nuveen A TIAA Company

NUVEEN FUNDS **TRADITIONAL AND ROTH IRAs NEW ACCOUNT FORM/ADOPTION AGREEMENT**

Page 1 of 12

You should use this form to establish a new Nuveen Fund by making a contribution to a Traditional or Roth IRA or a transfer or rollover from an existing Traditional or Roth IRA. To transfer assets to open a new account, you must also complete an IRA Asset Transfer Form. You can open only one IRA per New Account Form/Adoption Agreement. Please note the following:

- Do not use this form to transfer assets to an existing Nuveen Funds Traditional or Roth IRA. Complete only the IRA Asset Transfer Form.
- Do not use this form if you are converting a Traditional IRA to a Roth IRA. Complete the Roth IRA Conversion Form/Adoption Agreement.

By signing this form, investor(s) acknowledges that neither Nuveen Funds nor any affiliate or service provider to Nuveen Funds has provided the investor(s) with advice, recommendations or suggestions as to any specific investment decisions. Investors in Nuveen Funds are urged to consult their own professional advisors before making investment-related decisions, including but not limited to those related to transfer or rollover from retirement plans, purchase or sale of investments, selection or retention of investment managers, or selection of account beneficiaries.

Please send your signed and completed application to Nuveen Funds per the Return Completed Forms section below or in the enclosed postage-paid business-reply envelope. Please contact Nuveen Funds with any questions at 800-257-8787.

IMPORTANT INFORMATION ABOUT PROCEDURES FOR OPENING A NEW ACCOUNT

To help the government fight the funding of terrorism and money laundering activities, federal law requires all financial institutions to obtain, verify and record information that identifies each person who opens an account.

What this means for you: When you open an account, we will ask for your name, address, date of birth, Social Security number and other information that will allow us to identify you (including a state-issued driver's license or other government-issued identification). This information will be verified to ensure the identity of all individuals opening a mutual fund account. Until you provide the information we need, we may not be able to open an account or effect any transactions for you.

1. ACCOUNT REGISTRATION (REQUIRED)

Owner's Name	Please	print	or type.	
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Prefix	First Name		MI	Last Name		
Name of E	ntity					
•	opening an entity account as ben he Nuveen Funds Legal Entity Be orm.	•		•		-
	urity Number/ lentification Number	Date of Birth (mm/dd/yyyy)			
Citizenship	For foreign accounts, one of the following	g must be provided: ID or passpor	t number	with country of issuance along with p	photocopy of ID.	
U.S.	Resident Non-U.S. Citizen	Nonresident, Non-U.S. (Citizen			(Specify country)
	Nonresident ID or Passport N	lumber				
Address St	reet or P.O. Box (APO and FPO addres	ses will be accepted)	City	1	State	Zip Code



1. ACCOUNT REGISTRATION (REQUIRED) (CONTINUED)

Address (If the above address is a P.O. Box, you must also provide a st	treet address) City	State Zip	Code
Primary Phone Number Phone Number Type	Secondary Phone Nu	Imber Phone Number Type	
Mobile Home E	Business	Mobile Home	Business
Alternate Phone Number Phone Number Type	Email Address		
Mobile Home E	Business		
Broker-Dealer	Branch Number (if kno	own) Representative Numb	er (if known)
For Custodial IRAs Only			
Custodian's Name			
Social Security Number/			
Taxpayer Identification Number Date of Birth	h (mm/dd/yyyy)		
Citizenship For foreign accounts, one of the following must be provided			
U.S. Resident Non-U.S. Citizen Nonresider	nt, Non-U.S. Citizen	(\$	pecify country)
Nonresident ID or Passport Number			
Address If different than above.	City	State Zip	Code
Primary Phone Number Phone Number Type	Secondary Phone Nu	Imber Phone Number Type	
Mobile Home E	Business	Mobile Home	Business
Alternate Phone Number Phone Number Type	Email Address		
Mobile Home E	Business		
2. TYPE OF IRA			
Please check the appropriate boxes in 2A, 2B, 2C or 2D, a	nd provide the information specif	fied for your investment type.	
A. TRADITIONAL IRA ONLY			
New Contribution to a Nuveen Funds Traditional IRA fo	r tax year		
Transfer from an existing Traditional IRA or a direct rollo	over from a retirement plan		
Indirect Rollover			
or indirect IRA rollovers, please check the box that corres	sponds to the source of money ne	ow being rolled over:	
Traditional Contributory IRA	Traditional Roll	over IRA (established only with fund	ds received
Roth Contributory IRA	from retirement	t plan distributions)	
	Retirement Pla	n	
Roth Conversion IRA (not included under SECURE Act)			
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11153 (06/25)			

2. TYPE OF IRA (CONTINUED)

Please be advised that you can make only one rollover from an IRA to another (or the same) IRA in any 12-month period, regardless of the number of IRAs you own. Exceptions are trustee-to-trustee transfers and Roth IRA conversions. For more information, please see irs.gov/retirement-plans/plan-participant-employee/rollovers-of-retirement-plan-and-ira-distributions.

Please check the appropriate boxes in 2A (see prior page), 2B or 2C, and provide the information specified for your investment type.

