



Vanguard Digital Advisor™ Important Information

Documents Included:

1. Vanguard Advisers, Inc. Client Relationship Summary (Form CRS)
For retail account holders only
2. Vanguard Digital Advisor Brochure & Supplement (Form ADV Parts 2A & 2B)
For all eligible Digital Advisor account holders (retail brokerage and participants in certain employer-sponsored retirement plans)

Advisor Client Relationship Summary (Form CRS)

June 30, 2020

Vanguard Advisers, Inc. (VAI)

Registered with the Securities and Exchange Commission (SEC) as an Investment Adviser.

The services provided by an investment advisor and other financial services providers, like a broker-dealer, will differ, as well as the fees charged by such providers. It's important to understand who can provide you with the level of financial services and investment support you need at a price reasonable to you. The SEC makes free and simple tools and educational materials available to research firms and financial professionals at investor.gov/CRS.

What investment services and advice can you provide me?

We provide investment advisory services to retail investors through our Vanguard Personal Advisor Services® ("PAS") and Vanguard Digital Advisor™ ("DA") programs.

In PAS, we provide ongoing advised account services. You'll work with a financial advisor, agree upon a financial plan and investment strategy, and grant us authority to trade your account(s) in accordance with that strategy. We will not implement or change your investment strategy without getting your approval. Our lead recommendations will normally be limited to certain Vanguard funds. We will monitor your accounts and rebalance, as needed, on a quarterly basis. PAS requires a minimum of \$50,000 of investable cash or securities in the advised portfolio.

In DA, we provide online financial planning tools designed to help you create and implement a personalized, goal-based financial plan. We'll monitor your enrolled accounts frequently using an algorithm, and have full investment discretion in order to rebalance and make trades as necessary to align your account(s) with your goal(s). We'll recommend varying combinations of Vanguard Total Stock Market ETF, Total International Stock ETF, Total Bond Market ETF, and Total International Bond ETF for retail accounts. There is a \$3,000 minimum to enroll, and we require that your entire account be invested in Vanguard Federal Money Market Fund prior to enrolling.

The services will require you to hold your accounts with Vanguard. Our lead investment recommendations in PAS and DA will generally not include recommendations to purchase individual securities or bonds, CDs, options, derivatives, annuities, third-party mutual funds, closed-end funds, partnerships, or other non-Vanguard securities. For more information regarding our services, see the "Advisory business" and "Types of clients" sections of each brochure: PAS ADV Brochure personal.vanguard.com/pdf/vpabroc.pdf and DA ADV Brochure vanguard.com/digitalbrochure.

Conversation Starters: Consider these questions before choosing a financial service. You can see details at investor.vanguard.com/financial-advisor/digital-advisor-details and investor.vanguard.com/financial-advisor/personal-advisor-details or call us at the number provided below.



- Given my financial situation, should I choose an investment advisory service? Why or why not?
- How will you choose investments to recommend to me?
- What is your relevant experience, including your licenses, education, and other qualifications? What do these qualifications mean?

What fees will I pay?

For PAS clients, the annual advisory fee starts at 0.30% of program assets and decreases on a tiered level as assets in the program increase. In addition, where mutual funds are held in your account (including Vanguard), there are built-in fees known as "expense ratios." These are the costs for the fund company to run a fund and will vary by fund, so your combined fees for advice and investments will vary.

For DA clients, the target net annual advisory fee is 0.15% of program assets, although this fee will vary based on the holdings in your portfolio. The gross advisory fee for DA is 0.20%, from which we subtract any revenue we, or our affiliates, collect on assets held in underlying investments in your portfolio in order to calculate your net advisory fee.

Fees are calculated quarterly or on a rolling 90-day basis for PAS and DA, respectively, and based on your average daily balance in the portfolio over the fee period. We do not charge advisory fees on the balance

of money market fund securities or other cash equivalents held within your portfolio. As you invest more assets in the programs, the amount of fees we collect will increase; therefore, there could be incentive to encourage you to increase your assets.

There may be additional fees, including account service fees, and non-Vanguard fund fees, as discussed in more detail in the “Fees and compensation” section of each program’s Form ADV Brochure under “Fees and compensation.”

You will pay fees and costs whether you make or lose money on your investments. Fees and costs will reduce any amount of money you make on your investments over time. Please make sure you understand what fees and costs you are paying.



Help me understand how these fees and costs might affect my investments. If I give you \$10,000 to invest, how much will go to fees and costs, and how much will be invested for me?

What are your legal obligations to me when acting as my investment advisor? How else does your firm make money and what conflicts of interest do you have?

When we act as your investment advisor, we have to act in your best interest and put your interests ahead of ours. At the same time, the way we make money creates some conflicts with your interests. You should understand and ask us about these conflicts because they can affect the investment advice we provide you. Here are some examples to help you understand what this means.

- Our lead advice will be to invest in Vanguard funds, and you will pay the funds’ expense ratios. The funds’ expense ratios are received by The Vanguard Group, Inc. (an entity wholly owned by the individual member funds themselves), as revenue.
- We’ll also require your portfolio to be maintained through accounts held with our affiliates. Your account may be subject to additional fees such as account service fees, commission charges, and other charges and processing fees. If you were to transact in non-Vanguard funds through a Vanguard Brokerage Account, another of our affiliates, Vanguard Marketing Corporation, may receive transaction fees, front-end and back-end loads, sales charges, 12b-1 fees, and revenue-sharing payments in connection with certain third-party mutual funds.



How might your conflicts of interest affect me, and how will you address them?

See the “Fees and compensation” section of each program’s Form ADV Brochure for more details on how we and our affiliates make money and the conflicts involved.

How do your financial professionals make money?

Our advisors servicing PAS are salaried employees who do not earn commissions or additional compensation based on the products they recommend or the amount of assets they service.

Our DA service does not employ financial professionals who directly advise clients or directly manage individual client accounts. The professionals responsible for the service and its methodology are salaried employees who do not earn commissions or additional compensation based on the products they recommend or the amount of assets serviced.

Do you or your financial professionals have legal or disciplinary history?

Yes. For more information related to legal or disciplinary history disclosure go to investor.gov/CRS. There, you will find a free and simple search tool to research us and our financial professionals.



As a financial professional, do you have any disciplinary history? For what type of conduct?

For more information regarding our advisory services, obtain a copy of Form ADV from adviserinfo.sec.gov, or contact us at 800-523-9447 to request a copy of the ADV Brochure or Form CRS.



Who is my primary contact person? Is he or she a representative of an investment advisor or a broker-dealer? Who can I talk to if I have concerns about how this person is treating me?

Vanguard Digital Advisor Brochure

August 25, 2020

Vanguard Advisers, Inc.
100 Vanguard Boulevard
Malvern, PA 19355
877-662-7447
vanguard.com

This brochure provides information about the qualifications and business practices of Vanguard Digital Advisor™, an advisory service offered through Vanguard Advisers, Inc. (“VAI”) (also referred to herein as “we,” “us,” and “our”). This brochure also describes how VAI is compensated for the service provided to you. You should carefully consider this information in your evaluation of the service. If you have any questions about the contents of this brochure, please contact us at the phone number above. The information in this brochure hasn’t been approved or verified by the U.S. Securities and Exchange Commission (“SEC”) or by any state securities authority.

Additional information about VAI also is available on the SEC’s website at adviserinfo.sec.gov.

VAI is a registered investment advisor with the SEC. Registration doesn’t imply a certain level of skill or training.

Material Changes: Since Vanguard Digital Advisor’s annual update on March 30, 2020, Digital Advisor has added or is in the process of adding the following material changes to its service:

On June 9, the methodology we use to create your investment glide path became more personalized. For additional information see “**Methods of analysis, investment strategies, and risk of loss**” on page 16.

This brochure update includes other additional non-material changes regarding the features and capabilities available in the service. Additionally, Digital Advisor updated its brokerage practices. For additional information see “**Brokerage Practices**” on page 29.

Table of Contents

Advisory business	2
Fees and compensation	12
Performance-based fees and side-by-side management	15
Types of clients	15
Methods of analysis, investment strategies, and risk of loss	16
Disciplinary information	27
Other financial industry activities and affiliations	27
Code of ethics, participation or interest in client transactions, and personal trading	28
Brokerage practices	29
Review of accounts	30
Client referrals and other compensation	31
Custody	31
Investment discretion	32
Voting client securities	32
Financial information	33
Requirements for state-registered advisors	33
Investment risks	33

Advisory business

VAI is a Pennsylvania corporation that provides investment advisory services to a wide variety of clients, including the following:

- Stable Value: discretionary investment advisory services to separate accounts that are offered as investment options in state-sponsored education savings plans (“529 Plans”);
- Vanguard Institutional Advisory Services: discretionary and nondiscretionary advisory services and administrative services to institutional clients such as endowments, foundations, employee benefit plans and trusts, and family offices;
- Vanguard ETF Strategic Model Portfolios: model portfolios comprised of Vanguard Funds and exchange traded funds (ETFs) (as defined below) that are accessed by third party intermediaries through third party platforms;
- Interactive Advice Tools: Personal Online Advisor (“POA”) is a nondiscretionary advisory service previously offered to certain retail clients. POA is sub-advised by Financial Engines Advisors L.L.C. (“FE”), an independent investment advisory unaffiliated with VAI;
- Vanguard Personal Advisor Services (“PAS”): ongoing advised account services for certain retail clients and point-in-time advice services to participants in certain employer-sponsored retirement plans;
- Vanguard Digital Advisor: discretionary advisory service offered to retail clients and to participants of eligible employer-sponsored retirement plans; and

- Vanguard Managed Account Program (“VMAP”) and POA: discretionary advisory service offered to participants of eligible employer-sponsored retirement plans. POA is a nondiscretionary advisory service offered to participants of eligible employer-sponsored retirement plans. VMAP and POA are sub-advised by FE.

As an SEC-registered advisor, VAI has a fiduciary duty to act in its clients’ best interests and to abide by the duties of care and loyalty. VAI was incorporated in and has been in business since 1995. VAI is 100% owned by Goliath, Inc., a Delaware corporation. Goliath is 100% owned by The Vanguard Group, Inc. (“Vanguard”). As such, VAI is an indirect, wholly owned subsidiary of Vanguard, the sponsor and manager of the family of mutual funds and ETFs (exchange-traded funds) comprising The Vanguard Group of Investment Companies (“Vanguard® Funds”), which VAI typically recommends as investments. Please see the section of this brochure entitled “Other financial industry activities and affiliations” for more information.

Vanguard Digital Advisor

Vanguard Digital Advisor (“Digital Advisor”), launched by VAI in 2019, provides services to clients with (i) a Vanguard Brokerage Account (“Vanguard Brokerage Accounts”) established with Vanguard Marketing Corporation (“VMC”), doing business as Vanguard Brokerage Services®, a registered broker-dealer that is a wholly owned subsidiary of Vanguard (“RIG Clients”) and/or (ii) a participant account in certain employer-sponsored retirement plans (“Participant Accounts”) that are recordkeeping clients of VGI’s Institutional Investor Group (“IIG”) (“IIG Clients”) who enroll in the online and automated investment advisory services (collectively, RIG Clients and IIG Clients are referred to herein as “Clients” and Vanguard Brokerage Accounts and Participant Accounts are referred to herein as “Vanguard Accounts”). Digital Advisor also provides online financial planning tools to users of the Digital Advisor digital interface and website (“DA Website and Interface”) designed to help Clients and prospective clients (collectively, “Users”) create a personalized, goals-based financial plan. Digital Advisor anticipates expanding the availability over time, with the eventual objective of making enrollment in the service available, as appropriate, to any eligible existing or prospective User. Use of Digital Advisor requires internet access in order to enroll and to access program documents. Users should not interact with Digital Advisor if they do not have consistent internet access or do not want to accept electronic delivery of documents and disclosures required to be delivered in connection with the service. Clients are required to maintain an active email address with us in order to remain enrolled in the service. Upon electronic acceptance of the Digital Advisor Advisory Service Agreement, Clients grant Digital Advisor discretionary authority to conduct trading in their enrolled accounts to establish and maintain a recommended mix of investments.

In the Digital Advisor experience your inputs will enable us to show you different planning scenarios and visualizations (leveraging inflation and return on capital models developed by VAI and its affiliates) so that we can partner with you to set your financial goals. Any investment outcome projections or goal achievement forecasts are hypothetical in nature, provided for educational purposes only, and are not guarantees of future results. Currently, the retirement savings accumulation goal-setting experience is designed based on a long-term asset allocation strategy and may not suit your needs if you are nearing (within 5 years) or in retirement. More information regarding the methodology used on the DA Website and Interface is provided in the sections of this Brochure that follow under the heading entitled “**Methods of analysis, investment strategies, and risk of loss**” below.

