

Your Service Agreement for Vanguard Personal Advisor Services

July 2018

Vanguard Advisers, Inc.
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Read this document carefully and keep it for your records.

Overview

Vanguard Advisers, Inc. ("VAI"), a federally registered investment advisor, provides Vanguard Personal Advisor Services® (the "Service"). By enrolling in the Service, you authorize VAI, as investment agent, to invest and reinvest the assets in the accounts included in this Service pursuant to your Financial Plan, as further described in this Service Agreement ("Agreement").

Description of Service

VAI. VAI is an indirect, wholly owned subsidiary of The Vanguard Group, Inc. ("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"). VAI is registered as an investment advisor with the U.S. Securities and Exchange Commission ("SEC").

VAI's advisory services. This Service is designed to offer clients an investment strategy for accounts enrolled in the Service, based on an affordable and personalized financial plan created by VAI (the "Financial Plan"). The advice you'll receive is based on Vanguard's investment methodology, as well as generally accepted investment principles. The Service will consist of an online experience that includes web content based on your goals and provides personalized reporting and analysis. It'll be tailored to your personal situation and based on the information you provide. Under the Service, VAI will initiate transactions to implement your Financial Plan, developed in consultation with and as approved by you. The Service offers clients different asset-based service models. Details about service models can be found in the *Vanguard Personal Advisor Services Brochure*.

VAI will invest and reinvest assets in the account(s) registered as identified on the applicable Authorization for Vanguard Personal Advisor Services ("Authorization"), or as separately noted on the attached forms, statements, or other correspondence, pursuant to your Financial Plan. Collectively, the accounts enrolled in the Service where investments are made by the Service to maintain your target allocation shall be referred to herein as the "Portfolio." The Service will also offer

goals-based reporting and recommendations on securities that may be held outside of the Portfolio. Please note that any Vanguard® account numbers referenced are used for informational purposes only and are subject to change. You'll be notified, under separate cover, of any account number changes for the listed registrations.

Authorization of Service

Investment services. In connection with this Service, VAI will use an investment questionnaire to evaluate your age, financial objectives, investment time horizon, current investments, tax status, other assets and sources of income, investment preferences, planned spending from the Portfolio, and your willingness to assume risk with the cash and securities being invested in the Portfolio in order to formulate an overall investment strategy reasonably suited to meet your investment objectives. The investment strategy will be set forth in a Financial Plan you approve and direct VAI to implement either verbally or in writing (including email and similar electronic communications), and such direction may include a standing instruction to rebalance the Portfolio on a predetermined basis if and to the extent set forth in the Financial Plan. VAI will construct and invest your Portfolio in accordance with your approved Financial Plan, including any reasonable restrictions that you may wish to impose on VAI's 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, VAI will take no action with respect to the assets held in the Portfolio. Within five business days after you approve the Financial Plan, VAI will initiate transactions implementing your Financial Plan, unless you direct VAI to implement the Financial Plan over time, as agreed upon with an advisor. In implementing the Financial Plan, VAI or its affiliates will 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 oral, written, or online instructions to effect transactions with third parties, at the times and according to the terms established in the Financial Plan. On a quarterly basis, the Service will review your target allocation as it relates to your investment time horizon. If needed, the Service will adjust your allocation and implement the changes within five business days.

VAI may propose changes in investments used to effect the investment strategy set forth in the Financial Plan, including changes in the investments used for purposes of rebalancing the Portfolio or changes involving the substitution of a particular investment for another investment you previously approved. If VAI recommends such a change with respect to securities held in a Vanguard individual retirement account or Vanguard 403(b)(7) custodial account ("Retirement Account"), VAI will notify you at least 30 days before the change is implemented. Any notice of a proposed change in investments in a Retirement Account will include the effective date of the proposed change, instructions you may 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.

VAI will also have the authority to open new accounts with its affiliates for you with identical registrations in order to transfer and segregate securities in the Portfolio.