B. INHERITED FUNDS (CHECK ONE BOX IN SECTION 1 AND 2):

1. Opening the Following Account Type:

Traditional IRA OR Roth IRA

Please identify your beneficiary relationship with the original owner of the IRA/Roth IRA in order to open an account. Please select only one beneficiary type. If you need further guidance, contact your tax advisor. **Note:** *If you select a beneficiary type marked by an asterisk (*), you must additionally complete the Installment Distributions/Required Minimum Distribution section.*

The SECURE Act modified the Internal Revenue Code definition of a retirement account beneficiary as well as the distribution rules a beneficiary must follow when distributing assets from an inherited retirement account. This in turn impacts when an inherited retirement account is considered abandoned under a state's unclaimed property law. As a result, we need to confirm your beneficiary type in the relation to the original owner from whom you inherited the retirement account. To prevent your inherited retirement account from being considered abandoned, we recommend you maintain regular contact with Nuveen by either periodically logging into your account or contacting customer service.

Name of Decedent		Value of account as of 12/31 of prior year	PIN (Nuveen Clients Only)
Decedent's Date of Birth (mm/dd/yyyy)	\$ Decedent's Date of Death (mm/dd/yyyy)		
2. Beneficiary (you are) (Choose only one op	tion):		
I. Eligible Designated Beneficiary			
Surviving Spouse beneficiary tre	eating IRA as own		
Surviving Spouse beneficiary re	gistering account as a Decede	nt (DCD) IRA	
Non-Spouse beneficiary registerin	ng account as a Decedent (DCD)	IRA	
Note: The SECURE Act now require year after the year of death of the	•		nherited IRA by the end of the 10th professional tax advisor.
II. Designated Beneficiary			
If you are opening an entity account as complete the Nuveen Funds Legal Enti with this form.	•	•	• •
III. Non-Designated Beneficiary			

(Continued)



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2. TYPE OF IRA (CONTINUED)

3. Complete if opening a Decedent (DCD) IRA:

Please identify your beneficiary relationship with the original owner of the IRA/Roth IRA in orderto open an account. Please select only **one** beneficiary type. If you need further guidance, contact your tax advisor. **Note:** If you select a beneficiary type marked by an asterisk (*), you must additionally complete the Installment Distributions/Required Minimum Distribution section.

Please select one:

INHERITING DIRECTLY FROM THE ORIGINAL OWNER:

First Generation Non-Designated Beneficiary* (1st Gen NDB) Select this option if the inherited IRA is being transferred to an entity beneficiary (estate, charity, trust)

First Generation Eligible Designated Sole Spouse Beneficiary (1st Gen EDB-Sole Spouse) Select this option if you are a sole spouse and you are not electing to treat as your own IRA. If you are treating the IRA as your own, skip this section and see the Installment Distribution/Required Minimum Distribution Section below.

First Generation Eligible Designated Minor Beneficiary of Deceased Owner* (1st Gen EDB-Minor) Select this option if the inherited IRA is for a minor (under the age of 18) who is a direct descendent (son or daughter) of the deceased shareholder.

First Generation Eligible Designated Beneficiary – Other* (1st Gen DB) Select this option if you are eligible for Life Expectancy payments (chronically ill beneficiary, disabled beneficiary, eligible designated beneficiary less than 10 years younger than original account owner.)

First Generation Designated Beneficiary Select this option if you are not eligible for Life Expectancy (sibling of deceased, grandchild of deceased, child over the age of 18.)

INHERITING FROM A BENEFICIARY (NOT THE ORIGINAL OWNER):

The previous beneficiary:

First Name		Last Name	
Date of Birth (mm/dd/yyyy)	Date of Death (mm/d	dd/yyyy)	

Succeeding Generation Beneficiary when First Generation was Eligible Designated Sole Spouse Beneficiary* (2nd or > Gen EDB-Sole Spouse) Select this option if you are a second generation or greater beneficiary when the first generation beneficiary was an Eligible Designated Sole Spouse.

Succeeding Generation Beneficiary when First Generation was Eligible Designated Minor of Deceased Owner* (2nd or > Gen EDB-Minor) Select this option if you are a second generation or greater beneficiary when the first generation beneficiary was a minor son or daughter (under the age of 18) of the original account owner.

Succeeding Generation Beneficiary when First Generation was Eligible Designated Beneficiary – Other* (2nd or > Gen EDB-Other) Select this option if you are a second generation or greater beneficiary when the first generation beneficiary was eligible for Life Expectancy payments and was not the sole spouse or minor direct decedent of the original account owner.

Succeeding Generation Beneficiary when First Generation was a Designated Beneficiary (2nd or > Gen DB) Select this option if you are a second generation or greater beneficiary when the first generation beneficiary was a designated beneficiary who was not eligible for Life Expectancy payments.