In order to develop your personalized financial goals, you'll create a profile within the DA Website and Interface that provides us with information relating to your family, age, risk tolerance, specific financial goals, investment time horizon, current investments, tax filing status, other assets and sources of income, investment preferences, planned spending, and existing financial/investment accounts. Digital Advisor allows you to manage the goals you set via a financial goal dashboard. You may set a standard financial goal, e.g., retirement savings accumulation goal, or in the future, assess your readiness for a financial emergency, and save for a custom financial goal. In setting your goals, you will be asked to respond to customized scenarios with varying risk/reward calculations that are designed to tell us about your willingness to tolerate risk in connection with your financial goals. Based on your scenario responses, we will provide you with a risk attitude assessment derived from an assessment tool based on behavioral economics and decision science. Digital Advisor will also give Users the opportunity to learn about each of the five risk attitude categorizations that we use in our investment methodology and the projected asset allocation aligned with each risk attitude. Additionally, the assessment will seek to measure if you have a low or high loss aversion. A high loss aversion means that you indicate in the assessment that you feel a greater level of discomfort toward a loss relative to the comfort from an equal-sized gain. Users may choose to deviate from risk attitude results of our assessment based on their personal judgement of their willingness and ability to tolerate risk. Changes to your risk attitude will impact your recommended investment strategy. If we are not able to assess your risk attitude using the assessment tool (e.g., due to inconsistency in your scenario responses) you will be able to select a risk attitude. Users may not choose to deviate from an assessed high or low loss aversion. If the assessment scenario results are inconsistent then users will not be attributed with a low or high loss aversion. We will rely on a User's final risk attitude selection in providing our guidance and recommendations for our investment strategy for a Client's financial goals.

For existing Vanguard Account owners, we will also identify accounts held with a VAI affiliate owned by you that are associated with your login. For these accounts we will further identify:

- 1) Accounts Digital Advisor can manage: These are account types over which Digital Advisor can exercise discretionary management. Eligible account types include: individual, joint accounts with rights of survivorship, traditional IRA, Roth IRA, Participant Accounts (inclusive of 401(k), and Roth 401(k) accounts) authorized by the plan fiduciary. Once enrolled, Digital Advisor will make trades in these accounts to hold the mix of investments recommended by us to align to your financial goals. Users will only be able to enroll their Participant Accounts if the plan fiduciary has approved the Digital Advisor service. Joint accounts with rights of survivorship are currently restricted from enrolling in the Digital Advisor service. You may choose to enroll eligible joint accounts in the future, subject to availability. Collectively, the accounts that you elect to enroll in Digital Advisor where investments are made by us to maintain your target allocation are herein referred to as the "Portfolio," individually each an "enrolled account";
- 2) Accounts Digital Advisor can include in goal success forecasting: These are accounts that Digital Advisor cannot take investment discretion over or perform trading in on your behalf, but Digital Advisor has the capability to integrate these account types and balances into forecasts of your goal. However, our forecasts are

limited by assumptions about these accounts and based primarily on the account type and not the underlying investments. See **Methods of analysis, investment strategies, and risk of loss – Goals Forecasting** below. These account types may be considered for purposes of goals forecasting, but will not influence or alter the recommendations provided by Digital Advisor. Digital Advisor does not make specific recommendations or manage investments in accounts held at an entity outside of Vanguard; and

- 3) Accounts Digital Advisor can't support: These are accounts we are able to identify as associated with your login, however, we are unable to manage these accounts or integrate them into tools within this service.

Prospective Users without an existing Vanguard Account will be asked to provide basic identifying information to create a login that can be used to access the DA Website and Interface. In order to enroll in Digital Advisor, prospective Users will need to open an eligible account with VMC, a Vanguard affiliate.

You must set at least one financial goal in order to enroll an account into the Digital Advisor's discretionary investment advisory service. Digital Advisor will recommend an asset allocation and specific investments that can be maintained in your enrolled taxable or retirement account(s) within your Portfolio to meet that asset allocation. Your Digital Advisor financial goals will be specific to the inputs you set. Digital Advisor is not intended to provide comprehensive tax advice or financial planning with respect to every aspect of your financial situation and goal forecasts are based on your account types (e.g. IRA, Roth IRA) and do not incorporate specific projections of investments that you hold at Vanguard or elsewhere.

Digital Advisor's ability to optimize a Client's portfolio allocation is dependent on the information that a Client enters into the DA Website and Interface, including a Client's projections of future spending needs and responses to visualizations of the potential financial goal planning options. Within the DA Website and Interface, we will also use the information you provided to us to generate goals-based forecasting and recommendations on how to better meet your investing goals, based on your situation and goals at the time you engage the service and as you input updated information in the future. As an automated investment advisory service, we will oversee and monitor the operation of the rebalance and other technologies that comprise the DA Website and Interface. However, under normal circumstances, Digital Advisor personnel will not assess each account individually or override individual investment recommendations resulting from the automated rebalancing. As a fully discretionary advisor, you have given Digital Advisor the authority to trade in your account. Therefore, we will initiate or halt trading at our discretion for any reason. For example, we may determine to cease trading if there are market conditions where Digital Advisor believes continued trading may pose an undue risk of harm to your Portfolio. In the event that we suspend or delay trading, requests to withdraw and transfer cash from enrolled accounts continue to be honored. However, there may be a delay in Digital Advisor's ability to liquidate securities to cover requests for withdrawals in excess of the cash in enrolled accounts, or to invest existing or new cash balances.

Digital Advisor will also provide guidance to Clients saving for emergencies as well as where to direct extra or idle cash. Digital Advisor also provides guidance and tools for Clients to model how to optimize debt repayment options.

Eventually, as we add new functionality to the DA Website and Interface, your financial goals dashboard can include multiple investing goals that meet your particular financial situation, such as assessing your debt, planning for college, saving for a home, or establishing a rainy-day fund in addition to saving for retirement.

Over time, as the DA Website and Interface evolves the new content, capabilities, or features may be introduced at different times. As new capabilities are introduced they may initially be available to a small population of Clients. At any given time, not all Clients will have access to the same features and services.

Vanguard Brokerage Account Users

Users with a Vanguard Brokerage Account or considering opening a Vanguard Brokerage Account and who are considering enrollment in Digital Advisor must hold at least \$3,000 in Vanguard Federal Money Market Fund in each Vanguard Brokerage Account. Vanguard Brokerage Accounts containing assets in investments other than the Vanguard Federal Money Market Fund are ineligible to enroll in Digital Advisor. In the event that Client enrolls in Digital Advisor while trades are pending to invest in investments other than the Vanguard Federal Money Market Fund, Digital Advisor reserves the right to cancel those trades.

For enrolled Vanguard Brokerage accounts, Digital Advisor uses ETFs as the core building blocks investments due to their low investment minimums and expense ratios, as well as their ability to help facilitate future investment strategies, such as tax loss harvesting, in Client's Portfolios. Our investment recommendations for assets held in Vanguard Brokerage Accounts will not include recommendations to purchase individual securities or bonds, CDs, options, derivatives, annuities, third-party mutual funds, closed-end funds, unit investment trusts, partnerships, or other non-Vanguard securities. In particular, Digital Advisor will recommend varying combinations of Vanguard Total Stock Market ETF, Vanguard Total International Stock Market ETF, Vanguard Total Bond Market ETF, and Vanguard Total International Bond ETF (collectively referred to as the "Four Totals") within Vanguard Brokerage Accounts. If a Client enrolls both Vanguard Brokerage Accounts and Participant Accounts then other Vanguard index ETFs, such as Vanguard FTSE Developed Markets ETF or Vanguard FTSE Emerging Markets ETF, could be recommended in order to achieve Digital Advisor's desired asset allocation for that Client depending on the Participant Account recommendations. More information regarding the asset allocation can be found under the heading entitled "**Methods of analysis, investment strategies, and risk of loss**" below.

Each of the Four Totals is a share class of mutual funds that are used or are substantially similar to the mutual funds used to meet the allocations underlying certain Vanguard single fund solutions, such as Vanguard's Target Retirement Funds. However, Digital Advisor will enable Clients to provide personalized inputs that align Digital Advisor's investment strategy to each Client's needs. In certain circumstances, the recommended Digital Advisor portfolio will contain identical allocations to the four Total Funds that would have been used as the underlying investments in a Vanguard single fund solution purchased by that investor. Users should consider the Digital Advisor advisory fees and Vanguard ETFs expense ratios they will incur upon enrollment as well as the personalized features and additional services available to Digital

Advisor Clients in comparison to the lower costs and absence of personalized services of Vanguard single fund solutions when considering the managed offer.

Participant Accounts

You may enroll your Participant Accounts, specifically a 401(k) or Roth 401(k) U.S. tax qualified retirement plan account, in Digital Advisor only if the service has been made available by your plan fiduciary. There is a \$5 minimum Participant Account balance required to enroll an eligible Participant Account in the service. In some cases, your plan fiduciary may have enrolled your plan account in Digital Advisor and provided certain information on your behalf that was necessary to create your Portfolio, such as risk attitude, retirement age, length of retirement, retirement contributions, and retirement spending. You are encouraged to access your account to personalize your risk attitude, set additional goals once available, and complete your profile, which will trigger Digital Advisor to reassess your asset allocation. If your plan fiduciary enrolls your account and you do not take action to un-enroll from Digital Advisor, your decision to remain enrolled in the service will constitute your approval of the investment strategy selected for your Portfolio.

Our investment recommendations for Participant Accounts will normally be limited to allocations in certain Vanguard and non-Vanguard: mutual funds, collective investment trusts, or stable value funds. Digital Advisor will not include recommendations to purchase individual securities (with the exception of reasonable accommodations for company stock) or bonds, CDs, options, derivatives, annuities, closed-end funds, unit investment trusts, or partnerships. Plans and participants will have the opportunity to provide Digital Advisor with additional information about their desired allocation to company stock investments if the participant's account is invested in, or eligible to invest in (in the event a company match is available), such assets.

Investment recommendations generated for participants in eligible employer-sponsored retirement plans will recommend an allocation based on the investment options selected by the plan fiduciary as the plan core lineup and will typically recommend a combination of specific Vanguard Funds or affiliated collective investment trusts based on their low cost and broad diversification, if available in the eligible employer-sponsored retirement plan. Digital Advisor will select Participant Account investments based on their asset allocation alignment with the methodology outlined in **"Methods of analysis, investment strategies, and risk of loss"** below. Digital Advisor's lead portfolio recommendation is to be globally diversified across equity and fixed income asset classes. However, if your plan fiduciary does not offer a currency-hedged international fixed income index fund, Digital Advisor will use a US aggregate bond index fund for fixed income asset allocation exposure. By enrolling a Participant Account, you will be directing us to apply our asset allocation methodology to invest in funds offered in your plan's core lineup as it exists today and as that lineup may be changed by your plan fiduciary in the future. Additionally, participants in certain employer-sponsored retirement plans may not be eligible to enroll or remain enrolled if the plan lineup only includes company stock or third-party investments that lack the asset allocation exposure required by Digital Advisor's investment strategy. Investments (e.g., mutual funds or collective investment trusts) that are not affiliated with Vanguard may be included in your Portfolio to meet your allocation, if they are made available as part of your plan lineup of investment choices and including them is necessary to meet our recommended asset allocation for your Portfolio. Clients may be un-enrolled from Digital Advisor if their plan fiduciary changes the core plan lineup and there are insufficient

investment options to complete the recommended asset allocation. Additionally, participants with self-directed brokerage accounts in their Participant Accounts will be ineligible to enroll in Digital Advisor.

All Users

You will be given the opportunity to preview Digital Advisor's initial recommended asset allocation and specific fund recommendations in order to determine whether to enroll in the ongoing advised service. These recommendations are based on a point-in-time assessment of our projected investment strategy to manage towards your financial goal. In the event you choose to implement these recommendations without enrolling in Digital Advisor, we will not be held responsible for any losses resulting from any delays or mistakes in such implementation caused by you. Once you've agreed to ongoing management of your Portfolio, we will provide discretionary management based on the financial goal you set in the DA Website and Interface. It is extremely important that you immediately notify us through the DA Website and Interface of material changes to your willingness and ability to tolerate risk, financial situation, financial goals, and investment objectives.

By enrolling in the ongoing advised service, you're granting us discretionary investment authority to purchase and sell securities on your behalf. Accordingly, Digital Advisor will assess Portfolios using an algorithm (typically on each business day that markets are open for trading, however, Digital Advisor may in its discretion for technical or market infrastructure reasons forgo an assessment on a given day) to determine whether a rebalancing opportunity exists consistent with Digital Advisor's investment strategy. Notwithstanding the foregoing, Digital Advisor will not attempt to engage in market timing trading practices. Digital Advisor may evolve its investment strategy described below under the heading "**Methods of analysis, investment strategies, and risk of loss**" from time to time.

