



BNY MELLON



January 22, 2021

John Meyer
Director of Contributions and Plan Management
820 Silver Lake Boulevard, Suite 100
Dover, DE 19904
Email: Treasury_RFP@delaware.gov
Phone: (302)-672-6705

RE: REQUEST FOR PROPOSAL – DELAWARE COLLEGE INVESTMENT PLAN

Mr. Meyer,

On behalf of Sumday and BNY Mellon, I would like to thank you for the opportunity to participate in the Request for Proposal for the Delaware College Investment Plan. I believe that our team has prepared a comprehensive and compelling response for your consideration. We have thoroughly reviewed the RFP, associated terms and conditions, and provided our response in the exact order prescribed in the RFP.

Respondent's Information:

Parent Entity	The Bank of New York Mellon
Name	Sumday Administration
Location	New York, NY
Street Address	240 Greenwich Street New York, NY 10286

Respondent's Representative:

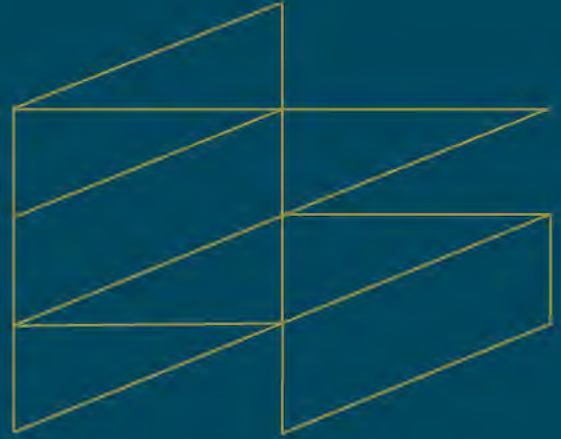
Name	Douglas Magnolia
Title	Chief Executive Officer
Phone	212-298-1685
E Mail	Douglas.magnolia@bnymellon.com

In our response to the RFP, we have provided all attachments and associated documents required per the RFP instructions.

Our goal is not to simply match the current service offerings, but to leap-frog historical service paradigms by applying new technologies, user experience models, and development approaches while leveraging BNY Mellon's proven core processes and procedures. Our financial proposal benefits both the plan participants and the State. Thank you for favorably considering us in this review process and please let me or any of my colleagues listed in the RFP know if we can be of any assistance in your evaluation.

Kind Regards,

Douglas Magnolia
Managing Director, BNY Mellon / CEO, Sumday Administration LLC



Delaware College Investment Plan

Executive Summary

January 22, 2021

Our Understanding of Your Needs

Introduction

Sumday Administration, LLC ("Sumday"), an indirect and wholly owned subsidiary of The Bank of New York Mellon Corporation ("BNY Mellon"), is pleased to respond to the Delaware Program Manager RFP.

As the Board seeks to ensure that the Plan continues to operate effectively, its challenges are clear. The Board must:

- Help to ensure that the Plan's message resonates with your constituents to promote the importance of education savings and to drive enrollment & contributions
- Find the best possible plan manager that understands your goals and is focused on delivering a flexible, high quality solution that is innovative and forward looking, yet at a reasonable cost
- Be a leader in education 529 savings. Always looking for ways to improve the program and deliver an innovative yet simple and efficient enrollment process with high performing, straightforward investment options
- Establish the infrastructure and transparency required for the Board to provide effective oversight, within a complex regulatory environment

BNY Mellon understands these challenges and our RFP response provides information that demonstrates how we can support the Board's end to end process.

In Sumday and BNY Mellon, you will find an innovative, highly consultative and experienced team supporting your efforts, with nimble technology and a highly effective process. Our onboarding and conversion methodology is well-proven and mature, with a robust project management discipline and transparent communication to give you confidence in a seamless transition. Ultimately, your success is our success.

Who We Are

Founded in 1784, **BNY Mellon** is a global investments company dedicated to helping its clients manage and service their financial assets throughout the investment lifecycle. Whether providing financial services for institutions, corporations or individual investors, BNY Mellon delivers informed investment management and investment services in 35 countries and more than 100 markets. The depth and strength of the organization enables an efficient solution for the State through the inclusion of services from Sumday.

Established as a Delaware limited liability company in 2014, **Sumday** was created by a team of ambitious entrepreneurs at BNY Mellon to help people save and invest for the future. It is the embodiment of the bank's mission: to improve lives through investing. Sumday is a combination of people, technology, creativity and financial services that helps businesses, institutions and government entities reach their goals.

The State would leverage our highly experienced team that currently supports our other state education and ABLE program clients, including Doug Magnolia and Jim Balsan – CEO and COO of Sumday. We would seek to provide to the Board the same high levels of service and collaboration that our clients have become accustomed to. While we do work with other plans currently, we also understand that one size does not fit all. Our relationship with the Board will be independent and tailored to meet your unique needs.

1. Consists of AUC/A primarily from the Asset Servicing business and, to a lesser extent, the Clearance and Collateral Management, Issuer Services, Pershing and Wealth Management businesses. Includes the AUC/A of CIBC Mellon Global Securities Services Company (CIBC Mellon), a joint venture with the Canadian Imperial Bank of Commerce, of \$1.4 trillion at September 30, 2020.

2. Excludes securities lending cash management assets and assets managed in the Investment Services business.

\$38.6T

Assets under custody and/or administration¹

\$2T

Assets under management²

35

Countries where we operate

1784

Year we were founded by Alexander Hamilton

Our Solution

Summary of Sunday / BNY Mellon Program / Plan Manager Solution

BNY Mellon and Sunday have a proven history of design and implementation methods that enable our clients to quickly create custom solutions for their program management needs. We look forward to working in collaboration with the Board to support a program that both resonates with your constituents and addresses your operating requirements. Some of the key structural elements that we will employ include:



- **An open platform for investment options where the Program Manager does not earn any revenue from the funds offered in the plan.** This means that we do not require proprietary products and allows for maximum flexibility to support the investment policy of the Plan, which provides a low cost, diversified and conflict free solution. Focusing on best in breed managers provides both asset and investment manager diversification. The universe of fund options should not be limited by the investment manager. The Plan should be focused on investment outcomes with the lowest possible risk at the best price. Fund managers are in a price war and your investors should benefit.



- **Expanded functionality** is available through our platform. This includes key requirements such as: smooth year of enrollment glide path options, innovative new services including live chat and screen share capabilities for Plan participants, as well as support for novel local-based contribution options. Our platform is never static. We continually improve and iterate to publish soft releases about every 6-8 weeks.



- **Mobile, Digital / Web front end application** specifically designed with the User's experience as the primary driver of features and functionality. We believe that a successful program will provide an exceptional customer experience both via digital and direct interactions. We have spent countless hours designing our front end to consider very simple human behaviors and traits, and where possible leverage those behaviors to create a simple, transparent, yet fully functional product easily accessible by a wide range of participants as well as being ADA compliant.



- Our scale and breadth of services enable us to deliver a **fully automated process** that only requires manual intervention when participants choose to follow a paper-based enrollment or provide telephonic transaction instructions. These 'back-end' services are directly linked to the front-end technology providing a seamless single point for participants as well as the Board itself. We currently administer more than 165 million individual accounts representing 529 college programs, ABLE Programs, HSAs, IRAs, entire Mutual Fund families and investment advisors.



- **Robust Call Center** which has been specifically trained and monitored to the highest level of quality standards.



- A successful program requires not only features and functionality at an appropriate cost to the programs and your participants but relies on timely and accurate reporting to all interested parties. Important to our design philosophy is our belief that **reporting** needs to be flexible, timely, efficient and clear.

Why BNY Mellon / Sunday?

There are a number of important considerations that we believe highlight exactly why we are unique and best suited to meet the needs of the Delaware Plan through a complete, end-to-end solution:

Flexibility – BNY Mellon provides the Board with the flexibility to deliver an innovative service offering to meet your specific needs. Our approach to platform development is nimble, allowing for timely and efficient updates as those needs evolve. At the same time, we are a powerhouse securities processing provider which helps enable the program to grow without concerns about capacity constraints. With all service components housed within a single organization, we offer accountability and ease of use that is unmatched amongst our competitors.

Experience – We combine a knowledgeable service team singularly focused on your business, with demonstrated program management success. In addition, BNY Mellon brings extensive operational expertise in 529 college-savings plans, Defined Contribution plans, 401k plans, traditional individual and Roth IRA accounts (“IRAs”), and Health Savings Accounts (“HSAs”), which all share significant operational similarities. The end result is a solution grounded in quality, efficiency and uniquely poised to help the Plan achieve success.

Alignment – This is truly a unique and important public policy program, with its own set of service components and measures of success; which, very significantly, fit squarely within our corporate vision of ‘Improving Lives through Investing’ and Mission of ‘Helping people realize their full potential by leveraging our distinctive expertise to power investment success’. Our proposal brings to bear the full support of our executive management team, who have pledged the resources necessary to help ensure a high-quality solution and unwavering ongoing support of your Plan objectives.

Organizational Strength – Founded by Alexander Hamilton in 1784, BNY Mellon is one of the oldest financial institutions in the world. We have endured, been innovative and gone on to prosper through every economic event and market move over the past 236 years. From the strength of our balance sheet with US \$428 billion in total assets, as of September 30, 2020, and as demonstrated by our industry leading credit ratings and our position as a Globally-Systemically Important Financial Institution with the vast set of resiliency and capital requirements and oversight this entails, our solution brings to bear a vast depth of resource and stability.

Commitment to the Public Sector – The public sector market is a key focus across the entire BNY Mellon organization. We have dedicated client-focused teams covering the public market within our various business lines. We are proud to be the number one provider for the Top Public Funds with 43% of the largest Public Funds¹. With \$2 trillion in public sector assets under custody and administration and 149 clients, BNY Mellon is dedicated to serving the unique needs of this highly complex and important market².

BNY Mellon has a proven track record of leading detailed transition and implementation projects, with robust program and project management processes and thorough communication. We view Delaware 529 as a valuable relationship, and look forward to the opportunity to work with you on this important initiative.

^[1] MMD, P&I Research as of 2017
^[2] BNY Mellon Reports as of 12/31/19

Our Commitment to The Delaware College Investment Plan

Our focused business strategy and commitment to this industry will contribute to the continued success and growth of your organization. Our combination of technology, products and services, delivered by a knowledgeable, experienced team, offers the State a premier client servicing philosophy and solution to your requirements that will continue to evolve over time.

At the core of our philosophy and approach is our mission to help you reach your highest goals and solve your toughest problems. With our fully-integrated, industry-focused suite of services, our promise is to serve you by designing and delivering innovative solutions to help you manage and grow your organization. By listening carefully to you, we will provide creative solutions and practical strategies in a consultative approach.

We understand the requirements you have today and know they will change tomorrow. With the depth of our capabilities, we stand ready to support the Delaware 529 as your needs evolve.



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Doug Magnolia
CEO of Sumday



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Jim Balsan
COO of Sumday



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Matt Forester
Lockwood Advisors



Sally Riefenstahl
Sumday Account Executive



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Declan Denehan
Global Client Management



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Tom Malone
Call Center





BNY MELLON



DELAWARE COLLEGE INVESTMENT PLAN

Tab B: Questionnaire

Response to Request for Proposal for Program
Manager and Administration Services Issued by the
Office of the State Treasurer

Contract number TRE-CPM-20102

Sumday Administration, LLC

January 22, 2021

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Attachment 1: Vendor Questionnaire

Contract Number: TRE-CPM-20102

Relevant Experience

- Provide a history of your organization as it pertains to defined benefit, defined contribution, and college investment plans. Provide a matrix showing revenues, assets under management, and participant count for each line of business.

Sumday Administration, LLC resides in BNY Mellon's Investment Services group. Established as a Delaware limited liability company in 2014, Sumday was created by a team of ambitious entrepreneurs at BNY Mellon to help people save and invest for the future. It is the embodiment of the bank's mission: to improve lives through investing. Sumday is a combination of people, technology, creativity and financial services that helps businesses, institutions and government entities, reach their goals.

For all programs, Sumday Administration, LLC acts as Program Manager and primary contact for the State and coordinates and monitors all activities of the program. They act as 'general contractor' and then engage the various BNY Mellon legal entities needed to fulfill all aspects of running either an ABLE or Education program.

In each program the Sumday application is the core investor tool to open and manage their accounts. We are continually improving and evolving the application and managing the ongoing development, design, testing and running of the application in all aspects. We pride ourselves on both our attention to detail with regard to accessibility for the application, the Marcom sites and the program documentation and forms, as well as the advanced features of our ABLE programs.

BNY Mellon has extensive experience in account administration and recordkeeping through our Transfer Agency and Sub-Accounting business, including IRA accounts, Non-Retirement accounts, College 529 plans, ABLE Plans and Health Savings Accounts. All of these plans have similar operational components. Sumday is directly connected to the BNY Mellon institutional recordkeeping system SuRPAS. Please refer to the following table that describes services we provide to our current client relationships.

Plan / Service Type	Clients	Assets	Participants	Services
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Plan / Service Type	Clients	Assets	Participants	Services

- For non-incumbents, describe your transition experience, provide a sample transition plan, and identify your transition team members for this engagement. Specifically identify every defined benefit, defined contribution and college investment plans transitioned in the last five years.

[Redacted content]

We also request representation from the business and technical communities at the prior agent to facilitate the definition of business and functional requirements, participate in the project management process, and provide technical guidance for any interfaces or customer-specific product integration.

We not only take into consideration the core daily processing requirements, but also periodic processing, such as statement generation and tax reporting.

The following is a sample list of responsibilities and activities, but is not exhaustive:

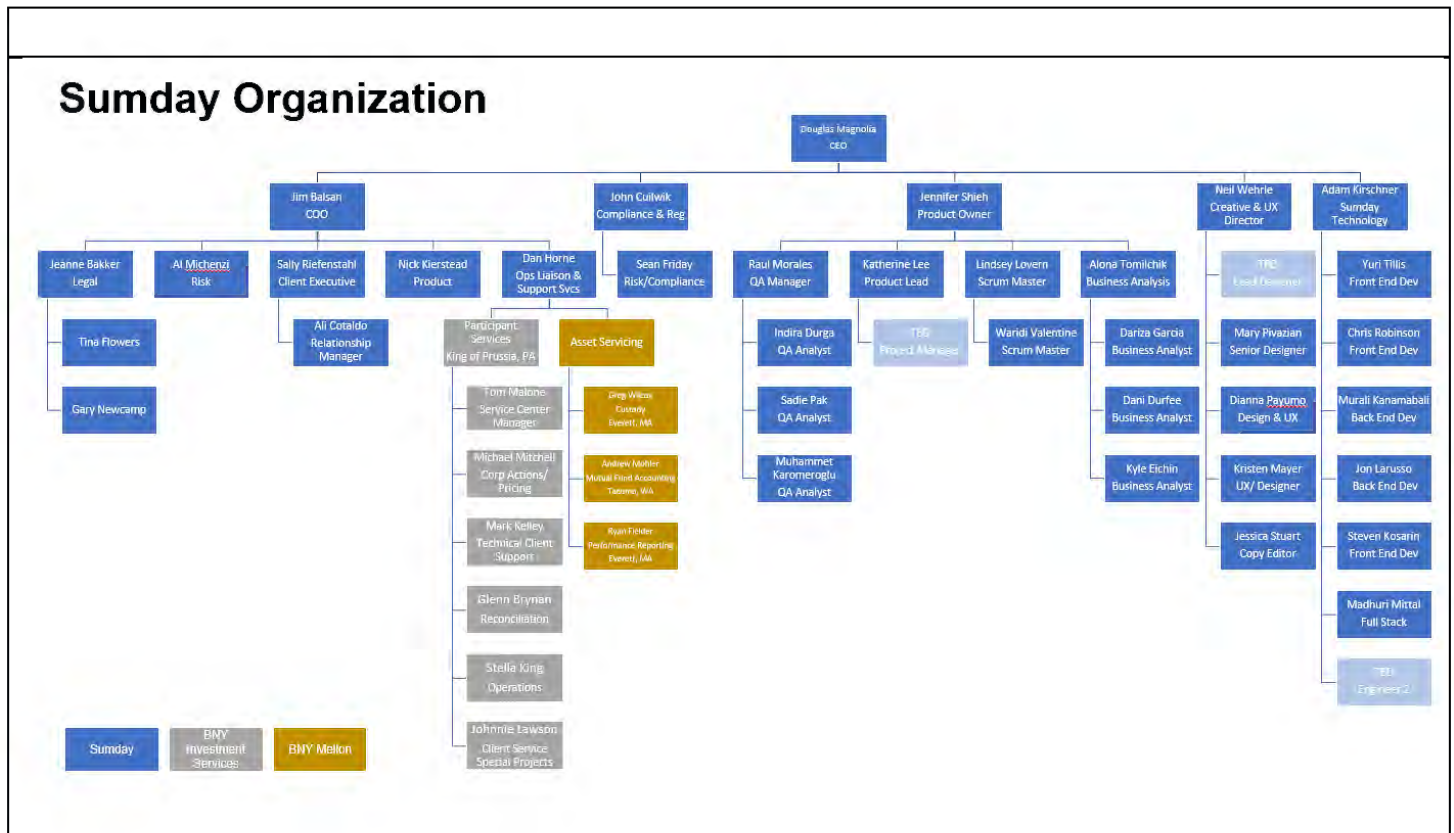
- Participate in weekly conference calls throughout the conversion process
- Direct business requirements and data mapping
- Data inconsistencies during the transition process
- Other business requirements and data mapping issues/events that need to be resolved during the transition process
- Coordinate the development and testing of any interface files. BNY Mellon will manage the transmission process
- Coordinate the testing of any interfaces to third parties.
- Review and sign-off of business/functional requirements
- Review of transfer agent systems and acceptance test plans prior to execution
- Review of testing results from both test regions and provide approval/sign-off
- Participate in the execution of a test via data entry or data transmission
- Assist with account/data clean-up prior to conversion
- Participate in mock conversions
- Participate in go/no go decision
- Our project conversion team tries to minimize the use of the client's resources by using the following information:
 - Information obtained during the sales process
 - Information from parsing every field of the client's database to identify all options and values that drive functionality

We would expect the prior agent to provide a single point of contact to serve as the central reference for project management and business-related issues. We would also look to execute a document similar to **Exhibit 2, Items Agreed Upon**, which details the conversion duties.

- **Provide an organizational chart showing all key personnel who will be responsible for all aspects of the Program.**

Please see the Sumday organization chart below, which lists the major services being provided as well as the management staff that will be responsible for the delivery of these services. Please note that the chart

does not depict a formal reporting structure but is a representation of our cross-functional team. Doug Magnolia will have primary responsibility for the relationship.



- Name the key individuals who would be responsible for providing services for the Program. Provide a brief resume including background and experience information on each individual, emphasizing specific experience with college savings programs. In the event of a departure of a key individual from your Company that would be directly associated with the Program, address back-up procedures and steps to ensure continuity of servicing the Program

Below are brief biographies of the key staff responsible for performing the services included in this RFP:

Douglas Magnolia – CEO

Douglas Magnolia has over 28 years' experience in banking and capital markets in New York and London, and is currently a Managing Director at BNY Mellon in our global product management group. He is responsible for several important and emerging opportunities for BNY Mellon, both in Fintech in general and for digital solutions. Specifically, Doug is the CEO and co-founder of Sumday Administration, LLC, a wholly owned subsidiary. Doug is also an advisor to Fintech Collective, a NY-based early stage venture capital firm. Prior, he was working in a strategy role for our Investment Management division focusing on digital transformation and retail solutions.

He also worked in the Office of The President looking at longer-term strategic opportunities for the company as a whole. Prior to that Doug was President and CEO of QSR Management, Ltd., a wholly

owned subsidiary of BNY Mellon. While leading QSR, Doug was able to capitalize on QSR's unique expertise during the financial crisis in 2007/08 enabling QSR to play an instrumental role in a number of financial stability programs, notably as the Financial Agent for the U.S. Treasury TARP program, PPIP and for the N.Y. Federal Reserve Bank's TALF and Maiden Lane II & III programs. Doug has been involved with the Structured Credit market since the late 90's. Prior to that he worked in different areas from Syndicated Lending to International Project Finance; concentrating on new products and business development. His entrepreneurial strengths have enabled him to develop and build several successful business lines. Doug holds a B.A. in Economics from the University of Massachusetts at Amherst.

Jim Balsan – COO

With 32 years of securities processing experience Jim brings a wealth of detailed operational knowledge to Sumday. His experience in front, middle and back-office roles, coupled with his ever-inquisitive nature allowed him to help "connect the financial dots" that created the Sumday infrastructure. This is not the first time Jim has re-purposed core financial services to meet new needs. Jim previously worked to develop a framework that delivers financial services to the global environmental markets including carbon credits and renewable energy credits. He was also an integral part in planning and executing the most widely distributed Initial Public Offering in the United States, the de-mutualization of MetLife to over 19 million investors.

Jim's desire to achieve win-win outcomes for his projects and the larger community extends to his volunteer work. He speaks at a local high school, explaining the interconnectedness of banking and the environment. The goal is to have students more intelligently connect the academic, political, environmental and financial dots for themselves so that they can make informed decisions in the future. Jim earned a B.S. in Economics from the University of Wisconsin. In addition, Jim received his MBA in Finance and International Business, with honors, from NYU.

Sally Riefenstahl – Lead Relationship Manager

Sally Riefenstahl is the Lead Relationship Manager for Sumday's ABLE, 529 and Health Savings Account clients. With over 19 years of healthcare, financial services, product development and client management experience, Sally thrives at managing new business development, solving complex business issues and overseeing all aspects of client service delivery. She will be your advocate across all Sumday and BNY Mellon teams, leveraging strong middle and back office experience, with a focus on delivering superior customer service. Sally earned her BSN from Immaculata University in Malvern, PA. In addition, Sally received her MBA, with honors, from LaSalle University in Philadelphia, PA.

Jennifer Shieh – Head of Product

Jennifer is the head of Digital Product Management at Sumday. She has over 15 years of experience as a customer-focused, solution-oriented program/product management professional specializing in agile engagements. Her experience includes end-to-end delivery across industries such as finance, government, retail, CPG, and B2B. She is focused on solving business problems through improving product design and development standards, and best practices with technology and smart design. Jennifer earned her B.A. in English from Hunter College.

Scott Linton –Application Development

Scott is Vice President and Application Manager for multiple US Transfer Agency applications, Sumday Technology Group Manager and Principle Architect for distributed applications in BNY Mellon's US Transfer Agency. He has held various roles at BNY Mellon since joining 18 years ago from software engineer, solutions architect, enterprise architect, project manager, scrum master, information risk officer and development manager working across and with multiple business areas.

Scott's primary focus is in the Sumday space but do continue to work and collaborate across the firm when opportunities arise. He holds a Bachelor of Science in Computer Science.

Declan Denehan – Global Client Manager

Declan Denehan currently acts as Government Banking Practice Leader at BNY Mellon. Responsibilities include defining strategy and leading a team of senior relationship bankers responsible for high level relationships in the Public sector.

Prior to this, Denehan served as co-head of strategy and innovation in the Office of the President. The group's goal was to identify evolving regulatory reforms and emerging technologies to accelerate opportunities for BNY Mellon and its clients globally.

During his career at a variety of financial institutions (including Mellon Financial, Chase Mellon and Manufacturers Hanover Trust), Denehan has been responsible for a number of new businesses, product launches and line extensions including a range of Investor Relations services, Chase Mellon's first Internet products and services, and its Capital Strategies Group.

Prior to 2009, Declan served as Chief Operating Officer, Mellon Securities LLC and SVP Business Development for BNY Mellon Shareowner Services.

Dan Horne- Operations Liaison

Daniel Horne is a Vice President in the Sumday Group and is tasked with the oversight and development of new products and services within Investor Services in conjunction with the Sumday platform. In this position he has responsibility for the general oversight of the Service Teams while maintaining a direct client relationship to insure operational aspects of the Sumday Plans maintain the highest levels of customer satisfaction. His responsibilities include oversight of the Operations team that performs transaction processing, the Call Center Service teams as well as the Regulatory Solutions, AML, CIP and Escheatment services for our 529 and ABLE clients. In addition to the operational and regulatory aspects of his position, Dan is also responsible for the identification and development of new service improvement products for the operational teams that improve our ability to serve customers in the most efficient way possible.

Prior to joining Sumday, Dan spent 18 years with responsibility for the overall servicing of Transfer Agency clients at our Valley Forge, PA location. He oversaw a staff of client service officers who worked directly with clients on day-to-day operating issues and concerns. It was his responsibility to insure clients received the highest levels of service with the organization. He spent two of those years working within the Regulatory Solutions team managing the AML and CIP process for the Transfer Agency client base. Previous employment included BISYS Fund Services where he served as Director of operations and client services within the transfer agency. Prior to BISYS, he was employed by the Vanguard Group of Investments Companies, where he served in several operations-related management positions. Dan graduated from Penn State University with a Bachelor of Science degree in Management in 1989.

Tom Malone- Customer Services Manager

Thomas Malone (BNY Mellon Investment Management Services) is currently responsible for the operational oversight of the Valley Forge and Westborough service centers supporting mutual funds, managed accounts, 529 plans, and health savings accounts. His responsibilities include managing client relationships, aiming to affirm all contractual service standards are achieved, identifying and implementing workflow and procedural improvements, and supporting new business growth through conversions and client on-boarding.

Prior to joining BNY Mellon in July 2011 Thomas worked at Delaware Investments for 15 years where he served as Assistant Vice President and managed a variety of operational departments. During his tenure with Delaware Investments he acted as Trust Officer for the Delaware Management Trust Company and served on both the NICS Transfer Agent Committee and the ICI Transfer Agent Advisory Committee. Thomas is a graduate of Philadelphia University with a Bachelor's degree in Business & Science.

Program	Contract Term	Service Provided	Total Managed	
			AUM	Accounts

Please note that we consider client information to be confidential.

- **Please describe your organization's diversity and inclusion program, including goals, priorities, and metrics established for the current and forthcoming calendar year (if applicable) in the table on the following page:**

BNY Mellon has an unwavering commitment to diversity and inclusion. This commitment is not only important to our company's culture and to each of us as individuals, it's also critical to our ability to serve our clients and grow our businesses. An important part of this commitment is founded on compliance with all applicable Equal Employment Opportunity and Affirmative Action laws and regulations. We reaffirm BNY Mellon's commitment to abide by these laws.

BNY Mellon conducts business and delivers services across multi-functional, geographic, and jurisdictional borders. People across the company must be able to work effectively in cross-cultural teams and move seamlessly across borders to service client needs. Top talent gravitates towards leading world - class organizations where they believe they can achieve their greatest potential. BNY Mellon must foster a workplace where top talent:

- Knows their unique perspectives matter and that their ideas are valued and they can engage in creative and divergent thinking;
- Gains opportunities to make an impact to develop innovative breakthroughs, challenge the status quo and play a role in transformative change; and
- Contributes to a culture of meritocracy, where people are treated with respect and fairness, and evaluated and rewarded on the basis of their effort and outcomes, without bias.

In an increasingly global, complex and competitive world, it is critical for BNY Mellon to innovate, distinguish itself and stay ahead of the pack. Diversity and inclusion can be effective levers for increased productivity, greater profitability and improved risk management and governance.

At BNY Mellon, we define diversity as the differences that inform our individual perspectives and enable us to make unique contributions. We define inclusion as establishing and maintaining a workplace culture where all employees feel valued and respected and are given the opportunity to contribute to their fullest potential.

Companies that are more diverse have proven more adept at innovating, winning new business, taking smart risks and improving shareholder performance.* But diversity alone is not enough. BNY Mellon is evolving the conversation to raise awareness and appreciation for attributes people develop, acquire or have the power to change as fuel for new ideas and fresh perspectives.

The Global Diversity and Inclusion function has developed an enterprise-wide approach to the diversity strategy. BNY Mellon's diversity and inclusion vision is 'To power investment success through a culture of inclusion and innovation', and efforts are anchored around three major pillars:

- Market leadership
- Business integration
- Great people

Listed below are BNY Mellon's global Diversity and Inclusion goals, which define how our employees and senior leaders are held accountable for cultivating and advancing diversity and inclusion across the organization:

- Attract, engage, develop and retain a diverse talent pool.
- Integrate diversity and inclusion with businesses to drive high performance and client experience.
- Leverage diverse perspectives to advance a culture of inclusion and innovation.
- Transform BNY Mellon into the global market leader for diversity, inclusion and innovation.

How We Measure Success | Global KPIs:

Surveys and Benchmarks

- Employee Survey (Benchmark against prior years)
- Upward Feedback Surveys
- Market benchmark data (industry/country)

Representation Demographics (by global gender and U.S. ethnic/racial representation)

- Workforce
- Executive Committee (EC), EC-1, Director+ levels, Vice President levels
- Candidate slates
- New hires

- Succession benches
- MD-level promotion
- Board Directors

Business and Client Engagements

- Number and type
- Business impact

Marketplace Recognition

- Number, type and quality of awards and accolades
- Rankings
- Brand visibility

Our leaders and managers are responsible for leading by example through bold actions, ongoing progress and real results. We are continuing to increase diverse representation across our management and leadership ranks, leveraging existing and prospective talent. Our commitment to diversity, with a focus on inclusion, is evidenced in our policies, programs and throughout our business. To help ensure accountability, executives, managers and all employees at BNY Mellon have a D&I goal in their annual performance plans with results considered in the compensation actions for the executives, managers and employees. BNY Mellon's actions are bold; these trends matter to our Board, our Executive Committee, our Global D&I Advisory Council to the CEO, and our global and U.S. business leaders.

BNY Mellon continued to achieve significant external marketplace recognition for diversity and inclusion, as evidenced by the number of prominent corporate and individual awards and accolades (73 in 2018 – 26 corporate awards and 47 individual employee awards). (FY- 2017, 66 awards | FY- 2016, 47 awards | FY- 2015, 32 awards | FY-2014, 26 awards | FY- 2013, 22 awards). 2018 highlights include: Bloomberg Financial Services Gender-Equality Index, Anita Borg Institute (ABI) Leadership Index and a 100 percent score in the Corporate Equality Index (CEI), an annual survey administered by the Human Rights Campaign Foundation.

*Sources: Andres T. Tapia, The Inclusion Paradox: The Obama Era and the Transformation of Global Diversity. Ruth Malloy and Amy Cortese, "Inequality In the Workplace: The Conversation That Won't End." (<http://www.kornferry.com/institute/inequality-in-the-workplace-the-conversation-that-wontend#sthash.7jcWbrF5.dpuf>)

- **If the Program Manager manages a state college savings program for another state, how will you differentiate the Program for prospective customers from the other(s) that you manage? Identify any restrictions on your ability to market the Program, locally and nationally. What steps will you take to prevent conflicts with other college investment programs managed by your Company?**

Currently, in all 529 programs that we manage or administer, we do not lead the marketing efforts for the plans. They are led by the State administrative teams themselves. We do provide a supporting role in all marketing efforts, but we are not responsible solely for their marketing and distribution. That said, we certainly can do that, and in fact think it is a bit of an advantage for Delaware in as much as we do not have any competing programs. Today, Delaware's program is one of 5 programs that the incumbent markets. Our approach is more bespoke, tailored and focused.

In the future, as we do expect the current situation to change, we would work with the Plan, Board and staff to create a unique message and focal point for any program. Most States have a unique brand and message that we would leverage and along with our Marketing firm look to create a strategy that is unique to Delaware. That said, we would also look to leverage techniques and tools that are successful in other jurisdictions. Another consideration is that we are currently bidding on the Delaware ABLE program administration and hope to bid on the Delaware Auto-IRA/ Secure Choice program. We believe there are great synergies between programs and cross sale opportunities, to the extent that would be permissible by the respective programs.

We have no restrictions on marketing your plan locally or nationally. At BNY Mellon, we provide a myriad of services to most investment programs, investment managers, banks, insurance companies, governments, central banks around the world, all of whom at some level compete with the other. Core to our organization is our trust and security of what we do and part of that is our commitment to provide conflict free services.

- **Does the Program Manager have a retail presence in Delaware? If so, provide the specific locations, and indicate whether there are any plans to expand in Delaware. If not, describe how you currently market college investment programs or other consumer-facing products and services in Delaware**

While we do not have a retail presence in Delaware we do have a significant number of staff working in the state supporting a number of our businesses. Our main Delaware locations are listed below.

BNY Mellon Wealth Management

Two Greenville Crossing
4005 Kennett Pike, First Floor
Greenville, DE 19807-2018, United States

BNY Mellon

Bellevue Corporate Center
103, 301 and 400 Bellevue Parkway
Wilmington, DE 19809, United States

BNY Mellon Trust of Delaware

301 Bellevue Parkway
Suite 19A-0307
Wilmington, DE 19809, United States

- **Describe your willingness and ability to support, including monetarily, a national campaign to heighten awareness of college investment programs. Will you make Delaware's Program a "national" plan? Will you incorporate Delaware's new branding into your efforts? Investment Management**

We are willing and we can support, including monetarily, a national campaign. If specifically you are referring to the CSPN national campaign, we do support that today and expect to continue to do so. We believe that more 'industry' participants should pay their fair share. It is extremely disappointing how low awareness is generally about these programs given that they have been in existence for at least 20 years.

In addition, we will make Delaware a National plan. We will work with Delaware to determine the key goals of the Board and then build a plan to address those goals. We will certainly incorporate any new branding. It is your plan, not ours. However, depending on where you are in the effort of rebranding, we would also

like to offer our input and thoughts on branding, language, communication methods and styles, visual language and the overall Marketing and Communications (Marcom) site that is the home for the program. Including a full makeover of the Marcom site, if necessary.

Investment Management

- **Please provide the investment options you propose for the Program. Please differentiate between the proposed age-based option(s), static investment multi-fund portfolios, and single fund static options. For each investment option listed above, please provide the following information, as applicable, for each underlying investment.**

Underlying Fund or Strategy	Weighted (%)	Investment Option	Asset Class	Ticker	Expense Ratio	Benchmark

We utilize Lockwood Advisors as an investment manager who opened in 1996. As of 12/31, Lockwood Advisors have over \$9.7B in Assets under Management (AUM) and \$2.3B in Assets under Administration (AUA).

Please refer to **Exhibit 3** – Proposed Investment options for the requested information.

- **Describe your manager/fund selection process for the underlying funds of the age-based and risk-based portfolios. Do you have a separate team dedicated to manager research? If not, who is responsible for investment manager/fund selection? Please also describe your flexibility around replacing underlying investments when there is an interest from the Board to remove a fund, particularly if it is a proprietary fund.**

For index mutual fund portfolios, a key risk element is the vehicle's ability to track its benchmark. A vehicle's tracking error (standard deviation of return variations from a market benchmark) is one of the most prevalent risks in passive investing. Historical analysis is used as a starting point to draw conclusions pertaining to the vehicle's ability to replicate the risk and return characteristics of its benchmark over time. Qualitative analysis is conducted to evaluate the liquidity, expenses and performance metrics of the prospective index mutual funds.

Lockwood receives certain manager research and vehicle selection information from the BNY Mellon Manager Research Group, whose core focus is on investment manager research and oversight. Quantitative and qualitative analyses are used together throughout the manager evaluation and selection process. The manager screening process begins with an internally developed quantitative ranking model. Risk and return data are gathered from multiple investment manager databases and are used to rank the universe of prospective sub-managers.

The goal of the initial screening process is to group and rank prospective investment managers or strategies according to a series of risk-and return-based metrics, as well as identify investment managers that have the potential to add value over the long term. For those candidates that pass the initial quantitative screening, we review qualitative factors of the investment managers. Some qualitative factors include: the tenure and the depth of key investment professionals, investment philosophy and process, sources and methods of investment research, implementation of the investment process, portfolio turnover and ownership/business structure. An additional layer of analysis is performed to assess the viability of the investment firm, including a review of the manager's regulatory filings.

After selecting options for the lineup, the team conducts a quarterly review of the investment landscape relative to the current lineup. We regularly look for pricing changes and seek to take advantage of cost savings through lower cost share classes or investment options. The Lockwood Investment Committee reviews existing fund managers routinely to help evaluate consistent implementation of the originally articulated investment philosophy. Qualitative or quantitative issues would be detected through ongoing monitoring and evaluation of fund managers, which may result in proposed removal from the portfolios.

- **Describe your risk management oversight and the integration of risk management across your organization. Detail the reporting chain for the risk team when issues are identified. Describe the role of senior management in risk management and the establishment of formal risk limits for the portfolios being offered.**

Risk management is an integral part of our investment management process with regards to due diligence of selected mutual funds, risk monitoring of overall portfolio exposures as well as benchmark tracking error for both individual funds and the overall portfolio.

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Lockwood uses advanced risk monitoring tools to measure overall portfolio exposure to multiple risk factors (including traditional factor risk and macroeconomic risk) as well as potential draw down risk from various macroeconomic shocks (e.g., real rates, inflation, oil, etc.) to the overall portfolio. We have no formal risk limits established as the portfolio is extensively diversified from the use of index mutual funds. In this context, we are more concerned with manager selection (due diligence) and tracking error risk as described above.

Additionally, BNY Mellon has a comprehensive Operational Risk Management Framework in place, from Board level down to the individual process level. Each business is responsible for actively identifying, assessing and managing the risks it faces. The goal of the Company's approach to risk management is to help ensure that all material risks in each business are defined, understood and effectively managed by

well-designed policies and controls. The control environment reflects the overall attitude, awareness and actions of the Board of Directors, management, owners, employees and others concerning the importance and relevant components of internal controls and their emphasis within the organization, through its policies, procedures, methods and organizational structure. Our organizational structure provides an overall framework for planning, directing and controlling operations, including controls over the execution of transactions, services and operations. Authority and responsibility are assigned within the organizational structure to provide for adequate staffing, segregation of duties, efficiency of operation, and adequate concentration of knowledge and skills.

Each business also has an independent Chief Risk Officer (CRO), reporting to the Corporate Chief Risk Officer, who is responsible for independently assessing risk within the business, ensuring key risks and control gaps are identified and addressed, as well as ensuring that the businesses are effectively adhering to the Corporate Risk Management Framework.

The Company's Corporate Risk Management Framework has been designed to help:

- Ensure that appropriate risk tolerances ("limits") are in place to govern risk-taking activities across all businesses and risk types.
- Ensure that risk-appetite principles permeate the Company's culture and are incorporated into strategic decision-making processes.
- Ensure rigorous monitoring and reporting of key risk metrics to senior management and the Board of Directors.
- Ensure that there is an ongoing, and forward-looking, capital planning process to support risk-taking activities.

BNY Mellon Asset Servicing has also implemented a business and operations control function. The primary goal of the embedded control function is to ensure that we have well-controlled operations and are meeting client needs. Embedded Control Managers (ECMs) are control professionals embedded within Operations and are a critical part of the function. ECMs support the Operations team in several key aspects, including ensuring that design of controls is appropriate and testing for control adherence.

Embedded Control testing is intended to provide senior management with a barometer of the health of the Company's operations, in terms of compliance with existing controls and procedures, as well as ensuring controls are well designed. Testing activities are focused in high-impact, high-probability risk areas:

- Ensuring that effective root-cause analysis of operational errors is conducted, and corrective actions are tracked to implementation.
- Assessing new operational procedures to support clients' service requests.
- Serving as a focal point within the business teams to communicate changes to corporate policies and ensuring adherence to those policies.

Additionally, through ongoing meetings between ECMs and senior management, the function sharpens senior management's view into day-to-day operations and controls analysis and increases senior management's focus on key issues related to losses and errors. This further serves to identify opportunities for investment and reengineering on a macro level.

Reporting Structure

BNY Mellon has a Risk Management organization led by Chief Risk Officer (CRO) Senthil Kumar, who reports to the CEO of the company.

The CRO also has a direct reporting line to the Chair of the Risk Committee of the Board.

The Risk Management group is structured into three major groupings, which provide full views of risks across the organization.

- Line-of-business view: Business-line coverage that enables a comprehensive view of all the risks within a business.
- Regional or Geographical view: Consolidated coverage of all risks within a region or legal entity.
- Functional view: Consistent and consolidated coverage of common risks across the company, including operational, credit, market, liquidity, investment, technology and model risks.
- **Would your proposed investment lineup include either a stepped or progressive glide path design? Outline the typical portfolio allocation process; how often are allocations revisited in the strategic glidepath? Would your proposed glidepath solution include tactical asset allocation?**

The Year of Enrollment option features stepped glide paths and offers portfolios designed for different Enrollment Years (anticipated year of enrollment in college) in two-year increments. In addition, the Year of Enrollment Investment Option has three risk tolerances (Conservative, Moderate or Growth) to choose from.

Within each glide path, changes in allocations among underlying funds take place at least every two years and, in many cases (especially as glide paths begin nearing the year of enrollment), annually. This smoothed option helps prevent large and abrupt asset allocation shifts in any given rebalance period. In our view, there are only marginal benefits to very frequent allocation adjustments (more than annually). We believe market fluctuations and potential operational risks tend to offset any longer-term benefits from frequent allocation adjusting procedures.

The portfolios in the Year of Enrollment Investment Option are designed to take into account a beneficiary's age and investing time horizon - i.e., the number of years before the beneficiary is expected to attend an Eligible Educational Institution. In general, for younger beneficiaries, the portfolios will be invested more heavily in underlying funds that invest in stocks to capitalize on the longer investment horizon and to try to maximize returns. As time passes, assets are moved automatically to more conservative underlying funds in an effort to preserve capital as the time for distribution approaches. This change in asset allocation over time helps smooth the shift from capital accumulation in the earlier years to capital preservation later on.

At college enrollment age, the assets in the Year of Enrollment Portfolios automatically move into the corresponding College Enrolled Portfolios. The College Enrolled Portfolios seek to further reduce risk and are at the most conservative phase of the glide path. The College Enrolled Portfolios are designed to maintain a static asset allocation when beneficiaries are currently attending college. There is also a substantial cash component (Money Market Fund) to help meet college-related distribution needs.

Sumday performs systematic calculations to allocate daily cash flows to the underlying funds in an attempt to bring the portfolios back to their target asset allocations. In addition, Sumday performs quarterly rebalancing to bring the portfolios back to their target allocations.

The proposed glide path solution does not include a tactical asset allocation.

- **Provide your current and longer-term view on the following three strategic decisions:**
 - a. **Use of active/passive management**

Each of our portfolios is 100% passive, comprised of indexed mutual funds from third-party providers. This passive management strategy is designed to maintain low costs to plan participants, and expense ratios are a major consideration in our analysis. The team regularly reviews and monitors the investment landscape for lower cost fund options with the intention of passing fund expense savings on to end investors. A key objective of our portfolios is to minimize tracking error relative to the blended benchmark, rather than outperform.

b. U.S./non-U.S. equity split (as it relates to global market cap weightings)

The average split between U.S. and non-U.S. equities is 52%/48%. We believe that this split is roughly in line with global market-cap allocations and allows us to avoid a home country bias. Within non-U.S. equities, the average split between developed and emerging markets is 74%/26%. This is supported by BNY Mellon's Capital Market Assumptions and equity market return expectations within international equities. Overall, we expect emerging markets equities to outperform relative to developed non-U.S. equities, primarily due to stronger earnings growth.

c. U.S./foreign bond split (as it relates to global market cap weightings) Administration

The average split between U.S. and foreign bonds is 93%/7% (average across all 37 portfolios). Within foreign bonds, portfolios are 100% allocated to emerging markets. We expect emerging market bonds to perform well due to higher yields in the current environment and less principal loss from less significant interest rate increases. We expect returns to be lowest in the developed world outside of the U.S., due to extremely low current yields and loss of principal from rising rates.

- **List the administrative reports that you propose to provide including the types of data and frequency necessary to keep the Board and staff apprised of the status of the Program. Samples of these reports should be included in your response.**

We plan on providing an investment advisory report to the Board on a quarterly basis. Refer to **Exhibit 4** for our most recent Investment Advisory Report for the DreamAhead Washington 529 plan. Additionally, Sunday has a standard reporting package that is typically delivered monthly, but can be scheduled to run weekly as well. We also have a fairly standard quarterly Board package. We also have the ability to customize any type of report based on data we are capturing. Some of the reports are listed below:

Monthly Reports
Summary Statistics
By Month (Both In-State & Out-of-State):
Account Owners Added
Account Owners Closed
Accounts Added
Accounts Closed
Unique Beneficiaries Added
Unique Beneficiaries Closed
Total Account Owners (ALR)
Total Accounts
Total Unique Beneficiary
Contributions \$
Distributions \$
Total \$

[illegible]

one call can cover multiple topics

(Please note BNY Mellon considers client names to be confidential.)

We will collaborate with the Board to help ensure that we provide all pertinent reporting to provide oversight of the overall program including but not limited to: overall program data, account level data, inflows and outflows, call statistics and correspondence information.

The Board will be provided inquiry access to an administrator portal. The portal is real time and will allow Board members and other state employees to view account level detail for each Beneficiary Access will be restricted and controlled by Authorized representatives of each Member. It will be functional via most recognized web browsers (Microsoft, Google, Apple, Firefox, etc.).

Reports will be available, per the requirements of the Board as well as any State, Federal or Regulatory requirements. Reports and on-line viewable information will be in real time, although pricing of securities or positions will be as of the previous business day.

NEXEN Online Report Delivery

BNY Mellon streamlines the delivery of information to our clients through NEXEN, whereby clients can access data via the Internet 24x7.

NEXEN enables easy access to key account, portfolio, NAV, and transaction information including financial transaction activity, account and account group information, currency balances, issue information, lists of holders, and various other historical data.

NEXEN not only provides clients with instant access to all accounting and custody data, but it also provides an interface to query and/or create custom downloads, enabling you to respond quickly to reporting needs and reducing expenses by putting reporting responsibilities in the hands of non-technical personnel. Users can customize the look and feel of their reports right in NEXEN with the following features:

- A report writing tool that facilitates easy custom report creation, eliminating the need for a client to hire a programmer to create sophisticated, detailed reports
- A user-friendly data dictionary that highlights where to find each data element for reporting

Reports can be accessed online and/or delivered on a daily, weekly, monthly or ad hoc basis via e-mail or secure FTP. Data can also be extracted into all industry-standard formats such as PDF, Excel or Word.

- **For each type of plan that you administer, describe how contributions are processed, (i.e., through payroll deduction or clearinghouse transactions), and provide the number of programs using workplace enrollment, the total number of participants, the total number of accounts by process and the monthly average contribution. Please specify whether different minimum initial and subsequent contribution amounts apply to accounts with automatic contributions.**

Payroll contributions are supported via unsolicited ACH contributions via the employer's payroll system. At point of establishment, we require the employee to complete a "Payroll Deduction Form". The original is mailed to the service provider with a copy provided to their employer to establish the payroll deduction. We have developed a Payroll Deductions Guide for both the employee and their employer to help them through the process. The only restriction is the payroll deduction amount must be greater than or equal to the minimum contribution amount required by the Plan.

We have also worked with Gift of College, a third party provider. We have found that many large employers are located throughout the country and are hesitant to offer a single state 529 plan. Gift of College enables employees to contribute to ANY state's 529 college savings plan and ANY student loan account. The decision is up to the employees, not the employers. This makes it a much easier decision for a large employer to offer a 529 payroll deduction benefit.

We propose that the initial and subsequent minimum investments be attainable by all investors. As such, our recommendation is for the initial and subsequent investments to be \$25.00 and \$5.00 respectively.

With these low minimums, we do not recommend having different investment minimums for accounts with automatic contributions.

Currently, 350 employers are using workplace enrollment covering 1,042 accounts and \$160 average monthly contribution.

All contributions will be processed through our normal banking operations. Through the Sumday platform we make the initiation of both simple and easy as a few clicks. With our simplified bank account linking option, multiple bank accounts can be added to the account for low cost and streamlined ACH transfers to and from the Account.

The Plan only accepts payroll contributions by ACH funds. If the employer cannot support ACH funds as the preferred method of payment, then the employee should consider setting up automatic monthly contributions through the Sumday application.

The Employer will receive a copy of the Payroll Deduction form from the employee and set up payroll deductions with their payroll bank in the amount and date requested by the employee.

The Plan will set up how payroll deductions are contributed to portfolios based on the instructions provided by the employee in the Payroll Deduction Form. Once the Plan receives payroll contributions from the employer's payroll bank they will post the contributions to the employee's Plan account.

Payroll Processing is accepted directly into accounts via employer generated ACH payments at the individual employee level. Each account will utilize a routing number and individual account number to insure accurate processing. For employers without ACH capability a check and list-bill can be forwarded via mail for processing.

- **Provide the following information with respect to data backup procedures:**

- a. Detailed description of your daily backup procedures**

Production data is continually replicated in real-time from the U.S. primary, production Data Center to the contingency Data Centers via asynchronous communication. Local data backups are automated and are conducted, daily, or more frequently as defined by the application's architecture. In the event disaster recovery is invoked, data would be recovered at the contingency Data Centers using replicated data and would not rely on local backup copies, which would be used only in the case of database or file system corruption.

BNY Mellon production voice networks are monitored on a 24x7x365 basis. A full scale test of the voice networks is completed multiple times per year, occurring across our lines of business. A DR test for the BNY Mellon core voice communications infrastructure is tested on an annual basis as part of the Data Center recovery testing process.

- b. Description of your business continuity, business recovery and disaster control plans including the location of any disaster recovery facilities**

BNY Mellon maintains a robust Business Continuity Plan. BNY Mellon has a resiliency posture aimed at maintaining critical functions at normal operating levels during a crisis. We manage a global portfolio of recovery solutions to facilitate the ability to respond to disruption of the availability of a building, workforce, technology and/or supplier service. Wherever possible, our businesses leverage BNY Mellon's diverse global footprint to geographically disperse operations across multiple locations. This global approach to balancing utilizes cross-regional recovery as a best-practice solution for recovering business operations by transparently transferring workload from one geographic location to another.

Business Continuity plans are addressed in policies and procedures outlined by the Enterprise Resiliency Office (ERO). The policy on Enterprise Resiliency establishes The Enterprise Resiliency Office's framework and governance. Business Continuity policies establish requirements for before, during, and

after a disruption or event. The Disaster Recovery policies set out BNY Mellon's methodologies for establishing, maintaining, and executing an enterprise-wide Disaster Recovery program focused on demonstrating business service resumption capabilities. The Incident and Crisis Management (ICM) policies define when and how the ICM team engages with key groups, including the Business, Operations, Technology, and Corporate Support teams, as well as, Business Continuity and Disaster Recovery in order to effectively manage incidents.

Business Recovery

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Our business contingency sites are designed to satisfy recovery requirements and support business processes and operations. Sites are located at sufficient distances from the primary facility to mitigate impact from the same event but within a reasonable travel distance to enable staff to meet their recovery time objectives.

Our data centers are dedicated to processing functions and are strategically separated from our business operations. Our primary production data center, located in the U.S., recovers to one of two dedicated backup data centers controlled and supported by BNY Mellon, with replication of data occurring continuously. These sites provide disaster recovery services as well as computer operations command centers and crisis situation event rooms.

c. The testing schedule and the date you last performed a disaster recovery test

BCP exercises are conducted at least annually for every business continuity recovery plan. DR exercises are a key component of our enterprise resiliency framework and occur throughout the year to validate technology recovery capabilities and preparedness. These include quarterly exercises for our primary data center and annual exercises for our regional data centers. BNY Mellon conducted its Q3 2020 Disaster Recovery exercise on August 15-16, 2020. Normal operations were resumed on August 16 at approximately 6:00 p.m. ET.

- **Has the Program Manager implemented a cyber security plan? If so, please provide a detailed description of the plan. Describe your security methods in use for protecting personal identifying data and account owner financial information, including protections for telephonic and online inquiries and transactions.**

Yes. BNY Mellon has implemented a Cyber Threat Intelligence function for the explicit purpose of identifying and assessing emerging threats. In addition, we have documented and implemented an Information Security Response Standard. The policy outlines our approach to responding to incidents and describes the roles of BNY Mellon stakeholders in responding to such incidents. Our dedicated team of incident responders rapidly deploys in the event of a cybersecurity breach or other event. The team maintains the ability to conduct host and network forensics across the BNY Mellon enterprise to enumerate and contain any cyber security incidents.

We have instigated formal procedures to deal with incidents that are aligned to the firm's business continuity processes and incident / problem management. BNY Mellon has a Cyber Security Incident Response Team whose role is to bring integrity to systems and business services, then perform forensic investigations, root cause analysis and lessons learned.

Please refer to **Exhibit 5** – BNY Mellon Cybersecurity Program Overview for further details.

Protecting Personal Data

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

The key to successful branding systems is the ability to customize communications elements for the needs of different target audience groups, while maintaining the integrity of the overall brand tone, messaging, manner and visual language.

As your trusted advisor, we would be able to work together on building a clear and succinct graphic system including logos, typefaces, color palette, graphic elements, and messaging. We would work with the team to create a simple Brand Adherence Guideline document that clearly guides the style, usage, and implementation of visual assets across all marketing materials.

Upon establishing these guidelines, we would customize messaging accordingly for marketing materials aimed at unique targets, while maintaining overall brand integrity. With each designed element, we would examine our specific target's unique communications needs and develop a recommendation for design assets. All design and development would be implemented and managed through our team. We would work with an outside, expert partner to adapt materials to fit unique languages and cultures.

- **Describe any previous relevant experience providing customer service for a state college savings program (or similar retail program) defined benefit, defined contribution, and college investment plans and indicate whether dedicated customer service staff will be assigned to the Program.**

We have a very large call center support infrastructure that today supports many programs from 529 plans, IRA programs and HSAs to large national broker dealer and mutual fund families.

Our call centers are located in the U. S. and we make sure that all activity for these State programs are maintained onshore. We have a dedicated team that supports all of our direct sold 529 and ABLE programs.

Our customer support team is the verbal face of the program and we take pride in our team, training and management of service standards. Our service centers are currently staffed from 9:00 am to 8:00 pm EST. Investors may speak with a representative during normal business hours and have access to self-service functionality 24 hours a day. There is no mechanism for a caller to leave a voicemail message. We do, however, monitor a participant email box that is available 24/7.

Additionally, we have deployed a full 'live chat' feature across marketing websites as well as the Sunday application. There is a persistent chat button available for a user to activate and interact with the call center staff, whether on mobile devices or a computer. The system also has the ability for the user to share their screen with the customer service representative (CSR). In this way, if a user is having a specific problem the CSR can see the screen and the problem as well as correct and instruct the user on how to solve the problem. Moreover, all transcripts of chats are available for printing or can be saved by the user for reference themselves in the future. As an added level of customer service, the chat functionality is constantly screening for sentiment and will dynamically create color codes for the CSR and the CSR Supervisor that will indicate if a chat participant's engagement is trending positively or negatively. This enables the CSR and the Supervisor to course correct if the sentiment starts trending negatively.

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- **Describe the process used to handle incoming customer calls, specifying whether or not a live representative answers the call, and if not, how do you provide routing to speak to live representatives and the ability to leave messages for return calls?**

Please refer to the response provided above. Additionally, our voice response unit provides callers with an option to transfer to a live customer service representative. Customers are able to request live assistance throughout the application. The major exception is during response to sensitive prompts such as entry of account numbers, transaction amounts, pins, etc.

- **Where are your United States-based customer service center located and how many customer service representatives work there? How do you handle peak volume periods? How many customer service representatives will be specifically dedicated to this Program?**

We have two established contact centers located in King of Prussia, Pennsylvania and Westborough, Massachusetts. Each is staffed with a team of service representatives to answer incoming and make outgoing calls, provide problem resolution, maintain contact center quality, and conduct appropriate research. We have approximately 250 phone agents across the business, however total staffing fluctuates throughout the year based on forecasting tools utilized within the contact center.

Handling peak volume call center periods

To continually manage call volumes, we have both real-time and historical reporting solutions to track and report volume daily every half hour. This data is generated from our Avaya ACD contact center system and our IEX work force management system. Both can provide data via an export process for long-term analysis and trending. We use this data as a primary source of information for reporting on our performance and to monitor our average speed of answer is in adherence with our monthly Service Level Agreement, as well as forecasting our expectations/growth.

In situations where we are dealing with non-forecasted or unforeseen volume increases, we use cross-trained backup representatives that can shift in a moment's notice via our master console, to help handle that increase in volume.

- **Provide the following for the past 12 months, if applicable:**

- **Number of days to process a new account**

While the vast majority of new account openings and transactions are initiated electronically via our web portal, we continue to offer and support paper enrollment-based requests. We will design a paper-based enrollment kit that will be unique to the Program, with ease of use as a primary driver.

New accounts received via a paper enrollment application are established within 1 business day of receipt in good order.

- **Number of days to process 99% of withdrawal requests**

Online transactions received through Sunday are automatically processed through the underlying recordkeeping platform on the same day they are received, assuming requests are received in good order, and prior to 4pm EST on days when the NYSE is open. Transactions received after market close are held to process on the next business day. There is no need for manual intervention on these transactions.

Paper based requests are entered into our system and initiated on the same day they are received, if submitted before market close, and in good order. Transactions input after market close are held and processed on the next business day. Funds are typically sent via ACH 2 business days after the transaction is initiated. Funds are typically received within 5 business days. If required, we can also issue payment in the form of a paper check. ACH times for receipt by the receiving bank depend on that institution's processes, so some may be received within a day or two, others may take several days, which is why we say 5 business days to accommodate for the varying time frames.

- **Maximum time the system was not available during peak hours (i.e. when live representatives were available), and during non-peak hours**

99% availability measured on a 24 x 7 basis, not including scheduled downtime.

- **Number of days to fulfill customer requests for information**

Depending on the fulfillment request, most can be accomplished within 1 business day. We have found that in most cases, since almost all activity can be conducted online, often activity is completed same day, subject to the cutoff times for trading as discussed in other sections. In short we strive for completing requests as soon as practicable.

- **Percent of contribution by check processed within one business day**

Checks received in good order prior to 4pm EST on days when the NYSE is open are processed on the day of receipt. Checks received after 4pm EST will be processed on the next day the NYSE is open.

All contributions no matter the source are all checked against both the annual and account balance limits via our nightly cycle. Any contributions that exceed either limit are suspended and reviewed by an operations associate the following business day. Any excess contribution amounts are returned to the requester.

- **Wait time (average number of minutes a participant is on hold)**

Our default contact center service standards are as follows:

- Call abandonment rate less than or equal to 2%
- Average speed to answer is 30 seconds or less

These metrics are monitored in real time throughout the day via our automated call distribution (ACD) system, Avaya, to confirm compliance and to adjust staff allocation to volume increases. The data is then transferred to a data repository, which allows reports to be generated on a daily and monthly basis. Performance is ultimately measured against client-established service levels, which vary based on individual arrangement.

Call volumes and call distribution are tracked and managed through the ACD. The number of calls, average wait time, calls in queue, and abandonment rate are monitored to help ensure appropriate staffing levels.

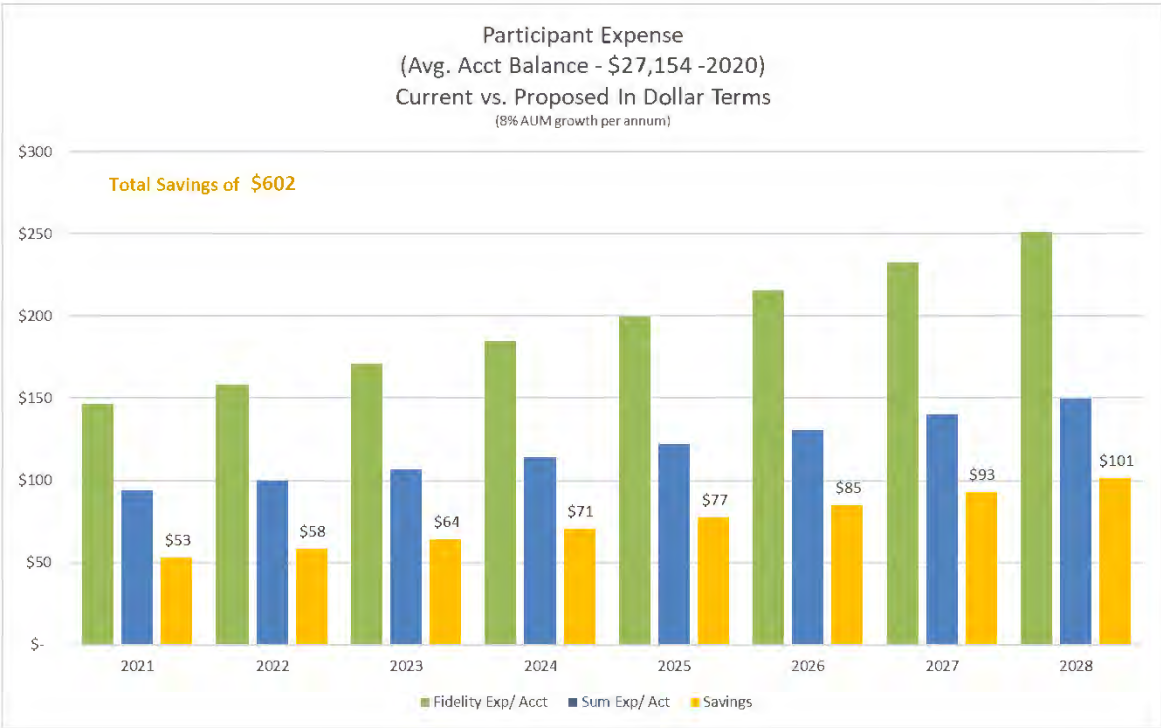
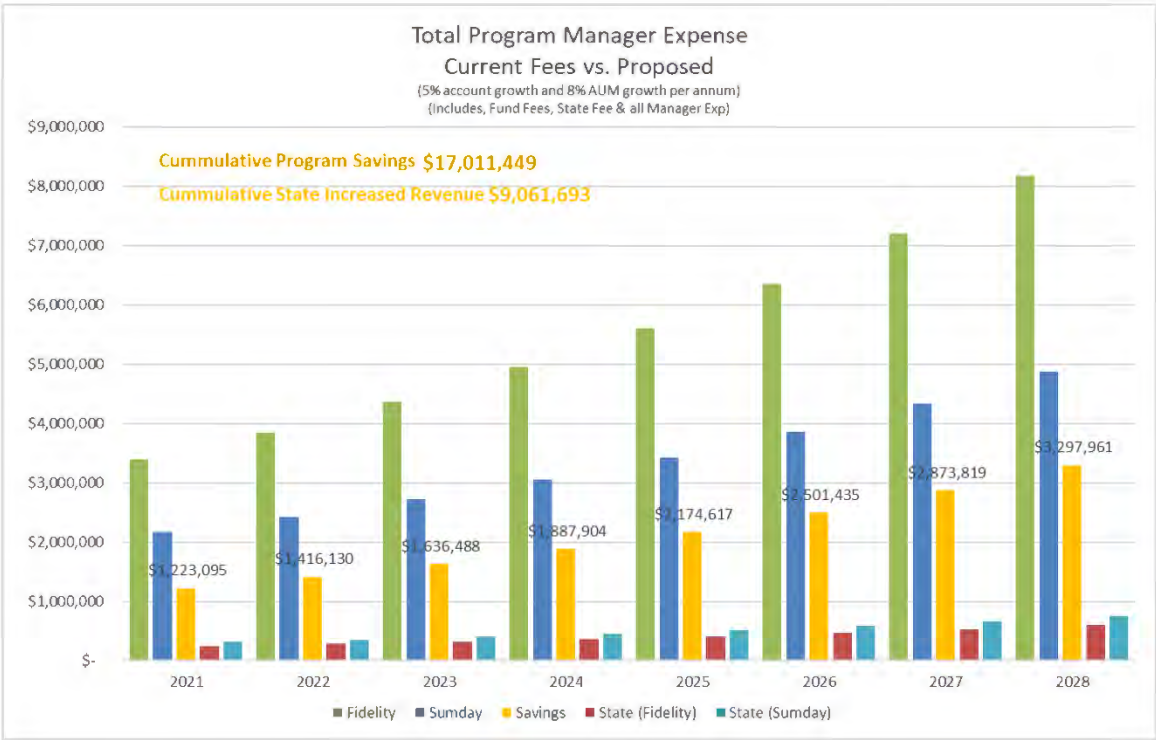
- **Do you provide participants with account projections at college age? Do you provide a college savings calculator? Do you provide information on distribution options and strategy?**

Our other plans provide these things on their own currently. Hence, we do not provide account projections as of today; however, we would work with the State to determine the right set of financial education/ literacy and tools to make available to investors. As this is a 'Direct Sold' plan and neither we, nor you are acting in an Advisory capacity, we have to make sure that the program is providing education only vs.

crossing the gray line of advice. We will work with our legal and compliance teams to review all the content to insure we both stay on the right side of the regulatory line but provide as much support for participants as regulation allows.

