



Account Number

Brokerage Account Application Personal Registrations

Type on screen or fill in using CAPITAL letters and black ink. If you need more room for information or signatures, use a copy of the relevant page.

For Authorized agent/ Advisor Use Only

To provide information on more Authorized agent(s)/ Advisor(s), owners, etc., make additional copies of necessary page(s).

Primary Authorized agent/Advisor	DTC Number	G Number
		G
Additional Authorized agent/Advisor		G Number
		G
Additional Authorized agent/Advisor		G Number
		G
Additional Authorized agent/Advisor		G Number
		G
Additional Authorized agent/Advisor		G Number
		G

For Advisor Use Only: Account referred through Wealth Advisor Solutions program (Use WAS specific G Number in Primary Authorized agent/Advisor G Number field above.)

Optional: Transfer Eligible Assets From or Change Registration of Existing Fidelity Account Complete if applicable.

To change the registration of an existing account, by signing and dating this application you acknowledge and agree that the account will be registered as instructed on this account application, and you may be changing your ownership interests in this account. For eligible scenarios, review the *Change of Registration* policies and procedures. If this request cannot be granted, there will be a new account number provided and eligible assets will be transferred. You should confirm if assets in your existing account are eligible for transfer as certain assets may not be eligible for transfer and may be liquidated.

- Transfer Eligible Assets from Existing Fidelity Account.* **OR**
 Re-register this account, keeping my same account number, if applicable.†

Account Number

* Both accounts must have identical registrations.

† You cannot complete a re-registration request online. Once you have filled out the application, print and check the option before signing.

Type of Registration Check one type only and fill in applicable blanks.

Consult your Authorized agent(s)/Advisor(s) or state tax officials for information on state account ownership laws.

- Individual** **Joint:** For these accounts, "you" means all owners.
 Tenants with Rights of Survivorship
 Community Property
 Tenants in Entirety*
 Tenants in Common*

UGMA/UTMA Indicate where gift/transfer was made. Default: state where account is registered.

State

* For Tenants that are trusts, include a separate Certification of Trust form or applicable pages from the trust agreement and a Trustee Certification of Investment Power form for each trust.

- Estate** Attach copy of court order of appointment or letter testamentary, dated within the past 90 days. Other documents may be required.

Name of Estate	TIN of Estate

- Other Non-Trust Fiduciary** Attach a copy of court appointment. For Institutions, a separate corporate resolution and articles of incorporation or corporate seal must be attached.

Type of Fiduciary (guardianship, conservatorship)	Name of Ward

Address of Record

Required for all accounts. Unless you request otherwise in the Document Delivery and Frequency section, account information will be mailed to the mailing address below. The mailing address should not be your Authorized agent's/Advisor's address.

Permanent Address of Account Cannot be a P.O. Box or Mail Drop.

Mailing Address of Account Complete if different than Permanent Address.

Address		
City	State/Province	Zip/Postal Code
Country		
UNITED STATES		

Address		
City	State/Province	Zip/Postal Code
Country		
UNITED STATES		



1. Personal Information — Owner, Minor, Executor, or Guardian/Conservator

Complete the information below for an owner, minor, executor, or guardian/conservator. To provide more personal information than this application will hold, duplicate this page, as well as the Agreement Signatures section.

Enter full name as evidenced by a government-issued, unexpired document (e.g., driver's license, passport, permanent resident card).

First Name		Middle Name	Last Name		
Social Security/Taxpayer ID Number	Required <input type="checkbox"/> SSN <input type="checkbox"/> TIN	Date of Birth MM DD YYYY	U.S. Driver's License Number	State	
Institution Name Enter full entity name as evidenced by the relevant formation document (e.g., trust document, partnership agreement, corporate resolution).					
Primary Phone		<input type="checkbox"/> Mobile Number	Secondary Phone		<input type="checkbox"/> Mobile Number
Email*					

Provide phone number(s) to be used to verify and/or authorize transactions. Provide an email address to be used to authorize transactions and/or for electronic delivery of documents.

U.S. Mail – Send the following document types to me by U.S. mail instead of electronically:

- Monthly Account Statement Immediate and Quarterly Trade Confirm
 Tax Documents and Related Disclosures Prospectuses, other financial reports, etc.

