

Vanguard Digital Advisor and Vanguard Personal Advisor Brochure

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This brochure provides information about the qualifications and business practices of Vanguard Digital Advisor® and Vanguard Personal Advisor™, advisory services (each a “Service” and collectively the “Services”) 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 each 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: This is our annual brochure amendment reflecting an update to Vanguard Advisers, Inc.’s assets under management. Since Vanguard Digital Advisor and Vanguard Personal Advisor’s Brochure (“Brochure”) annual update on March 31, 2023 several updates to the Services have occurred including:

On March 28, 2024, this Brochure was amended to enhance withdrawal capabilities and enable Clients to pre-schedule withdrawals subject to certain limitations effective on or after April 1, 2024. See “Enrolled Account Restrictions and Defaults” page 13.

On August 24, 2023, the Services expanded capabilities to manage multiple goals using individual retirement account (“IRA”) assets. For additional information, see “Methods of analysis, investment strategies, and risk of loss” on page 25. Effective October 21, 2023, the gross advisory fee assessed to managed accounts on a quarterly basis started to be calculated across all recommended cash allocations associated with a specific goal and glidepath within each enrolled account. The gross advisory fee continues to not be applied to the cash assets held in your settlement fund. This change

impacted you if you have multiple managed goals. If you only have a retirement savings goal or a managed employer-sponsored plan account, there was no impact to your current fees. For additional information, see “Fees and compensation” on page 16.

On October 10, 2023, additional investment types were eligible to be retained in managed taxable accounts subject to a breakeven analysis. See Methods of analysis, investment strategies, and risk of loss - Smart Sell down (tax efficient rebalancing) on page 36. Also on October 10, 2023, employer-sponsored retirement plans with 403(b) and 401(a) plan types are now eligible to enroll. See “Types of Clients -- Participant Account” on page 24.

On or about December 27, 2023, you were able to plan and invest towards multi-year education goals. For more information see Methods of analysis, investment strategies, and risk of loss on page 25.

This brochure update includes other additional non-material changes regarding rebalancing practices, features and capabilities available in Digital Advisor and Personal Advisor.

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Advisory business

VAI is a Pennsylvania corporation that provides clients with a wide variety of investment advisory services, 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) as well as mutual funds and ETFs managed by third party asset managers 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 and currently to participants of eligible employer-sponsored retirement plans. POA is sub-advised by Edelman Financial Engines Advisors L.L.C. (“FEA”), an independent investment advisor unaffiliated with VAI;
- Vanguard Personal Advisor Select (formerly branded Vanguard Personal Advisor Services): ongoing advised account services for certain retail clients and point- in-time advice services for participants in eligible employer- sponsored retirement plans;
- Vanguard Personal Advisor: discretionary advisory service offered to retail clients and eligible participants of certain employer-sponsored retirement plans;
- Vanguard Digital Advisor: discretionary advisory service offered to retail clients and to eligible participants of certain employer- sponsored retirement plans;
- Vanguard Situational Advisor: point-in-time, nondiscretionary advice services and financial planning offered to participants in certain employer-sponsored retirement plans; and
- Vanguard Managed Account Program (“VMAP”) and POA: VMAP is a 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 FEA.

VAI is a Pennsylvania corporation that provides clients with a wide variety of investment advisory services. This Brochure provides information about the Vanguard Digital Advisor (“Digital Advisor”) and Vanguard Personal Advisor (“Personal Advisor”) programs.

Information about the other investment advisory programs and services offered by VAI is available through the SEC’s website at www.adviserinfo.sec.gov.

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 for its investment advisory services. Please see the section of this brochure entitled “Other financial industry

activities and affiliations” for more information.

Vanguard Digital Advisor

Digital Advisor, launched by VAI in 2019, provides an automated investment advisory program that offers eligible clients access to discretionary investment advisory services through a website and digital interface (the “Site”). Digital Advisor also provides online financial planning tools designed to help clients create a personalized, goals-based financial plan.

Vanguard Personal Advisor

Personal Advisor, launched by VAI in June 2022, provides the same discretionary investment advisory and financial planning services as Digital Advisor through the Site while also offering financial planning consultations with a VAI investment adviser representative (“VAI Financial Advisor”).

As an SEC-registered investment advisor, VAI has a fiduciary duty to act in its clients’ best interests and to abide by the duties of care and loyalty under the Investment Advisers Act of 1940 (“Advisers Act”). Additionally, when we provide investment advice to you regarding your Participant Account or IRA, we are fiduciaries within the meaning of Title I of the Employee Retirement Income Security Act and/or the Internal Revenue Code, as applicable, which are laws governing retirement accounts. As fiduciaries, we act in your best interest and do not put our interest ahead of yours. At the same time, certain aspects of the Services create potential conflicts of interest, such as the way we make money inclusive of recommending the use of proprietary products and investment accounts. See “**Fees and compensation**” on page 16 for additional information.

Our client relationship begins when you enter into Your Service Agreement for Vanguard Discretionary Advice Services: Vanguard Digital Advisor, Vanguard Personal Advisor (the “Client Agreement”) and the scope of our fiduciary relationship is defined in the Client Agreement. Signatories of the Client Agreement are referred to as “Clients” for their respective Service. Goal forecasting and other financial planning tools that are available prior to signing the Client Agreement, are provided solely for your information and education, but your use of those tools prior to signing the Client Agreement does not constitute a fiduciary relationship between you and VAI under the Advisers Act.

Your participation in either Service requires internet access in order to enroll and to access program documents. You should not interact with either Service if you 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 Services. You are required to maintain an active email address with us in order to remain enrolled in a Services.

As the Site evolves over time, 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.

Below is an overview of the Services, please refer to the sections of this Brochure that follow under the heading entitled “**Methods of analysis, investment strategies, and risk of loss**” for more detailed information.

Developing Your Investment Strategy

Our 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 and personalized 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. Each Service relies on information you provide through the Site.

Across all your goals, we will gather information about your risk/reward preferences or risk tolerance to determine your personalized investment strategy. This information helps us to provide an assessment of your risk attitude (Very Conservative, Conservative, Moderate, Aggressive and Very Aggressive) for you to consider.

You must set a retirement investment goal to enroll an account into either Service. Each Service captures inputs around your retirement investment goal including your expected retirement age as well as your anticipated spending needs, taxable income, and your savings depending on the onboarding journey that you choose. The risk attitude you select, your current age, marital status, and the expected retirement age you provide are then used as inputs to our proprietary investment algorithm. Our proprietary algorithm uses this data to recommend a particular investing track and glide path that correspond to your retirement investment goal.

In order to obtain a recommended asset allocation through a Service, you will need to open a new account or enroll an eligible existing account that is either: (i) a Vanguard brokerage account (“Vanguard Brokerage Account”) established with Vanguard Marketing Corporation (“VMC”), doing business as Vanguard Brokerage Services, or (ii) a participant account in an eligible employer- sponsored retirement plan (“Participant Account”) for which Vanguard affiliates provide recordkeeping services. Vanguard Brokerage Accounts and Participant Accounts are referred to collectively in this brochure as “Enrolled Accounts.” Once enrolled, we will recommend an asset allocation and specific investments that can be maintained in your Enrolled Accounts to meet your target asset allocation. The Enrolled Accounts that we manage on a discretionary basis through the Services are referred to as a “Portfolio.”

If you are enrolling a brokerage account, you will also take a style assessment, also known as an active risk assessment, to determine your investing patience and active risk tolerance. Based on the results of the style assessment, we will recommend an active/index or all-index investment option. Additionally, you will have an opportunity to elect an optional environmental, social, and governance (“ESG”) all-index investment option to further personalize your Portfolio investments based on your preferences. Depending on the onboarding track you select for the Site, these customization options could appear prior to or after enrollment.

We can manage additional lump sum or certain multi- year financial goals, subject to availability. Unlike traditional approaches, where an individual investment account is earmarked to a single goal, our multi- goal capability treats accounts as fungible assets and flexibly allocates those assets across goals based on the plan you set. We determine the appropriate goal-weighted asset allocation across all goals, dynamically managing assets and anticipated contributions within an integrated multi-goal framework. This approach is designed to help you balance your retirement investment goal with other major financial goals. It is important to understand that your target asset allocation and specific investments may change significantly upon the inclusion of financial

goals if a sizable portion of your account balances are required to fund financial goals on your target goal dates and will could result in decreasing your overall retirement savings.

You should carefully consider the tradeoffs against your retirement savings when setting your other financial goals, including reviewing the interactive forecasts and projected investment glidepaths displayed in the Site.

Goal Forecasting and Multiple Goals

In the Site, your inputs will enable you to use different interactive planning tools and visualizations (leveraging inflation and return on capital models developed by VAI and its affiliates) to help you set your financial goals. 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 benefits inform your retirement investment goal forecasting. You can also elect to include certain spouse or partner inputs for a more complete household projection. Subject to availability, if you have connected an account or manually entered information about an account that is not managed by us (“self-managed account” or “non-managed account”), you may plan additional financial goals that you anticipate funding with your self-managed accounts for purposes of hypothetical forecasting, including projected tradeoffs with your retirement savings goal.

Projections and forecasts regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. Goal forecasts, including any suggestions to improve the likelihood of funding your goals, are based solely on your account types (e.g., individual, IRA, Roth IRA) and do not incorporate specific projections of investments that you hold at Vanguard or elsewhere. Any self-managed accounts included in your goal planning are assumed to have similar asset allocations as managed accounts. If you invest differently, the goals forecast and any related suggestions, may not be realistic to meet your goals.

Each Service also provides projections to help you understand the tradeoffs between different goals that influence the success of all your goals. Additionally, if you incorporate self-managed accounts into multiple goals, forecasting success probabilities and tradeoffs are limited by assumptions regarding those accounts.

The retirement investment goal setting experience is based on a long-term asset allocation strategy and will not suit your needs if you are seeking a comprehensive retirement income strategy. Setting up additional financial goals is subject to availability. You can plan a financial goal with a single goal date that is at least eighteen months from the day you add the goal to your plan.

Each Service provides access to calculators and interactive tools to help educate Clients about how to save for emergencies, where to direct extra or idle cash and how to optimize debt repayment options. These interactive tools are not integrated with the discretionary investment advisory and related online financial planning services offered through the Services and do not impact your recommended investment strategy.

Prior to enrollment, if you have any questions, you'll have the option to speak with a VAI Financial Advisor. You will also be given the opportunity to preview projected investment recommendations to determine whether to enroll in Personal Advisor. You can also choose to forego scheduling an initial or follow-up VAI Financial Advisor consultation and instead enroll in Personal Advisor using an all-digital enrollment process. If you switch from Digital Advisor to Personal Advisor you must enroll in Personal Advisor prior to scheduling a call.

Clients enrolled in Personal Advisor will have the ability to call and schedule an appointment with a VAI Financial Advisor at any time. Employer-sponsored retirement plan participants ("Participants") with Portfolio securities less than \$500,000 and Vanguard Brokerage Account Clients are assigned to a team of VAI Financial Advisors. Clients assigned to a team of advisors can schedule an appointment with a VAI Financial Advisor by logging in to the Site and scheduling a convenient time for the VAI Financial Advisor to call them, or by calling us at 877-662- 7447.

Participants with Portfolio securities equal to or more than \$500,000 receive an assigned VAI Financial Advisor. Participants with Portfolio securities of \$500,000 or more can contact their VAI Financial Advisor directly by phone or by scheduling an appointment through the Site.

VAI reserves the right, in its discretion, to alter its service models without notice or grant exceptions to the service models where it deems appropriate.

Building your profile

Your financial goals will be specific to the inputs you set. The Services are not intended to provide comprehensive tax advice or financial planning with respect to every aspect of your financial situation.

Our ability to optimize your Portfolio allocation is dependent on the information you enter into the Site, including your planned savings, projections of future spending needs and responses to visualizations of the potential financial goal planning options. We will also use the information you provide to us through the Site to generate goals-based forecasting and recommendations on how to better meet your investing goals. Any such goals-based forecasting and recommendations are a point-in-time assessment based on your situation and goals at the time you access the Site. We do not proactively update your forecasts, provide ongoing financial planning, or generally monitor your progress toward your financial goals on an ongoing basis. You must interact with the Site for updated forecasts and personalized messaging about your plan progress.

If you elect to include self-managed accounts in goal forecasts, including spouse's or partner's accounts, these account types and balances may be considered for purposes of goals forecasting, but will not influence or alter the investment recommendations provided by us for your Portfolio. We do not make specific recommendations or manage investments in self-managed accounts, including those held at an entity outside of Vanguard.

If you switch between Services (either from Digital Advisor to Personal Advisor or from Personal Advisor to Digital Advisor) then the information and elections that you provided to the prior Service will be used to manage your Portfolio in the new Service unless you make additional changes.