Pricing Proposal

- [illegible]



Our simple formal fee schedule appears below:

Fee Schedule

Fee Schedule*

<u>Management Fees</u> <i><u>Paid by Plan Participants or by the State, in whole or in part, if the State determines to do so in its sole discretion to the Plan Manager</u></i>	Fee Description (Per Participant & Total Assets - Per Annum)
Savings Plan Fees, per account per year	\$15.00 and 20 bps
<u>Processing and Miscellaneous Fees</u> <i><u>Paid by Plan Participants to the Plan Manager (per item unless otherwise noted)</u></i>	
Rollovers / Transfers out of the Delaware Plan	\$50
ACH Fail / returned checks	\$25
Paper Statement Delivery, per account per year	\$10
Paper check disbursement	\$2.50
Overnight delivery	\$15
Re- issue of disbursement checks	\$15
Outgoing wires	\$15
<u>Proposed Administrative Fees</u> <i><u>Paid by Plan Participants to the Board</u></i>	5 bps

*** Notes**

FDIC Asset Based Fees

If the interest rate received on the Cash Option for any period is less than or equal to the sum of the Management Fee and the State Administrative Fee for such period, the net interest accrual on Units in the Cash Option for such period payable to the Plan Participant will be zero. In addition, for such periods the interest rate received by the parties on the FDIC Option will be divided pro-rata between the Management Fee (Sumday) and the Administrative Fee (State).

Management Fee

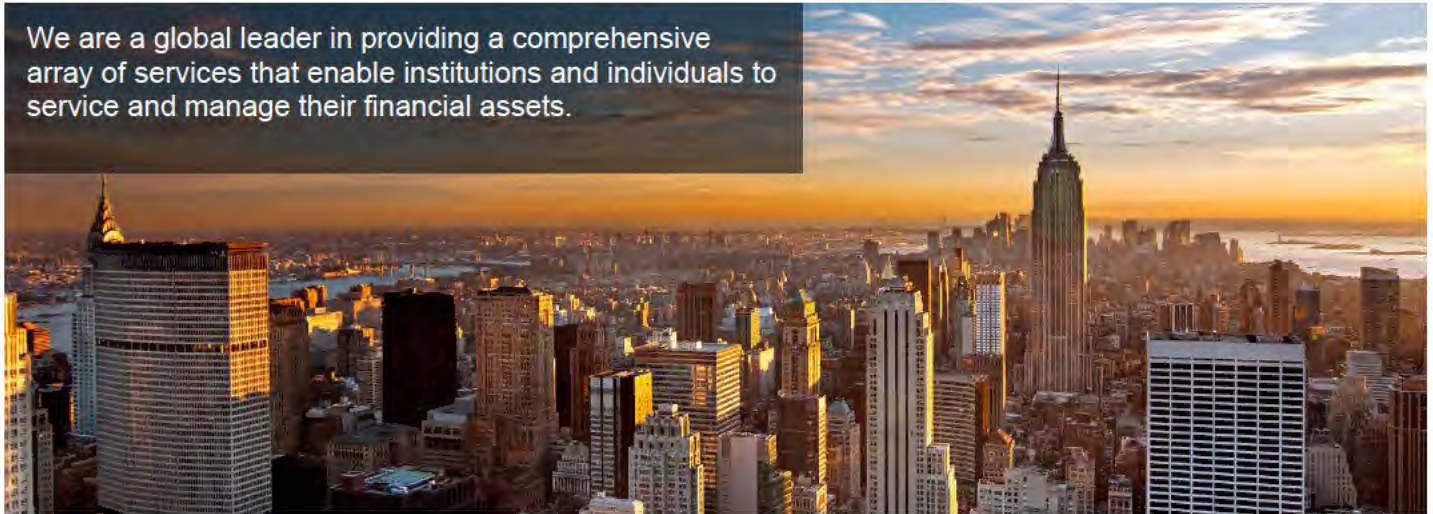
- The Management Fee may be increased by mutual written agreement of the parties in connection with a mutually agreed upon change in the Plan. In addition, if (i) the Plan is modified or restructured in response to a change in law, regulation, rule or other administrative act or initiative (or any interpretation thereof by a Governmental Authority), or (ii) the State Board requires modifications to Services or administrative systems or additional Services, and such modification, restructuring or requirement results in an aggregate cumulative increase (since the last increase) in Plan Manager's costs and expenses by more than ten percent (10%), the State Board will negotiate in good faith regarding the necessity for and amount of the increase of the Management Fee that will, if approved in writing by the Board, be increased to reflect Plan Manager's documented increases in costs and expenses resulting therefrom. No increase in the Management Fee shall be effective unless reflected in a written amendment to this Agreement duly executed by both Plan Manager and the Board.

Billing

- Plan Manager will deduct from Plan Participants' accounts or bill the Board, as applicable, on a quarterly basis in arrears for per account Management Fees and Processing and Miscellaneous Fees. Asset based fees will be netted from the Plan assets monthly.
- Except as otherwise provided under this fee schedule, this schedule shall remain in full force and effect until modified by written amendment to this Agreement.

Please note, BNY Mellon considers fees to be confidential.

We are a global leader in providing a comprehensive array of services that enable institutions and individuals to service and manage their financial assets.



BNY Mellon* has attempted to reflect accurately in this document the details of any contractual terms to which BNY Mellon will agree, notwithstanding anything to the contrary in any written or verbal statement, request for proposal, request for information or other document of any type (including, without limitation, any online or other electronic communications), neither: (i) the act of submitting this document; nor (ii) this document itself, on their own constitutes (a) a legally binding offer; (b) an acceptance of any offer made by you; or (c) a legally binding agreement. You will be required to sign an agreement with BNY Mellon, which will set out the rights, obligations and liabilities of each party. It will also include a statement that it represents the entire terms of agreement between the parties and supersedes all prior agreements between them. In the event of any conflict between such agreement and this document, the terms of the former will prevail.

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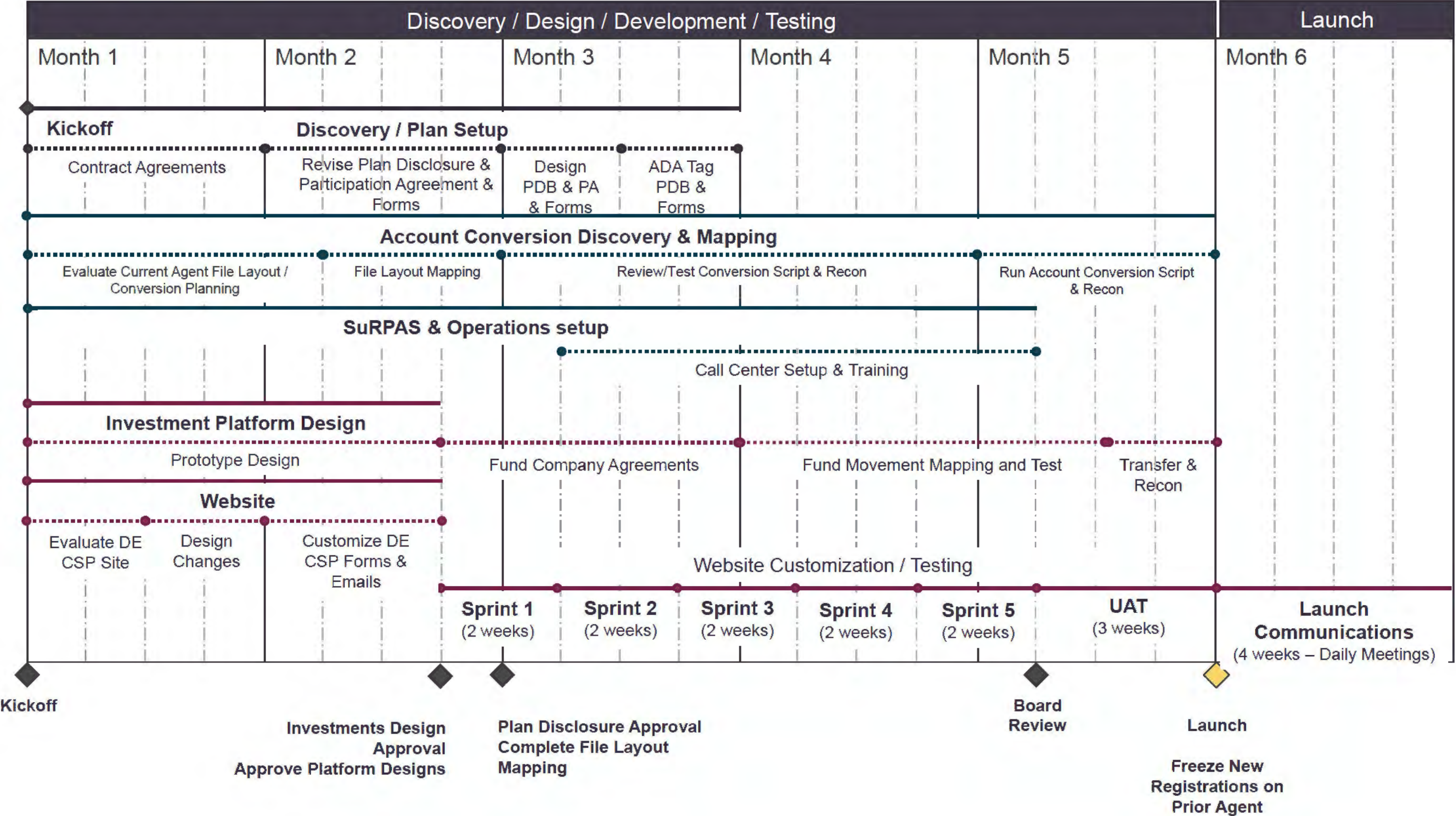
Exhibits

Exhibits Table of Contents

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2. Exhibit 2 Items Agreed Upon
3. Exhibit 3 Proposed Investment Option
4. Exhibit 4 Investment Advisory Report
5. Exhibit 5 BNY Mellon Cybersecurity Program Overview

Sample Transition Plan

Proposed Schedule



Items Agreed Upon



BNY MELLON

Items Agreed Upon

For

CLIENT Conversion from Fidelity to BNY Mellon

Conversion Date: TBD

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Introduction

The “Items Agreed Upon” (IAU) document is an outline of roles and responsibilities that have been mutually developed and agreed upon between **CLIENT, BNY Mellon Asset Servicing (“BNY Mellon”), the acquiring Agent and processing agent.** CLIENT will correspond directly with the resigning Records Administrator, Fidelity (“Fidelity for an and all requests, documents, or data. This IAU does not amend, restate, supersede, terminate, extinguish, or replace any prior contract and in the event of a contradiction between any term in this IAU and a prior contract, the prior contract shall control.

The purpose of these responsibilities is to achieve the planned conversion of the CLIENT Plan (“the Plan”) from FIDELITY and the successful transition of Transfer Agency responsibilities to BNY Mellon. All parties will provide reason efforts to achieve the objectives and results as delineated within. It is understood that this IAU document sets forth the understanding of BNY Mellon and FIDELITY with respect to certain responsibilities and rights in connection with the conversion.

The system production conversion of the Plan from FIDELITY to BNY Mellon will start at the close of business (COB) on XX and will include all shareholder processing completed through the COB on XX with a go live date on the BNY Mellon system on XX.

The details of conversion-related activities and responsibilities follow. Please take note that this document contains references to delivery of information in Eastern Time (ET).

Definitions

“Account Owner” is an account established by a Designated Beneficiary or an Account Administrator (ALR) on their behalf.

“Business Day” is defined as each day that that New York Stock Exchange (“NYSE”) is open for regular trading. Regular trading usually closes at 4:00 p.m. ET.

“Close of Business” is defined as after 4:00 p.m. ET on a Business Day.

“Conversion” is the transfer of control of the Plan Records from FIDELITY to BNY Mellon or its designee.

“Conversion Date” is 4:00 p.m. ET on XX.

“Eastern Time” is the time then in effect in New York, New York.

“Plan Records” are all electronic records and files relating solely or primarily to the Plan.

“Transaction Cutoff Date” shall mean the period from the close of business 4:00 p.m. ET on XX until the completion of required tasks associated with transactions received through 4:00 p.m. ET on XX.

Performance Conversion Standards – Assumptions and General Obligations

1. The parties will provide necessary resources to support the process of effecting the Conversion.
2. CLIENT has requested mock conversion data files from BNY Mellon prior to the live conversion.
3. Other than what has been requested, FIDELITY will not provide any additional conversion reports.
4. The parties agree to the specifications supporting the Conversion, criteria as defined below.
Theses specifications will not be changed unless such changes are mutually agreed to in writing by the parties.

CLIENT Conversion from Fidelity to BNY Mellon

Production Conversion: Date TBD

Primary Contacts

The primary contacts for the events for XX Through XX. (Production):

BNY Mellon

CONTACT	RESPONSIBILITY	EMAIL	PHONE
	Project Manager		
	Operations – Group Manager		
	Sumday		
	Sumday		

CLIENT

CONTACT	RESPONSIBILITY	EMAIL	PHONE / FAX

Balancing

BNY will balance the following:

- 1) Total Outstanding Shares by Fund as of close of business XX.
- 2) Total Number of Open and Closed Accounts as of close of business XX.

Data Conversion Files

Conversion Timeline:

- No trading during Transaction Cutoff Date.
- CLIENT will upload final test transition files to the BNY Mellon Sharepoint site no later than XX.
- CLIENT will upload final production files to the BNY Mellon Sharepoint site no later than 12 PM on XX.
- BNY Mellon to run conversion process on XX – XX.

CLIENT Conversion from FidelityFidelity to BNY Mellon

Production Conversion: Date TBD

- CLIENT will request that FIDELITY overnights a cumulative set of correspondence data files (tax forms and statements since) on XX. The files will be overnights on an encrypted thumb drive to the following address:

**BNY Mellon
c/o TBD
4400 Computer Drive
Westboro, MA 01581**

- CLIENT will request that FIDELITY overnights a cumulative set of correspondence data files (tax forms and statements since) with 5498-QA reporting no later than XX. The files will be overnights on an encrypted thumb drive to the following address:

**BNY Mellon
c/o TBD
4400 Computer Drive
Westboro, MA 01581**

BNY Sunday team contacts for Production Conversion

CONTACT	EMAIL	PHONE

Data System Conversion – Assumptions and Limitations

The Conversion Business Requirements Document will be provided under separate cover.

Shareholder Servicing

FIDELITY will be responsible for all shareholder and dealer servicing and will continue to research and reconcile items through Conversion Date.

BNY Mellon will assume responsibility for all shareholder servicing on the converted accounts, beginning on, XX.

The BNY Mellon call center will begin taking calls on XX at 9:00 AM ET.

Shareholder Mail

FIDELITY will forward misdirected accountable mail overnight to BNY for a period of three (3) months, at BNY's expense to the following address:

**CLIENT
4400 Computer Drive
Westborough, MA 01581**

CLIENT Conversion from FidelityFidelity to BNY Mellon

Production Conversion: Date TBD

CLIENT will request invoices from FIDELITY and will supply invoices to BNY and BNY shall pay the costs related to mail forwarding after the Conversion Date.

CLIENT will requests that FIDELITY has USPS forward all mail from the current Plan PO Box address to the Plan's new PO Box (listed below) for 12 months after the conversion, to begin on day after Conversion Date.

**CLIENT
PO Box XXXX
Providence RI, 02940-XXXX**

Items Not in Good Order (NIGO)

CLIENT will request that FIDELITY provides a spreadsheet along with corresponding documentation that is outstanding at the time of the conversion to the address or email below. Upon receiving, CLIENT will send to:

**BNY Mellon
Attn. TBD
760 Moore Road
King of Prussia PA 19406**

Email address TBD

The only item FIDELITY anticipates having to report is pending withdrawals due to unmatured contributions. FIDELITY will furnish a report with the account level detail.

ACH Returns

Purchase Returns

CLIENT Inc. will receive notice of returned payment.

Redemption Returns

BNY Mellon Control should be notified of these items if they are being sent over from CLIENT. Email the following.

- [Contact TBD](#)
- [Group Email box TBD](#)

Misdirected Wires/ACH

BNY Mellon Control should be notified of these items if they are being sent over from CLIENT. Email the following.

- [Contact TBD](#)
- [Group Email box TBD](#)

Systematic Purchase Plan (SPP)

SPP transactions currently exist for Account Owners. FIDELITY shall handle all SPP scheduled for posting through the Transaction Cutoff Date and will not process any SPP past this date.

For any accounts that have a scheduled on XX – XX BNY Mellon will initiate a one off ACH purchase on XX. The purchase will post to the account with a trade date of XX.

RPO (Return Post Office) & Lost Shareholder Search items

BNY Mellon will add holds to accounts based on RPO information included on the FIDELITY conversion files.

BNY Mellon is not converting outstanding RPO Dollars.

Escheatment

CLIENT will be handled via the BNY Mellon Unclaimed Property Admin (UPA) team.

CLIENT to confirm whether there are escheatable accounts as of the Conversion Date.

SEC Rule 17Ad-17/Unresponsive Payee

CLIENT will follow the terms and conditions of the Program Description and Participation and will provide guidance to BNY Mellon as necessary.

TA Regulatory Operations Services

Customer Identification Program (CIP)

Sumday will create CIP records on all converted accounts. These accounts will be processed through the overnight cycle.

After the conversion, CLIENT accounts will follow the standard CIP process. Accounts that do not pass vendor verification (from overnight cycle), will be reviewed by CIP analysts for additional non documentary review to see if CIP records can be cleared. If not, outreach will be performed via correspondence letter.

Tax Reporting

CLIENT will provide a Work Order request with FIDELITY to support any research request to help solve tax reporting issues for 2021 that cannot be resolved with historical information converted.

CLIENT Conversion from Fidelity to BNY Mellon

Production Conversion: Date TBD

The following will be FIDELITY's responsibilities:

1. 1099 Q and - TBD based upon conversion date.
2. Should basis and earnings calculations issues arise due to pre-conversion data whereby the account basis and earnings calculation is not resolveable with available data, FIDELITY will need to provide support to resolve calculation.

Fidelity's Tax Reporting contacts are:

CONTACT	EMAIL	PHONE	FAX

The following will be BNY Mellon's responsibilities:

- a) Tax year XXXX and moving forward for as long as BNY Mellon is responsible for CLIENT tax reporting, Forms 1099-Q , 5498-Q original full year reporting to recipients and IRS.
- b) 1099-Q, corrections post-conversion for current year. TBD how many prior years.

CLIENT would certify that the data from FIDELITY is accurate and if issues arise the Program would take responsibility, not BNY.

The 2020 1099 QA and 5498 QA forms should use the FIDELITY address.

BNY Mellon's Tax Reporting contacts for post-conversion work are:

CONTACT	EMAIL	PHONE	FAX

Correspondence Items

FIDELITY will distribute (email/mail) outbound program correspondence resulting from Conversion Date cycle.

FIDELITY does not anticipate having any incomplete outbound correspondence.

Processing Items

Transaction Processing / Processing Items Not Completed:

FIDELITY will continue to perform all other normal shareholder support functions Transaction Cutoff Date. FIDELITY will make a “best effort” to complete all transaction processing by XX; however, all financial transactions must be completed.

Rejected Items:

FIDELITY will notify CLIENT of any transactions that could not be processed during the normal nightly cycle on the Conversion Date.

Other Processing:

FIDELITY will continue to perform all other normal shareholder support functions Transaction Cutoff Date.

FIDELITY anticipates there will be no outstanding items to be processed at transition.

Outstanding Checks

For checks issued prior to the conversion by FIDELITY, CLIENT will continue to honor and pay these checks for a period of 180 days post conversion. After 180 days, CLIENT will place a stop on any uncashed checks and remit a single wire to BNY Mellon along with the check details for each check.

During the time period between the conversion date and 180 days, if a distribution does not clear for any reason, the Account Owner may submit a request to reissue the distribution or return the funds to the Account. BNY Mellon will provide details of the check(s) to stop to CLIENT. CLIENT will place a stop on the outstanding check(s) and send a wire to BNY Mellon for the check(s) amount. BNY will follow Account Owner direction.

BNY Contacts:

CONTACT	EMAIL	PHONE

Document Retrieval/Research

Until the trailing statements and tax forms are received and loaded by BNY post-Conversion Date, CLIENT can submit research requests via the standard Work Order process to FIDELITY.

Historical Statements and Tax Forms

CLIENT to request that FIDELITY provides the following images to BNY:

CLIENT Conversion from FidelityFidelity to BNY Mellon

Production Conversion: Date TBD

All account Statements

All 1099/5498-QA Tax Forms and Corrections

CLIENT will work with FIDELITY to provide all outstanding items to BNY Mellon, including 2020 1099 IRS Tax Reporting by XX.

Details on the Image conversion (how reviewed, test loads of images, what documents will be loaded) will be added to the Conversion BRD document. Conversion BRD will also address timing of Image load.

Shareholder Confirmations and Statements

FIDELITY will be responsible for the printing and mailing of items including all daily output, checks, statements and confirmation of transactions, processed through Conversion Date.

BNY Mellon will assume responsibility for all daily output, beginning XX. BNY Mellon will generate quarterly statements the quarter in which the conversion occurs, and on a go-forward basis.

Participant Web Portal

FIDELITY participant web portal will be available to participants through 4:00 PM ET on Conversion Date, at which time enrollment and account access will be disabled and replaced by a temporary message re-directing participants to the marketing web site.

BNY Mellon participant web portal (Sumday) will be available to participants at 9:00 AM ET on XX.

Transition of 800 Number

FIDELITY will continue to take phone calls through the close of business, 6:00 PM ET on XX.

The 800 number will be transferred to BNY Mellon on Wednesday morning, XX prior to the start of business.

Ancillary Websites

FIDELITY has at least one ancillary website branded with CLIENT. Ownership of any additional websites on behalf of the CLIENT program will be transferred to CLIENT no later than 10 business days from Conversion Date.

Adjustment Processing

FIDELITY will respond to data requests and/or any other related conversion inquiries made by CLIENT via standard Work Order process.

CLIENT Conversion from FidelityFidelity to BNY Mellon

Production Conversion: Date TBD

IAU Modification

This IAU may be modified by mutual consent at any time, but no modification or alteration of this IAU will be valid or effective unless such modification is made in writing and signed by all parties and affixed to this instrument.

Each party has caused its duly authorized officer to execute this IAU this [DATE].

BNY Mellon Asset Servicing

CLIENT

Name:

Title:

Name:

Title:

Proposed Investment Options

Underlying Fund or Strategy	Weighted (%)	Investment Option	Asset Class	Ticker	Prospectus Net Expense Ratio	Benchmark
Vanguard Federal Money Market Fund Investor Shares	100	Cash Preservation Portfolio	Money Market	VMMFXX	0.110	Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD
Fidelity® U.S. Bond Index Fund	30	Income Portfolio	Intermediate Core Bond	FXNAX	0.025	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Total Bond Market Index Fund Institutional Plus Shares	30	Income Portfolio	Intermediate Core Bond	VBMPX	0.030	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Long-Term Treasury Index Fund Institutional Shares	5	Income Portfolio	Long Government	VLGIX	0.050	Bloomberg Barclays Long Term US Treasury TR USD
Schwab® Treasury Inflation Protected Securities Index Fund	8	Income Portfolio	Inflation-Protected Bond	SWRSX	0.050	Bloomberg Barclays US Treasury US TIPS TR USD
Vanguard Emerging Markets Government Bond Index Fund Institutional Shares	2	Income Portfolio	Emerging Markets Bond	VGIVX	0.230	Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD
Vanguard Federal Money Market Fund Investor Shares	25	Income Portfolio	Money Market	VMMFXX	0.110	Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD
Fidelity® Total Market Index Fund	10	Income and Growth Portfolio	U.S. Large Cap Blend	FSKAX	0.015	Dow Jones US Total Stock Market TR USD
Schwab Total Stock Market Index Fund®	10	Income and Growth Portfolio	U.S. Large Cap Blend	SWTSX	0.030	Dow Jones US Total Stock Market TR USD
Fidelity® International Index Fund	15	Income and Growth Portfolio	Foreign Large Blend	FSPSX	0.035	MSCI EAFE NR USD
Fidelity® Emerging Markets Index Fund	5	Income and Growth Portfolio	Diversified Emerging Markets	FPADX	0.075	MSCI EM NR USD
Fidelity® U.S. Bond Index Fund	24	Income and Growth Portfolio	Intermediate Core Bond	FXNAX	0.025	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Total Bond Market Index Fund Institutional Plus Shares	24	Income and Growth Portfolio	Intermediate Core Bond	VBMPX	0.030	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Long-Term Treasury Index Fund Institutional Shares	4	Income and Growth Portfolio	Long Government	VLGIX	0.050	Bloomberg Barclays Long Term US Treasury TR USD
Schwab® Treasury Inflation Protected Securities Index Fund	5	Income and Growth Portfolio	Inflation-Protected Bond	SWRSX	0.050	Bloomberg Barclays US Treasury US TIPS TR USD
Vanguard Emerging Markets Government Bond Index Fund Institutional Shares	2	Income and Growth Portfolio	Emerging Markets Bond	VGIVX	0.230	Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD
Vanguard Federal Money Market Fund Investor Shares	1	Income and Growth Portfolio	Money Market	VMMFXX	0.110	Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD
Fidelity® Total Market Index Fund	13	Balanced Portfolio	U.S. Large Cap Blend	FSKAX	0.015	Dow Jones US Total Stock Market TR USD
Schwab Total Stock Market Index Fund®	13	Balanced Portfolio	U.S. Large Cap Blend	SWTSX	0.030	Dow Jones US Total Stock Market TR USD
Fidelity® International Index Fund	18	Balanced Portfolio	Foreign Large Blend	FSPSX	0.035	MSCI EAFE NR USD
Fidelity® Emerging Markets Index Fund	6	Balanced Portfolio	Diversified Emerging Markets	FPADX	0.075	MSCI EM NR USD
Fidelity® U.S. Bond Index Fund	20	Balanced Portfolio	Intermediate Core Bond	FXNAX	0.025	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Total Bond Market Index Fund Institutional Plus Shares	20	Balanced Portfolio	Intermediate Core Bond	VBMPX	0.030	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Long-Term Treasury Index Fund Institutional Shares	3	Balanced Portfolio	Long Government	VLGIX	0.050	Bloomberg Barclays Long Term US Treasury TR USD
Schwab® Treasury Inflation Protected Securities Index Fund	4	Balanced Portfolio	Inflation-Protected Bond	SWRSX	0.050	Bloomberg Barclays US Treasury US TIPS TR USD
Vanguard Emerging Markets Government Bond Index Fund Institutional Shares	2	Balanced Portfolio	Emerging Markets Bond	VGIVX	0.230	Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD
Vanguard Federal Money Market Fund Investor Shares	1	Balanced Portfolio	Money Market	VMMFXX	0.110	Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD
Fidelity® Total Market Index Fund	16	Conservative Growth Portfolio	U.S. Large Cap Blend	FSKAX	0.015	Dow Jones US Total Stock Market TR USD
Schwab Total Stock Market Index Fund®	16	Conservative Growth Portfolio	U.S. Large Cap Blend	SWTSX	0.030	Dow Jones US Total Stock Market TR USD
Fidelity® International Index Fund	21	Conservative Growth Portfolio	Foreign Large Blend	FSPSX	0.035	MSCI EAFE NR USD
Fidelity® Emerging Markets Index Fund	7	Conservative Growth Portfolio	Diversified Emerging Markets	FPADX	0.075	MSCI EM NR USD
Fidelity® U.S. Bond Index Fund	15	Conservative Growth Portfolio	Intermediate Core Bond	FXNAX	0.025	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Total Bond Market Index Fund Institutional Plus Shares	15	Conservative Growth Portfolio	Intermediate Core Bond	VBMPX	0.030	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Long-Term Treasury Index Fund Institutional Shares	3	Conservative Growth Portfolio	Long Government	VLGIX	0.050	Bloomberg Barclays Long Term US Treasury TR USD
Schwab® Treasury Inflation Protected Securities Index Fund	4	Conservative Growth Portfolio	Inflation-Protected Bond	SWRSX	0.050	Bloomberg Barclays US Treasury US TIPS TR USD
Vanguard Emerging Markets Government Bond Index Fund Institutional Shares	2	Conservative Growth Portfolio	Emerging Markets Bond	VGIVX	0.230	Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD
Vanguard Federal Money Market Fund Investor Shares	1	Conservative Growth Portfolio	Money Market	VMMFXX	0.110	Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD
Fidelity® Total Market Index Fund	21	Moderate Growth Portfolio	U.S. Large Cap Blend	FSKAX	0.015	Dow Jones US Total Stock Market TR USD
Schwab Total Stock Market Index Fund®	21	Moderate Growth Portfolio	U.S. Large Cap Blend	SWTSX	0.030	Dow Jones US Total Stock Market TR USD
Fidelity® International Index Fund	29	Moderate Growth Portfolio	Foreign Large Blend	FSPSX	0.035	MSCI EAFE NR USD
Fidelity® Emerging Markets Index Fund	9	Moderate Growth Portfolio	Diversified Emerging Markets	FPADX	0.075	MSCI EM NR USD
Fidelity® U.S. Bond Index Fund	6	Moderate Growth Portfolio	Intermediate Core Bond	FXNAX	0.025	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Total Bond Market Index Fund Institutional Plus Shares	6	Moderate Growth Portfolio	Intermediate Core Bond	VBMPX	0.030	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Long-Term Treasury Index Fund Institutional Shares	2	Moderate Growth Portfolio	Long Government	VLGIX	0.050	Bloomberg Barclays Long Term US Treasury TR USD
Schwab® Treasury Inflation Protected Securities Index Fund	3	Moderate Growth Portfolio	Inflation-Protected Bond	SWRSX	0.050	Bloomberg Barclays US Treasury US TIPS TR USD
Vanguard Emerging Markets Government Bond Index Fund Institutional Shares	2	Moderate Growth Portfolio	Emerging Markets Bond	VGIVX	0.230	Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD
Vanguard Federal Money Market Fund Investor Shares	1	Moderate Growth Portfolio	Money Market	VMMFXX	0.110	Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD
Fidelity® Total Market Index Fund	25	Growth Portfolio	U.S. Large Cap Blend	FSKAX	0.015	Dow Jones US Total Stock Market TR USD
Schwab Total Stock Market Index Fund®	25	Growth Portfolio	U.S. Large Cap Blend	SWTSX	0.030	Dow Jones US Total Stock Market TR USD
Fidelity® International Index Fund	37	Growth Portfolio	Foreign Large Blend	FSPSX	0.035	MSCI EAFE NR USD
Fidelity® Emerging Markets Index Fund	12	Growth Portfolio	Diversified Emerging Markets	FPADX	0.075	MSCI EM NR USD
Vanguard Federal Money Market Fund Investor Shares	1	Growth Portfolio	Money Market	VMMFXX	0.110	Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD
Fidelity® Total Market Index Fund	15	Year or Enrollment 2038 Conservative Portfolio	U.S. Large Cap Blend	FSKAX	0.015	Dow Jones US Total Stock Market TR USD
Schwab Total Stock Market Index Fund®	14	Year or Enrollment 2038 Conservative Portfolio	U.S. Large Cap Blend	SWTSX	0.030	Dow Jones US Total Stock Market TR USD
Fidelity® International Index Fund	19	Year or Enrollment 2038 Conservative Portfolio	Foreign Large Blend	FSPSX	0.035	MSCI EAFE NR USD
Fidelity® Emerging Markets Index Fund	7	Year or Enrollment 2038 Conservative Portfolio	Diversified Emerging Markets	FPADX	0.075	MSCI EM NR USD
Fidelity® U.S. Bond Index Fund	17	Year or Enrollment 2038 Conservative Portfolio	Intermediate Core Bond	FXNAX	0.025	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Total Bond Market Index Fund Institutional Plus Shares	18	Year or Enrollment 2038 Conservative Portfolio	Intermediate Core Bond	VBMPX	0.030	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Long-Term Treasury Index Fund Institutional Shares	3	Year or Enrollment 2038 Conservative Portfolio	Long Government	VLGIX	0.050	Bloomberg Barclays Long Term US Treasury TR USD
Schwab® Treasury Inflation Protected Securities Index Fund	4	Year or Enrollment 2038 Conservative Portfolio	Inflation-Protected Bond	SWRSX	0.050	Bloomberg Barclays US Treasury US TIPS TR USD
Vanguard Emerging Markets Government Bond Index Fund Institutional Shares	2	Year or Enrollment 2038 Conservative Portfolio	Emerging Markets Bond	VGIVX	0.230	Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD
Vanguard Federal Money Market Fund Investor Shares	1	Year or Enrollment 2038 Conservative Portfolio	Money Market	VMMFXX	0.110	Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD
Fidelity® Total Market Index Fund	13	Year or Enrollment 2036 Conservative Portfolio	U.S. Large Cap Blend	FSKAX	0.015	Dow Jones US Total Stock Market TR USD
Schwab Total Stock Market Index Fund®	13	Year or Enrollment 2036 Conservative Portfolio	U.S. Large Cap Blend	SWTSX	0.030	Dow Jones US Total Stock Market TR USD
Fidelity® International Index Fund	18	Year or Enrollment 2036 Conservative Portfolio	Foreign Large Blend	FSPSX	0.035	MSCI EAFE NR USD
Fidelity® Emerging Markets Index Fund	6	Year or Enrollment 2036 Conservative Portfolio	Diversified Emerging Markets	FPADX	0.075	MSCI EM NR USD
Fidelity® U.S. Bond Index Fund	20	Year or Enrollment 2036 Conservative Portfolio	Intermediate Core Bond	FXNAX	0.025	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Total Bond Market Index Fund Institutional Plus Shares	20	Year or Enrollment 2036 Conservative Portfolio	Intermediate Core Bond	VBMPX	0.030	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Long-Term Treasury Index Fund Institutional Shares	3	Year or Enrollment 2036 Conservative Portfolio	Long Government	VLGIX	0.050	Bloomberg Barclays Long Term US Treasury TR USD
Schwab® Treasury Inflation Protected Securities Index Fund	4	Year or Enrollment 2036 Conservative Portfolio	Inflation-Protected Bond	SWRSX	0.050	Bloomberg Barclays US Treasury US TIPS TR USD
Vanguard Emerging Markets Government Bond Index Fund Institutional Shares	2	Year or Enrollment 2036 Conservative Portfolio	Emerging Markets Bond	VGIVX	0.230	Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD
Vanguard Federal Money Market Fund Investor Shares	1	Year or Enrollment 2036 Conservative Portfolio	Money Market	VMMFXX	0.110	Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD
Fidelity® Total Market Index Fund	12	Year or Enrollment 2034 Conservative Portfolio	U.S. Large Cap Blend	FSKAX	0.015	Dow Jones US Total Stock Market TR USD
Schwab Total Stock Market Index Fund®	11	Year or Enrollment 2034 Conservative Portfolio	U.S. Large Cap Blend	SWTSX	0.030	Dow Jones US Total Stock Market TR USD
Fidelity® International Index Fund	16	Year or Enrollment 2034 Conservative Portfolio	Foreign Large Blend	FSPSX	0.035	MSCI EAFE NR USD
Fidelity® Emerging Markets Index Fund	6	Year or Enrollment 2034 Conservative Portfolio	Diversified Emerging Markets	FPADX	0.075	MSCI EM NR USD
Fidelity® U.S. Bond Index Fund	21	Year or Enrollment 2034 Conservative Portfolio	Intermediate Core Bond	FXNAX	0.025	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Total Bond Market Index Fund Institutional Plus Shares	22	Year or Enrollment 2034 Conservative Portfolio	Intermediate Core Bond	VBMPX	0.030	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Long-Term Treasury Index Fund Institutional Shares	4	Year or Enrollment 2034 Conservative Portfolio	Long Government	VLGIX	0.050	Bloomberg Barclays Long Term US Treasury TR USD
Schwab® Treasury Inflation Protected Securities Index Fund	5	Year or Enrollment 2034 Conservative Portfolio	Inflation-Protected Bond	SWRSX	0.050	Bloomberg Barclays US Treasury US TIPS TR USD
Vanguard Emerging Markets Government Bond Index Fund Institutional Shares	2	Year or Enrollment 2034 Conservative Portfolio	Emerging Markets Bond	VGIVX	0.230	Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD
Vanguard Federal Money Market Fund Investor Shares	1	Year or Enrollment 2034 Conservative Portfolio	Money Market	VMMFXX	0.110	Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD
Fidelity® Total Market Index Fund	9	Year or Enrollment 2032 Conservative Portfolio	U.S. Large Cap Blend	FSKAX	0.015	Dow Jones US Total Stock Market TR USD
Schwab Total Stock Market Index Fund®	9	Year or Enrollment 2032 Conservative Portfolio	U.S. Large Cap Blend	SWTSX	0.030	Dow Jones US Total Stock Market TR USD
Fidelity® International Index Fund	12	Year or Enrollment 2032 Conservative Portfolio	Foreign Large Blend	FSPSX	0.035	MSCI EAFE NR USD
Fidelity® Emerging Markets Index Fund	5	Year or Enrollment 2032 Conservative Portfolio	Diversified Emerging Markets	FPADX	0.075	MSCI EM NR USD
Fidelity® U.S. Bond Index Fund	26	Year or Enrollment 2032 Conservative Portfolio	Intermediate Core Bond	FXNAX	0.025	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Total Bond Market Index Fund Institutional Plus Shares	26	Year or Enrollment 2032 Conservative Portfolio	Intermediate Core Bond	VBMPX	0.030	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Long-Term Treasury Index Fund Institutional Shares	4	Year or Enrollment 2032 Conservative Portfolio	Long Government	VLGIX	0.050	Bloomberg Barclays Long Term US Treasury TR USD
Schwab® Treasury Inflation Protected Securities Index Fund	6	Year or Enrollment 2032 Conservative Portfolio	Inflation-Protected Bond	SWRSX	0.050	Bloomberg Barclays US Treasury US TIPS TR USD
Vanguard Emerging Markets Government Bond Index Fund Institutional Shares	2	Year or Enrollment 2032 Conservative Portfolio	Emerging Markets Bond	VGIVX	0.230	Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD
Vanguard Federal Money Market Fund Investor Shares	1	Year or Enrollment 2032 Conservative Portfolio	Money Market	VMMFXX	0.110	Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD
Fidelity® Total Market Index Fund	7	Year or Enrollment 2030 Conservative Portfolio	U.S. Large Cap Blend	FSKAX	0.015	Dow Jones US Total Stock Market TR USD
Schwab Total Stock Market Index Fund®	6	Year or Enrollment 2030 Conservative Portfolio	U.S. Large Cap Blend	SWTSX	0.030	Dow Jones US Total Stock Market TR USD
Fidelity® International Index Fund	8	Year or Enrollment 2030 Conservative Portfolio	Foreign Large Blend	FSPSX	0.035	MSCI EAFE NR USD
Fidelity® Emerging Markets Index Fund	4	Year or Enrollment 2030 Conservative Portfolio	Diversified Emerging Markets	FPADX	0.075	MSCI EM NR USD
Fidelity® U.S. Bond Index Fund	29	Year or Enrollment 2030 Conservative Portfolio	Intermediate Core Bond	FXNAX	0.025	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Total Bond Market Index Fund Institutional Plus Shares	30	Year or Enrollment 2030 Conservative Portfolio	Intermediate Core Bond	VBMPX	0.030	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Long-Term Treasury Index Fund Institutional Shares	5	Year or Enrollment 2030 Conservative Portfolio	Long Government	VLGIX	0.050	Bloomberg Barclays Long Term US Treasury TR USD
Schwab® Treasury Inflation Protected Securities Index Fund	8	Year or Enrollment 2030 Conservative Portfolio	Inflation-Protected Bond	SWRSX	0.050	Bloomberg Barclays US Treasury US TIPS TR USD
Vanguard Emerging Markets Government Bond Index Fund Institutional Shares	2	Year or Enrollment 2030 Conservative Portfolio	Emerging Markets Bond	VGIVX	0.230	Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD
Vanguard Federal Money Market Fund Investor Shares	1	Year or Enrollment 2030 Conservative Portfolio	Money Market	VMMFXX	0.110	Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD
Fidelity® Total Market Index Fund	4	Year or Enrollment 2028 Conservative Portfolio	U.S. Large Cap Blend	FSKAX	0.015	Dow Jones US Total Stock Market TR USD
Schwab Total Stock Market Index Fund®	4	Year or Enrollment 2028 Conservative Portfolio	U.S. Large Cap Blend	SWTSX	0.030	Dow Jones US Total Stock Market TR USD
Fidelity® International Index Fund	5	Year or Enrollment 2028 Conservative Portfolio	Foreign Large Blend	FSPSX	0.035	MSCI EAFE NR USD
Fidelity® Emerging Markets Index Fund	2	Year or Enrollment 2028 Conservative Portfolio	Diversified Emerging Markets	FPADX	0.075	MSCI EM NR USD
Fidelity® U.S. Bond Index Fund	26	Year or Enrollment 2028 Conservative Portfolio	Intermediate Core Bond	FXNAX	0.025	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Total Bond Market Index Fund Institutional Plus Shares	27	Year or Enrollment 2028 Conservative Portfolio	Intermediate Core Bond	VBMPX	0.030	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Long-Term Treasury Index Fund Institutional Shares	4	Year or Enrollment 2028 Conservative Portfolio	Long Government	VLGIX	0.050	Bloomberg Barclays Long Term US Treasury TR USD
Schwab® Treasury Inflation Protected Securities Index Fund	6	Year or Enrollment 2028 Conservative Portfolio	Inflation-Protected Bond	SWRSX	0.050	Bloomberg Barclays US Treasury US TIPS TR USD
Vanguard Emerging Markets Government Bond Index Fund Institutional Shares	2	Year or Enrollment 2028 Conservative Portfolio	Emerging Markets Bond	VGIVX	0.230	Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD
Vanguard Federal Money Market Fund Investor Shares	20	Year or Enrollment 2028 Conservative Portfolio	Money Market	VMMFXX	0.110	Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD
Fidelity® Total Market Index Fund	3	Year or Enrollment 2026 Conservative Portfolio	U.S. Large Cap Blend	FSKAX	0.015	Dow Jones US Total Stock Market TR USD
Schwab Total Stock Market Index Fund®	2	Year or Enrollment 2026 Conservative Portfolio	U.S. Large Cap Blend	SWTSX	0.030	Dow Jones US Total Stock Market TR USD
Fidelity® International Index Fund	4	Year or Enrollment 2026 Conservative Portfolio	Foreign Large Blend	FSPSX	0.035	MSCI EAFE NR USD
Fidelity® Emerging Markets Index Fund	1	Year or Enrollment 2026 Conservative Portfolio	Diversified Emerging Markets	FPADX	0.075	MSCI EM NR USD
Fidelity® U.S. Bond Index Fund	26	Year or Enrollment 2026 Conservative Portfolio	Intermediate Core Bond	FXNAX	0.025	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Total Bond Market Index Fund Institutional Plus Shares	27	Year or Enrollment 2026 Conservative Portfolio	Intermediate Core Bond	VBMPX	0.030	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Long-Term Treasury Index Fund Institutional Shares	4	Year or Enrollment 2026 Conservative Portfolio	Long Government	VLGIX	0.050	Bloomberg Barclays Long Term US Treasury TR USD
Schwab® Treasury Inflation Protected Securities Index Fund	6	Year or Enrollment 2026 Conservative Portfolio	Inflation-Protected Bond	SWRSX	0.050	Bloomberg Barclays US Treasury US TIPS TR USD
Vanguard Emerging Markets Government Bond Index Fund Institutional Shares	2	Year or Enrollment 2026 Conservative Portfolio	Emerging Markets Bond	VGIVX	0.230	Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD
Vanguard Federal Money Market Fund Investor Shares	25	Year or Enrollment 2026 Conservative Portfolio	Money Market	VMMFXX	0.110	Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD
Fidelity® Total Market Index Fund	2	Year or Enrollment 2024 Conservative Portfolio	U.S. Large Cap Blend	FSKAX	0.015	Dow Jones US Total Stock Market TR USD
Schwab Total Stock Market Index Fund®	1	Year or Enrollment 2024 Conservative Portfolio	U.S. Large Cap Blend	SWTSX	0.030	Dow Jones US Total Stock Market TR USD
Fidelity® International Index Fund	2	Year or Enrollment 2024 Conservative Portfolio	Foreign Large Blend	FSPSX	0.035	MSCI EAFE NR USD
Fidelity® Emerging Markets Index Fund	0	Year or Enrollment 2024 Conservative Portfolio	Diversified Emerging Markets	FPADX	0.075	MSCI EM NR USD
Fidelity® U.S. Bond Index Fund	18	Year or Enrollment 2024 Conservative Portfolio	Intermediate Core Bond	FXNAX	0.025	Bloomberg Barclays US Aggregate Bond TR USD
Vanguard Total Bond Market Index Fund Institutional Plus Shares	18	Year or Enrollment 2024 Conservative Portfolio	Intermediate Core Bond	VBMPX	0.030	Bloomberg Barclays US Aggregate Bond TR USD

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Investment Advisory Report

Investment Advisory Report

Third Quarter 2020

Washington Student Achievement Council

Prepared by Lockwood Advisors, Inc.

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Executive Summary

Plan-specific highlights, with brief discussion of broader market activity to provide context.

DreamAhead College Investment Plan Highlights

- All Static and Year of Enrollment portfolios have met their respective benchmarks in Q3 2020, year-to-date, and trailing 12 month period.
- No remedial action is necessary.
- There are no funds on the Watch List. All funds have performed as expected.

Broad Market Macroeconomic Highlights

Five Trends to Consider

1. The Need for Inflation

Disinflation has ruled the roost for decades, but now we find ourselves in need of a little inflation to ease our sizable federal, corporate and personal loan burdens. A small dose of inflation might help reduce the real, inflation-adjusted burden of debt for current debt holders, at least for fixed (not adjustable) debt. It would also help wage earners add a little to their paychecks.

2. The Candidates Have Spoken

Democratic nominee and former Vice President Joe Biden has issued a detailed plan that begins to cut the national debt, but only in the years beyond 2030 and only after significant tax hikes. These tax hikes would, if enacted, likely lower GDP (gross domestic product) growth in the intermediate time frame, bringing deficit reduction into question. On the other side, President Trump has offered a middle-class tax cut, hinted at a capital gains tax cut and proposed tax breaks for those companies returning manufacturing to the U.S. He also proposes a payroll tax break for the pandemic period.

3. No Fiscal Discipline

Unfortunately, neither party seems remotely interested in anything akin to fiscal prudence during this election process. Granted, this may be understandable given that we still need to heal from the destruction of capital and labor that resulted from the coronavirus recession. Even if GDP recovers in several years, it may take much longer than that for employment and small business to regain pre-COVID-19 levels.

4. Monetary Policy at Zero

The Federal Reserve has signaled that it intends to keep the federal funds policy rate extremely low, effectively at the zero bound, until 2024. This underscores the dramatic monetary policy support that has been underpinning the market recovery this summer, but also sends a sign of concern about the amount of damage COVID-19 and forced lockdowns have had on the U.S. economy.

5. It Was a Rough September

Capital markets had a rough September, reversing many of the previous trends that we have seen since the troughs in risk assets in the spring. So far, the consensus view is that the markets just need a breather, a correction, a small, sharp pullback from the exhaustive and heady summer exuberance. There is an assemblage of near-term temporal concerns that markets must overcome. We face a wickedly contested election with a heightened prospect for violence and confusion. Volatility futures predict a marked possibility of market disruption after the election.

WIN

It was 1974 and inflation was a runaway train. WIN, short for “Whip Inflation Now,” was a policy effort on the part of the Gerald Ford administration to attempt to rein in spiraling inflation by encouraging savings and curtail inflationary spending habits.

This photo is of a genuine red 1974 Whip Inflation Now- pin, one of a whole bag your author collected as an impulse purchase. If you can believe it, there were WIN sweaters, bags, balls, stickers and earrings.



The WIN policy appeared somewhat successful, at least at first. Inflation, measured by headline consumer prices, did decline from an annual pace of 12.3% in late 1974 to 4.9% by late 1976, but spiked again to reach an all-time peak of 14.8% by March 1980. Anti-inflationary policy didn't really begin to succeed until some months after the Federal Reserve, under Chairman Paul Volcker, jacked up interest rates dramatically to slow money supply growth and the economy in October 1979. This was the so-called “Volcker Slam.”

Whip Up Some Inflation Now

We're almost at a polar opposite point today. Disinflation has ruled the roost for decades, but now we find ourselves in need of a little inflation to help ease our sizable federal, corporate and personal loan burdens. A small dose of inflation might help reduce the real, inflation-adjusted burden of debt for current debt holders, at least for fixed (not adjustable) debt. It would also help wage earners add a little to their paychecks. A little inflation would be good. A large dose of inflation might make things a lot worse by ratcheting up interest rates enough to slow an interest rate-sensitive economy too much.

Market Overview
Index Returns (%) as of September 30, 2020

Index	3Q 2020	1 Yr.	3 Yr. ^	5 Yr. ^	2019	2018	2017	2016
S&P 500	8.9	15.1	12.3	14.1	31.5	(4.4)	21.8	12.0
MSCI USA Small Cap	5.6	0.2	3.5	8.9	27.4	(10.0)	17.3	19.8
MSCI EAFE (net of taxes)	4.8	0.5	0.6	5.3	22.0	(13.8)	25.0	1.0
MSCI Emerging Markets (net of taxes)	9.6	10.5	2.4	9.0	18.4	(14.6)	37.3	11.2
Bloomberg Barclays US Aggregate Bond	0.6	7.0	5.2	4.2	8.7	0.0	3.5	2.6
Bloomberg Barclays Global Aggregate ex-US	4.1	5.5	3.1	3.6	5.1	(2.1)	10.5	1.5
S&P GSCI Crude Oil	2.4	(25.6)	(8.0)	(2.3)	34.5	(24.8)	12.5	45.0
S&P GSCI Gold	3.6	25.4	12.4	10.0	18.0	(2.8)	12.8	7.7
Bloomberg Commodity	9.1	(8.2)	(4.2)	(3.1)	7.7	(11.2)	1.7	11.8
Bloomberg Barclays US Treasury Bill 6–9 Month	0.1	1.7	1.9	1.3	2.6	1.8	0.7	0.5
Inflation \$	1.5	1.3	2.0	1.8	2.3	1.9	2.1	2.1

^3 year and 5 year returns are annualized

Sources: MSCI; Bloomberg Barclays; Standard and Poor's (©2020, S&P Dow Jones Indices LLC. All rights reserved); Bureau of Labor Statistics.

\$ Inflation data through August 2020. Visual created by Lockwood Advisors, Inc. For additional information regarding the indices shown, please refer to the Important Disclosures at the end of this document. Indices are unmanaged and are not available for direct investment. **Past performance is not a guarantee of future results.**

Let's look at U.S. federal debt. Before we vote in the election on November 3, we will experience Halloween in whatever form the pandemic allows. You don't need to wait for your seasonal horror fix. Right now, you can read a hot-off-the-press September release of a 74-page graphic horror novel. It's called "The 2020 Long-Term Budget Outlook" by the Congressional Budget Office (CBO). This annual report, available free to the public at [cbo.gov](https://www.cbo.gov), offers proof that reality is as spooky as anything Hollywood can dream up. This document shows what happens when governments fail to take responsible measures to balance their checkbooks over multiple business cycles and several administrations.

"The American Republic will endure until the day Congress discovers that it can bribe the public with the public's money."

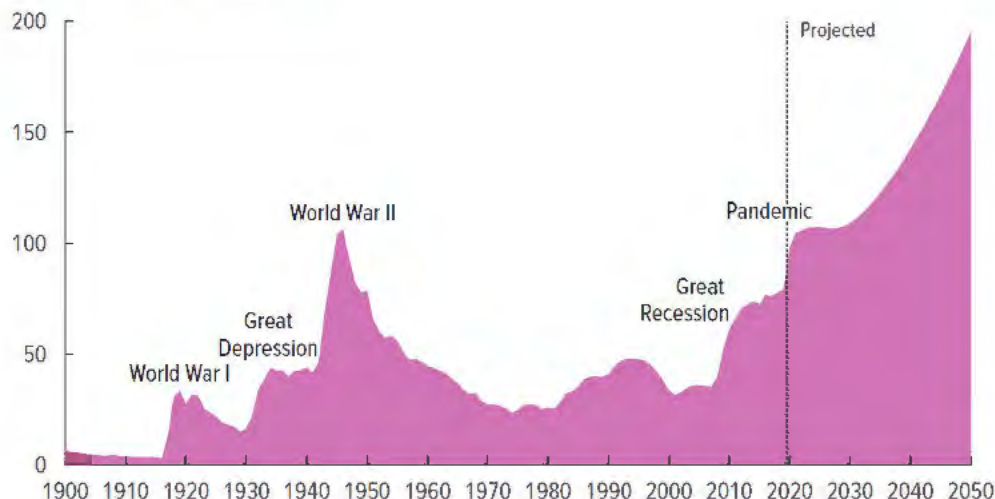
– Alexis de Tocqueville (1835)

The CBO presents a bleak picture of national debt rising for the next 30 years, and projects federal debt to rise to 195% of GDP (gross domestic product) by 2050. That would dwarf the previous peak of 106% just after World War II when the country was on a wartime footing. For reference, our pre-virus federal debt to GDP ratio was 79% in 2019 and 31% in 1974, when they issued our WIN pin. The pandemic alone is forecast to raise our debt to GDP ratio to 108% by 2023. We may surpass the previous historical high by the end of 2020, depending perhaps on whether the raucous politicians will stop dithering and agree on additional pandemic stimulus. In the longer-term forecast, driving the debt acceleration are expenditures on net interest on the debt as well as major health care programs, attributable in part to an aging population and overall health care cost increases.

Debt and Deficits

Federal debt held by the public is projected to equal 195 percent of gross domestic product (GDP) in 2050, and the deficit is projected to equal 13 percent of GDP.

Percentage of Gross Domestic Product

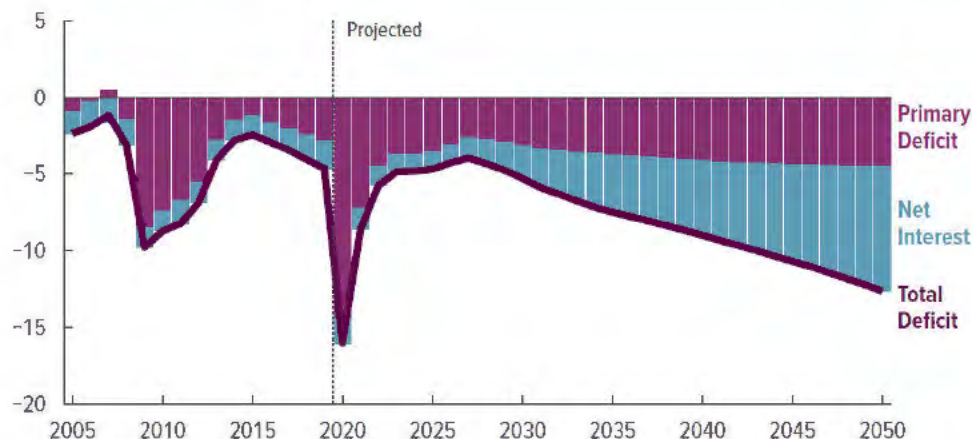


In CBO's projections, federal debt held by the public surpasses its historical high of 106 percent of GDP in 2023 and continues to climb in most years thereafter. In 2050, debt as a percentage of GDP is nearly 2.5 times what it was at the end of last year.

Source: Congressional Budget Office (CBO.gov). Data as of September 30, 2020

Pointedly, the U.S. is now at a debt to GDP ratio that has served as a threshold or tipping point where, historically, many nations' debt management has failed to recover. The U.S. may have additional fiscal space, or room to increase the ratio above 100%, but we're close or at a dangerous point that has led to trouble for many nations in the past.

Percentage of Gross Domestic Product



Deficits grow from an average of 4.8 percent of GDP from 2010 to 2019 to an average of 10.9 percent from 2041 to 2050, driving up debt. Net spending for interest rises rapidly and accounts for much of the growth in total deficits in the last two decades of the projection period.

Source: Congressional Budget Office (CBO.gov). Data as of September 30, 2020

"If something cannot go on forever, it will stop."

— Herbert Stein, U.S. Economist (1976)

Granted, these estimates are based on current enacted law that will most likely change over the course of the 30-year time horizon envisioned in the report. They also rely on a set of assumptions about interest rates and health care expenditures that could prove unrealistic. Nonetheless, they present a picture of a republic whose spending has gone seriously awry. They also project a federal debt to GDP ratio that alarms many economists, as examined in well-known

historical studies of financial crisis like Kenneth Rogoff and Carmen Reinhart's *This Time is Different: Eight Centuries of Financial Folly* (2011).

Both parties and COVID-19 have been complicit in getting us to these dire fiscal straits. Both major candidates for the U.S. presidency have presented policy proposals that do little to nothing to mitigate debt acceleration before the next presidential election in 2024.

The Biden Plan

Democratic nominee and former Vice President Joe Biden has issued a detailed plan that begins to cut the national debt, but only in the years beyond 2030 and only after significant tax hikes. These tax hikes would, if enacted, likely lower GDP growth in the intermediate time frame, bringing deficit reduction into question. According to Penn Wharton's Budget Model, the Biden platform would raise \$3.375 trillion in new tax revenue while spending an additional \$5.37 trillion over the 2021-2030 period. Wharton estimates the plan will begin to reduce national debt by 2050 and even then only by about 6%. Biden's tax plan would raise top rates on ordinary income from 37% to 39.6%, repeal tax cuts embedded in the Tax Cuts and Jobs Act (TCJA) for high-income filers, eliminate the stepped-up cost basis for estate tax calculation, limit itemized deductions, raise the corporate tax rate from 21% to 28%, impose a minimum corporate tax, raise tax on foreign subsidiary income (from 10.5% to 21%), eliminate fossil fuel and real estate subsidies and loopholes, and impose sanctions on foreign countries that facilitate corporate tax avoidance.

Wharton estimates that the Biden plan's largest impact on revenues would derive from the corporate rate hike (\$1.23 trillion), foreign subsidiary profit tax hike (\$310 billion), minimum corporate tax (\$212 billion) and eliminating the stepped-up basis (\$163 billion). For individual filers, Penn Wharton estimates that individual filers with incomes over \$400,000 will see an average 17.7% decline in after-tax income, not least in part due to a 12.4% Social Security tax hike for taxpayers in that category. There are tax credits for electric vehicles, residential energy efficiency, seniors, informal caregivers, solar and child care facilities. No matter your political views, this is one of the largest tax plans and expansions of the federal government proposed in U.S. history. If enacted, Biden's proposal could spur some inflation because of the large injection of federal spending.

The Trump Plan

President Trump has issued few details about his proposals for a second term and has issued somewhat vague descriptions of policy goals. We have only about one page worth of policy prescriptions and they appear to focus on tax credits and outright tax cuts. For example, he has offered a middle-class tax cut, hinted at a capital gains tax cut (20% to 15%) and proposed tax breaks for those companies returning manufacturing to the U.S. He also proposes a payroll tax break for the pandemic period. There are few, if any, spending cuts that seem to be implied by his general policy goals.

"Politics...has always been the systematic organization of hatreds."

— Henry Adams, *The Education of Henry Adams* (1918)

These are very different visions of future fiscal policy priorities. Whether any of these prescriptions, in whole or in part, can materialize remains to be seen. Both visions are constrained by macroeconomics and tactical politics, such as who controls the United States Senate next January. The House may initiate money bills, but the party in control of the Senate will be the key to determining whether many of these policy proposals come to pass. They may also be constrained by geopolitical realities, as the U.S. will need to continue to fund an effective and expensive military deterrent regardless of political social spending wish lists.

Wartime Footing

The U.S. has passed 7 million COVID-19 infections and 200,000 deaths, as of September 25, 2020. The virus has put both the U.S. fiscal and monetary policies on something akin to a wartime footing. We mean that the emergency policy stances in play now are similar to the control over capital markets that were enacted during and after World War II. As mentioned above, that period marks the previous peak in federal debt to GDP of around 106%. In 2021, or sometime after we have begun to control the virus or adapted to it, the United States could begin to chip away at the enormous bill we've rung up from these emergency stimulus measures.

How to Cut Debt

Theoretically, there are three ways to reduce a debt overhang: 1) austerity – cut spending and/or raise taxes to reduce deficits and debt; 2) grow faster – grow your way out in real, inflation-adjusted terms; or 3) inflate it away – use the central bank to print money and monetize the debt and reduce the cost of debt in real, inflation-adjusted terms. Of course, there is a fourth option: default.

After World War II, the U.S. economy took option #2 and grew the economy out of a massively indebted position. Several tailwinds to the U.S. economy contributed to our ability to manage the debt at that time. Real growth (non-inflationary growth) was higher than real interest rates, and demographics contributed as birth rates rose dramatically. Very importantly, productivity growth rates stayed high. Sentiment also remained elevated, not surprising after the end of a major global conflict. Also, since the U.S. had not been in an excessively indebted position prior to the War, it was easier to adjust to a one-time spike in debt. Moreover, and somewhat akin to Japan today, we were able to finance most of our debts internally.

These beneficial conditions are not present now and this will make working our way out of this predicament more difficult. We rely extensively on foreign lenders to fund our spending; the demographic picture is alarming, while productivity growth has slowed dramatically from the post-WWII period. A little bit of inflation might make our debt predicament easier to bear.

No Fiscal Discipline

Unfortunately, neither party seems remotely interested in anything akin to fiscal prudence during this election process. Granted, this may be understandable given that we still need to heal from the destruction of capital and labor that resulted from the coronavirus recession. Even if GDP recovers in several years, it may take much longer than that for employment and small business to regain pre-COVID-19 levels. So, it may be too early to begin to fret about near-term increases in debt while we work our way out of this morass. Still, the worrying trend is that neither party seems very interested in the long-term budget dynamic at this time and has not seemed worried for several decades.

So, if politicians have disregarded the federal debt and deficits and their impacts, why should investors care?

U.S. bond and foreign currency markets appear to be pricing in or poised to price in some of these longer-term effects. Markets are always long-term discounting mechanisms, but they could soon dramatically reevaluate U.S. interest rates, future inflation and the pricing of the dollar versus international currencies. Deficit hawks have been sounding the alarms for many decades. While many have downplayed the effects of sizable federal debt and deficits while they grew incrementally, markets will not be able to ignore very large changes in prescriptions from both monetary and fiscal policy. For example, markets responded to the Volcker Fed's abrupt policy shift by putting interest rates on a general path lower for four decades.

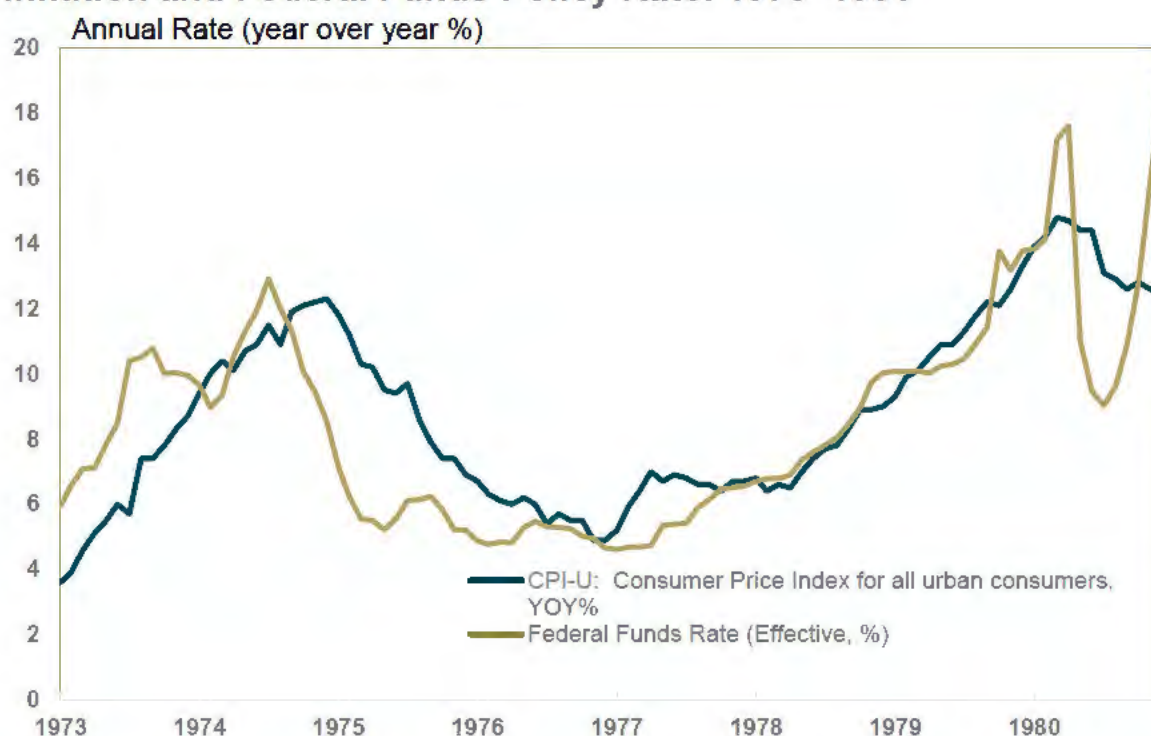
Monetary Policy: At Zero Until Next Presidential Election Cycle

The Federal Reserve has signaled it intends to keep the federal funds policy rate extremely low, effectively at the zero bound, until 2024. This underscores the dramatic monetary policy support that has been underpinning the market recovery this summer, but also sends a sign of concern about the amount of damage COVID-19 and forced lockdowns

have had on the U.S. economy. So far, the Federal Reserve has resisted the lure of negative nominal interest rates. Even so, a large swath of the government curve, in the U.S. and the around the world, is already in a negative real rate posture.

