

Your Portfolio Advisor investment proposal is enclosed for your approval.

Dear Investor,

Thank you for your interest in the TIAA Portfolio Advisor Program. We look forward to the opportunity to help you plan to simplify your life and improve your chances of reaching your financial goals.

Action is required:

- 1. Please review the attached **Investment Strategy Proposal**, which contains the personalized investment proposal we've prepared for you, based on your individual investment goals and preferences.
- 2. If you agree to its recommendations, please sign the applicable documents contained in the **Account Opening Materials**. Once we've received and reviewed them, we will activate your portfolio.

Also enclosed in this package are important disclosure and agreement documents, which outline the terms of our advisory relationship with you. Please read them carefully and keep them with your records.

Questions? We're here to help.

If you have any questions, contact your advisor directly. He or she will be happy to assist you and answer any questions you may have. Thank you again for this opportunity to work with you in pursuit of your investment goals—now and for many years to come.

Thank you,

TIAA Managed Accounts

Advisory services are provided by Advice and Planning Services, a division of TIAA CREF Individual & Institutional Services, LLC, a registered investment advisor. TIAA-CREF Individual & Institutional Services, LLC, Member FINRA, distributes securities products.

Investment, insurance, and annuity products are not FDIC insured, are not bank guaranteed, are not deposits, are not insured by any federal government agency, are not a condition to any banking service or activity, and may lose value.

©2022 Teachers Insurance and Annuity Association of America-College Retirement Equities Fund (TIAA-CREF), 730 Third Avenue, New York, NY 10017

TIAA.org

P0107214 (01/22)

-*-*- Demonstration Page - Powered	-*-*- Demonstration Page - Powered by OpenText Exstream, Version 16.3.0 64-bit -*-*-			





TIAA Portfolio Advisor Investment Strategy Proposal

For ORAL, KAYLE

Portfolio Advisor is an advisory service offered by Advice and Planning Services, a division of TIAA-CREF Individual & Institutional Services, LLC, a SEC registered investment adviser. Brokerage services are also offered through TIAA-CREF Individual & Institutional Services, LLC in its capacity as a registered broker/dealer.

BUILT TO PERFORM.

Table of Contents

Investment Strategy Proposal

Investment Profile	1
Proposed Asset Allocation	2
TIAA Investment Management Group	3
Your Investment Preferences	5
Recommended Managed Account Portfolio	7
Program Fees and Expenses	9
Notes and Disclosures	
Notes	10
Appendix	

Investment Profile Questionnaire

Investment Profile

This investment profile serves as the foundation for a long-term investment strategy designed to address your needs and goals. What is your overall financial situation? What are your personal preferences with respect to risk-taking? What are your basic investment objectives? The answers to these fundamental questions provide the foundation for the ongoing management of your assets.

After considering your risk tolerance, time horizon and investment preferences, we develop an investment strategy customized to your situation. Your Investor Risk Rating (see below) is based on an assessment of your risk tolerance, as determined by your response to the Investment Profile questionnaire.

Investment Goal	Retirement
Goal Time Horizon	Short
Investor Risk Rating	Moderately Conservative
Planned/Actual Investment	\$500,000.00
Y2D_AO	\$500,000.00
Personalizations	N/A

All investment decisions involve risk, or the possibility that an investment will lose value.

The Portfolio Advisor Advisory Agreement and Disclosure brochure contain important information about the Program. You should read these materials carefully prior to deciding to enroll.

Please notify us promptly of any changes to your investment profile as changes may impact the Program's advice.

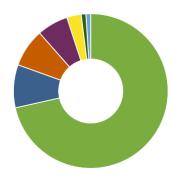
Proposed Asset Allocation

Studies have shown that how your money is allocated across the major asset classes tends to have a far greater impact on the variability of investment returns than the individual securities in which your assets are invested.* In addition, effective asset allocation can potentially lower portfolio risk and improve returns by managing the risk associated with concentrating in a single asset class.