* Fidelity will use this email address for electronic delivery of account documents. Unless U.S. Mail is checked for all document types, you will receive a follow-up email from Fidelity and will need to consent to begin receiving documents electronically. See Document Delivery and Frequency section for more information regarding eDelivery.

Permanent Address

Complete if different than Permanent Address of Account on Page 1. Cannot be a P.O. Box or Mail Drop.

Address		
City	State/Province	Zip/Postal Code
Country UNITED STATES		

Mailing Address

Complete if different than Mailing Address of Account on Page 1.

Address		
City	State/Province	Zip/Postal Code
Country UNITED STATES		

Citizenship

Indicate your citizenship status.

U.S. Skip to Income Source **OR** Foreign citizen Information in this box must be completed.

Country of Citizenship

Choose one.

- Permanent U.S. Resident Non-Permanent U.S. Resident Non-Resident of U.S.

Government Identification

Unexpired ID must include reference number and photo. Attach copy of ID.

Passport Other Government-Issued ID

ID Number	Country of Issuance
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Country of Tax Residence

U.S. Other

Country

continued on next page



1. Personal Information — *Owner, Minor, Executor, or Guardian/Conservator* *continued*

Income Source *Industry regulations require us to ask for this information.*

Check one. Employed Not Employed Retired *List Income Source if Retired or Not Employed.*

Employer/Income Source <small>required for margin privileges</small>		Occupation	
Address			
City	State/Province	Zip/Postal Code	
Country			

Associations

If you are employed by or associated with a broker-dealer, stock exchange, exchange member firm, the Financial Industry Regulatory Authority (FINRA), a municipal securities dealer, or other financial institution, or are the spouse or an immediate family member residing in the same household of someone who meets the aforementioned employment criteria, provide the company's name and address below. By providing this information and completing this form, you hereby authorize Fidelity to provide the associated person's employer with duplicate copies of confirmations and statements, or the transactions data contained therein, for your account(s) and any accounts you choose to have on a consolidated statement for purposes of their compliance review.

As a person associated with a member firm, you are obligated to receive consent from that firm. Fidelity has existing consent agreements with many firms for their employees to maintain accounts with Fidelity and to deliver transactional data. If your firm is not one of them, Fidelity will attempt to contact your firm's compliance office.

Company Name			
Company Address			
City	State	Zip/Postal Code	Country

Affiliations

If you, your spouse, or any of your relatives (including parents, in-laws and/or dependents, etc.), living in your home (at the same address), is a member of the board of directors, is a 10% shareholder, or is a policy-making officer or can direct corporate management of policies of a publicly traded company (an "Affiliate"), you must provide the information below.

Company Name	CUSIP or Symbol
Company Name	CUSIP or Symbol
Company Name	CUSIP or Symbol

continued on next page



1. Personal Information — *Owner, Minor, Executor, or Guardian/Conservator* *continued*

Trusted Contact *Optional.*

Fidelity will contact this individual if there are questions or concerns about your health or welfare due to potential diminished capacity, financial exploitation or abuse, endangerment, and/or neglect. We will:

- Provide the trusted contact with information about you and/or your account(s), but not the ability to transact on your account(s).
- Inquire about your current contact information or health status.
- Inquire about whether another person or entity has legal authority to act on your behalf (e.g., legal guardian or conservator, or trustee).

First Name	Middle Name	Last Name	
Email		Relationship to Owner	
Phone	Extension	<input type="checkbox"/> Check here if phone number is a mobile number.	
Address			
City		State/Province	Zip/Postal Code
Country			



1. Personal Information — Additional Owner, Custodian, or Ward

Complete the information below for an owner, minor, executor, or guardian/conservator. To provide more personal information than this application will hold, duplicate this page, as well as the Agreement Signatures section.

Enter full name as evidenced by a government-issued, unexpired document (e.g., driver's license, passport, permanent resident card).