The Federal Reserve has also disclosed it intends to change how it thinks of its inflation target. Previously, the Fed thought of meeting an inflation target point estimate. Now, it will think of the inflation target as an average over time. This means it will allow inflation to run hotter than the target of 2% on core personal consumption expenditure deflator (Core PCE), the Federal Reserve's preferred measure of inflation, for some indeterminate period of time and will not necessarily reflexively raise policy interest rates once inflation begins to rear its head. The Federal Reserve has faced criticism in the past for raising interest rates when wages begin to rise. As we've mentioned, some wage inflation now would help U.S. workers recover.

Inflation and Federal Funds Policy Rate: 1973–1981



Source: Bloomberg. Visual created by Lockwood Advisors, Inc. Data as of September 30, 2020.

The Federal Reserve has been playing a large role in the U.S. debt markets in order to provide liquidity to stressed markets. In combination with its inflation stance, this implies that real interest rates could not only remain low but also actually fall. Low real interest rates will likely support equity prices. The Fed will also likely boost precious metals prices that have a high correlation with lower real rates. It also means that investors, like the mythological Sisyphus who pushes his rock up the hill again and again, will remain on the never-ending quest for something resembling a positive real yield on their investments.

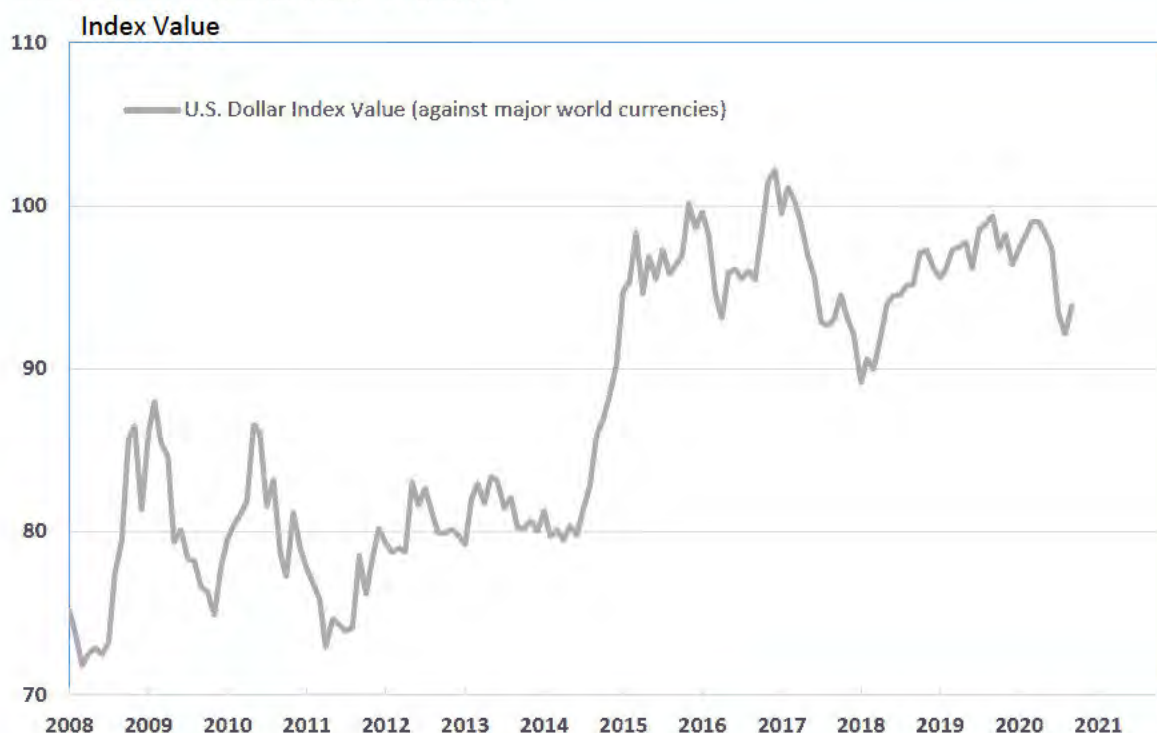
Interestingly, the Federal Reserve has been actively calling for additional fiscal stimulus to support the economy. In most circumstances, the Federal Reserve cajoles legislators for their profligate and spendthrift stance on fiscal policy, and has consistently labeled U.S. fiscal policy as unsustainable. This time, though, the Federal Reserve acknowledges that its arsenal to provide support to the economy is running thin. Central banks are all in and enormously stimulative. It's worth pointing out, however, that support for the corporate bond market has been sharply curtailed since August. Nonetheless, the Fed's policy stance underscores its concern in the near-term around additional damage from COVID-19 and weak domestic economic conditions.

Overall, the Federal Reserve would like to see inflation approach or even surpass its 2% target to help debt burdens and workers find their way out of current economic fragility. It doesn't mean the Federal Reserve will get additional inflation but, like in the late 1970s, it may take some time for changes in policy prescriptions to have the desired effect.

Currency Volatility

Many of these long-term concerns may be showing up in currencies. Some of the recent currency volatility can be traced to investors reassessing Federal Reserve policy changes and the lack of fiscal discipline. The Dollar Index, a measure of the value of the dollar compared to other major world currencies, peaked on March 20 at an index value of nearly 103. Since then, it slid to under 92 in early September, a value it had not seen since its ascendance in the 2014-2015 period when the U.S. economy was firmly entrenched in an economic recovery and benefiting from pronounced energy weakness. More recently, it has bounced off the marks from early September and ended the month at 93.886. This small backup in dollar values has roiled markets. It's still too early to determine whether the 12-year bullish run in the dollar is over, but expansive monetary and fiscal policy will put more dollars in circulation around the globe. Most valuation measures, such as PPP (purchasing power parity) have shown the dollar in an overvalued state for several years. The dollar has shown a strong degree of global investor caution, but it may be hard to sustain these values in the face of overwhelming stimulus from monetary and fiscal authorities. If the Federal Reserve wants more inflation and ultimately gets it, the U.S. dollar will react negatively.

U.S. Dollar Index: 2008–Present



Source: Bloomberg. Visual created by Lockwood Advisors, Inc. Data as of September 30, 2020.

Rough September

Capital markets had a rough September, reversing many of the previous trends that we have seen since the troughs in risk assets in the spring. So far, the consensus view is that the markets just need a breather, a correction, a small, sharp pullback from the exhaustive and heady summer exuberance. There is an assemblage of near-term temporal concerns that markets must overcome. We face a wickedly contested election with a heightened prospect for violence

and confusion. Volatility futures predict a marked possibility of market disruption after the election. There has been no resolution about continued fiscal support for the economy as we enter the fourth quarter while heated partisanship over a Supreme Court nominee flares tempers and makes compromise more difficult. Lack of additional stimulus brings into open question the possibility of a fiscal cliff that could emerge for workers and businesses impacted by the virus. Lastly, as mentioned, recent dollar strength puts some recent market trends into reversal.

Unusual Technical and Volatility Market Setup

Technically, it's unusual for a market correction to begin from such high levels of volatility (measured by the VIX Index). Most major market reversals take place when volatility is low and markets are complacent when faced with a shock. Does it imply that more market volatility is ahead?

Volatility (VIX) at Previous Market Peaks

Date	S&P 500	VIX
3/24/2000	1527.46	23.31
10/11/2007	1554.41	18.88
5/2/2011	1361.22	15.99
5/21/2015	2130.82	12.11
9/21/2018	2929.67	11.68
2/19/2020	3386.15	14.38
9/30/2020	3363.00	26.37

VIX is the ticker symbol for the Chicago Board Options Exchange (CBOE) Volatility Index, which shows the market's expectation of 30-day volatility. It is constructed using the implied volatilities of a wide range of S&P 500 index options. This volatility is meant to be forward looking, is calculated from both calls and puts, and is a widely used measure of market risk, often referred to as the "investor fear gauge."

Source: Bloomberg. Data as of September 30, 2020. Visual created by Lockwood Advisors, Inc.

We predicted last quarter that volatility would remain well above 2019 levels and that has remained true, never dipping below 20 on the VIX since the virus crisis began. The high levels of implied volatility show high levels of investor caution. However, that could set the stage for calmer markets once we get through the near-term concerns listed above. Lower implied volatility is usually the path when we have extraordinary monetary stimulus.

COVID-19 Is Global

Concerns about the long-term fiscal health of many nations are coming to the forefront as a result of COVID-19. It's exacerbating slow growth and demographic trends that were already in place, and taxing monetary authorities to their limits. Many countries might prefer more inflation now. The World Bank, in its June 2020 Global Economic Prospects, says that the global economy will shrink 5.2%, making this year the worst recession since World War II. It also expects a global rebound of 4.2% in 2021, but the damage wrought in 2020 will leave deep scars on the global outlook. Moreover, of the countries that the World Bank tracks, a higher percentage than ever are currently experiencing their worst decline in per capita output since 1870. For reference, the U.S. is projected to decline 7% and rebound 4% in 2021. COVID-19 has left particularly deep impressions on Europe and Latin America.

The virus itself will continue to play a large role in the shape of the recovery. In the United Kingdom, Spain, India, parts of Latin America and several U.S. states, we're seeing a dreaded second wave of infections. The question is whether it spreads to other parts of the U.S. and other nations around the world. Also, will authorities react differently when faced with opposition to widespread lockdowns? Has the virus mutated and, if so, how? There are four coronavirus vaccines in late-stage clinical studies. A breakthrough on that front will be sorely welcome, but will still need manufacturing prowess and widespread acceptance to succeed on a broad scale. Many asset managers appear to base their optimistic forecasts on a successful virus vaccine emerging over the next several quarters.

U.S.

There are multiple developments besides a vaccine that could prove to be positive catalysts for equity markets. Yes, we're getting a recovery and the U.S. GDP growth in the third quarter will be strong. However, we still won't get back to pre-COVID-19 levels of output for at least several years. The employment damage, while steadily improving, will progress at a slower pace than it has this summer. As we noted in last quarter's commentary, Americans have put substantial savings away since the virus started. That cash could get put back to work at some point. Corporations have amassed an impressive cash hoard as well and those funds could go to support stock buybacks, but that positive outcome seems conditional on politics that would block a sizable increase in the corporate tax rate.

U.S. equity markets look extremely expensive on very suppressed earnings, so we expect that markets will continue to be extraordinarily sensitive to the direction and pace of earnings estimates far into the future. There has been a shift in 2020 towards relying on much longer-run valuation measures. Disappointingly, S&P 500 Index earnings estimates for 2021 continue to come in. They have declined about \$5 in the past month on top of a \$30 decline in the estimate since the beginning of the year. That is a disconnect. Right now, markets are giving corporate results a pass and expecting much better results soon, but estimates continue to be under pressure. High valuations give fundamental buyers pause and makes equity markets vulnerable to disappointing news. Credit also looks like it has regained a very expensive posture relative to history.

Need Immediate Money

Last but not least, the equity markets continue to bask in extremely stimulative monetary policy. "Don't Fight the Fed" is a worn out cliché, but formed the basis for the markets' complete recovery over 2020. The extreme stimulus measures from monetary policy makers in the U.S. and around the world is one of the reasons asset allocators have not gotten too worked up over recent market gyrations. It's been made clear, again, that enough Federal Reserve stimulus can bolster markets. The question for markets in the years ahead is whether the Fed can also whip up some inflation.

We still believe that current market conditions and high valuations, overall, warrant a cautious and protective stance for client assets at this juncture.

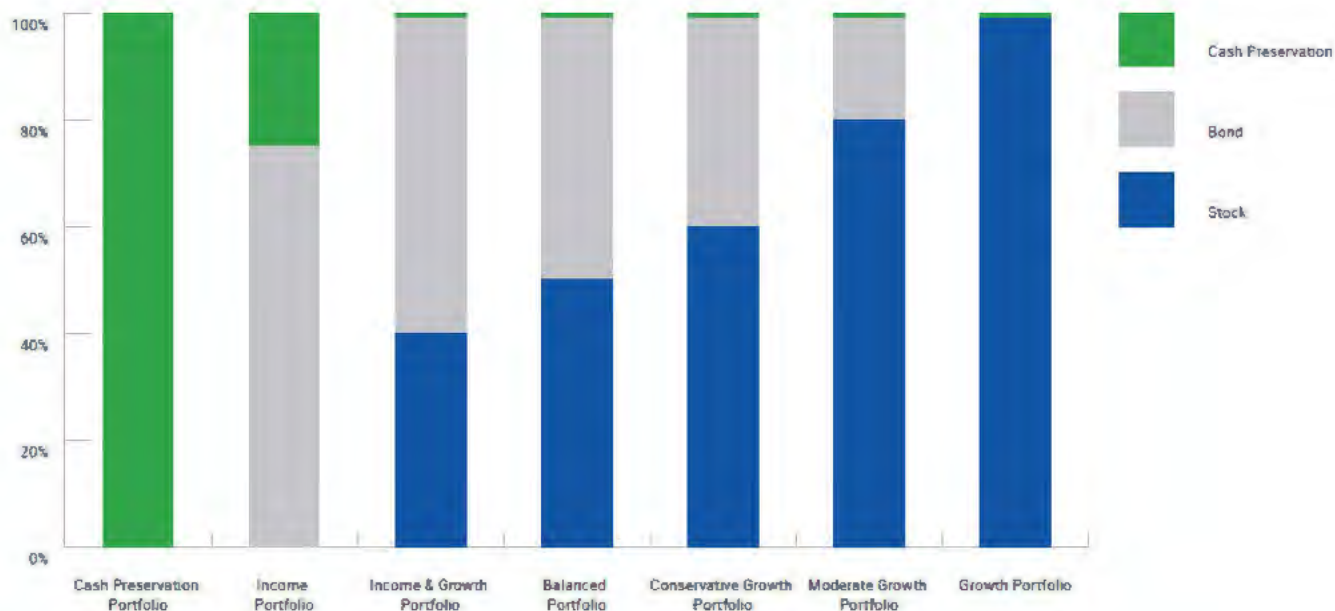
Of course, if you turn the red WIN pin upside down it becomes NIM. At the time, jokesters opined that the policy acronym meant "No Immediate Miracles" or "Need Immediate Money." Given that the markets appear disappointed without additional fiscal stimulus packages or additional measures from the Fed, these may be appropriate messages for markets today.

Performance Review

- All Static and Year of Enrollment portfolios have met their respective benchmarks in Q3 2020, year-to-date, and trailing 12 month period.
- No remedial action is necessary.
- There are no funds on the Watch List. All funds have performed as expected.

Static Portfolio Review

Static Asset Class Allocations



Source: SumDay Administration, LLC, a BNY Mellon Company. SumDay is an affiliate of Lockwood Advisors, Inc.
Portfolio allocations as of 9/30/2020

Static Portfolio Underlying Fund Allocations

Asset Category	Fund	Ticker	Cash Preservation Portfolio	Income Portfolio	Income and Growth Portfolio	Balanced Portfolio	Conservative Growth Portfolio	Moderate Growth Portfolio	Growth Portfolio
U.S. Large Cap Blend	Fidelity® Total Market Index Fund	FSKAX	0	0	10	13	16	21	25
U.S. Large Cap Blend	Schwab Total Stock Market Index Fund*	SWTSX	0	0	10	13	16	21	25
Foreign Large Blend	Fidelity® International Index Fund	FSPSX	0	0	15	18	21	29	37
Diversified Emerging Mkts	Fidelity® Emerging Markets Index Fund	FPADX	0	0	5	6	7	9	12
Intermediate-Term Bond	Fidelity® U.S. Bond Index Fund	FXNAX	0	30	24	20	15	6	0
Intermediate-Term Bond	Vanguard Total Bond Market Index Fund Institutional Plus Shares	VBMPX	0	30	24	20	15	6	0
Long Government	Vanguard Long-Term Treasury Index Fund Institutional Shares	VLGIX	0	5	4	3	3	2	0
Inflation-Protected Bond	Schwab® Treasury Inflation Protected Securities Index Fund	SWRSX	0	8	5	4	4	3	0
Emerging Markets Bond	Vanguard Emerging Markets Government Bond Index Fund Institutional Shares	VGIVX	0	2	2	2	2	2	0
Cash	Vanguard Federal Money Market Fund Investor Shares	VMFXX	100	25	1	1	1	1	1
Equity			0	0	40	50	60	80	99
Fixed Income			0	75	59	49	39	19	0
Cash			100	25	1	1	1	1	1
Total			100	100	100	100	100	100	100

Source: SumDay Administration, LLC, a BNY Mellon Company. SumDay is an affiliate of Lockwood Advisors, Inc.
Portfolio allocations as of 9/30/2020

Growth Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	7.51	0.19	9.09
Net of All Fees Return	7.45	0.03	8.85
Blended Benchmark	7.48	-0.15	8.82
Excess Return	-0.03	0.18	0.03

Moderate Growth Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	6.32	2.34	9.63
Net of All Fees Return	6.26	2.17	9.38
Blended Benchmark	6.31	1.86	9.21
Excess Return	-0.05	0.31	0.17

Conservative Growth Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	5.00	4.39	9.91
Net of All Fees Return	4.94	4.21	9.67
Blended Benchmark	4.98	3.66	9.25
Excess Return	-0.04	0.55	0.42

Balanced Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	4.25	5.02	9.64
Net of All Fees Return	4.19	4.85	9.40
Blended Benchmark	4.25	4.27	8.97
Excess Return	-0.06	0.58	0.43

Income & Growth Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	3.52	5.63	9.28
Net of All Fees Return	3.46	5.46	9.04
Blended Benchmark	3.55	5.01	8.77
Excess Return	-0.09	0.45	0.27

Income Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	0.61	6.06	6.06
Net of All Fees Return	0.56	5.89	5.83
Blended Benchmark	0.68	5.99	6.11
Excess Return	-0.12	-0.10	-0.28

Cash Preservation Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	0.01	0.37	0.78
Net of All Fees Return	-0.04	0.20	0.55
Benchmark	0.03	0.52	0.96
Excess Return	-0.07	-0.32	-0.41

Please see Blended Benchmark Definitions in the Important Disclosures section at the end of this report.

Performance as of 9/30/2020.

Source: SumDay Administration, LLC, a BNY Mellon Company. SumDay is an affiliate of Lockwood Advisors, Inc.

Performance is calculated using a time and asset-weighted Modified Dietz methodology. The Gross of Fees Return shown reflects the deduction of fees and expenses associated with the underlying mutual funds held in the portfolio (the "Underlying Fund Fee"). The Net of Fees Return shown reflects the deduction of the Underlying Fund Fee, Service Fee, and State Administrative Fee (together, the "Total Annual Asset-Based Fee"). The returns shown do not reflect account maintenance fees or other account level service-based fees (e.g., returned check fees, statement delivery fees, etc.).

Past performance is not a guarantee of future results. Current performance may be lower or higher than the performance data quoted. The investment return and principal value of an investment will fluctuate, so that an investor's assets, when sold, may be worth more or less than their original cost.

Indices are unmanaged and are not available for direct investment.

Conservative Year of Enrollment Portfolio Review

Conservative Year of Enrollment Portfolio Underlying Fund Allocations

Asset Category	Fund	Ticker	YoE 2038	YoE 2036	YoE 2034	YoE 2032	YoE 2030	YoE 2028	YoE 2026	YoE 2024	YoE 2022	Enrolled
U.S. Large Cap Blend	Fidelity® Total Market Index Fund	FSKAX	15	13	12	9	7	4	3	2	0	0
U.S. Large Cap Blend	Schwab Total Stock Market Index Fund*	SWTSX	14	13	11	9	6	4	2	1	0	0
Foreign Large Blend	Fidelity® International Index Fund	FSPSX	19	18	16	12	8	5	4	2	0	0
Diversified Emerging Mkts	Fidelity® Emerging Markets Index Fund	FPADX	7	6	6	5	4	2	1	0	0	0
Intermediate-Term Bond	Fidelity® U.S. Bond Index Fund	FXNAX	17	20	21	26	29	26	26	18	20	20
Intermediate-Term Bond	Vanguard Total Bond Market Index Fund Institutional Plus Shares	VBMPX	18	20	22	26	30	27	27	18	21	21
Long Government	Vanguard Long-Term Treasury Index Fund Institutional Shares	VLGIX	3	3	4	4	5	4	4	3	3	3
Inflation-Protected Bond	Schwab® Treasury Inflation Protected Securities Index Fund	SWRSX	4	4	5	6	8	6	6	4	4	4
Emerging Markets Bond	Vanguard Emerging Markets Government Bond Index Fund Institutional Shares	VGIVX	2	2	2	2	2	2	2	2	2	2
Cash	Vanguard Federal Money Market Fund Investor Shares	VMFXX	1	1	1	1	1	20	25	50	50	50
	Equity		55	50	45	35	25	15	10	5	0	0
	Fixed Income		44	49	54	64	74	65	65	45	50	50
	Cash		1	1	1	1	1	20	25	50	50	50
	Total		100	100	100	100	100	100	100	100	100	100

Source: SumDay Administration, LLC, a BNY Mellon Company. SumDay is an affiliate of Lockwood Advisors, Inc.
Portfolio allocations as of 9/30/2020.

Conservative Year of Enrollment 2036 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	4.34	4.24	9.35
Net of All Fees Return	4.28	4.07	9.12
Blended Benchmark	4.25	3.62	8.77
Excess Return	0.03	0.45	0.35

Conservative Year of Enrollment 2034 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	3.97	4.90	9.54
Net of All Fees Return	3.91	4.73	9.30
Blended Benchmark	3.94	3.96	8.64
Excess Return	-0.03	0.77	0.66

Conservative Year of Enrollment 2032 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	3.35	5.70	9.37
Net of All Fees Return	3.29	5.53	9.13
Blended Benchmark	3.28	4.74	8.48
Excess Return	0.01	0.79	0.65

Conservative Year of Enrollment 2030 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	2.73	6.25	9.03
Net of All Fees Return	2.67	6.07	8.79
Blended Benchmark	2.64	5.43	8.29
Excess Return	0.03	0.64	0.50

Conservative Year of Enrollment 2028 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	1.93	6.18	8.09
Net of All Fees Return	1.88	6.00	7.85
Blended Benchmark	1.75	5.32	7.29
Excess Return	0.13	0.68	0.56

Conservative Year of Enrollment 2026 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	1.48	5.78	7.22
Net of All Fees Return	1.42	5.60	6.99
Blended Benchmark	1.33	4.99	6.51
Excess Return	0.09	0.61	0.48

Conservative Year of Enrollment 2024 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	0.97	5.24	6.20
Net of All Fees Return	0.91	5.07	5.97
Blended Benchmark	0.79	4.72	5.78
Excess Return	0.12	0.35	0.19

Conservative Year of Enrollment 2022 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	0.53	3.74	4.36
Net of All Fees Return	0.47	3.57	4.13
Blended Benchmark	0.45	3.46	4.14
Excess Return	0.02	0.11	-0.01

Conservative Year of Enrollment Enrolled Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	0.42	NA	NA
Net of All Fees Return	0.37	NA	NA
Blended Benchmark	0.45	NA	NA
Excess Return	-0.08	NA	NA

Please see Blended Benchmark Definitions in the Important Disclosures section at the end of this report.

Performance as of 9/30/2020.

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Moderate Year of Enrollment Portfolio Review

Moderate Year of Enrollment Portfolio Underlying Fund Allocations

Asset Category	Fund	Ticker	YoE 2038	YoE 2036	YoE 2034	YoE 2032	YoE 2030	YoE 2028	YoE 2026	YoE 2024	YoE 2022	Enrolled
U.S. Large Cap Blend	Fidelity® Total Market Index Fund	FSKAX	24	24	21	18	16	13	9	5	3	0
U.S. Large Cap Blend	Schwab Total Stock Market Index Fund®	SWTSX	23	23	21	18	16	13	9	5	2	0
Foreign Large Blend	Fidelity® International Index Fund	FSPSX	33	33	29	26	21	18	12	7	4	0
Diversified Emerging Mkts	Fidelity® Emerging Markets Index Fund	FPADX	10	10	9	8	7	6	5	3	1	0
Intermediate-Term Bond	Fidelity® U.S. Bond Index Fund	FXNAX	3	3	6	10	15	20	24	27	27	27
Intermediate-Term Bond	Vanguard Total Bond Market Index Fund Institutional Plus Shares	VBMPX	2	2	6	10	15	20	25	28	28	28
Long Government	Vanguard Long-Term Treasury Index Fund Institutional Shares	VLGIX	1	1	2	3	3	3	4	5	5	5
Inflation-Protected Bond	Schwab® Treasury Inflation Protected Securities Index Fund	SWRSX	2	2	3	4	4	4	5	8	8	8
Emerging Markets Bond	Vanguard Emerging Markets Government Bond Index Fund Institutional Shares	VGIVX	1	1	2	2	2	2	2	2	2	2
Cash	Vanguard Federal Money Market Fund Investor Shares	VMFXX	1	1	1	1	1	1	5	10	20	30
Equity			90	90	80	70	60	50	35	20	10	0
Fixed Income			9	9	19	29	39	49	60	70	70	70
Cash			1	1	1	1	1	1	5	10	20	30
Total			100	100	100	100	100	100	100	100	100	100

Source: SumDay Administration, LLC, a BNY Mellon Company. SumDay is an affiliate of Lockwood Advisors, Inc.
Portfolio allocations as of 9/30/2020.

Moderate Year of Enrollment 2036 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	6.85	1.43	9.58
Net of All Fees Return	6.79	1.27	9.34
Blended Benchmark	6.95	0.89	9.10
Excess Return	-0.16	0.38	0.24

Moderate Year of Enrollment 2034 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	6.49	0.78	8.88
Net of All Fees Return	6.43	0.62	8.65
Blended Benchmark	6.31	0.30	8.45
Excess Return	0.12	0.32	0.20

Moderate Year of Enrollment 2032 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	5.85	1.82	9.08
Net of All Fees Return	5.79	1.65	8.84
Blended Benchmark	5.61	1.19	8.49
Excess Return	0.18	0.46	0.35

Moderate Year of Enrollment 2030 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	5.24	3.18	9.55
Net of All Fees Return	5.18	3.01	9.31
Blended Benchmark	4.98	2.12	8.53
Excess Return	0.20	0.89	0.78

Moderate Year of Enrollment 2028 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	4.54	4.03	9.53
Net of All Fees Return	4.48	3.86	9.29
Blended Benchmark	4.25	2.95	8.50
Excess Return	0.23	0.91	0.79

Moderate Year of Enrollment 2026 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	3.67	4.67	9.31
Net of All Fees Return	3.61	4.50	9.07
Blended Benchmark	3.23	3.25	7.90
Excess Return	0.38	1.25	1.17

Moderate Year of Enrollment 2024 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	2.67	5.45	8.70
Net of All Fees Return	2.61	5.28	8.46
Blended Benchmark	2.19	4.14	7.45
Excess Return	0.42	1.14	1.01

Moderate Year of Enrollment 2022 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	1.73	6.05	7.91
Net of All Fees Return	1.67	5.87	7.67
Blended Benchmark	1.40	5.11	7.04
Excess Return	0.27	0.76	0.63

Moderate Year of Enrollment Enrolled Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	0.63	NA	NA
Net of All Fees Return	0.58	NA	NA
Blended Benchmark	0.66	NA	NA
Excess Return	-0.08	NA	NA

Please see Blended Benchmark Definitions in the Important Disclosures section at the end of this report.

Performance as of 9/30/2020.

Source: SumDay Administration, LLC, a BNY Mellon Company. SumDay is an affiliate of Lockwood Advisors, Inc.

Performance is calculated using a time and asset-weighted Modified Dietz methodology. The Gross of Fees Return shown reflects the deduction of fees and expenses associated with the underlying mutual funds held in the portfolio (the "Underlying Fund Fee"). The Net of Fees Return shown reflects the deduction of the Underlying Fund Fee, Service Fee, and State Administrative Fee (together, the "Total Annual Asset-Based Fee"). The returns shown do not reflect account maintenance fees or other account level service-based fees (e.g., returned check fees, statement delivery fees, etc.).

Past performance is not a guarantee of future results. Current performance may be lower or higher than the performance data quoted. The investment return and principal value of an investment will fluctuate, so that an investor's assets, when sold, may be worth more or less than their original cost.

Indices are unmanaged and are not available for direct investment.

Growth Year of Enrollment Portfolio Review

Growth Year of Enrollment Portfolio Underlying Fund Allocations

Asset Category	Fund	Ticker	YoE 2038	YoE 2036	YoE 2034	YoE 2032	YoE 2030	YoE 2028	YoE 2026	YoE 2024	YoE 2022	Enrolled
U.S. Large Cap Blend	Fidelity® Total Market Index Fund	FSKAX	25	25	24	24	22	21	18	13	8	3
U.S. Large Cap Blend	Schwab Total Stock Market Index Fund*	SWTSX	24	24	23	23	22	21	18	13	7	2
Foreign Large Blend	Fidelity® International Index Fund	FSPSX	35	35	33	33	31	29	26	18	11	4
Diversified Emerging Mkts	Fidelity® Emerging Markets Index Fund	FPADX	11	11	10	10	10	9	8	6	4	1
Intermediate-Term Bond	Fidelity® U.S. Bond Index Fund	FXNAX	1	1	3	3	3	6	10	20	28	24
Intermediate-Term Bond	Vanguard Total Bond Market Index Fund Institutional Plus Shares	VBMPX	1	1	2	2	4	6	10	20	28	24
Long Government	Vanguard Long-Term Treasury Index Fund Institutional Shares	VLGIX	1	1	1	1	2	2	3	3	4	4
Inflation-Protected Bond	Schwab® Treasury Inflation Protected Securities Index Fund	SWRSX	0	0	2	2	3	3	4	4	7	6
Emerging Markets Bond	Vanguard Emerging Markets Government Bond Index Fund Institutional Shares	VGIVX	1	1	1	1	2	2	2	2	2	2
Cash	Vanguard Federal Money Market Fund Investor Shares	VMFXX	1	1	1	1	1	1	1	1	1	30
Equity			95	95	90	90	85	80	70	50	30	10
Fixed Income			4	4	9	9	14	19	29	49	69	60
Cash			1	1	1	1	1	1	1	1	1	30
Total			100	100	100	100	100	100	100	100	100	100

Source: SumDay Administration, LLC, a BNY Mellon Company. SumDay is an affiliate of Lockwood Advisors, Inc.
Portfolio allocations as of 9/30/2020.

Growth Year of Enrollment 2036 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	7.19	0.37	8.88
Net of All Fees Return	7.13	0.21	8.64
Blended Benchmark	7.24	0.37	8.99
Excess Return	-0.11	-0.16	-0.35

Growth Year of Enrollment 2034 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	7.05	0.57	9.07
Net of All Fees Return	6.99	0.40	8.83
Blended Benchmark	6.95	0.10	8.69
Excess Return	0.04	0.30	0.14

Growth Year of Enrollment 2032 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	6.95	1.30	9.41
Net of All Fees Return	6.89	1.13	9.17
Blended Benchmark	6.95	0.89	9.10
Excess Return	-0.06	0.24	0.07

Growth Year of Enrollment 2030 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	6.77	1.13	9.25
Net of All Fees Return	6.71	0.96	9.01
Blended Benchmark	6.65	0.62	8.80
Excess Return	0.06	0.34	0.21

Growth Year of Enrollment 2028 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	6.49	1.74	9.46
Net of All Fees Return	6.43	1.57	9.22
Blended Benchmark	6.31	1.08	8.84
Excess Return	0.12	0.49	0.38

Growth Year of Enrollment 2026 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	5.91	2.08	9.38
Net of All Fees Return	5.85	1.92	9.14
Blended Benchmark	5.61	1.19	8.49
Excess Return	0.24	0.73	0.65

Growth Year of Enrollment 2024 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	4.57	3.84	9.35
Net of All Fees Return	4.51	3.67	9.11
Blended Benchmark	4.25	2.86	8.40
Excess Return	0.26	0.81	0.71

Growth Year of Enrollment 2022 Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	3.20	5.43	9.09
Net of All Fees Return	3.15	5.26	8.86
Blended Benchmark	2.91	4.46	8.20
Excess Return	0.24	0.80	0.66

Growth Year of Enrollment Enrolled Portfolio	Q3 2020	YTD	1 Year
Gross of Fees Return	1.25	NA	NA
Net of All Fees Return	1.20	NA	NA
Blended Benchmark	1.30	NA	NA
Excess Return	-0.10	NA	NA

Please see Blended Benchmark Definitions in the Important Disclosures section at the end of this report.

Performance as of 9/30/2020.

Source: SumDay Administration, LLC, a BNY Mellon Company. SumDay is an affiliate of Lockwood Advisors, Inc.

Performance is calculated using a time and asset-weighted Modified Dietz methodology. The Gross of Fees Return shown reflects the deduction of fees and expenses associated with the underlying mutual funds held in the portfolio (the "Underlying Fund Fee"). The Net of Fees Return shown reflects the deduction of the Underlying Fund Fee, Service Fee, and State Administrative Fee (together, the "Total Annual Asset-Based Fee"). The returns shown do not reflect account maintenance fees or other account level service-based fees (e.g., returned check fees, statement delivery fees, etc.).

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DreamAhead College Investment Plan Mutual Fund Evaluations

Presented by Lockwood Advisors, Inc.

The following are evaluations of the funds used in DreamAhead. The sources used are BNY Mellon Manager Research Group (MRG), Morningstar, and the respective fund companies. Relevant MRG research was used where available, supplemented with Morningstar research and fund company data. The ratings and narratives used are taken directly from the sources noted. MRG and Morningstar use differing scales. MRG rates Organizations as Positive, Satisfactory, or Negative; while Morningstar rates Funds as Positive, Neutral or Negative; or High, Above Average, Average, Below Average, and Low. Source dates vary based on the most recent ratings available for a particular category, fund, or parent company.

The following information and opinions contained in this material are derived from proprietary and nonproprietary sources deemed by Lockwood to be reliable, but are not necessarily all inclusive. Opinions and ratings are subject to change at any time without notice. Please refer to the Important Disclosures at the end of this document.

Fidelity Emerging Markets Index Fund (FPADX)

Firm Background*

Fidelity Institutional Asset Management Trust Company (FIAM) is the US-based investment management subsidiary of Fidelity Management & Research (FRM). FRM is a large, privately-held, multi-service financial services firm founded in 1946 by Edward C. Johnson. FMR is currently under the leadership of CEO Abigail Johnson. Approximately 49% of FMR is owned by Ms. Johnson and other members of the Johnson family. 51% is held by employees and former employees.

FIAM was established in 2015 through the combination of Pyramis Global Advisors and Fidelity Financial Advisor Solutions, which served, respectively, institutional and retail investment management clients. The firm manages roughly \$175 billion across fixed income (38%), multi-asset (32%), and equity (28%), with cash and alternatives comprising the balance. Judy Marlinski is President of FIAM. She reports to Mike Dervin, Head of Fidelity Institutional at FMR.

Organization: Satisfactory*

FMR and, by extension, FIAM are highly complex and deeply intertwined organizations. Differences between functional business units and legal entities are often indistinct, but the high degree of involvement from the senior ranks of the FMR organization, particularly given the hands-on approach of FMR CEO Abigail Johnson, appear to manage this complexity effectively. FIAM is large, owing a portion of its success to the strong brand and distribution power of the parent company. The firm maintains a diversified client base and product line, as well as a strong investment culture. Senior leadership at FIAM has experienced some significant changes over the past two years, most notably the retirement of Charlie Morrison, FMR's President of Asset Management, in December of 2018 and the departure of Scott Cuoto, President of FIAM in mid-2017. The President of FIAM reports into the President of Asset Management at FRM. Additionally, the firm has experienced high profile sexual harassment claims in recent years, leading to some turnover among senior investment professionals. This may indicate that the firm has non-investment-related cultural issues, which can still damage the likelihood of success for the investment teams. However, senior management responded forcefully, and we will continue to monitor the organization for cultural and legal issues.

Strategy**

The Fidelity® Emerging Markets Index Fund seeks to provide investment results that correspond to the total return of emerging stock markets.

Normally investing at least 80% of assets in securities included in the MSCI Emerging Markets Index and in depository receipts representing securities included in the index. Using statistical sampling techniques based on such factors as capitalization, industry exposures, dividend yield, price/earnings ratio, price/book ratio, earnings growth, country weightings, and the effect of foreign taxes to attempt to replicate the returns of the MSCI Emerging Markets Index. Lending securities to earn income for the fund.

Summary

This fund has not been rated by Morningstar, Inc.

Performance

This fund has not been rated by Morningstar, Inc.

Price

This fund has not been rated by Morningstar, Inc.

Process

This fund has not been rated by Morningstar, Inc.

People

This fund has not been rated by Morningstar, Inc.

* Source: BNY Mellon Manager Research Group, as of July 2019

** Source: Fidelity (FMR, LLC), as of 9/30/2020

Release date 09-30-2020

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Fidelity® Emerging Markets Idx (USD)

Performance 09-30-2020

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2018	2.19	-8.83	-1.03	-7.41	-14.83
2019	9.75	0.85	-4.45	11.82	18.20
2020	-23.80	18.79	9.87	—	-0.82

Trading Features	1 yr	3 yr	5 yr	10 yr	Income
Load only Fidelity	10.90	2.43	8.81	—	2.94
Std 09-30-2020	10.90	—	8.81	—	2.94
Total Return	10.90	2.43	8.81	—	2.94

+/- Std Index	7.90	1.27	2.50	—	—
+/- Cat Index	0.26	0.01	-0.16	—	—
% Rank Cat	38	35	36	—	—
No. in Cat	790	895	590	—	—

7-day Yield	Substantiated	Unsubstantiated
30-day SEC Yield	—	—

Performance Summary

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar returns.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-805-5082 or visit www.institutional.fidelity.com.

Fees and Expenses

Sales Charges	
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	
Management Fees %	0.08
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08
Risk and Return Profile	

	3 yr	5 yr	10 yr
Morningstar Rating™	3★	3★	—
Morningstar Risk	Avg	Avg	—
Morningstar Return	Avg	Avg	—

	3 yr	5 yr	10 yr
Standard Deviation	19.04	17.29	—
Alpha	2.43	8.81	—
Sherpa Ratio	0.14	0.51	—

MPI Statistics	Standard Index	Best Fit Index
	MSCI EM NR USD	—
Alpha	1.84	0.04
Beta	1.11	1.00
R-Squared	88.64	98.88
12-Month Yield	—	—
Potential Cap Gains Exp	2.35%	—

Operations

Family:	Fidelity Investments
Manager:	Multiple
Tenure:	9.1 Years
Objective:	Diversified Emerging Markets

Morningstar Quantitative
Rating™
Bronze
(09-30-2020)

Overall Morningstar Rating™
★★★
895 US Fund Diversified
Emerging Mkts

Standard Index
MSCI ACWI Ex
USA NR USD

Category Index
MSCI EM NR USD

Morningstar Cat
US Fund Diversified
Emerging Mkts



Portfolio Analysis 09-30-2020

Asset Allocation %	Net %	Long %	Short %	Share Chg since 07-2020	Share Amount	Holdings: 1,474 Total Stocks, 0% Turnover Rate	Net Assets %
Cash	3.08	3.08	0.00				
US Stocks	0.23	0.23	0.00				
Non-US Stocks	96.64	96.64	0.00		905,267	Aikbae Group Holding Ltd ADR	7.83
Bonds	0.00	0.00	0.00		3 mil	Tencent Holdings Ltd	5.88
Other/Not Clsd	0.06	0.06	0.00		12 mil	Taiwan Semiconductor Manufacturing	5.21
Total	100.00	100.00	0.00	184	2,220	MSCI Emerging Markets Index Future	3.60

Equity Style	Portfolio Statistics	Port. Avg	Rel. Index	Rel. Cat
Value	P/E Ratio TTM	15.7	0.85	0.83
Mid	P/B Ratio TTM	8.5	1.01	0.86
Small	P/B Ratio TTM	1.7	1.09	0.76
	Gao Avg Mkt Cap (\$mil)	46204	1.21	0.87

Fixed-Income Style	Portfolio Statistics	Port. Avg	Rel. Index	Rel. Cat
Value	Avg Eff Maturity	—	—	—
Mid	Avg Eff Duration	—	—	—
Small	Avg Wtd Coupon	—	—	—
	Avg Wtd Price	—	—	—

Factor	Value	Rel. Index	Rel. Cat
Growth Quality Breakdown	—	—	—
AAA	—	—	—
AA	—	—	—
A	—	—	—
BBB	—	—	—
BB	—	—	—
B	—	—	—
Below B	—	—	—
NR	—	—	—

Regional Exposure	Stocks %	Rel. Std Index
Americas	7.6	0.82
Greater Europe	11.9	0.29
Greater Asia	80.5	1.89

Sector Weightings	Stocks %	Rel. Std Index
Cyclical	45.8	1.14
Basic Materials	7.1	0.50
Consumer Cyclical	17.6	1.46
Financial Services	17.7	1.05
Real Estate	2.6	0.94
Sensitive	41.8	1.15
Communication Services	14.3	1.89
Energy	5.0	1.28
Industrials	4.3	0.37
Technology	17.8	1.47
Defensive	13.1	0.54
Consumer Defensive	8.9	0.88
Healthcare	4.3	0.40
Utilities	2.0	0.59

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Standardized and Tax Adjusted Returns Disclosure Statement

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit <http://advisor.morningstar.com/familyinfo.asp>.

Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including RABE risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges. The maximum redemption fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

Money Market Fund Disclosures

If money market fund(s) are included in the Standardized Returns table below, each money market fund's name will be followed by a superscripted letter that links it to the applicable disclosure below:

Institutional Money Market Funds (designated by an "S"):

You could lose money by investing in the fund. Because the share price of the fund will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "L") and

Retail Money Market Funds (designated by an "L"):

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen not to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "N"):

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Annualized returns 09-30-2020

Standardized Returns (%)	7-day Yield Subscribed as of date	7-day Yield Unsubscribed as of date	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio %	Max Redemption %
Fidelity® Emerging Markets Idx	—	—	10.90	8.81	—	2.94	09-08-2011	NA	NA	0.08	0.08	NA
BBGBarc US Agg Bond TR USD			6.90	4.18	2.64	—	01-03-1980					
MSCI ACWI Ex USA NR USD			3.00	6.23	4.90	—	01-01-2001					
MSCI EAFE NR USD			0.49	5.26	4.62	—	03-31-1986					
MSCI EM NR USD			10.54	8.97	2.50	—	01-01-2001					
S&P 500 TR USD			15.15	14.15	13.74	—	01-30-1970					

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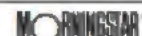
Annualized returns 09-30-2020

Standardized Returns (%)	7-day Yield Subsidized as of date	7-day Yield Unsubsidized as of date	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio %	Max Redemption %
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USTREAS T-Bill Auction Ave 3 Mon **0.77** **1.17** **0.81** **—** **02-28-1941**

Return after Tax (%)	On Distribution					On Distribution and Sales of Shares				
	1Yr	5Yr	10Yr	Since Inception	Inception Date	1Yr	5Yr	10Yr	Since Inception	
Fidelity® Emerging Markets Idx	9.95	8.08	—	2.28	09-08-2011	6.68	6.73	—	2.02	

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Mutual Fund Detail Report Disclosure Statement

The Mutual Fund Detail Report is supplemental sales literature, and therefore must be preceded or accompanied by the mutual fund's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Mutual Fund Detail Report. Morningstar is not itself a FINRA-member firm.

All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities.

Prior to 2016, Morningstar's methodology evaluated open-end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most-recent month-end reflect the updated methodology.

Risk measures (such as alpha, beta, r-squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns, and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publically-offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject

to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution.

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual fund itself, or through an intermediary, but cannot be traded on a secondary market, such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net

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asset value minus a deferred sales charge, and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Fund portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the investment income tax and Medicare surcharge. As of 2018, this rate is 37% plus 3.8% investment income plus 0.9% Medicare surcharge, or 41.7%. This rate changes periodically in accordance with changes in federal law.

Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share class(es) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.

When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in *italics*.

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

12b-1 Expense %

A 12b-1 fee is a fee used to pay for a mutual fund's distribution costs. It is often used as a commission to brokers for selling the fund. The amount of the fee is taken from a fund's returns.

Alpha

Alpha is a measure of the difference between a security or portfolio's actual returns and its expected performance, given its level of risk (as measured by beta). Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The "Other"

category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the fund against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the fund's managers are buying and how they are positioning the fund's portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the fund's exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security's price rises over time. Short positions are taken with the hope of benefitting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most fund portfolios hold fairly conventional securities, such as long positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while others have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart's generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of fund holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of fund holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the fund only.

Average Effective Duration

Duration is a time measure of a bond's interest-rate sensitivity. Average effective duration is a weighted average of the duration of the fixed-income securities within a portfolio.

Average Effective Maturity

Average Effective Maturity is a weighted average of the maturities of all bonds in a portfolio.

Average Weighted Coupon

A coupon is the fixed annual percentage paid out on a bond. The average weighted coupon is the asset-weighted coupon of each bond in the portfolio.

Average Weighted Price

Average Weighted Price is the asset-weighted price of bonds held in a portfolio, expressed as a percentage of par (face) value. This number reveals if the portfolio favors bonds selling at prices above or below par value (premium or discount securities respectively.)

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Best Fit Index

Alpha, beta, and R-squared statistics are presented for a broad market index and a "best fit" index. The Best Fit Index identified in this report was determined by Morningstar by calculating R-squared for the fund against approximately 100 indexes tracked by Morningstar. The index representing the highest R-squared is identified as the best fit index. The best fit index may not be the fund's benchmark, nor does it necessarily contain the types of securities that may be held by the fund or portfolio.

Beta

Beta is a measure of a security or portfolio's sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

Credit Quality Breakdown

Credit Quality breakdowns are shown for corporate-bond holdings in the fund's portfolio and depict the quality of bonds in the underlying portfolio. It shows the percentage of fixed-income securities that fall within each credit-quality rating as assigned by a Nationally Recognized Statistical Rating Organization (NRSRO). Bonds not rated by an NRSRO are included in the Other/Not-Classified category.

Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a fund. The percentage of the load charged generally declines the longer the fund's shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

Expense Ratio %

The expense ratio is the annual fee that all funds charge their shareholders. It expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred by the fund. Portfolio transaction fees, or brokerage costs, as well as front-end or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. The gross expense ratio, in contrast to the net expense ratio, does not reflect any fee waivers in effect during the time period.

Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

Geometric Average Market Capitalization

Geometric Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

Growth of 10,000

For funds, this graph compares the growth of an investment of 10,000 (in the base currency of the fund) with that of an index and/or with that of the average for all funds in its Morningstar Category. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing fund expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. If pre-inception data is included in the analysis, it will be graphed.

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The index does not reflect any initial or ongoing expenses. A fund's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund's prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund's prior fiscal year.

Maximum Redemption Fee %

The Maximum Redemption Fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase (for example, 30, 180, or 365 days).

Mean

Mean is the annualized geometric return for the period shown.

Morningstar Analyst Rating™

Effective October 31, 2019, Morningstar updated its Morningstar Analyst Rating™ methodology. For any Morningstar Analyst Rating published on or prior to October 31, 2019, the following disclosure applies:

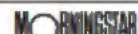
The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates funds based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five pillar evaluation to determine how they believe funds are likely to perform relative to a benchmark, or in the case of exchange-traded funds and index mutual funds, a relevant peer group, over the long term on a risk-adjusted basis. They consider quantitative and qualitative factors in their research, and the weight of each pillar may vary. The Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. A Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's conviction in a fund's prospects for outperformance. Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months. For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to global.morningstar.com/managerdisclosures/.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating a fund, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the fund.

For any Morningstar Analyst Rating published after October 31, 2019, the following disclosure applies:

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10% weighting. For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars. The impact of the weighted pillar scores for people, process and parent on the final Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of funds using alternative investment strategies, the modification by alpha dispersion is not used.

For active funds, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an active fund will be able to deliver positive alpha net of fees relative to the standard benchmark index assigned to the Morningstar category. The level of the rating relates to the level of expected positive net alpha relative to Morningstar category peers for active funds. For passive funds, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that a fund will be able to deliver a higher alpha net of fees than the lesser of the relevant Morningstar category median or 0. The level of the rating relates to the level of expected net alpha relative to Morningstar category peers for passive funds. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of funds using alternative investment strategies, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that a fund will deliver a weighted pillar score above a predetermined threshold within its peer group. Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months.

For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx>

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Morningstar Quantitative Rating™

Morningstar's quantitative fund ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent pillar, (iii) Quantitative People pillar, and (iv) Quantitative Process pillar (collectively the "Quantitative Fund Ratings"). The Quantitative Fund Ratings are calculated monthly and derived from the analyst-driven ratings of a fund's peers as determined by statistical algorithms. Morningstar, Inc. calculates Quantitative Fund Ratings for funds when an analyst rating does not exist as part of its qualitative coverage.

• **Morningstar Quantitative Rating:** Intended to be comparable to Morningstar's Analyst Ratings for open-end funds and ETFs, which is the summary expression of Morningstar's forward-looking analysis of a fund. The Morningstar Analyst Rating is based on the analyst's conviction in the fund's ability to outperform its peer group and/or relevant benchmark on a risk-adjusted basis over a full market cycle of at least 5 years. Ratings are assigned on a five-tier scale with three positive ratings of Gold, Silver, and Bronze, a Neutral rating, and a Negative rating. Morningstar calculates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our fund analysts assign to open-end funds and ETFs. Please go to <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx> for information about Morningstar Analyst Rating Morningstar's fund analysts assign to funds.

• **Quantitative Parent pillar:** Intended to be comparable to

Morningstar's Parent pillar scores, which provides Morningstar's analyst opinion on the stewardship quality of a firm. Morningstar calculates the Quantitative Parent pillar using an algorithm designed to predict the Parent Pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), Low (1).

• **Quantitative People pillar:** Morningstar's People pillar scores, which provides Morningstar's analyst opinion on the fund manager's talent, tenure, and resources. Morningstar calculates the Quantitative People pillar using an algorithm designed to predict the People pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), Low (1).

• **Quantitative Process Pillar:** Intended to be comparable to Morningstar's Process pillar scores, which provides Morningstar's analyst opinion on the fund's strategy and whether the management has a competitive advantage enabling it to execute the process and consistently over time. Morningstar calculates the Quantitative Process pillar using an algorithm designed to predict the Process pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Morningstar Quantitative Ratings have not been made available to the issuer of the security prior to publication.

Risk Warning

The quantitative fund ratings are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the quantitative fund ratings. In addition, there is the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the quantitative fund ratings can mean that the recommendation is subsequently no longer accurate.

For more information about Morningstar's quantitative methodology, please visit <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx>

Morningstar Category

Morningstar Category is assigned by placing funds into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a fund's prospectus may not be sufficiently detailed for our proprietary classification methodology. Funds are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the fund is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a fund at the time of calculation.

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Morningstar Rating™

The Morningstar Rating™ for funds, or "star rating", is calculated for funds and separate accounts with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product's monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. For more information about the Morningstar Rating for funds, including its methodology, please go to global.morningstar.com/managerdisclosures

The Morningstar Return rates a fund's performance relative to other managed products in its Morningstar Category. It is an assessment of a product's excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Avg), and the bottom 10% Low (Low). Morningstar Return is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Risk

Morningstar Risk evaluates a fund's downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations, in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (-Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Style Box™

The Morningstar Style Box™ reveals a fund's investment strategy as of the date noted on this report.

For equity funds, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened square in the style box indicates the weighted average style of the portfolio.

For fixed-income funds, the vertical axis shows the credit quality of the long bonds owned and the horizontal axis shows interest-rate sensitivity as measured by a bond's effective duration. Morningstar seeks credit rating information from fund companies on a periodic basis (for example, quarterly). In compiling credit rating information, Morningstar accepts credit ratings reported by fund companies that have been issued by all Nationally Recognized Statistical Rating Organizations. For a list of all NRSROs, please visit <http://www.sec.gov/divisions/marketreg/ratingagency.htm>. Additionally, Morningstar accepts foreign credit ratings from widely recognized or registered rating agencies. If two rating organizations/agencies have rated a security, fund companies are to report the lower rating; if three or more

organizations/agencies have rated a security, fund companies are to report the median rating; and in cases where there are more than two organization/agency ratings and a median rating does not exist, fund companies are to use the lower of the two middle ratings.

Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the fund. NRSRO or rating agency ratings can change from time to time.

For credit quality, Morningstar combines the credit rating information provided by the fund companies with an average default rate calculation to come up with a weighted-average credit quality. The weighted-average credit quality is currently a letter that roughly corresponds to the scale used by a leading NRSRO. Bond funds are assigned a style box placement of "low," "medium," or "high" based on their average credit quality. Funds with a "low" credit quality are those whose weighted-average credit quality is determined to be less than "BBB-"; "medium" are those less than "AA-", but greater or equal to "BBB-"; and "high" are those with a weighted-average credit quality of "AA-" or higher. When classifying a bond portfolio, Morningstar first maps the NRSRO credit ratings of the underlying holdings to their respective default rates (as determined by Morningstar's analysis of actual historical default rates). Morningstar then averages these default rates to determine the average default rate for the entire bond fund. Finally, Morningstar maps this average default rate to its corresponding credit rating along a convex curve.

For interest-rate sensitivity, Morningstar obtains from fund companies the average effective duration. Generally, Morningstar classifies a fixed-income fund's interest-rate sensitivity based on the effective duration of the Morningstar Core Bond Index, which is currently three years. The classification of Limited will be assigned to those funds whose average effective duration is between 25% to 75% of MCB's average effective duration; funds whose average effective duration is between 75% to 125% of the MCB will be classified as Moderate; and those that are at 125% or greater of the average effective duration of the MCB will be classified as Extensive.

For municipal-bond funds, Morningstar also obtains from fund companies the average effective duration. In these cases, static breakpoints are used. These breakpoints are as follows: (i) Limited: 4.5 years or less; (ii) Moderate: more than 4.5 years but less than 7 years; and (iii) Extensive: more than 7 years. In addition, for non-U.S. taxable and non-U.S. domiciled fixed-income funds, static duration breakpoints are used: (i) Limited: less than or equal to 3.5 years; (ii) Moderate: more than 3.5 years but less than or equal to 6 years; (iii) Extensive: more than 6 years.

Interest-rate sensitivity for non-U.S. domiciled funds (excluding funds in convertible categories) may be measured with modified duration when effective duration is not available.

P/B Ratio TTM

The Price/Book Ratio (or P/B Ratio) for a fund is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

P/C Ratio TTM

The Price/Cash Flow Ratio (or P/C Ratio) for a fund is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

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P/E Ratio TTM

The Price/Earnings Ratio (or P/E Ratio) for a fund is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is the stock's current price divided by the company's trailing 12-month earnings per share. A high P/E Ratio usually indicates the market will pay more to obtain the company's earnings because it believes in the company's abilities to increase their earnings. A low P/E Ratio indicates the market has less confidence that the company's earnings will increase, however value investors may believe such stocks have an overlooked or undervalued potential for appreciation.

Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, funds within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

Performance Quartile

Performance Quartile reflects a fund's Morningstar Rank.

Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

Quarterly Returns

Quarterly Return is calculated applying the same methodology as Total Return except it represents return through each quarter-end.

R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

Regional Exposure

The regional exposure is a display of the portfolio's assets invested in the regions shown on the report.

Sector Weightings

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the stocks included in these sectors generally have betas greater than 1. The Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Share Change

Shares Change represents the number of shares of a stock bought or sold by a fund since the previously reported portfolio of the fund.

Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk.

Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility of returns.

Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the security was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes reinvestment of dividends and capital gains. It is the return an investor would have experienced if the fund was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Trailing Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the fund was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Investment Risks

International/Emerging Market Equities: Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

Sector Strategies: Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor

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to increased industry-specific risks.

Non-Diversified Strategies: Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

Small Cap Equities: Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure, and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

Mid Cap Equities: Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

High-Yield Bonds: Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

Tax-Free Municipal Bonds: The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

Bonds: Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

HOLDERS: The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDER might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

Hedge Funds: The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

Bank Loan/Senior Debt: Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

Exchange Traded Notes (ETNs): ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its obligations. ETNs do not typically pay interest.

Leveraged ETFs: Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their fund objectives on a daily basis (or other time period stated within the prospectus

objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, -200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the fund to be either greater or less than the index performance multiplied by the multiple stated within the funds objective over a stated time period.

Short Positions: When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

Long-Short: Due to the strategies used by long-short funds, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these funds may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

Liquidity Risk: Closed-end fund, ETF, and HOLDER trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

Market Price Risk: The market price of ETFs, HOLDERS, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

Market Risk: The market prices of ETFs and HOLDERS can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

Target-Date Funds: Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at any time, including at the fund's target date.

High double- and triple-digit returns: High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

Benchmark Disclosure

BBGBarc US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage-Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which includes the daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond ETF.

MSCI ACWI Ex USA NR USD

The MSCI AC World ex USA is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global developed and emerging markets. The index consists of 48 developed and emerging market country indices. The returns we publish for the index are total returns, which include reinvestment of dividends. The constituents displayed for this index are

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from the following proxy: iShares Core MSCI EAFE ETF.

MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

This disclosure applies to all MSCI indices. Certain information included herein is derived by Morningstar in part from MSCI's Index Constituents (the "Index Data"). However, MSCI has not reviewed any information contained herein and does not endorse or express any opinion such information or analysis. MSCI does not make any express or implied warranties, representations or guarantees concerning the Index Data or any information or data derived therefrom, and in no event will MSCI have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of this information.

MSCI EM NR USD

Description unavailable. The constituents displayed for this index are from the following proxy: Amundi IS MSCI Emerging Markets.

S&P 500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the U.S. stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: SPDR® S&P 500 ETF Trust.

USTREAS T-Bill Auction Ave 3 Mon

Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months. Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

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Fidelity International Index Fund (FSPSX)

Firm Background*

Fidelity Institutional Asset Management Trust Company (FIAM) is the US-based investment management subsidiary of Fidelity Management & Research (FRM). FRM is a large, privately-held, multi-service financial services firm founded in 1946 by Edward C. Johnson. FMR is currently under the leadership of CEO Abigail Johnson. Approximately 49% of FMR is owned by Ms. Johnson and other members of the Johnson family. 51% is held by employees and former employees.

FIAM was established in 2015 through the combination of Pyramis Global Advisors and Fidelity Financial Advisor Solutions, which served, respectively, institutional and retail investment management clients. The firm manages roughly \$175 billion across fixed income (38%), multi-asset (32%), and equity (28%), with cash and alternatives comprising the balance. Judy Marlinski is President of FIAM. She reports to Mike Dervin, Head of Fidelity Institutional at FMR.

Organization: Satisfactory*

FMR and, by extension, FIAM are highly complex and deeply intertwined organizations. Differences between functional business units and legal entities are often indistinct, but the high degree of involvement from the senior ranks of the FMR organization, particularly given the hands-on approach of FMR CEO Abigail Johnson, appear to manage this complexity effectively. FIAM is large, owing a portion of its success to the strong brand and distribution power of the parent company. The firm maintains a diversified client base and product line, as well as a strong investment culture. Senior leadership at FIAM has experienced some significant changes over the past two years, most notably the retirement of Charlie Morrison, FMR's President of Asset Management, in December of 2018 and the departure of Scott Cuoto, President of FIAM in mid-2017. The President of FIAM reports into the President of Asset Management at FRM. Additionally, the firm has experienced high profile sexual harassment claims in recent years, leading to some turnover among senior investment professionals. This may indicate that the firm has non-investment-related cultural issues, which can still damage the likelihood of success for the investment teams. However, senior management responded forcefully, and we will continue to monitor the organization for cultural and legal issues.

Strategy**

Fidelity® International Index Fund seeks to provide investment results that correspond to the total return of foreign stock markets.

Normally investing at least 80% of assets in common stocks included in the Morgan Stanley Capital International Europe, Australasia, Far East Index, which represents the performance of foreign stock markets.

Summary***

Fidelity International Index has a well-diversified portfolio and rock-bottom fee that should add up to strong category-relative performance over the long-run. It earns a Morningstar Analyst Rating of Silver.

This fund tracks the MSCI EAFE Index. It holds large- and mid-cap stocks from 21 overseas developed markets. It weights them by market capitalization, an approach that benefits investors by capturing the market's collective opinion of each stock's value while keeping turnover low.

Market-cap weighting can be tough to beat because the market tends to do a good job valuing stocks over the long term. Occasionally it will increase the fund's exposure to expensive stocks when investors get excited about an area of the market. But this doesn't undermine its long-term efficacy.

The portfolio's solid diversification mitigates the consequences of owning the worst-performing names. It holds more than 900 stocks and has only 12% of assets in its 10 largest names. Its regional composition looks modestly different from a typical fund in the category because it excludes emerging-markets stocks. But stocks from these regions account for about 6% of a typical peer's portfolio, so ignoring them shouldn't have a large impact on the fund's category-relative performance.

Performance over the past decade has been good but not great. The fund managed to beat the category average by 61 basis points annually over the decade ending in November 2019. But this advantage didn't allow it stand out among its competitors. Its better-performing peers tended to be more conservative, allowing them to hold up better during market declines. Over the long run, fees tend to play a big role in determining category relative performance. So, this fund's ultra-low expense ratio should provide a strong long-term edge.

Performance***

The management team has delivered sound index-tracking performance, but the fund's return has not stood out among its peers in Morningstar's foreign large-blend category over the 10 years through November 2019. Foreign markets performed poorly by historical standards over this period. Many of the better-performing strategies in the category built their success through more-defensive portfolios. They tended to invest in relatively stable stocks or hold cash, which allowed them to better weather drawdowns than index tracking funds like this one.

Stocks listed in Japan and the United Kingdom collectively account for more than 42% of this portfolio. Consequently, the performance of these two markets can have an outsize effect on performance. Over the past decade, Japanese stocks have been a tailwind while those from the U.K. were less advantageous.

This fund does not hedge its currency risk. Over much of the past decade foreign-exchange rates have subtracted from its performance because the U.S. dollar has appreciated against the foreign currencies represented in this portfolio. Foreign-exchange rates tend to move in cycles, so an appreciating dollar will not always be a disadvantage. Over the long run, the impact of foreign exchange rates on total return tends to wash out.

Price***

It's critical to evaluate expenses, as they come directly out of returns. The share class on this report levies a fee that ranks in its Morningstar category's cheapest quintile. Based on our assessment of the fund's People, Process and Parent pillars in the context of these fees, we think this share class will be able to deliver positive alpha relative to the category benchmark index, explaining its Morningstar Analyst Rating of Silver.

Process: Above Average***

This strategy earns an Above Average Process Pillar rating for capturing most of the overseas market capitalization while diversifying its stock and sector-specific risks.

The fund's portfolio managers use full replication to track the MSCI EAFE Index. This benchmark starts with all stocks listed in 21 foreign developed markets. It targets companies that land in the top 85% of each

country's market cap, with a buffer around that threshold to rein in unnecessary turnover. The index applies some additional liquidity screens to ensure its holdings are investable, and it weights its final constituents by their market capitalization. This approach helps control turnover and trading costs as each stock's weight will adjust proportionally to price changes. The index reconstitutes semiannually in May and November with smaller adjustments in February and August, such as adding recent IPOs.

The resulting portfolio captures a majority of the available foreign market capitalization. It effectively diversifies stock-specific risk, with only 12% of assets in its 10 largest holdings. Broad diversification causes the portfolio to look similar to the average of its category peers in certain ways. Sector weightings are comparable, with financial and industrial stocks collectively representing one-third of the fund's assets.

Country and regional allocations aren't far off the category average either. The fund modestly differs from its peers in this regard, but the gaps don't pose a significant threat to its category relative performance. Eurozone stocks represent 30% of the fund, while Japan and the United Kingdom make up an additional 24% and 16%, respectively.

The fund's selection universe doesn't include stocks listed in emerging markets and Canada. Japanese stocks mostly fill this gap, which is consistent with diversified, foreign developed market indexes. This strategy does not include small-cap names. This, combined with its market-cap-weighted approach, tilts the portfolio toward large-cap multinational corporations, with companies like Nestle, Toyota, and BP among its biggest names.

People: Average***

The fund's management team is experienced and well-supported. But it earns an Average People Pillar rating because personnel turnover has been on the high side.

The fund is managed by a team of five managers from Geode Capital Management, which subadvises Fidelity's index-tracking funds. Splitting responsibilities across several managers can reduce the impact of departures. However, six managers have left the fund since September 2012. Most recently, Tom Brussard was removed as a named manager in April 2018 and Patrick Waddell retired from Geode in April 2019. Payal Kapoor Gupta was added to the roster in June 2019 to fill the gap left by Waddell. She previously managed portfolios at State Street Global Advisors.

Louis Bottari, Peter Matthew, Robert Regan, and Deane Gyllenhaal are the other named managers on this fund. Bottari is the longest tenured manager, having served since January 2009, while Matthew joined three years later in 2012. Regan and Gyllenhaal have only been at Geode for a few years, but they previously worked as portfolio managers for SSGA and Hartford Investment Management, respectively.

* Source: BNY Mellon Manager Research Group, as of July 2019

** Source: Fidelity (FMR, LLC), as of 9/30/2020

*** Source: Morningstar, Inc., as of 12/9/2019

Release date 09-30-2020 (Note: Portions of the analysis are based on pre-announcement returns. Please read disclosure for more information.)