2. TYPE OF IRA (CONTINUED)

C. ROTH IRA ONLY

	New Contribution to a Nuveen Funds Roth IRA for tax year
	Transfer from an existing Roth IRA
	Rollover from a designated Roth account
	Indirect Rollover
	For indirect Roth IRA rollovers, please check the box that corresponds to the source of money now being rolled over. Nuveen Funds will establish the same type of IRA for you.
	Roth Contributory IRA Roth Conversion IRA
-	

D. RETIREMENT PLAN

Retirement Plan covered by ERISA

3. INSTALLMENT DISTRIBUTIONS/REQUIRED MINIMUM DISTRIBUTION

Complete only if required based on the beneficiary type chosen in section 2.

IRA Owners Over Required Minimum Distribution Age

Important transfer restriction for owners that had reached their RMD Applicable Age* at the time of their death (not applicable for Roth IRAs). In the year of the owner's death, any unpaid Required Minimum Distribution (RMD) amounts for that year cannot be transferred to your IRA. These amounts must be paid to you, the beneficiary of the deceased owner. Check and complete if applicable.

Distribute the amount of the remaining decedent RMD due in the year of death in a single payment.

The IRA Owner received all RMDs in the year of their death. There are no remaining RMDs to distribute for the year of the IRA Owner's death.

***REQUIRED MINIMUM DISTRIBUTION (RMD) APPLICABLE AGE**

You must begin taking minimum distributions from your IRAs and employer retirement plan accounts by your required beginning date (or retirement, if later for employer retirement plan accounts). For IRAs (other than Roth IRAs), your required beginning date is April 1 of the year following the calendar year in which you reach your RMD Applicable Age. For employer-sponsored retirement plans, your required beginning date is April 1 of the year following the calendar year in which year in which you reach your RMD Applicable Age.

"YOUR RMD APPLICABLE AGE" IS:

- age 70½ if you were born before 7/1/1949;
- age 72 if you were born on or after 7/1/1949 or in 1950;
- age 73 if you were born between 1951 and 1959; or
- age 75 if you were born on or after 1960.

Please consult your professional tax advisor regarding your personal tax matters.

If you are a beneficiary of an Inherited IRA, there are many factors that must be evaluated to determine when you must take required minimum distributions depending on the beneficiary designation you fall under. Nuveen does not calculate nor provide tax advice, so it is important to consult your professional tax advisor as to the best course of action related to your situation.



4. TELEPHONE OPTIONS

The services below allow you to invest or exchange by telephone or web among your identically registered Nuveen Funds IRA. These services are automatically included unless you opt out by checking **No** below. You will also have access to your IRA through the Automated Telephone Service (ATS) and the internet. See the Nuveen Funds prospectuses for details.

Telephone Purchase

This option lets you invest by telephone with payments transferred by Automated Clearing House (ACH) from your designated bank account to your existing mutual fund account. (\$100 minimum. Please complete Section 6.)

Telephone Exchange

This option permits exchanges between your identically registered Nuveen Funds IRAs. (\$2,000 minimum to a new fund account, \$50 to an existing fund account.)

If you do not want telephone options check this box No

5. INVESTMENT ALLOCATION

For transfers from an existing Traditional IRA held by another institution or a direct rollover from a retirement plan, please fill out only the Investment Allocation section on the IRA Asset Transfer Form. The minimum investment per fund is \$2,000 unless you're electing to make contributions through the Automatic Investment Plan. (Please complete sections 6 and 7.) Please enclose a check payable to: Nuveen Funds.

Please note: Third-party checks or any check not made payable to Nuveen Funds can be accepted for subsequent purchases only and if \$10,000 or less. Cashier's checks can be accepted if \$10,000 or less. All purchases must be in U.S. dollars, and all checks must be drawn on U.S. banks. Nuveen Funds will not accept payment in the following forms: traveler's checks, money orders, credit card convenience checks, cash, counter checks, virtual currency (such as Bitcoin), or starter checks. Nuveen Funds will not accept corporate checks for investment into non-corporate accounts.

Payment from a Transfer: (Please complete form A11745 for transfers. Note: A separate transfer form is required for each transfer.)

Existing Mutual Fund IRA Account Number

Existing other Nuveen IRA Account

Transfer from a Non-Nuveen Account. (Please include a copy of the current custodian's statement.)

Please check here to set this allocation for future investments unless other instructions are received.

A CLASS

FUND NAME (FUND CODE)	AMOUNT	PERCENT	FUND NAME (FUND CODE)	AMOUNT	PERCENT
Nuveen 5-15 Year Laddered Tax Exempt Bond Fund (98)	\$	%	Nuveen Connecticut Municipal Bond Fund (5005)	\$	%
Nuveen All-American Municipal Bond Fund (1167)	\$	%	Nuveen Core Bond Fund (66)	\$	%
Nuveen Arizona Municipal Bond Fund (5002)	\$	%	Nuveen Core Equity Fund (64)	\$	%
Nuveen Bond Index Fund (91)	\$	%	Nuveen Core Impact Bond Fund (45)	\$	%
Nuveen California High Yield Municipal Bond Fund (1780)	\$	%	Nuveen Core Plus Bond Fund (96)	\$	%
Nuveen California Municipal Bond Fund (5003)	\$	%	Nuveen Credit Income Fund (6942)	\$	%
Nuveen Colorado Municipal Bond Fund (5004)	\$	%	Nuveen Dividend Growth Fund (5031)	\$	%

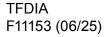
* Effective 12/13/24 the Nuveen Social Choice Low Carbon Equity Fund merged into Nuveen Large Cap Responsible Equity Fund.

