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

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

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

Material changes: There have been no material changes that impact the services provided to existing clients in Vanguard Personal Advisor Services since the last published brochure.

As part of our annual review of the brochure, we’ve revised the content to make the disclosure more reader-friendly and clarify certain processes.

Advisory business

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

Vanguard Personal Advisor Services

Vanguard Personal Advisor Services, launched by VAI in 2015, provides both ongoing advised account services for clients of Vanguard Retail Investor Group and point-in-time advice services to participants in certain employer-sponsored retirement plans through an offering branded as Vanguard Financial Planning Services. VAI uses the same methodology to generate financial plans for retail clients enrolled in the Vanguard Personal Advisor Services ongoing advised account service and the point-in-time advice and financial planning service offered to plan participants through Vanguard Financial Planning Services.

Point-in-time advice and financial planning for plan participants

Participants in eligible employer-sponsored retirement plans can engage Vanguard Personal Advisor Services through Vanguard Financial Planning Services to engage in a discussion with a financial planner for point-in-time advice, which includes addressing specific investment-related questions or topics, or providing nondiscretionary investment strategies for their retirement accounts based on personalized financial plans created by VAI. In choosing to receive a financial plan, you’ll provide us with information relating to your financial situation, investment objectives, and willingness and ability to tolerate risk. A financial plan will then be formulated for you that will recommend an asset allocation and specific investments that you can maintain in your retirement account to meet that allocation. Financial plans generated for participants will recommend an allocation from among the investment options selected by the plan fiduciary that make up the plan’s lineup and will typically recommend a combination of specific Vanguard Funds based on their low cost and broad diversification unless the plan lineup only includes company stock or third-party mutual funds or lacks the necessary Vanguard Funds needed to complete the recommended asset allocation. Your financial plan will also include advice regarding how to allocate future contributions to your retirement plan. You will be able to impose reasonable restrictions upon our investment strategy, which may include an ability to accommodate non-Vanguard securities in your financial plan (please see the section of this brochure entitled “Reasonable restrictions” for more information). Within the financial plan, we will also use the information you provided to us to provide goals-based forecasting and recommendations on how to better meet your investing goals, based on your situation and goals at the time you engage the service. Your financial plan will be finalized after consultation with an advisor representative of Vanguard Personal Advisor Services. More information regarding the methodology used in creating the financial plan is provided in the sections of this brochure that follow under the heading entitled “Methods of analysis, investment strategies, and risk of loss” below.
Please keep in mind that when using Vanguard Financial Planning services, you'll need to implement transactions and rebalance your retirement account on an ongoing basis in accordance with the financial plan. We won’t monitor your retirement account or financial plan, seek to determine whether you may have experienced material changes to your financial situation, investment objectives, and willingness and ability to take risk, or initiate transactions in your retirement account. You’ll be solely responsible for initiating all transactions and implementing the other recommendations provided in the financial plan.

**Vanguard Personal Advisor Services**

Vanguard Advisers, Inc. ("VAI"), also offers ongoing advised services for clients of Vanguard Retail Investor Group through Vanguard Personal Advisor Services. Please note that ongoing advisory services aren’t currently offered to participants with respect to securities held in employer-sponsored retirement plans. By choosing to engage Vanguard Personal Advisor Services, you’ll provide us with information relating to your financial situation, investment objectives, and willingness and ability to take risk. A financial plan will then be formulated for you that will recommend an asset allocation that will be maintained in your account(s) to meet that allocation.

Our lead recommendations will normally be limited to allocations in certain Vanguard Funds, based on their low cost and broad diversification, and 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. We recognize, however, that you may experience costs and tax consequences associated with selling your existing securities positions in order to implement our lead advice recommendations. As such, we will weigh the costs to transition the securities held by you before enrolling in the ongoing advised service using a breakeven cost analysis. If the securities held by you before enrolling in the ongoing advised service pass our breakeven cost analysis, we will 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 will recommend that you sell those positions and implement our lead advice recommendations. If you want to retain some or all of those positions that fail the breakeven cost analysis, we may accommodate your requests provided that they do not violate our portfolio construction guidelines. See the section of this Brochure below entitled “Reasonable restrictions” for additional information about imposing restrictions upon our investment strategy. Even in situations where your Portfolio (as defined below) contains securities held by you before enrolling in the ongoing advised service, we will recommend that any additional purchases in your advised Portfolio (as defined below) be made into Vanguard Funds.

Within the financial plan, we will also use the information provided to us to provide goals-based forecasting and recommendations on how to better meet your investing goals, based on your situation and goals at the time you engage the service. More information regarding the methodology used in creating the financial plan is provided in the sections of this brochure under the heading entitled “Methods of analysis, investment strategies, and risk of loss” below.

Your financial plan will be finalized after consultation with an advisor representative of Vanguard Personal Advisor Services. If eligible, you may choose to forego scheduling an initial or follow-up advisor consultation and, instead, enroll in the ongoing advised service using our digital enrollment process. If you have any questions throughout the process, you’ll always have the option to speak with an advisor representative. You will also be given the opportunity to preview our initial financial plan in order to determine whether to enroll in the ongoing advised service. Be aware, however, that we may not have an opportunity to appropriately refine and tailor the initial financial plan in the event you decline to enroll in the ongoing advised service, and the initial financial plan’s suitability to your financial situation may be limited thereby. Within five business days of accepting the terms of the financial plan and enrolling in the ongoing advised service, we’ll initiate steps to begin the necessary transactions to hold the mix of Vanguard Funds or other securities recommended to meet the asset allocation selected for your account(s) designated as part of your financial plan. Changes to the investment strategy set forth in the financial plan will be made only with your input and consent, which makes it extremely important that you immediately notify us of material changes to your financial situation, investment objectives, and willingness and ability to take risk. Collectively, the accounts enrolled in the ongoing advised service where recommendations are made by us to maintain your target allocation will be referred to herein as the “Portfolio.” Once you’ve agreed to ongoing advisement of the Portfolio, we’ll provide regular monitoring and review of the financial plan, and rebalancing of the Portfolio pursuant to the standing instructions you approve in the financial plan.

By enrolling in the ongoing advised service, you’re granting us authority to purchase and sell securities on your behalf. Accordingly, we may change the investments used to effect the investment strategy set forth in the financial plan at any time and without prior notice to you, including changing the investments used for purposes of rebalancing the Portfolio or substituting a particular investment for another investment you previously approved. If, however, we recommend such a change with respect to securities held in an individual retirement account as that term is defined in Section 408(a) of the Code (“IRA”), we’ll notify you at least 30 days before the change is implemented. Any notice of a proposed change in investments held in an IRA will include the effective date of the proposed change, instructions you can follow to avoid the proposed change, and a reminder that your failure to respond by a specified date will be deemed to be your consent to the proposed change in investments.