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Fidelity® International Index (USD)Morningstar Analyst Rating™
Silver
12/05/2019Overall Morningstar Rating™
★★★★
647 US Fund Foreign Large BlendStandard Index
MSCI ACWI Ex
USA NR USDCategory Index
MSCI ACWI Ex
USA NR USDMorningstar Cat
US Fund Foreign Large Blend**Performance 09-30-2020**

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2018	-0.93	-1.80	1.28	-12.41	-13.52
2019	10.01	3.70	-0.92	7.83	22.00
2020	-23.02	15.70	4.78	—	-6.61

Trading Features	1 yr	3 yr	5 yr	10 yr	Income
Load and Adj. Fee	0.79	0.80	5.39	—	5.88
Std 09-30-2020	0.79	—	5.39	—	5.88
Total Return	0.79	0.80	5.39	4.79	5.88

+/- Std Index	-2.21	-0.30	-0.84	0.78	—
+/- Cat Index	-2.21	-0.30	-0.84	0.78	—
% Rank Cat	58	48	44	37	—
No. in Cat	761	647	548	363	—

7-day Yield	Substantiated	Unsubstantiated
—	—	—
30-day SEC Yield	—	—

Performance Summary

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar returns.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-805-5082 or visit www.institutional.fidelity.com.

Fees and Expenses

Sales Charges	—
Front-End Load %	NA
Deferred Load %	NA

Fund Expenses	—
Management Fees %	0.04
12b1 Expense %	NA

Net Expense Ratio %	0.04
Gross Expense Ratio %	0.04

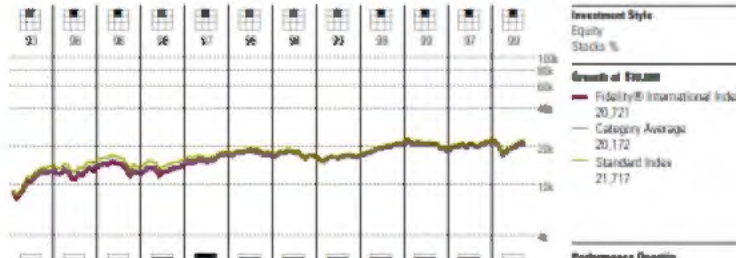
Risk and Return Profile

Morningstar Rating™	3★
Morningstar Risk	Avg
Morningstar Return	Avg

Standard Deviation	15.61
Alpha	-0.41
Beta	0.95
R-Squared	97.22
12-Month Yield	—
Potential Cap Gains Exp	-3.21%

MPT Statistics	Standard Index	Best Fit Index
Alpha	-0.41	0.21
Beta	0.95	1.01
R-Squared	97.22	98.98

Operations	—
Family:	Fidelity Investments
Manager:	Multiple
Tenure:	11.8 Years
Objective:	Foreign Stock



Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	09-30
Fidelity® International Index	28.48	7.70	-12.15	18.85	21.87	-5.31	-0.73	1.34	25.38	-13.52	22.00
Category Average	-12.86	-2.40	1.66	2.02	6.58	-1.45	4.93	-3.15	-1.81	0.67	0.49
Standard Index	-12.86	-2.40	1.66	2.02	6.58	-1.45	4.93	-3.15	-1.81	0.67	0.49
% Rank Cat	—	—	—	36	25	48	41	40	47	29	43
No. of Funds in Cat	—	—	—	786	791	750	788	762	756	741	732

Portfolio Analysis 09-30-2020

Asset Allocation %	Net %	Long %	Short %	Share Chg since 01-2020	Share Amount	Holdings: 501 Total Stocks 2% Turnover Ratio	Net Assets %
Cash	0.64	0.64	0.00	—	—	8 mi Nestle SA	2.51
US Stocks	1.05	1.05	0.00	—	—	1 mi Roche Holding AG Dividend Right Co	1.72
Non-US Stocks	98.30	98.30	0.00	—	—	4 mi Novartis AG	1.29
Bonds	0.00	0.00	0.00	—	—	2 mi SAP SE	1.21
Other/Not Classd	0.02	0.02	0.00	—	—	3,460 MSCI EAFE Index Future Sept 20	1.21
Total	100.00	100.00	0.00	—	—	813,542 ASML Holding NV	1.11

Equity Style	Portfolio Statistics	Port. Avg	Rel Index	Rel Cat
P/E Ratio TTM	19.8	1.07	1.02	—
P/B Ratio TTM	8.3	0.99	0.96	—
P/B Ratio TTM	1.6	0.87	0.94	—
Govt Avg Mkt Cap (\$bil)	36800	0.96	0.90	—
Fund Common Style	Avg Eff Maturity	Avg Eff Duration	Avg Wtd Coupon	Avg Wtd Price
—	—	—	—	—

Growth Quality Breakdown	Best %
A/A/A	—
A/A	—
A	—
B/B/B	—
B/B	—
B	—
Below B	—
NR	—

Regional Exposure	Stocks %	Rel Std Index
Americas	1.0	0.11
Greater Europe	62.3	1.44
Greater Asia	38.7	0.77

Sector Weightings	Stocks %	Rel Std Index
Cyclical	36.8	0.83
Basic Materials	7.4	0.94
Consumer Cyclical	10.0	0.83
Financial Services	18.1	0.95
Real Estate	3.2	1.15
Sensitive	31.5	0.82
Communication Services	6.4	0.75
Energy	3.4	0.79
Industrials	14.8	1.30
Technology	8.9	0.74
Defensive	29.9	1.24
Consumer Defensive	11.6	1.16
Healthcare	14.3	1.33
Utilities	3.9	1.16

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Standardized and Tax Adjusted Returns Disclosure Statement

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit <http://advisor.morningstar.com/familyinfo.asp>.

Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges. The maximum redemption fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

Money Market Fund Disclosures

If money market fund(s) are included in the Standardized Returns table below, each money market fund's name will be followed by a superscripted letter that links it to the applicable disclosure below:

Institutional Money Market Funds (designated by an "S"):

You could lose money by investing in the fund. Because the share price of the fund will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "L") and

Retail Money Market Funds (designated by an "R"):

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen not to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "N"):

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Annualized returns (9-30-2020)

Standardized Returns (%)	7-day Yield Substated as of date	7-day Yield Unsubstated as of date	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp. Ratio %	Gross Exp. Ratio %	Max Redemption %
Fidelity® International Index	—	—	0.79	5.39	—	5.88	09-08-2011	NA	NA	0.04	0.04	NA
BBGBarc US Agg Bond TR USD			6.98	4.18	3.64	—	01-03-1980					
MSCI ACWI Ex USA NR USD			3.00	6.23	4.00	—	01-01-2001					
MSCI EAFE NR USD			0.49	5.26	4.62	—	03-31-1986					
S&P 500 TR USD			15.15	14.15	13.74	—	01-30-1970					
USTREAS T-Bill Auction Ave 3 Mon			0.77	1.17	0.61	—	02-28-1941					

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Annualized returns 09-30-2020

Return after Tax (%)	On Distribution				Inception Date	On Distribution and Sales of Shares			
	1Yr	5Yr	10Yr	Since Inception		1Yr	5Yr	10Yr	Since Inception
Fidelity® International Index	0.07	4.56	—	4.91	09-08-2011	0.99	4.03	—	4.35

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Mutual Fund Detail Report Disclosure Statement

The Mutual Fund Detail Report is supplemental sales literature, and therefore must be preceded or accompanied by the mutual fund's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Mutual Fund Detail Report. Morningstar is not itself a FINRA-member firm.

All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities.

Prior to 2016, Morningstar's methodology evaluated open-end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most-recent month-end reflect the updated methodology.

Risk measures (such as alpha, beta, r-squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns, and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publically-offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject

to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution.

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual fund itself, or through an intermediary, but cannot be traded on a secondary market, such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net

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asset value minus a deferred sales charge, and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Fund portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the investment income tax and Medicare surcharge. As of 2018, this rate is 37% plus 3.8% investment income plus 0.9% Medicare surcharge, or 41.7%. This rate changes periodically in accordance with changes in federal law.

Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share class(es) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.

When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in italics.

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

12b-1 Expense %

A 12b-1 fee is a fee used to pay for a mutual fund's distribution costs. It is often used as a commission to brokers for selling the fund. The amount of the fee is taken from a fund's returns.

Alpha

Alpha is a measure of the difference between a security or portfolio's actual returns and its expected performance, given its level of risk (as measured by beta). Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The "Other"

category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the fund against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the fund's managers are buying and how they are positioning the fund's portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the fund's exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security's price rises over time. Short positions are taken with the hope of benefitting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most fund portfolios hold fairly conventional securities, such as long positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while others have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart's generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of fund holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of fund holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the fund only.

Average Effective Duration

Duration is a time measure of a bond's interest-rate sensitivity. Average effective duration is a weighted average of the duration of the fixed-income securities within a portfolio.

Average Effective Maturity

Average Effective Maturity is a weighted average of the maturities of all bonds in a portfolio.

Average Weighted Coupon

A coupon is the fixed annual percentage paid out on a bond. The average weighted coupon is the asset-weighted coupon of each bond in the portfolio.

Average Weighted Price

Average Weighted Price is the asset-weighted price of bonds held in a portfolio, expressed as a percentage of par (face) value. This number reveals if the portfolio favors bonds selling at prices above or below par value (premium or discount securities respectively.)

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Best Fit Index

Alpha, beta, and R-squared statistics are presented for a broad market index and a "best fit" index. The Best Fit Index identified in this report was determined by Morningstar by calculating R-squared for the fund against approximately 100 indexes tracked by Morningstar. The index representing the highest R-squared is identified as the best fit index. The best fit index may not be the fund's benchmark, nor does it necessarily contain the types of securities that may be held by the fund or portfolio.

Beta

Beta is a measure of a security or portfolio's sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

Credit Quality Breakdown

Credit Quality breakdowns are shown for corporate-bond holdings in the fund's portfolio and depict the quality of bonds in the underlying portfolio. It shows the percentage of fixed-income securities that fall within each credit-quality rating as assigned by a Nationally Recognized Statistical Rating Organization (NRSRO). Bonds not rated by an NRSRO are included in the Other/Not-Classified category.

Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a fund. The percentage of the load charged generally declines the longer the fund's shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

Expense Ratio %

The expense ratio is the annual fee that all funds charge their shareholders. It expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred by the fund. Portfolio transaction fees, or brokerage costs, as well as front-end or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. The gross expense ratio, in contrast to the net expense ratio, does not reflect any fee waivers in effect during the time period.

Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

Geometric Average Market Capitalization

Geometric Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

Growth of 10,000

For funds, this graph compares the growth of an investment of 10,000 (in the base currency of the fund) with that of an index and/or with that of the average for all funds in its Morningstar Category. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing fund expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. If pre-inception data is included in the analysis, it will be graphed.

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The index does not reflect any initial or ongoing expenses. A fund's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund's prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund's prior fiscal year.

Maximum Redemption Fee %

The Maximum Redemption Fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase (for example, 30, 180, or 365 days).

Mean

Mean is the annualized geometric return for the period shown.

Morningstar Analyst Rating™

Effective October 31, 2019, Morningstar updated its Morningstar Analyst Rating™ methodology. For any Morningstar Analyst Rating published on or prior to October 31, 2019, the following disclosure applies:

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates funds based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five pillar evaluation to determine how they believe funds are likely to perform relative to a benchmark, or in the case of exchange-traded funds and index mutual funds, a relevant peer group, over the long term on a risk-adjusted basis. They consider quantitative and qualitative factors in their research, and the weight of each pillar may vary. The Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. A Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's conviction in a fund's prospects for outperformance. Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months. For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to global.morningstar.com/managerdisclosures/.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating a fund, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the fund.

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10% weighting. For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars. The impact of the weighted pillar scores for people, process and parent on the final Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of funds using alternative investment strategies, the modification by alpha dispersion is not used.

For active funds, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an active fund will be able to deliver positive alpha net of fees relative to the standard benchmark index assigned to the Morningstar category. The level of the rating relates to the level of expected positive net alpha relative to Morningstar category peers for active funds. For passive funds, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that a fund will be able to deliver a higher alpha net of fees than the lesser of the relevant Morningstar category median or 0. The level of the rating relates to the level of expected net alpha relative to Morningstar category peers for passive funds. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of funds using alternative investment strategies, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that a fund will deliver a weighted pillar score above a predetermined threshold within its peer group. Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months.

For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx>

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Morningstar Quantitative Rating™

Morningstar's quantitative fund ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent pillar, (iii) Quantitative People pillar, and (iv) Quantitative Process pillar (collectively the "Quantitative Fund Ratings"). The Quantitative Fund Ratings are calculated monthly and derived from the analyst-driven ratings of a fund's peers as determined by statistical algorithms. Morningstar, Inc. calculates Quantitative Fund Ratings for funds when an analyst rating does not exist as part of its qualitative coverage.

• **Morningstar Quantitative Rating:** Intended to be comparable to Morningstar's Analyst Ratings for open-end funds and ETFs, which is the summary expression of Morningstar's forward-looking analysis of a fund. The Morningstar Analyst Rating is based on the analyst's conviction in the fund's ability to outperform its peer group and/or relevant benchmark on a risk-adjusted basis over a full market cycle of at least 5 years. Ratings are assigned on a five-tier scale with three positive ratings of Gold, Silver, and Bronze, a Neutral rating, and a Negative rating. Morningstar calculates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our fund analysts assign to open-end funds and ETFs. Please go to <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx> for information about Morningstar Analyst Rating Morningstar's fund analysts assign to funds.

• **Quantitative Parent pillar:** Intended to be comparable to

Morningstar's Parent pillar scores, which provides Morningstar's analyst opinion on the stewardship quality of a firm. Morningstar calculates the Quantitative Parent pillar using an algorithm designed to predict the Parent Pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), Low (1).

• **Quantitative People pillar:** Morningstar's People pillar scores, which provides Morningstar's analyst opinion on the fund manager's talent, tenure, and resources. Morningstar calculates the Quantitative People pillar using an algorithm designed to predict the People pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), Low (1).

• **Quantitative Process Pillar:** Intended to be comparable to Morningstar's Process pillar scores, which provides Morningstar's analyst opinion on the fund's strategy and whether the management has a competitive advantage enabling it to execute the process and consistently over time. Morningstar calculates the Quantitative Process pillar using an algorithm designed to predict the Process pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Morningstar Quantitative Ratings have not been made available to the issuer of the security prior to publication.

Risk Warning

The quantitative fund ratings are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the quantitative fund ratings. In addition, there is the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the quantitative fund ratings can mean that the recommendation is subsequently no longer accurate.

For more information about Morningstar's quantitative methodology, please visit <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx>

Morningstar Category

Morningstar Category is assigned by placing funds into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a fund's prospectus may not be sufficiently detailed for our proprietary classification methodology. Funds are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the fund is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a fund at the time of calculation.

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Morningstar Rating™

The Morningstar Rating™ for funds, or "star rating", is calculated for funds and separate accounts with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product's monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. For more information about the Morningstar Rating for funds, including its methodology, please go to global.morningstar.com/managedisclosures

The Morningstar Return rates a fund's performance relative to other managed products in its Morningstar Category. It is an assessment of a product's excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Avg), and the bottom 10% Low (Low). Morningstar Return is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Risk

Morningstar Risk evaluates a fund's downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations, in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (-Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Style Box™

The Morningstar Style Box™ reveals a fund's investment strategy as of the date noted on this report.

For equity funds, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened square in the style box indicates the weighted average style of the portfolio.

For fixed-income funds, the vertical axis shows the credit quality of the long bonds owned and the horizontal axis shows interest-rate sensitivity as measured by a bond's effective duration. Morningstar seeks credit rating information from fund companies on a periodic basis (for example, quarterly). In compiling credit rating information, Morningstar accepts credit ratings reported by fund companies that have been issued by all Nationally Recognized Statistical Rating Organizations. For a list of all NRSROs, please visit <http://www.sec.gov/divisions/marketreg/ratingagency.htm>. Additionally, Morningstar accepts foreign credit ratings from widely recognized or registered rating agencies. If two rating organizations/agencies have rated a security, fund companies are to report the lower rating; if three or more

organizations/agencies have rated a security, fund companies are to report the median rating; and in cases where there are more than two organization/agency ratings and a median rating does not exist, fund companies are to use the lower of the two middle ratings.

Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the fund. NRSRO or rating agency ratings can change from time to time.

For credit quality, Morningstar combines the credit rating information provided by the fund companies with an average default rate calculation to come up with a weighted-average credit quality. The weighted-average credit quality is currently a letter that roughly corresponds to the scale used by a leading NRSRO. Bond funds are assigned a style box placement of "low," "medium," or "high" based on their average credit quality. Funds with a "low" credit quality are those whose weighted-average credit quality is determined to be less than "BBB-"; "medium" are those less than "AA-", but greater or equal to "BBB-"; and "high" are those with a weighted-average credit quality of "AA-" or higher. When classifying a bond portfolio, Morningstar first maps the NRSRO credit ratings of the underlying holdings to their respective default rates (as determined by Morningstar's analysis of actual historical default rates). Morningstar then averages these default rates to determine the average default rate for the entire bond fund. Finally, Morningstar maps this average default rate to its corresponding credit rating along a convex curve.

For interest-rate sensitivity, Morningstar obtains from fund companies the average effective duration. Generally, Morningstar classifies a fixed-income fund's interest-rate sensitivity based on the effective duration of the Morningstar Core Bond Index, which is currently three years. The classification of Limited will be assigned to those funds whose average effective duration is between 25% to 75% of MCB's average effective duration; funds whose average effective duration is between 75% to 125% of the MCB will be classified as Moderate; and those that are at 125% or greater of the average effective duration of the MCB will be classified as Extensive.

For municipal-bond funds, Morningstar also obtains from fund companies the average effective duration. In these cases, static breakpoints are used. These breakpoints are as follows: (i) Limited: 4.5 years or less; (ii) Moderate: more than 4.5 years but less than 7 years; and (iii) Extensive: more than 7 years. In addition, for non-U.S. taxable and non-U.S. domiciled fixed-income funds, static duration breakpoints are used: (i) Limited: less than or equal to 3.5 years; (ii) Moderate: more than 3.5 years but less than or equal to 6 years; (iii) Extensive: more than 6 years.

Interest-rate sensitivity for non-U.S. domiciled funds (excluding funds in convertible categories) may be measured with modified duration when effective duration is not available.

P/B Ratio TTM

The Price/Book Ratio (or P/B Ratio) for a fund is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

P/C Ratio TTM

The Price/Cash Flow Ratio (or P/C Ratio) for a fund is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

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P/E Ratio TTM

The Price/Earnings Ratio (or P/E Ratio) for a fund is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is the stock's current price divided by the company's trailing 12-month earnings per share. A high P/E Ratio usually indicates the market will pay more to obtain the company's earnings because it believes in the company's abilities to increase their earnings. A low P/E Ratio indicates the market has less confidence that the company's earnings will increase, however value investors may believe such stocks have an overlooked or undervalued potential for appreciation.

Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, funds within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

Performance Quartile

Performance Quartile reflects a fund's Morningstar Rank.

Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

Quarterly Returns

Quarterly Return is calculated applying the same methodology as Total Return except it represents return through each quarter-end.

R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

Regional Exposure

The regional exposure is a display of the portfolio's assets invested in the regions shown on the report.

Sector Weightings

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the stocks included in these sectors generally have betas greater than 1. The Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Share Change

Shares Change represents the number of shares of a stock bought or sold by a fund since the previously reported portfolio of the fund.

Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk.

Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility of return.

Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the security was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes reinvestment of dividends and capital gains. It is the return an investor would have experienced if the fund was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Trailing Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the fund was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Investment Risks

International/Emerging Market Equities: Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

Sector Strategies: Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor

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to increased industry-specific risks.

Non-Diversified Strategies: Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

Small Cap Equities: Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure, and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

Mid Cap Equities: Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

High-Yield Bonds: Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

Tax-Free Municipal Bonds: The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

Bonds: Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

HOLDRs: The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDER might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

Hedge Funds: The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

Bank Loan/Senior Debt: Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

Exchange Traded Notes (ETNs): ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its obligations. ETNs do not typically pay interest.

Leveraged ETFs: Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their fund objectives on a daily basis (or other time period stated within the prospectus

objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, -200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the fund to be either greater or less than the index performance multiplied by the multiple stated within the funds objective over a stated time period.

Short Positions: When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

Long-Short: Due to the strategies used by long-short funds, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these funds may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

Liquidity Risk: Closed-end fund, ETF, and HOLDER trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

Market Price Risk: The market price of ETFs, HOLDRs, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

Market Risk: The market prices of ETFs and HOLDRs can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

Target-Date Funds: Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at any time, including at the fund's target date.

High double- and triple-digit returns: High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

Benchmark Disclosure

BBgBarc US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage-Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which includes the daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond ETF.

MSCI ACWI Ex USA NR USD

The MSCI AC World ex USA is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global developed and emerging markets. The index consists of 48 developed and emerging market country indices. The returns we publish for the index are total returns, which include reinvestment of dividends. The constituents displayed for this index are

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from the following proxy: iShares Core MSCI EAFE ETF.

MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

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S&P 500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the U.S. stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: SPDR® S&P 500 ETF Trust.

USTREAS T-Bill Auction Ave 3 Mon

Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months. Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

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Fidelity Total Market Index Fund (FSKAX)

Firm Background*

Fidelity Institutional Asset Management Trust Company (FIAM) is the US-based investment management subsidiary of Fidelity Management & Research (FMR). FMR is a large, privately-held, multi-service financial services firm founded in 1946 by Edward C. Johnson. FMR is currently under the leadership of CEO Abigail Johnson. Approximately 49% of FMR is owned by Ms. Johnson and other members of the Johnson family. 51% is held by employees and former employees.

FIAM was established in 2015 through the combination of Pyramis Global Advisors and Fidelity Financial Advisor Solutions, which served, respectively, institutional and retail investment management clients. The firm manages roughly \$175 billion across fixed income (38%), multi-asset (32%), and equity (28%), with cash and alternatives comprising the balance. Judy Marlinski is President of FIAM, She reports to Mike Dervin, Head of Fidelity Institutional at FMR.

Organization: Satisfactory*

FMR and, by extension, FIAM are highly complex and deeply intertwined organizations. Differences between functional business units and legal entities are often indistinct, but the high degree of involvement from the senior ranks of the FMR organization, particularly given the hands-on approach of FMR CEO Abigail Johnson, appear to manage this complexity effectively. FIAM is large, owing a portion of its success to the strong brand and distribution power of the parent company. The firm maintains a diversified client base and product line, as well as a strong investment culture. Senior leadership at FIAM has experienced some significant changes over the past two years, most notably the retirement of Charlie Morrison, FMR's President of Asset Management, in December of 2018 and the departure of Scott Cuoto, President of FIAM in mid-2017. The President of FIAM reports into the President of Asset Management at FMR. Additionally, the firm has experienced high profile sexual harassment claims in recent years, leading to some turnover among senior investment professionals. This may indicate that the firm has non-investment-related cultural issues, which can still damage the likelihood of success for the investment teams. However, senior management responded forcefully, and we will continue to monitor the organization for cultural and legal issues.

Strategy**

Fidelity® Total Market Index Fund seeks to provide investment results that correspond to the total return of a broad range of United States stocks.

Normally investing at least 80% of assets in common stocks included in the Dow Jones U.S. Total Stock Market Index, which represents the performance of a broad range of U.S. stocks.

Summary***

It effectively replicates the composition of the total U.S. stock market, which has been hard to beat over the long term. The fund's low fee and broad diversification set it up for success. It earns a Morningstar Analyst Rating of Gold.

The fund tracks the Dow Jones U.S. Total Stock Market Index, which includes nearly all U.S. stocks and weights them by market capitalization. Market-cap weighting pulls the portfolio toward the largest stocks, so the fund lands in the large-blend Morningstar Category. This broad market-cap-weighted index accurately

reflects the composition of the U.S. large-cap market and harnesses the market's collective wisdom. Compared with funds that target specific segments of the market, this fund isn't prone to forced buying or selling that is the result of stocks entering or exiting a market segment. This should mitigate transaction costs and turnover, which is among the lowest in the large-blend category.

The market doesn't always get prices right. Over short periods, investors may overreact and either drive prices too high or low. Market-cap weighting will increase or decrease exposure to stocks accordingly. This can at times lead to stock and sector level concentration. That said, the fund's broad diversification and low-cost advantage far outweigh these minor disadvantages.

The fund is always fully invested, which should help it more fully capture the market's returns over the long term than most of its category peers but could expose it to greater losses during market downturns. Unlike many of its active peers, this portfolio excludes stocks listed outside the United States. This should help the fund's category-relative performance when U.S. stocks outperform foreign stocks but hurt when they lag.

The fund charges 0.02%, which is its greatest strength. It builds on this cost advantage with low turnover, which helps mitigate transaction costs.

Performance***

Over the trailing 15 years ended February 2020, the fund beat the category average by 151 basis points annualized, with slightly higher risk. Much of this outperformance can be attributed to the fund's cost advantage, lower-than-average cash drag, and more favorable stock exposure in the healthcare, financial services, and consumer defensive sectors compared with the category average.

The fund ranked in the top half over the trailing three and five years through February 2020, consistently outperforming the category average while exhibiting slightly higher volatility. The fund also tended to hold up as well as most of its peers during downturns since inception, despite its lower-than-average cash balance.

This portfolio is always fully invested, which helps its category-relative performance during bull markets but could hurt during bear markets. Most actively managed funds in the category keep larger cash balances on hand to meet redemptions.

The fund has effectively tracked its index. Over the trailing five-year periods through February 2020, the fund trailed the Dow Jones U.S. Total Stock Market Index by 2 basis points, the amount of its expense ratio.

Price***

It's critical to evaluate expenses, as they come directly out of returns. The share class on this report levies a fee that ranks in its Morningstar category's cheapest quintile. Based on our assessment of the fund's People, Process and Parent pillars in the context of these fees, we think this share class will be able to deliver positive alpha relative to the category benchmark index, explaining its Morningstar Analyst Rating of Gold.

Process: High***

The fund represents the entire investable U.S. equity market, effectively harnessing the market's collective wisdom and diversifying risk. It earns a High Process rating.

The fund tracks the Dow Jones U.S. Total Stock Market Index, which holds nearly every U.S. stock listed on a major U.S. exchange. This gives the fund lower turnover than index funds that track specific size segments of the market, as it is not subject to forced trade when holdings migrate up and down the market-cap ladder. By sampling among the smallest stocks in the index, the fund can avoid trading the least-liquid names, which keeps transaction costs down. However, this fund's large asset base allows it to replicate the index more completely than other total market funds. The fund holds about 3,450 out of 3,700 stocks in the index.

The portfolio managers reinvest dividends and use derivatives to equitize cash and keep pace with the benchmark. The fund has historically used securities lending to generate additional income to offset expenses.

The fund mirrors the composition of the large-cap market, allowing the market to dictate its stock and sector weightings. This allows the fund to harness the market's collective view about the relative value of each stock and keeps turnover low; it is among the lowest in the category.

The fund's top 10 holdings account for about 20% of assets and the largest holding accounts for 4% of assets, which effectively diversifies firm-specific risk.

Although it has a smaller market-cap orientation than the large-blend category average, this fund is representative of this category. Currently, the fund is slightly underweight in financial services and overweight in technology compared with the category average.

Large companies tend to have greater competitive advantages compared with smaller companies, and this is evident here as close to 76% of the portfolio is invested in firms with wide or narrow moats. On average, the fund's constituents generate 37% of their revenue overseas.

People: Average***

Since early 2002, a team of quantitative specialists from Geode Capital Management has managed this fund. The team is experienced, but its support infrastructure does not stand out, and the team has experienced some turnover. It earns an Average People rating.

The fund's multimanager approach mitigates the impact of departures. Four listed managers have been removed from the fund since September 2012, but most of these shuffled internally at Geode and did not leave the firm. Patrick Waddell, the longest-tenured member of the current six-person team, retired in 2019. Payal Gupta was hired in June 2019 to replace Waddell. Louis Bottari and Peter Matthew joined this team as assistant portfolio managers in 2009 and 2012, respectively. Since Waddell's retirement, day-to-day management of the portfolio has been undertaken by Louis Bottari. Deane Gyllenhaal joined in April 2014 and previously served as a portfolio manager at Hartford Investment Management. The team also added Tom Brussard and Robert Regan in the past year. Brussard started in August 2016 and has been an assistant portfolio manager with Geode since 2015. Regan joined in December 2016 and previously served as a portfolio manager at State Street Global Advisors.

Manager compensation is tied to index-tracking performance, which helps align their interest with investors'.

* Source: BNY Mellon Manager Research Group, as of July 2019

** Source: Fidelity (FMR, LLC), as of 9/30/2020

*** Source: Morningstar, Inc., as of 3/17/2020

Release date 09-30-2020 (Note: Portions of the analysis are based on pre-inception returns. Please read disclosure for more information.)

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Fidelity® Total Market Index (USD)Morningstar Analyst Rating™
GoldOverall Morningstar Rating™
★★★★
1,229 US Fund Large BlendStandard Index
S&P 500 TR USDCategory Index
Russell 1000 TR
USDMorningstar Cat
US Fund Large Blend**Performance 09-30-2020**

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2018	-0.60	3.89	7.10	-14.35	-5.28
2019	14.04	4.08	1.15	9.05	30.92
2020	-20.97	22.59	9.08	—	5.24

Trading Returns	1 Yr	3 Yr	5 Yr	10 Yr	Annual
Load-adj Mthly	14.76	11.54	13.62	—	14.18
Std 09-30-2020	14.76	—	13.62	—	14.18
Total Return	14.76	11.54	13.62	13.43	14.18

+/- Std Index	-0.39	-0.74	-0.53	-0.37	—
+/- Cat Index	-1.25	-0.83	-0.47	-0.33	—

% Rank Cat	33	36	26	27	—
No. in Cat	1370	1229	1066	919	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield	—	—

Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar returns.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return date quoted herein. For performance data current to the most recent month end, please call 800-635-5082 or visit www.fidelity.com.

Fees and Expenses

Sales Charges	
Front-End Load %	NA
Deferred Load %	NA

Fund Expenses	
Management Fees %	0.02
12b1 Expense %	NA
Net Expense Ratio %	0.02
Gross Expense Ratio %	0.02

Risk and Return Profile

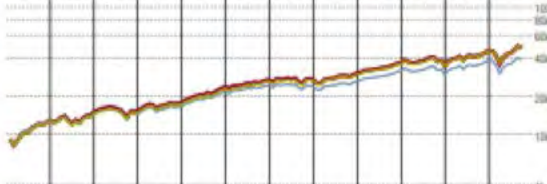
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	4★	4★
Morningstar Risk	+Avg	+Avg	+Avg
Morningstar Return	+Avg	+Avg	+Avg
Standard Deviation	18.47	15.49	13.78
Mean	11.54	13.62	13.43
Sharpe Ratio	0.60	0.83	0.94

MPI Statistics	Standard Index	Best Fit Index (Russell 1000 TR USD)
----------------	----------------	--------------------------------------

Alpha	-0.98	-0.10
Beta	1.04	1.00
R-Squared	99.82	100.00
12-Month Yield	—	—
Potential Cap Gains Exp	—	24.71%

Operations

Family:	Fidelity Investments
Manager:	Multiple
Tenure:	11.8 Years
Objective:	Growth and Income

Investment Style
Equity
Stocks %Growth of \$10,000
Fidelity® Total Market Index
47,601
Category Average
38,746
Standard Index
47,619Performance Quantile
(within category)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	09-20	History
NAV/Price	—	—	36.12	41.22	54.11	58.86	58.96	64.51	76.35	70.59	90.59	95.05	NAV/Price
Total Return %	28.35	17.47	7.07	16.35	30.42	12.47	0.47	12.68	21.18	-5.29	30.92	5.24	Total Return %
+/- Standard Index	1.83	2.34	-7.10	0.36	1.04	-1.22	-0.91	0.72	-0.65	-0.90	-0.57	-0.33	+/- Standard Index
+/- Category Index	-0.04	1.31	-0.49	-0.06	0.31	-0.77	-0.45	0.62	-0.51	-0.50	-0.51	-1.15	+/- Category Index
% Rank Cat	—	—	—	28	32	38	36	19	44	44	37	—	% Rank Cat
No. of Funds in Cat	—	—	—	1685	1558	1568	1606	1405	1396	1402	1387	1387	No. of Funds in Cat

Portfolio Analysis 09-30-2020

Asset Allocation %	Net %	Long %	Short %	Share Opg since 07-2020	Share Amount	Holdings: 3,354 Total Stocks, 0 Total Fixed Income, 11% Turnover Ratio	Net Assets %
Cash	0.02	0.02	0.00	—	—	—	—
US Stocks	98.88	98.88	0.00	—	—	—	6.10
Non-US Stocks	1.10	1.10	0.00	—	24 mil	Apple Inc	4.96
Bonds	0.00	0.00	0.00	—	11 mil	Microsoft Corp	4.19
Other/Not Classd	0.00	0.00	0.00	—	628,292	Amazon.com Inc	2.04
Total	100.00	100.00	0.00	—	4 mil	Facebook Inc A	1.42

Equity Style			Portfolio Statistics			Port Avg	Rel Index	Rel Cat	Holdings	Net Assets %
Value	Blend	Growth	P/E Ratio TTM	25.5	1.02	1.09	+	439,185	Alphabet Inc Class C	1.39
			P/B Ratio TTM	14.8	0.99	0.97		3 mil	Berkshire Hathaway Inc Class B	1.23
			P/S Ratio TTM	3.5	0.97	0.99		4 mil	Johnson & Johnson	1.17
			Govt Avg Mkt Cap (\$mil)	102377	0.65	0.46		1 mil	Tesla Inc	1.06
								3 mil	Visa Inc Class A	1.04
								4 mil	Procter & Gamble Co	0.99
Fixed-Income Style			Avg Eff Maturity					922,486	NVIDIA Corp	0.95
			Avg Eff Duration					1 mil	Mastercard Inc A	0.92
			Avg Wtd Coupon					2 mil	The Home Depot Inc	0.89
			Avg Wtd Price					5 mil	JPMorgan Chase & Co	0.88

Credit Quality Breakdown	Bond %	Holdings	Net Assets %
AAA	—	—	—
AA	—	—	—
A	—	—	—
BBB	—	—	—
BB	—	—	—
B	—	—	—
Below B	—	—	—
NR	—	—	—

Regional Exposure	Stocks %	Rel Std Index	Holdings	Net Assets %
Americas	98.9	1.00	—	—
Greater Europe	0.8	0.94	—	—
Greater Asia	0.2	8.10	—	—

Sector Weightings	Stocks %	Rel Std Index
Cyclical	38.7	1.06
Basic Materials	2.3	0.99
Consumer Cyclical	12.2	1.07
Financial Services	12.7	0.99
Real Estate	2.6	1.35
Sensitive	45.8	0.99
Communication Services	10.3	0.95
Energy	2.2	1.07
Industrials	8.8	1.02
Technology	24.5	0.99
Defensive	23.5	0.95
Consumer Defensive	6.7	0.89
Healthcare	14.2	0.99
Utilities	2.7	0.90

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Standardized and Tax Adjusted Returns Disclosure Statement

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit <http://advisor.morningstar.com/familyinfo.asp>.

Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges. The maximum redemption fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

Money Market Fund Disclosures

If money market fund(s) are included in the Standardized Returns table below, each money market fund's name will be followed by a superscripted letter that links it to the applicable disclosure below:

Institutional Money Market Funds (designated by an "S"):

You could lose money by investing in the fund. Because the share price of the fund will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "L") and

Retail Money Market Funds (designated by an "L"):

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen not to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "N"):

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Annualized returns (9-30-2020)

Standardized Returns (%)	7-day Yield Substated as of date	7-day Yield Unstated as of date	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp. Ratio %	Gross Exp. Ratio %	Max Redemption %
Fidelity® Total Market Index	—	—	14.76	13.62	—	14.18	09-08-2011	NA	NA	0.02	0.02	NA
BBGBarc US Agg Bond TR USD			6.98	4.18	3.64	—	01-03-1980					
MSCI EAFE NR USD			0.49	5.26	4.62	—	03-31-1986					
Russell 1000 TR USD			16.01	14.09	12.76	—	12-31-1978					
Russell 3000 TR USD			15.00	12.69	12.48	—	12-31-1978					
S&P 500 TR USD			15.15	14.15	12.74	—	01-30-1970					

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Annualized returns 09-30-2020

Standardized Returns (%)	7-day Yield Subsidized as of date	7-day Yield Unsubsidized as of date	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio %	Max Redemption %
USTREAS T-Bill Auction Ave 3 Mon			0.77	1.17	0.61	—	02-28-1941					
Returns after Tax (%)	On Distribution						On Distribution and Sales of Shares					
	1Yr	5Yr	10Yr	Since Inception	Inception Date		1Yr	5Yr	10Yr	Since Inception		
Fidelity® Total Market Index	13.90	12.60	—	13.27	09-08-2011		8.69	10.39	—	11.34		

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Mutual Fund Detail Report Disclosure Statement

The Mutual Fund Detail Report is supplemental sales literature, and therefore must be preceded or accompanied by the mutual fund's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Mutual Fund Detail Report. Morningstar is not itself a FINRA-member firm.

All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities.

Prior to 2016, Morningstar's methodology evaluated open-end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most-recent month-end reflect the updated methodology.

Risk measures (such as alpha, beta, r -squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns, and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publically-offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject

to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution.

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual fund itself, or through an intermediary, but cannot be traded on a secondary market, such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net

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asset value minus a deferred sales charge, and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Fund portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the investment income tax and Medicare surcharge. As of 2018, this rate is 37% plus 3.8% investment income plus 0.9% Medicare surcharge, or 41.7%. This rate changes periodically in accordance with changes in federal law.

Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share class(es) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.

When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in italics.

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

12b-1 Expense %

A 12b-1 fee is a fee used to pay for a mutual fund's distribution costs. It is often used as a commission to brokers for selling the fund. The amount of the fee is taken from a fund's returns.

Alpha

Alpha is a measure of the difference between a security or portfolio's actual returns and its expected performance, given its level of risk (as measured by beta). Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The "Other"

category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the fund against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the fund's managers are buying and how they are positioning the fund's portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the fund's exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security's price rises over time. Short positions are taken with the hope of benefitting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most fund portfolios hold fairly conventional securities, such as long positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while others have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart's generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of fund holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of fund holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the fund only.

Average Effective Duration

Duration is a time measure of a bond's interest-rate sensitivity. Average effective duration is a weighted average of the duration of the fixed-income securities within a portfolio.

Average Effective Maturity

Average Effective Maturity is a weighted average of the maturities of all bonds in a portfolio.

Average Weighted Coupon

A coupon is the fixed annual percentage paid out on a bond. The average weighted coupon is the asset-weighted coupon of each bond in the portfolio.

Average Weighted Price

Average Weighted Price is the asset-weighted price of bonds held in a portfolio, expressed as a percentage of par (face) value. This number reveals if the portfolio favors bonds selling at prices above or below par value (premium or discount securities respectively.)

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Best Fit Index

Alpha, beta, and R-squared statistics are presented for a broad market index and a "best fit" index. The Best Fit Index identified in this report was determined by Morningstar by calculating R-squared for the fund against approximately 100 indexes tracked by Morningstar. The index representing the highest R-squared is identified as the best fit index. The best fit index may not be the fund's benchmark, nor does it necessarily contain the types of securities that may be held by the fund or portfolio.

Beta

Beta is a measure of a security or portfolio's sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

Credit Quality Breakdown

Credit Quality breakdowns are shown for corporate-bond holdings in the fund's portfolio and depict the quality of bonds in the underlying portfolio. It shows the percentage of fixed-income securities that fall within each credit-quality rating as assigned by a Nationally Recognized Statistical Rating Organization (NRSRO). Bonds not rated by an NRSRO are included in the Other/Not-Classified category.

Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a fund. The percentage of the load charged generally declines the longer the fund's shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

Expense Ratio %

The expense ratio is the annual fee that all funds charge their shareholders. It expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred by the fund. Portfolio transaction fees, or brokerage costs, as well as front-end or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. The gross expense ratio, in contrast to the net expense ratio, does not reflect any fee waivers in effect during the time period.

Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

Geometric Average Market Capitalization

Geometric Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

Growth of 10,000

For funds, this graph compares the growth of an investment of 10,000 (in the base currency of the fund) with that of an index and/or with that of the average for all funds in its Morningstar Category. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing fund expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. If pre-inception data is included in the analysis, it will be graphed.

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The index does not reflect any initial or ongoing expenses. A fund's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund's prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund's prior fiscal year.

Maximum Redemption Fee %

The Maximum Redemption Fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase (for example, 30, 180, or 365 days).

Mean

Mean is the annualized geometric return for the period shown.

Morningstar Analyst Rating™

Effective October 31, 2019, Morningstar updated its Morningstar Analyst Rating™ methodology. For any Morningstar Analyst Rating published on or prior to October 31, 2019, the following disclosure applies:

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates funds based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five pillar evaluation to determine how they believe funds are likely to perform relative to a benchmark, or in the case of exchange-traded funds and index mutual funds, a relevant peer group, over the long term on a risk-adjusted basis. They consider quantitative and qualitative factors in their research, and the weight of each pillar may vary. The Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. A Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's conviction in a fund's prospects for outperformance. Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months. For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to global.morningstar.com/managerdisclosures/.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating a fund, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the fund.

For any Morningstar Analyst Rating published after October 31, 2019, the following disclosure applies:

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates funds based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five-pillar evaluation to determine how they believe funds are likely to perform relative to a benchmark over the long term on a risk adjusted basis. They consider quantitative and qualitative factors in their research. For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting. For passive strategies, process receives an 80% weighting, while people and parent each receive a

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10% weighting. For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars. The impact of the weighted pillar scores for people, process and parent on the final Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of funds using alternative investment strategies, the modification by alpha dispersion is not used.

For active funds, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an active fund will be able to deliver positive alpha net of fees relative to the standard benchmark index assigned to the Morningstar category. The level of the rating relates to the level of expected positive net alpha relative to Morningstar category peers for active funds. For passive funds, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that a fund will be able to deliver a higher alpha net of fees than the lesser of the relevant Morningstar category median or 0. The level of the rating relates to the level of expected net alpha relative to Morningstar category peers for passive funds. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of funds using alternative investment strategies, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that a fund will deliver a weighted pillar score above a predetermined threshold within its peer group. Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months.

For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx>

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating a fund, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the fund.

Morningstar Quantitative Rating™

Morningstar's quantitative fund ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent pillar, (iii) Quantitative People pillar, and (iv) Quantitative Process pillar (collectively the "Quantitative Fund Ratings"). The Quantitative Fund Ratings are calculated monthly and derived from the analyst-driven ratings of a fund's peers as determined by statistical algorithms. Morningstar, Inc. calculates Quantitative Fund Ratings for funds when an analyst rating does not exist as part of its qualitative coverage.

• **Morningstar Quantitative Rating:** Intended to be comparable to Morningstar's Analyst Ratings for open-end funds and ETFs, which is the summary expression of Morningstar's forward-looking analysis of a fund. The Morningstar Analyst Rating is based on the analyst's conviction in the fund's ability to outperform its peer group and/or relevant benchmark on a risk-adjusted basis over a full market cycle of at least 5 years. Ratings are assigned on a five-tier scale with three positive ratings of Gold, Silver, and Bronze, a Neutral rating, and a Negative rating. Morningstar calculates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our fund analysts assign to open-end funds and ETFs. Please go to <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx> for information about Morningstar Analyst Rating Morningstar's fund analysts assign to funds.

• **Quantitative Parent pillar:** Intended to be comparable to

Morningstar's Parent pillar scores, which provides Morningstar's analyst opinion on the stewardship quality of a firm. Morningstar calculates the Quantitative Parent pillar using an algorithm designed to predict the Parent Pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), Low (1).

• **Quantitative People pillar:** Morningstar's People pillar scores, which provides Morningstar's analyst opinion on the fund manager's talent, tenure, and resources. Morningstar calculates the Quantitative People pillar using an algorithm designed to predict the People pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), Low (1).

• **Quantitative Process Pillar:** Intended to be comparable to Morningstar's Process pillar scores, which provides Morningstar's analyst opinion on the fund's strategy and whether the management has a competitive advantage enabling it to execute the process and consistently over time. Morningstar calculates the Quantitative Process pillar using an algorithm designed to predict the Process pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Morningstar Quantitative Ratings have not been made available to the issuer of the security prior to publication.

Risk Warning

The quantitative fund ratings are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the quantitative fund ratings. In addition, there is the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the quantitative fund ratings can mean that the recommendation is subsequently no longer accurate.

For more information about Morningstar's quantitative methodology, please visit <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx>

Morningstar Category

Morningstar Category is assigned by placing funds into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a fund's prospectus may not be sufficiently detailed for our proprietary classification methodology. Funds are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the fund is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a fund at the time of calculation.

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Morningstar Rating™

The Morningstar Rating™ for funds, or "star rating", is calculated for funds and separate accounts with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product's monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. For more information about the Morningstar Rating for funds, including its methodology, please go to global.morningstar.com/managedisclosures

The Morningstar Return rates a fund's performance relative to other managed products in its Morningstar Category. It is an assessment of a product's excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Avg), and the bottom 10% Low (Low). Morningstar Return is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Risk

Morningstar Risk evaluates a fund's downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations, in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (-Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Style Box™

The Morningstar Style Box™ reveals a fund's investment strategy as of the date noted on this report.

For equity funds, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened square in the style box indicates the weighted average style of the portfolio.

For fixed-income funds, the vertical axis shows the credit quality of the long bonds owned and the horizontal axis shows interest-rate sensitivity as measured by a bond's effective duration. Morningstar seeks credit rating information from fund companies on a periodic basis (for example, quarterly). In compiling credit rating information, Morningstar accepts credit ratings reported by fund companies that have been issued by all Nationally Recognized Statistical Rating Organizations. For a list of all NRSROs, please visit <http://www.sec.gov/divisions/marketreg/ratingagency.htm>. Additionally, Morningstar accepts foreign credit ratings from widely recognized or registered rating agencies. If two rating organizations/agencies have rated a security, fund companies are to report the lower rating; if three or more

organizations/agencies have rated a security, fund companies are to report the median rating; and in cases where there are more than two organization/agency ratings and a median rating does not exist, fund companies are to use the lower of the two middle ratings.

Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the fund. NRSRO or rating agency ratings can change from time to time.

For credit quality, Morningstar combines the credit rating information provided by the fund companies with an average default rate calculation to come up with a weighted-average credit quality. The weighted-average credit quality is currently a letter that roughly corresponds to the scale used by a leading NRSRO. Bond funds are assigned a style box placement of "low," "medium," or "high" based on their average credit quality. Funds with a "low" credit quality are those whose weighted-average credit quality is determined to be less than "BBB-"; "medium" are those less than "AA-", but greater or equal to "BBB-"; and "high" are those with a weighted-average credit quality of "AA-" or higher. When classifying a bond portfolio, Morningstar first maps the NRSRO credit ratings of the underlying holdings to their respective default rates (as determined by Morningstar's analysis of actual historical default rates). Morningstar then averages these default rates to determine the average default rate for the entire bond fund. Finally, Morningstar maps this average default rate to its corresponding credit rating along a convex curve.

For interest-rate sensitivity, Morningstar obtains from fund companies the average effective duration. Generally, Morningstar classifies a fixed-income fund's interest-rate sensitivity based on the effective duration of the Morningstar Core Bond Index, which is currently three years. The classification of Limited will be assigned to those funds whose average effective duration is between 25% to 75% of MCB's average effective duration; funds whose average effective duration is between 75% to 125% of the MCB will be classified as Moderate; and those that are at 125% or greater of the average effective duration of the MCB will be classified as Extensive.

For municipal-bond funds, Morningstar also obtains from fund companies the average effective duration. In these cases, static breakpoints are used. These breakpoints are as follows: (i) Limited: 4.5 years or less; (ii) Moderate: more than 4.5 years but less than 7 years; and (iii) Extensive: more than 7 years. In addition, for non-U.S. taxable and non-U.S. domiciled fixed-income funds, static duration breakpoints are used: (i) Limited: less than or equal to 3.5 years; (ii) Moderate: more than 3.5 years but less than or equal to 6 years; (iii) Extensive: more than 6 years.

Interest-rate sensitivity for non-U.S. domiciled funds (excluding funds in convertible categories) may be measured with modified duration when effective duration is not available.

P/B Ratio TTM

The Price/Book Ratio (or P/B Ratio) for a fund is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

P/C Ratio TTM

The Price/Cash Flow Ratio (or P/C Ratio) for a fund is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

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P/E Ratio TTM

The Price/Earnings Ratio (or P/E Ratio) for a fund is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is the stock's current price divided by the company's trailing 12-month earnings per share. A high P/E Ratio usually indicates the market will pay more to obtain the company's earnings because it believes in the company's abilities to increase their earnings. A low P/E Ratio indicates the market has less confidence that the company's earnings will increase, however value investors may believe such stocks have an overlooked or undervalued potential for appreciation.

Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, funds within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

Performance Quartile

Performance Quartile reflects a fund's Morningstar Rank.

Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

Quarterly Returns

Quarterly Return is calculated applying the same methodology as Total Return except it represents return through each quarter-end.

R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

Regional Exposure

The regional exposure is a display of the portfolio's assets invested in the regions shown on the report.

Sector Weightings

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the stocks included in these sectors generally have betas greater than 1. The Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Share Change

Shares Change represents the number of shares of a stock bought or sold by a fund since the previously reported portfolio of the fund.

Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk.

Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility of return.

Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the security was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes reinvestment of dividends and capital gains. It is the return an investor would have experienced if the fund was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Trailing Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the fund was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Investment Risks

International/Emerging Market Equities: Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

Sector Strategies: Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor

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to increased industry-specific risks.

Non-Diversified Strategies: Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

Small Cap Equities: Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure, and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

Mid Cap Equities: Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

High-Yield Bonds: Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

Tax-Free Municipal Bonds: The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

Bonds: Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

HOLDERS: The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDER might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

Hedge Funds: The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

Bank Loan/Senior Debt: Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

Exchange Traded Notes (ETNs): ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its obligations. ETNs do not typically pay interest.

Leveraged ETFs: Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their fund objectives on a daily basis (or other time period stated within the prospectus

objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, -200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the fund to be either greater or less than the index performance multiplied by the multiple stated within the funds objective over a stated time period.

Short Positions: When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

Long-Short: Due to the strategies used by long-short funds, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these funds may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

Liquidity Risk: Closed-end fund, ETF, and HOLDER trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

Market Price Risk: The market price of ETFs, HOLDERS, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

Market Risk: The market prices of ETFs and HOLDERS can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

Target-Date Funds: Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at any time, including at the fund's target date.

High double- and triple-digit returns: High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

Benchmark Disclosure

BBGBarc US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage-Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which includes the daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond ETF.

MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

This disclosure applies to all MSCI indices. Certain information included herein is derived by Morningstar in part from MSCI's Index Constituents (the "Index

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Data"). However, MSCI has not reviewed any information contained herein and does not endorse or express any opinion such information or analysis. MSCI does not make any express or implied warranties, representations or guarantees concerning the Index Data or any information or data derived therefrom, and in no event will MSCI have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of this information.

Russell 1000 TR USD

Consists of the 1000 largest companies within the Russell 3000 index, which represents approximately 98% of the investable US equity market. Also known as the Market-Oriented Index, because it represents the group of stocks from which most active money managers choose. The constituents displayed for this index are from the following proxy: iShares Russell 1000 ETF.

Russell 3000 TR USD

Composed of the 3000 largest U.S. companies by market capitalization, representing approximately 98% of the U.S. equity market. The constituents displayed for this index are from the following proxy: iShares Russell 3000 ETF.

S&P 500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the U.S. stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: SPDR® S&P 500 ETF Trust.

USTREAS T-Bill Auction Ave 3 Mon

Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months. Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

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Fidelity U.S. Bond Index Fund (FXNAX)

Firm Background*

Fidelity Institutional Asset Management Trust Company (FIAM) is the US-based investment management subsidiary of Fidelity Management & Research (FMR). FMR is a large, privately-held, multi-service financial services firm founded in 1946 by Edward C. Johnson. FMR is currently under the leadership of CEO Abigail Johnson. Approximately 49% of FMR is owned by Ms. Johnson and other members of the Johnson family. 51% is held by employees and former employees.

FIAM was established in 2015 through the combination of Pyramis Global Advisors and Fidelity Financial Advisor Solutions, which served, respectively, institutional and retail investment management clients. The firm manages roughly \$175 billion across fixed income (38%), multi-asset (32%), and equity (28%), with cash and alternatives comprising the balance. Judy Marlinski is President of FIAM, She reports to Mike Dervin, Head of Fidelity Institutional at FMR.

Organization*

FMR and, by extension, FIAM are highly complex and deeply intertwined organizations. Differences between functional business units and legal entities are often indistinct, but the high degree of involvement from the senior ranks of the FMR organization, particularly given the hands-on approach of FMR CEO Abigail Johnson, appear to manage this complexity effectively. FIAM is large, owing a portion of its success to the strong brand and distribution power of the parent company. The firm maintains a diversified client base and product line, as well as a strong investment culture. Senior leadership at FIAM has experienced some significant changes over the past two years, most notably the retirement of Charlie Morrison, FMR's President of Asset Management, in December of 2018 and the departure of Scott Cuoto, President of FIAM in mid-2017. The President of FIAM reports into the President of Asset Management at FMR. Additionally, the firm has experienced high profile sexual harassment claims in recent years, leading to some turnover among senior investment professionals. This may indicate that the firm has non-investment-related cultural issues, which can still damage the likelihood of success for the investment teams. However, senior management responded forcefully, and we will continue to monitor the organization for cultural and legal issues.

Strategy**

Fidelity® U.S. Bond Index Fund seeks to provide investment results that correspond to the aggregate price and interest performance of the debt securities in the Bloomberg Barclays U.S. Aggregate Bond Index.

Normally investing at least 80% of the fund's assets in bonds included in the Bloomberg Barclays U.S. Aggregate Bond Index. Using statistical sampling techniques based on duration, maturity, interest rate sensitivity, security structure, and credit quality to attempt to replicate the returns of the Index using a smaller number of securities. Engaging in transactions that have a leveraging effect on the fund, including investments in derivatives - such as swaps (interest rate, total return, and credit default) and futures contracts - and forward-settling securities, to adjust the fund's risk exposure. Investing in Fidelity's central funds (specialized investment vehicles used by Fidelity funds to invest in particular security types or investment disciplines).

Summary***

Under our new ratings framework, which places greater emphasis on fees, the fund warrants an upgrade to a Morningstar Analyst Rating of Gold from Silver.

The strategy tracks the Bloomberg Barclays U.S. Aggregate Bond Index, which includes investment-grade U.S. dollar-denominated bonds with at least one year until maturity. The index is weighted by market value, tilting the portfolio toward the largest, most liquid issues, which are easy to obtain and cheap to trade. This approach also harnesses the market's collective wisdom about the relative value of each security. That said, bond issuing activity influences the composition of this portfolio.

The U.S. government is the largest debt issuer in the United States, so the portfolio maintains a larger position in Treasuries relative to the intermediate core bond Morningstar Category average. The strategy invests nearly 70% of its assets in Treasuries and agency mortgaged-backed securities, which carry AAA ratings, while the corresponding figure for the category average is only about 45%. While this might limit the fund's return potential, its lower credit risk should offer better downside protection.

This portfolio has minimal credit risk, which can make it a low hurdle for active managers. That does not make this an unattractive proposition, as risk and return are highly correlated in the fixed-income market. Nearly 75% of the assets in this portfolio carry a AAA rating, making it one of the more conservative options in the category. Like most investment-grated portfolios, interest-rate risk is the biggest drivers of this fund's returns. Its average effective duration is about 5.50 years as of February 2020, generally in line with the category average.

While conservative, the fund's corporate bond sleeve maintains a tilt toward BBB rated issues. As of February 2020, about 20% of the fund's assets were in corporate bonds, while just under 10% of the fund's assets were rated BBB.

Performance***

The fund's performance from its inception in May 2011 through March 2020 has been solid. It beat the category average by 30 basis points annually, which ranked in the category's top third, largely thanks to its cost advantage.

The fund's category-relative performance is largely related to credit spreads, given its Treasury-heavy tilt. The fund has tended to outperform category peers during periods of widening credit spreads, and it has tended to lag during periods of tightening credit spreads. For example, the strategy outperformed its average category peer by 1.13% during 2011, as the ICE Bank of America BBB Option-Adjusted Spread, or OAS, widened by 1.04%. Conversely, the fund lagged the category average by 1.41% during 2012, as the OAS tightened by 1.07%.

The fund's conservative credit risk should help it weather periods of market turmoil better than most of its category peers. For instance, the strategy did not decline by nearly as much as its average peer during the onset of the novel coronavirus economic crisis, between Feb. 20, 2020, and March 22, 2020. During that time, the fund fell by 2.01% while the category average fell by 3.75%.

Over the trailing five years through March 2020, the strategy's returns matched its index.

Price***

It's critical to evaluate expenses, as they come directly out of returns. The share class on this report levies a fee that ranks in its Morningstar category's cheapest quintile. Based on our assessment of the fund's People, Process and Parent pillars in the context of these fees, we think this share class will be able to

deliver positive alpha relative to the category benchmark index, explaining its Morningstar Analyst Rating of Gold.

Process: Above Average***

This portfolio replicates the composition of the U.S.-dollar-denominated investment-grade bond market, effectively harnessing the market's collective wisdom about the relative value of each bond. This is a sound approach because it promotes low turnover, is cost-effective, and because the market does a decent job pricing these bonds. It earns an Above Average Process Pillar rating.

The strategy employs representative sampling to track the performance of the Aggregate Index, which includes investment-grade U.S.-dollar-denominated bonds with at least one year until maturity. Qualifying bonds must have at least \$300 million in outstanding face value. The index weights its holdings by their market value and is rebalanced monthly. This yields a conservative portfolio, which limits its return potential but also cuts downside risk.

The composition of the portfolio is conservative, reflecting the size and quality of the U.S. investment-grade bond market. The amount of debt issued by the U.S. Treasury Department grew sharply since the global financial crisis, and the portfolio maintains a larger percentage of its assets in Treasury bonds as a result.

As of February 2020, approximately 45% of the fund's assets were in Treasury bonds, versus the category average of slightly less than 25%. The bulk of the fund's remaining balance is composed of agency MBS and corporate debt, which represent about 25% and 22% of the portfolio's assets, respectively. While this limits the fund's potential for returns, it also limits potential losses.

Although it represents only about one fifth of the portfolio, the fund's corporate bond sleeve contains most of the fund's credit risk. In addition to the growth of the Treasury bonds, the U.S. corporate bond market also grew in response to the global financial crisis, as companies issued debt to capitalize on low interest rates. As a result, BBB corporate bonds grew rapidly and now represent about half of the market value of all investment-grade corporate bonds. Accordingly, nearly 10% of the strategy's assets are rated BBB.

The strategy's interest-rate risk is line with category peers. As of February 2020, its average effective duration was 5.5 years.

People: Above Average***

Fidelity maintains a relatively small portfolio management team, but the team enjoys strong support from Fidelity's broader fixed-income portfolio management department. As a result, it enjoys the benefits of a large and experienced team supported by a centralized trading desk, which mitigates key-person risk. This team earns an Above Average People rating.

Brandon Bettencourt and Jay Small have managed this fund since 2014 and 2015, respectively. Prior to serving as portfolio managers, Bettencourt was a portfolio analyst while Small was a corporate bond trader. Two quantitative research analysts assist the named managers.

The portfolio managers are primarily responsible for managing the daily operations of the fund. The quant analysts act as an extension of the portfolio managers, applying input from Fidelity's research team to help mitigate index-tracking error. The portfolio managers benefit from the technical expertise of the quant analysts when identifying baskets of securities for creations or redemptions.

Independent oversight of the fund is provided by the office of the chief investment officer, who leads a team that independently reviews the index portfolios and index-tracking performance. Fidelity links manager compensation to index-tracking performance, aligning managers' interest with investors'.

* Source: BNY Mellon Manager Research Group, as of July 2019

** Source: Fidelity (FMR, LLC), as of 9/30/2020

*** Source: Morningstar, Inc., as of 4/1/2020

Release date 09-30-2020 | Note: Portions of the analysis are based on pre-emption returns. Please read disclosure for more information.

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Fidelity® US Bond Index (USD)**Performance 09-30-2020**

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2018	-1.51	-0.22	0.07	1.70	0.01
2019	2.96	2.97	2.27	0.06	8.48
2020	3.66	2.77	0.43	—	6.99

Trading Returns	1 Yr	3 Yr	5 Yr	12 Yr	Interp
Load-adj Mthly	7.06	5.22	4.14	—	3.76
Std 09-30-2020	7.06	—	4.14	—	3.76
Total Return	7.06	5.22	4.14	3.59	3.76

+/- Std Index	0.07	-0.02	-0.04	-0.04	—
+/- Cat Index	0.07	-0.02	-0.04	-0.04	—
% Rank Cat	36	28	39	47	—
No. in Cat	417	380	335	255	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield	—	—

Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar returns.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return date quoted herein. For performance data current to the most recent month end, please call 800-544-8544 or visit www.fidelity.com.

Fees and Expenses

Sales Charges	
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	
Management Fees %	0.03
12b1 Expense %	NA
Net Expense Ratio %	0.03
Gross Expense Ratio %	0.03

Risk and Return Profile

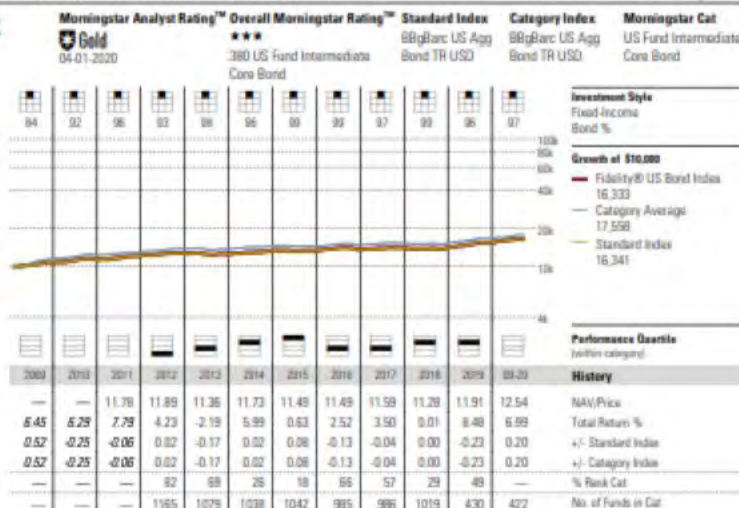
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	3★	3★
Morningstar Risk	-Avg	Avg	Avg
Morningstar Return	+Avg	Avg	Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	3.38	3.21	3.05
Mean	5.22	4.14	3.59
Sharpe Ratio	1.06	0.93	0.98

MPI Statistics	Standard Index	Best Fr Index
	Bid/Ask US Agg	Bond TR USD
Alpha	-0.01	-0.01
Beta	1.00	1.00
R-Squared	99.02	99.02
12-Month Yield	—	—
Potential Cap Gains Exp	0.01%	—

Operations

Family:	Fidelity Investments
Manager:	Multiple
Tenure:	6.4 Years
Objective:	Multisector Bond

**Portfolio Analysis 09-30-2020**

Asset Allocation %				Share Ovg	Share	Holdings:	Net Assets
	Net %	Long %	Short %	since	Amount	0 Total Stocks, 2,224 Total Fixed-Income, 58% Turnover Ratio	
Cash	2.05	2.05	0.00	07-2020			
US Stocks	0.00	0.00	0.00				
Non-US Stocks	0.00	0.00	0.00		1,497 mil	Fannie Mae 3% 30 Year	2.85
Bonds	97.37	97.37	0.00		1,233 mil	Fannie Mae 3.5% 30 Year	2.35
Other/Not Clsd	0.59	0.59	0.00		1,115 mil	Ginnie Mae 3% 30 Year	2.11
Total	100.00	100.00	0.00		1,068 mil	Ginnie Mae 3.5% 30 Year	2.04
					1,049 mil	Fannie Mae 4% 30 Year	2.02
					1,029 mil	Fidelity Reverse Str Tr	1.84
					942 mil	Freddie Mac 3.5% 30 Year	1.60
					646 mil	United States Treasury Notes 1.5%	1.24
					611 mil	United States Treasury Notes 2.25%	1.23
					659 mil	United States Treasury Notes 0.12%	1.18
					585 mil	Freddie Mac 2.5% 30 Year	1.12
					588 mil	United States Treasury Notes 0.25%	1.05
					519 mil	Ginnie Mae 4% 30 Year	1.00
					320 mil	United States Treasury Bonds 5%	0.93
					467 mil	Units 3% 30 Year	0.92

Equity Style	Portfolio Statistics	Net Avg	Net Index	Net Cat
P/E Ratio TTM	—	—	—	—
P/C Ratio TTM	—	—	—	—
P/B Ratio TTM	—	—	—	—
Gov Avg Mkt Cap	—	—	—	—
Gov Avg Mkt Cap	—	—	—	—

Fixed-Income Style	Avg Eff Maturity	Avg Eff Duration	Avg Wtd Coupon	Avg Wtd Price
—	—	5.63	—	110.73

Credit Quality Breakdown 09-30-2020	Bond %
AAA	73.78
AA	4.06
A	11.86
BBB	10.08
BB	0.17
B	0.00
Below B	0.00
NR	0.05

Regional Exposure	Stocks %	Net Std Index
Americas	—	—
Greater Europe	—	—
Greater Asia	—	—

Sector Weightings	Stocks %	Net Std Index
Cyclical	—	—
Basic Materials	—	—
Consumer Cyclical	—	—
Financial Services	—	—
Real Estate	—	—
Sensitive	—	—
Communication Services	—	—
Energy	—	—
Industrials	—	—
Technology	—	—
Defensive	—	—
Consumer Defensive	—	—
Healthcare	—	—
Utilities	—	—

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Standardized and Tax Adjusted Returns Disclosure Statement

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit <http://advisor.morningstar.com/familyinfo.asp>.

Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges. The maximum redemption fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

Money Market Fund Disclosures

If money market fund(s) are included in the Standardized Returns table below, each money market fund's name will be followed by a superscripted letter that links it to the applicable disclosure below:

Institutional Money Market Funds (designated by an "S"):

You could lose money by investing in the fund. Because the share price of the fund will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "L") and

Retail Money Market Funds (designated by an "N"):

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen not to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "N"):

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Annualized returns (9-30-2020)

Standardized Returns (%)	7-day Yield Substated as of date	7-day Yield Unstated as of date	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp. Ratio %	Gross Exp. Ratio %	Max Redemption %
Fidelity® US Bond Index	—	—	7.06	4.14	—	3.76	05-04-2011	NA	NA	0.03	0.03	NA
BBGBarc US Agg Bond TR USD			6.98	4.18	3.64	—	01-03-1980					
MSCI EAFE NR USD			0.49	5.26	4.62	—	03-31-1986					
S&P 500 TR USD			15.15	14.15	12.74	—	01-30-1970					
USTREAS T-Bill Auction Ave 2 Mon			0.77	1.17	0.61	—	02-28-1941					

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Annualized returns (09-30-2020)

Return after Tax (%)	On Distribution					On Distribution and Sales of Shares				
	1Yr	5Yr	10Yr	Since Inception	Inception Date	1Yr	5Yr	10Yr	Since Inception	
Fidelity® US Bond Index	6.08	3.02	—	2.64	05-04-2011	4.16	2.67	—	2.42	

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Mutual Fund Detail Report Disclosure Statement

The Mutual Fund Detail Report is supplemental sales literature, and therefore must be preceded or accompanied by the mutual fund's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Mutual Fund Detail Report. Morningstar is not itself a FINRA-member firm.

All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities.

Prior to 2016, Morningstar's methodology evaluated open-end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most-recent month-end reflect the updated methodology.

Risk measures (such as alpha, beta, r -squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns, and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publically-offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject

to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution.

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual fund itself, or through an intermediary, but cannot be traded on a secondary market, such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net

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asset value minus a deferred sales charge, and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Fund portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the investment income tax and Medicare surcharge. As of 2018, this rate is 37% plus 3.8% investment income plus 0.9% Medicare surcharge, or 41.7%. This rate changes periodically in accordance with changes in federal law.

Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share class(es) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.

When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in italics.

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

12b-1 Expense %

A 12b-1 fee is a fee used to pay for a mutual fund's distribution costs. It is often used as a commission to brokers for selling the fund. The amount of the fee is taken from a fund's returns.

Alpha

Alpha is a measure of the difference between a security or portfolio's actual returns and its expected performance, given its level of risk (as measured by beta). Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The "Other"

category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the fund against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the fund's managers are buying and how they are positioning the fund's portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the fund's exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security's price rises over time. Short positions are taken with the hope of benefitting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most fund portfolios hold fairly conventional securities, such as long positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while others have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart's generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of fund holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of fund holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the fund only.

Average Effective Duration

Duration is a time measure of a bond's interest-rate sensitivity. Average effective duration is a weighted average of the duration of the fixed-income securities within a portfolio.

Average Effective Maturity

Average Effective Maturity is a weighted average of the maturities of all bonds in a portfolio.

Average Weighted Coupon

A coupon is the fixed annual percentage paid out on a bond. The average weighted coupon is the asset-weighted coupon of each bond in the portfolio.

Average Weighted Price

Average Weighted Price is the asset-weighted price of bonds held in a portfolio, expressed as a percentage of par (face) value. This number reveals if the portfolio favors bonds selling at prices above or below par value (premium or discount securities respectively.)

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Best Fit Index

Alpha, beta, and R-squared statistics are presented for a broad market index and a "best fit" index. The Best Fit Index identified in this report was determined by Morningstar by calculating R-squared for the fund against approximately 100 indexes tracked by Morningstar. The index representing the highest R-squared is identified as the best fit index. The best fit index may not be the fund's benchmark, nor does it necessarily contain the types of securities that may be held by the fund or portfolio.

Beta

Beta is a measure of a security or portfolio's sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

Credit Quality Breakdown

Credit Quality breakdowns are shown for corporate-bond holdings in the fund's portfolio and depict the quality of bonds in the underlying portfolio. It shows the percentage of fixed-income securities that fall within each credit-quality rating as assigned by a Nationally Recognized Statistical Rating Organization (NRSRO). Bonds not rated by an NRSRO are included in the Other/Not-Classified category.

Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a fund. The percentage of the load charged generally declines the longer the fund's shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

Expense Ratio %

The expense ratio is the annual fee that all funds charge their shareholders. It expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred by the fund. Portfolio transaction fees, or brokerage costs, as well as front-end or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. The gross expense ratio, in contrast to the net expense ratio, does not reflect any fee waivers in effect during the time period.

Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

Geometric Average Market Capitalization

Geometric Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

Growth of 10,000

For funds, this graph compares the growth of an investment of 10,000 (in the base currency of the fund) with that of an index and/or with that of the average for all funds in its Morningstar Category. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing fund expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. If pre-inception data is included in the analysis, it will be graphed.

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The index does not reflect any initial or ongoing expenses. A fund's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund's prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund's prior fiscal year.

Maximum Redemption Fee %

The Maximum Redemption Fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase (for example, 30, 180, or 365 days).

Mean

Mean is the annualized geometric return for the period shown.

Morningstar Analyst Rating™

Effective October 31, 2019, Morningstar updated its Morningstar Analyst Rating™ methodology. For any Morningstar Analyst Rating published on or prior to October 31, 2019, the following disclosure applies:

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates funds based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five pillar evaluation to determine how they believe funds are likely to perform relative to a benchmark, or in the case of exchange-traded funds and index mutual funds, a relevant peer group, over the long term on a risk-adjusted basis. They consider quantitative and qualitative factors in their research, and the weight of each pillar may vary. The Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. A Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's conviction in a fund's prospects for outperformance. Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months. For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to global.morningstar.com/managerdisclosures/.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating a fund, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the fund.

For any Morningstar Analyst Rating published after October 31, 2019, the following disclosure applies:

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates funds based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five-pillar evaluation to determine how they believe funds are likely to perform relative to a benchmark over the long term on a risk adjusted basis. They consider quantitative and qualitative factors in their research. For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting. For passive strategies, process receives an 80% weighting, while people and parent each receive a

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10% weighting. For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars. The impact of the weighted pillar scores for people, process and parent on the final Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of funds using alternative investment strategies, the modification by alpha dispersion is not used.

For active funds, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an active fund will be able to deliver positive alpha net of fees relative to the standard benchmark index assigned to the Morningstar category. The level of the rating relates to the level of expected positive net alpha relative to Morningstar category peers for active funds. For passive funds, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that a fund will be able to deliver a higher alpha net of fees than the lesser of the relevant Morningstar category median or 0. The level of the rating relates to the level of expected net alpha relative to Morningstar category peers for passive funds. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of funds using alternative investment strategies, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that a fund will deliver a weighted pillar score above a predetermined threshold within its peer group. Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months.

For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx>

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating a fund, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the fund.

Morningstar Quantitative Rating™

Morningstar's quantitative fund ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent pillar, (iii) Quantitative People pillar, and (iv) Quantitative Process pillar (collectively the "Quantitative Fund Ratings"). The Quantitative Fund Ratings are calculated monthly and derived from the analyst-driven ratings of a fund's peers as determined by statistical algorithms. Morningstar, Inc. calculates Quantitative Fund Ratings for funds when an analyst rating does not exist as part of its qualitative coverage.

• **Morningstar Quantitative Rating:** Intended to be comparable to Morningstar's Analyst Ratings for open-end funds and ETFs, which is the summary expression of Morningstar's forward-looking analysis of a fund. The Morningstar Analyst Rating is based on the analyst's conviction in the fund's ability to outperform its peer group and/or relevant benchmark on a risk-adjusted basis over a full market cycle of at least 5 years. Ratings are assigned on a five-tier scale with three positive ratings of Gold, Silver, and Bronze, a Neutral rating, and a Negative rating. Morningstar calculates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our fund analysts assign to open-end funds and ETFs. Please go to <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx> for information about Morningstar Analyst Rating Morningstar's fund analysts assign to funds.

• **Quantitative Parent pillar:** Intended to be comparable to

Morningstar's Parent pillar scores, which provides Morningstar's analyst opinion on the stewardship quality of a firm. Morningstar calculates the Quantitative Parent pillar using an algorithm designed to predict the Parent Pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), Low (1).

• **Quantitative People pillar:** Morningstar's People pillar scores, which provides Morningstar's analyst opinion on the fund manager's talent, tenure, and resources. Morningstar calculates the Quantitative People pillar using an algorithm designed to predict the People pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), Low (1).

• **Quantitative Process Pillar:** Intended to be comparable to Morningstar's Process pillar scores, which provides Morningstar's analyst opinion on the fund's strategy and whether the management has a competitive advantage enabling it to execute the process and consistently over time. Morningstar calculates the Quantitative Process pillar using an algorithm designed to predict the Process pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Morningstar Quantitative Ratings have not been made available to the issuer of the security prior to publication.

Risk Warning

The quantitative fund ratings are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the quantitative fund ratings. In addition, there is the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the quantitative fund ratings can mean that the recommendation is subsequently no longer accurate.

For more information about Morningstar's quantitative methodology, please visit <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx>

Morningstar Category

Morningstar Category is assigned by placing funds into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a fund's prospectus may not be sufficiently detailed for our proprietary classification methodology. Funds are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the fund is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a fund at the time of calculation.

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Morningstar Rating™

The Morningstar Rating™ for funds, or "star rating", is calculated for funds and separate accounts with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product's monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. For more information about the Morningstar Rating for funds, including its methodology, please go to global.morningstar.com/managedisclosures

The Morningstar Return rates a fund's performance relative to other managed products in its Morningstar Category. It is an assessment of a product's excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Avg), and the bottom 10% Low (Low). Morningstar Return is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Risk

Morningstar Risk evaluates a fund's downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations, in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (-Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Style Box™

The Morningstar Style Box™ reveals a fund's investment strategy as of the date noted on this report.

For equity funds, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened square in the style box indicates the weighted average style of the portfolio.

For fixed-income funds, the vertical axis shows the credit quality of the long bonds owned and the horizontal axis shows interest-rate sensitivity as measured by a bond's effective duration. Morningstar seeks credit rating information from fund companies on a periodic basis (for example, quarterly). In compiling credit rating information, Morningstar accepts credit ratings reported by fund companies that have been issued by all Nationally Recognized Statistical Rating Organizations. For a list of all NRSROs, please visit <http://www.sec.gov/divisions/marketreg/ratingagency.htm>. Additionally, Morningstar accepts foreign credit ratings from widely recognized or registered rating agencies. If two rating organizations/agencies have rated a security, fund companies are to report the lower rating; if three or more

organizations/agencies have rated a security, fund companies are to report the median rating; and in cases where there are more than two organization/agency ratings and a median rating does not exist, fund companies are to use the lower of the two middle ratings.

Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the fund. NRSRO or rating agency ratings can change from time to time.

For credit quality, Morningstar combines the credit rating information provided by the fund companies with an average default rate calculation to come up with a weighted-average credit quality. The weighted-average credit quality is currently a letter that roughly corresponds to the scale used by a leading NRSRO. Bond funds are assigned a style box placement of "low," "medium," or "high" based on their average credit quality. Funds with a "low" credit quality are those whose weighted-average credit quality is determined to be less than "BBB-"; "medium" are those less than "AA-", but greater or equal to "BBB-"; and "high" are those with a weighted-average credit quality of "AA-" or higher. When classifying a bond portfolio, Morningstar first maps the NRSRO credit ratings of the underlying holdings to their respective default rates (as determined by Morningstar's analysis of actual historical default rates). Morningstar then averages these default rates to determine the average default rate for the entire bond fund. Finally, Morningstar maps this average default rate to its corresponding credit rating along a convex curve.

For interest-rate sensitivity, Morningstar obtains from fund companies the average effective duration. Generally, Morningstar classifies a fixed-income fund's interest-rate sensitivity based on the effective duration of the Morningstar Core Bond Index, which is currently three years. The classification of Limited will be assigned to those funds whose average effective duration is between 25% to 75% of MCB's average effective duration; funds whose average effective duration is between 75% to 125% of the MCB will be classified as Moderate; and those that are at 125% or greater of the average effective duration of the MCB will be classified as Extensive.

For municipal-bond funds, Morningstar also obtains from fund companies the average effective duration. In these cases, static breakpoints are used. These breakpoints are as follows: (i) Limited: 4.5 years or less; (ii) Moderate: more than 4.5 years but less than 7 years; and (iii) Extensive: more than 7 years. In addition, for non-U.S. taxable and non-U.S. domiciled fixed-income funds, static duration breakpoints are used: (i) Limited: less than or equal to 3.5 years; (ii) Moderate: more than 3.5 years but less than or equal to 6 years; (iii) Extensive: more than 6 years.

Interest-rate sensitivity for non-U.S. domiciled funds (excluding funds in convertible categories) may be measured with modified duration when effective duration is not available.

P/B Ratio TTM

The Price/Book Ratio (or P/B Ratio) for a fund is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

P/C Ratio TTM

The Price/Cash Flow Ratio (or P/C Ratio) for a fund is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

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P/E Ratio TTM

The Price/Earnings Ratio (or P/E Ratio) for a fund is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is the stock's current price divided by the company's trailing 12-month earnings per share. A high P/E Ratio usually indicates the market will pay more to obtain the company's earnings because it believes in the company's abilities to increase their earnings. A low P/E Ratio indicates the market has less confidence that the company's earnings will increase, however value investors may believe such stocks have an overlooked or undervalued potential for appreciation.

Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, funds within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

Performance Quartile

Performance Quartile reflects a fund's Morningstar Rank.

Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

Quarterly Returns

Quarterly Return is calculated applying the same methodology as Total Return except it represents return through each quarter-end.

R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

Regional Exposure

The regional exposure is a display of the portfolio's assets invested in the regions shown on the report.

Sector Weightings

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the stocks included in these sectors generally have betas greater than 1. The Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Share Change

Shares Change represents the number of shares of a stock bought or sold by a fund since the previously reported portfolio of the fund.

Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk.

Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility of return.

Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the security was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes reinvestment of dividends and capital gains. It is the return an investor would have experienced if the fund was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Trailing Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the fund was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Investment Risks

International/Emerging Market Equities: Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

Sector Strategies: Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor

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to increased industry-specific risks.

Non-Diversified Strategies: Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

Small Cap Equities: Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure, and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

Mid Cap Equities: Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

High-Yield Bonds: Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

Tax-Free Municipal Bonds: The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

Bonds: Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

HOLDERS: The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDER might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

Hedge Funds: The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

Bank Loan/Senior Debt: Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

Exchange Traded Notes (ETNs): ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its obligations. ETNs do not typically pay interest.

Leveraged ETFs: Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their fund objectives on a daily basis (or other time period stated within the prospectus

objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, -200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the fund to be either greater or less than the index performance multiplied by the multiple stated within the funds objective over a stated time period.

Short Positions: When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

Long-Short: Due to the strategies used by long-short funds, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these funds may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

Liquidity Risk: Closed-end fund, ETF, and HOLDER trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

Market Price Risk: The market price of ETFs, HOLDERS, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

Market Risk: The market prices of ETFs and HOLDERS can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

Target-Date Funds: Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at any time, including at the fund's target date.

High double- and triple-digit returns: High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

Benchmark Disclosure

BBGBarc US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage-Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which includes the daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond ETF.

MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

This disclosure applies to all MSCI indices. Certain information included herein is derived by Morningstar in part from MSCI's Index Constituents (the "Index

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S&P 500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the U.S. stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: SPDR® S&P 500 ETF Trust.

USTREAS T-Bill Auction Ave 3 Mon

Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months. Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

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Schwab Total Stock Market Index Fund[®] (SWTSX)

Firm Background*

Charles Schwab Investment Management, Inc., (CSIM or the firm), was founded in 1989 as a wholly-owned subsidiary of The Charles Schwab Corporation (Schwab), a publicly held company. Schwab was founded in 1971 by Charles Schwab as a full service brokerage firm. Since its founding Schwab has expanded its services to include investment management for retail and institutional clients, as well as traditional banking and lending. Initially founded to serve as the investment adviser to the Schwab Money Funds, CSIM now provides advisory services to proprietary mutual funds, separately managed accounts participating in wrap programs, exchange-traded funds, and collective trust funds. The majority of CSIM's asset base resides in passive index (52%) and money market (38%) strategies. The remainder is in active and target date/asset allocation strategies. CSIM is headquartered in San Francisco, CA, with operations also residing in Colorado and California. The firm has more than 600 employees, including approximately 150 investment professionals.

In 2019, the firm became part of a combined broader business unit, Schwab Asset Management Solutions (SAMS) that was established to unite asset management related services across Schwab. SAMS includes CSIM, Charles Schwab Investment Advisory, Inc. (CSIA), Asset Management Client Solutions and the Schwab Center for Financial Research. SAMS is led by Rick Wurster, who also serves as the CEO of CSIA. Effective November 1, 2019, Mr. Wurster became CEO of CSIM. All CIOs within the firm now report directly to Mr. Wurster, while performing their respective day-to-day investment functions. Jonathan de St. Paer remains in his role as the firm's President (since October 1, 2018) responsible for the overseeing the firm's product, strategy and governance groups.

Organization: Satisfactory*

In our view, CSIM has grown into one of the larger asset management companies in the US and is a substantial provider of retail index funds, money market funds, and exchange traded funds. While there have been changes to the firm's senior management team since its founding, we believe the transitioning of leadership has been thoughtfully executed. Further, we believe the firm has effectively expanded its product base over time and placed adequate resources to support its strategies and business segments. We believe the firm's client base is diverse, as its products have gained acceptance across both retail and institutional client segments. Additionally, we believe the creation of SAMS has been thoughtfully constructed to strengthen client services and create efficiencies in product development across the broader organization.

Strategy**

The investment seeks to track the total return of the entire U.S. stock market, as measured by the Dow Jones U.S. Total Stock Market IndexSM. The fund generally invests at least 80% of its net assets (including, for this purpose, any borrowings for investment purposes) in these stocks; typically, the actual percentage is considerably higher. It generally gives the same weight to a given stock as the index does. The fund may invest in derivatives, principally futures contracts, and lend its securities to minimize the gap in performance that naturally exists between any index fund and its corresponding index.

Summary***

It effectively replicates the composition of the total U.S. stock market, which has been hard to beat over the long term. The fund's low fee and broad diversification set it up for success. It earns a Morningstar Analyst Rating of Gold.

The fund tracks the Dow Jones U.S. Total Stock Market Index, which includes nearly all U.S. stocks and weights them by market capitalization. Market-cap weighting pulls the portfolio toward the largest stocks, so the fund lands in the large-blend Morningstar Category. This broad market-cap-weighted index accurately reflects the composition of the U.S. large-cap market and harnesses the market's collective wisdom. Compared with funds that target specific segments of the market, this fund isn't prone to forced buying or selling that is the result of stocks entering or exiting a market segment. This should mitigate transaction costs and turnover, which is among the lowest in the large-blend category.

The market doesn't always get prices right. Over short periods, investors may overreact and either drive prices too high or low. Market-cap weighting will increase or decrease exposure to stocks accordingly. This can at times lead to stock- and sector-level concentration. That said, the fund's broad diversification and low-cost advantage far outweigh these minor disadvantages.

The fund is always fully invested, which should help it more fully capture the market's returns over the long term than most of its category peers but could expose it to greater losses during market downturns. Unlike many of its active peers, this portfolio excludes stocks listed outside the U.S. This should help the fund's category-relative performance when U.S. stocks outperform foreign stocks but hurt when they lag.

The fund charges 0.03%, which is its greatest strength. It builds on this cost advantage with low turnover, which helps mitigate transaction costs. Long-term investors will likely come out ahead with this fund compared with more expensive options.

Performance***

Over the trailing 15 years through February 2020, the fund beat the category average by 152 basis points annualized, with slightly higher risk. Much of this outperformance can be attributed to the fund's cost advantage, lower-than-average cash drag, and more favorable stock exposure in the healthcare, financial services, and consumer defensive sectors compared with the category average.

The fund ranked in the top quartile over the trailing 10 and 15 years through February 2020, consistently outperforming the category average while exhibiting slightly higher volatility. The fund also tended to hold up as well as most of its peers during downturns since inception, despite its lower-than-average cash balance.

This portfolio is always fully invested, which helps its category-relative performance during bull markets but could hurt during bear markets. Most actively managed funds in the category keep larger cash balances on hand to meet redemptions.

The fund has effectively tracked its index. Over the trailing five-year periods through February 2020, the fund trailed the Dow Jones U.S. Total Stock Market Index by 3 basis points, the amount of its expense ratio.

Price***

It's critical to evaluate expenses, as they come directly out of returns. The share class on this report levies a fee that ranks in its Morningstar category's cheapest quintile. Based on our assessment of the fund's People, Process and Parent pillars in the context of these fees, we think this share class will be able to deliver positive alpha relative to the category benchmark index, explaining its Morningstar Analyst Rating of Gold.

Process: High***

The fund represents the entire investable U.S. equity market, effectively harnessing the market's collective wisdom and diversifying risk. It earns a High Process rating.

The fund tracks the Dow Jones U.S. Total Stock Market Index, which holds nearly every U.S. stock listed on a major U.S. exchange. This gives the fund lower turnover than index funds that track specific size segments of the market, as it is not subject to forced trade when holdings migrate up and down the market-cap ladder. By sampling among the smallest stocks in the index, the fund can avoid trading the least-liquid names, which keeps transaction costs down. However, this fund's large asset base allows it to replicate the index more completely than other total market funds. The fund holds about 2,900 out of 3,700 stocks in the index.

The portfolio managers reinvest dividends and use derivatives to equitize cash and keep pace with the benchmark. The fund has historically used securities lending to generate additional income to offset expenses.

The fund mirrors the composition of the large-cap market, allowing the market to dictate its stock and sector weightings. This allows the fund to harness the market's collective view about the relative value of each stock and keeps turnover low, which is among the lowest in the category.

The fund's top 10 holdings account for about 20% of assets and the largest holding accounts for 4% of assets, which effectively diversifies firm-specific risk.

Although it has a smaller market cap orientation than the large-blend category average, this fund is representative of this category. Currently, the fund is slightly underweight in financial services and overweight in technology compared with the category average.

Large companies tend to have greater competitive advantages compared to smaller companies and this is evident here as close to 76% of the portfolio is invested in firms with wide or narrow moats. On average, the fund's constituents generate 37% of their revenue overseas.

People: Average***

The team is competent and experienced, but many of its members haven't worked together long. Additionally, its supporting infrastructure does not stand out, so it earns an Average People Pillar rating.

Schwab's passive equity funds follow a team approach under the direction of Chris Bliss, who leads the firm's equity index portfolio management team and is a named manager on this fund. Bliss joined Schwab in September 2016 after spending 12 years at BlackRock. Ferian Juwono and Sabya Sinha are also listed portfolio managers on the fund. Juwono joined Schwab in 2010 and became a named comanager on the fund in 2011. He previously spent three years as an equity index portfolio manager at Barclays Global Investors. Sinha joined the firm in 2015 from F-Squared investments, where he worked in product development. Prior to that, Sinha served as an index portfolio manager at IndexIQ from 2011 to 2014, and as a portfolio manager at Columbia Management from 2006 to 2010.

These three managers are listed on most of Schwab's U.S. equity index portfolios. None of the listed portfolio managers are currently invested in this fund, but managers' incentives are aligned with shareholders' through a bonus structure that rewards managers based on index-relative performance and compliance with risk oversight.

* Source: BNY Mellon Manager Research Group, as of September 2020

** Source: Charles Schwab Investment Management, Inc. (CSIM), as of 9/30/2020

*** Source: Morningstar, Inc., as of 3/19/2020

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Schwab Total Stock Market Index (USD)

Morningstar Analyst Rating™
Gold
03-19-2020

Overall Morningstar Rating™
★★★★
1,229 US Fund Large Blend

Standard Index
S&P 500 TR USD

Category Index
Russell 1000 TR
USD

Morningstar Cat
US Fund Large Blend

Performance 09-30-2020

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2018	-0.59	3.67	7.09	-14.36	-5.30
2019	14.04	4.08	1.12	9.04	30.88
2020	-20.96	22.07	9.06	—	5.20

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	14.71	11.49	13.56	13.39	6.97
Std 09-30-2020	14.71	—	13.56	13.39	6.97
Total Return	14.71	11.49	13.56	13.39	6.97

+/- Std Index	-0.44	-0.79	-0.59	-0.35	—
+/- Cat Index	-1.30	-0.89	-0.53	-0.37	—

% Rank Cat	34	37	29	22	—
No. in Cat	1370	1229	1066	819	—

7-day Yield

30-day SEC Yield

Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar returns.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return date quoted herein. For performance data current to the most recent month-end, please call 877-824-5615 or visit www.schwab.com.

Fees and Expenses

Sales Charges

Front-End Load %

NA

Deferred Load %

NA

Fund Expenses

Management Fees %

0.03

12b1 Expense %

NA

Net Expense Ratio %

0.03

Gross Expense Ratio %

0.03

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	3★	4★
Morningstar Risk	+Avg	+Avg	Avg
Morningstar Return	Avg	+Avg	+Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	18.46	15.48	13.74
Mean	11.49	13.56	13.39
Sharpe Ratio	0.60	0.83	0.94

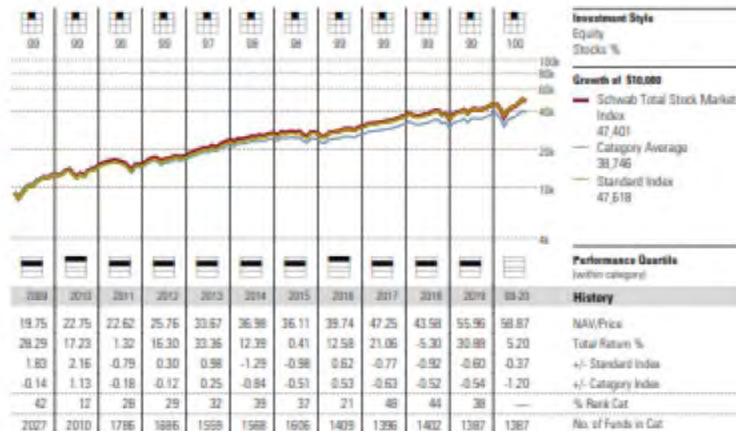
MPF Statistics	Standard Index	Best Fit Index (Russell 1000 TR)
Alpha	-1.03	-0.15
Beta	1.04	1.00
R-Squared	99.51	100.00
12-Month Yield	—	—
Potential Cap Gains Exp	39.70%	—

Operations

Family: Schwab Funds
Manager: Multiple
Tenure: 7.7 Years
Objective: Growth and Income

Base Currency: USD
Ticker: SWTSX
ISIN: US9085097561
Minimum Initial Purchase: \$0

Purchase Constraints: —
Incept: 06-01-1999
Type: MF
Total Assets: \$11,502.25 mil



Portfolio Analysis 09-30-2020

Asset Allocation %	Net %	Long %	Short %	Share Chg since 08-2020	Share Amount	Holdings: 3,191 Total Stocks, 0 Total Fixed-Income, 3% Turnover Ratio	Net Assets %
Cash	0.47	0.47	0.00	—	—	—	—
US Stocks	98.44	98.44	0.00	—	—	—	—
Non-US Stocks	1.08	1.08	0.00	—	—	—	—
Bonds	0.00	0.00	0.00	—	—	—	—
Other/Not Clsd	0.00	0.00	0.00	—	—	—	—
Total	100.00	100.00	0.00	—	—	—	—

Equity Style	Portfolio Statistics	Port Avg	Rel Index	Rel Cat			
Value	Small	Mid	Large				

Credit Quality Breakdown	Bond %
AAA	—
AA	—
A	—
BBB	—
BB	—
B	—
Below B	—
NR	—

Regional Exposure	Stocks %	Rel Std Index
Americas	98.9	1.00
Greater Europe	0.8	0.92
Greater Asia	0.2	0.31

Sector Weightings	Stocks %	Rel Std Index
Cyclical	30.5	1.05
Basic Materials	2.4	1.03
Consumer Cyclical	12.1	1.07
Financial Services	12.5	0.98
Real Estate	3.5	1.34
Sensitive	45.3	0.98
Communication Services	10.2	0.94
Energy	1.9	0.94
Industrials	9.0	1.04
Technology	24.3	0.99
Defensive	24.1	0.97
Consumer Defensive	6.8	0.90
Healthcare	14.6	1.02
Utilities	2.8	0.94

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Standardized and Tax Adjusted Returns Disclosure Statement

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit <http://advisor.morningstar.com/familyinfo.asp>.

Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges. The maximum redemption fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

Money Market Fund Disclosures

If money market fund(s) are included in the Standardized Returns table below, each money market fund's name will be followed by a superscripted letter that links it to the applicable disclosure below:

Institutional Money Market Funds (designated by an "S"):

You could lose money by investing in the fund. Because the share price of the fund will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "L") and

Retail Money Market Funds (designated by an "L"):

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen not to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "N"):

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Annualized returns (9-30-2020)

Standardized Returns (%)	7-day Yield Substated as of date	7-day Yield Unstated as of date	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp. Ratio %	Gross Exp. Ratio %	Max Redemption %
Schwab Total Stock Market Index	—	—	14.71	13.58	13.39	6.97	06-01-1999	NA	NA	0.03	0.03	NA
BBGBarc US Agg Bond TR USD			6.98	4.18	3.64	—	01-03-1980					
MSCI EAFE NR USD			8.49	5.26	4.62	—	03-31-1986					
Russell 1000 TR USD			16.01	14.09	12.76	—	12-31-1978					
Russell 3000 TR USD			15.00	13.69	12.48	—	12-31-1978					
S&P 500 TR USD			15.15	14.15	12.74	—	01-30-1970					

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Annualized returns 09-30-2020

Standardized Returns (%)	7-day Yield Subsidized as of date	7-day Yield Unsubsidized as of date	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio %	Max Redemption %
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USTREAS T-Bill Auction Ave 3 Mon **0.77 1.17 0.61 — 02-28-1941**

Returns after Tax (%)	On Distribution					On Distribution and Sales of Shares				
	1Yr	5Yr	10Yr	Since Inception	Inception Date	1Yr	5Yr	10Yr	Since Inception	
Schwab Total Stock Market Index	13.87	12.57	12.51	6.33	06-01-1999	8.73	10.35	10.75	5.52	

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Mutual Fund Detail Report Disclosure Statement

The Mutual Fund Detail Report is supplemental sales literature, and therefore must be preceded or accompanied by the mutual fund's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Mutual Fund Detail Report. Morningstar is not itself a FINRA-member firm.

All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities.

Prior to 2016, Morningstar's methodology evaluated open-end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most-recent month-end reflect the updated methodology.

Risk measures (such as alpha, beta, *r*-squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns, and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publically-offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject

to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution.

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual fund itself, or through an intermediary, but cannot be traded on a secondary market, such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net

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asset value minus a deferred sales charge, and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Fund portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the investment income tax and Medicare surcharge. As of 2018, this rate is 37% plus 3.8% investment income plus 0.9% Medicare surcharge, or 41.7%. This rate changes periodically in accordance with changes in federal law.

Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share class(es) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.

When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in *italics*.

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

12b-1 Expense %

A 12b-1 fee is a fee used to pay for a mutual fund's distribution costs. It is often used as a commission to brokers for selling the fund. The amount of the fee is taken from a fund's returns.

Alpha

Alpha is a measure of the difference between a security or portfolio's actual returns and its expected performance, given its level of risk (as measured by beta). Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The "Other"

category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the fund against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the fund's managers are buying and how they are positioning the fund's portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the fund's exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security's price rises over time. Short positions are taken with the hope of benefitting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most fund portfolios hold fairly conventional securities, such as long positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while others have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart's generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of fund holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of fund holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the fund only.

Average Effective Duration

Duration is a time measure of a bond's interest-rate sensitivity. Average effective duration is a weighted average of the duration of the fixed-income securities within a portfolio.

Average Effective Maturity

Average Effective Maturity is a weighted average of the maturities of all bonds in a portfolio.

Average Weighted Coupon

A coupon is the fixed annual percentage paid out on a bond. The average weighted coupon is the asset-weighted coupon of each bond in the portfolio.

Average Weighted Price

Average Weighted Price is the asset-weighted price of bonds held in a portfolio, expressed as a percentage of par (face) value. This number reveals if the portfolio favors bonds selling at prices above or below par value (premium or discount securities respectively.)

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Best Fit Index

Alpha, beta, and R-squared statistics are presented for a broad market index and a "best fit" index. The Best Fit Index identified in this report was determined by Morningstar by calculating R-squared for the fund against approximately 100 indexes tracked by Morningstar. The index representing the highest R-squared is identified as the best fit index. The best fit index may not be the fund's benchmark, nor does it necessarily contain the types of securities that may be held by the fund or portfolio.

Beta

Beta is a measure of a security or portfolio's sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

Credit Quality Breakdown

Credit Quality breakdowns are shown for corporate-bond holdings in the fund's portfolio and depict the quality of bonds in the underlying portfolio. It shows the percentage of fixed-income securities that fall within each credit-quality rating as assigned by a Nationally Recognized Statistical Rating Organization (NRSRO). Bonds not rated by an NRSRO are included in the Other/Not-Classified category.

Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a fund. The percentage of the load charged generally declines the longer the fund's shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

Expense Ratio %

The expense ratio is the annual fee that all funds charge their shareholders. It expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred by the fund. Portfolio transaction fees, or brokerage costs, as well as front-end or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. The gross expense ratio, in contrast to the net expense ratio, does not reflect any fee waivers in effect during the time period.

Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

Geometric Average Market Capitalization

Geometric Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

Growth of 10,000

For funds, this graph compares the growth of an investment of 10,000 (in the base currency of the fund) with that of an index and/or with that of the average for all funds in its Morningstar Category. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing fund expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. If pre-inception data is included in the analysis, it will be graphed.

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The index does not reflect any initial or ongoing expenses. A fund's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund's prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund's prior fiscal year.

Maximum Redemption Fee %

The Maximum Redemption Fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase (for example, 30, 180, or 365 days).

Mean

Mean is the annualized geometric return for the period shown.

Morningstar Analyst Rating™

Effective October 31, 2019, Morningstar updated its Morningstar Analyst Rating™ methodology. For any Morningstar Analyst Rating published on or prior to October 31, 2019, the following disclosure applies:

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates funds based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five pillar evaluation to determine how they believe funds are likely to perform relative to a benchmark, or in the case of exchange-traded funds and index mutual funds, a relevant peer group, over the long term on a risk-adjusted basis. They consider quantitative and qualitative factors in their research, and the weight of each pillar may vary. The Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. A Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's conviction in a fund's prospects for outperformance. Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months. For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to global.morningstar.com/managerdisclosures/.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating a fund, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the fund.

For any Morningstar Analyst Rating published after October 31, 2019, the following disclosure applies:

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates funds based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five-pillar evaluation to determine how they believe funds are likely to perform relative to a benchmark over the long term on a risk adjusted basis. They consider quantitative and qualitative factors in their research. For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting. For passive strategies, process receives an 80% weighting, while people and parent each receive a

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10% weighting. For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars. The impact of the weighted pillar scores for people, process and parent on the final Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of funds using alternative investment strategies, the modification by alpha dispersion is not used.

For active funds, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an active fund will be able to deliver positive alpha net of fees relative to the standard benchmark index assigned to the Morningstar category. The level of the rating relates to the level of expected positive net alpha relative to Morningstar category peers for active funds. For passive funds, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that a fund will be able to deliver a higher alpha net of fees than the lesser of the relevant Morningstar category median or 0. The level of the rating relates to the level of expected net alpha relative to Morningstar category peers for passive funds. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of funds using alternative investment strategies, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that a fund will deliver a weighted pillar score above a predetermined threshold within its peer group. Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months.

For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx>

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating a fund, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the fund.

Morningstar Quantitative Rating™

Morningstar's quantitative fund ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent pillar, (iii) Quantitative People pillar, and (iv) Quantitative Process pillar (collectively the "Quantitative Fund Ratings"). The Quantitative Fund Ratings are calculated monthly and derived from the analyst-driven ratings of a fund's peers as determined by statistical algorithms. Morningstar, Inc. calculates Quantitative Fund Ratings for funds when an analyst rating does not exist as part of its qualitative coverage.

• **Morningstar Quantitative Rating:** Intended to be comparable to Morningstar's Analyst Ratings for open-end funds and ETFs, which is the summary expression of Morningstar's forward-looking analysis of a fund. The Morningstar Analyst Rating is based on the analyst's conviction in the fund's ability to outperform its peer group and/or relevant benchmark on a risk-adjusted basis over a full market cycle of at least 5 years. Ratings are assigned on a five-tier scale with three positive ratings of Gold, Silver, and Bronze, a Neutral rating, and a Negative rating. Morningstar calculates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our fund analysts assign to open-end funds and ETFs. Please go to <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx> for information about Morningstar Analyst Rating Morningstar's fund analysts assign to funds.

• **Quantitative Parent pillar:** Intended to be comparable to

Morningstar's Parent pillar scores, which provides Morningstar's analyst opinion on the stewardship quality of a firm. Morningstar calculates the Quantitative Parent pillar using an algorithm designed to predict the Parent Pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), Low (1).

• **Quantitative People pillar:** Morningstar's People pillar scores, which provides Morningstar's analyst opinion on the fund manager's talent, tenure, and resources. Morningstar calculates the Quantitative People pillar using an algorithm designed to predict the People pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), Low (1).

• **Quantitative Process Pillar:** Intended to be comparable to Morningstar's Process pillar scores, which provides Morningstar's analyst opinion on the fund's strategy and whether the management has a competitive advantage enabling it to execute the process and consistently over time. Morningstar calculates the Quantitative Process pillar using an algorithm designed to predict the Process pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Morningstar Quantitative Ratings have not been made available to the issuer of the security prior to publication.

Risk Warning

The quantitative fund ratings are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the quantitative fund ratings. In addition, there is the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the quantitative fund ratings can mean that the recommendation is subsequently no longer accurate.

For more information about Morningstar's quantitative methodology, please visit <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx>

Morningstar Category

Morningstar Category is assigned by placing funds into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a fund's prospectus may not be sufficiently detailed for our proprietary classification methodology. Funds are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the fund is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a fund at the time of calculation.

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Morningstar Rating™

The Morningstar Rating™ for funds, or "star rating", is calculated for funds and separate accounts with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product's monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. For more information about the Morningstar Rating for funds, including its methodology, please go to global.morningstar.com/managedisclosures

The Morningstar Return rates a fund's performance relative to other managed products in its Morningstar Category. It is an assessment of a product's excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Avg), and the bottom 10% Low (Low). Morningstar Return is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Risk

Morningstar Risk evaluates a fund's downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations, in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (-Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Style Box™

The Morningstar Style Box™ reveals a fund's investment strategy as of the date noted on this report.

For equity funds, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened square in the style box indicates the weighted average style of the portfolio.

For fixed-income funds, the vertical axis shows the credit quality of the long bonds owned and the horizontal axis shows interest-rate sensitivity as measured by a bond's effective duration. Morningstar seeks credit rating information from fund companies on a periodic basis (for example, quarterly). In compiling credit rating information, Morningstar accepts credit ratings reported by fund companies that have been issued by all Nationally Recognized Statistical Rating Organizations. For a list of all NRSROs, please visit <http://www.sec.gov/divisions/marketreg/ratingagency.htm>. Additionally, Morningstar accepts foreign credit ratings from widely recognized or registered rating agencies. If two rating organizations/agencies have rated a security, fund companies are to report the lower rating; if three or more

organizations/agencies have rated a security, fund companies are to report the median rating; and in cases where there are more than two organization/agency ratings and a median rating does not exist, fund companies are to use the lower of the two middle ratings.

Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the fund. NRSRO or rating agency ratings can change from time to time.

For credit quality, Morningstar combines the credit rating information provided by the fund companies with an average default rate calculation to come up with a weighted-average credit quality. The weighted-average credit quality is currently a letter that roughly corresponds to the scale used by a leading NRSRO. Bond funds are assigned a style box placement of "low," "medium," or "high" based on their average credit quality. Funds with a "low" credit quality are those whose weighted-average credit quality is determined to be less than "BBB-"; "medium" are those less than "AA-", but greater or equal to "BBB-"; and "high" are those with a weighted-average credit quality of "AA-" or higher. When classifying a bond portfolio, Morningstar first maps the NRSRO credit ratings of the underlying holdings to their respective default rates (as determined by Morningstar's analysis of actual historical default rates). Morningstar then averages these default rates to determine the average default rate for the entire bond fund. Finally, Morningstar maps this average default rate to its corresponding credit rating along a convex curve.

For interest-rate sensitivity, Morningstar obtains from fund companies the average effective duration. Generally, Morningstar classifies a fixed-income fund's interest-rate sensitivity based on the effective duration of the Morningstar Core Bond Index, which is currently three years. The classification of Limited will be assigned to those funds whose average effective duration is between 25% to 75% of MCB's average effective duration; funds whose average effective duration is between 75% to 125% of the MCB will be classified as Moderate; and those that are at 125% or greater of the average effective duration of the MCB will be classified as Extensive.

For municipal-bond funds, Morningstar also obtains from fund companies the average effective duration. In these cases, static breakpoints are used. These breakpoints are as follows: (i) Limited: 4.5 years or less; (ii) Moderate: more than 4.5 years but less than 7 years; and (iii) Extensive: more than 7 years. In addition, for non-U.S. taxable and non-U.S. domiciled fixed-income funds, static duration breakpoints are used: (i) Limited: less than or equal to 3.5 years; (ii) Moderate: more than 3.5 years but less than or equal to 6 years; (iii) Extensive: more than 6 years.

Interest-rate sensitivity for non-U.S. domiciled funds (excluding funds in convertible categories) may be measured with modified duration when effective duration is not available.

P/B Ratio TTM

The Price/Book Ratio (or P/B Ratio) for a fund is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

P/C Ratio TTM

The Price/Cash Flow Ratio (or P/C Ratio) for a fund is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

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P/E Ratio TTM

The Price/Earnings Ratio (or P/E Ratio) for a fund is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is the stock's current price divided by the company's trailing 12-month earnings per share. A high P/E Ratio usually indicates the market will pay more to obtain the company's earnings because it believes in the company's abilities to increase their earnings. A low P/E Ratio indicates the market has less confidence that the company's earnings will increase, however value investors may believe such stocks have an overlooked or undervalued potential for appreciation.

Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, funds within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

Performance Quartile

Performance Quartile reflects a fund's Morningstar Rank.

Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

Quarterly Returns

Quarterly Return is calculated applying the same methodology as Total Return except it represents return through each quarter-end.

R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

Regional Exposure

The regional exposure is a display of the portfolio's assets invested in the regions shown on the report.

Sector Weightings

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the stocks included in these sectors generally have betas greater than 1. The Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Share Change

Shares Change represents the number of shares of a stock bought or sold by a fund since the previously reported portfolio of the fund.

Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk.

Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility of return.

Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the security was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes reinvestment of dividends and capital gains. It is the return an investor would have experienced if the fund was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Trailing Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the fund was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Investment Risks

International/Emerging Market Equities: Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

Sector Strategies: Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor

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to increased industry-specific risks.

Non-Diversified Strategies: Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

Small Cap Equities: Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure, and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

Mid Cap Equities: Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

High-Yield Bonds: Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

Tax-Free Municipal Bonds: The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

Bonds: Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

HOLDERS: The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDER might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

Hedge Funds: The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

Bank Loan/Senior Debt: Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

Exchange Traded Notes (ETNs): ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its obligations. ETNs do not typically pay interest.

Leveraged ETFs: Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their fund objectives on a daily basis (or other time period stated within the prospectus

objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, -200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the fund to be either greater or less than the index performance multiplied by the multiple stated within the funds objective over a stated time period.

Short Positions: When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

Long-Short: Due to the strategies used by long-short funds, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these funds may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

Liquidity Risk: Closed-end fund, ETF, and HOLDER trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

Market Price Risk: The market price of ETFs, HOLDERS, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

Market Risk: The market prices of ETFs and HOLDERS can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

Target-Date Funds: Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at any time, including at the fund's target date.

High double- and triple-digit returns: High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

Benchmark Disclosure

BBGBarc US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage-Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which includes the daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond ETF.

MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

This disclosure applies to all MSCI indices. Certain information included herein is derived by Morningstar in part from MSCI's Index Constituents (the "Index

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Data"). However, MSCI has not reviewed any information contained herein and does not endorse or express any opinion such information or analysis. MSCI does not make any express or implied warranties, representations or guarantees concerning the Index Data or any information or data derived therefrom, and in no event will MSCI have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of this information.

Russell 1000 TR USD

Consists of the 1000 largest companies within the Russell 3000 index, which represents approximately 98% of the investable US equity market. Also known as the Market-Oriented Index, because it represents the group of stocks from which most active money managers choose. The constituents displayed for this index are from the following proxy: iShares Russell 1000 ETF.

Russell 3000 TR USD

Composed of the 3000 largest U.S. companies by market capitalization, representing approximately 98% of the U.S. equity market. The constituents displayed for this index are from the following proxy: iShares Russell 3000 ETF.

S&P 500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the U.S. stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: SPDR® S&P 500 ETF Trust.

USTREAS T-Bill Auction Ave 3 Mon

Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months. Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

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Schwab[®] Treasury Inflation Protected Securities Index Fund (SWRSX)

Firm Background*

Charles Schwab Investment Management, Inc., (CSIM or the firm), was founded in 1989 as a wholly-owned subsidiary of The Charles Schwab Corporation (Schwab), a publicly held company. Schwab was founded in 1971 by Charles Schwab as a full service brokerage firm. Since its founding Schwab has expanded its services to include investment management for retail and institutional clients, as well as traditional banking and lending. Initially founded to serve as the investment adviser to the Schwab Money Funds, CSIM now provides advisory services to proprietary mutual funds, separately managed accounts participating in wrap programs, exchange-traded funds, and collective trust funds. The majority of CSIM's asset base resides in passive index (52%) and money market (38%) strategies. The remainder is in active and target date/asset allocation strategies. CSIM is headquartered in San Francisco, CA, with operations also residing in Colorado and California. The firm has more than 600 employees, including approximately 150 investment professionals.

In 2019, the firm became part of a combined broader business unit, Schwab Asset Management Solutions (SAMS) that was established to unite asset management related services across Schwab. SAMS includes CSIM, Charles Schwab Investment Advisory, Inc. (CSIA), Asset Management Client Solutions and the Schwab Center for Financial Research. SAMS is led by Rick Wurster, who also serves as the CEO of CSIA. Effective November 1, 2019, Mr. Wurster became CEO of CSIM. All CIOs within the firm now report directly to Mr. Wurster, while performing their respective day-to-day investment functions. Jonathan de St. Paer remains in his role as the firm's President (since October 1, 2018) responsible for the overseeing the firm's product, strategy and governance groups.

Organization: Satisfactory*

In our view, CSIM has grown into one of the larger asset management companies in the US and is a substantial provider of retail index funds, money market funds, and exchange traded funds. While there have been changes to the firm's senior management team since its founding, we believe the transitioning of leadership has been thoughtfully executed. Further, we believe the firm has effectively expanded its product base over time and placed adequate resources to support its strategies and business segments. We believe the firm's client base is diverse, as its products have gained acceptance across both retail and institutional client segments. Additionally, we believe the creation of SAMS has been thoughtfully constructed to strengthen client services and create efficiencies in product development across the broader organization.

Strategy**

The investment seeks as closely as possible, before fees and expenses, the total return of the Bloomberg Barclays US Treasury Inflation-Linked Bond Index (Series-L)SM. To pursue its goal, the fund generally invests in securities that are included in the index. The index includes all publicly-issued TIPS that have at least one year remaining to maturity, are rated investment grade and have \$500 million or more of outstanding face value. The TIPS in the index must be denominated in U.S. dollars and must be fixed-rate and non-convertible.

Summary

This fund has not been rated by Morningstar, Inc.

Performance

This fund has not been rated by Morningstar, Inc.

Price

This fund has not been rated by Morningstar, Inc.

Process

This fund has not been rated by Morningstar, Inc.

People

This fund has not been rated by Morningstar, Inc.

* Source: BNY Mellon Manager Research Group, as of September 2020

** Source: Charles Schwab Investment Management, Inc. (CSIM), as of 9/30/2020

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Schwab® Treasury Inflation Protected Secs Idx (USD)

Performance 09-30-2020

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2018	-0.78	0.73	-0.80	-0.48	-1.32
2019	3.20	2.87	1.31	0.77	8.38
2020	1.69	4.19	3.02	—	9.15
Trading Returns	1 Yr	3 Yr	5 Yr	10 Yr	Annual
Load-adj Mthly	10.00	5.73	4.51	3.33	4.12
Std 09-30-2020	10.00	—	4.51	3.33	4.12
Total Return	10.00	5.73	4.51	3.33	4.12
+/- Std Index	3.01	0.49	0.33	-0.31	—
+/- Cat Index	-0.09	-0.06	-0.11	-0.25	—
% Rank Cat	31	23	25	29	—
No. in Cat	212	200	172	116	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 10-29-20	3.47	5.39

Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-457-0206 or visit www.schwab.com.

Fees and Expenses

Sales Charges	
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	
Management Fees %	0.05
12b1 Expense %	NA
Net Expense Ratio %	0.05
Gross Expense Ratio %	0.05

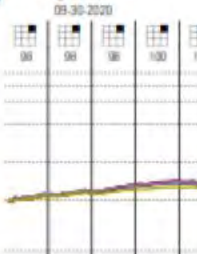
Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	4★	4★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	+Avg	+Avg	+Avg
Standard Deviation	3.75	3.55	4.41
Mean	5.73	4.51	3.33
Sharpe Ratio	1.07	0.93	0.83
MPI Statistics	Standard Index	Best Fr Index	Best Fr Index
Alpha	0.63	-0.01	-0.01
Beta	0.96	0.99	0.99
R-Squared	71.81	99.83	99.83
12-Month Yield		1.29%	
Potential Cap Gains Exp		4.16%	

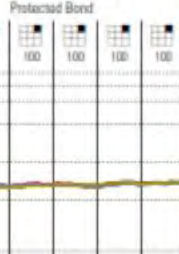
Operations

Family:	Schwab Funds
Manager:	Multiple
Tenure:	14.6 Years
Objective:	Income

Morningstar Quantitative Rating™



Overall Morningstar Rating™



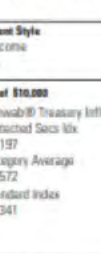
Standard Index



Category Index



Morningstar Cat



Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
10.43	10.73	11.58	12.09	10.87	10.98	10.88	10.97	11.07	10.62	11.26	12.24	NA/Price
9.24	9.82	12.80	6.58	-8.83	3.48	-1.81	4.47	2.94	-1.32	8.38	9.15	Total Return %
3.21	-0.72	4.95	2.38	-6.80	-2.49	-2.16	1.82	-0.60	-1.34	-0.34	2.26	+/- Standard Index
-2.17	-0.49	-0.76	-0.39	-0.22	-0.16	-0.17	-0.21	-0.06	-0.06	-0.05	-0.07	+/- Category Index
74	52	25	39	52	9	30	45	36	42	30	—	% Rank Cat
158	162	193	196	212	218	228	235	231	228	221	212	No. of Funds in Cat

Portfolio Analysis 09-30-2020

Asset Allocation %				Net %	Long %	Short %	Share Chg since 08-2020	Share Amount	Holdings:	Net Assets
Cash	0.00	0.00	0.00						0 Total Stocks, 42 Total Fixed-Income, 25% Turnover Ratio	
US Stocks	0.00	0.00	0.00							
Non-US Stocks	0.00	0.00	0.00				+	51 ml	United States Treasury Notes 0.12%	3.7
Bonds	100.00	100.00	0.00					52 ml	United States Treasury Notes 0.38%	3.7
Other/Not Clsd	0.00	0.00	0.00				+	50 ml	United States Treasury Notes 0.62%	3.8
Total	100.00	100.00	0.00				+	49 ml	United States Treasury Notes 0.25%	2.4
							+	48 ml	United States Treasury Notes 0.12%	3.4
							+	50 ml	United States Treasury Notes 0.12%	3.4
							+	46 ml	United States Treasury Notes 0.38%	3.7
							+	44 ml	United States Treasury Notes 0.12%	3.1
							+	49 ml	United States Treasury Notes 0.12%	3.2
							+	47 ml	United States Treasury Notes 0.12%	3.1
							+	45 ml	United States Treasury Notes 0.62%	3.1
							+	40 ml	United States Treasury Notes 0.5%	2.8
							+	39 ml	United States Treasury Notes 0.62%	2.9
							+	38 ml	United States Treasury Notes 0.38%	2.8
							+	36 ml	United States Treasury Notes 0.75%	2.8
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Credit Quality Breakdown 09-30-2020

Credit Quality	Bond %
AAA	100.00
AA	0.00
A	0.00
BBB	0.00
BB	0.00
B	0.00
Below B	0.00
NR	0.00

Regional Exposure

Region	Stocks %	Rel Std Index
Americas	—	—
Greater Europe	—	—
Greater Asia	—	—

Sector Weightings

Sector	Stocks %	Rel Std Index
Cyclical	—	—
Basic Materials	—	—
Consumer Cyclical	—	—
Financial Services	—	—
Real Estate	—	—
Sensitive	—	—
Communication Services	—	—
Energy	—	—
Industrials	—	—
Technology	—	—
Defensive	—	—
Consumer Defensive	—	—
Healthcare	—	—
Utilities	—	—

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Standardized and Tax Adjusted Returns Disclosure Statement

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit <http://advisor.morningstar.com/familyinfo.asp>.

Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges. The maximum redemption fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

Money Market Fund Disclosures

If money market fund(s) are included in the Standardized Returns table below, each money market fund's name will be followed by a superscripted letter that links it to the applicable disclosure below:

Institutional Money Market Funds (designated by an "S"):

You could lose money by investing in the fund. Because the share price of the fund will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "L") and

Retail Money Market Funds (designated by an "L"):

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen not to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "N"):

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Annualized returns 09-30-2020

Standardized Returns (%)	7-day Yield Substated as of date	7-day Yield Unsubstated as of date	1Yr	5Yr	10Yr	Class Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio %	Redemption %	Max
Schwab® Treasury (Int) Protected Secs Ltd	—	—	10.00	4.51	3.33	4.12	03-31-2006	NA	NA	0.05	0.05	NA	
BBGBarc US Agg Bond TR USD			6.98	4.18	3.64	—	01-03-1980						
BBGBarc US Treasury US TIPS TR USD			10.08	4.61	3.57	—	04-15-1998						
MSCI EAFE NR USD			0.49	5.26	4.62	—	03-31-1986						
S&P 500 TR USD			15.15	14.15	13.74	—	01-30-1970						
USTREAS T-Bill Auction Ave 3 Mon			0.77	1.17	0.61	—	02-28-1941						

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Annualized returns 09-30-2020

Returns after Tax (%)	On Distribution					On Distribution and Sales of Shares				
	1Yr	5Yr	10Yr	Since Inception	Inception Date	1Yr	5Yr	10Yr	Since Inception	
Schwab® Treasury Intl Protected Secs lds	9.39	3.82	2.47	3.10	03-31-2006	5.90	3.07	2.21	2.81	

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Mutual Fund Detail Report Disclosure Statement

The Mutual Fund Detail Report is supplemental sales literature, and therefore must be preceded or accompanied by the mutual fund's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Mutual Fund Detail Report. Morningstar is not itself a FINRA-member firm.

All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities.

Prior to 2016, Morningstar's methodology evaluated open-end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most-recent month-end reflect the updated methodology.

Risk measures (such as alpha, beta, r-squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns, and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publically-offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject

to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution.

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual fund itself, or through an intermediary, but cannot be traded on a secondary market, such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net

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asset value minus a deferred sales charge, and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Fund portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the investment income tax and Medicare surcharge. As of 2018, this rate is 37% plus 3.8% investment income plus 0.9% Medicare surcharge, or 41.7%. This rate changes periodically in accordance with changes in federal law.

Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share class(es) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.

When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in italics.

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

12b-1 Expense %

A 12b-1 fee is a fee used to pay for a mutual fund's distribution costs. It is often used as a commission to brokers for selling the fund. The amount of the fee is taken from a fund's returns.

Alpha

Alpha is a measure of the difference between a security or portfolio's actual returns and its expected performance, given its level of risk (as measured by beta). Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The "Other"

category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the fund against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the fund's managers are buying and how they are positioning the fund's portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the fund's exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security's price rises over time. Short positions are taken with the hope of benefitting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most fund portfolios hold fairly conventional securities, such as long positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while others have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart's generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of fund holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of fund holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the fund only.

Average Effective Duration

Duration is a time measure of a bond's interest-rate sensitivity. Average effective duration is a weighted average of the duration of the fixed-income securities within a portfolio.

Average Effective Maturity

Average Effective Maturity is a weighted average of the maturities of all bonds in a portfolio.

Average Weighted Coupon

A coupon is the fixed annual percentage paid out on a bond. The average weighted coupon is the asset-weighted coupon of each bond in the portfolio.

Average Weighted Price

Average Weighted Price is the asset-weighted price of bonds held in a portfolio, expressed as a percentage of par (face) value. This number reveals if the portfolio favors bonds selling at prices above or below par value (premium or discount securities respectively.)

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Best Fit Index

Alpha, beta, and R-squared statistics are presented for a broad market index and a "best fit" index. The Best Fit Index identified in this report was determined by Morningstar by calculating R-squared for the fund against approximately 100 indexes tracked by Morningstar. The index representing the highest R-squared is identified as the best fit index. The best fit index may not be the fund's benchmark, nor does it necessarily contain the types of securities that may be held by the fund or portfolio.

Beta

Beta is a measure of a security or portfolio's sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

Credit Quality Breakdown

Credit Quality breakdowns are shown for corporate-bond holdings in the fund's portfolio and depict the quality of bonds in the underlying portfolio. It shows the percentage of fixed-income securities that fall within each credit-quality rating as assigned by a Nationally Recognized Statistical Rating Organization (NRSRO). Bonds not rated by an NRSRO are included in the Other/Not-Classified category.

Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a fund. The percentage of the load charged generally declines the longer the fund's shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

Expense Ratio %

The expense ratio is the annual fee that all funds charge their shareholders. It expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred by the fund. Portfolio transaction fees, or brokerage costs, as well as front-end or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. The gross expense ratio, in contrast to the net expense ratio, does not reflect any fee waivers in effect during the time period.

Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

Geometric Average Market Capitalization

Geometric Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

Growth of 10,000

For funds, this graph compares the growth of an investment of 10,000 (in the base currency of the fund) with that of an index and/or with that of the average for all funds in its Morningstar Category. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing fund expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. If pre-inception data is included in the analysis, it will be graphed.

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The index does not reflect any initial or ongoing expenses. A fund's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund's prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund's prior fiscal year.

Maximum Redemption Fee %

The Maximum Redemption Fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase (for example, 30, 180, or 365 days).

Mean

Mean is the annualized geometric return for the period shown.

Morningstar Analyst Rating™

Effective October 31, 2019, Morningstar updated its Morningstar Analyst Rating™ methodology. For any Morningstar Analyst Rating published on or prior to October 31, 2019, the following disclosure applies:

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10% weighting. For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars. The impact of the weighted pillar scores for people, process and parent on the final Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of funds using alternative investment strategies, the modification by alpha dispersion is not used.

For active funds, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an active fund will be able to deliver positive alpha net of fees relative to the standard benchmark index assigned to the Morningstar category. The level of the rating relates to the level of expected positive net alpha relative to Morningstar category peers for active funds. For passive funds, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that a fund will be able to deliver a higher alpha net of fees than the lesser of the relevant Morningstar category median or 0. The level of the rating relates to the level of expected net alpha relative to Morningstar category peers for passive funds. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of funds using alternative investment strategies, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that a fund will deliver a weighted pillar score above a predetermined threshold within its peer group. Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months.

For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx>

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating a fund, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the fund.

Morningstar Quantitative Rating™

Morningstar's quantitative fund ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent pillar, (iii) Quantitative People pillar, and (iv) Quantitative Process pillar (collectively the "Quantitative Fund Ratings"). The Quantitative Fund Ratings are calculated monthly and derived from the analyst-driven ratings of a fund's peers as determined by statistical algorithms. Morningstar, Inc. calculates Quantitative Fund Ratings for funds when an analyst rating does not exist as part of its qualitative coverage.

• **Morningstar Quantitative Rating:** Intended to be comparable to Morningstar's Analyst Ratings for open-end funds and ETFs, which is the summary expression of Morningstar's forward-looking analysis of a fund. The Morningstar Analyst Rating is based on the analyst's conviction in the fund's ability to outperform its peer group and/or relevant benchmark on a risk-adjusted basis over a full market cycle of at least 5 years. Ratings are assigned on a five-tier scale with three positive ratings of Gold, Silver, and Bronze, a Neutral rating, and a Negative rating. Morningstar calculates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our fund analysts assign to open-end funds and ETFs. Please go to <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx> for information about Morningstar Analyst Rating Morningstar's fund analysts assign to funds.

• **Quantitative Parent pillar:** Intended to be comparable to

Morningstar's Parent pillar scores, which provides Morningstar's analyst opinion on the stewardship quality of a firm. Morningstar calculates the Quantitative Parent pillar using an algorithm designed to predict the Parent Pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), Low (1).

• **Quantitative People pillar:** Morningstar's People pillar scores, which provides Morningstar's analyst opinion on the fund manager's talent, tenure, and resources. Morningstar calculates the Quantitative People pillar using an algorithm designed to predict the People pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), Low (1).

• **Quantitative Process Pillar:** Intended to be comparable to Morningstar's Process pillar scores, which provides Morningstar's analyst opinion on the fund's strategy and whether the management has a competitive advantage enabling it to execute the process and consistently over time. Morningstar calculates the Quantitative Process pillar using an algorithm designed to predict the Process pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Morningstar Quantitative Ratings have not been made available to the issuer of the security prior to publication.

Risk Warning

The quantitative fund ratings are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the quantitative fund ratings. In addition, there is the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the quantitative fund ratings can mean that the recommendation is subsequently no longer accurate.

For more information about Morningstar's quantitative methodology, please visit <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx>

Morningstar Category

Morningstar Category is assigned by placing funds into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a fund's prospectus may not be sufficiently detailed for our proprietary classification methodology. Funds are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the fund is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a fund at the time of calculation.

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Morningstar Rating™

The Morningstar Rating™ for funds, or "star rating", is calculated for funds and separate accounts with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product's monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. For more information about the Morningstar Rating for funds, including its methodology, please go to global.morningstar.com/managedisclosures

The Morningstar Return rates a fund's performance relative to other managed products in its Morningstar Category. It is an assessment of a product's excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Avg), and the bottom 10% Low (Low). Morningstar Return is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Risk

Morningstar Risk evaluates a fund's downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations, in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (-Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Style Box™

The Morningstar Style Box™ reveals a fund's investment strategy as of the date noted on this report.

For equity funds, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened square in the style box indicates the weighted average style of the portfolio.

For fixed-income funds, the vertical axis shows the credit quality of the long bonds owned and the horizontal axis shows interest-rate sensitivity as measured by a bond's effective duration. Morningstar seeks credit rating information from fund companies on a periodic basis (for example, quarterly). In compiling credit rating information, Morningstar accepts credit ratings reported by fund companies that have been issued by all Nationally Recognized Statistical Rating Organizations. For a list of all NRSROs, please visit <http://www.sec.gov/divisions/marketreg/ratingagency.htm>. Additionally, Morningstar accepts foreign credit ratings from widely recognized or registered rating agencies. If two rating organizations/agencies have rated a security, fund companies are to report the lower rating; if three or more

organizations/agencies have rated a security, fund companies are to report the median rating; and in cases where there are more than two organization/agency ratings and a median rating does not exist, fund companies are to use the lower of the two middle ratings.

Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the fund. NRSRO or rating agency ratings can change from time to time.