Information to VAI. You agree to provide VAI in a timely manner with all information relating to your financial circumstances and investment objectives that VAI reasonably needs to invest the Portfolio, including information relating to age, financial objectives, investment time horizon, current investments, tax status, other assets and sources of income, investment preferences, planned spending from the Portfolio, and your willingness to assume risk with the cash and securities being invested in the Portfolio. You further agree to provide VAI in a timely manner with any reasonable modifications to investment restrictions you have imposed on the Portfolio. In providing services under this Agreement, VAI will rely on and take into account the information you provide without any duty or obligation to investigate the accuracy or completeness of such information or to take into account information requested of, but not furnished by, you. It's your responsibility to inform VAI about any change to the information provided, your financial circumstances, or your investment objectives, as such changes could have a material effect on any recommendation made under this Agreement. At least annually, VAI will contact you to validate your financial planning needs and the strategy chosen for the Portfolio, and determine whether there have been any changes in your financial situation (including changes to the information identified above) or changes in desired reasonable restrictions.

Reasonable restrictions. You'll have the ability to impose reasonable restrictions on the investment of the Portfolio. Specifically, you'll be able to request that certain non-Vanguard securities be held as part of the Portfolio, provided that those securities meet certain standards imposed by VAI. If VAI maintains a sell recommendation for a particular security that you want to be held as part of the Portfolio, such security may be characterized by VAI as being subject to a client-directed hold if it meets certain standards imposed by VAI. If a non-Vanguard security is characterized as being subject to a client-directed hold, VAI may permit that security to remain part of the Portfolio. VAI won't be responsible, however, for performing due diligence on any security that's subject

to a client-directed hold. You may also have the ability to designate certain securities that shouldn't be purchased for the Portfolio or that shouldn't be sold if held in the Portfolio. If your desired restrictions are unreasonable or if we believe that the restrictions are inappropriate for you, we'll notify you that, unless the instructions are modified, we may remove particular securities from the Portfolio, remove particular accounts from the Portfolio, or terminate the Service.

Funding or adding assets to accounts. While enrolled in the Service, you may transfer assets to and from the Portfolio at any time and you may add or remove accounts at any time, provided you give VAI prior notice. Additionally, if you process a transaction in a Vanguard Brokerage Account enrolled in the Service and don't have sufficient funds to cover the transaction, an advisor will raise cash by selling a portion of the largest position in the impacted account. Transactions performed without prior notice to VAI may be reversed or unwound by VAI in order to maintain the recommended allocation for your Portfolio. Assets 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) and all other purchases less than \$100 will be allocated in accordance with your Financial Plan upon your next rebalancing opportunity, or as otherwise agreed upon with an advisor. All other transactions will be handled as described below.

Spending Fund. The 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 managed accounts, herein defined as a "Spending Fund." If you've established a Spending Fund, any additional cash added will remain in the established, or existing, Spending Fund until the total amount of assets in the Spending Fund exceeds an 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, unless and until you establish a new 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 assets among your holdings in order to meet the Target Balance in the Spending Fund. This may involve selling or exchanging out of overweight holdings to get your Portfolio in line with your target asset allocation.

Cash transfers. If you'll be transferring cash to the Portfolio and you haven't established a Spending Fund, it will be deposited into your existing money market fund, or settlement fund, in the designated account, or 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. Cash purchases into money market funds will be invested within five business days of the transfer according to the terms of the current Financial Plan.

If you haven't yet established a Financial Plan, assets will be held in a money market fund until you establish a Financial Plan for such assets.

Purchases into existing managed securities. Assets transferred into existing managed securities will be invested within five business days of the transfer according to the terms of the current Financial Plan unless and until you establish a new Financial Plan. If you haven't established a Financial Plan, assets will be held in kind until you establish a Financial Plan for such assets. If you and an advisor have agreed upon terms for strategic purchases into existing securities, additional action may not be required.

Purchases or transfers of new securities. If you haven't contacted VAI regarding purchases or transfers of new securities, an advisor will review the transactions and determine the impact to your Financial Plan. If changes need to be made as a result of the transactions, an advisor will contact you to discuss your options. If you and an advisor have agreed upon terms for the purchase or transfer, additional action may not be required. VAI and its affiliates reserve the right to reject the transfer of certain securities.

Disclosure documents. As a recipient of this Service, you should review this Agreement, the *Vanguard Personal Advisor Services Brochure*, the *Supplement to the Ask a CFP Professional*, *Vanguard Financial Plan*, and *Vanguard Personal Advisor Services Brochures*, and *Vanguard's privacy policy*, which were provided to you. You can also access the *Vanguard Personal Advisor Services Brochure* by visiting the SEC's website at adviserinfo.sec.gov and following the instructions to search for an investment advisor firm. You should also review the Annual Service Notice you'll receive each year, which provides information for Retirement Accounts.