The ongoing advised service is contained within the DA Website and Interface, which includes content based on your goals and provides personalized reporting. Once you are enrolled, the DA Website and Interface is accessed by logging on to your account at vanguard.com. For clients enrolled in the ongoing advised service, we will contact you, at least annually via the DA Website and Interface to validate your financial goal(s) chosen for the Portfolio for the purposes of determining whether there have been any changes in your financial situation, risk tolerance, tax situation, investment time horizon, investment objectives, or desired reasonable restrictions. Again, it is critical that you interact with us during these attempts to validate your financial goals, needs, and the strategy chosen for the Portfolio, or whenever you believe that you may have experienced material changes to your financial situation, investment objectives, restrictions, and willingness and ability to tolerate risk, in order to ensure that our investment strategy is appropriately tailored to your financial goals. If you fail to validate your current investor profile or respond to our attempts to confirm your information, we'll assume that there have been no changes, and we'll continue in accordance with the financial goals you set on the DA Website and Interface. Digital Advisor reserves the right to un-enroll your Portfolio from management if you fail to respond or interact with the DA Website and Interface.

Before enrolling in the ongoing advised service, Users should consider paying off high-interest debt. If potential returns on your investments are lower than your debt's interest rate, it may be best to prioritize debt payments first. See "**Methods of analysis, investment strategies, and**

risk of loss- Goals forecasting” for the investment returns we assume for the asset classes in Digital Advisor portfolios.

Enrolled Account Restrictions and Defaults

When you enroll in the Digital Advisor’s discretionary management, you will no longer be able to independently purchase or sell securities in your Portfolio, and you will be restricted from such activity until you terminate the ongoing advised service. Transactions performed in a Portfolio enrolled in the ongoing advised service without prior notice to us may be reversed or unwound by us in order to maintain the recommended allocation for your Portfolio. In the event that you enroll in Digital Advisor while trades are pending to invest in investments other than the Vanguard Federal Money Market Fund, Digital Advisor reserves the right to cancel those trades or otherwise take the actions necessary to invest your enrolled accounts into the target asset allocation. Unauthorized trades or transfers placed in a taxable Vanguard Brokerage Account may result in taxable consequences. Other account transactions or services, like automatic trading services (such as automatic investment/withdrawal), will be restricted or unavailable through your traditional self-directed account web experience. Specific enrolled account restrictions and default account requirements for enrolled Vanguard Brokerage Accounts and enrolled Participant Accounts are summarized below.

Enrolled Vanguard Brokerage Accounts

In connection with the ongoing advised service, you’ll retain the right to: (i) withdraw securities and take sales proceeds as cash from the Portfolio; (ii) vote on shareholder proposals of beneficially owned securities or delegate the authority to vote on such proposals to another person; (iii) be provided, in a timely manner, with a confirmation or other notification of each securities transaction in the Portfolio and all other documents required by law to be provided to security holders; and (iv) proceed directly as a security holder against the issuer of any security in the Portfolio and not be obligated to join any person involved in the operation of the service, or any other Client of the service, as a condition precedent to initiating such proceeding. Due to initial limited functionality, Clients may need to un-enroll accounts from the service in order to perform certain functions as disclosed in the DA Website and Interface.

MinTax cost basis method default for enrolled Vanguard Brokerage Accounts

When you enroll, we’ll use the minimum tax (“MinTax”) cost basis method in performing the necessary transactions to manage your Portfolio on an ongoing basis for all securities held in your taxable accounts in the Portfolio. While the ongoing advised service will consider the tax impact (as a result of the account type) of potential Portfolio changes, transitioning the Portfolio based on our portfolio construction guidelines could result in realized taxable gains or losses, or the generation of taxable dividend income or tax-preference items that are taxable under the alternative minimum tax. Neither VAI nor any affiliated entity shall have any responsibility to pay these taxes.

The MinTax cost basis method is generally designed to minimize tax impact and lower an individual’s tax burden by identifying selective units or quantities, also referred to as lots, of securities to sell in any sale transaction (including rebalancing) based on specific ordering rules. In many cases, the MinTax cost basis method will minimize the tax impact to you of a transaction but it may not do so in every case. For example, if the taxable accounts within your Portfolio hold a position with a small short-term capital loss and a large long-term capital loss,

the MinTax cost basis method will choose to sell the position held at a small short-term capital loss first. The method's effectiveness at minimizing your taxes will vary depending on your individual circumstances. You should consult with your tax advisor to discuss whether the MinTax cost basis method is appropriate for you given your individual circumstances.

Digital Advisor doesn't provide tax advice, nor does the ongoing advised service's use of the MinTax cost basis method constitute tax advice. We strongly urge you to consult with your tax advisor to discuss any tax concerns related to the ongoing advised service, including the appropriate cost basis method for you before enrollment.

Cash in /Cash out for enrolled Vanguard Brokerage Accounts

While enrolled in Digital Advisor, you may transfer cash to and from the Portfolio at any time, and you may add or un-enroll eligible accounts at any time via the DA Website and Interface. You will be able to transfer funds from any bank that you have linked to your Vanguard Brokerage Account. Digital Advisor reserves the right to un-enroll Clients that maintain a balance below \$3,000 in enrolled assets. We will attempt to contact you if you hold less than \$3000 across your Portfolio (if entirely composed of Vanguard Brokerage Accounts) and will un-enroll your Accounts if we are unable to reach you or if you confirm that you will not be adding additional funds. Clients seeking to withdraw an amount from their Vanguard Brokerage Account that would cause the account balance to be less than \$3,000 will be instructed to un-enroll the account rather than use the "Get Cash" functionality.

Transfers of funds into your enrolled accounts typically are invested after two business days although the specific circumstances of your transfer could result in longer processing times. Any amounts transferred into an enrolled account will be allocated to the appropriate investments based on our rebalancing methodology.

If you have more than one enrolled account, in the future, Digital Advisor will recommend an allocation among your accounts that seeks to optimize the deposit of cash based on your financial goals. You may change our recommended allocations among your enrolled accounts. When cash is transferred to the Portfolio as a result of automated account services (such as an automatic investment plan) or investment earnings (such as interest or dividend payments), the cash will be allocated in accordance with the Digital Advisor's investment strategy upon your next rebalancing opportunity. Upon enrollment, Client accounts will be defaulted to receiving dividend and capital gain distributions in cash to optimize rebalancing opportunities. Digital Advisor is currently only able to rebalance your Vanguard Brokerage Accounts by purchasing whole shares of ETFs. Digital Advisor will monitor the assets in your settlement fund(s) in these accounts and will look for opportunities to put them to work in accordance with our investment strategy. Balances may remain in your settlement fund, generally less than \$300 across your Portfolio. The lower your account balance the more likely that cash equivalent balances may remain in your settlement fund due to ETF share prices and consequently your settlement fund will represent a disproportionately higher percentage of your Portfolio.

You will be able to request a sale of assets in your enrolled taxable Vanguard Brokerage Accounts and to have the proceeds sent as cash to your linked bank account(s) via an electronic bank transfer. You may only elect to transfer cash to authenticated and authorized bank accounts linked to your enrolled taxable Vanguard Brokerage Account. Transfers of cash

out of your enrolled taxable Vanguard Brokerage Account typically take two to four business days to occur (subject to the settlement of securities transactions in your managed account). Market closures will delay the settlement of securities transactions, which will, in turn, delay the transfer of cash out of your account. Taking out cash will have an impact on your financial goals. If the balance of your settlement fund is sufficient to cover the withdrawal request, shares of the settlement fund will be sold to cover the withdrawal rather than selling assets in your enrolled taxable Vanguard Brokerage Account otherwise your Portfolio will be reallocated within our methodology guardrails. More information regarding the methodology used on the DA Website and Interface is provided in the sections of this Brochure that follow under the heading entitled **“Methods of analysis, investment strategies, and risk of loss”** below. During the pilot of Digital Advisor, you will need to un-enroll your tax-deferred Vanguard Brokerage Accounts from the service in order to request cash out of your accounts.

Purchase and sale of securities in a Portfolio for enrolled Vanguard Brokerage Accounts

Digital Advisor currently does not accept the transfer of securities into enrolled Vanguard Brokerage Accounts. While enrolled in the ongoing advised service, you are restricted from purchasing or selling securities in your Portfolio until you terminate the ongoing advised service. Transactions performed in a Portfolio enrolled in the ongoing advised service may be reversed or unwound by us in order to maintain the recommended allocation for your Portfolio.

The processes regarding the transfer of cash and securities to and from the Portfolio do not apply those clients who only use the financial planning tools and decide to not enroll in the ongoing advised service.

Enrolled Participant Accounts

Any distribution, withdrawal or loan transactions will continue to be subject to the terms of your plan.

While enrolled in Digital Advisor, you are prohibited from initiating investment exchanges and directing the investment of new contributions in your plan account unless you terminate the service.

All Account Types

You may not receive third-party discretionary advice on assets held in the Portfolio under the ongoing advised service. If you wish to receive third-party discretionary advice regarding certain securities in the Portfolio, you should terminate the ongoing advised service. You may separately arrange for the provision of advice by another provider that has no material affiliation with, and receives no compensation in connection with, the securities held in your account(s).

You may terminate the service at any time via the DA Website and Interface, but your Portfolio will remain invested in the investment options selected by Digital Advisor until you take further action.

As of June 30, 2020: Digital Advisor offered under Vanguard Advisers, Inc. (“VAI”) had a total of \$993.4 million in discretionary assets under management.

Fees and compensation

In order to mitigate conflicts of interest for any revenues that Vanguard receives on assets held in the underlying investments (for example, revenues from Vanguard Funds), Digital Advisor will reduce your gross advisory fee by the amount of revenue that Vanguard (or a Vanguard affiliate) collects on your Portfolio in order to calculate the net advisory fee. Digital Advisor targets an annual net advisory fee of 0.15% across your Portfolio although actual expenses will vary based on the specific holdings in each enrolled account. Your net advisory fee can also vary by enrolled account type. The combined annual costs of enrolling in Digital Advisor and investing in Vanguard Funds in the Portfolio will be 0.20% for Vanguard Brokerage Accounts. The combined annual costs of enrolling in Digital Advisor and investing in Vanguard Funds or collective investment trusts will vary for IIG Clients.

Gross Advisory fee

The gross advisory fee compensates Digital Advisor for the ongoing discretionary management of the enrolled accounts and is inclusive of the Digital Advisor services described in this brochure. The gross advisory fee will be calculated across all securities in your enrolled accounts, with the exception of money market fund or other assets representing the cash equivalent portion of your Portfolio. Digital Advisor won't assess a gross advisory fee on the balance of money market fund securities (or other cash equivalent assets) held within your enrolled accounts.

The gross advisory fee does not include the expenses that you incur to invest in the underlying funds, collective investment trusts, or ETFs in your enrolled accounts. You will be responsible for paying underlying fund, collective investment trust, or ETF expenses charged at the individual holding levels within your enrolled accounts. These underlying funds, collective investment trust, or ETF expenses vary by fund and share class, and are expenses that all fund and ETF shareholders and collective investment trust holder's pay. Details of fund and ETF's expenses can be found in each fund's or ETF's prospectus. These expenses are not itemized or billed separately.

Enrolled Vanguard Brokerage Accounts

Your enrolled Vanguard Brokerage Accounts will be charged an annual gross advisory fee based on your average daily balance of ETFs held in your account. Digital Advisor's annual gross advisory fee for managed retail accounts is 0.20%.

Enrolled Participant Accounts

Your enrolled Participant Accounts will be charged an annual gross advisory fee based on your average daily balance of funds and collective investment trusts held in your account. Digital Advisor's annual gross advisory fee for your Participant Account varies by plan. Please see your plan fee disclosure notices for the applicable annual gross advisory fees that apply to your plan assets.

Net Advisory Fee (Credit Amount)

The annual gross advisory fee applied to each enrolled account is reduced by a credit of the actual revenue Vanguard (or a Vanguard affiliate) accrues and retains from expense ratios of Vanguard managed funds or other Vanguard revenues received from Portfolio investments (e.g., 12b-1 or revenue sharing fees) in each enrolled account. Your resulting net advisory fee

calculated for each account will be the actual fee collected. These actual amounts will vary based on your unique asset allocation and fund investments within the managed portfolio and the holdings in each enrolled account.

Other fees

Enrolled Vanguard Brokerage Accounts

Enrolled Vanguard Brokerage Accounts will be primarily composed of ETF shares that trade commission-free through VMC, doing business as Vanguard Brokerage Services,[®] a registered broker-dealer that's a wholly owned subsidiary of Vanguard and an affiliate of VAI. Additionally, accounts eligible for enrollment in Digital Advisor are required to elect e-delivery of statements and other account documents, which results in a waiver of account service fees. Clients are required to maintain e-delivery elections in order to remain enrolled in the service. To the extent that you incur account service fees, commission charges, other account charges and processing fees in connection with establishing accounts with VAI affiliates, you should review the terms of your account opening documents for details regarding fees that may be assessed in connection with these accounts. If Vanguard or a Vanguard affiliate receives revenue from these charges they will be included in the credit amount deducted from your gross advisory fee. Fees assessed for a purpose other than generating revenue for Vanguard or a Vanguard affiliate, for example, sales fees on certain sell transactions assessed at a rate consistent with Section 31 of the Securities Exchange Act of 1934, and any related interest income will not be included in the credit amount. VMC remits these fees to self-regulatory organizations and national securities exchanges to submit corresponding payments to the SEC. These fees are intended to cover the costs incurred by the government, including the SEC, for supervising the securities markets. The rate is subject to adjustments that result in differences between the assessed amounts and the actual amount applicable to your transaction. VMC retains any excess. Additionally, due to payment timing VMC may also receive interest income on these fees.