First Name		Middle Name	Last Name	
Social Security/Taxpayer ID Number	Required <input type="checkbox"/> SSN <input type="checkbox"/> TIN	Date of Birth MM DD YYYY	U.S. Driver's License Number	State
Institution Name Enter full entity name as evidenced by the relevant formation document (e.g., trust document, partnership agreement, corporate resolution).				
Primary Phone	<input type="checkbox"/> Mobile Number	Secondary Phone	<input type="checkbox"/> Mobile Number	
Email*				

Provide phone number(s) to be used to verify and/or authorize transactions. Provide an email address to be used to authorize transactions and/or for electronic delivery of documents.

U.S. Mail – Send the following document types to me by U.S. mail instead of electronically:

- Monthly Account Statement Immediate and Quarterly Trade Confirm
 Tax Documents and Related Disclosures Prospectuses, other financial reports, etc.

* Fidelity will use this email address for electronic delivery of account documents. Unless U.S. Mail is checked for all document types, you will receive a follow-up email from Fidelity and will need to consent to begin receiving documents electronically. See Document Delivery and Frequency section for more information regarding eDelivery.

Permanent Address

Complete if different than Permanent Address of Account on Page 1. Cannot be a P.O. Box or Mail Drop.

Address		
City	State/Province	Zip/Postal Code
Country		

Mailing Address

Complete if different than Mailing Address of Account on Page 1.

Address		
City	State/Province	Zip/Postal Code
Country		

Citizenship

Indicate your citizenship status.

U.S. Skip to Income Source **OR** Foreign citizen Information in this box must be completed.

Country of Citizenship

Choose one.

- Permanent U.S. Resident Non-Permanent U.S. Resident Non-Resident of U.S.

Government Identification

Unexpired ID must include reference number and photo. Attach copy of ID.

Passport Other Government-Issued ID

ID Number	Country of Issuance
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Country of Tax Residence

U.S. Other

Country

continued on next page



1. Personal Information — *Additional Owner, Custodian, or Ward* *continued*

Income Source *Industry regulations require us to ask for this information.*

Check one. Employed Not Employed Retired *List Income Source if Retired or Not Employed.*

Employer/Income Source <small>required for margin privileges</small>		Occupation	
Address			
City	State/Province	Zip/Postal Code	
Country			

Associations

If you are employed by or associated with a broker-dealer, stock exchange, exchange member firm, the Financial Industry Regulatory Authority (FINRA), a municipal securities dealer, or other financial institution, or are the spouse or an immediate family member residing in the same household of someone who meets the aforementioned employment criteria, provide the company's name and address below. By providing this information and completing this form, you hereby authorize Fidelity to provide the associated person's employer with duplicate copies of confirmations and statements, or the transactions data contained therein, for your account(s) and any accounts you choose to have on a consolidated statement for purposes of their compliance review.

As a person associated with a member firm, you are obligated to receive consent from that firm. Fidelity has existing consent agreements with many firms for their employees to maintain accounts with Fidelity and to deliver transactional data. If your firm is not one of them, Fidelity will attempt to contact your firm's compliance office.

Company Name			
Company Address			
City	State	Zip/Postal Code	Country

Affiliations

If you, your spouse, or any of your relatives (including parents, in-laws and/or dependents, etc.), living in your home (at the same address), is a member of the board of directors, is a 10% shareholder, or is a policy-making officer or can direct corporate management of policies of a publicly traded company (an "Affiliate"), you must provide the information below.

Company Name	CUSIP or Symbol
Company Name	CUSIP or Symbol
Company Name	CUSIP or Symbol

continued on next page



1. Personal Information — *Additional Owner, Custodian, or Ward* **continued**

Trusted Contact *Optional.*

Fidelity will contact this individual if there are questions or concerns about your health or welfare due to potential diminished capacity, financial exploitation or abuse, endangerment, and/or neglect. We will:

- Provide the trusted contact with information about you and/or your account(s), but not the ability to transact on your account(s).
- Inquire about your current contact information or health status.
- Inquire about whether another person or entity has legal authority to act on your behalf (e.g., legal guardian or conservator, or trustee).