Personal Advisor Transition Services

Personal Advisor offers additional transition services if you are unenrolling from Vanguard Personal Advisor Select (“Select”) and enrolling into Vanguard Personal Advisor. If you are transitioning you will not be required to enroll the aggregate account balance required for new clients. In this experience, you can simultaneously confirm your unenrollment from Select and enrollment in Personal Advisor. If you previously elected tax loss harvesting services in Select, your election will carry over to Personal Advisor.

Processing unenrollment, including any final Select fee assessments, will typically take VAI 4-6 business days after which you will gain access to the Site and your Portfolio will be rebalanced in accordance with your Personal Advisor settings, if required under the Service’s methodology. Certain account settings may result in a longer transition period, inclusive of additional VAI outreach to confirm Client preferences. In the interim, Clients can schedule appointments with VAI Financial Advisors and request transactions by calling 877-662- 7447.

Vanguard Brokerage Account Clients

Enrollments in Vanguard Digital Advisor require at least a \$3,000 balance in each eligible Vanguard Brokerage Account. Enrollments in Personal Advisor require an aggregate \$50,000 balance or greater in eligible Vanguard Brokerage Accounts. Plan participants may also enroll Vanguard Brokerage Accounts in Personal Advisor subject to the eligibility criteria described under “Participant Account Clients” below.

Eligible Vanguard Brokerage Account types include taxable accounts (e.g., individual, or joint accounts with rights of survivorship) as well as certain tax-advantaged accounts (e.g., traditional, Roth, or rollover IRAs). For each brokerage account you wish to enroll, the entire balance must be in certain investment types (based on eligibility screening by a Service at the time of enrollment) and/or the brokerage account’s settlement fund. The settlement fund includes both money market fund and bank sweep products designated by Vanguard Brokerage Services. If your brokerage account holds investments that are not accommodated by a Service’s breakeven analysis or trading capabilities, then such account will be ineligible for enrollment.

If an account is enrolled in a Service with pending trades, we reserve the right to cancel those trades as needed to allocate assets to the recommended portfolio.

We recognize that you may experience costs and tax consequences associated with selling your existing securities positions to implement our lead advice recommendations. As such, subject to eligibility screening at enrollment, we’ll weigh the costs of transitioning the securities you hold before enrolling in a Service using a breakeven cost analysis (unless you’ve elected an ESG investment setting). We consider your costs by estimating the capital gains tax impacts compared to the expense ratio benefits from selling securities that are inconsistent with our lead recommendation. The breakeven analysis does not account for any fee offsets. If the securities you held before enrolling in a Service pass our breakeven cost analysis, we’ll recommend that you continue to hold all or a portion of such securities, subject to our portfolio construction guidelines. If they fail the breakeven cost analysis, we’ll recommend that you sell those positions and implement our lead advice recommendations. The breakeven analysis does not screen for investing style so your Portfolio could hold investments for an extended period of time that are inconsistent with

your selected investment setting (e.g., retention of an actively managed fund with a total market all-index investment setting.)

Read the section below titled “Customizations” for additional information about imposing restrictions on our investment strategy. Retention of existing securities in your portfolio to minimize tax consequences will result in variance to the calculation of your advisory fees. For example, if a non- Vanguard security is retained under the break-even analysis, you will incur any investment costs (e.g., expense ratios) that are not revenues to Vanguard in addition to the advisory fees you pay to VAI. See “Fees and Compensation” below for more information on fees. Even in situations where your Portfolio continues to hold securities you purchased before enrolling in a Service, we’ll recommend that any additional purchases in your Portfolio be made into Vanguard Funds, as applicable for your investment setting.

For enrolled Vanguard Brokerage accounts, our lead investment recommendations will normally be limited to allocations in certain Vanguard Funds, based on cost, diversification and their ability to help facilitate investment strategies, such as total market, active, or tax loss harvesting, in 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, we will typically 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 for passive index exposure, such as the total market all-index investment option. Other investment options also include combinations of other Vanguard mutual funds, including certain Vanguard Funds exclusively available to advisory clients, and other Vanguard ETFs. If you hold mutual fund share classes of a Vanguard ETF within your Vanguard Brokerage Accounts when you enroll, we may complete your target asset allocation around those existing mutual fund share class positions if those holdings provide appropriate asset allocation exposure. New investments will be allocated to the ETF share classes. See “Fees and compensation” below, Clients do not collectively pay more to Vanguard and its affiliates if their investments are held in mutual funds vs. ETFs.

Under certain circumstances (e.g., a Portfolio with Participant Accounts and Vanguard Brokerage Accounts), we will recommend other Vanguard ETFs and funds other than the Four Totals to complete your target asset allocations: including but not limited to Vanguard FTSE Developed Markets ETF, Vanguard FTSE Emerging Markets ETF, Vanguard S&P 500 ETF, Vanguard Extended Market ETF, Vanguard Growth ETF, Vanguard Value ETF, Vanguard Short-Term Bond ETF, Vanguard Intermediate- Term Bond ETF, Vanguard Intermediate Term Tax Exempt Fund, Vanguard Limited Term Tax Exempt Fund, Vanguard Long-Term Bond ETF, Vanguard Long Term Tax-Exempt Fund, and Vanguard Tax-Exempt Bond ETF. In certain circumstances, based on your Portfolio’s composition relative to your target asset allocation as well as consideration of potential tax consequences of selling to achieve your target asset allocation, we will recommend other ETFs such as Vanguard S&P 500 ETF or Vanguard Extended Market ETF to better satisfy the sub-asset class targets to achieve a diversified portfolio. Additionally, you may elect into another investment option that uses other Vanguard ETFs or funds. More information can be found under the heading entitled “**Methods of analysis, investment strategies, and risk of loss**” below.

Vanguard offers a range of different solutions to help you meet your financial goals, including self-directed brokerage services, single fund investments (such as Vanguard's Target Retirement Funds), and different investment advisory programs. If you are considering investing through a total market index investment setting, you should understand that each of the Four Totals is a share class of the mutual funds that are used (or are substantially similar to the mutual funds used) in Vanguard's Target Retirement Funds. In certain circumstances, a total market investment setting portfolio will contain identical allocations to the four Total Funds that are available in a Vanguard Target Retirement Fund, which is generally available at a lower cost than the Services. You should consider the advisory fees and Vanguard ETFs expense ratios you will incur upon enrollment as well as the personalized features and additional services that are available through each Service in comparison to the lower costs and absence of personalized services of Vanguard single fund solutions when considering the managed offer. When considering whether to enroll in a Service, you should consider that you will pay both the advisory fees and investment fees (e.g., Vanguard Fund or ETF expense ratios) upon enrollment in exchange for receiving access to a Service's personalized features and services offered to Clients. In comparison, an investor who decides to not enroll would have access to many of the same Vanguard Funds without the payment of advisory fees but would also not have access to each Service's personalized features and services offered to Clients.

Participant Account Clients

You may enroll your Participant Accounts, specifically a 401(k), Roth 401(k), 401 (a), or 403 (b) U.S. tax qualified retirement plan account, in each Service only if the Service has been made available by your plan fiduciary.

To enroll in Personal Advisor, Participants must have a minimum of \$250,000 in their Participant Account. If Participants elect to enroll Vanguard Brokerage Accounts, those balances will also satisfy this minimum. Alternatively, Participants can also enroll their Participant Account at any asset level if they elect to enroll Vanguard Brokerage Accounts that total \$50,000 or more.

There is a \$5 minimum Participant Account balance required to enroll an eligible Participant Account in Digital Advisor. 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 and complete your profile, which will trigger Digital Advisor to reassess your asset allocation. Personalizing your enrollment will also give you access to plan additional goals (subject to availability) and use digital tools like the debt payoff calculator. 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. Enrolled Accounts with no assets will automatically be un-enrolled from Digital Advisor.

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. We will not include recommendations to purchase individual securities (except for 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 a Service 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. Additionally, if your Participant Accounts have multiple tax types or funding sources (i.e. pre-tax or after-tax), then we will also seek to allocate future contributions to optimize tax efficiency. This contribution allocation can automatically change when changes to your employee or employer contributions become effective subject to your employer plan contributions and limits, as well as other plan design considerations, if sufficient information is available to the Services. Typically, your employer must authorize the Services to be offered to your Participant Account in order to receive automated updates. Generally, 403(b) and 401(a) plan types are assumed to be substantially similar to 401(k)s within the methodology. Depending on your employer plan, you may be able to manually enter contributions to update your future contribution allocation.

For Participants in eligible employer-sponsored retirement plans, we will recommend an asset 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. We 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. Our 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, we 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 our 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 a Service if their plan fiduciary changes the core plan lineup and there are insufficient investment options to complete the recommended asset allocation. If a plan fiduciary elects to change recordkeeping service providers, your Participant Account will be un-enrolled as part of the transition. Additionally, Participants with self-directed brokerage accounts in their Participant Accounts will be ineligible to enroll in a Service.

All Clients

You will be given the opportunity to preview our initial recommended asset allocation and specific fund recommendations to determine whether to enroll in the Services (except if your plan fiduciary has enrolled your Participant Account in Digital Advisor). These recommendations are based on a point-in-time assessment of our projected investment strategy for your selected investment settings as applicable, to manage towards your financial goal. In the event you choose to implement these recommendations without enrolling, 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 enroll your Portfolio, we will provide discretionary management based on the financial goals and investment settings you set in the Site. Enrollment starts on the day you electronically execute the Client Agreement on the Site unless you accept the Agreement as part of a transfer of assets then your enrollment will start on the date your Enrolled Account is funded with the applicable minimum amount of assets ("Enrollment Date"). For example, rolling over assets from an employer-sponsored plan to open a new Vanguard Brokerage Account.

It is extremely important that you immediately notify us through the Site of material changes to your willingness and ability to tolerate risk, financial situation, financial goals, and investment objectives. The foregoing does not apply if your plan fiduciary enrolls your plan account in Digital Advisor and provides certain information on your behalf that was necessary to create your Portfolio. You should also compare the different fees and services that are offered through Digital Advisor and Personal Advisor when deciding which Service is more appropriate for you. You can invest in Digital Advisor and receive access to the same online financial planning tools and discretionary investment advice offered through Personal Advisor at a lower fee. However, you will not have access to VAI Financial Advisor consultations.

By enrolling in a Service, you're granting us discretionary investment authority to purchase and sell securities on your behalf. Accordingly, we will assess Portfolios using an algorithm (typically on each business day that markets are open for trading, however, we may in our discretion for technical or market infrastructure reasons forgo an assessment on a given day) to determine whether a rebalancing opportunity exists consistent with our investment strategy.

Notwithstanding the foregoing, we will not attempt to engage in market timing trading practices. We may evolve our investment strategy described below under the heading "**Methods of analysis, investment strategies, and risk of loss**" from time to time.

Each Service's Site includes content based on your goals and provides personalized reporting. Once you are enrolled, the Site is accessed by logging on to your account at vanguard.com.

For Clients enrolled in a Service, we will contact you, at least annually via the Site 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 customizations. 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 Site. VAI reserves the right to un-enroll your Portfolio from management if you fail to respond or interact with the Site.

Before enrolling in a Service, Clients 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 each Service's portfolios.

Enrolled Account Restrictions and Defaults

When you enroll, 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 a Service.

Transactions performed in a Portfolio enrolled in a Service without prior notice to us may be reversed or unwound by us to maintain the recommended allocation for your Portfolio (including any investment setting elections). If you enroll while trades are pending, we reserve the right to cancel those trades or otherwise take the actions necessary to invest your Enrolled Accounts into the target asset allocation. Ineligible 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 into specific investments/withdrawal from multiple accounts), will be restricted or unavailable through your traditional self-directed account web experience. On or about April 1, 2024 you will be able to schedule automatic withdrawals for a single Vanguard Brokerage Account. This capability is expected to expand over time. 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 enrollment in a 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.

If you enroll a brokerage account that is currently approved for margin, your approval to invest on margin will be revoked. If you have any outstanding margin debt, that debt will need to be satisfied. We will undertake to trade to satisfy any outstanding margin debt, however, additional collection may be required if your assets are insufficient to do so. Due to certain limited functionality, Clients may need to un-enroll accounts from the service in order to perform certain functions as disclosed in the Site or call Vanguard.

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 we will consider the tax impact (because 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.

We don't provide tax advice, nor does a 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 Services, including the appropriate cost basis method for you before enrollment.

Cash in /Cash out for enrolled Vanguard Brokerage Accounts

While enrolled in a Service, 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 Site. You will be able to transfer funds from any bank that you have linked to your Vanguard Brokerage Account. Additionally, you are able to transfer funds between settlement funds in different Vanguard Brokerage Accounts.