Further, all investments in funds are subject to the terms of the relevant fund's prospectus. You'll receive prospectuses when funds are initially purchased in your Portfolio. You acknowledge that it's your responsibility to review prospectuses that are sent to you.

Engaging the Service. In order to engage the Service, you must accept VAI's terms and conditions by signing the accompanying Authorization. After you've returned the signed Authorization, you'll be contacted by a VAI advisor.

Multiple signatories and agent authorizations

i. **Multiple individual signatories.** All signatories to the Authorization shall be collectively referred to as "you."

1. By executing the Authorization, each signatory is authorizing the other signatories and their agents, if applicable, as specified in this Agreement, to do the following on all accounts in the Portfolio, regardless of registration:

a. Have access to all information about the accounts in the Portfolio, and any accounts held outside the Portfolio but used to support your investment goals

for goals-based reporting by all available channels, including by phone, by mail, by fax, online, or household combined statements or other reports provided by Vanguard; and

b. Approve and direct implementation of your Financial Plan and any changes to your Financial Plan.

The signatories acknowledge that, unless expressly authorized by the filing of an Agent Authorization form, Information-Only Access Form, or Agent Certification for Incapacitated Person form (the "Vanguard TPA Forms"), the authority granted in this paragraph as to the account(s) in the Portfolio shall not apply to any accounts of any signatory at Vanguard that aren't included in the Portfolio except as specified above with respect to accounts you identify to support your investment goals. The signatories further acknowledge that the authority granted in this paragraph may only be canceled by removing an account from the Portfolio or removing an account from an investment goal, respectively, or by terminating the Agreement.

2. If services will be provided to multiple signatories of this Agreement, then the clients acknowledge and agree that VAI may select one of the signatories as the "Primary Advice Client" hereunder. Unless applicable law requires that VAI deliver certain documents and information to all signatories, VAI will only be required to deliver communications relating to the Service and the Portfolio to the Primary Advice Client, including but not limited to the Financial Plan. Additionally, only the Primary Advice Client will have online access to the Service webpages.

Further, the clients acknowledge and agree that the Primary Advice Client will select and approve the withdrawal hierarchy, as described in the *Vanguard Personal Advisor Services Brochure*, and elect and choose the rate of tax withholding on any Retirement Accounts or Roth accounts in the Service, including accounts held solely in the Secondary Advice Client's name. While the Vanguard Personal Advisor Services withdrawal hierarchy methodology seeks to act in a tax-efficient manner, it may not be tax-equitable for all clients.

3. The signatories agree to sign all forms and submit all additional documentation that may be required by Vanguard or its affiliates or subsidiaries to open, maintain, transfer, or close any of the accounts in the Portfolio.

4. Named Agents on Vanguard TPA Forms will have authority under this Agreement (in the capacity set forth below) only for the individuals who executed the Vanguard TPA Forms.

ii. **Vanguard TPA Forms and other agent authorizations.**

If you've executed a non-Vanguard power of attorney document in a form and substance acceptable to VAI (the "POA") or a Vanguard TPA Form, authorizing other individuals ("Named Agent") to act on your behalf, in addition to having the rights, powers, and obligations set forth in the POA or Vanguard TPA Form, Named Agent will have the following authority under this Agreement:

1. **Full Agent appointed under Agent Authorization form or acceptable POA.** Named Full Agent will have the same rights, powers, and obligations under this Agreement as you, including but not limited to those listed in paragraph (i) at left and terminating this Agreement.
2. **Limited Agent appointed under Agent Authorization form or acceptable POA.** Unless Named Limited Agent has executed the Authorization in an individual capacity or has been delegated appropriate authority by you in a separate writing, Named Agent won't be able to:
 - a. Obtain account information for the solely titled assets of other individuals held in the Portfolio;
 - b. Approve or make changes to the Financial Plan; or
 - c. Terminate this Agreement.
- iii. **Trustee signatories.** Generally, trust instruments, including any amendments thereto, control who is authorized to act on behalf of trust accounts (including revocable trusts). All current trustees also represent that they have the fiduciary powers given under applicable state law or the trust document to engage and employ agents, such as investment managers, and to delegate investment authority to an agent and that each has complied with any and all statutory or trust requirements concerning such delegation. VAI may accept an Agent Authorization form or non-Vanguard limited POA on a trust account naming an agent with limited powers, but Named Limited Agent won't be able to approve or make changes to the trust Portfolio's Financial Plan or terminate this Agreement. VAI won't accept appointment of a Full Agent under an Agent Authorization form or non-Vanguard POA on a trust account.

