



**AGENDA
CITY OF FORT WORTH
DEFERRED COMPENSATION OVERSIGHT COMMITTEE
FRIDAY, FEBRUARY 25, 2022**

**9:00 AM
HUMAN RESOURCE CONFERENCE ROOM
200 TEXAS ST
FORT WORTH TX 76102**

VIDEOCONFERENCE

<https://fortworthtexas.webex.com/fortworthtexas/j.php?MTID=mcef619f7153b3f8492543a21dceae5b3>

Meeting Number: 2558 046 9541

Meeting password: wPtQJmyU742

Join by Phone

469-210-7159

Access Code: 2558 046 9541

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- I. Call to Order – Daryl Trotter
 - II. Opening Comments – Daryl Trotter
 - III. Approval of Minutes from December 3, 2021 Meeting
 - IV. Briefings
 - a. Introduction of Christopher Chavez and Larry Spradley – Daryl Trotter
 - b. TIAA Fourth Quarter 2021 Plan Report – Christopher Chavez, TIAA
 - c. Fourth Quarter Performance – Tony Kay, &Co.
 - d. 457 Audit Findings – Joanne Hinton
 - e. 457 Member Fiduciary Training – Tony Kay, &Co.
 - f. Handbook Subcommittee Final Update – Joanne Hinton
 - V. Future Agenda Items
 - VI. Public Comment
 - VII. Adjourn

Please Note: [*IF MEETING WILL BE VIRTUAL, ADD THIS SENTENCE - This meeting will be conducted by videoconference or telephone call in accordance with the Texas Open Meetings Act.***] The location identified on this**

agenda is the location at which the presiding officer will be physically present and presiding over the meeting. Members of the Committee may be participating remotely by videoconference in accordance with the Texas Open Meetings Act.

Please Note: Additional members of the Fort Worth City Council may be attending the meeting for information gathering purposes. Any members of the Council who are not on the Committee will not be deliberating or voting on any Committee agenda items.

I, the undersigned authority, do hereby certify that this Notice of Meeting was posted on the City of Fort Worth official website and said Notice was posted on the following date and time Monday, February 21, 2022 at 2:30 p.m. and remained so posted continuously for at least 72 hours preceding the scheduled time of said meeting.



City Secretary for the City of Fort Worth, Texas

Executive Session - The Deferred Compensation Program Committee may conduct a closed meeting as authorized by Section 551.071 of the Texas Government Code to seek the advice of its attorneys on legal issues regarding any matter listed on today's Deferred Compensation Program Committee Agenda.

Due to health and safety concerns related to the COVID-19 coronavirus, this meeting will be conducted by videoconference or telephone call in accordance with the Texas Open Meetings Act and the provisions provided by the Governor of Texas in conjunction with the Declaration of Disaster enacted on March 13, 2020.

DEFERRED COMPENSATION COMMITTEE MEETING MINUTES

Friday, December 03, 2021

VIDEOCONFERENCE

<https://fortworthtexas.webex.com/fortworthtexas/j.php?MTID=m6bfccba9a9d6145f443f60ed14954935>

Meeting Number: 2554 721 1008

Meeting Password: 89T9vk78Nim

Join by phone

469-210-7159

Access Code: 2554 721 1008

Agenda Item	Description	Follow-up Action
Attendees	<p>Committee Members: Daryl Trotter (Chair) – Park and Recreation, John Samford – (Vice Chair) Finance, Nathan Gregory – Human Resources, Shannon Elder – Code Compliance, Darryl Woody, Jared Salzman – Police, Veronica Bailey – TPW, Elizabeth Dierdorf – Retiree</p> <p>Committee Members Not in Attendance: Larry Bilbrey – Fire</p> <p>Professional Advisor: Tony Kay – AndCo Consulting</p> <p>Vendors: Donna Ahrens, Kevin Kenny, Aaron Knode – TIAA</p> <p>City Staff Attendance: J.B. Strong – Legal, Joanne Hinton, Vivianee Haydon – Human Resources, Jesus Chapa - CMO</p> <p>Public Presence: None</p>	
Call to Order	The meeting called to order at 9:02am by Daryl Trotter (Chair)	
Opening Comments	Hope everyone has stayed safe and that we can reconvene in person in 2022.	
Approval of Minutes from August 27, 2021 Meeting	John had a recommendation to spell out the new fund name. Very few minor changes. John motioned to approve minutes from August 27, 2021 meeting. Jared Salzman seconded. All in favor, minutes were approved.	

DEFERRED COMPENSATION COMMITTEE MEETING MINUTES

Briefings	<ul style="list-style-type: none">• 457 Plan IRS Audit No update. Joanne reached out to the State person who did the audit and asked if they need anything else from us and she has not received a response. Nathan reminded us that this was a fairly routine audit and there was no specific reasoning for it. No news is good news. Tony Kay mentioned that the no news is pretty common and that he would not expect to hear anything from them. John suggested to remove this item from the agenda and maybe move it to opening comments if we receive any update in the future.• TIAA Third Quarter 2021 Plan Report Business Plan Review on page 9 of the packet, this will tell you in terms of how the employees with the City of Fort Worth are investing their retirement and their assets in the plan. Page 11 shows new enrollments in the plan. A number of clients that Donna talked to had hiring freezes during this time. Page 12 shows demographics. The longer your employees are in the plan the higher the account balance makes sense here. Page 14 shows an even further breakdown of how many active participants are in each age group, total active participants, total active assets and then the assets in the plan based on that age group. Participants can meet with Brandon Dyson to run a retirement readiness analysis. TIAA can also do targeted messaging campaigns toward these groups. John asked if it were possible to get information, relative to other plans with a pension, if these numbers are in the right range. Donna can get that information for us. Page 17, good asset allocation, good mixing, diversification and asset allocation in terms of your employees. Everything looks good overall. Page 31 looks at rollovers and transfers out of the plan. We are not seeing anything unusual from last quarter. Previously there were a lot of discussions and communication about how we can engage more with Brandon and consulting those employees who are looking at retirement. Those he's specifically trying to engage with are the fire and police departments so that they don't automatically think that they have to pull their monies out.• TIAA Communications Update Communications Consultant, Aaron Knode, went over communication, education and	Donna to get more information comparing peer benchmarks similar to the City of Fort Worth who have a separate pension plan.
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DEFERRED COMPENSATION COMMITTEE MEETING MINUTES

advice. We have a very programmatic and strategic approach to communicating with your employees. There are triggered communications that go out throughout the year. CE&A results for 2021:

- 3,746 participants reached
- 50% email open rate
- 14.79% overall action

Begin Smart is onboarding into the plan where participants receive legal information and welcome package. Early engagement Program are unique pages that are sent to the participants to try and get them to setup their account. It is a unique campaign that is personalized to the participants.

Grow Smart is where TIAA has their Financial Foundations campaigns, Supplemental campaigns and national awareness events. They also do webinars and workshops and gaming. Beneficiary campaign has moved from annual to a triggered communication. If you do not have a beneficiary on file, every time you log in to the website a pop up will come up so that you can enter that right away. Annual reminders will also go out and if you have not updated it within 2 years then you will be in the annual reminder email list. City of Fort Worth has great digital engagement. There is an assessment tool for employee's that includes a 6-minute checkup. Aaron can talk with Michael to assure we're reaching safety personnel ages 50-55.

Stay Smart is the off-boarding program. This is preparation for retirement or transition after leaving a job. There is yearly outreach from ages 60 to 70. There are personalized emails sent out on their TIAA anniversary. At age 62 communications will highlight social security. There is something that is highlighted each year. The goal is to meet with TIAA, talk to a financial consultant either in person or via online retirement advisor.

John stated that TIAA does a good job communicating with City of Fort Worth employees and asked if TIAA continues to look at jargon and wording so we do not lose people. Aaron said yes, we constantly check that and are trying to make things simpler for everyone. That's exactly what the 6-minute checkup is for. Data was based on a rolling 12 months.

DEFERRED COMPENSATION COMMITTEE MEETING MINUTES

	<ul style="list-style-type: none">• Large Cap Fund Transition Update Donna notified the committee that participant communication did go out. She clarified with the Fund Transition Manager and the change will take effect on December 6th.• Third Quarter Performance – Tony Kay, &Co. S&P500 companies outperform their earnings expectations for the quarter. Declines in emerging market equities, down 8.1%. The quarter was volatile but the 1-year numbers are strong. Total Market value compared to a year ago, approaching 330 million. Decent amount in domestic equities. Page 14 shows the individual investment managers. No significant shift from what we saw a year ago. Same portfolio's that were top 5 a year ago are the same now. VT Plus Fund is now Mission Square. We discussed the Invesco Diversified fund going away and being replaced by the Vanguard Equity Income fund in December. The TIAA suite of target funds, when you compare those versus some of the other providers, TIAA tends to have a little more allocated stocks versus bonds. There have been some changes in the way these portfolios are constructed, they use underlying investment funds to build out the allocation. This is something &Co is watching. Page 18 discusses quantitative highlights. There has been a lot of positive momentum trending in the right direction. Tony would like to point out for the quarter that we are at an all-time high. We have good contributions and good retention of the plan assets. Lazard International had a positive return when most international equity funds were negative. Vanguard Treasury Money Market fund, the committee worked with TIAA recently to make sure that this fund was closed to investors. It is mainly used for any excess revenue. Some of our peers started to offer a 2065 fund. Tony mentioned to Donna that they can get together to see if that is available and when the committee should consider adding this fund. We did a small balance cash out, this was done in June and is done on an annual basis. This was implemented as a routine recurring item to do on behalf of the City of Fort Worth.• 457 Member Fiduciary Training Deferred compensation, defined contribution plan, providers, consultants, investment managers, and record keepers have all done a pretty good job to get	
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DEFERRED COMPENSATION COMMITTEE MEETING MINUTES

	<p>people in plans and to keep them in plans. Giving them investment options for retirement. The chart shows defined contribution assets versus pension assets. The next slide is dedicated to retirement income options currently as it exists in our plan lineup. Within our plan as it stands today, the target date funds that we have are managed through retirement so the asset allocation can be used to shift.</p> <ul style="list-style-type: none"> • Handbook Subcommittee Update – Joanne Hinton The handbook committee has met. We have reviewed everything and Tony has made some minor recommendations. We are moving forward and hope to have the full committee review in January. • Future meeting dates Joanne asked if we’d like to try to meet in person and if TIAA can travel yet. Changing the May 27th date to June 3rd. TIAA is not allowed to travel just yet but it might open up in Spring of 2022. Daryl suggested that we remain virtual until the June 3rd meeting. We will shoot for an in person meeting that date. 	<p>Tony to meet with Donna to discuss adding the 2065 fund.</p>
Future Agenda Items	<ul style="list-style-type: none"> • Michael Thomas to present year end for 2021 • 2065 Fund, Donna will check to make sure that it is just administrative to add this fund 	
Public Comment	None	
Adjourn	The committee meeting was adjourned at 10:43am by the Chair.	

Approval of Meeting Minutes _____

Investment Performance Review
Period Ending December 31, 2021

**City of Fort Worth
457 Deferred Compensation Plan**



On behalf of everyone at AndCo, we want to Thank You for the opportunity to serve and the trust you place in us! 2021 marked another unique year as society continued to deal with the effects of the global pandemic. While this environment caused all organizations to reassess their business models and service approach, AndCo has remained steadfast in our belief and conviction that the best way to service our valued clients is within a model that is independent, singularly focused, customized, and passionately delivered. These four AndCo principles drive our service approach and desire to exceed your expectations. We take our role as your consultant and trusted advisor seriously and will continue working hard to maintain your confidence.

Looking back at 2021, we would like to provide a brief update on the firm. We advise on approximately \$123 billion in client assets, as of June 30, 2021. 2021 also marked the 21st straight year of revenue growth for the firm. We continue to reinvest 100% of our net profits back into the organization so that we can continue to evolve and adapt within a market environment that is constantly changing and challenging. Put simply, stasis is not 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, we continued to make personnel and technology investments within the firm. Our personnel investments focused on further enhancing departmental service levels and narrowing perceived gaps. We continued to invest in our proprietary software system to more effectively and efficiently compile and share information across departments and ultimately better serve our clients. We also continued to build out our internal site (the intranet) so colleagues could stay connected with the firm and gain a deeper understanding of standard operating procedures and collectively service our clients the AndCo way. Our intranet also helped strengthen our internal brand and culture by pushing out a variety of daily firm updates, videos, and interactive posts to increase team member bonds to our values, core philosophies, and ultimately, brought the firm closer together. We believe these connections are increasingly important in the COVID environment when many team members remain wholly or partially remote and we will continue to explore innovative ways to be together in 2022.

As we start 2022, we are 87 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 departments including Research and Client Solutions, which will strengthen our alternative and public market research as well as our client service. We are also looking to add team members to our Consulting, Finance, Marketing, and IT departments.

While adding so many 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 push us closer to our vision of being a transformational organization viewed as the leader in our industry.

At the beginning of each year, we discuss the AndCo partnership and, when earned, announce new partners. This year I am thrilled to share two new team members were named partners at AndCo – Brian Green and Kerry Richardville. Brian has been with the firm for over 6 years and is currently a consultant based out of our Detroit, Michigan office. Kerry has been with AndCo for over 5 years and is a consultant based in Orlando. We could not be happier for both Brian and Kerry or more grateful for the contributions they have made to AndCo since joining the firm. Brian and Kerry represent what it means to be an AndCo team member, and we are honored and fortunate to have them serving our clients. With the addition of Brian and Kerry, we have 13 partners representing various departments at AndCo, which provides diverse perspectives and insight. Our growing partnership group continues to strengthen AndCo and reaffirm our belief that 100% employee management is vital to protecting our mission, vision, values, and the long-term success of our organization. We enter 2022 with an unwavering commitment to serve you the best we possibly can.

Coming off a year that provided many of our clients record returns, we recognize results going forward may be more challenging to obtain. Please know we will continue to invest and evolve our firm in aiming to meet these realities. We do not take any client relationship for granted and will continue to work tirelessly to serve, earn your trust, add value, and exceed your expectations. We are honored and humbled you have chosen AndCo as your partner.

In closing, and as we have stated since our rebrand in 2017, our name, AndCo, reminds us of who we work for every day - “Our Client” &Co. You will always be 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®
Brian Green
Bryan Bakardjiev, CFA®
Dan Johnson
Dan Osika, CFA®
Donna Sullivan
Evan Scussel, CFA®, CAIA®

Jacob Peacock, CPFA
Jason Purdy
Kerry Richardville, CFA®
Kim Spurlin, CPA
Steve Gordon
Troy Brown, CFA®

LEADERSHIP & MANAGEMENT

Mike Welker, CFA®
CEO

Bryan Bakardjiev, CFA®
COO

Kim Spurlin, CPA
CFO

Sara Searle
CCO

Stacie Runion
CHRO

Steve Gordon
Partner

Troy Brown, CFA®
Executive Director

Brooke Wilson, CIPM®
Client Solutions Director

Dan Johnson
Consulting Director

Daniel Kwasny, CIPM®
Client Solutions Director

Evan Scussel, CFA®, CAIA®
Research Director

Jack Evatt
Consulting Director

Jacob Peacock, CPFA
Consulting Director

Jason Purdy
I.T. Director

Molly Halcom
Marketing Director

Philip Schmitt
Research Director

Rachel Brignoni, MHR
People & Culture Director

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Bryan Bakardjiev, CFA®
Troy Brown, CFA®
Sara Searle

CONSULTING

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Brad Hess, CFA®, CPFA
Brendon Vavrica, CFP®
Brian Green
Chris Kuhn, CFA®, CAIA®
Christiaan Brokaw, CFA®
Dave West, CFA®
Doug Anderson
Gwelda Swilley
Ian Jones
James Ross
Jeff Kuchta, CFA®, CPFA
Jennifer Brozstek

Jennifer Gainfort, CFA®, CPFA
John Mellinger
John Thinnis, CFA®, CAIA®
Jon Breth, CFP®
Justin Lauver, Esq.
Kevin Vandolder, CFA®
Kerry Richardville, CFA®
Mary Nye
Michael Fleiner
Michael Holycross, CIMA®
Mike Bostler

Oleg Sydyak, CFA®, FSA, EA
Paul Murray, CPFA
Peter Brown
Tim Nash
Tim Walters
Tony Kay
Tyler Grumbles, CFA®, CIPM®, CAIA®

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Donna Sullivan
Albert Sauerland
Amy Foster
David Gough, CPFA
Don Delaney

Donnell Lehrer, CPFA
Grace Niebrzydowski
James Reno
Jeff Pruniski
Joe Carter, CPFA

Julio Garcia Rengifo
Kim Hummel
Meghan Haines
Misha Bell
Yoon Lee-Choi

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Robert Marquetti

COMPLIANCE
Allen Caldwell
Thay Arroyo

H.R.
Sara Schmedinghoff

OPERATIONS
Jerry Camel

MARKETING
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Kayleigh Greaser
Kim Goodearl
Lauren Kaufmann

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Chester Wyche
Real Estate & Real Assets

Dan Lomelino, CFA®
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David Julier
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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®, CAIA®
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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

Zac Chichinski, CFA®, CIPM®
Public Equity



87
EMPLOYEES

38 ADVANCED
DEGREES

23 CFA®

8 CAIA®

8 CPFA

6 CIPM®



4th Quarter 2021 Market Environment



The Economy

- The US economy faced headwinds from the Omicron variant during the quarter which likely had a negative impact on economic growth. Fortunately, despite higher transmission rates, the variant appears to be less likely to result in hospitalizations or significant health risks.
- Even with the variant, the demand for goods and services remained strong during the quarter and market expectations for 4th quarter US GDP growth range from 4% to 7%.
- The US labor market is nearing full employment with the unemployment rate falling to 3.9% in December. The pace of job growth slowed during the quarter with a three-month average of roughly +365,000. Despite the continued improvement in the labor market, workers are continuing to leave their employers in record numbers. This condition means the number of jobs available exceeds the number of unemployed workers. As a result, wage growth remains strong as employers compete to fill job openings.
- Persistently higher inflation readings forced the Fed to announce it was planning to end its bond purchase program earlier than expected. In addition, the Fed's December statement suggested that it could also begin raising short-term interest rates sooner than expected.

Equity (Domestic and International)

- US equities rose to all-time highs during the 4th quarter as investors expressed optimism about future economic growth and continued monetary support from the Fed. Large cap growth was the best performing domestic segment of the equity market relative to other US market capitalizations and styles.
- International equities lagged far behind their US counterparts during the 4th quarter. A key contributor to the muted performance was US dollar strength, which rose against both the Euro and Yen developed market currencies and most emerging market currencies. Emerging markets came under pressure as the Chinese property developer Evergrande defaulted during the quarter.

Fixed Income

- The combination of concerns related to the potential for rising US interest rates and persistent inflation acted as headwinds for fixed income performance during the quarter. US interest rates moved modestly higher during the quarter with the US 10-Year Treasury bond rising 2 basis points to close at 1.51%.
- Generally, performance across most bond markets sectors was positive during the quarter, led by US high yield corporate bonds and US Treasury Inflation-Protected Securities (TIPS).
- High yield bond's combination of higher coupons and a shorter maturity profile relative to high quality government bonds was the primary driver of their performance during the period.
- TIPS outperformed all other sectors during the quarter. US inflation remained substantially higher than the Fed's stated 2% long-term target average, and as a result, investors' expectations of future inflation increased.

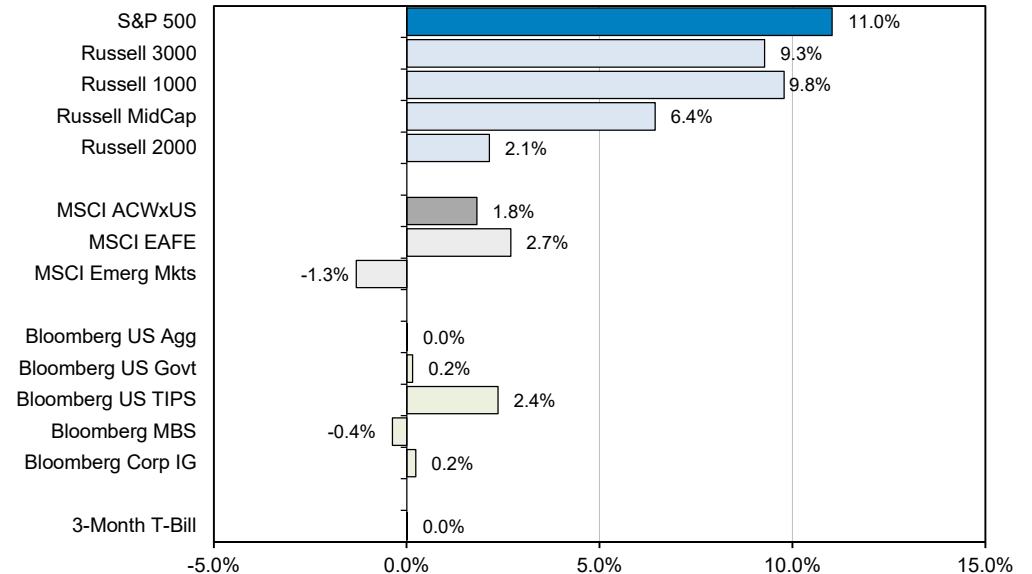
Market Themes

- Global central bank monetary policy diverged somewhat during the quarter as the Fed stated its intention to taper its bond purchases and potentially begin raising interest rates in 2022. Both the European Central Bank and the Bank of Japan reiterated their intent to remain accommodative as localized inflation remains low.
- While US economic growth remained strong, overall global economic growth slowed during the quarter primarily due to the rise in pandemic-related cases and shutdowns. It is likely that economic growth could face headwinds in 2022 as central bank stimulus begins to wear off.
- US equity markets – as measured by the S&P 500 Index – experienced their third consecutive year of double-digit positive performance led by large, growth-oriented companies. While equities have historically performed well during periods of rising inflation due to their links with strong economic growth, companies may face headwinds if they are unable to pass along price increases, which would result in lower profit margins.
- Longer-dated fixed income markets were negatively impacted by rising interest rates during the year. Despite the potential for increasing risks due to deteriorating credit conditions, corporate bonds could outperform given their higher coupons and shorter maturity profiles compared to higher quality, longer duration bonds.



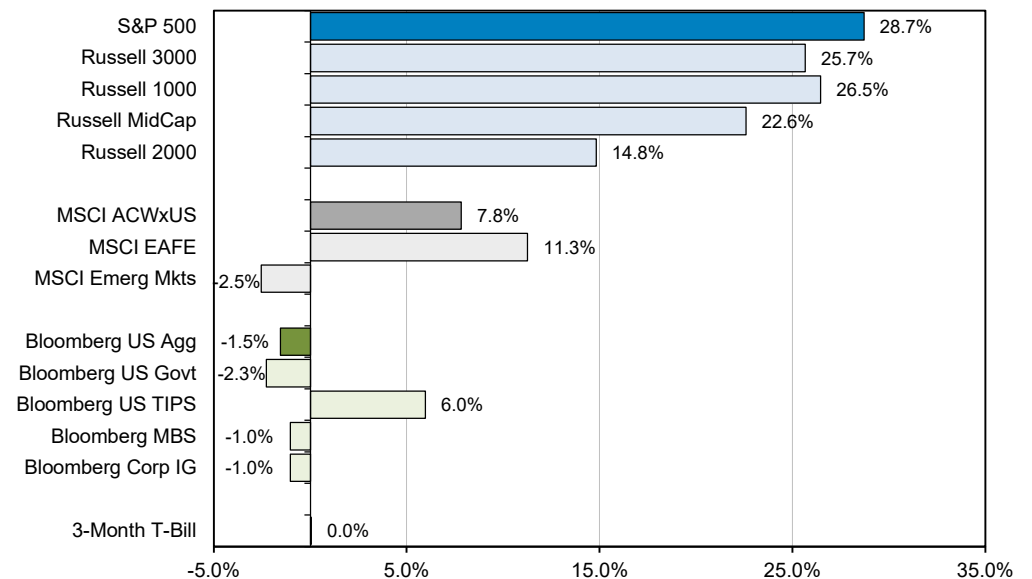
- Broad US equity markets experienced strong returns during the 4th quarter of 2021. There were a variety of factors that contributed to performance including improving corporate earnings, increased consumer spending and demand, and continued accommodative monetary support from the Fed. For the period, the S&P 500 large cap benchmark returned 11.0%, compared to 6.4% for the mid-cap and 2.1% for small cap indices.
- Similar to domestic markets, developed market international equities also posted positive results for the 4th quarter, albeit more muted. Europe and the UK were negatively affected by the increase in COVID cases related to the Omicron variant. Emerging markets declined primarily due to concerns related to future economic growth in China and the default of property developer Evergrande. China is the second largest country in the developed market index (9.4%) and its weight dominates the emerging markets index (32.5%). During the period, the MSCI EAFE Index returned of 2.7% while the MSCI Emerging Markets Index declined by -1.3%
- For the quarter, bond market performance was generally muted as concerns about higher interest rates and rising inflation acted as sizable headwinds. The outlier during the period was TIPS, which are highly sensitive to future inflation expectations and posted a return of 2.4%. The Bloomberg Barclays (BB) US Aggregate Index returned 0.0%, for the period, trailing Investment Grade Corporate bonds, which returned 0.2%.

Quarter Performance



- Developed equity markets were sharply higher over the trailing 1-year period. The combination of Improving economic fundamentals, continued support from the Fed, and improving investor expectations all combined to drive equity markets higher. All broad US equity market indexes traded at near-record levels during the quarter. The S&P 500 large cap stock index led equity market performance for the year with a return of 28.7%. The Russell 2000 small cap index returned a lower, but still strong, 14.8% for the year.
- Over the trailing 1-year period the developed market MSCI EAFE Index return of 11.3% outpaced the MSCI Emerging Markets Index return of -2.5%. While growth in developed markets improved throughout the year, emerging markets were negatively impacted from concerns related to index's dominant county weight to China.
- Bond market returns over the trailing 1-year period were broadly negative as rising interest rates and concerns regarding inflation detracted from performance. TIPS were the lone bright spot in the bond market with the TIPS Index returning 6.0% for the year.

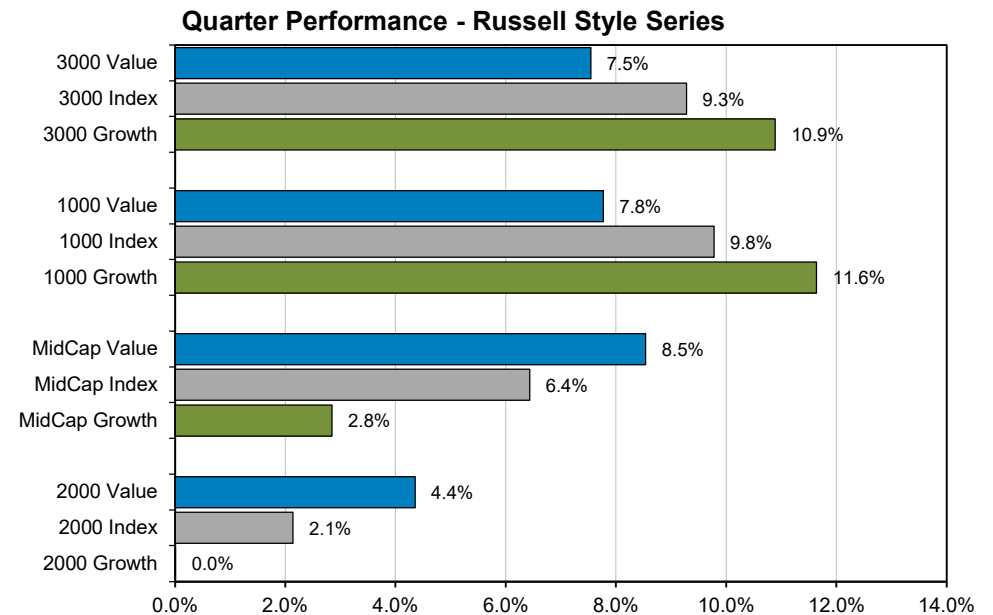
1-Year Performance



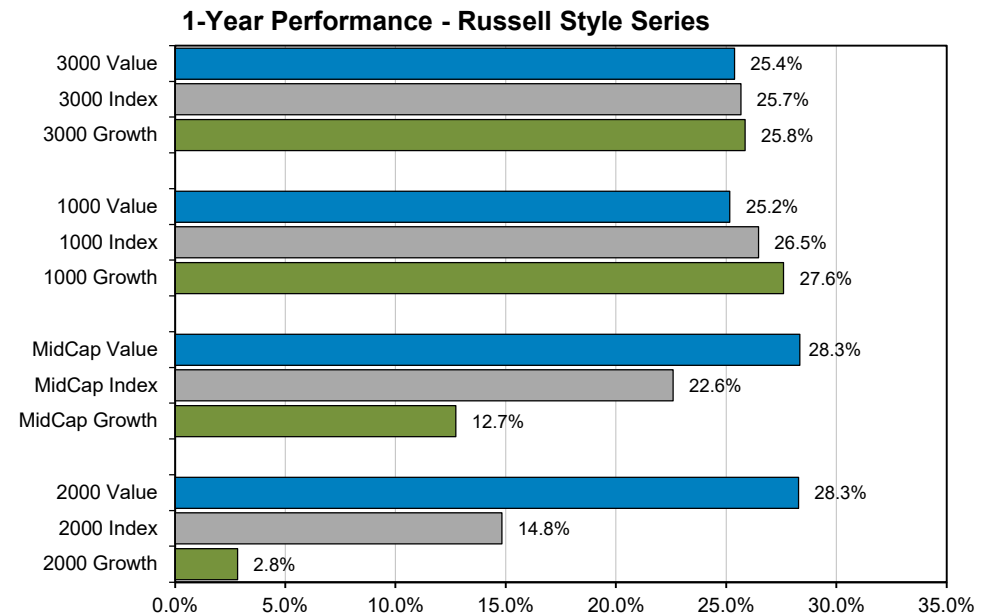
Source: Investment Metrics



- The equity market resumed its solid momentum during the 4th quarter as nearly all US equity benchmarks posted positive returns across both the style and market capitalization spectrums. Large cap stocks continued their leadership followed by mid and small cap issues. The Russell 1000 Index returned a strong 9.8% for the quarter and outpaced a 6.4% return of the Russell Mid Cap Index and a Russell 2000 Index return of 2.1%.
- Performance across styles and market capitalizations was disparate during the quarter. Large cap growth stocks sizably outpaced their value counterparts while mid and small cap value stocks outperformed growth stocks by an even wider margin. For the period, the Russell 1000 Growth Index was the best performing style index, posting a return of 11.6%. Mid cap value index performance was the next best performing segment, returning 8.5% for the quarter. Small cap growth stocks were the laggards during the period with the Russell 2000 Growth Index returning 0.0%.



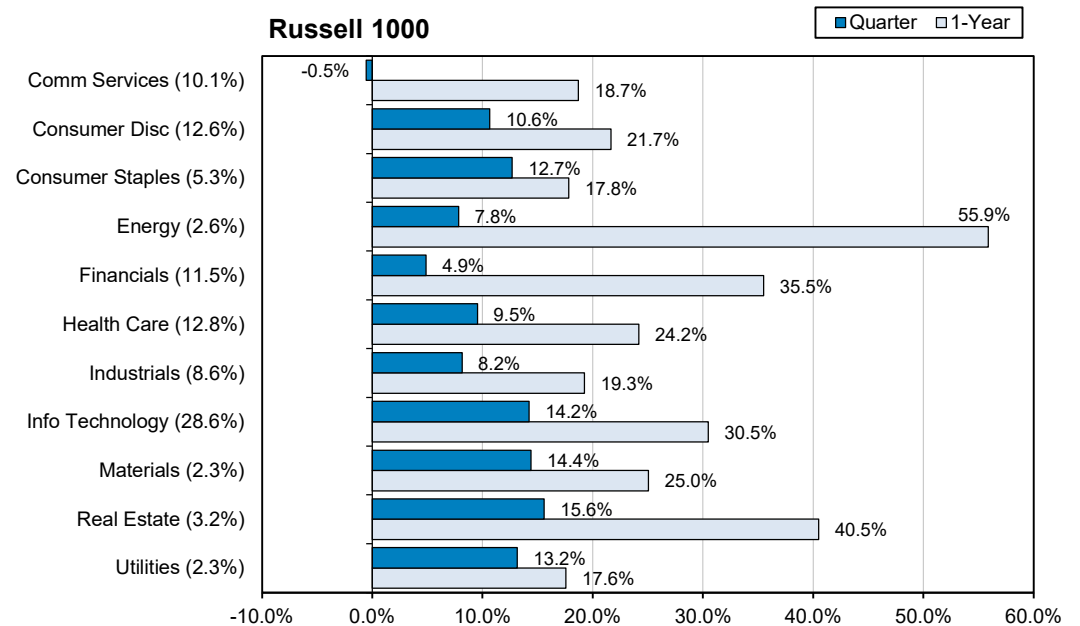
- Performance across all market capitalizations and styles was broadly robust over the trailing 1-year period. Much like the 4th quarter, the outlier for the year was small cap growth stocks. The Russell 2000 Growth Index return of 2.8% for the year significantly lagged both its mid and large cap growth index counterparts and Russell 2000 Value index return of 28.3%.
- While large cap style returns were relatively similar for the year, there was wide dispersion across mid and small style-based index performance. For the year, the Russell 1000 Growth Index rose by 27.6% compared to a still robust 25.2% return for the Russell 1000 Value Index. Within mid and small cap benchmark performance, value dominated growth by double digits. The Russell 2000 Value Index and Russell Mid Cap Value Index both returned 28.3% for the period. In comparison, the Russell Mid Cap Growth Index returned 12.7%, while the Russell 2000 Growth Index returned only 2.8%.



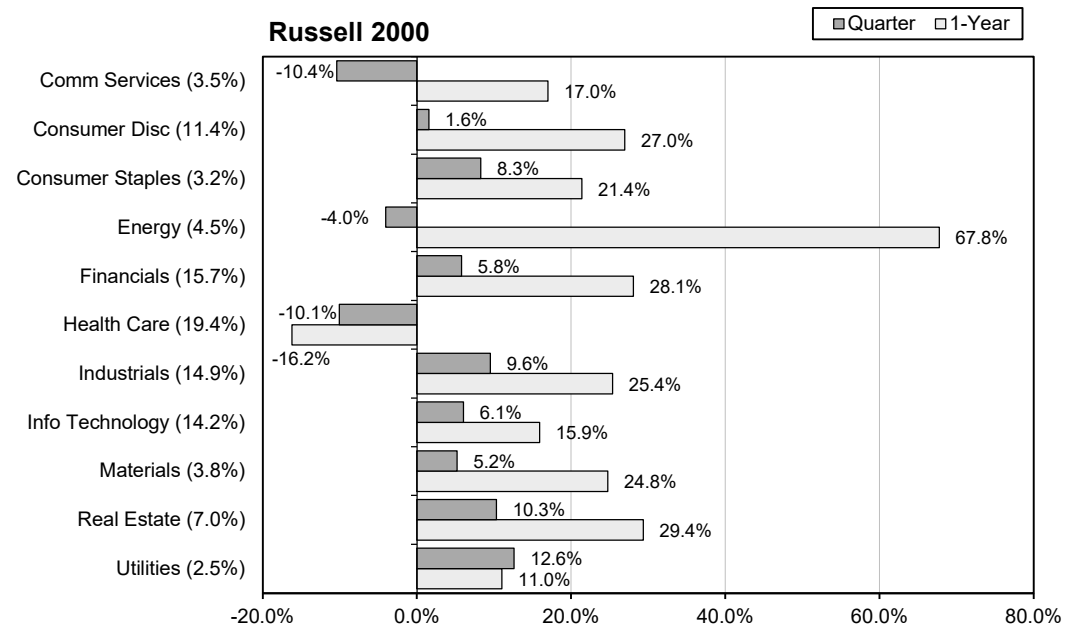
Source: Investment Metrics



- Economic sector performance was positive across ten of the eleven large cap economic sectors for the 4th quarter. Six sectors outpaced the return of the broad index during the period.
- Economically sensitive sectors like real estate (15.6%), materials (14.4%), information technology (14.2%), and utilities (13.2%) were the best performing sectors for the quarter. In general, companies in sectors with the ability to grow earnings and either guard against, or pass along, inflation experienced the strongest returns. While nearly all sectors experienced positive results, the communication services sector (-0.5%) lagged its peers and was the sole negative performer for the quarter.
- For the full year, four sectors exceeded the return of the broad large cap benchmark: energy (55.9%), real estate (40.5%), financials (35.5%), and information technology (30.5%). The weakest economic sector performance in the Russell 1000 for the year was utilities, which still managed to post a solid return of 17.6%.



- Small cap sector performance was more mixed with eight of the eleven economic sectors posting positive performance for the quarter and seven of them outpacing the return of the broader Russell 2000 Index. Utilities were the best performing sector during the quarter, returning 12.6%. The real estate (10.3%), industrials (9.6%), and consumer staples (8.3%) sectors also performed well during the period.
- For the trailing 1-year period, nine of the eleven sectors outpaced the broad benchmark's return. Outperforming sectors included energy (67.8%), real estate (29.4%), financials (28.1%), consumer discretionary (27.0%), industrials (25.4%), materials (24.8%), consumer staples (21.4%), communication services (17.0%), and information technology (15.9%). The combination of a steadily improving economy, improving corporate fundamentals, easy monetary policy, and rising inflationary pressures were all tailwinds for the robust performance in these sectors.



Source: Morningstar Direct
 As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency, post creation of the Communication Services sector.



The Market Environment
Top 10 Index Weights & Quarterly Performance for the Russell 1000 & 2000
As of December 31, 2021

Top 10 Weighted Stocks				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Apple Inc	6.11%	25.7%	34.6%	Information Technology
Microsoft Corp	5.65%	19.5%	52.5%	Information Technology
Amazon.com Inc	3.23%	1.5%	2.4%	Consumer Discretionary
Alphabet Inc Class A	1.94%	8.4%	65.3%	Communication Services
Tesla Inc	1.91%	36.3%	49.8%	Consumer Discretionary
Alphabet Inc Class C	1.81%	8.6%	65.2%	Communication Services
Meta Platforms Inc Class A	1.77%	-0.9%	23.1%	Communication Services
NVIDIA Corp	1.57%	42.0%	125.5%	Information Technology
Berkshire Hathaway Inc Class B	1.22%	9.5%	29.0%	Financials
UnitedHealth Group Inc	1.05%	28.9%	45.2%	Health Care

Top 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Arista Networks Inc	0.08%	67.3%	97.9%	Information Technology
Builders FirstSource Inc	0.04%	65.7%	110.0%	Industrials
New Relic Inc	0.01%	53.2%	68.1%	Information Technology
Teradyne Inc	0.06%	49.9%	36.8%	Information Technology
Ciena Corp	0.03%	49.9%	45.6%	Information Technology
ON Semiconductor Corp	0.06%	48.4%	107.5%	Information Technology
Ford Motor Co	0.18%	47.4%	137.5%	Consumer Discretionary
Dollar Tree Inc	0.07%	46.8%	30.1%	Consumer Discretionary
Marvell Technology Inc	0.16%	45.2%	84.6%	Information Technology
Rexford Industrial Realty Inc	0.03%	43.4%	67.8%	Real Estate

Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Peloton Interactive Inc	0.02%	-58.9%	-76.4%	Consumer Discretionary
Everbridge Inc	0.01%	-55.4%	-54.8%	Information Technology
Chegg Inc	0.01%	-54.9%	-66.0%	Consumer Discretionary
Upstart Holdings Inc Ordinary Shares	0.02%	-52.2%	271.3%	Financials
StoneCo Ltd Class A	0.01%	-51.4%	-79.9%	Information Technology
Vroom Inc Ordinary Shares	0.00%	-51.1%	-73.7%	Consumer Discretionary
Paysafe Ltd Ord Shares - Class A	0.01%	-49.5%	N/A	Information Technology
Virgin Galactic Holdings Inc Shs A	0.01%	-47.1%	-43.6%	Industrials
DraftKings Inc Ord Shares - Class A	0.02%	-43.0%	-41.0%	Consumer Discretionary
DocuSign Inc	0.07%	-40.8%	-31.5%	Information Technology

Top 10 Weighted Stocks				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
AMC Entmt Hldgs Inc Class A	0.47%	-28.5%	1,183.0%	Communication Services
Synaptics Inc	0.38%	61.1%	200.3%	Information Technology
Lattice Semiconductor Corp	0.35%	19.2%	68.2%	Information Technology
EastGroup Properties Inc	0.31%	37.4%	68.4%	Real Estate
BJ's Wholesale Club Holdings Inc	0.31%	21.9%	79.6%	Consumer Staples
Tetra Tech Inc	0.31%	13.8%	47.5%	Industrials
Saia Inc	0.30%	41.6%	86.4%	Industrials
Ovintiv Inc	0.30%	3.0%	138.4%	Energy
Tenet Healthcare Corp	0.29%	23.0%	104.6%	Health Care
WillScot Mobile Mini Holdings Corp	0.29%	28.8%	76.3%	Industrials

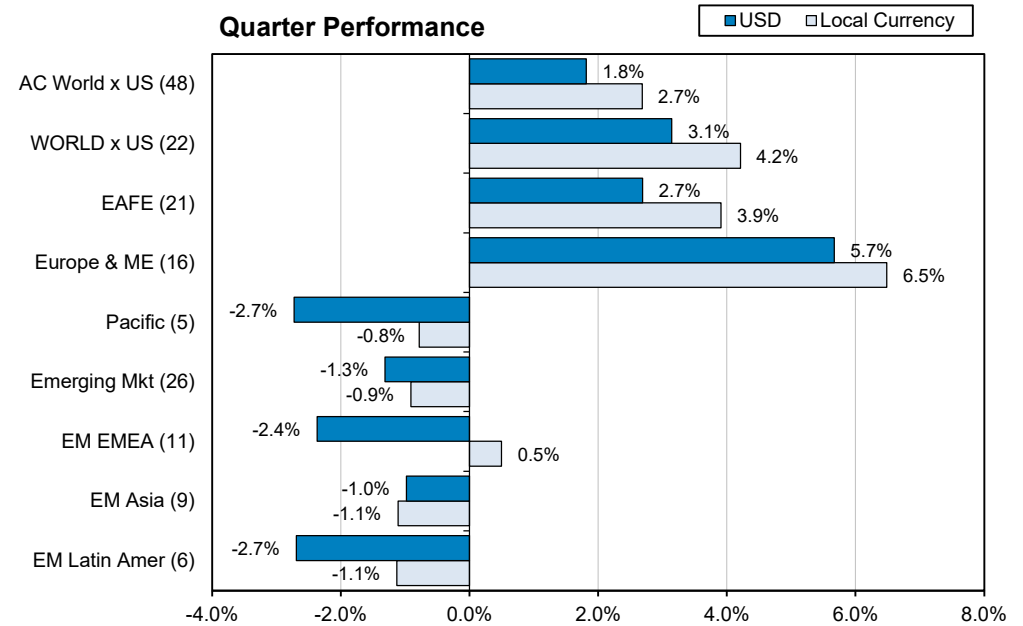
Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Adicet Bio Inc Ordinary Shares	0.01%	123.1%	24.5%	Health Care
Yellow Corp Ordinary Shares	0.02%	122.9%	184.3%	Industrials
R.R.Donnelley & Sons Co	0.03%	119.1%	398.2%	Industrials
ChemoCentryx Inc	0.07%	112.9%	-41.2%	Health Care
iRhythm Technologies Inc	0.12%	101.0%	-50.4%	Health Care
BlueLinX Holdings Inc	0.03%	95.9%	227.3%	Industrials
Kezar Life Sciences Inc	0.02%	93.5%	220.3%	Health Care
Alpha & Omega Semiconductor Ltd	0.04%	93.1%	156.2%	Information Technology
Protagonist Therapeutics Inc	0.05%	93.0%	69.6%	Health Care
Clearfield Inc	0.03%	91.2%	241.5%	Information Technology

Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Allakos Inc	0.01%	-90.8%	-93.0%	Health Care
Cortextyme Inc	0.01%	-86.2%	-54.6%	Health Care
Rafael Hldgs Inc Ord Shares - B	0.00%	-83.4%	-78.1%	Real Estate
Adagio Therapeutics Inc Ord Shares	0.01%	-82.8%	N/A	Health Care
Atea Pharmaceuticals Inc Ord Shs	0.02%	-74.5%	-78.6%	Health Care
Eros STX Global Corp	0.00%	-73.9%	-86.8%	Communication Services
Reata Pharmaceuticals Inc A	0.02%	-73.8%	-78.7%	Health Care
Generation Bio Co Ordinary Shares	0.01%	-71.8%	-75.0%	Health Care
BeyondSpring Inc	0.00%	-71.3%	-62.9%	Health Care
Deciphera Pharmaceuticals Inc	0.01%	-71.2%	-82.9%	Health Care

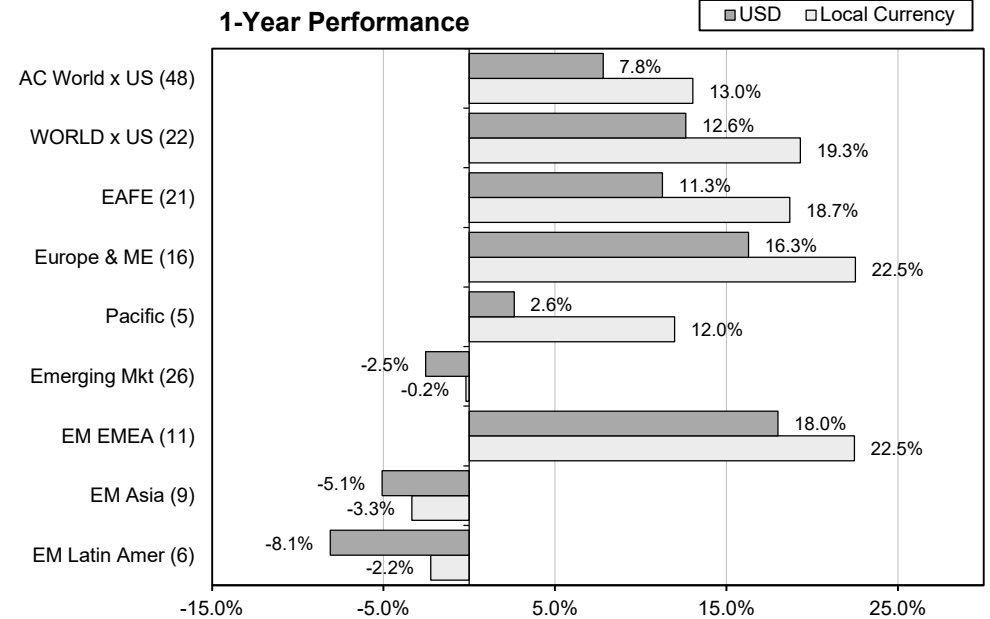
Source: Morningstar Direct



- Most developed market international equity indexes tracked in the chart posted positive returns in both US dollar (USD) and local currency terms for the 4th quarter. The provincial outlier during the period was the Pacific region which declined during the period on concerns about China and the country's future economic growth. The developed market MSCI EAFE Index returned 2.7% in USD and 3.9% in local currency (LC) terms for the period, while the MSCI Emerging Markets Index declined by -1.3% in USD and -0.9% in local currency terms.



- The trailing 1-year results for international developed markets were positive across all regions and currencies. The MSCI EAFE Index returned 11.3% in USD for the year and 18.7% in LC. Returns across emerging markets were more polarized by geography. While the MSCI Emerging Markets Index returned -2.5% in USD and -0.2% in LC, the EMEA (Europe, Middle East, and Africa) regional index's return of 18.0% in USD and 22.5% in LC, rivaled developed regional benchmark performance. In contrast, performance within the Latin America and Asia regional benchmarks detracted from emerging market index performance with the EM Latin America Index returning -8.1% in USD and -2.2% in LC, while EM Asia posted a return of -5.1% in USD and -3.3% in LC.



Source: MSCI Global Index Monitor (Returns are Net)



The Market Environment
US Dollar International Index Attribution & Country Detail
As of December 31, 2021

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	4.5%	-5.6%	-5.7%
Consumer Discretionary	12.5%	2.9%	10.7%
Consumer Staples	10.3%	5.2%	7.3%
Energy	3.4%	-0.5%	22.9%
Financials	16.9%	1.2%	16.6%
Health Care	12.8%	3.0%	8.6%
Industrials	16.2%	2.6%	13.6%
Information Technology	9.7%	3.8%	20.9%
Materials	7.6%	5.9%	10.4%
Real Estate	2.8%	-0.5%	4.1%
Utilities	3.4%	8.8%	0.0%
Total	100.0%	2.7%	11.3%

MSCI - ACWxUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	6.1%	-2.8%	-6.9%
Consumer Discretionary	12.1%	-0.9%	-6.0%
Consumer Staples	8.6%	3.8%	5.3%
Energy	4.8%	-0.4%	26.0%
Financials	19.2%	1.9%	16.4%
Health Care	9.4%	0.1%	3.7%
Industrials	12.6%	2.6%	12.9%
Information Technology	13.6%	5.2%	15.4%
Materials	8.1%	3.6%	9.7%
Real Estate	2.4%	-2.3%	-2.2%
Utilities	3.1%	6.8%	3.1%
Total	100.0%	1.8%	7.8%

MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	10.7%	-0.5%	-9.1%
Consumer Discretionary	13.5%	-8.2%	-29.1%
Consumer Staples	5.9%	-2.1%	-4.9%
Energy	5.6%	-3.8%	21.0%
Financials	19.4%	-0.4%	8.2%
Health Care	4.2%	-15.4%	-19.8%
Industrials	5.1%	-0.3%	8.4%
Information Technology	22.7%	7.4%	9.9%
Materials	8.6%	-2.9%	9.3%
Real Estate	2.0%	-8.5%	-21.8%
Utilities	2.4%	0.7%	12.4%
Total	100.0%	-1.3%	-2.5%

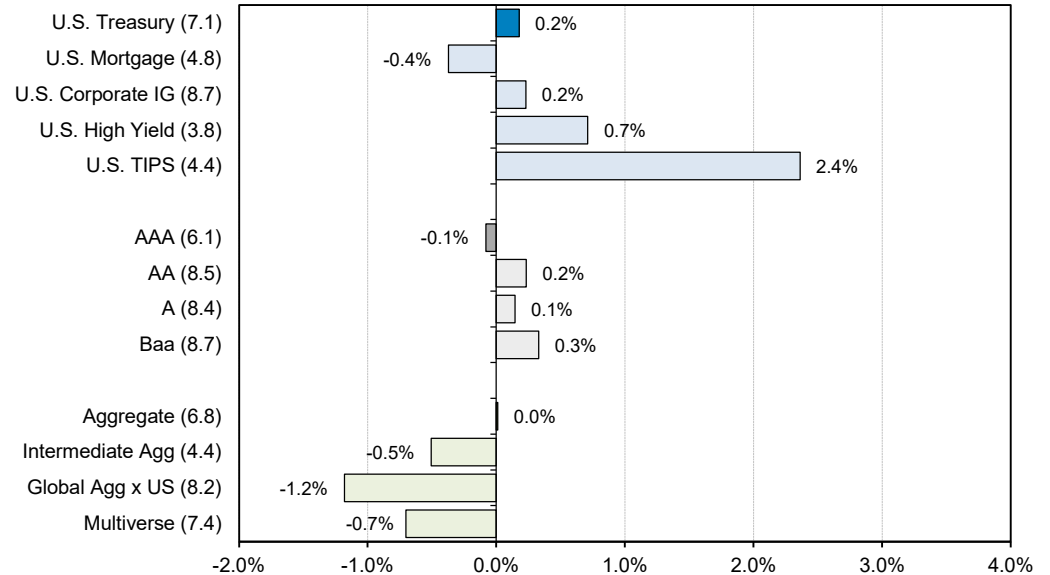
Country	MSCI-EAFE Weight	MSCI-ACWxUS Weight	Quarter Return	1-Year Return
Japan	22.5%	14.3%	-4.0%	1.7%
United Kingdom	14.6%	9.3%	5.6%	18.5%
France	11.7%	7.5%	7.1%	19.5%
Switzerland	10.5%	6.7%	12.8%	19.3%
Germany	8.9%	5.6%	0.8%	5.3%
Australia	6.9%	4.4%	2.1%	9.4%
Netherlands	4.9%	3.1%	3.5%	27.6%
Sweden	4.0%	2.5%	6.1%	21.9%
Hong Kong	2.8%	1.8%	-3.6%	-3.9%
Denmark	2.7%	1.7%	5.8%	19.1%
Italy	2.5%	1.6%	5.6%	15.0%
Spain	2.2%	1.4%	-1.4%	1.4%
Singapore	1.2%	0.8%	-3.4%	5.7%
Finland	1.0%	0.7%	3.0%	9.0%
Belgium	0.9%	0.6%	1.7%	2.2%
Israel	0.7%	0.5%	7.0%	15.2%
Ireland	0.7%	0.4%	0.6%	8.5%
Norway	0.7%	0.4%	-0.3%	22.0%
Austria	0.2%	0.2%	5.2%	41.5%
New Zealand	0.2%	0.1%	-4.0%	-17.1%
Portugal	0.2%	0.1%	1.9%	0.2%
Total EAFE Countries	100.0%	63.6%	2.7%	11.3%
Canada		7.5%	7.2%	26.0%
Total Developed Countries		71.1%	3.1%	12.6%
China		9.4%	-6.1%	-21.7%
Taiwan		4.7%	8.4%	26.1%
Korea		3.7%	-0.9%	-8.4%
India		3.6%	-0.2%	26.2%
Brazil		1.2%	-6.5%	-17.4%
Russia		1.0%	-9.2%	19.0%
Saudi Arabia		1.0%	-0.7%	37.7%
South Africa		0.9%	-0.5%	3.6%
Mexico		0.6%	6.2%	22.5%
Thailand		0.5%	3.0%	-1.4%
Indonesia		0.4%	6.4%	2.1%
Malaysia		0.4%	1.8%	-6.2%
United Arab Emirates		0.3%	10.3%	50.2%
Poland		0.2%	-2.4%	8.5%
Qatar		0.2%	2.6%	15.2%
Philippines		0.2%	3.7%	-3.9%
Kuwait		0.2%	2.3%	30.9%
Chile		0.1%	-10.5%	-17.3%
Hungary		0.1%	-9.7%	12.1%
Turkey		0.1%	-11.2%	-28.4%
Peru		0.1%	10.4%	-19.9%
Greece		0.1%	-3.6%	8.0%
Colombia		0.1%	-2.7%	-13.8%
Czech Republic		0.0%	12.3%	55.0%
Egypt		0.0%	18.3%	7.5%
Argentina		0.0%	-0.4%	21.0%
Pakistan		0.0%	-2.7%	-24.9%
Total Emerging Countries		28.9%	-1.3%	-2.5%
Total ACWxUS Countries		100.0%	1.8%	7.8%

Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)
As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency, post creation of the Communication Services sector.



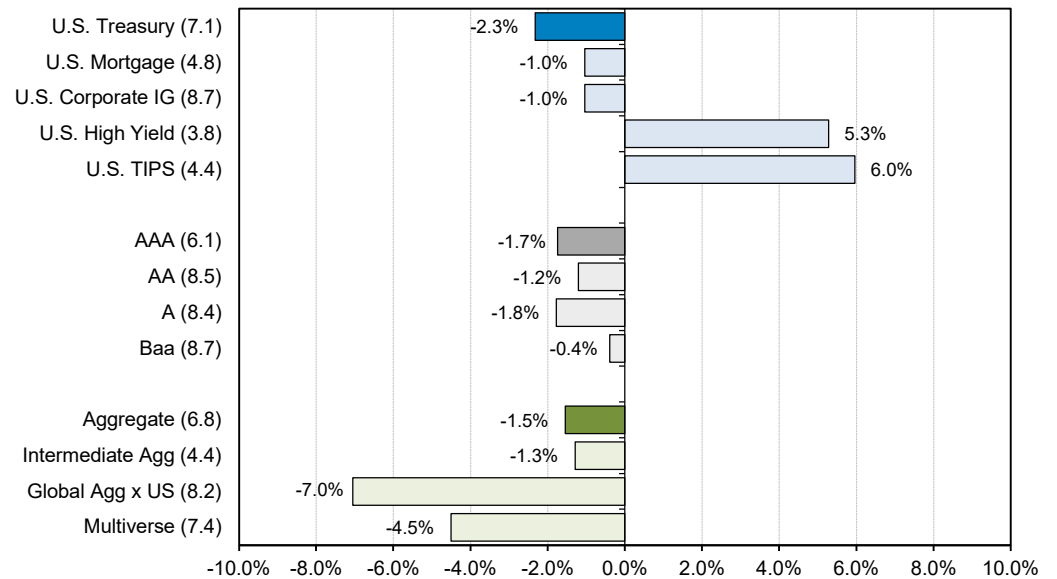
- Fixed income market results were mixed during the 4th quarter. While the Fed remained supportive with bond purchases, concerns about rising inflation and potentially higher interest rates detracted from performance. US Treasury yields were mixed across the maturity curve but remained low.
- The return for the Bloomberg US Aggregate Bond Index, the bellwether investment grade benchmark, was flat for the period at 0.0%.
- Performance across the investment grade index's segments was mixed during the period with the US Corporate Investment Grade bonds returning 0.2% while the US Mortgage index component fell -0.4%.
- US TIPS posted the quarter's strongest bond performance with a return of 2.4%. High yield issues were also positive, posting a return of 0.7%.
- Outside of domestic markets, the BB Global Aggregate ex US Index posted a return of -1.2% for the quarter. Like international stocks, global bond index performance was negatively impacted by the strengthening USD, which acted as a drag on domestic index returns.

Quarter Performance



- Over the trailing 1-year period, domestic investment grade benchmark performance was skewed lower by higher quality government bonds (-2.3%) as well as negative performance from investment grade corporate (-1.0%) and mortgage-backed (-1.0%) bonds. Aided by higher inflation, only US TIPS managed to generate positive returns during the year with a return of 6.0%. The bellwether Bloomberg US Aggregate Bond Index declined by -1.5% for the year.
- Lower quality high yield bonds delivered solid performance during the year supported by both higher coupons and a lower maturity profile, which acted as tailwinds. The Bloomberg US High Yield Index returned of 5.3% for the period.
- Performance for non-US bonds was broadly negative for the year with the developed market Bloomberg Global Aggregate ex US Index declining by -7.0%. The combination of rising interest rates overseas, a longer maturity profile, and USD strength for the year hindered index performance.

1-Year Performance

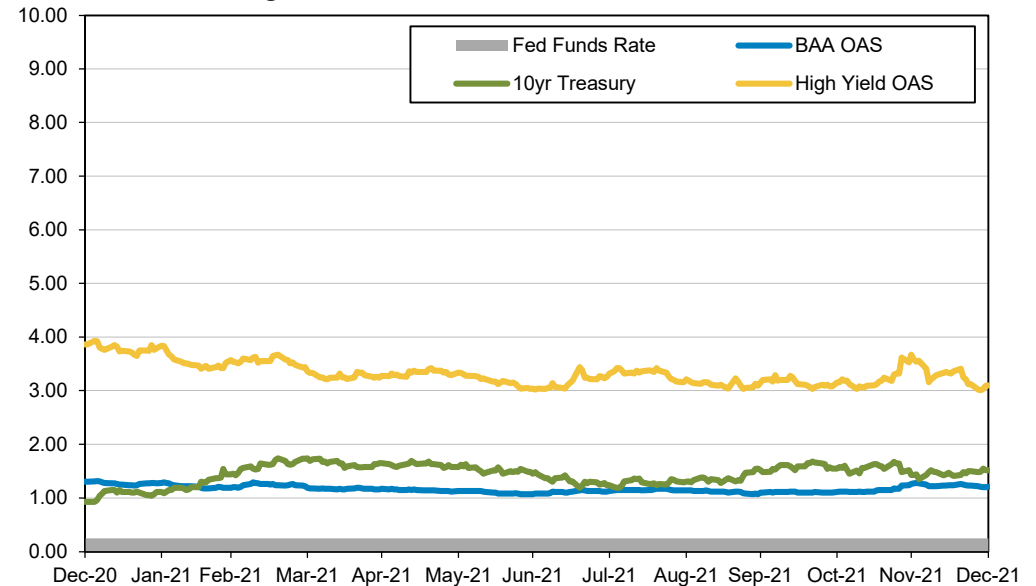


Source: Bloomberg

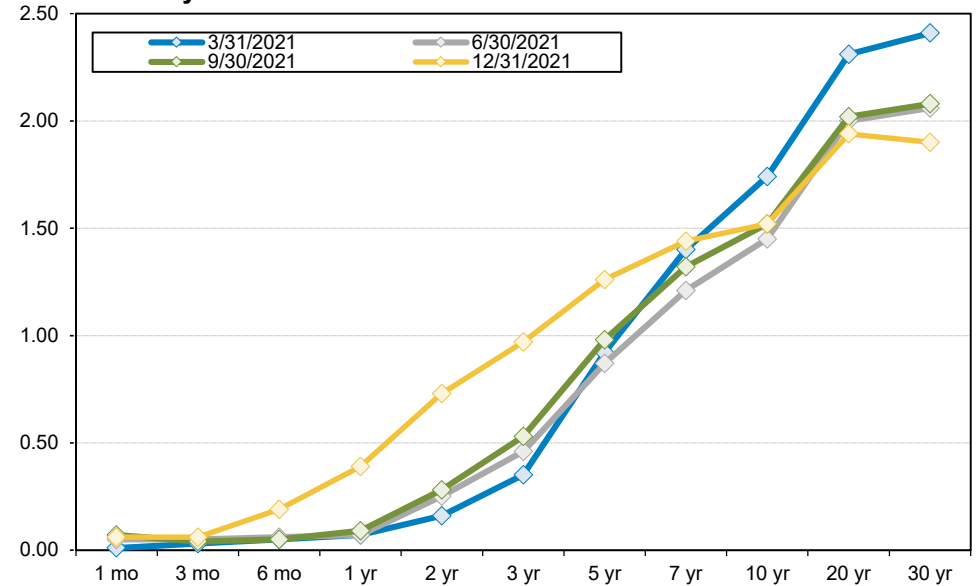


- The gray band across the graph illustrates the range of the current Fed Funds Rate. Over the past year, the Fed's target rate range has remained unchanged at 0.00% to 0.25%. During its recent December meeting, the Federal Open Market Committee (FOMC) stated its intent to keep interest rates unchanged in the near-term, while also signaling that it would end its bond purchase program earlier than expected and foreshadowing that interest rates could begin to rise early next year.
- The yield on the US 10-year Treasury (green line) ended the year higher as economic growth accelerated in anticipation of the Fed beginning the process of normalizing interest rates. After reaching a high of 1.74% during the 1st quarter of 2021, interest rates traded within a narrow range for the remainder of the year. The yield on the US 10-year Treasury was 1.52% on December 31st.
- 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 narrowed slightly from 1.30% to 1.21%. A narrowing of the premium measured by the High Yield OAS showed investors' willingness to take on credit risk during the year as the spread tightened from 3.86% to 3.10% over the course 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. While short-term rates are largely pinned to the Fed Funds Rate, beginning in the 1st quarter of 2021, intermediate-term interest rates began to move higher as investors' expectations for higher future interest rates increased. In contrast, longer-term interest rates declined throughout the year over concerns that future economic growth may slow due to rising interest rates.

1-Year Trailing Market Rates



Treasury Yield Curve



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

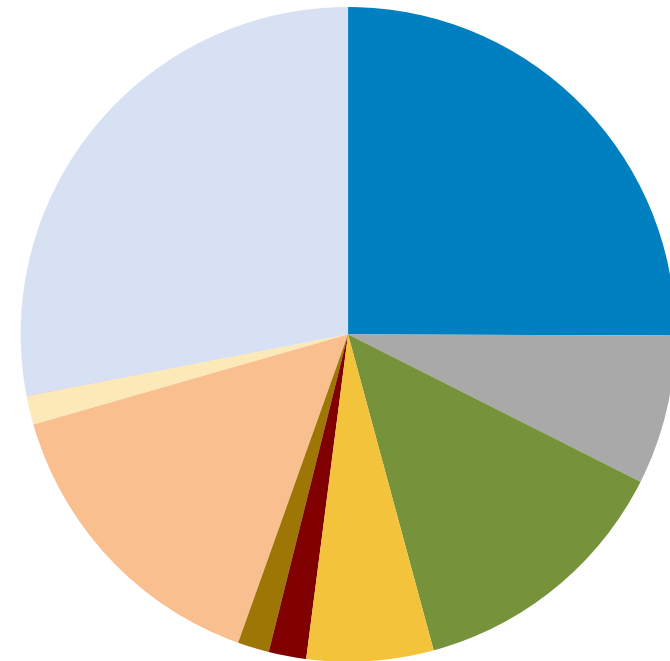
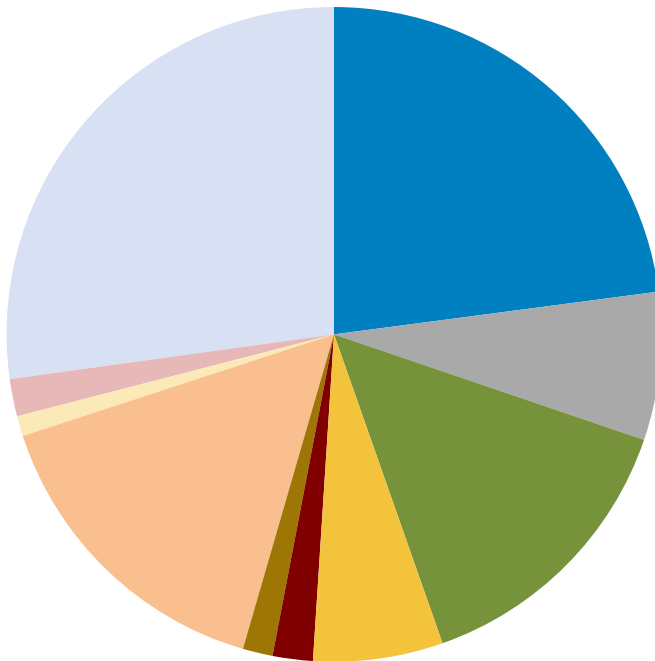


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December 31, 2020 : \$304,210,921

December 31, 2021 : \$343,355,449



Asset Allocation by Segment

Segments	Market Value	Allocation
Domestic Equity	69,703,147	22.9
International Equity	22,233,405	7.3
Global Equity	43,813,932	14.4
Domestic Fixed Income	19,475,505	6.4
Loans	6,034,346	2.0
Other Fixed Income	4,507,709	1.5
VT Plus	47,105,931	15.5
Real Estate	3,049,692	1.0
Cash	5,591,205	1.8
Balanced	82,696,049	27.2

Asset Allocation by Segment

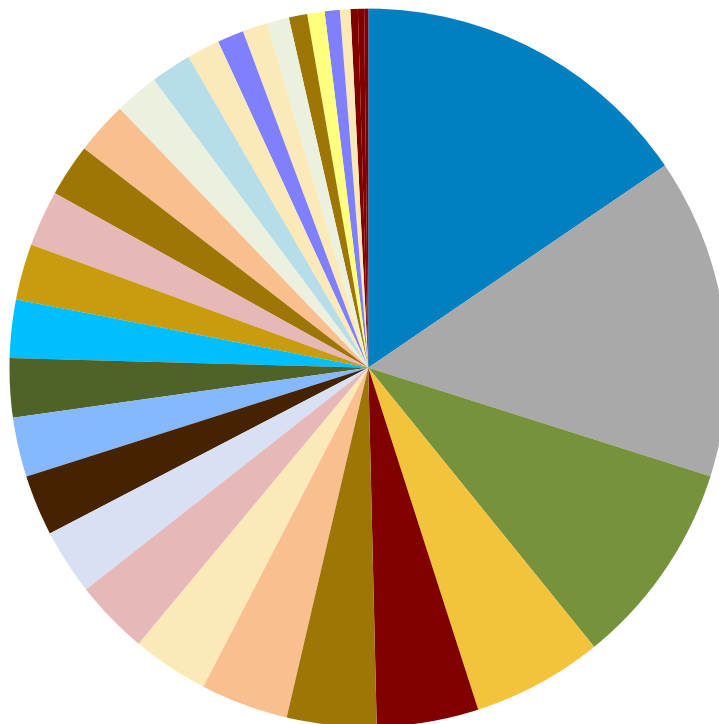
Segments	Market Value	Allocation
Domestic Equity	86,013,732	25.1
International Equity	25,342,107	7.4
Global Equity	45,868,390	13.4
Domestic Fixed Income	21,479,608	6.3
Loans	6,369,884	1.9
Other Fixed Income	5,330,021	1.6
VT Plus	51,868,532	15.1
Real Estate	4,830,075	1.4
Cash	69,130	0.0
Balanced	96,183,969	28.0



Asset Allocation By Manager
457 Total Fund
As of December 31, 2021

December 31, 2020 : \$304,210,921

Allocation



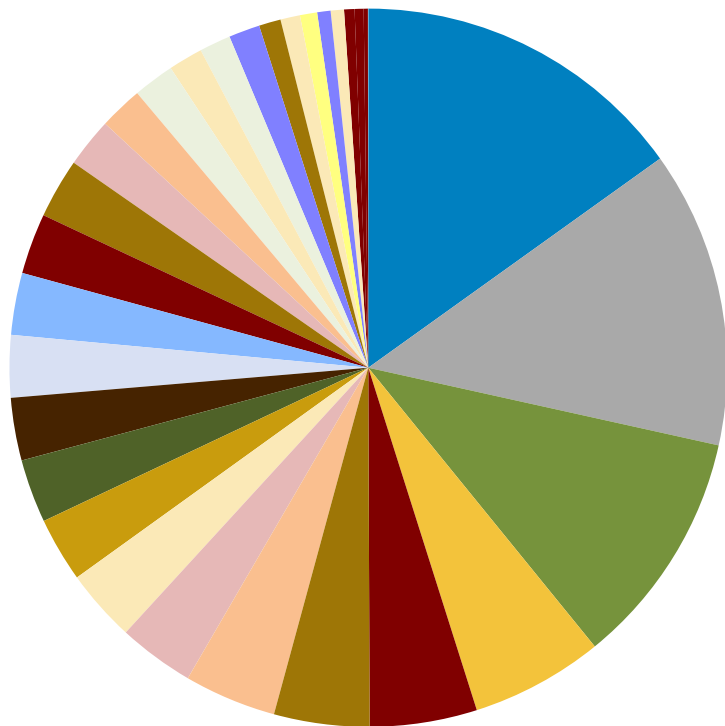
	Market Value	Allocation
MissionSquare PLUS Fund R10	47,105,931	15.5
American Funds The New Economy Fund (RNGHX)	43,813,932	14.4
Vanguard Institutional Index (VINIX)	28,221,710	9.3
TIAA-CREF Lifecycle 2035 (TCYPX)	17,910,369	5.9
TIAA-CREF Lifecycle 2030 (TCHPX)	13,910,739	4.6
Metropolitan West Total Return Bond (MWTIX)	12,268,118	4.0
TIAA-CREF Lifecycle 2040 (TCZPX)	12,000,486	3.9
Carillon Scout Mid Cap (UMBMX)	10,486,363	3.4
TIAA-CREF Lifecycle 2025 (TCQPX)	10,218,499	3.4
American Funds SmallCap World Fund (RSLDX)	9,015,541	3.0
TIAA-CREF International Equity Index (TRIPX)	8,307,253	2.7
Goldman Sachs Small Cap Value (GSSIX)	8,146,695	2.7
TIAA-CREF Lifecycle 2045 (TTFPX)	8,064,785	2.7
Invesco Diversified Dividend (DDFIX)	7,972,057	2.6
Vanguard Small-Cap Index Fund (VSMAX)	7,657,345	2.5
TIAA-CREF Lifecycle 2020 (TCWPIX)	7,636,443	2.5
Vanguard Mid-Cap Index Fund (VIMAX)	7,218,976	2.4
Vanguard Total Bond Market Index (VBTLX)	7,207,387	2.4
Loan Fund	6,034,346	2.0
Vanguard Treasury Money Market (VUSXX)	5,591,205	1.8
BlackRock High Yield Bond (BHYIX)	4,507,709	1.5
TIAA-CREF Lifecycle 2050 (TCLPX)	3,631,761	1.2
TIAA-CREF Lifecycle 2015 (TCFPX)	3,404,327	1.1
DFA Real Estate (DFREX)	3,049,692	1.0
DFA Emerging Markets Small Cap (DEMSX)	2,528,989	0.8
Lazard International Equity R6 (LZIEIX)	2,381,622	0.8
TIAA-CREF Lifecycle 2010 (TCTPX)	2,056,643	0.7
TIAA-CREF Lifecycle 2055 (TTRPX)	1,428,601	0.5
TIAA-CREF Lifecycle Retirement Income (TPILX)	1,007,525	0.3
TIAA-CREF Self Directed	856,475	0.3
TIAA-CREF Lifecycle 2060 (TLXPX)	569,396	0.2
Vanguard Equity-Income (VEIRX)	-	0.0



Asset Allocation By Manager
457 Total Fund
As of December 31, 2021

December 31, 2021 : \$343,355,449

Allocation



	Market Value	Allocation
MissionSquare PLUS Fund R10	51,868,532	15.1
American Funds The New Economy Fund (RNGHX)	45,868,390	13.4
Vanguard Institutional Index (VINIX)	36,622,360	10.7
TIAA-CREF Lifecycle 2035 (TCYPX)	20,540,366	6.0
TIAA-CREF Lifecycle 2030 (TCHPX)	16,581,643	4.8
Metropolitan West Total Return Bond (MWTIX)	14,735,882	4.3
TIAA-CREF Lifecycle 2040 (TCZPX)	14,251,426	4.2
TIAA-CREF Lifecycle 2025 (TCQPX)	11,757,481	3.4
Carillon Scout Mid Cap (UMBMX)	11,222,461	3.3
Vanguard Small-Cap Index Fund (VSMAX)	9,977,523	2.9
TIAA-CREF Lifecycle 2045 (TTFPX)	9,813,172	2.9
TIAA-CREF International Equity Index (TRIPX)	9,679,815	2.8
American Funds SmallCap World Fund (RSLDX)	9,618,793	2.8
Goldman Sachs Small Cap Value (GSSIX)	9,576,445	2.8
Vanguard Equity-Income (VEIRX)	9,371,556	2.7
Vanguard Mid-Cap Index Fund (VIMAX)	9,243,389	2.7
TIAA-CREF Lifecycle 2020 (TCWPX)	7,629,390	2.2
Vanguard Total Bond Market Index (VBTLX)	6,743,726	2.0
Loan Fund	6,369,884	1.9
BlackRock High Yield Bond (BHYIX)	5,330,021	1.6
DFA Real Estate (DFREX)	4,830,075	1.4
TIAA-CREF Lifecycle 2050 (TCLPX)	4,819,283	1.4
DFA Emerging Markets Small Cap (DEMSX)	3,381,662	1.0
TIAA-CREF Lifecycle 2015 (TCFPX)	3,026,226	0.9
Lazard International Equity R6 (LZIEX)	2,661,837	0.8
TIAA-CREF Lifecycle 2010 (TCTPX)	2,074,279	0.6
TIAA-CREF Lifecycle 2055 (TTRPX)	2,055,795	0.6
TIAA-CREF Self Directed	1,601,656	0.5
TIAA-CREF Lifecycle Retirement Income (TPILX)	1,389,011	0.4
TIAA-CREF Lifecycle 2060 (TLXPX)	644,239	0.2
Vanguard Treasury Money Market (VUSXX)	69,130	0.0
Invesco Diversified Dividend (DDFIX)	-	0.0