Your financial plan can include multiple investing goals that meet your particular financial situation, such as planning for college, saving for a home, establishing a rainy-day fund, saving for retirement, or managing your assets in a trust. Your goals may be supported by your Portfolio as well as accounts held outside of the Portfolio.
The ongoing advised service also offers a web experience that includes content based on your goals and provides personalized reporting. The web experience is accessed by logging on to your account at vanguard.com. Certain account registrations, such as revocable trusts or supporting entity-type registrations, may preclude clients from a web experience. For clients enrolled in the ongoing advised service, we’ll contact you, at least annually, via digital interface or phone, to validate your financial planning needs and the strategy chosen for the Portfolio for the purposes of determining whether there have been any changes in your financial situation, risk tolerance, tax situation, investment time horizon, investment objectives, or desired reasonable restrictions that may require a new financial plan for your review and approval. Again, it is critical that you interact with us during these attempts to validate your financial planning 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, and willingness and ability to take risk, in order to ensure that your financial plan is appropriately tailored. If you fail to validate your current investor profile or respond to our attempts to schedule and conduct an annual review, we’ll assume that there have been no changes, and we’ll continue in accordance with your approved financial plan.

In connection with the ongoing advised service, you’ll retain the right to: (i) withdraw securities or 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 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.

Vanguard Personal Advisor Services offers different asset-based service models to clients enrolled in the service. Clients with Portfolio securities ranging in value from $50,000 to $500,000 are assigned to a team of financial advisors. Clients with Portfolio securities of more than $500,000 receive an assigned financial advisor. All Vanguard Personal Advisor clients have the ability to call and schedule an appointment with an advisor at any time. Additional information about fee tiers based on assets under management are included below in the “Fees and compensation” section.

Before enrolling in the ongoing advised service, potential clients should consider paying off high-interest debt.

Estimated capital gains and MinTax cost basis method
We will provide an estimate of the capital gains and/or losses that you may realize if you implement the recommendations in your financial plan. We will use the average cost method for estimating your capital gains and/or losses, unless you have opted into the usage of the minimum tax (“MinTax”) cost basis method in connection with your enrollment into the ongoing advised service (please see the following paragraph for more information about the MinTax cost basis method). If the cost basis of a particular security is unknown, we’ll assume that the entire position is held at a gain (meaning that we will assume your cost basis for that security is zero). Actual capital gains and/or losses may differ from the estimates, as they’re based on the price of the security at the time of sale. While the ongoing advised service will weigh the tax impact 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.

This paragraph regarding MinTax cost basis method applies to those clients who have enrolled in the ongoing advised service. Our initial financial plan will use average cost as its cost basis method to estimate gains and losses potentially realized due to implementation. Once you’ve accepted the terms of the financial plan and are enrolled in the ongoing advised service, we’ll use the MinTax cost basis method in performing the necessary transactions within your taxable accounts to construct your Portfolio and on an ongoing basis for all securities held in your taxable accounts in the Portfolio unless you affirmatively opt out of such method. If you affirmatively opt out of MinTax, we will continue to use average cost as the cost basis method in calculating estimated gains and losses.

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 may not do so in every case. For example, if the taxable accounts within your Portfolio have a position held 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. Please refer to Your Service Agreement for Vanguard Personal Advisor Services for more information about the MinTax cost basis method.

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

Additional information for participants and Vanguard IRA holders
VAI intends Vanguard Personal Advisor Services to be a level-fee eligible investment advice arrangement and to comply with the conditions of the statutory exemption for eligible investment
advice arrangements under Sections 408(b)(14) and (g) of the Employee Retirement Income Security Act (“ERISA”) and Sections 4975(d)(17) and (f)(8) of the Internal Revenue Code (the “Code”). In providing advice for assets held in IRAs, or with respect to assets held in eligible employer-sponsored retirement plans as defined in Section 3(2) of ERISA, VAI will act as a fiduciary advisor as defined under Section 408(g)(11) of ERISA and Section 4975(f)(8)(U) of the Code and, therefore, VAI must act prudently and only with clients’ interests in mind when providing clients recommendations about investment of those assets. Additionally, Vanguard Personal Advisor Services will be afforded independent auditor for compliance with the requirements of the statutory level-fee exemption and related regulation. Clients of Vanguard Retail Investor Group who have received our advice with respect to securities held in IRAs during a calendar year will receive a copy of the most recent version of the auditor’s findings published in the next calendar year within 30 days of our receipt of the report. Sponsors of eligible employer-sponsored retirement plans that make Vanguard Personal Advisor Services through Vanguard Financial Planning available to participants during a calendar year will also receive a copy of the most recent version of the auditor’s findings published in the next calendar year within 60 days of our receipt of the report.

Spending Fund
This section regarding the Spending Fund applies to those clients who have enrolled in the ongoing advised service. The ongoing advised service will recommend that you establish a new money market fund, or designate an existing money market fund, to facilitate cash flow into and out of the Portfolio, herein defined as a “Spending Fund.” If you’ve established a Spending Fund, any additional cash added will remain in the Spending Fund until the total amount of assets in the Spending Fund exceeds your agreed-upon maximum limit (the “Upper Threshold”). When the Upper Threshold is exceeded, your Spending Fund balance will be reduced to the agreed-upon target amount (the “Target Balance”) and the additional assets will be invested according to the terms of your current financial plan. You can also establish an agreed-upon minimum limit for the Spending Fund (the “Lower Threshold”). When the balance of the Spending Fund falls below the Lower Threshold, an advisor will act in accordance with your current financial plan to rebalance securities among your holdings to meet the Target Balance in the Spending Fund.

The processes regarding the Spending Fund do not apply to participants of employer-sponsored retirement plans who engage Vanguard Personal Advisor Services through Vanguard Financial Planning Services, or those clients who only receive a financial plan and decide to not enroll in the ongoing advised service.

Transferring cash or securities to and from the Portfolio
This section regarding transfers of cash and securities to and from the Portfolio applies to those clients who have enrolled in the ongoing advised service. While enrolled in the ongoing advised service, you may transfer cash or securities to and from the Portfolio at any time, and you may add or remove accounts at any time, provided you give us prior notice by contacting us. Clients with Portfolio securities ranging in value from $50,000 to $500,000 can schedule an appointment with an advisor by logging on to their Vanguard accounts and selecting “Manage Appointments” to choose a convenient time for an advisor to call them, or by calling us at 800-992-5541. Clients with Portfolio securities in excess of $500,000 can contact their advisor directly by phone or by scheduling an appointment.

Cash transferred to the Portfolio will be deposited into your Spending Fund (as defined below) or an existing money market fund or settlement fund in a Vanguard Brokerage Account where you haven’t established a Spending Fund. In the event that you have no Spending Fund, existing money market fund, or settlement fund in a Vanguard Brokerage Account, you hereby agree to establish, at the time of transfer, an account in Vanguard Federal Money Market Fund for the purpose of accepting your transfer of cash into the Portfolio. 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 your financial plan upon your next rebalancing opportunity, or as otherwise agreed upon with an advisor.