Fees and other costs

Annual service fee. In consideration for VAI's services under this Agreement, you'll pay VAI a fee according to the following schedule.

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

The fee will be calculated quarterly and based on your average daily balances in the Portfolio across the entire fee period. VAI won't charge a fee on the money market fund balances held within the Portfolio when calculating and collecting the advisory fee. A fee period is the prior calendar quarter. The fee will be assessed on the first Monday (non-holiday) after the completion of a fee period and will generally be deducted within two weeks of assessment. VAI will select the designated fee account(s) of the Portfolio from which the fee will be deducted and then will systematically determine which fund(s) to deduct the fees from based upon a hierarchy of expected fund volatility from least to most volatile.

The annual service fee is in addition to any fees or expenses assessed by the Vanguard Funds or other investment products

in the Portfolio. The annual service fees will begin to accrue as of the first transaction executed in the Portfolio and will be prorated for services rendered during any period of time less than one quarter in a calendar year. You may also incur account service fees and other account charges and processing fees in connection with establishing accounts with VAI's affiliates.

Note: VAI may offer a negotiated fee schedule to clients, including fee structures based on combined assets of related clients. The assets of related clients can only be combined if under management at the time the fee is assessed. In these cases, clients will be notified in writing that they qualify for an alternate fee schedule. Clients using an alternate fee schedule will still follow the same calculation and fee assessment processes outlined above. The Service reserves the right to provide periodic fee waivers where it deems appropriate.

Fee authorization. You authorize VAI to deduct fees under this Agreement from your account(s) held on the books of Vanguard and its affiliates and subsidiaries, including Vanguard Marketing Corporation ("VMC"), that are enrolled in the Service. The annual service fee will be automatically deducted from the Portfolio and remitted to VAI. If the Portfolio is insufficient to cover the annual service fee, you agree to remit prompt payment of the balance due. VAI reserves the right to change the annual service fee or charge additional fees for other services upon 30 days' written notice to you.

Annual service fee from Retirement Accounts. Unless the only account in the Portfolio is a Retirement Account, VAI won't select the Retirement Account as the account from which the fee will be deducted. In the case of multiple Retirement Accounts only in the Portfolio, the fee will be taken proportionally from all of the Retirement Accounts in the Portfolio. You understand that no fees under this Agreement will be charged to or deducted from said Retirement Accounts except for fees representing ordinary and necessary expenses of such Retirement Accounts for which each Retirement Account is separately and solely liable.

Transaction and redemption fees. Some Vanguard Funds charge fees on the purchase of shares. These fees, designed to offset the cost of buying and selling securities, are paid directly to the fund and aren't sales charges. Additionally, some Vanguard Funds charge redemption fees to discourage short-term trading. We may recommend Vanguard Funds with either or both of these types of fees. Should you incur such fees as a result of transactions in your Portfolio to implement and maintain your Financial Plan, you acknowledge that these fees will be assessed on your purchase or deducted from your redemption proceeds in accordance with the conditions set forth in the prospectus of the particular Vanguard Fund being purchased or redeemed.

Fees for brokerage services and other securities. Under certain circumstances, VAI may purchase or sell Vanguard ETFs® or other non-Vanguard securities in the Portfolio. Such transactions will require the use of a brokerage account that you have opened through VMC, member FINRA and SIPC,

which is an affiliate of VAI and Vanguard. In the event that VAI recommends that clients transact in Vanguard ETFs or non-Vanguard investments, clients may incur additional fees, including transaction fees, brokerage charges, sales charges, loads, expense ratios, commissions, markups, or other fees or expenses. In addition, Vanguard or its affiliates may receive other compensation, including asset-based sales charges, service fees, revenue-sharing payments, 12b-1 fees, or other fees, in connection with such investments.

