richardville, CFA®

## PERFORMANCE REPORTING

**Albert Sauerland Edward Cha Amy Steele** Grace Niebrzydowski **Bob Bulas James Culpepper David Gough, CPFA James Reno Don Delanev** Jeff Pruniski **Donnell Lehrer, CPFA** Joe Carter, CPFA **OPERATIONS** 

FINANCE **I.T. & OPERATIONS Geoffrey Granger** Kahjeelia Pope **Jerry Camel Michelle Boff** 

Kenneth Dav **Robert Marquetti** COMPLIANCE HUMAN RESOURCES

**Allen Caldwell** Thay Arroyo

Mary Nye **Michael Fleiner Michael Holycross Mike Bostler** Oleg Sydyak, CFA<sup>®</sup>, FSA, EA Paul Murray, CPFA Peter Brown **Tim Walters Tony Kay** Tyler Grumbles, CFA®, **CIPM®, CAIA®** 

Julio Garcia Rengifo **Kim Hummel Rotchild Dorson** Yoon Lee-Choi

MARKETING Lauren Kaufmann

SOLUTIONS & GROWTH Dan Osika, CFA® John Rodak, CIPM<sup>®</sup> Paola Gervasi



## RESEARCH

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Ben Baldridge, CFA<sup>®</sup>, CAIA<sup>®</sup> Private & Hedged Fixed Income

**Chester Wyche** Real Estate & Real Assets

Dan Lomelino, CFA® **Fixed Income** 

**David Julier** Real Estate & Real Assets

**Elizabeth Wolfe** Capital Markets & Asset Allocation

Evan Scussel, CFA®, CAIA® Private & Public Equity

Joseph Ivaszuk **Operational Due Diligence** 

Josue Christiansen, CFA®, CIPM® Public Equity

Julie Baker, CFA<sup>®</sup>, CAIA<sup>®</sup> Private & Hedged Equity

Justin Ellsesser, CFA®, CAIA® Private Equity

Kevin Laake, CFA®, CAIA® Private Equity

**Michael Kosoff** Hedge Funds

**Philip Schmitt** Fixed Income & Capital Markets

Ryan McCuskey Real Estate & Real Assets

Xinxin Liu, CFA®, FRM Private Equity and Private Debt

Zac Chichinski, CFA®, CIPM® Public Equity

**EMPLOYEES** 

ADVANCED 23 CFA® 8 CAIA® 11 CPFA 5 CIPM®

Employee counts are as of 1/1/2023 and reflect only full time employees and do not include any who are part time, temporary or independent contractors.

**Kelly Pearce** 

**Shelley Berthold** 



**Brooke Wilson, CIPM®** Performance Reporting

Jack Evatt

4th Quarter 2022 Market Environment



#### The Economy

- US GDP growth is expected to remain strong in the 4th quarter. While the final measure of 3rd quarter GDP was revised upward to 3.2%, global GDP growth remains challenged with higher energy prices continuing to act as a headwind, especially in Europe. However, China is beginning the process of reopening its economy which should boost emerging markets.
- The US Federal Reserve Bank (the Fed) continued to increase interest rates during the quarter with a 0.75% increase in November and a 0.50% increase in December. Importantly, the Fed signaled it remains committed to fighting inflation through additional rate hikes if needed.
- The US labor market continued to show its resiliency by adding roughly 680 thousand jobs during the 4th quarter. As a result, the unemployment rate fell to 3.5% in December. Despite these gains, the number of announced layoffs during the quarter increased, which could impact labor markets in the future periods.
- Global markets were broadly positive during the 4th quarter. Despite persistent inflation, tighter central bank monetary policy, slowing GDP growth, and continuing geopolitical risks investors were focused on the potential of central banks slowing the pace of tightening as inflation moderated.

#### Equity (Domestic and International)

- US equities moved higher during the 4th quarter despite concerns regarding inflation, the potential for higher interest rates, and a slowing global GDP growth. Large cap value was the best performing domestic segment of the equity market relative to other US market capitalizations and styles during the period while large cap growth performed the worst.
- International stocks also experienced strong returns during the 4th quarter. While local currency performance was solid, the primary catalyst for outsized returns was a weakening USD, which fell against most major and emerging market currencies. GDP growth, especially in Europe, remained under pressure as central bank policies remained restrictive and elevated energy prices acted as a headwind. Finally, China began to relax its zero-tolerance policy regarding Covid-19, which positively contributed to both global GDP growth and equity market performance.

#### Fixed Income

- While inflation declined during the 4th quarter, the Fed continued increasing interest rates with two increases totaling 1.25%. Despite the short-term increases, long-term interest rates remained relatively stable during the period. US interest rates moved slightly higher during the quarter with the US 10-Year Treasury bond rising 0.08% to close the year at a yield of 3.88%.
- Performance across domestic bond market sectors was positive during the quarter, led by US high yield and corporate investment grade bonds. Much like equities, global bonds outperformed their domestic peers mainly due to a weaker USD.
- The combination of higher coupons, a shorter maturity profile relative to high quality government bonds, and narrower credit spreads were the primary drivers of relative return during the period.
- US Treasury bonds lagged their corporate bond peers during the quarter as investors' concerns about rising interest rates and the need for safety subsided.

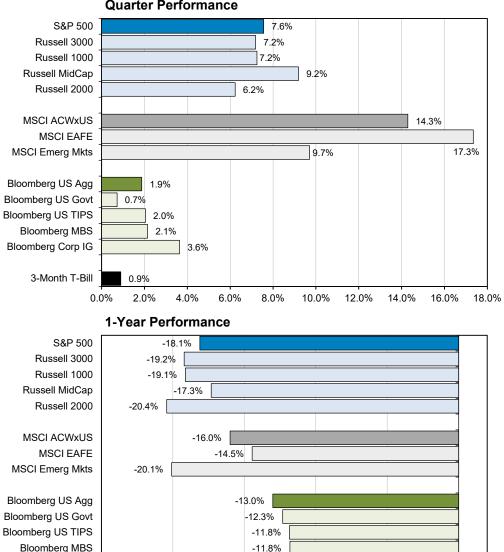
#### **Market Themes**

- Central banks remained vigilant in their fight against inflation with the Fed, the Bank of England, and the European Central Bank all raising interest rates during the quarter. Additionally, the Bank of Japan relaxed their targeting of interest rates, allowing the 10-Year Japanese Government Bond to float to 0.50%, above the previous 0.25% level.
- The conflict in Ukraine continues to disrupt global energy markets, in addition to the ongoing humanitarian crisis. Energy costs remain elevated which could further negatively impact economic growth.
- Both US and international equity markets rebounded during the quarter on expectations that inflation would continue to moderate, which could lead central banks to begin the process of slowing the pace of monetary tightening. Valueoriented stocks outperformed growth stocks as investors remained concerned about the pace of future growth.
- Short-term interest rates rose across most developed markets as central banks continued to tighten. Despite concerns about the potential for slowing economic growth, lower quality corporate bonds outperformed higher quality government bonds and USD weakness acted as a tailwind for global bonds during the quarter.



- Equity markets moved higher during the 4th guarter, but it was not sufficient to offset prior quarter pullbacks. Factors that contributed to performance included declining inflation, expectations that the Fed would slow the pace of future interest rate increases, and expectations that China would begin to open its economy. For the period, the S&P 500 large cap benchmark returned 7.6%, compared to 9.2% for mid-cap and 6.2% for small cap benchmarks.
- Like domestic equities, developed markets international and emerging market equities delivered positive results for the 4th quarter. Europe continues to face headwinds from higher-than-expected inflation, elevated energy prices, geopolitical risks related to the conflict in Ukraine, and rising interest rates. Emerging markets were positively impacted by China's decision to loosen restrictions related to the pandemic. Importantly, global equities were positively impacted by a decline in the USD. For the guarter, the MSCI EAFE Index returned 17.3% while the MSCI Emerging Markets Index rose by 9.7%.
- For the guarter, performance of the bond market was broadly positive due to lower inflation and lower interest rate volatility. The Bloomberg (BB) US Aggregate Index returned 1.9%, for the period while investment grade corporate bonds posted a return of 3.6%.
- Performance for developed equity markets was strongly negative over the trailing 1-year period. The bellwether S&P 500 Index dropped -18.1% for the year. The primary drivers of return during the period were concerns related to rising inflation, tighter monetary policy from global central banks, and slowing global economic growth. The weakest relative performance outlier was the Russell 2000 Index which declined by -20.4% for the year.
- Over the trailing 1-year period, international markets declined similarly to domestic markets. The MSCI EAFE Index returned -14.5% while the MSCI Emerging Markets Index fell by -20.1%. Continued concerns related to Ukraine, elevated inflation, and slowing global economic growth negatively impacted markets. However, a weakening USD acted as a tailwind to international performance in the second half of the year.
- Bond market returns were widely negative over the trailing 1-year period due primarily to concerns about persistently high inflation and the expectation of higher future interest rates. US TIPS and mortgage-backed bonds were the least negative sectors with both returning -11.6% for the year. Investment grade corporate bonds suffered the year's largest loss, falling -15.8%.

Source: Investment Metrics



-15.8%

-20.0%

-15.0%

-10.0%

-5.0%

## **Quarter Performance**

Bloomberg Corp IG

3-Month T-Bill

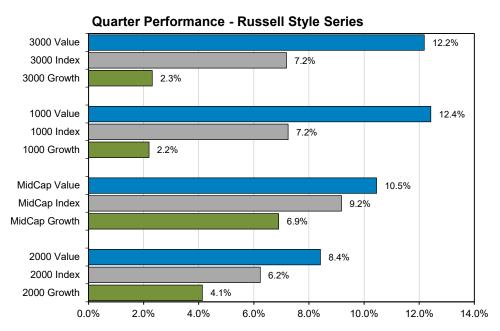
-25.0%

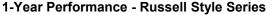
1.5%

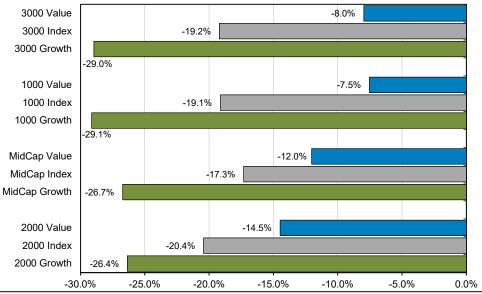
0.0%

- Despite a pullback in December, equity markets broadly experienced strong absolute returns during the 4th quarter across both the style and market capitalization spectrums. With concerns about the potential for slowing economic conditions, large cap stocks resumed their leadership, followed by mid and small cap stocks. The Russell 1000 Value Index delivered 12.4% for the quarter, followed by while the Russell Mid Cap Value Index and the Russell 2000 Index, which rose by 10.5% and 8.4%, respectively.
- Performance across styles and market capitalizations was disparate during the quarter. Large, mid, and small cap value stocks all outperformed their growth counterparts. For the period, the Russell 1000 Value Index was the best relative performing style index, posting a return of 12.4%. Large and small cap growth stocks were the laggards during the period with the Russell Large Cap Growth Index and Russell 2000 Growth Index returning 2.2% and 4.1%, respectfully.

- In contrast to the 4th quarter's positive performance, there was a wide range of negative results across market capitalizations over the trailing 1-year period. The Russell 2000 Index returned a disappointing -20.4% for the year, which underperformed both its large and mid cap index counterparts.
- There was also a wide performance dispersion across the style-based indexes for the year with growth stocks down significantly more than their value counterparts at all capitalization ranges. Within large cap stocks, the Russell 1000 Value Index returned -7.5% compared to much larger -29.1% decline for the Russell Large Cap Growth benchmark. The Russell Mid Cap Value Index returned -12.0% while the Russell 2000 Value Index returned -14.5% for the period. While these value benchmark results represented double-digit losses for the year, the Russell Mid Cap Growth Index fell a much larger -26.7% and the Russell 2000 Growth Index declined by a similar -26.4%.





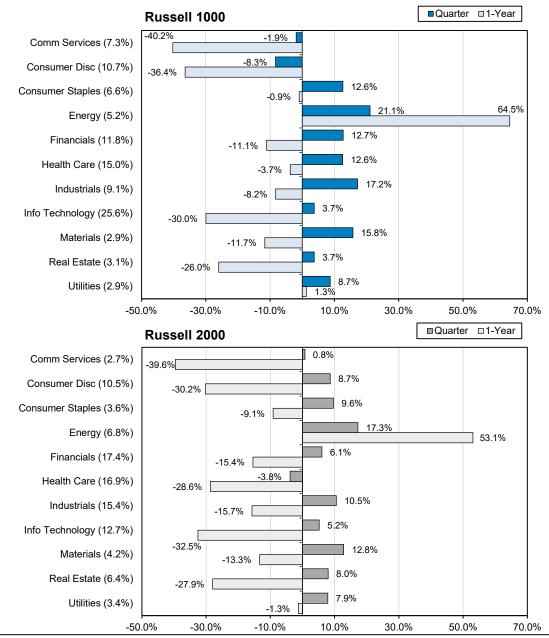


Source: Investment Metrics



- Economic sector performance was positive for nine of the eleven large cap economic sectors for the 4th quarter. Seven sectors outpaced the return of the broad index on a relative basis during the period.
- Energy continued its strong 2022 performance with a 4th quarter return of 21.1%. Other sectors that outpaced the headline index's return for the quarter included industrials (17.2%), materials (15.8%), financials (12.7%), healthcare (12.6%), consumer staples (12.6%), and utilities (8.7%). The real estate (3.7%), information technology (3.7%), communication services (-1.9%), and consumer discretionary (-8.3%) sectors all trailed the Russell 1000 Index return for the period.
- For the full year, seven economic sectors exceeded the return of the broad large cap benchmark but only the energy (64.5%) and utilities (1.3%) sectors managed to post positive, albeit vastly different, results. The weakest economic sector performance in the Russell 1000 for the year was communication services which declined by a staggering -40.2%.

- Ten small cap economic sectors posted positive returns during the quarter and seven exceeded the 6.2% return of the broader Russell 2000 Index. The energy (17.3%), materials (12.8%), and industrials (10.5%) sectors each posted double-digit positive results for the quarter. The only small cap economic sector that posted negative performance for the quarter was health care which fell by -3.8%.
- For the trailing 1-year period, six of the eleven economic sectors were down less than the broad small cap benchmark's return of -20.4%. Energy was the best performing and only positive economic sector for the year with a strong return of 53.1%. The utilities (-1.3%) and consumer staples (-9.1%) sectors were only small cap index segments to fall less than double-digit amounts for the year. The worst performing sector for the full year was communication services with a return of -39.6%. In addition, the information technology (-32.5%), consumer discretionary (-30.2%), health care (28.6%), and real estate (-27.9%) sectors all were down significantly for the year.