For credit quality, Morningstar combines the credit rating information provided by the fund companies with an average default rate calculation to come up with a weighted-average credit quality. The weighted-average credit quality is currently a letter that roughly corresponds to the scale used by a leading NRSRO. Bond funds are assigned a style box placement of "low," "medium," or "high" based on their average credit quality. Funds with a "low" credit quality are those whose weighted-average credit quality is determined to be less than "BBB-"; "medium" are those less than "AA-", but greater or equal to "BBB-"; and "high" are those with a weighted-average credit quality of "AA-" or higher. When classifying a bond portfolio, Morningstar first maps the NRSRO credit ratings of the underlying holdings to their respective default rates (as determined by Morningstar's analysis of actual historical default rates). Morningstar then averages these default rates to determine the average default rate for the entire bond fund. Finally, Morningstar maps this average default rate to its corresponding credit rating along a convex curve.

For interest-rate sensitivity, Morningstar obtains from fund companies the average effective duration. Generally, Morningstar classifies a fixed-income fund's interest-rate sensitivity based on the effective duration of the Morningstar Core Bond Index, which is currently three years. The classification of Limited will be assigned to those funds whose average effective duration is between 25% to 75% of MCB's average effective duration; funds whose average effective duration is between 75% to 125% of the MCB will be classified as Moderate; and those that are at 125% or greater of the average effective duration of the MCB will be classified as Extensive.

For municipal-bond funds, Morningstar also obtains from fund companies the average effective duration. In these cases, static breakpoints are used. These breakpoints are as follows: (i) Limited: 4.5 years or less; (ii) Moderate: more than 4.5 years but less than 7 years; and (iii) Extensive: more than 7 years. In addition, for non-U.S. taxable and non-U.S. domiciled fixed-income funds, static duration breakpoints are used: (i) Limited: less than or equal to 3.5 years; (ii) Moderate: more than 3.5 years but less than or equal to 6 years; (iii) Extensive: more than 6 years.

Interest-rate sensitivity for non-U.S. domiciled funds (excluding funds in convertible categories) may be measured with modified duration when effective duration is not available.

P/B Ratio TTM

The Price/Book Ratio (or P/B Ratio) for a fund is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

P/C Ratio TTM

The Price/Cash Flow Ratio (or P/C Ratio) for a fund is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

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P/E Ratio TTM

The Price/Earnings Ratio (or P/E Ratio) for a fund is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is the stock's current price divided by the company's trailing 12-month earnings per share. A high P/E Ratio usually indicates the market will pay more to obtain the company's earnings because it believes in the company's abilities to increase their earnings. A low P/E Ratio indicates the market has less confidence that the company's earnings will increase, however value investors may believe such stocks have an overlooked or undervalued potential for appreciation.

Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, funds within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

Performance Quartile

Performance Quartile reflects a fund's Morningstar Rank.

Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

Quarterly Returns

Quarterly Return is calculated applying the same methodology as Total Return except it represents return through each quarter-end.

R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

Regional Exposure

The regional exposure is a display of the portfolio's assets invested in the regions shown on the report.

Sector Weightings

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the stocks included in these sectors generally have betas greater than 1. The Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Share Change

Shares Change represents the number of shares of a stock bought or sold by a fund since the previously reported portfolio of the fund.

Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk.

Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility of return.

Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the security was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes reinvestment of dividends and capital gains. It is the return an investor would have experienced if the fund was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Trailing Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the fund was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Investment Risks

International/Emerging Market Equities: Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

Sector Strategies: Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor

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to increased industry-specific risks.

Non-Diversified Strategies: Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

Small Cap Equities: Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure, and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

Mid Cap Equities: Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

High-Yield Bonds: Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

Tax-Free Municipal Bonds: The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

Bonds: Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

HOLDERS: The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDER might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

Hedge Funds: The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

Bank Loan/Senior Debt: Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

Exchange Traded Notes (ETNs): ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its obligations. ETNs do not typically pay interest.

Leveraged ETFs: Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their fund objectives on a daily basis (or other time period stated within the prospectus

objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, -200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the fund to be either greater or less than the index performance multiplied by the multiple stated within the funds objective over a stated time period.

Short Positions: When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

Long-Short: Due to the strategies used by long-short funds, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these funds may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

Liquidity Risk: Closed-end fund, ETF, and HOLDER trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

Market Price Risk: The market price of ETFs, HOLDERS, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

Market Risk: The market prices of ETFs and HOLDERS can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

Target-Date Funds: Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at any time, including at the fund's target date.

High double- and triple-digit returns: High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

Benchmark Disclosure

BBGBarc: US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage-Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which includes the daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond ETF.

BBGBarc: US Treasury US TIPS TR USD

BarCap U.S. Treasury TIPS is an unmanaged market index made up of U.S. Treasury Inflation Linked Index securities. The rules to be included in the index are as follows: all bonds must have cash flows linked to an inflation index, the minimum amounts outstanding will be 100 million U.S. dollars, all bonds must be sovereign issues and be denominated in the relevant national currency, and

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all bonds must have more than one year to maturity. The constituents displayed for this index are from the following proxy: iShares TIPS Bond ETF.

MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

This disclosure applies to all MSCI indices: Certain information included herein is derived by Morningstar in part from MSCI's Index Constituents (the "Index Data"). However, MSCI has not reviewed any information contained herein and does not endorse or express any opinion such information or analysis. MSCI does not make any express or implied warranties, representations or guarantees concerning the Index Data or any information or data derived therefrom, and in no event will MSCI have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of this information.

S&P 500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the U.S. stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: SPDR® S&P 500 ETF Trust.

USTREAS T-Bill Auction Ave 3 Mon

Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months. Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

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Vanguard Emerging Markets Government Bond Index Fund Institutional Shares (VGIVX)

Firm Background*

The Vanguard Group, Inc. is one of the largest providers of low-cost mutual funds and index-tracking products. Jack Bogle founded Vanguard in 1975 with the philosophy that low costs are crucial to generate consistently attractive investment performance. Vanguard was the first firm to provide widespread passive index products to retail investors. Over time, Vanguard expanded its product set to include various asset classes and actively managed funds. Vanguard's active products are either managed internally or subadvised by external asset managers. Equity strategies represent more than two-thirds of firm assets, fixed income strategies account for approximately 25% of assets, and cash and multi-asset strategies comprise the balance of assets. The firm's client mix is approximately 60% institutional and 40% retail investors.

Headquartered in Malvern, PA, Vanguard employs over 17,000 people. The firm has offices around the world, but investment management is concentrated in a limited number of them (Malvern; Melbourne, Australia; and London, UK). The firm is owned by its own investment funds, which are, in turn, owned by their shareholders. As a result, Vanguard's fund investors indirectly own the firm. Fund management fees pay for the firm's expenses and Vanguard reinvests profits to lower future expense ratios. Effective January 1, 2018, Tim Buckley succeeded William McNabb as Vanguard's Chief Executive Officer. Mr. Buckley joined the firm in 1991 and has held a number of senior leadership positions during his tenure. Mr. McNabb will remain chairman of Vanguard's board, a role he has held since 2009.

Organization: Satisfactory (4 out of 5)*

Vanguard has a decades-long legacy of client service and thoughtful product development that dates to its founding as an indexing provider. It launches funds after thorough consideration of where it believes product offerings are consistent with investor interests as well as the firm's philosophy and long-term focus. In our view, Vanguard's mutual fund ownership structure has both advantages and disadvantages. For instance, the firm's trademark low fees provide Vanguard with a persistent return advantage over peers, which contributes to the strength of the franchise. These low fees are a direct result of the ownership structure, which has also greatly contributed to the firm's considerable level of assets under management. On the other hand, a disadvantage of the firm's ownership structure is that it does not allow employees to benefit from a profit sharing or equity compensation scheme; although, Vanguard does make use of deferred bonus compensation for key executives and investment professionals. The firm actively rotates senior employees across roles and disciplines. While this may result in longevity and broad perspectives, it reduces specialization and tenure in the roles left behind. Vanguard has experienced tremendous growth over the past decade to become one of the world's largest asset managers. Along with this growth, the firm has had to address the issues that often accompany a significant increase in AUM.

Strategy**

Vanguard Emerging Markets Government Bond Index Fund seeks to track the performance of a benchmark index that measures the investment return of U.S. dollar-denominated bonds issued by governments and government related issuers in emerging markets countries.

The fund employs an indexing investment approach designed to track the performance of the Bloomberg Barclays USD Emerging Markets Government RIC Capped Index. The index includes U.S. dollar-denominated bonds that have maturities longer than one year and that were issued by emerging market governments and government agencies, as well as government-owned corporations.

The fund invests by sampling the index, meaning that it holds a range of securities that, in the aggregate, approximates the full index in terms of key risk factors and other characteristics. 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 included in the index. The fund maintains a dollar-weighted average maturity consistent with that of the index, which generally ranges between 10 and 15 years.

Summary

This fund has not been rated by Morningstar, Inc.

Performance

This fund has not been rated by Morningstar, Inc.

Price

This fund has not been rated by Morningstar, Inc.

Process

This fund has not been rated by Morningstar, Inc.

People

This fund has not been rated by Morningstar, Inc.

* Source: BNY Mellon Manager Research Group, as of December 2019

** Source: Vanguard Group, Inc., as of 9/30/2020

Release date 09-30-2020 | Note: Portions of the analysis are based on pre-inception returns. Please read disclosure for more information.

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Vanguard Emerging Mkts Govt Bd Idx Instl (USD)

Performance 09-30-2020

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2018	-1.71	-2.62	1.76	-0.20	-2.80
2019	5.60	4.14	1.48	2.18	14.02
2020	-12.61	11.63	2.55	—	0.06

Trading Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	2.23	3.69	6.06	—	5.31
Std 09-30-2020	2.23	—	6.06	—	5.31
Total Return	2.23	3.69	6.06	—	5.31

+/- Std Index	-4.76	-1.56	1.89	—	—
+/- Cat Index	0.93	0.19	-0.09	—	—

% Rank Cat	32	15	28	—	—
No. in Cat	276	239	187	—	—

7-day Yield	Substandard	Unsubstandard
30-day SEC Yield 10-26-20	3.91	3.94

Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar returns.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-749-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges

Front-End Load %	NA
Deferred Load %	NA

Fund Expenses

Management Fees %	0.22
12b1 Expense %	NA
Net Expense Ratio %	0.23
Gross Expense Ratio %	0.23

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	4★	—
Morningstar Risk	-Avg	-Avg	—
Morningstar Return	+Avg	+Avg	—

	3 Yr	5 Yr	10 Yr
Standard Deviation	9.98	8.40	—
Mean	3.69	6.06	—
Sharpe Ratio	0.25	0.61	—

MPI Statistics	Standard Index	Best Fr Index
Alpha	-1.29	0.28
Beta	1.07	0.93
R-Squared	12.89	98.95

	12-Month Yield	Potential Cap Gains Exp
	4.62%	2.18%

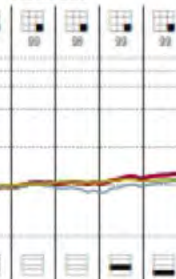
Operations

Family:	Vanguard
Manager:	Joshua Barrickman
Tenure:	7.4 Years
Objective:	Government Bond - General

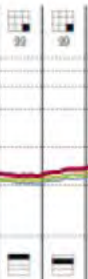
Morningstar Quantitative
Rating™
Gold
09-30-2020



Overall Morningstar Rating™
★★★★
239 US Fund Emerging Markets Bond



Standard Index
BBB+US Agg
Bond TR USD



Category Index
JPM EMB Global
Diversified TR USD



Morningstar Cat
US Fund Emerging
Markets Bond



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	09-20
Investment Style	—	—	—	—	—	—	—	—	—	—	—	—
Fixed-Income Bond %	—	—	—	—	—	—	—	—	—	—	—	—
Growth of \$10,000	—	—	—	—	—	—	—	—	—	—	—	—
Vanguard Emerging Mkts Govt Bd Idx Instl	—	—	—	—	—	—	—	—	—	—	—	—
Category Average	—	—	—	—	—	—	—	—	—	—	—	—
Standard Index	—	—	—	—	—	—	—	—	—	—	—	—
Standard Index	—	—	—	—	—	—	—	—	—	—	—	—

Portfolio Analysis 09-30-2020

Asset Allocation %	Net %	Long %	Short %	Share Chg since 08-2020	Share Amount	Holdings	Net Assets %
Cash	0.07	0.07	0.00	—	—	0 Total Stocks, 713 Total Fixed-Income, 48% Turnover Ratio	—
US Stocks	0.00	0.00	0.00	—	—	12 mil State of Qatar	0.77
Non-US Stocks	0.00	0.00	0.00	—	—	11 mil State of Qatar	0.74
Bonds	99.93	99.93	0.00	—	—	13 mil Saudi Arabia (Kingdom of)	0.74
Other/Not Clsd	0.00	0.00	0.00	—	—	11 mil Russian Federation	0.71
Total	100.00	100.00	0.00	—	—	38 mil Argentina (Republic of)	0.69

Equity Style	Portfolio Statistics	Net Avg	Rel Index	Rel Cat
P/E Ratio TTM	—	—	—	—
P/C Ratio TTM	—	—	—	—
P/B Ratio TTM	—	—	—	—
Gav Avg Mkt Cap \$mil	—	—	—	—
Fixed-Income Style	Avg Eff Maturity	—	—	—
Avg Eff Duration	—	—	—	—
Avg Wtd Coupon	—	—	—	—
Avg Wtd Price	—	—	—	—

Credit Quality Breakdown 09-30-2020	Bond %
AAA	-0.16
AA	9.84
A	18.57
BBB	31.23
BB	0.00
B	0.00
Below B	42.52
NR	0.00

Regional Exposure	Stocks %	Rel Std Index
Americas	—	—
Greater Europe	—	—
Greater Asia	—	—

Sector Weightings	Stocks %	Rel Std Index
Cyclical	—	—
Basic Materials	—	—
Consumer Cyclical	—	—
Financial Services	—	—
Real Estate	—	—
Sensitive	—	—
Communication Services	—	—
Energy	—	—
Industrials	—	—
Technology	—	—
Defensive	—	—
Consumer Defensive	—	—
Healthcare	—	—
Utilities	—	—

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Standardized and Tax Adjusted Returns Disclosure Statement

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit <http://advisor.morningstar.com/familyinfo.asp>.

Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges. The maximum redemption fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

Money Market Fund Disclosures

If money market fund(s) are included in the Standardized Returns table below, each money market fund's name will be followed by a superscripted letter that links it to the applicable disclosure below:

Institutional Money Market Funds (designated by an "S"):

You could lose money by investing in the fund. Because the share price of the fund will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "L") and

Retail Money Market Funds (designated by an "L"):

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen not to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "N"):

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Annualized returns 09-30-2020

Standardized Returns (%)	7-day Yield Subsidized as of date	7-day Yield Unsubsidized as of date	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp. Ratio %	Gross Exp. Ratio %	Redemption %	Max
Vanguard Emerging Mkts Govt Bd Idx Instl	—	—	2.23	6.06	—	5.31	02-11-2015	NA	NA	0.23	0.23	NA	NA
BBGBarc US Agg Bond TR USD			6.98	4.18	3.64	—	01-03-1980						
JPM EMBI Global Diversified TR USD			1.29	6.15	5.43	—	07-30-1999						
MSCI EAFE NR USD			0.49	5.26	4.62	—	03-31-1986						
S&P 500 TR USD			15.15	14.15	13.74	—	01-30-1970						
USTREAS T-Bill Auction Ave 3 Mon			0.77	1.17	0.61	—	02-28-1941						

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Annualized returns 09-30-2020

Returns after Tax (%)	On Distribution					On Distribution and Sales of Shares				
	1Yr	5Yr	10Yr	Since Inception	Inception Date	1Yr	5Yr	10Yr	Since Inception	
Vanguard Emerging Mkts Govt Bd Idx Instl	0.31	4.00	—	3.25	02-11-2015	1.29	3.74	—	3.14	

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Mutual Fund Detail Report Disclosure Statement

The Mutual Fund Detail Report is supplemental sales literature, and therefore must be preceded or accompanied by the mutual fund's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Mutual Fund Detail Report. Morningstar is not itself a FINRA-member firm.

All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities.

Prior to 2016, Morningstar's methodology evaluated open-end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most-recent month-end reflect the updated methodology.

Risk measures (such as alpha, beta, r-squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns, and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publically-offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject

to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution.

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual fund itself, or through an intermediary, but cannot be traded on a secondary market, such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net

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asset value minus a deferred sales charge, and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Fund portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the investment income tax and Medicare surcharge. As of 2018, this rate is 37% plus 3.8% investment income plus 0.9% Medicare surcharge, or 41.7%. This rate changes periodically in accordance with changes in federal law.

Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share class(es) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.

When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in italics.

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

12b-1 Expense %

A 12b-1 fee is a fee used to pay for a mutual fund's distribution costs. It is often used as a commission to brokers for selling the fund. The amount of the fee is taken from a fund's returns.

Alpha

Alpha is a measure of the difference between a security or portfolio's actual returns and its expected performance, given its level of risk (as measured by beta). Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The "Other"

category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the fund against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the fund's managers are buying and how they are positioning the fund's portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the fund's exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security's price rises over time. Short positions are taken with the hope of benefitting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most fund portfolios hold fairly conventional securities, such as long positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while others have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart's generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of fund holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of fund holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the fund only.

Average Effective Duration

Duration is a time measure of a bond's interest-rate sensitivity. Average effective duration is a weighted average of the duration of the fixed-income securities within a portfolio.

Average Effective Maturity

Average Effective Maturity is a weighted average of the maturities of all bonds in a portfolio.

Average Weighted Coupon

A coupon is the fixed annual percentage paid out on a bond. The average weighted coupon is the asset-weighted coupon of each bond in the portfolio.

Average Weighted Price

Average Weighted Price is the asset-weighted price of bonds held in a portfolio, expressed as a percentage of par (face) value. This number reveals if the portfolio favors bonds selling at prices above or below par value (premium or discount securities respectively.)

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Best Fit Index

Alpha, beta, and R-squared statistics are presented for a broad market index and a "best fit" index. The Best Fit Index identified in this report was determined by Morningstar by calculating R-squared for the fund against approximately 100 indexes tracked by Morningstar. The index representing the highest R-squared is identified as the best fit index. The best fit index may not be the fund's benchmark, nor does it necessarily contain the types of securities that may be held by the fund or portfolio.

Beta

Beta is a measure of a security or portfolio's sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

Credit Quality Breakdown

Credit Quality breakdowns are shown for corporate-bond holdings in the fund's portfolio and depict the quality of bonds in the underlying portfolio. It shows the percentage of fixed-income securities that fall within each credit-quality rating as assigned by a Nationally Recognized Statistical Rating Organization (NRSRO). Bonds not rated by an NRSRO are included in the Other/Not-Classified category.

Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a fund. The percentage of the load charged generally declines the longer the fund's shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

Expense Ratio %

The expense ratio is the annual fee that all funds charge their shareholders. It expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred by the fund. Portfolio transaction fees, or brokerage costs, as well as front-end or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. The gross expense ratio, in contrast to the net expense ratio, does not reflect any fee waivers in effect during the time period.

Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

Geometric Average Market Capitalization

Geometric Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

Growth of 10,000

For funds, this graph compares the growth of an investment of 10,000 (in the base currency of the fund) with that of an index and/or with that of the average for all funds in its Morningstar Category. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing fund expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. If pre-inception data is included in the analysis, it will be graphed.

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The index does not reflect any initial or ongoing expenses. A fund's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund's prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund's prior fiscal year.

Maximum Redemption Fee %

The Maximum Redemption Fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase (for example, 30, 180, or 365 days).

Mean

Mean is the annualized geometric return for the period shown.

Morningstar Analyst Rating™

Effective October 31, 2019, Morningstar updated its Morningstar Analyst Rating™ methodology. For any Morningstar Analyst Rating published on or prior to October 31, 2019, the following disclosure applies:

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates funds based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five pillar evaluation to determine how they believe funds are likely to perform relative to a benchmark, or in the case of exchange-traded funds and index mutual funds, a relevant peer group, over the long term on a risk-adjusted basis. They consider quantitative and qualitative factors in their research, and the weight of each pillar may vary. The Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. A Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's conviction in a fund's prospects for outperformance. Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months. For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to global.morningstar.com/managerdisclosures/.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating a fund, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the fund.

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10% weighting. For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars. The impact of the weighted pillar scores for people, process and parent on the final Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of funds using alternative investment strategies, the modification by alpha dispersion is not used.

For active funds, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an active fund will be able to deliver positive alpha net of fees relative to the standard benchmark index assigned to the Morningstar category. The level of the rating relates to the level of expected positive net alpha relative to Morningstar category peers for active funds. For passive funds, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that a fund will be able to deliver a higher alpha net of fees than the lesser of the relevant Morningstar category median or 0. The level of the rating relates to the level of expected net alpha relative to Morningstar category peers for passive funds. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of funds using alternative investment strategies, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that a fund will deliver a weighted pillar score above a predetermined threshold within its peer group. Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months.

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Morningstar Quantitative Rating™

Morningstar's quantitative fund ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent pillar, (iii) Quantitative People pillar, and (iv) Quantitative Process pillar (collectively the "Quantitative Fund Ratings"). The Quantitative Fund Ratings are calculated monthly and derived from the analyst-driven ratings of a fund's peers as determined by statistical algorithms. Morningstar, Inc. calculates Quantitative Fund Ratings for funds when an analyst rating does not exist as part of its qualitative coverage.

• **Morningstar Quantitative Rating:** Intended to be comparable to Morningstar's Analyst Ratings for open-end funds and ETFs, which is the summary expression of Morningstar's forward-looking analysis of a fund. The Morningstar Analyst Rating is based on the analyst's conviction in the fund's ability to outperform its peer group and/or relevant benchmark on a risk-adjusted basis over a full market cycle of at least 5 years. Ratings are assigned on a five-tier scale with three positive ratings of Gold, Silver, and Bronze, a Neutral rating, and a Negative rating. Morningstar calculates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our fund analysts assign to open-end funds and ETFs. Please go to <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx> for information about Morningstar Analyst Rating Morningstar's fund analysts assign to funds.

• **Quantitative Parent pillar:** Intended to be comparable to

Morningstar's Parent pillar scores, which provides Morningstar's analyst opinion on the stewardship quality of a firm. Morningstar calculates the Quantitative Parent pillar using an algorithm designed to predict the Parent Pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), Low (1).

• **Quantitative People pillar:** Morningstar's People pillar scores, which provides Morningstar's analyst opinion on the fund manager's talent, tenure, and resources. Morningstar calculates the Quantitative People pillar using an algorithm designed to predict the People pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), Low (1).

• **Quantitative Process Pillar:** Intended to be comparable to Morningstar's Process pillar scores, which provides Morningstar's analyst opinion on the fund's strategy and whether the management has a competitive advantage enabling it to execute the process and consistently over time. Morningstar calculates the Quantitative Process pillar using an algorithm designed to predict the Process pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Morningstar Quantitative Ratings have not been made available to the issuer of the security prior to publication.

Risk Warning

The quantitative fund ratings are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the quantitative fund ratings. In addition, there is the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the quantitative fund ratings can mean that the recommendation is subsequently no longer accurate.

For more information about Morningstar's quantitative methodology, please visit <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx>

Morningstar Category

Morningstar Category is assigned by placing funds into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a fund's prospectus may not be sufficiently detailed for our proprietary classification methodology. Funds are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the fund is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a fund at the time of calculation.

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Morningstar Rating™

The Morningstar Rating™ for funds, or "star rating", is calculated for funds and separate accounts with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product's monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. For more information about the Morningstar Rating for funds, including its methodology, please go to global.morningstar.com/managedisclosures

The Morningstar Return rates a fund's performance relative to other managed products in its Morningstar Category. It is an assessment of a product's excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Avg), and the bottom 10% Low (Low). Morningstar Return is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Risk

Morningstar Risk evaluates a fund's downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations, in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (-Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Style Box™

The Morningstar Style Box™ reveals a fund's investment strategy as of the date noted on this report.

For equity funds, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened square in the style box indicates the weighted average style of the portfolio.

For fixed-income funds, the vertical axis shows the credit quality of the long bonds owned and the horizontal axis shows interest-rate sensitivity as measured by a bond's effective duration. Morningstar seeks credit rating information from fund companies on a periodic basis (for example, quarterly). In compiling credit rating information, Morningstar accepts credit ratings reported by fund companies that have been issued by all Nationally Recognized Statistical Rating Organizations. For a list of all NRSROs, please visit <http://www.sec.gov/divisions/marketreg/ratingagency.htm>. Additionally, Morningstar accepts foreign credit ratings from widely recognized or registered rating agencies. If two rating organizations/agencies have rated a security, fund companies are to report the lower rating; if three or more

organizations/agencies have rated a security, fund companies are to report the median rating; and in cases where there are more than two organization/agency ratings and a median rating does not exist, fund companies are to use the lower of the two middle ratings.

Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the fund. NRSRO or rating agency ratings can change from time to time.

For credit quality, Morningstar combines the credit rating information provided by the fund companies with an average default rate calculation to come up with a weighted-average credit quality. The weighted-average credit quality is currently a letter that roughly corresponds to the scale used by a leading NRSRO. Bond funds are assigned a style box placement of "low," "medium," or "high" based on their average credit quality. Funds with a "low" credit quality are those whose weighted-average credit quality is determined to be less than "BBB-"; "medium" are those less than "AA-", but greater or equal to "BBB-"; and "high" are those with a weighted-average credit quality of "AA-" or higher. When classifying a bond portfolio, Morningstar first maps the NRSRO credit ratings of the underlying holdings to their respective default rates (as determined by Morningstar's analysis of actual historical default rates). Morningstar then averages these default rates to determine the average default rate for the entire bond fund. Finally, Morningstar maps this average default rate to its corresponding credit rating along a convex curve.

For interest-rate sensitivity, Morningstar obtains from fund companies the average effective duration. Generally, Morningstar classifies a fixed-income fund's interest-rate sensitivity based on the effective duration of the Morningstar Core Bond Index, which is currently three years. The classification of Limited will be assigned to those funds whose average effective duration is between 25% to 75% of MCB's average effective duration; funds whose average effective duration is between 75% to 125% of the MCB will be classified as Moderate; and those that are at 125% or greater of the average effective duration of the MCB will be classified as Extensive.

For municipal-bond funds, Morningstar also obtains from fund companies the average effective duration. In these cases, static breakpoints are used. These breakpoints are as follows: (i) Limited: 4.5 years or less; (ii) Moderate: more than 4.5 years but less than 7 years; and (iii) Extensive: more than 7 years. In addition, for non-U.S. taxable and non-U.S. domiciled fixed-income funds, static duration breakpoints are used: (i) Limited: less than or equal to 3.5 years; (ii) Moderate: more than 3.5 years but less than or equal to 6 years; (iii) Extensive: more than 6 years.

Interest-rate sensitivity for non-U.S. domiciled funds (excluding funds in convertible categories) may be measured with modified duration when effective duration is not available.

P/B Ratio TTM

The Price/Book Ratio (or P/B Ratio) for a fund is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

P/C Ratio TTM

The Price/Cash Flow Ratio (or P/C Ratio) for a fund is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

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P/E Ratio TTM

The Price/Earnings Ratio (or P/E Ratio) for a fund is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is the stock's current price divided by the company's trailing 12-month earnings per share. A high P/E Ratio usually indicates the market will pay more to obtain the company's earnings because it believes in the company's abilities to increase their earnings. A low P/E Ratio indicates the market has less confidence that the company's earnings will increase, however value investors may believe such stocks have an overlooked or undervalued potential for appreciation.

Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, funds within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

Performance Quartile

Performance Quartile reflects a fund's Morningstar Rank.

Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

Quarterly Returns

Quarterly Return is calculated applying the same methodology as Total Return except it represents return through each quarter-end.

R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

Regional Exposure

The regional exposure is a display of the portfolio's assets invested in the regions shown on the report.

Sector Weightings

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the stocks included in these sectors generally have betas greater than 1. The Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Share Change

Shares Change represents the number of shares of a stock bought or sold by a fund since the previously reported portfolio of the fund.

Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk.

Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility of return.

Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the security was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes reinvestment of dividends and capital gains. It is the return an investor would have experienced if the fund was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Trailing Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the fund was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Investment Risks

International/Emerging Market Equities: Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

Sector Strategies: Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor

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to increased industry-specific risks.

Non-Diversified Strategies: Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

Small Cap Equities: Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure, and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

Mid Cap Equities: Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

High-Yield Bonds: Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

Tax-Free Municipal Bonds: The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

Bonds: Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

HOLDERS: The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDER might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

Hedge Funds: The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

Bank Loan/Senior Debt: Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

Exchange Traded Notes (ETNs): ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its obligations. ETNs do not typically pay interest.

Leveraged ETFs: Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their fund objectives on a daily basis (or other time period stated within the prospectus

objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, -200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the fund to be either greater or less than the index performance multiplied by the multiple stated within the funds objective over a stated time period.

Short Positions: When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

Long-Short: Due to the strategies used by long-short funds, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these funds may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

Liquidity Risk: Closed-end fund, ETF, and HOLDER trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

Market Price Risk: The market price of ETFs, HOLDERS, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

Market Risk: The market prices of ETFs and HOLDERS can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

Target-Date Funds: Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at any time, including at the fund's target date.

High double- and triple-digit returns: High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

Benchmark Disclosure

BBGBarc: US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage-Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which includes the daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond ETF.

JPM EMBI Global Diversified TR USD

Description unavailable.

MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

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S&P 500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the U.S. stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: SPDR® S&P 500 ETF Trust.

USTREAS T-Bill Auction Ave 3 Mon

Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months. Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

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Vanguard Federal Money Market Fund (VMFXX)

Firm Background*

The Vanguard Group, Inc. is one of the largest providers of low-cost mutual funds and index-tracking products. Jack Bogle founded Vanguard in 1975 with the philosophy that low costs are crucial to generate consistently attractive investment performance. Vanguard was the first firm to provide widespread passive index products to retail investors. Over time, Vanguard expanded its product set to include various asset classes and actively managed funds. Vanguard's active products are either managed internally or subadvised by external asset managers. Equity strategies represent more than two-thirds of firm assets, fixed income strategies account for approximately 25% of assets, and cash and multi-asset strategies comprise the balance of assets. The firm's client mix is approximately 60% institutional and 40% retail investors.

Headquartered in Malvern, PA, Vanguard employs over 17,000 people. The firm has offices around the world, but investment management is concentrated in a limited number of them (Malvern; Melbourne, Australia; and London, UK). The firm is owned by its own investment funds, which are, in turn, owned by their shareholders. As a result, Vanguard's fund investors indirectly own the firm. Fund management fees pay for the firm's expenses and Vanguard reinvests profits to lower future expense ratios. Effective January 1, 2018, Tim Buckley succeeded William McNabb as Vanguard's Chief Executive Officer. Mr. Buckley joined the firm in 1991 and has held a number of senior leadership positions during his tenure. Mr. McNabb will remain chairman of Vanguard's board, a role he has held since 2009.

Organization: Satisfactory (4 out of 5)*

Vanguard has a decades-long legacy of client service and thoughtful product development that dates to its founding as an indexing provider. It launches funds after thorough consideration of where it believes product offerings are consistent with investor interests as well as the firm's philosophy and long-term focus. In our view, Vanguard's mutual fund ownership structure has both advantages and disadvantages. For instance, the firm's trademark low fees provide Vanguard with a persistent return advantage over peers, which contributes to the strength of the franchise. These low fees are a direct result of the ownership structure, which has also greatly contributed to the firm's considerable level of assets under management. On the other hand, a disadvantage of the firm's ownership structure is that it does not allow employees to benefit from a profit sharing or equity compensation scheme; although, Vanguard does make use of deferred bonus compensation for key executives and investment professionals. The firm actively rotates senior employees across roles and disciplines. While this may result in longevity and broad perspectives, it reduces specialization and tenure in the roles left behind. Vanguard has experienced tremendous growth over the past decade to become one of the world's largest asset managers. Along with this growth, the firm has had to address the issues that often accompany a significant increase in AUM.

Strategy**

Vanguard Federal Money Market Fund seeks to provide current income while maintaining liquidity and a stable share price of \$1.

The fund invests primarily in high-quality, short-term money market instruments issued by the U.S. government and its agencies and instrumentalities. Although these securities are high-quality, most of the securities held by the fund are neither guaranteed by the U.S. Treasury nor supported by the full faith and credit of the U.S. government. To be considered high quality, a security must be determined by Vanguard to present minimal credit risk based in part on a consideration of maturity, portfolio diversification, portfolio liquidity, and credit quality. The fund maintains a dollar-weighted average maturity of 60 days or less and a

dollar-weighted average life of 120 days or less. Under the new money market reforms, government money market funds are required to invest at least 99.5% of their total assets in cash, government securities, and/or repurchase agreements that are collateralized solely by government securities or cash (collectively, government securities). The fund generally invests 100% of its assets in government securities and therefore will satisfy the 99.5% requirement for designation as a government money market fund.

Summary

This fund has not been rated by Morningstar, Inc.

Performance

This fund has not been rated by Morningstar, Inc.

Price

This fund has not been rated by Morningstar, Inc.

Process

This fund has not been rated by Morningstar, Inc.

People

This fund has not been rated by Morningstar, Inc.

* Source: BNY Mellon Manager Research Group, as of December 2019

** Source: Vanguard Group, Inc., as of 9/30/2020

Fact sheet | September 30, 2020



Vanguard Federal Money Market Fund

Money market fund

Fund facts

Risk level Low ← → High	Total net assets	Expense ratio as of 12/31/19	Ticker symbol	Inception date	Fund number
1 2 3 4 5	\$199,581 MM	0.11%	VMFXX	07/13/91	0033

Investment objective

Vanguard Federal Money Market Fund seeks to provide current income while maintaining liquidity and a stable share price of \$1.

Investment strategy

The fund invests primarily in high-quality, short-term money market instruments issued by the U.S. government and its agencies and instrumentalities. Although these securities are high-quality, most of the securities held by the fund are neither guaranteed by the U.S. Treasury nor supported by the full faith and credit of the U.S. government. To be considered high quality, a security must be determined by Vanguard to present minimal credit risk based in part on a consideration of maturity, portfolio diversification, portfolio liquidity, and credit quality. The fund maintains a dollar-weighted average maturity of 60 days or less and a dollar-weighted average life of 120 days or less. Under the new money market reforms, government money market funds are required to invest at least 99.5% of their total assets in cash, government securities, and/or repurchase agreements that are collateralized solely by government securities or cash (collectively, government securities). The fund generally invests 100% of its assets in government securities and therefore will satisfy the 99.5% requirement for designation as a government money market fund.

For the most up-to-date fund data, please scan the QR code below.



Benchmark

US Gov't Money Market Funds Average

Growth of a \$10,000 investment: January 31, 2010–December 31, 2019



Annual returns

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Fund	0.02	0.01	0.01	0.02	0.01	0.04	0.30	0.81	1.79	2.14
Benchmark	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.34	1.23	1.61

Total returns

Periods ended September 30, 2020

	7-Day SEC Yield	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	0.05%	0.02%	0.44%	0.87%	1.54%	1.10%	0.55%
Benchmark	—	0.00%	0.23%	0.52%	1.07%	0.68%	0.34%

The performance data shown represent past performance, which is not a guarantee of future results. Investment returns will fluctuate. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at [vanguard.com/performance](https://www.vanguard.com/performance).

Figures for periods of less than one year are cumulative returns. All other figures represent average annual returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All returns are net of expenses. Seven-day current yield net of expenses. The yield quotation more closely reflects the current earnings of the fund than the total return quotation.

US Gov't Money Market Funds Average: Derived from data provided by Lipper, a Thomson Reuters Company.

F0033 092020

Fact sheet | September 30, 2020

Vanguard Federal Money Market Fund

Money market fund

Connect with Vanguard * > [vanguard.com](https://www.vanguard.com)

Plain talk about risk

The fund is designed for investors with a low tolerance for risk; however, the fund's performance could be hurt by:

Income risk: The chance that the fund's income will decline because of falling interest rates. Because the fund's income is based on short-term interest rates—which can fluctuate significantly over short periods—income risk is expected to be high.

Manager risk: The chance that poor security selection will cause the fund to underperform relevant benchmarks or other funds with a similar investment objective.

Credit risk: The chance that the issuer of a security will fail to pay interest or principal in a timely manner or that negative perceptions of the issuer's ability to make such payments will cause the price of that security to decline. Credit risk should be very low for the fund because it invests primarily in securities that are considered to be of high quality.

While U.S. Treasury or government agency securities provide substantial protection against credit risk, they do not protect investors against price changes due to changing interest rates. Unlike stocks and bonds, U.S. Treasury bills are guaranteed as to the timely payment of principal and interest.

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

For more information about Vanguard funds or to obtain a prospectus, see below for which situation is right for you.

If you receive your retirement plan statement from Vanguard or log on to Vanguard's website to view your plan, visit [vanguard.com](https://www.vanguard.com) or call 800-523-1188.

If you receive your retirement plan statement from a service provider other than Vanguard or log on to a recordkeeper's website that is not Vanguard to view your plan, please call 855-402-2646.

Visit [vanguard.com](https://www.vanguard.com) to obtain a prospectus or, if available, a summary prospectus. Investment objectives, risks, charges, expenses, and other important information about a fund are contained in the prospectus; read and consider it carefully before investing.

Financial advisor clients: For more information about Vanguard funds, contact your financial advisor to obtain a prospectus.

Investment Products: Not FDIC Insured • No Bank Guarantee • May Lose Value

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F0033 092020

Vanguard Long-Term Treasury Index Fund Institutional Shares (VLGIX)

Firm Background*

The Vanguard Group, Inc. is one of the largest providers of low-cost mutual funds and index-tracking products. Jack Bogle founded Vanguard in 1975 with the philosophy that low costs are crucial to generate consistently attractive investment performance. Vanguard was the first firm to provide widespread passive index products to retail investors. Over time, Vanguard expanded its product set to include various asset classes and actively managed funds. Vanguard's active products are either managed internally or subadvised by external asset managers. Equity strategies represent more than two-thirds of firm assets, fixed income strategies account for approximately 25% of assets, and cash and multi-asset strategies comprise the balance of assets. The firm's client mix is approximately 60% institutional and 40% retail investors.

Headquartered in Malvern, PA, Vanguard employs over 17,000 people. The firm has offices around the world, but investment management is concentrated in a limited number of them (Malvern; Melbourne, Australia; and London, UK). The firm is owned by its own investment funds, which are, in turn, owned by their shareholders. As a result, Vanguard's fund investors indirectly own the firm. Fund management fees pay for the firm's expenses and Vanguard reinvests profits to lower future expense ratios. Effective January 1, 2018, Tim Buckley succeeded William McNabb as Vanguard's Chief Executive Officer. Mr. Buckley joined the firm in 1991 and has held a number of senior leadership positions during his tenure. Mr. McNabb will remain chairman of Vanguard's board, a role he has held since 2009.

Organization: Satisfactory (4 out of 5)*

Vanguard has a decades-long legacy of client service and thoughtful product development that dates to its founding as an indexing provider. It launches funds after thorough consideration of where it believes product offerings are consistent with investor interests as well as the firm's philosophy and long-term focus. In our view, Vanguard's mutual fund ownership structure has both advantages and disadvantages. For instance, the firm's trademark low fees provide Vanguard with a persistent return advantage over peers, which contributes to the strength of the franchise. These low fees are a direct result of the ownership structure, which has also greatly contributed to the firm's considerable level of assets under management. On the other hand, a disadvantage of the firm's ownership structure is that it does not allow employees to benefit from a profit sharing or equity compensation scheme; although, Vanguard does make use of deferred bonus compensation for key executives and investment professionals. The firm actively rotates senior employees across roles and disciplines. While this may result in longevity and broad perspectives, it reduces specialization and tenure in the roles left behind. Vanguard has experienced tremendous growth over the past decade to become one of the world's largest asset managers. Along with this growth, the firm has had to address the issues that often accompany a significant increase in AUM.

Strategy**

Vanguard Long-Term Treasury Index Fund seeks to track the performance of a market-weighted Treasury index with a long-term dollar-weighted average maturity.

The fund employs an index sampling technique to select securities. Using sophisticated computer programs, the fund's advisor generally selects a representative sample of securities that approximates the full target index in terms of key risk factors and other characteristics.

These factors include duration, cash flow, quality, and callability of the underlying bonds. In addition, the fund keeps sector and subsector exposure within tight boundaries relative to its target index. Because the fund does not hold all issues in its target index, some of the issues (and issuers) that are held will likely be overweighted (or underweighted) compared with the target index. The maximum overweight (or underweight) is constrained at the issuer level with the goal of producing well-diversified credit exposure in the portfolio.

Summary

This fund has not been rated by Morningstar, Inc.

Performance

This fund has not been rated by Morningstar, Inc.

Price

This fund has not been rated by Morningstar, Inc.

Process

This fund has not been rated by Morningstar, Inc.

People

This fund has not been rated by Morningstar, Inc.

* Source: BNY Mellon Manager Research Group, as of December 2019

** Source: Vanguard Group, Inc., as of 9/30/2020

Release date 09-30-2020

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Vanguard Long-Term Treasury Idx Instl (USD)

Performance 09-30-2020

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2018	-3.49	0.44	-2.83	4.43	-1.63
2019	4.67	5.67	8.12	-4.42	14.30
2020	20.86	0.36	-0.03	—	21.27
Trailing Returns:	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	15.91	11.77	8.14	7.12	7.53
Std 09-30-2020	15.91	—	8.14	7.12	7.53
Total Return	15.91	11.77	8.14	7.12	7.53
+/- Std Index	8.92	6.52	3.90	3.49	—
+/- Cat Index	-0.30	-0.02	-0.05	-0.05	—
% Rank Cat	59	46	34	37	—
No. in Cat	31	28	25	22	—

7-day Yield —
30-day SEC Yield 10-20-20 1.37

Performance Disclosure

The Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; that an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-827-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges

Front-End Load %	NA
Deferred Load %	NA

Fund Expenses

Management Fees %	0.04
12b1 Expense %	NA
Net Expense Ratio %	0.05
Gross Expense Ratio %	0.05

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	3★	3★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	Avg	Avg
Standard Deviation	12.34	11.40	11.85
Mean	11.77	8.14	7.12
Sharpe Ratio	0.84	0.64	0.60

MPT Statistics	Standard Index	Best Fit Index
		BBG Govt Long TR USD
Alpha	-0.64	-0.19
Beta	3.06	1.02
R-Squared	69.18	99.54
12-Month Yield	1.87%	—
Potential Cap Gains Exp	11.85%	—

Operations

Family:	Vanguard
Manager:	Joshua Batnickman
Tenure:	7.7 Years
Objective:	Government Bond - General

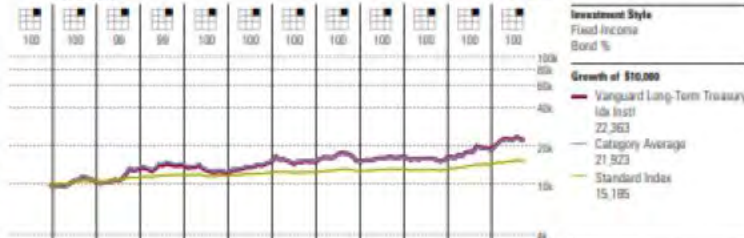
Morningstar Quantitative
Rating™
Gold
09-30-2020

Overall Morningstar Rating™
★★★
28 US Fund Long Government

Standard Index
BBG Govt US Agg
Bond TR USD

Category Index
BBG Govt US
Government Long
TR USD

Morningstar Cat
US Fund Long
Government



Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
24 Mo	25.81	32.09	32.23	27.30	33.13	31.81	31.46	33.30	31.86	35.51	42.47	NA
—	9.35	28.94	3.52	-12.73	25.09	-1.32	1.38	8.67	-1.63	14.30	21.27	NA
—	2.80	21.10	-0.69	-10.71	19.12	-1.87	-1.27	5.12	-1.64	5.98	14.48	NA
—	-0.08	-0.20	-0.25	-0.25	0.42	-0.15	-0.05	0.13	0.15	-0.45	0.14	NA
—	—	58	55	26	31	40	28	42	32	43	—	NA
—	—	34	32	24	30	34	34	32	31	32	32	NA

Portfolio Analysis 09-30-2020

Asset Allocation %	Net %	Long %	Short %	Share Chg since 08-2020	Share Amount	Holdings: 0 Total Stocks, 56 Total Fixed-Income, 16% Turnover Ratio	Net Assets %
Cash	-0.41	0.00	0.41	—	—	—	—
US Stocks	0.00	0.00	0.00	—	—	—	—
Non-US Stocks	0.00	0.00	0.00	—	225 mil	United States Treasury Bonds	4.62
Bonds	100.41	100.41	0.00	—	166 mil	United States Treasury Bonds	3.88
Other/Not Classd	0.00	0.00	0.00	—	124 mil	United States Treasury Bonds	3.08
Total	100.00	100.41	0.41	—	141 mil	United States Treasury Bonds	3.03
				—	114 mil	United States Treasury Bonds	2.88
				—	108 mil	United States Treasury Bonds	2.86
				—	166 mil	United States Treasury Bonds	2.85
				—	114 mil	United States Treasury Bonds	2.81
				—	157 mil	United States Treasury Bonds	2.80
				—	110 mil	United States Treasury Bonds	2.71
				—	109 mil	United States Treasury Bonds	2.70
				—	113 mil	United States Treasury Bonds	2.67
				—	99 mil	United States Treasury Bonds	2.64
				—	100 mil	United States Treasury Bonds	2.48
				—	111 mil	United States Treasury Bonds	2.48

Credit Quality Breakdown 09-30-2020

	Bond %
AAA	99.33
AA	0.00
A	0.00
BBB	0.67
BB	0.00
B	0.00
Below B	0.00
NR	0.00

Regional Exposure

	Stocks %	Rel Std Index
Americas	—	—
Greater Europe	—	—
Greater Asia	—	—

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	—	—
Basic Materials	—	—
Consumer Cyclical	—	—
Financial Services	—	—
Real Estate	—	—
Sensitive	—	—
Communication Services	—	—
Energy	—	—
Industrials	—	—
Technology	—	—
Defensive	—	—
Consumer Defensive	—	—
Healthcare	—	—
Utilities	—	—

Purchase Constraints:	—
Incept:	11-19-2009
Type:	MF
Total Assets:	\$2,618.37 mil

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Standardized and Tax Adjusted Returns Disclosure Statement

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit <http://advisor.morningstar.com/familyinfo.asp>.

Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges. The maximum redemption fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

Money Market Fund Disclosures

If money market fund(s) are included in the Standardized Returns table below, each money market fund's name will be followed by a superscripted letter that links it to the applicable disclosure below:

Institutional Money Market Funds (designated by an "S"):

You could lose money by investing in the fund. Because the share price of the fund will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "L") and

Retail Money Market Funds (designated by an "L"):

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen not to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "N"):

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Annualized returns (05-30-2020)

Standardized Returns (%)	7-day Yield Subsidized as of date	7-day Yield Unsubsidized as of date	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio %	Max Redemption %
Vanguard Long-Term Treasury Idx Instl	—	—	15.91	8.14	7.12	7.53	11-19-2009	NA	NA	0.05	0.05	NA
BBGBarc US Agg Bond TR USD			6.98	4.18	3.64	—	01-03-1980					
BBGBarc US Government Long TR USD			16.21	8.18	7.18	—	05-01-1991					
MSCI EAFE NR USD			0.49	5.26	4.62	—	03-31-1986					
S&P 500 TR USD			15.15	14.15	12.74	—	01-30-1970					
USTREAS T-Bill Auction Ave 3 Mon			0.77	1.17	0.61	—	02-28-1941					

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Annualized returns 09-30-2020

Return after Tax (%)	On Distribution					On Distribution and Sales of Shares				
	1Yr	5Yr	10Yr	Since Inception	Inception Date	1Yr	5Yr	10Yr	Since Inception	
Vanguard Long-Term Treasury Idx Instl	14.98	7.01	5.91	6.31	11-19-2009	9.39	5.80	5.07	5.42	

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Mutual Fund Detail Report Disclosure Statement

The Mutual Fund Detail Report is supplemental sales literature, and therefore must be preceded or accompanied by the mutual fund's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Mutual Fund Detail Report. Morningstar is not itself a FINRA-member firm.

All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities.

Prior to 2016, Morningstar's methodology evaluated open-end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most-recent month-end reflect the updated methodology.

Risk measures (such as alpha, beta, r-squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns, and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publically-offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject

to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution.

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual fund itself, or through an intermediary, but cannot be traded on a secondary market, such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net

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asset value minus a deferred sales charge, and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Fund portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the investment income tax and Medicare surcharge. As of 2018, this rate is 37% plus 3.8% investment income plus 0.9% Medicare surcharge, or 41.7%. This rate changes periodically in accordance with changes in federal law.

Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share class(es) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.

When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in italics.

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

12b1 Expense %

A 12b-1 fee is a fee used to pay for a mutual fund's distribution costs. It is often used as a commission to brokers for selling the fund. The amount of the fee is taken from a fund's returns.

Alpha

Alpha is a measure of the difference between a security or portfolio's actual returns and its expected performance, given its level of risk (as measured by beta.) Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The "Other"

category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the fund against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the fund's managers are buying and how they are positioning the fund's portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the fund's exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security's price rises over time. Short positions are taken with the hope of benefitting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most fund portfolios hold fairly conventional securities, such as long positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while others have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart's generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of fund holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of fund holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the fund only.

Average Effective Duration

Duration is a time measure of a bond's interest-rate sensitivity. Average effective duration is a weighted average of the duration of the fixed-income securities within a portfolio.

Average Effective Maturity

Average Effective Maturity is a weighted average of the maturities of all bonds in a portfolio.

Average Weighted Coupon

A coupon is the fixed annual percentage paid out on a bond. The average weighted coupon is the asset-weighted coupon of each bond in the portfolio.

Average Weighted Price

Average Weighted Price is the asset-weighted price of bonds held in a portfolio, expressed as a percentage of par (face) value. This number reveals if the portfolio favors bonds selling at prices above or below par value (premium or discount securities respectively.)

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Best Fit Index

Alpha, beta, and R-squared statistics are presented for a broad market index and a "best fit" index. The Best Fit Index identified in this report was determined by Morningstar by calculating R-squared for the fund against approximately 100 indexes tracked by Morningstar. The index representing the highest R-squared is identified as the best fit index. The best fit index may not be the fund's benchmark, nor does it necessarily contain the types of securities that may be held by the fund or portfolio.

Beta

Beta is a measure of a security or portfolio's sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

Credit Quality Breakdown

Credit Quality breakdowns are shown for corporate-bond holdings in the fund's portfolio and depict the quality of bonds in the underlying portfolio. It shows the percentage of fixed-income securities that fall within each credit-quality rating as assigned by a Nationally Recognized Statistical Rating Organization (NRSRO). Bonds not rated by an NRSRO are included in the Other/Not-Classified category.

Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a fund. The percentage of the load charged generally declines the longer the fund's shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

Expense Ratio %

The expense ratio is the annual fee that all funds charge their shareholders. It expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred by the fund. Portfolio transaction fees, or brokerage costs, as well as front-end or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. The gross expense ratio, in contrast to the net expense ratio, does not reflect any fee waivers in effect during the time period.

Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

Geometric Average Market Capitalization

Geometric Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

Growth of 10,000

For funds, this graph compares the growth of an investment of 10,000 (in the base currency of the fund) with that of an index and/or with that of the average for all funds in its Morningstar Category. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing fund expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. If pre-inception data is included in the analysis, it will be graphed.

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The index does not reflect any initial or ongoing expenses. A fund's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund's prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund's prior fiscal year.

Maximum Redemption Fee %

The Maximum Redemption Fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase (for example, 30, 180, or 365 days).

Mean

Mean is the annualized geometric return for the period shown.

Morningstar Analyst Rating™

Effective October 31, 2019, Morningstar updated its Morningstar Analyst Rating™ methodology. For any Morningstar Analyst Rating published on or prior to October 31, 2019, the following disclosure applies:

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates funds based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five pillar evaluation to determine how they believe funds are likely to perform relative to a benchmark, or in the case of exchange-traded funds and index mutual funds, a relevant peer group, over the long term on a risk-adjusted basis. They consider quantitative and qualitative factors in their research, and the weight of each pillar may vary. The Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. A Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's conviction in a fund's prospects for outperformance. Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months. For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to global.morningstar.com/managerdisclosures/.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating a fund, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the fund.

For any Morningstar Analyst Rating published after October 31, 2019, the following disclosure applies:

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates funds based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five-pillar evaluation to determine how they believe funds are likely to perform relative to a benchmark over the long term on a risk adjusted basis. They consider quantitative and qualitative factors in their research. For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting. For passive strategies, process receives an 80% weighting, while people and parent each receive a

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10% weighting. For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars. The impact of the weighted pillar scores for people, process and parent on the final Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of funds using alternative investment strategies, the modification by alpha dispersion is not used.

For active funds, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an active fund will be able to deliver positive alpha net of fees relative to the standard benchmark index assigned to the Morningstar category. The level of the rating relates to the level of expected positive net alpha relative to Morningstar category peers for active funds. For passive funds, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that a fund will be able to deliver a higher alpha net of fees than the lesser of the relevant Morningstar category median or 0. The level of the rating relates to the level of expected net alpha relative to Morningstar category peers for passive funds. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of funds using alternative investment strategies, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that a fund will deliver a weighted pillar score above a predetermined threshold within its peer group. Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months.

For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx>

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating a fund, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the fund.

Morningstar Quantitative Rating™

Morningstar's quantitative fund ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent pillar, (iii) Quantitative People pillar, and (iv) Quantitative Process pillar (collectively the "Quantitative Fund Ratings"). The Quantitative Fund Ratings are calculated monthly and derived from the analyst-driven ratings of a fund's peers as determined by statistical algorithms. Morningstar, Inc. calculates Quantitative Fund Ratings for funds when an analyst rating does not exist as part of its qualitative coverage.

• **Morningstar Quantitative Rating:** Intended to be comparable to Morningstar's Analyst Ratings for open-end funds and ETFs, which is the summary expression of Morningstar's forward-looking analysis of a fund. The Morningstar Analyst Rating is based on the analyst's conviction in the fund's ability to outperform its peer group and/or relevant benchmark on a risk-adjusted basis over a full market cycle of at least 5 years. Ratings are assigned on a five-tier scale with three positive ratings of Gold, Silver, and Bronze, a Neutral rating, and a Negative rating. Morningstar calculates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our fund analysts assign to open-end funds and ETFs. Please go to <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx> for information about Morningstar Analyst Rating Morningstar's fund analysts assign to funds.

• **Quantitative Parent pillar:** Intended to be comparable to

Morningstar's Parent pillar scores, which provides Morningstar's analyst opinion on the stewardship quality of a firm. Morningstar calculates the Quantitative Parent pillar using an algorithm designed to predict the Parent Pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), Low (1).

• **Quantitative People pillar:** Morningstar's People pillar scores, which provides Morningstar's analyst opinion on the fund manager's talent, tenure, and resources. Morningstar calculates the Quantitative People pillar using an algorithm designed to predict the People pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as: High (5), Above Average (4), Average (3), Below Average (2), Low (1).

• **Quantitative Process Pillar:** Intended to be comparable to Morningstar's Process pillar scores, which provides Morningstar's analyst opinion on the fund's strategy and whether the management has a competitive advantage enabling it to execute the process and consistently over time. Morningstar calculates the Quantitative Process pillar using an algorithm designed to predict the Process pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as: High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Morningstar Quantitative Ratings have not been made available to the issuer of the security prior to publication.

Risk Warning

The quantitative fund ratings are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the quantitative fund ratings. In addition, there is the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the quantitative fund ratings can mean that the recommendation is subsequently no longer accurate.

For more information about Morningstar's quantitative methodology, please visit <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx>

Morningstar Category

Morningstar Category is assigned by placing funds into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a fund's prospectus may not be sufficiently detailed for our proprietary classification methodology. Funds are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the fund is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a fund at the time of calculation.

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Morningstar Rating™

The Morningstar Rating™ for funds, or "star rating", is calculated for funds and separate accounts with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product's monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. For more information about the Morningstar Rating for funds, including its methodology, please go to global.morningstar.com/managedisclosures

The Morningstar Return rates a fund's performance relative to other managed products in its Morningstar Category. It is an assessment of a product's excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Avg), and the bottom 10% Low (Low). Morningstar Return is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Risk

Morningstar Risk evaluates a fund's downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations, in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (-Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Style Box™

The Morningstar Style Box™ reveals a fund's investment strategy as of the date noted on this report.

For equity funds, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened square in the style box indicates the weighted average style of the portfolio.

For fixed-income funds, the vertical axis shows the credit quality of the long bonds owned and the horizontal axis shows interest-rate sensitivity as measured by a bond's effective duration. Morningstar seeks credit rating information from fund companies on a periodic basis (for example, quarterly). In compiling credit rating information, Morningstar accepts credit ratings reported by fund companies that have been issued by all Nationally Recognized Statistical Rating Organizations. For a list of all NRSROs, please visit <http://www.sec.gov/divisions/marketreg/ratingagency.htm>. Additionally, Morningstar accepts foreign credit ratings from widely recognized or registered rating agencies. If two rating organizations/agencies have rated a security, fund companies are to report the lower rating; if three or more

organizations/agencies have rated a security, fund companies are to report the median rating; and in cases where there are more than two organization/agency ratings and a median rating does not exist, fund companies are to use the lower of the two middle ratings.

Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the fund. NRSRO or rating agency ratings can change from time to time.

For credit quality, Morningstar combines the credit rating information provided by the fund companies with an average default rate calculation to come up with a weighted-average credit quality. The weighted-average credit quality is currently a letter that roughly corresponds to the scale used by a leading NRSRO. Bond funds are assigned a style box placement of "low," "medium," or "high" based on their average credit quality. Funds with a "low" credit quality are those whose weighted-average credit quality is determined to be less than "BBB-"; "medium" are those less than "AA-", but greater or equal to "BBB-"; and "high" are those with a weighted-average credit quality of "AA-" or higher. When classifying a bond portfolio, Morningstar first maps the NRSRO credit ratings of the underlying holdings to their respective default rates (as determined by Morningstar's analysis of actual historical default rates). Morningstar then averages these default rates to determine the average default rate for the entire bond fund. Finally, Morningstar maps this average default rate to its corresponding credit rating along a convex curve.

For interest-rate sensitivity, Morningstar obtains from fund companies the average effective duration. Generally, Morningstar classifies a fixed-income fund's interest-rate sensitivity based on the effective duration of the Morningstar Core Bond Index, which is currently three years. The classification of Limited will be assigned to those funds whose average effective duration is between 25% to 75% of MCB's average effective duration; funds whose average effective duration is between 75% to 125% of the MCB will be classified as Moderate; and those that are at 125% or greater of the average effective duration of the MCB will be classified as Extensive.

For municipal-bond funds, Morningstar also obtains from fund companies the average effective duration. In these cases, static breakpoints are used. These breakpoints are as follows: (i) Limited: 4.5 years or less; (ii) Moderate: more than 4.5 years but less than 7 years; and (iii) Extensive: more than 7 years. In addition, for non-U.S. taxable and non-U.S. domiciled fixed-income funds, static duration breakpoints are used: (i) Limited: less than or equal to 3.5 years; (ii) Moderate: more than 3.5 years but less than or equal to 6 years; (iii) Extensive: more than 6 years.

Interest-rate sensitivity for non-U.S. domiciled funds (excluding funds in convertible categories) may be measured with modified duration when effective duration is not available.

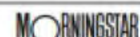
P/B Ratio TTM

The Price/Book Ratio (or P/B Ratio) for a fund is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

P/C Ratio TTM

The Price/Cash Flow Ratio (or P/C Ratio) for a fund is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

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P/E Ratio TTM

The Price/Earnings Ratio (or P/E Ratio) for a fund is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is the stock's current price divided by the company's trailing 12-month earnings per share. A high P/E Ratio usually indicates the market will pay more to obtain the company's earnings because it believes in the company's abilities to increase their earnings. A low P/E Ratio indicates the market has less confidence that the company's earnings will increase, however value investors may believe such stocks have an overlooked or undervalued potential for appreciation.

Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, funds within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

Performance Quartile

Performance Quartile reflects a fund's Morningstar Rank.

Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

Quarterly Returns

Quarterly Return is calculated applying the same methodology as Total Return except it represents return through each quarter-end.

R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

Regional Exposure

The regional exposure is a display of the portfolio's assets invested in the regions shown on the report.

Sector Weightings

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the stocks included in these sectors generally have betas greater than 1. The Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Share Change

Shares Change represents the number of shares of a stock bought or sold by a fund since the previously reported portfolio of the fund.

Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk.

Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility of return.

Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the security was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes reinvestment of dividends and capital gains. It is the return an investor would have experienced if the fund was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Trailing Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the fund was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Investment Risks

International/Emerging Market Equities: Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

Sector Strategies: Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor

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to increased industry-specific risks.

Non-Diversified Strategies: Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

Small Cap Equities: Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure, and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

Mid Cap Equities: Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

High-Yield Bonds: Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

Tax-Free Municipal Bonds: The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

Bonds: Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

HOLDERS: The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDER might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

Hedge Funds: The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

Bank Loan/Senior Debt: Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

Exchange Traded Notes (ETNs): ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its obligations. ETNs do not typically pay interest.

Leveraged ETFs: Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their fund objectives on a daily basis (or other time period stated within the prospectus

objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, -200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the fund to be either greater or less than the index performance multiplied by the multiple stated within the funds objective over a stated time period.

Short Positions: When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

Long-Short: Due to the strategies used by long-short funds, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these funds may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

Liquidity Risk: Closed-end fund, ETF, and HOLDER trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

Market Price Risk: The market price of ETFs, HOLDERS, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

Market Risk: The market prices of ETFs and HOLDERS can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

Target-Date Funds: Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at any time, including at the fund's target date.

High double- and triple-digit returns: High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

Benchmark Disclosure

BBGBarc US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage-Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which includes the daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond ETF.

BBGBarc US Government Long TR USD

Includes those indexes found in the BarCap Government index which have a maturity of 10 years or more. The constituents displayed for this index are from the following proxy: iShares 20+ Year Treasury Bond ETF.

MSCI EAFE NR USD

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This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

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S&P 500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the U.S. stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: SPDR® S&P 500 ETF Trust.

USTREAS T-Bill Auction Ave 3 Mon

Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months. Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

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Vanguard Total Bond Market Index Fund Institutional Plus Shares (VBMPX)

Firm Background*

The Vanguard Group, Inc. is one of the largest providers of low-cost mutual funds and index-tracking products. Jack Bogle founded Vanguard in 1975 with the philosophy that low costs are crucial to generate consistently attractive investment performance. Vanguard was the first firm to provide widespread passive index products to retail investors. Over time, Vanguard expanded its product set to include various asset classes and actively managed funds. Vanguard's active products are either managed internally or subadvised by external asset managers. Equity strategies represent more than two-thirds of firm assets, fixed income strategies account for approximately 25% of assets, and cash and multi-asset strategies comprise the balance of assets. The firm's client mix is approximately 60% institutional and 40% retail investors.

Headquartered in Malvern, PA, Vanguard employs over 17,000 people. The firm has offices around the world, but investment management is concentrated in a limited number of them (Malvern; Melbourne, Australia; and London, UK). The firm is owned by its own investment funds, which are, in turn, owned by their shareholders. As a result, Vanguard's fund investors indirectly own the firm. Fund management fees pay for the firm's expenses and Vanguard reinvests profits to lower future expense ratios. Effective January 1, 2018, Tim Buckley succeeded William McNabb as Vanguard's Chief Executive Officer. Mr. Buckley joined the firm in 1991 and has held a number of senior leadership positions during his tenure. Mr. McNabb will remain chairman of Vanguard's board, a role he has held since 2009.

Organization: Satisfactory (4 out of 5)*

Vanguard has a decades-long legacy of client service and thoughtful product development that dates to its founding as an indexing provider. It launches funds after thorough consideration of where it believes product offerings are consistent with investor interests as well as the firm's philosophy and long-term focus. In our view, Vanguard's mutual fund ownership structure has both advantages and disadvantages. For instance, the firm's trademark low fees provide Vanguard with a persistent return advantage over peers, which contributes to the strength of the franchise. These low fees are a direct result of the ownership structure, which has also greatly contributed to the firm's considerable level of assets under management. On the other hand, a disadvantage of the firm's ownership structure is that it does not allow employees to benefit from a profit sharing or equity compensation scheme; although, Vanguard does make use of deferred bonus compensation for key executives and investment professionals. The firm actively rotates senior employees across roles and disciplines. While this may result in longevity and broad perspectives, it reduces specialization and tenure in the roles left behind. Vanguard has experienced tremendous growth over the past decade to become one of the world's largest asset managers. Along with this growth, the firm has had to address the issues that often accompany a significant increase in AUM.

Fund Strategy**

Vanguard Total Bond Market Index Fund seeks to track the performance of a broad, market-weighted bond index.

The fund employs an indexing investment approach designed to track the performance of the Bloomberg Barclays U.S. Aggregate Float Adjusted Bond Index. This index measures 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. The fund invests by sampling the index, meaning that it holds a range of securities that, in the aggregate, approximate the full index in terms of key risk factors and other

characteristics. 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. The fund maintains a dollar-weighted average maturity consistent with that of the index, which currently ranges between 5 and 10 years.