Your asset allocation should be aligned with your personal situation, financial goals and attitude toward risk. As your goals, financial situation and risk tolerance change, your asset allocation should be adjusted appropriately.

The table below shows the Recommended Allocation for this investment.

	Recommended %
U.S. Fixed Income	71.50%
U.S. Equities	9.00%
Other Assets	8.00%
International Equities	6.50%
Managed Futures	3.00%
International Fixed Income	1.00%
Cash	1.00%



Asset Allocation does not ensure a profit or protect against a loss.

^{*} See Notes and Disclosures section of this proposal for sourcing information.

TIAA Investment Management Group

Portfolio Advisor portfolios are managed by the Investment Management Group, a team of investment professionals within TIAA dedicated to delivering investment solutions that offer:

- Customization based upon your comfort level with risk, time horizon, and personal investment preferences.
- High quality investment experience by carefully coordinating the three critical components of the investment process: Needs Assessment, Investment Research and Portfolio Construction.

Understanding your needs

A successful investment experience begins with our understanding of your investment needs. The information you share with your Individual Services advisor through the Client Risk Tolerance and Preference questionnaires has been designed by the Investment Management Group and outside experts to provide the insights necessary to deliver an investment strategy that is uniquely aligned with your preferences and priorities.

Our understanding of your comfort level with risk is the primary driver of your target asset allocation, which has the most direct influence on the overall risk and performance characteristics of the strategy we will recommend for you. We then consider the investment preferences you have indicated to refine your asset allocation and the selection of investments we will use to build your recommended strategy.



Investment research

The Investment Management Group is also responsible for the research, selection and ongoing coverage of the mutual funds and ETFs used to build your recommended portfolio. For active managers, we begin our investment research process with a universe of thousands of mutual funds. These are subjected to a two-stage research process that includes:

- Quantitative evaluation where we use proprietary research tools to identify biases and eliminate investments that do not
 meet our risk and performance characteristics criteria; and
- Qualitative evaluation where we research the portfolio strategy, investment philosophy, and operational capabilities of a select group of investment managers who pass the first stage.

The Investment Management Group develops an investment thesis for each of the investment managers who are ultimately selected through this process, and our research team follows these investments on an ongoing basis to ensure that the thesis remains intact.

Prepared for: ORAL, KAYLE October 18, 2022

Portfolio construction and maintenance

Through the information you provide in the needs assessment, the Investment Management Group develops a recommended portfolio that includes a target asset allocation and selection of investments designed to balance your risk tolerance and investment preferences. We monitor your portfolio and will periodically make adjustments to help keep it aligned with your stated objectives.

The Investment Management Group

The Investment Management Group provides the portfolio management services that are delivered to you through the Portfolio Advisor program.* To help ensure the delivery of customized investment options for the Portfolio Advisor program, this team of investment professionals is focused upon the Needs Assessment, Investment Research and Portfolio Construction core disciplines described above.

The Investment Management Group is an integral part of the Portfolio Advisor program, with primary responsibility for these three core disciplines. Each of the disciplines is managed by a seasoned team leader, with more than 15 years of experience in their respective investment specialty. Leveraging the depth of technical expertise that comes from specialization and focus throughout their investment careers, our team leaders work closely together to combine that knowledge into holistic, personalized investment options that address your needs.

While the investment professionals comprising the Investment Management Group have primary responsibility for the portfolio management services offered through the Portfolio Advisor program, they are members of a larger investment advisory team within TIAA, FSB (TIAA Trust). This team environment brings the perspectives of the Chief Investment Officer, Lead Fixed Income Manager, and Lead Equity Manager of TIAA Trust to the portfolio management process, helping to ensure that portfolios developed by the Investment Management Group stay at the forefront of economic and market developments.

Bringing it all together for your portfolio

The Investment Management Group brings all of these resources together to provide you with a customized investment program designed to evolve with you and the financial markets over time.