We reserve the right to un-enroll Clients that maintain a balance below \$3,000 in Vanguard Brokerage Accounts. We will attempt to contact you if you hold less than \$2,000 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. Enrolled Accounts with no assets will automatically be un-enrolled from a Service.

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. To invest assets in Enrolled Accounts as quickly as possible, we will place trades based on the availability of pending transfers of cash in your Vanguard Brokerage Account. If you set up multiple financial goals, it will typically take one to two additional business days to invest your contribution to recognize your contribution relative to your planned savings.

Also, transfers of funds using methods outside of ACH transfers, wire transfers, check, or incoming rollover transactions will not be automatically allocated as planned savings for purposes of calculating your target asset allocation. In accordance with your VMC Custodial Account Agreement governing your Vanguard Brokerage Account, your ability to use recently added funds may be restricted until they are collected. In addition, if funds are unpaid, recalled, or otherwise not honored, then VMC may debit your Vanguard Brokerage Account (including executing transactions) and/or charge your Vanguard Brokerage Account a fee. 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 our investment strategy upon your next rebalancing opportunity.,

Rebalancing occurs periodically in your Portfolio based on a systematic review on whether particular guardrails relative to your target recommended asset allocation are triggered. Upon enrollment, Enrolled Accounts will be defaulted to receiving dividend and capital gain distributions in cash to optimize rebalancing opportunities. The Services are currently only able to purchase whole shares of ETFs in your Vanguard Brokerage Accounts. We 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 Vanguard Brokerage Accounts and to have the proceeds sent as cash to your authenticated and authorized linked bank account(s) via an electronic bank transfer.

Transfers of cash out of your enrolled Vanguard Brokerage Account typically take two to four business days to occur (subject to the settlement of securities and other transactions in your managed account). Market closures will delay the settlement of transactions, which will, in turn, delay the transfer of cash out of your account. Additionally, due to market fluctuations it is possible that your withdrawal may require multiple trading days to generate your requested amount. One time withdrawals cannot be scheduled to occur at the same time as a scheduled withdrawal.

Taking out cash will have an impact on your financial goal progress. Unplanned withdrawals do not automatically update your target goal amount when you take such a withdrawal, and you will also need to separately update your plan to ensure that your needed goal amount remains accurate. If you do not update your target goal amount when you take an unplanned withdrawal to meet a goal, then your investments will not be efficiently invested for your needs, because we will assume you still need to fund the full goal amount. 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 Vanguard Brokerage Account otherwise your Portfolio will be reallocated within our methodology guardrails to raise cash sufficient to satisfy your withdrawal request. More information regarding the methodology used on the Site is provided in the sections of this Brochure that follow under the heading entitled “**Methods of analysis, investment strategies, and risk of loss**” below.

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

While enrolled in the Services, you are restricted from purchasing or selling securities in your Portfolio until you terminate the Services. Ineligible transactions performed in a Portfolio enrolled in the Services may be reversed or unwound by us in order to maintain the recommended allocation for your Portfolio. Each Service currently does not accept the transfer of securities into enrolled Vanguard Brokerage Accounts. When externally initiating transfers into your enrolled Vanguard Brokerage Account, all transferred assets should be in cash. If you erroneously transfer securities into an enrolled Vanguard Brokerage Account they will be sold as soon as reasonably practicable, which will result in the realization of investment gains and losses and may result in a

taxable event in taxable accounts. Any charges or fees associated with the sale, such as contingent deferred sales charges, that are not revenue to Vanguard remain your sole responsibility. If we are unable to liquidate transferred investments, we will contact you to discuss your options.

Enrolled Participant Accounts

Any default investment, distribution, withdrawal, or loan transactions will continue to be subject to the terms of your plan. While enrolled, you are prohibited from initiating investment exchanges and directing the investment of new contributions in your plan account unless you terminate the service. In certain situations, de minimis investments may be added to your account in accordance with plan terms (for example, as a result of dividends or rebates from investments held in your account prior to the date of enrollment). In addition, certain investments may be contributed to your Participant Account by your employer in accordance with plan rules (e.g., upon auto-enrollment in the plan). Such investments generally will be re-balanced from your account.

All Account Types

The Services may not be appropriate for all investors. Clients interested in other types of investment advice services regarding assets held in the Portfolio may contact VAI to discuss alternative arrangements or services. You may not receive third-party discretionary advice on assets held in the Portfolio. If you wish to receive third-party discretionary advice regarding certain securities in the Portfolio, you should terminate the Services. 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). Enrolled Accounts with no assets will automatically be un-enrolled. For Digital Advisor, you may terminate the service at any time via the Site. You can unenroll individual accounts from Personal Advisor on the Site, but final account termination must be completed by contacting Vanguard. If you terminate your Portfolio will remain invested in the investment options selected by us until you take further action. Upon requesting termination, your account will remain restricted from trading for up to four business days to remove the managed status from your account if there are pending transactions.

Restrictions will typically be lifted within one business day. Depending on the timing of your termination relative to each Service's automated trade process, additional trades could process prior to the removal of the managed status from your account.

As of December 31, 2023, Vanguard Advisers, Inc. ("VAI"), had a total of \$143,801,600,000 in discretionary client assets under management and \$189,265,900,000 in non-discretionary client assets under management.

Fees and compensation

Clients are subject to a gross advisory fee but pay to VAI a net advisory fee. As detailed and computed below, the fee is designed to mitigate conflicts of interest for any revenues that Vanguard receives on assets held in the underlying investments (for example, revenues from Vanguard Funds). Each Service 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.

Net advisory fee is approximately 0.15% or 0.30% across your Portfolio for a total market all-index investment option for Digital Advisor and Personal Advisor, respectively, although actual expenses will vary based on the specific holdings and investment settings in each Enrolled Account. Your net advisory fee can also vary by Enrolled Account type. The combined annual costs of enrolling in a Service and investing in Vanguard Funds or collective investment trusts will vary for Participants within a particular plan. As described in more detail below, the gross advisory fees do not include investment expense ratios—such as fees paid to the funds' third-party managers, which aren't credited because they are not Vanguard revenues.

Gross Advisory fee

The gross advisory fee compensates us for the ongoing discretionary management of the Enrolled Accounts and is inclusive of the services described in this brochure. The gross advisory fee will be calculated across all securities in your Enrolled Accounts, except for money market fund securities (or other cash equivalent assets like assets held in a bank sweep settlement account) held in the settlement fund 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 expenses can be found in each fund's or ETF's prospectus. These expenses are not itemized or billed separately. The gross advisory fee is rounded to the nearest whole penny using standard rounding for the purpose of calculating the net fee amount to be charged.

Enrolled Vanguard Brokerage Accounts

Your enrolled Vanguard Brokerage Accounts will be subject to an annual gross advisory fee based on your average daily balance of Vanguard Funds held in your account.

Digital Advisor's annual gross advisory fee for each Vanguard Brokerage Accounts is 0.20% for its all-index investment options or 0.25% for an active/index mix. Personal Advisor's annual gross advisory fee for Vanguard Brokerage Accounts is 0.35% for its all-index investment options and 0.40% for an active/index mix.

Enrolled Participant Accounts

Your enrolled Participant Accounts will be subject to an annual gross advisory fee based on your average daily balance of funds and collective investment trusts held in your account. Digital Advisor's and Personal Advisor's annual gross advisory fees for your Participant Account varies by plan and Service. 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 Funds or other Vanguard revenues received from Portfolio investments (e.g., 12b-1 or revenue

sharing fees) in each Enrolled Account. Revenue sharing fees are credited manually and are not automated.

We will not credit de minimis amounts of revenue sharing less than \$1.00 that we receive in the event you erroneously transfer securities into a managed account, or, for Participant Accounts, securities added to the account in relation to investments held prior to management of the account. Assets held in a Vanguard Brokerage Account's settlement fund (either money market or bank sweep) are not strategic allocations. Net advisory fees will not be a negative amount.

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 Portfolio and the holdings in each Enrolled Account. The credit amount will be rounded to the nearest whole penny using standard rounding for the purpose of calculating the net advisory fee.

Account specific credit information

Enrolled Vanguard Brokerage Accounts

Enrolled Vanguard Brokerage Accounts will be primarily composed of ETF shares and Vanguard mutual funds 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. Expected net advisory fees will vary based on your selected investment setting. A total market all-index investment setting comprised of the Four Totals ETFs will be credited approximately 0.05% as of the date of this brochure resulting in a net advisory fee of 0.15% for Digital Advisor and 0.30% for Personal Advisor. For the ESG all-index investment setting, approximate net advisory fees are expected to range from 0.10% to 0.12% in Digital Advisor and approximately 0.25% to 0.27% in Personal Advisor. This is due to the varied and higher-cost of investments resulting in a higher credit amount due to the associated Vanguard revenues.

If you select an active/index mix, the net advisory fee you pay will vary based on the specific funds included in your portfolio. That's because the expenses for these funds are varied and fees paid to some active funds' third-party managers aren't credited because they are not Vanguard revenues. As of the date of this brochure, net advisory fees collected in Digital Advisor are estimated to range from about 0.11% to 0.20% and in Personal Advisor are estimated to range from about 0.26% to 0.35% for clients that elect an active/index investment setting.

In addition to investment setting elections, there are some other reasons that your net advisory fees could vary. For example, if you hold mutual fund share classes of the Four Totals within IRA accounts when you enroll, each Service will complete your target asset allocation around those existing holdings resulting in a higher credit amount due to the associated Vanguard revenues. If you enroll taxable Vanguard Brokerage Accounts with existing investments that are retained under the breakeven analysis described above the credit amount will vary based on the Vanguard revenues, if any, generated from the retained investments. Vanguard does not collect revenue from the advisory fees paid to nonaffiliated external managers of Vanguard actively managed mutual funds and unless

there are revenue sharing payments Vanguard typically will not collect revenue from non-Vanguard investments. As a result, any investment fees and expenses associated with those investments are not offset and Clients are responsible for those expenses in addition to the advisory fees.

Additionally, accounts eligible for enrollment are required to elect e-delivery of statements and other account documents, which results in a waiver of account service fees. You 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 are 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. Due to manual processing, the timing of the credit of these other charges will differ from the automated process to credit revenues from Portfolio holdings and certain credits and could take the form of a check reimbursement.

Certain types of trade processing fees assessed by Vanguard or a Vanguard affiliate, and any related interest income will not be included in the credit amount. For example, fees charged to recoup transaction fees paid by VMC to an exchange or other self-regulatory organization (collectively, "SROs") in connection with the sale of certain securities such as equities, options, and other covered securities. The amount of this fee varies and is determined periodically by the assessing SRO in accordance with Section 31 of the Securities Exchange Act of 1934, as amended. Section 31 requires SROs to pay transaction fees to the SEC based on the volume of securities sold on their markets. SROs, in turn, have adopted rules charging their broker-dealer members the applicable amount of the fee charged to the SROs by the SEC. Broker-dealers are not required to charge their clients these fees. 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. To the extent that a Vanguard Brokerage Account has margin interest accrued from positions bought prior to enrollment that interest accrual is not credited. Additionally, if you hold American Depositary Receipts (ADRs) that you direct us to sell down as part of your enrollment, fees associated with holding such ADRs will not be included in the credit amount. Banks that custody ADRs are permitted to charge ADR holders certain fees, as detailed in the ADR prospectuses. "Pass through" ADR fees are collected from Vanguard Brokerage Services by the Depository Trust Company (DTC).

If you holds deposits in a bank sweep service in your Vanguard Brokerage Account, VMC will receive a fee from program banks that accept bank sweep deposits that (i) is set by VMC, (ii) may vary from program bank to program bank, (iii) may be changed by VMC at any time, and (iv) will affect the yield clients receive from the bank sweep service. Clients enrolled in the bank sweep settlement fund option receive a lower yield on deposits under the bank sweep than if VMC had not earned this fee, because program banks reduce the amount of interest they are willing to pay depositors by the amount of the fee they pay to VMC. These VMC

revenues are not included in the credit amount.

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 each Service. These fees for recordkeeping services are not included in the credit amount. Thus, retirement plan Participants who receive advice from us 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 a Service. 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 us 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. No fees will be charged with respect to certain de minimis or fractional shares on investments held in Participant Accounts due to plan rules or in relation to investments held prior to management. In addition, no fees shall be charged with respect to less than 1/1000th of a share of a security.

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 us 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 (i.e., revenue sharing not otherwise allocated to the sponsor to offset plan expenses or directly to Participant Accounts) related to transactions in non-Vanguard mutual funds will be included in the fee credit. Fee credits will also vary among Participants of the same plan if investment options selected by the plan fiduciary as the plan core lineup generate different levels of revenue depending on the recommended asset allocation.