Summary***

Vanguard Total Bond Market Index is a great core bond holding. Under our enhanced ratings framework, which places a greater emphasis on fees, the Morningstar Analyst Rating for the strategy's cheapest share classes has been upgraded to Gold from Silver. The strategy's more expensive Admiral and Investor share classes are rated Silver and Bronze rating, respectively.

The strategy tracks the Bloomberg Barclays U.S. Aggregate Float-Adjusted Index, which includes investment-grade U.S. dollar-denominated bonds with at least one year until maturity. The index is weighted by market-value, tilting the portfolio toward the largest, most liquid issues, which tend to be easy to obtain and cheap to trade. The float adjustment excludes the value of bonds held by the Federal reserve from the weighting calculations, which slightly increases the fund's exposure to agency mortgage-backed securities. The float adjustment should not have a material impact. The fund's weighting approach harnesses the market's collective wisdom about the relative value of each security. That said, bond issuing activity influences the composition of this portfolio.

The U.S. government is the largest debt issuer in the nation, so the portfolio maintains a larger position in treasuries relative to the intermediate core bond Morningstar Category average. The strategy invests just about 65% of its assets in treasuries and agency MBS, which carry AAA ratings, while the category average is about 45%. While this might limit the fund's return potential, its lower credit risk should offer better downside protection.

This is a conservative portfolio with minimal credit risk, which can make it a low hurdle for active managers. That does not make this an unattractive investment, as risk and return are highly correlated in the fixed-income market. Approximately 65% of the assets in this portfolio carry an AAA rating, making it one of the more conservative options in the category. After controlling for risk, this portfolio is tougher to beat.

Performance***

The fund's performance during the trailing 10 years through May 2020 has been solid. It beat the category average by 6 basis points annually, ranking in the category's middle third, as its cost advantage offset the lower returns from its more conservative portfolio.

The fund's category-relative performance is largely related to credit spreads, given its Treasury-heavy tilt. The fund has tended to outperform category peers when credit spreads widen, and lag when they tighten. For example, it outperformed its average category peer by 93 basis points during 2011, as the ICE Bank of America BBB OAS Spread widened by 1.04%. Conversely, the fund lagged the category average by 1.61% during 2012, as that spread tightened by 1.07%.

The fund's conservative credit risk should help it weather periods of market turmoil better than most category peers. For instance, it did not decline by nearly as much as the category average during the onset of the coronavirus-driven crisis between Feb. 19 and March 23, 2020. During that time, the exchange-traded share class fell by 1.04%, while the category average fell by 3.15%.

Like most investment-grade bond funds, interest-rate risk is the primary driver of this portfolio's absolute returns.

Price***

It's critical to evaluate expenses, as they come directly out of returns. The share class on this report levies a fee that ranks in its Morningstar category's cheapest quintile. Based on our assessment of the fund's People, Process and Parent pillars in the context of these fees, we think this share class will be able to deliver positive alpha relative to the category benchmark index, explaining its Morningstar Analyst Rating of Gold.

Process: Above Average***

This portfolio replicates the composition of the U.S.-dollar-denominated investment-grade bond market, effectively harnessing the market's collective wisdom about the relative value of each bond. This is a sound approach because it promotes low turnover, it is cost-effective, and the market does a decent job pricing these bonds. It earns an Above Average Pillar process rating.

The strategy employs representative sampling to track the performance of the Bloomberg Barclays U.S. Aggregate Float-Adjusted Index, which includes investment-grade U.S.-dollar-denominated bonds with at least one year until maturity. Qualifying bonds must have at least \$300 million in outstanding face value. The float adjustment excludes holdings in the Federal Reserve's account, which should not have a significant impact on the composition of the portfolio.

The index weights its holdings by market value and is rebalanced monthly. This yields a conservative portfolio, which limits its return potential but also cuts downside risk and makes this a good complement for stock holdings.

While it may seem risky to allocate larger weightings to bigger debt issuers, this is a very conservative portfolio, largely because U.S. Treasury and agency MBS represent most of the U.S. investment-grade market. These securities are rated AAA.

As of May 2020, just about 40% of the fund's assets were in Treasury bonds, while the corresponding figure for the category average is slightly more than 20%. The bulk of the fund's remaining balance is composed of corporate bonds and agency MBS, which represent about 28% and 23% of the portfolio's assets, respectively. While this limits the fund's potential for returns, it also limits potential losses.

Although corporate bonds only represent about one fourth of the portfolio, these holdings are where most of the fund's credit risk resides. In addition to the growth of the Treasury bonds, the U.S. corporate bond market also grew in response to the financial crisis of 2008, as companies issued debt to capitalize on low interest rates. As a result, BBB rated corporate bonds grew rapidly and now represent about half of the market value of all investment-grade corporate bonds. Accordingly, just over 15% of the strategy's assets are rated BBB.

The fund's interest-rate risk is line with the intermediate core bond category average. As of May 2020, its average effective duration was 6.0 years.

People: Above Average***

An experienced team manages all of Vanguard's fixed-income index strategies, supporting a positive People Pillar rating.

Joshua Barrickman was named as manager in 2013. He has worked in investment management at Vanguard since 1999 and managed investment portfolios since 2005. In 2013, he was promoted to head of Vanguard's Bond Index Group.

Portfolio management at Vanguard is a team effort, so key-person risk is not a concern. Barrickman leads a team of sector specialists, including a manager focused on government bonds, along with an ETF team, which helps with ETF basket creation. These managers are also supported by a team of traders who focus on execution, as well as a data team that checks incoming index data and helps the managers prepare for upcoming index changes. These teams free up time for the managers to focus on portfolio construction and index tracking. There's also a separate risk management team that independently monitors the managers' performance.

Although fund managers are not required to invest in this strategy, Vanguard aligns managers' incentives with investors' by tying their compensation and performance evaluation to the strategy's tracking error.

* Source: BNY Mellon Manager Research Group, as of December 2019

** Source: Vanguard Group, Inc., as of 9/30/2020

*** Source: Morningstar, Inc., as of 7/11/2020

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Morningstar Gold
07.12.2020

★★★★

380 US Fund Intermediaries

©2004 by US Auto

Bond TR USD

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Bond TR USD

US Fund Internmed

Core Band

Investment Style
Fixed Income
Bond %

Growth of \$10,000

— Vanguard Total Bond Market Index Inst Fds 16,321

— Category Average 17,558

— Standard Index 16,341

Performance Quartile
(within category)

NAV/Price
Total Return %
1. Standard Index

+/- Standard Index
 +/- Category Index
 % Blank Cell
 No. of Funds in Cell

Portfolio Analysis 05.35.2016

	Net Assets
Total Fixed Income	

Non-US Stocks

Mortgage Associate	0
Mortgage Associate	0
Mortgage Notes	0
Mortgage Bonds	0
Mortgage Notes	0

Equity Style	Portfolio Size
--------------	----------------

Treasury Notes	0
Treasury Notes	0
Treasury Notes	0
Treasury Notes	0
Treasury Notes	0

			Gross Avg M
			\$/lb.

Treasury Notes	0
Treasury Notes	0
Treasury Notes	0
Treasury Bonds	0
Treasury Notes	0

			Avg Eff Dur
			Avg Mtd C

... Treasury Notes	0.00
... Treasury Notes	0.00
... Treasury Notes	0.00
Stocks %	Real Std Dev

Credit Quality Breakdown 08-31-20

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Greater Area

06/30/09

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Standardized and Tax Adjusted Returns Disclosure Statement

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit <http://advisor.morningstar.com/familyinfo.asp>.

Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges. The maximum redemption fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

Money Market Fund Disclosures

If money market fund(s) are included in the Standardized Returns table below, each money market fund's name will be followed by a superscripted letter that links it to the applicable disclosure below:

Institutional Money Market Funds (designated by an "S"):

You could lose money by investing in the fund. Because the share price of the fund will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "L") and

Retail Money Market Funds (designated by an "L"):

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen not to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "N"):

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Annualized returns (9/30/2020)

Standardized Returns (%)	7-day Yield Subsequent as of date	7-day Yield Unsubsidized as of date	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio %	Max Redemption %
Vanguard Total Bond Market Idx Instl Plc	—	—	7.05	4.22	3.62	3.97	02-05-2015	NA	NA	0.03	0.03	NA
BBGBarc US Agg Bond TR USD			6.98	4.18	3.64	—	01-03-1980					
MSCI EAFE NR USD			0.49	5.26	4.62	—	03-31-1986					
S&P 500 TR USD			15.15	14.15	12.74	—	01-30-1970					
USTREAS T-Bill Auction Ave 3 Mon			0.77	1.17	0.61	—	02-28-1941					

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Annualized returns 09-30-2020

Return after Tax (%)	On Distribution					On Distribution and Sales of Shares				
	1Yr	5Yr	10Yr	Since Inception	Inception Date	1Yr	5Yr	10Yr	Since Inception	
Vanguard Total Bond Market Idx InstPis	6.00	3.08	2.45	2.79	02-05-2010	4.16	2.72	2.29	2.57	

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Mutual Fund Detail Report Disclosure Statement

The Mutual Fund Detail Report is supplemental sales literature, and therefore must be preceded or accompanied by the mutual fund's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Mutual Fund Detail Report. Morningstar is not itself a FINRA-member firm.

All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities.

Prior to 2016, Morningstar's methodology evaluated open-end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most-recent month-end reflect the updated methodology.

Risk measures (such as alpha, beta, r-squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns, and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publically-offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject

to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution.

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual fund itself, or through an intermediary, but cannot be traded on a secondary market, such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net

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asset value minus a deferred sales charge, and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Fund portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the investment income tax and Medicare surcharge. As of 2018, this rate is 37% plus 3.8% investment income plus 0.9% Medicare surcharge, or 41.7%. This rate changes periodically in accordance with changes in federal law.

Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share class(es) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.

When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in italics.

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

12b-1 Expense %

A 12b-1 fee is a fee used to pay for a mutual fund's distribution costs. It is often used as a commission to brokers for selling the fund. The amount of the fee is taken from a fund's returns.

Alpha

Alpha is a measure of the difference between a security or portfolio's actual returns and its expected performance, given its level of risk (as measured by beta.) Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The "Other"

category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the fund against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the fund's managers are buying and how they are positioning the fund's portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the fund's exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security's price rises over time. Short positions are taken with the hope of benefitting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most fund portfolios hold fairly conventional securities, such as long positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while others have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart's generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of fund holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of fund holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the fund only.

Average Effective Duration

Duration is a time measure of a bond's interest-rate sensitivity. Average effective duration is a weighted average of the duration of the fixed-income securities within a portfolio.

Average Effective Maturity

Average Effective Maturity is a weighted average of the maturities of all bonds in a portfolio.

Average Weighted Coupon

A coupon is the fixed annual percentage paid out on a bond. The average weighted coupon is the asset-weighted coupon of each bond in the portfolio.

Average Weighted Price

Average Weighted Price is the asset-weighted price of bonds held in a portfolio, expressed as a percentage of par (face) value. This number reveals if the portfolio favors bonds selling at prices above or below par value (premium or discount securities respectively.)

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Best Fit Index

Alpha, beta, and R-squared statistics are presented for a broad market index and a "best fit" index. The Best Fit Index identified in this report was determined by Morningstar by calculating R-squared for the fund against approximately 100 indexes tracked by Morningstar. The index representing the highest R-squared is identified as the best fit index. The best fit index may not be the fund's benchmark, nor does it necessarily contain the types of securities that may be held by the fund or portfolio.

Beta

Beta is a measure of a security or portfolio's sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

Credit Quality Breakdown

Credit Quality breakdowns are shown for corporate-bond holdings in the fund's portfolio and depict the quality of bonds in the underlying portfolio. It shows the percentage of fixed-income securities that fall within each credit-quality rating as assigned by a Nationally Recognized Statistical Rating Organization (NRSRO). Bonds not rated by an NRSRO are included in the Other/Not-Classified category.

Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a fund. The percentage of the load charged generally declines the longer the fund's shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

Expense Ratio %

The expense ratio is the annual fee that all funds charge their shareholders. It expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred by the fund. Portfolio transaction fees, or brokerage costs, as well as front-end or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. The gross expense ratio, in contrast to the net expense ratio, does not reflect any fee waivers in effect during the time period.

Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

Geometric Average Market Capitalization

Geometric Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

Growth of 10,000

For funds, this graph compares the growth of an investment of 10,000 (in the base currency of the fund) with that of an index and/or with that of the average for all funds in its Morningstar Category. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing fund expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. If pre-inception data is included in the analysis, it will be graphed.

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The index does not reflect any initial or ongoing expenses. A fund's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund's prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund's prior fiscal year.

Maximum Redemption Fee %

The Maximum Redemption Fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase (for example, 30, 180, or 365 days).

Mean

Mean is the annualized geometric return for the period shown.

Morningstar Analyst Rating™

Effective October 31, 2019, Morningstar updated its Morningstar Analyst Rating™ methodology. For any Morningstar Analyst Rating published on or prior to October 31, 2019, the following disclosure applies:

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates funds based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five pillar evaluation to determine how they believe funds are likely to perform relative to a benchmark, or in the case of exchange-traded funds and index mutual funds, a relevant peer group, over the long term on a risk-adjusted basis. They consider quantitative and qualitative factors in their research, and the weight of each pillar may vary. The Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. A Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's conviction in a fund's prospects for outperformance. Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months. For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to global.morningstar.com/managerdisclosures/.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating a fund, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the fund.

For any Morningstar Analyst Rating published after October 31, 2019, the following disclosure applies:

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates funds based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five-pillar evaluation to determine how they believe funds are likely to perform relative to a benchmark over the long term on a risk adjusted basis. They consider quantitative and qualitative factors in their research. For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting. For passive strategies, process receives an 80% weighting, while people and parent each receive a

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10% weighting. For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars. The impact of the weighted pillar scores for people, process and parent on the final Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of funds using alternative investment strategies, the modification by alpha dispersion is not used.

For active funds, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an active fund will be able to deliver positive alpha net of fees relative to the standard benchmark index assigned to the Morningstar category. The level of the rating relates to the level of expected positive net alpha relative to Morningstar category peers for active funds. For passive funds, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that a fund will be able to deliver a higher alpha net of fees than the lesser of the relevant Morningstar category median or 0. The level of the rating relates to the level of expected net alpha relative to Morningstar category peers for passive funds. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of funds using alternative investment strategies, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that a fund will deliver a weighted pillar score above a predetermined threshold within its peer group. Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months.

For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx>

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating a fund, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the fund.

Morningstar Quantitative Rating™

Morningstar's quantitative fund ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent pillar, (iii) Quantitative People pillar, and (iv) Quantitative Process pillar (collectively the "Quantitative Fund Ratings"). The Quantitative Fund Ratings are calculated monthly and derived from the analyst-driven ratings of a fund's peers as determined by statistical algorithms. Morningstar, Inc. calculates Quantitative Fund Ratings for funds when an analyst rating does not exist as part of its qualitative coverage.

• **Morningstar Quantitative Rating:** Intended to be comparable to Morningstar's Analyst Ratings for open-end funds and ETFs, which is the summary expression of Morningstar's forward-looking analysis of a fund. The Morningstar Analyst Rating is based on the analyst's conviction in the fund's ability to outperform its peer group and/or relevant benchmark on a risk-adjusted basis over a full market cycle of at least 5 years. Ratings are assigned on a five-tier scale with three positive ratings of Gold, Silver, and Bronze, a Neutral rating, and a Negative rating. Morningstar calculates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our fund analysts assign to open-end funds and ETFs. Please go to <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx> for information about Morningstar Analyst Rating Morningstar's fund analysts assign to funds.

• **Quantitative Parent pillar:** Intended to be comparable to

Morningstar's Parent pillar scores, which provides Morningstar's analyst opinion on the stewardship quality of a firm. Morningstar calculates the Quantitative Parent pillar using an algorithm designed to predict the Parent Pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), Low (1).

• **Quantitative People pillar:** Morningstar's People pillar scores, which provides Morningstar's analyst opinion on the fund manager's talent, tenure, and resources. Morningstar calculates the Quantitative People pillar using an algorithm designed to predict the People pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as: High (5), Above Average (4), Average (3), Below Average (2), Low (1).

• **Quantitative Process Pillar:** Intended to be comparable to Morningstar's Process pillar scores, which provides Morningstar's analyst opinion on the fund's strategy and whether the management has a competitive advantage enabling it to execute the process and consistently over time. Morningstar calculates the Quantitative Process pillar using an algorithm designed to predict the Process pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as: High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Morningstar Quantitative Ratings have not been made available to the issuer of the security prior to publication.

Risk Warning

The quantitative fund ratings are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the quantitative fund ratings. In addition, there is the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the quantitative fund ratings can mean that the recommendation is subsequently no longer accurate.

For more information about Morningstar's quantitative methodology, please visit <https://shareholders.morningstar.com/investor-relations/governance/Compliance-Disclosure/default.aspx>

Morningstar Category

Morningstar Category is assigned by placing funds into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a fund's prospectus may not be sufficiently detailed for our proprietary classification methodology. Funds are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the fund is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a fund at the time of calculation.

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Morningstar Rating™

The Morningstar Rating™ for funds, or "star rating", is calculated for funds and separate accounts with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product's monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. For more information about the Morningstar Rating for funds, including its methodology, please go to global.morningstar.com/managedisclosures

The Morningstar Return rates a fund's performance relative to other managed products in its Morningstar Category. It is an assessment of a product's excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Avg), and the bottom 10% Low (Low). Morningstar Return is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Risk

Morningstar Risk evaluates a fund's downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations, in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (-Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Style Box™

The Morningstar Style Box™ reveals a fund's investment strategy as of the date noted on this report.

For equity funds, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened square in the style box indicates the weighted average style of the portfolio.

For fixed-income funds, the vertical axis shows the credit quality of the long bonds owned and the horizontal axis shows interest-rate sensitivity as measured by a bond's effective duration. Morningstar seeks credit rating information from fund companies on a periodic basis (for example, quarterly). In compiling credit rating information, Morningstar accepts credit ratings reported by fund companies that have been issued by all Nationally Recognized Statistical Rating Organizations. For a list of all NRSROs, please visit <http://www.sec.gov/divisions/marketreg/ratingagency.htm>. Additionally, Morningstar accepts foreign credit ratings from widely recognized or registered rating agencies. If two rating organizations/agencies have rated a security, fund companies are to report the lower rating; if three or more

organizations/agencies have rated a security, fund companies are to report the median rating; and in cases where there are more than two organization/agency ratings and a median rating does not exist, fund companies are to use the lower of the two middle ratings.

Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the fund. NRSRO or rating agency ratings can change from time to time.

For credit quality, Morningstar combines the credit rating information provided by the fund companies with an average default rate calculation to come up with a weighted-average credit quality. The weighted-average credit quality is currently a letter that roughly corresponds to the scale used by a leading NRSRO. Bond funds are assigned a style box placement of "low," "medium," or "high" based on their average credit quality. Funds with a "low" credit quality are those whose weighted-average credit quality is determined to be less than "BBB-"; "medium" are those less than "AA-", but greater or equal to "BBB-"; and "high" are those with a weighted-average credit quality of "AA-" or higher. When classifying a bond portfolio, Morningstar first maps the NRSRO credit ratings of the underlying holdings to their respective default rates (as determined by Morningstar's analysis of actual historical default rates). Morningstar then averages these default rates to determine the average default rate for the entire bond fund. Finally, Morningstar maps this average default rate to its corresponding credit rating along a convex curve.

For interest-rate sensitivity, Morningstar obtains from fund companies the average effective duration. Generally, Morningstar classifies a fixed-income fund's interest-rate sensitivity based on the effective duration of the Morningstar Core Bond Index, which is currently three years. The classification of Limited will be assigned to those funds whose average effective duration is between 25% to 75% of MCB's average effective duration; funds whose average effective duration is between 75% to 125% of the MCB will be classified as Moderate; and those that are at 125% or greater of the average effective duration of the MCB will be classified as Extensive.

For municipal-bond funds, Morningstar also obtains from fund companies the average effective duration. In these cases, static breakpoints are used. These breakpoints are as follows: (i) Limited: 4.5 years or less; (ii) Moderate: more than 4.5 years but less than 7 years; and (iii) Extensive: more than 7 years. In addition, for non-U.S. taxable and non-U.S. domiciled fixed-income funds, static duration breakpoints are used: (i) Limited: less than or equal to 3.5 years; (ii) Moderate: more than 3.5 years but less than or equal to 6 years; (iii) Extensive: more than 6 years.

Interest-rate sensitivity for non-U.S. domiciled funds (excluding funds in convertible categories) may be measured with modified duration when effective duration is not available.

P/B Ratio TTM

The Price/Book Ratio (or P/B Ratio) for a fund is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

P/C Ratio TTM

The Price/Cash Flow Ratio (or P/C Ratio) for a fund is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

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P/E Ratio TTM

The Price/Earnings Ratio (or P/E Ratio) for a fund is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is the stock's current price divided by the company's trailing 12-month earnings per share. A high P/E Ratio usually indicates the market will pay more to obtain the company's earnings because it believes in the company's abilities to increase their earnings. A low P/E Ratio indicates the market has less confidence that the company's earnings will increase, however value investors may believe such stocks have an overlooked or undervalued potential for appreciation.

Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, funds within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

Performance Quartile

Performance Quartile reflects a fund's Morningstar Rank.

Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

Quarterly Returns

Quarterly Return is calculated applying the same methodology as Total Return except it represents return through each quarter-end.

R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

Regional Exposure

The regional exposure is a display of the portfolio's assets invested in the regions shown on the report.

Sector Weightings

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the stocks included in these sectors generally have betas greater than 1. The Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Share Change

Shares Change represents the number of shares of a stock bought or sold by a fund since the previously reported portfolio of the fund.

Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk.

Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility of return.

Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the security was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes reinvestment of dividends and capital gains. It is the return an investor would have experienced if the fund was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Trailing Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the fund was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Investment Risks

International/Emerging Market Equities: Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

Sector Strategies: Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor

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to increased industry-specific risks.

Non-Diversified Strategies: Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

Small Cap Equities: Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure, and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

Mid Cap Equities: Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

High-Yield Bonds: Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

Tax-Free Municipal Bonds: The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

Bonds: Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

HOLDERS: The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDER might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

Hedge Funds: The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

Bank Loan/Senior Debt: Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

Exchange Traded Notes (ETNs): ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its obligations. ETNs do not typically pay interest.

Leveraged ETFs: Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their fund objectives on a daily basis (or other time period stated within the prospectus

objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, -200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the fund to be either greater or less than the index performance multiplied by the multiple stated within the funds objective over a stated time period.

Short Positions: When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

Long-Short: Due to the strategies used by long-short funds, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these funds may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

Liquidity Risk: Closed-end fund, ETF, and HOLDER trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

Market Price Risk: The market price of ETFs, HOLDERS, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

Market Risk: The market prices of ETFs and HOLDERS can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

Target-Date Funds: Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at any time, including at the fund's target date.

High double- and triple-digit returns: High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

Benchmark Disclosure

BBGBarc US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage-Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which includes the daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond ETF.

MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

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S&P 500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the U.S. stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: SPDR® S&P 500 ETF Trust.

USTREAS T-Bill Auction Ave 3 Mon

Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months. Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

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Any factors discussed, including past performance of various investment strategies, sectors, vehicles and indices, are not indicative of future results.

Past performance is not a guarantee of future results. Current performance may be lower or higher than the performance data quoted. The investment return and principal value of an investment will fluctuate, so that an investor's assets, when sold, may be worth more or less than their original cost.

The performance data provided is calculated using a time and asset-weighted Modified Dietz methodology. The Gross of Fees Return shown reflects the deduction of fees and expenses associated with the underlying mutual funds held in the portfolio (the "Underlying Fund Fee"). The Net of Fees Return shown reflects the deduction of the Underlying Fund Fee, Service Fee, and State Administrative Fee (together, the "Total Annual Asset-Based Fee"). The returns shown do not reflect account maintenance fees or other account level service-based fees (e.g., returned check fees, statement delivery fees, etc.).

There is no guarantee that investment objectives will be attained. Results may vary. There is no guarantee that risk can be managed successfully.

Diversification and strategic asset allocation do not guarantee a profit or protect against a loss in declining markets. **All investments are subject to risk, including the loss of principal.**

It is important to remember that there are risks inherent in any investment and that there is no assurance that any money manager, fund, asset class, index, style or strategy will provide positive performance over time.

Investors should carefully consider the investment objectives, risks, charges and expenses of any mutual fund before investing. This and other important information can be found in the fund prospectus and, if available, the summary prospectus, which may be obtained by visiting www.morningstar.com. Please read the prospectus and, if available, the summary prospectus carefully.

Foreign investments are subject to risks not ordinarily associated with domestic investments, such as currency, economic and political risks, and may follow different accounting standards than domestic investments.

Investments in emerging or developing markets involve exposure to economic structures that are generally less diverse and mature, and to political systems that can be expected to have less stability than those of more developed countries. These securities may be less liquid and more volatile than investments in US and longer established non-US markets.

Portfolios that invest in fixed income securities are subject to several general risks, including interest rate risk, credit risk, the risk of issuer default, liquidity risk and market risk. These risks can affect a security's price and yield to varying degrees, depending upon the nature of the instrument, and may occur from fluctuations in interest rates, a change to an issuer's individual situation or industry, or events in the financial markets. In general, a bond's yield is inversely related to its price. Bonds can lose their value as interest rates rise and an investor can lose principal. If sold prior to maturity, fixed income securities are subject to gains/losses based on the level of interest rates, market conditions and the credit quality of the issuer.

Liquidity risk increases when particular investments are difficult to purchase or sell. A lack of liquidity also may cause the value of investments to decline. Illiquid investments may be harder to value, especially in changing markets. Typically liquid investments may become illiquid, particularly during periods of market turmoil. When illiquid assets must be sold in such market conditions (to meet redemption requests or other cash needs for example), it may be necessary to sell such assets at a loss.

Short-term fixed income securities are susceptible to fluctuations in interest rates. If interest rates rise, bond prices will decline, despite the lack of change in both coupon and maturity. Price volatility typically increases with the length of the maturity and decreases as the size of the coupon decreases.

Investments in intermediate- and long-term fixed income securities involve interest rate risk and inflation risk, which could reduce the value or real return of an investment should interest rates rise.

Inflation is the rate at which the general level of prices for goods and services is rising and, consequently, the purchasing power of currency is falling.

Mutual funds included in portfolios charge additional fees and expenses outside of the Total Annual Asset-Based Fee for this program. Mutual funds may additionally charge a redemption fee if shares are redeemed by within a specified period of time. The amount of the redemption fee, as well as the minimum holding period, is disclosed in each of the respective fund prospectuses. For complete details, please refer to the applicable fund prospectus.

Mutual funds may use derivatives that are often more volatile than other investments and may magnify the fund's gains or losses. An investment that uses derivatives could be negatively affected if the change in the market value of its securities fails to correlate adequately with the values of the derivatives it purchased or sold.

Securities are not bank deposits. They are not insured or guaranteed by Lockwood, its affiliates or its parent companies.

Securities are not insured or guaranteed by the Federal Deposit Insurance Corporation (FDIC), the Federal Reserve, the U.S Securities and Exchange Commission (SEC) or any other government agency.

All performance is expressed in US dollars. Sources: Bloomberg Barclay; Federal Reserve Board; MSCI; Standard & Poor's; US Treasury Department; Bloomberg; and US Bureau of Labor Statistics.

The information on indices is presented for illustrative purposes only and is not intended to imply the potential performance of any fund or investment. Index performance assumes the reinvestment of all distributions, but does not assume any transaction costs, taxes, management fees or other expenses, which would reduce the performance shown. Indices are unmanaged and are not available for direct investment.

Bloomberg Barclays Global Aggregate ex-U.S. Bond Index is designed to be a broad-based measure of the global investment-grade, fixed rate, fixed income corporate markets outside the United States.

Bloomberg Barclays Global Aggregate Negative Yielding Debt TR Index Value Unhedged USD represents the market value in US dollars (\$) of unhedged global negative-yielding debt securities.

Bloomberg Barclays U.S. Aggregate Bond Index represents securities that are SEC registered, taxable and dollar denominated. The index covers the U.S. investment-grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities and asset-backed securities. These major sectors are subdivided into more specific indices that are calculated and reported on a regular basis. Securities must have at least one year to final maturity regardless of call features and must have at least \$250 million par amount outstanding.

Bloomberg Barclays U.S. Treasury Bill 6–9 Month Index represents United States-issued government debt with a bond maturity between six months and nine months.

Bloomberg Commodity Index is designed to be a highly liquid and diversified benchmark for the commodity futures market. The index is composed of exchange-traded futures and represents 20 physical commodities, which are weighted to account for economic significance and market liquidity (subject to weighting restrictions).

Bloomberg Barclays Long U.S. Treasury Index includes all publicly issued, U.S. Treasury securities that have a remaining maturity of 10 or more years, are rated investment grade and have \$250 million or more of outstanding face value. In addition, the securities must be denominated in U.S. dollars and must be fixed rate and non-convertible.

Bloomberg Barclays U.S. Treasury Inflation Protected Securities (TIPS) Index represents inflation-protected securities issued by the U.S. Treasury. Securities must be investment-grade, publicly issued, dollar-denominated, have at least one year remaining to maturity and have at least \$250 million par amount outstanding.

Bloomberg Barclays USD Emerging Markets Government RIC Capped Index is designed to measure the investment return of dollar-denominated bonds that have maturities longer than one year and were issued by emerging market governments and government-related issuers. The index is capped, which means that its exposure to any particular bond is limited to a maximum of 20% and its aggregate exposure to issuers that individually constitute 5% or more is limited to 48%. If the index, as constituted based on market weights, exceeds the 20% or 48% limits, the excess is reallocated to bonds of other issuers represented in the index.

Bloomberg Barclays U.S. Treasury Bill 1–3 Month Index is the one-to-three month component of the U.S. Treasury Bill Index. The Bloomberg Barclays Treasury Bill Index includes U.S. Treasury bills with a remaining maturity from one up to (but not including) 12 months. It excludes zero coupon strips.

Bloomberg Barclays U.S. Aggregate Float Adjusted Index provides broad exposure to the U.S. investment-grade bond market. The float-adjusted index excludes U.S. Treasuries, agencies, and mortgage-backed securities (MBS) held in Federal Reserve accounts, thereby reducing the market value weight of these securities.

Dow Jones U.S. Total Stock Market Index is an unmanaged, float-adjusted market-capitalization-weighted index providing broad-based coverage of the U.S. equity market. The index is considered a total market index, representing the top 95% of the U.S. stock market based on market capitalization. To be included in the index, a security generally must be all of the following: an equity security (common stock, REIT or limited partnership), a security that has its primary market listing in the U.S. and be issued by U.S. headquartered company.

MSCI ACWI (All Country World Index) Index ex-USA (net of taxes) is a subset of the MSCI ACWI Index, a free-float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. This version of the index excludes the United States. The index is net because dividends are reinvested after deducting a withholding tax from dividend distributions. Since taxes are withheld from the MSCI ACWI Index ex-USA (net of taxes), the performance of the MSCI ACWI Index ex-USA (net of taxes) will generally be lower than that of the MSCI ACWI Index ex-USA (gross of taxes).

MSCI ACWI (All Country World Index) Index (net of taxes) is a free-float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. As of May 30, 2019, the MSCI ACWI consisted of 47 country indices comprising 23 developed and 24 emerging market country indices. The developed market country indices included are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom and the United States. The emerging market country indices included are Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey and United Arab Emirates. The index is net because dividends are reinvested after deducting a withholding tax from dividend distributions. Since taxes are withheld from the MSCI ACWI Index (net of taxes), the performance of the MSCI ACWI Index (net of taxes) will generally be lower than that of the MSCI ACWI Index (gross of taxes).

MSCI EAFE (Europe, Australasia and the Far East) Index (net of taxes) is a free-float-adjusted market-capitalization index that is designed to measure developed market equity performance, excluding the United States and Canada. As of May 30, 2019, the MSCI EAFE Index consisted of the following 21 developed market country indices: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland and the United Kingdom. The index is net because dividends are reinvested after deducting a withholding tax from dividend distributions. Since taxes are withheld from the MSCI EAFE Index (net of taxes), the performance of the MSCI EAFE Index (net of taxes) will generally be lower than that of the MSCI EAFE Index (gross of taxes).

MSCI Emerging Markets Index (net of taxes) is a free-float adjusted, market-capitalization index that is designed to measure equity market performance of emerging markets. As of May 30, 2019, the MSCI Emerging Markets Index consisted of the following 26 emerging market country indices: Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Qatar, Russia, Saudi Arabia, South Africa, Taiwan, Thailand, Turkey and United Arab Emirates. The index is net because dividends are reinvested after deducting a withholding tax from dividend distributions. Since taxes are withheld from the MSCI Emerging Markets Index (net of taxes), the performance of the MSCI Emerging Markets Index (net of taxes) will generally be lower than that of the MSCI Emerging Markets Index (gross of taxes).

MSCI USA Investable Market Index (IMI) is designed to measure the performance of the large, mid and small cap segments of the US market. With 2,428 constituents, the index covers approximately 99% of the free float-adjusted market capitalization in the U.S.

MSCI USA Small Cap Index is an unmanaged index designed to measure the performance of the small-cap segment of the US equity market. The index represents approximately 14% of the free float-adjusted market capitalization in the U.S.

Purchasing Managers' Index™ (PMI™) data are compiled by IHS Markit for more than 40 economies worldwide. The monthly data are derived from surveys of senior executives at private sector companies and are available only via subscription. The PMI dataset features a headline number, which indicates the overall health of an economy, and sub-indices, which provide insights into other key economic drivers such as GDP, inflation, exports, capacity utilization, employment and inventories. The PMI data are used by financial and corporate professionals to better understand where economies and markets are headed, and to uncover opportunities.

S&P GSCI Gold Index, a sub-index of the S&P GSCI Index, provides investors with a reliable and publicly available benchmark for investment performance in the gold commodity markets. The index is designed to be tradable, readily

accessible to market participants and cost efficient to implement. The S&P GSCI Index is widely recognized as the leading measure of general commodity price movements and inflation in the world economy.

S&P GSCI Crude Oil Index, a sub-index of the S&P GSCI, provides investors with a reliable and publicly available benchmark for investment performance in the crude oil commodity markets. The index is designed to be tradable, readily accessible to market participants and cost efficient to implement. The S&P GSCI is widely recognized as the leading measure of general commodity price movements and inflation in the world economy. Spot price in the S&P GSCI means the price of the S&P GSCI futures holdings.

S&P 500 Index, an unmanaged index, includes 500 of the largest stocks (in terms of stock market value) in the United States; prior to March 1957, it consisted of 90 of the largest stocks. Although the S&P 500 focuses on the large-cap segment of the market, with approximately 80% coverage of U.S. equities, it is also used as a proxy for the total U.S. equity market.

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US Dollar Index: The US Dollar Index (USD, DXY, DX) is an index (or measure) of the value of the United States dollar relative to a basket of foreign currencies, often referred to as a basket of U.S. trade partners' currencies.

Blended Benchmark Definitions

As of September 30, 2020

Growth Portfolio

50% Dow Jones US Total Stock Market TR USD, 37% MSCI EAFE NR USD, 12% MSCI EM NR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Moderate Growth Portfolio

42% Dow Jones US Total Stock Market TR USD, 29% MSCI EAFE NR USD, 9% MSCI EM NR USD, 12% Bloomberg Barclays US Aggregate Bond TR USD, 2% Bloomberg Barclays Long Term US Treasury TR USD, 3% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Conservative Growth Portfolio

32% Dow Jones US Total Stock Market TR USD, 21% MSCI EAFE NR USD, 7% MSCI EM NR USD, 30% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Balanced Portfolio

26% Dow Jones US Total Stock Market TR USD, 18% MSCI EAFE NR USD, 6% MSCI EM NR USD, 40% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Income & Growth Portfolio

20% Dow Jones US Total Stock Market TR USD + 15% MSCI EAFE NR USD + 5% MSCI EM NR USD + 48% Bloomberg Barclays US Aggregate Bond TR USD + 4% Bloomberg Barclays Long Term US Treasury TR USD + 5% Bloomberg Barclays US Treasury US TIPS TR USD + 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD + 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Income Portfolio

60% Bloomberg Barclays US Aggregate Bond TR USD + 5% Bloomberg Barclays Long Term US Treasury TR USD + 8% Bloomberg Barclays US Treasury US TIPS TR USD + 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD + 25% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Cash Preservation Portfolio

100% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Conservative Year of Enrollment 2038 Portfolio

29% Dow Jones US Total Stock Market TR USD, 19% MSCI EAFE NR USD, 7% MSCI EM NR USD, 35% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Conservative Year of Enrollment 2036 Portfolio

26% Dow Jones US Total Stock Market TR USD, 18% MSCI EAFE NR USD, 6% MSCI EM NR USD, 40% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Conservative Year of Enrollment 2034 Portfolio

23% Dow Jones US Total Stock Market TR USD, 16% MSCI EAFE NR USD, 6% MSCI EM NR USD, 43% Bloomberg Barclays US Aggregate Bond TR USD, 4% Bloomberg Barclays Long Term US Treasury TR USD, 5% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Conservative Year of Enrollment 2032 Portfolio

18% Dow Jones US Total Stock Market TR USD, 12% MSCI EAFE NR USD, 5% MSCI EM NR USD, 52% Bloomberg Barclays US Aggregate Bond TR USD, 4% Bloomberg Barclays Long Term US Treasury TR USD, 6% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Conservative Year of Enrollment 2030 Portfolio

13% Dow Jones US Total Stock Market TR USD, 8% MSCI EAFE NR USD, 4% MSCI EM NR USD, 59% Bloomberg Barclays US Aggregate Bond TR USD, 5% Bloomberg Barclays Long Term US Treasury TR USD, 8% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Conservative Year of Enrollment 2028 Portfolio

8% Dow Jones US Total Stock Market TR USD, 5% MSCI EAFE NR USD, 2% MSCI EM NR USD, 53% Bloomberg Barclays US Aggregate Bond TR USD, 4% Bloomberg Barclays Long Term US Treasury TR USD, 6% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 20% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Conservative Year of Enrollment 2026 Portfolio

5% Dow Jones US Total Stock Market TR USD, 4% MSCI EAFE NR USD, 1% MSCI EM NR USD, 53% Bloomberg Barclays US Aggregate Bond TR USD, 4% Bloomberg Barclays Long Term US Treasury TR USD, 6% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 25% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Conservative Year of Enrollment 2024 Portfolio

3% Dow Jones US Total Stock Market TR USD, 2% MSCI EAFE NR USD, 0% MSCI EM NR USD, 36% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 50% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Conservative Year of Enrollment 2022 Portfolio

41% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 50% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Conservative Year of Enrollment Enrolled Portfolio

41% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 50% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Moderate Year of Enrollment 2038 Portfolio

47% Dow Jones US Total Stock Market TR USD, 33% MSCI EAFE NR USD, 10% MSCI EM NR USD, 5% Bloomberg Barclays US Aggregate Bond TR USD, 1% Bloomberg Barclays Long Term US Treasury TR USD, 2% Bloomberg Barclays US Treasury US TIPS TR USD, 1% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Moderate Year of Enrollment 2036 Portfolio

47% Dow Jones US Total Stock Market TR USD, 33% MSCI EAFE NR USD, 10% MSCI EM NR USD, 5% Bloomberg Barclays US Aggregate Bond TR USD, 1% Bloomberg Barclays Long Term US Treasury TR USD, 2% Bloomberg Barclays US Treasury US TIPS TR USD, 1% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Moderate Year of Enrollment 2034 Portfolio

42% Dow Jones US Total Stock Market TR USD, 29% MSCI EAFE NR USD, 9% MSCI EM NR USD, 12% Bloomberg Barclays US Aggregate Bond TR USD, 2% Bloomberg Barclays Long Term US Treasury TR USD, 3% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Moderate Year of Enrollment 2032 Portfolio

36% Dow Jones US Total Stock Market TR USD, 26% MSCI EAFE NR USD, 8% MSCI EM NR USD, 20% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Moderate Year of Enrollment 2030 Portfolio

32% Dow Jones US Total Stock Market TR USD, 21% MSCI EAFE NR USD, 7% MSCI EM NR USD, 30% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Moderate Year of Enrollment 2028 Portfolio

26% Dow Jones US Total Stock Market TR USD, 18% MSCI EAFE NR USD, 6% MSCI EM NR USD, 40% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Moderate Year of Enrollment 2026 Portfolio

18% Dow Jones US Total Stock Market TR USD, 12% MSCI EAFE NR USD, 5% MSCI EM NR USD, 49% Bloomberg Barclays US Aggregate Bond TR USD, 4% Bloomberg Barclays Long Term US Treasury TR USD, 5% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 5% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Moderate Year of Enrollment 2024 Portfolio

10% Dow Jones US Total Stock Market TR USD, 7% MSCI EAFE NR USD, 3% MSCI EM NR USD, 55% Bloomberg Barclays US Aggregate Bond TR USD, 5% Bloomberg Barclays Long Term US Treasury TR USD, 8% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 10% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Moderate Year of Enrollment 2022 Portfolio

5% Dow Jones US Total Stock Market TR USD, 4% MSCI EAFE NR USD, 1% MSCI EM NR USD, 55% Bloomberg Barclays US Aggregate Bond TR USD, 5% Bloomberg Barclays Long Term US Treasury TR USD, 8% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 20% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Moderate Year of Enrollment Enrolled Portfolio

55% Bloomberg Barclays US Aggregate Bond TR USD, 5% Bloomberg Barclays Long Term US Treasury TR USD, 8% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 30% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Growth Year of Enrollment 2038 Portfolio

49% Dow Jones US Total Stock Market TR USD, 35% MSCI EAFE NR USD, 11% MSCI EM NR USD, 2% Bloomberg Barclays US Aggregate Bond TR USD, 1% Bloomberg Barclays Long Term US Treasury TR USD, 1% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Growth Year of Enrollment 2036 Portfolio

49% Dow Jones US Total Stock Market TR USD, 35% MSCI EAFE NR USD, 11% MSCI EM NR USD, 2% Bloomberg Barclays US Aggregate Bond TR USD, 1% Bloomberg Barclays Long Term US Treasury TR USD, 1% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Growth Year of Enrollment 2034 Portfolio

47% Dow Jones US Total Stock Market TR USD, 33% MSCI EAFE NR USD, 10% MSCI EM NR USD, 5% Bloomberg Barclays US Aggregate Bond TR USD, 1% Bloomberg Barclays Long Term US Treasury TR USD, 2% Bloomberg Barclays US Treasury US TIPS TR USD, 1% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Growth Year of Enrollment 2032 Portfolio

47% Dow Jones US Total Stock Market TR USD, 33% MSCI EAFE NR USD, 10% MSCI EM NR USD, 5% Bloomberg Barclays US Aggregate Bond TR USD, 1% Bloomberg Barclays Long Term US Treasury TR USD, 2% Bloomberg

Barclays US Treasury US TIPS TR USD, 1% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Growth Year of Enrollment 2030 Portfolio

44% Dow Jones US Total Stock Market TR USD, 31% MSCI EAFE NR USD, 10% MSCI EM NR USD, 7% Bloomberg Barclays US Aggregate Bond TR USD, 2% Bloomberg Barclays Long Term US Treasury TR USD, 3% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Growth Year of Enrollment 2028 Portfolio

42% Dow Jones US Total Stock Market TR USD, 29% MSCI EAFE NR USD, 9% MSCI EM NR USD, 12% Bloomberg Barclays US Aggregate Bond TR USD, 2% Bloomberg Barclays Long Term US Treasury TR USD, 3% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Growth Year of Enrollment 2026 Portfolio

36% Dow Jones US Total Stock Market TR USD, 26% MSCI EAFE NR USD, 8% MSCI EM NR USD, 20% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Growth Year of Enrollment 2024 Portfolio

26% Dow Jones US Total Stock Market TR USD, 18% MSCI EAFE NR USD, 6% MSCI EM NR USD, 40% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Growth Year of Enrollment 2022 Portfolio

15% Dow Jones US Total Stock Market TR USD, 11% MSCI EAFE NR USD, 4% MSCI EM NR USD, 56% Bloomberg Barclays US Aggregate Bond TR USD, 4% Bloomberg Barclays Long Term US Treasury TR USD, 7% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Growth Year of Enrollment Enrolled Portfolio

5% Dow Jones US Total Stock Market TR USD, 4% MSCI EAFE NR USD, 1% MSCI EM NR USD, 48% Bloomberg Barclays US Aggregate Bond TR USD, 4% Bloomberg Barclays Long Term US Treasury TR USD, 6% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 30% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

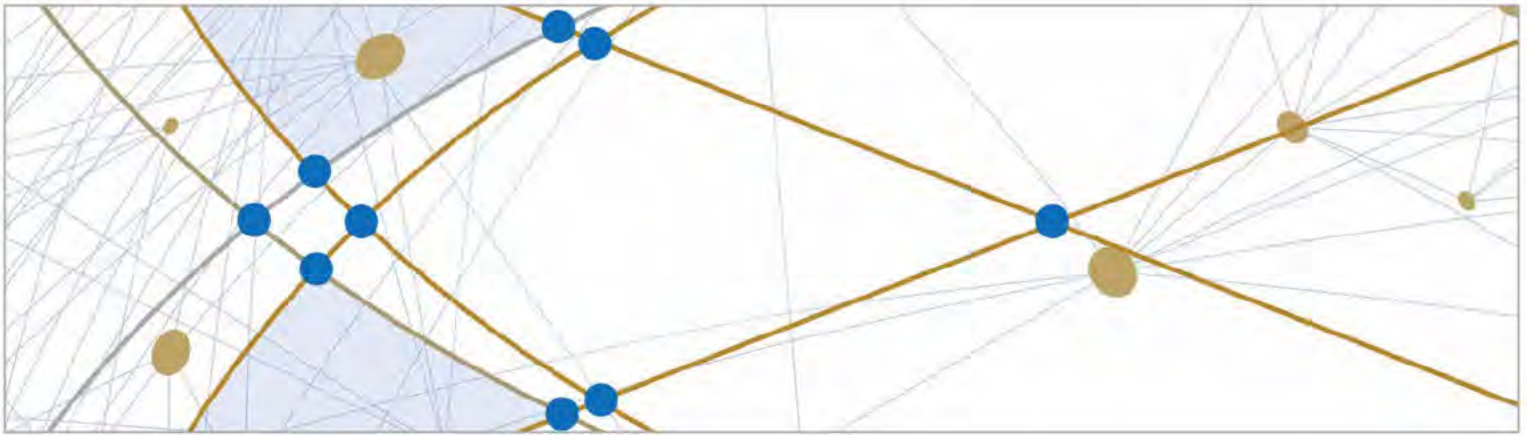
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Tax considerations, while important, are just one factor to consider before making any investment decision. **Lockwood is not a tax advisor and this communication does not constitute tax advice.** Advisors should consult with a qualified tax professional for specific tax advice.

For more information about Lockwood, as well as its products, fees and services, please refer to Lockwood's Form CRS (Customer Relationship Summary) and applicable Form ADV Part 2, Wrap Fee Brochure (Managed 360® Program, Managed Account Advisor Program, Lockwood Sponsored Program, Co-Sponsored Programs or the Firm

Brochure) which may be obtained through your financial advisor or by writing to: Lockwood, Attn: Legal Department (AIM #19K-0203), 760 Moore Road, King of Prussia, PA 19406, or by calling (800) 200-3033, option 3.

BNY Mellon Cybersecurity Program Overview



BNY Mellon

Cybersecurity Program Overview

Our Strategy

Technology reveals a world of possibility for financial services institutions, and also exposes companies to attacks by sophisticated adversaries. Today's cybersecurity threat landscape encompasses a vast array of evolving risks and exposures: nation states seeking to steal and exploit intellectual property and insights, hacktivists aiming to cripple services to inflict reputational damage, and criminal enterprises and insiders working for financial gain.

BNY Mellon takes these risks seriously. Protecting the confidentiality, integrity and availability of our information is paramount to our business and our clients—and underpins our corporate values.

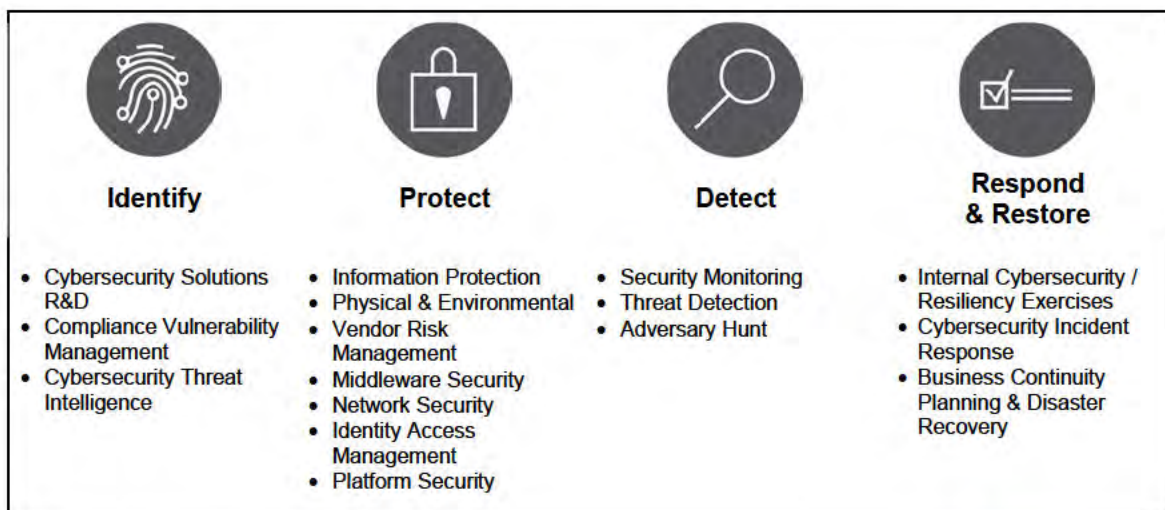
Over many years, we have invested in evolving our cybersecurity program—developing our people, processes and systems. We have in place multiple levels of IT-related threat protection and preemptive computer security measures designed to protect the company and our clients. Protecting our information requires a strong defense on all fronts: from

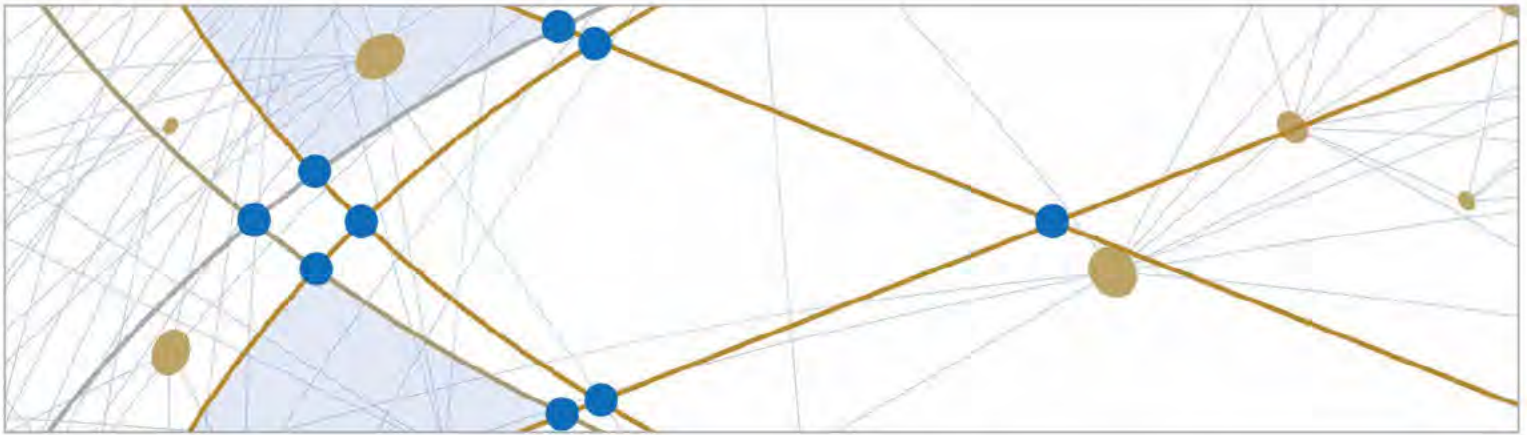
building upon our dynamic cybersecurity strategy to developing, implementing and managing our comprehensive controls and information security services.

Our cybersecurity program is designed to stay ahead of, and effectively respond to, cybersecurity threats and their diverse, multi-faceted attacks—protecting the security, integrity and uninterrupted delivery of information so that we can support our company's and our clients' objectives. It coordinates closely with BNY Mellon's Enterprise Resiliency Office, which aligns, centralizes and integrates disciplines and capabilities to deliver timely and effective incident identification, impact assessment, escalation, communication and resolution; provide clients with superior service; and deliver resilient world-class products and services.

Our Approach

Our cybersecurity program, which includes controls that are aligned to national and international industry standards, is certified, independently attested and regularly updated to keep pace with the changing threat landscape.





In addition to a multi-layered control infrastructure with built-in redundancies and checks, our program:

- Leverages threat intelligence capabilities that aid investigations and inform key business decisions;
- Monitors our enterprise for vulnerabilities and risks and rapidly responds to threats;
- Evolves our cybersecurity and risk management program to stay ahead of the dynamic threat landscape; and
- Collaborates across our businesses and our technology, risk, compliance, and internal audit organizations to ensure a consistent and transparent approach.

Governance

We maintain strong internal controls, including policies and standards, which are regularly reviewed. We monitor changing regulatory requirements, guidelines and technologies in all countries in which we operate to make sure our global program is aligned with industry and business best practices. Our program is benchmarked against leading standards such as ISO 27001/2, COBIT and the NIST Cybersecurity Framework.

Information risk officers are aligned to our business units and work to ensure policies, standards and guidelines are applied at the business level. We also collaborate and report on cybersecurity risk with various internal risk governance committees, including the Board of Directors, to address key issues involving risk.

Network and Information Protection

We separate BNY Mellon's own computing environments from publicly accessible environments. We also use "defense in depth," where multiple layers of security controls are placed throughout information technology systems. This deliberate redundancy protects the firm and its assets in case a security control fails or a vulnerability is exploited.

Vulnerability Detection

Our teams are constantly monitoring and assessing our internal and client-facing systems for potential vulnerabilities and threats in an effort to safeguard the confidentiality, integrity and availability of information. Our investigation teams use many of the same tools and strategies as cyber attackers—to look for evidence of unauthorized access as well as gaps and vulnerabilities that can be proactively addressed before they can be detected and exploited by cyber attackers. We continue to invest in and implement protections designed to pre-empt potential attacks.

Third-Party Risk Management

We operate an end-to-end third-party risk management program and escalation process to onboard, monitor, and assess information risk associated with third-party providers. We evolve our assessment model to keep pace with business and technology changes and regulatory compliance.

Cybersecurity Threat Intelligence

We regularly receive information on potential cybersecurity threats from diverse sources including our peers, the broader financial services industry, as well as law enforcement, government, and a variety of other public and private sources. We integrate current actionable intelligence concerning cyber-related threats with enterprise security, risk and vulnerability mitigation activities. By providing trusted third-party and open-source intelligence concerning threat actors, attack methodologies, and adversary intent and capabilities, we increase situational and contextual awareness.

Cybersecurity/Resiliency Exercises

We conduct internal cybersecurity and resiliency exercises, based on various attack/outage scenarios, to help raise awareness, evaluate resiliency, assess communication protocols and test alternative procedures in the event of a hypothetical cyberattack/system outage. In addition, we participate in industry-led exercises to help coordinate responses to significant cybersecurity incidents.

Training and Awareness

We perform annual information risk refresher training and conduct ongoing risk awareness campaigns to empower our staff worldwide to serve as risk defenders of our company and its information assets.

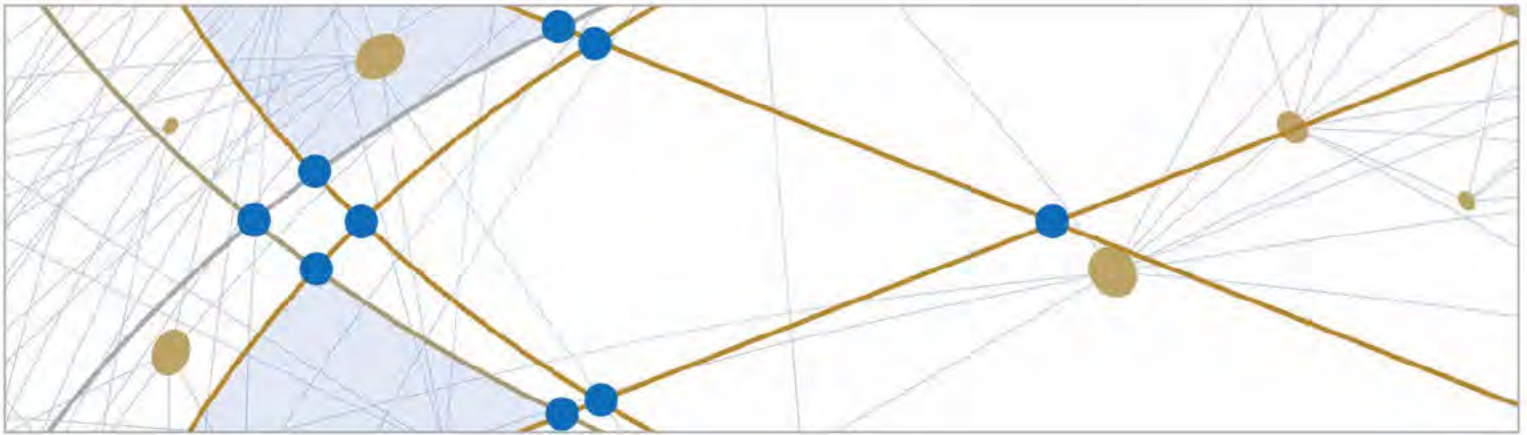
Insurance

We maintain appropriate coverage for computer crime, privacy and Internet liability. All coverage is regularly reviewed and renewed prior to expiration dates. Our policies are stand-alone policies and loss limits are not combined.

Cybersecurity Incident Response

Our dedicated team of incident responders rapidly deploys in the event of a cybersecurity threat or incident. The team maintains the ability to conduct host and network forensics across the BNY Mellon enterprise to assess and contain a cybersecurity event.





The following additional materials are available upon request:

- Evidence of our ISO 27001:2013 certification, audited by BSI and valid until September 2021.
- SSAE certification SOC1 and CMITs reports relevant to the services provided.
- BNY Mellon's Information Protection Policies Overview.

BNY Mellon

BNY Mellon is the investments company servicing the world. We provide investment management and investment services that help individuals and institutions invest, conduct business and transact in markets all over the world. We play an integral role in the infrastructure of the world's capital markets, a role that requires stringent adherence to regulatory requirements and industry standards.

BNY Mellon actively participates in several key industry organizations such as the Securities Industry and Financial Markets Association (SIFMA), Financial Services Information Sharing & Analysis Center (FS-ISAC) and Financial Services Sector Coordinating Council (FSSCC). Our active engagement in these and other forums confirms our best practices in many areas and supports our philosophy of continuous improvement.

ISO 27001 CERTIFICATION

BNY Mellon has achieved ISO 27001 Certification of its Information Security Management System framework, including but not limited to:



- | | | |
|-----------------------------------|--------------------------------------|--|
| • Antivirus Management | • Desktop Security | • Organization of Information Security |
| • Asset Management | • HR Security | • Patch Management |
| • Backup & Restoration Management | • Incident / Problem Management | • Physical Security |
| • Capacity Management | • Information Security Continuity | • Remote Access Management |
| • Change Management | • Information Security Policies | • Supplier Management |
| • Compliance | • Information Systems Audit Controls | • Transport and Storage of Media |
| • Cryptography | • Logging & Monitoring | • User Access Management |
| • Data Centers | • Network Devices | • Vulnerability Management |

Information Classification: Public

BNY Mellon is the corporate brand of The Bank of New York Mellon Corporation and may be used as a generic term to reference the corporation as a whole and/or its various subsidiaries generally. BNY Mellon is not responsible for updating any information contained within this material and information contained herein is subject to change without notice. BNY Mellon assumes no direct or consequential liability for any errors in or reliance upon this material. This material may not be reproduced or disseminated in any form without the prior written permission of BNY Mellon.

Attachment 2: Confidential or Proprietary Information Form

CONTRACT NUMBER: TRE-CPM-20102

☐ By checking this box, Vendor acknowledges that its proposal does not contain any information it declares to be confidential or proprietary for the purpose of production under FOIA.

Confidentiality or Proprietary Information
Client List and Client Names: pages 2, 7, 8, 17, 21 of the questionnaire response
Business References- Tab E
Pricing Proposal

Note: Use additional pages as necessary.

Attachment 3: Exception Form

CONTRACT NUMBER: TRE-CPM-20102

Proposals must include all exceptions to the specifications, terms or conditions contained in this solicitation, including all attachments and appendices. If Vendor is submitting the proposal without exceptions, please state so below.

☐ By checking this box, Vendor acknowledges that it takes no exception to the specifications, terms or conditions found in this solicitation, including the terms of the PSA.

Paragraph # and page #	Exceptions to specifications, terms or conditions	Proposed alternative
Paragraph 1.1, new Paragraphs 1.2 and 1.3, pages 1-2.	Revised to further describe "Services", Subcontracting of Services, and the Standard of Care applicable to Vendor and the investment advisor.	<p>Services, Standard of Care and Term.</p> <p>"Services" means all necessary and appropriate administration, custody, fund accounting, advisory, recordkeeping services, and transition services that Vendor and its affiliated subcontractors shall provide the State for the 529 Plan as set forth herein and/or as specified on Exhibit 1 (Statement of Work) to this Agreement. The Services shall not include, and Vendor shall have no responsibility for brokerage services or any services rendered by other third parties who are not subcontractors or affiliates of Vendor.</p> <p>Subcontracting of Services. OST hereby acknowledges that Vendor shall have the right to subcontract certain Services, including (i) advisory services; (ii) recordkeeping services; (iii) custody services; (iv) fund accounting services; and (v) administration services required hereunder. However, Vendor may not subcontract any material portion of the Services provided under this Agreement to an entity unaffiliated with Vendor without obtaining the prior written approval of OST, which approval shall not be unreasonably denied. Any such subcontract or assignment to an affiliated subcontractor shall be contingent on the following in order to protect the interests of OST: Before OST's approval of any subcontract or assignment is effective, Vendor shall (i) have provided all prospective subcontractors and assignees with a copy of this executed Agreement, including all</p>

		<p>Exhibits and Schedules annexed hereto and (ii) obtained the prospective subcontractor's or assignees signed affirmation that it has received a copy of this executed Agreement all Exhibits and Schedules annexed hereto, and, with respect to the performance of such Services as are subcontracted or assigned, agrees to be bound by all terms and conditions to which Vendor is bound.</p> <p>Notwithstanding the foregoing, Vendor is responsible for ensuring that all terms, conditions, assurances and certifications set forth in this Agreement are carried forward to any subcontracts. Notwithstanding the foregoing, OST hereby approves the subcontracting of the following services to the following affiliates: (i) Lockwood Advisors, Inc. for advisory services; (ii) The Bank of New York Mellon for custody services and fund accounting services; and (iii) BNY Investment Management Services LLC for recordkeeping services. Vendor shall be liable and responsible for the actions of any subcontractor as if Vendor had performed those duties itself. Vendor represents and warrants that OST shall be an express and intended third party beneficiary of each subcontract, and agrees, at OST's request, to provide it with copies of all relevant contracts, agreements, or memoranda of understanding with its subcontractors.</p> <p>Standard of Care.</p> <p>Vendor acknowledges that its affiliated subcontractor providing advisory services under this Agreement for the benefit of OST has fiduciary duties to OST pursuant to the Investment Advisers Act of 1940, as amended, with respect to the advisory services, subject to the investment policies, objectives and allocations for each of the investment options adopted or approved by OST and to the requirements and limitations set forth in this Agreement.</p> <p>Vendor will perform the Services, and discharge its responsibilities, duties and obligations under this Agreement with the same degree of care and skill under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.</p>
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Paragraph 4.13, page 5	Deleted. Employment decisions are internal.	
Paragraph 4.14, page 5	Revised to reflect internal HR requirements.	Unless legally prohibited, Vendor shall promptly notify OST's Designated Contact (as defined below) in writing of any investigation, examination or other proceeding involving Vendor's Services provided under this Agreement commenced by any regulatory or law enforcement agency and involving allegations of fraud or illegal conduct.
Paragraph 5.2, page 6	Revised to reflect Vendor's intellectual property rights.	All materials, information, documents, reports and other work product, whether finished, unfinished, or draft, developed, prepared or completed by Vendor ("Program Records or Materials") for the State relating to the Services shall become the property of the State and shall be delivered upon request. The State shall have the right to reproduce and disclose all work product related to the Agreement. The State's rights under this Section shall survive termination of the Agreement. For clarity, Vendor will be the sole owner of all intellectual property rights relating to the structure and operation of the offered Services (such as methodologies and know-how, software and analytical tools) as are otherwise owned by Vendor or their respective Affiliates and utilized or developed by or for Vendor for the administration of the Services.
Paragraph 6.1, page 6	Revised to define "Confidential Material" as information related to the 529 Plan.	"Confidential Material," as used herein, means all agreements and other documents and data that contain confidential commercial, financial, consumer, or other confidential information of the State related to the 529 Plan, whether or not such agreements or other documents are marked "confidential" or otherwise designated as confidential by OST.
Paragraph 6.4, pages 6-7	Revised to reflect Vendor's use of Confidential Material as required to execute its duties under the Agreement.	Except as expressly permitted in this Section 6, Confidential Material shall not be disclosed to any individuals or third parties without the prior written consent of OST, except to the extent as may reasonably be required for Vendor to execute its duties and obligations under the Agreement, and unless such disclosure is otherwise required by law. Vendor shall promptly notify OST in writing of Vendor's receipt of a court order, subpoena or discovery requests seeking or ordering the

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		production, disclosure or inspection of any Confidential Material. Vendor shall, at the request of OST, object to any such order, subpoena or discovery and shall take all other measures that may reasonably be necessary to protect against the unwarranted production, disclosure or inspection of Confidential Material. In the event disclosure of Confidential Material is compelled or otherwise required by law, Vendor shall mark all documents submitted in connection with any such disclosure so as to indicate the confidential nature of the material and the State's interest therein.
Paragraph 6.7, page 7	Revised to reflect internal policy of providing prompt notice of known security breaches only.	Vendor shall promptly disclose to OST the discovery of any security breach involving Confidential Material and shall identify the type and amount of Confidential Material that was compromised or disclosed.
New Paragraph 6.11, page 8	New Paragraph 6.11 added to reflect internal policy regarding anonymized use of client data for centralized functions.	Notwithstanding the foregoing, Vendor may: (a) use OST's Confidential Information in connection with certain functions performed on a centralized basis by Vendor, its Affiliates and joint ventures and their service providers (including audit, accounting, risk, legal, compliance, sales, administration, product communication, relationship management, compilation and analysis of customer-related data and storage); (b) disclose such information to its Affiliates and joint ventures and to its and their service providers who are subject to confidentiality obligations and (c) store the names and business contact information of OST's employees and representatives relating to this Agreement on the systems or in the records of its Affiliates and joint ventures and its and their service providers. In addition, Vendor may aggregate information regarding OST and the 529 Plan on an anonymized basis with other similar client data for Vendor's and its Affiliates' reporting, research, product development and distribution, and marketing purposes.
Paragraph 7.2, page 8	Revised to reflect internal policy.	Agreements between Vendor and third parties governing any software solutions or hardware or other products within the scope of the Agreement generally contain warranties in favor of Vendor.