**City of Fort Worth 457 Deferred Compensation Plan
Investment Option Performance Review**

As of December 31, 2021

Domestic Equity Funds	Manager Tenure	5 & 10 Year Return > Index		5 & 10 Year Return < 50th %-tile		5 & 10 Year Sharpe < 50th %-tile		Positive 5 & 10 Year Alpha		Watch List
Vanguard Equity-Income (VEIRX)	14.5	Yes	Yes	22	23	7	1	2.64	1.97	No
Carillon Scout Mid Cap (UMBMX)	15.3	No (1)	No (3)	16	22	23	29	-0.47 (1)	-0.89 (3)	No
Goldman Sachs Small Cap Value (GSSIX)	15.2	No (5)	Yes	45	30	38	20	0.35	0.74	No

International Equity Funds	Manager Tenure	5 & 10 Year Return > Index		5 & 10 Year Return < 50th %-tile		5 & 10 Year Sharpe < 50th %-tile		Positive 5 & 10 Year Alpha		Watch List
American Funds The New Economy Fund (RNGHX)	31.1	Yes	Yes	12	N/A (5)	14	N/A (5)	4.82	N/A	No
Lazard International Equity R6 (LZIEX)	30.1	No (5)	No (2)	67 (5)	33	53 (5)	19	-1.03 (5)	-0.19 (1)	No
American Funds SmallCap World Fund (RSLDX)	22.2	Yes	Yes	25	N/A (5)	25	N/A (5)	5.81	N/A	No
DFA Emerging Markets Small Cap (DEMSX)	12.0	No (2)	Yes	35	17	44	18	-0.39 (2)	0.64	No

Fixed Income & Other Funds	Manager Tenure	5 & 10 Year Return > Index		5 & 10 Year Return < 50th %-tile		5 & 10 Year Sharpe < 50th %-tile		Positive 5 & 10 Year Alpha		Watch List
Metropolitan West Total Return Bond (MWTIX)	24.9	Yes	Yes	26	4	4	1	0.58	1.34	No
BlackRock High Yield Bond (BHYIX)	14.2	Yes	Yes	12	8	18	12	0.10	0.31	No
DFA Real Estate (DFREX)	10.0	No (5)	No (5)	34	20	34	22	-0.26 (5)	-0.39 (5)	No

Fund meets criteria
Fund does not currently meet criteria
Fund has not met criteria for more than 4 quarters

"More than 4 quarters" evaluation criteria excludes Index Funds



Index Funds	Manager Tenure	5 & 10 Year Track. Error Rank		Watch List
Vanguard Institutional Index (VINIX)	21.2	1	1	No
Vanguard Mid-Cap Index (VIMAX)	23.8	1	1	No
Vanguard Small-Cap Index (VSMAX)	5.8	1	1	No
TIAA-CREF International Equity Index (TRIPX)	16.5	1	1	No
Vanguard Total Bond Market (VBTXX)	9.0	6	6	No

Lifecycle Funds	Manager Tenure	5 & 10 Year Return < 50th %-tile		5 & 10 Year Sharpe < 50th %-tile		Heightened Scrutiny
TIAA-CREF Lifecycle Retirement Income (TPILX)	14.3	21	6	43	25	No
TIAA-CREF Lifecycle 2010 (TCTPX)	15.9	16	11	46	41	No
TIAA-CREF Lifecycle 2015 (TCFPX)	15.9	21	20	54 (2)	36	No
TIAA-CREF Lifecycle 2020 (TCWPIX)	15.9	24	18	50 (1)	37	No
TIAA-CREF Lifecycle 2025 (TCQPX)	15.9	31	19	58 (2)	33	No
TIAA-CREF Lifecycle 2030 (TCHPX)	15.9	37	21	60 (2)	35	No
TIAA-CREF Lifecycle 2035 (TCYPX)	15.9	40	26	59 (2)	36	No
TIAA-CREF Lifecycle 2040 (TCZPX)	15.9	37	23	58 (2)	41	No
TIAA-CREF Lifecycle 2045 (TTFPX)	14.3	30	17	54 (1)	37	No
TIAA-CREF Lifecycle 2050 (TCLPX)	14.3	27	18	53 (1)	44	No
TIAA-CREF Lifecycle 2055 (TTRPX)	10.8	23	23	55 (1)	51 (2)	No
TIAA-CREF Lifecycle 2060 (TLXPX)	7.4	21	N/A (5)	58 (5)	N/A (5)	No

Fund meets criteria
Fund does not currently meet criteria
Fund has not met criteria for more than 4 quarters

"More than 4 quarters" evaluation criteria excludes Index Funds



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	4 th Quarter 2021	3 rd Quarter 2021	2 nd Quarter 2021	1 st Quarter 2021	4 th Quarter 2020
Total Assets (\$M)	\$343.4	\$328.7	\$328.1	\$312.5	\$304.2
Contributions	\$3,698,206	\$3,221,184	\$3,605,479	\$3,293,580	\$3,398,387
Transfers In	\$1,662,086	\$2,432,632	\$1,284,748	\$1,982,544	\$763,309
Distributions	\$3,387,974	\$3,332,868	\$5,099,363	\$6,480,647	\$6,981,160
Rollovers Out	\$1,278,270	\$1,197,830	\$3,069,840	\$3,268,220	\$3,960,000
Transfers Out	\$0	\$0	\$0	\$0	\$183,853
New Loans	\$706,991	\$775,063	\$814,733	\$538,138	\$330,253
No. of New Loans	49	54	55	31	33
Excess Plan Revenue Acct	\$69,130	\$69,130	\$68,838	\$68,532	\$68,886
Participants Contributing	2,999	2,999	2,994	3,003	2,992

Estimated amounts provided by TIAA



Asset Allocation & Performance

	Allocation		Performance(%)							
	Market Value \$	%	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	
457 Total Fund	343,355,449	100.0								
Domestic Equity										
Vanguard Equity-Income (VEIRX)	9,371,556	2.7	8.70 (30)	25.65 (58)	25.65 (58)	17.54 (57)	12.67 (22)	11.20 (11)	13.23 (23)	
Russell 1000 Value Index			7.77 (58)	25.16 (62)	25.16 (62)	17.64 (54)	11.16 (62)	9.73 (47)	12.97 (33)	
IM U.S. Large Cap Value Equity (MF) Median			8.23	26.24	26.24	17.86	11.60	9.66	12.54	
Vanguard Institutional Index (VINIX)	36,622,360	10.7	11.02 (27)	28.67 (24)	28.67 (24)	26.05 (28)	18.44 (25)	14.91 (14)	16.52 (15)	
S&P 500 Index			11.03 (26)	28.71 (24)	28.71 (24)	26.07 (27)	18.47 (24)	14.93 (14)	16.55 (14)	
IM U.S. Large Cap Core Equity (MF) Median			9.98	26.73	26.73	24.17	16.98	13.36	15.19	
Vanguard Mid-Cap Index Fund (VIMAX)	9,243,389	2.7	7.97 (52)	24.51 (54)	24.51 (54)	24.48 (12)	15.86 (7)	12.57 (12)	15.12 (5)	
Vanguard Spliced Mid Cap Index			7.98 (51)	24.52 (54)	24.52 (54)	24.51 (10)	15.89 (5)	12.60 (10)	15.15 (3)	
IM U.S. Mid Cap Core Equity (MF) Median			7.99	24.87	24.87	20.79	12.35	10.18	12.85	
Carillon Scout Mid Cap (UMBMX)	11,222,461	3.3	4.81 (89)	15.90 (92)	15.90 (92)	21.22 (42)	14.80 (16)	13.27 (6)	14.18 (22)	
Russell Midcap Index			6.44 (77)	22.58 (65)	22.58 (65)	23.29 (17)	15.10 (12)	12.23 (16)	14.91 (8)	
IM U.S. Mid Cap Core Equity (MF) Median			7.99	24.87	24.87	20.79	12.35	10.18	12.85	
Goldman Sachs Small Cap Value (GSSIX)	9,576,445	2.8	6.95 (27)	26.71 (80)	26.71 (80)	16.77 (80)	8.99 (45)	8.88 (44)	12.15 (30)	
Russell 2000 Value Index			4.36 (75)	28.27 (65)	28.27 (65)	17.99 (58)	9.07 (44)	9.45 (34)	12.03 (32)	
IM U.S. Small Cap Value Equity (MF) Median			5.85	30.85	30.85	18.26	8.59	8.57	11.45	
Vanguard Small-Cap Index Fund (VSMAX)	9,977,523	2.9	3.87 (82)	17.73 (83)	17.73 (83)	21.33 (24)	13.49 (11)	11.53 (18)	14.16 (11)	
Vanguard Spliced Small Cap Index			3.87 (82)	17.71 (83)	17.71 (83)	21.31 (25)	13.47 (12)	11.50 (18)	14.14 (11)	
IM U.S. Small Cap Core Equity (MF) Median			5.89	24.55	24.55	19.55	10.97	10.12	12.54	
International Equity/Global Equity										
TIAA-CREF International Equity Index (TRIPX)	9,679,815	2.8	3.16 (37)	11.16 (40)	11.16 (40)	13.44 (49)	9.61 (31)	6.83 (19)	8.05 (18)	
MSCI EAFE (Net) Index			2.69 (61)	11.26 (39)	11.26 (39)	13.54 (48)	9.55 (32)	6.76 (19)	8.03 (19)	
IM International Large Cap Core Equity (MF) Median			2.86	10.33	10.33	13.22	8.66	5.25	6.70	
American Funds The New Economy Fund (RNGHX)	45,868,390	13.4	3.72 (70)	12.12 (76)	12.12 (76)	23.85 (28)	19.68 (12)	N/A	N/A	
MSCI AC World Index (Net)			6.68 (35)	18.54 (34)	18.54 (34)	20.38 (48)	14.40 (44)	10.90 (41)	11.85 (47)	
IM Global Equity (MF) Median			5.83	16.53	16.53	19.90	13.34	9.86	11.46	
Lazard International Equity R6 (LZIEIX)	2,661,837	0.8	0.38 (87)	6.00 (87)	6.00 (87)	11.79 (73)	8.19 (67)	5.38 (47)	7.43 (35)	
MSCI EAFE (Net) Index			2.69 (61)	11.26 (39)	11.26 (39)	13.54 (48)	9.55 (32)	6.76 (19)	8.03 (19)	
IM International Large Cap Core Equity (MF) Median			2.86	10.33	10.33	13.22	8.66	5.25	6.70	



	Allocation		Performance(%)							
	Market Value \$	%	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	
American Funds SmallCap World Fund (RSLDX)	9,618,793	2.8	-0.48 (83)	10.51 (78)	10.51 (78)	25.89 (19)	18.07 (25)	N/A	N/A	
MSCI World Small Cap (Net)			2.23 (63)	15.75 (42)	15.75 (42)	19.20 (69)	12.35 (73)	10.50 (65)	12.30 (72)	
IM Global SMID Cap Equity (MF) Median			2.56	14.65	14.65	21.64	16.19	12.37	13.47	
DFA Emerging Markets Small Cap (DEMSX)	3,381,662	1.0	0.98 (14)	14.58 (7)	14.58 (7)	14.42 (31)	10.81 (35)	7.80 (23)	7.90 (17)	
MSCI Emerging Markets Small Cap (Net)			1.33 (12)	18.75 (4)	18.75 (4)	16.46 (21)	11.47 (29)	7.32 (28)	7.42 (23)	
IM Emerging Markets Equity (MF) Median			-1.26	-1.60	-1.60	11.81	9.59	5.87	5.62	
Fixed Income & Other										
Vanguard Total Bond Market Index (VBTLX)	6,743,726	2.0	-0.09 (42)	-1.67 (66)	-1.67 (66)	4.82 (70)	3.58 (59)	2.98 (57)	2.86 (66)	
Blmbg. U.S. Aggregate Index			0.01 (22)	-1.55 (61)	-1.55 (61)	4.79 (70)	3.57 (61)	3.00 (55)	2.90 (64)	
IM U.S. Broad Market Core Fixed Income (MF) Median			-0.14	-1.32	-1.32	5.17	3.71	3.07	3.10	
Metropolitan West Total Return Bond (MWTIX)	14,735,882	4.3	-0.09 (43)	-1.13 (40)	-1.13 (40)	5.58 (33)	4.04 (26)	3.27 (36)	4.06 (4)	
Blmbg. U.S. Aggregate Index			0.01 (22)	-1.55 (61)	-1.55 (61)	4.79 (70)	3.57 (61)	3.00 (55)	2.90 (64)	
IM U.S. Broad Market Core Fixed Income (MF) Median			-0.14	-1.32	-1.32	5.17	3.71	3.07	3.10	
BlackRock High Yield Bond (BHYIX)	5,330,021	1.6	0.90 (14)	5.88 (24)	5.88 (24)	8.90 (17)	6.30 (12)	5.80 (15)	6.98 (8)	
ICE BofAML High Yield Master II			0.64 (36)	5.35 (36)	5.35 (36)	8.57 (25)	6.09 (15)	6.02 (9)	6.72 (11)	
IM U.S. High Yield Bonds (MF) Median			0.55	4.71	4.71	7.78	5.28	4.97	5.82	
DFA Real Estate (DFREX)	4,830,075	1.4	16.06 (39)	41.85 (41)	41.85 (41)	19.95 (48)	12.09 (34)	10.25 (28)	11.95 (20)	
FTSE NAREIT All Equity REITs			16.17 (37)	41.30 (50)	41.30 (50)	19.93 (49)	12.46 (29)	10.48 (23)	12.22 (15)	
IM Real Estate Sector (MF) Median			15.65	41.16	41.16	19.72	11.23	9.29	10.97	
Vanguard Treasury Money Market (VUSXX)	69,130	0.0	0.00 (45)	0.01 (33)	0.01 (33)	0.87 (12)	1.04 (13)	0.78 (13)	0.55 (13)	
90 Day U.S. Treasury Bill			0.01 (8)	0.05 (6)	0.05 (6)	0.99 (2)	1.14 (8)	0.86 (9)	0.61 (8)	
IM U.S. Taxable Money Market (MF) Median			0.00	0.01	0.01	0.74	0.87	0.63	0.44	
MissionSquare PLUS Fund R10	51,868,532	15.1	0.46 (14)	1.89 (13)	1.89 (13)	2.19 (35)	2.19 (38)	2.14 (30)	2.20 (27)	
ICE BofAML 3 Month U.S. T-Bill			0.01 (86)	0.05 (94)	0.05 (94)	0.99 (100)	1.14 (100)	0.87 (100)	0.63 (100)	
IM U.S. GIC/Stable Value (SA+CF) Median			0.35	1.50	1.50	2.08	2.04	1.94	1.83	
Target Date Funds										
TIAA-CREF Lifecycle Retirement Income (TPIILX)	1,389,011	0.4	2.16 (55)	6.92 (29)	6.92 (29)	10.91 (22)	7.96 (21)	6.50 (16)	7.08 (7)	
Dow Jones Global Conservative Index			0.29 (99)	-0.17 (100)	-0.17 (100)	5.26 (96)	4.15 (95)	3.29 (95)	3.37 (93)	
IM Mixed-Asset Target Today (MF) Median			2.20	6.06	6.06	9.61	6.92	5.44	5.63	
TIAA-CREF Lifecycle 2010 (TCTPX)	2,074,279	0.6	2.07 (54)	6.78 (47)	6.78 (47)	10.99 (25)	8.09 (16)	6.64 (7)	7.50 (11)	
Dow Jones Global Target 2010 Index			0.29 (100)	-0.20 (100)	-0.20 (100)	5.29 (100)	4.22 (100)	3.37 (100)	3.72 (99)	
IM Mixed-Asset Target 2010 (MF) Median			2.10	5.80	5.80	10.35	7.54	6.09	6.79	



	Allocation		Performance(%)							
	Market Value \$	%	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	
TIAA-CREF Lifecycle 2015 (TCFPX)	3,026,226	0.9	2.40 (69)	7.56 (62)	7.56 (62)	11.81 (36)	8.69 (21)	7.09 (17)	8.10 (20)	
Dow Jones Global Target 2015 Index			0.37 (100)	0.17 (100)	0.17 (100)	5.92 (100)	4.77 (100)	3.89 (100)	4.48 (100)	
IM Mixed-Asset Target 2015 (MF) Median			2.68	8.05	8.05	11.59	8.25	6.68	7.64	
TIAA-CREF Lifecycle 2020 (TCWPX)	7,629,390	2.2	2.62 (68)	8.28 (64)	8.28 (64)	12.64 (39)	9.32 (24)	7.58 (17)	8.80 (18)	
Dow Jones Global Target 2020 Index			0.72 (100)	1.63 (100)	1.63 (100)	7.33 (100)	5.82 (99)	4.74 (100)	5.61 (99)	
IM Mixed-Asset Target 2020 (MF) Median			2.88	8.70	8.70	12.15	8.58	6.78	8.16	
TIAA-CREF Lifecycle 2025 (TCQPX)	11,757,481	3.4	3.07 (68)	9.60 (54)	9.60 (54)	14.01 (36)	10.24 (31)	8.27 (20)	9.65 (19)	
Dow Jones Global Target 2025 Index			1.33 (97)	3.91 (96)	3.91 (96)	9.22 (94)	7.15 (92)	5.82 (92)	6.94 (94)	
IM Mixed-Asset Target 2025 (MF) Median			3.37	9.70	9.70	13.32	9.54	7.46	8.88	
TIAA-CREF Lifecycle 2030 (TCHPX)	16,581,643	4.8	3.50 (75)	11.10 (65)	11.10 (65)	15.42 (43)	11.18 (37)	8.96 (27)	10.46 (21)	
Dow Jones Global Target 2030 Index			2.04 (100)	6.56 (98)	6.56 (98)	11.42 (95)	8.67 (93)	7.03 (89)	8.34 (86)	
IM Mixed-Asset Target 2030 (MF) Median			3.99	11.44	11.44	15.03	10.78	8.42	9.82	
TIAA-CREF Lifecycle 2035 (TCYPX)	20,540,366	6.0	3.98 (85)	12.64 (83)	12.64 (83)	16.80 (46)	12.10 (40)	9.63 (36)	11.24 (26)	
Dow Jones Global Target 2035 Index			2.78 (98)	9.38 (99)	9.38 (99)	13.66 (96)	10.11 (93)	8.12 (88)	9.58 (79)	
IM Mixed-Asset Target 2035 (MF) Median			4.72	13.84	13.84	16.70	11.81	9.21	10.46	
TIAA-CREF Lifecycle 2040 (TCZPX)	14,251,426	4.2	4.48 (82)	14.18 (85)	14.18 (85)	18.18 (45)	12.98 (37)	10.25 (35)	11.84 (23)	
Dow Jones Global Target 2040 Index			3.47 (98)	12.05 (95)	12.05 (95)	15.70 (89)	11.39 (88)	9.09 (75)	10.60 (69)	
IM Mixed-Asset Target 2040 (MF) Median			5.21	15.67	15.67	17.97	12.61	9.76	11.13	
TIAA-CREF Lifecycle 2045 (TTFPX)	9,813,172	2.9	4.90 (77)	15.75 (80)	15.75 (80)	19.46 (33)	13.68 (30)	10.78 (27)	12.21 (17)	
Dow Jones Global Target 2045 Index			4.05 (95)	14.28 (95)	14.28 (95)	17.31 (87)	12.37 (79)	9.81 (65)	11.30 (55)	
IM Mixed-Asset Target 2045 (MF) Median			5.74	16.67	16.67	18.90	13.08	10.10	11.39	
TIAA-CREF Lifecycle 2050 (TCLPX)	4,819,283	1.4	5.13 (75)	16.28 (73)	16.28 (73)	19.77 (32)	13.88 (27)	10.95 (21)	12.32 (18)	
Dow Jones Global Target 2050 Index			4.44 (94)	15.78 (88)	15.78 (88)	18.33 (72)	12.96 (60)	10.25 (49)	11.63 (51)	
IM Mixed-Asset Target 2050 (MF) Median			5.88	16.99	16.99	19.23	13.36	10.21	11.65	
TIAA-CREF Lifecycle 2055 (TTRPX)	2,055,795	0.6	5.24 (74)	16.46 (73)	16.46 (73)	19.95 (32)	14.00 (23)	11.05 (20)	12.40 (23)	
Dow Jones Global Target 2055 Index			4.60 (88)	16.36 (76)	16.36 (76)	18.68 (66)	13.15 (58)	10.38 (50)	11.72 (55)	
IM Mixed-Asset Target 2055 (MF) Median			5.90	17.18	17.18	19.34	13.35	10.34	11.78	
TIAA-CREF Lifecycle 2060 (TLXPX)	644,239	0.2	5.24 (71)	16.68 (65)	16.68 (65)	20.16 (25)	14.11 (21)	11.15 (23)	N/A	
Dow Jones Global Target 2060 Index			4.61 (87)	16.36 (73)	16.36 (73)	18.68 (70)	13.15 (62)	10.38 (78)	11.71 (N/A)	
IM Mixed-Asset Target 2060+ (MF) Median			5.91	17.16	17.16	19.53	13.59	10.77	N/A	



	Allocation		Performance(%)						
	Market Value \$	%	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR
Brokerage & Loan Fund									
TIAA-CREF Self Directed	1,601,656	0.5							
Loan Fund	6,369,884	1.9							



Asset Allocation & Performance											
	Allocation		Performance(%)								
	Market Value \$	%	YTD	2020	2019	2018	2017	2016	2015	2014	2013
457 Total Fund	343,355,449	100.0									
Domestic Equity											
Vanguard Equity-Income (VEIRX)	9,371,556	2.7	25.65 (58)	3.12 (44)	25.35 (62)	-5.65 (15)	18.49 (23)	14.82 (38)	0.86 (4)	11.38 (37)	30.19 (82)
Russell 1000 Value Index			25.16 (62)	2.80 (48)	26.54 (45)	-8.27 (36)	13.66 (76)	17.34 (19)	-3.83 (58)	13.45 (9)	32.53 (48)
IM U.S. Large Cap Value Equity (MF) Median			26.24	2.62	26.07	-9.06	16.29	13.82	-3.53	10.82	32.30
Vanguard Institutional Index (VINIX)	36,622,360	10.7	28.67 (24)	18.39 (40)	31.46 (30)	-4.42 (31)	21.79 (39)	11.93 (27)	1.37 (33)	13.65 (17)	32.35 (39)
S&P 500 Index			28.71 (24)	18.40 (40)	31.49 (29)	-4.38 (30)	21.83 (38)	11.96 (26)	1.38 (33)	13.69 (16)	32.39 (38)
IM U.S. Large Cap Core Equity (MF) Median			26.73	16.00	29.68	-5.61	21.17	10.06	0.25	11.39	31.77
Vanguard Mid-Cap Index Fund (VIMAX)	9,243,389	2.7	24.51 (54)	18.24 (19)	31.03 (20)	-9.23 (23)	19.25 (19)	11.22 (75)	-1.34 (24)	13.76 (11)	35.15 (49)
Vanguard Spliced Mid Cap Index			24.52 (54)	18.24 (19)	31.09 (19)	-9.22 (23)	19.30 (19)	11.25 (73)	-1.28 (23)	13.83 (10)	35.21 (48)
IM U.S. Mid Cap Core Equity (MF) Median			24.87	9.97	28.07	-11.52	15.44	14.23	-3.40	8.91	35.08
Carillon Scout Mid Cap (UMBMX)	11,222,461	3.3	15.90 (92)	27.27 (7)	20.76 (95)	-9.74 (27)	24.02 (6)	18.31 (21)	1.41 (9)	4.09 (92)	37.68 (25)
Russell Midcap Index			22.58 (65)	17.10 (24)	30.54 (25)	-9.06 (20)	18.52 (27)	13.80 (55)	-2.44 (34)	13.22 (16)	34.76 (53)
IM U.S. Mid Cap Core Equity (MF) Median			24.87	9.97	28.07	-11.52	15.44	14.23	-3.40	8.91	35.08
Goldman Sachs Small Cap Value (GSSIX)	9,576,445	2.8	26.71 (80)	2.06 (66)	23.14 (27)	-14.02 (35)	12.34 (18)	24.65 (72)	-5.39 (33)	7.28 (10)	38.82 (29)
Russell 2000 Value Index			28.27 (65)	4.63 (42)	22.39 (36)	-12.86 (24)	7.84 (57)	31.74 (15)	-7.47 (55)	4.22 (37)	34.52 (68)
IM U.S. Small Cap Value Equity (MF) Median			30.85	3.84	21.26	-16.08	8.32	26.61	-7.10	3.36	36.11
Vanguard Small-Cap Index Fund (VSMAX)	9,977,523	2.9	17.73 (83)	19.11 (18)	27.37 (16)	-9.31 (18)	16.24 (13)	18.30 (78)	-3.64 (41)	7.50 (13)	37.81 (44)
Vanguard Spliced Small Cap Index			17.71 (83)	19.07 (18)	27.35 (16)	-9.33 (18)	16.24 (13)	18.26 (78)	-3.68 (42)	7.54 (12)	37.77 (44)
IM U.S. Small Cap Core Equity (MF) Median			24.55	10.36	23.89	-12.66	12.38	21.34	-4.34	4.65	36.97
International Equity/Global Equity											
TIAA-CREF International Equity Index (TRIPX)	9,679,815	2.8	11.16 (40)	8.01 (54)	21.59 (58)	-13.39 (19)	25.14 (37)	1.08 (52)	-0.69 (13)	-5.60 (42)	21.75 (37)
MSCI EAFE (Net) Index			11.26 (39)	7.82 (55)	22.01 (52)	-13.79 (25)	25.03 (39)	1.00 (54)	-0.81 (16)	-4.90 (29)	22.78 (23)
IM International Large Cap Core Equity (MF) Median			10.33	8.53	22.09	-15.66	24.45	1.31	-2.72	-5.86	20.31
American Funds The New Economy Fund (RNGHX)	45,868,390	13.4	12.12 (76)	33.72 (20)	26.69 (48)	-4.04 (13)	34.71 (8)	2.32 (80)	N/A	N/A	N/A
MSCI AC World Index (Net)			18.54 (34)	16.25 (45)	26.60 (49)	-9.42 (46)	23.97 (42)	7.86 (37)	-2.36 (59)	4.16 (37)	22.80 (60)
IM Global Equity (MF) Median			16.53	15.21	26.35	-9.73	22.32	6.37	-1.65	2.57	24.98
Lazard International Equity R6 (LZIEIX)	2,661,837	0.8	6.00 (87)	8.76 (48)	21.19 (63)	-13.61 (22)	22.81 (84)	-4.18 (92)	1.62 (4)	-4.29 (27)	20.84 (41)
MSCI EAFE (Net) Index			11.26 (39)	7.82 (55)	22.01 (52)	-13.79 (25)	25.03 (39)	1.00 (54)	-0.81 (16)	-4.90 (29)	22.78 (23)
IM International Large Cap Core Equity (MF) Median			10.33	8.53	22.09	-15.66	24.45	1.31	-2.72	-5.86	20.31



	Allocation		Performance(%)								
	Market Value \$	%	YTD	2020	2019	2018	2017	2016	2015	2014	2013
American Funds SmallCap World Fund (RSLDX)	9,618,793	2.8	10.51 (78)	37.73 (26)	31.08 (17)	-9.50 (22)	27.09 (38)	5.90 (70)	N/A	N/A	N/A
MSCI World Small Cap (Net)			15.75 (42)	15.96 (63)	26.19 (53)	-13.86 (56)	22.66 (70)	12.71 (33)	-0.31 (54)	1.90 (26)	32.38 (40)
IM Global SMID Cap Equity (MF) Median			14.65	24.09	26.77	-12.25	25.86	8.55	0.79	-1.61	29.85
DFA Emerging Markets Small Cap (DEMSX)	3,381,662	1.0	14.58 (7)	13.80 (68)	14.89 (79)	-17.56 (62)	35.26 (51)	10.92 (32)	-8.70 (19)	3.00 (10)	-1.38 (50)
MSCI Emerging Markets Small Cap (Net)			18.75 (4)	19.29 (41)	11.51 (89)	-18.59 (71)	33.84 (58)	2.28 (85)	-6.85 (11)	1.01 (17)	1.04 (32)
IM Emerging Markets Equity (MF) Median			-1.60	17.46	20.09	-16.39	35.37	8.35	-13.66	-2.93	-1.38
Fixed Income & Other											
Vanguard Total Bond Market Index (VBTLX)	6,743,726	2.0	-1.67 (66)	7.72 (65)	8.71 (53)	-0.03 (20)	3.56 (53)	2.60 (63)	0.40 (31)	5.89 (31)	-2.14 (58)
Blmbg. U.S. Aggregate Index			-1.55 (61)	7.51 (72)	8.72 (53)	0.01 (18)	3.54 (54)	2.65 (61)	0.55 (20)	5.97 (26)	-2.02 (53)
IM U.S. Broad Market Core Fixed Income (MF) Median			-1.32	8.19	8.76	-0.63	3.59	2.86	0.09	5.55	-1.98
Metropolitan West Total Return Bond (MWTIX)	14,735,882	4.3	-1.13 (40)	9.12 (26)	9.09 (39)	0.16 (12)	3.43 (60)	2.46 (71)	0.29 (38)	5.99 (25)	0.50 (2)
Blmbg. U.S. Aggregate Index			-1.55 (61)	7.51 (72)	8.72 (53)	0.01 (18)	3.54 (54)	2.65 (61)	0.55 (20)	5.97 (26)	-2.02 (53)
IM U.S. Broad Market Core Fixed Income (MF) Median			-1.32	8.19	8.76	-0.63	3.59	2.86	0.09	5.55	-1.98
BlackRock High Yield Bond (BHYIX)	5,330,021	1.6	5.88 (24)	5.79 (39)	15.30 (15)	-2.86 (49)	8.20 (13)	13.93 (45)	-4.04 (54)	3.38 (12)	9.30 (12)
ICE BofAML High Yield Master II			5.35 (36)	6.17 (31)	14.41 (33)	-2.27 (32)	7.48 (25)	17.49 (5)	-4.64 (64)	2.50 (23)	7.42 (30)
IM U.S. High Yield Bonds (MF) Median			4.71	5.28	13.51	-2.91	6.65	13.52	-3.85	1.49	6.61
DFA Real Estate (DFREX)	4,830,075	1.4	41.85 (41)	-5.04 (60)	28.10 (43)	-2.99 (8)	5.71 (42)	8.38 (21)	3.24 (41)	31.11 (20)	1.39 (57)
FTSE NAREIT All Equity REITs			41.30 (50)	-5.12 (61)	28.66 (38)	-4.04 (17)	8.67 (16)	8.63 (19)	2.83 (53)	28.03 (70)	2.86 (22)
IM Real Estate Sector (MF) Median			41.16	-4.24	27.44	-5.74	5.21	6.28	2.92	29.42	1.66
MissionSquare PLUS Fund R10	51,868,532	15.1	1.89 (13)	2.22 (34)	2.45 (64)	2.27 (27)	2.12 (16)	1.98 (24)	2.03 (11)	2.07 (22)	2.27 (18)
ICE BofAML 3 Month U.S. T-Bill			0.05 (94)	0.67 (100)	2.28 (96)	1.87 (86)	0.86 (100)	0.33 (100)	0.05 (100)	0.04 (100)	0.07 (94)
IM U.S. GIC/Stable Value (SA+CF) Median			1.50	2.11	2.48	2.13	1.80	1.77	1.67	1.51	1.50
Target Date Funds											
TIAA-CREF Lifecycle Retirement Income (TPILX)	1,389,011	0.4	6.92 (29)	10.93 (16)	15.03 (23)	-3.90 (67)	11.84 (6)	5.89 (24)	0.10 (3)	4.38 (30)	9.69 (8)
Dow Jones Global Conservative Index			-0.17 (100)	8.05 (78)	8.13 (99)	-0.62 (2)	5.73 (95)	3.01 (92)	-0.63 (22)	3.86 (51)	1.41 (85)
IM Mixed-Asset Target Today (MF) Median			6.06	9.49	13.31	-3.57	8.85	5.07	-1.42	3.87	5.29
TIAA-CREF Lifecycle 2010 (TCTPX)	2,074,279	0.6	6.78 (47)	11.01 (24)	15.36 (14)	-4.09 (73)	12.52 (2)	6.06 (50)	0.24 (3)	4.44 (38)	11.84 (8)
Dow Jones Global Target 2010 Index			-0.20 (100)	8.07 (96)	8.22 (100)	-0.68 (1)	6.07 (100)	3.33 (95)	-0.72 (21)	4.20 (47)	3.00 (92)
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
TIAA-CREF Lifecycle 2015 (TCFPX)	3,026,226	0.9	7.56 (62)	11.68 (39)	16.36 (33)	-4.60 (73)	13.75 (6)	6.28 (57)	0.18 (4)	4.63 (47)	13.72 (13)
Dow Jones Global Target 2015 Index			0.17 (100)	8.30 (91)	9.54 (100)	-1.28 (1)	7.59 (100)	4.51 (91)	-0.97 (35)	4.48 (50)	5.49 (83)
IM Mixed-Asset Target 2015 (MF) Median			8.05	11.40	15.31	-3.90	11.40	6.40	-1.29	4.47	10.42



	Allocation		Performance(%)								
	Market Value \$	%	YTD	2020	2019	2018	2017	2016	2015	2014	2013
TIAA-CREF Lifecycle 2020 (TCWPX)	7,629,390	2.2	8.28 (64)	12.24 (33)	17.59 (25)	-5.26 (73)	15.35 (4)	6.52 (45)	0.27 (1)	4.62 (53)	16.49 (12)
Dow Jones Global Target 2020 Index			1.63 (100)	8.63 (83)	12.00 (91)	-2.33 (3)	9.88 (82)	5.27 (81)	-1.04 (36)	4.81 (46)	9.05 (72)
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
TIAA-CREF Lifecycle 2025 (TCQPX)	11,757,481	3.4	9.60 (54)	13.34 (32)	19.29 (26)	-6.23 (78)	17.19 (3)	6.87 (50)	0.22 (1)	4.73 (66)	19.11 (17)
Dow Jones Global Target 2025 Index			3.91 (96)	9.62 (83)	14.38 (92)	-3.22 (4)	12.02 (83)	6.39 (68)	-1.11 (38)	5.14 (52)	12.84 (76)
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
TIAA-CREF Lifecycle 2030 (TCHPX)	16,581,643	4.8	11.10 (65)	14.24 (32)	21.13 (30)	-7.18 (75)	19.02 (4)	7.22 (54)	0.13 (4)	4.68 (65)	21.87 (12)
Dow Jones Global Target 2030 Index			6.56 (98)	10.88 (79)	17.06 (87)	-4.43 (9)	14.64 (78)	7.50 (41)	-1.21 (41)	5.50 (42)	16.59 (62)
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
TIAA-CREF Lifecycle 2035 (TCYPX)	20,540,366	6.0	12.64 (83)	15.15 (38)	22.86 (32)	-8.12 (83)	20.88 (6)	7.40 (61)	0.10 (6)	4.53 (71)	24.51 (8)
Dow Jones Global Target 2035 Index			9.38 (99)	12.15 (84)	19.70 (88)	-5.80 (15)	16.99 (78)	8.49 (25)	-1.61 (52)	5.80 (38)	19.90 (66)
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
TIAA-CREF Lifecycle 2040 (TCZPX)	14,251,426	4.2	14.18 (85)	16.11 (33)	24.52 (26)	-9.11 (86)	22.69 (1)	7.65 (58)	-0.06 (8)	4.49 (70)	26.09 (4)
Dow Jones Global Target 2040 Index			12.05 (95)	13.28 (70)	22.03 (74)	-6.94 (23)	18.97 (65)	9.30 (15)	-1.94 (60)	6.03 (32)	22.38 (44)
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
TIAA-CREF Lifecycle 2045 (TTFPX)	9,813,172	2.9	15.75 (80)	17.14 (28)	25.73 (19)	-9.78 (93)	23.45 (2)	7.85 (61)	-0.01 (8)	4.48 (71)	26.07 (4)
Dow Jones Global Target 2045 Index			14.28 (95)	14.18 (63)	23.71 (67)	-7.80 (38)	20.36 (59)	9.85 (7)	-2.15 (71)	6.16 (30)	23.71 (36)
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
TIAA-CREF Lifecycle 2050 (TCLPX)	4,819,283	1.4	16.28 (73)	17.34 (27)	25.93 (19)	-9.93 (90)	23.76 (2)	7.99 (54)	0.05 (7)	4.47 (74)	25.92 (8)
Dow Jones Global Target 2050 Index			15.78 (88)	14.78 (58)	24.69 (50)	-8.29 (44)	21.02 (46)	10.10 (10)	-2.23 (67)	6.19 (31)	23.89 (37)
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
TIAA-CREF Lifecycle 2055 (TTRPX)	2,055,795	0.6	16.46 (73)	17.43 (29)	26.21 (18)	-10.10 (94)	24.07 (3)	8.16 (53)	0.00 (9)	4.39 (71)	26.07 (8)
Dow Jones Global Target 2055 Index			16.36 (76)	15.03 (59)	24.89 (49)	-8.37 (46)	21.06 (52)	10.11 (6)	-2.23 (71)	6.19 (35)	23.89 (40)
IM Mixed-Asset Target 2055 (MF) Median			17.18	15.65	24.85	-8.48	21.12	8.25	-1.67	5.43	23.21
TIAA-CREF Lifecycle 2060 (TLXPX)	644,239	0.2	16.68 (65)	17.57 (27)	26.47 (20)	-10.27 (92)	24.29 (2)	8.27 (37)	0.03 (9)	N/A	N/A
Dow Jones Global Target 2060 Index			16.36 (73)	15.03 (61)	24.89 (60)	-8.37 (46)	21.06 (60)	10.11 (4)	-2.23 (88)	6.11 (15)	23.89 (N/A)
IM Mixed-Asset Target 2060+ (MF) Median			17.16	15.99	25.08	-8.66	21.30	7.86	-1.01	5.72	N/A



	Allocation		Performance(%)								
	Market Value \$	%	YTD	2020	2019	2018	2017	2016	2015	2014	2013
Brokerage & Loan Fund											
TIAA-CREF Self Directed	1,601,656	0.5									
Loan Fund	6,369,884	1.9									



Asset Class	2060+	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	Retirement
Equity Range												
Maximum	100%	100%	100%	95%	95%	90%	85%	75%	65%	55%	45%	45%
Minimum	50%	50%	50%	45%	45%	40%	35%	25%	15%	10%	5%	5%
Fixed Income Range												
Maximum	20%	20%	30%	35%	40%	50%	55%	65%	70%	75%	80%	85%
Minimum	0%	0%	0%	5%	5%	10%	15%	20%	25%	35%	40%	45%
Cash Range												
Maximum	20%	20%	30%	30%	30%	30%	30%	30%	35%	35%	35%	35%
Minimum	0%	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%	20%
Minimum	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Target Date Universe	61	54	55	52	54	54	51	56	54	37	38	39

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.



TIAA-CREF Lifecycle Inst
Target Date Fund Asset Allocation
December 31, 2021

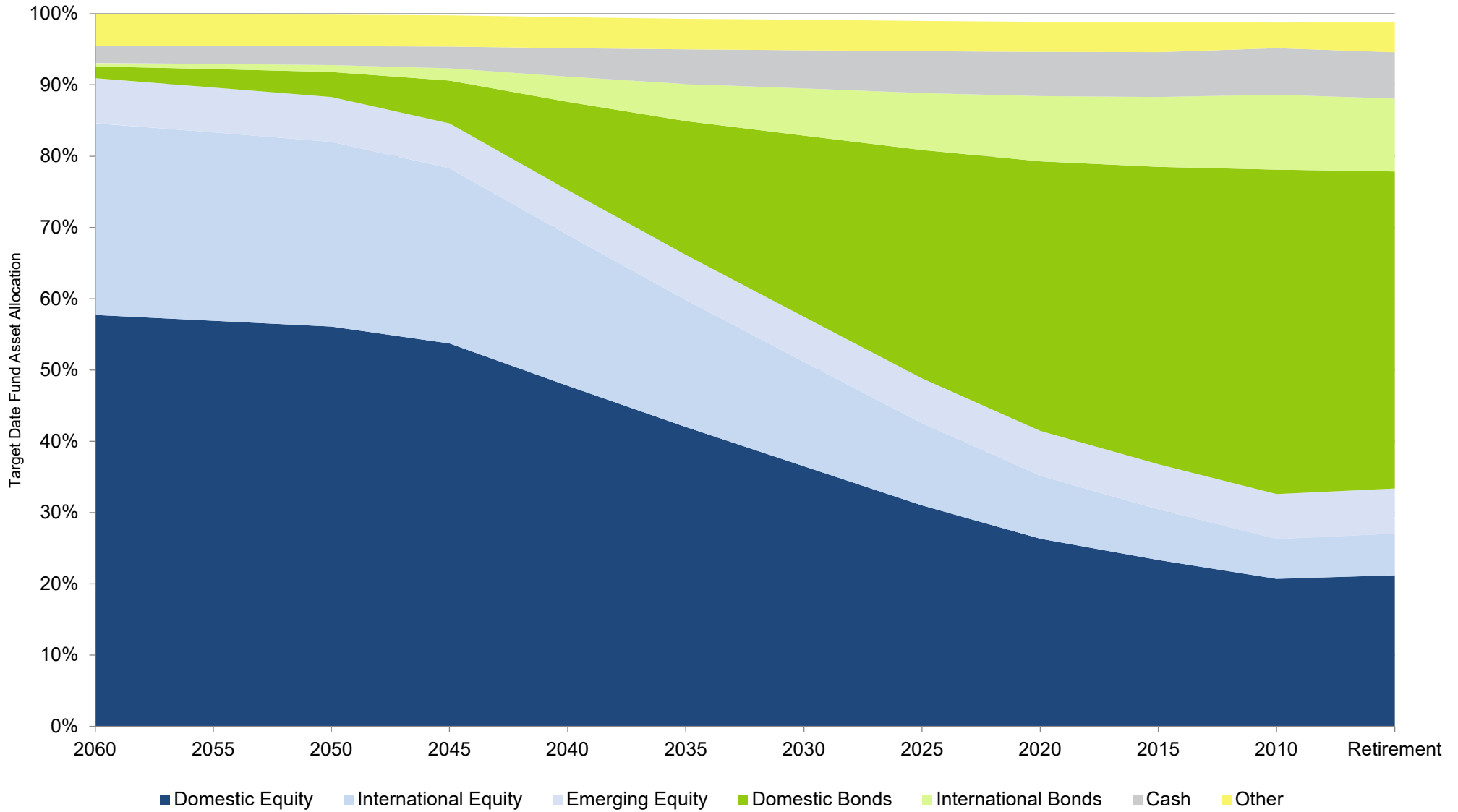
Asset Class	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	Retirement
Total Equity	91%	90%	88%	85%	75%	66%	57%	49%	41%	37%	33%	33%
Domestic Equity	58%	57%	56%	54%	48%	42%	36%	31%	26%	23%	21%	21%
International Equity	27%	26%	26%	25%	21%	18%	15%	12%	9%	7%	6%	6%
Emerging Equity	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Total Fixed Income	2%	3%	4%	8%	16%	24%	32%	40%	47%	52%	56%	55%
Domestic Bonds	2%	3%	3%	6%	12%	19%	25%	32%	38%	42%	45%	44%
International Bonds	0%	1%	1%	2%	4%	5%	7%	8%	9%	10%	11%	10%
Cash	2%	3%	3%	3%	4%	5%	5%	6%	6%	6%	7%	7%
Other	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Total	100%	100%	100%	100%	100%	99%	99%	99%	99%	99%	99%	99%

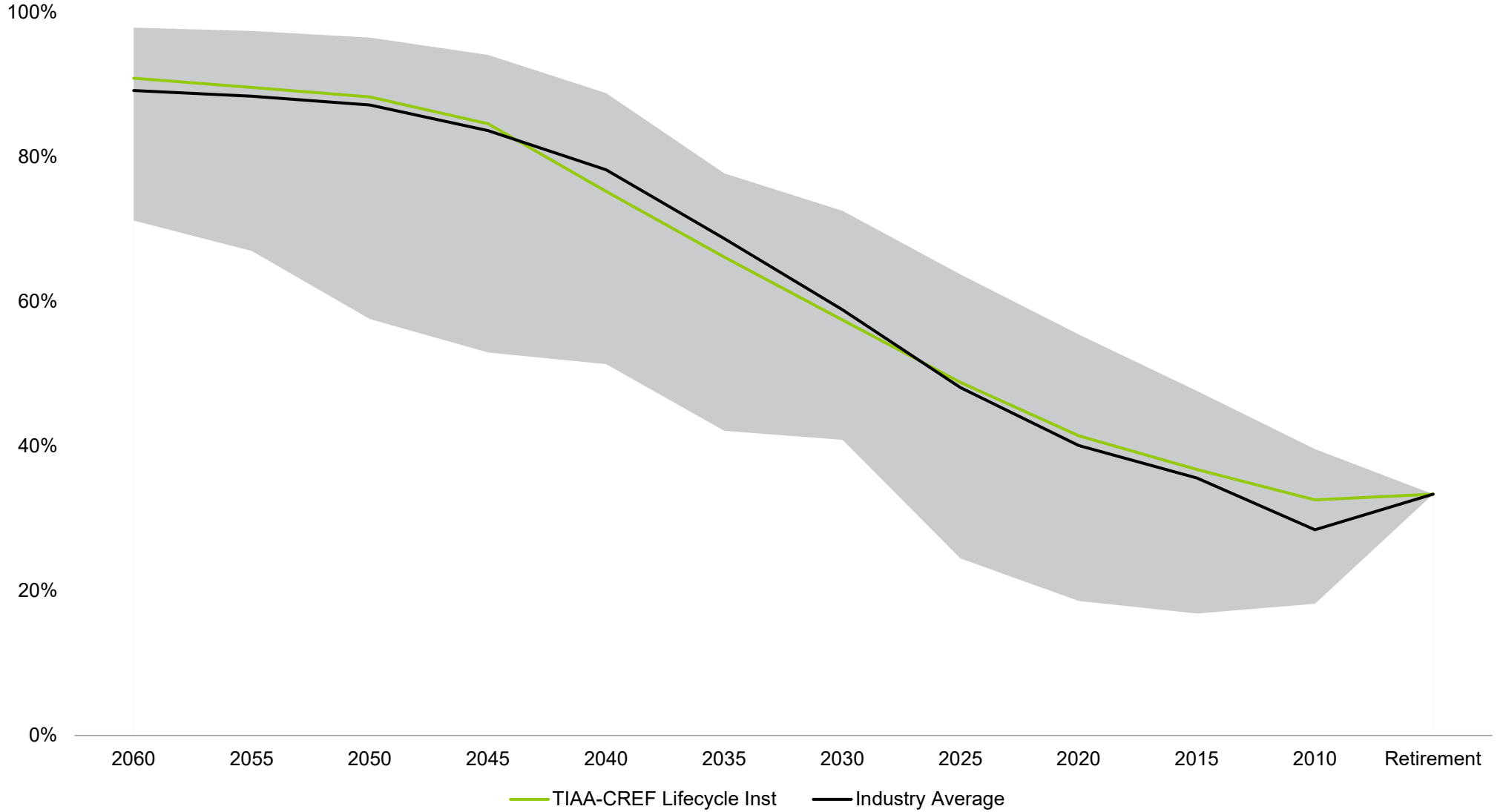
Terminal Equity Date:	30 years after Retirement
Active/Passive/Blend Allocation:	Active

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.



Quarterly	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Review of plan investments and compliance with investment policy statement	✓	✓	✓	✓
Follow required procedures, including documentation of all meetings and decisions	✓	✓	✓	✓
Review performance of providers	✓	✓	✓	✓
Periodically				
Review QDIA selection	✓			
Allocation fund (Target Date or Risk-based) analysis	✓			
Investment policy statement review	✓			
Employee education review	✓	✓	✓	✓
Plan recordkeeping & administration services review	✓	✓	✓	✓
Fee analysis				
Other Projects				
Fiduciary Module	✓	✓	✓	✓
Large Cap Value Search	✓			
Vanguard Equity Income Replacing Invesco Diversified Dividend				✓
Small Balance Cash-out		6/21/2021		
Committee Charter and Handbook Revisions			Pending	✓



Managed account services are designed to professionally allocate, monitor, and rebalance participant contributions among existing plan options to provide an asset mix that, at a minimum, accounts for the individual's age or retirement date.

- Services should be managed by a Plan Fiduciary and are typically offered by a third-party personal advisor, automated (“robo”) allocation service, or some combination therein.
- May be appropriate for Participants that have a limited understanding of investments, asset allocation, rebalancing and/or retirement readiness concepts.
- The number of DC plans offering managed accounts has increased to 45%¹.
- Managed account utilization represents 3.6% of total DC assets and 2.9% of total DC participants².
- The Department of Labor allows managed accounts to be designated as a Plan's QDIA to provide Safe Harbor relief. Utilization as a default option is less than 10%³.
- Fees typically range from 0.35% to 0.65% annually but can vary materially based on numerous factors.

¹ Deloitte “2019 Defined Contribution Benchmarking Survey Report” 2019

² Cerulli Associates, “The Cerulli Report-U.S. Defined Contribution Distribution 2018: An Update on Managed Accounts in DC Plans,” 2018

³ PlanSponsor “2019 Defined Contribution Survey” 2019

Potential Benefits

- Assets are professionally managed, monitored, and rebalanced.
- Tailored personal advice.
- May support higher contribution rates.
- Additional peace of mind.

Potential Drawbacks

- Additional layer of fees – fees for the service are in addition to underlying investment management fees and recordkeeping fees.
- Possible conflict of interest - participant education reps or relationship managers may be compensated based on managed account (or other proprietary option) utilization.
- Lack of success measurement – There is currently no standard or required metric for this analysis. Would the average participant have been better off, net of fees, in the appropriate Target Date Fund series?
- Programs have been the subject of recent “excessive-fee” litigation¹.

¹ Reichert v. Juniper Networks, Inc., N.D. Cal., No. 3:21-cv-06213, complaint 8/11/21.

Fiduciary Considerations:

- Plan Sponsors DO have a Fiduciary duty to select and monitor managed account providers.
- Is the service appropriate for the Plan based on demographics, education programs, option menu, Target Date Fund offerings, etc.?
- Are managed accounts the best option for a QDIA?
- How are managed account services offered? Does the recordkeeper education and enrollment process focus on directing Participants to managed account services? Are lower cost solutions (e.g., Target Date Funds) being introduced first?
- Are fees transparently disclosed to Participants and the Plan Sponsor?
- Is the potential value added from the service beyond what is offered via standard online advice services from most recordkeepers? Is true customization being offered to justify extra layer of fees, or is the service just “robo-advice”? How robust is the data set collected to provide tailored advice?
- How does the education and direction provided avoid conflicts of interest? Are account representatives paid commissions based on managed account usage? How much is allocated to proprietary options and stable value? Are these conflicts transparently disclosed to the Plan Sponsor and Participants?
- How are assets mapped when changing recordkeepers and/or discontinuing managed account services? Should re-enrollment be considered?

	2020	2021	2022
Elective Deferrals - 401(k), 403(b), and Most 457 Plans	\$19,500	\$19,500	\$20,500
Catch-up Contribution	\$6,500	\$6,500	\$6,500
DC Plan Combined Annual Contribution Limit	\$57,000	\$58,000	\$61,000
Defined Benefit Annual Benefit Limit	\$230,000	\$230,000	\$245,000
Highly Compensated Employee Threshold	\$130,000	\$130,000	\$135,000
Top Heavy Key Employee Dollar Limit	\$185,000	\$185,000	\$200,000
SIMPLE Plan Contribution Limit	\$13,500	\$13,500	\$14,000
SIMPLE Plan Catch-up	\$3,000	\$3,000	\$3,000
IRA Contribution Limit	\$6,000	\$6,000	\$6,000
IRA Catch-Up	\$1,000	\$1,000	\$1,000
HSA Contribution Limit, Single	\$3,550	\$3,600	\$3,650
HSA Contribution Limit, Non-Single	\$7,100	\$7,200	\$7,300

Source: IRS Notice 2021-61, IRS Tax Tip 2021-170 and Revenue Procedure 2021-25

Strictly 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.



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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Investment Performance Review
Period Ending December 31, 2021

**City of Fort Worth
457 Deferred Compensation Plan
Manager Review**



Fund Information

Fund Name : Vanguard Fenway Funds: Vanguard Equity Income Fund; Admiral Shares
 Fund Family : Vanguard
 Ticker : VEIRX
 Inception Date : 08/13/2001
 Fund Assets : \$44,728 Million
 Portfolio Turnover : 29%

Portfolio Assets : \$50,009 Million
 Portfolio Manager : Reckmeyer III/Guo/Hill
 PM Tenure : 2007--2016--2021
 Fund Style : IM Equity Income (MF)
 Style Benchmark : Russell 1000 Value Index

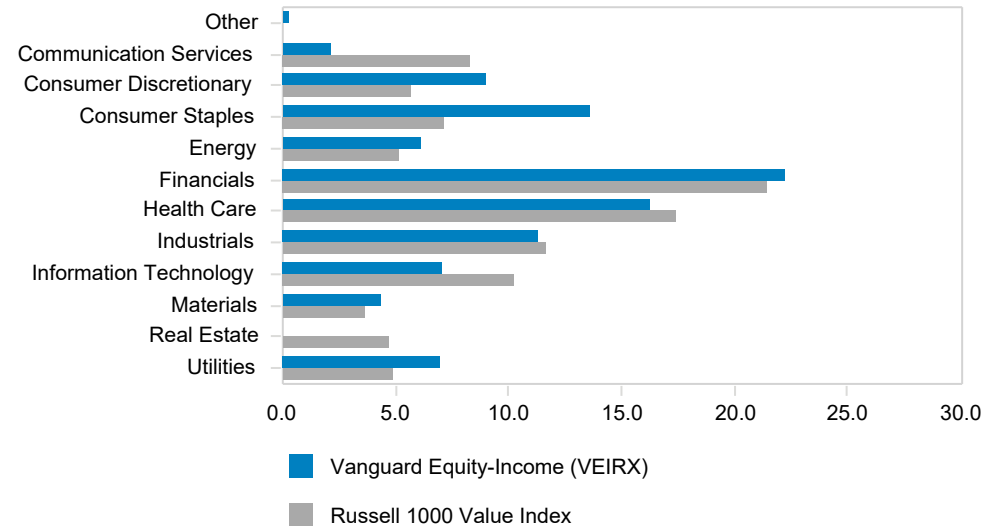
Portfolio Characteristics As of 09/30/2021

	Portfolio	Benchmark
Total Securities	197	848
Avg. Market Cap (\$)	159,182,708,442	13,196,823,780
Price/Earnings (P/E)	23.49	18.25
Price/Book (P/B)	5.70	2.60
Dividend Yield	2.65	2.02
Annual EPS	-6.36	5.24
5 Yr EPS	5.62	11.87
3 Yr EPS Growth	5.38	N/A
Beta (5 Years, Monthly)	0.88	1.00

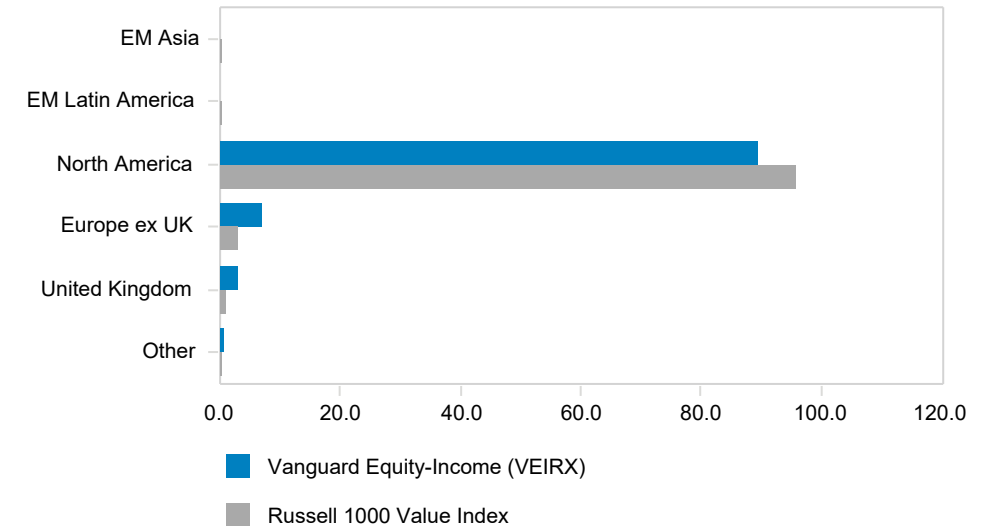
Top Ten Securities As of 09/30/2021

JPMorgan Chase & Co ORD	4.1 %
Johnson & Johnson ORD	3.7 %
Bank of America Corp ORD	3.1 %
Procter & Gamble Co ORD	2.8 %
Cisco Systems Inc ORD	2.6 %
Comcast Corp ORD	2.4 %
Morgan Stanley ORD	2.0 %
Pfizer Inc ORD	1.9 %
Eli Lilly and Co ORD	1.9 %
Merck & Co Inc ORD	1.8 %

Sector Weights As of 09/30/2021



Region Weights As of 09/30/2021



Statistics provided by Lipper. Most recent available data shown.



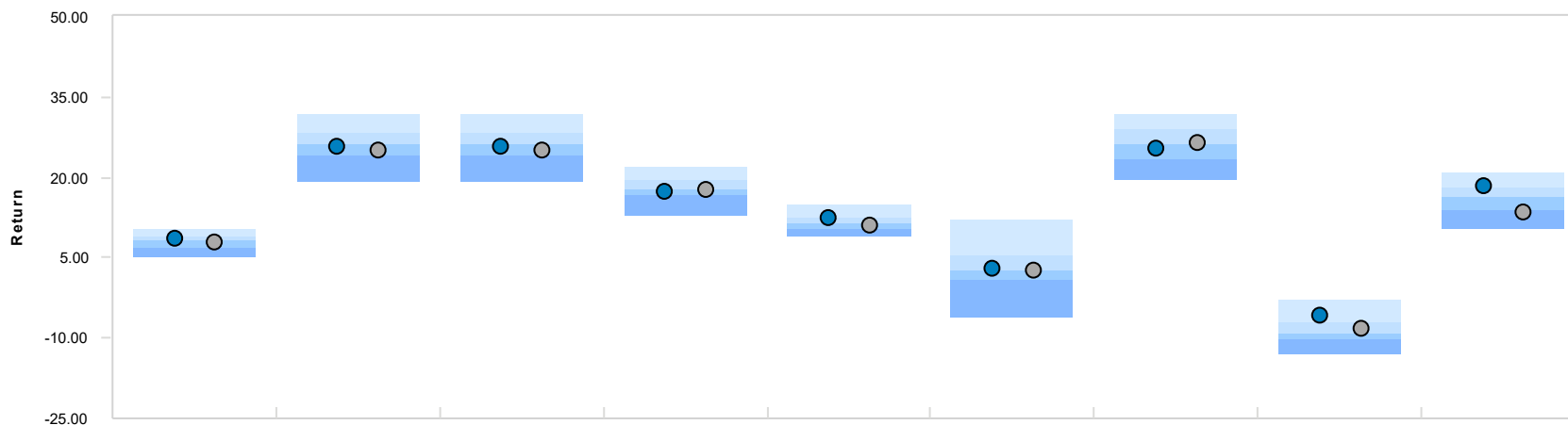
Mutual Fund Info from Lipper

Product Name : Vanguard Equity Inc;Adm (VEIRX)
Fund Family : Vanguard
Ticker : VEIRX
Peer Group : IM U.S. Large Cap Value Equity (MF)
Benchmark : Russell 1000 Value Index
Fund Inception : 08/13/2001
Portfolio Manager : Reckmeyer III/Guo/Hill
Total Assets : \$44,728 Million
Total Assets Date : 11/30/2021
Gross Expense : 0.19%
Net Expense : 0.19%
Turnover : 29%

Summary Description

The investment seeks to track the performance of a benchmark index that measures the investment return of large-capitalization stocks. The fund employs an indexing investment approach designed to track the performance of the Standard & Poor's 500 Index, a widely recognized benchmark of U.S. stock market performance that is dominated by the stocks of large U.S. companies. It attempts to replicate the target index by investing all, or substantially all, of its assets in the stocks that make up the index, holding each stock in approximately the same proportion as its weighting in the index.

Peer Group Analysis - IM U.S. Large Cap Value Equity (MF)



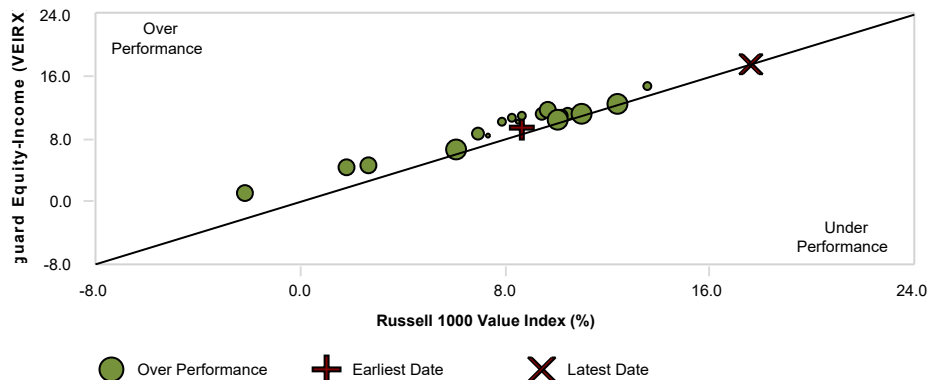
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● Vanguard Equity-Income (VEIRX)	8.70 (30)	25.65 (58)	25.65 (58)	17.54 (57)	12.67 (22)	3.12 (43)	25.35 (62)	-5.65 (14)	18.49 (23)
○ Russell 1000 Value Index	7.77 (58)	25.16 (62)	25.16 (62)	17.64 (54)	11.16 (62)	2.80 (48)	26.54 (45)	-8.27 (36)	13.66 (77)
Median	8.23	26.24	26.24	17.86	11.60	2.62	26.07	-9.08	16.29

Comparative Performance

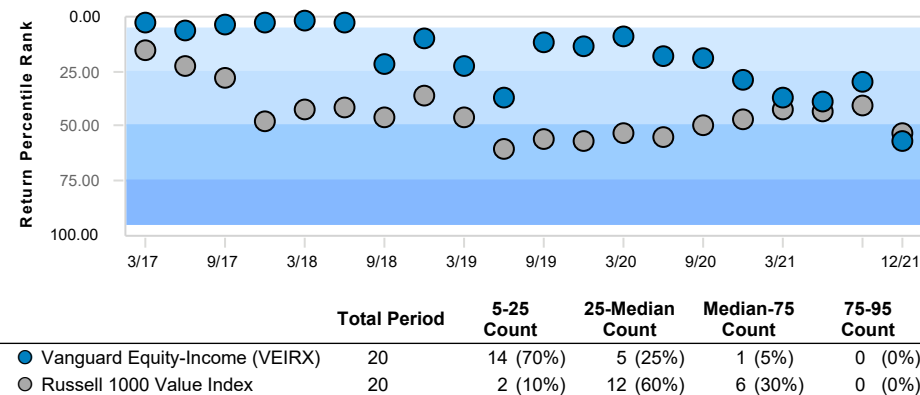
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
Vanguard Equity-Income (VEIRX)	-0.25 (34)	5.27 (50)	10.08 (69)	13.13 (82)	5.15 (45)	12.67 (93)
Russell 1000 Value Index	-0.78 (54)	5.21 (53)	11.26 (50)	16.25 (43)	5.59 (34)	14.29 (68)
IM U.S. Large Cap Value Equity (MF) Median	-0.68	5.25	11.24	15.77	4.82	15.47



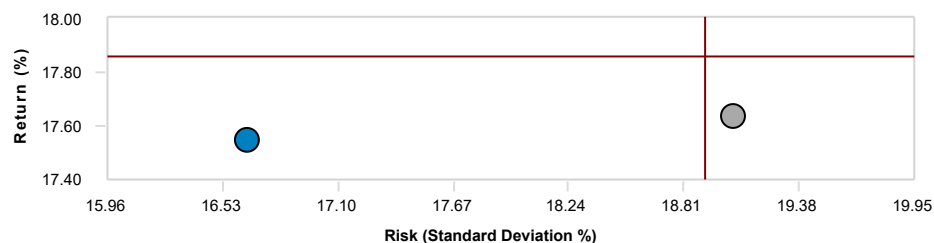
3 Yr Rolling Under/Over Performance - 5 Years



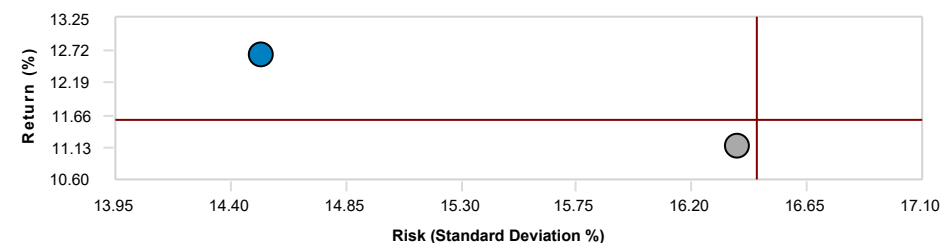
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Equity-Income (VEIRX)	3.39	92.10	86.88	1.92	-0.16	1.00	0.87	10.55
Russell 1000 Value Index	0.00	100.00	100.00	0.00	N/A	0.90	1.00	12.59

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Equity-Income (VEIRX)	2.94	94.89	83.86	2.56	0.36	0.82	0.88	9.52
Russell 1000 Value Index	0.00	100.00	100.00	0.00	N/A	0.66	1.00	11.16



Fund Information

Fund Name :	Vanguard Institutional Index Fund: Vanguard Institutional Index Fund; Institutional Shares	Portfolio Assets :	\$294,871 Million
Fund Family :	Vanguard	Portfolio Manager :	Butler/Louie
Ticker :	VINIX	PM Tenure :	2000--2017
Inception Date :	07/31/1990	Fund Style :	IM S&P 500 Index (MF)
Fund Assets :	\$125,336 Million	Style Benchmark :	S&P 500 Index
Portfolio Turnover :	4%		

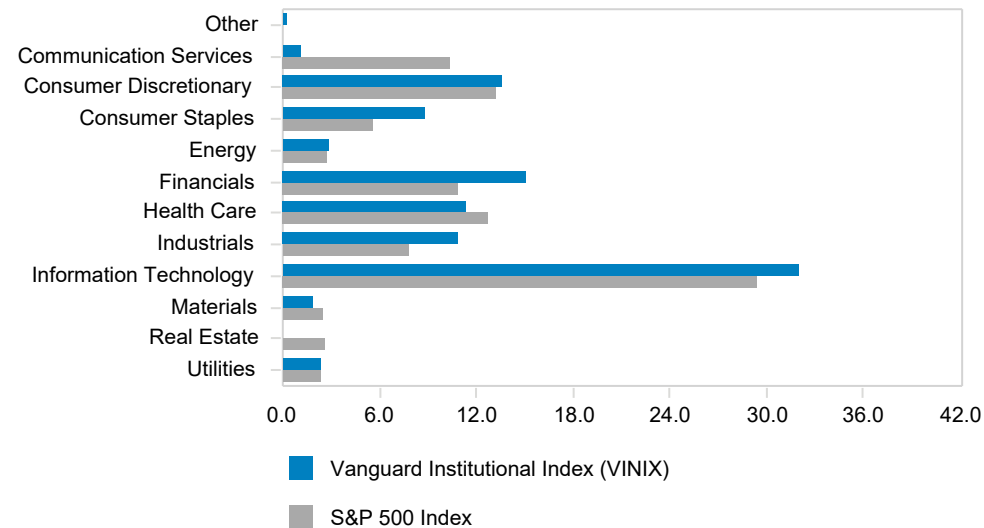
Portfolio Characteristics As of 11/30/2021

	Portfolio	Benchmark
Total Securities	507	505
Avg. Market Cap (\$)	668,359,447,233	32,403,344,000
Price/Earnings (P/E)	33.16	24.65
Price/Book (P/B)	11.12	4.81
Dividend Yield	1.75	1.36
Annual EPS	22.00	9.53
5 Yr EPS	18.73	21.35
3 Yr EPS Growth	17.78	N/A
Beta (5 Years, Monthly)	1.00	1.00

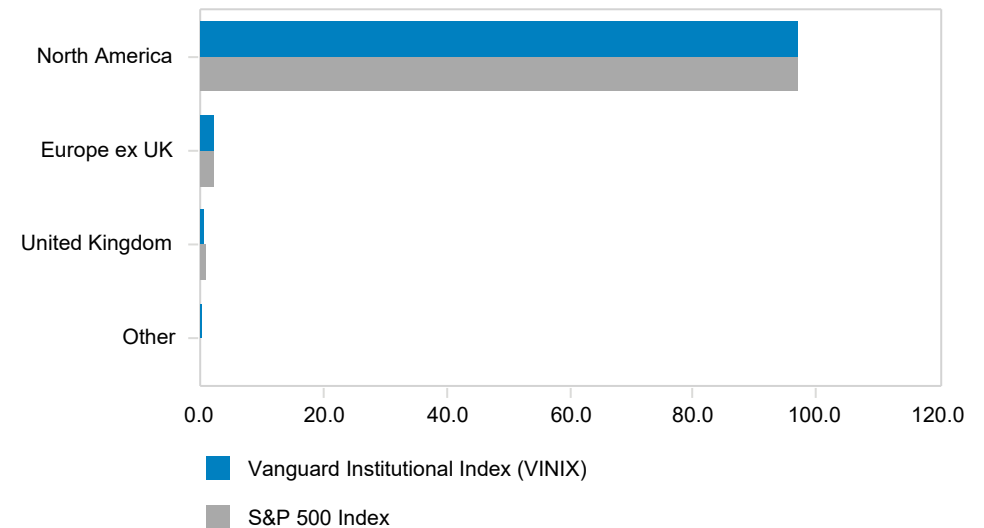
Top Ten Securities As of 11/30/2021

Apple Inc ORD	6.7 %
Microsoft Corp ORD	6.4 %
Amazon.com Inc ORD	4.0 %
Tesla Inc ORD	2.4 %
Alphabet Inc Class A ORD	2.2 %
NVIDIA Corp ORD	2.1 %
Alphabet Inc Class C ORD	2.1 %
Meta Platforms Inc ORD	2.0 %
Berkshire Hathaway Inc ORD	1.3 %
JPMorgan Chase & Co ORD	1.2 %

Sector Weights As of 11/30/2021



Region Weights As of 11/30/2021



Statistics provided by Lipper. Most recent available data shown.



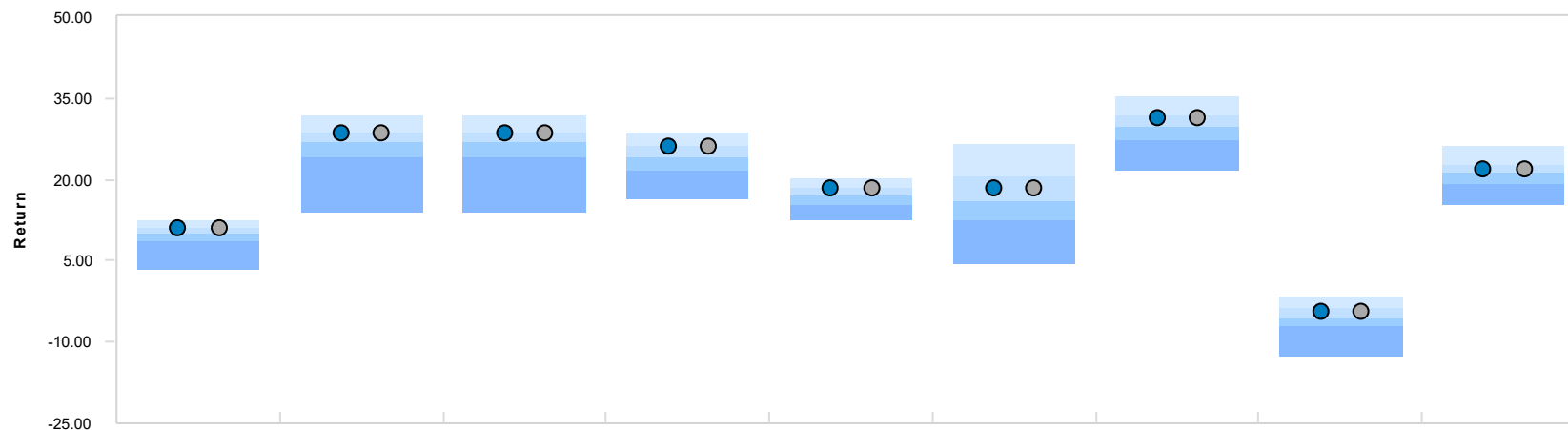
Mutual Fund Info from Lipper

Product Name : Vanguard Instl Indx;Inst (VINIX)
Fund Family : Vanguard
Ticker : VINIX
Peer Group : IM U.S. Large Cap Core Equity (MF)
Benchmark : S&P 500 Index
Fund Inception : 07/31/1990
Portfolio Manager : Butler/Louie
Total Assets : \$125,336 Million
Total Assets Date : 11/30/2021
Gross Expense : 0.04%
Net Expense : 0.04%
Turnover : 4%

Summary Description

The investment seeks to track the performance of a benchmark index that measures the investment return of large-capitalization stocks. The fund employs an indexing investment approach designed to track the performance of the Standard & Poor's 500 Index, a widely recognized benchmark of U.S. stock market performance that is dominated by the stocks of large U.S. companies. It attempts to replicate the target index by investing all, or substantially all, of its assets in the stocks that make up the index, holding each stock in approximately the same proportion as its weighting in the index.