^{*} TIAA Trust provides investment advisory services to TIAA-CREF Individual and Institutional Services LLC, the sponsor of the Portfolio Advisor program, through the Investment Management Group.

Prepared for: ORAL, KAYLE October 18, 2022

Your Investment Preferences

During the needs assessment process, we capture information, such as the risk tolerance, time horizon and investment preferences associated with your goals. While your risk tolerance and time horizon are the primary determinants of our recommended asset allocation, your investment preferences collectively influence the type of investments selected to implement your asset allocation.

Each individual investment preference is considered relative to all of the preferences you have selected. Therefore, if you have indicated multiple investment preferences, the combination of your preferences will be reflected in the investment portfolio rather than the pure presentation of an individual preference.

The table below illustrates the influence of each of your investment preferences upon your recommended portfolio:

Your preference question response

Portfolio influence

1. Sources of Investment Advice

A. I prefer that a variety of sources, both internal and external to TIAA, be used to determine asset allocation and investment selection decisions for my portfolio. A variety of sources both internal and external to TIAA will be used to make asset allocation and investment selection decisions. Because of the greater breadth of sources, selecting this option also provides additional customization options through the use of additional preferences. The purchases and sales of securities in your account will be effected by TIAA affiliates.

2. Income Approach

B. I prefer a strategy that is not focused on attempting to support income distribution but one that instead focuses on the total return of my portfolio. I understand that the Program will create a strategy focused on the total return of my portfolio, while taking into consideration additional preference options.

The Program will create a strategy focused on the total return of your portfolio, while taking into consideration the other preferences you select.

3. Downside Risk

A. I prefer a strategy designed to help reduce, but not eliminate, my portfolio's exposure to major downward market movements, even if it means not fully participating in upward market movements, or "bull," markets.

I understand that the Program will attempt to reduce my portfolio's exposure to downward movements in equity markets through the selection of investments and asset classes. I also understand that the Program may use mutual funds and ETFs that invest in nontraditional investment strategies, known as alternative investments, that are intended to help mitigate overall portfolio volatility. I also understand that selecting this preference will result in the selection of a recommended portfolio designed to potentially reduce (but not eliminate) downside risk, relative to a portfolio that would be recommended where the Downside Risk preference is not indicated.

The Program will select investments and asset classes that attempt to reduce your portfolio's exposure to downward movements in equity markets. Selecting this preference does not alter your risk tolerance as indicated by the risk tolerance questionnaire, but it will result in the selection of a portfolio designed to potentially reduce (but not eliminate) downside risk, relative to a portfolio where the downside risk preference is not indicated. Selecting this preference may also result in the use of mutual funds and ETFs that invest in nontraditional investment strategies, known as alternative investments, that are intended to help mitigate overall portfolio volatility. Portfolios designed to reduce downside risk, however, typically will not fully participate in upward market movements, reducing your portfolio returns in "bull" markets. The Program's goal when you select this preference is to balance your portfolio's potential for long-term appreciation vs. opportunities to potentially mitigate downside risk.

Prepared for: ORAL, KAYLE October 18, 2022

Your preference question response

Portfolio influence

4. Socially Aware Investing

B. I prefer that the investment managers in my portfolio have no socially responsible investment constraints. I understand that the Program will not consider socially responsible investment criteria in selecting managers for use in my portfolio. The Program will not consider socially responsible investment criteria in our selection of managers for use in your portfolio.

5. Portfolio Management Approach

B. I prefer to use passive managers who attempt to match the performance and risk of the market to an index while focusing on keeping expenses low. I understand that the Program will use predominantly (or exclusively) passive managers that employ index strategies, to construct my portfolio. I also understand that passive managers may not be available for all asset classes in my portfolio.

The Program will generally use predominantly (or exclusively) passive managers, that employ index strategies, to construct your portfolio. Passive managers attempt to match the performance and risk of the index market while focusing on keeping expenses low.