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Paragraph 8.1, pages 8-9	Revised to reflect Vendor's liability for direct damages only that OST incurs as a result of Vendor's violation of the Standard of Care.	<p>To the fullest extent permitted by Applicable Law, Vendor shall indemnify, defend and hold harmless OST, the Board and the State and their respective officers, committees, members, agents and employees (the "Indemnified Parties") from direct liability, suits, actions, claims or damages, together with all reasonable costs and expenses (including attorneys' fees), arising out of Vendor's breach of the Agreement, or the negligent, reckless, intentional or other tortious, fraudulent, illegal, or unlawful conduct of Vendor or any subcontractor in violation of the Standard of Care, or their respective officers, employees or agents, arising out of or related to the Agreement ("Claims").</p> <p>Vendor's liability shall be limited solely to those direct damages that are caused by Vendor's failure to perform its obligations under this Agreement in accordance with the Standard of Care. Notwithstanding anything in this Agreement to the contrary, in no event shall Vendor be liable under this Agreement for any indirect, incidental, consequential, exemplary, punitive or special damages, or damages for lost profits or loss of business opportunity, whether or not such damages are foreseeable and even if Vendor has been advised of the possibility of such damages.</p>
Paragraph 8.2, page 9	Revised to reflect Vendor's liability for direct damages only that OST incurs as a result of Vendor's violation of the Standard of Care.	If OST notifies Vendor in writing of a Claim against an Indemnified Party, including, without limitation, any Claim based on Vendor's disclosure of or failure to safeguard any personal financial or other private or confidential information in violation of the Standard of Care, Vendor will defend such Claim at Vendor's expense if so requested by OST, in OST's sole discretion. Vendor will pay all direct costs and damages that may be finally awarded against an Indemnified Party.
Paragraph 8.3, pages 9-10	Revised to add language that describes OST's liability to Vendor for fees, breach of the Agreement, and actions taken by Vendor as required by OST; and, includes a waiver of immunity.	Notwithstanding the foregoing, OST, and the Board shall be liable to Vendor for any and all Losses (defined below) suffered, incurred or sustained by Vendor or their subcontractors, or to which Vendor or their subcontractors become subject, to the extent resulting from, arising out of or relating to non-payment of amounts due to Vendor under this Agreement, or a material breach by OST or the Board of their duties, obligations, representations, warranties or covenants under this Agreement as a result of any bad faith, grossly negligent act or

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		omission, willful misconduct, unlawful conduct, a violation of law, or fraud by OST or the Board or its officers, agents, or delegates, or as a result of actions by Vendor or its officers, employees, agents, delegates or subcontractors that were mandated or required by OST or the Board. To the extent that OST or the Board may now or hereafter be entitled to claim, for itself or its assets, immunity from suit, execution, attachment (before or after judgment) or other legal process, the OST and the Board irrevocably agree not to claim, and each hereby waives, such immunity in connection with liability under this Agreement. "Losses" shall mean direct damages, excluding, for the avoidance of doubt, indirect, incidental, consequential, exemplary, punitive or special damages, or damages for lost profits or loss of business opportunity, whether or not such damages are foreseeable and even if the Party responsible for such damages has been advised of the possibility of such damages.
Paragraph 8.6, page 10	Added Force Majeure clause	Force Majeure. Except for payment obligations hereunder, no Party shall be liable to the another Party for any failure to comply with the terms of this Agreement, for any delays in the performance thereof or for failure to perform under the terms and provisions of this Agreement, where such failure or delay is caused, directly or indirectly, by any event beyond such Party's reasonable control including, but not limited to, acts of God, acts of civil or military authority, acts of the State in its sovereign capacity, legal constraint, fires, floods, power failures, suspension of trading, epidemics or pandemics, quarantine restrictions, wars, terrorism, riots, general civil unrest, strikes or other labor disputes, work stoppages, delays in transportation and freight embargoes, or the interruption, loss or malfunction of utilities or communications or computer systems. Vendor shall promptly notify OST upon the occurrence of any such event and shall use commercially reasonable efforts to minimize its effect.
Damage Cap	Vendor did not include a Damage Cap in the Professional Services Agreement, but Vendor asks that OST consider including a Damage Cap in the final	Vendor's cumulative maximum liability to OST and all persons claiming through OST for any losses whatsoever (including but not limited to those arising out of or related to this agreement) and regardless of the form of action or legal theory shall

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	Professional Services Agreement. Sample Damage Cap language is provided.	not exceed (i) the fees received by vendor for services provided hereunder during the six months immediately prior to the date of the first reported loss; or (ii) if the first reported loss occurs during the first six months after the effective date of the agreement, the estimated fees, determined in good faith by vendor, to be paid to vendor for services provided hereunder during the first six months after the effective date.
Paragraphs 12.1.a., page 12	Revised to provide for 45 days' notice of intent to terminate and opportunity to cure.	The Agreement may be terminated by either party for default, which shall mean the failure of the other party to fulfill a material obligation under this Agreement, through no fault of the terminating party, but only after the other party is given: <p>a. Not less than forty-five 45 calendar days' written notice of intent to terminate and opportunity to cure; and</p>
Paragraph 12.2, page 12	Revised to provide for 90 days' notice of termination.	The Agreement may be terminated in whole or in part by the State for its convenience, but only after Vendor is given ninety (90) calendar days' written notice of intent to terminate.
Paragraph 13.1, page 13	Revised to reflect Vendor's ability to assign the Agreement in the event of a change of control.	Any attempt by Vendor to assign or otherwise transfer any interest in the Agreement without the prior written consent of OST shall be void; provided however, that Vendor may assign this Agreement to any successor to the business of Vendor to which this Agreement relates, in which event, Vendor agrees to provide notice of such successor to OST.
Lockwood role as non-discretionary fiduciary	Vendor did not include language that describes Lockwood's role as a non-discretionary fiduciary in the Professional Services Agreement, but Vendor asks that OST consider including this language in the final Professional Services Agreement. Sample language is provided.	Lockwood is a non-discretionary fiduciary with respect to recommendations made in the context of the Model Portfolios and Underlying Investments to the OST only. The OST acknowledges and agrees that Lockwood does not guarantee any investment results, and does not have any discretion (1) with respect to choosing to make the Model Portfolios or any Underlying Investments available in a Program, and (2) with respect to the individual Account Owners investment of the underlying assets. OST further acknowledges and agrees that Lockwood is not a fiduciary to any individual Account Holders, and is not providing investment advice nor determining the suitability of any investment for any individual Account Owner.

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Exhibit 4, page 21	Revised to reflect internal policy of providing prompt notice of known security breaches only.	I/we, as an employee(s) of or officer of my firm, when performing work for the State, understand that I/we act as an extension of DTI and therefore I/we are responsible for safeguarding the State's data and computer files as indicated above. I/we will not use, disclose, or modify State data or State computer files without the written knowledge and written authorization of the State. Furthermore, I/we understand that I/we are to take all necessary precautions to prevent unauthorized use, disclosure, or modification of State computer files, and I/we should alert my immediate supervisor of any known situation of unauthorized use, disclosure or modification of State data.
Exhibit 5, CS 1-A	Revised to reflect internal policy.	Security Standard Compliance Certifications: Vendor shall meet, and provide proof of, one or more of the following Security Certifications. CSA STAR – Cloud Security Alliance – Security, Trust & Assurance Registry (Level Two or higher) FedRAMP - Federal Risk and Authorization Management Program [Note to OST: BNYM works with cloud providers that meet these certifications.]
Exhibit 5, CS 1-B	Revised to reflect internal policy.	Background Checks: Vendor agrees it will only assign employees and subcontractors who have passed a state- approved criminal background checks. The background checks must demonstrate that staff, including subcontractors, utilized to fulfill the obligations of the contract, have no convictions, pending criminal charges, or civil suits related to any crime of dishonesty. This includes but is not limited to criminal fraud, or any conviction for any felony or misdemeanor offense for which incarceration for a minimum of 1 year is an authorized penalty. Vendor shall promote and maintain an awareness of the importance of securing the State's information among Vendor's employees and agents.
Exhibit 5, CS 2	Revised to reflect internal policy.	Breach Notification and Recovery: Vendor must notify the State promptly of any known incident resulting in the destruction, loss, unauthorized disclosure, or alteration of State data. If data is not encrypted (see CS3, below), Delaware Code (6 Del. C. §12B-100 et seq.) requires public breach notification of any incident resulting in unreasonable delay after determination of the breach, except 1) when a shorter time is required under federal law; 2) when law enforcement requests a delay; 3)

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		reasonable diligence did not identify certain residents, in which case notice will be delivered as soon as practicable. All such communication shall be coordinated with the State. Should Vendor or its employees or subcontractors be directly and solely liable for the breach, Vendor shall bear all costs actually incurred associated with investigation, response, and recovery from the breach. This includes, but is not limited to, credit monitoring services with a term of at least three (3) years, mailing costs, website, and toll-free telephone call center services. The State shall not agree to any limitation on liability that relieves Vendor or any person or entity from responsibility for its own negligence or conduct, or to the extent that it creates an obligation on the part of the State to hold any person or entity harmless.
Exhibit 5, CS 3	Revised to reflect internal policy.	Data Encryption: Vendor shall encrypt all non-public data in transit, regardless of transit mechanism. For engagements where Vendor stores personally identifiable information or other sensitive, confidential information, Vendor will protect non-public data at rest as Vendor determines to be appropriate in accordance with Vendor's information security program and any law applicable to Vendor's provision of the Services. Vendor's encryption shall meet validated cryptography standards as specified by the National Institute of Standards and Technology in FIPS140-2 and subsequent security guidelines. Vendor and the State will negotiate mutually acceptable key location and key management details. Note to OST: BNY Mellon maintains this insurance, but prefers that maintenance of such insurance not be contractually mandated.
Exhibit 6, DU1	Revised to reflect internal policy.	The State shall own all right, title and interest in its data that is related to the Services. Vendor shall not access State user accounts, or State data, except (i) in the course of data center operations, (ii) response to service or technical issues, (iii) as required by the express terms of this contract, or (iv) at OST or the State's written request. All information obtained or generated by Vendor in connection with the Agreement shall become and remain property of the State. Notwithstanding the foregoing, for clarity, Vendor will be the sole owner of all intellectual property rights relating to the structure and operation of the Services (such as methodologies and know-how, software and analytical tools) as are otherwise owned by Vendor

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		or its affiliates and utilized or developed by or for Vendor for the administration of the Services.
Exhibit 6, DU2	Revised to reflect internal policy.	<p>Except as otherwise required by applicable law, Vendor shall comply with the following conditions. At no time will any information belonging to or intended for the State be copied, disclosed, or retained by Vendor or any third party for subsequent use. Vendor will take reasonable steps to limit the use of, or disclosure of, and requests for, confidential State data. Vendor may not use any information collected in connection with the Services for any purpose other than fulfilling a Service. Protection of personally identifiable information, privacy, and sensitive data shall be an integral part of the business activities of Vendor to ensure that there is no inappropriate or unauthorized use of State information at any time. Vendor shall safeguard the confidentiality, integrity, and availability of State information.</p> <p>Only duly authorized Vendor staff will have access to State data and may be required to obtain security clearance from the State. No party related to Vendor may retain any data for subsequent use that has not been expressly authorized by the State.</p>
Exhibit 6, DU4	Revised to reflect internal policy.	<p>Unless otherwise provided in the Agreement, at no time shall any data or processes that either belong to or are intended for the use of the State be copied, disclosed, or retained by Vendor. Note to OST: Given that Sumday will use Affiliated and non-Affiliated subcontractors to service Delaware's 529 program, the Agreement must permit subcontractors' access to data/processes necessary to administer the program.</p> <p>Unless otherwise provided in the Agreement, when required by the State, Vendor shall destroy all requested data in all of its forms (e.g., disk, CD/DVD, backup tape, paper). Data shall be permanently deleted, and shall not be recoverable, in accordance with National Institute of Standards and Technology (NIST) approved methods. Vendor shall provide written certificates of destruction to OST.</p>
Exhibit 6, DU6	Revised to reflect internal policy.	Vendor must notify the State immediately of any known incident resulting in the destruction, loss, unauthorized disclosure, or alteration of State data. If data is not encrypted (see CS3, below), Delaware Code (6 Del. C. §12B-100 et seq.) requires public

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		<p>breach notification of any incident resulting in the loss or unauthorized disclosure of personally identifiable information by Vendor or its subcontractors. Vendor will provide notification to persons whose information was breached without unreasonable delay after determination of the breach, except 1) when a shorter time is required under federal law;</p> <p>2) when law enforcement requests a delay; 3) reasonable diligence did not identify certain residents, in which case notice will be delivered as soon as practicable. All such communication shall be coordinated with the State. Should Vendor or its employees or subcontractors be directly and solely liable for the breach, Vendor shall bear all costs actually incurred associated with investigation, response, and recovery from the breach. This includes, but is not limited to, credit monitoring services with a term of at least three (3) years, mailing costs, website, and toll-free telephone call center services. The State shall not agree to any limitation on liability that relieves Vendor or any person or entity from responsibility for its own negligence or conduct, or to the extent that it creates an obligation on the part of the State to hold any person or entity harmless.</p>
Exhibit 6, DU7	Revised to reflect internal policy.	<p>Vendor shall encrypt all non-public data in transit, regardless of transit mechanism. For engagements where Vendor stores personally identifiable information or other sensitive or confidential information, Vendor will protect such non-public data at rest as Vendor determines to be appropriate in accordance with Vendor's information security program and any law applicable to Vendor's provision of the Services. Vendor's encryption shall meet validated cryptography standards as specified by the National Institute of Standards and Technology in FIPS140-2 and subsequent security guidelines. Vendor and the State will negotiate mutually acceptable key location and key management details. Note to OST: BNY Mellon maintains this insurance, but prefers that maintenance of such insurance not be contractually mandated.</p>

Note: Use additional pages as necessary.

**PROFESSIONAL SERVICES AGREEMENT FOR
COLLEGE INVESTMENT PLAN PROGRAM MANAGER AND ADMINISTRATION
SERVICES**

This Professional Services Agreement (“**Agreement**”) is entered into by and between the Office of State Treasurer (“**OST**”) for the State of Delaware (the “**State**”), on behalf of the Plans Management Board (the “**Board**”), and [_____] (“**Vendor**”).

WHEREAS, the State desires to retain Vendor to provide all necessary and appropriate recordkeeping, investment management and administrative services for the State’s college investment plan under section 529 of the Internal Revenue Code (the “**529 Plan**”);

WHEREAS, Vendor desires to provide the Services on the terms set forth in the Agreement;

WHEREAS, the State and Vendor represent and warrant that each party has full right, power and authority to enter into and perform under this Agreement;

FOR AND IN CONSIDERATION OF the premises and mutual agreements herein, the State and Vendor agree as follows:

1. Services, Standard of Care and Term.

1.1. 1.1.—“Services” means all necessary and appropriate administration, custody, fund accounting, advisory, recordkeeping services, and transition services that Vendor and its affiliated subcontractors shall provide the State with all necessary and appropriate transition, recordkeeping, investment management and administrative services for the 529 Plan, including those services as set forth herein and/or as specified on Exhibit 1 (Statement of Work) to this Agreement (collectively, “Services”). The Services shall not include, and Vendor shall have no responsibility for brokerage services or any services rendered by other third parties who are not subcontractors or affiliates of Vendor.

1.2. Subcontracting of Services. OST hereby acknowledges that Vendor shall have the right to subcontract certain Services, including (i) advisory services; (ii) recordkeeping services; (iii) custody services; (iv) fund accounting services; and (v) administration services required hereunder. However, Vendor may not subcontract any material portion of the Services provided under this Agreement to an entity unaffiliated with Vendor without obtaining the prior written approval of OST, which approval shall not be unreasonably denied. Any such subcontract or assignment to an affiliated subcontractor shall be contingent on the following in order to protect the interests of OST: Before OST’s approval of any subcontract or assignment is effective, Vendor shall (i) have provided all prospective subcontractors and assignees with a copy of this executed Agreement, including all Exhibits and Schedules annexed hereto and (ii) obtained the prospective subcontractor’s or assignees signed affirmation that it has received a copy of this executed Agreement all Exhibits and Schedules annexed hereto, and, with respect to the performance of such Services as are subcontracted or assigned, agrees to be bound by all terms and conditions to which Vendor is bound. Notwithstanding the foregoing, Vendor is responsible for ensuring that all terms,

conditions, assurances and certifications set forth in this Agreement are carried forward to any subcontracts. Notwithstanding the foregoing, OST hereby approves the subcontracting of the following services to the following affiliates: (i) Lockwood Advisors, Inc. for advisory services; (ii) The Bank of New York Mellon for custody services and fund accounting services; and (iii) BNY Investment Management Services LLC for recordkeeping services. Vendor shall be liable and responsible for the actions of any subcontractor as if Vendor had performed those duties itself. Vendor represents and warrants that OST shall be an express and intended third party beneficiary of each subcontract, and agrees, at OST's request, to provide it with copies of all relevant contracts, agreements, or memoranda of understanding with its subcontractors. ~~Vendor shall serve as a co-fiduciary in connection with the provision of Services.~~

1.3. Standard of Care.

- (a) Vendor acknowledges that its affiliated subcontractor providing advisory services under this Agreement for the benefit of OST has fiduciary duties to OST pursuant to the Investment Advisers Act of 1940, as amended, with respect to the advisory services, subject to the investment policies, objectives and allocations for each of the investment options adopted or approved by OST and to the requirements and limitations set forth in this Agreement.
- (b) Vendor will perform the Services, and discharge its responsibilities, duties and obligations under this Agreement with the same degree of care and skill under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.

- 1.42. The initial term of the Agreement shall begin on the date this Agreement is fully executed, or as may be otherwise agreed upon by the parties, and shall extend for five years from that date. The State has three one-year extension options. OST, in its discretion, may exercise each option at any time prior to the expiration of the initial or extended term, as the case may be, subject only to Board approval of any such extension.
- 1.53. Vendor shall meet and confer with OST, the Board and/or any committee of the Board at such times and places as OST, the Board or a committee may reasonably request. Vendor, if requested by OST, shall participate in meetings with other State agencies concerning the Services or plan-related issues. Vendor shall keep OST staff informed of progress and provide updates to OST and the Board on the status of the Services. This interface shall include regular telephone communication, exchange of written data and analysis and other interaction as requested by OST or the Board.

2. Payment for Services and Expense

2.1. Vendor is entitled to receive compensation for Services from participants solely as provided on **Exhibit 2**. The State shall have no obligation to compensate Vendor for the performance of Services.

2.2. Vendor is solely responsible for ensuring that all Services are completed for the agreed upon fees.

2.3. All expenses incurred in the performance of Services are Vendor's responsibility. Vendor shall not be reimbursed for any expenses incurred by Vendor in the performance of the Services, including, but not limited to, travel and lodging expenses, communications charges, and computer time and supplies.

2.4. The State shall not be liable for the payment of federal, state or local sales, use or excise taxes, including any interest and penalties from any related deficiency, which may become due and payable by Vendor as a consequence of the Agreement.

3. Performance Schedule.

3.1. Vendor is responsible for completing the transition of Services and providing Services to participants and beneficiaries in a timely fashion. A preliminary transition and Services schedule is set out on **Exhibit 3**. The parties shall work together to craft a final transition and Services schedule. The final project schedule shall be agreed upon and substituted as a replacement **Exhibit 3** within 30 days from the date the Agreement is fully executed by the parties.

3.2. Any delay of Services or change in the sequence of Services, whether on the preliminary or final project schedule, must be approved in writing by OST.

3.3. In the event that Vendor fails to complete the Services or any portion thereof within the time specified in **Exhibit 3**, or with such additional time as may be granted in writing by OST, or fails to perform any Service as specified on **Exhibit 3**, or any extensions thereof, Vendor shall forfeit and promptly return to OST those amounts specified on **Exhibit 3**. Unless otherwise directed by the Board, OST shall credit all amounts so forfeited and returned to the administrative fund of the 529 Plan trust.

4. Responsibilities of Vendor.

4.1. Vendor shall be solely responsible for the professional quality, technical accuracy, timely completion, and coordination of all Services, including the quality of any third-party solutions. In performing the Services, Vendor shall adhere to generally accepted professional and technical standards and comply with all applicable federal, state and local laws, ordinances, codes and regulations.

4.2. Vendor shall be responsible for ensuring that all Services, including all solutions and deliverables furnished pursuant to the Agreement, comply with the standards promulgated by the State's Department of Technology and Information ("DTI") published at

<http://dti.delaware.gov/> and as modified from time to time by DTI during the term of the Agreement. If any Service furnished pursuant to the Agreement does not conform to DTI standards, Vendor shall, at its expense and option either (1) replace it with a conforming equivalent or (2) modify it to conform to DTI standards. Vendor shall be liable and shall indemnify, defend and hold harmless the Indemnified Parties (as defined below) for all liabilities, suits, actions or claims, together with all reasonable costs and expenses (including attorneys' fees), incurred by an Indemnified Party resulting from or attributable to Vendor's failure to comply with DTI standards and requirements, including those set forth on **Exhibits 4-6**.

- 4.3. Vendor shall execute and comply with the requirements of the Confidentiality (Non-Disclosure) and Integrity of Data Agreement attached as **Exhibit 4**.
- 4.4. It shall be Vendor's duty to assure that Vendor does not compromise the security, confidentiality, or integrity of information maintained by the State. In providing Services, Vendor will meet or exceed the standards set forth in the Top 20 Critical Security controls located at <http://www.sans.org/critical-security-controls/>.
- 4.5. Vendor shall be responsible for all security breaches involving State data (including participant and beneficiary personal identifiable information) caused by its employees and contract employees, its subcontractors, and the employees and contract employees of its subcontractors, and Vendor shall indemnify, defend and hold harmless the Indemnified Parties from any and all liabilities, suits, actions or claims, together with all reasonable costs and expenses (including attorneys' fees), arising out of such breaches.
- 4.6. Multifunction peripherals must be hardened when used or connected to the State's network.
- 4.7. Electronic information storage devices (hard drives, tapes, diskettes, compact disks, USB, multifunction peripherals, *etc.*) shall be disposed of in a manner corresponding to the classification of the stored information, up to and including physical destruction.
- 4.8. Vendor shall execute and comply with the Cloud Services Terms and Conditions Agreement attached as **Exhibit 5**.
- 4.9. Vendor shall execute and comply with the Data Usage Terms and Conditions Agreement attached as **Exhibit 6**.
- 4.10. It shall be the duty of Vendor to assure that all Services are technically sound and in conformance with all applicable federal, state and local statutes, codes, ordinances, resolutions and other regulations, rules and industry standards applicable to the Services. Vendor will not provide a Service that infringes on any copyright, trademark, patent or other intellectual property rights. Vendor shall, without additional compensation, immediately correct or revise any errors or omissions in the solution and shall indemnify, defend and hold harmless the Indemnified Parties for all liabilities, suits, actions or claims, together with all reasonable costs and expenses (including attorneys' fees), incurred by an

Indemnified Party resulting from or attributable to Vendor's failure to comply with this Section.

- 4.11. The State's knowledge, review, approval, or acceptance of, or payment for, any Service shall not be construed to operate as an admission of any fact or circumstance, or a waiver of any rights under the Agreement or otherwise, and Vendor shall be and remain liable in accordance with the terms of the Agreement and applicable law for all damages caused by Vendor's breach or negligent performance or failure to perform under the Agreement.
- 4.12. Vendor shall appoint a senior employee, reasonably acceptable to OST, who will manage the transition of Services to Vendor and act as the single point of contact to OST regarding transition-related Services. Vendor also shall appoint a senior employee, reasonably acceptable to OST, who will manage the performance of post-transitions Services and act as the single point of contact to OST once services have been transitioned to Vendor.
- 4.13. ~~[Intentionally Blank]Upon receipt of written notice from OST that a senior or other employee of Vendor is unsuitable for good cause, Vendor shall remove such employee from the performance of Services and substitute in his/her place an employee suitable to OST.~~
- 4.14. Unless legally prohibited, Vendor shall promptly notify OST's Designated Contact (as defined below) in writing of any investigation, examination or other proceeding involving ~~Vendor's Services provided under this Agreement, or any key personnel or designated staff of Vendor or a subcontractor,~~ commenced by any regulatory or law enforcement agency and involving allegations of fraud or illegal conduct.
- 4.15. Vendor agrees that its officers and employees will cooperate with OST in the performance of Services and will be available for consultation with OST and the Board or its committees upon reasonable request.
- 4.16. Vendor has or will retain such employees as it may need to perform the Services.
- 4.17. Vendor will not use OST's, the Board's or the State's name, either express or implied, in any of its advertising or sales materials without OST's express written consent.
- 4.18. Vendor represents that it is properly licensed, registered and authorized to transact business in the State.
- 4.19. Vendor will provide to OST audited or unaudited financial statements, as requested by OST.

5. OST Responsibilities/Representations.

- 5.1. OST agrees that its officers and employees will cooperate with Vendor in the performance of Services and will be available for consultation with Vendor upon reasonable request.

II. Ownership of Work Product and Data.

- 5.2. All materials, information, documents, reports and other work product, whether finished, unfinished, or draft, developed, prepared or completed by Vendor (“Program Records or Materials”) for the State relating to the Services shall become the property of the State and shall be delivered upon request. The State shall have the right to reproduce and disclose all work product related to the Agreement. The State’s rights under this Section shall survive termination of the Agreement. For clarity, Vendor will be the sole owner of all intellectual property rights relating to the structure and operation of the offered Services (such as methodologies and know-how, software and analytical tools) as are otherwise owned by Vendor or their respective Affiliates and utilized or developed by or for Vendor for the administration of the Services.
- 5.3. The State shall retain title and interest to all data and documents related to the Services. Upon termination of the Agreement, and for a period of six (6) months thereafter, OST and the State shall have access to all State data and documents and related activity and other reports available in connection with the Services. Promptly after such six (6) month period, all State data and documents and related activity and other reports shall be retained and returned or destroyed in accordance with Section 67.8.

6. Confidential Information of the State.

- 6.1. “Confidential Material,” as used herein, means all agreements and other documents and data that contain confidential commercial, financial, consumer, or other confidential information of the State related to the 529 Plan, whether or not such agreements or other documents are marked “confidential” or otherwise designated as confidential by OST.
- 6.2. Confidential Material shall be used by Vendor solely for purposes of executing its duties and obligations under the Agreement. Vendor may disclose Confidential Material only to those Vendor employees who have a need to access Confidential Material in the scope of their employment for Vendor, and who have been informed, understand and acknowledge in writing that Confidential Material is highly sensitive and confidential and must be held in strictest confidence.
- 6.3. Confidential Material shall not be copied or reproduced without the express written permission of OST, except for such copies as may reasonably be required for Vendor to execute its duties and obligations under the Agreement. Except as contemplated by the Agreement, Vendor shall not store or aggregate in a data base or other electronic storage means any Confidential Material; provided, however, that Vendor is permitted to store Confidential Material in physical or electronic files in accordance with this Section 7 while executing its duties under the Agreement and for a reasonable period of time thereafter, after which the Confidential Materials, including all physical and electronic copies, shall be returned or destroyed in accordance with Section 67.8.
- 6.4. Except as expressly permitted in this Section 76, Confidential Material shall not be disclosed to any individuals or third parties without the prior written consent of OST, except to the

extent as may reasonably be required for Vendor to execute its duties and obligations under the Agreement, and unless such disclosure is otherwise required by law. Vendor shall ~~immediately-promptly~~ notify OST in writing of Vendor's receipt of a court order, subpoena or discovery requests seeking or ordering the production, disclosure or inspection of any Confidential Material. Vendor shall, at the request of OST, object to any such order, subpoena or discovery and shall take all other measures that may reasonably be necessary to protect against the unwarranted production, disclosure or inspection of Confidential Material. In the event disclosure of Confidential Material is compelled or otherwise required by law, Vendor shall mark all documents submitted in connection with any such disclosure so as to indicate the confidential nature of the material and the State's interest therein.

6.5. This Section ~~67~~ shall not restrict the disclosure or use of Confidential Material that:

- a. is in the public domain at the time of disclosure or thereafter enters the public domain through no breach of the Agreement;
- b. is in the possession of Vendor without restrictions when received;
- c. has been lawfully obtained or is lawfully obtainable without restrictions from a source other than the State through no breach of the Agreement;
- d. has been developed independently by Vendor and without reliance upon Confidential Material.

6.6. Vendor shall take commercially reasonable steps to restrict access to and otherwise safeguard the confidentiality and integrity of Confidential Material at all times, including, without limitation, the implementation of electronic security procedures and other measures designed to ensure that all Confidential Material is properly stored and protected at all times.

6.7. Vendor shall ~~immediately-promptly~~ disclose to OST the discovery of any security breach ~~or suspicious intrusion~~ involving Confidential Material and shall identify the type and amount of Confidential Material that was compromised or disclosed.

6.8. Unless otherwise agreed, within six (6) months from the termination of the Agreement, all Confidential Material, regardless of form, shall, at OST's option, be returned to OST or destroyed in accordance with all applicable law, orders, rules and regulations and industry best practices. Any electronic data or documents destroyed or deleted under this Section ~~76.8~~ shall be permanently deleted and shall not be recoverable, according to the National Institute of Standards and Technology's approved methods. If requested, Vendor shall provide a destruction certificate to OST listing the type and contents of electronic records or physical documents destroyed or permanently deleted under this Section ~~67.8~~. Notwithstanding the foregoing, Vendor may retain State data or documents for any period if and as required by applicable law; provided, however that Vendor shall thereafter store and protect such data and documents as required by the Agreement, the applicable provisions of

which shall survive termination, and delete or destroy all such data and documents at the conclusion of such period.

- 6.9. The State shall have no obligation to disclose Confidential Material. The State may, in its discretion, provide or refuse to provide Confidential Material requested by Vendor.
- 6.10. Vendor understands and agrees that the State may suffer irreparable harm in the event that Vendor or its employees fail to comply with their obligations hereunder and that monetary damages may not be adequate to compensate the State for such breach. Vendor agrees that the State, in addition to other remedies available to it at law or in equity for actual damages, shall be entitled to seek injunctive relief to enforce the terms of this Section ~~6.7~~.

6.11. Notwithstanding the foregoing, Vendor may: (a) use OST's Confidential Information in connection with certain functions performed on a centralized basis by Vendor, its Affiliates and joint ventures and their service providers (including audit, accounting, risk, legal, compliance, sales, administration, product communication, relationship management, compilation and analysis of customer-related data and storage); (b) disclose such information to its Affiliates and joint ventures and to its and their service providers who are subject to confidentiality obligations and (c) store the names and business contact information of OST's employees and representatives relating to this Agreement on the systems or in the records of its Affiliates and joint ventures and its and their service providers. In addition, Vendor may aggregate information regarding OST and the 529 Plan on an anonymized basis with other similar client data for Vendor's and its Affiliates' reporting, research, product development and distribution, and marketing purposes.

7. Warranty.

- 7.1. Vendor agrees to correct or re-perform any Services not in compliance with this Agreement.
- 7.2. Agreements between Vendor and third parties governing any Third party software solutions or hardware or other products within the scope of the Agreement generally contain warranties in favor of Vendor, are warranted under the terms and conditions of the licenses or other agreements by which such products are governed. With respect to all third party products sold, licensed or offered by Vendor in connection with the provision of the Services, if any, Vendor shall pass through or assign to the State all rights Vendor obtains from the manufacturers and/or vendor of such products and services (including warranty and indemnification rights), to the extent that such rights are assignable. To the extent such rights are not assignable, Vendor shall honor all such third party software and hardware warranties and indemnification obligations.

8. Indemnification; Limitation of Liability.

- 8.1. To the fullest extent permitted by Applicable Law, Vendor shall indemnify, defend and hold harmless OST, the Board and the State and their respective officers, committees, members, agents and employees (the "Indemnified Parties") from ~~any and all direct~~

Commented [B/L1]: Note to OST: We note that the Agreement contains liability provisions in Sections 4.2, 4.5, 4.10, 4.11, 6.10, 10.3, 13.3 and 15.9. We would like to work with Delaware to consolidate the liability provisions in a single liability provision such as Section 8.

liability, suits, actions, claims or damages, together with all reasonable costs and expenses (including attorneys' fees), arising out of Vendor's breach of the Agreement, or the negligent, reckless, intentional or other tortious, fraudulent, illegal, or unlawful conduct of Vendor or any subcontractor in violation of the Standard of Care or independent contractor, or their respective officers, employees or agents, arising out of or related to the Agreement ("Claims").

Vendor's liability shall be limited solely to those direct damages that are caused by Vendor's failure to perform its obligations under this Agreement in accordance with the Standard of Care. Notwithstanding anything in this Agreement to the contrary, in no event shall Vendor be liable under this Agreement for any indirect, incidental, consequential, exemplary, punitive or special damages, or damages for lost profits or loss of business opportunity, whether or not such damages are foreseeable and even if Vendor has been advised of the possibility of such damages.

- 8.2. If OST notifies Vendor in writing of a Claim against an Indemnified Party, including, without limitation, any Claim based on Vendor's disclosure of or failure to safeguard any personal financial or other private or confidential information in violation of the Standard of Care, Vendor will defend such Claim at Vendor's expense if so requested by OST, in OST's sole discretion. Vendor will pay all direct costs and damages that may be finally awarded against an Indemnified Party.
- 8.3. Neither OST, the Board, the State, nor any other department, agency or instrumentality thereof, nor any committee, officer, member, agent or employee of the foregoing, shall have any liability to Vendor or any other party for fees (including attorneys' fees), expenses, suits, actions, claims or damages, whether direct or indirect, compensatory or punitive, actual or consequential, in or for actions, claims, causes of action or rights, including indemnification rights, arising out of or related in any way to the Agreement.

Notwithstanding the foregoing, OST, and the Board shall be liable to Vendor for any and all Losses (defined below) suffered, incurred or sustained by Vendor or their subcontractors, or to which Vendor or their subcontractors become subject, to the extent resulting from, arising out of or relating to non-payment of amounts due to Vendor under this Agreement, or a material breach by OST or the Board of their duties, obligations, representations, warranties or covenants under this Agreement as a result of any bad faith, grossly negligent act or omission, willful misconduct, unlawful conduct, a violation of law, or fraud by OST or the Board or its officers, agents, or delegates, or as a result of actions by Vendor or its officers, employees, agents, delegates or subcontractors that were mandated or required by OST or the Board. To the extent that OST or the Board may now or hereafter be entitled to claim, for itself or its assets, immunity from suit, execution, attachment (before or after judgment) or other legal process, the OST and the Board irrevocably agree not to claim, and each hereby waives, such immunity in connection with liability under this Agreement. "Losses" shall mean direct damages, excluding, for the avoidance of doubt, indirect, incidental, consequential, exemplary, punitive or special damages, or damages for lost profits or loss of business opportunity, whether or not such damages are foreseeable and

even if the Party responsible for such damages has been advised of the possibility of such damages.

- 8.4. Notwithstanding anything to the contrary herein, no provision of this Agreement shall constitute a waiver or limitation of any right of OST, the Board or the State that may exist under applicable law.
- 8.5. Notwithstanding anything to the contrary herein, to the extent available under applicable law, OST, the Board and the State and their respective committees, officers, members, agents and employees expressly reserve all rights, claims, arguments, defenses and immunities, including, without limitation, claims or defenses based on sovereign immunity, qualified immunity and other statutory or common law rights, claims, defenses or immunities; provided, however, that Vendor shall have the right to seek to enforce the Agreement in the courts of this State.

8.6 Force Majeure. Except for payment obligations hereunder, no Party shall be liable to the another Party for any failure to comply with the terms of this Agreement, for any delays in the performance thereof or for failure to perform under the terms and provisions of this Agreement, where such failure or delay is caused, directly or indirectly, by any event beyond such Party's reasonable control including, but not limited to, acts of God, acts of civil or military authority, acts of the State in its sovereign capacity, legal constraint, fires, floods, power failures, suspension of trading, epidemics or pandemics, quarantine restrictions, wars, terrorism, riots, general civil unrest, strikes or other labor disputes, work stoppages, delays in transportation and freight embargoes, or the interruption, loss or malfunction of utilities or communications or computer systems. Vendor shall promptly notify OST upon the occurrence of any such event and shall use commercially reasonable efforts to minimize its effect.

9. Insurance.

- 9.1. Vendor shall maintain the following insurance during the term of the Agreement:
- a. Worker's Compensation and Employer's Liability Insurance in accordance with applicable law;
 - b. Comprehensive General Liability—\$1,000,000 per occurrence/\$3,000,000 per aggregate;
 - c. Professional Liability—\$5,000,000 per occurrence/\$5,000,000 per aggregate;
 - d. Miscellaneous Errors and Omissions—\$1,000,000 per occurrence/\$3,000,000 per aggregate;

- e. Automotive Liability Insurance covering all automotive units used in the work with limits of not less than \$100,000 for each person and \$300,000 for each accident as to bodily injury and \$25,000 as to property damage to others; and
 - f. Excess/Umbrella policy - Excess/Umbrella \$10,000,000 total (sits above underlying worker's compensation and employer's liability, general liability, professional liability, and business automotive liability).
- 9.2. In addition to the insurance policies required by Section 10.1, Vendor must maintain cyber security liability insurance coverage with limits of \$5,000,000 per occurrence/\$5,000,000 per aggregate for loss resulting from a data breach. The policy shall be issued by an insurance company with an A.M. Best Rating of A- VII and shall remain in place for the term of the Agreement. Notwithstanding anything in **Exhibit 5**, Vendor shall immediately notify OST when Vendor becomes aware of a security breach involving State data.
- 9.3. Should any of the above-described policies be cancelled before the expiration date thereof, notice will be delivered to OST.
- 9.4. Before any work is performed pursuant to the Agreement, the Certificate of Insurance and/or copies of the insurance policies specified in Sections 10.1 and 10.2 shall be provided to OST. The certificate holder is as follows:

**Office of the State Treasurer
820 Silver Lake Blvd., Suite 100
Dover, DE 19904**

- 9.5. In no event shall OST, the Board, the State, or their respective committees, officers, members, agents or employees, be named as an additional insured on any policy required under the Agreement.

10. Independent Contractor.

- 10.1. It is understood that in the performance of the Services, Vendor is an independent contractor, not an agent or employee of OST, the Board or the State, and shall furnish such Services in its own manner and method, except as required by the Agreement.
- 10.2. Except as provided in Section 4, above, Vendor has and shall retain the right to exercise full control over the employment, direction, compensation and discharge of all persons employed by Vendor in the performance of the Services; provided, however, that Vendor will, subject to scheduling and staffing considerations, attempt to honor OST's request for specific individuals.
- 10.3. Vendor shall be solely responsible for, and shall indemnify, defend and hold the Indemnified Parties harmless from all matters relating to the payment of Vendor's employees and any subcontractor's or independent contractor's employees, including

compliance with Social Security, withholding and all other wages, salaries, benefits, taxes, exactions, and regulations of any nature whatsoever.

- 10.4. Vendor acknowledges that Vendor and any agents or employees employed by Vendor shall not, under any circumstances, be considered employees of the State, and that they shall not be entitled to any of the compensation, benefits or rights afforded employees of the State, including, but not limited to, sick leave, vacation leave, holiday pay, pension benefits, and health, life, dental, long-term disability and workers' compensation insurance benefits.
- 10.5. Vendor shall be responsible for providing liability insurance for its personnel.
- 10.6. As an independent contractor, Vendor has no authority to bind or commit OST, the Board or the State. Nothing herein shall be deemed or construed to create a joint venture, partnership, or agency relationship between the parties for any purpose.

11. [Reserved.]

12. Termination.

- 12.1. The Agreement may be terminated by either party for default, which shall mean the failure of the other party to fulfill a material obligation under this Agreement, through no fault of the terminating party, but only after the other party is given:
 - a. Not less than ~~forty-five~~ 45~~30~~ calendar days' written notice of intent to terminate and opportunity to cure; and
 - b. An opportunity for consultation with the terminating party prior to termination.
- 12.2. The Agreement may be terminated in whole or in part by the State for its convenience, but only after Vendor is given ~~ninety (90)~~sixty (60) calendar days' written notice of intent to terminate.
- 12.3. Vendor is entitled to compensation earned for Services provided as of the effective date of termination.
- 12.4. In connection with any notice issued under this Section ~~12.3~~, the State may immediately retain another vendor to perform the Services. Vendor shall at all times cooperate in the transition and shall, at no cost to the State, perform such services as OST or the Board shall determine are necessary or appropriate to enable the transition of work to a successor vendor or vendor. Vendor's obligation to provide transition services shall survive termination and shall continue until such date as is communicated in writing to Vendor that such services are no longer needed.
- 12.5. If after termination for breach it is determined that Vendor has not so failed, the termination shall be deemed to have been effected for convenience.

- 12.6. The termination of the Agreement shall not terminate any rights or obligations that are reasonably intended to extend beyond termination, including Vendor's indemnification and confidentiality obligations.
- 12.7. The rights and remedies of OST, the Board and the State provided in this Section are in addition to any other rights and remedies provided by law or under the Agreement.
- 12.8. Gratuities.
- a. OST may, by written notice to Vendor, terminate the Agreement without liability if it is found that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by Vendor or any agent or representative of Vendor to any officer or employee of OST, the Board or the State with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending or making of any determinations with respect to the performance of the Agreement.
 - b. In the event the Agreement is terminated as provided in Section 123.8.a, the State shall be entitled to pursue the same remedies against Vendor it could pursue in the event of a breach of the Agreement by Vendor.
- 12.9. The validity and enforcement of the Agreement is subject to appropriations by the General Assembly of the specific funds necessary for contract performance. If such funds are not so appropriated, (a) OST may immediately terminate the Agreement without liability, and (b) the Agreement shall be terminated without liability as to any obligation of the State requiring the expenditure of money for which no specific appropriation is available.

13. Assignment; Subcontracts.

- 13.1. Any attempt by Vendor to assign or otherwise transfer any interest in the Agreement without the prior written consent of OST shall be void; provided however, that Vendor may assign this Agreement to any successor to the business of Vendor to which this Agreement relates, in which event, Vendor agrees to provide notice of such successor to OST.
- 13.2. Vendor's employees shall perform all Services, unless OST ~~consents~~ consents in writing to Vendor's request to use temporary staff, independent contractors or a subcontractor. Neither approval by OST of any such request, nor OST's acceptance of any solution or deliverable, or payment of any invoice, shall relieve Vendor of responsibility for the professional and technical accuracy and adequacy of the Services. All temporary staff, independent contractors and subcontractors shall adhere to and be bound by all applicable provisions of this Agreement, including all exhibits.
- 13.3. Vendor shall be and remain liable for all damages to OST, the Board and the State caused by the negligent performance or non-performance of work under the Agreement by any use temporary staff, independent contractors or a subcontractor.

- 13.4. The compensation due to Vendor pursuant to **Exhibit 2** shall not be affected by OST's approval of Vendor's request to use temporary staff, independent contractors or a subcontractor.

14. Complete Agreement.

- 14.1. This Agreement and its exhibits, which are incorporated herein by reference, constitute the entire agreement between the State and Vendor with respect to the subject matter of the Agreement and shall not be modified or changed without the express written consent of the parties. The provisions of the Agreement supersede all prior oral and written quotations, communications, agreements and understandings of the parties with respect to the subject matter of the Agreement.
- 14.2. If the scope of any provision of the Agreement is too broad in any respect to permit enforcement to its full extent, then such provision shall be enforced to the maximum extent permitted by law, and the parties hereto consent and agree that such scope may be judicially modified accordingly and that the whole of such provisions of the Agreement shall not thereby fail, but the scope of such provision shall be curtailed only to the extent necessary to conform to the law.
- 14.3. If any term or provision of the Agreement is found by a court of competent jurisdiction to be invalid, illegal or otherwise unenforceable, the same shall not affect the other terms or provisions hereof or the whole of the Agreement, but such term or provision shall be deemed modified to the extent necessary in the court's opinion to render such term or provision enforceable, and the rights and obligations of the parties shall be construed and enforced accordingly, preserving to the fullest permissible extent the intent and agreements of the parties herein set forth.
- 14.4. Each exhibit, except as otherwise agreed, shall be a complete statement of its subject matter and shall supplement, modify and supersede the terms and conditions of the Agreement.

15. Miscellaneous Provisions.

- 15.1. Neither this Agreement, nor any exhibit, may be modified or amended except by the mutual written agreement of the parties. No waiver of any provision of the Agreement shall be effective unless it is in writing and signed by the party against whom enforcement is sought.
- 15.2. The delay or failure by either party to exercise or enforce any of its rights under the Agreement shall not constitute or be deemed a waiver of that party's right thereafter to enforce those rights, nor shall any single or partial exercise of any such right preclude any other or further exercise thereof or the exercise of any other right.

- 15.3. Vendor covenants that it presently has no interest, and that it will not acquire any interest, direct or indirect, that conflicts or would conflict in any manner or degree with the performance of Services required under the Agreement. Vendor further covenants that, in the performance of said Services, no person having any such interest shall be employed.
- 15.4. Vendor acknowledges that OST, the Board and the State will not subsidize or tolerate discrimination. Vendor recognizes that its refusal to hire or do business with an individual or company due to reasons of race, color, gender, ethnicity, disability, national origin, age, or any other protected status, may result in the State declaring Vendor in breach of the Agreement, terminating the Agreement without liability and/or taking such additional action as may be warranted under the circumstances.
- 15.5. Vendor warrants that no person or selling agency has been employed or retained to solicit or secure the Agreement upon an agreement or understanding for a commission, or a percentage, brokerage or contingent fee. For breach or violation of this warranty, the State shall have the right to annul the Agreement without liability.
- 15.6. The Agreement was drafted with the joint participation of both parties and shall be construed neither against nor in favor of either, but rather in accordance with the fair meaning thereof.
- 15.7. At the option of OST, the parties shall attempt in good faith to resolve any dispute arising out of or relating to the Agreement promptly by negotiation between officials or executives who have authority to settle the controversy. All offers, promises, conduct and statements, in each case relating to dispute resolution, whether oral or written, made in the course of the negotiation by any of the parties, their agents, employees, experts and attorneys are confidential, privileged and inadmissible in any proceeding involving the parties; provided, however, that evidence that is otherwise admissible or discoverable may not be rendered inadmissible merely because it was the subject of discussion in the course of negotiation.
- 15.8. Any disputes, claims or controversies arising out of or relating to the Agreement that are not resolved through resolution pursuant to Section 165.7, may be submitted to mediation, if OST so elects in its sole discretion. Any such proceedings held pursuant to this provision shall be governed by the State's laws, and venue shall be in this State. The parties shall maintain the confidential nature of the proceedings and shall keep the terms of any resulting settlement or award confidential to the extent permissible under applicable law. Each party shall bear its own costs of mediation, including attorneys' fees and half of the mediator's fees and expenses.
- 15.9. Neither party to the Agreement shall be liable for damages resulting from delayed or defective performance of its obligations under the Agreement when such delays or defective performance arise out of causes beyond the reasonable control and without the negligence or willful misconduct of the party.
- 15.10. The Agreement (including all exhibits and content) and all information relating to Vendor's compensation for Services are public documents subject to mandatory disclosure under 29

Del. C. § 10001-10007. In the event that OST is required by law (any statute, governmental rule or regulation, or judicial or governmental order, judgment or decree) to disclose to the public any information or document reasonable designated as “confidential” by Vendor, OST will, to the extent reasonably practicable prior to disclosure, give Vendor prior written notice of such disclosure or potential disclosure. Vendor’s designation as to confidentiality is not binding on OST, the Board or the State.

15.11. The provisions of the Agreement are for the sole benefit of the parties hereto. The Agreement confers no rights, benefits or claims upon any person or entity not a party hereto.

16. Assignment of Antitrust Claims.

As consideration for the award and execution of the Agreement, Vendor hereby grants, conveys, sells, assigns and transfers to the State all of Vendor’s right, title and interest in and to all known or unknown causes of action it presently has or may now or hereafter acquire under the antitrust laws of the United States or this State relating to the Services or the Agreement.

17. Governing Law.

The Agreement shall be governed by and construed in accordance with Delaware law, without regard to conflict of laws rules or principles. Vendor consents to jurisdiction and venue in this State.

18. Notices.

Any and all notices required by the provisions of the Agreement shall be in writing and shall be mailed, certified or registered mail, return receipt requested. All notices shall be sent to the following addresses:

If to OST:

Attn: [_____] (
[_____] (“Designated Contact”)
820 Silver Lake Blvd., Suite 100
Dover, DE 19904

If to Vendor:

Attn:

IN WITNESS THEREOF, the parties hereto have caused this Agreement to be duly executed as of the date and year first above written.

**OFFICE OF THE STATE
TREASURER, on behalf of the PLANS
MANAGEMENT BOARD**

Signature

Name

Title

Date

[Vendor]

Signature

Name

Title

Date

The following five exhibits are attached and shall be considered part of this Agreement:

Exhibit 1 – Statement of Work

Exhibit 2 – Payment Schedule

Exhibit 3 – Performance Schedule

Exhibit 4 – Confidentiality (Non-Disclosure) and Integrity of Data Agreement

Exhibit 5 – Cloud Services Terms and Conditions Agreement

Exhibit 6 – Data Usage Terms and Conditions Agreement

Capitalized terms used but not defined in an exhibit shall have the meanings ascribed to such terms in the Agreement.

Exhibit 1: Statement of Work

Exhibit 2: Payment Schedule

Vendor shall be entitled to compensation for Services provided under the Agreement as provided below.

Exhibit 3: Project Schedule

Exhibit 4: Confidentiality (Non-Disclosure) & Integrity of Data Agreement

CONFIDENTIALITY (NON-DISCLOSURE) AND INTEGRITY OF DATA AGREEMENT

DTI is responsible for safeguarding the confidentiality and integrity of data in State computer files regardless of the source of those data or medium on which they are stored; e.g., electronic data, computer output microfilm (COM), tape, or disk. Computer programs developed to process State agency data will not be modified without the knowledge and written authorization of DTI. All data generated from the original source data shall be the property of the State. The control of the disclosure of those data shall be retained by the State and DTI.

I/we, as an employee(s) of _____ or officer of my firm, when performing work for the State, understand that I/we act as an extension of DTI and therefore I/we are responsible for safeguarding the State's data and computer files as indicated above. I/we will not use, disclose, or modify State data or State computer files without the written knowledge and written authorization of the State. Furthermore, I/we understand that I/we are to take all necessary precautions to prevent unauthorized use, disclosure, or modification of State computer files, and I/we should alert my immediate supervisor of any known situation ~~which might result in, or create the appearance of~~ unauthorized use, disclosure or modification of State data.

Penalty for unauthorized use, unauthorized modification of data files, or disclosure of any confidential information may mean the loss of my position and benefits, and prosecution under applicable State or federal law.

This statement applies to the undersigned Vendor and to any others working under the Vendor's direction.

I, the undersigned, hereby affirm that I have read and understand the terms of the above Confidentiality (Non-Disclosure) and Integrity of Data Agreement, and that I/we agree to abide by its terms.

Vendor Name: _____

Authorizing Official Name (print): _____

Authorizing Official Signature: _____

Date: _____

Exhibit 5: Cloud Services Terms and Conditions Agreement

PUBLIC AND NON-PUBLIC DATA OWNED BY THE STATE OF DELAWARE

Contract # _____, between State of Delaware and _____

dated _____

	Public Data	Non Data	CLOUD SERVICES (CS) TERMS
Vendor must satisfy Clause CS1-A OR Clauses CS1-B and CS1-C, AND Clause CS4 for all engagements involving non-public data. Clause CS2 is mandatory for all engagements involving on-public data. Clause CS3 is only mandatory for SaaS or PaaS engagements involving non-public data.			
S1-A	<input type="checkbox"/>	<input type="checkbox"/>	Security Standard Compliance Certifications: Vendor shall meet, and provide proof of, one or more of the following Security Certifications. CSA STAR – Cloud Security Alliance – Security, Trust & Assurance Registry (Level Two or higher) FedRAMP - Federal Risk and Authorization Management Program <u>[Note to OST: BNYM works with cloud providers that meet these certifications.]</u>
S1-B	<input type="checkbox"/>	<input type="checkbox"/>	Background Checks: Vendor must warrant that they agrees it will only assign employees and subcontractors who have passed a state- approved criminal background checks. The background checks must demonstrate that staff, including subcontractors, utilized to fulfill the obligations of the contract, have no convictions, pending criminal charges, or civil suits related to any crime of dishonesty. This includes but is not limited to criminal fraud, or any conviction for any felony or misdemeanor offense for which incarceration for a minimum of 1 year is an authorized penalty. Vendor shall promote and maintain an awareness of the importance of securing the State's information among Vendor's employees and agents. Failure to obtain and maintain all required criminal history may be deemed a material breach of the Agreement and grounds for immediate termination and denial of further work with the State.
S1-C	<input type="checkbox"/>	<input type="checkbox"/>	Responsibility: Vendor shall be responsible for ensuring its employees' and any subcontractors' compliance with the security requirements stated herein.
S2	<input type="checkbox"/>	<input type="checkbox"/>	Breach Notification and Recovery: Vendor must notify the State promptly <u>immediately</u> of any <u>known</u> incident resulting in the destruction, loss, unauthorized disclosure, or alteration of State data. If data is not encrypted (<i>see</i> CS3, below), Delaware Code (6 <i>Del. C.</i> §12B-100 et seq.) requires pubic breach notification of any incident resulting in the loss or unauthorized disclosure of personally identifiable information by Vendor or its subcontractors. Vendor will provide notification to persons whose information was breached without

	Public Data	Non Public Data	CLOUD SERVICES (CS) TERMS
			unreasonable delay but not later than 60 days after determination of the breach, except 1) when a shorter time is required under federal law; 2) when law enforcement requests a delay; 3) reasonable diligence did not identify certain residents, in which case notice will be delivered as soon as practicable. All such communication shall be coordinated with the State. Should Vendor or its employees or subcontractors be directly and solely liable for the breach, Vendor shall bear all costs actually incurred associated with investigation, response, and recovery from the breach. This includes, but is not limited to, credit monitoring services with a term of at least three (3) years, mailing costs, website, and toll-free telephone call center services. The State shall not agree to any limitation on liability that relieves Vendor or any person or entity from responsibility for its own negligence or conduct, or to the extent that it creates an obligation on the part of the State to hold any person or entity harmless.
CS3	<input type="checkbox"/>	<input type="checkbox"/>	Data Encryption: Vendor shall encrypt all non-public data in transit, regardless of transit mechanism. For engagements where Vendor stores personally identifiable information or other sensitive, confidential information, Vendor will protect shall encrypt this non-public data at rest as Vendor determines to be appropriate in accordance with Vendor's information security program and any law applicable to Vendor's provision of the Services. Vendor's encryption shall meet validated cryptography standards as specified by the National Institute of Standards and Technology in FIPS140-2 and subsequent security guidelines. Vendor and the State will negotiate mutually acceptable key location and key management details. Vendor shall maintain mandatory cyber security liability insurance coverage for the duration of the Agreement.
CS4	<input type="checkbox"/>	<input type="checkbox"/>	Notification of Legal Requests: Vendor shall contact OST upon receipt of any electronic discovery, litigation holds, discovery searches, and expert testimonies related to, or which in any way might reasonably require access to the data of the State. With regard to State data and processes, Vendor shall not respond to subpoenas, service of process, and other legal requests without first notifying OST, unless prohibited by law from providing such notice.

Commented [B/L2]: Note to OST: BNYM maintains this insurance, but prefers that maintenance of such insurance not be contractually mandated.

The terms of this document shall be incorporated into the Agreement. Any conflict between this document and the aforementioned Agreement shall be resolved by giving priority to the Agreement.

FOR OFFICIAL USE ONLY

CS4 (Public Data)
 CS1-A and CS4 (Non-Public Data) OR CS1-B and CS1-C and CS4 (Non-public Data)

CS2 (Non-public Data)

CS3 (SaaS, PaaS – Non-public Data)

VENDOR Name/Address (*print*):

VENDOR Authorizing Official Name (*print*):

VENDOR Authorizing Official Signature:

Date:

TRE-CPM-20102

Exhibit 6: Data Usage Terms and Conditions Agreement

Contract # _____, between State of Delaware
_____ and dated _____

	Public Data	Non Public Data	DATA USAGE (DU) TERMS	
DU1	√	√	Data Ownership	The State shall own all right, title and interest in its data that is related to the Services. Vendor shall not access State user accounts, or State data, except (i) in the course of data center operations, (ii) response to service or technical issues, (iii) as required by the express terms of this contract, or (iv) at OST or the State's written request. All information obtained or generated by Vendor in connection with the Agreement shall become and remain property of the State. <u>Notwithstanding the foregoing, for clarity, Vendor will be the sole owner of all intellectual property rights relating to the structure and operation of the Services (such as methodologies and know-how, software and analytical tools) as are otherwise owned by Vendor or its affiliates and utilized or developed by or for Vendor for the administration of the Services.</u>
DU2	√	√	Data Usage	<u>Except as otherwise required by applicable law,</u> Vendor shall comply with the following conditions. At no time will any information belonging to or intended for the State be copied, disclosed, or retained by Vendor or any third party for subsequent use. Vendor will take reasonable steps to limit the use of, or disclosure of, and requests for, confidential State data. Vendor may not use any information collected in connection with the Services for any purpose other than fulfilling a Service. Protection of personally identifiable information, privacy, and sensitive data shall be an integral part of the business activities of Vendor to ensure that there is no inappropriate or unauthorized use of State information at any time. Vendor shall safeguard the confidentiality, integrity, and availability of State information. Only duly authorized Vendor staff will have access to State data and may be required to obtain security clearance from the State. No party related to Vendor may retain any data for subsequent use that has not been expressly authorized by the State.

	Public Data	Non Public Data	DATA USAGE (DU) TERMS	
DU3	√	√	Termination and Suspension of Service	<p>Unless otherwise provided in the Agreement, in the event of termination of the Agreement, Vendor shall implement an orderly return (in CSV or XML or another mutually agreeable format), or, shall guarantee secure disposal of State data.</p> <p><i>Termination of the Agreement:</i> In the event of termination, Vendor shall not take any action to intentionally alter, erase, or otherwise render inaccessible any State data for a period of six (6) months after the effective date of the termination. Within this timeframe, Vendor will continue to secure and back up State data covered under the Agreement. After such 6-month period, Vendor shall have no obligation to maintain or provide any State data. Thereafter, unless legally prohibited, Vendor shall dispose securely of all State data in its systems or otherwise in its possession or control, as specified herein.</p> <p><i>Post-Termination Assistance:</i> The State shall be entitled to reasonable post-termination assistance with respect to the transition of Services.</p>
DU4		√	Data Disposition	<p>Unless otherwise provided in the Agreement, at no time shall any data or processes that either belong to or are intended for the use of the State be copied, disclosed, or retained by Vendor.</p> <p>Unless otherwise provided in the Agreement, when required by the State, Vendor shall destroy all requested data in all of its forms (e.g., disk, CD/DVD, backup tape, paper). Data shall be permanently deleted, and shall not be recoverable, in accordance with National Institute of Standards and Technology (NIST) approved methods. Vendor shall provide written <u>certificates of destruction</u> to OST.</p>
DU5		√	Data Location	<p>Vendor shall not store, process, or transfer any non-public State data outside of the United States, including for backup and disaster recovery purposes. Vendor may permit its personnel offshore access to the data, as long as the data remains onshore.</p>

Commented [BJL3]: Note to OST: Given that Sunday will use Affiliated and non-Affiliated subcontractors to service Delaware's 529 program, the Agreement must permit subcontractors' access to data/processes necessary to administer the program.

Public Data	Non Public Data	DATA USAGE (DU) TERMS	
DU6	√	Breach Notification and Recovery	Vendor must notify the State immediately of any <u>known</u> incident resulting in the destruction, loss, unauthorized disclosure, or alteration of State data. If data is not encrypted (<i>see</i> CS3, below), Delaware Code (6 <i>Del. C.</i> §12B-100 et seq.) requires public breach notification of any incident resulting in the loss or unauthorized disclosure of personally identifiable information by Vendor or its subcontractors. Vendor will provide notification to persons whose information was breached without unreasonable delay but not later than 60 days after determination of the breach, except 1) when a shorter time is required under federal law; 2) when law enforcement requests a delay; 3) reasonable diligence did not identify certain residents, in which case notice will be delivered as soon as practicable. All such communication shall be coordinated with the State. Should Vendor or its employees or subcontractors be <u>directly and solely</u> liable for the breach, Vendor shall bear all costs <u>actually incurred</u> associated with investigation, response, and recovery from the breach. This includes, but is not limited to, credit monitoring services with a term of at least three (3) years, mailing costs, website, and toll-free telephone call center services. The State shall not agree to any limitation on liability that relieves Vendor or any person or entity from responsibility for its own negligence or conduct, or to the extent that it creates an obligation on the part of the State to hold any person or entity harmless.
DU7	√	Data Encryption	Vendor shall encrypt all non-public data in transit, regardless of transit mechanism. For engagements where Vendor stores personally identifiable information or other sensitive or confidential information, <u>Vendor will protect such non-public data at rest as Vendor determines to be appropriate in accordance with Vendor's information security program and any law applicable to Vendor's provision of the Services, it shall encrypt this non-public data at rest.</u> Vendor's encryption shall meet validated cryptography standards as specified by the National Institute of Standards and Technology in FIPS140-2 and subsequent security guidelines. Vendor and the State will negotiate mutually acceptable key location and key management details. Vendor shall maintain mandatory cyber security liability insurance coverage for the duration of the Agreement.

Commented [BJL4]: Note to OST: BNYM maintains this insurance, but prefers that maintenance of such insurance not be contractually mandated.

The terms of this document shall be incorporated into the Agreement. Any conflict between this document and the aforementioned Agreement shall be resolved by giving priority to the Agreement.

TRE-CPM-20102

FOR OFFICIAL USE ONLY

DU 1 - DU 3 (Public Data Only) OR

DU 1 - DU 7 (Non-public

Data)

VENDOR Name/Address (*print*):

VENDOR Authorizing Official Name (*print*):

VENDOR Authorizing Official Signature: _____

Date: _____

Attachment 4: Business References

CONTRACT NUMBER: TRE-CPM-20102

List a minimum of three business references. At least two (2) of the references should be from government entities. Business references should include the following information:

- **Business name and mailing address**
- **Contact name, phone number and email address**
- **Number of years doing business with**
- **Type of work performed**

Please do not list any State entity, officer or employee as a business reference.

We invite you to contact the following client references. Please note that we consider client information to be confidential.

Reference 1

[illegible]

[REDACTED]	
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED] [REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

[illegible]

BNY Mellon is currently contracted as the State's Electronic Collections Provider. BNY Mellon provides the following services:

- Our principal contact is:

2