Peer Group Analysis - IM U.S. Large Cap Core Equity (MF)



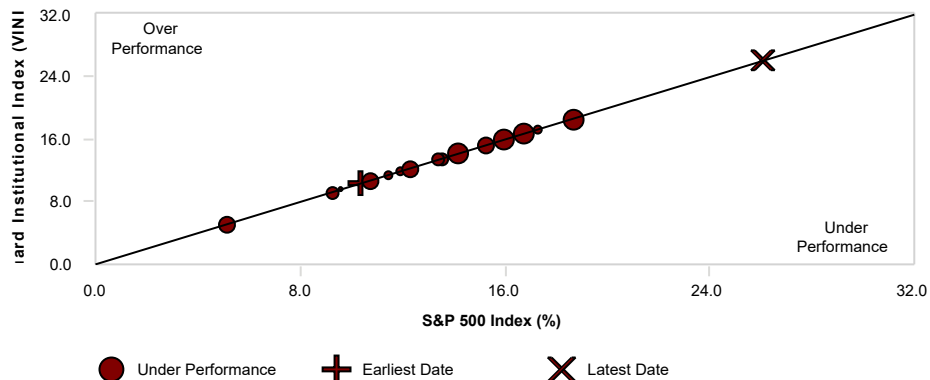
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● Vanguard Institutional Index (VINIX)	11.02 (27)	28.67 (24)	28.67 (24)	26.05 (28)	18.44 (25)	18.39 (40)	31.46 (30)	-4.42 (31)	21.79 (39)
○ S&P 500 Index	11.03 (26)	28.71 (24)	28.71 (24)	26.07 (28)	18.47 (24)	18.40 (40)	31.49 (30)	-4.38 (30)	21.83 (38)
Median	9.96	26.73	26.73	24.15	16.97	15.94	29.68	-5.61	21.17

Comparative Performance

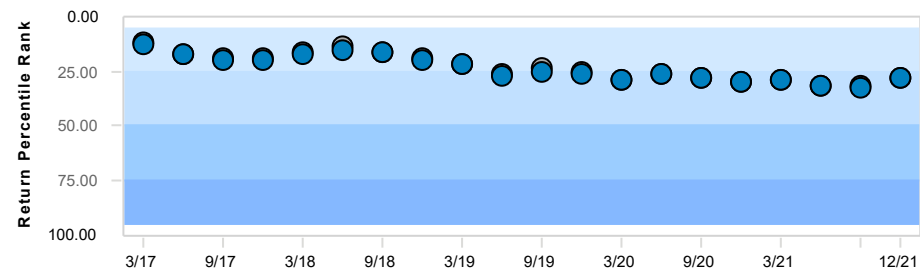
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
Vanguard Institutional Index (VINIX)	0.57 (26)	8.54 (33)	6.18 (57)	12.15 (48)	8.92 (45)	20.55 (37)
S&P 500 Index	0.58 (25)	8.55 (33)	6.17 (57)	12.15 (48)	8.93 (45)	20.54 (37)
IM U.S. Large Cap Core Equity (MF) Median	0.04	8.00	6.44	12.02	8.45	19.45



3 Yr Rolling Under/Over Performance - 5 Years

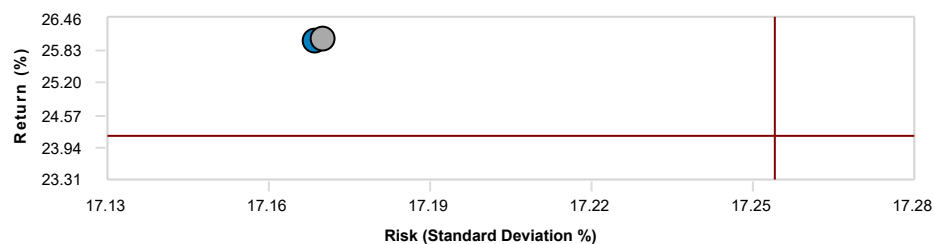


3 Yr Rolling Percentile Ranking - 5 Years



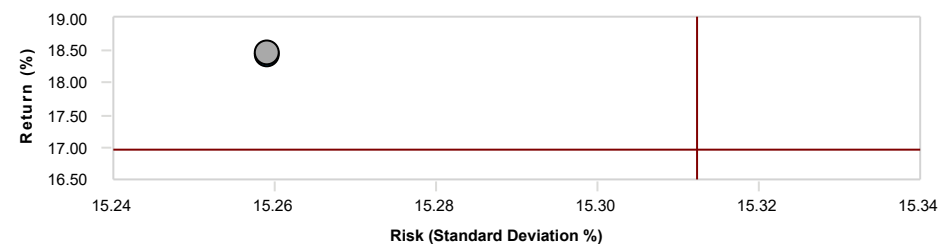
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● Vanguard Institutional Index (VINIX)	20	10 (50%)	10 (50%)	0 (0%)	0 (0%)
○ S&P 500 Index	20	11 (55%)	9 (45%)	0 (0%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● Vanguard Institutional Index (VINIX)	26.05	17.17
○ S&P 500 Index	26.07	17.17
— Median	24.15	17.25

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● Vanguard Institutional Index (VINIX)	18.44	15.26
○ S&P 500 Index	18.47	15.26
— Median	16.97	15.31

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Institutional Index (VINIX)	0.01	99.97	100.03	-0.01	-1.67	1.38	1.00	10.13
S&P 500 Index	0.00	100.00	100.00	0.00	N/A	1.38	1.00	10.13

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Institutional Index (VINIX)	0.01	99.94	100.05	-0.03	-2.43	1.11	1.00	9.55
S&P 500 Index	0.00	100.00	100.00	0.00	N/A	1.11	1.00	9.55



Fund Information

Fund Name : Vanguard Index Funds: Vanguard Mid-Cap Index Fund; Admiral Shares
 Fund Family : Vanguard
 Ticker : VIMAX
 Inception Date : 11/12/2001
 Fund Assets : \$63,025 Million
 Portfolio Turnover : 26%

Portfolio Assets : \$168,900 Million
 Portfolio Manager : Butler/Khan
 PM Tenure : 2001--2021
 Fund Style : IM U.S. Mid Cap Core Equity (MF)
 Style Benchmark : Vanguard Spliced Mid Cap Index

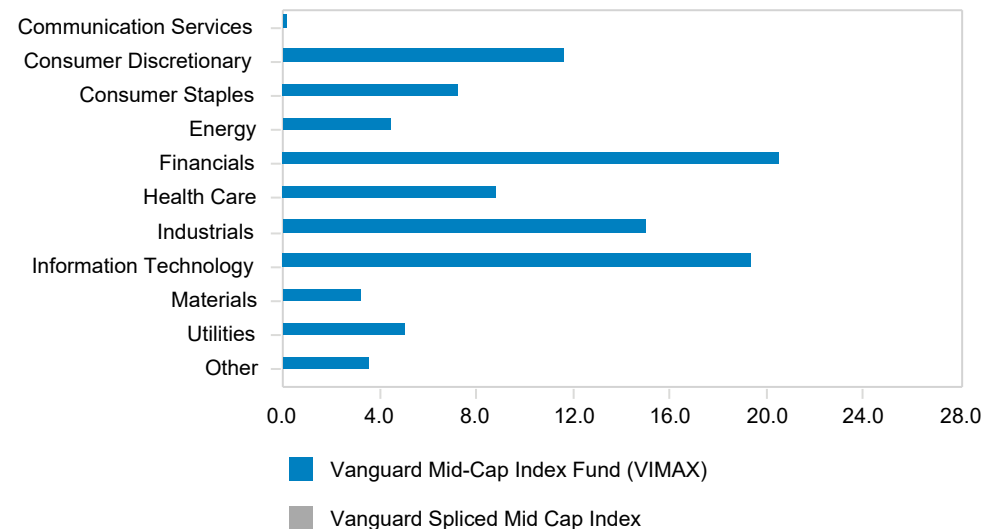
Portfolio Characteristics As of 11/30/2021

	Portfolio	Benchmark
Total Securities	386	N/A
Avg. Market Cap (\$)	29,424,412,536	-
Price/Earnings (P/E)	34.88	N/A
Price/Book (P/B)	8.00	N/A
Dividend Yield	1.86	N/A
Annual EPS	4.58	N/A
5 Yr EPS	14.18	N/A
3 Yr EPS Growth	13.43	N/A
Beta (5 Years, Monthly)	1.00	1.00

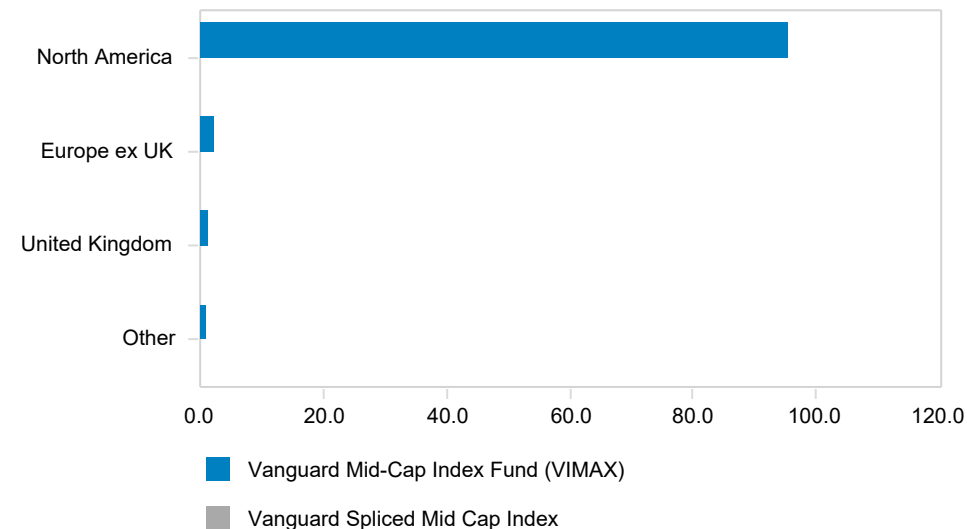
Top Ten Securities As of 11/30/2021

Vanguard Market Liquidity Fund	1.0 %
Marvell Technology Inc ORD	0.8 %
Xilinx Inc ORD	0.8 %
Dexcom Inc ORD	0.8 %
Synopsys Inc ORD	0.7 %
Palo Alto Networks Inc ORD	0.7 %
IQVIA Holdings Inc ORD	0.7 %
MSCI Inc ORD	0.7 %
Cadence Design Systems Inc ORD	0.7 %
Amphenol Corp ORD	0.7 %

Sector Weights As of 11/30/2021



Region Weights As of 11/30/2021



Statistics provided by Lipper. Most recent available data shown.



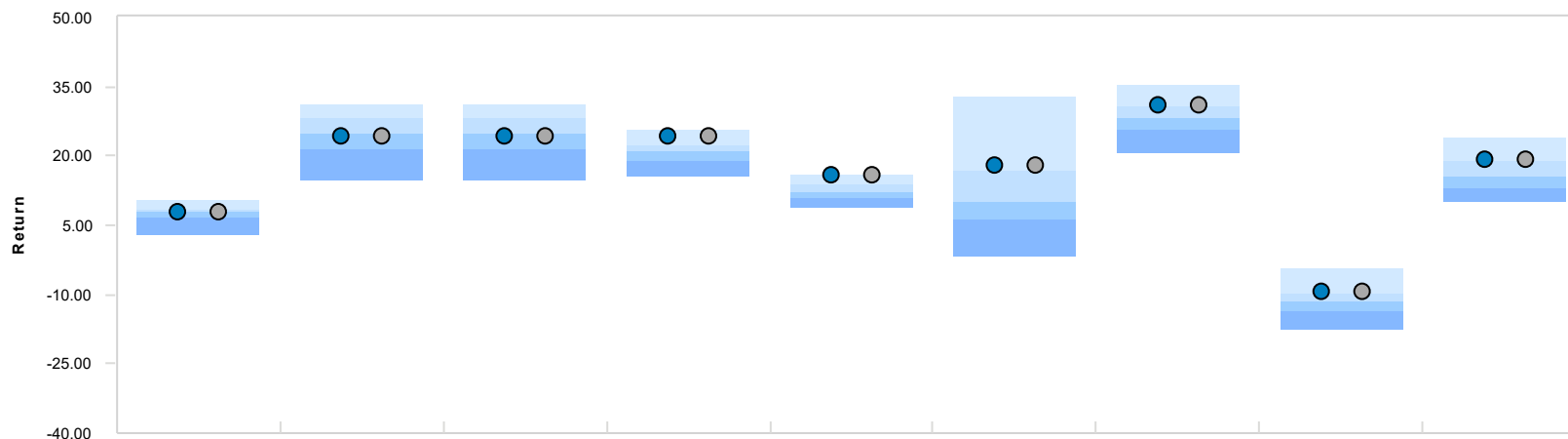
Mutual Fund Info from Lipper

Product Name : Vanguard Md-Cp I;Adm (VIMAX)
Fund Family : Vanguard
Ticker : VIMAX
Peer Group : IM U.S. Mid Cap Core Equity (MF)
Benchmark : Vanguard Spliced Mid Cap Index
Fund Inception : 11/12/2001
Portfolio Manager : Butler/Khan
Total Assets : \$63,025 Million
Total Assets Date : 11/30/2021
Gross Expense : 0.05%
Net Expense : 0.05%
Turnover : 26%

Summary Description

The investment seeks to track the performance of a benchmark index that measures the investment return of mid-capitalization stocks. The fund employs an indexing investment approach designed to track the performance of the CRSP US Mid Cap Index, a broadly diversified index of stocks of mid-size U.S. companies. The advisor attempts to replicate the target index by investing all, or substantially all, of its assets in the stocks that make up the index, holding each stock in approximately the same proportion as its weighting in the index.

Peer Group Analysis - IM U.S. Mid Cap Core Equity (MF)



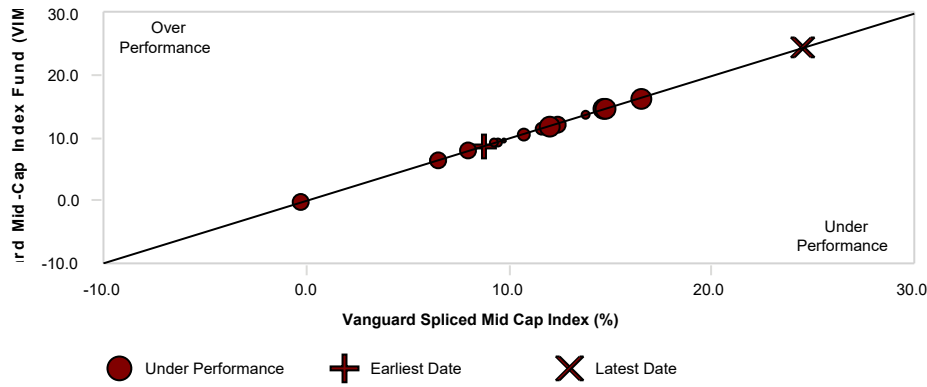
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● Vanguard Mid-Cap Index Fund (VIMAX)	7.97 (52)	24.51 (54)	24.51 (54)	24.48 (12)	15.86 (7)	18.24 (20)	31.03 (20)	-9.23 (23)	19.25 (19)
○ Vanguard Spliced Mid Cap Index	7.98 (51)	24.52 (54)	24.52 (54)	24.51 (10)	15.89 (5)	18.24 (20)	31.09 (19)	-9.22 (23)	19.30 (19)
Median	7.99	24.87	24.87	20.79	12.35	10.02	28.08	-11.52	15.44

Comparative Performance

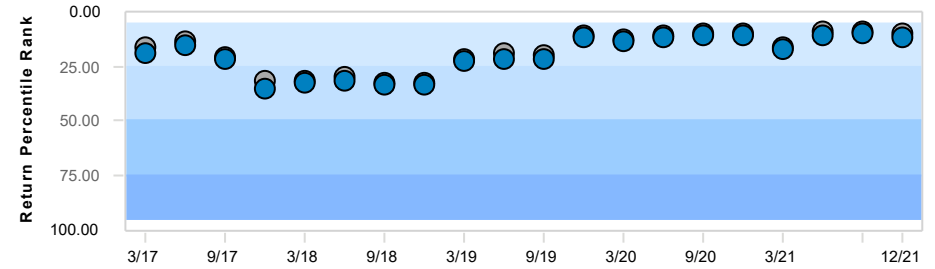
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
Vanguard Mid-Cap Index Fund (VIMAX)	0.00 (26)	7.58 (8)	7.18 (85)	18.02 (68)	7.95 (19)	24.96 (22)
Vanguard Spliced Mid Cap Index	0.01 (26)	7.59 (7)	7.18 (86)	18.03 (67)	7.95 (19)	24.97 (21)
IM U.S. Mid Cap Core Equity (MF) Median	-0.85	5.21	10.41	19.40	5.84	20.87



3 Yr Rolling Under/Over Performance - 5 Years

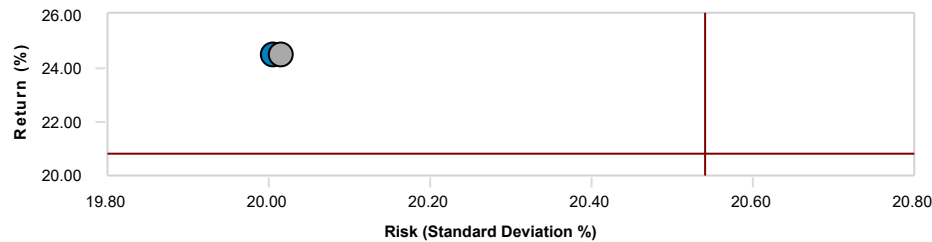


3 Yr Rolling Percentile Ranking - 5 Years



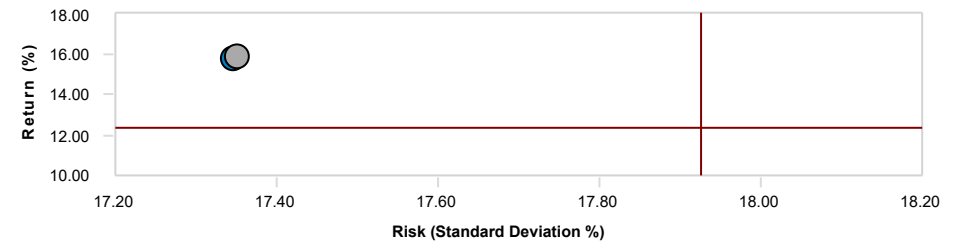
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● Vanguard Mid-Cap Index Fund (VIMAX)	20	15 (75%)	5 (25%)	0 (0%)	0 (0%)
○ Vanguard Spliced Mid Cap Index	20	15 (75%)	5 (25%)	0 (0%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● Vanguard Mid-Cap Index Fund (VIMAX)	24.48	20.01
○ Vanguard Spliced Mid Cap Index	24.51	20.01
— Median	20.79	20.54

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● Vanguard Mid-Cap Index Fund (VIMAX)	15.86	17.34
○ Vanguard Spliced Mid Cap Index	15.89	17.35
— Median	12.35	17.92

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Mid-Cap Index Fund (VIMAX)	0.03	99.96	100.05	-0.01	-0.76	1.15	1.00	12.73
Vanguard Spliced Mid Cap Index	0.00	100.00	100.00	0.00	N/A	1.15	1.00	12.74

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Mid-Cap Index Fund (VIMAX)	0.03	99.95	100.05	-0.02	-0.88	0.87	1.00	11.58
Vanguard Spliced Mid Cap Index	0.00	100.00	100.00	0.00	N/A	0.87	1.00	11.59



Fund Information

Fund Name : Carillon Series Trust: Carillon Scout Mid Cap Fund; Class I Shares
 Fund Family : Carillon Tower Advisers
 Ticker : UMBMX
 Inception Date : 10/31/2006
 Fund Assets : \$4,397 Million
 Portfolio Turnover : 109%

Portfolio Assets : \$4,753 Million
 Portfolio Manager : G. Patrick Dunkerley
 PM Tenure : 2006
 Fund Style : IM U.S. Mid Cap Core Equity (MF)
 Style Benchmark : Russell Midcap Index

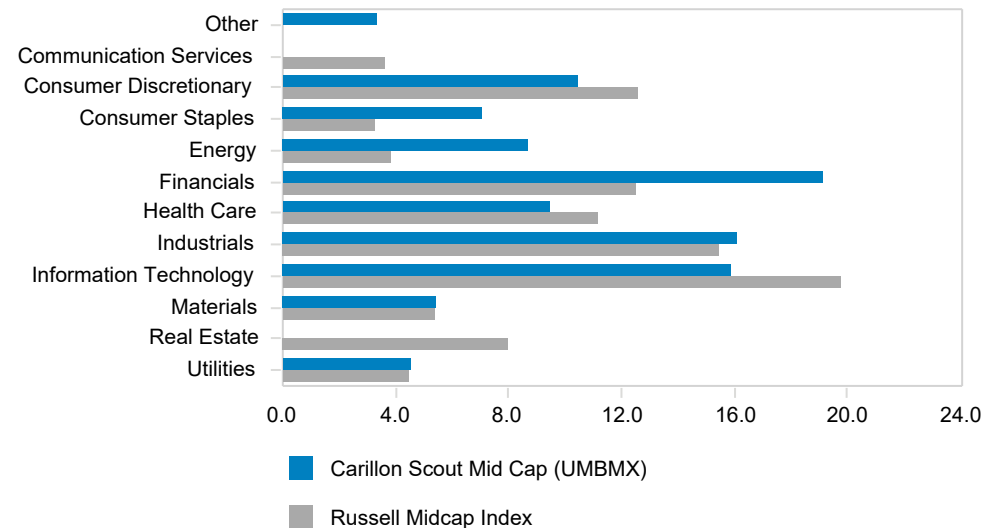
Portfolio Characteristics As of 11/30/2021

	Portfolio	Benchmark
Total Securities	169	829
Avg. Market Cap (\$)	22,438,600,341	11,189,845,680
Price/Earnings (P/E)	31.41	20.32
Price/Book (P/B)	7.09	3.57
Dividend Yield	1.62	1.30
Annual EPS	10.59	3.66
5 Yr EPS	15.12	18.75
3 Yr EPS Growth	21.49	N/A
Beta (5 Years, Monthly)	0.98	1.00

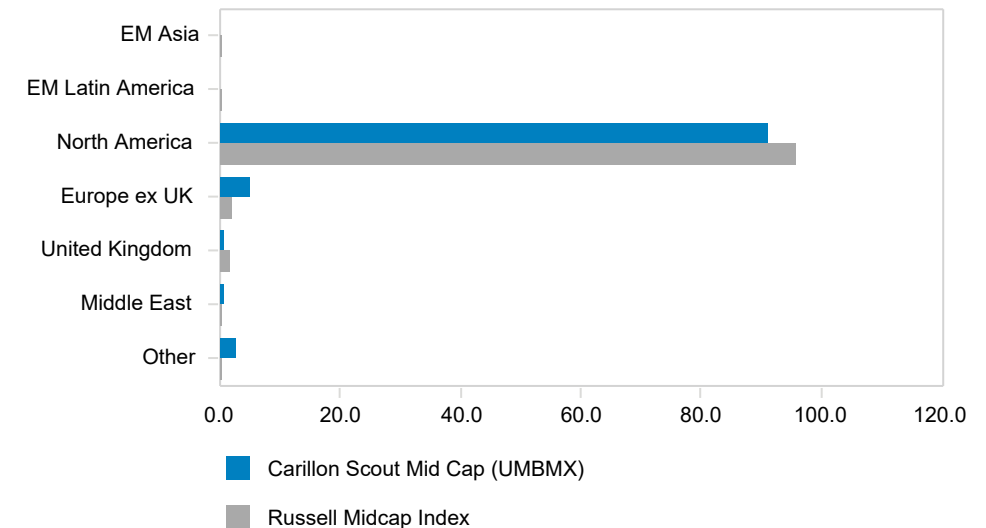
Top Ten Securities As of 11/30/2021

Baker Hughes Co ORD	2.6 %
STAG Industrial Inc ORD	2.4 %
Darling Ingredients Inc ORD	1.6 %
KLA Corp ORD	1.5 %
Signature Bank ORD	1.5 %
Quanta Services Inc ORD	1.5 %
CenterPoint Energy Inc ORD	1.5 %
Devon Energy Corp ORD	1.4 %
Evergy Inc ORD	1.3 %
Mid-America Apartment Communities	1.3 %

Sector Weights As of 11/30/2021



Region Weights As of 11/30/2021



Statistics provided by Lipper. Most recent available data shown.



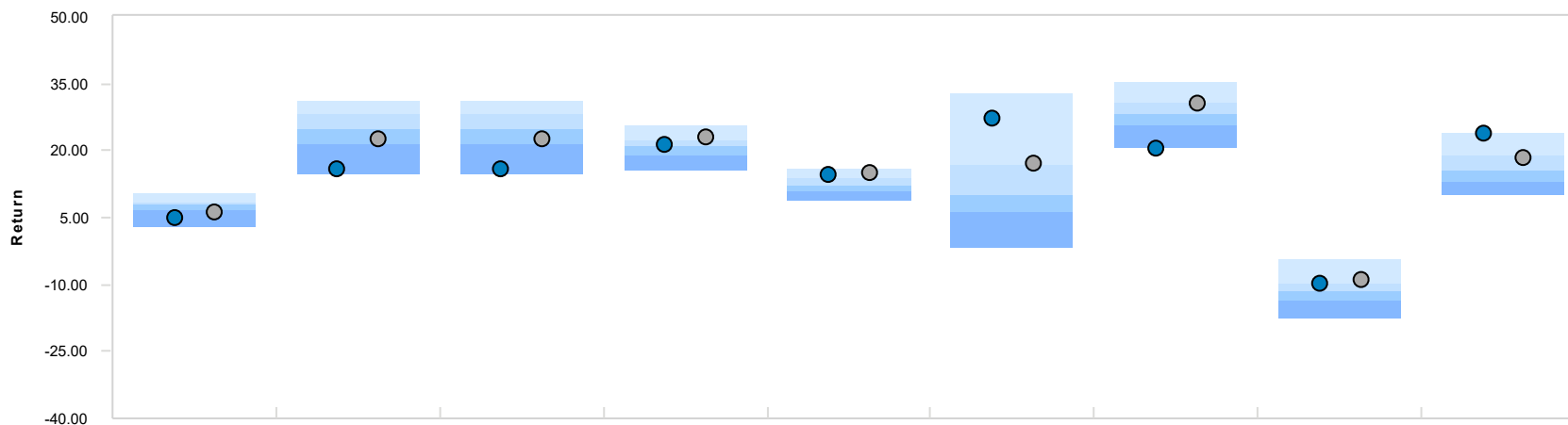
Mutual Fund Info from Lipper

Product Name : Carillon:Sct Mid Cap;I (UMBMX)
Fund Family : Carillon Tower Advisers
Ticker : UMBMX
Peer Group : IM U.S. Mid Cap Core Equity (MF)
Benchmark : Russell Midcap Index
Fund Inception : 10/31/2006
Portfolio Manager : G. Patrick Dunkerley
Total Assets : \$4,397 Million
Total Assets Date : 12/31/2021
Gross Expense : 0.97%
Net Expense : 0.97%
Turnover : 109%

Summary Description

The investment seeks long-term growth of capital. Under normal circumstances, at least 80% of the fund's net assets will be invested in mid cap equity securities. Mid cap equity securities are securities issued by companies that fall within the market capitalization range of the Russell Midcap® Index (the "index") at the time of purchase. It maintains a portfolio of investments diversified across companies and economic sectors.

Peer Group Analysis - IM U.S. Mid Cap Core Equity (MF)



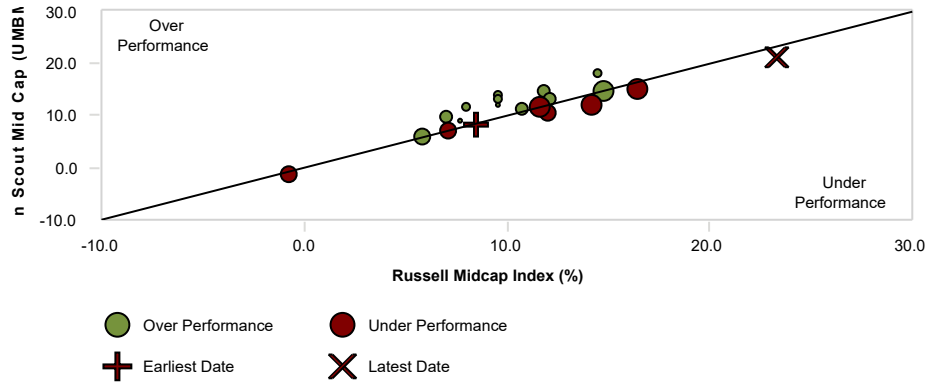
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● Carillon Scout Mid Cap (UMBMX)	4.81 (89)	15.90 (92)	15.90 (92)	21.22 (42)	14.80 (16)	27.27 (7)	20.76 (95)	-9.74 (27)	24.02 (6)
○ Russell Midcap Index	6.44 (77)	22.58 (65)	22.58 (65)	23.29 (17)	15.10 (12)	17.10 (25)	30.54 (25)	-9.06 (20)	18.52 (27)
Median	7.99	24.87	24.87	20.79	12.35	10.02	28.08	-11.52	15.44

Comparative Performance

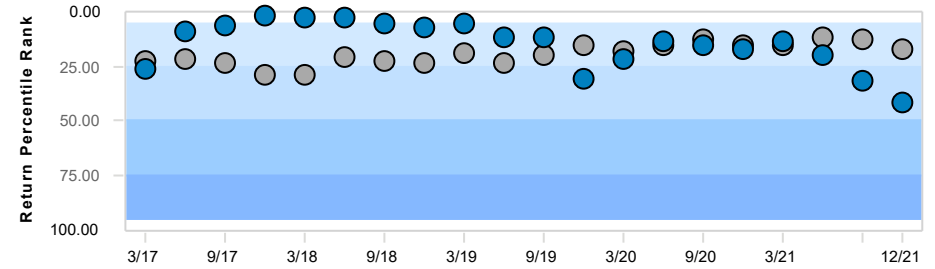
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
Carillon Scout Mid Cap (UMBMX)	-1.55 (68)	3.59 (85)	8.43 (74)	21.64 (30)	9.23 (8)	28.15 (9)
Russell Midcap Index	-0.93 (52)	7.50 (10)	8.14 (77)	19.91 (46)	7.46 (26)	24.61 (25)
IM U.S. Mid Cap Core Equity (MF) Median	-0.85	5.21	10.41	19.40	5.84	20.87



3 Yr Rolling Under/Over Performance - 5 Years

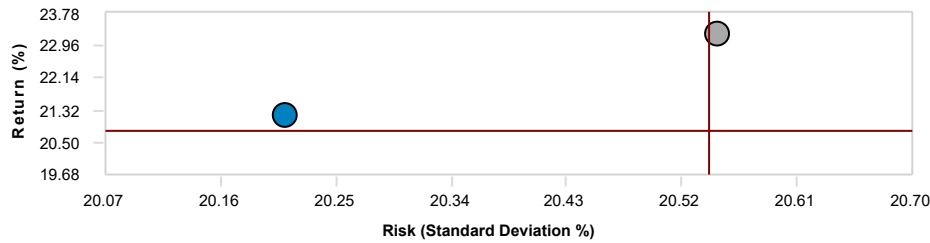


3 Yr Rolling Percentile Ranking - 5 Years



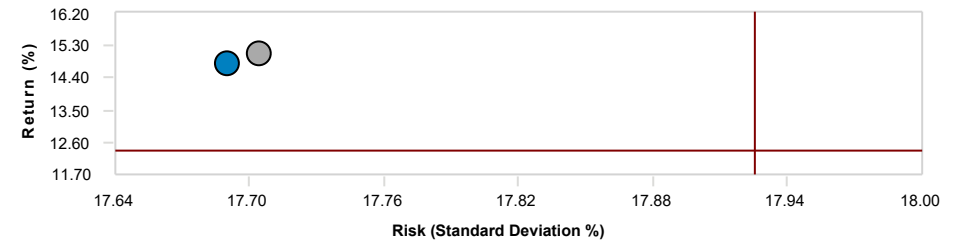
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● Carillon Scout Mid Cap (UMBMX)	20	16 (80%)	4 (20%)	0 (0%)	0 (0%)
● Russell Midcap Index	20	18 (90%)	2 (10%)	0 (0%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● Carillon Scout Mid Cap (UMBMX)	21.22	20.21
● Russell Midcap Index	23.29	20.55
— Median	20.79	20.54

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● Carillon Scout Mid Cap (UMBMX)	14.80	17.69
● Russell Midcap Index	15.10	17.70
— Median	12.35	17.92

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Carillon Scout Mid Cap (UMBMX)	3.97	95.61	100.60	-1.00	-0.46	1.01	0.96	12.69
Russell Midcap Index	0.00	100.00	100.00	0.00	N/A	1.08	1.00	13.35

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Carillon Scout Mid Cap (UMBMX)	3.72	98.69	99.17	0.08	-0.07	0.81	0.98	11.75
Russell Midcap Index	0.00	100.00	100.00	0.00	N/A	0.82	1.00	12.00



Fund Information

Fund Name :	Goldman Sachs Trust: Goldman Sachs Small Cap Value Fund; Institutional Shares	Portfolio Assets :	\$4,631 Million
Fund Family :	Goldman Sachs	Portfolio Manager :	Davis/Crystal/Butkus
Ticker :	GSSIX	PM Tenure :	2006--2006--2011
Inception Date :	08/15/1997	Fund Style :	IM U.S. Small Cap Core Equity (MF)
Fund Assets :	\$2,101 Million	Style Benchmark :	Russell 2000 Value Index
Portfolio Turnover :	64%		

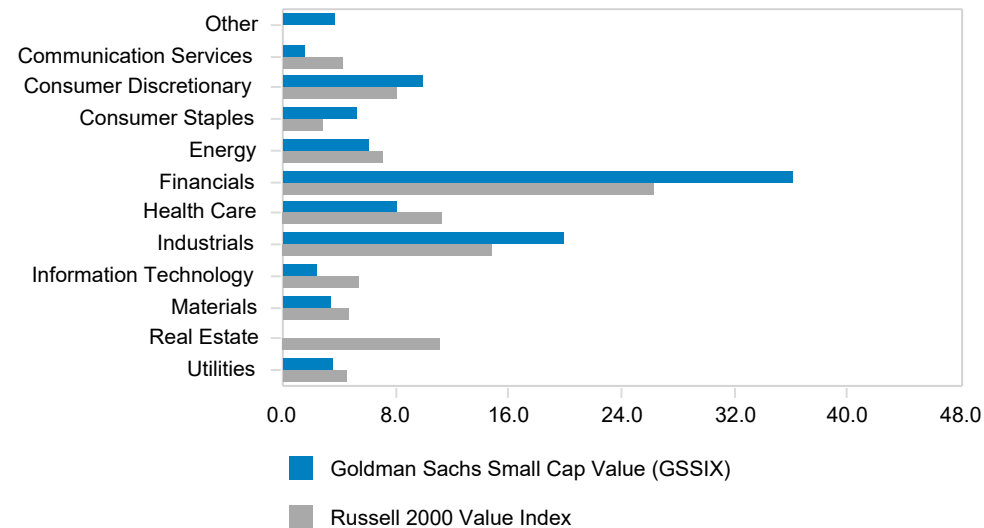
Portfolio Characteristics As of 09/30/2021

	Portfolio	Benchmark
Total Securities	226	1,429
Avg. Market Cap (\$)	3,764,119,367	1,083,050,160
Price/Earnings (P/E)	26.33	12.93
Price/Book (P/B)	3.43	1.80
Dividend Yield	2.13	1.66
Annual EPS	5.17	-4.35
5 Yr EPS	7.37	13.69
3 Yr EPS Growth	8.35	N/A
Beta (5 Years, Monthly)	0.95	1.00

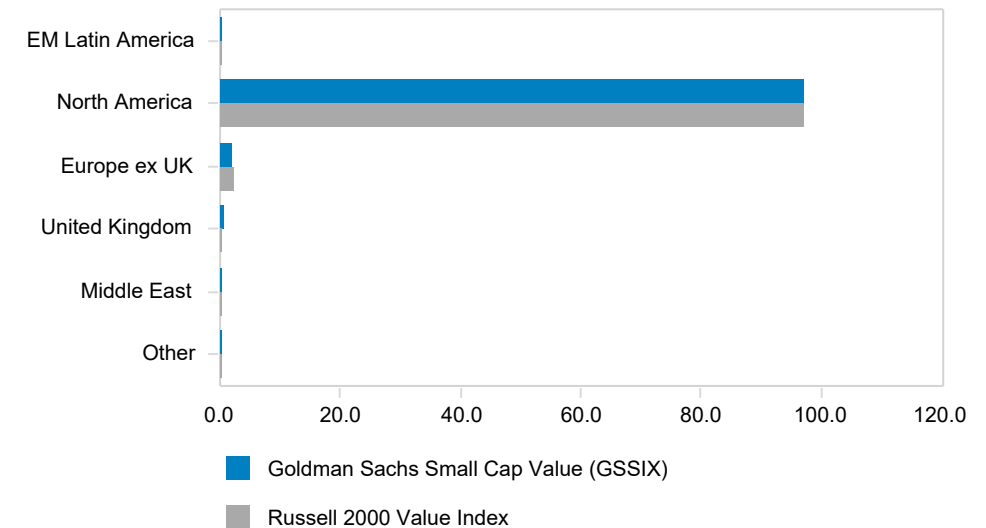
Top Ten Securities As of 09/30/2021

Zurn Water Solutions Corp ORD	1.2 %
Avient Corp ORD	1.2 %
Wesco International Inc ORD	1.0 %
KBR Inc ORD	0.9 %
Tenet Healthcare Corp ORD	0.9 %
PennyMac Mortgage Investment Trust	0.9 %
Healthcare Realty Trust Inc ORD	0.9 %
Antero Resources Corp ORD	0.8 %
Pebblebrook Hotel Trust ORD	0.8 %
Washington Federal Inc ORD	0.8 %

Sector Weights As of 09/30/2021



Region Weights As of 09/30/2021



Statistics provided by Lipper. Most recent available data shown.



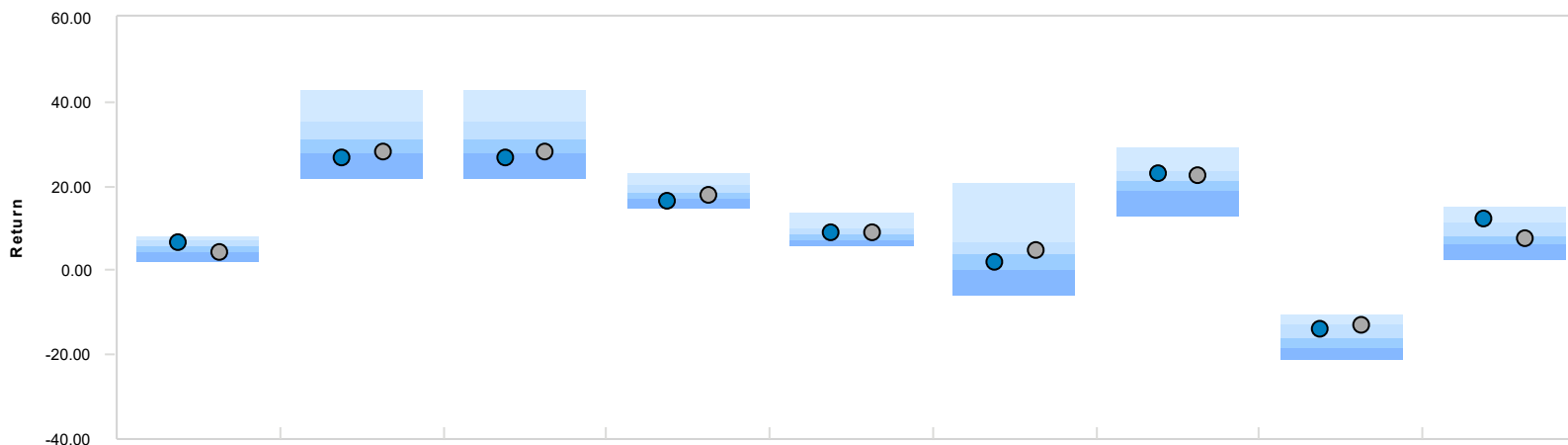
Mutual Fund Info from Lipper

Product Name : Goldman:Sm Cap Val;I (GSSIX)
Fund Family : Goldman Sachs
Ticker : GSSIX
Peer Group : IM U.S. Small Cap Value Equity (MF)
Benchmark : Russell 2000 Value Index
Fund Inception : 08/15/1997
Portfolio Manager : Davis/Crystal/Butkus
Total Assets : \$2,101 Million
Total Assets Date : 12/31/2021
Gross Expense : 0.99%
Net Expense : 0.96%
Turnover : 64%

Summary Description

The investment seeks long-term capital appreciation. The fund normally invests at least 80% of its net assets plus any borrowings for investment purposes (measured at time of purchase) ("net assets") in a diversified portfolio of equity investments in small-cap issuers with public stock market capitalizations within the range of the market capitalization of companies constituting the Russell 2000® Value Index at the time of investment. Although it will invest primarily in publicly traded U.S. securities, including real estate investment trusts, it may also invest in foreign securities.

Peer Group Analysis - IM U.S. Small Cap Value Equity (MF)



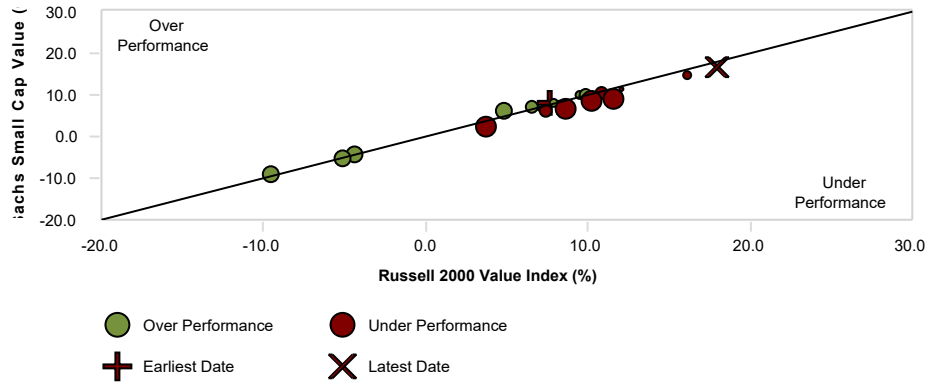
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● Goldman Sachs Small Cap Value (GSSIX)	6.95 (27)	26.71 (80)	26.71 (80)	16.77 (80)	8.99 (45)	2.06 (66)	23.14 (27)	-14.02 (35)	12.34 (18)
○ Russell 2000 Value Index	4.36 (75)	28.27 (65)	28.27 (65)	17.99 (58)	9.07 (44)	4.63 (42)	22.39 (36)	-12.86 (24)	7.84 (57)
Median	5.85	30.85	30.85	18.26	8.59	3.84	21.26	-16.08	8.32

Comparative Performance

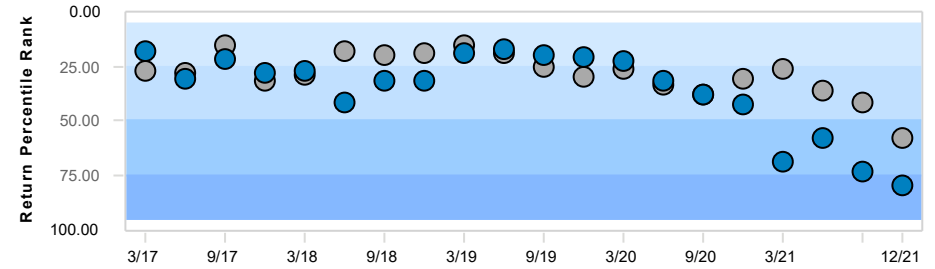
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
Goldman Sachs Small Cap Value (GSSIX)	-1.24 (25)	2.66 (84)	16.86 (87)	31.58 (55)	3.03 (43)	17.82 (90)
Russell 2000 Value Index	-2.98 (78)	4.56 (50)	21.17 (52)	33.36 (38)	2.56 (48)	18.91 (82)
IM U.S. Small Cap Value Equity (MF) Median	-2.08	4.52	21.38	32.34	2.48	21.79



3 Yr Rolling Under/Over Performance - 5 Years

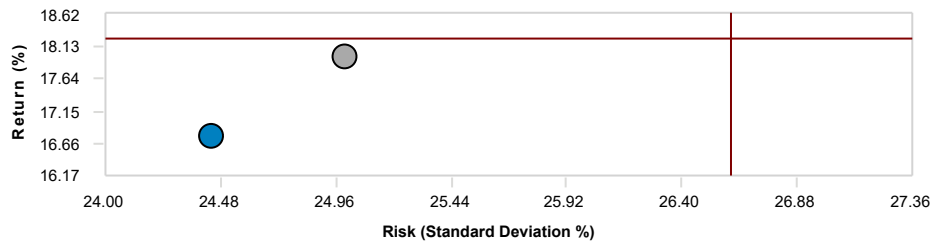


3 Yr Rolling Percentile Ranking - 5 Years



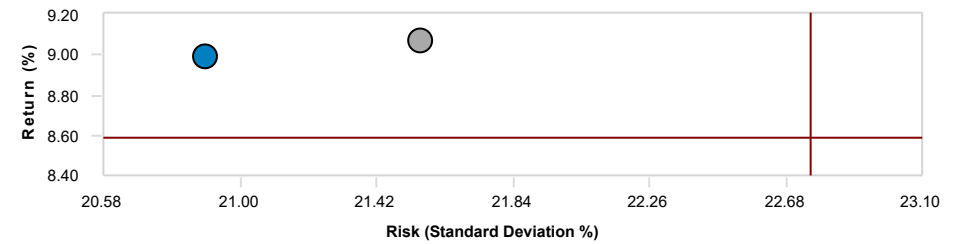
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● Goldman Sachs Small Cap Value (GSSIX)	20	7 (35%)	9 (45%)	3 (15%)	1 (5%)
● Russell 2000 Value Index	20	7 (35%)	12 (60%)	1 (5%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● Goldman Sachs Small Cap Value (GSSIX)	16.77	24.44
● Russell 2000 Value Index	17.99	25.00
— Median	18.26	26.60

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● Goldman Sachs Small Cap Value (GSSIX)	8.99	20.89
● Russell 2000 Value Index	9.07	21.55
— Median	8.59	22.76

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Goldman Sachs Small Cap Value (GSSIX)	4.44	95.98	97.50	-0.40	-0.26	0.72	0.96	17.23
Russell 2000 Value Index	0.00	100.00	100.00	0.00	N/A	0.75	1.00	17.21

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Goldman Sachs Small Cap Value (GSSIX)	3.89	94.58	92.67	0.33	-0.05	0.47	0.95	15.09
Russell 2000 Value Index	0.00	100.00	100.00	0.00	N/A	0.46	1.00	15.26



Fund Information

Fund Name : Vanguard Index Funds: Vanguard Small-Cap Index Fund; Admiral Shares
 Fund Family : Vanguard
 Ticker : VSMAX
 Inception Date : 11/13/2000
 Fund Assets : \$53,599 Million
 Portfolio Turnover : 22%

Portfolio Assets : \$141,421 Million
 Portfolio Manager : Coleman/O'Reilly
 PM Tenure : 2016--2016
 Fund Style : IM U.S. SMID Cap Core Equity (MF)
 Style Benchmark : Vanguard Spliced Small Cap Index

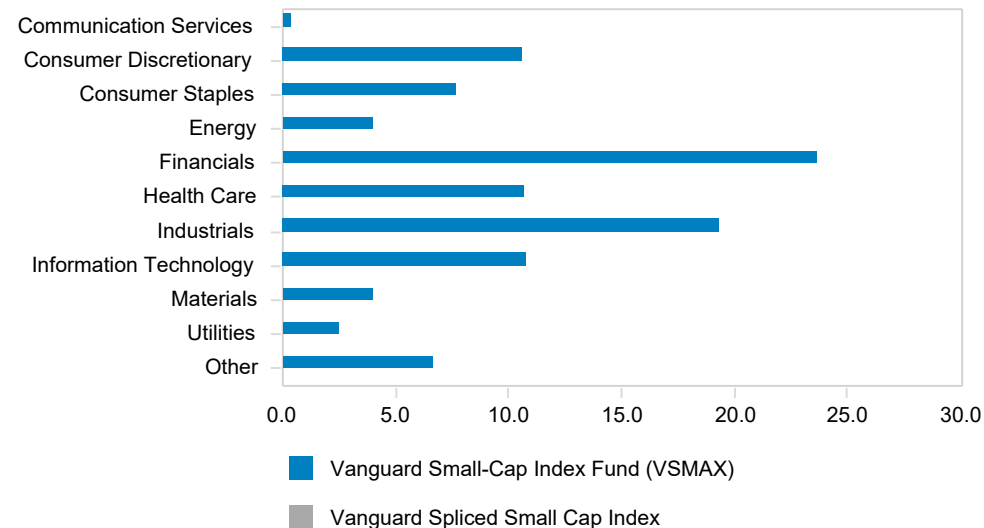
Portfolio Characteristics As of 11/30/2021

	Portfolio	Benchmark
Total Securities	1,562	N/A
Avg. Market Cap (\$)	7,563,021,268	-
Price/Earnings (P/E)	27.76	N/A
Price/Book (P/B)	5.81	N/A
Dividend Yield	2.03	N/A
Annual EPS	5.06	N/A
5 Yr EPS	10.17	N/A
3 Yr EPS Growth	11.40	N/A
Beta (5 Years, Monthly)	1.00	1.00

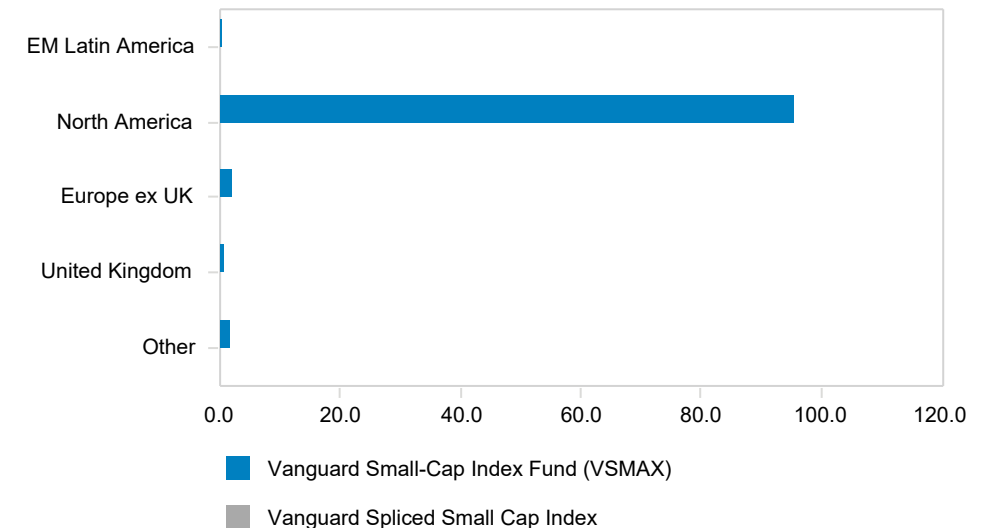
Top Ten Securities As of 11/30/2021

Vanguard Market Liquidity Fund	1.6 %
Pool Corp ORD	0.4 %
Entegris Inc ORD	0.4 %
Diamondback Energy Inc ORD	0.4 %
Bio-Techne Corp ORD	0.3 %
Signature Bank ORD	0.3 %
Nuance Communications Inc ORD	0.3 %
IDEX Corp ORD	0.3 %
VICI Properties Inc ORD	0.3 %
Molina Healthcare Inc ORD	0.3 %

Sector Weights As of 11/30/2021



Region Weights As of 11/30/2021



Statistics provided by Lipper. Most recent available data shown.



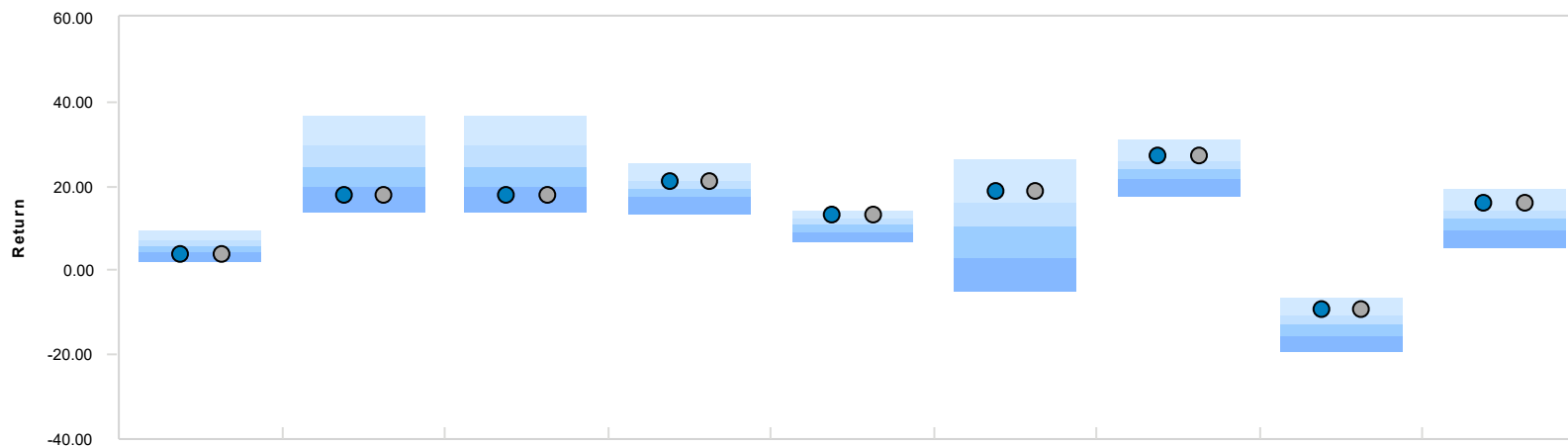
Mutual Fund Info from Lipper

Product Name : Vanguard S-C Id;Adm (VSMAX)
Fund Family : Vanguard
Ticker : VSMAX
Peer Group : IM U.S. Small Cap Core Equity (MF)
Benchmark : Vanguard Spliced Small Cap Index
Fund Inception : 11/13/2000
Portfolio Manager : Coleman/O'Reilly
Total Assets : \$53,599 Million
Total Assets Date : 11/30/2021
Gross Expense : 0.05%
Net Expense : 0.05%
Turnover : 22%

Summary Description

The investment seeks to track the performance of a benchmark index that measures the investment return of small-capitalization stocks. The fund employs an indexing investment approach designed to track the performance of the CRSP US Small Cap Index, a broadly diversified index of stocks of small U.S. companies. The advisor attempts to replicate the target index by investing all, or substantially all, of its assets in the stocks that make up the index, holding each stock in approximately the same proportion as its weighting in the index.

Peer Group Analysis - IM U.S. Small Cap Core Equity (MF)



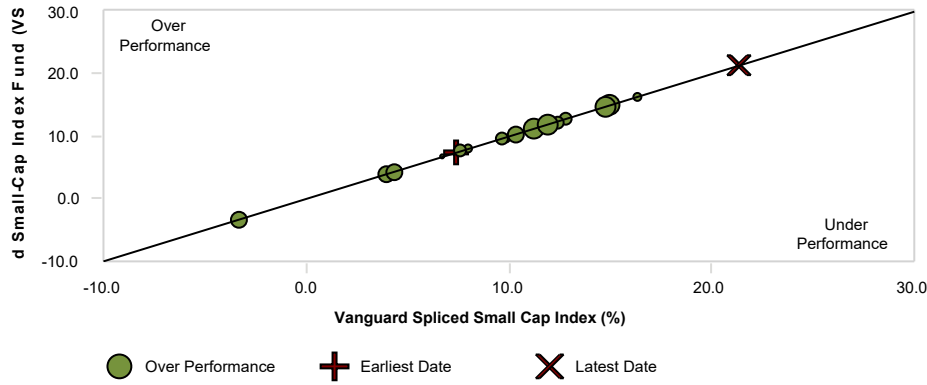
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● Vanguard Small-Cap Index Fund (VSMAX)	3.87 (82)	17.73 (83)	17.73 (83)	21.33 (24)	13.49 (11)	19.11 (18)	27.37 (15)	-9.31 (18)	16.24 (13)
○ Vanguard Spliced Small Cap Index	3.87 (82)	17.71 (83)	17.71 (83)	21.31 (25)	13.47 (12)	19.07 (18)	27.35 (16)	-9.33 (18)	16.24 (13)
Median	5.89	24.55	24.55	19.55	10.97	10.36	23.86	-12.67	12.38

Comparative Performance

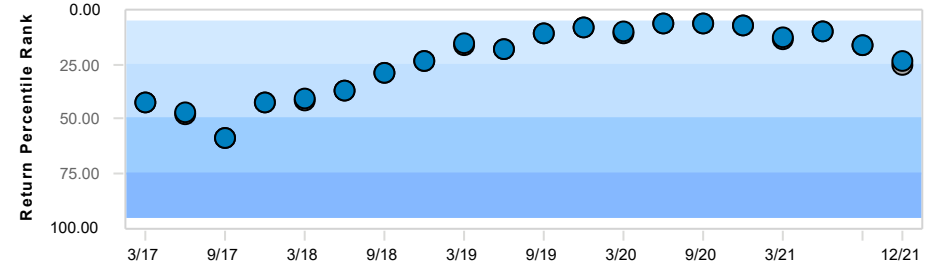
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
Vanguard Small-Cap Index Fund (VSMAX)	-2.62 (59)	5.60 (18)	10.22 (92)	27.10 (68)	5.79 (20)	26.66 (20)
Vanguard Spliced Small Cap Index	-2.62 (59)	5.59 (18)	10.21 (92)	27.10 (68)	5.78 (20)	26.66 (20)
IM U.S. Small Cap Core Equity (MF) Median	-2.28	4.00	15.25	28.43	3.45	22.42



3 Yr Rolling Under/Over Performance - 5 Years

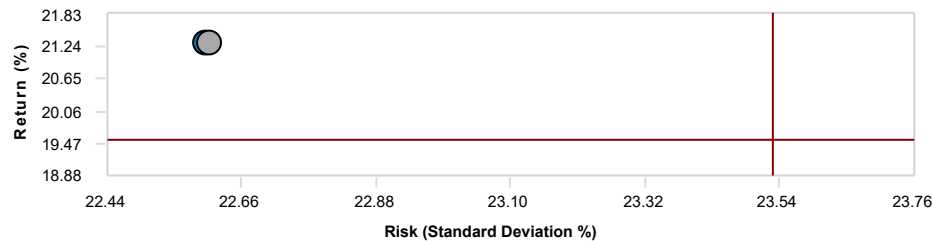


3 Yr Rolling Percentile Ranking - 5 Years



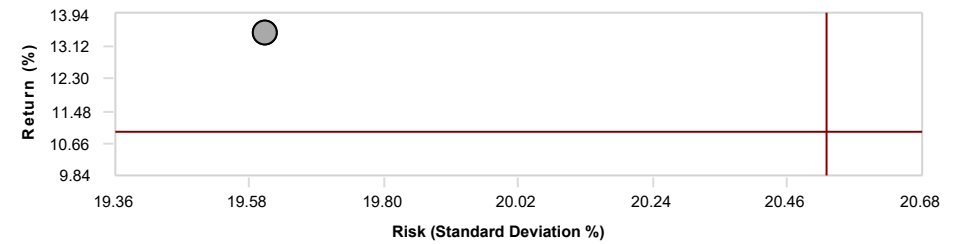
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● Vanguard Small-Cap Index Fund (VSMAX)	20	13 (65%)	6 (30%)	1 (5%)	0 (0%)
○ Vanguard Spliced Small Cap Index	20	13 (65%)	6 (30%)	1 (5%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● Vanguard Small-Cap Index Fund (VSMAX)	21.33	22.60
○ Vanguard Spliced Small Cap Index	21.31	22.61
— Median	19.55	23.53

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● Vanguard Small-Cap Index Fund (VSMAX)	13.49	19.60
○ Vanguard Spliced Small Cap Index	13.47	19.61
— Median	10.97	20.52

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Small-Cap Index Fund (VSMAX)	0.03	100.04	99.99	0.02	0.68	0.93	1.00	14.87
Vanguard Spliced Small Cap Index	0.00	100.00	100.00	0.00	N/A	0.93	1.00	14.88

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Small-Cap Index Fund (VSMAX)	0.03	100.05	100.00	0.02	0.55	0.69	1.00	13.49
Vanguard Spliced Small Cap Index	0.00	100.00	100.00	0.00	N/A	0.69	1.00	13.49



Fund Information

Fund Name : TIAA-CREF Funds: International Equity Index Fund; Premier Class Shares
 Fund Family : TIAA
 Ticker : TRIPX
 Inception Date : 09/30/2009
 Fund Assets : \$192 Million
 Portfolio Turnover : 5%

Portfolio Assets : \$19,414 Million
 Portfolio Manager : Campagna/Liao/Tran
 PM Tenure : 2009--2014--2019
 Fund Style : IM International Multi-Cap Core Equity (MF)
 Style Benchmark : MSCI EAFE (Net) Index

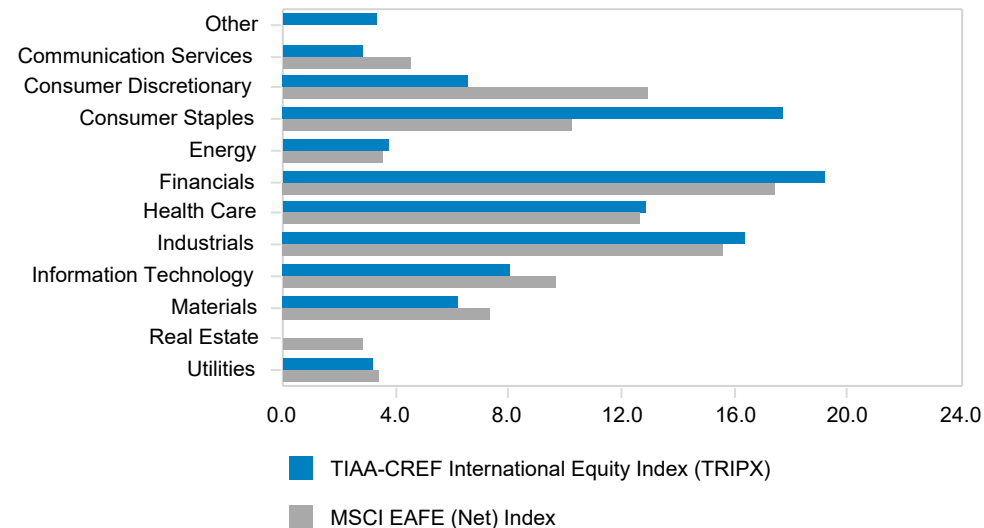
Portfolio Characteristics As of 10/31/2021

	Portfolio	Benchmark
Total Securities	865	843
Avg. Market Cap (\$)	85,238,575,545	14,494,479,516
Price/Earnings (P/E)	26.88	17.68
Price/Book (P/B)	5.01	2.84
Dividend Yield	2.46	2.72
Annual EPS	5.08	134.57
5 Yr EPS	6.44	13.50
3 Yr EPS Growth	1.18	N/A
Beta (5 Years, Monthly)	1.00	1.00

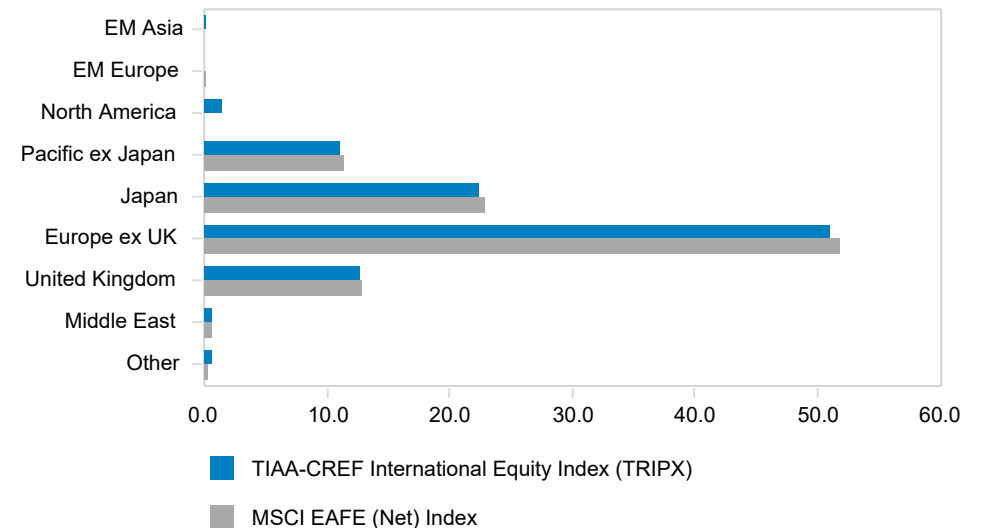
Top Ten Securities As of 10/31/2021

Nestle SA ORD	2.2 %
ASML Holding NV ORD	1.9 %
Roche Holding AG	1.6 %
LVMH Moet Hennessy Louis Vuitton	1.2 %
AstraZeneca PLC ORD	1.1 %
Toyota Motor Corp ORD	1.1 %
Novo Nordisk A/S ORD	1.1 %
Novartis AG ORD	1.0 %
SAP SE ORD	0.9 %
Sony Group Corp ORD	0.8 %

Sector Weights As of 10/31/2021



Region Weights As of 10/31/2021



Statistics provided by Lipper. Most recent available data shown.



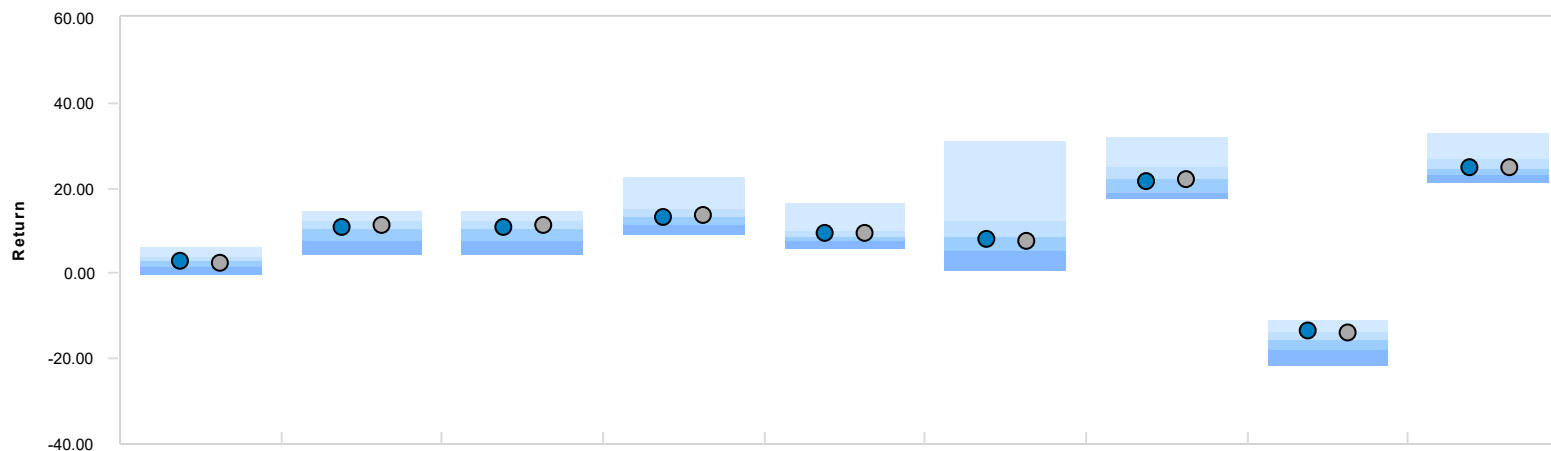
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Itl Eq lx;Prmr (TRIPX)
 Fund Family : TIAA
 Ticker : TRIPX
 Peer Group : IM International Large Cap Core Equity (MF)
 Benchmark : MSCI EAFE (Net) Index
 Fund Inception : 09/30/2009
 Portfolio Manager : Campagna/Liao/Tran
 Total Assets : \$192 Million
 Total Assets Date : 12/31/2021
 Gross Expense : 0.20%
 Net Expense : 0.20%
 Turnover : 5%

Summary Description

The investment seeks a favorable long-term total return, mainly through capital appreciation, by investing primarily in a portfolio of foreign equity investments based on a market index. Under normal circumstances, the fund invests at least 80% of its assets in securities of its benchmark index (the MSCI EAFE® Index). It buys most, but not necessarily all, of the stocks included in its benchmark index, and the advisor will attempt to closely match the overall investment characteristics of the fund's benchmark index. The fund primarily invests its assets in equity securities selected to track a designated stock market index.

Peer Group Analysis - IM International Large Cap Core Equity (MF)



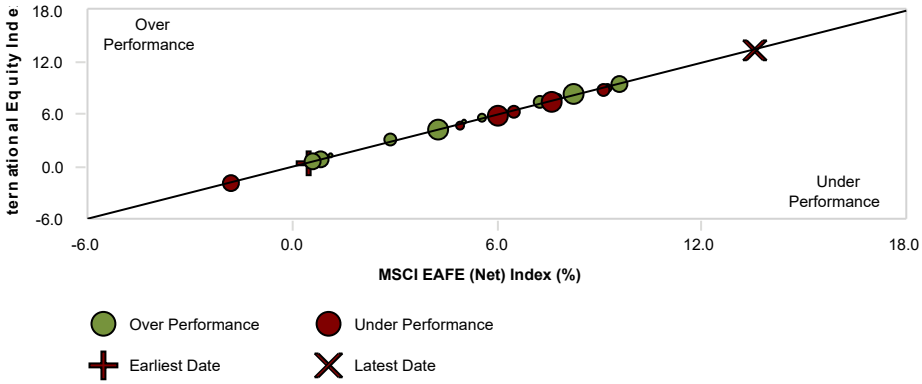
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● TIAA-CREF International Equity Index (TRIPX)	3.16 (37)	11.16 (40)	11.16 (40)	13.44 (50)	9.61 (32)	8.01 (54)	21.59 (58)	-13.39 (19)	25.14 (37)
○ MSCI EAFE (Net) Index	2.69 (61)	11.26 (39)	11.26 (39)	13.54 (49)	9.55 (32)	7.82 (55)	22.01 (52)	-13.79 (25)	25.03 (38)
Median	2.86	10.33	10.33	13.34	8.66	8.49	22.06	-15.69	24.43

Comparative Performance

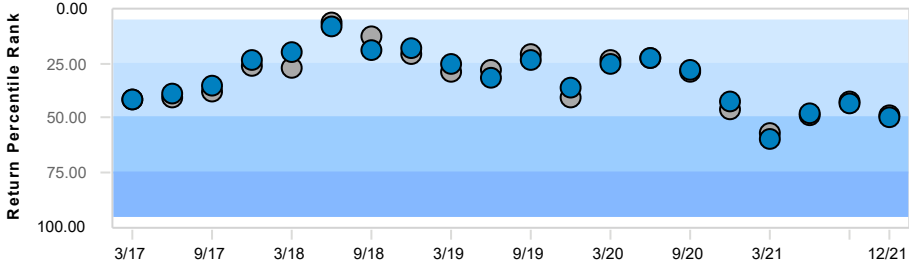
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
TIAA-CREF International Equity Index (TRIPX)	-1.04 (23)	5.26 (43)	3.45 (66)	15.79 (55)	4.55 (72)	15.89 (56)
MSCI EAFE (Net) Index	-0.45 (14)	5.17 (45)	3.48 (66)	16.05 (51)	4.80 (70)	14.88 (89)
IM International Large Cap Core Equity (MF) Median	-2.01	5.09	4.40	16.08	5.42	16.63



3 Yr Rolling Under/Over Performance - 5 Years

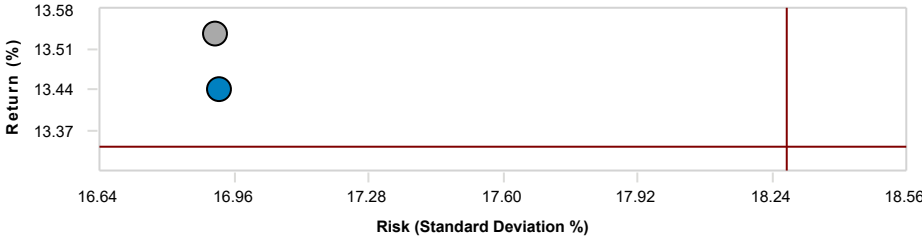


3 Yr Rolling Percentile Ranking - 5 Years



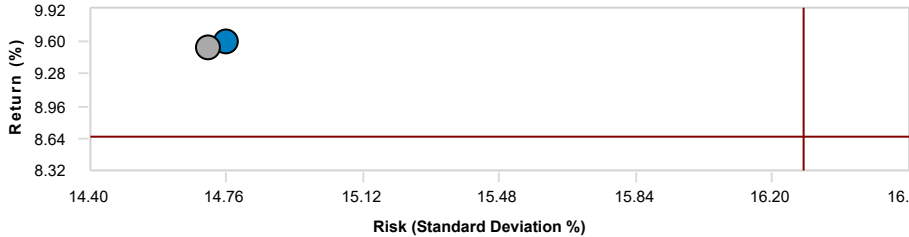
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● TIAA-CREF International Equity Index (TRIPX)	20	9 (45%)	10 (50%)	1 (5%)	0 (0%)
● MSCI EAFE (Net) Index	20	6 (30%)	13 (65%)	1 (5%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● TIAA-CREF International Equity Index (TRIPX)	13.44	16.93
● MSCI EAFE (Net) Index	13.54	16.92
— Median	13.34	18.28

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● TIAA-CREF International Equity Index (TRIPX)	9.61	14.76
● MSCI EAFE (Net) Index	9.55	14.71
— Median	8.66	16.28

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF International Equity Index (TRIPX)	1.67	100.64	101.65	-0.02	-0.05	0.77	1.00	11.00
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.78	1.00	10.81

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF International Equity Index (TRIPX)	1.54	100.05	99.60	0.10	0.05	0.62	1.00	9.88
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.61	1.00	9.71



Fund Information

Fund Name : New Economy Fund; Class R5E Shares
 Fund Family : Capital Group/American Funds
 Ticker : RNGHX
 Inception Date : 11/20/2015
 Fund Assets : \$86 Million
 Portfolio Turnover : 38%

Portfolio Assets : \$35,170 Million
 Portfolio Manager : Team Managed
 PM Tenure :
 Fund Style : IM U.S. Multi-Cap Growth Equity (MF)
 Style Benchmark : MSCI AC World Index (Net)

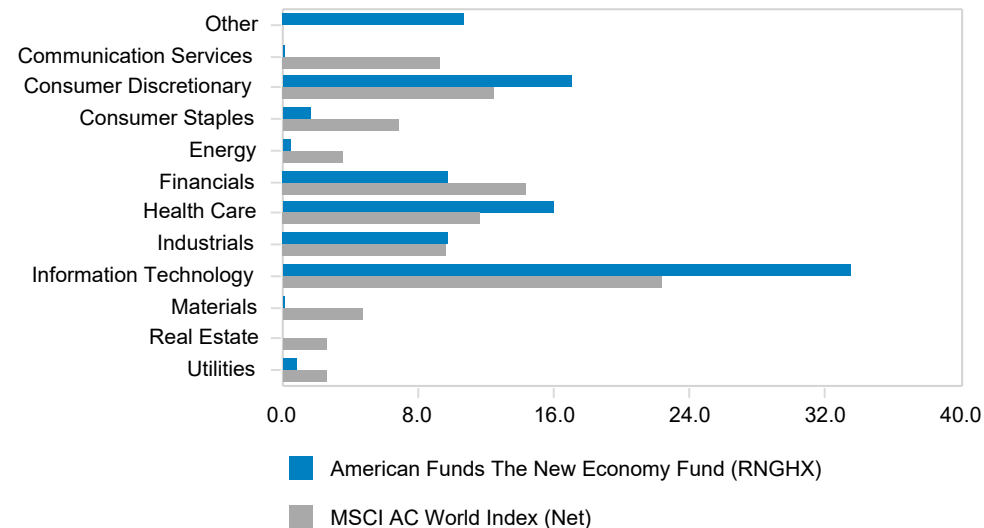
Portfolio Characteristics As of 09/30/2021

	Portfolio	Benchmark
Total Securities	259	2,979
Avg. Market Cap (\$)	295,016,007,512	13,589,282,145
Price/Earnings (P/E)	38.72	19.83
Price/Book (P/B)	11.76	3.67
Dividend Yield	1.17	1.88
Annual EPS	19.20	123.05
5 Yr EPS	28.37	17.72
3 Yr EPS Growth	23.11	N/A
Beta (5 Years, Monthly)	0.97	1.00

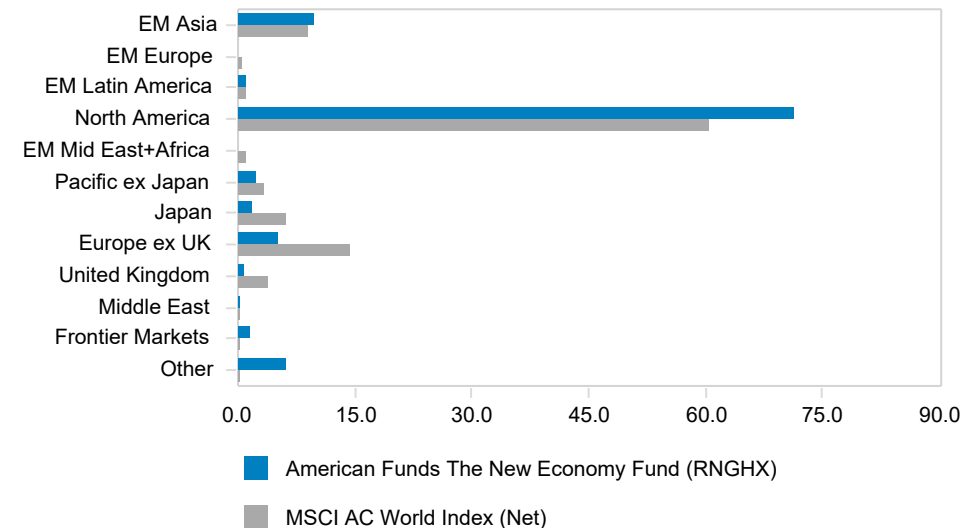
Top Ten Securities As of 09/30/2021

Netflix Inc ORD	4.3 %
Microsoft Corp ORD	4.0 %
Capital Group Central Cash Fund;	3.6 %
Broadcom Inc ORD	2.5 %
Ceridian HCM Holding Inc ORD	2.3 %
Amazon.com Inc ORD	2.3 %
Meta Platforms Inc ORD	1.8 %
UnitedHealth Group Inc ORD	1.8 %
Kotak Mahindra Bank Ltd ORD	1.6 %
Alphabet Inc Class C ORD	1.6 %

Sector Weights As of 09/30/2021



Region Weights As of 09/30/2021



Statistics provided by Lipper. Most recent available data shown.