First Name	Middle Name	Last Name	
Email		Relationship to Owner	
Phone	Extension	<input type="checkbox"/> Check here if phone number is a mobile number.	
Address			
City		State/Province	Zip/Postal Code
Country			



2. Account Characteristics

These features can be modified or withdrawn upon written notice to Fidelity. For Cash Management or Options Trading, obtain the appropriate form(s) from your Authorized agent(s)/Advisor(s).

Trading and Asset Movement Authorizations

Trading Authorization

Authorizes Fidelity to accept trades, servicing, or account-related instructions on your account from your Authorized agent(s)/Advisor(s), without direct instructions from you. Trading authorization is a feature of all accounts opened with this application; you grant trading authorization when you sign the application. By granting trading authorization to your Authorized agent(s)/Advisor(s), you understand and agree that your Authorized agent(s)/Advisor(s) will have the ability to instruct Fidelity to initiate transfers of cash from your bank account to your Fidelity account, based on standing written funds transfer instructions provided by you to Fidelity. See the Client Agreement for more complete information.

Asset Movement Authorization *Check one only.*

Authorizes Fidelity to accept instructions from your Authorized agent(s)/Advisor(s) to move assets in and out of your account, without direct instructions from you. If no Asset Movement option below is chosen, your Authorized agent/Advisor will not be able to move money from this account without your signature. See the Client Agreement for more complete information. Fidelity may require direct instructions from you for transactions over a certain amount.

By checking Level 1 Limited, Level 1, or Level 2, you direct Fidelity to accept instructions from your Authorized agent(s)/Advisor(s) concerning the types of transactions indicated for that level. In the descriptions below, "same-registration" means the same owner or owners and the same registration type.

No Asset Movement Authority on this Account Your Authorized agent/Advisor will not be able to move money from this account without your signature.

- Level 1 Limited (First Party Only)** This authorization includes one-time disbursements and the establishment of, and changes to, periodic disbursements (Periodic Distribution Plans) from your account, including:
 - checks made payable to you and sent to your address.
 - bank wires or electronic funds transfers (EFTs) to any first-party account you have authorized through standing written instructions and first-party check disbursements you have authorized through standing written instructions.
 - transfers of cash or securities from this account to other same registration accounts at Fidelity, if this account is an individual or transfer on death account (accounts owned by you individually), contributions from this account to any IRA you own at Fidelity.
- Level 1 (First and Third Party)** This includes all Level 1 Limited authorizations, plus:
 - bank wires or electronic funds transfers (EFTs) to any third-party account you have authorized through standing written instructions and third-party check disbursements to any payee and address you have authorized through standing written instructions.
 - transfers of cash or securities from this account to other third-party accounts at Fidelity you have authorized through standing written instructions.
- Level 2** This includes all Level 1 authorizations, plus:
 - bank wires to any same-registration account outside Fidelity, without direct instructions from you.

Note that you agree that Fidelity cannot confirm the account registration at the receiving bank and will rely solely on the representations of your Authorized agent(s)/Advisor(s) as to the registration of the receiving account.

Margin Privileges *Subject to approval by Fidelity; involves additional costs and risks.*

Apply for Margin Privileges

Margin allows you to borrow money from Fidelity using certain securities in your account as collateral. Not available on UGMA/UTMA, estate, and non-trust fiduciary accounts.

Note: Employment status is required for each account owner in order to be considered for margin.

Core Transaction Account *Check one only.*

The core account is used for settling transactions in your account and for holding balances awaiting investment. Availability of core account options may change. If you have not chosen a fund or if the one you have selected is not available, the default option listed will be the core account. You understand and agree that Fidelity may change your core account selection with notice to you. You may make a different core account selection from available options. Contact your advisor to change your core account option. See the Core Transaction section of the Client Agreement for details.