Purchases into Vanguard Funds in the Portfolio, other securities transfers, and cash transfers greater than $100, with the exception of automated account services or investment earnings as noted above, will be invested within five business days of the transfer according to the terms of the current financial plan, except for cash transfers deposited into your Spending Fund. Any transfers less than $100, except for cash transfers deposited into your Spending Fund, will be allocated in accordance with your financial plan upon your next rebalancing opportunity. If you have established a Spending Fund, see the section above entitled “Spending Fund” for details on how cash transfers will be invested.

If you haven’t established a financial plan, securities will be held in kind until you establish a financial plan for such assets. We reserve the right to reject the transfer of certain securities. You may work with an advisor to establish an alternate timing for the investment of additional cash, Vanguard Funds, or other securities transferred to your Portfolio. The processes regarding the transfer of cash and securities to and from the Portfolio do not apply to participants of employer-sponsored retirement plans who engage Vanguard Personal Advisor Services through Vanguard Financial Planning Services, or those clients who only receive a financial plan and decide to not enroll in the ongoing advised service.

Purchase and sale of securities in a Portfolio
This section regarding purchases of securities in a Portfolio applies to those clients who have enrolled in the ongoing advised service. If you process a transaction in a Vanguard Brokerage Account enrolled in the ongoing advised service and don’t have sufficient funds to settle the transaction, an advisor will raise settlement proceeds by selling a portion of the largest position in the impacted account based on our drawdown hierarchy methodology discussed below. The processes regarding the purchase of securities in a
Portfolio do not apply to participants of employer-sponsored retirement plans who engage Vanguard Personal Advisor Services through Vanguard Financial Planning Services, or those clients who only receive a financial plan and decide to not enroll in the ongoing advised service.

When selling securities from the Portfolio during rebalancing or a Spending Fund replenishment, or when raising cash for a one-time withdrawal, securities will be sold according to the following drawdown hierarchy, as applicable: securities held in IRAs subject to required minimum distribution (RMD) requirements, securities held in taxable accounts, securities held in tax-deferred accounts, and then securities held in tax-free (Roth) accounts. You may work with an advisor to customize your drawdown hierarchy when you need to sell securities. The client designated as the “Primary Advice Client” in the Service Agreement for Vanguard Personal Advisor Services will be able to accept or customize the drawdown hierarchy and direct withholding elections for all accounts in the Portfolio, including accounts owned solely by the Secondary Advice Client. The drawdown hierarchy aims to be tax-efficient but may not be equitable in relation to the accounts owned by a Primary Advice Client versus those owned by a Secondary Advice Client, meaning that one individual’s account could be depleted before securities are sold from the other’s accounts. Securities may not be sold and balances may not be withdrawn proportionately from various accounts when following the drawdown hierarchy.

Restrictions on Portfolio accounts

While enrolled in the ongoing advised service, you shouldn’t purchase or sell securities in your Portfolio without prior assistance from an advisor, and you may be restricted from such activity until you terminate the ongoing advised service. Transactions performed in a Portfolio enrolled in the ongoing advised service without prior notice to us may be reversed or unwound by us in order to maintain the recommended allocation for your Portfolio. Other account transactions or services, like automatic trading services (such as automatic investment/withdrawal), will be restricted or unavailable through the web experience but can be processed or enabled with the assistance of an advisor. Other actions requiring advisor assistance include cost basis provisioning, dividend and capital gain distribution elections, and setting RMD payments.

You may not receive third-party discretionary advice on securities held in the Portfolio under the ongoing advised service. If you want to receive third-party discretionary advice about certain securities in the Portfolio, we can assist you in transferring those securities to an account outside of the Portfolio or you may choose to terminate the ongoing advised service. You may separately arrange for the provision of advice by another provider that has no material affiliation with, and receives no compensation in connection with, the securities held in your account(s).

As of December 31, 2018: Vanguard Personal Advisor Services offered under Vanguard Advisers, Inc. (“VAI”), had a total of $83.7 billion in discretionary assets under management.

Fees and compensation

Advisory fee

The annual advisory service fee paid to VAI for clients enrolled in the ongoing advised service will be as follows:

- 0.30% On Portfolios below $5 million
- 0.20% On Portfolios from $5 million to below $10 million
- 0.10% On Portfolios from $10 million to below $25 million
- 0.05% On Portfolios of $25 million and above

In most cases, Portfolios of $5 million and above will be serviced by Vanguard National Trust Company (“VNTC”), an affiliate of VAI that offers its own version of Vanguard Personal Advisor Services to its client base. Please see the section below entitled “Other financial industry activities and affiliations” for additional information about VNTC.

Fees will be calculated quarterly and based on your average daily balance in the Portfolio across the entire fee period. A fee period is the prior calendar quarter. The fee will be assessed on the first Monday (unless falling on a U.S. holiday; a list of observed U.S. holidays is available on The New York Stock Exchange’s website, available at nyse.com/markets/hours-calendars) after the completion of a fee period and will generally be deducted within two weeks of assessment. A total fee will be calculated across all securities in the Portfolio, with the exception of money market fund positions. VAI won’t assess a fee on the balance of money market fund securities held within the Portfolio. VAI will select the designated fee account(s) of the Portfolio from which the fee will be deducted and then will systematically determine which securities to sell to raise proceeds sufficient to cover the fee based on a fee withdrawal hierarchy of expected fund volatility from least to most volatile. In situations where you own Vanguard Funds both in accounts held with The Vanguard Group, Inc. (“Vanguard”), and in Vanguard Brokerage Accounts held with Vanguard Marketing Corporation, we’ll look to sweep the fees from the accounts held with Vanguard first. The fee withdrawal hierarchy prioritizes mutual funds with relatively low volatility and expected tax consequences over funds with higher volatility and potential embedded gains. Unless the only account in the Portfolio is an IRA, we won’t select the IRA as the account from which the fee should be deducted. In the case of multiple IRAs only in the Portfolio, the fee will be taken proportionally from all of the IRAs in the Portfolio. In addition, when sweeping fees from a taxable account with a Spending Fund, we’ll prioritize the Spending Fund first. We reserve the right to change the annual service fee upon 30 days’ written notice to you. Upon removal of an account, or termination of the ongoing advised service, we will require payment of any accrued fees from the time of the last quarterly payment until the termination date. We may offer a negotiated fee schedule to clients solely at our discretion, including fee structures based on combined assets of related clients. The assets of related clients can only be combined for the purposes of determining the appropriate fee tier if they’re contained within a Portfolio at the time the fee is assessed. In these cases, clients will be notified in writing that they qualify for a lower fee tier. Clients using a lower fee tier will still follow...
the same calculation and fee assessment processes outlined above. The ongoing advised service reserves the right to provide periodic fee waivers where it deems appropriate.

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

Participants in eligible employer-sponsored retirement plans receiving financial plans from Vanguard Personal Advisor Services through Vanguard Financial Planning Services will not be charged an advisory fee for the financial plan.

Advisory fees for the financial plan or ongoing advised service are in addition to the Vanguard Fund fees, Vanguard Variable Annuity fees, Account fees, non-Vanguard fund fees, and retirement plan fees described in the paragraphs below. You should review this information and carefully consider the impact of our advisory fees before approving your financial plan or implementing any recommendations provided through a financial plan or the ongoing advised service.