Billing

Fees will be assessed quarterly (approximately every 90 days) and based on your average daily balance in each holding of each Enrolled Account across the entire fee period after the completion of a fee period and will generally be deducted within 30 days of assessment. Your fee period will start on the same day as your first account enrollment. If you switch between Digital Advisor and Personal Advisor your billing periods and frequency will not change (i.e. the date of your first account enrollment in either Service will continue to be used to calculate your billing periods. For

example, if you upgrade to Personal Advisor on day 90 of your Digital Advisor billing period, then as of day 90 you will be assessed fees for 89 days at the Digital Advisor fee rate and 1 day at the Personal Advisor fee rate.

VAI reserves the right to provide periodic fee waivers where it deems appropriate. VAI 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 is waived or discounted for certain accounts of employees of Vanguard or its affiliates.

We reserve the right to increase the annual gross advisory fee upon 30 days' written notice to you. We may offer periodic fee waivers where VAI deems appropriate and has negotiated custom fee waiver periods with certain plan sponsors for the Services. As a result of fee waivers, similarly situated Clients pay different fees.

We will continue to monitor your Portfolio and goals to help keep you on track to meet your financial goals and will therefore continue to charge all applicable fees, including periods of time when rebalancing isn't needed because the Portfolio is appropriately allocated.

Fee Collection

Accrued fees will not be collected for the portion of the gross advisory fee equal to the net advisory fee for the period from the last quarterly fee collection upon termination of an account's enrollment. Accounts that switch between Digital Advisor and Personal Advisor are not considered terminated for fee collection purposes. Accrued fees will be collected for the prior Service on a pro rata basis.

Vanguard Brokerage Accounts

Each Service 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, bank sweep account, or other cash equivalent asset 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, excluding active loans. 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.

Introductory waiver for new Clients

This introductory 90-day net advisory fee waiver is available for new Digital Advisor Clients. Participant Accounts enrolled by a plan fiduciary in Digital Advisor are not eligible for this introductory fee waiver. The 90-day advisory fee-waiver period (the "fee-waiver period") will start when your first account is enrolled (i.e. first Enrollment Date) in Digital Advisor (of either a Vanguard Brokerage Account or Participant Account) and ends after the close of the first billing period (generally 90 days), which is specific to each Client. Additional Accounts enrolled at a later date can still take advantage of any remaining fee-waiver period. However, each additional account

enrolled will not trigger new fee- waiver periods and any remaining fee-waiver period will be calculated based on the enrollment date of your first Enrolled Account. If you unenroll before your fee-waiver period has ended, you'll owe no net advisory fees. But if you choose to re-enroll in Digital Advisor during or after your fee-waiver period, you will not be eligible for a second fee waiver period.

This first-time fee waiver does not apply to Personal Advisor. If you previously enrolled accounts in other VAI proprietary retail offers you will not be eligible for the introductory fee waiver. Other VAI proprietary retail offers are defined as: Vanguard Personal Advisor Select; Vanguard Personal Advisor; and Vanguard Digital Advisor. Additionally, you will not be eligible if you switch to Vanguard Digital Advisor from Vanguard Personal Advisor.

This introductory advisory fee waiver is conditioned on your consent (or, for Participant Accounts, your plan fiduciary) to the funds available for purchase in your account during the fee waiver period including changes in fund fees and expenses. For Participant Accounts, if a plan sponsor does not provide consent the waiver may be terminated.

VAI reserves the right to change the waiver terms or terminate the waiver at any time without notice. VAI also reserves the right to terminate this waiver at any time and to refuse a waiver or portion of waiver if we determine that you obtained it under wrongful or fraudulent circumstances, that you provided inaccurate or incomplete information in enrolling the account, that any rules or regulations would be violated, or that you violated any terms of your Client Agreement.

Vanguard Fund and Collective Investment Trust fees

The advice provided by the Services 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 (see Net Advisory Fee (Credit Amount) above).

A purchase or sale of Vanguard Fund shares isn't subject to a load, sales charge, or commission. However, each Vanguard Fund incurs advisory and administrative fees as well as custodial fees and other fees and expenses that it pays out of its own assets. Certain funds also pay advisory fees to third party managers that are not affiliated with Vanguard. These 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.

VAI does not consider the Digital Advisor or Personal Advisor programs to be wrap programs. As a 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 each Service is solely for the advice provided.

Advisor compensation practices

The advice provided by our VAI Financial Advisors and by sales professionals who refer prospects to the Service does not vary based on whether Vanguard or any of its affiliates or subsidiaries will receive fees from any recommendations to purchase, hold, or sell Vanguard Funds or non-Vanguard investments. VAI Financial Advisors and sales professionals who refer prospects to the Service are not compensated for, or on the basis of, any recommendation or sales of specific securities. We reserve the right, at our discretion and without prior notice, to change the methods by which we compensate our advisors and sales professionals.

VAI Financial Advisors who deliver advice to clients of the Service are paid base compensation (hourly/non-exempt wages) and are eligible for an annual payment from an enterprise-wide compensation plan. This plan is made available to qualifying employees of Vanguard, not just to VAI Financial Advisors. Payments from the plan are determined based on an employee's level in with the organization as well as a overall investment performance of Vanguard funds and overall company performance of Vanguard during the prior three years. Accordingly, payments from the plan do not create a conflict of interest between you and the Service or VAI's Financial Advisors.

In assessing the performance of a VAI Financial Advisor, Vanguard considers discretionary and nondiscretionary factors including, but not limited to: (i) client satisfaction (client surveys, complaints), (ii) risk measures (such as adherence to supervisory, security and privacy procedures, compliance with regulatory standards and avoidance of trading errors), (iii) implementation of key business initiatives, (iv) various subjective criteria, such as corporate citizenship, subject matter proficiency and expertise, and contributions to the advisor's team and Vanguard, (v) the advisor's overall utilization (productivity) rate, (vi) number and rate of transitions from Personal Advisor Select to Personal Advisor, (vii) the number of consultations with prospective clients and consultations with Clients, (viii) the percentage of Clients retained in any VAI proprietary advisory service, (ix) measured frequency at which the advisor discussed financial planning strategies to improve client utilization of asset allocation, tax efficiency, and other features, and (x) rate at which consultations utilize video technology. Additionally, VAI Financial Advisors who are both exempt and non-exempt employees are eligible for annual merit increases to their base compensation based, in part, on the same factors listed above.

Some of these factors create conflicts of interest due to the incentives they create for both the VAI Financial Advisor and VAI. Specifically, factors (vi) through (ix) in the paragraph above give a VAI Financial Advisor and VAI an incentive to recommend advisory programs over other services offered by Vanguard. In addition, VAI and its affiliates benefit through receipt of additional compensation when clients enroll or remain enrolled in the Service.

VAI addresses these conflicts of interest by maintaining policies and procedures requiring that our VAI Financial Advisors act in your best interest, reasonably supervising their activities, providing advisors with training and disclosing these conflicts so that you can make informed decisions.

Additionally, VAI Financial Advisors are provided with qualified leads to prospects who have previously expressed an interest in learning more about the service before scheduling an

appointment with the advisor to consider enrollment. Finally, the performance measures are designed to mitigate the conflicts of interest caused by the program, including requirements for VAI Financial Advisors to identify and elevate client complaints and feedback on the service and abide by risk measures (such as adherence to supervisory, security and privacy procedures, compliance with regulatory standards and avoidance of trading errors). The enterprise-wide compensation plan payments to advisors do not increase the advisory fees paid by clients.

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

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 either Service (including both Participant Accounts and Vanguard Brokerage Accounts). Additionally, clients of certain other VAI retail advisory service (e.g., Select,) are not eligible to enroll. Clients may not be enrolled in both Digital Advisor and Personal Advisor at the same time. Clients are required to maintain permanent residence in the 50 United 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 a Service.

Vanguard Brokerage Accounts

Digital Advisor is made available to retail clients with a minimum of \$3,000 in each eligible Vanguard Brokerage Account they seek to enroll. Enrollments in Personal Advisor require an aggregate \$50,000 balance or greater in eligible Vanguard Brokerage Accounts. For each brokerage account you seek to enroll, all assets in the brokerage account's settlement fund or in certain investment types (based on eligibility screening by a Service at the time of enrollment) and/or the brokerage account's settlement fund are eligible to enroll.

Eligible clients include those with individual accounts (including IRAs) and joint accounts with rights of survivorship. Other account types may be considered for purposes of goals forecasting, but we won't invest or reallocate assets in those ineligible accounts.

Participant Accounts

Participants enrolled in eligible 401(k), or Roth 401(k), 401 (a), or 403 (b) employer-sponsored retirement plans, whose employers have approved Digital Advisor or Personal Advisor, are eligible to use that Service. Other account types may be considered for purposes of goals forecasting, but the Service won't invest or reallocate assets in those other employer-sponsored accounts.

A Participant may enroll their account(s) in Personal Advisor if their eligible Participant Account meets the \$250,000 minimum. For Participants, eligible account types include 401(k), or Roth 401(k), 401 (a), or 403 (b).

Alternatively, a Participant may enroll Vanguard Brokerage Accounts and Participant Accounts if (in all circumstances Participants must enroll their Participant Account):

- They elect to enroll Vanguard Brokerage Accounts that total \$50,000 or more then they may also enroll their Participant Account at any asset level; or
- Their eligible Vanguard Brokerage Accounts combined with an eligible Participant Account satisfy the \$250,000 minimum.

Methods of analysis, investment strategies, and risk of loss

VAI's investment methodology incorporates our own investment philosophies and beliefs, such as the benefits of having clear and appropriate investment goals, developing a suitable asset allocation using broadly diversified funds (in other words, balance), minimizing costs, and maintaining perspective and long-term discipline. 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. Additionally, we believe dependent on your appetite for financial risk, an asset mix that balances a chance for higher returns from actively managed concentrated funds with the broad diversification of index fund could be appropriate.

We periodically review our investment methodology which may result in modifications that impact your Portfolio's asset allocation, security selection, or other aspects. Each Service supports the goal of investing for retirement savings and, subject to availability, additional financial goals. The objective of the retirement goal is to build sufficient wealth to cover expected income needs through retirement. You may also setup multiple financial goals after enrollment. This multi-goal capability helps you balance your retirement goal with other financial goals. We apply an overall long- term investment philosophy to the multi-goal capability that allocates investable assets to near- term goals first to ensure the funds needed to cover expenses when goals reach maturity.

We also treat accounts as fungible assets and allocates assets in those accounts across goals based on the financial goal- based plan you set.

Investment strategy for the Portfolio

Our 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 regardless of your investment setting. Subject to availability, you may be able to further customize your Portfolio through certain elections. Regardless of the customization, we require that your Portfolio remains 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.

As digital advisory experiences, each Service 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, your 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. As a Personal Advisor client, you will also have the opportunity to speak with a VAI Financial Advisor about your financial situation.

Developing an asset allocation - Retirement Investment 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 your decisions within an assessment tool on the Site: TrueProfile Solutions®, provided by Capital Preferences Ltd. This assessment provides you six hypothetical risk/reward scenarios that are designed to measure your 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. The risk tolerance measurement maps to the recommended risk attitudes (Very Conservative, Conservative, Moderate, Aggressive and Very Aggressive) for you to consider.

You may choose to deviate from the result of our assessment based on your personal judgement of your willingness and ability to tolerate risk by selecting a different risk attitude up to two steps away from your assessed risk attitude to make your selected risk more conservative or aggressive, as applicable. 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 after an opportunity to learn about each of the five risk attitude categorizations that we use in our investment methodology and the projected glide path aligned with each 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. You may not choose to deviate the assessed loss aversion. If the assessment results are inconsistent, then you will not be attributed with a low or high loss aversion. If you have previously completed this risk assessment for another Vanguard advisory service (i.e. Digital Advisor or Personal Advisor) then you will not be prompted to retake the assessment when onboarding in another offer. We will rely on your final risk attitude selection in providing our guidance and recommendations for our investment strategy.

Next, you may select the accounts that you want included for retirement planning. You will also provide inputs around your expectations and goal planning for retirement. Investment strategies are derived based on your 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 investment goal forecasting. See Goals Forecasting below.

Your selected risk attitude and the retirement planning inputs are then used as inputs to our proprietary investment algorithm. Our proprietary algorithm uses this data to recommend a suitable glide path that embodies the risk tolerance, asset allocation, and time horizon for your retirement investment goal. Glide paths are generated using the personalized glide path (“PGP”) service developed in partnership between Vanguard’s Investment Strategy Group and Vanguard Enterprise Advice Group. Glide paths for retirement PGPs 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 our proprietary algorithm to include personalized glide

path recommendations, your retirement investment 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.