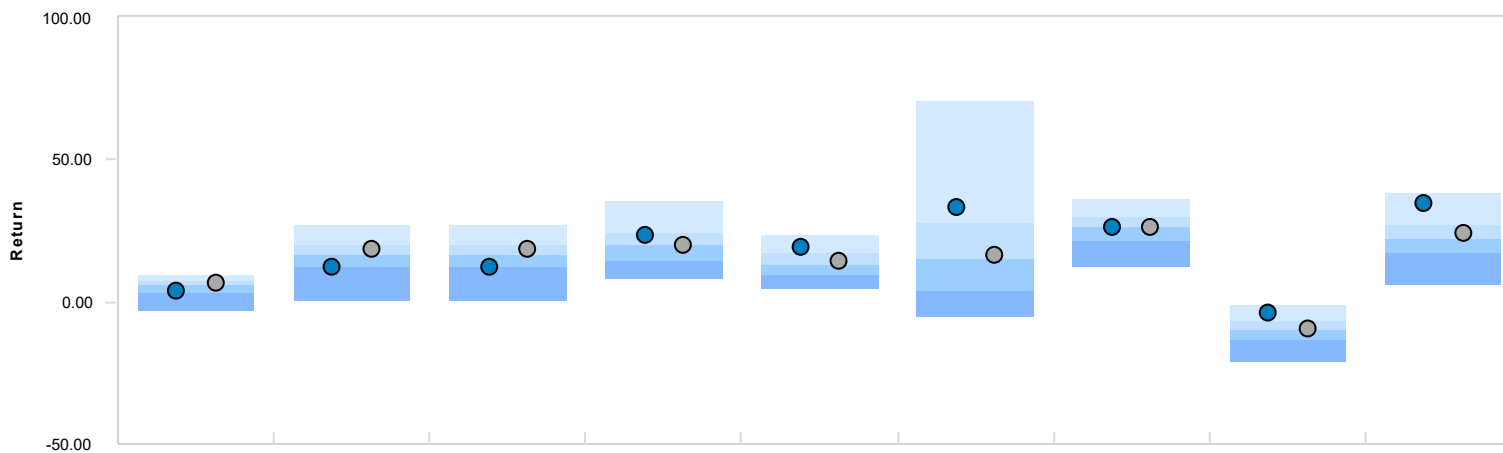
Mutual Fund Info from Lipper

Product Name : American Funds NEco;R5E (RNGHX)
Fund Family : Capital Group/American Funds
Ticker : RNGHX
Peer Group : IM Global Equity (MF)
Benchmark : MSCI AC World Index (Net)
Fund Inception : 11/20/2015
Portfolio Manager : Team Managed
Total Assets : \$86 Million
Total Assets Date : 12/31/2021
Gross Expense : 0.56%
Net Expense : 0.56%
Turnover : 38%

Summary Description

The investment seeks long term growth of capital; current income is a secondary consideration. The fund invests primarily in common stocks that the investment adviser believes have the potential for growth. It normally invests in securities of companies that can benefit from innovation, exploit new technologies or provide products and services that meet the demands of an evolving global economy. The fund may invest a significant portion of its assets in issuers based outside the United States, including those based in developing countries.

Peer Group Analysis - IM Global Equity (MF)



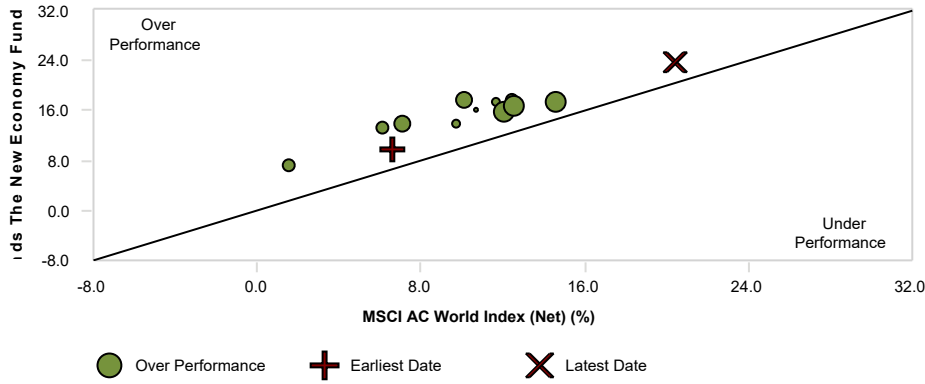
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● American Funds The New Economy Fund (RNGHX)	3.72 (70)	12.12 (76)	12.12 (76)	23.85 (28)	19.68 (12)	33.72 (20)	26.69 (48)	-4.04 (14)	34.71 (8)
○ MSCI AC World Index (Net)	6.68 (35)	18.54 (34)	18.54 (34)	20.38 (48)	14.40 (44)	16.25 (45)	26.60 (49)	-9.42 (46)	23.97 (42)
Median	5.83	16.54	16.54	19.92	13.32	15.26	26.37	-9.72	22.33

Comparative Performance

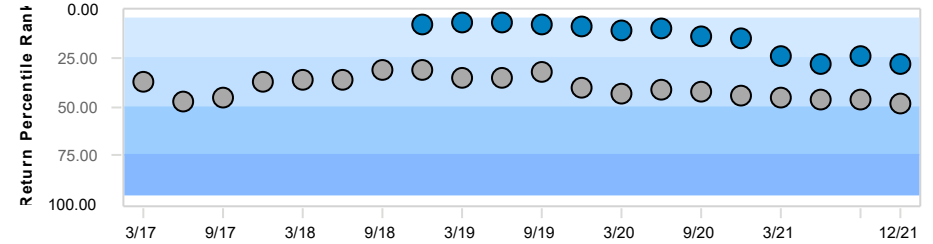
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
American Funds The New Economy Fund (RNGHX)	-0.45 (37)	7.83 (35)	0.71 (85)	16.41 (41)	9.77 (31)	25.36 (24)
MSCI AC World Index (Net)	-1.05 (50)	7.39 (43)	4.57 (44)	14.68 (53)	8.13 (46)	19.22 (54)
IM Global Equity (MF) Median	-1.15	6.95	4.06	15.08	7.65	20.10



3 Yr Rolling Under/Over Performance - 5 Years



3 Yr Rolling Percentile Ranking - 5 Years



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● American Funds The New Economy Fund (RNGHX)	13	11 (85%)	2 (15%)	0 (0%)	0 (0%)
● MSCI AC World Index (Net)	20	0 (0%)	20 (100%)	0 (0%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● American Funds The New Economy Fund (RNGHX)	23.85	16.79
● MSCI AC World Index (Net)	20.38	16.84
— Median	19.92	17.48

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● American Funds The New Economy Fund (RNGHX)	19.68	15.19
● MSCI AC World Index (Net)	14.40	14.72
— Median	13.32	15.26

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
American Funds The New Economy Fund (RNGHX)	5.20	102.03	85.16	3.95	0.55	1.30	0.95	9.53
MSCI AC World Index (Net)	0.00	100.00	100.00	0.00	N/A	1.13	1.00	10.47

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
American Funds The New Economy Fund (RNGHX)	5.21	110.82	87.32	5.20	0.89	1.19	0.97	9.11
MSCI AC World Index (Net)	0.00	100.00	100.00	0.00	N/A	0.91	1.00	9.56



Fund Information

Fund Name : Lazard Funds, Inc: Lazard International Equity Portfolio; Institutional Shares
 Fund Family : Lazard
 Ticker : LZIEX
 Inception Date : 10/01/1991
 Fund Assets : \$1,657 Million
 Portfolio Turnover : 38%

Portfolio Assets : \$1,884 Million
 Portfolio Manager : John R. Reinsberg
 PM Tenure : 1991
 Fund Style : IM International Large Cap Growth Equity (MF)
 Style Benchmark : MSCI EAFE (Net) Index

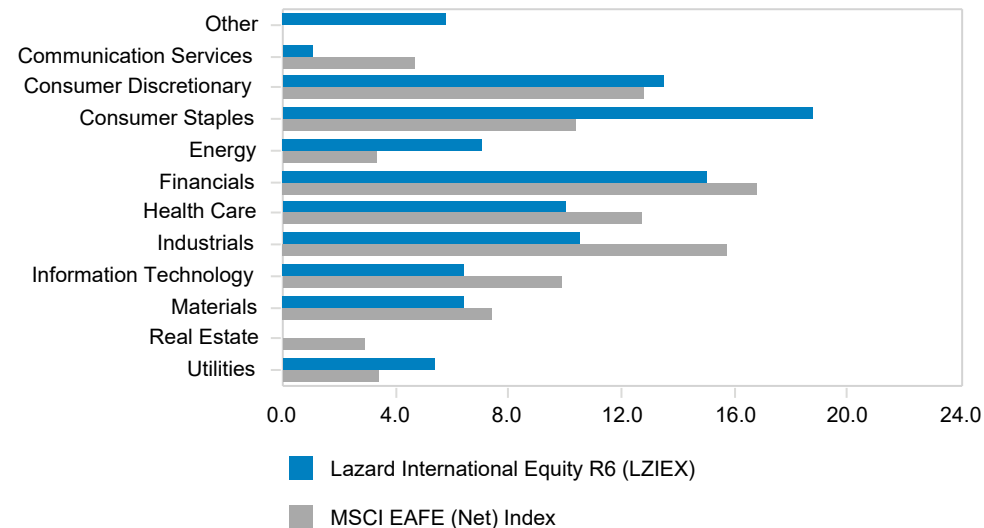
Portfolio Characteristics As of 11/30/2021

	Portfolio	Benchmark
Total Securities	83	841
Avg. Market Cap (\$)	50,814,259,018	13,613,864,081
Price/Earnings (P/E)	26.87	15.54
Price/Book (P/B)	4.44	2.68
Dividend Yield	2.22	2.86
Annual EPS	6.35	139.57
5 Yr EPS	5.56	14.06
3 Yr EPS Growth	0.69	N/A
Beta (5 Years, Monthly)	0.97	1.00

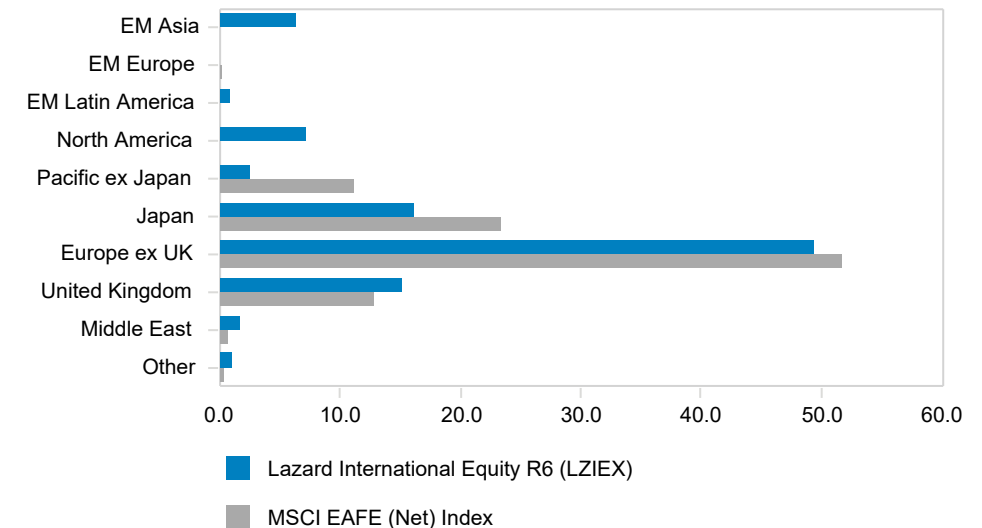
Top Ten Securities As of 11/30/2021

Relx PLC ORD	3.4 %
Sanofi SA ORD	2.7 %
Medtronic PLC ORD	2.6 %
State Street Institutional Treas	2.6 %
Engie SA ORD	2.5 %
Hitachi Ltd ORD	2.5 %
Aon PLC ORD	2.5 %
Abb Ltd ORD	2.1 %
Merck KGaA ORD	2.0 %
Tesco PLC ORD	2.0 %

Sector Weights As of 11/30/2021



Region Weights As of 11/30/2021



Statistics provided by Lipper. Most recent available data shown.



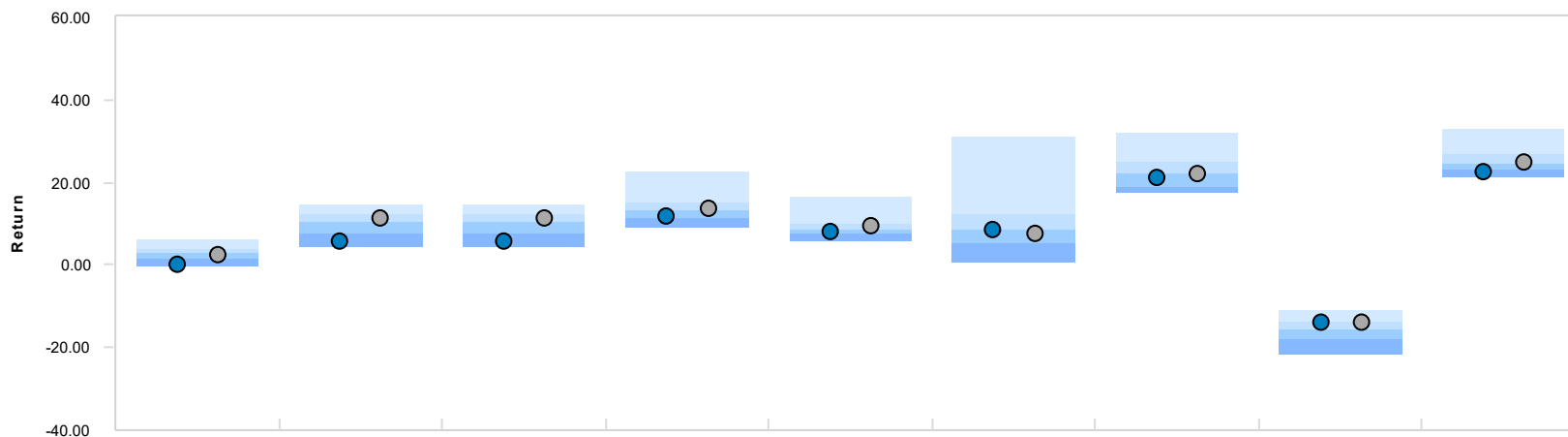
Mutual Fund Info from Lipper

Product Name : Lazard:Intl Eqty:Inst (LZIEX)
 Fund Family : Lazard
 Ticker : LZIEX
 Peer Group : IM International Large Cap Core Equity (MF)
 Benchmark : MSCI EAFE (Net) Index
 Fund Inception : 10/01/1991
 Portfolio Manager : John R. Reinsberg
 Total Assets : \$1,657 Million
 Total Assets Date : 11/30/2021
 Gross Expense : 0.82%
 Net Expense : 0.82%
 Turnover : 38%

Summary Description

The investment seeks long-term total return, principally from growth of capital. The fund invests normally in a minimum of ten countries throughout the world, focusing on companies located in Europe, the Pacific Basin and emerging industrialized countries whose economies and political regimes appear stable. It invests primarily (no less than 65% of its total assets) in common and preferred stocks of foreign companies, including those located in emerging market countries. Companies in the fund's portfolio generally have market capitalizations in excess of \$1 billion at the time of purchase.

Peer Group Analysis - IM International Large Cap Core Equity (MF)



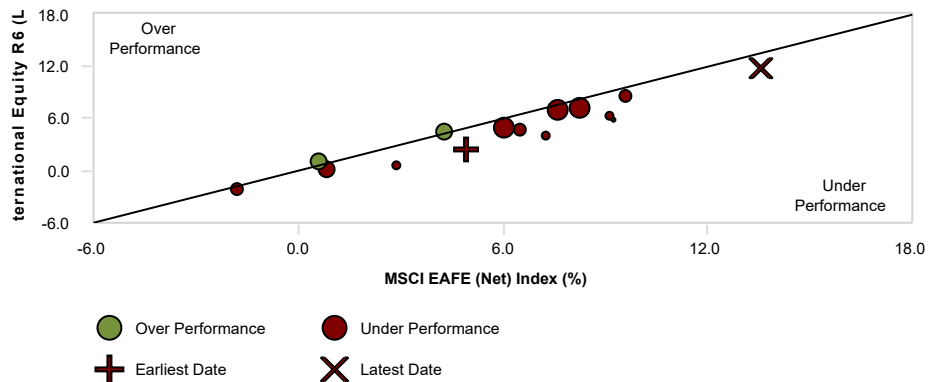
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● Lazard International Equity R6 (LZIEX)	0.38 (87)	6.00 (87)	6.00 (87)	11.79 (73)	8.19 (67)	8.76 (47)	21.19 (63)	-13.61 (22)	22.81 (82)
○ MSCI EAFE (Net) Index	2.69 (61)	11.26 (39)	11.26 (39)	13.54 (49)	9.55 (32)	7.82 (55)	22.01 (52)	-13.79 (25)	25.03 (38)
Median	2.86	10.33	10.33	13.34	8.66	8.49	22.06	-15.69	24.43

Comparative Performance

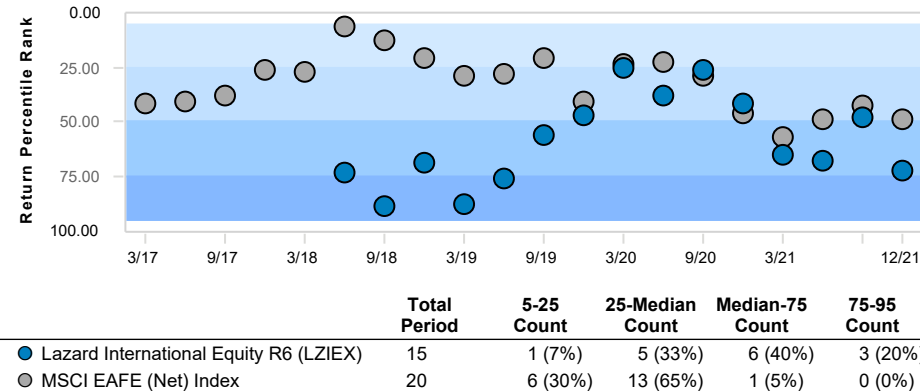
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
Lazard International Equity R6 (LZIEX)	0.14 (7)	3.68 (74)	1.70 (88)	15.34 (64)	7.26 (15)	14.25 (92)
MSCI EAFE (Net) Index	-0.45 (14)	5.17 (45)	3.48 (66)	16.05 (51)	4.80 (70)	14.88 (89)
IM International Large Cap Core Equity (MF) Median	-2.01	5.09	4.40	16.08	5.42	16.63



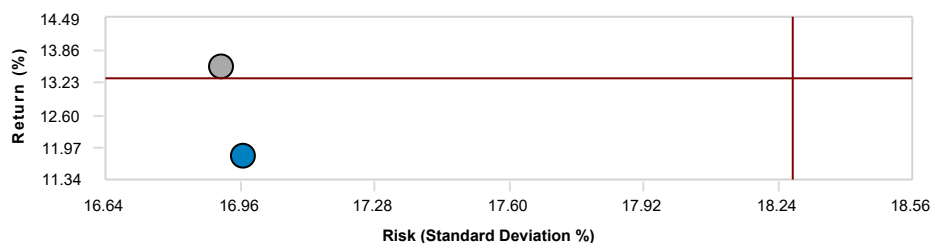
3 Yr Rolling Under/Over Performance - 5 Years



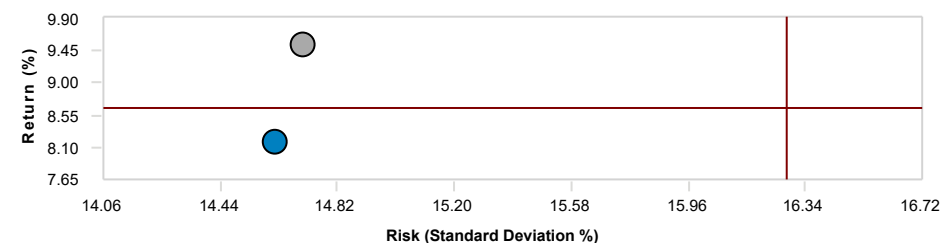
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Lazard International Equity R6 (LZIEX)	3.06	96.74	103.28	-1.34	-0.50	0.68	0.99	11.35
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.78	1.00	10.81

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Lazard International Equity R6 (LZIEX)	2.93	94.64	99.42	-0.99	-0.43	0.53	0.97	9.99
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.61	1.00	9.71



Fund Information

Fund Name : SMALLCAP World Fund, Inc; Class R5E Shares
Fund Family : Capital Group/American Funds
Ticker : RSLDX
Inception Date : 11/20/2015
Fund Assets : \$192 Million
Portfolio Turnover : 30%

Portfolio Assets : \$82,186 Million
Portfolio Manager : Team Managed
PM Tenure :
Fund Style : IM Global SMID Cap Equity (MF)
Style Benchmark : MSCI World Small Cap (Net)

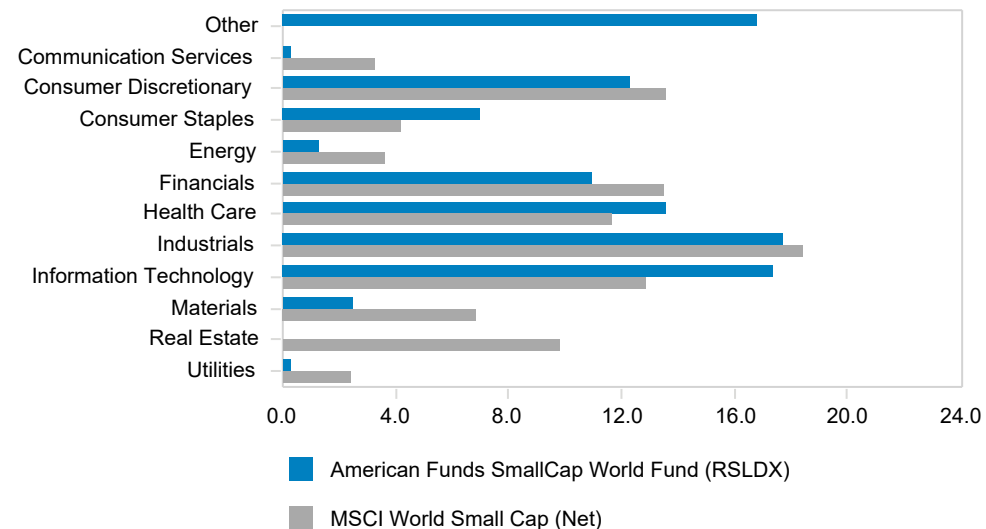
Portfolio Characteristics As of 09/30/2021

	Portfolio	Benchmark
Total Securities	930	4,430
Avg. Market Cap (\$)	8,683,593,215	1,673,393,701
Price/Earnings (P/E)	42.61	17.00
Price/Book (P/B)	9.96	2.71
Dividend Yield	1.08	1.58
Annual EPS	13.43	100.37
5 Yr EPS	19.54	13.75
3 Yr EPS Growth	22.50	N/A
Beta (5 Years, Monthly)	0.90	1.00

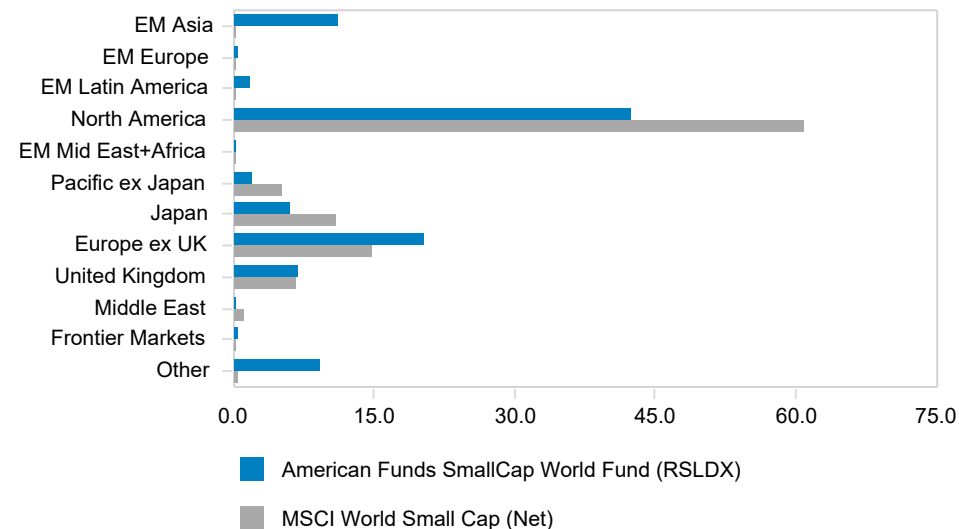
Top Ten Securities As of 09/30/2021

Capital Group Central Cash Fund;	5.2 %
Evolution AB (publ) ORD	1.5 %
MongoDB Inc ORD	1.1 %
Insulet Corp ORD	1.0 %
RingCentral Inc ORD	1.0 %
IMCD NV ORD	0.8 %
Molina Healthcare Inc ORD	0.8 %
BayCurrent Consulting Inc ORD	0.8 %
Yeti Holdings Inc ORD	0.6 %
Nibe Industrier AB ORD	0.6 %

Sector Weights As of 09/30/2021



Region Weights As of 09/30/2021



Statistics provided by Lipper. Most recent available data shown.



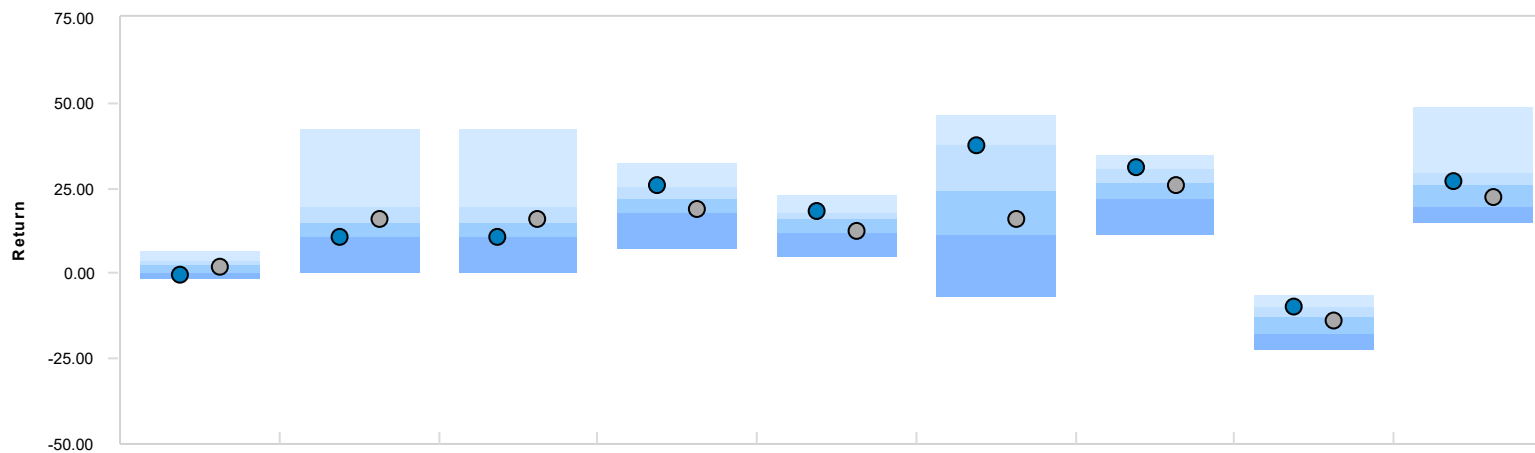
Mutual Fund Info from Lipper

Product Name : American Funds SMCP;R5E (RSLDX)
 Fund Family : Capital Group/American Funds
 Ticker : RSLDX
 Peer Group : IM Global SMID Cap Equity (MF)
 Benchmark : MSCI World Small Cap (Net)
 Fund Inception : 11/20/2015
 Portfolio Manager : Team Managed
 Total Assets : \$192 Million
 Total Assets Date : 12/31/2021
 Gross Expense : 0.80%
 Net Expense : 0.80%
 Turnover : 30%

Summary Description

The investment seeks long-term growth of capital. Normally the fund invests at least 80% of its net assets in growth-oriented common stocks and other equity-type securities (such as preferred stocks, convertible preferred stocks and convertible bonds) of companies with small market capitalizations. The investment adviser currently defines "small market capitalization" companies to be companies with market capitalizations of \$4.0 billion or less. Under normal circumstances, the fund will invest a significant portion of its assets outside the United States, including in emerging markets.

Peer Group Analysis - IM Global SMID Cap Equity (MF)



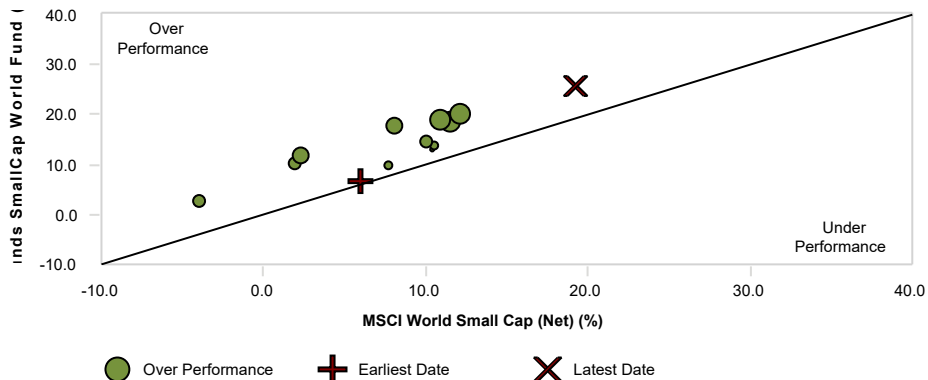
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● American Funds SmallCap World Fund (RSLDX)	-0.48 (83)	10.51 (78)	10.51 (78)	25.89 (19)	18.07 (25)	37.73 (26)	31.08 (17)	-9.50 (22)	27.09 (37)
○ MSCI World Small Cap (Net)	2.23 (63)	15.75 (42)	15.75 (42)	19.20 (69)	12.35 (73)	15.96 (63)	26.19 (52)	-13.86 (56)	22.66 (70)
Median	2.56	14.65	14.65	21.64	16.19	24.11	26.75	-12.45	25.87

Comparative Performance

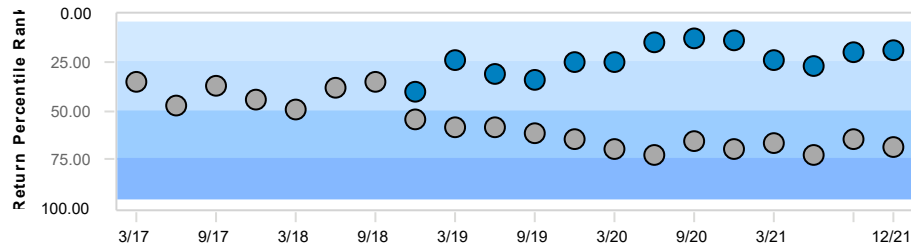
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
American Funds SmallCap World Fund (RSLDX)	-0.29 (34)	7.83 (31)	3.28 (58)	22.14 (44)	10.33 (41)	31.91 (27)
MSCI World Small Cap (Net)	-1.43 (56)	4.98 (67)	9.43 (29)	23.85 (28)	7.46 (69)	24.58 (47)
IM Global SMID Cap Equity (MF) Median	-1.25	6.27	4.97	21.86	10.07	24.39



3 Yr Rolling Under/Over Performance - 5 Years

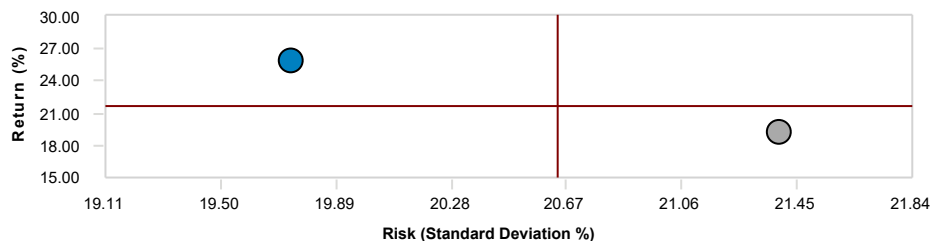


3 Yr Rolling Percentile Ranking - 5 Years



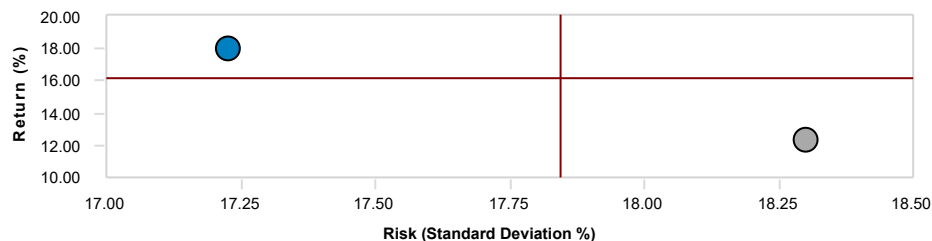
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● American Funds SmallCap World Fund (RSLDX)	13	9 (69%)	4 (31%)	0 (0%)	0 (0%)
● MSCI World Small Cap (Net)	20	0 (0%)	7 (35%)	13 (65%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● American Funds SmallCap World Fund (RSLDX)	25.89	19.74
● MSCI World Small Cap (Net)	19.20	21.39
— Median	21.64	20.64

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● American Funds SmallCap World Fund (RSLDX)	18.07	17.23
● MSCI World Small Cap (Net)	12.35	18.30
— Median	16.19	17.84

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
American Funds SmallCap World Fund (RSLDX)	6.42	100.41	72.36	7.81	0.80	1.22	0.88	11.53
MSCI World Small Cap (Net)	0.00	100.00	100.00	0.00	N/A	0.89	1.00	14.34

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
American Funds SmallCap World Fund (RSLDX)	5.25	104.58	78.13	6.29	0.91	0.99	0.90	10.81
MSCI World Small Cap (Net)	0.00	100.00	100.00	0.00	N/A	0.67	1.00	12.80



Fund Information

Fund Name : DFA Investment Dimensions Group Inc: Emerging Markets Small Cap Portfolio; Institutional Class Shares	Portfolio Assets : \$5,083 Million
Fund Family : Dimensional	Portfolio Manager : Team Managed
Ticker : DEMSX	PM Tenure :
Inception Date : 03/05/1998	Fund Style : IM Emerging Markets Equity (MF)
Fund Assets : \$5,083 Million	Style Benchmark : MSCI Emerging Markets Small Cap (Net)
Portfolio Turnover : 18%	

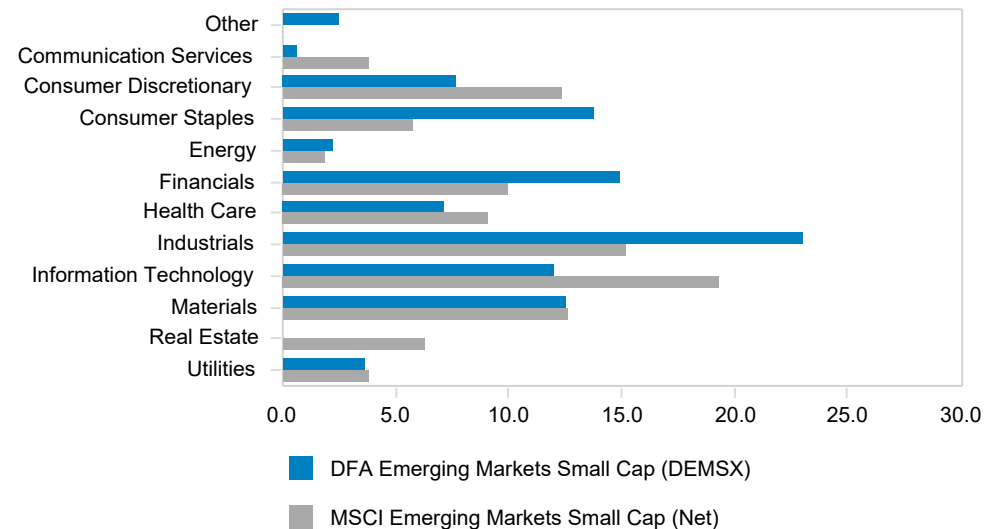
Portfolio Characteristics As of 07/31/2021

	Portfolio	Benchmark
Total Securities	4,680	1,821
Avg. Market Cap (\$)	2,138,785,258	991,779,549
Price/Earnings (P/E)	24.27	15.15
Price/Book (P/B)	3.14	2.70
Dividend Yield	2.83	1.90
Annual EPS	14.08	621.14
5 Yr EPS	11.44	14.21
3 Yr EPS Growth	9.83	N/A
Beta (5 Years, Monthly)	0.98	1.00

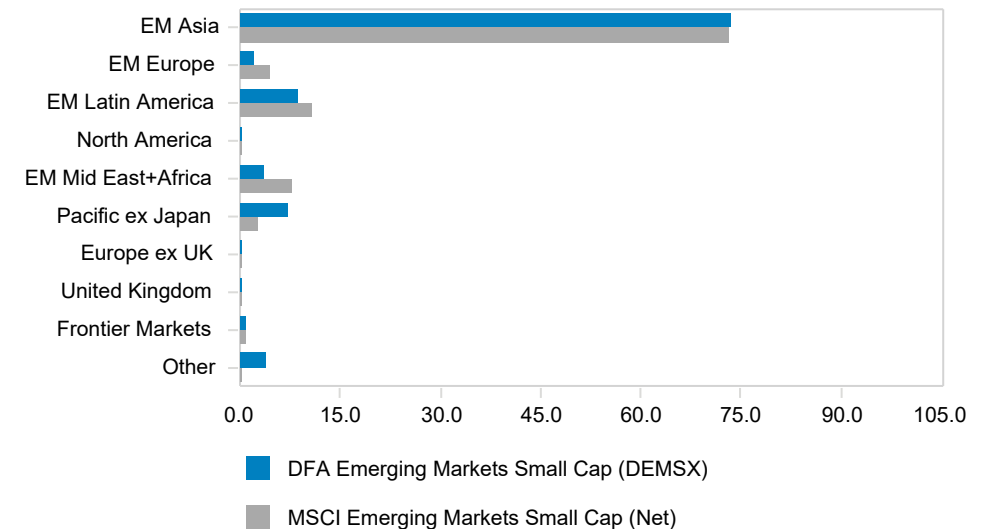
Top Ten Securities As of 07/31/2021

Chinasoft International Ltd ORD	0.3 %
Industrias CH SAB de CV ORD	0.3 %
Kingboard Holdings Ltd ORD	0.3 %
Zhuzhou CRRR Times Electric Co	0.3 %
GCL-Poly Energy Holdings Ltd ORD	0.3 %
Minth Group Ltd ORD	0.2 %
AAC Technologies Holdings Inc ORD	0.2 %
Hua Hong Semiconductor Ltd ORD	0.2 %
Crompton Greaves Consumer Electricals	0.2 %
China MeiDong Auto Holdings Ltd	0.2 %

Sector Weights As of 07/31/2021



Region Weights As of 07/31/2021



Statistics provided by Lipper. Most recent available data shown.



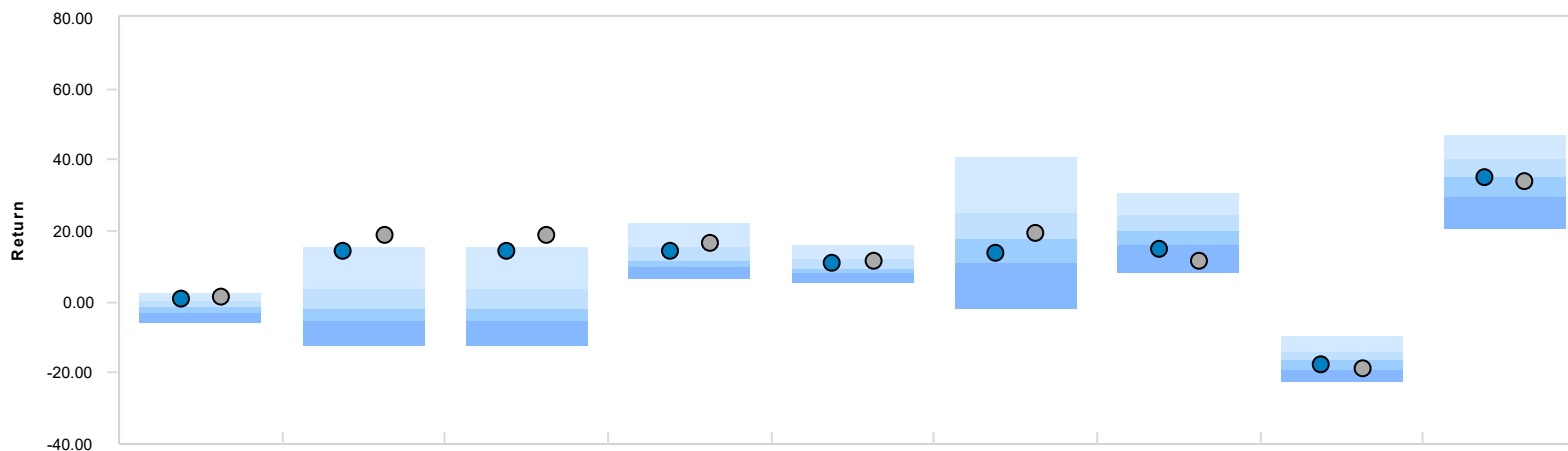
Mutual Fund Info from Lipper

Product Name : DFA Emg Mkts Sm Cap:I (DEMSX)
Fund Family : Dimensional
Ticker : DEMSX
Peer Group : IM Emerging Markets Equity (MF)
Benchmark : MSCI Emerging Markets Small Cap (Net)
Fund Inception : 03/05/1998
Portfolio Manager : Team Managed
Total Assets : \$5,083 Million
Total Assets Date : 12/31/2021
Gross Expense : 0.80%
Net Expense : 0.60%
Turnover : 18%

Summary Description

The investment seeks long-term capital appreciation. The Portfolio is a Feeder Portfolio and pursues its objective by investing substantially all of its assets in its corresponding Master fund, the Emerging Markets Small Cap Series (the "Emerging Markets Small Cap Series") of the DFA Investment Trust Company (the "Trust"), which has the same investment objective and policies as the Portfolio. As a non-fundamental policy, under normal circumstances, the Emerging Markets Small Cap Series will invest at least 80% of its net assets in emerging market investments that are designated in the Prospectus as Approved Market securities of small companies.

Peer Group Analysis - IM Emerging Markets Equity (MF)



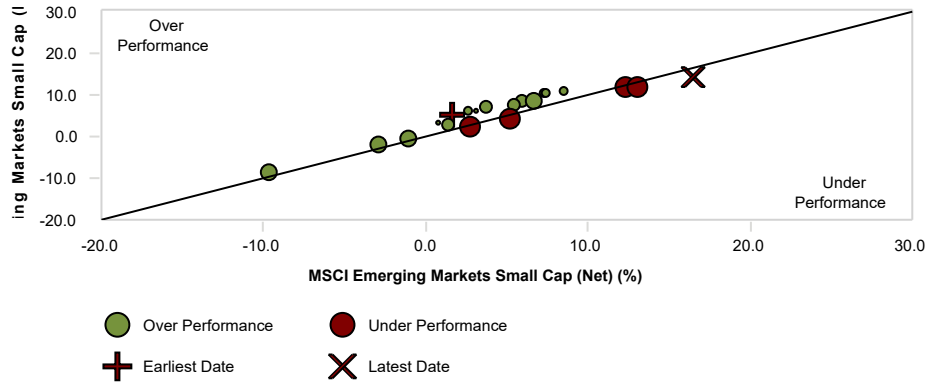
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● DFA Emerging Markets Small Cap (DEMSX)	0.98 (14)	14.58 (7)	14.58 (7)	14.42 (31)	10.81 (35)	13.80 (68)	14.89 (79)	-17.56 (62)	35.26 (51)
○ MSCI Emerging Markets Small Cap (Net)	1.33 (12)	18.75 (4)	18.75 (4)	16.46 (21)	11.47 (29)	19.29 (42)	11.51 (89)	-18.59 (71)	33.84 (58)
Median	-1.26	-1.60	-1.60	11.81	9.59	17.49	20.09	-16.39	35.37

Comparative Performance

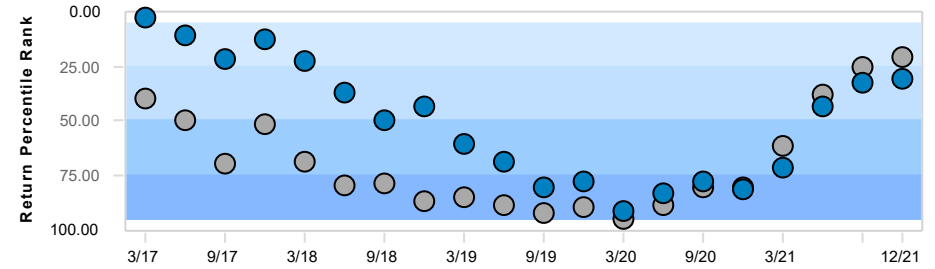
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
DFA Emerging Markets Small Cap (DEMSX)	-4.13 (19)	10.45 (9)	7.16 (7)	19.43 (44)	10.04 (42)	26.52 (19)
MSCI Emerging Markets Small Cap (Net)	-2.16 (9)	11.25 (7)	7.67 (5)	22.22 (17)	11.85 (21)	27.14 (16)
IM Emerging Markets Equity (MF) Median	-7.51	5.10	2.86	19.11	9.39	20.20



3 Yr Rolling Under/Over Performance - 5 Years

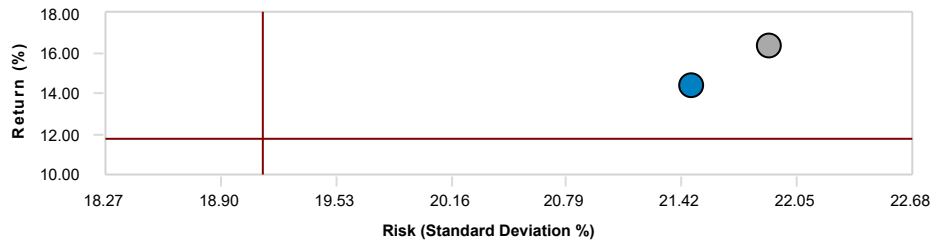


3 Yr Rolling Percentile Ranking - 5 Years



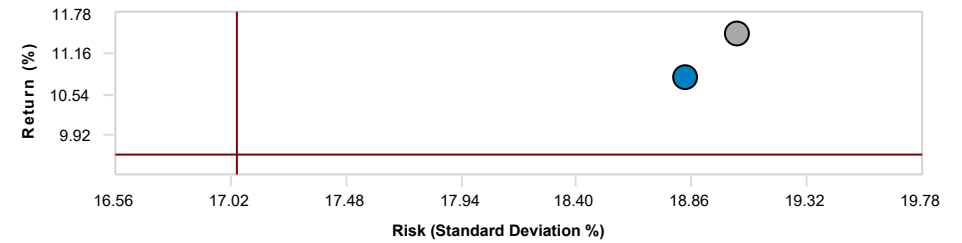
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● DFA Emerging Markets Small Cap (DEMSX)	20	5 (25%)	6 (30%)	3 (15%)	6 (30%)
● MSCI Emerging Markets Small Cap (Net)	20	2 (10%)	3 (15%)	4 (20%)	11 (55%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● DFA Emerging Markets Small Cap (DEMSX)	14.42	21.47
● MSCI Emerging Markets Small Cap (Net)	16.46	21.89
— Median	11.81	19.13

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● DFA Emerging Markets Small Cap (DEMSX)	10.81	18.83
● MSCI Emerging Markets Small Cap (Net)	11.47	19.04
— Median	9.59	17.05

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
DFA Emerging Markets Small Cap (DEMSX)	3.12	96.04	102.39	-1.34	-0.60	0.69	0.97	15.01
MSCI Emerging Markets Small Cap (Net)	0.00	100.00	100.00	0.00	N/A	0.76	1.00	14.92

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
DFA Emerging Markets Small Cap (DEMSX)	2.73	99.10	102.13	-0.36	-0.23	0.58	0.98	13.10
MSCI Emerging Markets Small Cap (Net)	0.00	100.00	100.00	0.00	N/A	0.61	1.00	13.14



Fund Information

Fund Name :	Vanguard Bond Index Funds: Vanguard Total Bond Market Index Fund; Admiral Shares	Portfolio Assets :	\$322,309 Million
Fund Family :	Vanguard	Portfolio Manager :	Joshua C. Barrickman
Ticker :	VBTLX	PM Tenure :	2013
Inception Date :	11/12/2001	Fund Style :	IM U.S. Broad Market Core Fixed Income (MF)
Fund Assets :	\$117,271 Million	Style Benchmark :	Bloomberg U.S. Aggregate
Portfolio Turnover :	79%		

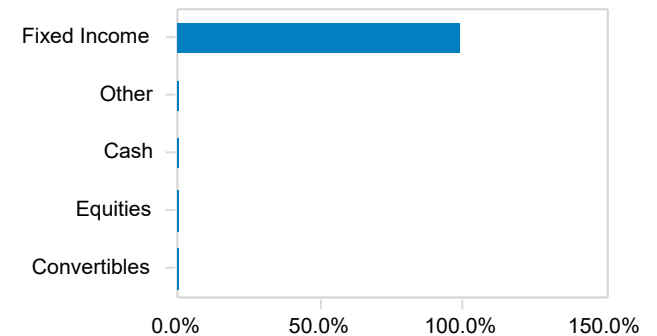
Fund Characteristics As of 09/30/2021

Avg. Coupon	2.70 %
Nominal Maturity	8.70 Years
Effective Maturity	N/A
Duration	6.80 Years
SEC 30 Day Yield	2.7
Avg. Credit Quality	AA

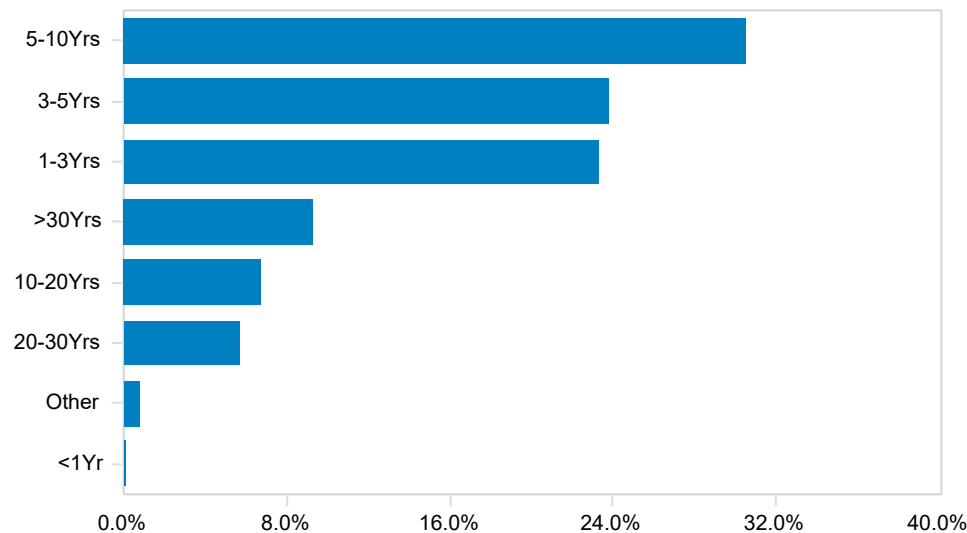
Top Ten Securities As of 09/30/2021

Corporate Notes/Bonds	28.5 %
GNMA and Other Mtg Backed	22.5 %
Government Agency Securities	22.1 %
Treasury Notes/Bonds	22.1 %
Fgn. Currency Denominated Bonds	3.7 %
Asset Backed Securities	0.4 %

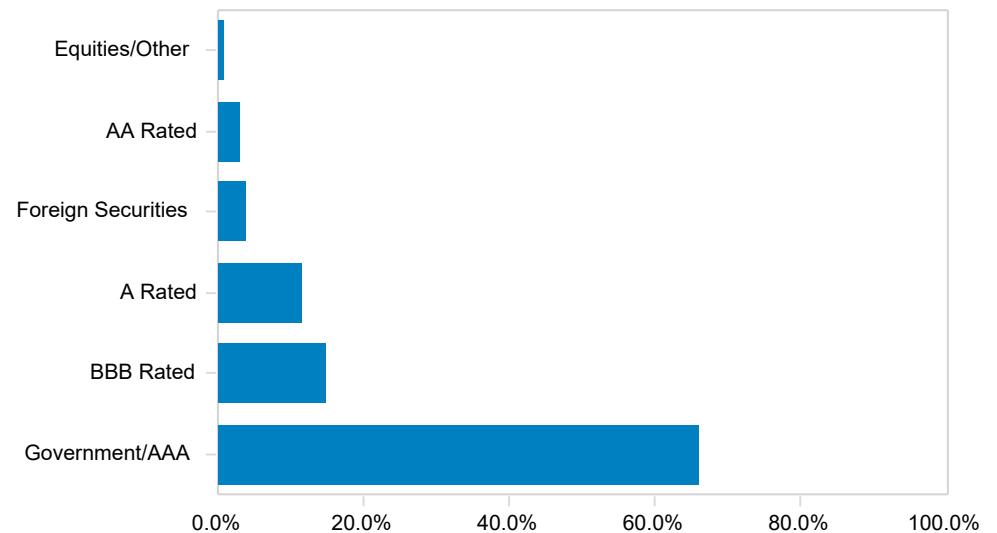
Asset Allocation As of 09/30/2021



Maturity Distribution As of 09/30/2021



Sector/Quality Allocation As of 09/30/2021



Statistics provided by Lipper. Most recent available data shown.



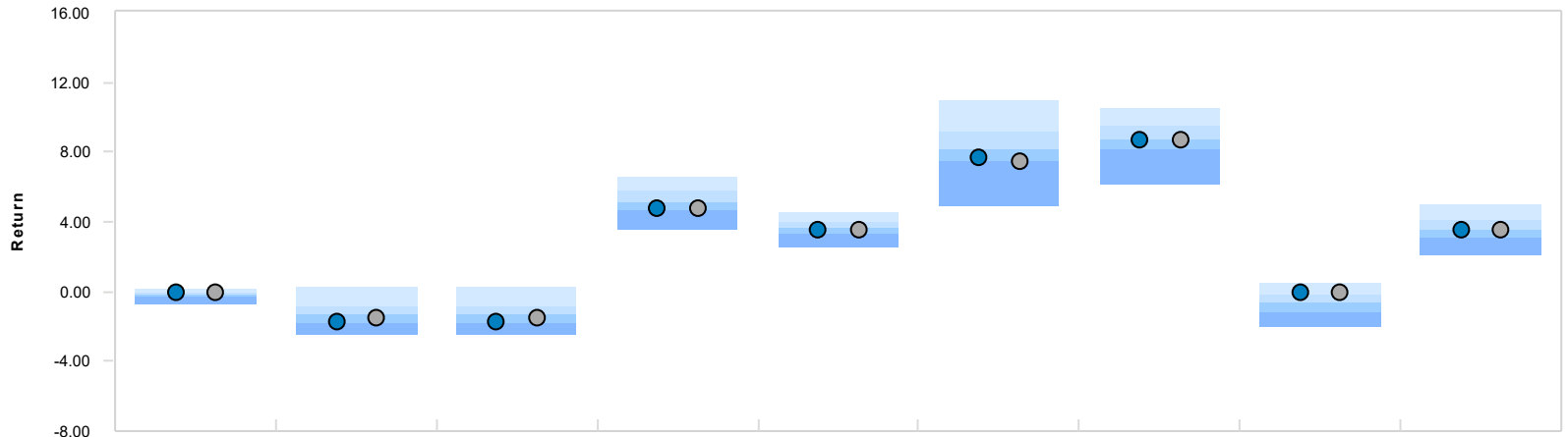
Mutual Fund Info from Lipper

Product Name : Vanguard Tot Bd;Adm (VBTLX)
 Fund Family : Vanguard
 Ticker : VBTLX
 Peer Group : IM U.S. Broad Market Core Fixed Income (MF)
 Benchmark : Blmbg. U.S. Aggregate Index
 Fund Inception : 11/12/2001
 Portfolio Manager : Joshua C. Barrickman
 Total Assets : \$117,271 Million
 Total Assets Date : 11/30/2021
 Gross Expense : 0.05%
 Net Expense : 0.05%
 Turnover : 79%

Summary Description

The investment seeks the performance of a broad, market-weighted bond index. The fund employs an indexing investment approach designed to track the performance of the Barclays U.S. Aggregate Float Adjusted Index. This index represents a wide spectrum of public, investment-grade, taxable, fixed income securities in the United States-including government, corporate, and international dollar-denominated bonds, as well as mortgage-backed and asset-backed securities-all with maturities of more than 1 year. All of the fund's investments will be selected through the sampling process, and at least 80% of the fund's assets will be invested in bonds held in the index.

Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (MF)



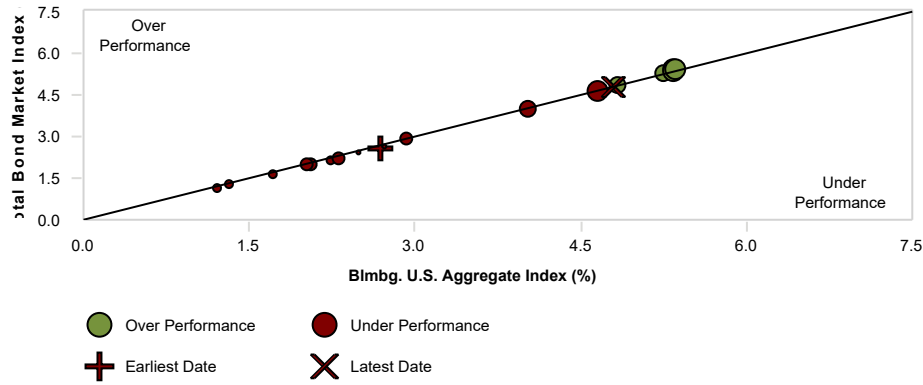
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● Vanguard Total Bond Market Index (VBTLX)	-0.09 (42)	-1.67 (66)	-1.67 (66)	4.82 (70)	3.58 (59)	7.72 (66)	8.71 (53)	-0.03 (20)	3.56 (53)
○ Blmbg. U.S. Aggregate Index	0.01 (22)	-1.55 (61)	-1.55 (61)	4.79 (70)	3.57 (61)	7.51 (72)	8.72 (53)	0.01 (18)	3.54 (54)
Median	-0.14	-1.32	-1.32	5.17	3.71	8.19	8.76	-0.63	3.59

Comparative Performance

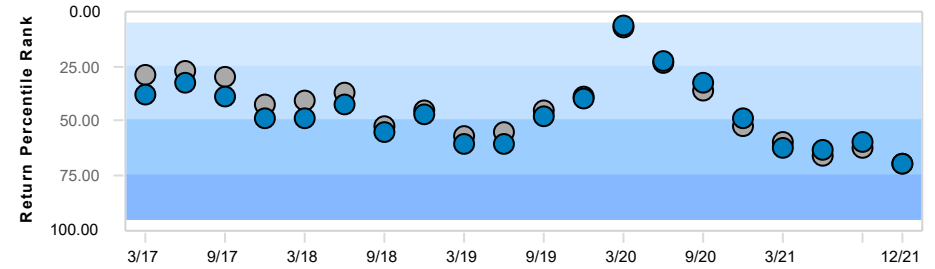
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
Vanguard Total Bond Market Index (VBTLX)	0.11 (30)	2.00 (42)	-3.61 (88)	0.67 (88)	0.61 (89)	2.98 (89)
Blmbg. U.S. Aggregate Index	0.05 (44)	1.83 (62)	-3.38 (74)	0.67 (88)	0.62 (88)	2.90 (91)
IM U.S. Broad Market Core Fixed Income (MF) Median	0.03	1.93	-3.04	1.36	1.19	4.94



3 Yr Rolling Under/Over Performance - 5 Years

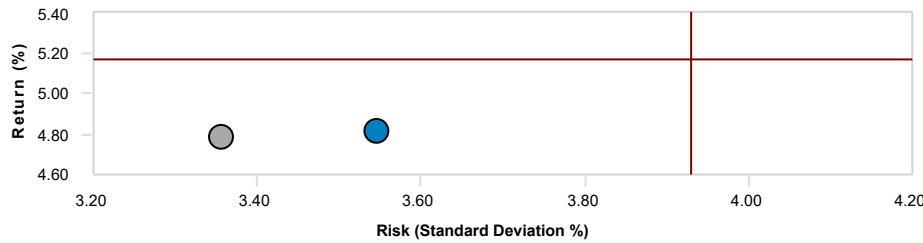


3 Yr Rolling Percentile Ranking - 5 Years



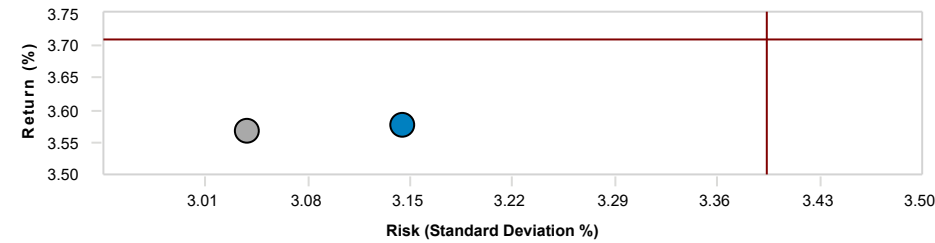
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● Vanguard Total Bond Market Index (VBTLX)	20	2 (10%)	11 (55%)	7 (35%)	0 (0%)
● Blmbg. U.S. Aggregate Index	20	2 (10%)	10 (50%)	8 (40%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● Vanguard Total Bond Market Index (VBTLX)	4.82	3.55
● Blmbg. U.S. Aggregate Index	4.79	3.36
— Median	5.17	3.93

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● Vanguard Total Bond Market Index (VBTLX)	3.58	3.14
● Blmbg. U.S. Aggregate Index	3.57	3.04
— Median	3.71	3.39

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Total Bond Market Index (VBTLX)	0.34	103.94	110.32	-0.22	0.09	1.09	1.05	1.62
Blmbg. U.S. Aggregate Index	0.00	100.00	100.00	0.00	N/A	1.15	1.00	1.47

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Total Bond Market Index (VBTLX)	0.31	101.81	103.86	-0.09	0.04	0.79	1.03	1.54
Blmbg. U.S. Aggregate Index	0.00	100.00	100.00	0.00	N/A	0.81	1.00	1.46



Fund Information

Fund Name :	Metropolitan West Funds: MetWest Total Return Bond Fund; Class I Shares	Portfolio Assets :	\$85,630 Million
Fund Family :	Metropolitan West Asset Management	Portfolio Manager :	Landmann/Kane/Whlen
Ticker :	MWTIX	PM Tenure :	2021--2021--2021
Inception Date :	03/31/2000	Fund Style :	IM U.S. Broad Market Core+ Fixed Income (MF)
Fund Assets :	\$52,316 Million	Style Benchmark :	Bloomberg U.S. Aggregate
Portfolio Turnover :	470%		

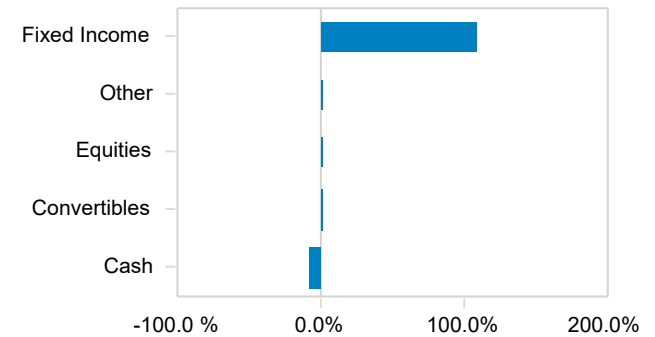
Fund Characteristics As of 09/30/2021

Avg. Coupon	N/A
Nominal Maturity	8.47 Years
Effective Maturity	N/A
Duration	6.29 Years
SEC 30 Day Yield	3.9
Avg. Credit Quality	AA

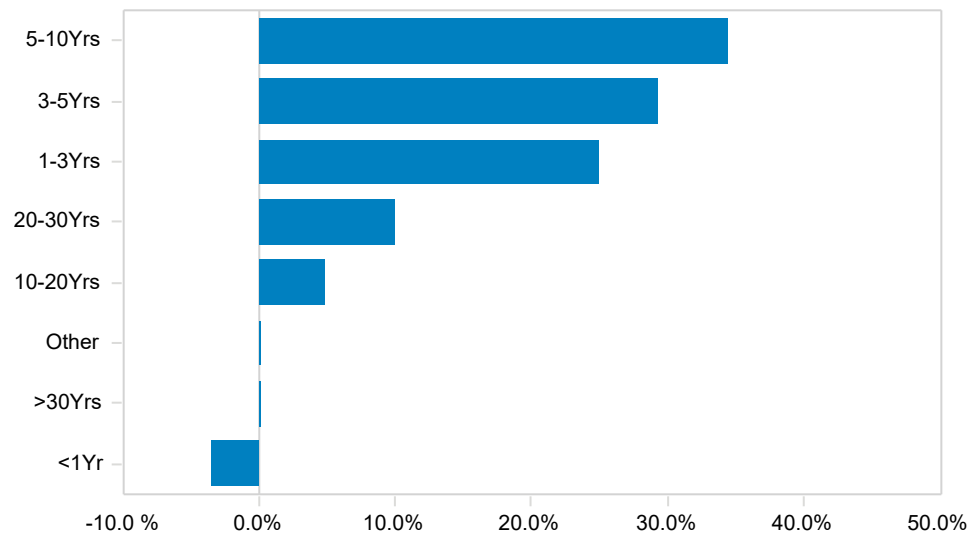
Top Ten Securities As of 09/30/2021

GNMA and Other Mtg Backed	40.3 %
Government Agency Securities	37.7 %
Corporate Notes/Bonds	26.9 %
Asset Backed Securities	4.0 %

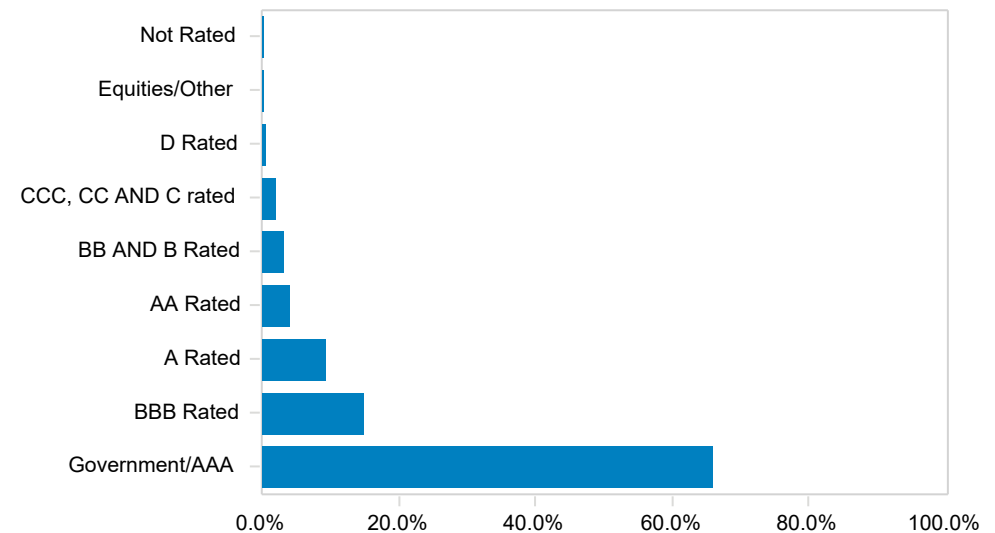
Asset Allocation As of 09/30/2021



Maturity Distribution As of 06/30/2021



Sector/Quality Allocation As of 09/30/2021



Statistics provided by Lipper. Most recent available data shown.