**Vanguard Fund fees**

The advice provided by Vanguard Advisers, Inc. ("VAI"), will include recommendations to sell, hold, or purchase Vanguard Funds. Where we transact to implement your financial plan or you act in accordance with our advice and invest in Vanguard Funds, it will result in the payment of fees to the Vanguard Funds and to The Vanguard Group, Inc. ("Vanguard"), an affiliate of VAI. A purchase or sale of Vanguard Fund shares isn’t subject to a load, sales charge, or commission. However, each Vanguard Fund incurs advisory, administrative, and custodial fees, as well as other fees and expenses that it pays out of its own assets. The advisory, administrative, custodial, and other costs make up the Vanguard Funds’ expense ratios. Also, some Vanguard Funds impose purchase and redemption fees. Clients who invest in Vanguard Funds are subject to the applicable expense ratios and to any purchase and redemption fees. Please consult the prospectus for information about a specific Vanguard Fund’s expense ratio and any fees assessed by that fund.

**Vanguard Variable Annuity fees**

When a Portfolio contains a Vanguard Variable Annuity, you’ll incur an expense ratio for the annuity, which will vary depending on the annuity’s investment allocation. The expense ratio includes an administrative fee of 0.10% payable to The Vanguard Group, Inc. ("Vanguard"), a mortality and expense risk fee of 0.17% payable to Transamerica Financial Life Insurance Company, and the expense ratio of the Vanguard Variable Insurance Fund portfolio comprising the investment allocation of the variable annuity payable to Vanguard. The variable annuity expense ratio excludes additional fees that would apply if the Return of Premium death benefit rider or Secure Income™ (Guaranteed Lifetime Withdrawal Benefit) rider is elected. In addition, contracts with balances under $25,000 are subject to a $25 annual maintenance fee payable to The Vanguard Group, Inc.

**Account fees**

You may also incur account service fees, commission charges, and other account charges and processing fees in connection with establishing accounts with Vanguard Advisers, Inc. ("VAI"), affiliates. You should review the terms of your account opening documents or any plan fee disclosure notices for details about fees that may be assessed in connection with these accounts. Vanguard Marketing Corporation ("VMC"), doing business as Vanguard Brokerage Services®, a registered broker-dealer that’s a wholly owned subsidiary of The Vanguard Group, Inc. ("Vanguard"), and an affiliate of VAI, offers a limited number of commission-free transactions to clients who open Vanguard Brokerage Accounts and are eligible for Vanguard’s Flagship® and Flagship Select® service levels. If you’re currently enrolled in one of these services, transactions performed by the ongoing advised service will be eligible for the commission-free benefit, but any such executed transactions will reduce the number of commission-free transactions available to you in your self-directed accounts held outside of your Portfolio.

**Non-Vanguard fund fees**

Mutual fund trades in a Vanguard Brokerage Account held through VMC are limited to those fund families with which VMC has entered into a selling agreement. VMC receives transaction fees, front- and back-end loads, sales charges, and 12b-1 fees in connection with various transactions in third-party mutual funds through VMC’s FundAccess® program. VMC will also receive fees for the provisioning of various shareholder services in connection with the participation of certain mutual funds in the FundAccess program. These fees may be considered revenue sharing payments, and represent a significant source of revenue for VMC. Determined in accordance with an asset-based formula, these payments may equal up to 0.40% of a mutual fund’s assets under management at VMC on an annual basis. VMC will also receive operational payments from mutual funds in the form of networking or per-position fees of up to $20 for each customer position in a mutual fund on an annual basis. These fees are reimbursed to VMC for the work it performs on behalf of the funds, which may include, but isn’t limited to, sub-accounting services, dividend calculation and posting, accounting, reconciliation, client confirmation and statement preparation and mailing, and tax statement preparation and mailing. Certain funds offered through the FundAccess program assess purchase and redemption fees. In the event that the Portfolio transacts in a fund that assesses such fees or pays the aforementioned forms of compensation to VMC, those fees will be imposed on your transaction(s) and the compensation will be paid to VMC separate and apart from the advisory fees assessed by us.

**Exchange-listed options**

VMC receives compensation for directing options order flow to specific market participants with which it has a relationship (Citadel Execution Services, Citigroup Global Markets, UBS Securities LLC, and KCG Americas LLC). VMC receives payments at an average blended rate below $0.18 per
Performance-based fees and side-by-side management

Vanguard Advisers, Inc., and its advisors don’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

The ongoing advised service offered by Vanguard Personal Advisor Services is made available to clients and prospects of Vanguard Retail Investor Group with a minimum of $50,000 of investable cash or securities in the Portfolio. Eligible clients include those with individual accounts (including IRAs and Vanguard Variable Annuity accounts), joint accounts, and trust accounts. Participants in eligible employer-sponsored retirement plans whose employers have approved Vanguard Personal Advisor Services through Vanguard Financial Planning Services are also eligible to receive advice. Please note that the ongoing advised service isn’t currently offered to participants with respect to securities held in employer-sponsored retirement plans. Other account types may be considered for purposes of goals forecasting, but Vanguard Advisers, Inc., won’t invest or reallocate assets in those other accounts.

Methods of analysis, investment strategies, and risk of loss

Vanguard Advisers, Inc.’s (“VAI”), investment methodology incorporates our own investment philosophies and beliefs, such as the benefits of low costs, diversification, and indexing. Our methodology, which is approved and periodically reviewed by senior Vanguard management, 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 financial plan or Portfolio—including investments from a variety of market sectors and asset classes. If, as a result of its periodic review, VAI makes material changes to our methodology that impact your financial plan, you’ll be informed of the changes and then be given the opportunity to approve them.

Investment strategy for the Portfolio

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

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

First, we’ll gather information through the use of a questionnaire, an investor profile, and consultation with an advisor (unless you choose to forego scheduling an advisor consultation) to understand your financial objectives, such as your age, risk tolerance, specific financial goals, investment time horizon, current investments, tax status, other assets and sources of income, investment preferences, and planned spending from the Portfolio or accounts covered by the financial plan. A proprietary algorithm uses these data to recommend a particular investing track and corresponding glide path that embodies the risk tolerance, asset allocation, and time horizon that’s suitable for your goals. The investing tracks range from very conservative, conservative, moderate, aggressive, and very aggressive, and the glide paths within each track are designed to change over time to adjust your risk exposure and asset allocation to match the time remaining for each of your specified goals. You have the option to discuss your investing track and glide path with an advisor at any time, and the advisor will have the ability to adjust your investing track to be more conservative or aggressive if you both deem such change to be appropriate. Your investment strategy may include separate asset allocation strategies tailored to each of your financial goals. When multiple accounts are used to support a goal, the asset mix of any single account may vary, but collectively the accounts will achieve the target asset allocation for the goal. We’ll rely on the information provided by you in formulating the financial plan or the Portfolio. Any inaccuracies in that information could affect the recommendations and your financial plan or Portfolio.