<input type="checkbox"/> FCASH Taxable Cash Account <i>Taxable Interest-bearing account. Default if no choice is indicated.</i>	<input checked="" type="checkbox"/> FDRXX Fidelity Government Cash Reserves Money Market Fund <i>U.S. Accounts Only</i>	<input type="checkbox"/> FZFX Fidelity Treasury Money Market Fund <i>U.S. Accounts Only</i>
<input type="checkbox"/> QFUPQ Federated Short-Term U.S. Prime Offshore Fund - Institutional Service Series <i>Non-U.S. Accounts Only. Not eligible for residents of Ireland. Default for non-U.S. accounts if not elected.</i>	<input type="checkbox"/> QIWSQ Bank Deposit Sweep <i>U.S. Accounts Only</i>	<input type="checkbox"/> OTHER Authorized Agent or Service <i>If you have authorization from Fidelity to use a different core fund option, enter the fund name and/or symbol.</i>

Other

continued on next page



2. Account Characteristics *continued*

Dividend and Capital Gain Payments *Check one only.*

These choices concern handling of any dividends, capital gains, and similar payments made by securities you own. Any payments that you choose to have reinvested will be used to purchase additional shares of the security that is making the payment. Any payments that you choose to have paid into your core account (along with any interest from debt securities that you own) will be invested in the core account vehicle for your account. Note that only certain domestic stocks and closed-end funds held in a Fidelity brokerage account are eligible for dividend reinvestment. For more information on reinvestment policies, see Dividend Reinvestment section in Client Agreement.

- Reinvest:** Payments from all mutual funds
Pay to Core Account: Payments from all eligible U.S. equities and closed-end funds (3) *Default choice if you make no indication*
- Reinvest:** Payments from all eligible U.S. equities and closed-end funds
Pay to Core Account: Payments from all mutual funds (5)

- Reinvest:** Payments from all eligible securities; any payments from ineligible securities will be paid to your core account (D)
- Pay All to Account** Do not distribute by check (4)

Document Delivery and Frequency

Electronic Delivery

By providing your email address in this form, you have elected to receive Statements, Trade Confirmations, Tax Forms and related disclosures, Prospectuses, Financial Reports, and other documents electronically. If you do not want any of these document types to be delivered to you electronically, you can choose U.S. Mail delivery for that document type.

By receiving documents electronically, you may be eligible for reduced trading commissions. Consult your Authorized agent/Advisor for more details. In order to begin receiving documents electronically, you will need to read the Electronic Delivery Agreement and agree to its terms. You will receive this agreement at the email address you provide.

Note:

- Your delivery preferences are applied across all eligible Fidelity accounts owned by you based upon your most recent election. Therefore, your choice of electronic or paper delivery for this new account will be applied to all eligible accounts unless you elect otherwise in the future.
- For joint accounts, any or all owners can consent to Electronic Delivery.
- The email address provided should not be your Authorized agent/Advisor's email address.
- This email address will replace any existing email address already on our system.

Document Redirection *Election to redirect the document below to your advisor will supersede electronic delivery selection above.*

	Send to My Advisor	OR	Send to Me	For Authorized agent/Advisor Use Only
Proxies¹ Includes all proxy-voting materials.	<input checked="" type="checkbox"/>		<input type="checkbox"/>	Proxy Voting G Number (Agent/Advisor or Administrator)
Reports Includes annual reports and information statements.	<input checked="" type="checkbox"/>		<input type="checkbox"/>	G
Prospectuses	<input checked="" type="checkbox"/>		<input type="checkbox"/>	Name (Administrator Only)
Corporate Actions²	<input checked="" type="checkbox"/>		<input type="checkbox"/>	EWA PRIMARY

¹ In choosing this option, you also direct Fidelity to accept votes regarding these proxies from your Primary Authorized agent/Advisor. If your Primary Authorized agent/Advisor has a Proxy Voting G Number or uses a proxy administrator, provide the G Number and administrator name as appropriate.

² Notwithstanding your election to receive Corporate Actions/Reorganization Notices at your account's mailing address. Fidelity will accept decisions on the corporate actions/reorganization notices from your Primary Authorized agent/ Advisor.

Trade Confirmation Frequency

Check one. Quarterly Immediately

Duplicate Materials

Account profiles include ownership and investment objectives information. Individuals or entities receiving account statements or trade confirmations will also be granted access to all account information.

To All Account Owners If selected, indicate which documents below to send to all account owner's mailing addresses. If not selected, these communications will be mailed to the mailing address of the account and deemed to have been delivered to all account owners.