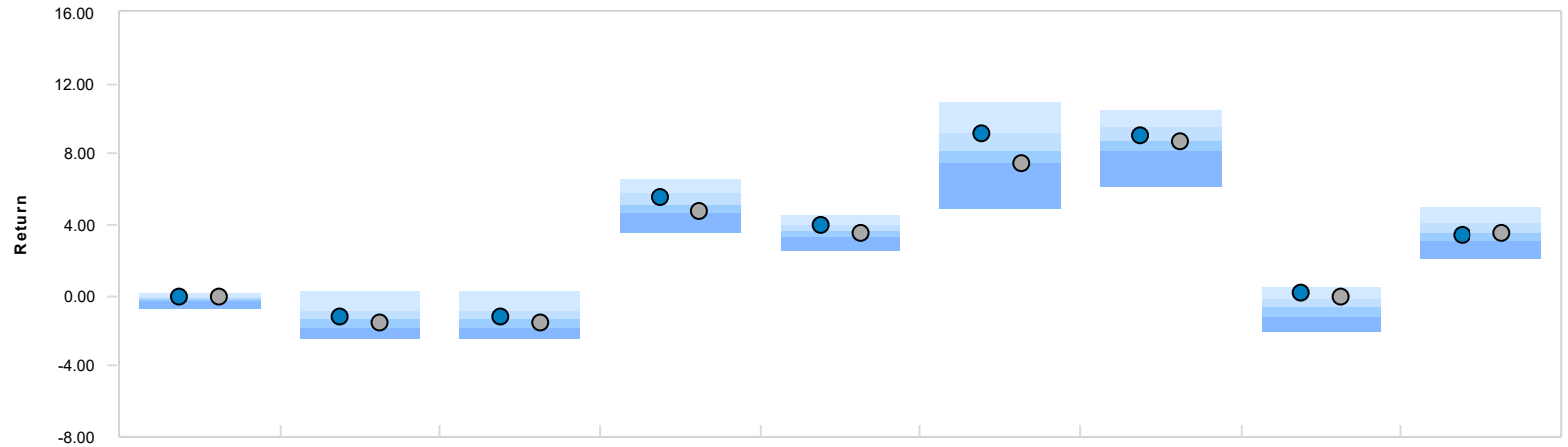
Mutual Fund Info from Lipper

Product Name : MetWest:Total Rtn;I (MWTIX)
Fund Family : Metropolitan West Asset Management
Ticker : MWTIX
Peer Group : IM U.S. Broad Market Core Fixed Income (MF)
Benchmark : Blmbg. U.S. Aggregate Index
Fund Inception : 03/31/2000
Portfolio Manager : Landmann/Kane/Whlen
Total Assets : \$52,316 Million
Total Assets Date : 12/31/2021
Gross Expense : 0.45%
Net Expense : 0.45%
Turnover : 470%

Summary Description

The investment seeks to maximize long-term total return. The fund pursues its objective by investing, under normal circumstances, at least 80% of its net assets in investment grade fixed income securities or unrated securities that are determined by the Adviser to be of similar quality. Up to 20% of the fund's net assets may be invested in securities rated below investment grade. The fund also invests at least 80% of its net assets plus borrowings for investment purposes in fixed income securities it regards as bonds.

Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (MF)



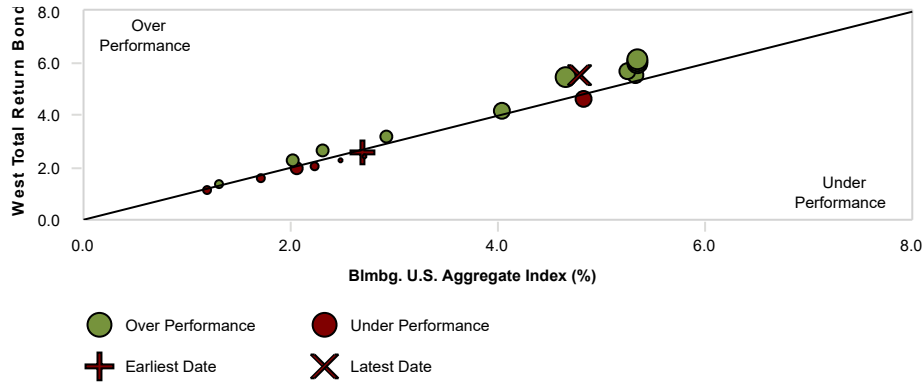
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● Metropolitan West Total Return Bond (MWTIX)	-0.09 (43)	-1.13 (40)	-1.13 (40)	5.58 (33)	4.04 (26)	9.12 (26)	9.09 (39)	0.16 (12)	3.43 (60)
○ Blmbg. U.S. Aggregate Index	0.01 (22)	-1.55 (61)	-1.55 (61)	4.79 (70)	3.57 (61)	7.51 (72)	8.72 (53)	0.01 (18)	3.54 (54)
Median	-0.14	-1.32	-1.32	5.17	3.71	8.19	8.76	-0.63	3.59

Comparative Performance

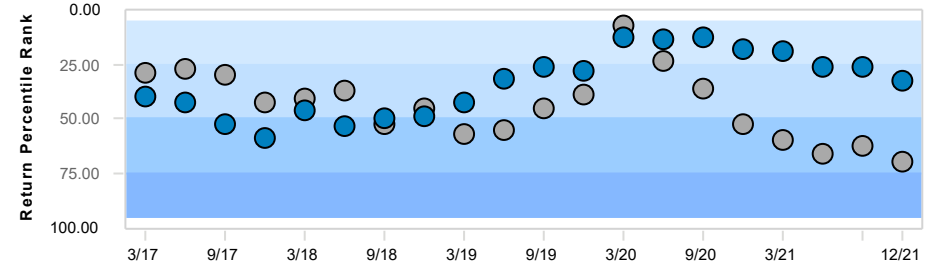
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
Metropolitan West Total Return Bond (MWTIX)	0.13 (25)	1.80 (65)	-2.91 (40)	1.20 (61)	1.26 (45)	4.07 (70)
Blmbg. U.S. Aggregate Index	0.05 (44)	1.83 (62)	-3.38 (74)	0.67 (88)	0.62 (88)	2.90 (91)
IM U.S. Broad Market Core Fixed Income (MF) Median	0.03	1.93	-3.04	1.36	1.19	4.94



3 Yr Rolling Under/Over Performance - 5 Years

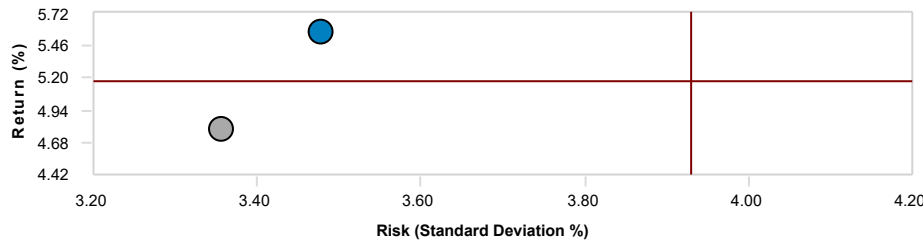


3 Yr Rolling Percentile Ranking - 5 Years



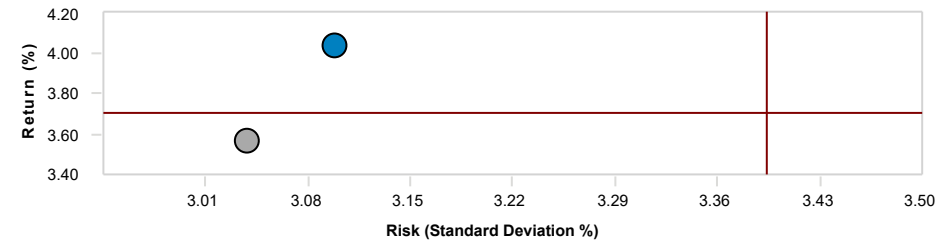
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Metropolitan West Total Return Bond (MWTIX)	20	5 (25%)	12 (60%)	3 (15%)	0 (0%)
Blmbg. U.S. Aggregate Index	20	2 (10%)	10 (50%)	8 (40%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Metropolitan West Total Return Bond (MWTIX)	5.58	3.48
Blmbg. U.S. Aggregate Index	4.79	3.36
Median	5.17	3.93

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Metropolitan West Total Return Bond (MWTIX)	4.04	3.10
Blmbg. U.S. Aggregate Index	3.57	3.04
Median	3.71	3.39

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Metropolitan West Total Return Bond (MWTIX)	0.67	107.96	92.44	0.68	1.14	1.32	1.02	1.44
Blmbg. U.S. Aggregate Index	0.00	100.00	100.00	0.00	N/A	1.15	1.00	1.47

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Metropolitan West Total Return Bond (MWTIX)	0.55	104.40	92.23	0.45	0.85	0.94	1.00	1.40
Blmbg. U.S. Aggregate Index	0.00	100.00	100.00	0.00	N/A	0.81	1.00	1.46



Fund Information

Fund Name :	BlackRock Funds V: BlackRock High Yield Bond Portfolio; Institutional Shares	Portfolio Assets :	\$23,558 Million
Fund Family :	BlackRock	Portfolio Manager :	Team Managed
Ticker :	BHYIX	PM Tenure :	
Inception Date :	11/19/1998	Fund Style :	IM U.S. High Yield Bonds (MF)
Fund Assets :	\$13,737 Million	Style Benchmark :	FTSE High Yield Market Index
Portfolio Turnover :	76%		

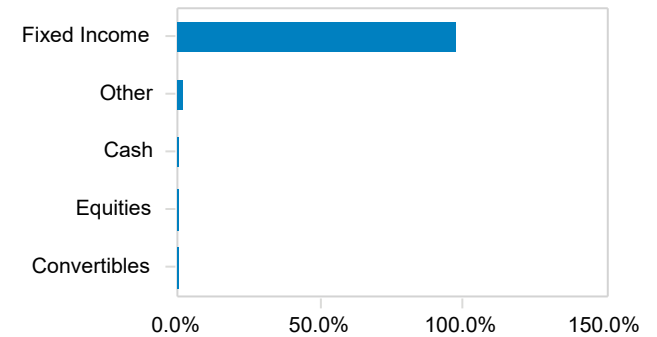
Fund Characteristics As of 06/30/2021

Avg. Coupon	4.63 %
Nominal Maturity	N/A
Effective Maturity	7.45 Years
Duration	1.45 Years
SEC 30 Day Yield	7.0
Avg. Credit Quality	CCC

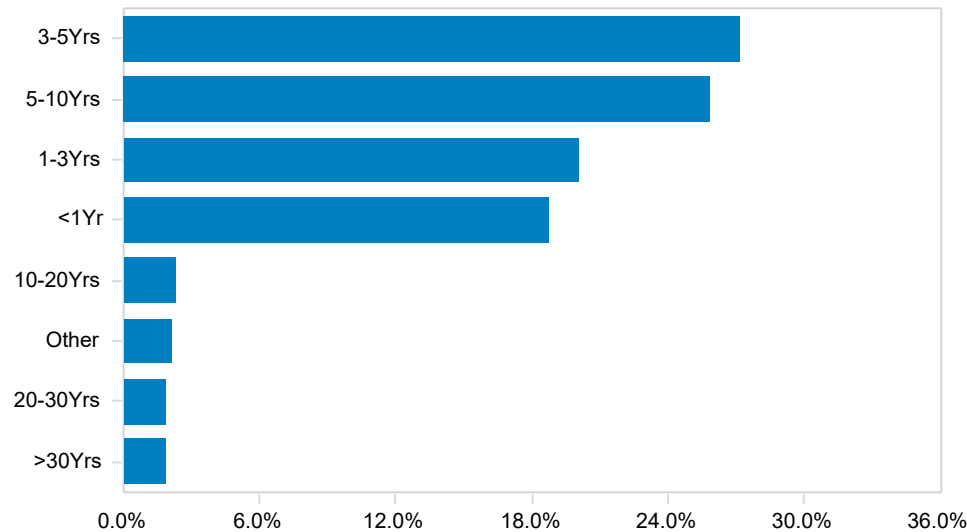
Top Ten Securities As of 06/30/2021

Corporate Notes/Bonds	97.5 %
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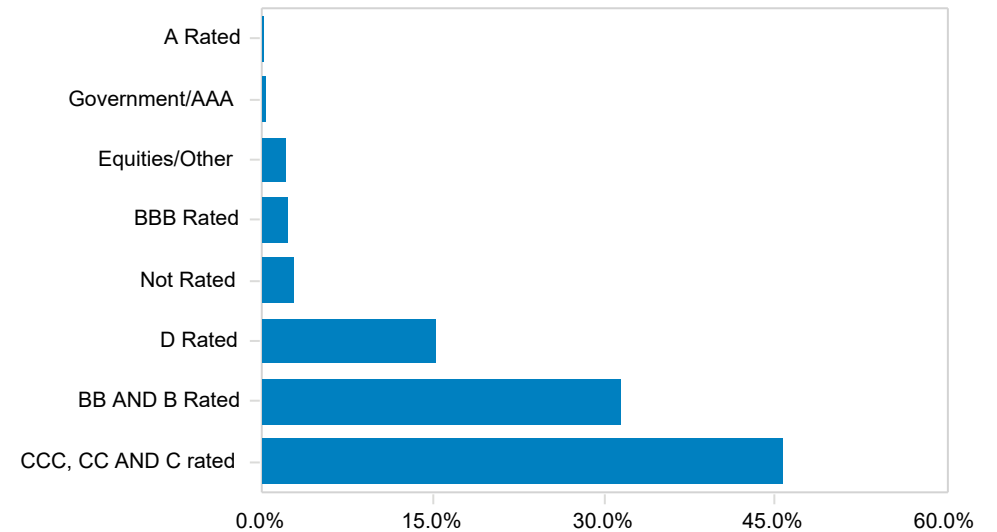
Asset Allocation As of 06/30/2021



Maturity Distribution As of 06/30/2021



Sector/Quality Allocation As of 06/30/2021



Statistics provided by Lipper. Most recent available data shown.



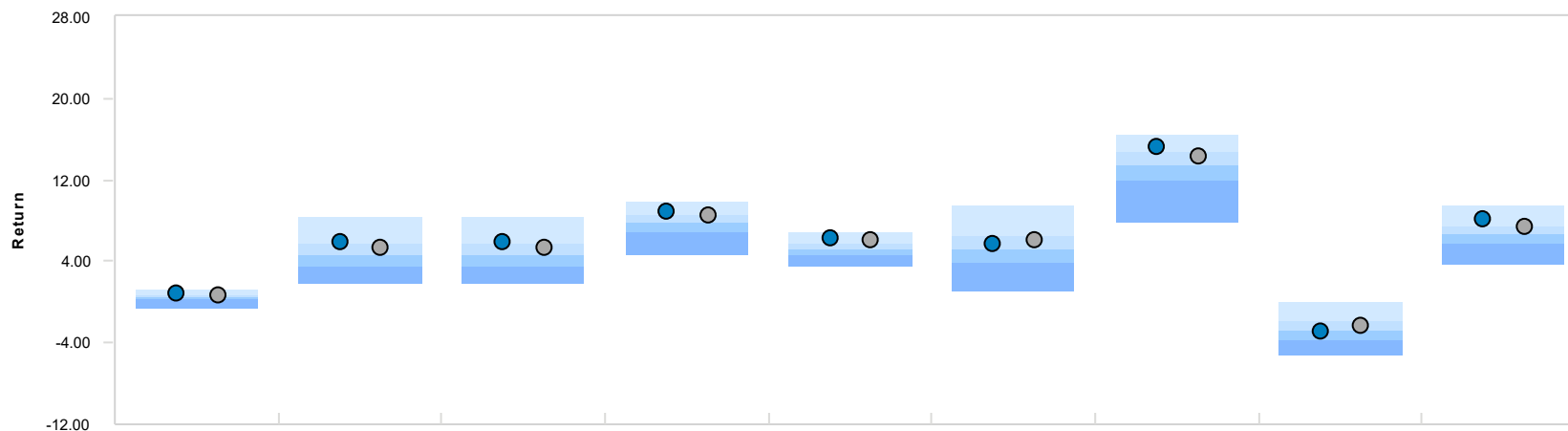
Mutual Fund Info from Lipper

Product Name : BlackRock:HY Bd:I (BHYIX)
Fund Family : BlackRock
Ticker : BHYIX
Peer Group : IM U.S. High Yield Bonds (MF)
Benchmark : ICE BofAML High Yield Master II
Fund Inception : 11/19/1998
Portfolio Manager : Team Managed
Total Assets : \$13,737 Million
Total Assets Date : 12/31/2021
Gross Expense : 0.63%
Net Expense : 0.62%
Turnover : 76%

Summary Description

The investment seeks to maximize total return, consistent with income generation and prudent investment management. The fund invests primarily in non-investment grade bonds with maturities of ten years or less. It normally invests at least 80% of its assets in high yield bonds. The fund may invest up to 30% of its assets in non-dollar denominated bonds of issuers located outside of the United States. Its investment in non-dollar denominated bonds may be on a currency hedged or unhedged basis. The fund may also invest in convertible and preferred securities.

Peer Group Analysis - IM U.S. High Yield Bonds (MF)



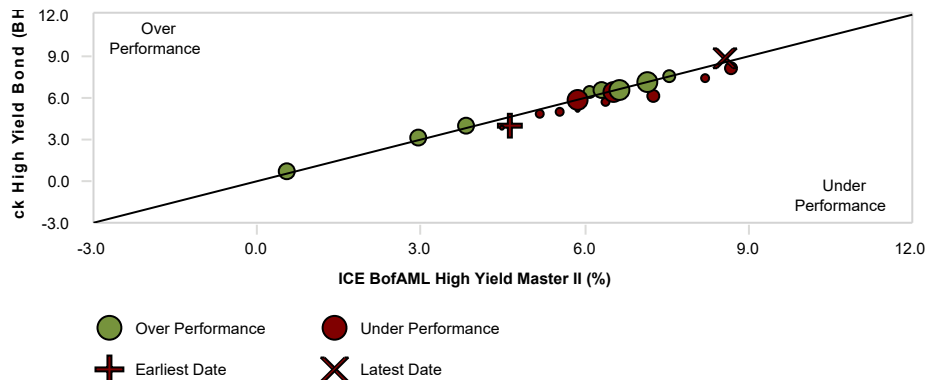
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● BlackRock High Yield Bond (BHYIX)	0.90 (14)	5.88 (24)	5.88 (24)	8.90 (17)	6.30 (12)	5.79 (39)	15.30 (15)	-2.86 (48)	8.20 (13)
○ ICE BofAML High Yield Master II	0.64 (36)	5.35 (36)	5.35 (36)	8.57 (25)	6.09 (15)	6.17 (31)	14.41 (33)	-2.27 (32)	7.48 (25)
Median	0.55	4.71	4.71	7.78	5.28	5.28	13.51	-2.91	6.65

Comparative Performance

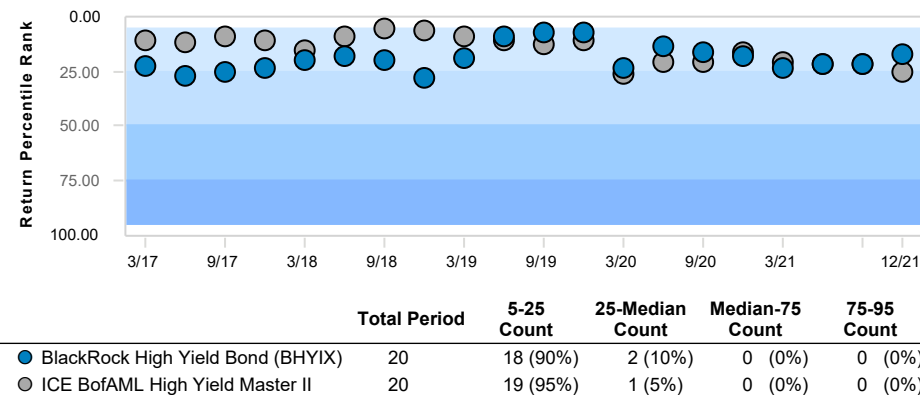
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
BlackRock High Yield Bond (BHYIX)	0.78 (34)	3.16 (14)	0.93 (48)	6.32 (43)	4.82 (30)	9.71 (37)
ICE BofAML High Yield Master II	0.94 (16)	2.77 (34)	0.90 (51)	6.48 (36)	4.71 (37)	9.61 (40)
IM U.S. High Yield Bonds (MF) Median	0.67	2.59	0.91	6.02	4.50	9.16



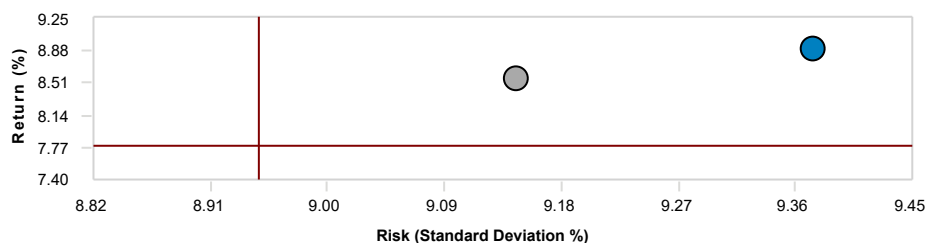
3 Yr Rolling Under/Over Performance - 5 Years



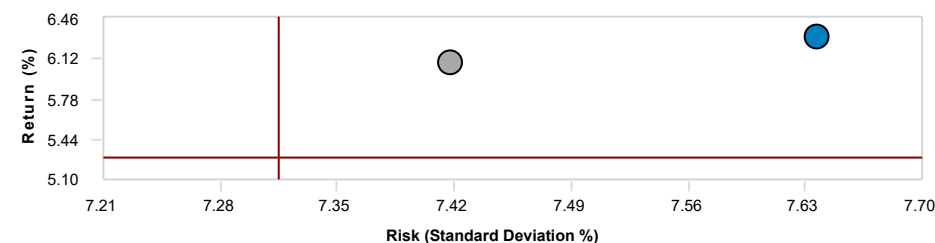
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
BlackRock High Yield Bond (BHYIX)	0.84	103.00	101.68	0.15	0.40	0.85	1.02	7.11
ICE BofAML High Yield Master II	0.00	100.00	100.00	0.00	N/A	0.83	1.00	6.94

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
BlackRock High Yield Bond (BHYIX)	0.76	102.83	102.00	0.06	0.28	0.68	1.02	5.73
ICE BofAML High Yield Master II	0.00	100.00	100.00	0.00	N/A	0.68	1.00	5.55



Fund Information

Fund Name : DFA Investment Dimensions Group Inc: DFA Real Estate Securities Portfolio; Institutional Class Shares
 Fund Family : Dimensional
 Ticker : DFREX
 Inception Date : 01/05/1993
 Fund Assets : \$11,764 Million
 Portfolio Turnover : 5%

Portfolio Assets : \$11,764 Million
 Portfolio Manager : Fogdall/Schneider
 PM Tenure : 2012--2019
 Fund Style : IM Real Estate Sector (MF)
 Style Benchmark : FTSE NAREIT All Equity REITs

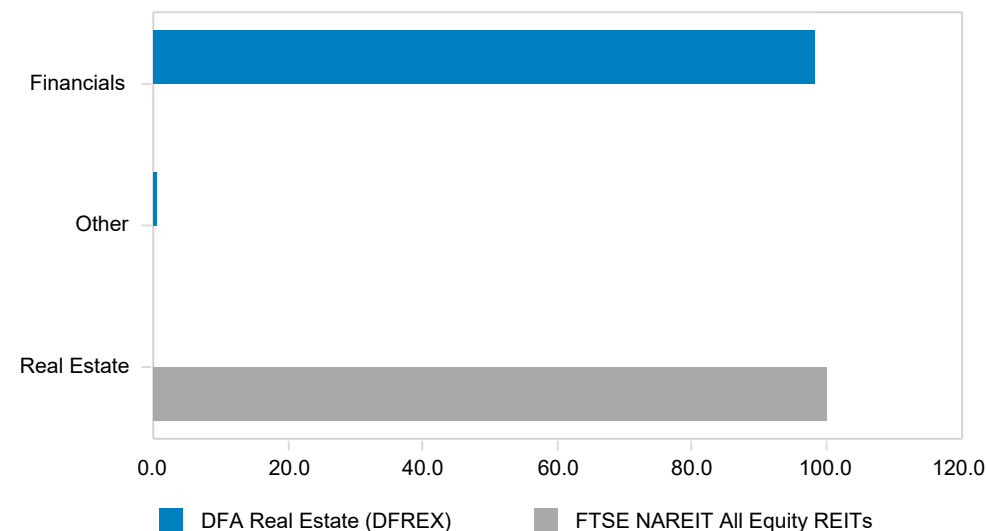
Portfolio Characteristics As of 10/31/2021

	Portfolio	Benchmark
Total Securities	162	153
Avg. Market Cap (\$)	42,404,709,741	3,922,240,000
Price/Earnings (P/E)	48.12	42.49
Price/Book (P/B)	6.48	3.26
Dividend Yield	2.72	2.75
Annual EPS	-8.68	2.15
5 Yr EPS	5.94	9.89
3 Yr EPS Growth	8.76	N/A
Beta (5 Years, Monthly)	1.00	1.00

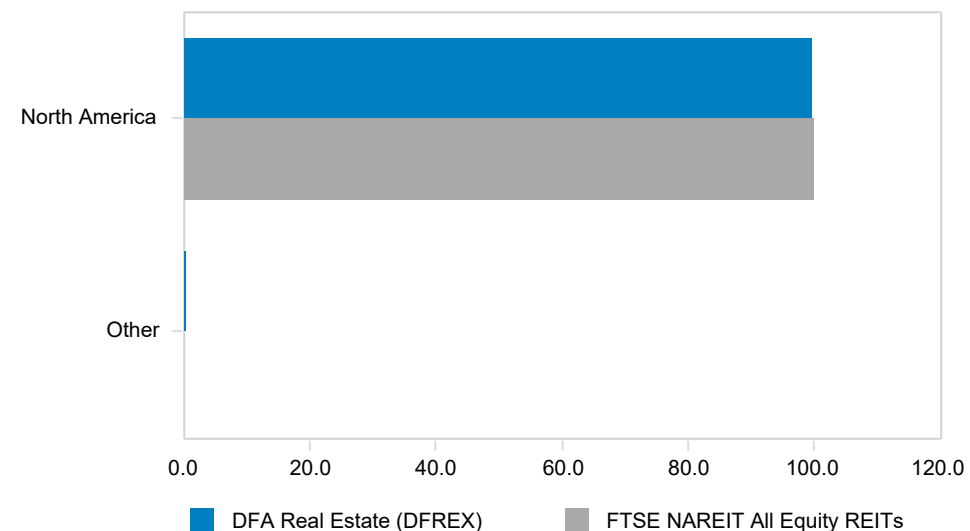
Top Ten Securities As of 10/31/2021

American Tower Corp ORD	8.7 %
Prologis Inc ORD	7.3 %
Crown Castle International Corp	5.3 %
Equinix Inc ORD	4.5 %
Public Storage ORD	3.6 %
Simon Property Group Inc ORD	3.3 %
Digital Realty Trust Inc ORD	3.1 %
SBA Communications Corp ORD	2.6 %
Welltower Inc ORD	2.3 %
Avalonbay Communities Inc ORD	2.3 %

Sector Weights As of 10/31/2021



Region Weights As of 10/31/2021



Statistics provided by Lipper. Most recent available data shown.



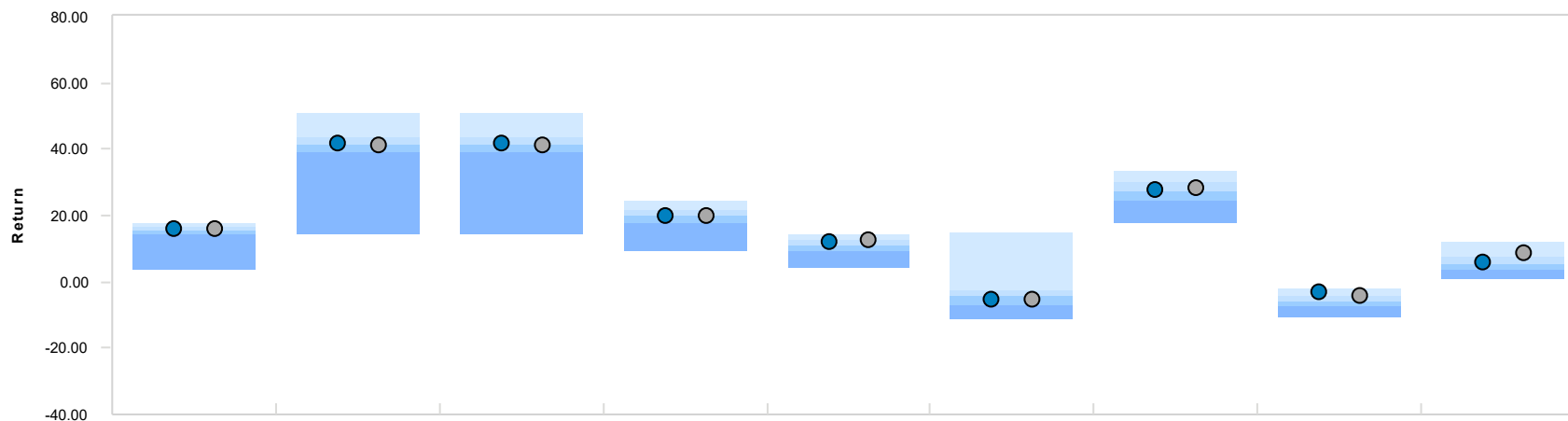
Mutual Fund Info from Lipper

Product Name : DFA Real Estate;I (DFREX)
Fund Family : Dimensional
Ticker : DFREX
Peer Group : IM Real Estate Sector (MF)
Benchmark : FTSE NAREIT All Equity REITs
Fund Inception : 01/05/1993
Portfolio Manager : Fogdall/Schneider
Total Assets : \$11,764 Million
Total Assets Date : 12/31/2021
Gross Expense : 0.20%
Net Expense : 0.18%
Turnover : 5%

Summary Description

The investment seeks long-term capital appreciation. The fund, using a free float-adjusted market capitalization weighted approach, purchases readily marketable equity securities of companies whose principal activities include ownership, management, development, construction, or sale of residential, commercial or industrial real estate. It will principally invest in equity securities of companies in certain real estate investment trusts and companies engaged in residential construction and firms, except partnerships, whose principal business is to develop commercial property.

Peer Group Analysis - IM Real Estate Sector (MF)



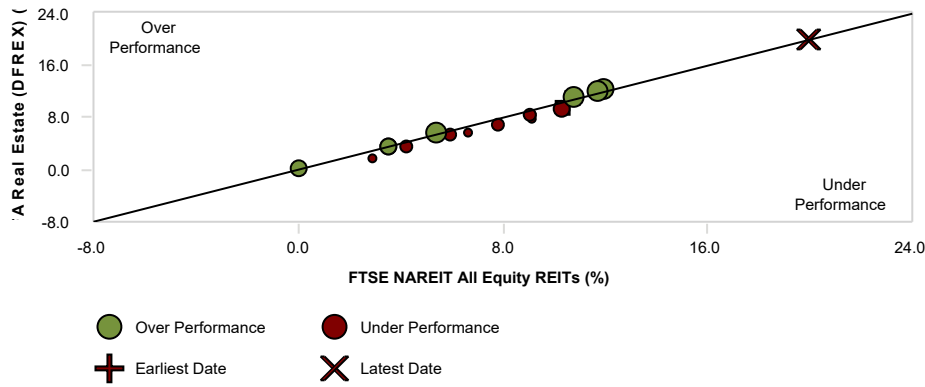
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● DFA Real Estate (DFREX)	16.06 (39)	41.85 (41)	41.85 (41)	19.95 (48)	12.09 (34)	-5.04 (60)	28.10 (43)	-2.99 (8)	5.71 (42)
○ FTSE NAREIT All Equity REITs	16.17 (37)	41.30 (50)	41.30 (50)	19.93 (49)	12.46 (29)	-5.12 (61)	28.66 (38)	-4.04 (17)	8.67 (16)
Median	15.65	41.16	41.16	19.72	11.23	-4.23	27.38	-5.75	5.20

Comparative Performance

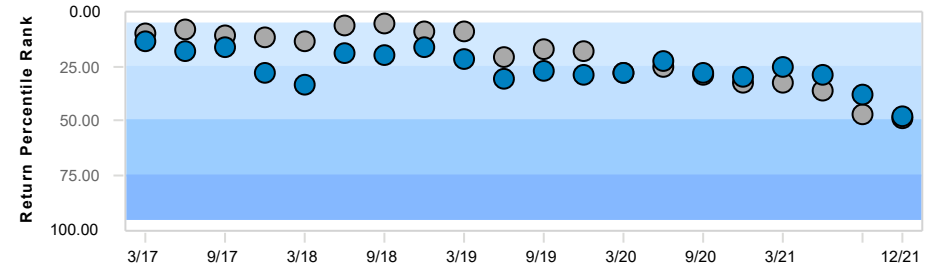
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
DFA Real Estate (DFREX)	0.38 (75)	12.37 (36)	8.36 (40)	8.36 (73)	0.68 (86)	13.13 (33)
FTSE NAREIT All Equity REITs	0.23 (80)	12.03 (54)	8.32 (41)	8.15 (77)	1.19 (77)	13.25 (30)
IM Real Estate Sector (MF) Median	1.07	12.06	7.83	9.24	2.11	11.92



3 Yr Rolling Under/Over Performance - 5 Years

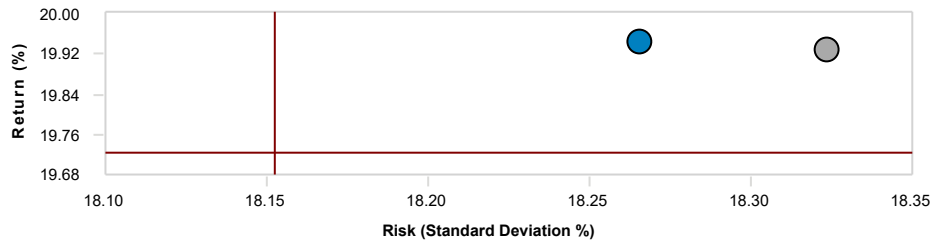


3 Yr Rolling Percentile Ranking - 5 Years



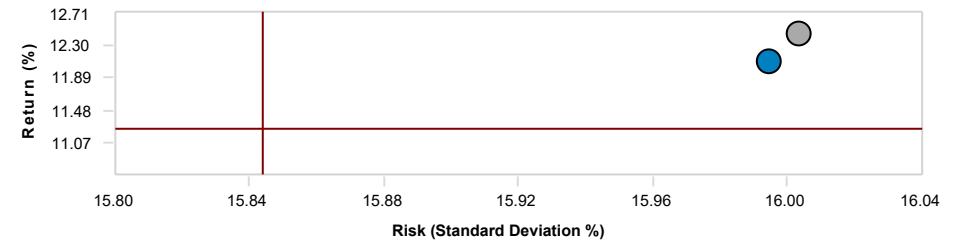
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● DFA Real Estate (DFREX)	20	9 (45%)	11 (55%)	0 (0%)	0 (0%)
● FTSE NAREIT All Equity REITs	20	13 (65%)	7 (35%)	0 (0%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● DFA Real Estate (DFREX)	19.95	18.27
● FTSE NAREIT All Equity REITs	19.93	18.32
— Median	19.72	18.15

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● DFA Real Estate (DFREX)	12.09	15.99
● FTSE NAREIT All Equity REITs	12.46	16.00
— Median	11.23	15.84

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
DFA Real Estate (DFREX)	0.69	99.95	99.87	0.08	0.00	1.04	1.00	12.20
FTSE NAREIT All Equity REITs	0.00	100.00	100.00	0.00	N/A	1.03	1.00	12.32

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
DFA Real Estate (DFREX)	0.94	98.91	100.33	-0.30	-0.35	0.72	1.00	10.83
FTSE NAREIT All Equity REITs	0.00	100.00	100.00	0.00	N/A	0.75	1.00	10.91



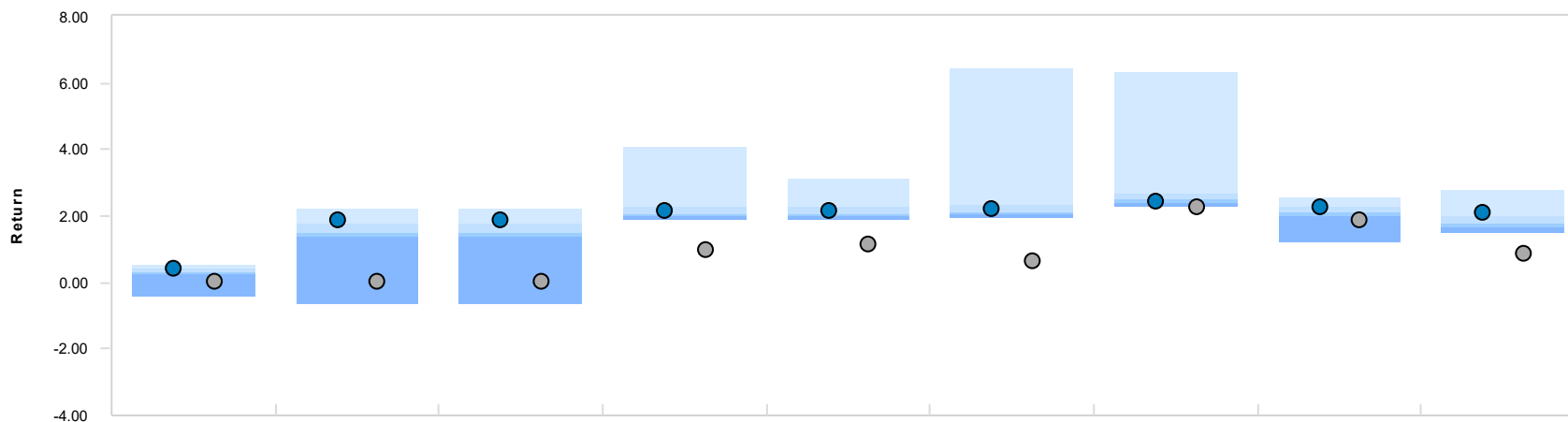
Mutual Fund Info from Lipper

No data found.

Summary Description

ICMA-RC employs a structured and diversified multi-product, multi-manager approach in managing the PLUS Fund. The Plus Fund invests primarily in a diversified and tiered portfolio of stable value investment contracts and in fixed income securities, fixed income mutual funds, and fixed income commingled trust funds (fixed income assets) that back certain stable value investment contracts. In addition, the PLUS Fund invest in money market mutual funds, as well as cash and cash equivalents. The PLUS Fund's portfolio may include different types of investments with a variety of negotiated terms and maturities, and is diversified across sectors and issuers. The composition of the PLUS Fund portfolio and its allocations to various stable value investments and fixed income investment sectors, across the Fund's multiple tiers, is determined based on prevailing economic and capital market conditions, relative value analysis, liquidity needs, and other factors.

Peer Group Analysis - IM U.S. GIC/Stable Value (SA+CF)



	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● MissionSquare PLUS Fund R10	0.46 (14)	1.89 (13)	1.89 (13)	2.19 (35)	2.19 (38)	2.22 (34)	2.45 (64)	2.27 (27)	2.12 (16)
○ ICE BofAML 3 Month U.S. T-Bill	0.01 (86)	0.05 (94)	0.05 (94)	0.99 (100)	1.14 (100)	0.67 (100)	2.28 (96)	1.87 (86)	0.86 (100)
Median	0.35	1.50	1.50	2.08	2.04	2.11	2.48	2.13	1.80

Comparative Performance

	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
MissionSquare PLUS Fund R10	0.47 (14)	0.47 (24)	0.48 (20)	0.52 (26)	0.54 (27)	0.56 (55)
ICE BofAML 3 Month U.S. T-Bill	0.02 (99)	0.00 (100)	0.02 (91)	0.03 (100)	0.04 (100)	0.02 (100)
IM U.S. GIC/Stable Value (SA+CF) Median	0.41	0.44	0.45	0.46	0.51	0.57



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle Retirement Income Fund; Premier Class Shares
 Fund Family : TIAA
 Ticker : TPILX
 Inception Date : 09/30/2009
 Fund Assets : \$19 Million
 Portfolio Turnover : 41%

Portfolio Assets : \$640 Million
 Portfolio Manager : Team Managed
 PM Tenure :
 Fund Style : IM Mixed-Asset Target Today (MF)
 Style Benchmark : Dow Jones Global Conservative Index

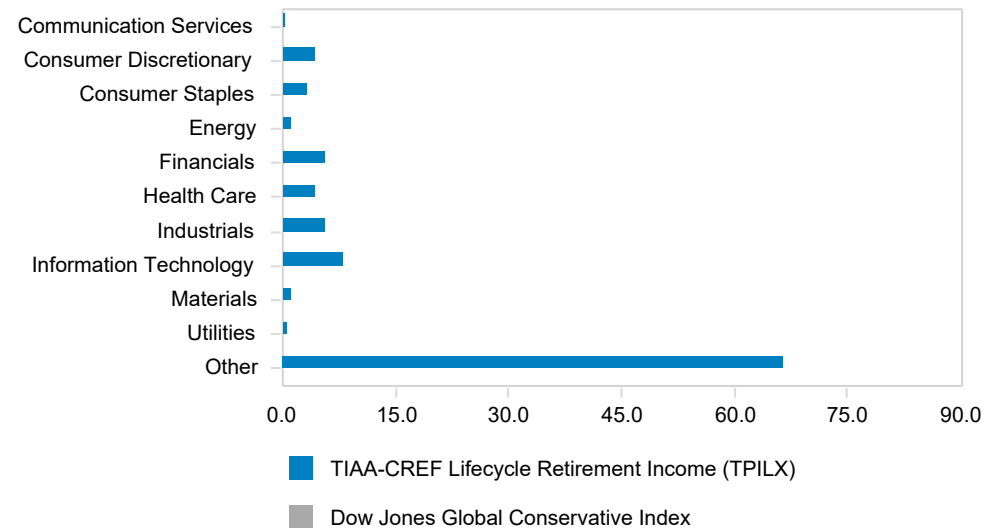
Portfolio Characteristics As of 11/30/2021

	Portfolio	Benchmark
Total Securities	23	N/A
Avg. Market Cap (\$)	119,984,823,036	-
Price/Earnings (P/E)	11.72	N/A
Price/Book (P/B)	2.98	N/A
Dividend Yield	0.56	N/A
Annual EPS	3.83	N/A
5 Yr EPS	4.94	N/A
3 Yr EPS Growth	4.05	N/A
Beta (5 Years, Monthly)	1.81	1.00

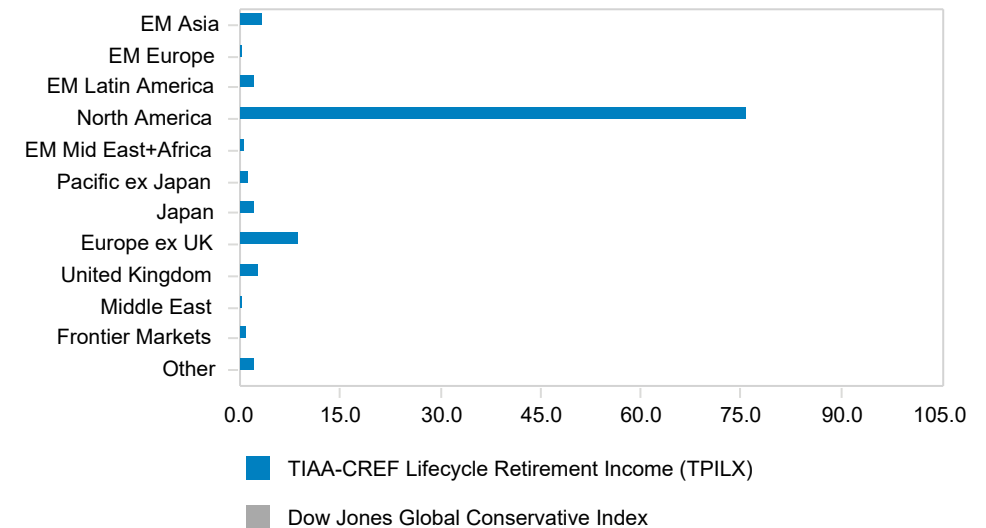
Top Ten Securities As of 11/30/2021

TIAA-CREF Core Bond Fund;W	21.1 %
TIAA-CREF Core Plus Bond Fund;W	13.1 %
TIAA-CREF Inflation-Linked Bond	10.0 %
TIAA-CREF Short-Term Bond Fund;W	10.0 %
Nuveen Growth Opportunities ETF	3.8 %
TIAA-CREF Large-Cap Growth Fund;W	3.8 %
TIAA-CREF International Equity	3.7 %
TIAA-CREF Large-Cap Value Fund;W	3.3 %
Nuveen Dividend Value Fund;R6	3.3 %
Nuveen Dividend Growth Fund;R6	3.3 %

Sector Weights As of 11/30/2021



Region Weights As of 11/30/2021



Statistics provided by Lipper. Most recent available data shown.



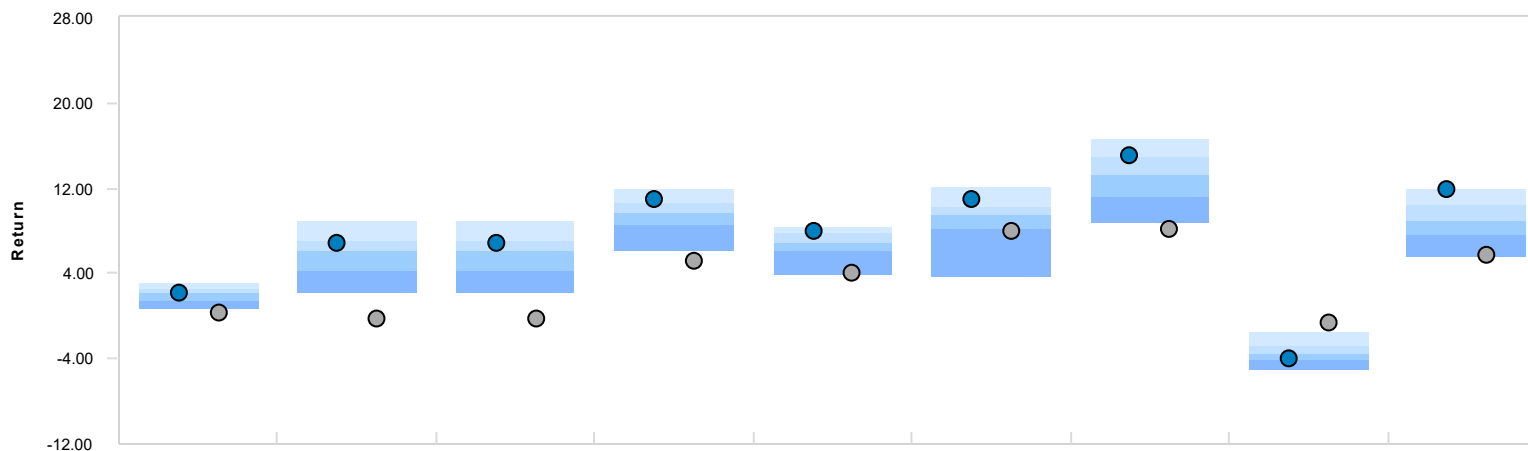
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy Ret;Pmr (TPILX)
 Fund Family : TIAA
 Ticker : TPILX
 Peer Group : IM Mixed-Asset Target Today (MF)
 Benchmark : Dow Jones Global Conservative Index
 Fund Inception : 09/30/2009
 Portfolio Manager : Team Managed
 Total Assets : \$19 Million
 Total Assets Date : 12/31/2021
 Gross Expense : 0.68%
 Net Expense : 0.52%
 Turnover : 41%

Summary Description

The investment seeks high total return over time primarily through income, with a secondary emphasis on capital appreciation. The fund is a "fund of funds" that invests in Institutional Class shares of other funds of the Trust and potentially in other investment pools or investment products. The managers expect to allocate approximately 40.00% of the fund's assets to equity underlying funds and 60.00% of its assets to fixed-income underlying funds. These allocations represent targets for equity and fixed-income asset classes. Target allocations may be changed and actual allocations may vary up to ten percentage points from the targets.

Peer Group Analysis - IM Mixed-Asset Target Today (MF)



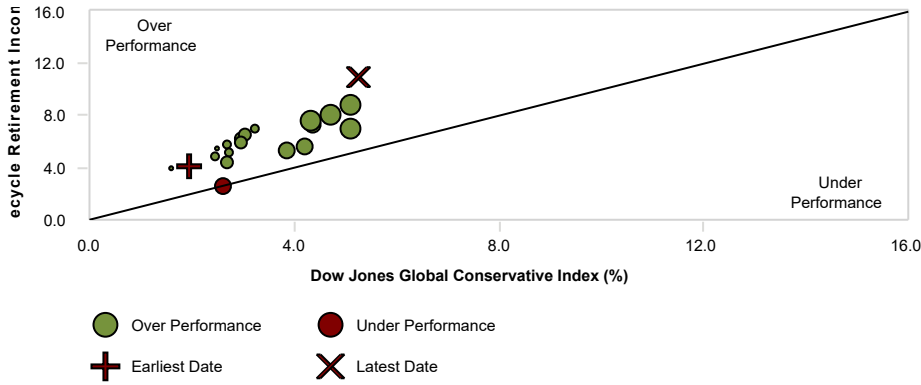
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● TIAA-CREF Lifecycle Retirement Income (TPILX)	2.16 (55)	6.92 (29)	6.92 (29)	10.91 (22)	7.96 (21)	10.93 (16)	15.03 (23)	-3.90 (67)	11.84 (6)
○ Dow Jones Global Conservative Index	0.29 (99)	-0.17 (100)	-0.17 (100)	5.26 (96)	4.15 (95)	8.05 (78)	8.13 (99)	-0.62 (2)	5.73 (95)
Median	2.20	6.06	6.06	9.61	6.92	9.49	13.31	-3.57	8.85

Comparative Performance

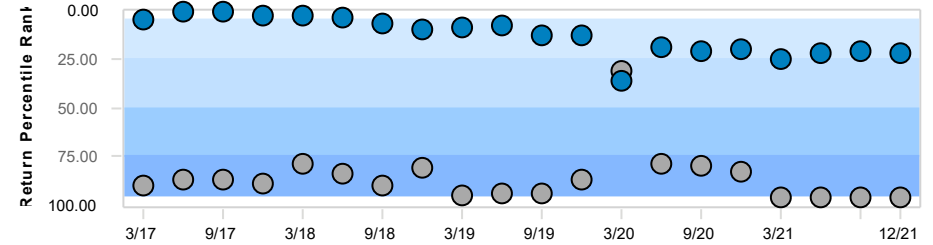
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
TIAA-CREF Lifecycle Retirement Income (TPILX)	-0.31 (62)	3.92 (19)	1.03 (13)	6.60 (33)	4.06 (12)	10.67 (11)
Dow Jones Global Conservative Index	-0.51 (87)	2.10 (95)	-2.00 (100)	4.02 (92)	2.27 (84)	5.12 (95)
IM Mixed-Asset Target Today (MF) Median	-0.23	3.46	0.43	6.07	3.20	8.82



3 Yr Rolling Under/Over Performance - 5 Years

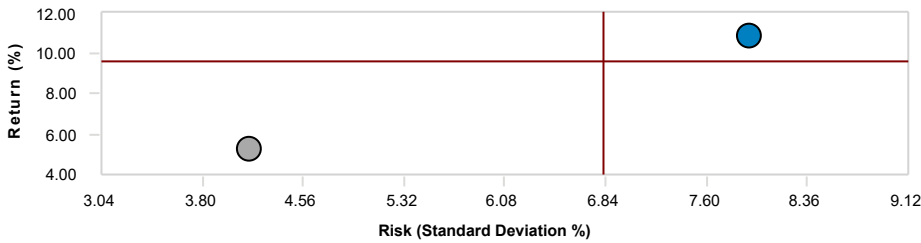


3 Yr Rolling Percentile Ranking - 5 Years



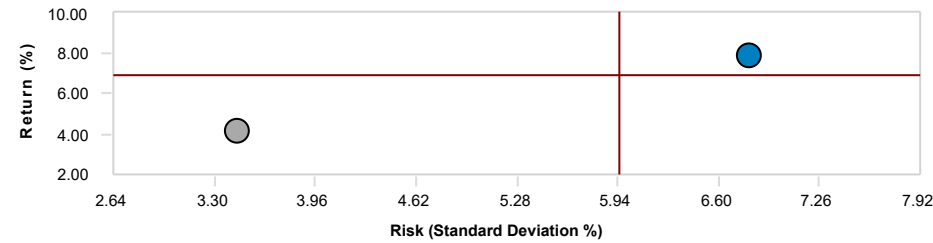
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● TIAA-CREF Lifecycle Retirement Income (TPILX)	20	19 (95%)	1 (5%)	0 (0%)	0 (0%)
● Dow Jones Global Conservative Index	20	0 (0%)	1 (5%)	0 (0%)	19 (95%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● TIAA-CREF Lifecycle Retirement Income (TPILX)	10.91	7.92
● Dow Jones Global Conservative Index	5.26	4.16
— Median	9.61	6.82

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● TIAA-CREF Lifecycle Retirement Income (TPILX)	7.96	6.80
● Dow Jones Global Conservative Index	4.15	3.45
— Median	6.92	5.95

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle Retirement Income (TPILX)	4.41	193.49	173.54	1.58	1.24	1.21	1.75	5.11
Dow Jones Global Conservative Index	0.00	100.00	100.00	0.00	N/A	1.00	1.00	2.40

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle Retirement Income (TPILX)	3.88	192.73	194.99	0.42	0.97	0.98	1.81	4.48
Dow Jones Global Conservative Index	0.00	100.00	100.00	0.00	N/A	0.85	1.00	2.02



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2010 Fund; Premier Class Shares
 Fund Family : TIAA
 Ticker : TCTPX
 Inception Date : 09/30/2009
 Fund Assets : \$56 Million
 Portfolio Turnover : 38%

Portfolio Assets : \$1,207 Million
 Portfolio Manager : Team Managed
 PM Tenure :
 Fund Style : IM Mixed-Asset Target 2010 (MF)
 Style Benchmark : Dow Jones Global Target 2010 Index

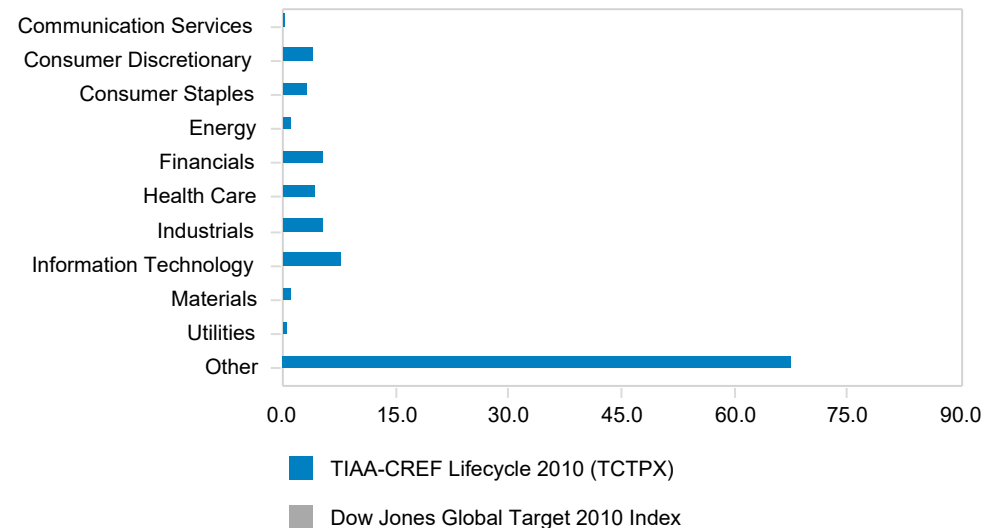
Portfolio Characteristics As of 11/30/2021

	Portfolio	Benchmark
Total Securities	23	N/A
Avg. Market Cap (\$)	116,836,627,302	-
Price/Earnings (P/E)	11.42	N/A
Price/Book (P/B)	2.91	N/A
Dividend Yield	0.54	N/A
Annual EPS	3.73	N/A
5 Yr EPS	4.82	N/A
3 Yr EPS Growth	3.95	N/A
Beta (5 Years, Monthly)	1.83	1.00

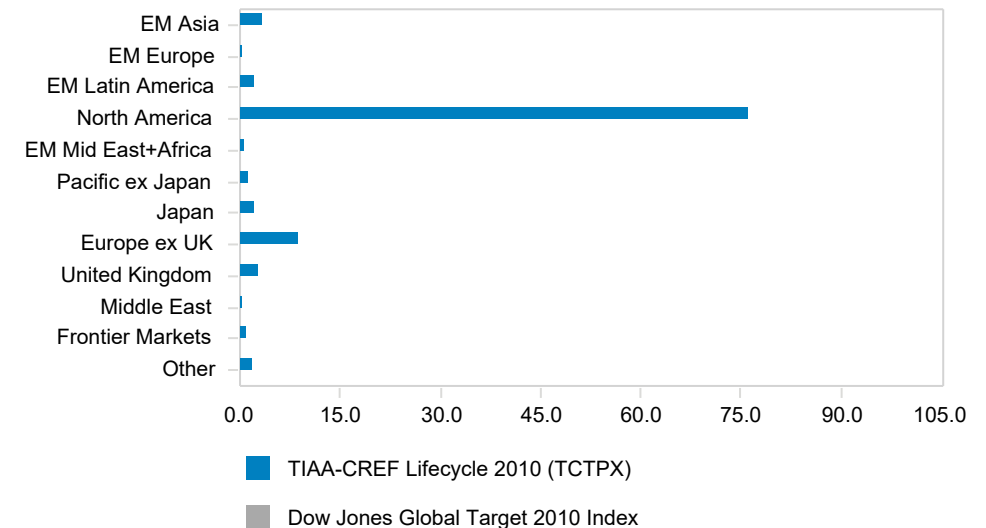
Top Ten Securities As of 11/30/2021

TIAA-CREF Core Bond Fund;W	21.0 %
TIAA-CREF Core Plus Bond Fund;W	13.0 %
TIAA-CREF Short-Term Bond Fund;W	11.4 %
TIAA-CREF Inflation-Linked Bond	10.0 %
TIAA-CREF Large-Cap Growth Fund;W	3.7 %
Nuveen Growth Opportunities ETF	3.7 %
TIAA-CREF International Equity	3.6 %
TIAA-CREF Large-Cap Value Fund;W	3.2 %
Nuveen Dividend Value Fund;R6	3.2 %
Nuveen Dividend Growth Fund;R6	3.2 %

Sector Weights As of 11/30/2021



Region Weights As of 11/30/2021



Statistics provided by Lipper. Most recent available data shown.



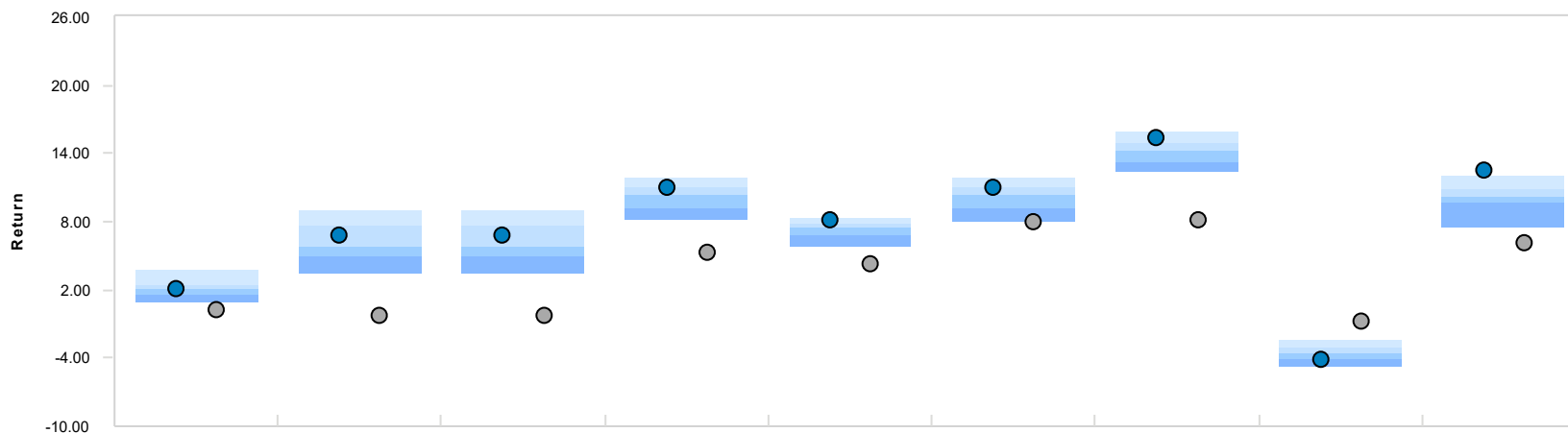
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2010;Prmr (TCTPX)
Fund Family : TIAA
Ticker : TCTPX
Peer Group : IM Mixed-Asset Target 2010 (MF)
Benchmark : Dow Jones Global Target 2010 Index
Fund Inception : 09/30/2009
Portfolio Manager : Team Managed
Total Assets : \$56 Million
Total Assets Date : 12/31/2021
Gross Expense : 0.67%
Net Expense : 0.52%
Turnover : 38%

Summary Description

The investment seeks high total return over time through a combination of capital appreciation and income. The fund is a "fund of funds" that invests in Institutional Class shares of other funds of the Trust and potentially in other investment pools or investment products (collectively, the "underlying funds"). The manager expects to allocate approximately 45.00% of the fund's assets to equity underlying funds and 55.00% of the fund's assets to fixed-income underlying funds. Target allocations will change over time and actual allocations may vary up to ten percentage points from the targets.

Peer Group Analysis - IM Mixed-Asset Target 2010 (MF)



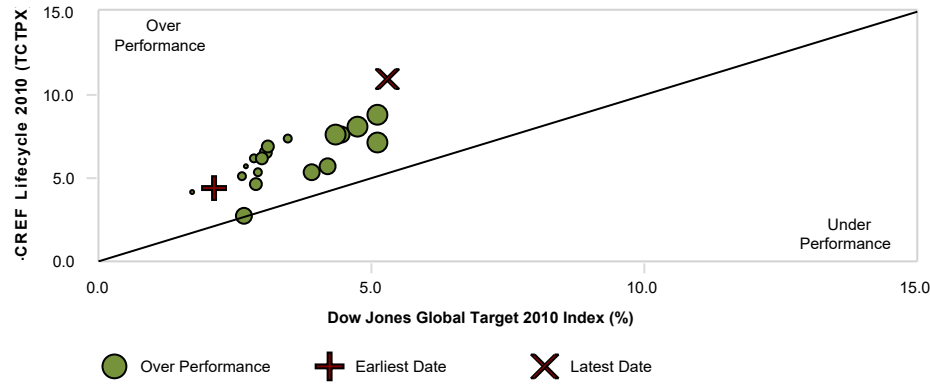
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● TIAA-CREF Lifecycle 2010 (TCTPX)	2.07 (54)	6.78 (47)	6.78 (47)	10.99 (25)	8.09 (16)	11.01 (24)	15.36 (14)	-4.09 (73)	12.52 (2)
○ Dow Jones Global Target 2010 Index	0.29 (100)	-0.20 (100)	-0.20 (100)	5.29 (100)	4.22 (100)	8.07 (96)	8.22 (100)	-0.68 (1)	6.07 (100)
Median	2.10	5.80	5.80	10.35	7.54	10.43	14.19	-3.58	10.24

Comparative Performance

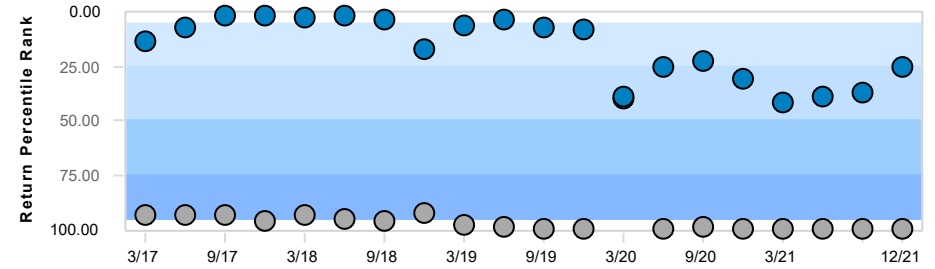
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
TIAA-CREF Lifecycle 2010 (TCTPX)	-0.24 (46)	3.90 (15)	0.94 (38)	6.72 (36)	4.11 (7)	10.64 (31)
Dow Jones Global Target 2010 Index	-0.51 (96)	2.11 (100)	-2.04 (100)	4.04 (99)	2.27 (99)	5.13 (100)
IM Mixed-Asset Target 2010 (MF) Median	-0.26	3.49	0.55	6.42	3.49	9.07



3 Yr Rolling Under/Over Performance - 5 Years

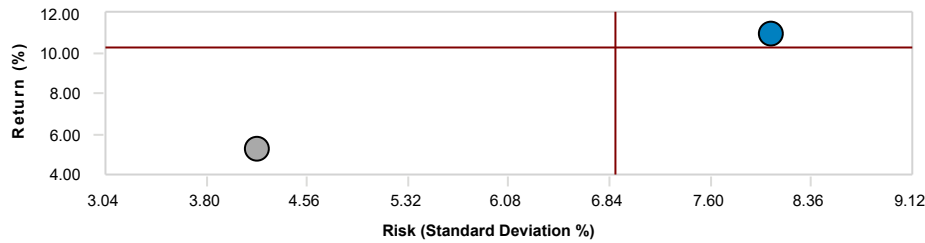


3 Yr Rolling Percentile Ranking - 5 Years



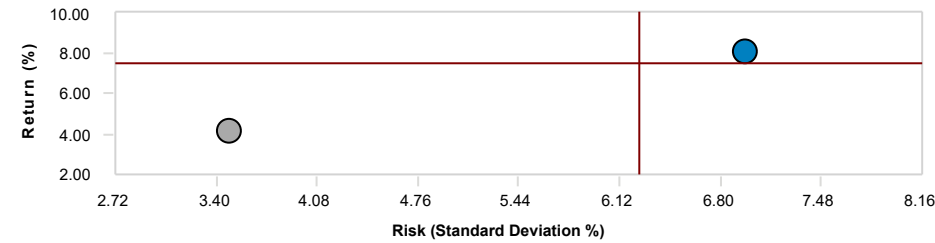
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
TIAA-CREF Lifecycle 2010 (TCTPX)	20	15 (75%)	5 (25%)	0 (0%)	0 (0%)
Dow Jones Global Target 2010 Index	20	0 (0%)	1 (5%)	0 (0%)	19 (95%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
TIAA-CREF Lifecycle 2010 (TCTPX)	10.99	8.05
Dow Jones Global Target 2010 Index	5.29	4.18
Median	10.35	6.88

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
TIAA-CREF Lifecycle 2010 (TCTPX)	8.09	6.96
Dow Jones Global Target 2010 Index	4.22	3.48
Median	7.54	6.25

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2010 (TCTPX)	4.51	194.69	175.77	1.52	1.23	1.20	1.77	5.14
Dow Jones Global Target 2010 Index	0.00	100.00	100.00	0.00	N/A	1.00	1.00	2.41

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2010 (TCTPX)	4.01	193.95	197.82	0.34	0.96	0.98	1.83	4.57
Dow Jones Global Target 2010 Index	0.00	100.00	100.00	0.00	N/A	0.86	1.00	2.04



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2015 Fund; Premier Class Shares
 Fund Family : TIAA
 Ticker : TCFPX
 Inception Date : 09/30/2009
 Fund Assets : \$85 Million
 Portfolio Turnover : 36%

Portfolio Assets : \$1,731 Million
 Portfolio Manager : Team Managed
 PM Tenure :
 Fund Style : IM Mixed-Asset Target 2015 (MF)
 Style Benchmark : Dow Jones Global Target 2015 Index

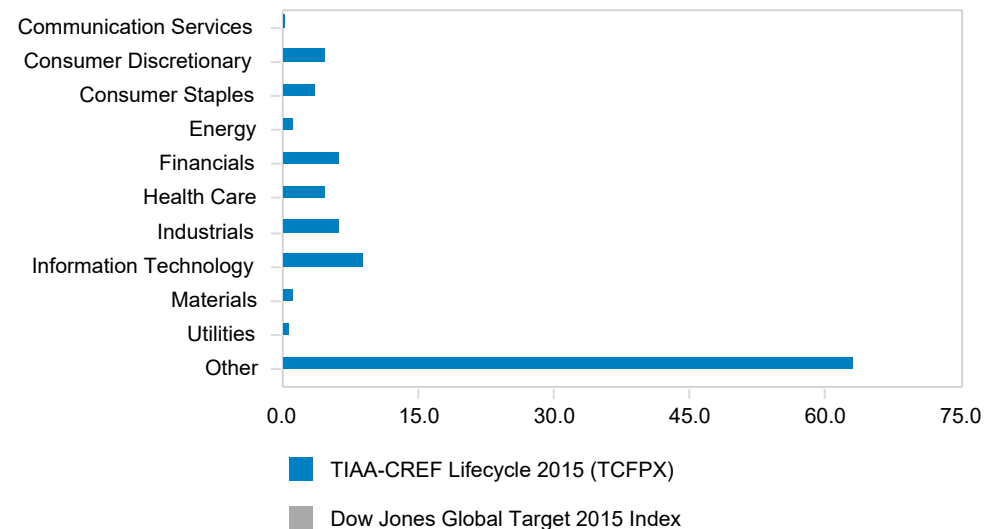
Portfolio Characteristics As of 11/30/2021

	Portfolio	Benchmark
Total Securities	23	N/A
Avg. Market Cap (\$)	132,630,188,302	-
Price/Earnings (P/E)	12.96	N/A
Price/Book (P/B)	3.30	N/A
Dividend Yield	0.62	N/A
Annual EPS	4.24	N/A
5 Yr EPS	5.47	N/A
3 Yr EPS Growth	4.48	N/A
Beta (5 Years, Monthly)	1.75	1.00

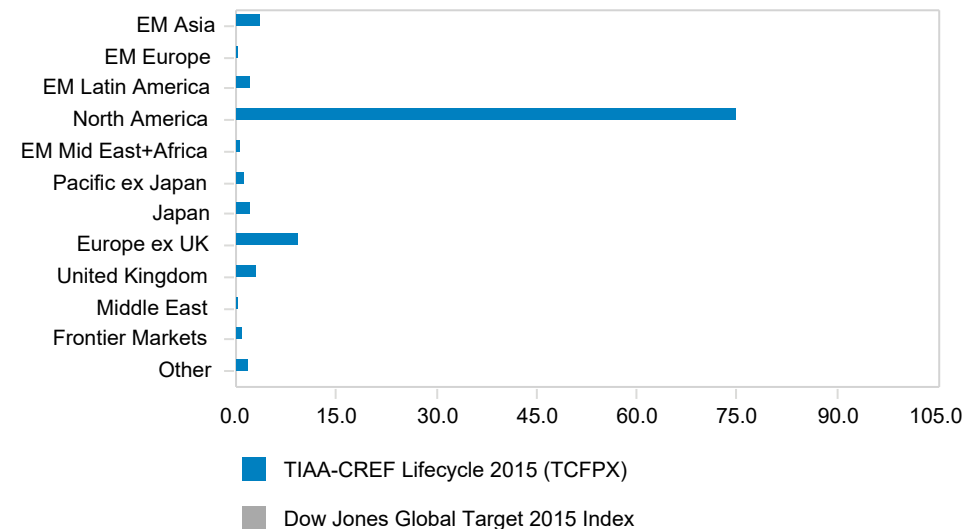
Top Ten Securities As of 11/30/2021

TIAA-CREF Core Bond Fund;W	20.8 %
TIAA-CREF Core Plus Bond Fund;W	12.9 %
TIAA-CREF Inflation-Linked Bond	8.6 %
TIAA-CREF Short-Term Bond Fund;W	8.6 %
Nuveen Growth Opportunities ETF	4.2 %
TIAA-CREF Large-Cap Growth Fund;W	4.2 %
TIAA-CREF International Equity	4.1 %
TIAA-CREF Large-Cap Value Fund;W	3.6 %
Nuveen Dividend Value Fund;R6	3.6 %
Nuveen Dividend Growth Fund;R6	3.6 %

Sector Weights As of 11/30/2021



Region Weights As of 11/30/2021



Statistics provided by Lipper. Most recent available data shown.



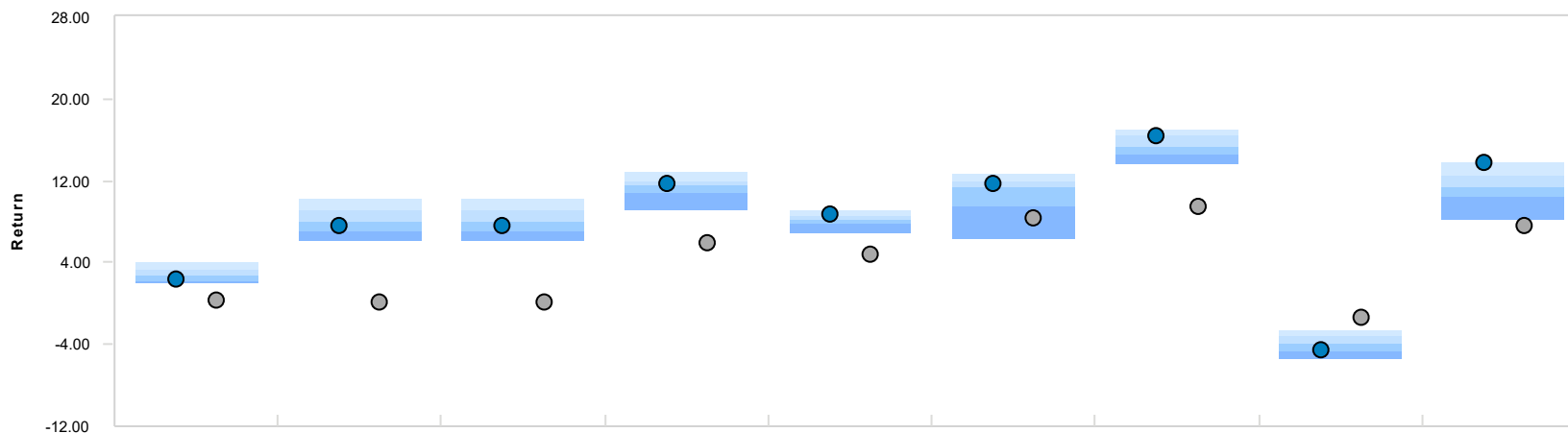
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2015;Prmr (TCFPX)
Fund Family : TIAA
Ticker : TCFPX
Peer Group : IM Mixed-Asset Target 2015 (MF)
Benchmark : Dow Jones Global Target 2015 Index
Fund Inception : 09/30/2009
Portfolio Manager : Team Managed
Total Assets : \$85 Million
Total Assets Date : 12/31/2021
Gross Expense : 0.68%
Net Expense : 0.53%
Turnover : 36%

Summary Description

The investment seeks high total return over time through a combination of capital appreciation and income. The fund is a "fund of funds" that invests in Institutional Class shares of other funds of the Trust and potentially in other investment pools or investment products. The managers expect to allocate approximately 50.00% of the fund's assets to equity underlying funds and 50.00% of the fund's assets to fixed-income underlying funds. Target allocations will change over time and actual allocations may vary up to ten percentage points from the targets.