Enrolled Participant Accounts

Participants in employer-sponsored retirement plans may also directly or indirectly bear the fees assessed by Vanguard for recordkeeping services provided by Vanguard to the retirement plan. In connection with its services, Vanguard receives fees that are separate from, and in addition to, any advisory fees assessed by Digital Advisor. These fees for recordkeeping services are not included in the credit amount. Thus, retirement plan participants who receive advice from Digital Advisor may directly or indirectly bear the fees assessed by Vanguard in connection with its services to the plan, in addition to any advisory fees assessed by Digital Advisor. Participants in employer-sponsored retirement plans for which Vanguard provides recordkeeping or investment services may be permitted to invest in collective trusts, company stock funds, or certain customized investment options for which Vanguard Fiduciary Trust Company ("VFTC"), an affiliate of VAI, provides services and receives compensation. Because advice provided by Digital Advisor may include recommendations to hold or purchase these investment options, acting in accordance with such advice may result in the payment of fees to VFTC. Revenues generated from these fees will be included in the credit amount.

Participants in employer-sponsored retirement plans for which Vanguard provides recordkeeping services are often permitted to invest in non-Vanguard mutual funds. Because the advice provided by Digital Advisor may include recommendations to transact in non-Vanguard mutual funds, acting in accordance with such advice may result in payments to Vanguard or one of its affiliates or subsidiaries as compensation for participant-level recordkeeping and administrative services provided by Vanguard for such funds. This payment may be made by the fund company sponsoring the non-Vanguard mutual fund or an affiliate, by your employer or plan sponsor, by the participants investing in the non-Vanguard mutual fund, or some combination thereof. Payments to Vanguard or Vanguard affiliates for recordkeeping services will not be included in the credit amount, but revenues received and retained as compensation related to transactions in non-Vanguard mutual funds will be included in the fee credit.

Billing

Fees will be calculated quarterly (approximately every 90 days) and based on your average daily balance in each holding of each enrolled account across the entire fee period (unless falling on a U.S. holiday; a list of observed U.S. holidays is available on The New York Stock Exchange's website, available at <https://www.nyse.com/markets/hours-calendars>) after the completion of a fee period and will generally be deducted within 30 days of assessment. Your fee period will start when Digital Advisor begins to manage your enrolled accounts, approximately three business days after your enrollment.

Digital Advisor reserves the right to provide periodic fee waivers where it deems appropriate. Digital Advisor in its discretion, can waive or reduce the gross advisory fee for any client or group of clients, including in connection with promotional efforts. The gross advisory fee may be waived or discounted for employees of Vanguard or its affiliates. As a result of promotional fee waivers, similarly situated Clients may pay different fees.

We reserve the right to increase the annual gross advisory fee upon 30 days' written notice to you. Upon removal of an account, or termination of the ongoing advised service, we will require payment of any accrued fees from the time of the last quarterly payment until the termination date. Upon un-enrollment, in order to place the trades necessary to collect accrued fees, your account will be restricted from trading for two to four business days. We may offer periodic fee waivers where Digital Advisor deems appropriate.

There may be periods of time when rebalancing isn't needed because the Portfolio is appropriately allocated. The ongoing advised service will continue to monitor your Portfolio and goals to help keep you on track to meet your investment objectives and will therefore continue to charge all applicable fees during these times of inactivity.

Fee Collection

Vanguard Brokerage Accounts

Digital Advisor will systematically determine which securities to sell in order to raise proceeds sufficient to cover the fee and reassess each enrolled account for alignment with the target asset allocation. See **Methods of analysis, investment strategies, and risk of loss -- Portfolio Rebalancing**. In addition, when collecting fees from an enrolled

account with a money market fund (or other cash equivalent assets) balance, we'll prioritize those assets first.

Enrolled Participant Accounts

For participant accounts, fees will be deducted proportionally from the balance invested in each investment in the enrolled participant account. Please note that during times of a plan-initiated event, such as a plan termination or conversion to an alternate service provider, fee handling will vary and will be communicated.

Vanguard Fund and Collective Investment Trust fees

The advice provided by Digital Advisor will include recommendations to sell, hold, or purchase Vanguard Funds and VFTC managed collective investment trusts. Where we transact to manage your Portfolio and invest in Vanguard Funds, it will result in the payment of fees to the Vanguard Funds and to Vanguard, an affiliate of VAI. A purchase or sale of Vanguard Fund shares isn't subject to a load, sales charge, or commission. However, each Vanguard Fund incurs advisory, administrative, and custodial fees, as well as other fees and expenses that it pays out of its own assets. The advisory, administrative, custodial, and other costs make up the Vanguard Funds' expense ratios. Also, some Vanguard Funds impose purchase and redemption fees. Vanguard collective investment trusts also charge expense ratios and may assess purchase or redemption fees, which results in the payment of fees to the Vanguard collective investment trusts and to VFTC, an affiliate of VAI. (Collective investment trusts are investment options only within Participant Accounts.) Clients who invest in Vanguard Funds and Vanguard collective investment trusts are subject to the applicable expense ratios and to any purchase and redemption fees. Please consult the prospectus or collective investment trust document for information about the specific expense ratio and any fees assessed by a Portfolio investment.

Advice not impacted by fees

The advice provided by Digital Advisor won't take into consideration whether Vanguard or any of its affiliates or subsidiaries will receive fees from its recommendation to purchase, hold, or sell Vanguard Funds or non-Vanguard investments in constructing the Portfolio.

VAI does not consider the Digital Advisor program to be a wrap program. As the leader in reducing costs for all investors, VMC does not charge commissions to any investors for buying or selling ETFs, and therefore there are no fees to be a wrap-fee program. The net advisory fee charged by Digital Advisor is solely for the advice provided.

Performance-based fees and side-by-side management

VAI doesn't receive any fees for advisory services provided to you that are based on a share of capital gains on or capital appreciation of your investments.

Types of clients

As of the date of this filing, Digital Advisor anticipates expanding the availability of Digital Advisor over time, with the eventual objective of making enrollment in the service available, as appropriate, to any eligible existing or prospective User.

Certain officers, directors and substantial shareholders, including any employees subject to Rule 144 of the Securities Act of 1933, as amended, or Section 16 of the Securities Exchange Act of 1934, as amended are not eligible for Digital Advisor (including both participant account and Vanguard Brokerage Accounts). Additionally, clients of the PAS or VMAP service are not eligible to enroll. Clients are required to maintain permanent residence in the 50 states, the District of Columbia, and the US Virgin Islands or have an APO/FPO/DPO mailing address in order to enroll and stay enrolled in Digital Advisor.

Vanguard Brokerage Accounts

The ongoing advised service offered by Digital Advisor is made available to RIG Clients and RIG prospects with a minimum of \$3,000 in Vanguard Federal Money Market Fund in each enrolled account. Eligible clients include those with individual accounts (including IRAs) and joint accounts. Joint accounts with rights of survivorship are currently restricted from enrolling in the Digital Advisor service. You may choose to enroll eligible joint accounts in the future, subject to availability. Other account types may be considered for purposes of goals forecasting, but Digital Advisor won't invest or reallocate assets in those other accounts.

Participant Accounts

Participants enrolled in eligible 401(k) and Roth 401(k) employer-sponsored retirement plans, whose employers have approved Digital Advisor, are eligible to use the service. Other account types may be considered for purposes of goals forecasting, but Digital Advisor won't invest or reallocate assets in those other employer-sponsored accounts.

Methods of analysis, investment strategies, and risk of loss

Digital Advisor's investment methodology incorporates our own investment philosophies and beliefs, such as the benefits of low costs, diversification, and indexing. Our methodology, which is approved and periodically reviewed by VAI's Advice Policy Committee, is based on Vanguard's own fundamental research, as well as research obtained from a wide variety of external sources, both public and private. Our methodology is driven by long-term financial goals, not by market timing or short-term investment performance. Rather than attempting to predict which investments will provide superior performance at any given time, VAI believes that it can provide the best opportunity for success by maintaining a broadly diversified Portfolio—including investments from a variety of market sectors and asset classes. Digital Advisor periodically reviews its methodology that could impact your Portfolio allocation.

Currently, Digital Advisor supports the goal of saving for retirement. The objective of the retirement goal is to build sufficient wealth to cover expected income needs through retirement.

Investment strategy for the Portfolio

Digital Advisor's investment strategies are designed with a disciplined, long-term approach that focuses on managing risk through appropriate asset allocation and diversification. Our methodology uses a strategic approach by first focusing on the mix of asset classes (i.e., stocks, bonds, cash) that aligns with your willingness and ability to take risk and is appropriate to meet your financial goals over time. The methodology is designed to then recommend specific investments for your Portfolio.

As a completely digital advisory experience, Digital Advisor relies on information provided by you and on certain assumptions based on our analysis about future financial factors, such as rates of return on certain types of investments, inflation rates, client rate of savings, percentage of income needed in retirement, portfolio withdrawals, tax rates, taxable capital gains and losses, and market returns, in order to develop an investment strategy for you. All assumptions are estimates based on historical data and proprietary forecasts that, in our opinion, serve as a useful and reasonable foundation on which to develop financial strategies.

Developing an asset allocation- Retirement Accumulation Strategy

First, we will gather information about your risk/reward preferences or risk tolerance (also referred to as risk attitude or profile). Risk tolerance is derived from a User's decisions within an assessment tool on the DA Website and Interface: TrueProfile Solutions®, provided by Capital Preferences Ltd. This assessment provides Users six hypothetical risk/reward scenarios that are designed to measure a User's inherent preference for risk by evaluating the tradeoffs in those decisions. The output of the assessment tool results in measurements of loss aversion, risk tolerance and decision consistency. These two parameters are then combined by Digital Advisor to map you to recommended risk attitudes (Very Conservative, Conservative, Moderate, Aggressive and Very Aggressive) for you to consider.

Digital Advisor will also give Users the opportunity to learn about each of the five risk attitude categorizations, including the projected asset allocation aligned with each risk attitude. Users may choose to deviate from risk attitude results of our assessment based on their personal judgement of their willingness and ability to tolerate risk. If we are not able to assess your risk attitude using the assessment tool (e.g. due to inconsistency in your scenario responses) you will be able to select a risk attitude. Additionally, the assessment will seek to assess if you have a low or high loss aversion. A high loss aversion means that you feel a greater level of discomfort toward a loss relative to the comfort from an equal-sized gain. Users may not choose to deviate the assessed loss aversion. If the assessment results are inconsistent then Users will not be attributed with a low or high loss aversion.

Digital Advisor will rely on a User's final risk attitude selection in providing our guidance and recommendations for our investment strategy for a Client's financial goals.

Next, Users select the accounts they want included for retirement planning. Digital Advisor then captures inputs around the User's expectations and goal planning for their retirement. Investment strategies are derived based on the User's current age and expected retirement age, and additional data such as current contributions, tax filing status, various income sources (lump sum, periodic, etc.), expenses, preferred age range of retirement options, and expected Social Security to inform your retirement savings goal forecasting. See *Goals Forecasting* below.

The risk attitude selected by a User and the retirement planning inputs are then used as inputs to Digital Advisor's proprietary investment algorithm. Digital Advisor's proprietary algorithm uses this data to recommend a particular investing track and corresponding glide path that embody the risk tolerance, asset allocation, and time horizon that are suitable for your retirement accumulation goal. Glide paths for Digital Advisor are generated using the personalized glide path ("PGP") service developed in partnership with Vanguard's Investment Strategy Group

("ISG"). Glide paths for PGP were created using the Vanguard Life-Cycle Model ("VLCM") and map a client to the optimal asset allocation from over 300 possible glide path options. With the evolution of Digital Advisor's proprietary algorithm to include personalized glide path recommendations, your asset allocation will be selected based upon your stated retirement age, the risk attitude you selected, your assessed loss aversion (if any), marital status, if your portfolio has low or high single stock exposure, retirement savings rate, and expected retirement income (collectively, "Personal Characteristics"). Your current age will determine your starting point on the glide path.

PGPs are designed to balance the risks of seeking wealth accumulation with your tolerance for portfolio volatility. Customizing your glide path based on your Personal Characteristics will impact the amount of equity exposure in your Portfolio. Very aggressive and aggressive risk attitudes will result in higher equity exposure than a more conservative risk attitude. If Digital Advisor assesses that you have a high loss aversion then Digital Advisor will reduce the equity exposure in your Portfolio relative to a client with low or no assessed loss aversion (all other Personal Characteristics being equal). Your stated retirement age is a key factor determining the slope (or rate at which equity exposure is reduced) in your Portfolio. Digital Advisor groups potential retirement ages into five-year age brackets between 50 and 75. PGPs also factor in marital status for married Clients based on an assumption that a joint household leads to a longer period of retirement consumption, given the chance that at least one person in the household may live longer. Additionally, PGPs will adjust your glide path if you have elected to have a concentrated equity position in your Portfolio.