Source: Morningstar Direct

The Market Environment Top 10 Index Weights & Quarterly Performance for the Russell 1000 & 2000

As of December 31, 2022

Top 10 Weighted Stocks					
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector	
Apple Inc	5.5%	-5.8%	-26.4%	Information Technology	
Microsoft Corp	5.1%	3.3%	-28.0%	Information Technology	
Amazon.com Inc	2.1%	-25.7%	-49.6%	Consumer Discretionary	
Berkshire Hathaway Inc Class B	1.6%	15.7%	3.3%	Financials	
Alphabet Inc Class A	1.5%	-7.8%	-39.1%	Communication Services	
UnitedHealth Group Inc	1.4%	5.3%	7.0%	Health Care	
Alphabet Inc Class C	1.3%	-7.7%	-38.7%	Communication Services	
Johnson & Johnson	1.3%	8.8%	6.0%	Health Care	
Exxon Mobil Corp	1.3%	27.4%	87.4%	Energy	
JPMorgan Chase & Co	1.1%	29.5%	-12.6%	Financials	

Top 10 Weighted Stocks					
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector	
Halozyme Therapeutics Inc	0.3%	43.9%	41.5%	Health Care	
ShockWave Medical Inc	0.3%	-26.1%	15.3%	Health Care	
Inspire Medical Systems Inc	0.3%	42.0%	9.5%	Health Care	
EMCOR Group Inc	0.3%	28.4%	16.8%	Industrials	
Crocs Inc	0.3%	57.9%	-15.4%	Consumer Discretionary	
Matador Resources Co	0.3%	17.2%	55.9%	Energy	
Iridium Communications Inc	0.3%	15.8%	24.5%	Communication Services	
Murphy Oil Corp	0.3%	22.9%	68.3%	Energy	
Agree Realty Corp	0.3%	6.0%	3.5%	Real Estate	
Texas Roadhouse Inc	0.3%	4.7%	4.1%	Consumer Discretionary	

Top 10 Performing Stocks (by Quarter)					
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector	
Horizon Therapeutics PLC	0.1%	83.9%	5.6%	Health Care	
Burlington Stores Inc	0.0%	81.2%	-30.4%	Consumer Discretionary	
Halliburton Co	0.1%	60.4%	74.5%	Energy	
Universal Health Services Inc Class B	0.0%	60.0%	9.4%	Health Care	
PVH Corp	0.0%	57.7%	-33.7%	Consumer Discretionary	
Spectrum Brands Holdings Inc	0.0%	57.4%	-38.6%	Consumer Staples	
Boeing Co	0.3%	57.3%	-5.4%	Industrials	
Under Armour Inc A	0.0%	52.8%	-52.1%	Consumer Discretionary	
Exact Sciences Corp	0.0%	52.4%	-36.4%	Health Care	
Moderna Inc	0.2%	51.9%	-29.3%	Health Care	

Top 10 Performing Stocks (by Quarter)						
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector		
Madrigal Pharmaceuticals Inc	0.2%	346.6%	242.5%	Health Care		
Immunovant Inc	0.0%	218.1%	108.3%	Health Care		
Rayonier Advanced Materials Inc	0.0%	204.8%	68.1%	Materials		
Maxar Technologies Inc	0.2%	176.5%	75.5%	Industrials		
4D Molecular Therapeutics Inc	0.0%	176.2%	1.2%	Health Care		
Icosavax Inc	0.0%	151.3%	-65.3%	Health Care		
Imago BioSciences Inc	0.0%	138.9%	51.6%	Health Care		
Provention Bio Inc	0.0%	134.9%	88.1%	Health Care		
Biohaven Ltd	0.0%	120.3%	N/A	Health Care		
Oceaneering International Inc	0.1%	119.7%	54.6%	Energy		

Bottor	n 10 Perform	ing Stocks (	by Quarter)		Botto	n 10 Perform	ning Stocks (	by Quarter)	
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector	Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Carvana Co Class A	0.0%	-76.7%	-98.0%	Consumer Discretionary	Tricida Inc	0.0%	-98.5%	-98.4%	Health Care
Opendoor Technologies Inc Class A	0.0%	-62.7%	-92.1%	Real Estate	Relmada Therapeutics Inc	0.0%	-90.6%	-84.5%	Health Care
Tesla Inc	0.9%	-53.6%	-65.0%	Consumer Discretionary	Avaya Holdings Corp	0.0%	-87.7%	-99.0%	Information Technology
Lucid Group Inc Shs	0.0%	-51.1%	-82.1%	Consumer Discretionary	Instil Bio Inc	0.0%	-87.0%	-96.3%	Health Care
Guardant Health Inc	0.0%	-49.5%	-72.8%	Health Care	Greenidge Generation Holdings Inc.	0.0%	-85.5%	-98.2%	Information Technology
Affirm Holdings Inc - Class A	0.0%	-48.5%	-90.4%	Information Technology	Eiger BioPharmaceuticals Inc	0.0%	-84.3%	-77.3%	Health Care
WeWork Inc	0.0%	-46.0%	-83.4%	Real Estate	Cano Health Inc - Class A	0.0%	-84.2%	-84.6%	Health Care
AppLovin Corp - Class A	0.0%	-46.0%	-88.8%	Information Technology	Gossamer Bio Inc	0.0%	-81.9%	-80.8%	Health Care
Ginkgo Bioworks Holdings Inc	0.0%	-45.8%	-79.7%	Materials	Rockley Photonics Holdings Ltd	0.0%	-80.3%	-96.8%	Information Technology
Olaplex Holdings Inc	0.0%	-45.5%	-82.1%	Consumer Staples	Boxed Inc	0.0%	-78.9%	-98.6%	Consumer Discretionary

Source: Morningstar Direct



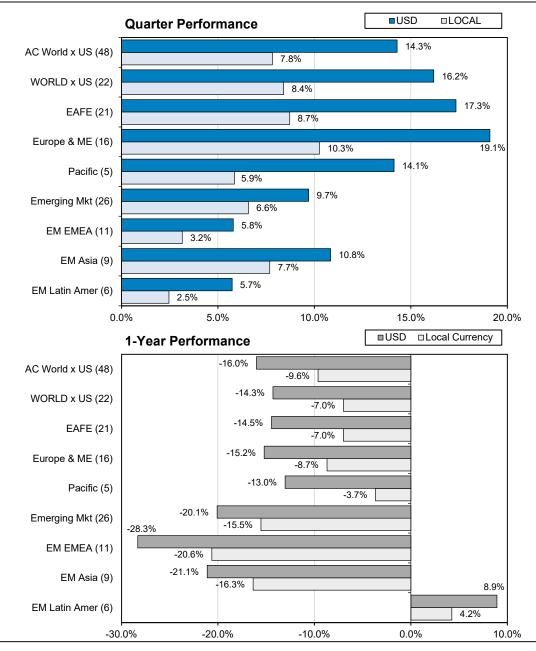
The Market Environment

International and Regional Market Index Performance (Country Count)

As of December 31, 2022

Each of the developed and emerging market international equity indexes tracked in the chart posted positive returns in both US dollar (USD) and local currency (LC) terms for the 4th quarter. A weaker USD acted as a tailwind for non-US index performance during the quarter. Higher energy prices and the reopening of China also drove performance, especially in emerging markets. The developed market MSCI EAFE Index returned a strong 17.3% in USD and 8.7% in LC terms for the period, and the MSCI Emerging Markets Index rose by 9.7% in USD and 6.6% in LC terms.

The trailing 1-year results for international developed and emerging markets were negative across most regions and currencies. The MSCI EAFE Index returned -14.5% in USD for the year and -7.0% in LC terms. Similarly, returns across emerging markets were broadly lower except for Latin America which returned 8.9% in USD and 4.2% in LC terms. The MSCI Emerging Markets Index declined by -20.1% in USD and -15.5% in LC terms for the year. Performance in the EMEA regional benchmark significantly detracted from emerging market index performance with the EMEA Index posting returns of -28.3% in USD and -20.6% in LC terms.





The Market Environment

US Dollar International Index Attribution & Country Detail As of December 31, 2022

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	7.8%	10.1%	-16.8%
Consumer Discretionary	5.0%	17.8%	-22.4%
Consumer Staples	18.7%	10.6%	-13.0%
Energy	4.5%	19.8%	27.7%
Financials	15.1%	23.9%	-4.6%
Health Care	13.6%	14.2%	-11.0%
Industrials	10.5%	19.0%	-20.6%
Information Technology	7.8%	14.9%	-32.4%
Materials	11.1%	20.7%	-10.3%
Real Estate	3.5%	11.0%	-20.9%
Utilities	2.6%	19.4%	-12.4%
Total	100.0%	17.3%	-14.5%

MSCI - ACWIXUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	8.4%	12.0%	-21.6%
Consumer Discretionary	6.0%	14.7%	-21.7%
Consumer Staples	21.0%	9.8%	-11.9%
Energy	5.9%	13.3%	8.1%
Financials	12.3%	15.6%	-7.3%
Health Care	9.8%	14.1%	-12.9%
Industrials	8.9%	17.3%	-18.4%
Information Technology	10.8%	13.5%	-34.5%
Materials	11.4%	16.6%	-11.2%
Real Estate	3.4%	10.4%	-20.6%
Utilities	2.3%	13.0%	-11.1%
	100.0%	14.3%	-16.0%

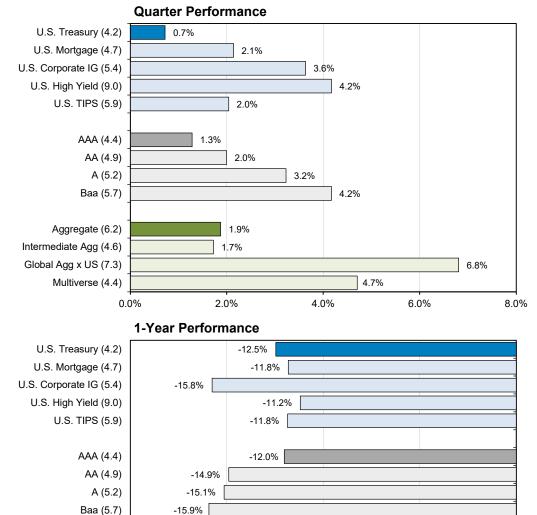
MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	8.9%	58.8%	1.8%
Consumer Discretionary	4.9%	46.2%	5.6%
Consumer Staples	22.1%	77.4%	48.9%
Energy	9.9%	92.9%	40.2%
Financials	6.1%	44.6%	24.5%
Health Care	4.1%	53.5%	3.8%
Industrials	6.4%	49.7%	18.8%
Information Technology	18.6%	9.8%	-34.7%
Materials	14.1%	45.6%	10.6%
Real Estate	3.0%	13.8%	-15.4%
Utilities	1.9%	38.8%	26.8%
Total	100.0%	9.7%	-20.1%

		MSCI-ACWIxUS	Querter	4 Maan
Country	MSCI-EAFE Weight	Weight	Quarter Return	1- Year Return
Japan	21.9%	14.0%	13.2%	-16.6%
United Kingdom	15.3%	9.8%	17.0%	-4.8%
France	11.8%	7.6%	22.2%	-13.3%
Switzerland	10.1%	6.5%	10.4%	-18.3%
Australia	7.9%	5.1%	15.7%	-5.3%
Germany	8.2%	5.2%	24.6%	-22.3%
Netherlands	4.3%	2.7%	21.0%	-27.7%
Sweden	3.3%	2.1%	18.1%	-28.4%
Hong Kong	3.0%	1.9%	18.2%	-4.7%
Denmark	3.0%	1.9%	31.6%	-4.8%
Spain	2.4%	1.5%	22.9%	-7.3%
Italy	2.3%	1.5%	26.4%	-14.4%
Singapore	1.5%	1.0%	10.5%	-11.0%
Belgium	1.0%	0.7%	22.6%	-12.5%
Finland	1.0%	0.7%	16.3%	-15.3%
Norway	0.8%	0.5%	16.9%	-7.0%
Israel	0.7%	0.5%	0.4%	-26.7%
Ireland	0.7%	0.4%	21.5%	-26.2%
Portugal	0.2%	0.1%	17.2%	0.2%
Austria	0.2%	0.1%	31.1%	-26.4%
New Zealand	0.2%	0.1%	24.5%	-13.6%
Total EAFE Countries	100.0%	63.9%	17.3%	-14.5%
Canada	100.076	7.7%	7.4%	-12.9%
Total Developed Countries		71.6%	16.2%	-14.3%
China		9.2%	13.5%	-21.9%
Taiwan		3.9%	9.6%	-29.8%
India		4.1%	2.0%	-8.0%
Korea		3.2%	18.1%	-29.4%
Brazil		1.5%	2.4%	14.2%
Saudi Arabia		1.2%	-7.4%	-5.1%
South Africa		1.0%	18.3%	-3.9%
Mexico		0.6%	12.5%	-2.0%
Thailand		0.6%	16.1%	5.0%
Indonesia		0.5%	-3.6%	3.6%
Malaysia		0.4%	14.0%	-5.8%
United Arab Emirates		0.4%	-1.5%	-6.2%
Qatar		0.3%	-15.3%	-6.9%
Kuwait		0.3%	5.7%	10.1%
Philippines		0.2%	21.1%	-13.9%
Poland		0.2%	47.7%	-27.2%
Chile		0.2%	6.2%	19.4%
Turkey		0.2%	62.9%	90.4%
Peru		0.1%	17.4%	9.4%
Greece		0.1%	29.1%	0.3%
Colombia		0.0%	19.7%	-6.0%
Czech Republic		0.0%	6.5%	-14.4%
Hungary		0.1%	36.3%	-31.1%
Egypt		0.0%	28.5%	-22.6%
Total Emerging Countries		28.4%	9.7%	-20.1%
Total ACWIXUS Countries		100.0%	14.3%	-16.0%

Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)



- After an extremely challenging year in fixed income markets, the 4th quarter's positive bond benchmark results were a welcome relief. Despite two rate increases during the quarter, bond performance was aided by lower investor concerns about rising inflation as US CPI declined. This was reflected in both intermediate and long-term interest rates which remained relatively stable during the quarter.
- The return for the BB US Aggregate Bond Index, the bellwether US investment grade benchmark, rose by 1.9% for the period.
- Performance across the investment grade index's segments was also positive during the period with the US Corporate Investment Grade Index returning 3.6% and the US Mortgage Index component posting a return of 2.1%.
- High yield bonds outperformed their investment grade counterparts, surging 4.2% during the quarter. US TIPS, which have delivered strong performance in recent periods, rose by 2.0% as investors' expectations of future inflation declined.
- Outside of domestic markets, the Bloomberg Global Aggregate ex US Index posted a strong return of 6.8% for the quarter. Like domestic bonds, global bond index performance was positively impacted declining inflation, but the benchmark also received a boost from the decline in the USD for the quarter.
- Over the trailing 1-year period, the bellwether BB US Aggregate Bond Index declined by -13.0% and each of the benchmark's components fell by more than -10%. US TIPS, which are excluded from the bellwether index, dropped by -11.8% for the year.
- Lower quality high yield corporate bonds were down less than their investment grade counterparts on a relative basis with the Bloomberg US High Yield Index posting still discouraging return of -11.2% for the period.
- Performance for non-US bonds was also strongly negative for the year with the developed market Bloomberg Global Aggregate ex US Index falling by -18.7%. The combination of rising interest rates overseas, elevated inflation, geopolitical risks, and USD strength earlier in the year hindered non-US index performance.