Peer Group Analysis - IM Mixed-Asset Target 2015 (MF)



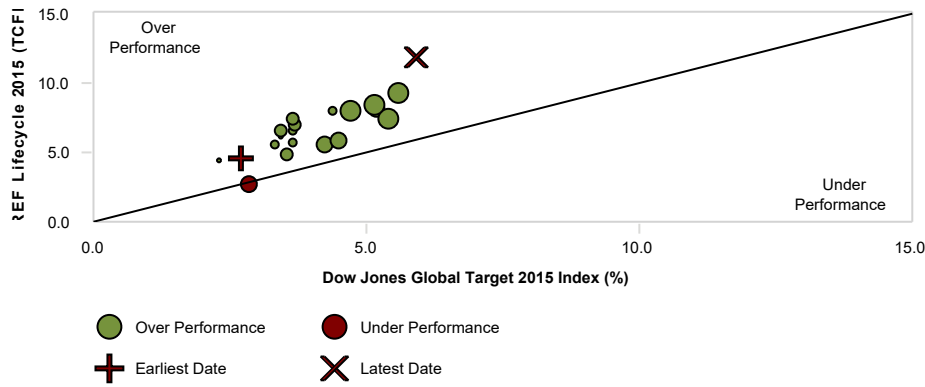
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● TIAA-CREF Lifecycle 2015 (TCFPX)	2.40 (69)	7.56 (62)	7.56 (62)	11.81 (36)	8.69 (21)	11.68 (39)	16.36 (33)	-4.60 (73)	13.75 (6)
○ Dow Jones Global Target 2015 Index	0.37 (100)	0.17 (100)	0.17 (100)	5.92 (100)	4.77 (100)	8.30 (91)	9.54 (100)	-1.28 (1)	7.59 (100)
Median	2.68	8.05	8.05	11.59	8.25	11.40	15.31	-3.90	11.40

Comparative Performance

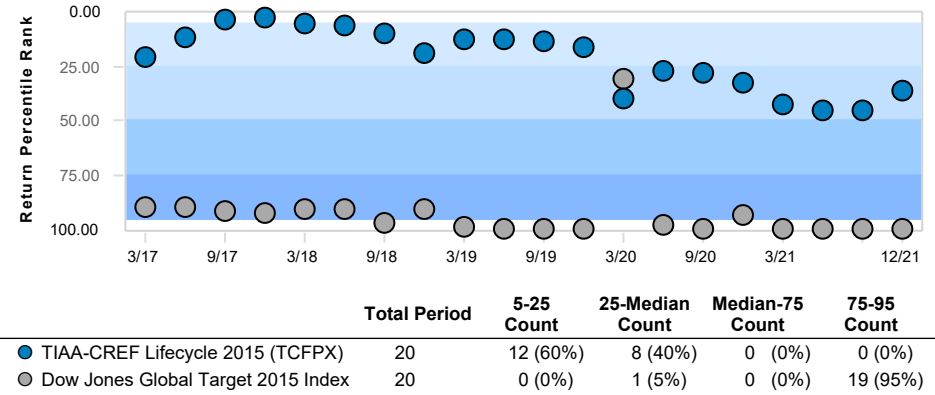
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
TIAA-CREF Lifecycle 2015 (TCFPX)	-0.37 (58)	4.12 (32)	1.26 (55)	7.41 (46)	4.51 (8)	11.56 (19)
Dow Jones Global Target 2015 Index	-0.52 (85)	2.21 (100)	-1.84 (100)	4.38 (100)	2.51 (98)	5.92 (100)
IM Mixed-Asset Target 2015 (MF) Median	-0.31	3.94	1.30	7.18	3.89	10.11



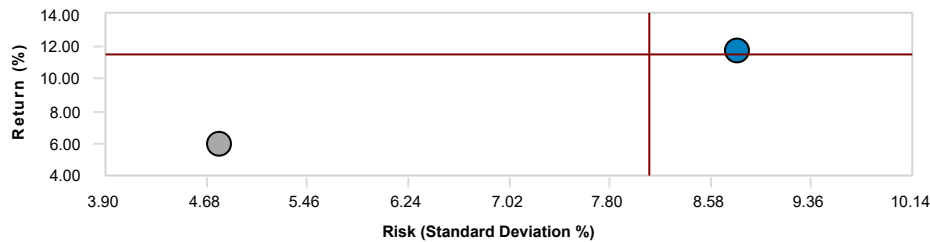
3 Yr Rolling Under/Over Performance - 5 Years



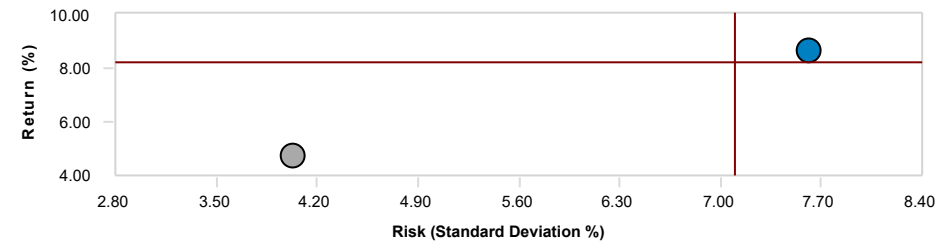
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2015 (TCFPX)	4.66	186.83	168.81	1.55	1.23	1.19	1.71	5.61
Dow Jones Global Target 2015 Index	0.00	100.00	100.00	0.00	N/A	1.01	1.00	2.85

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2015 (TCFPX)	4.13	182.41	182.52	0.34	0.95	0.98	1.75	5.00
Dow Jones Global Target 2015 Index	0.00	100.00	100.00	0.00	N/A	0.88	1.00	2.44



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2020 Fund; Premier Class Shares
 Fund Family : TIAA
 Ticker : TCWPX
 Inception Date : 09/30/2009
 Fund Assets : \$200 Million
 Portfolio Turnover : 38%

Portfolio Assets : \$3,829 Million
 Portfolio Manager : Team Managed
 PM Tenure :
 Fund Style : IM Mixed-Asset Target 2020 (MF)
 Style Benchmark : Dow Jones Global Target 2020 Index

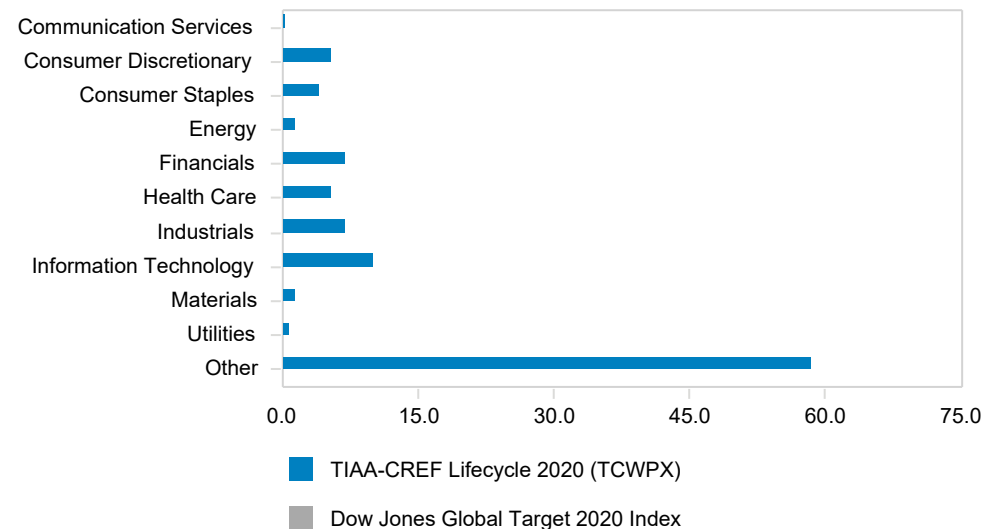
Portfolio Characteristics As of 11/30/2021

	Portfolio	Benchmark
Total Securities	23	N/A
Avg. Market Cap (\$)	149,263,331,424	-
Price/Earnings (P/E)	14.58	N/A
Price/Book (P/B)	3.71	N/A
Dividend Yield	0.69	N/A
Annual EPS	4.77	N/A
5 Yr EPS	6.15	N/A
3 Yr EPS Growth	5.05	N/A
Beta (5 Years, Monthly)	1.56	1.00

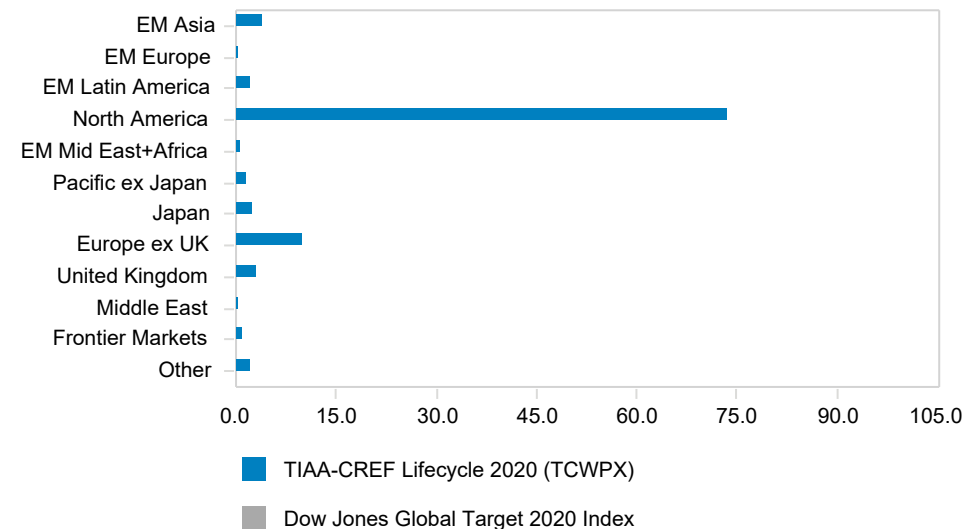
Top Ten Securities As of 11/30/2021

TIAA-CREF Core Bond Fund;W	20.2 %
TIAA-CREF Core Plus Bond Fund;W	12.5 %
TIAA-CREF Inflation-Linked Bond	6.6 %
TIAA-CREF Short-Term Bond Fund;W	6.6 %
Nuveen Growth Opportunities ETF	4.7 %
TIAA-CREF Large-Cap Growth Fund;W	4.7 %
TIAA-CREF International Equity	4.6 %
TIAA-CREF Large-Cap Value Fund;W	4.1 %
Nuveen Dividend Value Fund;R6	4.1 %
Nuveen Dividend Growth Fund;R6	4.1 %

Sector Weights As of 11/30/2021



Region Weights As of 11/30/2021



Statistics provided by Lipper. Most recent available data shown.



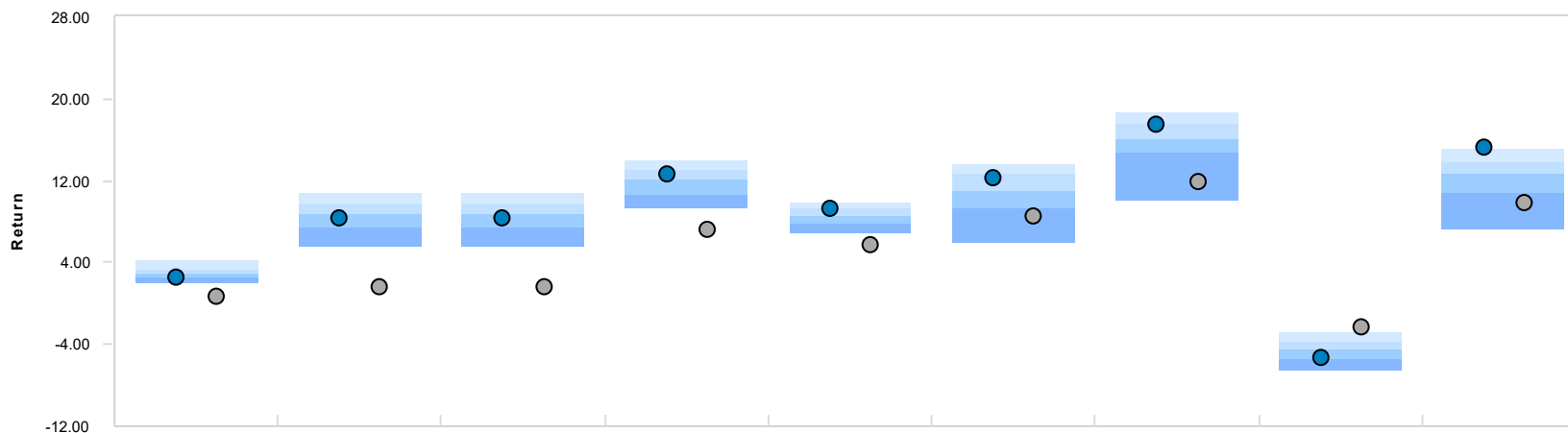
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2020;Prmr (TCWPX)
 Fund Family : TIAA
 Ticker : TCWPX
 Peer Group : IM Mixed-Asset Target 2020 (MF)
 Benchmark : Dow Jones Global Target 2020 Index
 Fund Inception : 09/30/2009
 Portfolio Manager : Team Managed
 Total Assets : \$200 Million
 Total Assets Date : 12/31/2021
 Gross Expense : 0.68%
 Net Expense : 0.54%
 Turnover : 38%

Summary Description

The investment seeks high total return over time through a combination of capital appreciation and income. The fund is a "fund of funds" that invests in Institutional Class shares of other funds of the Trust and potentially in other investment pools or investment products. The managers expect to allocate approximately 58.00% of the fund's assets to equity underlying funds and 42.00% of the fund's assets to fixed-income underlying funds. These allocations represent targets for equity and fixed-income asset classes. Target allocations will change over time and actual allocations may vary up to ten percentage points from the targets.

Peer Group Analysis - IM Mixed-Asset Target 2020 (MF)



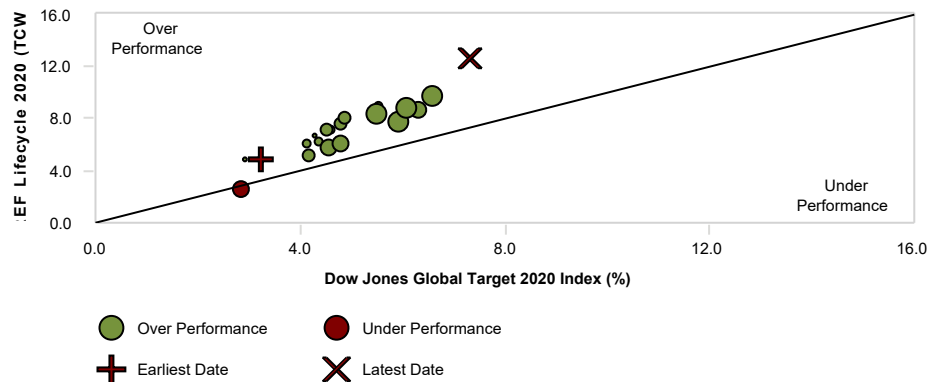
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● TIAA-CREF Lifecycle 2020 (TCWPX)	2.62 (68)	8.28 (64)	8.28 (64)	12.64 (39)	9.32 (24)	12.24 (33)	17.59 (25)	-5.26 (73)	15.35 (4)
○ Dow Jones Global Target 2020 Index	0.72 (100)	1.63 (100)	1.63 (100)	7.33 (100)	5.82 (99)	8.63 (83)	12.00 (91)	-2.33 (3)	9.88 (82)
Median	2.88	8.70	8.70	12.15	8.58	10.90	15.97	-4.52	12.69

Comparative Performance

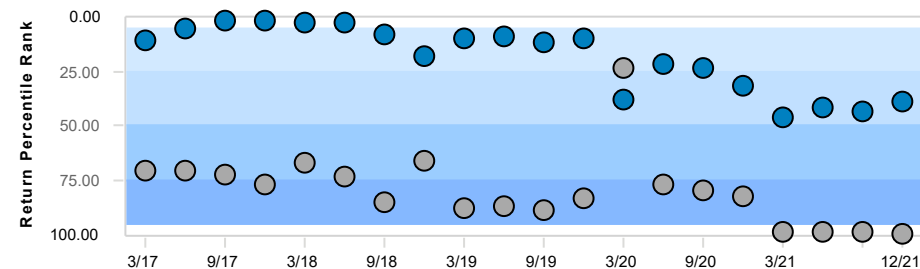
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
TIAA-CREF Lifecycle 2020 (TCWPX)	-0.53 (64)	4.52 (30)	1.50 (56)	8.09 (38)	4.87 (12)	12.53 (11)
Dow Jones Global Target 2020 Index	-0.57 (70)	2.64 (100)	-1.12 (100)	5.54 (94)	2.95 (85)	7.38 (91)
IM Mixed-Asset Target 2020 (MF) Median	-0.47	4.27	1.66	7.84	3.90	10.27



3 Yr Rolling Under/Over Performance - 5 Years

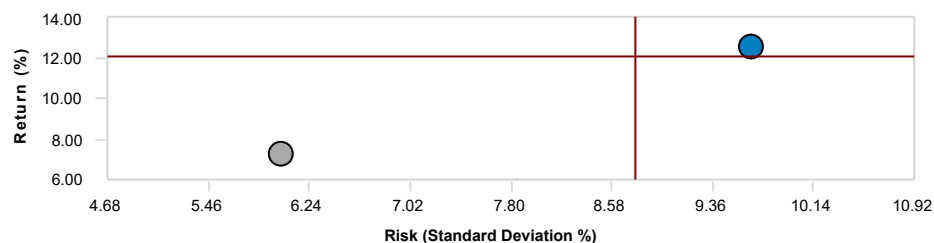


3 Yr Rolling Percentile Ranking - 5 Years



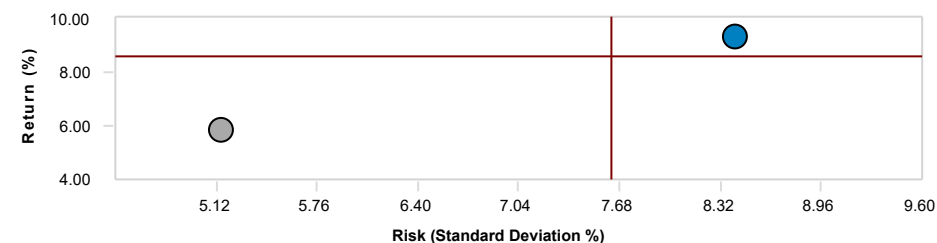
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● TIAA-CREF Lifecycle 2020 (TCWPX)	20	14 (70%)	6 (30%)	0 (0%)	0 (0%)
● Dow Jones Global Target 2020 Index	20	1 (5%)	0 (0%)	6 (30%)	13 (65%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● TIAA-CREF Lifecycle 2020 (TCWPX)	12.64	9.65
● Dow Jones Global Target 2020 Index	7.33	6.02
— Median	12.15	8.76

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● TIAA-CREF Lifecycle 2020 (TCWPX)	9.32	8.42
● Dow Jones Global Target 2020 Index	5.82	5.14
— Median	8.58	7.62

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2020 (TCWPX)	4.18	165.03	155.20	1.20	1.23	1.17	1.54	6.14
Dow Jones Global Target 2020 Index	0.00	100.00	100.00	0.00	N/A	1.03	1.00	3.72

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2020 (TCWPX)	3.81	160.52	160.88	0.23	0.92	0.96	1.56	5.54
Dow Jones Global Target 2020 Index	0.00	100.00	100.00	0.00	N/A	0.89	1.00	3.24



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2025 Fund; Premier Class Shares
 Fund Family : TIAA
 Ticker : TCQPX
 Inception Date : 09/30/2009
 Fund Assets : \$288 Million
 Portfolio Turnover : 40%

Portfolio Assets : \$5,492 Million
 Portfolio Manager : Team Managed
 PM Tenure :
 Fund Style : IM Mixed-Asset Target 2025 (MF)
 Style Benchmark : Dow Jones Global Target 2025 Index

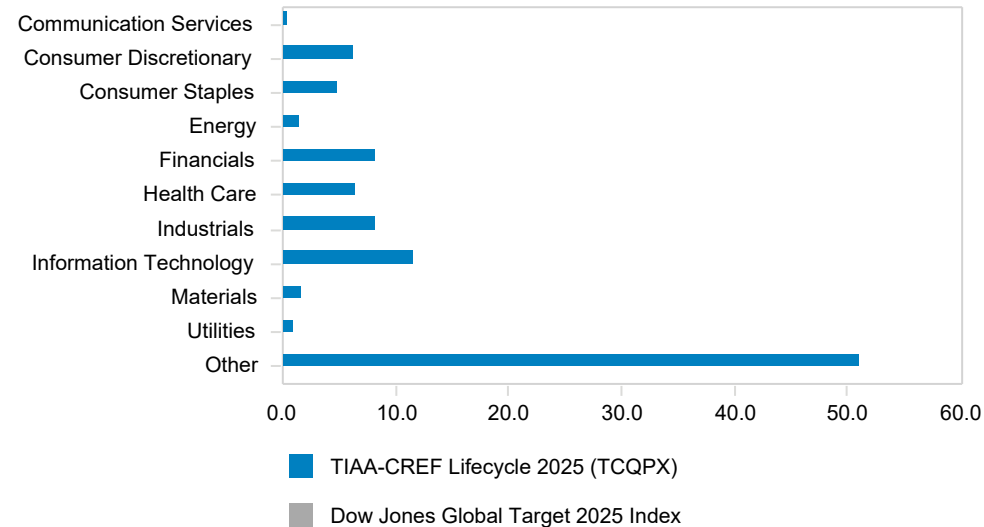
Portfolio Characteristics As of 11/30/2021

	Portfolio	Benchmark
Total Securities	23	N/A
Avg. Market Cap (\$)	175,824,648,961	-
Price/Earnings (P/E)	17.17	N/A
Price/Book (P/B)	4.37	N/A
Dividend Yield	0.82	N/A
Annual EPS	5.61	N/A
5 Yr EPS	7.25	N/A
3 Yr EPS Growth	5.94	N/A
Beta (5 Years, Monthly)	1.43	1.00

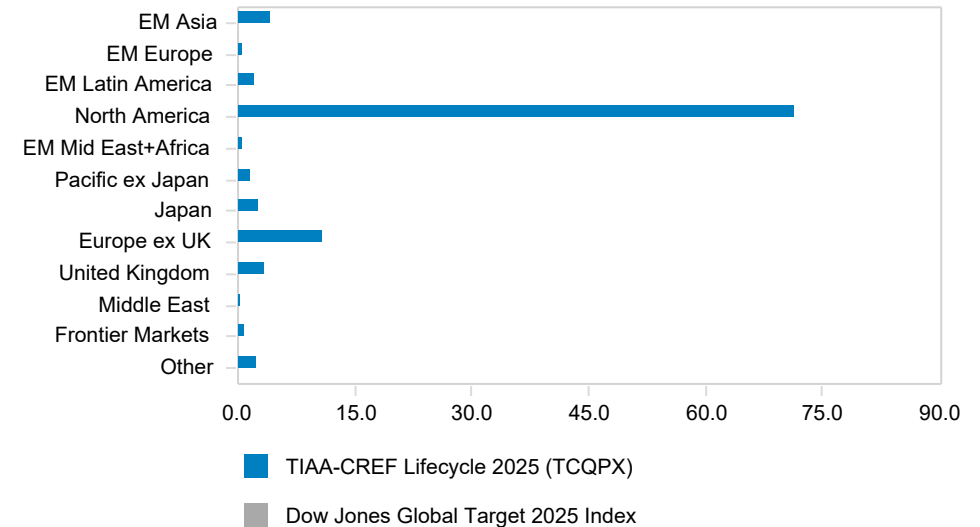
Top Ten Securities As of 11/30/2021

TIAA-CREF Core Bond Fund;W	18.3 %
TIAA-CREF Core Plus Bond Fund;W	11.3 %
Nuveen Growth Opportunities ETF	5.6 %
TIAA-CREF Large-Cap Growth Fund;W	5.6 %
TIAA-CREF International Equity	5.4 %
TIAA-CREF Large-Cap Value Fund;W	4.8 %
Nuveen Dividend Value Fund;R6	4.8 %
Nuveen Dividend Growth Fund;R6	4.8 %
TIAA-CREF Growth & Income Fund;W	4.8 %
TIAA-CREF Inflation-Linked Bond	4.6 %

Sector Weights As of 11/30/2021



Region Weights As of 11/30/2021



Statistics provided by Lipper. Most recent available data shown.



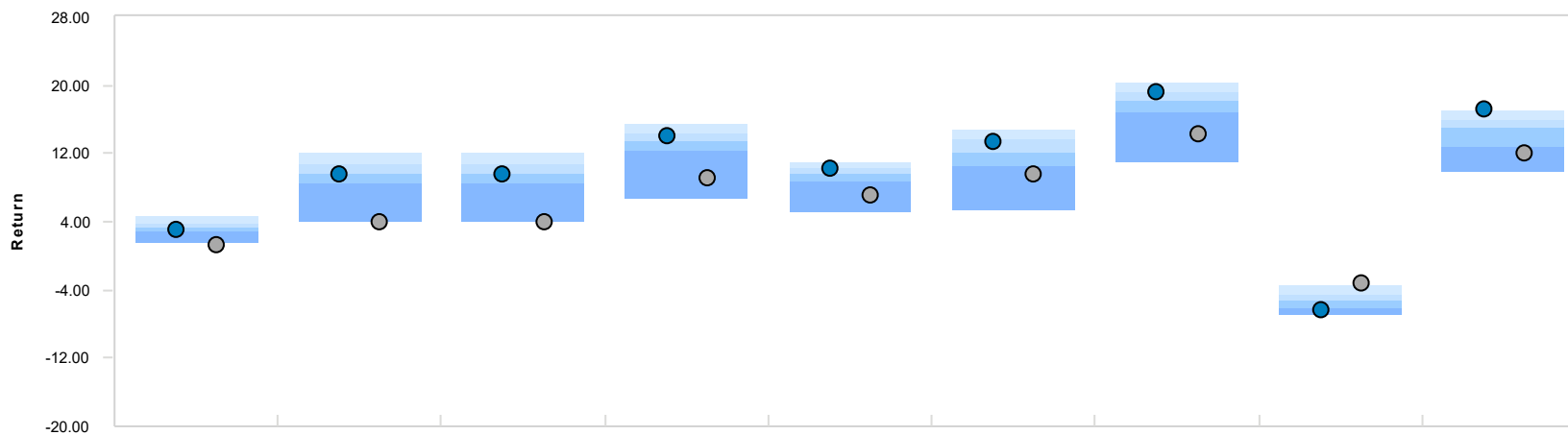
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2025;Prmr (TCQPX)
Fund Family : TIAA
Ticker : TCQPX
Peer Group : IM Mixed-Asset Target 2025 (MF)
Benchmark : Dow Jones Global Target 2025 Index
Fund Inception : 09/30/2009
Portfolio Manager : Team Managed
Total Assets : \$288 Million
Total Assets Date : 12/31/2021
Gross Expense : 0.71%
Net Expense : 0.56%
Turnover : 40%

Summary Description

The investment seeks high total return over time through a combination of capital appreciation and income. The fund is a "fund of funds" that invests in Institutional Class shares of other funds of the Trust and potentially in other investment pools or investment products. The managers expect to allocate approximately 66.00% of the fund's assets to equity underlying funds and 34.00% of the fund's assets to fixed-income underlying funds. These allocations represent targets for equity and fixed-income asset classes. Target allocations will change over time and actual allocations may vary up to ten percentage points from the targets.

Peer Group Analysis - IM Mixed-Asset Target 2025 (MF)



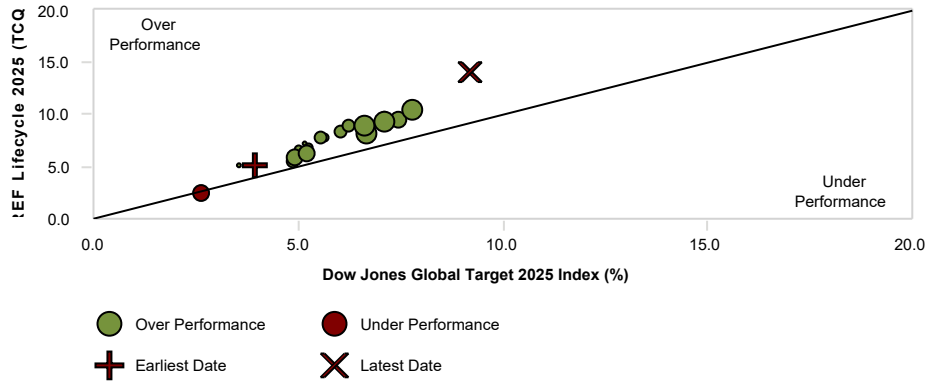
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● TIAA-CREF Lifecycle 2025 (TCQPX)	3.07 (68)	9.60 (54)	9.60 (54)	14.01 (36)	10.24 (31)	13.34 (32)	19.29 (26)	-6.23 (78)	17.19 (3)
○ Dow Jones Global Target 2025 Index	1.33 (97)	3.91 (96)	3.91 (96)	9.22 (94)	7.15 (92)	9.62 (83)	14.38 (92)	-3.22 (4)	12.02 (83)
Median	3.37	9.70	9.70	13.32	9.54	12.13	18.18	-5.23	14.95

Comparative Performance

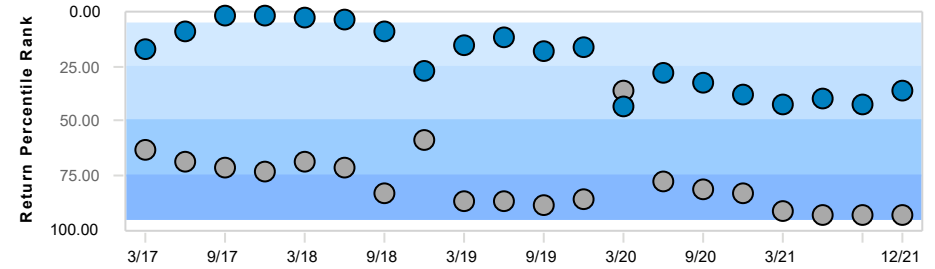
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
TIAA-CREF Lifecycle 2025 (TCQPX)	-0.68 (66)	4.97 (23)	1.99 (39)	9.33 (40)	5.39 (16)	14.21 (9)
Dow Jones Global Target 2025 Index	-0.64 (59)	3.23 (94)	-0.03 (94)	7.26 (81)	3.57 (88)	9.35 (89)
IM Mixed-Asset Target 2025 (MF) Median	-0.57	4.59	1.80	9.02	4.60	11.97



3 Yr Rolling Under/Over Performance - 5 Years

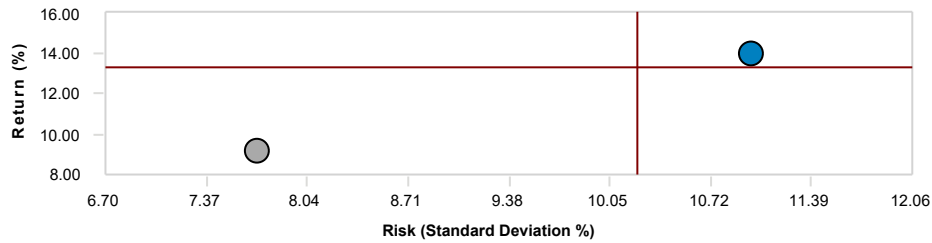


3 Yr Rolling Percentile Ranking - 5 Years



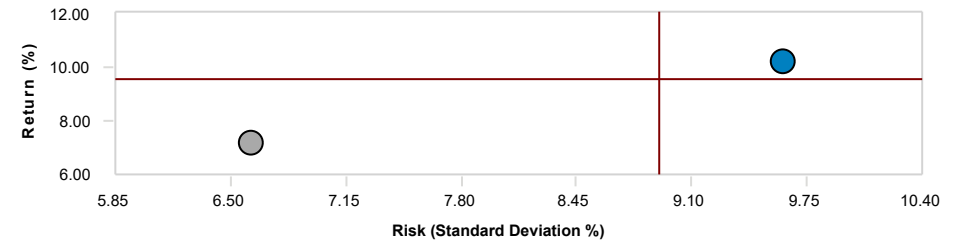
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
TIAA-CREF Lifecycle 2025 (TCQPX)	20	11 (55%)	9 (45%)	0 (0%)	0 (0%)
Dow Jones Global Target 2025 Index	20	0 (0%)	1 (5%)	7 (35%)	12 (60%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
TIAA-CREF Lifecycle 2025 (TCQPX)	14.01	10.99
Dow Jones Global Target 2025 Index	9.22	7.71
Median	13.32	10.23

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
TIAA-CREF Lifecycle 2025 (TCQPX)	10.24	9.61
Dow Jones Global Target 2025 Index	7.15	6.62
Median	9.54	8.91

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2025 (TCQPX)	3.64	148.96	146.01	0.94	1.27	1.15	1.41	6.97
Dow Jones Global Target 2025 Index	0.00	100.00	100.00	0.00	N/A	1.05	1.00	4.87

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2025 (TCQPX)	3.36	146.34	150.32	0.07	0.93	0.94	1.43	6.35
Dow Jones Global Target 2025 Index	0.00	100.00	100.00	0.00	N/A	0.90	1.00	4.27



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2030 Fund; Premier Class Shares
 Fund Family : TIAA
 Ticker : TCHPX
 Inception Date : 09/30/2009
 Fund Assets : \$307 Million
 Portfolio Turnover : 41%

Portfolio Assets : \$5,961 Million
 Portfolio Manager : Team Managed
 PM Tenure :
 Fund Style : IM Mixed-Asset Target 2030 (MF)
 Style Benchmark : Dow Jones Global Target 2030 Index

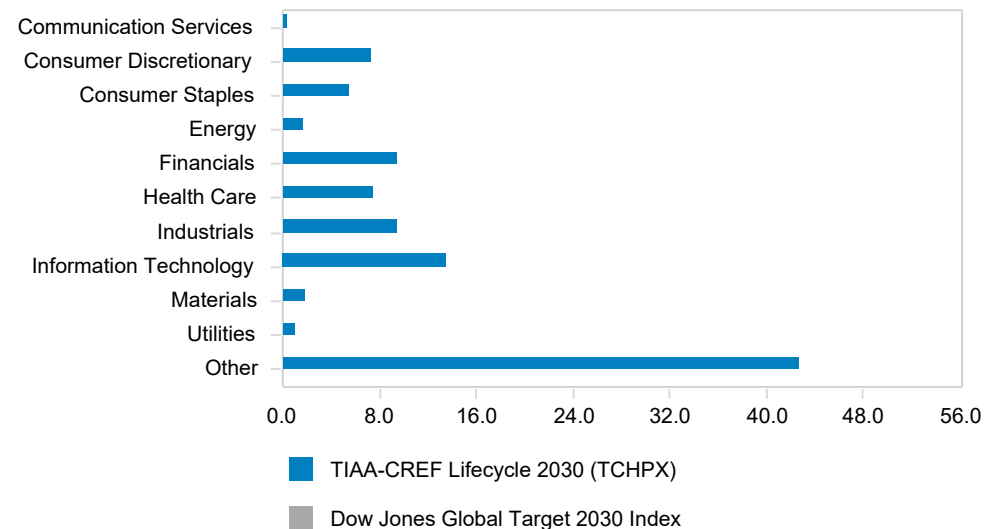
Portfolio Characteristics As of 11/30/2021

	Portfolio	Benchmark
Total Securities	23	N/A
Avg. Market Cap (\$)	205,980,079,954	-
Price/Earnings (P/E)	20.13	N/A
Price/Book (P/B)	5.12	N/A
Dividend Yield	0.96	N/A
Annual EPS	6.57	N/A
5 Yr EPS	8.49	N/A
3 Yr EPS Growth	6.96	N/A
Beta (5 Years, Monthly)	1.28	1.00

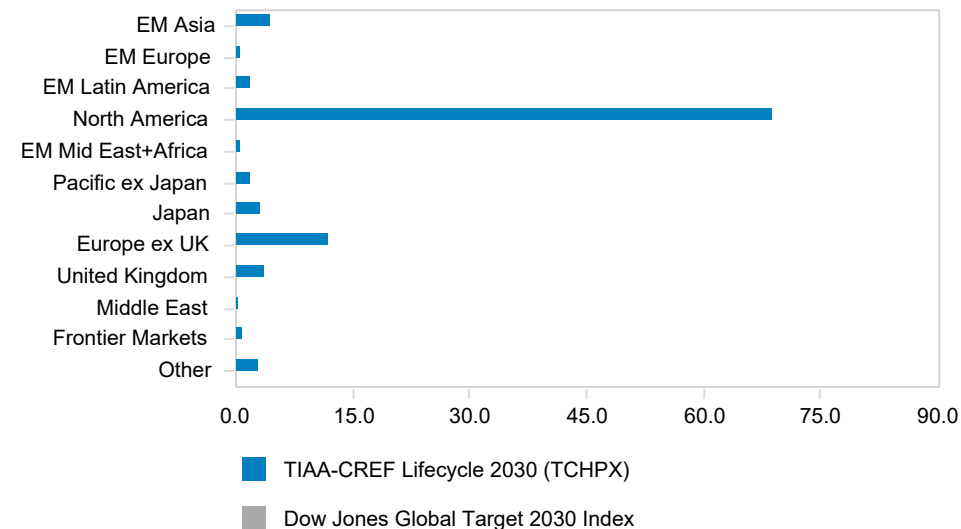
Top Ten Securities As of 11/30/2021

TIAA-CREF Core Bond Fund;W	15.7 %
TIAA-CREF Core Plus Bond Fund;W	9.7 %
Nuveen Growth Opportunities ETF	6.5 %
TIAA-CREF Large-Cap Growth Fund;W	6.5 %
TIAA-CREF International Equity	6.3 %
TIAA-CREF Large-Cap Value Fund;W	5.7 %
Nuveen Dividend Value Fund;R6	5.7 %
Nuveen Dividend Growth Fund;R6	5.6 %
TIAA-CREF Growth & Income Fund;W	5.6 %
TIAA-CREF International Opportunities	4.5 %

Sector Weights As of 11/30/2021



Region Weights As of 11/30/2021



Statistics provided by Lipper. Most recent available data shown.



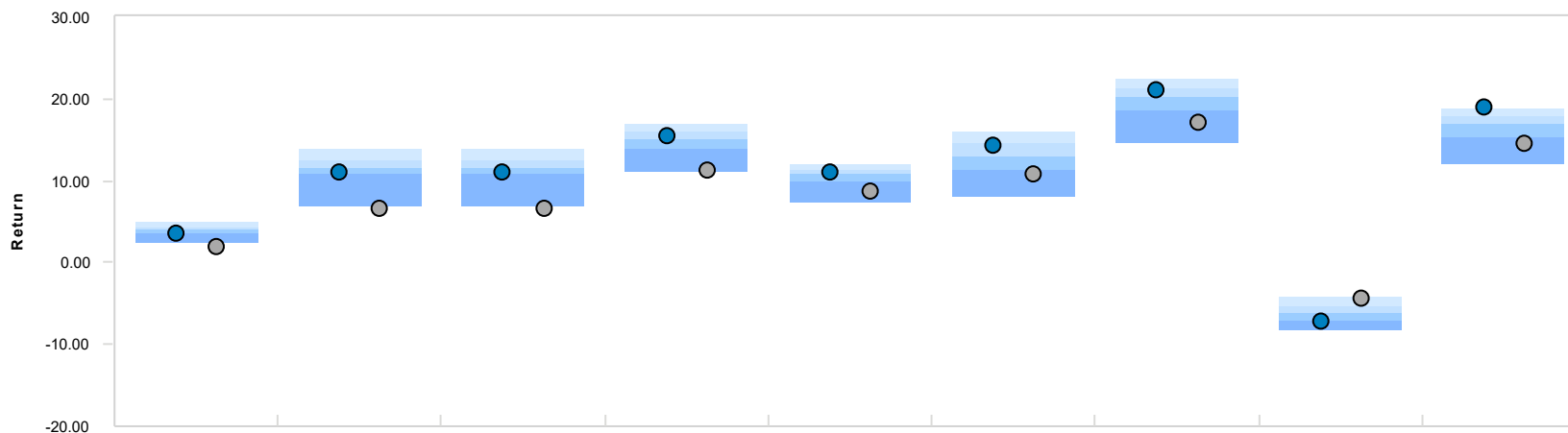
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2030;Prmr (TCHPX)
Fund Family : TIAA
Ticker : TCHPX
Peer Group : IM Mixed-Asset Target 2030 (MF)
Benchmark : Dow Jones Global Target 2030 Index
Fund Inception : 09/30/2009
Portfolio Manager : Team Managed
Total Assets : \$307 Million
Total Assets Date : 12/31/2021
Gross Expense : 0.73%
Net Expense : 0.57%
Turnover : 41%

Summary Description

The investment seeks high total return over time through a combination of capital appreciation and income. The fund is a "fund of funds" that invests in Institutional Class shares of other funds of the Trust and potentially in other investment pools or investment products. The managers expect to allocate approximately 74.00% of the fund's assets to equity underlying funds and 26.00% of the fund's assets to fixed-income underlying funds. These allocations represent targets for equity and fixed-income asset classes. Target allocations will change over time and actual allocations may vary up to ten percentage points from the targets.

Peer Group Analysis - IM Mixed-Asset Target 2030 (MF)



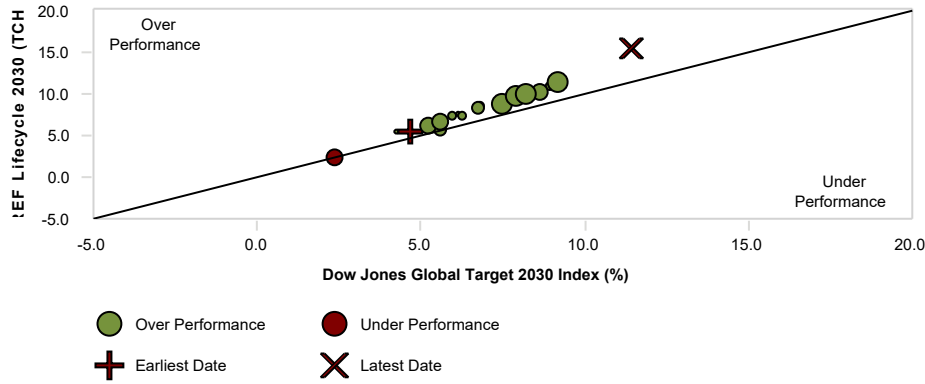
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● TIAA-CREF Lifecycle 2030 (TCHPX)	3.50 (75)	11.10 (65)	11.10 (65)	15.42 (43)	11.18 (37)	14.24 (32)	21.13 (30)	-7.18 (75)	19.02 (4)
○ Dow Jones Global Target 2030 Index	2.04 (100)	6.56 (98)	6.56 (98)	11.42 (95)	8.67 (93)	10.88 (79)	17.06 (87)	-4.43 (9)	14.64 (78)
Median	3.99	11.44	11.44	15.03	10.78	12.86	20.08	-6.32	16.92

Comparative Performance

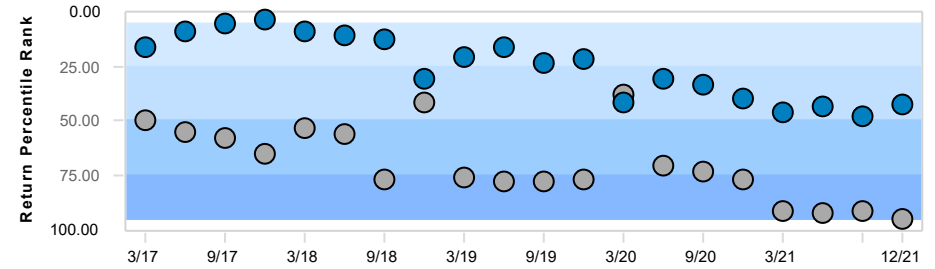
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
TIAA-CREF Lifecycle 2030 (TCHPX)	-0.83 (64)	5.41 (31)	2.69 (44)	10.44 (45)	6.08 (13)	15.66 (10)
Dow Jones Global Target 2030 Index	-0.73 (50)	3.92 (91)	1.23 (92)	9.26 (72)	4.27 (83)	11.61 (86)
IM Mixed-Asset Target 2030 (MF) Median	-0.74	5.21	2.65	10.28	5.37	13.73



3 Yr Rolling Under/Over Performance - 5 Years

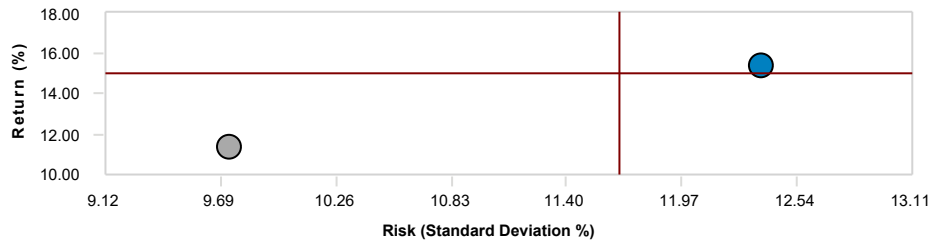


3 Yr Rolling Percentile Ranking - 5 Years



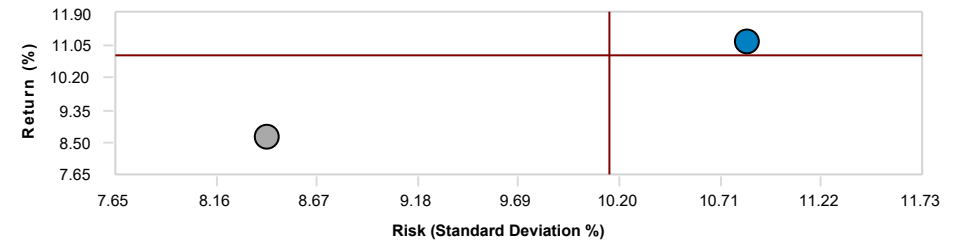
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● TIAA-CREF Lifecycle 2030 (TCHPX)	20	11 (55%)	9 (45%)	0 (0%)	0 (0%)
● Dow Jones Global Target 2030 Index	20	0 (0%)	3 (15%)	7 (35%)	10 (50%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● TIAA-CREF Lifecycle 2030 (TCHPX)	15.42	12.36
● Dow Jones Global Target 2030 Index	11.42	9.73
— Median	15.03	11.66

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● TIAA-CREF Lifecycle 2030 (TCHPX)	11.18	10.84
● Dow Jones Global Target 2030 Index	8.67	8.42
— Median	10.78	10.15

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2030 (TCHPX)	2.95	134.12	134.27	0.90	1.31	1.14	1.26	7.77
Dow Jones Global Target 2030 Index	0.00	100.00	100.00	0.00	N/A	1.05	1.00	6.20

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2030 (TCHPX)	2.74	131.84	135.31	0.13	0.93	0.92	1.28	7.14
Dow Jones Global Target 2030 Index	0.00	100.00	100.00	0.00	N/A	0.89	1.00	5.52



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2035 Fund; Premier Class Shares
 Fund Family : TIAA
 Ticker : TCYPX
 Inception Date : 09/30/2009
 Fund Assets : \$331 Million
 Portfolio Turnover : 44%

Portfolio Assets : \$6,164 Million
 Portfolio Manager : Team Managed
 PM Tenure :
 Fund Style : IM Mixed-Asset Target 2035 (MF)
 Style Benchmark : Dow Jones Global Target 2035 Index

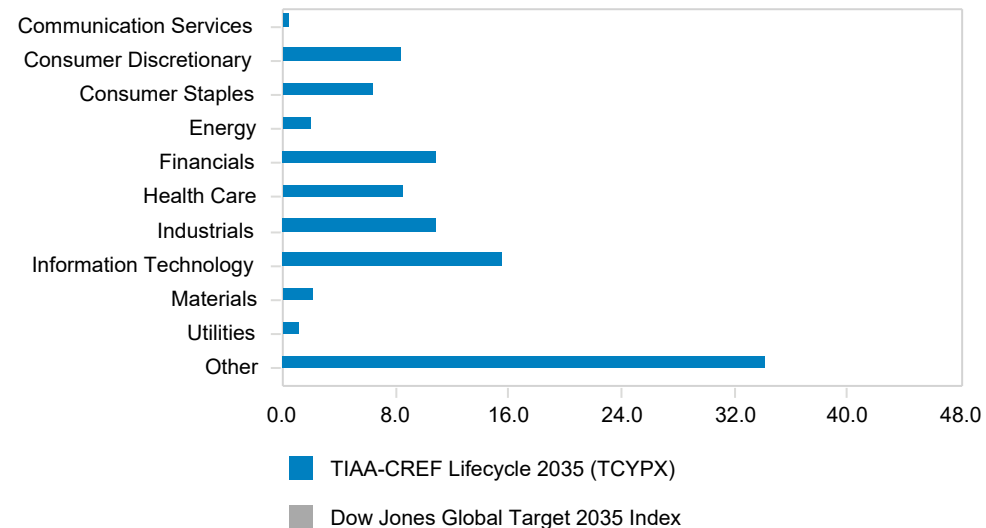
Portfolio Characteristics As of 11/30/2021

	Portfolio	Benchmark
Total Securities	23	N/A
Avg. Market Cap (\$)	236,269,741,126	-
Price/Earnings (P/E)	23.09	N/A
Price/Book (P/B)	5.87	N/A
Dividend Yield	1.10	N/A
Annual EPS	7.54	N/A
5 Yr EPS	9.74	N/A
3 Yr EPS Growth	7.98	N/A
Beta (5 Years, Monthly)	1.17	1.00

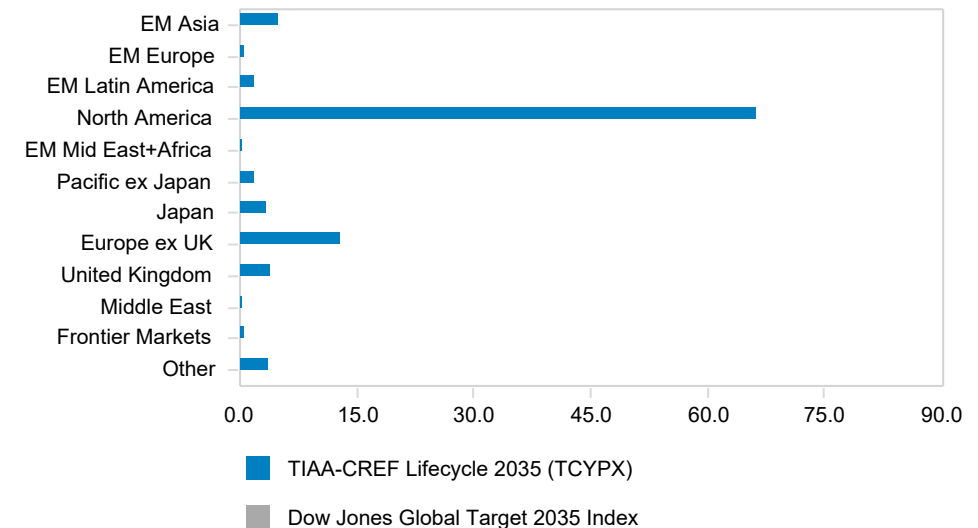
Top Ten Securities As of 11/30/2021

TIAA-CREF Core Bond Fund;W	13.2 %
TIAA-CREF Core Plus Bond Fund;W	8.2 %
Nuveen Growth Opportunities ETF	7.5 %
TIAA-CREF Large-Cap Growth Fund;W	7.5 %
TIAA-CREF International Equity	7.3 %
TIAA-CREF Large-Cap Value Fund;W	6.5 %
Nuveen Dividend Value Fund;R6	6.5 %
Nuveen Dividend Growth Fund;R6	6.4 %
TIAA-CREF Growth & Income Fund;W	6.4 %
Nuveen International Growth Fund;R6	5.1 %

Sector Weights As of 11/30/2021



Region Weights As of 11/30/2021



Statistics provided by Lipper. Most recent available data shown.



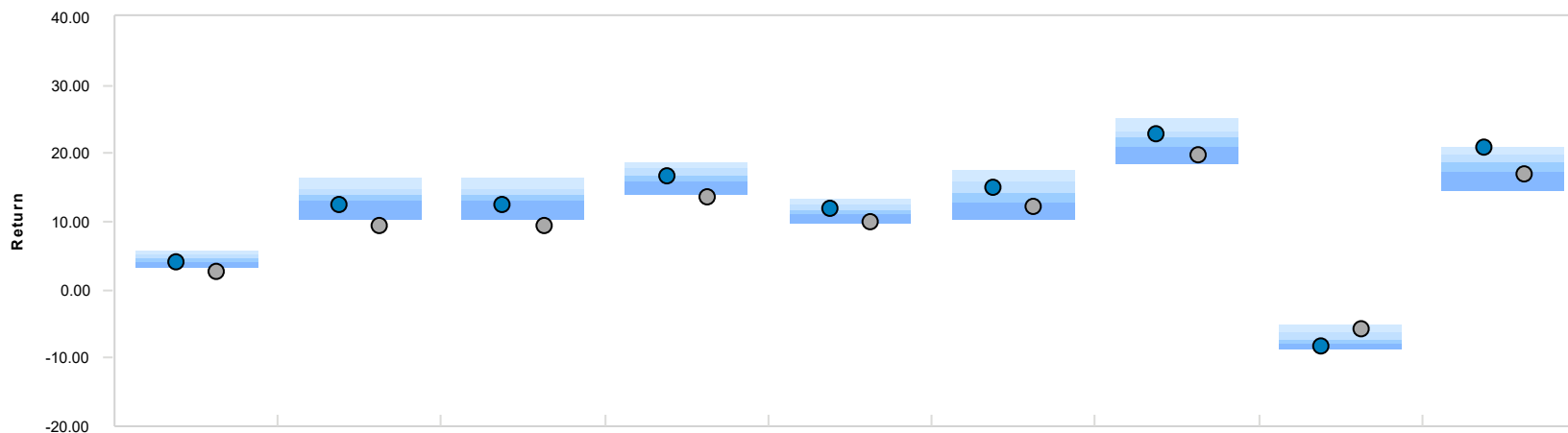
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2035;Prmr (TCYPX)
Fund Family : TIAA
Ticker : TCYPX
Peer Group : IM Mixed-Asset Target 2035 (MF)
Benchmark : Dow Jones Global Target 2035 Index
Fund Inception : 09/30/2009
Portfolio Manager : Team Managed
Total Assets : \$331 Million
Total Assets Date : 12/31/2021
Gross Expense : 0.75%
Net Expense : 0.58%
Turnover : 44%

Summary Description

The investment seeks high total return over time through a combination of capital appreciation and income. The fund is a "fund of funds" that invests in Institutional Class shares of other funds of the Trust and potentially in other investment pools or investment products. The managers expect to allocate approximately 82.00% of the fund's assets to equity underlying funds and 18.00% of the fund's assets to fixed-income underlying funds. These allocations represent targets for equity and fixed-income asset classes. Target allocations will change over time and actual allocations may vary up to ten percentage points from the targets.

Peer Group Analysis - IM Mixed-Asset Target 2035 (MF)



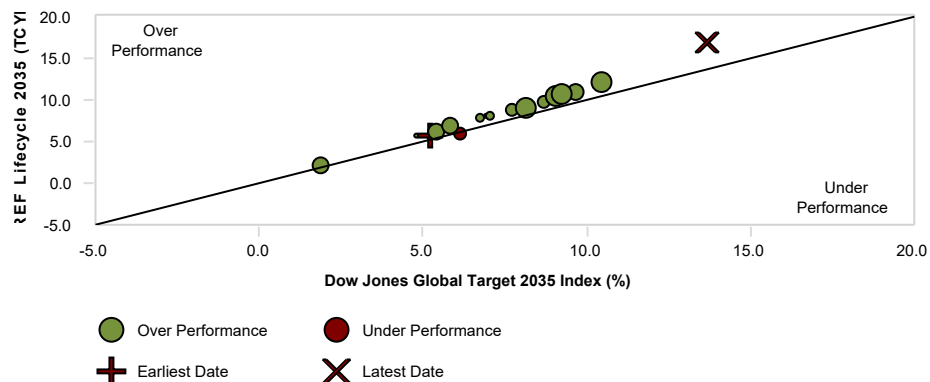
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● TIAA-CREF Lifecycle 2035 (TCYPX)	3.98 (85)	12.64 (83)	12.64 (83)	16.80 (46)	12.10 (40)	15.15 (38)	22.86 (32)	-8.12 (83)	20.88 (6)
○ Dow Jones Global Target 2035 Index	2.78 (98)	9.38 (99)	9.38 (99)	13.66 (96)	10.11 (93)	12.15 (84)	19.70 (88)	-5.80 (15)	16.99 (78)
Median	4.72	13.84	13.84	16.70	11.81	14.15	22.26	-7.26	18.72

Comparative Performance

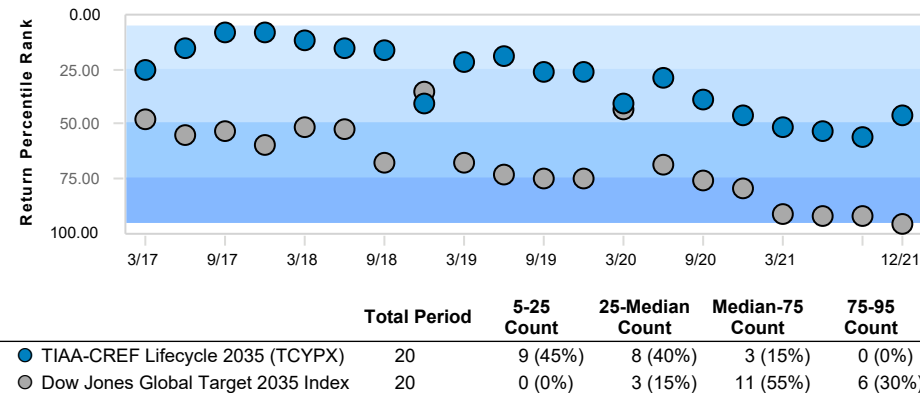
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
TIAA-CREF Lifecycle 2035 (TCYPX)	-1.04 (68)	5.94 (36)	3.33 (68)	11.69 (56)	6.61 (23)	17.33 (15)
Dow Jones Global Target 2035 Index	-0.82 (42)	4.63 (95)	2.55 (85)	11.33 (70)	4.99 (90)	13.93 (88)
IM Mixed-Asset Target 2035 (MF) Median	-0.90	5.80	3.60	11.83	6.25	15.75



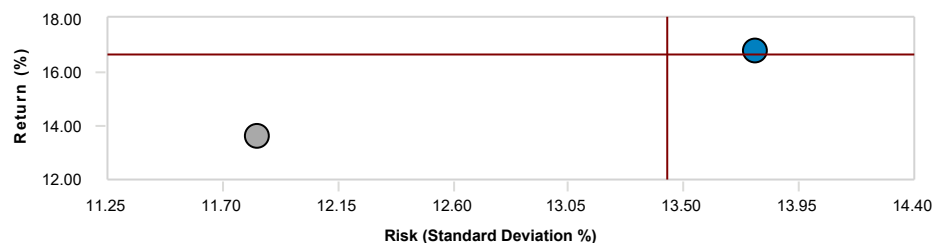
3 Yr Rolling Under/Over Performance - 5 Years



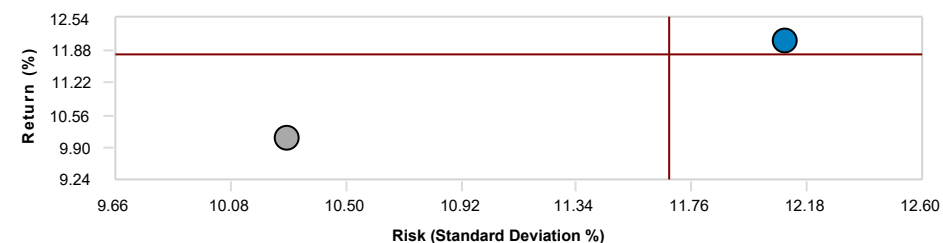
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2035 (TCYPX)	2.32	121.60	120.76	0.86	1.30	1.12	1.16	8.69
Dow Jones Global Target 2035 Index	0.00	100.00	100.00	0.00	N/A	1.05	1.00	7.57

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2035 (TCYPX)	2.18	120.82	122.11	0.28	0.92	0.91	1.17	8.00
Dow Jones Global Target 2035 Index	0.00	100.00	100.00	0.00	N/A	0.87	1.00	6.82



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2040 Fund; Premier Class Shares
 Fund Family : TIAA
 Ticker : TCZPX
 Inception Date : 09/30/2009
 Fund Assets : \$389 Million
 Portfolio Turnover : 46%

Portfolio Assets : \$7,339 Million
 Portfolio Manager : Team Managed
 PM Tenure :
 Fund Style : IM Mixed-Asset Target 2040 (MF)
 Style Benchmark : Dow Jones Global Target 2040 Index

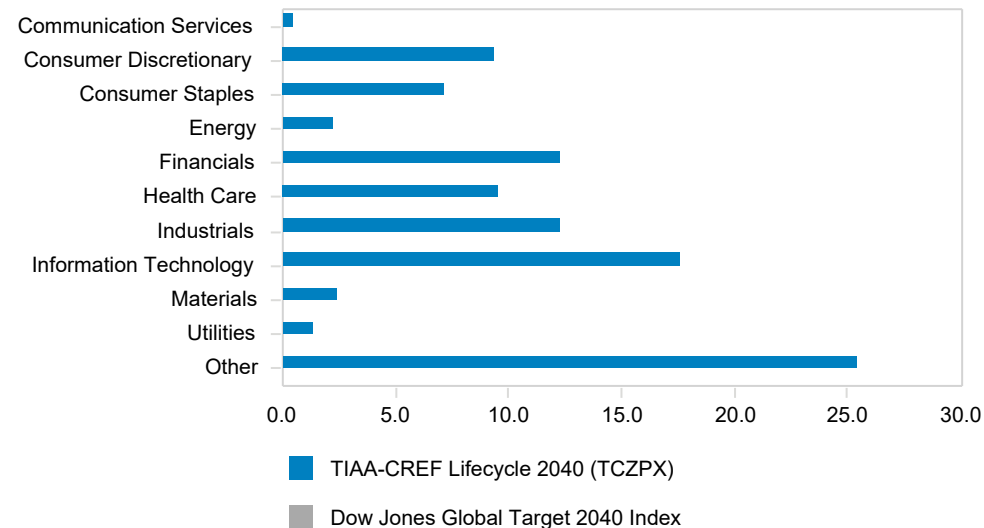
Portfolio Characteristics As of 11/30/2021

	Portfolio	Benchmark
Total Securities	21	N/A
Avg. Market Cap (\$)	267,221,142,070	-
Price/Earnings (P/E)	26.11	N/A
Price/Book (P/B)	6.64	N/A
Dividend Yield	1.24	N/A
Annual EPS	8.53	N/A
5 Yr EPS	11.01	N/A
3 Yr EPS Growth	9.03	N/A
Beta (5 Years, Monthly)	1.11	1.00

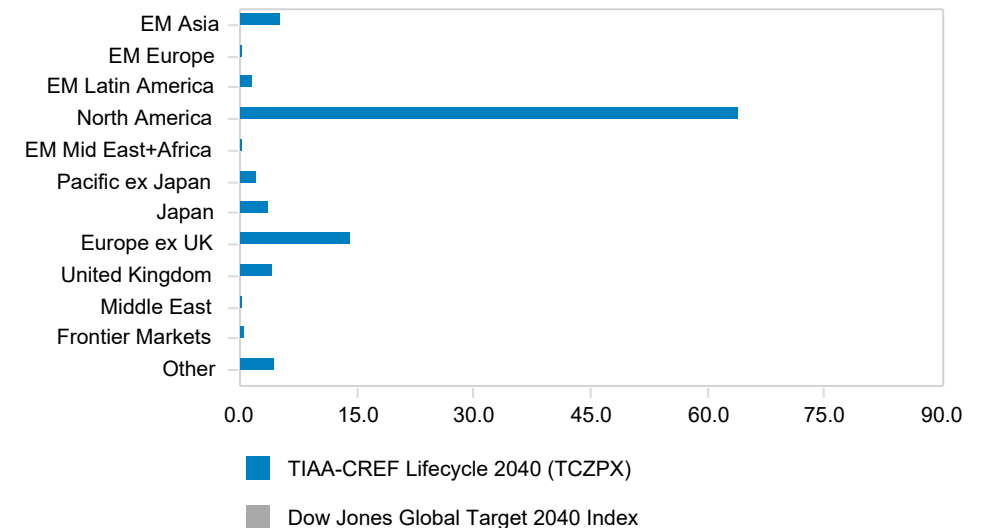
Top Ten Securities As of 11/30/2021

TIAA-CREF Core Bond Fund;W	9.1 %
Nuveen Growth Opportunities ETF	8.5 %
TIAA-CREF Large-Cap Growth Fund;W	8.5 %
TIAA-CREF International Equity	8.2 %
Nuveen Dividend Value Fund;R6	7.4 %
TIAA-CREF Large-Cap Value Fund;W	7.4 %
Nuveen Dividend Growth Fund;R6	7.3 %
TIAA-CREF Growth & Income Fund;W	7.3 %
TIAA-CREF International Opportunities	5.8 %
Nuveen International Growth Fund;R6	5.8 %

Sector Weights As of 11/30/2021



Region Weights As of 11/30/2021



Statistics provided by Lipper. Most recent available data shown.



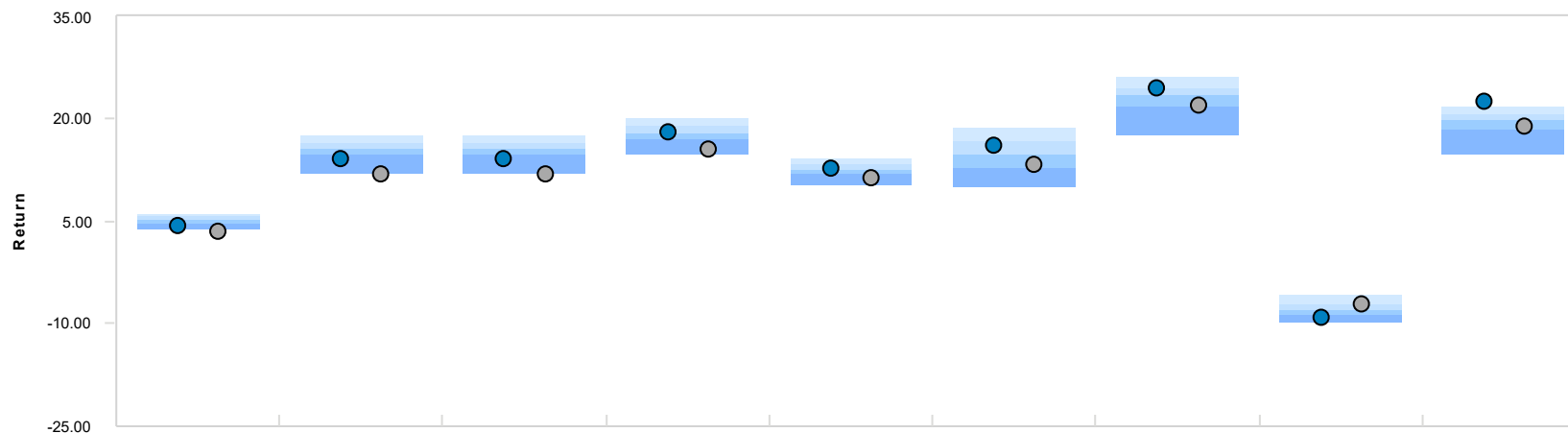
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2040;Prmr (TCZPX)
Fund Family : TIAA
Ticker : TCZPX
Peer Group : IM Mixed-Asset Target 2040 (MF)
Benchmark : Dow Jones Global Target 2040 Index
Fund Inception : 09/30/2009
Portfolio Manager : Team Managed
Total Assets : \$389 Million
Total Assets Date : 12/31/2021
Gross Expense : 0.77%
Net Expense : 0.59%
Turnover : 46%

Summary Description

The investment seeks high total return over time through a combination of capital appreciation and income. The fund is a "fund of funds" that invests in Institutional Class shares of other funds of the Trust and potentially in other investment pools or investment products. The managers expect to allocate approximately 90.00% of the fund's assets to equity underlying funds and 10.00% of the fund's assets to fixed-income underlying funds. These allocations represent targets for equity and fixed-income asset classes. Target allocations will change over time and actual allocations may vary up to ten percentage points from the targets.

Peer Group Analysis - IM Mixed-Asset Target 2040 (MF)



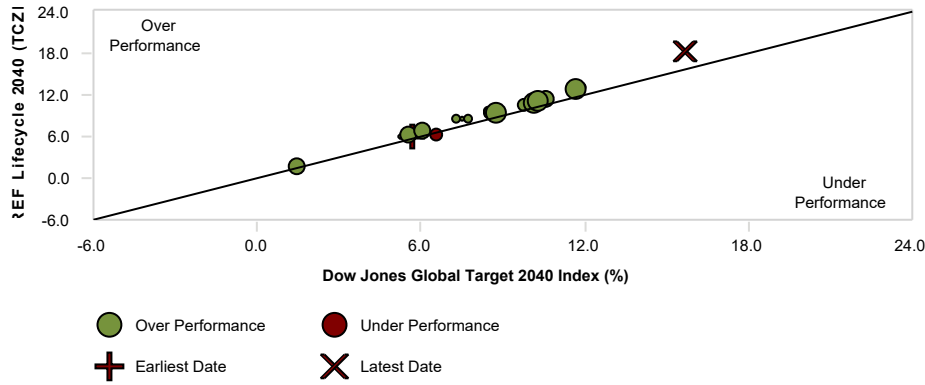
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● TIAA-CREF Lifecycle 2040 (TCZPX)	4.48 (82)	14.18 (85)	14.18 (85)	18.18 (45)	12.98 (37)	16.11 (33)	24.52 (26)	-9.11 (86)	22.69 (1)
○ Dow Jones Global Target 2040 Index	3.47 (98)	12.05 (95)	12.05 (95)	15.70 (89)	11.39 (88)	13.28 (70)	22.03 (74)	-6.94 (23)	18.97 (65)
Median	5.21	15.67	15.67	17.97	12.61	14.74	23.63	-7.98	19.74

Comparative Performance

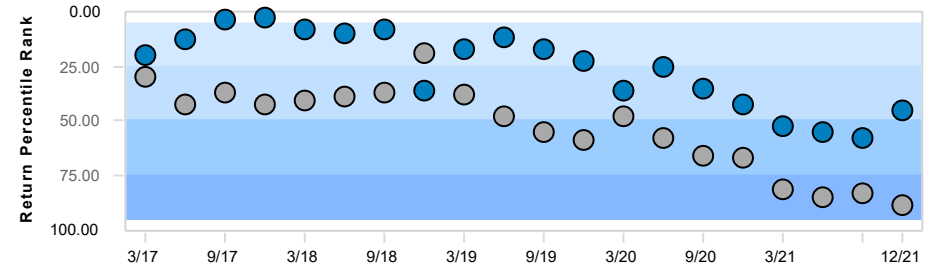
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
TIAA-CREF Lifecycle 2040 (TCZPX)	-1.27 (79)	6.49 (29)	3.94 (70)	12.83 (56)	7.35 (15)	18.72 (15)
Dow Jones Global Target 2040 Index	-0.91 (40)	5.30 (95)	3.78 (79)	13.25 (39)	5.65 (80)	16.07 (75)
IM Mixed-Asset Target 2040 (MF) Median	-1.03	6.25	4.42	12.90	6.72	17.14



3 Yr Rolling Under/Over Performance - 5 Years

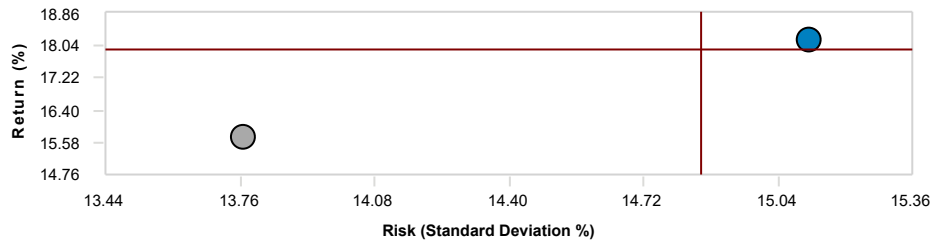


3 Yr Rolling Percentile Ranking - 5 Years



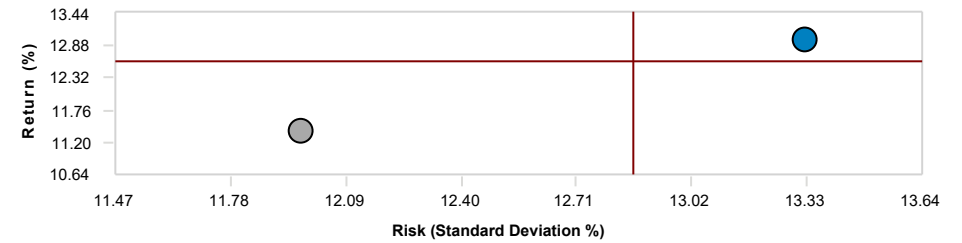
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● TIAA-CREF Lifecycle 2040 (TCZPX)	20	12 (60%)	5 (25%)	3 (15%)	0 (0%)
● Dow Jones Global Target 2040 Index	20	1 (5%)	10 (50%)	5 (25%)	4 (20%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● TIAA-CREF Lifecycle 2040 (TCZPX)	18.18	15.12
● Dow Jones Global Target 2040 Index	15.70	13.77
— Median	17.97	14.86

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● TIAA-CREF Lifecycle 2040 (TCZPX)	12.98	13.32
● Dow Jones Global Target 2040 Index	11.39	11.97
— Median	12.61	12.86

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2040 (TCZPX)	1.95	114.63	114.11	0.90	1.20	1.12	1.09	9.48
Dow Jones Global Target 2040 Index	0.00	100.00	100.00	0.00	N/A	1.06	1.00	8.82

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2040 (TCZPX)	1.89	114.68	115.60	0.37	0.85	0.90	1.11	8.80
Dow Jones Global Target 2040 Index	0.00	100.00	100.00	0.00	N/A	0.86	1.00	7.99



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2045 Fund; Premier Class Shares
 Fund Family : TIAA
 Ticker : TTFPX
 Inception Date : 09/30/2009
 Fund Assets : \$274 Million
 Portfolio Turnover : 46%

Portfolio Assets : \$4,885 Million
 Portfolio Manager : Team Managed
 PM Tenure :
 Fund Style : IM Mixed-Asset Target 2045 (MF)
 Style Benchmark : Dow Jones Global Target 2045 Index

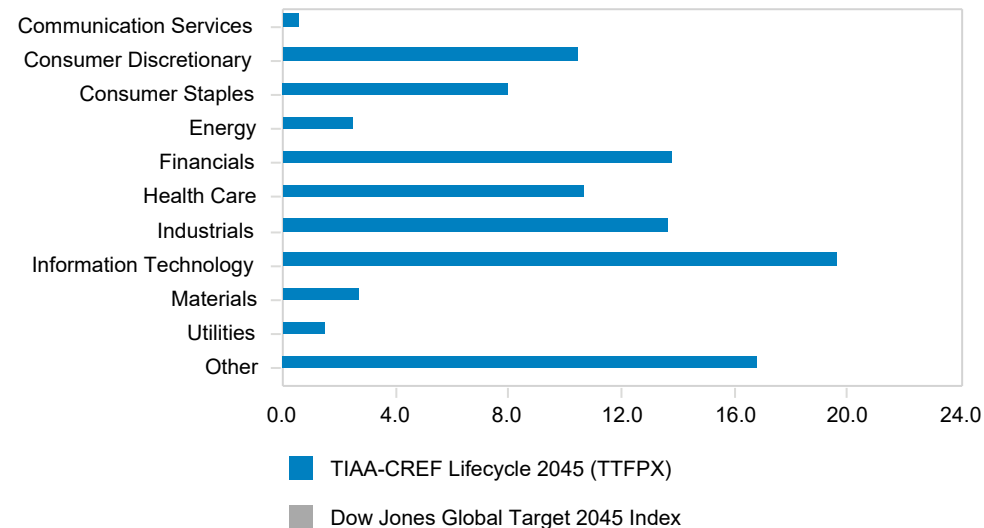
Portfolio Characteristics As of 11/30/2021

	Portfolio	Benchmark
Total Securities	21	N/A
Avg. Market Cap (\$)	298,153,489,509	-
Price/Earnings (P/E)	29.13	N/A
Price/Book (P/B)	7.41	N/A
Dividend Yield	1.38	N/A
Annual EPS	9.51	N/A
5 Yr EPS	12.29	N/A
3 Yr EPS Growth	10.08	N/A
Beta (5 Years, Monthly)	1.07	1.00

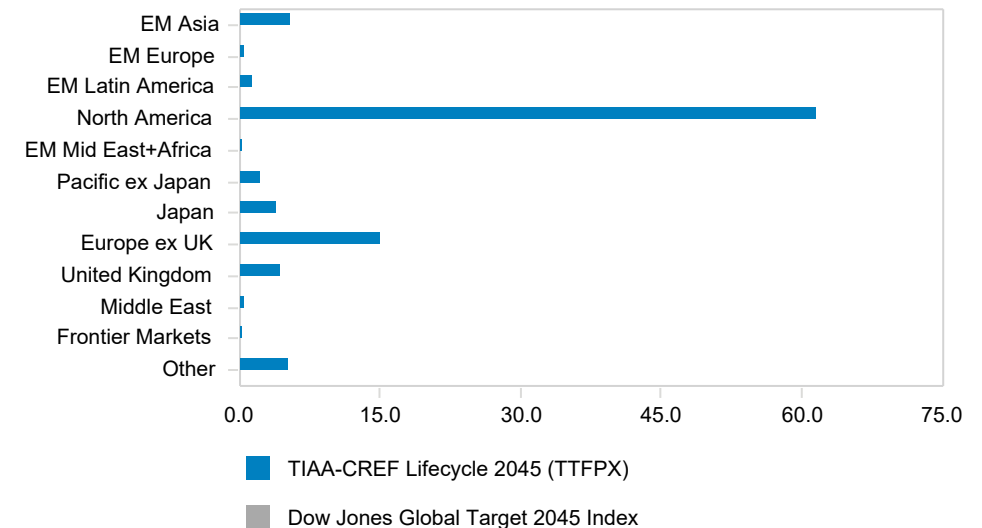
Top Ten Securities As of 11/30/2021

Nuveen Growth Opportunities ETF	9.5 %
TIAA-CREF Large-Cap Growth Fund;W	9.4 %
TIAA-CREF International Equity	9.2 %
TIAA-CREF Large-Cap Value Fund;W	8.2 %
Nuveen Dividend Value Fund;R6	8.2 %
Nuveen Dividend Growth Fund;R6	8.1 %
TIAA-CREF Growth & Income Fund;W	8.1 %
TIAA-CREF International Opportunities	6.5 %
Nuveen International Growth Fund;R6	6.4 %
TIAA-CREF Quant International Small-Cap	4.4 %

Sector Weights As of 11/30/2021



Region Weights As of 11/30/2021



Statistics provided by Lipper. Most recent available data shown.