** Effective 2/28/25 the following name change was made: Nuveen Mid Cap Growth Opportunities Fund was renamed Nuveen Small/Mid Cap Growth Opportunities Fund.

[†] Effective 3/1/25 Nuveen Mid Cap Growth Fund was renamed to Nuveen Quant Mid Cap Growth Fund.

⁺⁺ Effective 7/1/25 Mid Cap Value 1 Fund was renamed to Nuveen Mid Cap Value Opportunities Fund.





5. INVESTMENT ALLOCATION (CONTINUED)

A CLASS

FUND NAME (FUND CODE)	AMOUNT	PERCENT	FUND NAME (FUND CODE)	AMOUNT	PERCENT
Nuveen Dividend Value Fund (6759)	\$	%	Nuveen International Responsible Equity Fund (2762)	\$	%
Nuveen Emerging Markets Debt Fund (2794)	\$		Nuveen International Value Fund (1159)	\$	%
Nuveen Emerging Markets Equity Fund (67)	\$	%	Nuveen Kansas Municipal Bond Fund (5007)	\$	%
Nuveen Emerging Markets Equity Index Fund (69)	\$	%	Nuveen Kentucky Municipal Bond Fund (5008)	\$	%
Nuveen Equity Index Fund (65)	\$	%	Nuveen Large Cap Growth Fund (68)	\$	%
Nuveen Equity Long/Short Fund (5044)	\$	%	Nuveen Large Cap Responsible Equity Fund (62)*	\$	%
Nuveen Flexible Income Fund (5052)	\$	%	Nuveen Large Cap Select Fund (2605)	\$	%
Nuveen Floating Rate Income Fund (5064)	\$	%	Nuveen Large Cap Value Fund (85)	\$	%
Nuveen Georgia Municipal Bond Fund (5006)	\$	%	Nuveen Large Cap Value Opportunities Fund (5034)	\$	%
Nuveen Global Dividend Growth Fund (3037)	\$	%	Nuveen Lifecycle Retirement Income Fund (70)	\$	%
Nuveen Global Equity Income Fund (1759)	\$	%	Nuveen Lifestyle Aggressive Growth Fund (94)	\$	%
Nuveen Global Infrastructure Fund (6725)	\$	%	Nuveen Lifestyle Oconservative Fund (78)	\$	%
Nuveen Global Real Estate Securities Fund (7270)	\$	%	Nuveen Lifestyle Growth Fund (93)	\$	%
Nuveen Green Bond Fund (2608)	\$	%	Nuveen Lifestyle Income Fund (77)	\$	%
Nuveen High Yield Fund (95)	\$	%	Nuveen Lifestyle Moderate Fund (79)	\$	%
Nuveen High Yield Income Fund (5055)	\$	%	Nuveen Limited Term Municipal Bond Fund (5001)	\$	%
Nuveen High Yield Municipal Bond Fund (5000)	\$	%	Nuveen Louisiana Municipal Bond Fund (5009)	\$	%
Nuveen Inflation Linked Bond Fund (90)	\$	%	Nuveen Managed Allocation Fund (99)	\$	%
Nuveen Intermediate Duration Municipal Bond Fund (1170)	\$	%	Nuveen Maryland Municipal Bond Fund (5010)	\$	%
Nuveen International Bond Fund (2957)	\$	%	Nuveen Massachusetts Municipal Bond Fund (5011)	\$	%
Nuveen International Dividend Growth Fund (5068)	\$	%	Nuveen Michigan Municipal Bond Fund (5012)	\$	%
Nuveen International Equity Fund (61)	\$	%	Nuveen Mid Cap Value Opportunities Fund (6786)††	\$	%
Nuveen International Opportunities Fund (49)	\$	%	Nuveen Mid Cap Value Fund (87)	\$	%

* Effective 12/13/24 the Nuveen Social Choice Low Carbon Equity Fund merged into Nuveen Large Cap Responsible Equity Fund.

** Effective 2/28/25 the following name change was made: Nuveen Mid Cap Growth Opportunities Fund was renamed Nuveen Small/Mid Cap Growth Opportunities Fund.

[†] Effective 3/1/25 Nuveen Mid Cap Growth Fund was renamed to Nuveen Quant Mid Cap Growth Fund.

⁺⁺ Effective 7/1/25 Mid Cap Value 1 Fund was renamed to Nuveen Mid Cap Value Opportunities Fund.