Retirement PGPs are designed to balance the risks of seeking wealth 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 we assess that you have a high loss aversion, then we 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. We group 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, retirement PGPs will also adjust the glide path based on assessing your retirement savings rate as either low or normal, subject to availability. We 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, retirement 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 Site. 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 we determine that we do not have classifying sufficient data or are not otherwise able to adequately assess retirement savings or retirement income then we will use defaults of normal and moderate, respectively.

Developing an asset allocation- Multiple Goal Strategy

After you enroll with a retirement goal, subject to the criteria outlined below, you can add additional financial goals, subject to the limitations described below. For each financial goal, you will need to provide a target date (when you want to reach your goal and withdraw funds for your goal) and the lump sum amount you need on that target date, to determine where a goal’s asset allocation will be on your PGP. You can also add a multi-year education savings goal that allocates lump sum distributions over multiple goal target dates in a one-to-four-year period. For example, if you add a target goal amount of \$100,000 for an education savings goal over four years then your glidepath will be set for \$25,000 goal amounts over four goal target dates.

A financial goal PGP is created by leveraging VLCM, your goal amount, the goal’s target date, your selected risk attitude, loss aversion, and spending duration. As a result, we generate additional financial goal PGPs. Currently, we assume that you plan to fund your managed financial goals completely from your Enrolled Accounts to set the financial goal PGPs.

Once you confirm the addition of a financial goal to your plan then we will determine a collective goal-weighted asset allocation across all goals (retirement and financial goals) based on each goal's individual PGP. Your taxable and IRA Enrolled Account balances as well as your planned future savings in those accounts are used to determine your target asset allocation and investment strategy across your Portfolio (referred to as weighted asset allocation glide path). As result of this logic any excess current balance is allocated toward longer term goals, like a retirement investment goal, which will allocate more assets to equities, in line with your risk attitude and Personal Characteristics. In contrast, if we project a shortfall based on your current balance and planned contributions then your balance will be allocated conservatively (e.g., in bonds and short-term reserves) relative to your next goal target date unless your planned savings will offset for the shortfall.

As your life changes, each Service will allow you to update your retirement planning inputs, financial goal inputs, Personal Characteristics, and your risk attitude. When you enroll multiple accounts to support your goals, our collective portfolio-weighted asset allocation will be based on your managed balances and planned savings. We will rely on the information you provide in formulating our 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. Our investment strategy is currently designed for Clients that are seeking to invest their retirement savings and pool their assets to invest towards other financial goals. Appropriate asset allocations for retirement investment goals may range from 100% stock to 72% bonds. Appropriate asset allocations for financial goals may range from 100% stock to 100% cash. The objective of the retirement investment goal strategy is to build sufficient wealth to cover expected spending needs through retirement. This retirement investment strategy in isolation is not suitable for Clients seeking comprehensive retirement income advice. The objective of financial goals is to accumulate sufficient wealth to cover a Client's desired sum on their financial goal target date.

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

We seek to provide adequate diversification within each asset class for all glide paths as deemed appropriate for the goal target date. We recommend investing across different market segments to ensure sub-asset class diversification. Addition, removal, or adjustment of sub-asset class exposures could occur based on continuing portfolio construction research performed by Vanguard or based on changes to your financial situation or investment objectives. Diversification does not ensure a profit or protect against a loss. 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.

Our equity methodology seeks to diversify across different market segments (e.g., domestic and international; large-, mid-, and small-capitalization; and growth and value as well as passive and active). 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 and, if appropriate, active investment style. 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.

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. Financial goal glide paths may include a strategic allocation to short-term reserves or cash equivalents relative to your goal target date, risk attitude, and loss aversion.

Regardless your risk attitude and other inputs, the glide path for a financial goal could be allocated to approximately 100% short-term reserves within 12 months of a goal target date. Depending on your tax bracket, we may use tax-exempt bond and money market funds for your taxable account(s). At the Portfolio level, rounding the collective goal-weighted asset allocation to the nearest whole percentage across all of your goal glide paths could result in a mix of bond and short-term investments available to meet financial goals in your taxable account. Additionally, if your target goal amount is materially smaller relative to the assets for other goals, it could result in 0% short-term reserve investments as you approach your goal target date. The consequences of holding cash equivalents over extended time periods include extremely high capital stability; very low volatility and expected nominal returns; and low real returns (with the possibility that cash may underperform inflation to create a negative nominal return). Thus, inflation can be a significant risk to an investor's Portfolio and ability to achieve their long-term goals. Retirement investment 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, bond, and short-term reserves 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. As you update your information on the Site, we will adjust your investment strategy and your glide path based on the new information. While updates like salary changes may not trigger immediate rebalancing of your portfolio, it is important to take this information into account in planning your long-term investment trajectory. On the other hand, updating your savings plan, changing your risk attitude or other key information would likely trigger an immediate rebalancing the next time we assess your account.

If you are enrolling a Vanguard Brokerage Account, you will also take a style assessment, also known as an active risk assessment, to determine your investing patience and active risk tolerance. This investment setting will determine the specific investments used to achieve the target allocation determined by your PGP. Additionally, you should consider a willingness to pay higher advisory and investment fees before selecting the active/index investment option. Clients who enrolled Vanguard Brokerage Accounts prior to February 2023 are able to access the style assessment through the Profile and Settings section of the Site. Based on the results of your style assessment, we will recommend an active/index or all-index investment options as appropriate. For the active/index portfolio, we use a proprietary Vanguard Asset Allocation Model (“VAAM”) to map your style preferences to an appropriate balance of actively managed and passive index investments.

You should be aware that for retirement investment goals total market all-index investment settings, we implement an investment strategy founded in the same asset allocation that serves as the core of Vanguard’s Target Retirement single mutual fund solutions; however, each Service will enable you to provide personalized inputs that align our investment strategy to your needs.

To attain the lead target allocations for index exposure Vanguard Brokerage Accounts, we typically allocate 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 typically will be core index holdings within Vanguard Brokerage Account fixed income allocations and maintain an intermediate-term duration. When short-term reserves/cash is recommended as part of the strategic asset allocation target for financial goals, the Vanguard Cash Reserves Federal Money Market Fund will be used, subject to determination of your tax bracket. The Vanguard Federal Money Market Fund or a VMC provided bank sweep service serve as the settlement fund options for Vanguard Brokerage Accounts regardless of your tax bracket.

To attain the lead target allocations for the active/index mix, investments selected combine the broad diversification of the index investments with six Vanguard actively managed equity and fixed income funds that each seek to outperform their respective market benchmarks. These active investments present additional manager selection, concentration and non-diversification risks detailed in the Investment Risks section below.

The investments used to attain your target allocations are subject to any permitted elections, customizations, or preferences. Different Vanguard funds than the standard funds listed above could be used to achieve your target asset allocation depending on the specific accounts you enroll and any existing investments in order optimize your Portfolio for tax efficiency.

To attain the lead target allocations for Participant Accounts, we will recommend an allocation between investments available in the applicable plan lineup that align with our 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.

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 our 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 or comprehensive international equity exposure, we will use a US aggregate bond index fund for fixed income asset allocation exposure or developed equity investments, and we will construct your Portfolio using a US aggregate bond index fund or developed equity investments, respectively. 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 our lead recommendation is to invest in a diversified Portfolio, certain plan fiduciaries may elect 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. We will not buy additional company stock to maintain a particular percentage, nor will we 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 our guardrails.

When analyzing the asset and sub-asset allocation of securities that may be held in a Portfolio (including any securities held as a result of a customizations), we'll rely on Vanguard's asset classification assessments based partially on information received from third-party data providers to categorize these investments. In its discretion, VAI may vary the methodologies used to assess and set the asset classifications of securities based on data availability and to ensure that portfolios are constructed in accordance with our investment philosophy.

Considering tax efficiency in allocating assets

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. Additionally, if your Participant Accounts have multiple tax types or funding sources (i.e. pre-tax, after-tax, or Roth), then we will also seek to allocate future contributions to optimize tax efficiency. Certain employer-plan contribution hierarchy rules prevent optimizing future contributions for certain participants. 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 and active equity funds, in tax-advantaged accounts.

We 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. If it becomes necessary to hold bonds in a taxable account, tax-exempt municipal bond funds may be used depending on your tax bracket. For active/index investment settings, active equity funds allocations in your tax-advantaged accounts are subject to remaining capacity after your Portfolio’s target bond allocation has been fulfilled in those accounts.

If your financial goal target date is seven years or less, then we will likely recommend holding bond or cash asset allocations within a taxable account or tax deferred account, depending on your goal target date, to minimize the impact of market volatility on an upcoming funding need for your financial goals. When you are ready to withdrawal for your financial goal, generally we recommend spending from taxable accounts prior to IRAs to limit tax impact.

The Services will attempt to be more tax efficient and reduce the number of wash sales you could experience in your Portfolio of recommended Vanguard Funds in certain scenarios. You can consult Appendix A to the Client Agreement between you and VAI for the complete list of funds that may be purchased. A wash sale occurs when a taxpayer sells a security at a loss and has purchased or purchases the same security, or a substantially similar security, over a 61- calendar day period (the 30 days before the sale and the 30 days after sale). Trades that occur in your accounts (or a spouse’s) not managed by the Services could also result in a wash sale. The effects of a purchase in a taxable account that leads to a wash sale may only be temporary, as you are permitted to add the loss from the sale to the cost basis of the security purchased, and the holding period of the security sold will also be added to the holding period of the purchased security. A purchase in a tax-advantaged account leading to a wash sale, though, will cause you to permanently lose the ability to claim the original loss. If a wash sale occurs, the IRS may disallow or defer the loss for current tax reporting purposes. For more information on the wash sale rule, consult the IRS website or your tax advisor.

Where you previously sold a Vanguard Fund at a loss (that would otherwise be recommended for purchase by the Service) in an Enrolled taxable Vanguard Brokerage Account in the Portfolio within the prior 30 days, we will, where necessary and appropriate, recommend the purchase of an alternate Vanguard Fund (a “surrogate Vanguard fund”) if such purchase is planned to take place in an Enrolled taxable or IRA Vanguard Brokerage Account in the Portfolio and if the Service would have otherwise recommended a repurchase of the same Vanguard Fund that was originally sold at a loss. By recommending the purchase of a surrogate Vanguard Fund, we are attempting to mitigate the circumstances when you will experience a wash sale in your Portfolio.

If you previously purchased a Vanguard fund in an Enrolled taxable or IRA Vanguard Brokerage Account in the Portfolio and we recommend the sale of a security within the same asset or sub-asset class within 30 days of such purchase, we will, where necessary and appropriate, attempt to sell another holding in lieu of selling the recently purchased Vanguard Fund if such sale is planned to take

place in an advised taxable account and would result in a loss. By attempting to avoid the sale of the recently purchased Vanguard Funds, we are attempting to mitigate the circumstances when you will experience a wash sale in your Portfolio.

There are several limitations on our ability to perform Vanguard fund transactions in a Portfolio in a manner that attempts to reduce the number of wash sales:

- If you have enrolled Participant Accounts in addition to Vanguard Brokerage Accounts, we will not attempt to reduce the number of wash sales due to limitations on our ability to monitor described in more detail below.
- We will only monitor for wash sale compliance in Enrolled taxable or IRA Vanguard Brokerage Accounts that are part of a Portfolio governed by the same Service Agreement. Any accounts you include on the Site solely for forecasting or modelling will not be monitored.
- If your spouse or partner is separately enrolled in a Service we are not able to monitor those accounts collectively with yours.
- We are not currently able to monitor the transaction history in any employer-sponsored retirement plan accounts, including enrolled Participant Accounts. This means that we will not look at any recent activity performed in an Enrolled Participant Account in determining whether to sell a Vanguard Fund in an advised taxable account at a loss. Further, we will not recommend the purchase of a surrogate Vanguard Fund in your enrolled Participant Account where you recently sold a Vanguard Fund in an Enrolled Vanguard Brokerage Account at a loss.
- We will not seek to avoid wash sales in situations where you previously instructed us to sell a particular Vanguard Fund in order to customize your Portfolio for your investment setting.
- We will not seek to avoid wash sales when we are attempting to locate investments in account types that are appropriate for that security type (see the section entitled "Portfolio Rebalancing" for more information).
- We will not seek to avoid wash sales in situations where the only alternative to a wash sale is to sell another holding at a taxable gain.
- We will not seek to avoid wash sales in situations where we are required to transact to maintain your target asset allocation and the only Vanguard Fund available for sale will cause a wash sale.