-13.0%

-15.0%

-9.5%

-10.0%

-5.0%

Aggregate (6.2)

-18.7%

-20.0%

-16.0%

Intermediate Agg (4.6)

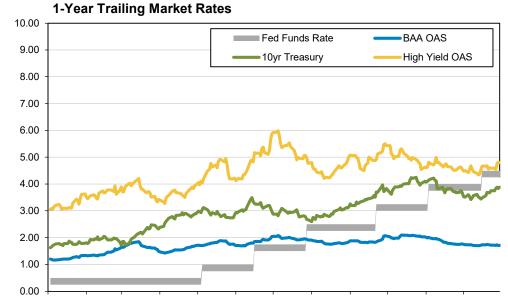
Global Agg x US (7.3) Multiverse (4.4)

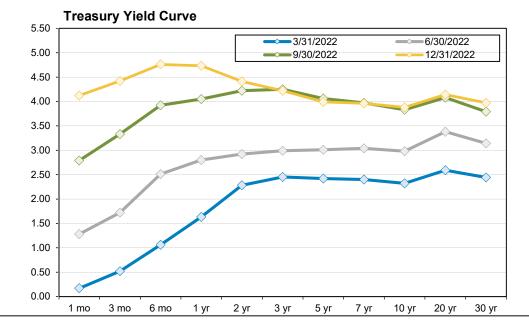


0.0%

Source: Bloomberg

- The gray band across the graph illustrates the range of the current Fed Funds Rate. In the 4th quarter this year, the Fed raised the lower end of its target rate range from 3.00% to 4.25% through a 0.75% increase in November and a 0.50% increase in December. During its December meeting, the Federal Open Market Committee (FOMC) stated it intends to monitor economic growth closely and will continue to raise interest rates to fight inflation if needed. The FOMC also stated that it would continue its policy of removing liquidity from the market by allowing bonds held on its balance sheet to mature without reinvesting those proceeds.
- The yield on the US 10-year Treasury (green line) ended the period slightly higher as concerns over the pace of inflation, combined with the Fed's announced rate increase, drove yields. The closing yield on the 10-Year Treasury was 3.88% at year-end, an increase of 0.08% from its 3rd quarter closing yield. The benchmark's rate peaked in October, reaching a high of roughly 4.25% before declining to end the quarter.
- The blue line illustrates changes in the BAA OAS (Option Adjusted Spread). This measure quantifies the additional yield premium that investors require to purchase and hold non-US Treasury investment grade issues. For the full year, the spread widened slightly from 1.17% to 1.72%. High Yield OAS spreads rose from roughly 3.05% at the beginning of the year to 4.81% at year-end. During 2022, high yield spreads reached a level of 5.80% in early July before trading lower the remainder of the year.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four quarters. Short-term rates continued to rise during the 4th quarter as the FOMC increased interest rates twice to combat elevated inflation. Despite these short-term rate increases, both intermediate and longer-term rates remained largely unchanged during the quarter. The yield curve remained inverted between 2-year and 10-year rates. Said differently, the short-term rate was higher than the long-term rate. Historically, a persistent inversion of these two key rates has been an indication of a future recession withing 6- to 24-months.





Jan-22 Feb-22 Mar-22 Apr-22 May-22 Jun-22 Jul-22 Aug-22 Sep-22 Oct-22 Nov-22 Dec-22

Source: US Department of Treasury, FRED (Federal Reserve of St. Louis)



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#### **Evaluation Process**

This section presents charts and graphs that highlight the investment character of each portfolio analyzed. The performance, portfolio characteristics, risk profile, and style traits of each portfolio are compared against those of its benchmark(s) and other funds with similar objectives. Eight criteria-specific rankings are developed, and then combined, to establish each portfolio's overall status.

The table below describes the evaluation standards used. Significant changes in portfolio characteristics compared to historical positioning, large performance deficits, and risk or style shortcomings are fundamental factors in concluding if remedial action is advisable. However, a violation of one of more of the standards does not automatically require remedial action.

Investment Policy Criteria	Weighting	Summary of Evaluation
Manager Performance		
Investment Returns vs. Peer Group	20%	A fund is evaluated relative to where its 1, 3 and 5-year returns fall within its peer group. The results for each period are combined to determine total ranking (satisfactory, modest breach, significant concern). A similar process is used to evaluate the fund's performance relative to its benchmark(s).
Historical Performance vs. Benchmark	20%	
Portfolio Characteristics		
Adherence to Standards	10%	These criteria compare portfolio characteristics such as market capitalization, number of holdings, cash, and concentration of holdings against objective standards and benchmarks. For example, a fund with a high allocation to cash or with a high/low average market capitalization relative to its benchmark will reserve a low are and a diditionally fund benchmarket.
Inception & Manager Tenure	10%	benchmark will receive a lower grade. Additionally, funds having less than three years of performance history or having manager tenure of less than three years will receive a lower grade.
Risk Profile		
Sharpe Ratio & Standard Deviation Relative to Peer Group	10%	A fund is evaluated relative to where its 3- and 5-year Sharpe ratio and standard deviation fall within its peer group. The results for each period are combined to determine total ranking. A similar process is used to evaluate the fund's Sharpe ratio and standard deviation relative to its benchmark(s).
Sharpe Ratio & Standard Deviation Relative to Benchmark	10%	
Style Traits		
Adherence to Investment Objectives	10%	A fund's style is evaluated based upon how closely it adheres to its stated investment objective and how stable its style has been historically. Criteria used to evaluate a fund's style traits include returns- based style analysis, statistics such as r-squared, and portfolio characteristics such as price/earnings
Historical Style Stability	10%	ratio. Funds with style traits that are inconsistent with their stated objective or historically unstable receive lower grades.
Status		
Overall Status		The results for all criteria are combined to determine an overall ranking for the fund. Rankings include Satisfactory, Modest Breach ("Guarded" status) and Significant Concern ("Watch List" status).

Note: Grades are based on AndCo's Proprietary scale



#### Portfolio Evaluation Summary

This report provides opinions, analysis, and supporting statistical information concerning:

- the performance, volatility, and characteristics of each designated Plan fund
- the continuing suitability of each fund as a Plan investment option

#### Portfolio Performance and Suitability of Plan Funds

Our overall evaluation of the Plan's investment funds may be summarized as follows:

Summary Evaluation	Number of Funds	
Pass (Satisfactory)	15	
Guarded	1	
Watch	0	

See the Plan Funds Observations and Comments, below, for further explanation.

#### Plan Fund Observations and Comments

The majority of Plan funds have substantially achieved their category-specific standards for performance, controlled volatility, and portfolio characteristics. The charts in the following pages reveal some modest breaches compared to established

#### **Fund Commentary**

The Hartford Mid Cap Fund remains on GUARDED status due to near term underperformance that has impacted longer term relative performance. The Fund continues to suffer from some significant underperformance experienced earlier during the year. The fund continues to hold overweight postioins in healthcare, industrials and technology. We will continue to monitor the fund, we are not recommending any changes at this time.

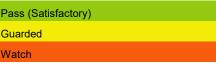
evaluation standards; however, we do not find divergences from the funds' stated objectives or styles that are worrisome except as discussed below.



#### Portfolio Evaluation Summary

1	Trailing 1, 3 and 5-year portfolio returns versus peer group	
2	Historic performance relative to benchmark	
3	Portfolio characteristics compared to established standards	
4	At least 3 years of investment performance/At least 3 years with current fund manager	Pass (Sati
5	Sharpe ratio and standard deviation of fund relative to peer group	Guarded
6	Sharpe ratio and standard deviation of fund relative to benchmark	Watch
7	Style consistent with fund objective	
8	Style historically stable	
9	Summary Evaluation	

Investment Funds	1	2	3	4	5	6	7	8	9
American Funds EuroPacific Growth (RERGX)	Guarded	Guarded	Pass						
Allspring Small Co Growth R6 (WSCRX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Vanguard Small Cap Index Adm (VSMAX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
AMG Managers Skyline Special Equities (SKSEX)	Guarded	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Hartford Mid Cap (HIMCX)	Guarded	Guarded	Pass	Pass	Pass	Pass	Pass	Pass	Guarded
Vanguard Mid Cap Index Adm (VIMAX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
American Funds Growth Fund of America (RGAGX)	Pass	Guarded	Pass						
Allspring Disciplined US Core (EVSIX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Vanguard Institutional Index (VINIX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
American Century Equity Income (AEUDX)	Guarded	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
American Funds Target Date 2060-2010 R6	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
American Funds American Balanced (RLBGX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
PIMCO High Yield (PHIYX)	Pass	Guarded	Pass						
PIMCO Foreign Bond USD-Hedged (PFORX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Hartford Total Return Bond (HIABX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Voya Fixed Account	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass





## Historical Summary Evaluation

Pass (Satisfactory)

Guarded Watch

Investment Funds	3Q22	2Q22	1Q22	4Q21	3Q21	2Q21	1Q21	4Q20	3Q20
American Funds EuroPacific Growth (RERGX)	Pass								
Allspring Small Co Growth R6 (WSCRX)	Pass	Pass	Pass	Pass	Pass	Guarded	Guarded	Guarded	Guarded
Vanguard Small Cap Index Adm (VSMAX)	Pass								
AMG Managers Skyline Special Equities (SKSEX)	Pass								
Hartford Mid Cap (HIMCX)	Guarded	Guarded	Guarded	Pass	Pass	Pass	Guarded	Guarded	Guarded
Vanguard Mid Cap Index Adm (VIMAX)	Pass								
American Funds Growth Fund of America (RGAGX)	Pass	Guarded	Guarded	Guarded	Pass	Pass	Pass	Pass	Guarded
Allspring Disciplined US Core (EVSIX)	Pass	Pass	Pass	Pass	Pass	Guarded	Guarded	Pass	Pass
Vanguard Institutional Index (VINIX)	Pass								
American Century Equity Income (AEUDX)	Pass	Guarded	Guarded	Guarded	Guarded	Guarded	Pass	Pass	Pass
American Funds Target Date 2060-2010 R6	Pass								
American Funds American Balanced (RLBGX)	Pass								
PIMCO High Yield (PHIYX)	Pass								
PIMCO Foreign Bond USD-Hedged (PFORX)	Pass								
Hartford Total Return Bond (HIABX)	Pass								
Voya Fixed Account	Pass								

## Asset Allocation 457 Total Plan

As of December 31, 2022

Asset Allocation Attributes
-----------------------------

	Dec-20	)22	Sep-2	022	Jun-2022		
	(\$)	%	(\$)	%	(\$)	%	
Total 457 Fund	186,584,228	100.00	179,732,107	100.00	183,530,717	100.00	
International Equity							
American Funds EuroPacific Growth (RERGX)	5,436,657	2.91	4,723,302	2.63	5,235,254	2.85	
Domestic Equity							
Allspring Small Co Growth (WSCRX)	2,234,601	1.20	2,133,480	1.19	2,186,388	1.19	
Vanguard Small Cap Index (VSMAX)	3,790,350	2.03	3,524,007	1.96	3,580,404	1.95	
AMG Managers Skyline Special Equities (SKSEX)	1,850,307	0.99	1,696,231	0.94	1,789,990	0.98	
Hartford Mid Cap (HIMCX)	7,919,433	4.24	7,411,814	4.12	7,873,704	4.29	
Vanguard Mid Cap Index (VIMAX)	6,643,689	3.56	6,184,373	3.44	6,339,294	3.45	
AF Growth Fund of America (RGAGX)	14,524,709	7.78	14,277,377	7.94	14,668,449	7.99	
Allspring Disciplined US Core (EVSIX)	11,825,281	6.34	11,042,943	6.14	11,688,985	6.37	
Vanguard Institutional Index (VINIX)	19,455,169	10.43	18,171,087	10.11	18,873,990	10.28	
American Century Equity Income (AEUDX)	7,112,800	3.81	6,586,245	3.66	6,785,608	3.70	
Balanced Fund							
American Funds American Balanced (RLBGX)	6,787,679	3.64	6,280,616	3.49	6,650,103	3.62	
Fixed Income							
PIMCO High Yield (PHIYX)	2,126,652	1.14	2,085,760	1.16	2,133,435	1.16	
PIMCO Foreign Bond USD-Hedged (PFORX)	484,327	0.26	447,918	0.25	471,557	0.26	
Hartford Total Return Bond (HIABX)	3,431,161	1.84	3,317,301	1.85	3,503,150	1.91	
Cash							
Voya Fixed Account	72,503,469	38.86	73,484,768	40.89	73,120,719	39.84	
Loan Account	2,128,479	1.14	2,231,297	1.24	2,143,480	1.17	

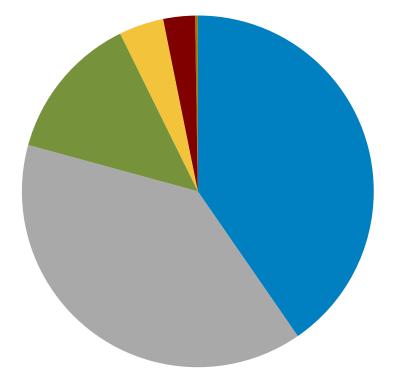


## Asset Allocation 457 Target Date Funds As of December 31, 2022

	Dec-2	022	Sep-2	022	Jun-2	022
	(\$)	%	(\$)	%	(\$)	%
American Funds 2060 TD Fund R6 (RFUTX)	243,967	1.33	190,687	1.18	205,460	1.25
American Funds 2055 TD Fund R6 (RFKTX)	252,309	1.38	196,027	1.22	177,073	1.07
American Funds 2050 TD Fund R6 (RFITX)	2,171,389	11.85	1,890,192	11.72	1,913,796	11.61
American Funds 2045 TD Fund R6 (RFHTX)	1,469,959	8.02	1,268,260	7.86	1,244,515	7.55
American Funds 2040 TD Fund R6 (RFGTX)	4,631,800	25.27	4,122,173	25.55	4,184,658	25.38
American Funds 2035 TD Fund R6 (RFFTX)	1,435,707	7.83	1,296,369	8.04	1,318,177	8.00
American Funds 2030 TD Fund R6 (RFETX)	4,582,783	25.00	3,860,378	23.93	3,998,178	24.25
American Funds 2025 TD Fund R6 (RFDTX)	1,944,528	10.61	1,854,676	11.50	1,919,094	11.64
American Funds 2020 TD Fund R6 (RRCTX)	1,473,661	8.04	1,357,283	8.41	1,426,506	8.65
American Funds 2015 TD Fund R6 (RFJTX)	31,180	0.17	13,838	0.09	11,470	0.07
American Funds 2010 TD Fund R6 (RFTTX)	92,183	0.50	83,706	0.52	87,280	0.53
Target Date Funds Total	18,329,465	100.00	16,133,589	100.00	16,486,207	100.00



			As of December 31,
December 31, 2022 : \$186,584,228	Allocation		
		Market Value	Allocation
	US Equity	75,356,340	40.4
	Cash	72,503,469	38.9
	US Balanced	25,117,144	13.5
	US Fixed Income	7,686,292	4.1
	International Equity	5,436,657	2.9
	International Fixed Income	484,327	0.3





### Asset Allocation By Manager 457 Total Plan As of December 31, 2022

December 31, 2022 : \$186,584,228		A5 01	December 31
December 31, 2022 : \$186,584,228	Allocation		
		Market Value	Allocation
	American Funds EuroPacific Growth (RERGX)	5,436,657	2.9
	Allspring Small Co Growth (WSCRX)	2,234,601	1.2
	Vanguard Small Cap Index (VSMAX)	3,790,350	2.0
	AMG Managers Skyline Special Equities (SKSEX)	1,850,307	1.0
	Hartford Mid Cap (HIMCX)	7,919,433	4.2
	Vanguard Mid Cap Index (VIMAX)	6,643,689	3.6
	AF Growth Fund of America (RGAGX)	14,524,709	7.8
	Allspring Disciplined US Core (EVSIX)	11,825,281	6.3
	Vanguard Institutional Index (VINIX)	19,455,169	10.4
	American Century Equity Income (AEUDX)	7,112,800	3.8
	American Funds American Balanced (RLBGX)	6,787,679	3.6
	PIMCO High Yield (PHIYX)	2,126,652	1.1
	PIMCO Foreign Bond USD-Hedged (PFORX)	484,327	0.3
	Hartford Total Return Bond (HIABX)	3,431,161	1.8
	American Funds 2060 TD Fund R6 (RFUTX)	243,967	0.1
	American Funds 2055 TD Fund R6 (RFKTX)	252,309	0.1
	American Funds 2050 TD Fund R6 (RFITX)	2,171,389	1.2
	American Funds 2045 TD Fund R6 (RFHTX)	1,469,959	0.8
	American Funds 2040 TD Fund R6 (RFGTX)	4,631,800	2.5
	American Funds 2035 TD Fund R6 (RFFTX)	1,435,707	0.8
	American Funds 2030 TD Fund R6 (RFETX)	4,582,783	2.5
	American Funds 2025 TD Fund R6 (RFDTX)	1,944,528	1.0
	American Funds 2020 TD Fund R6 (RRCTX)	1,473,661	0.8
	American Funds 2015 TD Fund R6 (RFJTX)	31,180	0.0
	American Funds 2010 TD Fund R6 (RFTTX)	92,183	0.0
	Voya Fixed Account	72,503,469	38.9
	Loan Account	2,128,479	1.1