In the future, PGPs will also adjust the glide path based on assessing your retirement savings rate as either low or normal, subject to availability. Digital Advisor will calculate your retirement savings rate by dividing your annual savings contribution by your salary. A lower savings rate will result in a higher equity exposure (all other Personal Characteristics being equal) prior to your retirement age. Finally in the future, PGPs will also adjust your glide path based on assessing your expected retirement income relative to your expected salary at retirement into one of three categories low, moderate, or high, subject to availability. Retirement income could include social security, rental income, part-time employment or another source disclosed in the DA Website and Interface. A low anticipated retirement income (all other Personal Characteristics being equal) decreases the rate at which the equity allocation in your Portfolio declines. Until personalization based on retirement income and retirement savings is available or if DA determines that it does not have sufficient data or is not otherwise able to adequately assess retirement savings or retirement income then DA will use defaults of normal and moderate, respectively.

As your life changes, Digital Advisor will allow you to update your retirement planning inputs, Personal Characteristics, and your risk attitude. When you enroll multiple accounts in Digital Advisor to support your goal, the asset mix of any single account may vary, but collectively the accounts will achieve the target asset allocation for the goal. We will rely on the information you provide in formulating the investment strategy for your overall Portfolio. Any inaccuracies in that information could affect our recommendations and our discretionary management of your Portfolio.

When recommending, setting, and managing your asset allocation, we weigh “shortfall risk”—the possibility that a Portfolio will fail to meet longer-term financial goals—against “market risk,” or the chance that your Portfolio’s value will fluctuate based on the market’s ups and downs. An investment strategy that’s too conservative raises the risk that inflation will erode the purchasing power of a long-term portfolio. Investment strategies for different goals may reflect different trade-offs between shortfall and market risk. Digital Advisor’s investment strategy is currently designed for Users with a financial goal of accumulating savings for their retirement. Appropriate asset allocations for retirement savings goals may range from 100% stock to 72% bonds. The objective of the retirement accumulation goal strategy is to build sufficient wealth to cover expected spending needs through retirement. Digital Advisor’s retirement accumulation investment strategies in isolation are not suitable for Users near (within 5 years) or in retirement.

Diversifying the Portfolio asset allocation across a variety of sub-asset classes

We seek to provide adequate diversification within each asset class. We recommend investing across different market segments to ensure sub-asset class diversification.

Our equity methodology seeks to diversify across different market segments (e.g., domestic and international; large-, mid-, and small-capitalization; and growth and value). While investing in equity securities can help grow your wealth over the long term, stock markets are also volatile and you may lose money in a sharp downturn that can occur without warning. Our investment strategy will generally diversify the domestic and international stock positions across market capitalizations within those segments in similar proportion to their long-term market weight. In addition, we seek to balance growth and value investment styles when constructing a Portfolio. We examine the industry segments represented in the Portfolio to ensure the Portfolio isn’t too heavily concentrated in one or more industry sectors, countries, or market segments. See the “**Investment risks**” section of this brochure below for further discussion of risks.

Our bond methodology emphasizes broad diversification across the bond market, both domestic and international, and maintains an interest rate risk exposure in line with the broad bond market. Investments in bonds are subject to multiple risks, including interest rate, credit, and inflation risk. Diversification across the domestic and global bond markets, as well as across market segments, issuers, and the yield curve, helps mitigate these risks. Our investment strategy seeks to diversify across short-, intermediate-, and long-maturity bond funds and seeks to maintain an intermediate-term duration. An intermediate-term duration generally means that your Portfolio stays in the middle of the spectrum when measuring its sensitivity to interest rate changes while maintaining exposure to all areas of the maturity range. We also recommend a broad exposure to investment-grade bond funds (both corporate and Treasury bonds). We seek to build a high-credit-quality Portfolio of bond funds, including funds that hold corporate, Treasury, agency, and mortgage-backed bonds. Bond portfolios may incorporate a mix of domestic and foreign bond funds. As with equities, we examine bond sector exposure to ensure a Portfolio isn’t concentrated in a single segment, which could expose the Portfolio to a higher level of risk. See the “**Securities recommendations and risk**,” “**Risks associated with usage of an algorithm**,” and “**Investment risks**” sections of this brochure below for further discussion of risks.

Retirement savings goals will not have strategic allocations to cash equivalents as part of their glide path.

Diverse investments, primarily consisting of low-cost Vanguard ETFs and Funds

After determining the overall asset mix and your stock and bond sub-allocations, our algorithm will recommend appropriate investments for your Portfolio. We approach fund selection with a long-term, buy-and-hold approach and discourage switching strategies based solely on recent performance. Digital Advisor implements an investment strategy founded in the same asset allocation that serves as the core of Vanguard's Target Retirement single mutual fund solutions; however, Digital Advisor will enable Clients to provide personalized inputs that align Digital Advisor's investment strategy to each Client's needs. Additionally, as a Client updates their information on the DA Website and Interface, Digital Advisor will adjust its investment strategy and the Client's glide path based on the new information. While updates like salary changes may not trigger immediate rebalancing of a Client's portfolio, it is important for Digital Advisor to take this information into account in planning a Client's long-term investment trajectory. On the other hand, updating your information may trigger an immediate rebalancing.

To attain the lead target allocations for Vanguard Brokerage Accounts, Digital Advisor allocates the equity portion of the Portfolio to Vanguard Total Stock Market ETF and Vanguard Total International Stock Market ETF. The Vanguard Total Bond Market ETF and Vanguard Total International Bond ETF will be core holdings within Vanguard Brokerage Account fixed income allocations and maintain an intermediate-term duration.

To attain the lead target allocations for Participant Accounts, Digital Advisor will recommend an allocation between investments available in the applicable 401(k) plan lineup that Digital Advisor determines align with Digital Advisor's investment strategy. However, for all Clients we may reallocate holdings among different Vanguard Funds and collective investment trusts and other investments as we periodically reassess the most appropriate investments to achieve the targeted asset allocation and sub-allocations. Additionally, 401(k) plan participants' investments in Participant Accounts may be reallocated if their plan fiduciary changes the available investment lineup.

Although Digital Advisor's lead recommendation is to invest in a diversified Portfolio, certain plan fiduciaries may elect for Digital Advisor to accommodate company stock holdings (a single stock or single stock fund) already held in Participant Accounts up to a limited amount. This limitation may not exceed 10% of the total equity exposure in company stock in a Portfolio unless a company match is available. If your company stock holdings exceed the accommodation limit then your company stock holdings will need to be sold down subject to plan rules. You will need to choose to sell down your company stock holdings to your desired amount. The proportion of company stock relative to your total equity exposure that you request to hold will fluctuate over time due to market movements. Digital Advisor will not buy additional company stock to maintain a particular percentage, nor will it sell company stock to maintain a particular percentage (unless exceeding the accommodation limitation). Company stock may represent more than 10% of the total equity exposure in your Portfolio due to market movements if your Portfolio is not otherwise outside of Digital Advisor's guardrails.

Considering tax efficiency in allocating assets across multiple Portfolio accounts

For Portfolios containing both taxable and tax-advantaged accounts, our investment strategy will aim to optimize the tax efficiency of the Portfolio by recommending or allocating investments

strategically among taxable and tax-advantaged accounts. The objective of this “asset location” approach is to hold relatively tax-efficient investments, such as broad-market stock index products, in taxable accounts while keeping relatively tax-inefficient investments, such as taxable bonds, in tax-advantaged accounts. The ongoing advised service will attempt to construct your Portfolio to fulfill your fixed income allocation in tax-advantaged accounts. This methodology does not preclude the purchase of taxable bonds outside of tax-advantaged accounts, but rather favors the placement of such investments into tax-advantaged accounts when possible. We will modify our approach to tax-efficient investing based on continuing portfolio construction research performed by the Vanguard Investment Strategy Group and Vanguard Enterprise Advice Group or relevant changes in tax laws.

Reasonable restrictions

When requesting that Digital Advisor manage your enrolled accounts, you'll have the ability to impose reasonable restrictions on the management of your Portfolio by personalizing the inputs into your retirement accumulation goal beyond standardized defaults to create your Personalized Glide Path. We require that your Portfolio remain diversified by asset class and within each asset class to ensure that no single security or class of securities will impose an unreasonable level of risk. If we believe that the restrictions are inappropriate for you, we'll notify you that we are unable to accommodate your request and we may need to remove particular accounts from the Portfolio of the ongoing advised service or terminate the ongoing advised service. However, as described above, plan participants may, if the option is permitted by your plan fiduciary, request to hold company stock in a Participant Account (a single stock) if it was obtained prior to enrollment in VAI's direct investor advisory offers. Restrictions on company stock holdings are subject to the policies outlined above under the subheading “**Diverse investments, primarily consisting of low-cost Vanguard ETFs and Funds**”.

Certain investments that you may request may not offer the same degree of diversification, liquidity, or performance consistency that may be available with the Vanguard Funds we normally recommend.

Portfolio Rebalancing

On each day that the markets are open for trading, Digital Advisor will typically look to assess Portfolios for whether a rebalancing opportunity exists consistent with Digital Advisor's investment strategy and the following criteria (“Rebalance”). Under normal circumstances, if any asset class (stocks, bonds, or cash) is off the target asset allocation by more than 5%, the Portfolio will be rebalanced to its target allocations (asset and sub-asset) or, in the future, within allowable guardrails pending embedded tax cost. For cash equivalent positions in the Portfolio, rebalancing for Vanguard Brokerage Accounts will only occur if there are sufficient funds to purchase whole shares of the required ETFs. Digital Advisor will monitor the assets in your settlement fund(s) in these accounts and will look for opportunities to put them to work in accordance with our investment strategy. Balances may remain in your settlement fund, generally less than \$300. Additionally, we will check to see if the target asset allocation has changed as prescribed by our investment strategy, as applicable.

Digital Advisor reserves the right to abstain from assessments on a given day for technical or market infrastructure reasons. For example, if your Vanguard Brokerage Account is on hold or in a restricted status, for any reason, including waiting for confirmation of an address change or

other client identification information then Digital Advisor will not be able to assess your Portfolio. In the event that your Vanguard Brokerage Account(s) remains on hold or restricted for longer than 45 days then those accounts will be un-enrolled.

If your ability to bear risk, your investment time horizon, your financial situation, or your overall investment objectives change, you should update your information on the DA Website and Interface so that Digital Advisor can take these considerations into account when reviewing your asset allocation target. We won't change the recommended asset allocation based on current or prevailing market conditions, but changes to your Personal Characteristics warrant a change in our investment strategy in order to align with your financial goals.

Securities recommendations and risk

Vanguard Brokerage Accounts

Digital Advisor uses Vanguard ETFs as the underlying investments in managed Portfolios. Equity portions of an investor's portfolio are invested in Vanguard Total Stock Market ETF and Vanguard Total International Stock Market ETF and bond portions are invested in Vanguard Total Bond Market ETF and Vanguard Total International Bond ETF. The Vanguard Federal Money Market Fund serves as the settlement fund for Digital Advisor Retail enrolled accounts. If a Client enrolls both Vanguard Brokerage Accounts and Participant Accounts then other Vanguard ETFs, such as Vanguard FTSE Developed Markets ETF or Vanguard FTSE Emerging Markets ETF, could be recommended in order to achieve Digital Advisor's desired asset allocation for that Client depending on the Participant Account recommendations.

401(k) Plan participant accounts

Investment recommendations generated for participants in eligible employer-sponsored retirement plans will recommend an allocation based on the investment options selected by the plan fiduciary as the plan core lineup and will typically recommend a combination of specific Vanguard Funds or affiliated collective investment trusts based on their low cost and broad diversification, if available in the eligible employer-sponsored retirement plan. While Digital Advisor's lead portfolio recommendation is to be globally diversified across equity and fixed income asset classes, if your plan fiduciary does not offer a currency-hedged international fixed income index fund, Digital Advisor will use a US aggregate bond index fund for fixed income asset allocation exposure. By enrolling a Participant Account, you will be directing us to apply our asset allocation methodology to invest in funds offered in your plan's core lineup as it exists today and as that lineup may be changed by your plan fiduciary in the future.

Although Digital Advisor's investment strategy is designed to be prudent and diversified, please remember that all investments, including mutual funds, ETFs, and collective investment trusts involve some risk, including possible loss of principal. Be aware that fluctuations in the financial markets and other factors may cause declines in the value of your account(s). There's no guarantee that any particular asset allocation or mix of funds will meet your investment objectives or provide you with a given level of income. We make investment recommendations using historical information. There's no guarantee that an investment strategy based upon historical information will meet your investment objectives, provide you with a given level of income, or protect against loss, particularly when future market conditions are drastically

different from the information used to create your strategy. Diversification doesn't ensure a profit or protect against a loss. There's no assurance that you'll achieve positive investment results by using our service. We can't guarantee the future performance of your investments. Please consult a fund's prospectus for more information about fund-specific risks. You should carefully consider all of your options before acting upon any advice you receive.