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TFDIA F11153 (06/25)



5. INVESTMENT ALLOCATION (CONTINUED)

A CLASS

FUND NAME (FUND CODE)	AMOUNT	PERCENT	FUND NAME (FUND CODE)	AMOUNT	PERCENT
Nuveen Minnesota Intermediate Municipal Bond Fund (6804)	\$	%	Nuveen Real Estate Securities Fund (817)	\$	
Nuveen Minnesota Municipal Bond Fund (6484)	\$	%	Nuveen Real Estate Securities Select Fund (89)	\$	
Nuveen Missouri Municipal Bond Fund (1186)	\$	%	Nuveen Short Duration High Yield Municipal Bond Fund (5026)	\$	
Nuveen Money Market Fund (63)	\$	%	Nuveen Short Duration Impact Bond Fund (2609)	\$	
Nuveen Multi Cap Value Fund (1157)	\$	%	Nuveen Short Term Bond Fund (97)	\$	
Nuveen Nebraska Municipal Bond Fund (5022)	\$	%	Nuveen Short Term Bond Index Fund (2797)	\$	
Nuveen New Jersey Municipal Bond Fund (5013)	\$	%	Nuveen Short Term Municipal Bond Fund (5024)	\$	
Nuveen New Mexico Municipal Bond Fund (5014)	\$	%	Nuveen Small Cap Growth Opportunities Fund (2454)	\$	
Nuveen New York Municipal Bond Fund (5015)	\$	%	Nuveen Small Cap Select Fund (5061)	\$	
Nuveen North Carolina Municipal Bond Fund (5016)	\$	%	Nuveen Small Cap Value Fund (6740)	\$	
Nuveen Ohio Municipal Bond Fund (5017)	\$	%	Nuveen Small Cap Value Opportunities Fund (5028)	\$	
Nuveen Oregon Intermediate Municipal Bond Fund (6779)	\$	%	Nuveen Small/Mid Cap Growth Opportunities Fund (6449)**	\$	
Nuveen Pennsylvania Municipal Bond Fund (5018)	\$	%	Nuveen Small/Mid Cap Value Fund (5037)	\$	
Nuveen Preferred Securities and Income Fund (5040)	\$	%	Nuveen Strategic Income Fund (1345)	\$	
Nuveen Quant International Small Cap Equity Fund (2966)	\$	%	Nuveen Strategic Municipal Opportunities Fund (6992)	\$	
Nuveen Quant Mid Cap Growth Fund (86)†	\$	%	Nuveen Virginia Municipal Bond Fund (5019)	\$	
Nuveen Quant Small Cap Equity Fund (88)	\$	%	Nuveen Winslow Large-Cap Growth ESG Fund (5049)	\$	
Nuveen Quant Small/Mid Cap Equity Fund (2956)	\$	%	Nuveen Wisconsin Municipal Bond Fund (5020)	\$	
Nuveen Real Asset Income Fund (6732)	\$	%	Total Amount or Percentage	\$	

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6. BANK INFORMATION

You must complete this section if you request the Telephone Purchase Privileges in Section 4 or the Automatic Investment Plan in Section 7.

Type of Account Checking Savings	
Name of Primary Bank Account Owner	Name of Joint Bank Account Owner
Bank Name	ABA Routing Number
Bank Phone Number	Bank Account Number

ATTACH A VOIDED BANK CHECK OR PREPRINTED SAVINGS DEPOSIT SLIP. This will ensure accurate bank information.

7. AUTOMATIC INVESTMENT PLAN

If you would like to participate in the Nuveen Funds Automatic Investment Plan, the minimum investment per fund is \$100. Please indicate below the amount to invest, the frequency, the first month to begin debiting your account and the time interval. Semimonthly investments occur on both the 1st and the 15th, while monthly investments occur on either the 1st OR 15th. It takes up to 10 days to initiate this service.

(Please also complete Section 6.)

FUND NAMES AND FUND CODES ARE LISTED IN SECTION 5

FUND NAME	FUND CODE	DOLLAR AMOUNT	SEMI	MONTHLY	START MONTH	1 st MONTH 15 TH MONTH
		\$				
		\$				
		\$				
		\$				
		\$				

8. DUPLICATE STATEMENTS

Please complete this section if you wish someone else to receive copies of your statements.

Please send a duplicate copy of my statement to the address below:

First Name	MI Last Name	
Street Address	City	State Zip Code
Daytime Telephone Number		

9. DESIGNATE YOUR BENEFICIARIES

We will transfer ownership of your IRA to your primary beneficiaries upon your death. Your primary beneficiaries will share equally in your IRA unless you specify different percentages below. If a primary beneficiary predeceases you, his or her share of your IRA shall be divided proportionately among the surviving primary beneficiaries. We will transfer ownership of your IRA to your contingent beneficiaries only if there are no surviving primary beneficiaries at the time of your death. If this happens, your contingent beneficiaries will share equally in your IRA unless you specify different percentages below. If there are no surviving primary or contingent beneficiaries at the time of your death, we will transfer ownership of your IRA to your estate. All percentages must total 100%.

Note: If more than one primary and/or contingent beneficiary is designated, and no percentages are indicated, equal percentages totaling 100% will be allocated to each beneficiary. Your choice of beneficiaries will affect their options for taking required minimum distributions after your death. The distribution period for non-spouse beneficiaries is generally limited to 10 years after the year of death. You should consult a professional tax advisor before choosing your beneficiaries.

Primary	Beneficiary
Circt No.	