When recommending, setting, and adjusting your asset allocation, we weigh “shortfall risk”—the possibility that a financial plan or Portfolio will fail to meet longer-term financial goals—against “market risk,” or the chance that a financial plan or 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. Appropriate asset allocations may range from 100% stock to 100% short-term reserves based on the risk tolerance and remaining investment time horizon for a particular financial goal. Investment strategies for different goals may reflect different trade-offs between shortfall and market risk.

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

We seek to provide adequate diversification within each asset class. We recommend investing across different market segments to ensure sub-asset class diversification. We’ll establish allowable sub-asset class ranges. The ongoing advised service will adjust your Portfolio to position sub-asset classes within our allowable ranges. We may propose the addition, removal, or adjustment of sub-asset class exposures based on continuing portfolio construction research performed by Vanguard Investment Strategy Group or based on changes to your financial situation or investment objectives.

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

Our bond methodology emphasizes broad diversification across the bond market, both domestic and international, and maintains an interest rate risk exposure in line with the broad bond market. Investments in bonds are subject to multiple risks, including interest rate, credit, and inflation risk. Diversification across the domestic and global bond markets, as well as across market segments, issuers, and the yield curve, helps mitigate these risks. Our lead bond recommendation builds financial plans and Portfolios that are diversified across short-, intermediate-, and long-maturity bond funds and seeks to maintain an intermediate-term duration. An intermediate-term duration generally means your financial plan or 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’ll seek to build a high-credit-quality financial plan or Portfolio of bond funds, including funds that hold corporate, Treasury, agency, and mortgage-backed bonds. Depending on your tax bracket, we may recommend tax-exempt bond funds for your taxable account(s). Bond portfolios may incorporate a mix of domestic and foreign bond funds. As with equities, we examine bond sector exposure to ensure a financial plan or Portfolio isn’t concentrated in a single segment, which could expose the financial plan or Portfolio to a higher level of risk. See the “Securities recommendations and risk,” “Risks associated with usage of an algorithm,” and “Investment risks” sections of this brochure below for further discussion of risks.

Diverse investments, primarily consisting of low-cost Vanguard Funds

After determining the overall asset mix and your stock and bond sub-allocations, our algorithm will then recommend appropriate investments for your financial plan or Portfolio. We approach fund selection with a long-term, buy-and-hold approach and discourage switching strategies based solely on recent performance. However, we may recommend reallocating holdings among different Vanguard Funds as we periodically reassess the most appropriate investments to achieve the targeted asset allocation and sub-allocations.
Considering tax efficiency in allocating assets across multiple Portfolio accounts
For Portfolios containing both taxable and tax-advantaged accounts, the financial plan will aim to optimize the tax efficiency of the Portfolio by recommending or allocating investments strategically among taxable and tax-advantaged accounts. The objective of this “asset location” approach is to hold relatively tax-efficient investments, such as broad-market stock index products, in taxable accounts while keeping relatively tax-inefficient investments, such as taxable bonds, in tax-advantaged accounts. This tax-efficient asset location methodology is demonstrated through the following tiered approach. First, the ongoing advised service will attempt to construct your Portfolio to fulfill your fixed income allocation in tax-advantaged accounts, unless you already hold individual bond positions that align with our portfolio construction methodology but are held in the wrong asset location. If it becomes necessary to hold bonds in a taxable account, tax-exempt municipal bond funds may be used. Second, the ongoing advised service will recommend holding any active equity funds in your Portfolio in your tax-advantaged accounts, subject to remaining capacity after your Portfolio’s target bond allocation has been fulfilled in those accounts. We will modify our approach to tax-efficient investing based on continuing portfolio construction research performed by Vanguard Investment Strategy Group or changes in tax laws.

Reasonable restrictions
When requesting a financial plan, you’ll have the ability to impose reasonable restrictions on the investments recommended for the financial plan or Portfolio. Specifically, you can request that certain alternate Vanguard Funds and certain non-Vanguard securities be held as part of the financial plan or in the Portfolio, provided that those securities meet certain standards imposed by VAI, including our portfolio construction and diversification standards established by us for such holdings. You will also have the ability to designate certain securities that shouldn’t be recommended for the financial plan or Portfolio or that shouldn’t be sold if held in the Portfolio.

Additionally, if you are a client of Vanguard Retail Investor Group enrolled in the ongoing advised service offered by Vanguard Personal Advisor Services, you can consult with an advisor representative in order to meet certain investing preferences you may have, for example, an active versus passive tilt, or limits on certain sub-asset allocation percentages, among other preferences. Specifically, you can request:

- A variance in the percentages of your equity allocation invested in domestic versus international funds (subject to our allowable variance ranges).
- A variance in the percentages of your international equity allocation invested in developed versus emerging markets (subject to our allowable variance ranges).
- An active equity allocation instead of an indexed approach (subject to available shelf space in tax-advantaged accounts, such as IRAs).
- A variance in the percentages of your bond allocation invested in domestic versus international funds (subject to our allowable variance ranges).
- An active domestic bond allocation instead of an indexed approach (subject to available shelf space in tax-advantaged accounts, such as IRAs).
- A variance in the domestic bond sub-asset allocation to accommodate a greater percentage investment in corporate bond funds (subject to available shelf space in tax-advantaged accounts, such as IRAs).

If you request reasonable restrictions in the financial plan or the Portfolio, we’ll analyze whether the requested securities may fit into the overall stock or bond allocations recommended for the financial plan or the Portfolio. When analyzing securities, we’ll rely on Vanguard’s asset classification assessments based on information received from third-party data providers to categorize these investments.

Any restriction you wish to impose is subject to review and approval by us. Restrictions will be allowed as long as they aren’t inconsistent with our methodology. The financial plan or Portfolio will 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. We won’t be responsible, however, for performing due diligence on any security that is included in your financial plan or Portfolio as a result of a requested restriction. If your desired restrictions are unreasonable or if we believe the restrictions are inappropriate for you, we’ll notify you that, unless the instructions are modified, we’ll remove particular securities from the financial plan or the Portfolio, remove particular accounts from the Portfolio of the ongoing advised service, or terminate the ongoing advised service.

Certain investments that you may request, such as individual stocks and bonds, stock sector funds, and other Vanguard or non-Vanguard funds, may not offer the same degree of diversification, liquidity, or performance consistency that may be available with the Vanguard Funds we normally recommend.

Adjusting the Portfolio asset allocation
This section regarding adjustments to the Portfolio asset allocation applies to those clients who have enrolled in the ongoing advised service. Each quarter (with timing determined by your contract anniversary date, or as otherwise agreed upon with an advisor), the ongoing advised service will review your target allocation as illustrated in the asset allocation schedule found in your financial plan in relation to your investment time horizon to determine if any changes in the target asset allocation you approved as part of your ongoing financial plan are recommended. If the ongoing advised service recommends changes to the Portfolio’s target allocation, recommendations may also be made with respect to the purchase or sale of securities in the Portfolio to meet the new target asset allocation and reflect your progress along the asset allocation schedule.
If your ability to bear risk, your investment time horizon, your financial situation, or your overall investment objectives change, you should notify an advisor or update your information so that the ongoing advised service 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 may recommend a different asset allocation based on changes to your financial situation or investment objectives. If we recommend a different asset allocation, you’ll receive a new financial plan for your review and approval.