## Asset Allocation 401(a) Total Plan

As of December 31, 2022

Asset Allocation Attributes						
	Dec-2022 Sep-2022		Jun-2	022		
	(\$)	%	(\$)	%	(\$)	%
Total 401(a) Fund	12,950,276	100.00	12,529,003	100.00	12,836,523	100.00
International Equity						
American Funds EuroPacific Growth (RERGX)	300,579	2.32	260,099	2.08	286,062	2.23
Domestic Equity						
Allspring Small Co Growth (WSCRX)	118,018	0.91	111,538	0.89	106,150	0.83
Vanguard Small Cap Index (VSMAX)	303,561	2.34	279,052	2.23	287,713	2.24
AMG Managers Skyline Special Equities (SKSEX)	349,390	2.70	328,129	2.62	349,842	2.73
Hartford Mid Cap (HIMCX)	584,517	4.51	534,387	4.27	562,389	4.38
Vanguard Mid Cap Index (VIMAX)	487,803	3.77	443,717	3.54	467,943	3.65
American Funds Growth Fund of America (RGAGX)	845,276	6.53	828,553	6.61	852,137	6.64
Allspring Disciplined US Core (EVSIX)	751,070	5.80	705,237	5.63	774,860	6.04
Vanguard Institutional Index (VINIX)	1,449,158	11.19	1,327,415	10.59	1,421,026	11.07
American Century Equity Income (AEUDX)	510,306	3.94	461,022	3.68	482,282	3.76
Balanced Fund						
American Funds American Balanced (RLBGX)	847,232	6.54	812,770	6.49	874,601	6.81
Fixed Income						
PIMCO High Yield (PHIYX)	115,099	0.89	108,925	0.87	102,059	0.80
PIMCO Foreign Bond USD-Hedged (PFORX)	76,443	0.59	74,761	0.60	73,716	0.57
Hartford Total Return Bond (HIABX)	184,988	1.43	180,802	1.44	180,920	1.41
Cash						
Voya Fixed Account	4,762,088	36.77	4,931,425	39.36	4,707,526	36.67
Loan Account	134,815	1.04	130,500	1.04	143,884	1.12



## Asset Allocation 401(a) Target Date Funds As of December 31, 2022

Asset Allocation Attributes						
	Dec-2	2022	Sep-2	022	Jun-2	022
	(\$)	%	(\$)	%	(\$)	%
American Funds 2060 TD Fund R6 (RFUTX)	16,542	1.46	14,067	1.39	13,890	1.19
American Funds 2055 TD Fund R6 (RFKTX)	-	0.00	-	0.00	-	0.00
American Funds 2050 TD Fund R6 (RFITX)	88,351	7.82	77,264	7.64	78,327	6.73
American Funds 2045 TD Fund R6 (RFHTX)	8,021	0.71	5,874	0.58	4,860	0.42
American Funds 2040 TD Fund R6 (RFGTX)	173,057	15.32	150,203	14.86	151,135	12.99
American Funds 2035 TD Fund R6 (RFFTX)	170,768	15.11	143,602	14.21	139,513	11.99
American Funds 2030 TD Fund R6 (RFETX)	390,449	34.56	358,303	35.45	502,132	43.16
American Funds 2025 TD Fund R6 (RFDTX)	185,841	16.45	170,200	16.84	177,372	15.25
American Funds 2020 TD Fund R6 (RRCTX)	-	0.00	-	0.00	-	0.00
American Funds 2015 TD Fund R6 (RFJTX)	7	0.00	7	0.00	10	0.00
American Funds 2010 TD Fund R6 (RFTTX)	96,898	8.58	91,152	9.02	96,173	8.27
Farget Date Funds Total	1,129,934	100.00	1,010,672	100.00	1,163,412	100.00

			As of December 31, 2022
December 31, 2022 : \$12,950,276	Allocation		
		Market Value	Allocation
	US Equity	5,399,099	41.7
	Cash	4,762,088	36.8
	US Balanced	1,977,166	15.3
	US Fixed Income	434,902	3.4
	International Equity	300,579	2.3
	International Fixed Income	76,443	0.6



## Asset Allocation By Manager 401(a) Total Plan As of December 31, 2022

December 31, 2022 : \$12,950,276	Allocation		
		Market Value	Allocation
	American Funds EuroPacific Growth (RERGX)	300,579	2.3
	Allspring Small Co Growth (WSCRX)	118,018	0.9
	Vanguard Small Cap Index (VSMAX)	303,561	2.3
	AMG Managers Skyline Special Equities (SKSEX)	349,390	2.7
	Hartford Mid Cap (HIMCX)	584,517	4.5
	Vanguard Mid Cap Index (VIMAX)	487,803	3.8
	American Funds Growth Fund of America (RGAGX)	845,276	6.5
	Allspring Disciplined US Core (EVSIX)	751,070	5.8
	Vanguard Institutional Index (VINIX)	1,449,158	11.2
	American Century Equity Income (AEUDX)	510,306	3.9
	American Funds American Balanced (RLBGX)	847,232	6.5
	PIMCO High Yield (PHIYX)	115,099	0.9
	PIMCO Foreign Bond USD-Hedged (PFORX)	76,443	0.6
	Hartford Total Return Bond (HIABX)	184,988	1.4
	American Funds 2060 TD Fund R6 (RFUTX)	16,542	0.1
	American Funds 2055 TD Fund R6 (RFKTX)	-	0.0
	American Funds 2050 TD Fund R6 (RFITX)	88,351	0.7
	American Funds 2045 TD Fund R6 (RFHTX)	8,021	0.1
	American Funds 2040 TD Fund R6 (RFGTX)	173,057	1.3
	American Funds 2035 TD Fund R6 (RFFTX)	170,768	1.3
	American Funds 2030 TD Fund R6 (RFETX)	390,449	3.0
	American Funds 2025 TD Fund R6 (RFDTX)	185,841	1.4
	American Funds 2020 TD Fund R6 (RRCTX)	-	0.0
	American Funds 2015 TD Fund R6 (RFJTX)	7	0.0
	American Funds 2010 TD Fund R6 (RFTTX)	96,898	0.7
	Voya Fixed Account	4,762,088	36.8
	Loan Account	134,815	1.0



## **Comparative Performance** 457 & 401(a) Trailing Returns

As of December 31, 2022

Comparative Performance														
	Q	ſR	Y	ГD	1`	YR	3 `	YR	5 \	/R	7	YR	10	YR
International Equity														
American Funds EuroPacific Growth (RERGX)	13.78	(86)	-22.72	(100)	-22.72	(100)	-0.15	(68)	1.54	(37)	5.24	(15)	5.30	(3)
MSCI EAFE (Net) Index	17.34	(49)	-14.45	(39)	-14.45	(39)	0.87	(50)	1.54	(37)	4.53	(44)	4.67	(20)
IM International Large Cap Core Equity (MF) Median	17.09		-15.06		-15.06		0.82		1.19		4.12		3.84	
Domestic Equity														
Allspring Small Co Growth (WSCRX)	4.40	(52)	-24.21	(28)	-24.21	(28)	4.15	(41)	6.64	(40)	8.70	(54)	N/A	
Russell 2000 Growth Index	4.13	(56)	-26.36	(44)	-26.36	(44)	0.65	(83)	3.51	(83)	7.09	(80)	9.20	(67)
IM U.S. Small Cap Growth Equity (MF) Median	4.46		-27.54		-27.54		3.48		6.11		8.95		9.80	
Vanguard Small Cap Index (VSMAX)	7.97	(77)	-17.61	(71)	-17.61	(71)	4.93	(56)	5.94	(22)	9.06	(25)	10.11	(21)
Vanguard Spliced Small Cap Index	7.95	(77)	-17.64	(71)	-17.64	(71)	4.90	(57)	5.92	(22)	9.04	(25)	10.09	(22)
IM U.S. Small Cap Core Equity (MF) Median	9.65		-15.78		-15.78		5.20		4.78		8.03		8.97	
AMG Managers Skyline Special Equities (SKSEX)	8.25	(92)	-15.33	(97)	-15.33	(97)	5.15	(85)	3.91	(68)	6.88	(83)	8.97	(42)
Russell 2000 Value Index	8.42	(90)	-14.48	(96)	-14.48	(96)	4.70	(88)	4.13	(63)	8.23	(48)	8.48	(53)
IM U.S. Small Cap Value Equity (MF) Median	11.70		-11.09		-11.09		6.79		4.73		8.12		8.53	
Hartford Mid Cap (HIMCX)	8.77	(67)	-24.30	(95)	-24.30	(95)	1.34	(98)	5.06	(72)	8.62	(50)	10.93	(14)
Russell Midcap Index	9.18	(60)	-17.32	(88)	-17.32	(88)	5.88	(51)	7.10	(28)	9.61	(22)	10.96	(14)
IM U.S. Mid Cap Core Equity (MF) Median	9.63		-13.21		-13.21		5.90		5.94		8.50		9.49	
Vanguard Mid Cap Index (VIMAX)	9.02	(65)	-18.71	(93)	-18.71	(93)	6.17	(46)	7.32	(24)	9.50	(27)	11.10	(12)
Vanguard Spliced Mid Cap Index	9.03	(64)	-18.68	(93)	-18.68	(93)	6.19	(45)	7.34	(24)	9.53	(26)	11.13	(11)
IM U.S. Mid Cap Core Equity (MF) Median	9.63		-13.21		-13.21		5.90		5.94		8.50		9.49	
American Funds Growth Fund of America (RGAGX)	2.29	(54)	-30.49	(38)	-30.49	(38)	4.78	(50)	7.57	(70)	10.27	(50)	11.93	(54)
Russell 1000 Growth Index	2.20	(57)	-29.14	(27)	-29.14	(27)	7.79	(10)	10.96	(11)	12.95	(7)	14.10	(7)
IM U.S. Large Cap Growth Equity (MF) Median	2.48		-31.30		-31.30		4.76		8.53		10.26		12.04	
Allspring Disciplined US Core (EVSIX)	6.94	(75)	-17.82	(42)	-17.82	(42)	7.81	(26)	8.25	(63)	10.52	(53)	12.34	(24)
S&P 500 Index	7.56	(57)	-18.11	(45)	-18.11	(45)	7.66	(29)	9.42	(30)	11.48	(21)	12.56	(15)
IM U.S. Large Cap Core Equity (MF) Median	7.83		-18.72		-18.72		6.95		8.77		10.64		11.69	
Vanguard Institutional Index (VINIX)	7.55	(57)	-18.14	(46)	-18.14	(46)	7.64	(30)	9.40	(31)	11.45	(21)	12.53	(16)
S&P 500 Index	7.56	(57)	-18.11	(45)	-18.11	(45)	7.66	(29)	9.42	(30)	11.48	(21)	12.56	(15)
IM U.S. Large Cap Core Equity (MF) Median	7.83		-18.72		-18.72		6.95		8.77		10.64		11.69	
American Century Equity Income (AEUDX)	10.02	(97)	-2.90	(18)	-2.90	(18)	4.92	(90)	6.65	(74)	9.46	(59)	N/A	
Russell 1000 Value Index	12.42	(59)	-7.54	(66)	-7.54	(66)	5.96	(79)	6.67	(73)	9.12	(67)	10.29	(58)
IM U.S. Large Cap Value Equity (MF) Median	12.88		-6.10		-6.10		7.19		7.50		9.75		10.51	

Returns for periods greater than one year are annualized. Returns are expressed as percentages. \*Returns are MassMutual Guaranteed Account until 1Q2019 then the Voya Fixed account thereafter.



**Comparative Performance** 457 & 401(a) Trailing Returns

As of December 31, 2022

	QT	R	Y	ГD	1`	YR	3 `	ΥR	5 YR		7 YR		10 YR	
Balanced Fund														
American Funds 2060 TD Fund R6 (RFUTX)	8.74	(74)	-19.66	(91)	-19.66	(91)	3.99	(20)	5.82	(1)	8.43	(N/A)	N/A	
S&P Target Date 2060 Index	10.12	(11)	-16.01	(7)	-16.01	(7)	4.16	(13)	5.35	(13)	8.10	(N/A)	8.50	(N/A)
IM Mixed-Asset Target 2065+ (MF) Median	9.26		-18.59		-18.59		3.57		4.60		N/A		N/A	
American Funds 2055 TD Fund R6 (RFKTX)	8.82	(71)	-19.50	(87)	-19.50	(87)	4.07	(17)	5.87	(4)	8.47	(5)	9.19	(1)
S&P Target Date 2055 Index	10.11	(9)	-15.97	(10)	-15.97	(10)	4.18	(10)	5.31	(21)	8.02	(19)	8.46	(18)
IM Mixed-Asset Target 2055 (MF) Median	9.23		-18.31		-18.31		3.57		4.94		7.56		7.86	
American Funds 2050 TD Fund R6 (RFITX)	8.88	(66)	-18.89	(68)	-18.89	(68)	4.34	(6)	6.04	(2)	8.59	(1)	9.28	(1)
S&P Target Date 2050 Index	10.01	(11)	-15.97	(10)	-15.97	(10)	4.12	(12)	5.26	(24)	7.91	(23)	8.33	(21)
IM Mixed-Asset Target 2050 (MF) Median	9.17		-18.30		-18.30		3.55		4.91		7.47		7.73	
American Funds 2045 TD Fund R6 (RFHTX)	8.92	(52)	-18.18	(52)	-18.18	(52)	4.55	(4)	6.11	(2)	8.62	(1)	9.29	(1)
S&P Target Date 2045 Index	9.77	(10)	-15.84	(12)	-15.84	(12)	3.98	(21)	5.16	(28)	7.73	(33)	8.11	(26)
IM Mixed-Asset Target 2045 (MF) Median	8.94		-18.15		-18.15		3.44		4.88		7.41		7.63	
American Funds 2040 TD Fund R6 (RFGTX)	8.82	(20)	-17.55	(41)	-17.55	(41)	4.59	(1)	6.10	(1)	8.54	(1)	9.23	(1)
S&P Target Date 2040 Index	9.17	(14)	-15.56	(11)	-15.56	(11)	3.72	(19)	4.97	(25)	7.46	(32)	7.84	(32)
IM Mixed-Asset Target 2040 (MF) Median	8.44		-17.85		-17.85		3.13		4.61		7.16		7.46	
American Funds 2035 TD Fund R6 (RFFTX)	8.26	(14)	-16.24	(30)	-16.24	(30)	4.39	(1)	5.88	(1)	8.23	(1)	8.96	(1)
S&P Target Date 2035 Index	8.31	(11)	-14.99	(12)	-14.99	(12)	3.29	(17)	4.63	(27)	7.01	(34)	7.42	(33)
IM Mixed-Asset Target 2035 (MF) Median	7.65		-17.05		-17.05		2.71		4.22		6.70		7.03	
American Funds 2030 TD Fund R6 (RFETX)	7.52	(6)	-14.50	(23)	-14.50	(23)	3.67	(1)	5.09	(1)	7.27	(1)	8.25	(1)
S&P Target Date 2030 Index	7.27	(20)	-13.96	(16)	-13.96	(16)	2.73	(18)	4.17	(23)	6.41	(32)	6.84	(29)
IM Mixed-Asset Target 2030 (MF) Median	6.68		-16.21		-16.21		2.03		3.76		6.07		6.34	
American Funds 2025 TD Fund R6 (RFDTX)	7.14	(1)	-12.74	(15)	-12.74	(15)	3.40	(1)	4.69	(1)	6.53	(2)	7.48	(1)
S&P Target Date 2025 Index	6.34	(29)	-13.13	(21)	-13.13	(21)	2.26	(22)	3.75	(23)	5.81	(29)	6.23	(24)
IM Mixed-Asset Target 2025 (MF) Median	5.85		-15.31		-15.31		1.40		3.30		5.37		5.57	
American Funds 2020 TD Fund R6 (RRCTX)	6.90	(2)	-11.01	(1)	-11.01	(1)	3.00	(1)	4.21	(1)	5.81	(3)	6.55	(1)
S&P Target Date 2020 Index	5.76	(39)	-12.81	(19)	-12.81	(19)	1.49	(45)	3.14	(45)	5.05	(54)	5.50	(42)
IM Mixed-Asset Target 2020 (MF) Median	5.59		-14.37		-14.37		1.36		3.09		5.10		5.39	
American Funds 2015 TD Fund R6 (RFJTX)	6.69	(1)	-10.25	(1)	-10.25	(1)	2.86	(1)	4.00	(1)	5.50	(2)	5.96	(1)
S&P Target Date 2015 Index	5.19	(51)	-12.16	(22)	-12.16	(22)	1.52	(35)	3.07	(38)	4.71	(55)	5.01	(53)
IM Mixed-Asset Target 2015 (MF) Median	5.19		-13.71		-13.71		1.27		2.91		4.81		5.06	
American Funds 2010 TD Fund R6 (RFTTX)	6.33	(2)	-9.15	(1)	-9.15	(1)	2.76	(1)	3.80	(2)	5.24	(1)	5.47	(1)
S&P Target Date 2010 Index	5.00	(30)	-11.44	(16)	-11.44	(16)	1.23	(36)	2.82	(44)	4.23	(60)	4.37	(48)
IM Mixed-Asset Target 2010 (MF) Median	4.48		-12.72		-12.72		0.86		2.68		4.37		4.32	

Returns for periods greater than one year are annualized. Returns are expressed as percentages. \*Returns are MassMutual Guaranteed Account until 1Q2019 then the Voya Fixed account thereafter.