VMC offers a limited number of commission-free transactions to clients that are eligible for certain service levels. If you're currently enrolled in one of these services, transactions in your Portfolio will reduce your number of commission-free transactions when executed.

Additional information for Retirement Accounts. With respect to Retirement Account assets included in the Portfolio, VAI intends the Service to be a level-fee eligible investment advice arrangement designed to comply with the conditions of the statutory exemption for investment advice under Sections 408(b)(14) and (g) of the Employee Retirement Income Security Act of 1974 ("ERISA") and the parallel provisions of Sections 4975(d)(17) and (f)(8) of the Internal Revenue Code. To the extent the Service is offered to Portfolios including Retirement Account assets, the Service will be audited annually by an independent auditor for compliance with the requirements of the statutory exemption and related regulations. If your Portfolio holds Retirement Account assets, a copy of the most recent version of the auditor's findings will be distributed to you or posted and available for your review at vanguard.com within 30 days after Vanguard receives the report from the auditor.

Acknowledgments

By implementing the Service you hereby acknowledge and agree that:

- You have read, understood, and accepted this Agreement.
- You have received, read, and understood the *Vanguard Personal Advisor Services Brochure*, the *Supplement to the Ask a CFP Professional, Vanguard Financial Plan, and Vanguard Personal Advisor Services Brochures*, and *Vanguard's privacy policy*.
- Recommendations made by VAI in connection with the Service will normally be limited to allocations in Vanguard Funds, and will generally not include recommendations to invest in individual securities or bonds, CDs (certificates of deposit), options, derivatives, annuities, third-party mutual funds, closed-end funds, unit investment trusts, partnerships, or other non-Vanguard securities.
- You'll be restricted from executing certain transactions or engaging in certain services for the account(s) within the Portfolio normally available to the account(s), including but not limited to:
 - Purchasing and selling securities;
 - Automatic trading services; and

- Setting required minimum distribution (RMD) payments. Please refer to the *Vanguard Personal Advisor Services Brochure* for additional information regarding restrictions.
- For trust accounts, you acknowledge that VAI hasn't been provided and hasn't reviewed the full trust instrument(s) applicable to the enrolled trust accounts and that VAI's knowledge of the provisions of the trust instrument may not be inferred solely from the fact that a copy of all or part of the trust instrument has been received by VAI or any of its affiliates. Further, you understand that VAI is relying on the statements and representations made by you in this Agreement and during the course of engagement. You agree to promptly notify VAI of any changes in circumstances, including, in the case of trusts, change in status from a domestic to a foreign trust, or changes to the trust instrument or any other event that could alter any certification made by the client in this Agreement. You understand that VAI may rely on information that you provided to Vanguard or its affiliates, such as data provided on the account opening and other Vanguard forms and investment questionnaires, collected by phone, mail, or online.
- You have the authority to retain VAI to manage the Portfolio and provide the Services specified in the Agreement and to enter into this Agreement.
- You're enrolling in the Service solely for your own personal, non-commercial use and not in any connection with an analysis of the Service for competitive, commercial, or journalistic purposes. You agree not to modify, copy, reproduce, publish, broadcast, create derivative works from, or exploit any data, information, content, services, webpages, business or investment methodologies, reports, recommendations, projections, or other materials received from the Service except in connection with such personal use.

Affiliate dealings

You understand and acknowledge that VAI is a subsidiary of Vanguard and affiliated with the mutual funds comprising the Vanguard Funds. VAI won't be compensated on the basis of a share of capital gains upon or capital appreciation of the Vanguard Funds or any portion of the Vanguard Funds. You further understand and acknowledge that although investments in the Vanguard Funds aren't subject to loads, commissions, or asset-based distribution fees (commonly known as "12b-1" fees), the Vanguard Funds pay advisory and other fees to, and reimburse the expenses of, Vanguard and its affiliates, including VAI, as set forth in the prospectus of each of the funds. Vanguard administers the Vanguard Funds in which your account(s) may be invested.

Additionally, Vanguard is the parent corporation of VMC. VMC is a registered broker-dealer and acts as the sales agent in connection with the sales of shares of the Vanguard Funds. VAI doesn't usually recommend broker-dealers in connection with client transactions arising out of VAI's advice, as VAI generally recommends the purchase of Vanguard Funds. However, if you

transact in Vanguard ETFs or non-Vanguard securities in the Portfolio, you acknowledge and agree that you'll be required to establish or utilize an existing brokerage account held through VMC for those securities. 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 fees payable under the Service.