Risks associated with usage of an algorithm

Our proprietary algorithms are based on Vanguard's market assumptions and analysis. The algorithms don't consider prevailing market conditions when making recommendations to you. While we have standards governing the development, testing and monitoring of our algorithms, there is a risk that the algorithms and associated software may not perform as intended for various reasons, including unintended consequences due to modifying the algorithms or underlying software code. The United States Securities and Exchange Commission has provided further information for investors to consider when engaging digital advice services. The guidance can be found at [investor.gov/additional-resources/news-alerts/alerts-bulletins/investor-bulletin-robo-advisers](https://www.investor.gov/additional-resources/news-alerts/alerts-bulletins/investor-bulletin-robo-advisers).

Goals forecasting - Navigating multiple goal inputs

We will also provide projections to help you assess your ability to achieve your personalized financial goals. In assisting you with projecting your potential success of accumulating a sufficient amount of savings in order to meet your projected expenses in retirement, Digital Advisor will ask you about 1) your annual contribution amounts, 2) your projected retirement income or spending needs, and 3) an age range when you plan to retire ("Retirement Accumulation Inputs"). In order to help you to explore combinations of the Retirement Accumulation Inputs, the DA Website and Interface will allow you to explore forecasts that leverage different combinations of the Retirement Accumulation Inputs.

After you enter ranges or initial Retirement Accumulation Inputs, we will make an initial assessment of whether there are multiple combinations of your Retirement Accumulation Inputs resulting in projections in at least 70% of our market forecasts that your planned investments will cover your estimated expenses in retirement. (See "**Goals forecasting – projected success rates**") We believe that achieving a combination of Retirement Accumulation Inputs that results in supporting your annual living in at least 70% of our market forecasts suggests you are moderately funded to meet your savings goal. If we forecast multiple combinations of your Retirement Accumulation Inputs that will result in you being on track, we will initially suggest three different combinations of the Retirement Accumulation Inputs that result in projecting you will be on track based on how close those combinations are to the information you provided. We may also provide you options for you to retire earlier within your specified retirement age range by suggesting a combination of the Retirement Accumulation Inputs where results in projections in at least 70% of our market forecasts that your planned investments will cover your estimated expenses in retirement. You will have an option to view more options or proceed to the next stage of goal forecasting where you can vary any of the Retirement Accumulation Inputs to see different forecasts. These combinations illustrate a variety of ways Users may be able to achieve their desired monthly income at retirement during the age range they indicated as preferred for retirement. Options illustrate the tradeoffs Clients may need to make to achieve an earlier retirement age (increased contributions and/or decreased monthly income at retirement),

as well as the benefits of retiring on the later end of their preferred range (including lower monthly contributions and/or higher income at retirement).

If Digital Advisor projects that your goal is forecasted to be off track, we will not suggest alternative combinations of the Retirement Accumulation Inputs, but rather direct you to the next stage of goal forecasting where you can vary any of the Retirement Accumulation Inputs to view the resulting goal success forecasts.

Assumptions about non-Portfolio accounts in goals forecasting

For prospective User (Users without an existing Vanguard Account), we will make a default assumption that the amount you enter for your retirement savings is taxable for purposes of providing you a goal forecast to avoid overstating the financial projection until we learn more about you and your accounts.

These are accounts that Digital Advisor can't manage, but it has the capability to integrate data about these accounts into your goal success forecasting. Accordingly, we will use the same index returns noted in the section below entitled “**Goals forecasting – projected success rates**” for the forecasting model to project your likelihood of success based on both outside accounts and accounts held in the Portfolio (or projected to be held in the Portfolio as part of the goal forecasting). If your accounts held outside the Portfolio (either at Vanguard or at another financial institution) aren't invested in a similar manner as the Portfolio, your actual investment results may vary significantly from our likelihood of success projections. A variance in the actual asset allocation of your accounts held outside of the Portfolio could significantly impact your likelihood of reaching a goal within the indicated time frame and with the exception of the account balance, such a variance would not be reflected in the projections.

If your retirement accumulation goal is forecasted using accounts held outside of the Portfolio (including other Vanguard accounts), the projections are calculated based solely on the information that you provide us with respect to the dollar amount of securities held in those accounts and your rate of contributions to those accounts. You may provide us with such information manually or through the usage of certain third party financial data aggregation services. We will continue to rely upon the information you provide for as long as your goals are supported by such accounts. We will not independently verify or update this information. You may update the dollar amount of securities in accounts held outside of the Portfolio and your rate of contributions within the DA Website and Interface or by authorizing a third party financial data aggregation service to refresh the data. Digital Advisor does not take this information about non-Portfolio accounts into account to manage your asset allocation.

Goals Forecasting – projected success rates

To cover a broad range of outcomes, Digital Advisor's forecasts will generate 10,000 scenarios to measure your likelihood of success of reaching your goals. Projections use forecasted index returns for equities, bonds, and cash, which are used to represent the hypothetical returns of the asset classes in your Portfolio (or potential portfolio for Users who have not yet enrolled). These forecasted index returns as well as inflation rates are provided through the Vanguard Capital Markets Model® (“VCMM”), developed by the Vanguard Investment Strategy Group, which is discussed in more detail later.

Projections may be based upon the account types and the balances of those accounts that Users select to be included in their goal planning or Portfolio or upon accounts held outside of the Portfolio (or potential portfolio for Users who have not yet enrolled). Our goals forecasting model uses the same index returns to represent the returns of the asset classes in all of your accounts supporting your goals in your Portfolio. Index returns for fixed income and equity products are reduced by 0.20% annually, and index returns for money market/cash/short-term reserves are reduced by 0.11% annually to account for hypothetical expenses and advisory fees. Because our forecasting model uses index returns it does not use actual returns of specific investments held within your accounts. Inflation is modeled based on historical data from 1960 through the most recent year-end and simulated going forward.

The likelihood of success projections for your goals do not attempt to predict or portray the future performance of any securities held in accounts supporting your goals. The forecasts are hypothetical projections based on statistical modeling of current and historical data. They aren't a guarantee of future results or a guarantee of the success rate of the simulated outcomes. Although we believe that the forecasts may reasonably project your likelihood of reaching your goals as supported by accounts invested in a diversified portfolio of Vanguard Funds or collective investment trusts, such projections may not correlate well to other assets held by you in any accounts that are not invested in accordance with our lead advice methodology. Accordingly, your actual investment results may vary significantly from our projections.

We also project your lifetime cash flows—inflows from investment income and other sources and outflows from spending—to assess whether your investments can adequately support your retirement income needs over your lifetime. We evaluate many factors in assessing your current and future cash flows, including:

- Projected and known expenses, including annual living expenses and other periodic expenses identified by you.
- The impact of adjusting your annual living expenses based on inflation projections.
- Projected income, including employment, Social Security, pension, and income from investments.
- The impact of variables, such as inflation and income taxes.
- The impact of different market scenarios on the rates of return used to project the likelihood of success of reaching your retirement goal.

We simulate your expected inflows and outflows each year through your expected planning horizon, and using each individual scenario's unique forecasted return and inflation assumptions, we project your likelihood of reaching your retirement goal. As part of your projected outflows, Digital Advisor forecasts your annual expenses based on our inflation projections and does not factor in market appreciation or depreciation. Additionally after your planned retirement age, any projected spending shortfall is assumed to result in a removing funds from your Portfolio to make up the difference. For participants that identify as retired, Digital Advisor will provide five year spending projections based on these assumptions.

The overall likelihood of success measure for your retirement goal represents the percentage of the 10,000 hypothetical scenarios in which your balance in your retirement accounts is above zero at the end of the planning horizon you select as part of the goal planning in Digital Advisor. For the retirement goal, Digital Advisor assumes a time horizon for retirement (time in

retirement) of age 100 unless Users input a different age. In other words, our projections represent the percentage of hypothetical scenarios in which the accounts supporting your retirement goal have at least a \$1 balance remaining as of your 100th birthday.

Index Benchmarks used in the calculations

The returns used in the simulations for each type of goal are based on the following:

- For U.S. bond market returns, we use the Barclays U.S. Aggregate Bond Index.
- We calculate U.S. short-term reserves returns on the basis of 3-month constant-maturity yields dating back to 1960, also provided in the Federal Reserve's Statistical Release H.15.
- For U.S. stock market returns, we use the MSCI US Broad Market Index. For international stock market returns, we use the MSCI All Country World ex USA Index.

Vanguard Capital Markets Model ("VCMM")

VCMM is a proprietary, state-of-the-art, financial simulation tool developed and maintained by the Vanguard Investment Strategy Group. The VCMM uses a statistical analysis of historical data for interest rates, inflation, and other risk factors for global equities, fixed income, and commodity markets to generate forward-looking distributions of expected long-term returns. The asset return distributions used in the goals forecasting models are drawn from 10,000 VCMM simulations based on market data from 1926 for the equity markets and from 1960 for the fixed income markets through the most recent year-end. The forecasts provided by the VCMM are updated annually to incorporate the most recent market data, though we may update the data more frequently in cases of major market events.

The VCMM is grounded on the empirical view that the returns of various asset classes reflect the compensation investors receive for bearing different types of systematic risk, a measure of the volatility of a security or a portfolio relative to a benchmark, also known as beta. Using a long span of historical monthly data, the VCMM estimates a dynamic statistical relationship among global risk factors and asset returns. Based on these calculations, the model uses regression-based Monte Carlo simulation methods to project relationships in the future. A regression-based Monte Carlo framework incorporates the uncertainty of any asset class that's produced by basic Monte Carlo simulation and also captures the dynamic relationships among certain assets and risk factors. By incorporating a variety of macroeconomic and financial risk factors into the return-generating process, a regression-based Monte Carlo framework generates financial simulations that are responsive to changes in the economy. By explicitly accounting for important initial market conditions when generating its return distributions, the VCMM framework departs fundamentally from more basic Monte Carlo simulation techniques.

Limitations of the quantitative analysis

Projections generated by the VCMM are based both on estimated historical relationships and on assumptions about the risk characteristics of various asset classes. As a result, the accuracy of VCMM forecasts depends on the relevance of the historical sample in simulating future events. The projections are hypothetical in nature, don't reflect actual investment results, and aren't guarantees of future results.

Emergency savings and next dollar guidance:

Digital Advisor will provide guidance to Clients on how to set emergency savings goals based on their needs. Guidance provided will help Clients define target thresholds for cash or cash equivalent holdings that could be liquidated at no cost, such as assets at a loss in a taxable account or where basis equals market value to address potential spending shocks. Additionally, Digital Advisor will also provide guidance how to balance competing financial objectives, such as wanting to contribute more money to your retirement accounts, pay down debt, or save for an emergency.

Disciplinary information

VAI has no material legal or disciplinary information to disclose.

Other financial industry activities and affiliations

The Vanguard Group, Inc.

VAI is 100% owned by Goliath, Inc., a Delaware corporation, which is wholly owned by Vanguard. Vanguard, also a registered investment advisor, provides a range of investment advisory and administrative services to the Vanguard Funds.

When giving advice to Clients, we will recommend the purchase of Vanguard Funds serviced by our corporate parent, Vanguard. We address the competing interests that arise between us and our Clients as a result of recommending proprietary funds by relying on our time-tested investment philosophies and beliefs, such as the benefits of low costs, diversification, and indexing, when formulating target allocations for Clients. We disclose to prospective Clients that we recommend Vanguard Funds prior to, or at the establishment of, the advisory relationship. Acting in accordance with our advice to purchase Vanguard's proprietary funds will result in the payment of fees to the Vanguard Funds that are separate from, and in addition to, any advisory fees assessed by us.

Vanguard Marketing Corporation

Shares of the Vanguard Funds are marketed and distributed by VMC. VMC's marketing and distribution services are conducted in accordance with the terms and conditions of a 1981 exemptive order from the SEC, which permits Vanguard Funds to internalize and jointly finance such activities. Each Vanguard Fund (other than a fund of funds) or each share class of a fund (in the case of a fund with multiple share classes) pays its allocated share of VMC's marketing costs. VMC doesn't receive transaction-based compensation in connection with the distribution of the Vanguard Funds.

When giving advice to Clients, we will recommend the purchase of Vanguard Funds distributed by our affiliate, VMC. Since VMC doesn't receive transaction-based compensation in connection with the distribution of the Vanguard Funds, the competing interests that arise from our affiliation with VMC in its role as distributor of the Vanguard Funds are mitigated. However, to the extent that you maintain a Retail brokerage account with VMC as part of the Portfolio, VMC may receive compensation from you that's separate from, and in addition to, the advisory fees payable to us. Please see the section of this brochure entitled "**Brokerage practices**" for more information about brokerage charges and other fees and expenses you may experience as a result of enrolling your Vanguard Brokerage Account in our service.