While the avoidance of wash sales provides tax benefits for you, some of the surrogate Vanguard Funds have higher expense ratios than the lead Vanguard funds we normally recommend. Further, the underlying securities owned by the surrogate Vanguard funds are different from the holdings of the typically recommended Vanguard Funds for your investment setting, which introduces some tracking error into your Portfolio. 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.

Multi-goal Limitations

You can plan and used Enrolled Account assets to invest towards a financial goal with a single goal target date or certain multi-year target date goals (i.e. education goals) that is at least eighteen months from the day you add the goal to your plan. Goals are presumed to be managed unless you set a target goal date prior to 59 ½ and do not have any Enrolled taxable Accounts or you link a self-

directed education savings account to an education goal.

You can plan and manage towards financial goals using individual retirement account (“IRA”) assets. Once you turn 59 ½, you can withdraw from your retirement accounts (IRA, 401[k], 403[b], etc.) without tax penalties. Because of this, investors over 59 ½ may benefit from using money from these accounts to fund goals other than retirement. However, at this time, we only consider your IRA assets to help fund financial goals other than retirement after this age. Other employer sponsored retirement accounts (e.g. 401[k] or 403 [b]) are currently only included in retirement savings projections and glidepaths.

You should keep in mind that using your IRA assets to fund new financial goals will impact your likelihood of successfully saving for your retirement, including how those savings are invested. This means the financial goal target dates you set after 59 ½ will result in the corresponding goal amounts being invested in accordance with a financial goal PGP rather than the retirement savings PGP. Additionally, if your goal is flexible or aspirational, or you don’t want to commit cash or invest your tax advantaged investment accounts more conservatively than your retirement PGP, you may want to consider the goal as an expense as part of planning rather than a financial goal to avoid impacting your longer-term goals like retirement savings. Additionally, if you are thinking about a goal amount that is relatively small compared to your total portfolio that could also be better suited as an expense.

Portfolio Rebalancing

On each day that the markets are open for trading, we will typically look to assess Portfolios for whether a rebalancing opportunity exists consistent with our 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.

Additionally, we will check to see if the target asset allocation has changed as prescribed by our investment strategy, as applicable. For Participant Accounts, your future contribution allocation will be rebalanced to your target asset allocation. 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. If your plan includes multiple goals then we will calculate and use an overall weighted asset allocation to rebalance the Portfolio, if needed, based on whether the current asset allocation is off from the weighted target asset allocation for all of your goals collectively by +/-5%. Additionally, if your plan includes financial goal target dates prior to age 59 1/2 and your taxable account asset allocation is off its target asset allocation by +/-5%, a rebalance will occur.

As a result of additional rebalancing checks for Portfolios with multiple goals, it is likely that rebalancing will be more frequent. However, controls have been put into place to limit Rebalances by rounding bond and short-term reserve allocations based on your collective goal- weighted asset allocation. Bond allocations at the Portfolio level will be rounded up and short- term reserve allocations will be rounded down. Each Service 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 in Vanguard Brokerage Accounts

for an extended period of time, generally less than \$300.

In certain situations, additional amounts may be added to Participant Accounts in accordance with plan rules (for example, as a result of dividends or rebates from investments held in your account prior to enrollment). We will sell down these investments and rebalance to the target allocation, as described above as soon as administratively feasible, with the exception of situations where the quantity is less than one full share.

VAI 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 we 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, unless you have responded to communications that you are taking action to remove the restriction. 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 Site so that we 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 and goal inputs may warrant a change in our recommended asset allocation in order to align with your financial goals if your resulting PGP shifts beyond guardrails.

Investing Risk

Although our 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 or plan disclosures for more information about fund or investment specific risks. You should carefully consider all of your options before enrolling or acting upon any advice you receive.

Customizations

Depending on the account types that you enroll, you may have the option to customize or personalize the management of your Portfolio. Regardless of the customization, 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 customizations are inappropriate for you, we reserve the right to modify the customization accordingly.

When requesting that we manage your Enrolled Accounts, you'll have the ability to impose these reasonable customizations to the management of your Portfolio by personalizing the inputs into your retirement investment goal beyond standardized defaults to create your Personalized Glide Path.

Smart Sell down (tax efficient rebalancing)

Subject to eligibility screening at the time of enrollment as well as an ongoing breakeven analysis, you will be permitted to retain investments purchased prior to enrollment that differ from our lead advice recommendation. In particular for assets held in taxable brokerage accounts, if you hold securities at enrollment that provide a portion of the target asset allocation then you will be permitted to retain those securities subject to a breakeven analysis. Although these securities are only retained if they meet a target asset allocation, their investment strategies may present different risks, diversification, liquidity, and performance than our lead advice recommendations. For example, a large-cap value active fund could be retained to satisfy that portion of your target asset allocation subject to the breakeven analysis even if you selected a total market all-index portfolio option. To the extent a non-Vanguard investment is retained in your Portfolio after enrollment it will reduce the typical net advisory fee credit described above.

Specialized Portfolio ESG Investment Setting

For Enrolled Brokerage Accounts, you may elect to an investment setting (also referred to as "specialized portfolio") that substitutes ETF investments whose investments strategy is to apply pre-screened ESG criteria based on your personal preference ("ESG investment option") to meet the U.S and international equity as well as the U.S. domestic bond exposure for your target asset allocation. In order to maintain diversified asset allocation, electing an ESG investment option includes non-ESG ETF investments. Vanguard Total International Bond ETF will remain the recommended international bond exposure in your portfolio as an adequate ESG ETF equivalent for this asset class that meets VAI's investment strategy criteria has not yet been determined as available. Additionally, we may also use other non-ESG treasury funds to mirror the duration of our lead total market portfolio construction methodology (i.e., Vanguard Short-Term Treasury ETF (VSGH) and Vanguard Intermediate-Term Treasury ETF (VGIT)). These non-ESG investments are referred to as completion holdings. Finally, depending on your goals and how close you are to your goal target dates, your ESG Portfolio may also include a money market fund to help minimize investment risk. If you elect the ESG investment option then the Service will substitute certain Vanguard ESG (environmental, social, and governance) ETFs: ESG U.S. Stock ETF (ESGV), ESG International Stock ETF (VSGX), and ESG U.S. Corporate Bond ETF (VCEB) to help achieve your target asset allocation within enrolled Vanguard Brokerage Accounts. Each of these ETFs track indices that are pre-screened to exclude certain companies based on specific environmental, social, and governance criteria. The exclusionary screening methodology is determined by each ETF's third-party index provider. There is the chance that the stocks or bonds screened by the index provider for ESG criteria generally will underperform the market as a whole or, in the aggregate, will trail returns of other funds screened for ESG criteria. The index provider's assessment of a company, based on the company's level of involvement in a particular industry or the index provider's own ESG criteria, may differ from that of other funds or of the advisor's or an investor's assessment of such company. As a result, the companies deemed eligible each ESG ETF's index provider may not reflect the beliefs and values of any particular investor and may not exhibit positive or favorable ESG characteristics. VAI does not have an

ability to influence the proxy voting or corporate engagement for ETFs within the ESG investment option.

The ESG investment option will apply to the Vanguard Brokerage Accounts. The investment options available through your Participant Account will be determined by your employer and typically don't offer access to the Vanguard ESG ETFs used in the ESG investment option.

Once you elect the ESG investment option, we will seek to promptly rebalance your investments by selling non-ESG holdings and buying the corresponding ESG funds (and any related non-ESG completion holdings listed above) to invest towards your target asset allocation. We will not apply the smart sell down methodology described above and prioritize your election over tax efficiency. This could result in realization of capital gains or losses.

If you elect to revert to a standard portfolio after electing an ESG investment option, then we will seek to utilize smart sell down methodology to rebalance your Portfolio. As result you may continue to hold ESG funds subject to the break-even analysis described above.

Company Stock

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.

Restrictions on company stock holdings are subject to the policies outlined under the subheading **"Diverse investments, primarily consisting of low-cost Vanguard ETFs and Funds"**. Additionally, a plan fiduciary may request asset allocation modifications to require a minimum fixed income allocation as a reasonable restriction for Participants enrolled by the plan fiduciary. These restrictions do not apply once a Participant enrolls directly into a Service.

Automated tax loss harvesting

The Services offer a tax loss harvesting service ("TLH Service") election for taxable individual and joint brokerage accounts. TLH involves selling a security at a loss and purchasing another security to maintain your asset allocation. Depending on your personal circumstances, a TLH strategy can add value in the form of reduced taxes when harvested losses are used to lower your tax bill and potentially grow your savings if you are able to reinvest those tax savings. However, before electing the TLH Service, you should consult with your tax advisor to discuss any concerns related to your participation in the TLH Service or consult your tax preparation software in light of your particular circumstances and their impact on your individual tax return. In order to elect the TLH Service you must consent to the Tax Loss Harvesting Addendum to the Agreement ("Addendum") on the Site at <https://personal.vanguard.com/pdf/vanguard-discretionary-advice-Tax-loss-harvesting-addendum.pdf>. You should carefully consider the TLH Service description on the Site and in the related disclosures in the Addendum including the TLH Service's risks and limitations prior to electing the TLH Service.

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

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 – Retirement Investment 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, each Service 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 Investment Inputs"). In order to help you to explore combinations of the Retirement Investment Inputs, the Site will allow you to explore forecasts that leverage different combinations of the Retirement Investment Inputs. You will have an option to vary any of the Retirement Investment Inputs to see different forecasts using a projection visualization in the Site. Additionally, both taxable and tax-advantaged accounts are projected to pool towards funding retirement savings subject to setting any other financial goals.

Goals forecasting – financial goal inputs

When you start planning a new financial goal, each Service will ask you when you want to reach your goal and how much money you need for your goal. Pooling of a particular accounts funds towards a particular goal will depend on the goal target date. Goals prior to age 59 ½ are projected only using taxable accounts. Additionally, currently only IRA accounts will be considered as fungible for projecting financial goals (other than retirement savings) after 59 1/2.

If you plan financial goals using self-managed accounts as the funding source those goals are incorporated for purposes of forecasting only (subject to the limitations detailed below) and that information will not impact your investments. Using the self-managed accounts, you connected as well as managed accounts to project your retirement goal, you can use the interactive forecast to model how increasing your savings in your taxable accounts could impact the likelihood of success of achieving your financial goal as well as project potential impact on your retirement goal. Each Service's multiple goal projection forecast seeks to visualize tradeoffs and interdependency of goal choices. Goals are projected to be funded based on the order in which they are due, and funding should be available within a year of the goal target date to conservatively provide early liquidity and minimizing volatility as a goal approaches distribution. For financial goals, managed and self-managed accounts will be included as available assets to fund goals and provide goal projections for goal success rates based on pooling all accounts.

Assumptions about non-Portfolio accounts in goals forecasting

For prospective Clients without an existing Enrolled Account, we will make a default assumption that the amount you enter for your retirement savings is taxable for purposes of providing you an initial goal forecast if we are unable to determine the account type associated with the contributions and balances you input to avoid overstating financial projections until we learn more about you and your accounts.

You will also have the option to add balances of accounts held outside of the Portfolio (including other Vanguard accounts) into goals forecasting, but not enroll those accounts. If you wish you can obtain a more holistic projection of your potential goal success by including these self-managed assets, however, there will be additional assumptions, see below, made about self-managed accounts that limit the quality of the hypothetical forecasts. In particular, all taxable (managed and self-managed) accounts aligned with your retirement goal will be assumed to be available for custom goals for purposes of goal projections. All taxable savings and balances will be treated as fungible assets that can be applied toward custom goals. However, our investment strategy assumes financial goals are 100% funded using only your Enrolled Accounts. As a result, your funding status could be overstated if your projections include self-managed and managed accounts. However, if you link self-managed education account to an education financial goal or plan financial goals prior to age 59 ½ without enrolling a taxable account then these goals are assumed to be self-managed (not impacting your recommended investment strategy).

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. As with any other self-managed account included in your goal plan, we assume your education savings has the same asset allocation and glidepath as the accounts that the Service manages. As a result, the projections could be more aggressive compared to the actual investments within your education savings account.

If your goals are 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 are responsible for the accuracy of the information you provide whether manually or through third-party services. You may update the dollar amount of securities in accounts held outside of the Portfolio and your rate of contributions within the Site or by authorizing a third-party financial data aggregation service to refresh the data. The Services do not take this information about non-Portfolio accounts into account to

manage your asset allocation and recommend investments for your Portfolio.

Limitations to incorporate spousal or partner information into projections

While you are able to model household expenses within the projections, there are currently limitations to including other household inputs such as spousal or partner investment accounts, income, and other financial profile information (e.g., retirement age). The Services are expanding the ability to project income and other financial information at the household level. Subject to availability, you will be able to incorporate a spouse or partner's retirement age, investment accounts, savings amounts, and planning horizon into goal projections for a more complete household forecast. Your spouse or partner inputs will not affect your asset allocation or investment recommendations. Any spouse or partner accounts you tell us about are not able to be managed by Vanguard as part of your enrollment.