VAI is 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 custodian for traditional IRAs, SEP-IRAs, and Roth IRAs (collectively referred to as "Vanguard IRAs"). Vanguard will perform administrative services in connection with Vanguard IRAs, for which Vanguard may be reimbursed, at cost by VFTC. VFTC may charge reasonable custodial fees with respect to the establishment and maintenance of your Vanguard IRAs, at any time during the calendar year, that are separate from, and in addition to, the fees payable under this Service.

VAI also has an affiliation with Vanguard National Trust Company ("VNTC"), a federally chartered, limited-purpose trust company regulated by the Office of the Comptroller of the Currency, which provides investment advisory services to a wide variety of clients. VNTC was chartered in 2001, but its business has been in operation since 1996.

With this knowledge, you specifically authorize VAI to invest and reinvest assets of the Portfolio, including the entire Portfolio, in Vanguard Funds as specified in the Financial Plan, as it may be amended. You further authorize VAI to engage Vanguard or any entity affiliated with Vanguard to provide services to the Portfolio, including executing securities transactions through VMC or maintaining IRAs with VFTC.

Other important disclosures

Standard of care. VAI and its representatives will perform the services described in this Agreement in good faith and in accordance with applicable law. When providing investment services to Retirement Account assets as part of your Portfolio, VAI will act as a fiduciary as defined in ERISA. Except for gross negligence, willful malfeasance, or bad faith, neither VAI nor any affiliate will be held liable for (i) any action performed or omitted, or for errors of judgment made within the scope of the performance of such services; (ii) any loss resulting from your direction or from any information provided by you; (iii) any losses to the Portfolio resulting from following the Financial Plan, VAI's policies, or clients' reasonable restrictions; or (iv) any act or failure to act by an unaffiliated third party. Federal and state securities laws impose liabilities under certain circumstances on persons, even when they act in good faith, and nothing contained herein shall constitute a waiver or limitation of rights that you may have under federal or state securities laws. Nothing contained in this Agreement shall constitute a waiver or limitation of rights that you have under federal law, or under any other law that can't be waived. VAI is permitted to provide advice to a range of clients and may give advice to or take action for other clients that may differ from the advice given to or action taken for you.

Risk acknowledgment. VAI generally recommends investments in Vanguard Funds. Although VAI will recommend investment strategies designed to be prudent and diversified, please remember that all investments, including mutual funds and investment company securities, 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. The Service generally makes investment decisions 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 where 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 VAI. VAI can't guarantee the future performance of your investments. Please consult a fund's prospectus for more information about fund-specific risks. You should carefully consider all of your options before acting upon any advice you receive.

VAI won't be responsible for any of your assets that aren't part of the Portfolio, including accounts and assets that may be analyzed by VAI as part of the Service's goals-based reporting.

No obligation to inquire. VAI shall have no obligation to initiate any inquiry with respect to your (or your appointed representative's) death, disability, or incompetence and shall incur no liability for any action taken at your (or your representative's) direction, or for any failure to act in the absence of your (or your representative's) direction, prior to receiving written notice of (i) your death, (ii) a judicial determination of your (or your representative's) disability or incompetence, or (iii) appointment of a guardian, conservator, or other legal representative of your (or your representative's) person or estate. In cases where you're acting in a fiduciary capacity such as a trustee, officer, or partner, VAI has no duty to investigate the appropriateness of your fiduciary actions or direction to VAI or whether said action or direction is in accordance with the terms of the trust instrument or other governing document. You further agree to indemnify and hold VAI and its affiliates harmless for any losses or expenses incurred by VAI or its affiliates for relying in good faith upon the certifications made herein.

Confidentiality. Your personal and financial information will be held in strict confidence and won't be disclosed to any unaffiliated third party except as requested by you, as part of a regulatory examination, or as set forth in Vanguard's privacy policy. We may disclose certain information that we have or that you provide regarding you or your account(s) to our affiliates as necessary in connection with services that you request or as you may direct us. In all cases, our affiliates are required to treat your information with the same high degree of confidentiality that we do. You can read our privacy policy, which has been provided separately and is also available online at vanguard.com.