This section regarding adjustments to the Portfolio asset allocation does not apply to participants of employer-sponsored retirement plans who engage Vanguard Personal Advisor Services through Vanguard Financial Planning Services, or those clients who only receive a financial plan and decide to not enroll in the ongoing advised service.

Securities recommendations and risk

Our lead advice approach recommends investments in Vanguard Funds. Although we’ll recommend investment strategies designed to be prudent and diversified, please remember that all investments, including mutual funds, involve some risk, including possible loss of principal. Be aware that fluctuations in the financial markets and other factors may cause declines in the value of your account(s). There’s no guarantee that any particular asset allocation or mix of funds will meet your investment objectives or provide you with a given level of income. We make investment recommendations using historical information. There’s no guarantee that an investment strategy based upon historical information will meet your investment objectives, provide you with a given level of income, or protect against loss, particularly when future market conditions are drastically different from the information used to create your strategy. Diversification doesn’t ensure a profit or protect against a loss. There’s no assurance that you’ll achieve positive investment results by using our service. We can’t guarantee the future performance of your investments. Please consult a fund’s prospectus for more information about fund-specific risks. You should carefully consider all of your options before acting on any advice you receive.

Risks associated with usage of an algorithm

Our proprietary algorithms are based on Vanguard’s market assumptions and analysis. The algorithms don’t consider prevailing market conditions when making recommendations to you. While we have standards governing the development, testing, and monitoring of our algorithms, there is a risk that the algorithms and associated software may not perform as intended for various reasons, including unintended consequences due to modifying the algorithms or underlying software code. The U.S. 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.

Goals forecasting

We will also provide projections to help you assess your ability to achieve your personalized financial goals. To cover a broad range of outcomes, our forecasts will generate 10,000 scenarios to measure your likelihood of success of reaching your goals. The projections use forecasted index returns for equities, bonds, and cash, which are used to represent the hypothetical returns of the asset classes in your financial plan or Portfolio. These forecasted index returns as well as inflation rates are provided through the Vanguard Capital Markets Model® (“VCMM”), developed by the Vanguard Investment Strategy Group, which is discussed in more detail later.

Projections may be based on accounts included within the financial plan or Portfolio or on accounts held outside of the financial plan or Portfolio. Our goals forecasting model uses the same index returns to represent the returns of the asset classes in all of your accounts supporting your goals in your financial plan or Portfolio. Index returns for fixed income and equity products are reduced by 0.50% annually, and index returns for money market/cash/short-term reserves are reduced by 0.30% annually to account for hypothetical expenses and advisory fees. Inflation is modeled based on historical data from 1960 through the most recent year-end and simulated going forward.

The likelihood of success projections forecast for your goals do not attempt to predict or portray the future performance of any securities held in accounts supporting your goals. The forecasts are hypothetical projections based on statistical modeling of current and historical data. They aren’t a guarantee of future results or a guarantee of the success rate of the simulated outcomes. Although we believe that the forecasts may reasonably project your likelihood of reaching your goals as supported by accounts invested in a diversified portfolio of Vanguard Funds, 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.

Outside accounts and cost assumptions used in goals forecasting

For any accounts held outside of the financial plan or Portfolio, we will assume that the asset allocation held in those outside accounts is the same as in the accounts held within the financial plan or Portfolio. Accordingly, we will use the same index returns noted in the section above entitled “Goals forecasting” for the forecasting model to project your likelihood of success based on both outside accounts and accounts held in the financial plan or Portfolio. If your outside accounts aren’t invested in a similar manner as the accounts in your financial plan or 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 financial plan or Portfolio could significantly impact your likelihood of reaching a goal within the indicated time frame.
Any goals that are forecasted using accounts held outside of the financial plan or Portfolio (including other Vanguard accounts) are calculated based solely on the information 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’ll continue to rely on the information provided by you for as long as your goals are supported by such accounts. We will not independently verify or update this information. You may update the dollar amount of securities in accounts held outside of the financial plan or Portfolio and your rate of contributions by contacting us or by authorizing a third-party financial data aggregation service to refresh the data.

Index benchmarks used in the calculations
The returns used in the simulations for each type of goal are based on the following:
- For U.S. bond market returns, we use the Standard & Poor’s High Grade Corporate Index from 1960 through 1968; the Citigroup High Grade Index from 1969 through 1972; the Lehman Brothers U.S. Long Credit AA Index from 1973 through 1975; and the Barclays U.S. Aggregate Bond Index thereafter.
- We calculate U.S. short-term reserves returns on the basis of 3-month constant-maturity yields dating back to 1960, also provided in the Federal Reserve’s Statistical Release H.15.
- For U.S. stock market returns, we use the S&P 90 Index from 1926 through March 3, 1957; the S&P 500 Index from March 4, 1957, through 1974; the Wilshire 5000 Index from 1975 through April 22, 2005; and the MSCI US Broad Market Index thereafter. For international stock market returns, we use the MSCI EAFE Index from 1970 through 1988 and a blend of 75% MSCI EAFE Index/25% MSCI Emerging Markets Index thereafter.

Goals forecasting for accumulator goals
An accumulator goal is one in which you’re currently saving for a future event. Accumulator goals can focus upon saving for a single lump-sum distribution (such as saving for a home) or upon saving a sum to be drawn down over an extended period of time (such as saving for retirement). We’ll illustrate the process using an accumulator goal with an extended drawdown.

The first step involves estimating the amount of assets you’ll need to accumulate at the beginning of the spending phase. To do so, you’ll need to inform us of the annual amount you expect to spend, the year in which you expect spending to begin, the number of years during which you expect to spend, and any sources of income you may have during the spending phase. After adjusting for inflation, we’ll arrive at the estimated sum needed at the beginning of the spending phase by running the VCMM Monte Carlo simulations using the underlying asset allocation assumption for the goal. Please see the section of the brochure below entitled “Vanguard Capital Markets Model” for more information about the Monte Carlo simulations. The calculations will be performed with the aim of estimating a sum that will allow you to meet your spending needs in 85% of the Monte Carlo simulations (meaning we estimate that, in 85% of the hypothetical scenarios projected, you’ll have at least $1 left at the end of the spending phase).
The second step involves determining whether you’re on track in the accumulation phase to meet your overall goal of arriving at the sum needed at the outset of the drawdown phase. To model the accumulation phase, you must provide us with the current amount of assets you have in support of the goal and the amount you intend to save annually until the start of the drawdown phase. Using the underlying asset allocation for the goal, we’ll run the VCMM Monte Carlo simulations and calculate what percentage of scenarios had an ending balance, without considering any taxes, greater than or equal to your target amount at the outset of the spending phase. The ability to meet a goal will be quantified using a success rate. A successful outcome is defined as one in which the projected ending account balance, without considering any taxes, either meets or exceeds the Target Balance by the target goal year. For example, if a goal has a success rate of 80%, then 80% of the simulations resulted in a projected ending balance that met or exceeded the target goal amount.