Comparative Performance 457 & 401(a) Trailing Returns As of December 31, 2022

	Q	R	Y	ГD	1`	(R	3 `	YR	5 ۱	′R	7`	YR	10	YR
American Funds American Balanced (RLBGX)	8.15	(30)	-11.83	(19)	-11.83	(19)	4.42	(9)	5.84	(7)	7.65	(13)	8.59	(6)
American Balanced Fund Hybrid	4.83	(75)	-15.26	(48)	-15.26	(48)	2.80	(40)	5.03	(19)	6.38	(37)	6.94	(35)
IM All Balanced (MF) Median	6.65		-15.51		-15.51		2.27		3.60		5.64		5.95	
Fixed Income														
PIMCO High Yield (PHIYX)	4.19	(34)	-10.79	(46)	-10.79	(46)	-0.75	(60)	1.84	(44)	4.06	(49)	3.55	(29)
ICE BofA U.S. High Yield Index	3.98	(49)	-11.25	(59)	-11.25	(59)	-0.25	(43)	2.11	(30)	4.94	(14)	3.94	(14)
IM U.S. High Yield Bonds (MF) Median	3.96		-10.94		-10.94		-0.49		1.70		4.05		3.21	
PIMCO Foreign Bond USD-Hedged (PFORX)	0.88	(77)	-9.84	(18)	-9.84	(18)	-2.00	(6)	0.73	(3)	2.00	(1)	2.61	(1)
Bloomberg Global Aggregate	4.55	(63)	-16.25	(62)	-16.25	(62)	-4.48	(38)	-1.65	(37)	0.12	(31)	-0.44	(26)
IM International Fixed Income (MF) Median	7.07		-12.94		-12.94		-5.44		-2.80		-0.78		-1.38	
Hartford Total Return Bond (HIABX)	2.54	(5)	-14.21	(70)	-14.21	(70)	-2.51	(38)	0.34	(20)	1.60	(8)	1.50	(11)
Blmbg. U.S. Aggregate Index	1.87	(35)	-13.01	(21)	-13.01	(21)	-2.71	(50)	0.02	(42)	0.89	(53)	1.06	(46)
IM U.S. Broad Market Core Fixed Income (MF) Median	1.71		-13.67		-13.67		-2.72		-0.07		0.92		1.02	
Cash														
Voya Fixed Account*	0.39	(81)	1.47	(50)	1.47	(50)	1.79	(25)	2.34	(1)	2.76	(1)	3.13	(1)
Morningstar US CIT Stable Value GR USD	0.56	(29)	1.88	(14)	1.88	(14)	1.96	(12)	2.12	(12)	2.05	(12)	1.97	(19)
IM U.S. GIC/Stable Value (SA+CF) Median	0.51		1.46		1.46		1.61		1.82		1.74		1.62	



**Comparative Performance** 457 & 401(a) Calendar Returns

As of December 31, 2022

Comparative Performance																				
	20:	21	20	20	20	19	20	18	20	17	20	16	20	15	20	14	20	13	20	12
International Equity																				
American Funds EuroPacific Growth (RERGX)	2.84	(96)	25.27	(1)	27.40	(4)	-14.91	(49)	31.17	(10)	1.01	(37)	-0.48	(22)	-2.29	(11)	20.58	(46)	19.64	(34)
MSCI EAFE (Net) Index	11.26	(39)	7.82	(67)	22.01	(52)	-13.79	(25)	25.03	(50)	1.00	(37)	-0.81	(29)	-4.90	(27)	22.78	(16)	17.32	(61)
IM International Large Cap Core Equity (MF) Median	10.74		9.07		22.06		-15.00		25.00		-0.04		-1.95		-6.01		20.42		18.04	
Domestic Equity																				
Allspring Small Co Growth (WSCRX)	15.68	(30)	28.87	(67)	26.55	(55)	-3.57	(30)	20.68	(51)	7.76	(72)	-4.33	(71)	N/A		N/A		N/A	
Russell 2000 Growth Index	2.83	(82)	34.63	(56)	28.48	(47)	-9.31	(73)	22.17	(43)	11.32	(43)	-1.38	(34)	5.60	(22)	43.30	(45)	14.59	(36)
IM U.S. Small Cap Growth Equity (MF) Median	10.53		36.55		27.69		-5.57		20.72		10.11		-2.35		2.77		42.49		13.59	
Vanguard Small Cap Index (VSMAX)	17.73	(84)	19.11	(17)	27.37	(16)	-9.31	(18)	16.24	(14)	18.30	(79)	-3.64	(39)	7.50	(13)	37.81	(43)	18.24	(19)
Vanguard Spliced Small Cap Index	17.71	(84)	19.07	(17)	27.35	(17)	-9.33	(18)	16.24	(14)	18.26	(80)	-3.68	(40)	7.54	(13)	37.77	(44)	18.20	(19)
IM U.S. Small Cap Core Equity (MF) Median	25.12		9.89		23.94		-12.71		12.09		21.66		-4.35		4.71		36.85		14.81	
AMG Managers Skyline Special Equities (SKSEX)	32.93	(43)	3.29	(54)	28.64	(7)	-19.00	(80)	8.39	(51)	21.32	(84)	-6.05	(33)	4.02	(38)	51.59	(3)	19.34	(24)
Russell 2000 Value Index	28.27	(73)	4.63	(35)	22.39	(28)	-12.86	(23)	7.84	(60)	31.74	(17)	-7.47	(57)	4.22	(35)	34.52	(71)	18.05	(37)
IM U.S. Small Cap Value Equity (MF) Median	31.97		3.57		21.05		-16.08		8.46		26.70		-7.05		3.41		36.46		16.16	
Hartford Mid Cap (HIMCX)	9.91	(100)	25.10	(7)	32.87	(16)	-7.44	(12)	24.47	(2)	11.98	(72)	1.60	(6)	11.37	(27)	39.82	(14)	19.44	(13)
Russell Midcap Index	22.58	(68)	17.10	(17)	30.54	(31)	-9.06	(21)	18.52	(25)	13.80	(57)	-2.44	(31)	13.22	(9)	34.76	(49)	17.28	(33)
IM U.S. Mid Cap Core Equity (MF) Median	25.73		8.44		28.59		-11.64		14.94		14.51		-3.74		8.88		34.49		15.88	
Vanguard Mid Cap Index (VIMAX)	24.51	(60)	18.24	(15)	31.03	(27)	-9.23	(22)	19.25	(19)	11.22	(76)	-1.34	(23)	13.76	(6)	35.15	(47)	15.99	(50)
Vanguard Spliced Mid Cap Index	24.52	(60)	18.24	(15)	31.09	(27)	-9.22	(22)	19.30	(19)	11.25	(76)	-1.28	(23)	13.83	(6)	35.21	(46)	16.04	(49)
IM U.S. Mid Cap Core Equity (MF) Median	25.73		8.44		28.59		-11.64		14.94		14.51		-3.74		8.88		34.49		15.88	
American Funds Growth Fund of America (RGAGX)	19.69	(67)	38.28	(36)	28.54	(89)	-2.60	(64)	26.53	(74)	8.82	(2)	5.70	(49)	9.63	(61)	34.29	(48)	20.98	(4)
Russell 1000 Growth Index	27.60	(17)	38.49	(34)	36.39	(19)	-1.51	(54)	30.21	(39)	7.08	(10)	5.67	(49)	13.05	(24)	33.48	(57)	15.26	(46)
IM U.S. Large Cap Growth Equity (MF) Median	22.39		35.62		33.26		-1.22		29.28		2.21		5.61		10.49		34.12		14.81	
Allspring Disciplined US Core (EVSIX)	30.94	(8)	16.47	(62)	29.04	(67)	-8.08	(88)	20.88	(59)	12.09	(18)	2.53	(22)	15.69	(4)	33.97	(21)	14.90	(58)
S&P 500 Index	28.71	(25)	18.40	(50)	31.49	(36)	-4.38	(32)	21.83	(45)	11.96	(20)	1.38	(35)	13.69	(18)	32.39	(37)	16.00	(41)
IM U.S. Large Cap Core Equity (MF) Median	26.95		18.39		30.64		-5.45		21.45		9.70		0.53		11.51		31.77		15.42	
Vanguard Institutional Index (VINIX)	28.67	(26)	18.39	(50)	31.46	(37)	-4.42	(32)	21.79	(45)	11.93	(20)	1.37	(35)	13.65	(18)	32.35	(38)	15.98	(41)
S&P 500 Index	28.71	(25)	18.40	(50)	31.49	(36)	-4.38	(32)	21.83	(45)	11.96	(20)	1.38	(35)	13.69	(18)	32.39	(37)	16.00	(41)
IM U.S. Large Cap Core Equity (MF) Median	26.95		18.39		30.64		-5.45		21.45		9.70		0.53		11.51		31.77		15.42	
American Century Equity Income (AEUDX)	17.27	(98)	1.43	(80)	24.64	(74)	-4.17	(18)	13.83	(82)	19.88	(6)	0.94	(6)	12.84	(14)	N/A		N/A	
Russell 1000 Value Index	25.16	(63)	2.80	(61)	26.54	(50)	-8.27	(45)	13.66	(82)	17.34	(17)	-3.83	(69)	13.45	(8)	32.53	(44)	17.51	(27)
IM U.S. Large Cap Value Equity (MF) Median	25.96		3.82		26.50		-8.61		16.95		13.85		-3.00		10.82		32.11		15.79	

Returns for periods greater than one year are annualized. Returns are expressed as percentages. \*Returns are MassMutual Guaranteed Account until 1Q2019 then the Voya Fixed account thereafter.



## **Comparative Performance** 457 & 401(a) Calendar Returns

As of December 31, 2022

	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Balanced Fund										
American Funds 2060 TD Fund R6 (RFUTX)	17.19 (48)	19.44 (1)	25.01 (61)	-5.64 (1)	22.49 (N/A)	8.41 (N/A)	N/A	N/A	N/A	N/A
S&P Target Date 2060 Index	18.05 (34)	13.99 (73)	24.73 (84)	-7.95 (7)	20.75 (N/A)	10.08 (N/A)	-0.66 (N/A)	5.64 (N/A)	24.96 (N/A)	15.81 (N/A)
IM Mixed-Asset Target 2065+ (MF) Median	17.15	16.23	26.28	-9.37	N/A	N/A	N/A	N/A	N/A	N/A
American Funds 2055 TD Fund R6 (RFKTX)	17.28 (46)	19.39 (7)	25.09 (40)	-5.65 (3)	22.63 (5)	8.30 (48)	0.63 (1)	7.01 (22)	26.59 (1)	16.76 (18)
S&P Target Date 2055 Index	18.19 (25)	13.86 (71)	24.48 (63)	-7.97 (38)	20.48 (66)	9.94 (7)	-0.54 (20)	5.64 (45)	24.96 (26)	15.81 (39)
IM Mixed-Asset Target 2055 (MF) Median	17.18	15.65	24.84	-8.48	21.12	8.25	-1.67	5.43	23.21	15.60
American Funds 2050 TD Fund R6 (RFITX)	17.27 (42)	19.42 (6)	25.04 (38)	-5.61 (2)	22.61 (6)	8.33 (44)	0.65 (1)	7.02 (18)	26.65 (1)	16.72 (17)
S&P Target Date 2050 Index	17.99 (26)	13.86 (65)	24.35 (60)	-7.94 (35)	20.18 (67)	9.74 (14)	-0.47 (16)	5.69 (46)	24.13 (33)	15.49 (50)
IM Mixed-Asset Target 2050 (MF) Median	16.99	15.54	24.67	-8.54	20.80	8.10	-1.63	5.61	23.08	15.47
American Funds 2045 TD Fund R6 (RFHTX)	17.18 (37)	19.21 (5)	24.68 (48)	-5.58 (3)	22.44 (6)	8.27 (47)	0.64 (1)	7.09 (14)	26.51 (2)	16.80 (13)
S&P Target Date 2045 Index	17.52 (25)	13.66 (69)	24.02 (63)	-7.74 (36)	19.56 (73)	9.54 (13)	-0.46 (18)	5.67 (43)	23.14 (46)	15.15 (61)
IM Mixed-Asset Target 2045 (MF) Median	16.67	15.38	24.61	-8.19	20.65	8.15	-1.65	5.55	23.07	15.47
American Funds 2040 TD Fund R6 (RFGTX)	16.83 (15)	18.77 (5)	24.40 (30)	-5.52 (3)	21.98 (4)	8.17 (41)	0.58 (1)	6.96 (15)	26.66 (2)	16.71 (10)
S&P Target Date 2040 Index	16.55 (20)	13.37 (69)	23.37 (57)	-7.41 (34)	18.87 (70)	9.23 (16)	-0.40 (15)	5.69 (41)	22.10 (46)	14.69 (58)
IM Mixed-Asset Target 2040 (MF) Median	15.67	14.74	23.63	-7.97	19.74	7.95	-1.66	5.38	21.61	14.92
American Funds 2035 TD Fund R6 (RFFTX)	15.54 (12)	17.55 (6)	23.29 (22)	-5.14 (4)	21.04 (3)	8.00 (44)	0.59 (1)	7.02 (11)	25.97 (1)	16.64 (9)
S&P Target Date 2035 Index	14.93 (20)	12.79 (75)	22.18 (52)	-6.88 (44)	17.78 (71)	8.85 (15)	-0.35 (15)	5.69 (40)	20.84 (49)	14.12 (65)
IM Mixed-Asset Target 2035 (MF) Median	13.84	14.15	22.26	-7.26	18.72	7.75	-1.53	5.40	20.78	14.75
American Funds 2030 TD Fund R6 (RFETX)	13.16 (13)	15.16 (14)	20.06 (52)	-4.16 (5)	18.40 (11)	7.71 (38)	0.47 (1)	7.06 (7)	25.64 (1)	16.49 (5)
S&P Target Date 2030 Index	12.61 (25)	11.91 (65)	20.38 (48)	-5.99 (42)	16.19 (61)	8.35 (19)	-0.30 (10)	5.64 (35)	19.14 (41)	13.43 (56)
IM Mixed-Asset Target 2030 (MF) Median	11.44	12.86	20.08	-6.32	16.92	7.30	-1.47	5.18	17.87	13.71
American Funds 2025 TD Fund R6 (RFDTX)	11.44 (14)	13.67 (23)	17.85 (57)	-3.47 (7)	15.33 (38)	7.36 (31)	0.13 (3)	6.66 (11)	23.76 (1)	15.58 (5)
S&P Target Date 2025 Index	10.67 (27)	11.22 (64)	18.38 (47)	-5.02 (43)	14.55 (56)	7.82 (17)	-0.25 (11)	5.56 (39)	17.03 (35)	12.51 (57)
IM Mixed-Asset Target 2025 (MF) Median	9.70	12.13	18.18	-5.23	14.95	6.87	-1.37	5.19	15.85	13.00
American Funds 2020 TD Fund R6 (RRCTX)	10.64 (6)	10.99 (47)	15.59 (58)	-2.69 (4)	12.87 (46)	7.05 (28)	0.19 (2)	6.74 (3)	18.71 (1)	12.98 (28)
S&P Target Date 2020 Index	8.76 (48)	10.24 (58)	16.52 (42)	-4.16 (41)	12.80 (48)	7.22 (25)	-0.19 (7)	5.67 (23)	14.76 (27)	11.48 (52)
IM Mixed-Asset Target 2020 (MF) Median	8.70	10.90	15.97	-4.52	12.69	6.36	-1.44	4.72	11.84	11.53
American Funds 2015 TD Fund R6 (RFJTX)	10.27 (3)	9.96 (64)	14.94 (58)	-2.72 (5)	11.19 (52)	7.55 (8)	-0.62 (18)	6.64 (3)	15.72 (1)	11.58 (35)
S&P Target Date 2015 Index	8.01 (50)	10.28 (62)	15.40 (47)	-3.67 (41)	11.39 (49)	6.56 (44)	-0.16 (7)	5.49 (25)	12.16 (36)	10.32 (63)
IM Mixed-Asset Target 2015 (MF) Median	8.00	11.37	15.22	-3.91	11.30	6.39	-1.30	4.49	10.38	10.81
American Funds 2010 TD Fund R6 (RFTTX)	9.32 (1)	9.25 (74)	13.88 (57)	-2.49 (9)	10.41 (41)	7.45 (3)	-0.84 (27)	6.79 (1)	12.55 (1)	10.51 (35)
S&P Target Date 2010 Index	6.54 (50)	9.95 (59)	14.30 (49)	-3.10 (25)	9.95 (66)	5.82 (59)	-0.21 (7)	5.07 (18)	9.42 (46)	8.94 (64)
IM Mixed-Asset Target 2010 (MF) Median	5.80	10.43	14.19	-3.58	10.24	6.06	-1.20	4.11	8.67	9.78