You acknowledge and agree that: (i) data, information, content, services, webpages, business or investment methodologies, reports, recommendations, projections, or other materials received from the Service constitute VAI's proprietary information ("Proprietary Information"); (ii) you shall have the limited right to use the Proprietary Information only in connection with your personal, non-commercial use of the Service, and not any other use (e.g., competitive, commercial, or journalistic); (iii) all Proprietary Information shall remain the sole and exclusive property of VAI; (iv) because of the unique nature of the Proprietary Information, there may be no adequate remedy at law for breach by you of your obligations under this section; (v) any such breach may allow you or third parties to unfairly compete with VAI resulting in irreparable harm to VAI; and (vi) upon such breach or any threat thereof, VAI shall be entitled to seek equitable relief in addition to any remedy at law it may have.

Communications between parties. You may send notices or other information to VAI in person, by U.S. mail, by overnight courier, or by electronic delivery at the address provided on the Authorization for Vanguard Personal Advisor Services or such other address VAI gives you in writing. Any notice, advice, or report given to you under this Agreement will be delivered in person, by U.S. mail, by overnight courier, or by electronic delivery at the address provided on the Authorization for Vanguard Personal Advisor Services or such other address as you may designate in writing.

Legal title and custody. The authority of cosignatories to this Agreement notwithstanding, assets contributed to the Portfolio shall retain their original ownership attributes as determined under applicable state law including community property laws. Assets delivered to Vanguard will be held by one of the VAI affiliates listed below, each entity acting in the capacity of a qualified custodian. VAI may register assets of the Portfolio in nominee name if VAI determines it's appropriate to do so. VAI shall not be responsible for the acts or omissions of any other entity or individual having custody of an asset in the Portfolio.

For mutual fund accounts:

By U.S. mail
The Vanguard Group, Inc.
P.O. Box 1110
Valley Forge, PA 19482-1110

By registered, certified, or overnight mail
The Vanguard Group, Inc.
455 Devon Park Drive
Wayne, PA 19087-1815

For brokerage accounts:

Vanguard Marketing Corporation
400 Devon Park Drive, A39
Wayne, PA 19087

Taxes. This Service doesn't provide tax advice. While the Service may 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. Nonresident aliens may be subject to withholding taxes on income or capital gains. Although VAI may provide an overview of the potential tax consequences of its investments, by enrolling in the Service you agree and acknowledge that the payment of all taxes due on income or capital gains remains your sole obligation, and neither VAI nor any affiliated or related party or person shall have any responsibility to pay these taxes.

You understand that VAI doesn't provide legal advice or tax advice as defined by Treasury Department Circular No. 230. Any information or ancillary advice services provided by VAI shouldn't be construed as a substitute for the advice of a qualified tax advisor or lawyer. You should consult with your tax advisor to discuss tax-related concerns.

Proxy voting and legal actions. Upon request, an advisor can provide additional information regarding proxy votes and corporate actions for certain clients enrolled in the 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. In connection with the services provided hereunder, VAI shall not exercise any voting rights associated with any security or other property held in your account(s) and won't advise you or act for you in any legal proceedings, including bankruptcies or class actions, involving securities held or previously held by your account(s) or the issuers of those securities.

Governing law. This Agreement will be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania and applicable federal regulations, except to the extent such laws have been specifically superseded by federal law as applicable.

Severability. If any part of this Agreement is held to be invalid or void, such invalidity shall not affect any other part of this Agreement, and the remainder of the Agreement shall be effective as though such invalid or void part wasn't contained herein.

Assignment, amendment, and termination of services

Binding Agreement. This Agreement will bind and be for the benefit of the parties to the Agreement and their successors and permitted assigns, except that neither party may assign this Agreement without prior consent.

Changes to advisory services and Agreement. VAI reserves the right, at our discretion and without prior notice, to change our investment planning methodology, staffing, or the components of our services, or to discontinue this advisory service, in whole or in part, at any time. Changes may affect all clients, individual clients, or only those in certain classes or groups. VAI reserves the right to modify or rescind existing

provisions or add new provisions to this Agreement at any time and for any reason and will provide prior or concurrent notice of material changes to you. By not terminating the Agreement, you confirm your understanding and acceptance of any and all changes to the Agreement. Notwithstanding the foregoing, any change to the annual service fee or the imposition of additional fees will only occur upon 30 days' written notice to you.