Trust goals forecasting

We can provide investment recommendations and ongoing management for certain trust accounts. We’ll collect information concerning current and future income and distributions from the trust. We consider future inflows and distributions throughout the projected duration of the trust planning horizon. We’ll assess cash flows—inflows from investment income and other sources and outflows from distributions—to assess whether the trust investments can adequately support the trust needs over the intended duration.

We evaluate many factors in assessing the trust’s current cash flow and in creating future cash flow projections, including:

• Projected and known distributions from the trust, as a percentage of the income of a Portfolio, or a fixed dollar amount, as provided by the trustee(s).
• Projected inflows to the trust from investment and noninvestment income sources, as identified by the trustee(s).
• The impact of variables, such as inflation and income taxes. The trust cash flow model will factor in trust-specific income tax considerations.
• The impact of different market scenarios on the rates of return of trust assets.

The validity of these assumptions is based exclusively on the information the trustee(s) have provided.

It’s important that the accounts supporting the trust’s goal be able to endure a variety of market conditions. To assess the ability of the trust to meet future distribution goals through a variety of market conditions, our cash flow analysis projects how the trust assets would perform under various hypothetical scenarios.

We simulate the trust’s expected inflows and outflows each year through its expected planning horizon, and using each individual scenario’s unique forecasted return and inflation assumptions, we project the trust Portfolio’s ending balance. The trust’s estimated success rate is simply the percentage of these scenarios in which the trust balance is above zero at the end of its planning horizon.

Vanguard Capital Markets Model (“VCMM”)

VCMM is a proprietary, state-of-the-art financial simulation tool developed and maintained by 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.

Disciplinary information

VAI has no material legal or disciplinary information to disclose.

Other financial industry activities and affiliations

The Vanguard Group, Inc.

Vanguard Advisers, Inc. (“VAI”), is 100% owned by Goliath, Inc., a Delaware corporation, which is wholly owned by
The Vanguard Group, Inc. ("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’ll 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 Vanguard Marketing Corporation ("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’ll 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 and ETFs are mitigated. However, to the extent that you maintain a brokerage account with VMC as part of the Portfolio, VMC may receive compensation from you that’s separate from, and in addition to, the advisory fees payable to us. Please see the section of this brochure entitled “Brokerage practices” for more information about brokerage charges and other fees and expenses you may experience as a result of enrolling your Vanguard Brokerage Account in our service.

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

**Vanguard Fiduciary Trust Company**

We are also affiliated with Vanguard Fiduciary Trust Company (“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 (“VNNT”) is a federally chartered, limited-purpose trust company regulated by the Office of the Comptroller of the Currency, which provides corporate trustee services and investment advisory services to its high-net-worth client base. VNNT’s investment advisory services use the Vanguard Personal Advisor Services brand but are provided separately from VAI’s Personal Advisor Services. VNNT was chartered in 2001, but its business has been in operation since 1996. VNNT 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 or prospective 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**

This section regarding brokerage practices applies to those clients who have enrolled in the ongoing advised service. If you transact in Vanguard ETFs® or non-Vanguard securities in the Portfolio, you’ll be required to establish or use an existing brokerage account held through our affiliated broker-dealer, Vanguard Marketing Corporation (“VMC”), for those securities, and you’ll agree in Your Service Agreement for Vanguard Personal Advisor Services 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 advisory fees assessed by us. For manually processed
brokerage trading, it is our practice to transmit orders to the
secondary markets beginning at 9:30 a.m., Eastern time,
up through the close of trading on any business day that
the markets are open for trading. For automated brokerage
trading, it is our practice to transmit orders to the secondary
markets beginning at 10:00 a.m., Eastern time, up through
the close of trading on any business day that the markets
are open for trading. In order to limit the adverse price impacts
that could be experienced by clients if we submitted all of
our automated brokerage trades in bulk to the secondary
markets at a single point in time, we’ve designed a system
for handling automated brokerage trades that we believe is
fair and equitable to our clients and does not systematically
disadvantage any client. Trade worksheets completed by us
between the hours of 3:45 p.m., Eastern time, on a business
day through 10:00 a.m., Eastern time, on the next business
day are sent out to the secondary markets in timed batches
during that second business day. We do not aggregate client
orders for the purposes of submitting manually processed
or automated brokerage trades through VMC. 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 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 options 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 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.

Review of accounts
This section about the review of accounts applies to those
clients who have enrolled in the ongoing advised service. Clients
of the ongoing advised service will have continuous access to
their Portfolio information through our online web experience.
We will periodically evaluate and monitor the Portfolio through
investment reviews and analyses. Each quarter, with timing
determined by your contract anniversary date, or otherwise
agreed upon with an advisor, we’ll check your Portfolio to make
sure it’s in line with your target allocation.

We don’t perform ongoing account monitoring or offer
account reviews for participants of employer-sponsored
retirement plans who engage Vanguard Personal Advisor
Services through Vanguard Financial Planning Services, or
those clients who only receive a financial plan and decide to
not enroll in the ongoing advised service.

Adjusting the asset allocation
This section regarding adjustments to your asset allocation
applies to those clients who have enrolled in the ongoing
advised service. We may recommend adjusting your asset
allocation as your ability to bear risk changes or to account
for changes to your investment time horizon, but it won’t
change the asset allocation based on market conditions.
Quarterly, we’ll review your target allocation in relation to
your investment time horizon to determine if changes to the
allocation are necessary. The Portfolio’s target allocation may
also change based on changes to your financial situation and
investment objectives. Changes in your asset allocation may
cause us to recommend and effect the purchase or sale of
securities in your Portfolio in order to meet the new target
asset allocation.

We don’t monitor for adjustments to the asset allocation
of participants of employer-sponsored retirement plans
who engage Vanguard Personal Advisor Services through
Vanguard Financial Planning Services, or those clients who
only receive a financial plan and decide to not enroll in the
ongoing advised service.

Rebalancing the Portfolio
This section regarding periodic rebalancing applies to those
clients who have enrolled in the ongoing advised service. If
during a quarterly review your Portfolio is found to deviate
from the target asset allocation by more than 5% in any
asset class, we’ll rebalance your Portfolio within the five-day
review period using investment methodologies and strategies
consistent with those employed during the implementation
of your Portfolio. Securities contributing to overweighted
sub-asset classes will be sold and the proceeds invested in
underweighted sub-asset classes in accordance with your
financial plan.

We’ll attempt to minimize the tax costs associated with
rebalancing your Portfolio. If the Portfolio consists of both
taxable and tax-advantaged registrations, we’ll first attempt
to rebalance within the tax-advantaged accounts to attempt
to limit tax costs. In addition, we’ll follow a tax-efficient
“asset location” strategy to consider the tax implications
of repositioning investments within the taxable accounts
and among the taxable and tax-advantaged accounts. This
strategy will follow similar practices as those used during
implementation of your Portfolio to hold relatively tax-efficient
investments, such as broad-market stock index products,
in taxable accounts while keeping relatively tax-inefficient
investments, such as taxable bonds, in tax-advantaged
accounts. In the event your Portfolio is found to deviate from
the target asset allocation by 5% or less in all asset classes,
individual investments may still be reviewed and sold, unless a client-directed hold exists, if determined appropriate.