First Name		MI Last Name	
Social Security Number/ Taxpayer Identification Number	Date of Birth (mm/dd/yyyy)	Relationship	Percentage
			%
Primary Beneficiary			
First Name		MI Last Name	
Social Security Number/ Taxpayer Identification Number	Date of Birth (mm/dd/yyyy)	Relationship	Percentage
Contingent Beneficiary			
First Name		MI Last Name	
Social Security Number/ Taxpayer Identification Number	Date of Birth (mm/dd/yyyy)	Relationship	Percentage
Contingent Beneficiary			
First Name		MI Last Name	
Social Security Number/			_
Taxpayer Identification Number	Date of Birth (mm/dd/yyyy)	Relationship	Percentage
			%

Note: If you reside in a community property state, you may need your spouse's consent to your beneficiary designation. You may wish to seek legal advice.



10. TRUSTED CONTACTS (OPTIONAL)

Trusted contacts are people you know and trust who are at least 18 years of age and whom Nuveen Funds may contact if we have questions about your account, your well-being, or if we suspect you are the victim of fraudulent activity. See Section 11 for more information.

FOR OWNER

t Name of Contact Person	Last Name		Relationship	
e of Birth (mm/dd/yyyy) Ph	one Number	Email Address		
ling Address	C	ity	State	Zip Code
ling Address	C	ity	State	Z

11. SIGNATURES - YOUR SIGNATURE(S) MUST APPEAR TO ESTABLISH THE ACCOUNT

By signing this form, I certify that I have received, read and agree to the terms of the prospectuses for the Nuveen Funds. I have the full authority and legal capacity to purchase shares of the Nuveen Funds, am of legal age in my state to purchase such shares, and believe each investment is suitable.

I authorize Nuveen Funds and their agents to act for any service authorized on this Account Application on any instructions that they believe to be genuine and that are received from me or any person claiming to act as my representative who can provide my account registration. The Nuveen Funds use reasonable procedures (including Shareholder identity verification) to confirm that instructions given by telephone are genuine and are not liable for acting on these instructions. If these procedures are not followed, the Nuveen Funds may be liable for losses due to unauthorized or fraudulent transactions.

To request assistance with accessing a prospectus, privacy policy, or business continuity policy please contact us at 800-257-8787.

- I agree that the Nuveen Funds can redeem shares from my account(s) to reimburse a Fund for any loss due to nonpayment or lack of money.
- I understand that for joint tenant accounts, "I" refers to all Shareholders, and each of the Shareholders agrees that any Shareholder has authority to act on the account without notice to the other Shareholders. Nuveen Funds, in its sole discretion, and for its protection, may require the written consent of all Shareholders prior to acting upon the instructions of any Shareholder.

Corporations or other entities must submit an original or certified resolution authorizing that the individual signing this form has the legal capacity to sign and act on behalf of the corporation/entity.

Trustee(s) Certification: I am/We are the currently acting Trustee(s) and am/are authorized by the trust agreement to purchase shares of the Nuveen Funds. All services are subject to conditions set forth in the Nuveen Funds Prospectuses.

Note: Trustee(s) must immediately notify Nuveen Funds if the trust becomes a foreign trust.

This paragraph is only applicable if you added a Trusted Contact in Section 10. I hereby authorize Nuveen Funds and its affiliates ("Nuveen Funds") to contact the person(s) I have listed above ("Contact") in the event Nuveen Funds has questions or concerns regarding my ability to handle my financial affairs (due to health-related matters or otherwise), potentially harmful financial transactions in my accounts or my whereabouts. In order to address any such questions or concerns, when speaking to my Contact, Nuveen Funds is authorized to: i. Share with the Contact nonpublic information about me and all of my investments/accounts/products/contracts held at Nuveen Funds and its affiliates now or in the future (or any other financial information I may have provided to Nuveen Funds), regardless of any previous election I have made under federal, state or other law regarding the sharing of such information; ii. Share with the Contact any concerns and details surrounding my potential financial exploitation; iii. Confirm with the Contact the specifics of my current contact information and/or health



status; iv. Discuss with the Contact whether any other person has been designated to act on my behalf (through power of attorney, Executor, Trustee or legal guardian or otherwise); and v. Share information obtained from the Contact with its affiliates. I understand this authorization will remain in effect until I notify Nuveen Funds in writing that I am revoking or amending such authority and Nuveen Funds acknowledges the receipt of such revocation and/or amendment. Except as may be required by FINRA Rule 2165, Nuveen Funds is under no obligation to speak to, write to or otherwise interact with the Contact. Nuveen Funds is not responsible for any action taken by the Contact, and Nuveen Funds will not direct the Contact to take any particular action on my behalf. Nuveen Funds suggests that the named Contact(s) not be someone authorized to transact business on the account, or who is already otherwise able to receive the information described above. By signing, I am affirming that the trusted contact person(s) listed in this form are at least 18 years old and, to the best of my knowledge, do not work for Nuveen Funds or its affiliates.

If I am a nonresident, noncitizen of the United States, I acknowledge that the below tax certifications do not apply to me. I have provided Nuveen with an IRS Form W-8BEN within the last three years or will submit a W-8BEN prior to requesting a distribution from this account. I acknowledge that I must have a W-8BEN on file to request a distribution.