Check all that apply: Trade Confirmations Account Profiles Account Statements

To Third Party(ies) Attach additional sheet if necessary. Completing this section will be considered your request to instruct Fidelity to send the type(s) of duplicate documents checked to the party or parties indicated.

Check all that apply: Trade Confirmations Statements

Name			
Address <i>not required if providing G Number</i>			G Number
			G
City	State/Province	Zip/Postal Code	Country

3. Signatures and Dates *Form cannot be processed without signatures and dates.*

All Accounts

To help the government fight financial crimes, Federal regulation requires Fidelity to obtain your name, date of birth, address, and a government-issued ID number before opening your account, and to verify the information. In certain circumstances, Fidelity may obtain and verify comparable information for any person authorized to make transactions in an account. Also, Federal regulation requires Fidelity to obtain and verify the beneficial owners and control persons of legal entity customers. Requiring the disclosure of key individuals who own or control a legal entity helps law enforcement investigate and prosecute crimes. Your account may be restricted or closed if Fidelity cannot obtain and verify this information. Fidelity will not be responsible for any losses or damages (including, but not limited to, lost opportunities) that may result if your account is restricted or closed. All owners must read and sign. Your signature binds you to the terms in "All Accounts" and any other applicable sections.

Note: If you would like this account to be treated as an Omnibus Account, you must complete and provide an Omnibus Certification Form. Omnibus Accounts with non-U.S. mailing addresses cannot be established. The Omnibus Certification Form is required in order to ensure that redemption fees are properly applied in accordance with the terms of mutual fund prospectuses.

By signing below, you:

- Affirm you are at least 18 years old and legally authorized to enter into this agreement in the state in which you reside.
- Certify that all information you have provided to us in this form is true, accurate, and complete.
- Represent and warrant that if you did not provide information in the sections titled Associations or Affiliations you have determined that none of the scenarios are applicable.
- Affirm that you have read, understand, and agree to the current terms of the Client Agreement and the account features you selected and agree to future amendments to these terms.

These include:

- your commitments to us
- your authorizations and statements concerning your Authorized agent(s)/Advisor(s), including your agreement to grant your Authorized agent(s)/Advisor(s) discretion over your account (as described in a written advisory contract) and, if indicated, asset movement authority
- our privacy policy and other notices and disclosures
- Grant your Authorized agent(s)/Advisor(s) trading authority, as defined in the Client Agreement, and agree that we may accept instructions on your account (such as orders to buy and sell securities) from your Authorized agent(s)/Advisor(s).
- With respect to the fees associated with your account:
 - Authorize your Authorized agent(s)/Advisor(s) to set the fees you pay for their services and the fees you pay for our services.
 - Authorize us to accept instructions from your Authorized agent(s)/Advisor(s) to deduct Authorized agent/Advisor fees directly from your account.
 - Authorize brokerage commissions and termination fees to be deducted from your account (see the Client Agreement for more complete information on fees).
- Understand that all communications with us may be monitored or recorded, and you consent to this monitoring or recording.
- Indemnify and hold us harmless [jointly and severally for accounts with more than one owner] from and against any and all losses, claims, costs, actions, demands,

suits, proceedings, damages and expenses, including, without limitation, regulatory fines, attorneys' fees and expenses, costs of collection, and any other costs suffered or incurred by us arising out of or relating to our effecting any transaction or acting upon any instruction given by you or any authorized agent, advisor or any third party you authorize on your account or from your action or inaction, whether intentional or not, including losses resulting from the action or inaction of any authorized agent, advisor or any other third party you authorize on your account.

- Authorize us to accept votes from your Authorized agent/Advisor on proxies if you direct us to deliver your prospectuses, proxies, related materials or corporate actions/reorganization notifications to your Primary Authorized agent/Advisor instead of delivering these documents to you, and you agree to the following:
 - We have no responsibility to verify any of the representations you make concerning these instructions.
 - You represent that if your Primary Authorized agent/Advisor has identified a proxy-related third-party administrator on this form you have separately authorized your Primary Authorized agent/Advisor to use such an administrator, your Primary Authorized agent/Advisor may not delegate to the proxy administrator the right to determine your proxy vote and we may honor instructions from your Primary Authorized agent/Advisor to forward proxy materials to the administrator and may accept your Primary Authorized agent's/Advisor's proxy voting decisions when communicated to us by the administrator.
 - Any and all Authorized agents/Advisors you have designated and authorized are either state or SEC-registered investment advisors, and have discretion over your account pursuant to a separate written advisory contract.