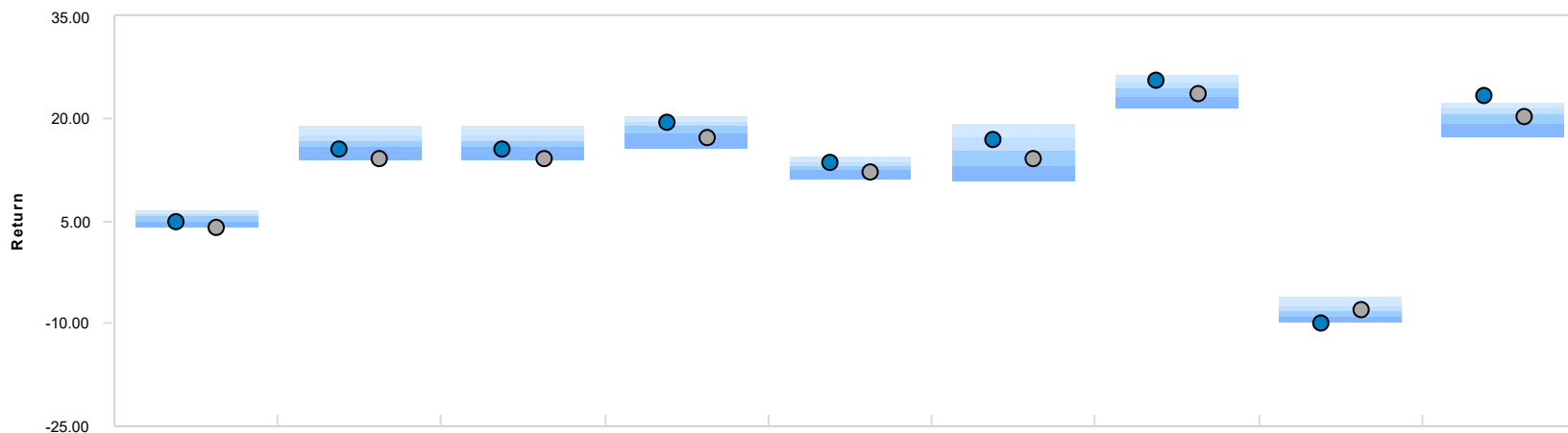
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2045;Prmr (TTFPX)
Fund Family : TIAA
Ticker : TTFPX
Peer Group : IM Mixed-Asset Target 2045 (MF)
Benchmark : Dow Jones Global Target 2045 Index
Fund Inception : 09/30/2009
Portfolio Manager : Team Managed
Total Assets : \$274 Million
Total Assets Date : 12/31/2021
Gross Expense : 0.79%
Net Expense : 0.60%
Turnover : 46%

Summary Description

The investment seeks high total return over time through a combination of capital appreciation and income. The fund is a "fund of funds" that invests in Institutional Class shares of other funds of the Trust and potentially in other investment pools or investment products. The managers expect to allocate approximately 91.00% of the fund's assets to equity underlying funds and 9.00% of the fund's assets to fixed-income underlying funds. These allocations represent targets for equity and fixed-income asset classes. Target allocations will change over time and actual allocations may vary up to ten percentage points from the targets.

Peer Group Analysis - IM Mixed-Asset Target 2045 (MF)



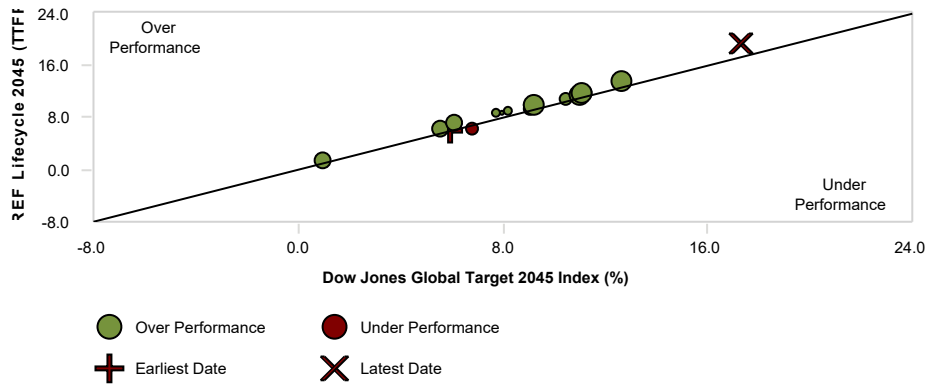
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● TIAA-CREF Lifecycle 2045 (TTFPX)	4.90 (77)	15.75 (80)	15.75 (80)	19.46 (33)	13.68 (30)	17.14 (28)	25.73 (19)	-9.78 (93)	23.45 (2)
○ Dow Jones Global Target 2045 Index	4.05 (95)	14.28 (95)	14.28 (95)	17.31 (87)	12.37 (79)	14.18 (63)	23.71 (67)	-7.80 (38)	20.36 (59)
Median	5.74	16.67	16.67	18.90	13.08	15.38	24.61	-8.19	20.65

Comparative Performance

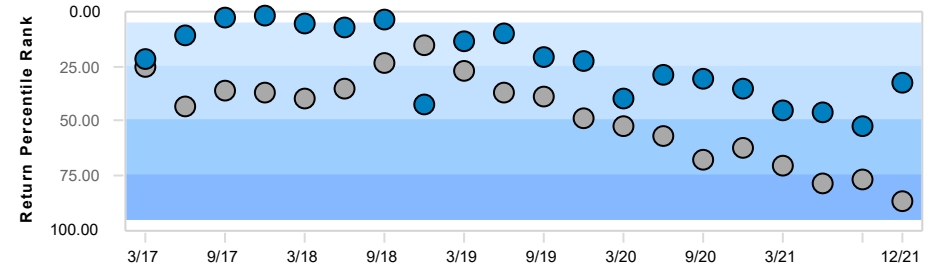
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
TIAA-CREF Lifecycle 2045 (TTFPX)	-1.40 (82)	6.95 (14)	4.63 (67)	13.95 (48)	8.00 (1)	19.98 (11)
Dow Jones Global Target 2045 Index	-0.99 (36)	5.85 (92)	4.80 (59)	14.81 (31)	6.17 (83)	17.78 (68)
IM Mixed-Asset Target 2045 (MF) Median	-1.14	6.52	4.96	13.87	7.15	18.21



3 Yr Rolling Under/Over Performance - 5 Years

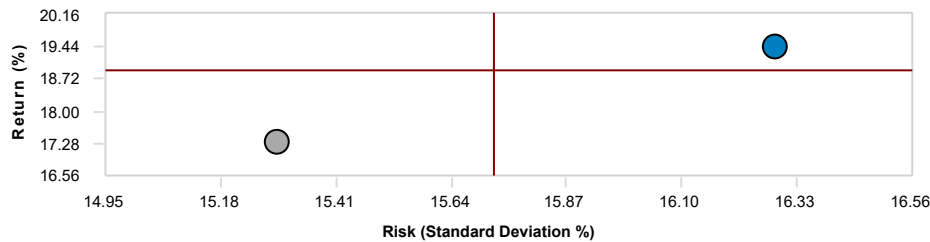


3 Yr Rolling Percentile Ranking - 5 Years



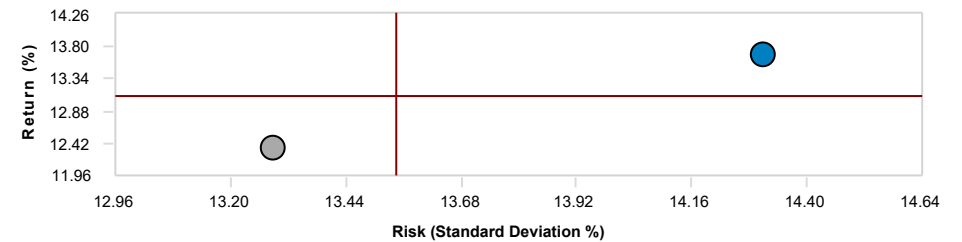
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● TIAA-CREF Lifecycle 2045 (TTFPX)	20	11 (55%)	8 (40%)	1 (5%)	0 (0%)
● Dow Jones Global Target 2045 Index	20	3 (15%)	9 (45%)	5 (25%)	3 (15%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● TIAA-CREF Lifecycle 2045 (TTFPX)	19.46	16.28
● Dow Jones Global Target 2045 Index	17.31	15.29
— Median	18.90	15.73

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● TIAA-CREF Lifecycle 2045 (TTFPX)	13.68	14.31
● Dow Jones Global Target 2045 Index	12.37	13.29
— Median	13.08	13.55

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2045 (TTFPX)	1.88	111.24	110.76	0.98	1.06	1.11	1.06	10.17
Dow Jones Global Target 2045 Index	0.00	100.00	100.00	0.00	N/A	1.06	1.00	9.82

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2045 (TTFPX)	1.79	110.99	111.60	0.42	0.74	0.89	1.07	9.43
Dow Jones Global Target 2045 Index	0.00	100.00	100.00	0.00	N/A	0.86	1.00	8.90



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2050 Fund; Premier Class Shares
 Fund Family : TIAA
 Ticker : TCLPX
 Inception Date : 09/30/2009
 Fund Assets : \$196 Million
 Portfolio Turnover : 43%

Portfolio Assets : \$3,606 Million
 Portfolio Manager : Team Managed
 PM Tenure :
 Fund Style : IM Mixed-Asset Target 2050 (MF)
 Style Benchmark : Dow Jones Global Target 2050 Index

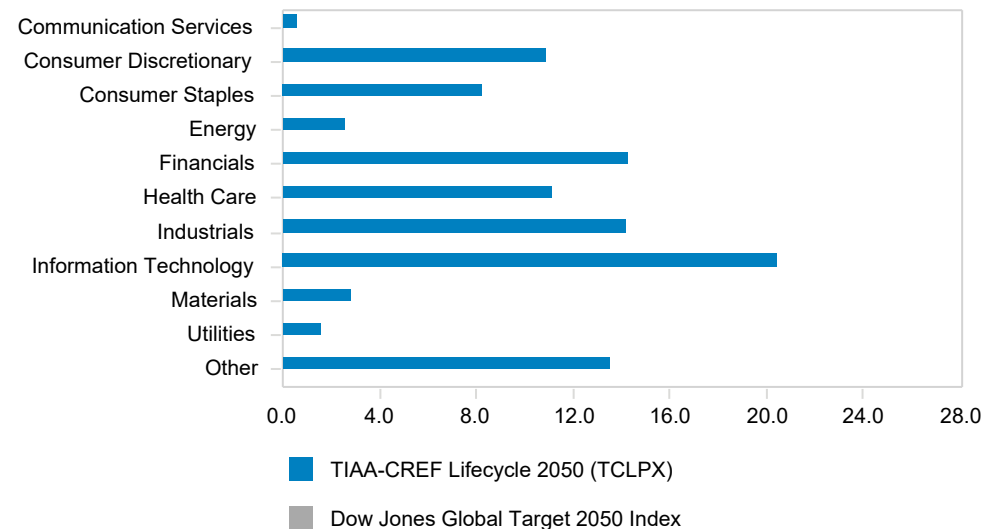
Portfolio Characteristics As of 11/30/2021

	Portfolio	Benchmark
Total Securities	21	N/A
Avg. Market Cap (\$)	310,249,892,011	-
Price/Earnings (P/E)	30.31	N/A
Price/Book (P/B)	7.71	N/A
Dividend Yield	1.44	N/A
Annual EPS	9.89	N/A
5 Yr EPS	12.79	N/A
3 Yr EPS Growth	10.49	N/A
Beta (5 Years, Monthly)	1.02	1.00

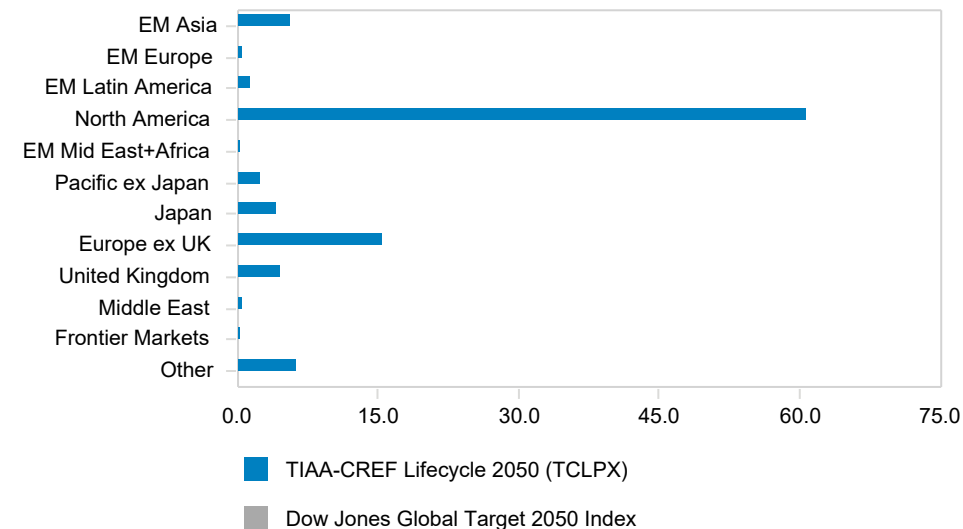
Top Ten Securities As of 11/30/2021

Nuveen Growth Opportunities ETF	9.9 %
TIAA-CREF Large-Cap Growth Fund;W	9.8 %
TIAA-CREF International Equity	9.5 %
TIAA-CREF Large-Cap Value Fund;W	8.5 %
Nuveen Dividend Value Fund;R6	8.5 %
TIAA-CREF Growth & Income Fund;W	8.4 %
Nuveen Dividend Growth Fund;R6	8.4 %
TIAA-CREF International Opportunities	6.7 %
Nuveen International Growth Fund;R6	6.7 %
TIAA-CREF Quant International Small-Cap	4.6 %

Sector Weights As of 11/30/2021



Region Weights As of 11/30/2021



Statistics provided by Lipper. Most recent available data shown.



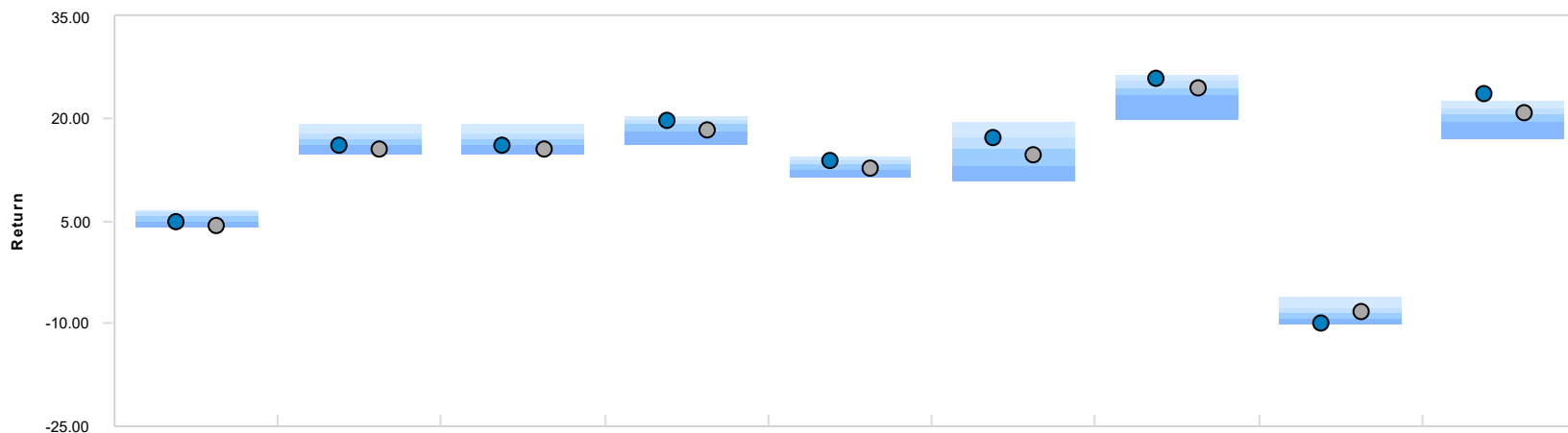
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2050;Prmr (TCLPX)
Fund Family : TIAA
Ticker : TCLPX
Peer Group : IM Mixed-Asset Target 2050 (MF)
Benchmark : Dow Jones Global Target 2050 Index
Fund Inception : 09/30/2009
Portfolio Manager : Team Managed
Total Assets : \$196 Million
Total Assets Date : 12/31/2021
Gross Expense : 0.80%
Net Expense : 0.60%
Turnover : 43%

Summary Description

The investment seeks high total return over time through a combination of capital appreciation and income. The fund is a "fund of funds" that invests in Institutional Class shares of other funds of the Trust and potentially in other investment pools or investment products. The adviser expects to allocate approximately 92.25% of the fund's assets to equity underlying funds and 7.75% of the fund's assets to fixed-income underlying funds. These allocations represent targets for equity and fixed-income asset classes. Target allocations will change over time and actual allocations may vary up to ten percentage points from the targets.

Peer Group Analysis - IM Mixed-Asset Target 2050 (MF)



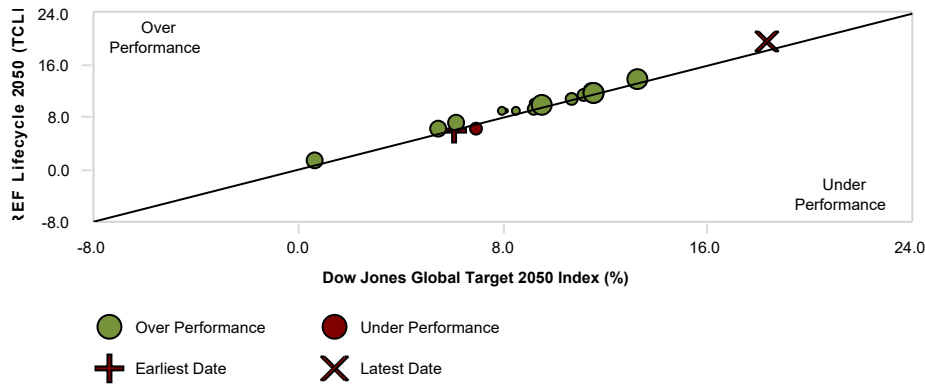
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● TIAA-CREF Lifecycle 2050 (TCLPX)	5.13 (75)	16.28 (73)	16.28 (73)	19.77 (32)	13.88 (27)	17.34 (27)	25.93 (19)	-9.93 (90)	23.76 (2)
○ Dow Jones Global Target 2050 Index	4.44 (94)	15.78 (88)	15.78 (88)	18.33 (72)	12.96 (60)	14.78 (58)	24.69 (50)	-8.29 (44)	21.02 (46)
Median	5.88	16.99	16.99	19.23	13.36	15.54	24.67	-8.54	20.80

Comparative Performance

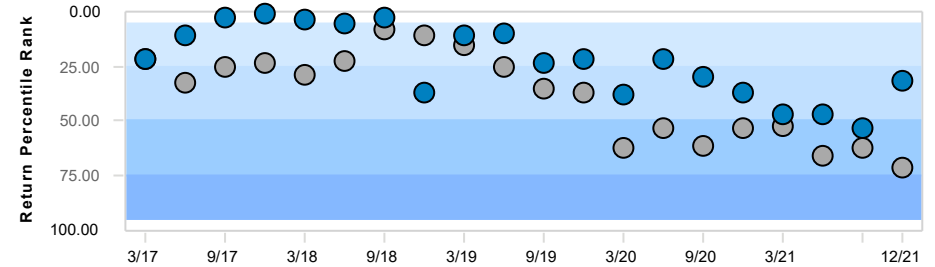
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
TIAA-CREF Lifecycle 2050 (TCLPX)	-1.44 (80)	7.04 (18)	4.85 (67)	14.16 (54)	8.03 (2)	20.29 (10)
Dow Jones Global Target 2050 Index	-1.04 (37)	6.22 (83)	5.46 (25)	15.83 (11)	6.50 (77)	18.85 (38)
IM Mixed-Asset Target 2050 (MF) Median	-1.17	6.63	5.11	14.26	7.28	18.49



3 Yr Rolling Under/Over Performance - 5 Years

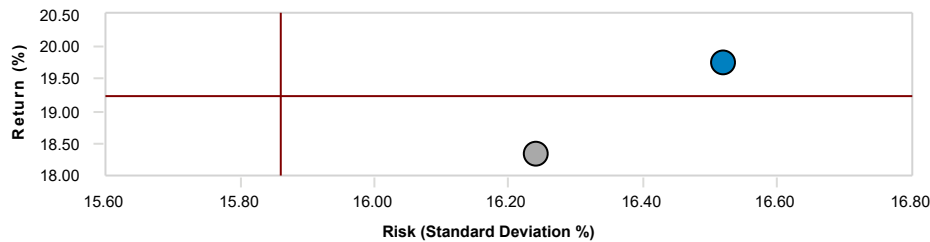


3 Yr Rolling Percentile Ranking - 5 Years



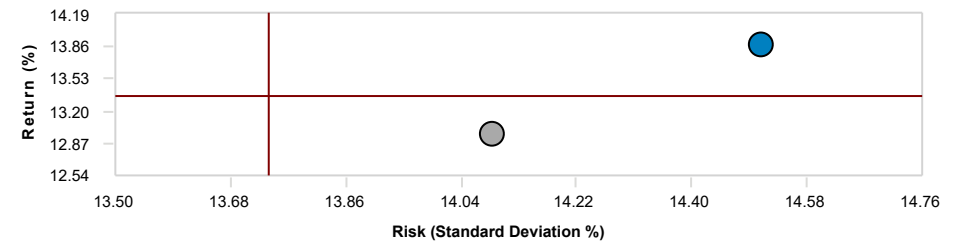
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
TIAA-CREF Lifecycle 2050 (TCLPX)	20	12 (60%)	7 (35%)	1 (5%)	0 (0%)
Dow Jones Global Target 2050 Index	20	8 (40%)	4 (20%)	8 (40%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
TIAA-CREF Lifecycle 2050 (TCLPX)	19.77	16.52
Dow Jones Global Target 2050 Index	18.33	16.24
Median	19.23	15.86

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
TIAA-CREF Lifecycle 2050 (TCLPX)	13.88	14.51
Dow Jones Global Target 2050 Index	12.96	14.09
Median	13.36	13.74

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2050 (TCLPX)	1.68	105.58	103.73	1.05	0.76	1.12	1.01	10.30
Dow Jones Global Target 2050 Index	0.00	100.00	100.00	0.00	N/A	1.06	1.00	10.43

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2050 (TCLPX)	1.58	105.97	105.24	0.56	0.56	0.89	1.02	9.54
Dow Jones Global Target 2050 Index	0.00	100.00	100.00	0.00	N/A	0.85	1.00	9.44



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2055 Fund; Premier Class Shares
Fund Family : TIAA
Ticker : TTRPX
Inception Date : 04/29/2011
Fund Assets : \$94 Million
Portfolio Turnover : 41%

Portfolio Assets : \$1,569 Million
Portfolio Manager : Team Managed
PM Tenure :
Fund Style : IM Mixed-Asset Target 2055 (MF)
Style Benchmark : Dow Jones Global Target 2055 Index

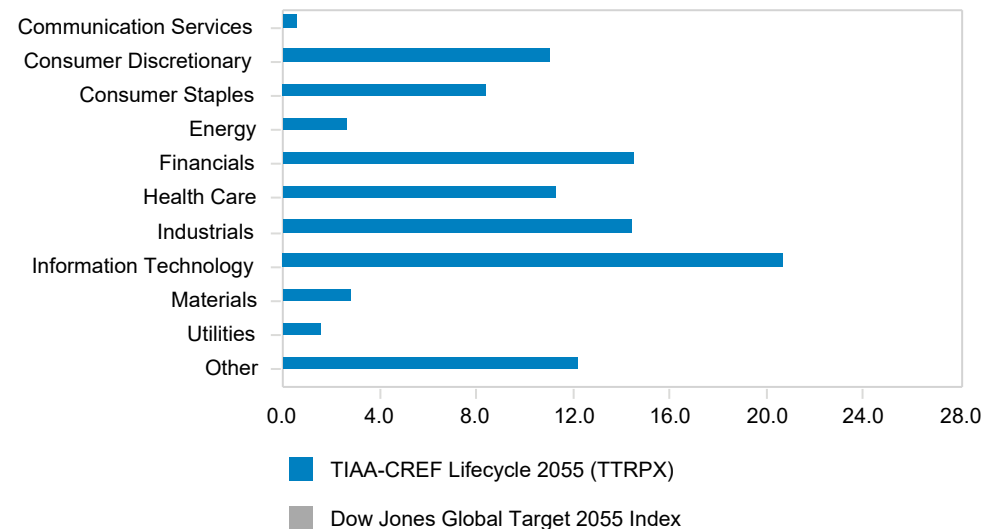
Portfolio Characteristics As of 11/30/2021

	Portfolio	Benchmark
Total Securities	21	N/A
Avg. Market Cap (\$)	314,979,826,380	-
Price/Earnings (P/E)	30.77	N/A
Price/Book (P/B)	7.83	N/A
Dividend Yield	1.46	N/A
Annual EPS	10.04	N/A
5 Yr EPS	12.98	N/A
3 Yr EPS Growth	10.65	N/A
Beta (5 Years, Monthly)	1.02	1.00

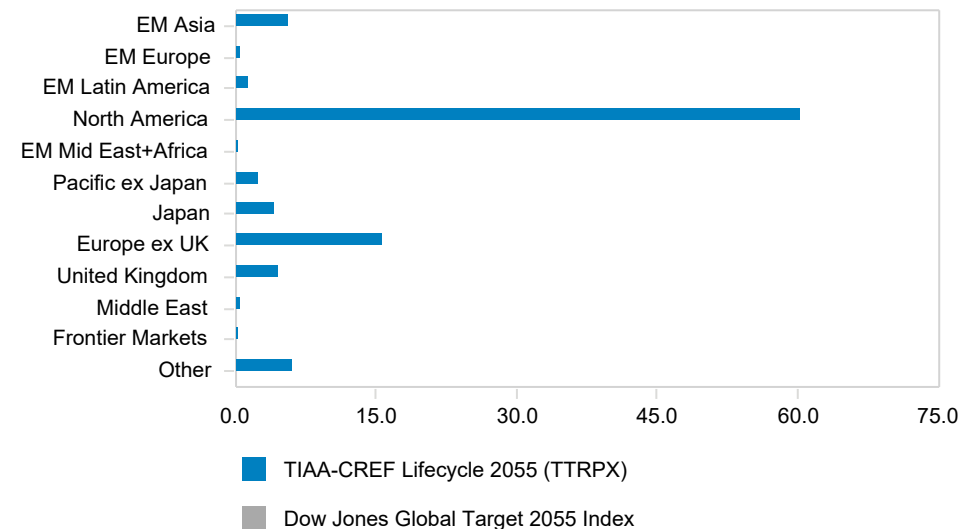
Top Ten Securities As of 11/30/2021

Nuveen Growth Opportunities ETF	10.0 %
TIAA-CREF Large-Cap Growth Fund;W	10.0 %
TIAA-CREF International Equity	9.7 %
TIAA-CREF Large-Cap Value Fund;W	8.7 %
Nuveen Dividend Value Fund;R6	8.7 %
Nuveen Dividend Growth Fund;R6	8.6 %
TIAA-CREF Growth & Income Fund;W	8.6 %
TIAA-CREF International Opportunities	6.8 %
Nuveen International Growth Fund;R6	6.8 %
TIAA-CREF Quant International Small-Cap	4.6 %

Sector Weights As of 11/30/2021



Region Weights As of 11/30/2021



Statistics provided by Lipper. Most recent available data shown.



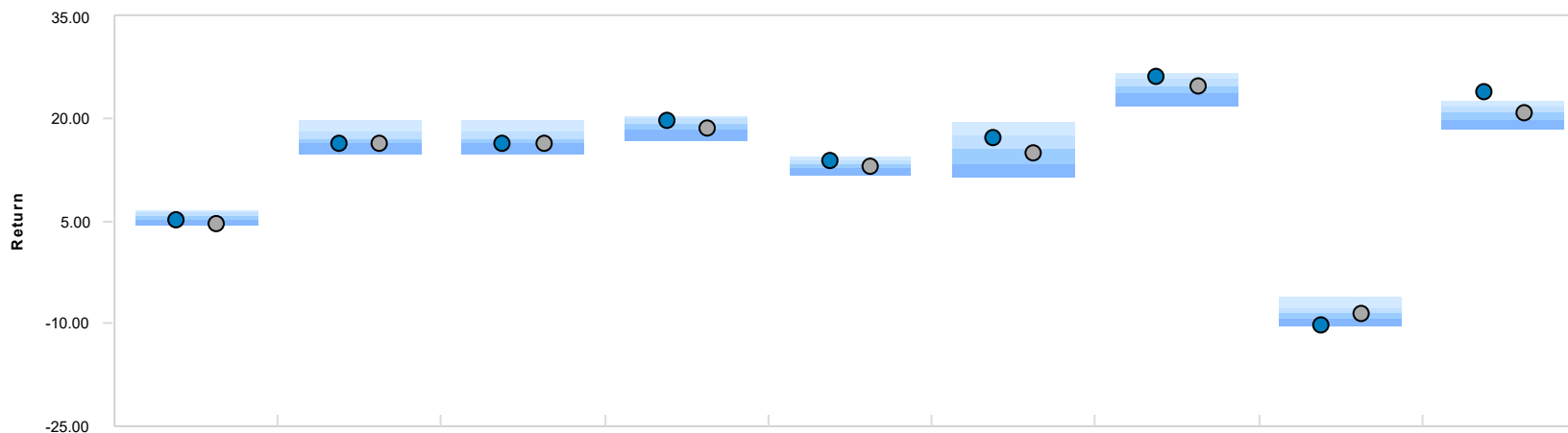
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2055;Prmr (TTRPX)
Fund Family : TIAA
Ticker : TTRPX
Peer Group : IM Mixed-Asset Target 2055 (MF)
Benchmark : Dow Jones Global Target 2055 Index
Fund Inception : 04/29/2011
Portfolio Manager : Team Managed
Total Assets : \$94 Million
Total Assets Date : 12/31/2021
Gross Expense : 0.81%
Net Expense : 0.60%
Turnover : 41%

Summary Description

The investment seeks high total return over time through a combination of capital appreciation and income. The fund is a "fund of funds" that invests in Institutional Class shares of other funds of the Trust and potentially in other investment pools or investment products. The adviser expects to allocate approximately 93.50% of the fund's assets to equity underlying funds and 6.50% of the fund's assets to fixed-income underlying funds. These allocations represent targets for equity and fixed-income asset classes. Target allocations will change over time and actual allocations may vary up to ten percentage points from the targets.

Peer Group Analysis - IM Mixed-Asset Target 2055 (MF)



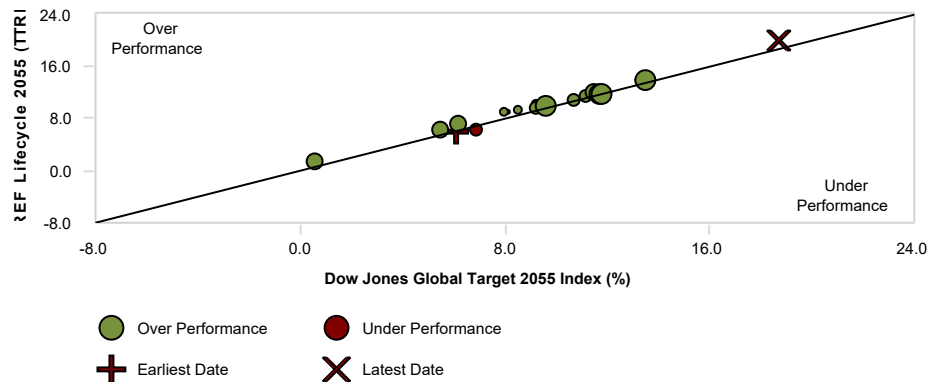
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● TIAA-CREF Lifecycle 2055 (TTRPX)	5.24 (74)	16.46 (73)	16.46 (73)	19.95 (32)	14.00 (23)	17.43 (29)	26.21 (18)	-10.10 (94)	24.07 (3)
○ Dow Jones Global Target 2055 Index	4.60 (88)	16.36 (76)	16.36 (76)	18.68 (66)	13.15 (58)	15.03 (59)	24.89 (49)	-8.37 (46)	21.06 (52)
Median	5.90	17.18	17.18	19.34	13.35	15.65	24.85	-8.48	21.12

Comparative Performance

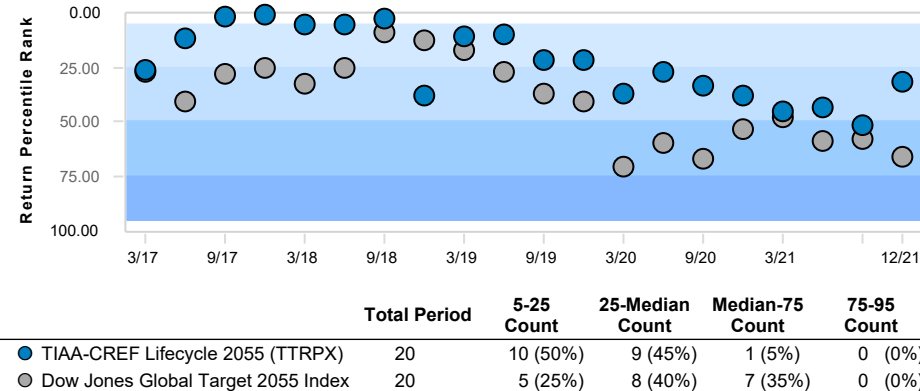
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
TIAA-CREF Lifecycle 2055 (TTRPX)	-1.51 (85)	7.10 (20)	4.91 (70)	14.42 (52)	8.09 (3)	20.41 (10)
Dow Jones Global Target 2055 Index	-1.06 (35)	6.36 (79)	5.71 (20)	16.17 (5)	6.60 (81)	19.16 (29)
IM Mixed-Asset Target 2055 (MF) Median	-1.23	6.67	5.21	14.48	7.32	18.69



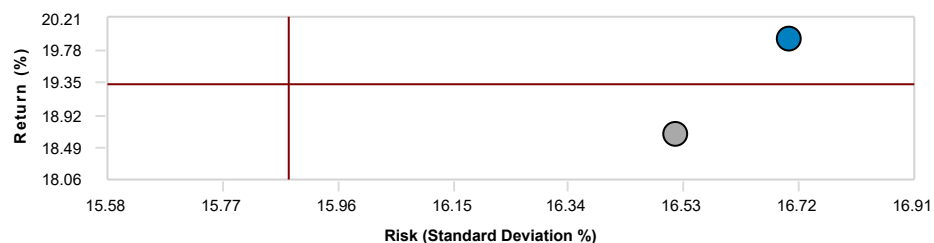
3 Yr Rolling Under/Over Performance - 5 Years



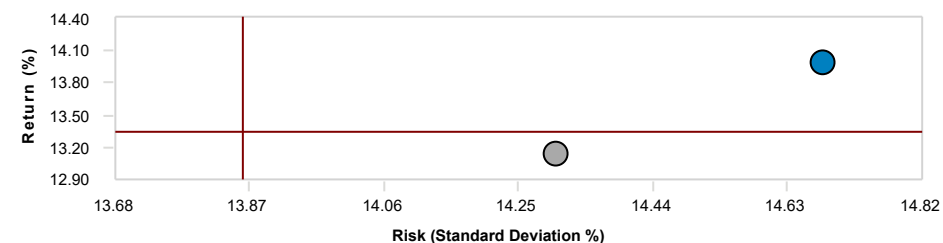
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2055 (TTRPX)	1.70	104.73	103.10	1.00	0.65	1.12	1.01	10.41
Dow Jones Global Target 2055 Index	0.00	100.00	100.00	0.00	N/A	1.06	1.00	10.60

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2055 (TTRPX)	1.60	105.65	105.25	0.54	0.51	0.89	1.02	9.66
Dow Jones Global Target 2055 Index	0.00	100.00	100.00	0.00	N/A	0.85	1.00	9.57



Fund Information

Fund Name : TIAA-CREF Funds: Lifecycle 2060 Fund; Premier Class Shares
 Fund Family : TIAA
 Ticker : TLXPX
 Inception Date : 09/26/2014
 Fund Assets : \$23 Million
 Portfolio Turnover : 40%

Portfolio Assets : \$481 Million
 Portfolio Manager : Team Managed
 PM Tenure :
 Fund Style : IM Mixed-Asset Target 2060+ (MF)
 Style Benchmark : Dow Jones Global Target 2060 Index

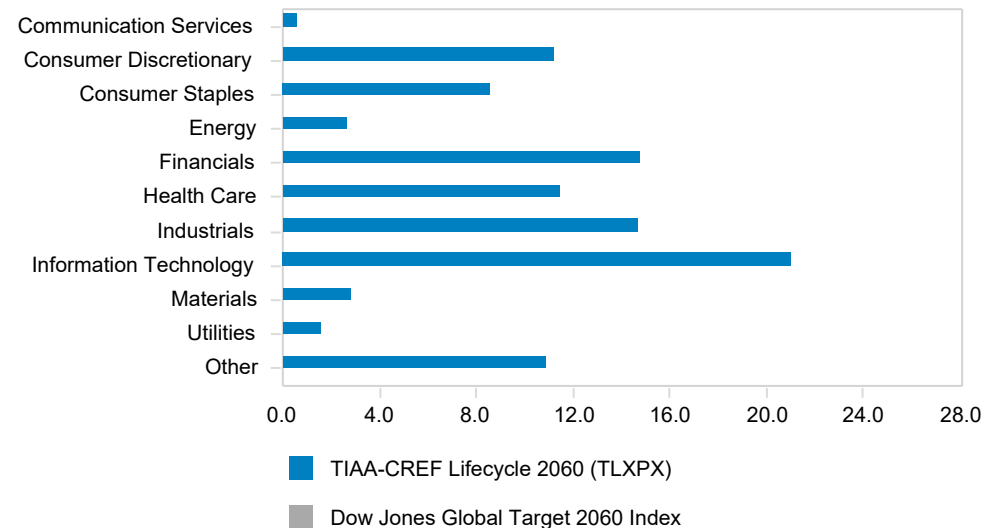
Portfolio Characteristics As of 11/30/2021

	Portfolio	Benchmark
Total Securities	21	N/A
Avg. Market Cap (\$)	319,710,033,854	-
Price/Earnings (P/E)	31.25	N/A
Price/Book (P/B)	7.95	N/A
Dividend Yield	1.48	N/A
Annual EPS	10.20	N/A
5 Yr EPS	13.18	N/A
3 Yr EPS Growth	10.81	N/A
Beta (5 Years, Monthly)	1.03	1.00

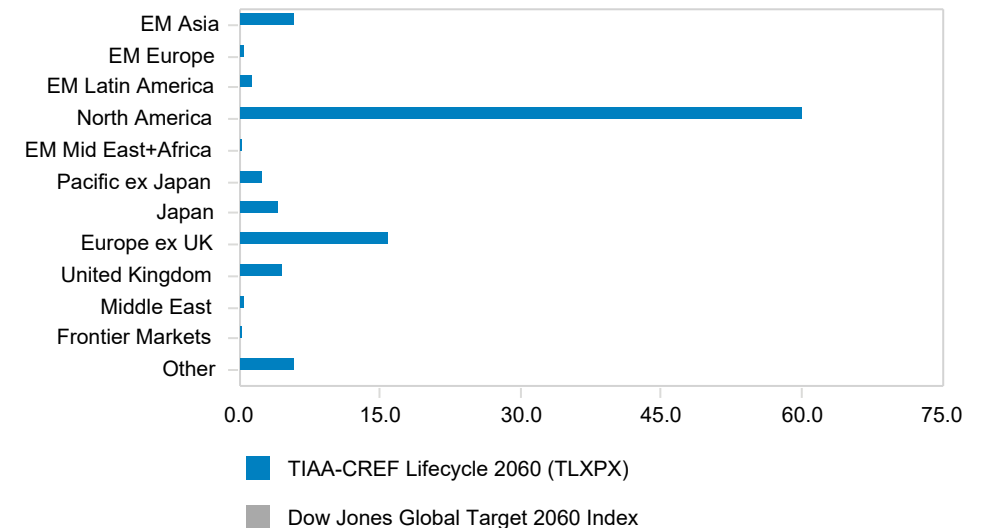
Top Ten Securities As of 11/30/2021

TIAA-CREF Large-Cap Growth Fund;W	10.2 %
Nuveen Growth Opportunities ETF	10.1 %
TIAA-CREF International Equity	9.8 %
TIAA-CREF Large-Cap Value Fund;W	8.8 %
Nuveen Dividend Value Fund;R6	8.8 %
Nuveen Dividend Growth Fund;R6	8.7 %
TIAA-CREF Growth & Income Fund;W	8.6 %
TIAA-CREF International Opportunities	6.9 %
Nuveen International Growth Fund;R6	6.9 %
TIAA-CREF Quant International Small-Cap	4.7 %

Sector Weights As of 11/30/2021



Region Weights As of 11/30/2021



Statistics provided by Lipper. Most recent available data shown.



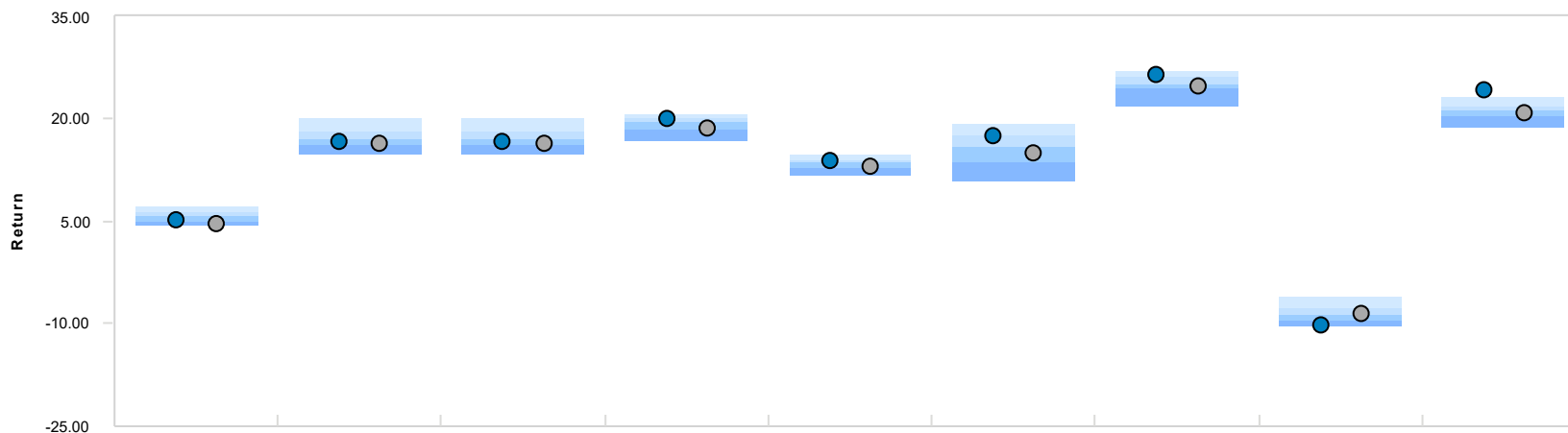
Mutual Fund Info from Lipper

Product Name : TIAA-CREF:Lfcy 2060;Prmr (TLXPX)
 Fund Family : TIAA
 Ticker : TLXPX
 Peer Group : IM Mixed-Asset Target 2060+ (MF)
 Benchmark : Dow Jones Global Target 2060 Index
 Fund Inception : 09/26/2014
 Portfolio Manager : Team Managed
 Total Assets : \$23 Million
 Total Assets Date : 12/31/2021
 Gross Expense : 0.86%
 Net Expense : 0.60%
 Turnover : 40%

Summary Description

The investment seeks high total return over time through a combination of capital appreciation and income. The fund is a "fund of funds" that invests in Institutional Class shares of other funds of the Trust and potentially in other investment pools or investment products. The adviser expects to allocate approximately 93.50% of the fund's assets to equity underlying funds and 6.50% of the fund's assets to fixed-income underlying funds. These allocations represent targets for equity and fixed-income asset classes. Target allocations will change over time and actual allocations may vary up to ten percentage points from the targets.

Peer Group Analysis - IM Mixed-Asset Target 2060+ (MF)



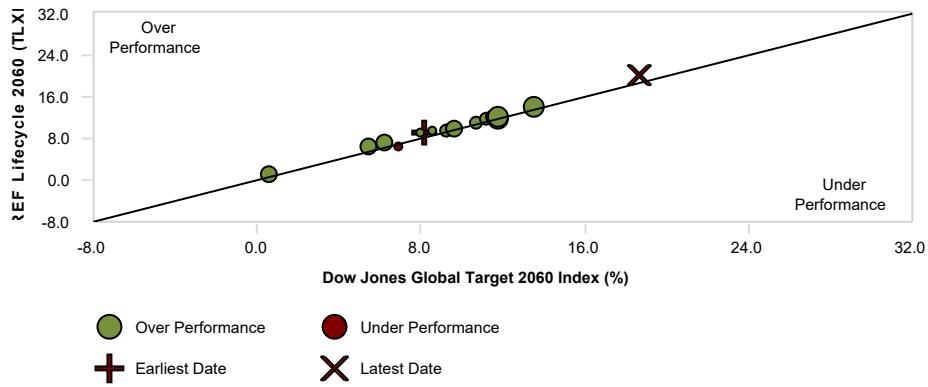
	QTR	YTD	1 YR	3 YR	5 YR	2020	2019	2018	2017
● TIAA-CREF Lifecycle 2060 (TLXPX)	5.24 (71)	16.68 (65)	16.68 (65)	20.16 (25)	14.11 (21)	17.57 (27)	26.47 (20)	-10.27 (92)	24.29 (2)
○ Dow Jones Global Target 2060 Index	4.61 (87)	16.36 (73)	16.36 (73)	18.68 (70)	13.15 (62)	15.03 (61)	24.89 (60)	-8.37 (46)	21.06 (60)
Median	5.91	17.16	17.16	19.53	13.59	15.99	25.08	-8.66	21.30

Comparative Performance

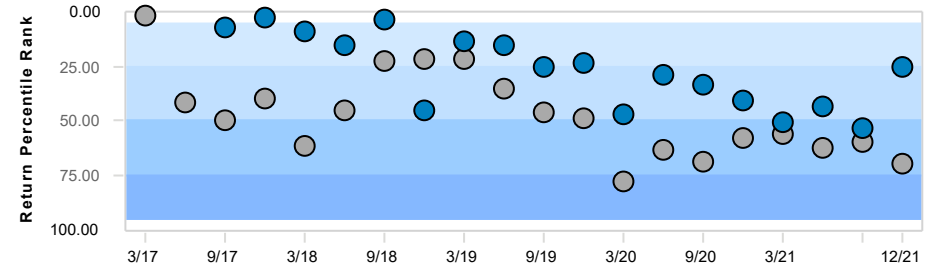
	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020
TIAA-CREF Lifecycle 2060 (TLXPX)	-1.54 (88)	7.25 (15)	5.00 (70)	14.49 (64)	8.25 (1)	20.62 (5)
Dow Jones Global Target 2060 Index	-1.06 (33)	6.36 (82)	5.71 (20)	16.17 (5)	6.60 (83)	19.16 (33)
IM Mixed-Asset Target 2060+ (MF) Median	-1.23	6.69	5.27	14.72	7.37	18.86



3 Yr Rolling Under/Over Performance - 5 Years

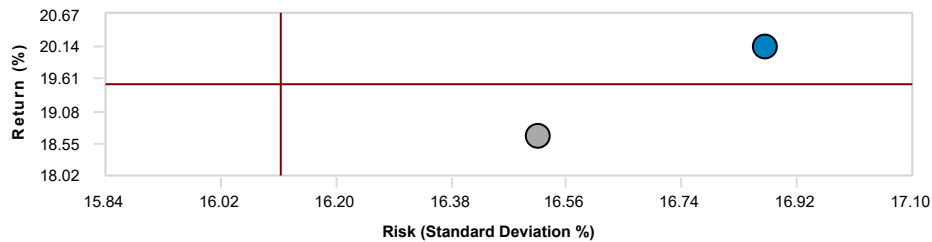


3 Yr Rolling Percentile Ranking - 5 Years



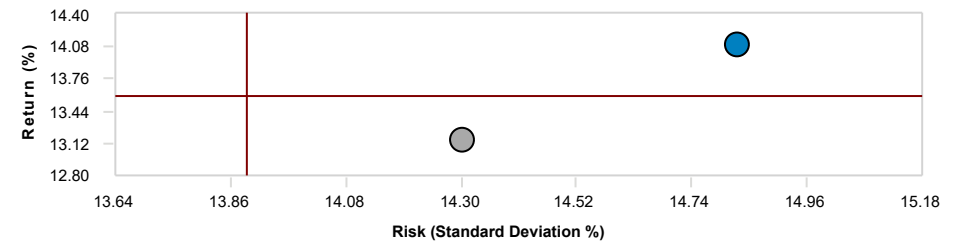
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● TIAA-CREF Lifecycle 2060 (TLXPX)	18	10 (56%)	6 (33%)	2 (11%)	0 (0%)
● Dow Jones Global Target 2060 Index	20	4 (20%)	7 (35%)	8 (40%)	1 (5%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● TIAA-CREF Lifecycle 2060 (TLXPX)	20.16	16.87
● Dow Jones Global Target 2060 Index	18.68	16.52
— Median	19.53	16.11

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● TIAA-CREF Lifecycle 2060 (TLXPX)	14.11	14.83
● Dow Jones Global Target 2060 Index	13.15	14.30
— Median	13.59	13.89

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2060 (TLXPX)	1.72	105.89	104.35	1.01	0.76	1.12	1.02	10.51
Dow Jones Global Target 2060 Index	0.00	100.00	100.00	0.00	N/A	1.06	1.00	10.60

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
TIAA-CREF Lifecycle 2060 (TLXPX)	1.66	106.67	106.37	0.52	0.56	0.89	1.03	9.76
Dow Jones Global Target 2060 Index	0.00	100.00	100.00	0.00	N/A	0.85	1.00	9.57



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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Plan Review City of Fort Worth

Optimizing plan effectiveness to help
drive better outcomes

As of December 31, 2021



Welcome to your Plan Review

What's the purpose of this report?



To help you answer three important questions to drive better outcomes:

- How well is your plan working to prepare employees for retirement?
- Are your participants on track to retire with sufficient income?
- What actions can be taken to make your plan more effective?

What's inside?



- Executive summary with key plan metrics, including your plan's income replacement ratio.
- Plan and participant details, including information about participants receiving lifetime income from your plan.
- In-depth information about retirement readiness drivers—employee engagement, investment solutions and plan management.

Why is income replacement important?



- Within the executive summary, you'll find your plan's income replacement ratio. We believe it's the best way to evaluate retirement readiness and plan success.
- The income replacement ratio measures how much income employees will be able to replace in retirement based on their current situations—like savings rate, investments and salary.¹

How do I get started?



1. Review your Plan Review report.
2. Identify opportunities for improvement.
3. Contact your TIAA relationship manager or call the Administrator Telephone Center at **888-842-7782** to develop an action plan.

1. When your employees' salary data is provided, an actual income replacement ratio is calculated; otherwise, estimated salary is used.

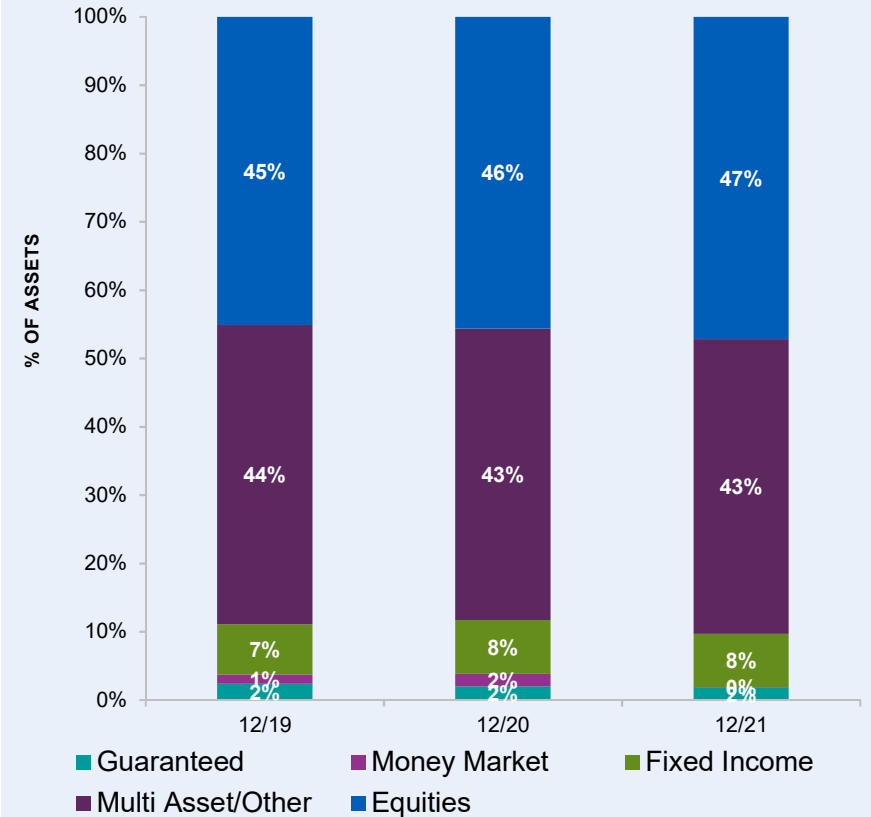
Executive summary: Participant trends

Contributions Impacting Plan Outcome



Contribution data reflects the trailing 12 months of activity.

Diversification



Multi-Asset/Other includes Lifecycle, Real Estate, and Brokerage.

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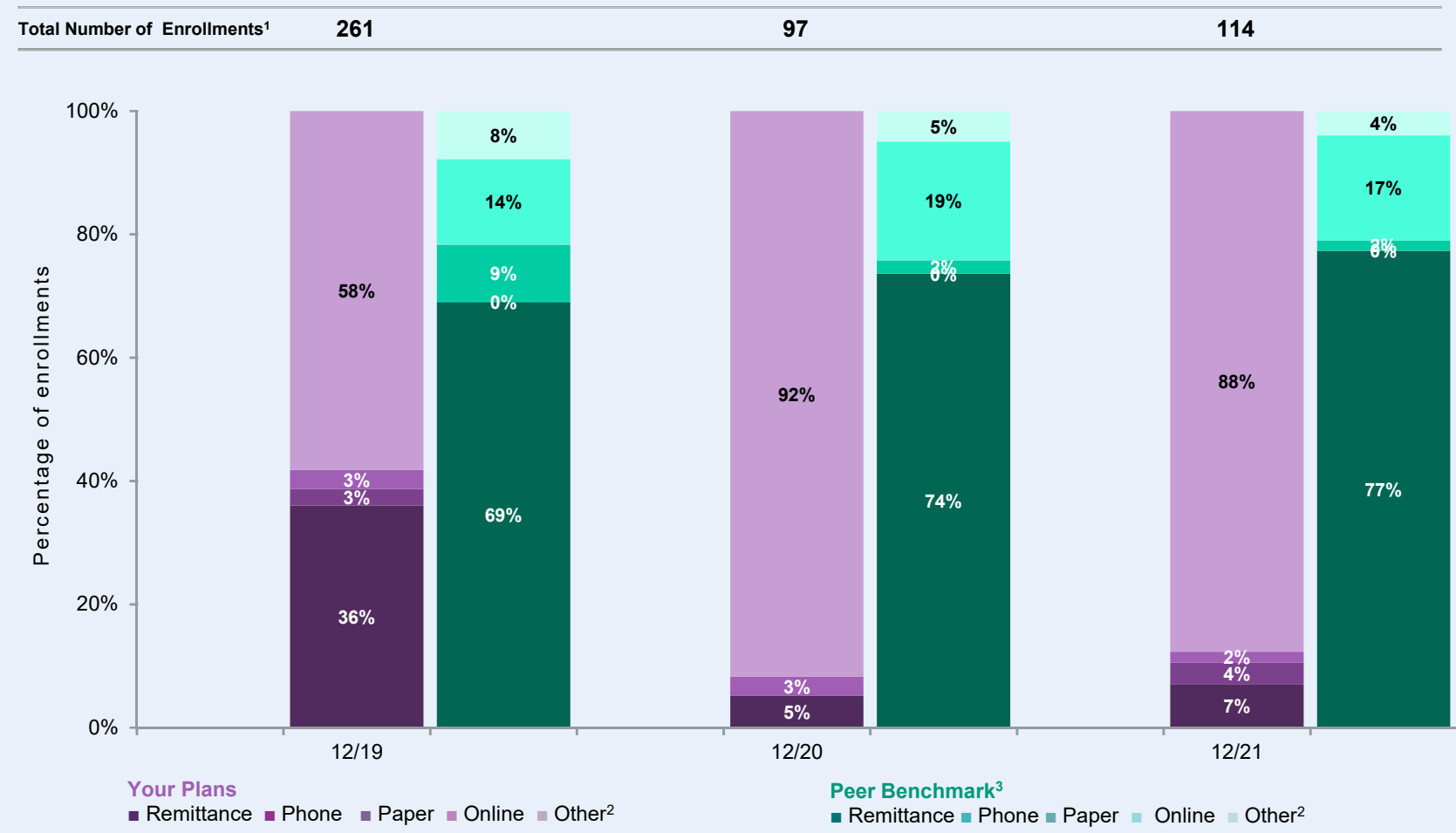
Employee Summary

Important plan and participant details



Employee summary: Enrollment trends

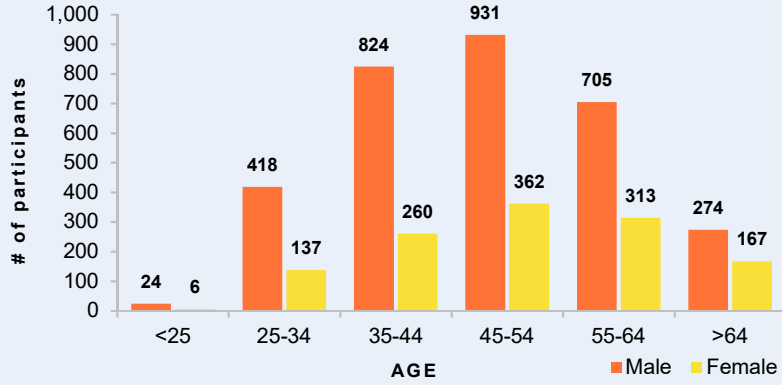
Enrollment by method



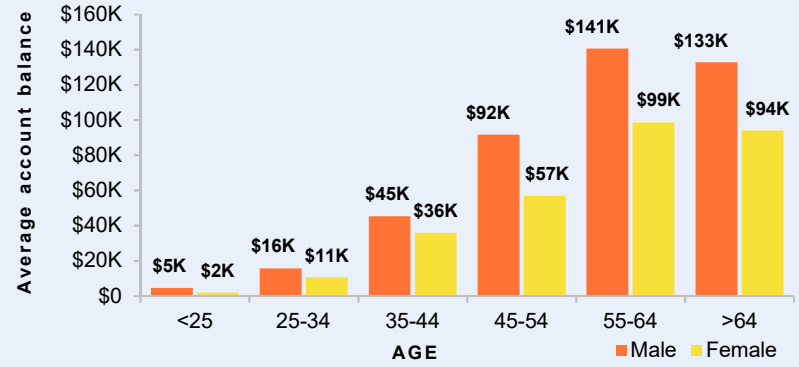
This report is as of the period ending 12/31/2021 and reflects the trailing 12 months of activity unless otherwise noted. The report includes all TIAA plans except 457(f), 457(b) Private, Nonqualified Deferred Compensation, and Retirement Healthcare plans. 1. If a participant is enrolled in more than one plan, they are still only counted as one unique enrollment in this chart. 2. "Other" includes the following enrollment categories: Internet/Admin, Negative, Enhanced Administrative Services (EAS) and Unknown. 3. The peer benchmark represents a group of institutions with TIAA recordkept assets in the not-for-profit market with total plan assets between 100M and 500M.
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Employee summary: Gender and age¹

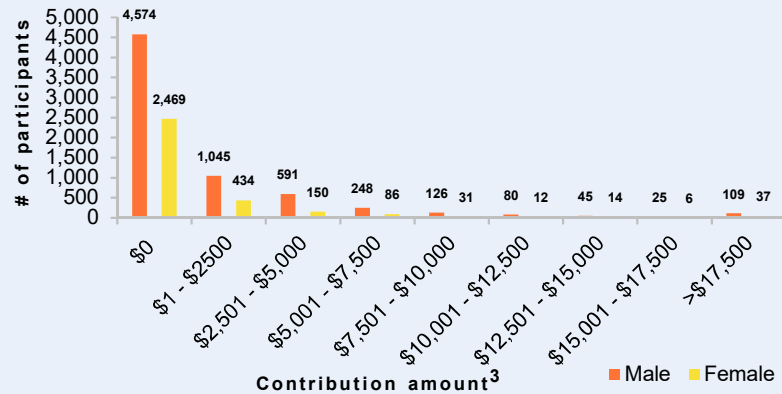
Demographics by Age and Gender



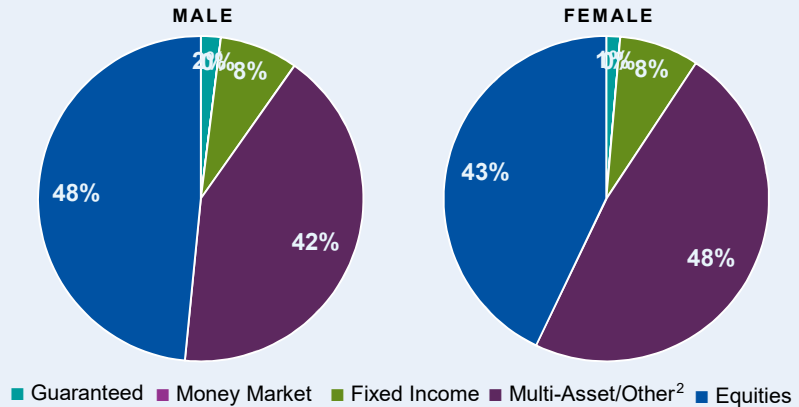
Average Account Balance by Age and Gender



Employee Contribution Amounts by Gender



Diversification by Gender



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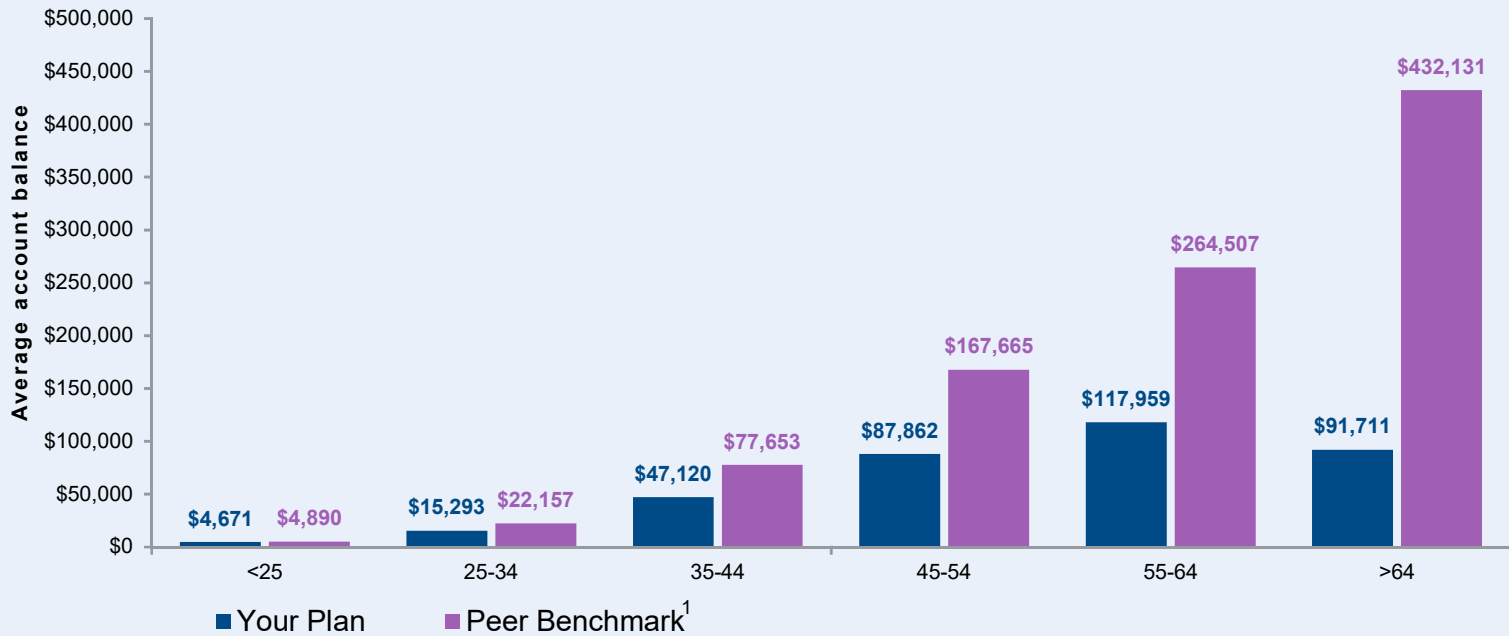
Employee summary: Participant diversification

Diversification by Age and Gender¹

Age	% Guaranteed		% Money Market		% Fixed Income		% Multi Asset/Other ²		% Equities	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
<25	12%	0%	0%	0%	0%	0%	87%	96%	0%	4%
25-34	1%	2%	0%	0%	3%	1%	77%	72%	20%	25%
35-44	2%	3%	0%	0%	5%	2%	55%	59%	39%	36%
45-54	3%	3%	0%	0%	9%	7%	45%	33%	44%	57%
55-64	1%	1%	0%	0%	10%	11%	46%	37%	43%	51%
>64	0%	0%	0%	0%	6%	7%	48%	53%	46%	40%

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Active participants: Average account balance by age



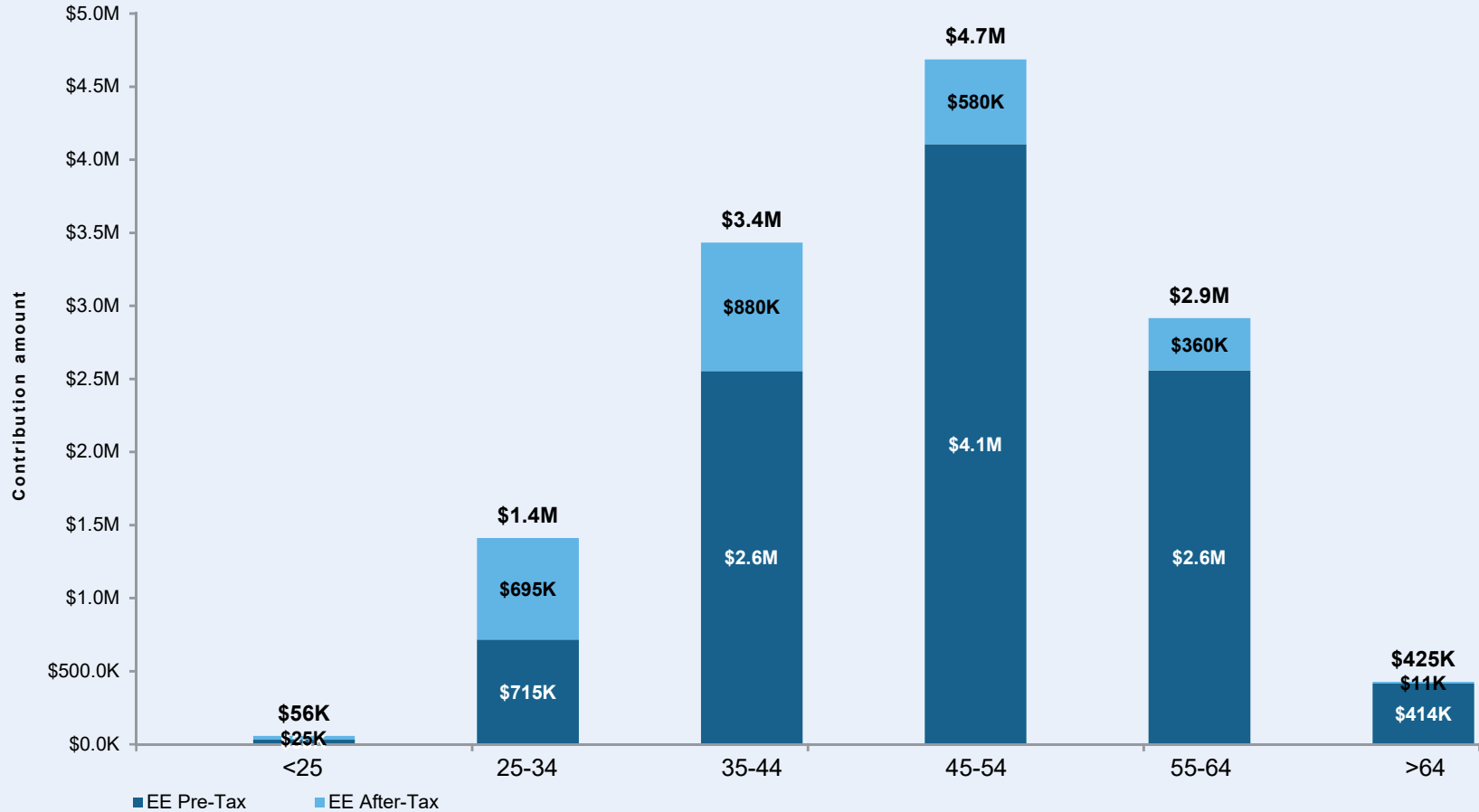
	<25	25-34	35-44	45-54	55-64	>64	Total
# of Active Participants	24	484	923	1,019	520	63	3,033
% of Total Active Participants	1%	16%	30%	34%	17%	2%	100%
Total Active Assets	\$112,100	\$7,402,053	\$43,491,582	\$89,531,197	\$61,338,659	\$5,777,786	\$207,653,377
% of Total Active Assets	0%	4%	21%	43%	30%	3%	100%

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Active participants: Contribution amounts by age

Employer (ER) & employee (EE) contributions



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Monitoring investments

Simplify your investment lineup. Make it easy for participants to choose and easy for you to monitor.