Certain members of our management and our advisors are registered representatives of, or are affiliated with, VMC. Please refer to the Supplement to the Vanguard Digital Advisor Brochure for further information.

Vanguard Fiduciary Trust Company

We are also affiliated with VFTC, a limited-purpose trust company incorporated under the banking laws of the Commonwealth of Pennsylvania and a wholly owned subsidiary of Vanguard. VFTC serves as trustee and investment advisor for certain collective investment trusts offered by Vanguard as eligible investment options by some retirement plans. We may recommend the purchase of Vanguard collective investment trusts serviced by VFTC. Additionally, VFTC serves as directed trustee for certain employer-sponsored retirement plans covering participants. VFTC also serves as custodian for traditional IRAs, SEP-IRAs, and Roth IRAs (collectively referred to as “Vanguard IRAs”). VFTC may charge reasonable custodial fees with respect to the establishment and maintenance of your Vanguard IRAs at any time during the calendar year. You should consult the Disclosure Statement and Custodial Account Agreement governing your Vanguard IRAs, or your Annual Plan Fee Disclosure Notice, for more information relating to VFTC’s fees and services provided.

Vanguard National Trust Company

Vanguard National Trust Company (“VNTC”) is a federally chartered, limited-purpose trust company regulated by the Office of the Comptroller of the Currency, which serves as corporate trustee and provides investment advisory services to certain high net worth clients of Vanguard’s Retail Investor Group under Vanguard Personal Advisor Services. VNTC was chartered in 2001, but its business has been in operation since 1996. VNTC is a wholly owned subsidiary of Vanguard.

Code of ethics, participation or interest in client transactions, and personal trading

VAI operates under a code of ethics that complies with Rule 17j-1 of the Investment Company Act of 1940 and Rule 204A-1 of the Investment Advisers Act of 1940.

The code sets forth fiduciary standards that apply to all employees, incorporates Vanguard’s insider trading policy, and governs outside employment and receipt of gifts. Additionally, the code imposes restrictions on the personal securities trading of Vanguard employees, as well as reporting requirements. The trading restrictions and reporting requirements are more involved for employees that have access to information about Vanguard Fund trading activity or Vanguard client trading activity and are designed to ensure that Vanguard employees don’t misuse fund or client information for their own benefit.

Vanguard will provide a copy of its code of ethics to any User upon request at no charge.

Please see the previous section of this brochure above entitled “**Other financial industry activities and affiliations**” for a discussion of VAI’s affiliations with other Vanguard entities and how those affiliations may impact clients of VAI.

Brokerage practices

Enrolled Vanguard Brokerage Accounts

This section regarding Brokerage practices applies to RIG Clients with enrolled Vanguard Brokerage Accounts. You will be required to establish or use an existing Vanguard Brokerage Account held through our affiliated broker-dealer, VMC, for those securities, and you'll agree in your Service Agreement for Digital Advisor to execute all Portfolio brokerage transactions through VMC. Transactions executed in a Vanguard Brokerage Account will be subject to VMC's usual and customary fees, markups, commissions, and charges, as well as bid-ask spreads, separate and apart from the gross advisory fees assessed by us. (However, if these fees are assessed and retained for purposes of generating revenue, they are included in the fee credit described above).

Digital Advisor typically starts sending trade orders for execution to our trading venues, at or near 10:00 a.m. each day, and, depending on trading volumes and appropriateness, may trade throughout the day. It is important to note that, RIG Clients give investment discretion to Digital Advisor to manage and make trades in their account(s), and, as such, Digital Advisor will initiate or pause trading at its discretion at any time and for any reason, including pausing trading when Digital Advisor believes that continuing trading may pose undue risk of harm to your Portfolio. In the event that we suspend or delay trading, requests to withdraw and transfer cash from enrolled accounts continue to be honored. However, there may be a delay in the Digital Advisor's ability to liquidate securities to cover requests for withdrawals in excess of the cash in enrolled accounts, or to invest existing or new cash balances.

To limit adverse price effects that you could experience if VAI submitted brokerage trades in bulk to the secondary markets at a single point in time, we've designed a fair and equitable system for handling automated brokerage trades that doesn't systematically disadvantage any Client. We aggregate trades among Clients and PAS clients for the purpose of minimizing transaction costs while seeking best execution on behalf of our clients. Where VAI aggregates trades, VAI will calculate an average price for all of the securities bought or sold together, and Clients who participated in the aggregated trade will receive that average price for the securities traded for them. The average price we assign to individual trades that were aggregated may be greater or less than the price the order would've received if traded on an individual basis.

Periodically, we conduct due diligence to review the execution quality of any transaction services provided by VMC for Clients' Portfolios, primarily to oversee VMC's compliance with its best execution practices. VMC routes equity and option orders to various markets. VMC uses a top-down approach in selecting market participants with which VMC will establish a relationship. This approach includes a review of system availability and quality of service, as well as financial and regulatory standing. The designated market participants to which orders are routed are selected based on the consistent high quality of their executions in one or more market segments. In analyzing quality of executions, VMC considers factors such as liquidity enhancement, price improvement, execution speed, and overall effective price compared with the national best bid or offer ("NBBO"). VMC regularly conducts analysis and reviews reports in order to evaluate quality of execution.

Other investment advisors may not require you to direct brokerage transactions through a specified broker-dealer. By directing brokerage transactions to VMC, we may be unable to

achieve most favorable execution of your transactions, and this practice may cost you more money.

Enrolled 401(k) Plan Participant Accounts

Digital Advisor will not provide recommendations on individual securities held through a brokerage window. Therefore, Digital Advisor does not select or recommend broker-dealers for client transactions for IIG Clients.

Review of accounts

This section regarding the review of accounts applies to those Users who have enrolled in Digital Advisor's ongoing discretionary advisory service. Clients of the ongoing advised service will have access to their Portfolio information through the DA Website and Interface. As part of Digital Advisor's Rebalance, we will evaluate and monitor the Portfolio.

We don't perform ongoing account monitoring or offer account reviews for Users who enter information on the DA Website and Interface to plan financial goals, but who do not enroll their accounts.

Adjusting the asset allocation

For Clients (Users with accounts enrolled in Digital Advisor), Digital Advisor will assess your asset allocation if you inform us that your Personal Characteristics have changed including your ability to bear risk changes, but we won't change the asset allocation based on market conditions. Each business day, we will review your target allocation in relation to your investment time horizon to determine if changes to the allocation are necessary. Digital Advisor reserves the right to abstain from assessments on a given day for technical or market infrastructure reasons. The Portfolio's target allocation will also change based on changes to your financial situation and financial goals, in particular, changes to your Personal Characteristics. Changes in your target asset allocation will cause us to recommend and effect the purchase or sale of securities in your Portfolio in order to meet the new target asset allocation, subject to the rebalancing guardrails below.

Rebalancing the Portfolio

For Users with accounts enrolled in Digital Advisor, if your Portfolio is found to deviate from the target asset allocation by more than 5% in any asset class during a daily Rebalance, under normal market circumstances, we will rebalance your Portfolio using our investment methodologies and strategies aligned with your financial goals. Securities contributing to overweighted sub-asset classes will be sold and the proceeds invested in underweighted sub-asset classes in accordance with your financial goal.

We will attempt to minimize the tax costs associated with rebalancing your Portfolio. If the Portfolio consists of both taxable and tax-advantaged account registrations, we'll first attempt to rebalance within the tax-advantaged accounts to attempt to limit tax costs. In addition, we'll follow a tax-efficient "asset location" strategy to consider the tax implications of repositioning investments within the taxable accounts and among the taxable and tax-advantaged accounts. This strategy will follow similar practices as those used during implementation of your Portfolio to hold relatively tax-efficient investments, such as broad-market stock index products, in taxable accounts while keeping relatively tax-inefficient investments, such as taxable bonds, in

tax-advantaged accounts. In the event your Portfolio is found to deviate from the target asset allocation by 5% or less in all asset classes, individual investments may still be reviewed and sold, if determined to be appropriate.

Additionally, we will use cash flows as an opportunity to adjust your holdings towards your target allocation. That is, we will invest your contributions or liquidate your withdrawals in a manner that adjusts your overall allocation back towards your target allocation, in order to minimize transaction and tax costs. If your contribution or additional proceeds are designated to purchase new ETF shares we will rebalance in a manner that purchases whole shares of the needed ETFs in your Vanguard Brokerage Account. If you have residual cash in your Vanguard Brokerage Account and it's not enough to purchase the necessary shares of ETFs, then the cash will continue to be held until the next rebalancing opportunity.

As owners of Vanguard Funds, Digital Advisor's clients will receive or have access to communications with respect to those securities. These communications include transaction confirmations, quarterly account statements, prospectus updates, annual and semiannual reports, and proxy statements relating to their holdings (as appropriate), as well as general Vanguard newsletters, emails, and other communications.

Client referrals and other compensation

We don't receive compensation or other economic benefits from persons other than clients for providing investment advice or advisory services to clients. We'll run prospecting and promotional campaigns from time to time to attract new clients to Digital Advisor ("Referral Programs"). These Referral Programs may include compensating affiliates, strategic partners, or third-party solicitors for referring Digital Advisor to prospects. Compensation will include flat fees or payments based on certain performance triggers, like enrolling in Digital Advisor. Clients aren't charged any fee nor do they incur any additional costs for us running these Referral Programs. We have oversight of third parties involved in the Referral Programs, and prospects will be informed of any such Referral Programs receiving compensation prior to becoming a Client. Note that Vanguard affiliates will also receive compensation in the form of expense ratios from Vanguard Funds and revenue sharing with third party funds as discussed in the "Fees and Compensation" section above.

Custody

Vanguard, the transfer agent of the Vanguard Funds, acts in the capacity of a qualified custodian for those Funds and sends quarterly or more frequent account statements directly to you. Vanguard will also transmit transaction confirmations to you in connection with purchases and sales made in your Vanguard Fund account(s). For IIG Clients enrolled in Digital Advisor in employer-sponsored retirement plans for which Vanguard provides recordkeeping services and VFTC provides trustee services, custody services are provided through VFTC and participants receive quarterly, or more frequent, plan account statements from Vanguard.

VMC, a registered broker-dealer, serves as qualified custodian for our Retail Investor Group clients holding securities in Vanguard Brokerage Accounts. VMC sends out quarterly or more frequent account statements directly to you. VMC will also transmit transaction confirmations to you in connection with purchases and sales made in your Vanguard Brokerage Account

(provided that VMC may furnish periodic statements of account activity in lieu of transaction confirmations in compliance with Rule 10b-10 of the Securities Exchange Act of 1934). You should carefully review and compare all account statements and reports from Vanguard and VMC with any account information made available by us and contact the appropriate entity with any questions.

Investment discretion

When you decide to enroll accounts, you are providing Digital Advisor full discretionary trading and investment authority over those accounts subject to the Digital Advisor Advisory Service Agreement. As a result, Digital Advisor will have full discretionary authority over the investments selected for your Portfolio, and the timing and size of purchases and sales within your Portfolio. Digital Advisor is not designed to provide a comprehensive financial plan to Users or Clients. Rather, the DA Website and Interface seeks to help Clients define their financial goals and designate investment accounts for which they would like Digital Advisor to exercise discretionary management.

In order to manage your accounts, we will have the authority, on your behalf, to purchase, sell, exchange, or transfer assets; rebalance and reallocate assets; modify our investment strategies; and execute other necessary and appropriate transactions, including transmitting verbal, written, or online instructions to effect transactions, at the times and according to the terms established in the Digital Advisor Advisory Service Agreement. We may change our investment strategy at any time and without prior notice to you, including changing the investments used for purposes of rebalancing the Portfolio.

We don't exercise any investment discretion with respect to Users who use the financial planning tools and decide not to enroll in the ongoing advised service.

Voting client securities

Vanguard Brokerage Accounts

Upon request, Digital Advisor will provide additional information regarding proxy votes and corporate actions for clients enrolled in the ongoing advised service, upon request. The information could include details on the security itself, impact on the Client's Portfolio, and recommended voting by Vanguard or third parties.

We won't vote or exercise similar rights for your securities. The exercise of all voting rights associated with any security or other property held by you shall be your responsibility. We won't advise or act for you in any legal proceedings, including bankruptcies or class actions, involving securities held or previously held by you or the issuers of those securities. Proxies will be delivered directly by the issuer of the security, the custodian, or its agent.

Participants in certain employer-sponsored 401(k) retirement plans

The responsibility for the exercise of all voting or similar rights associated with any security or other property held in the enrolled Participant Account will be outlined by your plan. Proxies related to plan holdings will be delivered directly by the issuer of the security, the custodian or its agent.

Financial information

We aren't aware of any financial condition that's reasonably likely to impair VAI's ability to meet contractual commitments to you.

Requirements for state-registered advisors

VAI is a federally registered investment advisor.