– We have no responsibility to verify any of the representations you make concerning these instructions.

– You represent that if your Primary Authorized agent/Advisor has identified a proxy-related third-party administrator on this form you have separately authorized your Primary Authorized agent/Advisor to use such an administrator, your Primary Authorized agent/Advisor may not delegate to the proxy administrator the right to determine your proxy vote and we may honor instructions from your Primary Authorized agent/Advisor to forward proxy materials to the administrator and may accept your Primary Authorized agent's/Advisor's proxy voting decisions when communicated to us by the administrator.

- Understand that unless you provide written notice to the contrary, we may supply your name to issuers of securities held in your account so you can receive important information regarding such securities. As provided by law and/or due to an independent relationship that may exist between an issuer and you, notwithstanding your objection, certain issuers of securities registered under the Investment Company Act of 1940, including the Fidelity Funds, have access to your identity through their transfer agent.

- Certify and agree that the certifications, authorizations, and appointments in this form will continue until we receive written notice of any changes in sufficient time to provide us a reasonable opportunity to act. Any revocation shall not affect any instruction or transaction initiated before its receipt.
- Understand that if requested, you will receive quarterly confirmation statements and not individual transaction confirmations, and you understand the limitations this places on your ability to monitor activity in your account.
- Acknowledge that we are not affiliated with your Authorized agent(s)/Advisor(s).
- Understand that we will act only on authorized instructions, and have no responsibility to monitor or review your account, to determine the suitability of any investment, or to judge the appropriateness of any instruction placed so long as it appears to be authorized. You can revoke this authorization any time by giving us written notice.
- Understand that all transactions and instructions related to your account are subject to Fidelity's policies and procedures, which may result in Fidelity's refusal to accept or execute any order, instruction or transfer related to your account for any reason at any time in its sole discretion.
- Acknowledge that if you or your Authorized agent/Advisor have elected a Bank Deposit Sweep Program as your core account option, your account is an eligible account, as that term is defined in the Bank Deposit Sweep Program disclosure documents. You further acknowledge that by electing a Bank Deposit Sweep Program as your core account option, the cash balance in your core account will be swept to an FDIC insurance-eligible interest-bearing account at a Bank. You also understand that a Bank Deposit Sweep Program is not a security and therefore is not protected by SIPC but when your core account balance is swept to an FDIC account at a Bank, it is eligible for FDIC insurance subject to FDIC insurance coverage limits.
- Acknowledge that you have received the description of the core account in the Client Agreement, including Fidelity's right to change the options available as core account options with notice to you when required, and consent to having free credit balances held or invested in the core account options made available.
- Agree that if an entity is opening the account, you will notify Fidelity if or when beneficial ownership information of the entity changes.

continued on next page

3. Signatures and Dates *continued*

Beneficial Ownership

• I hereby certify, to the best of my knowledge, as of the date of this certification, that the list of beneficial owners provided (any trustee, grantor (living or deceased), individual with the authority to appoint/remove trustees, or individual with authority to revoke/amend the trust) and the information provided for each (full first and last name, SSN/unexpired, government-issued identification number, legal street address, date of birth, and citizenship (for deceased grantor and individual with the authority to revoke/amend the trust, first and last name only)) is true, accurate and complete. I agree that I will promptly notify Fidelity if or when beneficial ownership of the trust changes. This certification applies to the account being opened by the current application as well as any additional accounts opened by the trust customer on the same day.

Clients Adding Trusted Contact Only

• You authorize Fidelity, at Fidelity's sole discretion, to communicate with your trusted

contact on any designated account(s) you may have on file and disclose information about designated accounts to address possible financial exploitation or confirm specifics about your current contact information, your health status, or inquire about the identity of any legal guardian, executor, trustee, or holder of a power of attorney, or as otherwise permitted. This does not allow your trusted contact to transact on your account(s).