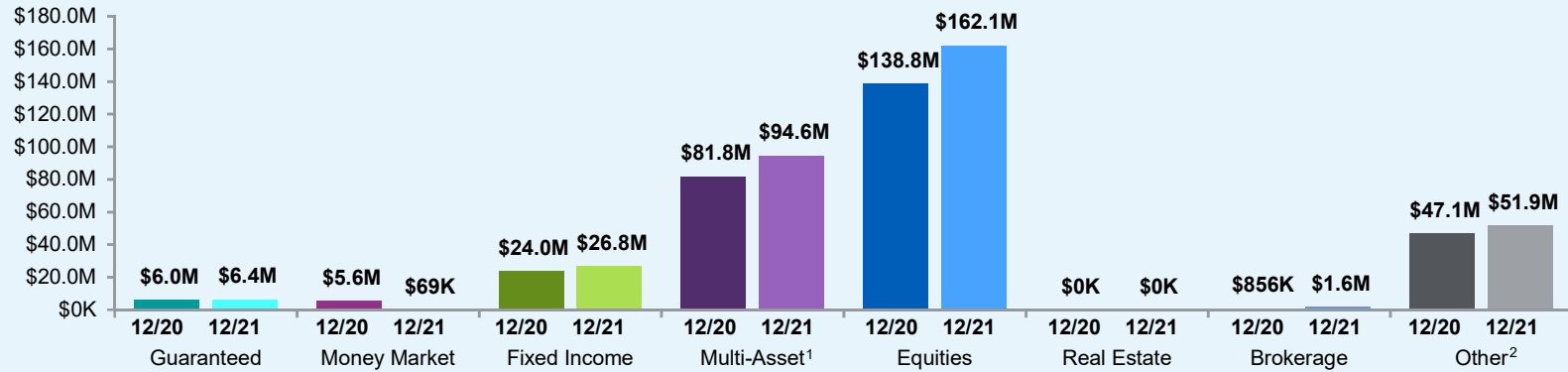


Assets & contributions by asset class year-over-year

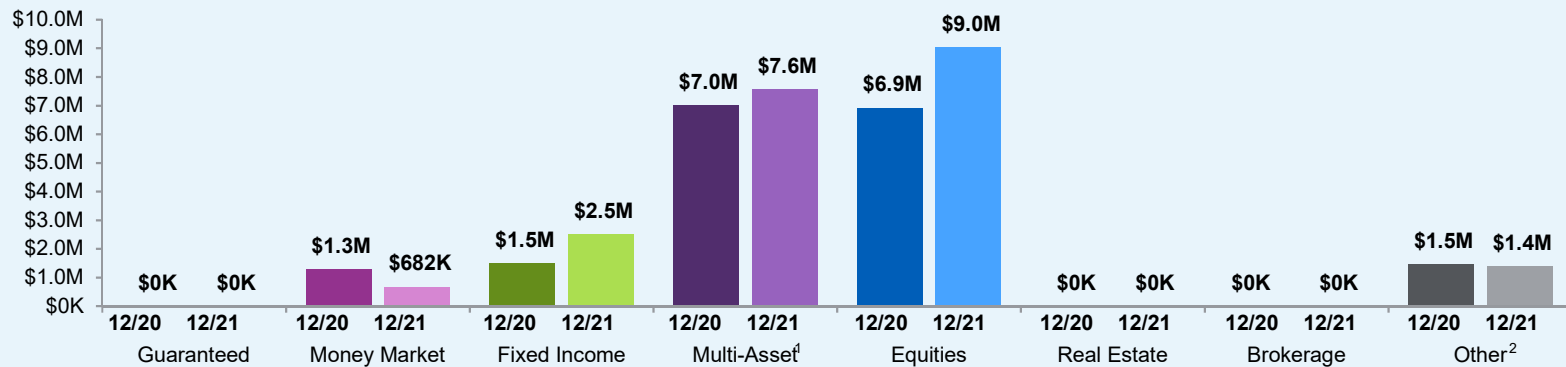
\$343,355,449
Total assets

\$21,180,460
Total contributions

Assets



Contributions



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Investment/account utilization by assets

Top 5 investments by Assets

	Participant Count	Total Assets	Balance % of Total
■ MissionSquare PLUS Fund R10	989	\$51,868,532	15.11%
■ American Funds New Economy R5E	1,067	\$45,868,390	13.36%
■ Vanguard Inst Idx Inst	1,060	\$36,622,360	10.67%
■ TIAA-CREF Lifecycle 2035-Prem	528	\$20,540,366	5.98%
■ TIAA-CREF Lifecycle 2030-Prem	375	\$16,581,643	4.83%
Total as a % of total assets		\$171,481,291	49.94%

Bottom 5 investments by Assets




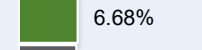
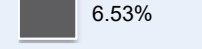
	Participant Count	Total Assets	Balance % of Total
■ TIAA-CREF Lifecycle 2055-Prem	223	\$2,055,795	0.60%
■ TIAA-CREF Self Directed Acct	45	\$1,601,656	0.47%
■ TIAA-CREF Lfcyle Rtmt Inc-Prem	461	\$1,389,011	0.40%
■ TIAA-CREF Lifecycle 2060-Prem	120	\$644,239	0.19%
■ Vanguard Treasury MoneyMkt Inv	1	\$69,130	0.02%
Total as a % of total assets		\$5,759,832	1.68%

■ Guaranteed ■ Money Market ■ Fixed Income ■ Multi-Asset ■ Equities ■ Real Estate ■ Other¹

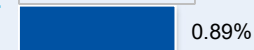

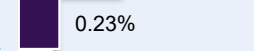
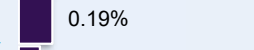
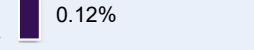
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Investment/account utilization by contributions

Top 5 Investments by Contributions

	Participant Count	Total Assets	Balance % of Total	
■ Vanguard Inst Idx Inst	689	\$2,207,815	10.42%	
■ American Funds New Economy R5E	637	\$1,938,164	9.15%	
■ TIAA-CREF Lifecycle 2035-Prem	435	\$1,553,234	7.33%	
■ Metropolitan West TotRet Bnd I	343	\$1,415,051	6.68%	
■ MissionSquare PLUS Fund R10	390	\$1,383,402	6.53%	
Total as a % of total assets		\$8,497,666	40.12%	

Bottom 5 Investments by Contributions

	Participant Count	Total Assets	Balance % of Total	
■ Lazard Intl Equity Port Instl	213	\$188,085	0.89%	
■ Vanguard Equity Income Adm	393	\$124,901	0.59%	
■ TIAA-CREF Lfcyle Rtmt Inc-Prem	17	\$48,402	0.23%	
■ TIAA-CREF Lifecycle 2010-Prem	18	\$39,996	0.19%	
■ TIAA-CREF Lifecycle 2015-Prem	16	\$25,907	0.12%	
Total as a % of total assets		\$427,293	2.02%	

■ Guaranteed ■ Money Market ■ Fixed Income ■ Multi-Asset ■ Equities ■ Real Estate ■ Other¹

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Assets & contributions by investment/account option category

	Total number of participants invested	Contribution amount	Contribution percentage of total	Asset amount	Asset percentage of total
MONEY MARKET					
Vanguard Treasury MoneyMkt Inv	1	\$682,258	3.22%	\$69,130	0.02%
Money Market Total		\$682,258	3.22%	\$69,130	0.02%
FIXED INCOME					
BlackRock High Yield Bd Instl	443	\$684,599	3.23%	\$5,330,021	1.55%
Metropolitan West TotRet Bnd I	521	\$1,415,051	6.68%	\$14,735,882	4.29%
Vanguard Ttl Bd Mkt Idx Adm	360	\$402,625	1.90%	\$6,743,726	1.96%
Fixed Income Total		\$2,502,275	11.81%	\$26,809,629	7.81%
MULTI-ASSET					
TIAA-CREF Lfcyle Rtmt Inc-Prem	461	\$48,402	0.23%	\$1,389,011	0.40%
TIAA-CREF Lifecyle 2010-Prem	65	\$39,996	0.19%	\$2,074,279	0.60%
TIAA-CREF Lifecyle 2015-Prem	73	\$25,907	0.12%	\$3,026,226	0.88%
TIAA-CREF Lifecyle 2020-Prem	194	\$599,941	2.83%	\$7,629,390	2.22%
TIAA-CREF Lifecyle 2025-Prem	279	\$699,766	3.30%	\$11,757,481	3.42%

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Assets & contributions by investment/account option category

	Total number of participants invested	Contribution amount	Contribution percentage of total	Asset amount	Asset percentage of total
MULTI-ASSET (Continued)					
TIAA-CREF Lifecycle 2030-Prem	375	\$1,308,612	6.18%	\$16,581,643	4.83%
TIAA-CREF Lifecycle 2035-Prem	528	\$1,553,234	7.33%	\$20,540,366	5.98%
TIAA-CREF Lifecycle 2040-Prem	435	\$1,062,261	5.02%	\$14,251,426	4.15%
TIAA-CREF Lifecycle 2045-Prem	364	\$976,956	4.61%	\$9,813,172	2.86%
TIAA-CREF Lifecycle 2050-Prem	279	\$635,412	3.00%	\$4,819,283	1.40%
TIAA-CREF Lifecycle 2055-Prem	223	\$432,060	2.04%	\$2,055,795	0.60%
TIAA-CREF Lifecycle 2060-Prem	120	\$196,225	0.93%	\$644,239	0.19%
Multi-Asset Total		\$7,578,773	35.78%	\$94,582,313	27.55%
EQUITIES					
AME Small Cap World Fund R5E	570	\$720,114	3.40%	\$9,618,793	2.80%

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Assets & contributions by investment/account option category

	Total number of participants invested	Contribution amount	Contribution percentage of total	Asset amount	Asset percentage of total
EQUITIES (Continued)					
American Funds New Economy R5E	1,067	\$1,938,164	9.15%	\$45,868,390	13.36%
DFA Emerging Mkt Small Cp Inst	400	\$294,625	1.39%	\$3,381,662	0.98%
DFA Real Estate Sec Port Inst	559	\$283,434	1.34%	\$4,830,075	1.41%
Goldman Sachs Sml Cp Val Inst	651	\$459,468	2.17%	\$9,576,445	2.79%
Invesco Diversified Dividnd R5	0	\$435,618	2.06%	\$0	0.00%
Lazard Intl Equity Port Instl	405	\$188,085	0.89%	\$2,661,837	0.78%
Scout Mid Cap Fund	653	\$642,904	3.04%	\$11,222,461	3.27%
TIAA-CREF Intl Eq Idx-Prem	611	\$732,074	3.46%	\$9,679,815	2.82%
Vanguard Equity Income Adm	707	\$124,901	0.59%	\$9,371,556	2.73%

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Assets & contributions by investment/account option category

	Total number of participants invested	Contribution amount	Contribution percentage of total	Asset amount	Asset percentage of total
EQUITIES (Continued)					
Vanguard Inst Idx Inst	1,060	\$2,207,815	10.42%	\$36,622,360	10.67%
Vanguard Mid-Cap Idx Adm	573	\$385,972	1.82%	\$9,243,389	2.69%
Vanguard Small-Cap Idx Adm	615	\$620,578	2.93%	\$9,977,523	2.91%
Equities Total		\$9,033,753	42.65%	\$162,054,305	47.20%
BROKERAGE					
TIAA-CREF Self Directed Acct	45	\$0	0.00%	\$1,601,656	0.47%
Brokerage Total		\$0	0.00%	\$1,601,656	0.47%
OTHER²					
Deemed Loan	122	\$0	0.00%	\$1,265,785	0.37%
Loan Fund	571	\$0	0.00%	\$5,104,098	1.49%
MissionSquare PLUS Fund R10	989	\$1,383,402	6.53%	\$51,868,532	15.11%
Other Total		\$1,383,402	6.53%	\$58,238,416	16.96%

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Appendix



Glossary

Term	Definition
Active Participants	Participants with a status of “Active” or “Leave” that have a balance greater than zero and have made a contribution in the last 12 months.
Advice	Specific investment recommendations, either in person, online or over the phone, that are tailored to individual circumstances, including variables such as age, current savings rates, plan investments and tolerance for risk.
Annuitants	Persons receiving benefits under a TIAA annuity contract.
Average Annual Payout	The average annual amount that all annuitants are receiving for income generated from an institution’s plan(s).
Average Projected Monthly Payout	The average monthly amount that participants may receive in their retirement years for income generated from the institution’s plan(s).
Average Guaranteed Income	Sources of income that are expected to continue for the participant’s lifetime (e.g., Social Security, TIAA Traditional, Defined Benefits).
Average Projected Monthly Income	The average after-tax retirement income your participants are projected to receive from your TIAA plan(s).
Consolidations	The number of participants who transfer balances from other service providers into TIAA retirement accounts.
Contributing Participants	Participants that have made a contribution in the last 12 months.
Contribution Rate	Annual contributions as a percentage of annual salary.
Defaulted Loans	Loans for which the participant missed the expected repayment and failed to pay the total overdue amount prior to the end of the calendar quarter following the calendar quarter in which the payment was due.

Glossary

Term	Definition
Defaulted Participants	Participants who have not made an investment allocation election and whose contributions have been directed to the plan's default investment.
Distributions	Includes, but is not limited to, the following categories: Loan, Hardship, In-Service, Terminated & Other. "Other" includes: Annuity Settlement Options, Death Benefits, Plan Loan Defaults, Withdrawals due to Opt-Out Option & Test Failure. In-Service and Terminated may include one or more of these categories: Voluntary Termination, Withdrawal, Death, Beneficiary, Installment Payment, Age 70.5 Minimum Distribution, QDRO, Hardship, Disability, Unforeseen Emergency, Full Withdrawal, Unknown, IRA Recharacterization, Excess Aggregate Contribution, Excess Contribution, Excess Deferral, Excess Annual Addition.
Early Engagement	A communication program that supports participants through their online account setup, plan review and goal setting and gives them an overview of the resources available to them at TIAA.
In Range	Participants who are on target to cover their essential retirement expenses such as housing, food and healthcare but aren't yet on target to replace the income needed to maintain their current standard of living in retirement. The target income replacement rates for participants in this group vary by their current salary (pretax) and are listed below: <ul style="list-style-type: none"> • Current salary <\$50K: Targeted to replace 80% - 100% of after-tax income in retirement • Current salary \$50K - \$100K: Targeted to replace 60% - 85% of after-tax income in retirement • Current salary >\$125K: Targeted to replace 50% - 70% of after-tax income in retirement
Income Replacement Ratio	The percentage of current salary that is estimated to be replaced during retirement, calculated using multiple variables (e.g., contribution rate, investments, salary). This is a way to visualize how ready your employees are for retirement.
Lifetime Income	An arrangement that provides fixed or variable income payments for the life of the annuitant.
Needs Action	Participants who aren't yet on target to cover essential expense needs in retirement such as housing, food and healthcare. The target income replacement rates for participants in this group vary by their current salary (pretax) and are listed below: <ul style="list-style-type: none"> • Current salary <\$50K: Targeted to replace <80% of after-tax income in retirement • Current salary \$50K - \$100K: Targeted to replace <60% of after-tax income in retirement • Current salary >\$125K: Targeted to replace <50% of after-tax income in retirement

Glossary

Term	Definition
On Track	<p>Participants who are on target to meet or exceed the income replacement rate needed to maintain their current standard of living in retirement. The target income replacement rates for participants in this group vary by their current salary (pretax) and are listed below:</p> <ul style="list-style-type: none"> • Current salary <\$50K: Targeted to replace >100% of after-tax income in retirement • Current salary \$50K - \$100K: Targeted to replace >85% of after-tax income in retirement • Current salary >\$125K: Targeted to replace >70% of after-tax income in retirement
Other Enrollments	All other enrollments not classified as remittance, phone, paper or online.
Participant-Directed Contributions	Contributions that have been invested per the participant's investment allocation election.
Participation Rate	Participation Rate is calculated by dividing the (number of eligible and participating) by (number of eligible and participating + number of eligible and not participating).
Peer Benchmark	A group of institutions at TIAA who provide a measure of comparison to your plan based on comparable plan asset size and market segment (K-12, Higher Education, Healthcare & Government).
Readiness Influencers	Plan features and participant behaviors that may contribute to a participant's retirement readiness and income replacement ratio.
Rebalanced	Total number of participants who reallocated their account balances during the last 12 months.
Remittance	Participant enrollment information, including investment election specifications, provided to TIAA by the plan sponsor.
Retirement Readiness	Measures the degree to which a participant is on track to retire with sufficient lifetime income while maintaining a desired standard of living.
Terminated Participants	Participants with an employee status of "Terminated."

Glossary

Term	Definition
Total Annual Payout	The total annual amount that all annuitants are receiving for income generated from an institution's plan(s).
Total Participants	Includes participants with an ending balance and at least one contribution during the evaluation period. In addition, other filters are applied to remove participants whose Ibbotson results could disproportionately skew the outcomes of the larger population.

Income replacement ratio methodology and assumptions

Participant-related salary, contribution, retirement age and advice assumptions:

- TIAA estimates participant salary based on a regression-tested analysis of more than 60,000 active, premium-paying participants across 48 institutions. Participant salaries are estimated based on a function of the participant's life stage, organization type, age, TIAA recordkept assets, gender, and region and contribution rate. The participant's gross annual income is used for various calculations, including retirement income replacement ratio, estimated Social Security benefits, and estimated federal and state taxes.
- Participant contributions are aggregated for a 12-month period for participants with a balance at the beginning of the period. For participants without a beginning balance, the contribution amount from the last month of the 12-month period is annualized. IRS contribution limits are applied and adjusted for participants eligible for catch-up provisions. Morningstar Investment Management LLC shifts any contribution amount above the annual limit to after-tax contributions for modeling purposes.
- All retirement plan contributions are considered to be dedicated solely for retirement. Assets will not be liquidated for use prior to retirement, and all contributions will end at the Target Retirement Age (TRA).
- The TRA value is defaulted to 67 for most plan participants. Participants aged 66 or higher have a TRA that is set two years from the current age. Life expectancy values are estimated by Morningstar and are based on participant age and gender.
- The participant's balance is aggregated for all selected plans. Amounts are designed as pretax and Roth contributions, as appropriate.
- The participant's asset allocation, for the purposes of this analysis, is categorized into simplified asset classes (i.e., stable value, equities, real estate, fixed income, multi asset and money market).
- The advice provided Morningstar consists of model portfolios composed of target allocations for the asset classes. Based on the target retirement goals, Morningstar will recommend a specific tolerance level designed to adjust over time based on Morningstar's proprietary methodology which customizes a risk level trajectory for the participant.
- The hypothetical advice target for the model is a 100% replacement ratio.
- The Morningstar tool's advice is based on statistical projections of the likelihood that an individual will achieve their retirement goals. The projections rely on financial and economic assumptions of historical rates of return of various asset classes that may not reoccur in the future, volatility measures and other facts, as well as information the individual provides. Morningstar's advice engine includes tax-rate assumptions, mortality tables, and Social Security estimates.

Retirement income replacement ratio calculation assumptions:

- TIAA measures retirement income replacement ratios by calculating the projected stream of distributions from participants' assets and estimated Social Security benefits in current dollars as a percentage of employees' current salaries.
- Using the participant's estimated salary, current contribution rates and asset allocation, TIAA leverages the advice engine from Morningstar an independent expert retained by TIAA, to perform a sophisticated, Monte Carlo analysis (500 total simulations) to project the retirement income replacement ratio.
- The results indicate the participant's 70% probability of achieving the retirement goal. A lower probability of success is associated with better (and less likely) estimated income. Your participants can also model different outcomes for themselves by going online to [TIAA.org/retirementadvisor](https://www.tiaa.org/retirementadvisor) (online Retirement Advisor tool).
- Data provided represents inputs into the Morningstar advice engine for plan management purposes. If a participant uses Retirement Advisor online or has an advice session with a consultant, estimated retirement income is not replaced with any of the information used in the Plan Outcome Assessment report calculations.
- The plan-level retirement income replacement ratio is determined by calculating the average retirement income replacement ratio of all participants in the plan analysis. All actively contributing participants are included in the analysis, unless the participant has annual compensation of less than \$25,000, has contributed less than \$300 in the previous 12-month period, has a current balance less than \$500, or is less than 23 or greater than 65 years of age.
- **IMPORTANT:** Projections, and other information generated through the TIAA Plan Outcome Assessment and the Morningstar tool regarding the likelihood of various investment outcomes, are hypothetical, do not reflect actual investment results, and are not a guarantee of future results. The projections are dependent in part on subjective and proprietary assumptions, including the rate of inflation and the rate of return for different asset classes, and these rates are difficult to accurately predict. The projections also rely on financial and economic historical assumptions that may not reoccur in the future, volatility measures and other facts. Results may vary with each use and over time.

Important information

This material is for informational or educational purposes only and does not constitute investment advice under ERISA. This material does not take into account any specific objectives or circumstances of any particular investor, or suggest any specific course of action. Investment decisions should be made based on the investor's own objectives and circumstances.

[TIAA.org](https://www.tiaa.org)

You should consider the investment objectives, risks, charges and expenses carefully before investing. Please call 877-518-9161 or log on to TIAA.org for underlying product and fund prospectuses that contain this and other information. Please read the prospectuses carefully before investing.

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Territory and Client Flows



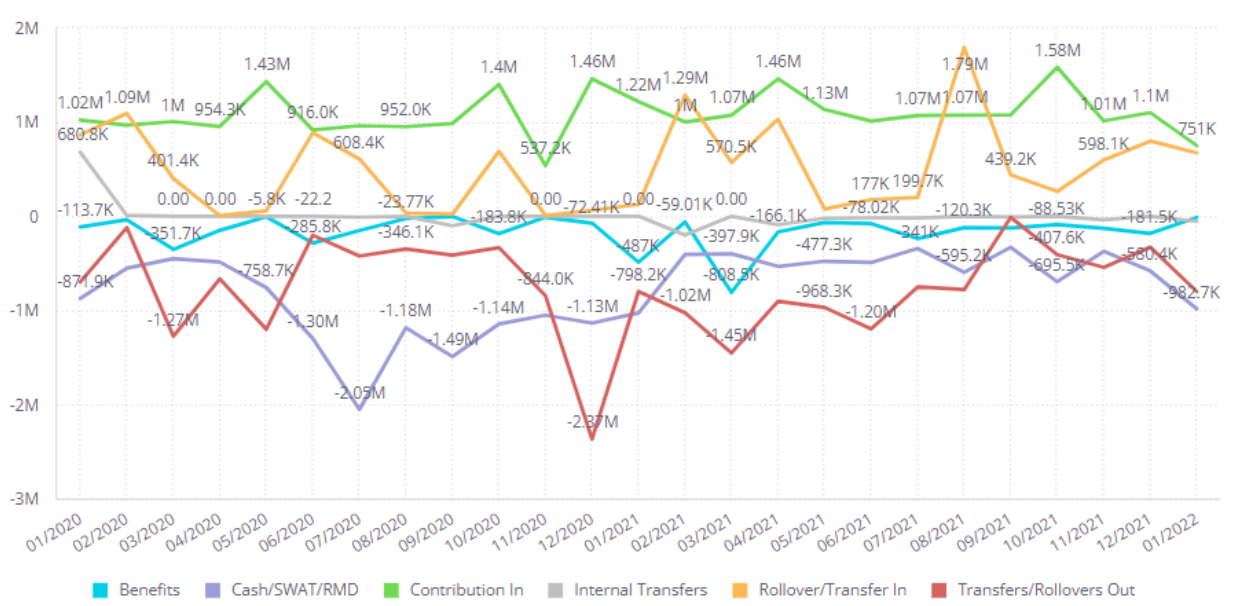
Client Name	Institutional Territory	12/2021						
		Customer Count	Total Contributions	Total Rollover Transfer In	Total Mappable Inflows	Total Mappable Outflows	Total Cash/SWAT/RMD	Total Rollover Transfer Out
CITY OF FORT WORTH	National	4,480	\$13.82M	\$7.36M			\$-6.87M	\$-10.85M

Territory and Client Flows - Last 4 months

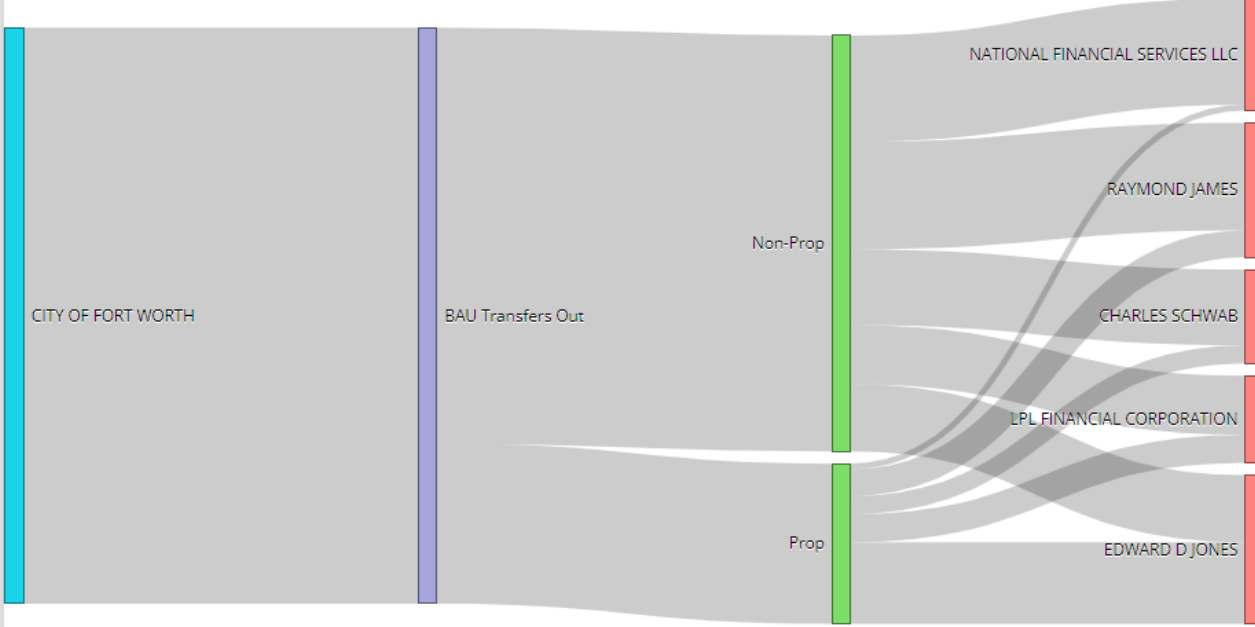


Months in Transaction Date	Customer Count	Contributions	Rollover Transfer In	Total Mappable Inflows	Total Mappable Outflows	Cash/SWAT/RMD	Rollover Transfer Out
10/2021	4,401	\$1.58M	\$264.15K			\$-695.47K	\$-407.57K
11/2021	4,435	\$1.01M	\$598.14K			\$-371.45K	\$-543.56K
12/2021	4,480	\$1.10M	\$799.80K			\$-580.37K	\$-327.14K
01/2022	3,142	\$751.02K	\$674.28K			\$-982.73K	\$-800.45K
Grand Total	4,517	\$4.45M	\$2.34M	\$0.00	\$0.00	\$-2.63M	\$-2.08M

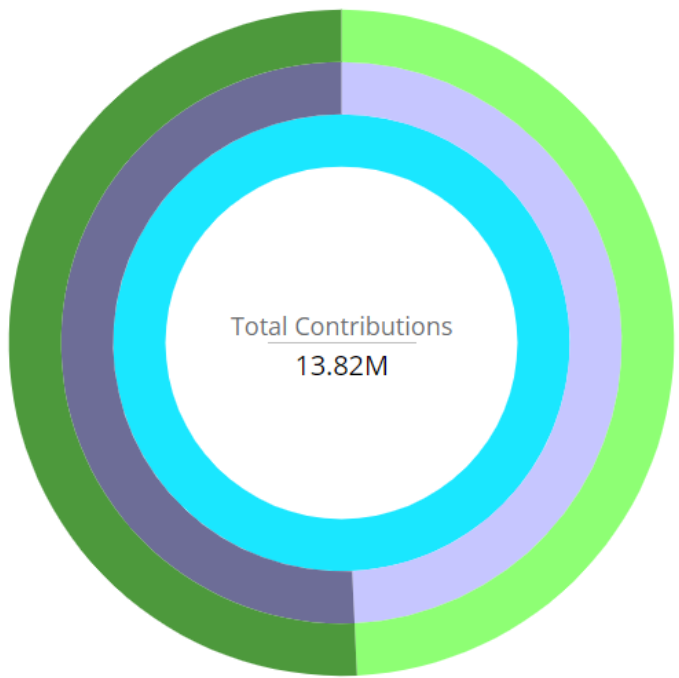
Monthly Flows



YTD Outflows by Flow Type, Fund & Competitor

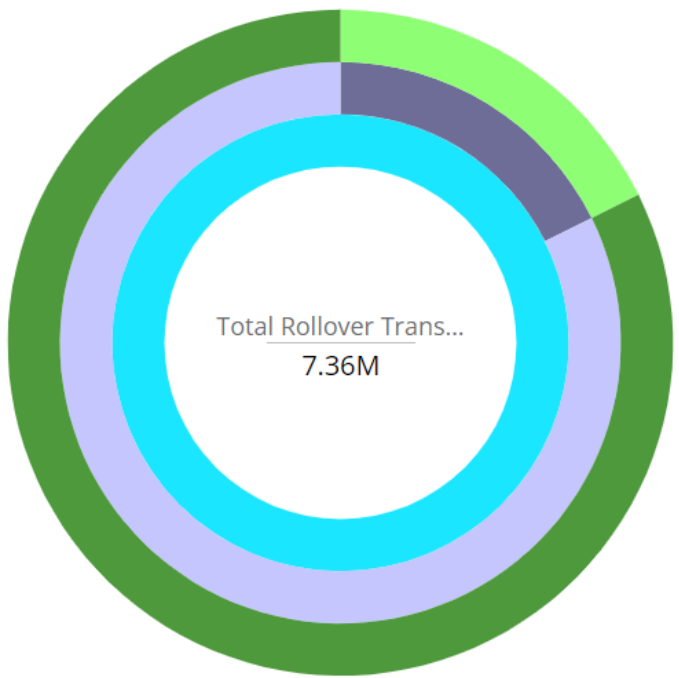


Contributions by Fund Group & Fund Lvl 2



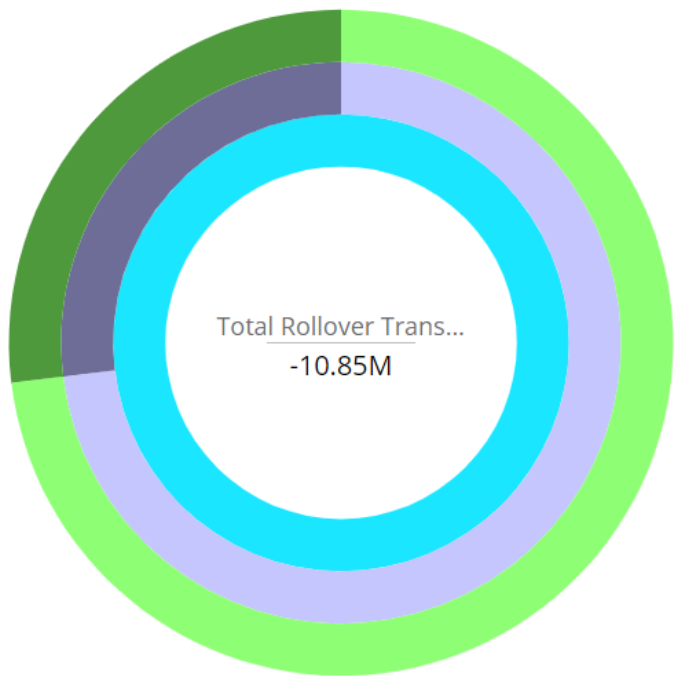
Client Name Fund Group Fund Level 2

Rollover/Transfer In by Fund Group & Fund Lvl 2



Client Name Fund Group Fund Level 2

Rollover/Transfer Out by Fund Group & Fund Lvl 2



Client Name Fund Group Fund Level 2



Fiduciary Guidebook

**City of Fort Worth 457
Plan Oversight
Committee**

February 2022

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I. INTRODUCTION, BACKGROUND, AND PURPOSE

Introduction

The City of Fort Worth City Council recognizes that one of the most valuable resources available to the residents of Fort Worth is the City's employees. As part of its benefits package, the City recognizes that retirement security for the City's employees is critical for the recruitment and retention of the City's vital human resources.

Background

The City of Fort Worth sponsors a defined benefit plan (the Fort Worth Employees' Retirement Fund) for its employees. In addition, the City sponsors a Deferred Compensation program (a defined contribution plan) under IRC §457(b) that allows employees to make additional voluntary contributions to their retirement security. The combination of defined benefit and defined contribution plans is particularly critical since the City does not participate in the federal Social Security plan. The City of Fort Worth's 457 Deferred Compensation program was established in March 1981.

The City of Fort Worth Deferred Compensation Plan is an IRC §457(b) governmental deferred compensation plan (the "Plan") created pursuant to Section 609.102(c) of the Texas Government Code (the "Code"). The Plan is open to eligible employees of the City of Fort Worth. The Plan allows participating employees to accumulate supplemental retirement savings by deferring current income in accordance with the rules and requirements of IRC §457(b).

The City Manager of the City of Fort Worth and his/her designee(s) have been designated by the City Council to serve as the Plan Administrator pursuant to Section 609.103(a) of the Texas Government Code and have the powers authorized by Chapter 609. Chapter 609 can be found here:

<https://statutes.capitol.texas.gov/Docs/GV/htm/GV.609.htm>

Pursuant to Section 609.106 of the Texas Government Code the Deferred Compensation Oversight Committee ("Committee") was created in 2011 to provide appropriate oversight and/or make recommendations to the City Manager regarding the Plan.

Purpose

The 457 Oversight Committee Governance Guidebook was created for the Committee and its members for three reasons:

- 1) To provide orientation material for new Committee members about the rules, responsibilities, policies, procedures and activities of the Committee;
- 2) To serve as an ongoing reference manual for current Committee members;
- 3) To provide Plan members and stakeholders with the necessary insight and transparency concerning the fiduciary activities and responsibilities of the Committee.

The Committee recognizes that a sound governance structure is essential if it is to fulfill its fiduciary duties and responsibilities. The Committee has prepared and adopted this Governance Guidebook to establish the framework within which it intends to set policy and operate. The Committee does so with the understanding that this document serves only as a reference guide and is not binding; that on occasion unusual circumstances may arise where the Committee chooses to waive specific requirements after discussion takes place at an open meeting.

Any questions about the contents of the Governance Guidebook should be directed to the Committee Chair or to the Director of the City of Fort Worth's Human Resources Department ("HR Director") or his/her designee. The Governance Guidebook may be reviewed by the Committee annually and updated as necessary.

II. MISSION & VISION STATEMENTS

Mission Statement

The 457 Oversight Committee provides oversight on behalf of the Plan participants and strategic leadership and advisement to the Plan sponsor moving the Plan forward to meet the retirement objectives of the employees, former employees and retirees of the City of Fort Worth.

Vision Statement

The 457 Oversight Committee, in conjunction with City staff, professional advisors and a Third party administrator, will develop the Plan into one of the most highly valued deferred compensation plans in the country by providing participants with access to a well-diversified, cost-effective and flexible line-up of investment options with exceptional participant member services.

III. BEING A FIDUCIARY

The Employee Retirement Income Security Act of 1974 (ERISA) defines a fiduciary as any person who:

- Exercises discretionary authority or control over the management of the plan or disposition of plan assets
- Offers investment advice to the plan for compensation or has ability to do so
- Possesses any discretionary authority over the administration of the plan including:
 - The governing body of the plan
 - Plan administrator
 - Investment advisors
 - Vendors/providers/TPAs
 - Outside professionals providing advice or recommendations (i.e. Consultants)
 - Anyone named in the plan document as a fiduciary, even if they do not exercise discretion.

The key to determining the fiduciary status is based on *function* and not simply on title. Internal support personnel are often overlooked as potential fiduciaries.

Because of its governmental status, the City of Fort Worth and its 457 Plan are NOT subject to ERISA. However, the 457 Plan’s Oversight Committee has historically used parts of ERISA to establish best practices for the operation of the Oversight Committee and the Plan. Additional guidance regarding the fiduciary responsibility of the Oversight Committee and its members is provided by Chapter 117 of the Texas Property Code. A link to that statute is provided here:

<https://statutes.capitol.texas.gov/docs/pr/htm/pr.117.htm>

Whether referencing the fiduciary definitions found in ERISA or in Chapter 117, the responsibilities of the fiduciaries of the plan include:

- Acting in the best interest of plan participants
- Fulfilling their obligations under ERISA
- Abiding by the plan documents
- Maintaining a diversified investment menu
- Paying “reasonable” plan expenses

The responsibilities of the fiduciaries also include some liabilities:

- There are some actions and processes that can limit those liabilities:
 - Creating a documented oversight and evaluation process

- Hiring service providers
- Allowing for participant control
- Fiduciaries that fail to fulfill their responsibilities may be held personally liable

IV. PLAN HIGHLIGHTS

457(b) DEFERRED COMPENSATION PLAN

Eligibility: All regular, full-time employees immediately upon hire.

Entry Dates: The first day of the month following the date the employee satisfies the eligibility requirements.

Plan Year: Calendar Year

Plan Recordkeeper: TIAA

Plan Investment Consultant: AndCo Consulting, LLC

Automatic Enrollment: Not Available

Automatic Escalation: Not Available

Employer Contribution: None

Participant Contributions:

- | | |
|-----------------------|-------------------------|
| ▪ Participant Pre-Tax | 100% Contribution Limit |
| ▪ Participant ROTH | 100% Contribution Limit |

Investment Menu Changes: At the recommendation of the Oversight Committee with assistance from the Plan's Investment Consultant and subject to approval by the City Manager (or designee.)

Vesting Schedule: 100% vested contributions.

- Salary deferrals including Roth 457(b) deferrals and "catch-up contributions"
- "Rollover" contributions

Loans: 1 loan offered

V. ROLES AND RESPONSIBILITIES

Role	RESPONSIBILITIES	CONTACT(S)
<p>City of Fort Worth 457 Oversight Committee</p>	<p>The general responsibilities of the Committee include:</p> <ul style="list-style-type: none"> ▪ Monitoring the performance of the Plan’s Administrator/Recordkeeper ▪ Evaluating employee issues and concerns ▪ Recommending methods to help facilitate the prudent administration of the Plan ▪ Monitoring the performance of the plan investments and recommending changes when necessary ▪ Monitoring the performance of the Plan’s Investment Consultant ▪ Periodically, subjecting the Plan’s service providers to the competitive bid process ▪ Acting exclusively in the best interests of the Plan’s participants and beneficiaries. 	
<p>Investment Consultant: AndCo Consulting</p>	<p>Non-Discretionary investment consulting & fiduciary oversight services:</p> <ul style="list-style-type: none"> ▪ Investment Policy Statement development, review, and maintenance as appropriate ▪ Monitor and report on investment manager compliance to investment policy statement on a quarterly basis ▪ Investment manager/strategy identification, evaluation, and implementation 	<p>Tony Kay (tonyk@andcoconsulting.com)</p>

	<ul style="list-style-type: none"> ▪ Customized quarterly and special request investment reports ▪ Annual Committee fiduciary education ▪ Ongoing investment manager due diligence ▪ RFP Assistance as needed 	
<p>Recordkeeper and Plan Administrator:</p> <p>TIAA</p>	<p>Recordkeeping, plan administration & monitoring of plan and participant transactions:</p> <ul style="list-style-type: none"> ▪ Transaction processing and account maintenance ▪ Creation and delivery of participant statements ▪ Trustee administrative services ▪ Plan document amendments and updates ▪ Payroll file related maintenance ▪ On-site and electronic Participant Education Services ▪ On-site and electronic Participant enrollment services ▪ Participant website tools and resources ▪ Quarterly Reporting to Committee 	<p>Administration Issues: Christopher Chavez Christopher.chavez@tiaa.org</p> <p>Larry Spradley Larry.Spradley@tiaa.org</p> <p>Local Representative: Brandon Dyson (brandon.dyson@tiaa.org)</p>

VI. INVESTMENT POLICY STATEMENT

The Investment Policy Statement (IPS) describes the process used by the Oversight Committee, assisted by its Investment Consultant, in making investment-related decisions for the Plan. The Committee and its consultant look to the IPS as the means of effectively supervising, monitoring, and evaluating the investment options of the Plan. A written IPS typically includes:

- The purpose of the Plan;
- Who is responsible for the oversight of the plan and the scope of those responsibilities;
- The frequency that formalized fiduciary-related activities are conducted;
- How investment options are selected for the plan;
- How investment options are monitored and replaced, when necessary;
- How employee contributions are invested in the absence of a formal employee election;
- How plan expenses are paid;
- Other items pertaining to the operation of the plan.

VII. COMMITTEE MEMBER POLICIES AND RESPONSIBILITIES

Committee Member Orientation and Education Policy

The City of Fort Worth considers it critical for the sound governance of the Plan that Committee members become and remain fully informed with regard to the nature, purposes, structure, operational systems and processes of the Plan. The City of Fort Worth further finds it important that Committee members are provided with opportunities for education and training in areas that will facilitate the performance of their governance and oversight responsibilities as Committee members and fiduciaries for the Plan.

Regular fiduciary training is required for all Committee members and members are ultimately responsible for ensuring that they receive this training. Failure to participate in training may result in removal from the Committee. The City's HR Director or designee may choose to contract with an independent 457 Retirement Plan Consultant to provide guidance to the Committee and to assist in determining the appropriate information and training to meet the Committee's education needs. The Consultant will periodically provide training and information to the Committee on appropriate upcoming conferences and seminars.

Committee Member Attendance Policy

It is essential that Committee members remain mindful of their fiduciary obligations to the Plan participants. In order to govern in accordance with the policies it has established, Committee members must recognize that attendance is vital for the accomplishment of the objectives under each member's trust. No official action can be taken without a quorum of Committee members present. Committee members may participate in any meeting of the Committee by telephone or video conference in a manner consistent with the Texas Open Meetings Act. If vacancies exist on the Committee, a quorum consists of a majority of currently serving Committee members.

If Committee members are unable to attend meetings or expect to be late, they are required to notify the City's assigned Human Resources staff to be considered an excused absence. The City's HR Director or designee, in consultation with the Committee Chair, may recommend to the City Manager the removal of a

Committee member following three (3) consecutive absences at the regular quarterly meetings.

Instead how about:

If Committee members are unable to attend meetings they should try to notify the City's assigned Human Resources staff as soon as practicable.

Committee Member Ethics and Travel Policies

All Committee members are expected to be familiar with and to comply fully with the City of Fort Worth's Ethics and Travel policies in executing their role on the Committee. Any questions regarding these policies and your compliance to them should be directed to the Committee Chair or to the Director of Human Resources.



VIII. OVERSIGHT COMMITTEE CHARTER AND BYLAWS

The Oversight Committee Charter and Bylaws document outlines:

- The parties to the Plan including the Plan Sponsor and the Plan Administrator;
- The creation of the Oversight Committee, its function, and its responsibilities;
- The size of the Oversight Committee, how its members are selected, and their specific responsibilities;
- The selection and responsibilities of the Committee Chair and Vice-Chair;
- Committee meeting protocol and procedures;
- Committee member education policy;
- Other items pertinent to the Committee and its functions.

IX. GLOSSARY OF FINANCIAL TERMS

401(a) Qualified Plans: A retirement plan that meets the requirements of IRC 401(a) and certain other sections. The plan, its employees, its employers, and its retirees receive favorable tax status.

401(a) (17) Limit: An annual limit on the amount of compensation used to calculate an employee's contributions to a pension plan to maintain plan's qualified status under IRC.

401(k) Plan: An employer-sponsored retirement plan that permits employees to divert part of their pay into the plan and avoid current taxes on that income. Money directed to the plan may be partially matched by the employer, and investment earnings within the plan accumulate tax until they are withdrawn. The 401(k) is named for the section of the federal tax code that authorizes it.

403(b) Plan: Section 403(b) of the Internal Revenue Code permits employees of certain non-profit organizations such as schools and hospitals to set up tax-deferred retirement plans. The plans are designated to compensate for the absence of profit-sharing plans at these organizations. Many such plans permit investments in mutual funds or annuities.

401(h) Retiree Medical Account: An account that contains money contributed on a pre-tax basis. A retiree may use the money to pay medical expenses for himself or herself, spouse, or dependents. The IRC does not tax the retiree on this money.

414(h)(2) Pickup: An IRC provision that permits state or local government employers to treat employee contributions to a retirement plan as though the employer made them. The pickup allows an employee to exclude such contributions in gross income for tax purposes until the individual draws a retirement benefit.

415 Limits: An IRC provision that limits benefit payments from and contributions to pension plans. If plans fail to follow these limits, they may lose their qualified status. Section 415(b) sets an annual dollar limit on the benefit that can accrue or be paid to participants through a defined benefit plan in a given year, whereas Section 415(c) limits the total amount of employee and employer contributions that can be made annually to an individual's defined contribution plan.

415(m) Plan: An IRC provision that allows a retirement plan to pay a benefit that exceeds the 415 limits, but is otherwise lawful under statute of the state or local government.

457(b) Plan: A defined contribution plan, also called a deferred compensation plan, available to all state and local governmental entities. Such plans permit employees to defer (that is, move into a tax-favored account) a portion of their pay. The employee typically directs the investments. Because of the tax-favored treatment, the employee pays no tax on contributions and earnings until the individual separates from service or meets other criteria. The IRC limits the amount of the yearly deferrals. The limit is adjusted for inflation.

12(b)-1 Fees: Named for the SEC rule that permits investment companies that sell mutual funds to charge an additional, ongoing fee for advertising and marketing the funds.

Absolute Return: Measures the actual rate of return of assets in a fund without regard for how that return compares to other funds. (See rate of return, relative return)

Accrued Benefit: The pension benefit an employee earns through participation in a plan as of a specific date. In a defined benefit plan, once vested, this is the annual benefit an individual receives at normal retirement age. In a defined contribution plan this is the balance in the plan account, whether vested or not.

Accrual/Accrued Income: Pro-rated income earned, but not yet paid, is called accrued income. As an example, interest on bonds is typically paid on a precise semiannual schedule of dates, such as February 15 and August 15. Therefore, income earned on securities bought or sold at a time other than these precise dates carries the income associated for the pre-rated time until the next payment is due. Note—when accrual income information is provided by a custodian, it can be used for calculation performance to reflect the impact of the income on total return.

Accrual Rate: The percentage of salary level at which a pension benefit builds up, or accrues, over years of credited service in a typical defined benefit plan.

Accrued Interest: Since bonds pay a fixed coupon on a regular schedule, bonds will, at any point, possess interest that is due to the bond holder. This accrued interest is bought and sold along with the principal amount when the bonds are traded. Accrued interest should be added to any accounting of portfolio market value; if the portfolio is liquidated, the account receives the accrued income from each issue that is sold.

Accrued Liability: The actuarial present value of the plan's pension obligations as determined by an actuarial cost method. It projects the total obligation to cover the costs to provide pensions for former and present employees and builds these assets over time to cover the liabilities.

Active Management: An investing approach that aims to focus on specific investments to create a portfolio that outperforms the broad market benchmark for the targeted securities.

Active Participant: An employee not yet retired, participating in a retirement plan, whereby contributions are made to the plan by the active participant, the employer, or both.

Actuarial Assumptions: Projections of anticipated behavior associated with certain plan variables (such as mortality rates) that are developed by an actuary and then used to make estimates of future costs.

Actuarial Cost Method: A formal actuarial process used to measure the present value of future pension benefits and perhaps administrative expenses. Its purpose is to develop an allocation of pension costs and needed contributions to ensure that the plan is sufficiently funded to meet all pension obligations.

Actuarial Gains and Losses: Measures of the differences between actual plan experience and the experience that the plan's actuary had predicted based on the actuarial assumptions.

Actuarial Impact Statement: A description of the liabilities and funding requirements related to a proposed change in the retirement system.

Actuary: Professional who guides the fiduciaries of a pension fund with information for making sound short and long range planning decisions for events that might occur next year, 5, 10 or more years from now. Using actuarial, accounting, legal, financial, investment and human resource planning assumptions to assist with the projections.

Alpha: The alpha is the premium or loss that a manager adds or subtracts by active management above the equivalent theoretical decision to be invested in the market represented by a select market index and “risk free” US Treasury Bills.

American Stock Exchange (AMEX): A private, not-for-profit organization located in New York city that handles roughly one-fifth of all securities transactions in the United States.

Annualized Return: Rate of return calculated for an interval of greater than 1 year, such as 2 years or 5 years, expressed in terms of the “average” return for each of the years in the period. (See rate of return)

Annuity: A series of regular payments, usually from an insurance company, guarantee to continue for a specific time, usually the annuitant’s lifetime, in exchange for a single payment to the company. With a deferred annuity, payments begin sometime in the future.

Asset: Something with a monetary value, e.g., stocks, real estate, accounts payable. Net assets are assets minus liabilities.

Asset Allocation: Proportion in which investments are divided among various types of securities, such as equities, bonds, cash equivalents of other assets. There are different levels of risk associated with different asset allocations. Overall risk, however, is reduced with an allocation to more than one type of security.

Asset Class: Groupings of securities by type, such as equities, bonds, cash, etc.

Average Life: For a bond with early redemption features (such as mortgage pass-through bonds) the average life is when, under typical conditions, half the principal has been returned to the bond holder. Obviously, non-callable bonds’ average life is the same as their maturity.

Balanced Fund: A diversified fund that holds a combination of different types of investments such as equities, bonds, cash or other assets. (See portfolio)

Balanced Market Index: This unique index is a blended market return benchmark reflecting the precise market equivalent asset mix from a portfolio’s actual asset allocating experience. This custom theoretical index is constructed to show the equivalent of investing in the stock, bond and cash market indexes in precisely the same proportion as a real total pension fund has been committed, on average, to its own managed allocations to equities, bonds and cash. The balanced market index can be compared to the fund’s actual returns for another measurement of relative performance.

Basis Points: Simply 1/100th of a percentage point; for example, 0.75% is 75 basis points.

Bear Market: A declining trend in stock markets.

Bearish: A bear thinks the market is going to go down. This makes bearish the opposite of bullish.

Beneficiary: Person or organization entitled to receive income and/or principal under the terms of a trust or a will. The person designated to receive the benefits of an insurance policy or a retirement plan such as an IRA.

Best Execution: Best execution implies that when a manager makes a trade through a broker, the trading strategy must result in the optimum investment decision value for the portfolio. Best execution sometimes includes trading obstacles because the “absolute best price” is not always received or paid in non-retail, institutional trading given the following market conditions:

1. a slight upward price adjustment where liquidity does not permit an easy sale on a difficult trade,
2. a “timing benefit or cost” from rapid variation in price occurring before the trade can actually be completed in the absence of liquidity, as well as other technical situations.

Commissions paid on the trade are often dwarfed in comparison to those other benefits or costs associated with these trading obstacles. Also, best execution takes special factors into consideration which are difficult to quantify such as the value of the long standing working relationship between the manager and the client. These special relationships would mitigate some of these “costs” noted above where trading is not “absolute best price” so that client portfolios are optimally traded over the long term. The investment manager is ultimately accountable for the best execution standards and must act prudently and in a fiduciary manner at all times.

Beta: A statistical measure of market risk that indicates portfolio or security volatility by measuring how returns vary as the market moves up or down. Beta estimates the proportional change in a security fund’s rate of return corresponding to a given change in the market, where the market may typically be the S&P 500. If the beta is 1.0, a 10% increase in return of the return on the market will predict or estimate, on average, a similar 10% increase in the return of the particular portfolio or security. If beta is less than 1.0, such as .9, the portfolio or security is considered less risky than the market and will increase or decrease less than the market. Conversely, a beta higher than 1.0, such as 1.1, indicates a riskier portfolio and the portfolio or security will increase or decrease more than the market. (See risk, volatility)

Blue Chip Stock: There is no set definition of a blue-chip stock, but most people would agree it has at least three characteristics: It is issued by a well-known, respected company, has a good record of earnings and dividend payments, and is widely held by investors. Blue chips can go down, but, since they are unlikely to go bankrupt, are generally considered more conservative than holding a stock in small companies. Blue– chip stocks are usually high-priced and low-yielding. The term “blue chip” comes from the game of poker in which the blue chip holds the highest value.

Bonds: Fixed income securities formally issued by governments, agencies, corporations, or other entities guaranteeing in setting the payment of the original investment plus interest by a specified future date, greater than 12 months in the future. Securities with maturities of less than 12 months are classified as cash equivalents. (See accruals, bond maturity, duration, fixed income)

Bond Fund: Funds that usually have the vast majority of their assets invested in bonds or cash equivalents. (See portfolio)

Bond Maturity: Specifies the period of time when the scheduled principal repayment is to be made. (See bond portfolio maturity, duration)

Bond Portfolio Maturity: In a bond portfolio, the maturity structure of each bond contributes to the repayment schedule for all the bonds, on average. This average period of years is often referred to as the bond portfolio maturity. (See bond maturity, duration, fixed income)

Bull Market: A rising trend in stock prices.

Bullish: A bull is someone who thinks the market is going up, which makes bullish the opposite or bearish.

Callable Bond: A bond that can be redeemed by the issuer. Often, corporations issue bonds that are callable, giving the issuer the option of paying off the bonds when interest rates drop and issuing new, lower coupon bonds, which will reduce the company's annual expense.

Call /Prepayment Risk: The risk that a bondholder has bonds taken away (in exchange for cash) during a period of declining interest rates. A bond that is callable or a mortgage bond that can be prepaid will have a virtual ceiling on its price when rates fall and prices rise, callable bond's prices will eventually top out, limiting the "upside potential" of these bonds.

Capital Gain: The profit made on the sale of property or securities. A short-term capital gain is made on holdings held less than a year; a long-term capital gain on those held for more than a year.

Capital Gains Distribution: Payments to mutual fund shareholders of gains realized on the sale of the fund's portfolio securities. These amounts are usually paid once a year and should be added to the basis of your investment.

Capital Loss: The loss taken on the sale of property or securities. Holding "cash" does not have a pile of dollar bills somewhere; the money is invested in interest-bearing short-term securities.

Cash/ Cash equivalents: securities (commercial paper, U.S. Treasury Bills, demand notes, short-term investment funds, etc.) with a term to maturity of less than one year. Considered a "risk free" investment when backed by the U.S. Government, in the case of Treasury Bills.

Certificate of Deposit: Usually called a CD, a certificate of deposit is a short to medium term instrument (one month to five years) that is issued by a bank or savings and loan association to pay interest at a rate higher than that paid by a passbook account. CD rates move up and down with general market interest rates. There is usually a penalty for early withdrawal.

Cola or Cost of Living Adjustment: A device to prevent inflation from eroding the value of a pension payment. A COLA can be a flat adjustment (e.g. 2% per year) or can be tied to an index. The index can be internal (e.g. adjustments are made if fund performance exceeds actuarial assumptions or other pre-determined levels) or external (e.g. based upon increases in the customer price index). The COLA with which most people are familiar is the one enacted in 1973 for Social Security and Supplemental Security Income Benefits. The Social Security COLA is based upon the Price Index for Urban Wage Earners and Clerical Workers (CPI-W) and effective January, 2002, will increase 2.6%.

Commercial Paper: Short term debt obligations of a corporation. Commercial paper is generally sold at a discount to par, instead of paying a coupon as most bonds do.

Commissions: The fee paid to a broker for trading a stock or bond. This is also referred to as “soft dollars”. Typically, in the case of listed equities, the commission is precisely stated on a confirmation ticket reflecting the transaction. However, with bonds or unlisted securities, sales are “net”, which means the commissions are effectively built into the sale or purchase price, and, therefore, are not directly reflected on a confirmation ticket.

Common Stock: A unit of equity ownership in a corporation. Owners of common stock exercise control over corporate affairs and enjoy any capital appreciation. They are paid dividends only after preferred stock. Their interest in the assets, in the event of liquidation, is junior to all others.

Consultant: Registered investment advisory firm that assists fiduciaries with impartial judgment on managers’ investment performance, meeting objectives, understanding risk, selecting new managers, and long term asset allocation issues. There are two general types of consultants: independent consultants and broker consultants. Independent consultants are typically paid a fixed fee for their services in order to remain free of any conflicts of interest. Broker consultants are typically paid a variable fee for their services based on commissions generated by the fund.

Contribution: An addition by the sponsor of cash or securities to a fund.

Counsel: Lawyer who guides the fiduciaries’ actions, and makes certain that Board actions or decisions are within the rules of the plan document and the laws prescribed by municipal, state and federal regulations.

Coupon: The interest the bond issuer pays to the bond holder, expressed as a percent (e.g., 6 5/8%). Normally half of the coupon is paid twice a year.

CPI (Consumer Price Index): The CPI measures changes in the consumer prices (food, transportation, housing, entertainment, medical care, etc.). It is published monthly by the U.S. Bureau of Labor, and it is used as a gauge for measuring inflation. The CPI is also used as a cost of living index.

Credit Risk: The risk that a bond issuer will become less creditworthy, leading to relative price under performance, or, in extreme circumstances, default. Ratings agencies review companies in order to judge their ability to meet future interest and principal payments and assign corresponding ratings.

Custodian /Trustee: Institution that keeps the independent ownership of assets for the benefit of the sponsor separate from all other sponsor funds. The custodian typically maintains records on financial transactions and assets, collects dividends and interest, settles security transactions, disburses checks, accepts contributions, administers the general cash flow of the fund, and provides statements showing financial details to the fiduciaries.

Database/Universe: A large statistical sample of fund information including returns, or other statistics. There are several universes in a data base displaying a variety of interesting information about similar funds, such as managed equity and bond returns. Values are arranged from best, 1st actual results to the specific universe. This investment information is collected from similar investors, and allows important comparisons about how specific investment results compare to similar funds.

Default: Occurs when the issuer misses a scheduled interest or principal payment. Generally, companies will take extreme measure to avoid defaulting, since it carries serious legal implications.

Defined Benefit Plan: A 'Qualified Retirement Plan' than is designed to provide a specified benefit to all participants upon retirement.

Deployment: Committing investments in the portfolio among alternative asset classes such as equities or bonds.

Disbursements: Payments made directly out of the assets of a fund, such as to pensioners, for management fees, for consultant fees, for actuarial services or legal expenses.

Discount: A price less than par. Generally, demand is stronger for callable bonds if they are selling at a discount to par.

Diversification: Process of reducing or avoiding risk inherent in holding a limited number of securities in a portfolio, a limited number of industry sectors, concentrating in one asset class or in one styles of investment management. By holding a variety of asset classes such as equities, bonds, cash, or real estate, or different manager styles, a higher level of diversity is assured. Further, risk of loss to the total asset holdings is reduced by the combination of dissimilar assets or styles. A fund's diversification is often measured by using the statistical computations of r^2 . (See Risk)

Dividend: A share of company earnings paid out to stockholders. Dividends are declared by the board of directors and paid quarterly. Most are paid as cash, but they are sometimes paid in the form of additional shares of stock.

Dow Jones Industrial Average (DJIA): An index representing the general price movement of 30 widely held industrial stocks listed on the New York Stock Exchange. The value of the Dow is determined by dividing the sum of per-share prices of the 30 component stocks by an adjusted denominator.

Duration: An indication of bond risk that measures the risk-adjusted "average" life of bond or bond portfolio. Generally, the longer the bond duration, the higher the risk.

Duration: The best measure of how a bond's price changes when interest rates change. Like maturity, duration is expressed in years: unlike maturity, duration also takes into account the income that a bond generates before maturity. As an example, a bond with a duration of 5.0 years will suffer a price decline of approximately 5.0% if interest rates rise by 1.00% and price rise of approximately 5.0% if interest rates decline 1.00%. Another bond with a duration of 9.0 years will suffer a price decline of approximately 9.0% from the same 1.00% increase in rates and a price increase of 9.0% if rates drop by 1.00%.

Equities: Publicly traded securities that represent ownership in companies. A claim on the success or failure of a firm to grow and /or pay dividends. Often referred to as stocks.

Equity Fund: Funds that usually have the vast majority of their assets invested in equities or cash equivalents. (See portfolio)

Fiduciary: Person or agent who is held in confidence and trust. A pension trustee is a fiduciary as he or she ultimately prudently decides which actions a Board will take on behalf of the plan participants.

Fixed Income: Securities backed by the promise that interest will be paid to the holder at a fixed rate until sale, maturity, or redemption. Categories include bonds, mortgages, and short-term assets. (See bonds)

Fixed Income: In contrast to stocks, whose income (dividends) can change, most bonds pay a fixed coupon, and are often referred to as “Fixed Income” securities.

Foreign Exchange Risk: The risk that a change in a currency’s exchange rate (relative to U.S. dollars) will negatively impact the return on a foreign bond when translated into dollars.

Gain/Capital Gain: The realized or unrealized increase in market value of a security or a portfolio at the end of a specified time period, excluding the effect of income, contributions and withdrawals.

Growth Fund: A mutual fund which seeks Capital Appreciation, that is, to make its shareholders’ capital grow over time by investing primarily in stocks that increase in value. Dividends are a minor consideration.

Growth and Income Fund: A mutual fund which seeks to make shareholders’ capital grow and also provide income. There can be wide variations in the relative emphasis on these two objectives.

Index: A measurement of a general market trend that is typically broad based. Examples of indexes are the S&P 500, a proxy for the general equity market; the Consumer Price Index, used to measure aggregate price changes in the economy; and many others noted in this glossary. One of the widely used benchmarks used to compare characteristics or performance versus a manager’s portfolio. Indices can be broad (e.g., Salomon Broad Investment Trade Index, or Lehman Aggregate Index) or constrained (e.g., Lehman 1-5 year Government Index).

Index Fund: Collection of securities in a portfolio uniquely selected to replicate the performance or results of a specific index, such as the S&P 500. An index fund typically holds fewer securities than The index, but precisely replicates the index in other respects.

Inflation: The rate at which prices in general are going up (usually quoted on an annualized basis). The consumer price index (CPI) tracks many consumer goods, the producer price index (PPI) tracks many industrial goods and materials. Inflation is a decrease in the value of money and is thought generally to result from an increase in the supply of money (both actual dollar bills in circulation and readily spendable money such as checking account).

Interest Rate Index: The degree to which a bond’s price will change with movements in interest rates. For investment grade bonds, interest rate risk is by far the most important source of risk. Duration is the best measure of interest rate risk.

Investment Income: Cash dividends on equities, or interest on fixed income securities.

Investment Objective: Desired result against which the progress of an investment program can be measured. May be expressed as an absolute rate of return, percentages above inflation, or returns relative to other funds or indexes.

Lehman Brothers Government/Corporate Bond Index (LB G/C Index): An index composed of approximately 5,000 publicly issued corporate and U.S. government debt rated Baa or better, with at least one year to maturity and at least \$1 million par outstanding, weighted by the market value of the issues

included in the index. Its rates of return reflect total return with interest reinvested. The index is frequently used to represent the bond market.

Liquidity: The ease with which a bond can be bought or sold. The cost of trading can be measured in the “Bid/Ask Spread”, the difference between what the market is willing to pay for a bond and at what price the bond will be sold. Generally, bonds with higher ratings, that are non-callable, and have shorter maturities will have better liquidity.

Loss/Capital Loss: The realized or unrealized decrease in market value of a portfolio at the end of a specified time period, excluding the effect of income, contributions and withdrawals.

Manager: Investment firm selected to manage the assets of a fund in order to meet the fiduciaries’ long range objectives by maximizing returns at minimum risk.

Manager Style: Classification of a portfolio or an investment manager based on the types of securities held, over a period of time. Manager styles include Value, Yield, Growth, Contrarian, Sector Style Rotator, Undiversified, Small Capitalization, and others. Over long time periods of 7-20 years or more, no single manager style provides superior results over any other style. Importantly, different manager styles provide significant diversification in a pension fund.

Market Cycle: Time period over which a broad market index, such as the S&P 500, falls from a high point to a low point and returns to a high point, or reverse (low/high/low). The first type of market cycle is called a peak-to-peak; the latter is called trough-to-trough. A market cycle is typically the shortest time a manager should be judged for relative performance because we are most fairly able to observe the manager’s strength or weakness in both the rising and falling market conditions.

Market Risk Versus Non Market Risk: The simple version of these abstract mathematical computations is that market risk quantifies how much variation in a portfolio’s rate of return can be explained by the market. Market risk in a security or portfolio is mathematically expressed as beta. The difference between what is explained by the market risk and the actual return called non market risk, or that risk which adds or subtracts value attributable to manager activity including security selection, sector selection, trading, asset allocation changes, etc. (See beta)

Maturity or Term: The date that the principal amount of the bond is paid by the issuer to the bond holder (e.g., May 15, 2004). The maturity of a bond is a rough estimate of its price volatility.

Median: The Value of the middle fund in the universe (i.e. the 1500th fund of 3000 funds); not always precisely the arithmetic average. The median holds a ranking of 50th. (See relative return, rankings)

Money Market Fund: A mutual fund that invests in short-term corporate and government debt and passes the interest payments on to shareholders. A key feature of money-market funds is that their market value doesn’t change, which makes them an ideal place to earn current market interest with a high degree of liquidity.

Money Market Indexes: Indexes representing the returns of professionally managed funds investing in cash and cash equivalents securities. (See cash/ cash equivalents)

Mortgage Backed Securities, Mortgages, or MBS: In their most common form, these are bonds (issued by one of three Government agencies) consisting of a large bundle of single-family Residential mortgages with the same interest rate. These are the so-called “pass-through” securities, since the homeowners’ monthly principal and interest payments are passed-through to the bond holders. There are many more complex securities which are derived from pass-throughs, including CMOs, REMICs, IOS, POs and so on. These securities introduce an additional element of risk, and must be carefully modeled and monitored.

Mutual Fund: An open-end investment company. Its portfolio is managed; that is, it buys or sells Securities according to changing conditions. It sells new shares on a continuous basis and buys back (redeems) outstanding shares. Buy and sell prices are equal to the fund’s Net Asset Value (plus sales and redemption charges, if any). Contrasts with Closed-End Investment Company.

NASDAQ: The Computerized National Association of Securities Dealers Automated Quotation System that provides price quotations of securities traded over the counter.

National Public Fund Median Index: An index representing the median or average returns for the average public pension’s total fund. Included are municipalities, counties, and states.

Net: See Commission for the concept of “net” with respect to security valuations.

Par: The price the bondholder will receive for his bonds at maturity. In almost all cases, par is equal to a price of 100.

Peer Group: A very specific subset of the data base with important similarities allowing meaningful comparisons of investment results for the total fund or portion of the fund. Examples include public pension funds, balanced, equity or bond funds, funds with similar asset mix, and funds with similar risk levels.

Performance: See rate of return.

Policy: Guidelines prescribed to obtain investment objectives, including specifications of acceptable risk and diversification levels consistent with those objectives (e.g. limits on commitments to stock, bonds, cash or other investment vehicles) Policy is generally independent of a time horizon and is based on a neutral market outlook.

Political Risk: The risk that a bond’s price will decline as a result of a country’s uncertain political future.

Premium: A price greater than par. Demand is low for callable bonds trading at a premium.

Prepayment: The rate at which a mortgage backed security is prepaying its principal. The prepayment rate is determined by the rate at which homeowners pay off their mortgages—either by refinancing, moving, or other form of accelerated payments. Since refinancing is such a big part of the prepayment equation, prepayments tend to accelerate when rates drop (homeowners pay off older, high interest loans) and slow down when rates rise. Prepayments act as a partial “call” on the bonds outstanding, reducing the bond holder’s principal little by little. “PSA” and “CPR” are two common measures of prepayment speed.

Prime Rate: The loan rate banks advertise as their best rate; that is, available to their best customers.

Property: Includes cash, securities, real estate, and any other possessions.

Proxy/Proxy Voting: A proxy is a document empowering a person to act for another. Specifically, with regard to common stock owned by Pension Fund, a proxy empowers a person to vote in the Pension Funds' stead at stockholders meeting using the voting power held by the total number of shares of stock owned.

Quality Ratings: Several independent research companies provide ratings on stocks and bonds. In the case of both stocks and bonds, these ratings are intended to give an indication of the Issuers' financial soundness. Bond ratings assess a company's ability to pay bondholders interest and to repay principal in a timely manner. Bond ratings assess a company's ability to pay bondholders interest and to repay principal in a timely manner. Stock ratings assess a company's balance sheet, relative industry position, dividend payment records and other features to fundamentally judge the stock's strength. These ratings provide an independent opinion about the quality of diverse and sometimes complex securities.

Rankings/ Percent Rank/ Percentile: During a given measurement period, a ranking between the 1st and 99th percentiles in a universe is given, representing the relative position of that fund or fund segment in the universe. For example, ranking of 5th means that the fund performed in the top 5% of all funds and that 95% of the funds performed below this return. When reviewing or comparing rankings, we must always be careful to understand what universe we are inspecting, what value we are reviewing and over what time period we are making observations. (See data base/universe, relative return, median)

Rate of Return: A mathematical measure of the rate of change in the market value of a fund's assets. Rates of return reflect both realized and unrealized capital gains and losses, as well as total earnings from interest and dividends. Contributions of distributions that increase or decrease the total value of the fund have no effect on investment performance. Often referred to as Performance or Total Return. (See absolute return, annualized return, relative return)

Ratings: A grading system for bonds, designed to estimate the credit quality of a bond issue. There are two major ratings agencies, Moody's and Standard and Poor's. Investment grade ratings from highest to lowest, respectively: Aaa (AAA), Aa (AA), A (A), Baa (BBB). Ratings below Baa/BBB represent non-investment grade ("junk") bonds, and possess a much higher degree of speculation than high-grade bonds.

Realization Gains/Losses: Gains and losses that result from the actual sale of securities.

Registered Investment Advisor (RIA): By law, an individual or business that receives compensation of any form for advice or services related to money, securities, or any financial product must register with the SEC. The SEC does not approve or disapprove of the 'Registered Investment Advisor's' professional knowledge or practice. This designation simply means that the person or business entity has complied with the law and registered with the SEC.

Relative Return: Compares absolute returns against investment results of similar portfolios. A ranking is provided to determine if a manager performs better than, equal to, or worse than a peer group. For example, a 12% absolute return with a ranking of 45th means that the return ranked in the top 45% of the data base: 45% of the funds did better, 55% did worse. First percentile is best; 99th percentile is worst. Median is average or 50th percentile. (See median, rankings)

Risk: The uncertainty associated with the possibility that actual investment results may not coincide with the expected rate of return associated with a given level of assumptions about asset mix, quality of investments and other factors. There are many measure of risk such as beta. Duration, standard deviation and other abstract statistics. High risk typically provides high returns couples with the chance of equally high losses. Low risk usually provides low returns with the chance of Equally high losses. Low risk usually provides low returns with the chance of similar low losses. (See beta, duration, diversification, volatility)

Sectors: The major groupings of the bond market. In the U.S. markets, the three main sectors are Government Bonds, Corporate Bonds, and Mortgage Bonds. Each of these can be broken into sub- sectors (e.g., Corporate consist of finance, industrial, utility and Yankee bonds).

Securities and Exchange Commission (SEC): A government agency responsible for the supervision and regulation of the securities industry.

Sharpe Ratio: Another measure of volatility combining two important risk elements: 1) portfolio return premiums earned over the “risk free” Treasury Bill rate, and 2) the fund’s standard deviation of returns. The Sharpe ratio assesses the volatility of a portfolio by analyzing how returns vary per unit of risk. The calculation is fairly simple. Take the return of the portfolio and subtract the “risk free” rate of Treasury Bill, then divide this return by the standard deviation of the portfolio’s returns over the period.

S&P 500: Standard and Poor’s benchmark indicator of 500 stocks, which tracks 400 industrial stocks, 20 transportation stocks, 40 financial stocks, and 40 public utilities. It is a market capitalization weighted index often used as an index against which money managers measure their performance.

Stock Market: An organized marketplace where securities are bought and sold on behalf of investors.

Total Return: Comprised of both the income and change in market value of a portfolio over some time period. Returns over multiple time periods are linked geometrically. Returns covering periods longer than on year are generally annualized a five-year cumulative return of 50.0% would be expressed as an 8.5% annual return.

Trustee: Person or organization entrusted to manage, administer, and distribute the trust for the benefit of the trust beneficiaries, in strict compliance with the terms of the document. Trustees are held to a high fiduciary duty of loyalty to the beneficiaries, as well as to reasonableness in investing, and making distribution to trust beneficiaries.

Universe: See data base.

Volatility: The degree to which a fund’s rates of return have fluctuated over a time period. High volatility tends to be associated with investment policies and management strategies of an aggressive nature; low volatility tends to be associated with conservative policies and strategies. A fund’s volatility is often assessing by using the statistical computations of standard deviation.
(See beta, risk)

Yield (current Yield and Yield to Maturity): One concept of yield is very simple. It represents the ratio of expected income to the current price of a security. However, this definition, known as the current yield,

is technically deficient, because the time value of money for the expected cash flows from coupon payments and the final principal payment is not considered in the calculation.

Yield: A measure of a bond's income relative to its price. The most accurate measure is Yield to Maturity (or alternatively, Yield to Worst) which allows comparisons between different types of bonds, and considers the present value of all future payments.

Yield Curve: The relationship between the maturities of bonds and their corresponding yields. Generally, bonds with longer maturities will have higher yields, forming a "normal" or "positively sloped" yield curve. These relationships change with economic activity, supply/demand, etc., leading to continuous shifts in the yield curve.

Yield Spread: The incremental yield advantage that a bond offers compared to a like- maturity U.S. Treasury. For instance, a 10-year maturity corporate bond yielding 7% would offer a yield spread of 75 basis points (.75%) over a 10-year Treasury yielding 6.25%.

Yield to maturity is more computationally and conceptually complex, but it provides a more accurate estimation of the yield on an investment. Yield to maturity is the rate of return or rate of interest an investor would earn if an investment equal to the price of the bond could generate a cash flow precisely equal to the semi-annual interest coupon payments plus the principal of the bond in precisely the same payment rhythm as the issuer of the bond promised. In other words, yield to maturity is the rate of return that makes the sum of the present values of each of the cash flows precisely equal to the original asset.