Returns for periods greater than one year are annualized. Returns are expressed as percentages. \*Returns are MassMutual Guaranteed Account until 1Q2019 then the Voya Fixed account thereafter.



## Comparative Performance 457 & 401(a) Calendar Returns As of December 31, 2022

	20	21	20	20	20	19	20	18	20	17	20	16	20	15	20	14	20	13	20	12
American Funds American Balanced (RLBGX)	16.11	(25)	11.22	(57)	19.55	(45)	-2.42	(7)	15.84	(39)	8.90	(18)	2.03	(3)	9.22	(6)	22.12	(20)	14.57	(24)
American Balanced Fund Hybrid	12.80	(46)	13.66	(35)	19.89	(42)	-1.90	(5)	12.37	(62)	7.38	(39)	1.21	(4)	9.85	(4)	14.08	(56)	10.13	(73)
IM All Balanced (MF) Median	11.99		12.01		18.63		-6.15		14.08		6.80		-1.58		4.75		15.39		12.17	
Fixed Income																				
PIMCO High Yield (PHIYX)	4.06	(73)	5.31	(53)	14.94	(24)	-2.49	(32)	7.02	(35)	12.68	(70)	-1.88	(21)	3.31	(13)	5.77	(74)	14.57	(50)
ICE BofA U.S. High Yield Index	5.35	(40)	6.17	(34)	14.41	(36)	-2.27	(27)	7.48	(21)	17.49	(5)	-4.64	(61)	2.50	(23)	7.42	(32)	15.58	(30)
IM U.S. High Yield Bonds (MF) Median	4.93		5.43		13.83		-2.97		6.63		13.80		-3.96		1.50		6.72		14.57	
PIMCO Foreign Bond USD-Hedged (PFORX)	-1.67	(8)	6.15	(57)	7.35	(34)	2.63	(7)	3.53	(69)	7.03	(7)	0.40	(9)	11.16	(3)	0.90	(17)	11.19	(22)
Bloomberg Global Aggregate	-4.71	(41)	9.20	(28)	6.84	(42)	-1.19	(46)	7.39	(59)	2.09	(61)	-3.15	(24)	0.59	(52)	-2.60	(37)	4.32	(79)
IM International Fixed Income (MF) Median	-5.39		6.55		6.64		-2.47		9.80		3.34		-5.82		0.63		-3.74		7.43	
Hartford Total Return Bond (HIABX)	-0.95	(31)	9.03	(27)	10.65	(5)	-0.81	(61)	5.16	(5)	4.49	(11)	-0.59	(73)	5.89	(33)	-1.36	(28)	7.54	(23)
Blmbg. U.S. Aggregate Index	-1.55	(60)	7.51	(73)	8.72	(53)	0.01	(18)	3.54	(54)	2.65	(62)	0.55	(20)	5.97	(27)	-2.02	(54)	4.21	(81)
IM U.S. Broad Market Core Fixed Income (MF) Median	-1.33		8.15		8.76		-0.62		3.60		2.90		0.04		5.55		-1.97		6.04	
Cash																				
Voya Fixed Account*	1.73	(20)	2.19	(23)	2.97	(9)	3.38	(1)	3.67	(2)	3.94	(1)	4.00	(1)	4.00	(2)	4.00	(1)	4.00	(6)
Morningstar US CIT Stable Value GR USD	1.74	(19)	2.24	(18)	2.51	(24)	2.23	(16)	1.96	(23)	1.79	(36)	1.77	(32)	1.69	(43)	1.84	(29)		(47)
IM U.S. GIC/Stable Value (SA+CF) Median	1.40		2.01		2.31		1.97		1.68		1.60		1.44		1.38		1.46		2.19	







## American Funds Target Retirement R6

**Target Date Fund Universe Ranges** 

December 31, 2022

Asset Class	2060+	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010
Equity Range											
Maximum	100%	100%	100%	95%	95%	90%	85%	75%	65%	55%	45%
Minimum	50%	50%	50%	45%	45%	40%	35%	25%	15%	10%	5%
Fixed Income Range											
Maximum	20%	20%	30%	35%	40%	50%	55%	65%	70%	75%	80%
Minimum	0%	0%	0%	5%	5%	10%	15%	20%	25%	35%	40%
Cash Range											
Maximum	20%	20%	30%	30%	30%	30%	30%	30%	35%	35%	35%
Minimum	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other Range											
Maximum	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Minimum	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Target Date Universe	61	54	55	52	55	54	51	57	56	37	38
raiger Date Universe	01	54	55	52	55	54	51	57	50	31	30

Morningstar Definitions:

1. Cash - The percentage of the fund's assets in cash. This figure is calculated separately for the short and long positions of the portfolio, and the sum of the asset allocation of each will not necessarily equal 100%.

2. Other - The percentage of the fund's assets in other instruments. This figure is calculated separately for the short and long positions of the portfolio, and the sum of the asset allocation of each will not necessarily equal 100%.

3. Target Date Universe - Based on the number of unique glide paths in the Morningstar Target Date Universe. Only one share class is selected to represent the fund manager.

## American Funds Target Retirement R6

**Target Date Fund Asset Allocation** 

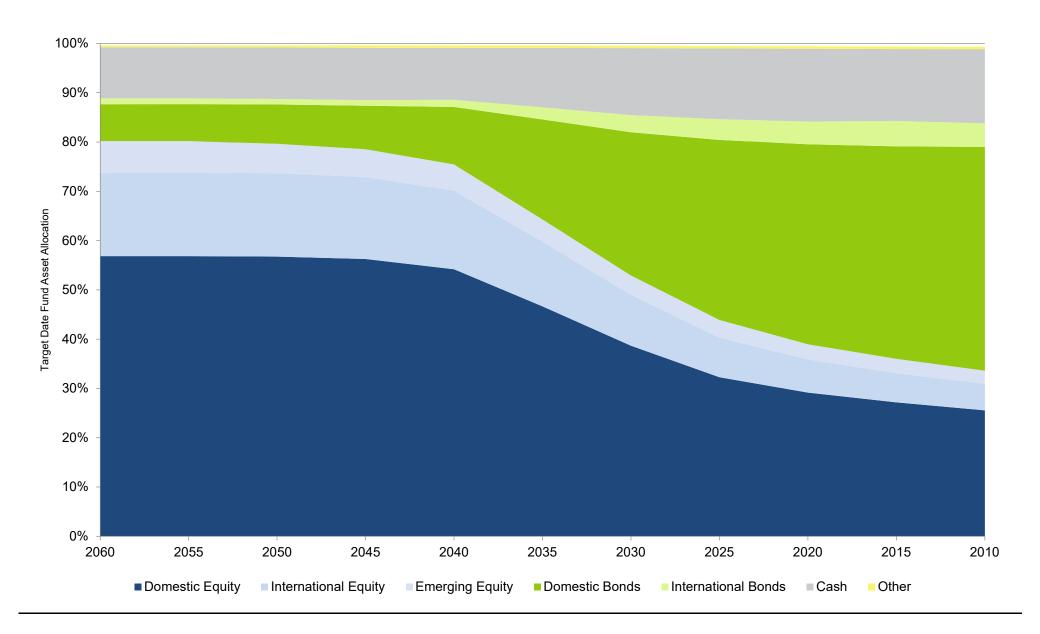
December 31, 2022

										2000	
Asset Class	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010
Total Equity	80%	80%	80%	79%	75%	64%	53%	44%	39%	36%	34%
Domestic Equity	57%	57%	57%	56%	54%	47%	39%	32%	29%	27%	26%
International Equity	17%	17%	17%	17%	16%	13%	10%	8%	7%	6%	5%
Emerging Equity	6%	6%	6%	6%	5%	5%	4%	4%	3%	3%	3%
Total Fixed Income	9%	9%	9%	10%	13%	23%	32%	41%	45%	48%	50%
Domestic Bonds	7%	7%	8%	9%	12%	20%	29%	37%	41%	43%	45%
International Bonds	1%	1%	1%	1%	1%	2%	3%	4%	5%	5%	5%
Cash	10%	10%	10%	11%	11%	12%	14%	14%	15%	15%	15%
Other	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	0%
Total	100%	100%	100%	100%	100%	100%	100%	99%	99%	99%	99%
Terminal Equity Date:	30 years after	Retirement									
Active/Passive/Blend Allocation:	Active										
ACTIVE/T ASSIVE/DIETTU ATTOCATION.											

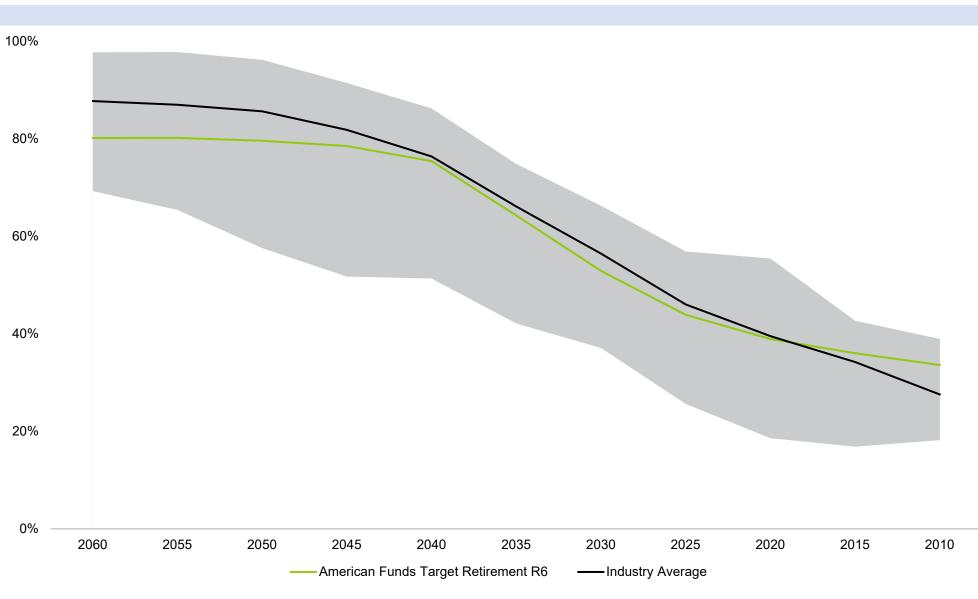
Morningstar Definitions:

1. Cash - The percentage of the fund's assets in cash. This figure is calculated separately for the short and long positions of the portfolio, and the sum of the asset allocation of each will not necessarily equal 100%.

2. Other - The percentage of the fund's assets in other instruments. This figure is calculated separately for the short and long positions of the portfolio, and the sum of the asset allocation of each will not necessarily equal 100%.







1. Industry Range (Gray Bar) - Represents the equity allocation range of the Target Date Funds in the universe.

2. Industry Average - The average equity allocation of the investments included in the universe.



## Fee and Expense Summary

Voya requires 0.03% in revenue from the plan assets annually.

AndCo Consulting bills quarterly. The fee structure is \$60,000 per annum, paid in quarterly cash payments.

Plan Demographics				
Total Assets*	\$197,271,211			
Number of Participants with a Balance (active and terminated)	3,327			
Expense Type Estimates (annual)	Percent of Assets	Dollar Cost	% Cost	
Voya Recordkeeping fees	0.03%	\$59,181	0.03%	
AndCo Consulting fees		\$60,000	0.03%	
Total plan expenses		\$ 119,181	0.06%	
Revenue Sharing Estimates (annual)				
Revenue from participant annual fee	0.08%	\$157,817		
Net plan fee surplus (annual)		\$38,636	0.02%	
Annual average total plan recordkeeping and administrative cost per participant (gros	SS)**	\$47.44		

### \*Does not include outstanding loan values

\*\*All revenue sharing monies are reimbursed to the participant accounts that utilize those funds. This policy was implemented on 1/1/18.



# Weighted Fee and Revenue Sharing Evaluation

	Market Value	Expense Ratio	Expense Ratio Weighted Fee	Revenue Sharing	*Revenue Sharing \$
American Funds EuroPacific Growth (RERGX)	\$5,737,236	0.46%	\$26,391	0.00%	\$0
Allspring Small Co Growth (WSCRX)	\$2,352,619	0.86%	\$20,233	0.00%	\$0
Vanguard Small Cap Index (VSMAX)	\$4,093,911	0.05%	\$2,047	0.00%	\$0
AMG Managers Skyline Special Equities (SKSEX)	\$2,199,697	1.13%	\$24,857	0.25%	\$5,499
Hartford Mid Cap (HIMCX)	\$8,503,950	0.69%	\$58,677	0.25%	\$21,260
Vanguard Mid Cap Index (VIMAX)	\$7,131,492	0.05%	\$3,566	0.00%	\$0
AF Growth Fund of America (RGAGX)	\$15,369,985	0.29%	\$44,573	0.00%	\$0
Allspring Disciplined US Core (EVSIX)	\$12,576,351	0.48%	\$60,366	0.15%	\$18,865
Vanguard Institutional Index (VINIX)	\$20,904,327	0.04%	\$8,362	0.00%	\$0
American Century Equity Income (AEUDX)	\$7,623,106	0.58%	\$44,214	0.00%	\$0
American Funds Target 2060-2010 R6	\$19,459,399	0.33%	\$64,994	0.00%	\$0
American Funds American Balanced (RLBGX)	\$7,634,911	0.25%	\$19,087	0.00%	\$0
PIMCO High Yield (PHIYX)	\$2,241,751	0.56%	\$12,554	0.00%	\$0
PIMCO Foreign Bond USD-Hedged (PFORX)	\$560,770	0.51%	\$2,860	0.00%	\$0
Hartford Total Return Bond (HIABX)	\$3,616,149	0.50%	\$18,081	0.25%	\$9,040
Voya Fixed Account	\$77,265,557	0.00%	\$0	0.00%	\$0
TOTAL	\$197,271,211	0.21%	\$410,862	0.03%	\$54,664

\*All revenue sharing monies are reimbursed to the participant accounts that utilize those funds. This policy was implemented on 1/1/18.