Termination. This is a continuous Agreement with no set expiration date. Either party can terminate this Agreement or the Service at any time upon prior notice. Termination shall be effective as of the date VAI receives or provides such notice. VAI shall be afforded a reasonable time in which to effect the termination. Upon termination, VAI will have no obligation to recommend or take any action with regard to the assets in the Portfolio. Verbal or written notice of termination should be provided to VAI via the address or phone number provided on the Authorization or by other acceptable means agreed to by VAI.

Termination won't affect (i) the validity of any action previously taken by VAI, (ii) your obligations for transactions initiated before termination, and (iii) VAI's right to retain fees for services rendered under this Agreement.

Termination due to death. Upon receipt of notice of the death of an individual client, the Service will be terminated with respect to any assets in the Portfolio formerly belonging to or benefiting the decedent. The transfer or disposition of the decedent's assets will be handled in accordance with Vanguard's procedures and appropriate authorized party instruction. Assets in the Portfolio belonging to or benefiting any remaining client(s) will be handled in accordance with VAI's procedures and instructions from the client(s). The Service won't be terminated with respect to assets in the Portfolio belonging to or benefiting any remaining client(s) unless the parties invoke the termination procedures set forth in this section of the Agreement.

Termination due to death won't affect (i) the validity of any action previously taken by VAI, (ii) your obligations for transactions initiated before termination, and (iii) VAI's right to retain fees for services rendered under this Agreement. VAI will have no obligation to take any action with regard to assets in your Portfolio after the termination of this Agreement.

Fees payable upon termination. In the event of a termination of the Service under this section of the Agreement, final fees will be collected prior to removal of the account(s) from the Service or transfer of assets. The market value of the Portfolio will be determined as of one business day prior to the effective date of the termination or the date asset transfers begin, whichever is earlier. Any fees due will be prorated based on the number of days an account was included in the Portfolio during the quarter.

Disability of an individual client. In the event of disability or incompetence of a client, this Agreement will continue with respect to that client until otherwise terminated in writing by the client's guardian, agent acting on the client's behalf

pursuant to an acceptable POA or Vanguard TPA Form, or other authorized representative. If there are multiple signatories to this Agreement, the terms of this Agreement will continue as to the remaining client(s) unless otherwise terminated in accordance with this section of the Agreement.

Arbitration

Subject to the following note regarding your rights under federal and state securities laws, all controversies arising out of or relating to any services provided by VAI, Vanguard, or any of their affiliates, directors, or employees with respect to transactions of any kind executed pursuant to this Agreement, with respect to any accounts serviced according to this Agreement, or which relate in any way to this Agreement, will be resolved by arbitration and governed by the laws of the Commonwealth of Pennsylvania without reference to its conflicts-of-laws rule.

Arbitration shall be conducted in accordance with and subject to the then-applicable Commercial Dispute Resolution Procedures of the American Arbitration Association (the "AAA rules"). Unless otherwise mutually agreed upon by the parties, the arbitration hearings will be held in the City of Philadelphia, Pennsylvania. A panel of three arbitrators will be selected in accordance with the AAA rules. The arbitrators will allow such discovery as is appropriate and consistent with the purposes of arbitration in accomplishing a fair, speedy, and cost-effective resolution of disputes. The arbitrators will reference the Federal Rules of Evidence and the Federal Rules of Civil Procedure then in effect in setting the scope of discovery. Judgment upon the award rendered in any such arbitration may be entered in any court having jurisdiction thereof, or application may be made to such court for a judicial acceptance of the award and enforcement, as the law of such jurisdiction may require or allow. You consent to service of process by first-class mail to your addresses maintained on record at Vanguard.

You should know that: (1) Arbitration awards will be final and binding on all parties; (2) by obtaining VAI advisory services, all parties are waiving their right to seek remedies in court, including the right to a jury trial; (3) prearbitration discovery is generally more limited than, and different from, court proceedings; (4) the arbitrators' decision isn't required to include factual findings or legal reasoning; and (5) any party's right to appeal or to seek modification of rulings by arbitrators is strictly limited.

Note that the arbitration clause may not constitute a waiver of any right under federal or state securities laws, including the right to choose the forum in which to seek resolution of disputes. The arbitration clause may not apply to residents of all states.