Investment risks

Digital risk: Digital Advisor provides its investment advisory services through digital services (e.g. the DA Website and Interface or the underlying algorithms). It is possible that a digital service or capability may not perform as intended or as disclosed despite diligent design and testing before those services and capabilities are put into production. VAI will monitor and test for potential defects and seek to correct capabilities that do not perform as intended or disclosed.

Vendor risk: Digital Advisor's risk assessment process and data aggregation capabilities rely on third-party vendors. It is possible that Users' ability to use the DA Website and Interface or the projections that Digital Advisor provides could be negatively impacted due to the performance of a third-party vendor. Third-party vendors may limit their liability to Users.

Data risk: Digital Advisor relies on data provided by clients or authorized by clients to be provided by third party vendors. Digital Advisor does not independently verify the accuracy or completeness of provided data. If a client decides to aggregate or integrate external accounts there is no guarantee that information provided by the third-party vendor regarding non-Vanguard accounts will be accurate or complete. Additionally, to the extent Digital Advisor projections and calculations are based on historical market data, labor statistics, or other historic economic data, models are not updated real-time and there will be a delay in incorporating significant events into models.

Discretionary manager risk: It is possible that poor security selection or focus on securities in a particular sector, category, or group of companies will cause one or more of the fund's or ETF's underlying funds—and, thus, the fund or ETF itself—to underperform relevant benchmarks or other funds with a similar investment objective.

Cybersecurity risks: The increased use of technology to conduct business could subject VAI and its third-party service providers to risks associated with cybersecurity. In general, a cybersecurity incident can occur as a result of a deliberate attack designed to gain unauthorized access to digital systems. If the attack is successful, an unauthorized person or persons could misappropriate assets or sensitive information, corrupt data, or cause operational disruption. A cybersecurity incident could also occur unintentionally if, for example, an authorized person inadvertently released proprietary or confidential information. Vanguard has developed robust technological safeguards and business continuity plans to prevent, or reduce the impact of, potential cybersecurity incidents. Additionally, Vanguard has a process for assessing the information security and/or cybersecurity programs implemented by third-party service providers, which helps minimize the risk of potential incidents. Despite these measures, a

cybersecurity incident still has the potential to disrupt business operations, which could negatively impact VAI and/or Digital Advisor's Users.

The following summarizes the principle risks of using equity and bond index funds, ETFs, or collective investment trust to achieve the asset allocations in the Digital Advisor's investment strategy. For conciseness the risk description references to "fund" describe risks associated with funds, ETFs, or collective investment trusts.

Index sampling risk: is the chance that the securities selected for a fund, in the aggregate, will not provide investment performance matching that of a fund's target index.

ETF risk: Vanguard ETF Shares are not redeemable directly with the issuing fund other than in very large aggregations worth millions of dollars. ETFs are subject to market volatility. When buying or selling an ETF, you will pay or receive the current market price, which may be more or less than net asset value.

Manager risk: is the chance that poor security selection or focus on securities in a particular sector, category, or group of companies will cause a fund to underperform relevant benchmarks or other funds with a similar investment objective.

Equity-specific risks:

Stock market risk: is the chance that stock prices overall will decline. Stock markets tend to move in cycles, with periods of rising prices and periods of falling prices.

Industry concentration risk: is the chance that there will be overall problems affecting a particular industry.

Sector risk: is the chance that significant problems will affect a particular sector or that returns from that sector will trail returns from the overall stock market. Daily fluctuations in specific market sectors are often more extreme than fluctuations in the overall market. Because a fund invests all, or substantially all, of its assets in a particular sector, the fund's performance largely depends—for better or for worse—on the general condition of that sector.

Company stock funds: concentrate on a single stock and are therefore considered riskier than diversified stock funds.

Investment style risk: is the chance that:

- Returns from large-capitalization stocks will trail returns from the overall stock market. Large-cap stocks tend to go through cycles of doing better—or worse—than other segments of the stock market or the stock market in general.
- Returns from small- and mid-capitalization stocks will trail returns from the overall stock market. Historically, small- and mid-cap stocks have been more volatile in price than the large-cap stocks that dominate the overall market, and they often perform quite differently.

International risk or country/regional risk: is the chance that world events—such as political upheaval, financial troubles, or natural disasters—will adversely affect the value of securities issued by companies in foreign countries or regions. Because a fund may invest a large portion

of its assets in securities of companies located in any one country or region, including emerging markets, its performance may be hurt disproportionately by the poor performance of its investments in that area. Country/Regional risk is especially high in emerging markets.

Emerging markets risk: is the chance that the stocks of companies located in emerging markets will be substantially more volatile, and substantially less liquid, than the stocks of companies located in more developed foreign markets.

Currency risk: is the chance that the value of a foreign investment, measured in U.S. dollars, will decrease because of unfavorable changes in currency exchange rates. Currency risk is especially high in emerging markets.

Bond-specific risks:

Call risk: is the chance that during periods of falling interest rates, issuers of callable bonds may call (redeem) securities with higher coupons or interest rates before their maturity dates. The fund would then lose any potential price appreciation above the bond's call price and would be forced to reinvest the unanticipated proceeds at lower interest rates, resulting in a decline in the fund's income. Such redemptions and subsequent reinvestments would also increase a fund's portfolio turnover rate.

Call risk is generally low for short-term bond funds, moderate for intermediate-term bond funds, high for long-term bond funds, and high for high-yield bond funds.

Prepayment risk: is the chance that during periods of falling interest rates, homeowners will refinance their mortgages before their maturity dates, resulting in prepayment of mortgage-backed securities held by the fund. The fund would then lose any price appreciation above the mortgage's principal and would be forced to reinvest the unanticipated proceeds at lower interest rates, resulting in a decline in the fund's income. Such prepayments and subsequent reinvestments would also increase a bond fund's portfolio turnover rate.

Extension risk: is the chance that during periods of rising interest rates, certain debt securities will be paid off substantially more slowly than originally anticipated, and the value of those securities may fall. This will lengthen the duration or average life of those securities and delay a fund's ability to reinvest proceeds at higher interest rates, making a fund more sensitive to changes in interest rates. For funds that invest in mortgage-backed securities, extension risk is the chance that during periods of rising interest rates, homeowners will repay their mortgages at slower rates.

Credit risk: is the chance that the issuer of a convertible security will fail to pay interest or dividends and 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.

Income risk: is the chance that the fund's income will decline because of falling interest rates. Income risk is generally high for short-term bond funds, low for long-term bond funds, and high for limited-term bond funds.

Interest rate risk: is the chance that bond and loan prices overall will decline because of rising interest rates.

Liquidity risk: is the chance that the fund may not be able to sell a security in a timely manner at a desired price. Liquidity risk is generally low for short-term bond funds, moderate for intermediate-term bond funds, and high for long-term bond funds.

Currency hedging risk: is the risk that the currency hedging transactions entered into by a fund may not perfectly offset the fund's foreign currency exposure.

Supplement to the Vanguard Digital Advisor Brochure

March 30, 2020

Vanguard Advisers, Inc.
100 Vanguard Boulevard
Malvern, PA 19355
877-662-7447 vanguard.com

This brochure supplement provides information about Vanguard Digital Advisor Services® advisory services under Vanguard Advisers, Inc. (“VAI”), the registered investment advisor that supplements the Vanguard Digital Advisor Brochure. You should have received a copy of the respective brochure. Please contact VAI at the number above if you didn’t receive a brochure or if you have any questions about the contents of this supplement. Additional information about VAI is available on the SEC website at adviserinfo.sec.gov.

Digital Advisor’s discretionary investment advice is provided by a team and VAI has provided information for the Supervised Persons with the most significant responsibility for the day-to-day investment advisory services to Clients.

Joel Dickson, Ph.D., (1967)

A.B. from Washington University in St. Louis (1989)

Ph.D. in economics from Stanford University (1995)

Joel Dickson is a Vanguard Principal and Global Head of Advice Methodology at Vanguard. Prior to his current role, Joel served as Head of Investment Research and Development in Vanguard’s Investment Strategy Group from 2014-2017. Joel joined Vanguard in 1996 and has held a number of senior investment-related roles.

Disciplinary Information: None

Other Business Activities: None

Supervision: Dr. Dickson reports to Mr. Taylor.

Maria Bruno, CFP®, (1968)

B.S.B.A. from Villanova University (1990)

Maria Bruno is Head of U.S. Wealth Planning Research at Vanguard. Prior to her current role, Maria was a Senior Investment Strategist in Vanguard’s Investment Strategy Group, leading a team responsible for conducting research and analysis on a wide range of retirement, wealth planning, and portfolio construction topics from 2012-2017. She has also served in a variety of advice-related and leadership roles, including as a practitioner in Vanguard Personal Financial Planning and Advice Services departments, where she created comprehensive financial plans, managed a team of financial planners, and developed Vanguard's advice programs and educational materials.

Disciplinary Information: None

Other Business Activities: None

Supervision: Ms. Bruno reports to Dr. Dickson.

Nathan Zahm, CFA®, FSA, (1983)

Bachelor of Arts in Economics from the University of Maryland, (2005)

Nathan Zahm is the head of Global Advised Portfolio Construction in Vanguard's Enterprise Advice Department. Prior to Nathan's current role, he was a Senior Investment Strategist in Vanguard's Investment Strategy Group leading teams within Vanguard's Hong Kong and Australian subsidiaries from 2017-2019 and 2015-2017, respectively. Nathan joined Vanguard in 2011 as an investment actuary in Vanguard's Investment Strategy Group.

Disciplinary Information: None

Other Business Activities: None

Supervision: Mr. Zahm reports to Dr. Dickson.

Supervision

Dr. Dickson's, Ms. Bruno's, and Mr. Zahm's Digital Advisor investment advisory activities are conducted as a part of a wealth planning and portfolio construction advice team and are supervised by the Advice Program Oversight Committee. The following management members serve on the Advice Program Oversight Committee:

Jonathan Cleborne, CFA®, (1980)

B.A. Government, University of Virginia (2003)

M.B.A., Dartmouth College (2010)

Principal, Vanguard: Head of Personal Advisor Services (2018-Present); Head of Product (2016-2018); Head of Product Strategy (2014-2016)

James M. Delaplane, Jr., (1966)

B.A., Harvard University (1989)

J.D., Harvard Law School (1995)

Principal, Vanguard: Head of Retail Relationship Management and Sales at Vanguard (2019-Present); Head of Flagship Services (2015-2019); Head of Securities & ERISA Regulation (2014-2015)

Dean Edwards, CFP®, (1982)

B.A. Communication Studies and Economics and Business Administration, Ursinus College (2004)

M.B.A., Villanova University (2010)

Principal, Vanguard: Head of Institutional Advice & Participant Experience (2019- Present); Head of Institutional Shared Services (2018); Head of DC Mega Market Client Services (2014-2017)

Aaron Taylor (1976)

B.S. Marine Engineering, U.S. Merchant Marine Academy (1999)

M.S. Engineering and Management, MIT (2005)

Principal, Vanguard: Head of Enterprise Advice (2019-Present); Head of Vanguard Digital Advisor Product Development (2018-2019); Head of Retail Strategic Support (2016-2018); Personal Advisor Services (2013-2016)

Educational background and business experience

The Supervised Persons from VAI have several years of experience with investment products in addition to the Vanguard group of mutual funds.

Several of the Supervised Persons are Certified Financial Analyst® (CFA) charterholders. To earn the CFA charter, candidates must:

- meet requirements to enroll in the CFA Program,
- pass required exams,
- have four years of professional work experience in the investment-decision making process, and
- join the CFA Institute as a regular member.

All charterholders are expected to adhere to the CFA Code of Ethics and Standards of Professional Conduct. In addition, it is recommended that CFA Institute members complete a minimum of 20 hours of continuing education credit activities, with a minimum of 2 hours in the topics of Standards, Ethics, and Regulations (SER) each calendar year.

Certain Supervised Persons hold the Certified Financial Planner® (CFP) certification. To obtain the certification, financial planners are required to meet the following four criteria set forth by the Certified Financial Planner Board of Standards:

- The certificant must have a bachelor's degree (or higher) or its equivalent, in any discipline, from an accredited college or university, and successfully complete one of the following additional education requirements: a CFP board-registered program, a challenge status, or a transcript review.
- The certificant must pass the CFP Certification Examination that assesses his or her ability to apply financial planning knowledge, in an integrated format, to financial planning situations.
- The certificant must have three years of full-time relevant personal financial planning experience.
- The certificant must agree to adhere to the Certified Financial Planner Board of Standards' Code of Ethics and Professional Responsibility, Rules of Conduct, and Financial Planning Practice Standards.

Additionally, Nathan Zahm holds the Fellow of the Society of Actuaries (FSA) designation. To attain the FSA designation, candidates must pass required exams and project assessments, as well as attend special courses.

VAI has no affiliation with the CFA, Certified Financial Planner Board of Standards, and the FSA.

Advice services are provided by Vanguard Advisers, Inc., a registered investment advisor. If you have any questions about our services, please call 844-899-0113 and leave your name and a phone number where you can be reached. A member of our management team will contact you within two business days.