Additionally, we’ll use cash flows as an opportunity to adjust your holdings to your target allocation. That is, we’ll invest your contributions or liquidate your withdrawals in a manner that adjusts your overall allocation back to your target allocation, to minimize transaction and tax costs. If your contribution or additional proceeds are designated to purchase a new fund and the amount is less than 0.5% of your Portfolio, not to exceed $10,000, then the money will be added to the largest position in the account as long as it’s consistent with our investment methodology. If you have residual cash in your Vanguard Brokerage Account at your next rebalancing event and it’s not enough to purchase greater than 0.0001% of the recommended mutual fund, then the cash will continue to be held until the next rebalancing opportunity. Notwithstanding the ability to place reasonable restrictions on your Portfolio, individual investments will be evaluated during a quarterly review and sold in certain cases if determined appropriate by us. For example, individual securities retained in taxable accounts to avoid generating a taxable gain may be sold if that sale would result in a loss. Additionally, individual securities that may initially satisfy our portfolio construction and diversification standards and be held pursuant to your financial plan may thereafter violate those standards, which could cause us to sell the individual security. If we recommend a full liquidation with respect to securities held in a Vanguard IRA® and the security being liquidated isn’t held in any other account, we’ll notify you at least 30 days before the change is implemented.

We don’t perform rebalancing services for participants of employer-sponsored retirement plans who engage Vanguard Personal Advisor Services through Vanguard Financial Planning Services, or those clients who only receive a financial plan and decide to not enroll in the ongoing advised service.

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

Client referrals and other compensation
We don’t receive compensation or other economic benefits from persons other than clients for providing investment advice or advisory services to our clients. We don’t directly or indirectly compensate any person who isn’t a supervised person for client referrals.

Custody
The Vanguard Group, Inc. (“Vanguard”), the transfer agent of the Vanguard Funds, acts in the capacity of a qualified custodian for those funds and sends quarterly or more frequent account statements directly to you. Vanguard will also transmit transaction confirmations to you in connection with purchases and sales made in your Vanguard mutual fund accounts.

Vanguard Marketing Corporation (“VMC”), a registered broker-dealer, serves as qualified custodian for our clients holding securities in Vanguard Brokerage Accounts. VMC sends out quarterly or more frequent account statements directly to you. VMC will also transmit transaction confirmations to you in connection with purchases and sales made in your Vanguard Brokerage Account (provided that VMC may furnish periodic statements of account activity in lieu of transaction confirmations in compliance with Rule 10b-10 of the Securities Exchange Act of 1934). You should carefully review and compare all account statements and reports from Vanguard and VMC with any account information made available by us and contact the appropriate entity with any questions.

Investment discretion
This section regarding investment discretion applies to those clients who have enrolled in the ongoing advised service. In connection with the ongoing advised service, you must approve your financial plan and direct us to implement the recommended investment strategy for your Portfolio either verbally or in writing (including email and similar electronic communications). We’ll construct and invest your Portfolio in accordance with your approved financial plan, including any reasonable restrictions you may want to impose on our investment of the Portfolio. Changes to the investment strategy set forth in the financial plan will be made only with your consent. Until you approve the financial plan and direct that it be implemented, we’ll take no action with respect to the assets held in the Portfolio. Within five business days after you approve the financial plan, we’ll initiate steps to begin implementing your investment strategy as specified in the financial plan, unless you direct us to implement the Financial Plan over time.

In implementing the financial plan, we’ll have the authority, on your behalf, to purchase, sell, exchange, or transfer assets; rebalance and reallocate assets; 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 financial plan. We may change the investments used to effect the investment strategy set forth in the financial plan at any time and without prior notice to you, including changing the investments used for purposes of rebalancing the Portfolio or substituting a particular investment for another investment you previously approved. If, however, we recommend such a change with respect to securities held in an IRA, we’ll notify you at least 30 days before the change is implemented. Any notice of a proposed change in investments will include the effective date of the proposed change, instructions you can follow to avoid the proposed change, and a reminder that your failure to respond by a specified date will be deemed to be your consent to the proposed change in investments. Your financial plan will also contain a standing instruction to reassess your asset allocation or rebalance the Portfolio on a predetermined basis if and to the extent set forth in the financial plan.
In your agreement with us, you’ll grant us the authority to open new accounts, except for new brokerage accounts, with our affiliates for you with identical registrations to transfer and segregate securities in the Portfolio. This authority will be exercised by us to fulfill your stated needs for the Portfolio or your goals-based reporting, such as when you only want to enroll a portion of your funds or securities in the ongoing advised service or in the event that we need to segregate your investments to support various goals selected by you.

We don’t exercise any investment discretion with respect to the accounts of participating employer-sponsored retirement plans who engage Vanguard Personal Advisor Services through Vanguard Financial Planning Services, or those clients who only receive a financial plan and decide to not enroll in the ongoing advised service.

**Voting client securities**

Upon request, an advisor may provide additional information about proxy votes and corporate actions for clients enrolled in the ongoing advised service. The information may include details on the security itself, impact on the client’s Portfolio, recommended voting by Vanguard or third parties, and a recommendation by the advisor.

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.

**Financial information**

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

**Requirements for state-registered advisors**

VAI is a federally registered investment advisor.

**Investment risks**

**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.

- **Nondiversification risk** is the chance that a fund’s performance may be hurt disproportionately by the poor performance of relatively few securities. A fund is considered nondiversified if it may invest a greater percentage of its assets in the securities of particular issuers as compared with other mutual funds.

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

- **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.

- **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.

- **Funds of funds** are also subject to **manager risk**, which is the chance 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 underlying funds—and, thus, the fund itself—to underperform relevant benchmarks or other funds with a similar investment objective.

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

- **Index sampling risk** is the chance that the securities selected for a fund, in the aggregate, won’t provide investment performance matching that of the fund’s target index.

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

- **International risk** or **country/regional risk** is the chance that world events—such as political upheaval, financial troubles, or natural disasters—will adversely affect the value of securities issued by companies in foreign countries or regions. Because a fund may invest a large portion of its assets in securities of companies located in any one country or region, including emerging markets, its performance may be hurt disproportionately by the poor performance of its investments in that area. Country/Regional risk is especially high in emerging markets.

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

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

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

**Manager risk** is the chance that poor security selection will cause a fund to underperform relevant benchmarks or other funds with a similar investment objective.

**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.

**State-specific risk** is the chance that developments in specific states will adversely affect the securities held by the fund. Because the fund invests primarily in securities issued by the state and its municipalities, it’s more vulnerable to unfavorable developments in the state than are funds that invest in municipal securities of many states. Unfavorable developments in any economic sector may have far-reaching ramifications on the overall state municipal market.

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

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