If your projections do not include spousal or partner information, a few key limitations to the projections could occur. In particular, the projections account for the spending needs using a single life expectancy (assumed life expectancy is 100 unless you chose to modify it) as a result your retirement goal and any related spending projections and recommendations could be overstated if your spouse or partner has a materially longer life expectancy. Also, if you are not able to include your partner's individual investment accounts that could be available to fund your goals, your projections will not include those household assets. As a result, the goal projections, including retirement spending recommendations, will likely understate the likelihood of meeting your goals if your full household expenses or household goal amounts are input, but the projections are missing assets or income that could help fund those goals.

Special assumptions for education savings accounts

The projections assume that all education savings accounts are 529 plans subject to a 10% penalty on earnings if used for something other than qualified higher-education expenses. Other account types, such as Coverdell Education Savings Accounts, have differing tax structures not accounted for in the projections. Additionally, the projections do not account for contribution limitations or state specific education savings account limitations or advantages.

If an education savings account is linked to a specific education goal, any savings you enter for that account are assumed to start on the date entered and end at the education goal date (for multi-duration goals savings are assumed to end the first year of your target goal end dates) or your retirement date, whichever is earlier. Any adjustments to your linked education goal target date will modify the savings assumptions for your education savings account.

If an education savings account is included in your plan, but not linked to an education savings goal then future contributions are assumed to start on the date entered and end at your retirement date (similar to the assumptions made for other accounts).

As with any other self-managed account included in your goal planning, we assume your education savings has the same asset allocation and glidepath as the accounts that the Service manages. As a result, the projections could be more aggressive compared to the actual investments within your education savings account.

Goals Forecasting – projected success rates

To cover a broad range of outcomes, the Services' 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 Clients 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 are based upon the account types and the balances of those accounts that you include in your goal planning. You may elect, in your discretion, whether to use the interactive tools to model only Enrolled Accounts or also accounts held outside of your enrolled Portfolio which could introduce additional imprecision into the model. This election is made by selecting the accounts that are connected to all of your goals and cannot be modified at the individual goal level. Our goals forecasting model uses the same index returns to represent estimated returns of the asset classes in all of your accounts supporting your goals in your Portfolio.

For Digital Advisor, index returns for fixed income and equity products are reduced by 0.30% annually, and index returns for money market/cash/short-term reserves are reduced by 0.26% annually to account for hypothetical expenses and advisory fees. For Personal Advisor, index returns for fixed income and equity products are reduced by 0.45% annually, and index returns for money market/cash/short-term reserves are reduced by 0.41% 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. The forecasting model is based on your projected target asset allocation, which does not differ if you elect a specialized portfolio. We do not calculate the tax consequences of rebalancing the accounts each year to maintain the target asset allocation. For clients with taxable accounts, we apply asset location logic when modeling returns. Inflation is modeled based on historical data (Consumer Price Index for All Urban Consumers (CPI-U) 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 rather they are market projections aligned with your expected asset allocations. 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 as well as your financial goals, as applicable. We evaluate many factors in assessing your current and future cash flows and make certain

corresponding assumptions, 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 as forecasted by our internal Vanguard Capital Markets Model (VCMM).
- Projected income, including employment, Social Security, pension, and income from investments.
- Funding financial goals required by the beginning of the year of the goal target date.
- Current contributions are assumed to continue until retirement. When you confirm your retirement, your pre-retirement spending and income information is removed, and your projections are updated accordingly. If your circumstances change and you go back to work, you can only return to pre-retired status by unenrolling and re-enrolling your accounts.
- Contributions to your retirement accounts will end at retirement while those to taxable accounts will continue unless you tell us otherwise. If that's not the case, projections of success toward reaching your goals could be overstated.
- Projected savings are for an entire year, and any contributions already made during the year will be adjusted against the projected savings amount. Your projections update when changes to your employee or employer contributions become effective subject to managed employer plan contributions and limits, as well as other plan design considerations, when that information is available to the Services.
- 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.
- If you indicate that you are taking a partial withdraw related to a specific financial goal, the goal target amount will be reduced. For multi-year education goals, as those withdrawals are taken, the annual "goal target" is decremented with any remaining amount rolling over into the subsequent year's goal target amount. Any excess withdrawal amounts in the current year beyond the goal target are assumed to not impact the planned future years "goal target" amounts.

Depending on the onboarding track you select for the Site, certain default assumptions (i.e., Social Security income estimates) are included as a starting point for your projections. For example in Digital Advisor, unless you've selected a different option, we will estimate your Social Security benefit assuming you begin receiving benefits at the initial retirement age you selected. You can adjust this by using the Social Security tools available when you edit the estimate. Additional details about the assumptions used in the projections can be found in the "Learn more about your projections -- Your Goal Outlook" section of the Site, including additional limitations of the projections.

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 well as your non-retirement investment goals, as applicable. As part of your projected outflows, the Services forecast 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 be taken from your non-retirement assets to make up the difference. Additionally, any surplus is assumed to be consumed in the year it occurs rather than reinvested. For Clients that identify as retired, each Service will provide details of your income and spending projections for the next five years based on these assumptions. In projecting the asset allocation for multiple goals, the forecast allocates funding to goals in the order in which they are due. If two goals are planned for the same goal target date, then funding is projected to be allocated to the goal with the lowest dollar amount. Multi-goal projections also assume funding should be available at the beginning of the year of your goal target date to conservatively provide early liquidity and minimizing volatility as a goal approaches distribution.

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 accounts is above zero at the end of the planning horizon you select as part of the goal planning. For the retirement goal, we assume a time horizon for retirement (time in retirement) of age 100 unless you 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. The overall likelihood of success measure for your financial goal represents the percentage of the 10,000 hypothetical scenarios in which the balance in your accounts available to fund the goal more than or equal to the target goal amount you indicated.

Index Benchmarks used in the projections

The returns used in the projections for your goals are based on the following historical index data:

- We use historical index data for U.S. bond market returns to forecast future bond market returns correlated with your expected bond allocation. For U.S. bond market returns, we use the Barclays U.S. Aggregate Bond Index. For municipal bond returns, a 20% haircut is applied to index returns.
- We use historical index data for U.S. short-term reserve returns to forecast future short-term reserve market returns correlated with your expected short-term reserve allocation. 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.

We use historical index data for U.S. stock market returns to forecast future equity market returns correlated with your expected equity allocation. 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. While we recommend that you invest a portion of your equity and bond allocations in securities with international exposure as part of our lead investment recommendation, the projections do not use historical index data for international bond market returns when forecasting your goal(s) because of the lack of long-term international benchmark data. Additionally, if your Portfolio contains investments that deviate from an investment allocation that does not seek to track the market (see Customizations above) or you elect to include accounts held outside of the Portfolio (including other Vanguard accounts) the historical index data we use to forecast the stock and bond markets and the expected asset allocations will differ from your actual investment exposure. As a result, to the extent your investments deviate from diversified market exposure (including more concentrated exposure or a specialized investment setting) your actual experience

will be less correlated with the market forecasts in the goal projections.

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.

Goals forecasting optimization

The Services offer goal optimization tools that help you explore different scenarios for contributions, retirement age, retirement spending, or other financial goals (“Goal Inputs”) to optimize your plans. Additionally, the tools enable you to model variations of your current income and expenses and the resulting impact on your projections. Our models will assess whether there are alternative Goal Inputs that result in projections in at least 85% of our market forecasts that your planned investments will cover your estimated expenses in retirement and fund the amounts needed for other financial goals. (See **“Goals forecasting – projected success rates”**) We will prioritize suggesting different combinations of the Goal Inputs that result in projecting you will be on track that are close to your original Goal Inputs.

The optimizer tools and corresponding suggestions illustrate the tradeoffs you may need to make to achieve different goal combinations. For example, you can model different retirement ages (increased contributions and/or decreased monthly income at retirement), lower monthly contributions and/or changing the dates or amounts of financial goals. Additionally, the modeling tool can provide suggestions for modifying different levels of contributions by account type, either: taxable or retirement tax-advantaged account types. The contribution suggestions while based on an assumption that assets will be managed as a Service will, however, are not account specific suggestions. These suggestions will not be realistic for self-managed accounts that you invest differently than the Services' investment strategies. Additionally, goal optimizer suggestions assume savings in your education savings accounts will stop a year prior to the final education goal target. In contrast, the goal projections will assume you continue to save until the first goal target date. For example, if you plan a four-year education savings goal the Service provides savings suggestions that end in year three of the goal, but the projections chart will reflect saving through year 1.

Implementing any changes to your financial goal plan after using the goal optimization tools are your responsibility (e.g., increase your investment account contributions or confirm all of your modeled goal amount or date changes have been modified as you wish). You are solely responsible for the success of any goals not managed by a Service.

Emergency savings and next dollar guidance:

The Services provide guidance on how to set emergency savings goals, as well as a tool that helps 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. Furthermore, the Services also provide guidance on 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. The Services will not use information that you provide solely VMC (e.g., purpose of account opening) as the basis for the management of your Portfolio.

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 and Vanguard Personal 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 Personal 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 Client 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 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 Client Agreement 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).

The Services typically start 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, you give investment discretion to us to manage and make trades in your account(s), and, as such, we will initiate or pause trading at our discretion at any time and for any reason, including pausing trading when we believe that continuing trading may pose undue risk of harm to your Portfolio. If 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 our 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 of Vanguard ETFs among Clients and other retail advisory service clients (i.e., PAS) for the purpose of minimizing transaction costs while seeking best execution on behalf of our clients. When VAI aggregates trades, they may be aggregated along with trades recommended for clients of VNTC, an affiliate of VAI. This means trades of certain VAI and VNTC clients may be combined for execution in the secondary market.

Except as provided below, where we aggregate trades in Vanguard ETFs, we first seek to reduce transaction costs by employing cross trading among the advised accounts of VAI and VNTC clients who are buying or selling a particular Vanguard ETF capable of being cross traded on that business day. To do so, we determine the net amount of our clients' buys and sells that can be aggregated for a particular Vanguard ETF on that business day and match up the trades of as many of those buyers and sellers as possible on a pro rata basis across all the clients participating in the aggregate trade. With this practice, individual advised clients are selling their Vanguard ETFs to other advised clients and thereby avoiding having those trades sent to the secondary markets for execution. We'll price all crossed trades at the then prevailing market price as determined by the midpoint between the national best bid and offer. Any portion of the aggregate trade unable to be executed through cross trading will be submitted as a residual aggregate trade to the secondary markets in an attempt to complete any unfilled orders for that Vanguard ETF.

Where VAI aggregates trades, VAI will calculate an average price for all of the Vanguard ETFs bought or sold together, and Clients who participated in the aggregated trade will receive that average price for the Vanguard ETFs traded for them. The average price we assign to individual trades that were aggregated may be greater or less than the price an individual Client's order would've received if not traded using aggregation and cross trading. Further, if we're unable to completely fill the residual aggregate trade, we'll distribute the Vanguard ETFs purchased or the proceeds received from such aggregate transaction to the Clients who participated in the residual aggregate trade on a pro rata basis. We'll initiate or pause automated trading at our discretion at any time and for any reason, including pausing trading when we believe that continuing trading may pose undue risk of harm to your Portfolio.

Aggregation and cross trading are not available to all account types, security types, or order types. You'll only be able to participate in aggregation and cross trading in certain automated trades of Vanguard ETFs submitted on your behalf from your Vanguard Brokerage Account. Accounts that are governed by ERISA generally are not permitted to engage in cross trading. Clients who are not permitted to participate in aggregation and cross trading might receive a different, possibly worse, price for the securities bought and sold on their behalf.

Additionally, you won't participate in aggregation and cross trading where:

- Trades are submitted manually instead of through our automated brokerage trading systems (typically triggered as part of error correction processes)
- Trades submitted for Vanguard ETF trades are submitted for an individual client along with an order to transact in securities that are ineligible for aggregation and cross trading.

Where VAI is selling your entire position in stocks or ETFs and the position includes fractional shares, the fractional shares liquidate automatically on the settlement date at no additional cost to you. VMC will purchase the fractional shares from you on a principal basis at the same price at which the whole shares executed.

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 Participant Accounts

We will not provide recommendations on individual securities held through a brokerage window. Therefore, we do not select or recommend broker-dealers for client transactions for Participant Accounts.