Substitute W-9 Request for Taxpayer Identification Number and Certification

Under penalties of perjury, I certify that: (1) The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and (2) I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and (3) I am a U.S. citizen or other U.S. person (as defined in the form W-9 instructions); and (4) the FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Please Sign Here

Signature (Owner, Custodian, Trustee or Entity (Authorized Signer))	day's						
		/		/	2	0	

CUSTODIAN ACCEPTANCE

UMB Bank, n.a. will accept appointment as Custodian of the Depositor's IRA. Receipt by the Depositor of a confirmation of the purchase of the fund shares indicated above will serve as notification of UMB Bank, n.a.'s acceptance of appointment as Custodian of the Depositor's Account.

UMB BANK, N.A., CUSTODIAN



RETURN COMPLETED FORM(S) TO:

Please return ALL numbered pages, including any pages you did not need to complete.

STANDARD MAIL:

Nuveen Funds P.O. Box 219140 Kansas City, MO 64121-9140 OVERNIGHT: Nuveen Funds 801 Pennsylvania Ave Suite 219140 Kansas City, MO 64105-1307



nuveen A TIAA Company

NUVEEN FUNDS LEGAL ENTITY BENEFICIAL OWNERSHIP CERTIFICATION FORM

To get started, simply complete the following sections, and return with the appropriate documentation as listed below. Please send your signed and completed form to Nuveen Funds per the Return Completed Forms section below or in the enclosed customer reply envelope. If you have any questions regarding completion of this form, please contact Nuveen Funds at 800-257-8787.

IMPORTANT INFORMATION ABOUT PROCEDURES FOR OPENING A NEW ENTITY ACCOUNT

To help the government fight the funding of terrorism and money laundering activities, federal law requires all financial institutions to obtain, verify and record information about the "beneficial owners" of business applicants. Businesses can be abused to disguise involvement in terrorist financing, money laundering, tax evasion, corruption, fraud, and other financial crimes. Requiring the disclosure of key individuals who own or control a legal entity (i.e., the beneficial owners) helps law enforcement investigate and prosecute these crimes.

What this means for you: This form requires you to provide the name, address, date of birth and Social Security number (or passport number or other similar information, in the case of non-U.S. persons) for the such individuals (i.e., the **beneficial owners**). This information will be verified to ensure the identity of all individuals opening a mutual fund account. Until you provide the information we need, we may not be able to open an account or effect any transactions for you.

DEFINING OWNERSHIP

- Beneficial owner: Any natural person who, directly or indirectly, owns 25% or more of the legal entity customer.
- **Control person:** An individual with significant responsibility to control, manage, or direct the legal entity. This includes a member of the organization with control (including chief executive officer, chief financial officer, chief operating officer, managing member, general partner, president, vice president, or treasurer) and a controlling stake in the organization.

This form requires you to provide the information mentioned above for all of the entity's beneficial owners, including individuals in a control role in the organization.

The number of individuals that satisfy this definition of "beneficial owner" may vary. Under Section 3, depending on the factual circumstances, up to four individuals (but as few as zero) may need to be identified. Regardless of the number of individuals identified under Section 3, you must provide the identifying information of one individual under Section 2. It is possible that in some circumstances, the same individual might be identified under both sections (e.g., the president of Acme, Inc., who is a controlling person may also be a beneficial owner by holding 30% equity interest in the company). Thus, a completed form will contain the identifying information of at least one individual under Section 2, and up to four individuals in Section 3.

Please note this form must be completed along with the appropriate Nuveen Funds Account Application or Adoption Agreement.

Please contact Nuveen Funds at 800-257-8787, if you need assistance obtaining one of these forms:

- Nuveen Funds Account Application (F11154)
- Nuveen Funds Account Application (Non-Retail Class Only) (F11488)
- Nuveen Funds Account Application Advisor Funds (F11624)
- Nuveen Funds Traditional and Roth IRAs New Account Form/Adoption Agreement (F11153)

RETURN COMPLETED FORM(S) TO:

Please return ALL numbered pages, including any pages you did not need to complete.

STANDARD MAIL: Nuveen Funds P.O. Box 219140 Kansas City, MO 64121-9140 OVERNIGHT: Nuveen Funds 801 Pennsylvania Ave Suite 219140 Kansas City, MO 64105-1307



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NUVEEN FUNDS LEGAL ENTITY BENEFICIAL OWNERSHIP CERTIFICATION FORM

Page 1 of 3

1. INDIVIDUAL OPENING THE ACCOUNT ON BEHALF OF THE LEGAL ENTITY (REQUIRED)

A. NAME AND TITLE OF NATURAL PERSON OPENING THE ACCOUNT (Must provide signature in box under Certification Section 4)

Prefix First Name	MI Last Name	
Social Security Number/ Taxpayer Identification Number Date of Birth (mmddyyyy) Image: Control of Control o	Entity Ro	ble
Mailing Address	City	State Zip Code
B. LEGAL ENTITY INFORMATION (for which the Account is being opened Name of Entity)	
Entity's Mailing Address	City	State Zip Code
Please check this box if you are updating the information in Section and fill in the existing account number.	1 2 or Section 3,	Account Number
2. CONTROL PERSON (REQUIRED)		
An individual must be named here.		
Name of Control Person (First, MI, Last) Date of Bir	th (mm/dd/yyyy)	Social Security Number
Residential Address	City	State Zip Code
Citizenship For foreign owners, one of the following must be provided: Alien ID or pass	port number with country of issuance	e along with a photocopy of the ID.
U.S. Resident Non-U.S. Citizen Nonresident Non-U.S. C	Citizen	(Specify country)
Non-U.S. Citizen ID or Passport Number		