- Certify that your trusted contact is 18 years or older.
- Understand that we may remove any trusted contact from any account at any time for any reason.
- Understand that this designation is optional and you may change or withdraw it at any time by notifying Fidelity in writing.

Margin Privileges Applicants Only

• **You authorize us to lend separately or with the property of others, either to ourself or to others, any property we may be carrying for you on margin.** This authorization applies

to all accounts we carry for you and will remain in force until we receive written notice of revocation.

For Texas Residents Only

- Acknowledge that in accordance with Texas House Bill 1454 Act No. 350, you, as an account owner of shares of a mutual fund, may designate a representative for the purpose of receiving a due diligence notice; however, you are not required to designate a representative.
- Agree that if you add a designated representative, Fidelity is required to mail the written notice upon presumption of abandonment to the representative, in addition to mailing the notice to the owner.
- Acknowledge that the designated representative does not have any rights to the mutual fund shares and may not access the shares.
- Understand that if you want to provide a designated representative, you must complete and attach a separate *Designated Representative—Texas* form.

Your Authorized agent/Advisor(s) determines with Fidelity the fees and rates you pay to Fidelity for its services. Contact your advisor for information on the pricing schedule of fees and rates applicable to your account.

Asset Based Pricing Clients:

You represent that you have read, understand and agree to the terms and conditions of the Asset Based Pricing Supplement included with this application and agree to be bound by such terms and conditions as are currently in effect and as may be amended from time to time.

Transaction Based Pricing Clients:

Transaction Based pricing includes interest rates, commissions rates and fees applicable to your account. For some customers it will include a Custody Fee. You agree to be bound by the terms and conditions of such rates and fees as are currently in effect and as may be amended from time to time and represent that your Authorized agent/Advisor has informed you of such fees. See the Client Agreement for additional information regarding rates and fees including Custody Fee. See the Client Agreement for additional information regarding fees, including the Custody Fee.

If you are a U.S. person:

• You certify under penalties of perjury that: (1) the Social Security number or Taxpayer identification Number that you provided on this application is correct (or you are waiting for a number to be issued to you); and (2) you are not subject to backup withholding because: (a) you are exempt from backup withholding, or (b) you have not been notified by the Internal Revenue Service (IRS) that you are subject to backup withholding for failure to report all interest or dividends, or (c) the IRS

has notified you that you are no longer subject to backup withholding; and (3) you are a U.S. citizen or other U.S. person, including a U.S. resident alien; and (4) the FATCA code(s) entered on this form (if any) indicating that you are exempt from FATCA reporting are correct.

If you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return, you must check this box to indicate that you do not certify Item 2.

If you are not a U.S. person:

• You are submitting the applicable Form W-8 with this form to certify your foreign status and, if applicable, claim tax treaty benefits.

The IRS does not require your consent to any provision of this document other than the certifications required to avoid backup withholding.

You acknowledge that this account is governed by a pre-dispute arbitration clause, which appears on the last page of the Client Agreement, and that you have read the pre-dispute arbitration clause.

Margin Applicants Only:

BY SIGNING THIS APPLICATION YOU ACKNOWLEDGE THAT YOUR SECURITIES MAY BE LOANED TO FIDELITY OR OTHERS AND THAT YOU HAVE READ AND RETAINED A COPY OF THE MARGIN DISCLOSURE STATEMENT AND MARGIN AGREEMENT. You agree to be bound by such terms and conditions as are currently in effect and as may be amended from time to time.

All Account Owners must sign and date on next page.

3. Signatures and Dates *continued*

Owner Signature(s)

If three or more owners, duplicate the Agreement Signatures section for additional owners to sign. Also fill out a duplicate of the Personal Information section for each owner. Submit this application, along with any other required materials, to your Authorized agent/Advisor. All account owners must sign.

Account Opening Authorization – Signature and Date Required

Print Name <i>First, M.I., Last</i>		Print Name <i>First, M.I., Last</i>	
Signature	Date <i>MM - DD - YYYY</i>	Signature	Date <i>MM - DD - YYYY</i>
SIGN ▶	▶	SIGN ▶	▶