Plan Sponsor interest in Retirement Income offerings has been growing in response to participant demand for assistance in converting retirement savings into a **smooth, reliable, and consistent income stream** (similar to a defined benefit plan). Many participants struggle to estimate their spending needs or understand how to budget withdrawals in order to preserve longevity. 51% of participants recently surveyed were interested in guaranteed retirement income<sup>1</sup>. Meanwhile, 82% of plan sponsors were interested in lifetime income solutions but were awaiting further regulatory and fiduciary guidance<sup>2</sup>.

# Legislative Support

To further a plan sponsor's ability to address participant demands, the SECURE Act (2019) included:

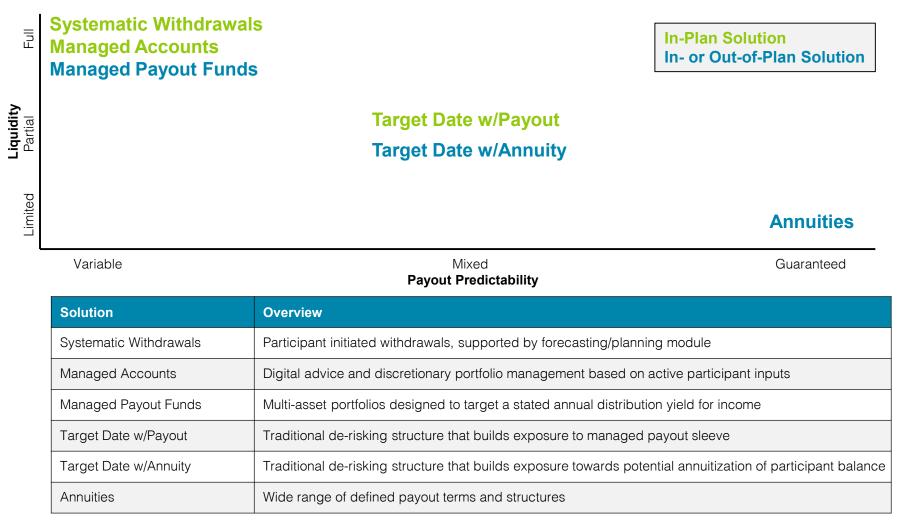
- 1. Safe Harbor treatment for annuities in qualified retirement plans. Extends fiduciary protections to plan sponsors for insurance carrier selection if certain criteria are met. This also allows for annuities to be incorporated as a Qualified Default Investment Alternative (QDIA).
- 2. Inclusion of Lifetime Income projections in participant statements (effective 2Q 2022). This serves as a continual reminder to participants about how much income they can expect their current savings to produce.

<sup>1</sup> TIAA Retirement Insights Survey, February 2021

<sup>2</sup> MetLife 'Special Commentary: Final Clarification of the Annuity Selection Safe Harbor and Income Disclosures for DC Plans', January 7, 2020



Plan sponsors are presented with a complex and evolving range of solutions, from basic ad-hoc do-it-yourself tools to dynamic investment products with annuity components.



Selection of a Retirement Income solution is a **Fiduciary** decision. Committees should document the due diligence and prudent process used in selecting any potential offering in the best interest of plan participants.



For educational purposes only. Not intended to provide legal or tax advice. Information presented represents a general overview, is not exhaustive and is only accurate as of the date of distribution and may not reflect future interpretations or guidance.

# Fiduciary Considerations & Challenges

Several headwinds exist to widespread adoption given the early-stage in the marketplace, product development, natural complexities associated with insurance, rigid recordkeeper platforms and additional clarity needed from regulators.

- Lack of consistency, broad availability, and historical results complicate due diligence
- Difficult to benchmark and provide ongoing oversight
- Potential extension of target date and managed account litigation
- Complicated expense structures, transparency and varying liquidity constraints
- Portability and potential conflicts of interest with proprietary products or partnerships
- Participant education is critical and time-consuming to understand product functions

# **Plan Design Considerations**

- Plan Structure
  - Retirement Plan: Designed as a longstanding fixture in a participant's retirement, accumulation through decumulation, may prefer in-plan solutions
  - Savings Plan: Focused on accumulation and roll-out, prefer to have limited exposure to inactive or terminated participants, may prefer out of plan solutions
- <u>Standalone or Integrated Solution</u> Voluntary election by participant or incorporated into QDIA offering
- <u>Plan Documents</u> Must comport with administrative needs of selected solution (e.g., allowing for partial/installment distributions); understand and review fees



	2021	2022	2023
Elective Deferrals - 401(k), 403(b), and Most 457 Plans	\$19,500	\$20,500	\$22,500
Catch-up Contribution	\$6,500	\$6,500	\$7,500
DC Plan Combined Annual Contribution Limit	\$58,000	\$61,000	\$66,000
Defined Benefit Annual Benefit Limit	\$230,000	\$245,000	\$265,000
Highly Compensated Employee Threshold	\$130,000	\$135,000	\$150,000
Top Heavy Key Employee Dollar Limit	\$185,000	\$200,000	\$215,000
SIMPLE Plan Contribution Limit	\$13,500	\$14,000	\$15,500
SIMPLE Plan Catch-up	\$3,000	\$3,000	\$3,500
IRA Contribution Limit	\$6,000	\$6,000	\$6,500
IRA Catch-Up	\$1,000	\$1,000	\$1,000
HSA Contribution Limit, Single	\$3,600	\$3,650	\$3,850
HSA Contribution Limit, Non-Single	\$7,200	\$7,300	\$7,750

Source: IRS Notice 2022-55 and Revenue Procedure 2022-24



Building upon the original SECURE Act (2019), SECURE 2.0 was signed into law on December 29, 2022. The approximately 400-page legislation is centered around the continued enhancement and support of American retirement savings. Below are highlights of notable provisions specifically impacting qualified defined contribution plans. Additional regulatory guidance and details will be forthcoming by respective governing agencies.

Provision	Effective Date	Mandatory / Optional
<b>RMD Age.</b> Immediately adjusts from 72 to 73, increasing to 75 by 2033. Tax penalties for missed RMDs reduced from 50% to 25% (10% if corrected within 2 years).	Immediate	Mandatory
Roth RMD and Catch-up Contributions Treatment. All Roth plan balances will be excluded from RMD considerations. Catch-up contributions must be Roth unless prior year wages do not exceed \$145,000 (optional if wages less than \$145,000).	2024	Mandatory
Increase Catch-up Contributions. Limit adjusted for participants aged 60-63 to greater of \$10,000 or 150% of 2024 standard catch-up limit (indexed).	2025	Mandatory
<b>Part-time Employees.</b> Reduces eligibility requirement to two years from three years in the original SECURE Act. Must work a minimum of 500 hours in consecutive years.	2025	Mandatory
Lost and Found Database. Department of Labor to create searchable online database to assist participants and beneficiaries in locating accounts from ERISA qualified plans.	2025	Mandatory
Auto-Enrollment/Escalation. Sponsors must auto-enroll participants with a default rate between 3% and 10%, with escalation of 1% per year up to at least 10% and no more than 15%. A 90-day opt-out must be provided. <i>For NEW 401(k) and 403(b) plans only.</i>	2025	Mandatory
Student Loan Matching. Allows employers to treat loan payments as eligible contributions for match purposes.	2024	Optional
<b>Cash-out Limit.</b> Increases balance limit to \$7,000 from \$5,000 for sponsor-directed involuntary distributions - IRA rollovers of inactive/terminated participant accounts.	2024	Optional



Provision	Effective Date	Mandatory / Optional
<b>Emergency Withdrawals.</b> Permits one penalty-free withdrawal of up to \$1,000 per year, may be repaid within three years.	2024	Optional
<b>Emergency Savings Accounts ("ESA").</b> Account linked to retirement plan for penalty- free emergency withdrawals. Post-tax contributions capped at \$2,500. Employer may auto-enroll up to 3% with safe harbor treatment. For non-HCEs only.	2024	Optional
<b>Natural Disasters.</b> Allows for distributions up to \$22,000 per qualified federally declared disaster, exempt from the 10% early withdrawal penalty; may be repaid within three years.	Events after Jan. 26, 2021	Optional
Roth Employer Contributions. Permits employees the option of receiving employer match or nonelective contributions as Roth; will be taxable and must be 100% vested.	Immediate	Optional
<b>Financial Incentives.</b> De minimus financial incentives, such a low-dollar gift cards, may now be permitted to encourage participation.	Immediate	Optional
Auto-Portability. Creates exemption for sponsors to direct involuntary distributions to participant's current employer-provided defined contribution plan. DOL and Treasury to provide additional review and guidance.	Immediate	Optional
<b>QLAC Increase.</b> Cap for QLAC exclusion from RMD rules increased from \$125,000 to \$200,000 (indexed after 2024) and removes 25% limit.	Immediate	Optional
<b>403(b) Enhancements.</b> Permits participation in MEP/PEPs and updates IRS Code to allow investments in Collective Investment Trusts (CIT). <i>Existing securities law may still prohibit CIT utilization, pending updated regulations.</i>	Immediate (MEP/PEP)	Optional

Plan sponsors should work with their respective counsel, recordkeeper/administrators and consultants on the review and implementation of adopted provisions. The preceding table is for educational purposes only and should not be considered legal guidance or an exhaustive compilation of applicable legislative provisions.

Source: Division T of the Consolidated Appropriations Act, 2023; Groom Law. Subject to change.

For educational purposes only. Not intended to provide legal or tax advice. Information presented represents a general overview, is not exhaustive and is only accurate as of the date of distribution and may not reflect future interpretations or guidance.



Quarterly	1 <sup>st</sup> Quarter	2 <sup>nd</sup> Quarter	3 <sup>rd</sup> Quarter	4 <sup>th</sup> Quarter
Follow procedures, including documentation of all meetings and decisions	Yes	Yes	Yes	Yes
Review of plan investments and compliance with investment policy statement	Yes	Yes	Yes	Yes
Fiduciary education	Yes	Yes	Yes	Yes
Periodically				
Investment policy statement review	No	No	No	Yes
Review QDIA selection	Yes	Yes	Yes	Yes
Plan fee analysis	Yes	Yes	Yes	Yes
Plan recordkeeping & administration services review	Yes	Yes	Yes	Yes
Employee education review	Yes	Yes	Yes	Yes
Review of ancillary products, if applicable (self-directed brokerage, managed accounts, etc.)		Yes		
Other Projects				



Fund Information		Fund Investment Policy
Portfolio Manager : Ruedi/Whittaker PM Tenure : 20042004 Fund Assets : -	Ticker : Inception Date : 07/14/1997 Portfolio Turnover : 28%	The Fund seeks long-term growth of capital. The Fund invests at least 80% of its assets in common stocks of mid-capitalization companies. The Fund may invest up to 20% of its total assets in securities of foreign issuers and non-dollar securities.

# **Comparative Performance - Trailing**

	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	
Hartford Mid Cap (HIMCX)	8.77 (67)	-24.30 (95)	-24.30 (95)	1.34 (98)	5.06 (72)	8.62 (50)	10.93 (14)	
Russell Midcap Index	9.18 (60)	-17.32 (88)	-17.32 (88)	5.88 (51)	7.10 (28)	9.61 (22)	10.96 (14)	
IM U.S. Mid Cap Core Equity (MF) 1st Quartile	11.73	-9.55	-9.55	7.30	7.18	9.54	10.45	
IM U.S. Mid Cap Core Equity (MF) Median	9.63	-13.21	-13.21	5.90	5.94	8.50	9.49	
IM U.S. Mid Cap Core Equity (MF) 3rd Quartile	8.52	-15.51	-15.51	4.33	4.87	7.56	8.60	
Comparative Performance - Calendar								
	2021	2020	2019	2018	2017	2016	2015	
Hartford Mid Cap (HIMCX)	9.91 (100)	25.10 (7)	32.87 (16)	-7.44 (12)	24.47 (2)	11.98 (72)	1.60 (6)	
Russell Midcap Index	22.58 (68)	17.10 (17)	30.54 (31)	-9.06 (21)	18.52 (25)	13.80 (57)	-2.44 (31)	
IM U.S. Mid Cap Core Equity (MF) 1st Quartile	28.72	14.20	31.35	-9.97	18.51	18.23	-1.68	
IM U.S. Mid Cap Core Equity (MF) Median	25.73	8.44	28.59	-11.64	14.94	14.51	-3.74	
IM U.S. Mid Cap Core Equity (MF) 3rd Quartile	21.53	3.24	25.60	-14.53	12.36	11.25	-6.51	

# Comparative Performance - Quarterly

	Sep-2022	Jun-2022	Mar-2022	Dec-2021	Sep-2021	Jun-2021	Mar-2021
Hartford Mid Cap (HIMCX)	-5.25 (75)	-18.09 (98)	-10.32 (99)	5.15 (92)	-3.52 (97)	2.98 (97)	5.20 (95)
Russell Midcap Index	-3.44 (32)	-16.85 (91)	-5.68 (77)	6.44 (80)	-0.93 (52)	7.50 (3)	8.14 (83)
IM U.S. Mid Cap Core Equity (MF) 1st Quartile	-3.25	-11.52	-1.65	8.95	-0.19	6.10	13.16
IM U.S. Mid Cap Core Equity (MF) Median	-4.32	-13.63	-4.08	8.20	-0.87	5.14	10.47
IM U.S. Mid Cap Core Equity (MF) 3rd Quartile	-5.35	-15.27	-5.65	6.74	-1.72	4.08	8.77

MPT Stats				Ranking vs. IM U.S. Mid Ca	o Core Equity (I	MF) 4 Quarters I	Rolling Periods		
	1 YR	3 YR	5 YR		Periods	5-25	25-Median	Median-75	75-95
Standard Deviation	23.77	24.09	21.63	Hartford Mid Cap (HIMCX)	28	14 (50%)	5 (18%)	2 (7%)	7 (25%)
Downside Risk	20.21	16.51	14.82	Russell Midcap Index	28	11 (39%)	9 (32%)	5 (18%)	3 (11%)
vs. Russell Midcap Index				Ranking vs. IM U.S. Mid Ca	o Core Equity (I	MF) 12 Quarters	Rolling Period	S	
Alpha	-8.00	-4.25	-1.93		Periods	5-25	25-Median	Median-75	75-95
Beta	1.01	1.00	1.02	Hartford Mid Cap (HIMCX)	28	24 (86%)	0 (0%)	0 (0%)	4 (14%)
Down Market Capture	111.71	105.51	105.32	Russell Midcap Index	28	24 (86%)	2 (7%)	2 (7%)	0 (0%)
Information Ratio	-2.09	-0.94	-0.39		20	24 (00%)	2 (170)	2 (170)	0 (070)
Tracking Error	4.07	4.62	4.49	Ranking vs. IM U.S. Mid Ca	o Core Equity (I	MF) 20 Quarters	Rolling Period	S	
Up Market Capture	87.59	92.17	98.28	5	Periods	5-25	25-Median	Median-75	75-95
vs. 90 Day U.S. Treasury Bil	I			Hartford Mid Cap (HIMCX)	28	25 (89%)	0 (0%)	3 (11%)	0 (0%)
Sharpe Ratio	-1.10	0.15	0.28	Russell Midcap Index	28	27 (96%)	1 (4%)	0 (0%)	0 (0%)