Review of accounts

This section regarding the review of accounts applies to those Clients who have Enrolled Accounts in the Services. Clients of the Services will have access to their Portfolio information through the Site. As part of the Rebalance (as described above), 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 Site to plan financial goals, but who do not enroll their accounts and receive ongoing discretionary advice services under the terms of your Client Agreement. Financial planning tools that are available prior to signing a Client Agreement, are provided solely for your information and education. Ongoing use of the financial planning tools depends on you to update manually added account information or keep linked account information up to date.

Initial Enrollment

After your enrollment, each Service will place trades, typically within 1-2 business days, based on the funds available in your account in order to rebalance your account into our recommended asset allocation for you. By enrolling an account, you are giving us an express order to sell any full or partial positions in that account that do not fit in with our recommended asset allocation, and invest the proceeds according to our investment strategy. These initial sells, directed by you, are subject to commissions and fees. VMC does not charge commissions on ETF, stock, and most fund trades, but you may be subject to purchase and redemption fees), and standard settlement time frames.

We will place those initial trades— typically after 10 a.m. on the following business day – without consideration of the current market value or all tax implications (if applicable). In the event that we are unable to sell any of the positions in your account, we will attempt to contact you; if we are unable to reach you, we reserve the right to terminate your enrollment.

Adjusting the asset allocation

For Clients, we will re-assess your target asset allocation if you inform us that your Personal Characteristics have changed including your ability to bear risk changes, you change your investment settings, or if you modify your financial goal plan, but we won't change your 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. VAI 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

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 over-weighted 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. Additionally, if your Participant Accounts have multiple tax types or funding sources (i.e. pre-tax, after-tax, or Roth), then we will also seek to allocate future contributions to optimize tax efficiency. 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.

In the coming weeks, the Services expect to further enhance rebalancing by incorporating the following:

If, during a rebalance, the proceeds resulting from the sale of securities are designated to purchase additional shares of a Vanguard ETF in a Vanguard Brokerage Account, the amount of the recommended purchase will be compared to a price we set as a proxy for the market price of such Vanguard ETF. If the amount of the recommended purchase is less than the proxy price, we will instead purchase additional shares of the largest existing holding of any one of the Four Totals, or a surrogate Vanguard Fund, or another diversified Vanguard Fund already held in the account for which the purchase recommendation was generated. If the account for which the purchase recommendation was generated does not contain an existing holding of one of the Four Totals, or a surrogate Vanguard Fund, or another diversified Vanguard Fund, or if the proceeds are insufficient to purchase additional shares of such existing holdings, then the proceeds will be

invested in the settlement fund or bank sweep established for the account.

Sale instructions during a rebalance will be reviewed systematically in order to facilitate efficient trade execution when there are minimal order amounts. See the “Brokerage practices” section above for more information. During any rebalance, if there is an instruction to sell 95% or more of a position in a Vanguard ETF, the instruction will be converted to a sell-all order unless the remaining value of the ETF position is \$25,000 or more. During a full or periodic rebalance, any sales of a Vanguard ETF for less than \$25 will be cancelled and the position will be maintained until the next rebalance opportunity. During a rebalance due to fee collection or a one-time withdrawal, any sales of a Vanguard ETF less than \$1 will be rounded to \$1 if the shares remaining will be at least \$1, or the sale will be converted to a sell-all order.

If, during a rebalance, the proceeds resulting from the sale of securities are designated to purchase securities worth less than one dollar (\$1.00) in a Vanguard Brokerage Account, then the proceeds will instead be invested in the settlement fund or bank sweep established for the account.

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 a discretionary advisor, VAI reserves the right to refine these rebalancing and trading practices overtime.

As owners of Vanguard Funds, 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. For Participant Accounts, you will receive investment documents through your plan disclosures.

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 the Services (“Referral Programs”). These Referral Programs may include compensating Clients, affiliates, strategic partners, or third-party solicitors for referring the Services to prospects. Compensation will include flat fees or payments based on certain performance triggers, like enrolling in the Services. Certain promotional programs also offer Clients the ability to have future advisory fees waived if qualifying criteria are met for referral promotional programs. Clients aren’t charged any fees, 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.

Certain VAI supervised persons who refer prospects to Vanguard’s proprietary advice offers, including the Service, are paid base compensation (either salary/exempt or hourly/non-exempt wages) and are eligible to receive an annual payment from an enterprise-wide compensation plan (see the Advisor compensation subsection above for additional details). Sales professionals who are exempt employees of Vanguard are also eligible to receive variable compensation based on discretionary factors. These discretionary factors are based on our assessment of the sales professional’s performance, including the number of Vanguard proprietary advice service consultations completed, amount of new assets brought to Vanguard, percentage of inbound calls that lead to a needs assessment, the number of high-quality outcall attempts, and the percentage of Vanguard proprietary advice service consultations completed. Additionally, sales professionals who are both exempt and non-exempt employees are eligible for annual merit increases to their base compensation based, in part, on the same discretionary factors listed above.

This variable compensation structure creates a financial incentive for certain of our sales professionals to recommend Vanguard proprietary advisory services over brokerage services offered by Vanguard and its affiliates and to encourage Clients to move their assets to VAI in order to generate greater compensation for the sales professionals. Also certain sales professionals who promote Vanguard services to employer sponsored plan sponsors or their consultants are also eligible to receive variable compensation based on discretionary factors including the number of plan sponsors that elect to offer an eligible VAI advisory program (either proprietary or advised) to their plan participants. Additionally, these sales professionals receive additional discretionary bonus credit if an employer sponsored plan sponsor elect a VAI advisory program as a default investment option. This variable compensation structure creates a financial incentive for sales professionals engaging with employer plan sponsors to promote VAI advisory services over other investment products offered by Vanguard and its affiliates.

VAI addresses these conflicts of interest by maintaining policies and procedures requiring that our sales professionals act in your best interest, reasonably supervising their activities, providing sales professionals with training and disclosing these conflicts so that you can make informed decisions. We reserve the right, at our discretion and without prior notice, to change the methods by which we compensate our sales professionals.

Custody

If you hold a mutual fund account directly with Vanguard, you will receive quarterly or more frequent account statements from Vanguard, the transfer agent of the Vanguard Funds, in lieu of a qualified custodian. Vanguard will also transmit transaction confirmations to you in connection with purchases and sales made in your Vanguard mutual fund account.

If you enroll a Participant Account, VFTC serves as the qualified custodian for the plan’s assets. You

will receive quarterly, or more frequent, plan account statements from Vanguard, in its capacity as plan recordkeeper.

If you enroll a Vanguard Brokerage Account, VMC serves as qualified custodian and will send 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 VAI through the Services full discretionary trading and investment authority over those accounts subject to the Client Agreement. As a result, VAI will have full discretionary authority over the investments selected for your Portfolio, and the timing and size of purchases and sales within your Portfolio. The Services are not designed to provide a comprehensive financial plan to Clients. Rather, their Sites seek to help Clients define their financial goals and designate investment accounts for which they would like VAI to exercise discretionary management to invest to help reach those goals. Personal Advisor Clients also have access to seek additional financial planning guidance from a Financial Advisor. While these Financial Advisors will be able to assist you with changing your financial profile and other inputs on Personal Advisor's Site, ultimately any trading and investment decisions within your Enrolled Accounts will be made by our algorithms.

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 Client 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.

In the event an error occurs in our handling of transactions, we will attempt to correct the error promptly and generally return the Portfolio to the same position it would have been in had the error not happened.

Voting client securities

Vanguard Brokerage Accounts

Upon request, the Services will provide additional information regarding proxy votes and corporate actions for Clients enrolled in the Services, 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 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

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 Clients (including prospective Clients).

Data risk: Data risk is the chance that the Service receives inaccurate, incomplete, or outdated data. The Services rely on data provided by vendors and Clients or authorized by Clients to be provided by third party vendors. The Services do 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 each Service's 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.

Digital risk: Each Service provide its investment advisory services through digital services (e.g., the Site 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.

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.

Tax Loss Harvesting risk: Tax-loss harvesting involves certain risks, including, among others, the risk that the new investment could have higher costs than the original investment and could introduce portfolio tracking error into your accounts. There may also be unintended tax implications. We recommend that you carefully review the optional tax-loss harvesting service terms and consult a tax advisor before taking action.

Vendor risk: The Services use a number of vendors to provide capabilities that are required by VAI to deliver the Services. An outage or interruption of, or defect in, a capability provided by these vendors could adversely impact VAI's ability to deliver the Service. Third-party vendors may limit their liability to Clients.

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

Asset concentration risk: Funds that invest a high percentage of their assets in a few companies are subject to the chance that their performance may be hurt disproportionately by the poor performance of relatively few investments. **Index sampling risk:** is the chance that the securities selected for an index fund, in the aggregate, will not provide investment performance matching that of a fund's target index.

Diversification risk: Diversification doesn't ensure a profit or protect against a loss. 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.

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.

ESG risk (applicable to ESG all-index investment option): is the chance that the stocks or bonds screened by the index provider for ESG criteria generally will underperform the market as a whole or, in the aggregate, will trail returns of other funds screened for ESG criteria. There are significant differences in interpretations of what it means for a company to meet ESG criteria. The index provider's assessment of a company, based on the company's level of involvement in a particular

industry or the index provider's own ESG criteria, may differ from that of other funds or of the advisor's or an investor's assessment of such company. As a result, the companies deemed eligible by the index provider may not reflect the beliefs and values of any particular investor and may not exhibit positive or favorable ESG characteristics.

The evaluation of companies for ESG screening or integration is dependent on the timely and accurate reporting of ESG data by the companies. Successful application of the screens will depend on the index provider's proper identification and analysis of ESG data. In addition, an ESG fund's target index may, at times, become focused on stocks of a particular market sector, which would subject the fund to proportionately higher exposure to the risks of that sector.

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.

Ownership Limitations and Regulatory Relief

The ability of Vanguard and external advisors to purchase or dispose of certain fund investments, or to exercise rights on behalf of a fund, is or may be restricted or impaired because of limitations imposed by law, regulation, or by certain regulators or issuers. As a result, Vanguard and external advisors, on behalf of certain funds currently and other funds potentially in the future, are required to limit purchases, sell existing investments, or otherwise limit the exercise of shareholder rights by a fund, including voting rights. These ownership restrictions and limitations can impact a fund's performance. For index funds, this impact generally takes the form of tracking error, which can arise when a fund is not able to acquire its desired amount of a security. For actively managed funds, this impact can result, for example, in missed investment opportunities otherwise desired by a fund's investment advisor. If a fund is required to limit its investment in a particular issuer, then a fund may seek to obtain regulatory or corporate consents or ownership waivers. Other options a fund may pursue include seeking to obtain economic exposure to that issuer through alternative means, such as through a derivative or through investment in a wholly owned subsidiary, both of which may be more costly than owning securities of the issuer directly. In the event a derivative, such as a swap, is used as an alternative means of exposure, Vanguard and external advisors on behalf of a fund are not able to guarantee the availability of derivatives necessary to allow economic exposure to the security, sector, or industry. This limited availability may have additional impacts to fund performance. Additionally, use of derivatives as an alternative means of exposure subjects a fund to derivatives-related risks. Ownership restrictions and limitations could result in unanticipated tax consequences to a fund that may affect the amount, timing, and character of distributions to shareholders.

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.

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. In fact, this could have the opposite effect, and could be related to international or regional risk.

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.
- Returns from dividend-paying 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. These periods have, in the past, lasted for as long as several years.
- Returns from non-U.S. growth stocks and, to the extent that the Fund is invested in them, small- and mid-cap stocks, will trail returns from global stock markets. Historically, non-U.S. small- and mid-cap stocks have been more volatile in price than the large-cap stocks
- that dominate the global markets, 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. The performance of companies who are not located in these countries or regions, but whose supply chains rely heavily on them, can also be negatively impacted.

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.

Nondiversification risk: which is the chance that the Fund's performance may be hurt disproportionately by the poor performance of relatively few stocks or even a single stock. The Fund is considered nondiversified, which means that it may invest a greater percentage of its assets in the securities of particular issuers as compared with diversified mutual funds.

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.

Regional risk: Regional risk, which is the chance that economic, political or regulatory occurrences within a certain state may adversely affect the value of securities offered by issuers located within that state. Because a Fund (in particular tax-exempt municipal bond funds) may invest a large portion of its assets in securities located in any one state, that Fund's performance may be hurt disproportionately by the poor performance of its investments in that area.

Tax risk: is the chance that all or a portion of the tax-exempt income from municipal bonds held by a Fund will be declared taxable, possibly with retroactive effect, because of unfavorable changes in tax laws, adverse interpretations by the Internal Revenue Service or state or local tax authorities, or noncompliant conduct of a bond issuer.

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. In fact, this could have the opposite effect, and could be related to international or regional risk.