3. BENEFICIAL OWNER INFORMATION (REQUIRED)

Name (First, MI, Last)	Date of Birth (mm/dd/yyyy)	Social Security Number
Residential Address	City	State Zip Code
tizenship For foreign owners, one of the following must be prov	ided: Non-U.S. Citizen ID or passport number with co	untry of issuance along with photocopy of ID.
U.S. Resident Non-U.S. Citizen Nonre	sident Non-U.S. Citizen	(Specify country)
on-U.S. Citizen ID or Passport Number		
Name (First, MI, Last)	Date of Birth (mm/dd/yyyy)	Social Security Number
Residential Address	City	State Zip Code
tizenship For foreign owners, one of the following must be prov		untry of issuance along with photocopy of ID.
U.S. Resident Non-U.S. Citizen Nonre	sident Non-U.S. Citizen	(Specify country)
on-U.S. Citizen ID or Passport Number		
Name (First, MI, Last)	Date of Birth (mm/dd/yyyy)	Social Security Number
Name (First, MI, Last)	Date of Birth (mm/dd/yyyy)	Social Security Number
Name (First, MI, Last) Residential Address	Date of Birth (mm/dd/yyyy)	Social Security Number State Zip Code
Residential Address	City	State Zip Code
Residential Address tizenship For foreign owners, one of the following must be prov	City	State Zip Code
tizenship For foreign owners, one of the following must be prov	City City	State Zip Code
Residential Address tizenship For foreign owners, one of the following must be prov U.S. Resident Non-U.S. Citizen	City City	State Zip Code
Residential Address tizenship For foreign owners, one of the following must be prov U.S. Resident Non-U.S. Citizen Nonre on-U.S. Citizen ID or Passport Number	City City ided: Non-U.S. Citizen ID or passport number with co	State Zip Code
Residential Address tizenship For foreign owners, one of the following must be prov U.S. Resident Non-U.S. Citizen Nonre on-U.S. Citizen ID or Passport Number	City City	State Zip Code
Residential Address tizenship For foreign owners, one of the following must be prov U.S. Resident Non-U.S. Citizen Nonre on-U.S. Citizen ID or Passport Number Name (First, MI, Last)	City City City Date of Birth (mm/dd/yyyy)	Social Security Number
Residential Address tizenship For foreign owners, one of the following must be prov U.S. Resident Non-U.S. Citizen Nonre on-U.S. Citizen ID or Passport Number Name (First, MI, Last)	City City ided: Non-U.S. Citizen ID or passport number with co	State Zip Code
Residential Address tizenship For foreign owners, one of the following must be prov U.S. Resident Non-U.S. Citizen Nonre on-U.S. Citizen ID or Passport Number Name (First, MI, Last) Residential Address	City City Date of Birth (mm/dd/yyyy) City City City City City City City City	Social Security Number State Zip Code State Zip Code State Zip Code State Zip Code
Residential Address izenship For foreign owners, one of the following must be prov U.S. Resident Non-U.S. Citizen Nonre n-U.S. Citizen ID or Passport Number Name (First, MI, Last) Residential Address izenship For foreign owners, one of the following must be prov	City City Date of Birth (mm/dd/yyyy) City City City City City City City City	Social Security Number State Zip Code State Zip Code State Zip Code State Zip Code



4. CERTIFICATION (REQUIRED)

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hereby certify, as the natural person opening the account, to the best of my knowledge, that the information provided above is complete and correct. Further, I agree to notify Nuveen Funds immediately in writing of any changes in the beneficial ownership interest of the above referenced organization.

By signing this form, investor(s) acknowledges that neither Nuveen Funds nor any affiliate or service provider to Nuveen Funds has provided the investor(s) with advice, recommendations or suggestions as to any specific investment decisions. Investors in Nuveen Funds are urged to consult their own advisors before making investment-related decisions, including but not limited to, those related to transfer or rollover from retirement plans, purchase or sale of investments, selection or retention of investment managers, or selection of account beneficiaries.

Under penalties of perjury, I certify that: (1) The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and (2) I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and (3) I am a U.S. citizen or other U.S. person; and (4) the FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

PRIMARY AUTHORIZED INDIVIDUAL



CHECKLIST

Remember to:

- Complete Section 1 with individual and entity information.
- Complete Section 2 with controlling party information.
- Complete Section 3 with beneficial owner information.
- Complete the certification in Section 4.
- Complete the appropriate new Account Application and Adoption Agreement and mail in with this form.
- Include any supporting documentation required.
- Make a copy of this form for your records.
- Please contact Nuveen Funds with any questions at 800-257-8787.