Portfolio Characteristics								Top Ten Equity Holdings					
		Portfol	io		Benchmark				Port.	Bend		Qtr	Contr.
Wtd. Avg. Mkt. Cap (\$)		10,822,95	5,664		21	,158,720,174			Wt	w	-	trn	Rtrn
Median Mkt. Cap (\$)		8,797,134	4,840		9	,045,010,115		Axon Enterprise Inc	2.5	0.		3.4	1.1
Price/Earnings ratio		14.0			16.1		United Therapeutics Corp	2.1	0.		2.8	0.7	
Price/Book ratio		3.1			2.9		WEX Inc	2.1	0.		8.9	0.6	
5 Yr. EPS Growth Rate (%)	)	19.0			17.2		NVR Inc.	2.1	0.		5.7	0.3	
Current Yield (%)			0.7			1.7		Genpact Ltd	2.0	0.		6.1	0.1
Beta (5 Years, Monthly)			1.02			1.00		Insulet Corporation	2.0	0.		8.3	0.6
Number of Stocks			101			818		IDEX Corp	2.0	0.		4.6	0.3
								Shift4 Payments Inc	1.9	0.	0 2	5.4	0.5
								Jazz Pharmaceuticals plc	1.9	0.		9.5	0.4
								Markel Corp	1.9	0.	2 2	1.5	0.4
Buy and Hold Sector Attri	bution - 1 Qtr							Ten Best Performers					
	Alloc	ation	Perfor	rmance	Attribution				Port.	Bench.	Qtr.	Contr.	
	Portfolio	Benchmark	Portfolio	Benchmark	Sector	Stock	Total			Wt	Wt	Rtrn	Rtrn
Communication Services	2.1	3.7	-15.50	-3.61	0.21	-0.30	-0.09	Exact Sciences Corporation		1.1	0.1	52.4	0.6
Consumer Discretionary	11.9	11.7	12.47	12.44	-0.01	0.01	0.00	Fair Isaac Corporation		0.9	0.2	45.3	0.4
Consumer Staples	0.0	3.7	0.00	8.94	0.01	0.00	0.01	YETI Holdings Inc		1.2	0.0	44.8	0.6
Energy	6.3	5.3	13.20	16.35	0.05	-0.19	-0.14	Axon Enterprise Inc		2.5	0.1	43.4	1.1
Financials	8.4	13.9	5.15	9.53	-0.02	-0.36	-0.38	Steel Dynamics Inc		0.5	0.2	38.2	0.2
Health Care	19.2	10.6	9.75	14.05	0.43	-0.77	-0.34	United Therapeutics Corp		2.1	0.1	32.8	0.7
Industrials	21.3	15.5	13.55	12.49	0.19	0.23	0.42	Integra LifeSciences Holding	s Corp	1.1	0.0	32.4	0.3
Information Technology	23.6	15.9	4.73	2.05	-0.58	0.62	0.04	Liveramp Holdings Inc		0.3	0.0	29.1	0.1
Materials	4.5	6.2	20.09	11.81	-0.06	0.36	0.30	WEX Inc		2.1	0.1	28.9	0.6
Real Estate	1.4	7.7	2.93	3.78	0.33	0.04	0.38	Flex Ltd		0.5	0.0	28.8	0.2
Utilities	1.2	5.8	8.67	10.91	-0.12	-0.05	-0.17						
Total	100.0	100.0	9.17	9.14	0.42	-0.40	0.03						

#### Buy and Hold Style Attribution - 1 Qtr

Buy and Hold S	tyle Attributio	n - 1 Qtr						Ten Worst Performers				
	Alloc	cation	Perfor	mance	Attribution			Port.	Bench.	Qtr.	Contr.	
	Portfolio	Benchmark	Portfolio	Benchmark	Style	Stock	Total		Wt	Wt	Rtrn	Rtrn
Large Growth	0.0	3.4	0.00	0.66	0.26	0.00	0.26	Roku Inc	0.4	0.1	-27.8	-0.1
Large Neutral	0.0	2.5	0.00	5.02	0.09	0.00	0.09	Apellis Pharmaceuticals Inc	0.8	0.0	-24.3	-0.2
Large Value	0.0	1.6	0.00	16.81	-0.12	0.00	-0.12	PTC Therapeutics Inc	0.8	0.0	-24.0	-0.2
Mid Growth	13.9	13.9	9.33	7.53	0.02	0.39	0.41	Lumentum Holdings Inc	0.8	0.0	-23.9	-0.2
Mid Neutral	37.0	34.6	7.82	9.32	0.01	-0.53	-0.52	Syneos Health Inc	0.4	0.0	-22.2	-0.1
Mid Value	28.3	33.0	10.30	9.94	-0.04	0.16	0.12	Olo Inc	0.3	0.0	-20.9	-0.1
Small Growth	4.0	0.3	10.92	2.26	-0.27	0.34	0.07	CommScope Holding Co Inc	0.2	0.0	-20.2	0.0
Small Neutral	5.8	1.0	7.46	7.02	-0.08	0.03	-0.05	Informatica Inc	1.0	0.0	-18.8	-0.2
Small Value	4.3	1.5	10.64	15.38	0.10	-0.12	-0.02	Datadog Inc	0.7	0.2	-17.2	-0.1
Unclassified	6.7	8.2	8.74	11.16	-0.04	-0.16	-0.21	M&T Bank Corp	1.3	0.3	-17.1	-0.2
Total	100.0	100.0	9.17	9.14	-0.09	0.12	0.03					



#### **Historical Activity**

### Sep-2020

Hotchkis & Wiley Mid Cap Value (HWMIX) fund removed from the fund line-up.

## Jan-2020

The Custom Target Date funds were replaced with the American R6 Target Date funds.

## Jun-2019

The MassMutual Guaranteed Interest Account was replaced by the Voya Fixed Account. The returns are MassMutual until 1Q2019, Voya thereafter. The Record Keeper was changed in 2Q2019 from Mass Mutual to Voya.

## Jul-2017

The Hartford Small Company Fund (HIASX) was replaced by Wells Fargo Small Company Growth Fund (WSCRX).

## Nov-2016

The Hartford Capital Appreciation Fund (HIACX) was replaced by the Wells Fargo Disciplined US Core Fund (EVSIX).

The Deutsche Real Assets Fund (AAAVX) was removed from the Plans. The remaining balances were mapped into the American Funds American Balanced Fund (RLBGX).

The Plan added WCAB Models 2015, 2025, 2035, 2045, 2055, and 2060. The 2010 Model was replaced by the Income Model.

## Dec-2015

The Plan was converted to the Mass Mutual platform. The following funds were changed:

The SSGA Index Fund were replaced by Vanguard Index Funds. The Hartford Balanced was replaced by American Funds Balanced. American Century Equity Income shares changed from ACIIX to AEUDX. Deutsche Alternative Asset Allocation shares changed from AAAAX to AAAVX.

## Sep-2014

Lord Abbett Mid Cap Value closes 9/3/14. Assets will map to the Hotchkis & Wiley Mid Cap Value Fund on September 5, 2014.

# Oct-2013

Pimco Foreign Bond (US Hedged) (PFORZ) was added to the fund lineup.

# Apr-2011

The LifePath Funds were removed from the fund line-up.

# Mar-2011

The Barclays LifePath Target Date Funds will be mapped to the Hartford Advisors HLS Fund.

Oct-2010



The following funds were moved to new share classes as follows:

American Funds EuroPacific Growth to R6 shares SSgA Russell Small Cap to A shares Lord Abbett Mid Cap Value to I shares SSgA S&P Mid Cap Index to A shares American Funds Growth Fund of America to R6 shares SSgA S&P 500 Index to A shares Pimco High Yield to Institutional shares.

#### Dec-2009

The LifePath 2010 fund was wrapped in with the Life Path Retirement Fund.

#### Sep-2009

Barclays merged with BlackRock. The LifePath funds took the BlackRock name.

#### Feb-2009

The Following new investment choices were added to the Plans:

American Century Capital, DFA Intl. Small Cap Value, DWS Alternative Asset Allocation, Lazard Emerging Markets, Lord Abbett Mid Cap Value.

#### Sep-2007

The Hartford Index HLS was replaced by the SSgA S&P 500 Flagship fund in the third quarter 2007. The TCW Opportunity Fund was renamed to the TCW Relative Value Small Cap Fund.

#### Jun-2007

The American Century Ultra Fund was removed from the fund lineup during the second quarter 2007.

#### Mar-2005



Changes to the fund lineup started on March 1, 2005 and concluded on March 31, 2005. Below is a list of the funds that were retained and a list of funds that were added to the lineup.

Retained Funds: Hartford Small Company HLS Skyline Special Equities Portfolio, Hartford Mid-Cap HLS American Century Ultra, Hartford Capital Appreciation Hartford Index HLS American Century Equity Income Hartford Advisors HLS Hartford Total Return Bond HLS General "Declared Interest"

Introduced Funds: American Funds EuroPacific TCW Opportunity Artisan Mid-Cap Hotchkis & Wiley Mid-Cap Value American Funds Growth Fund PIMCO High Yield General Account (Declared) Barclays Global Investors LifePath.



## **Common Index Definitions**

**The S&P 500® Index** is a broad based unmanaged index of 500 stocks, which is widely recognized as representative of the equity market in general.

**The Russell 1000® Index** measures the performance of those 1,000 largest companies in the Russell 3000® Index, which represents approximately 92% of the total market capitalization of the Russell 3000® Index.

**The Russell 1000® Value Index** measures the performance of those Russell 1000® Index companies with lower price-to-book ratios and lower forecasted growth values.

**The Russell 1000® Growth Index** measures the performance of those Russell 1000® Index companies with higher price-to-book ratios and higher forecasted growth values

The Russell 2000 $^{\mbox{\tiny B}}$  Index, an unmanaged index, measures the performance of the 2,000 smallest companies in the Russell 3000 $^{\mbox{\tiny B}}$  Index.

**The Russell 2000® Value Index** measures the performance of those Russell 2000® Index companies with lower price-to-book ratios and lower forecasted growth values.

**The Russell 2000® Growth Index** measures the performance of those Russell 2000® Index companies higher price-to-book ratios and higher forecasted growth values.

The Russell 3000® Index includes the 3,000 largest U.S.-traded stocks.

The Russell 3000® Value Index includes stocks from the Russell 3000® Index with lower price-tobook ratios and lower expected growth rates.

**The Russell 3000® Growth Index** includes companies that display signs of above average growth. The index is used to provide a gauge of the performance of growth stocks in the U.S.

The Russell Midcap® Index, an unmanaged index, measures the performance of the 800 smallest companies in the Russell 1000® Index.

**The Russell Midcap® Value Index** measures the performance of those Russell Midcap® Index companies with lower price-to book value ratios and lower forecasted growth values.

 $\label{eq:comparison} \begin{array}{l} \textbf{The Russell Midcap} \circledast \textbf{Growth Index} \ \text{measures the performance of those Russell Midcap} \circledast \ \text{Index} \ \text{companies with higher price-to book ratios and higher forecasted growth values.} \end{array}$ 

**The Russell Developed® Index** measures the performance of the investable securities in developed countries globally across all market capitalization ranges.

The Bloomberg Barclays Intermediate Treasury Index includes Treasuries with maturities between 1 and 10 years.

The Bloomberg Barclays Aggregate Bond Index, is a market capitalization-weighted intermediate term index, meaning the securities in the index are weighted according to the market size of each bond type. Most U.S. traded investment grade bonds are represented. Municipal bonds, and Treasury Inflation-Protected Securities are excluded, due to tax treatment issues. The index includes Treasury securities, Government agency bonds, Mortgage-backed bonds, Corporate bonds, and a small amount of foreign bonds traded in U.S. The Bloomberg Barclays US Aggregate Bond Index is an index.

**The BofA Merrill Lynch U.S. High Yield Index** tracks the performance of below investment grade, but not in default, US dollardenominated corporate bonds publicly issued in the US domestic market, and includes issues with a credit rating of BBB or below, as rated by Moody's and S&P.



Active Return	- Arithmetic difference between the manager's performance and the designated benchmark return over a specified time period.
Alpha	- A measure of the difference between a portfolio's actual performance and its expected return based on its level of risk as determined by beta. It determines the portfolio's non-systemic return, or its historical performance not explained by movements of the market.
Beta	- A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of the portfolio's systematic risk.
Consistency	- The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. Higher consistency indicates the manager has contributed more to the product's performance.
Distributed to Paid In (DPI)	- The ratio of money distributed to Limited Partners by the fund, relative to contributions. It is calculated by dividing cumulative distributions by paid in capital. This multiple shows the investor how much money they got back. It is a good measure for evaluating a fund later in its life because there are more distributions to measure against.
Down Market Capture	- The ratio of average portfolio performance over the designated benchmark during periods of negative returns. A lower value indicates better product performance
Downside Risk	- A measure similar to standard deviation that utilizes only the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. A higher factor is indicative of a riskier product.
Excess Return	- Arithmetic difference between the manager's performance and the risk-free return over a specified time period.
Excess Risk	- A measure of the standard deviation of a portfolio's performance relative to the risk free return.
Information Ratio	- This calculates the value-added contribution of the manager and is derived by dividing the active rate of return of the portfolio by the tracking error. The higher the Information Ratio, the more the manager has added value to the portfolio.
Public Market Equivalent (PME)	- Designs a set of analyses used in the Private Equity Industry to evaluate the performance of a Private Equity Fund against a public benchmark or index.
R-Squared	- The percentage of a portfolio's performance that can be explained by the behavior of the appropriate benchmark. A high R-Squared means the portfolio's performance has historically moved in the same direction as the appropriate benchmark.
Return	- Compounded rate of return for the period.
Sharpe Ratio	- Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is an absolute rate of return per unit of risk. A higher value demonstrates better historical risk-adjusted performance.
Standard Deviation	- A statistical measure of the range of a portfolio's performance. It represents the variability of returns around the average return over a specified time period.
Total Value to Paid In (TVPI)	- The ratio of the current value of remaining investments within a fund, plus the total value of all distributions to date, relative to the total amount of capital paid into the fund to date. It is a good measure of performance before the end of a fund's life
Tracking Error	- This is a measure of the standard deviation of a portfolio's returns in relation to the performance of its designated market benchmark.
Treynor Ratio	- Similar to Sharpe ratio but utilizes beta rather than excess risk as determined by standard deviation. It is calculated by taking the excess rate of return above the risk free rate divided by beta to derive the absolute rate of return per unit of risk. A higher value indicates a product has achieved better historical risk-adjusted performance.
Up Market Capture	- The ratio of average portfolio performance over the designated benchmark during periods of positive returns. A higher value indicates better product performance.



AndCo compiled this report for the sole use of the client for which it was prepared. AndCo is responsible for evaluating the performance results of the Total Fund along with the investment advisors by comparing their performance with indices and other related peer universe data that is deemed appropriate. AndCo uses the results from this evaluation to make observations and recommendations to the client.

AndCo uses time-weighted calculations which are founded on standards recommended by the CFA Institute. The calculations and values shown are based on information that is received from custodians. AndCo analyzes transactions as indicated on the custodian statements and reviews the custodial market values of the portfolio. As a result, this provides AndCo with a reasonable basis that the investment information presented is free from material misstatement. This methodology of evaluating and measuring performance provides AndCo with a practical foundation for our observations and recommendations. Nothing came to our attention that would cause AndCo to believe that the information presented is significantly misstated.

This performance report is based on data obtained by the client's custodian(s), investment fund administrator, or other sources believed to be reliable. While these sources are believed to be reliable, the data providers are responsible for the accuracy and completeness of their statements. Clients are encouraged to compare the records of their custodian(s) to ensure this report fairly and accurately reflects their various asset positions.

The strategies listed may not be suitable for all investors. We believe the information provided here is reliable, but do not warrant its accuracy or completeness. Past performance is not an indication of future performance. Any information contained in this report is for informational purposes only and should not be construed to be an offer to buy or sell any securities, investment consulting, or investment management services.

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