6. Investment Selection

A. I prefer that my portfolio be constructed with mutual funds managed by TIAA and any of its affiliates (referred to as "Affiliated Funds") over other funds when available. I understand that while all funds in my portfolio are selected based on the quantitative and qualitative investment selection and evaluation criteria described in the Program's disclosure brochure, this preference will result in my portfolio consisting wholly or predominantly of Affiliated Funds, even when unaffiliated Funds with superior performance and/or other investment metrics, that also meet the Program's selection criteria, are available.

The Program will select Affiliated Funds over other funds when available in constructing your portfolio. While all funds in your portfolio are selected based on the quantitative and qualitative investment selection and evaluation criteria described in the Program's disclosure brochure, this preference will result in your portfolio consisting wholly or predominantly of Affiliated Funds, even when unaffiliated Funds with superior performance and/or other investment metrics, that also meet the Program's selection criteria, are available. Conflicts of interest arise when the Program selects Affiliated Funds for use in your portfolio because TIAA affiliates earn compensation for advisory, distribution and administrative services provided to the Affiliated Funds. This compensation is in addition to the Program fee, resulting in the receipt of two levels of fees by TIAA. See the Program's disclosure brochure to learn more. If you do not want Affiliated Funds to be selected for your portfolio, see the preference for Source of Investment Advice where you can elect to have the Program rely exclusively upon unaffiliated parties for asset allocation and investment selection decisions. If you choose this preference, your portfolio will be constructed entirely using unaffiliated actively managed mutual funds, with no exchange traded funds or Affiliated Funds.

7. Tax Management for Taxable Accounts

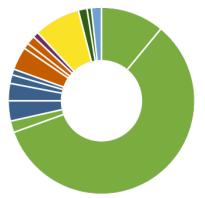
B. This is a tax-deferred account (e.g., IRA); or a taxable account, but I prefer to focus on my pre-tax performance without consideration for tax issues. I understand that investment strategies that focus on pre-tax returns - as opposed to minimizing taxes - will generally be used in the construction of my portfolio.

Investment strategies that focus on pre-tax performance without consideration for tax issues - will generally be used in the construction of your portfolio. This preference is generally most appropriate for tax-deferred accounts (IRAs) or accounts that are subject to a lower tax bracket.

Recommended Managed Account Portfolio

The investments selected for your recommended portfolio are based on the personal preferences you have shared with us, as well as our research on each underlying investment vehicle. In the construction of your custom portfolio, these investments have been selected to accommodate your personal appetite toward risk, as well as your investment time horizon and investment preferences.

A summary of the preferences which have influenced your recommended portfolio are:



Investment Strategy

Passive Downside Risk Mitigated

Preference Overlay

TIAA Preference

Asset Class	Recommended I	nvestment	Allocation %
Short Blend	BSV - VANGUAR	BD INDEX FDS-SHORT TRM BOND	11.00
Intermediate Blend	TBIIX - TIAA-CRE	FDS-BD INDX INSTL	58.50
High Yield	TIHYX - TIAA-CRE	F FDS-HI YLD INST	2.00
Large Cap Growth	TILIX - TIAA-CREF	MUT FDS-LGCP GWIDX INSTL	3.50
■ Large Cap Value	TILVX - TIAA-CRE	MUT FDS-LCP VL IDX INSTL	3.00
Mid Cap Value	IWS - ISHARES T	R-RUS MDCP VAL ETF	1.50
Mid Cap Growth	IWP - ISHARES T	R-RUS MD CP GR ETF	1.00
International Equities - Developed	Markets IEFA - ISHARES	R-CORE MSCI EAFE	4.00
International Equities - Emerging N	Markets HLMEX - HARDIN	G LOEVNER FDS INC-INSTINAL EMMRKT	1.00
International Equities - Developed	Markets JIGRX - JANUS IN	VT FD-OVERSEAS FD S	1.50
■ International Equities - Developed	Markets HAINX - HARBOF	FDS-INTL FD INSTL	1.00
Long Short Equity	DHLSX - DIAMON	ID HILL FUNDS-LNGSHRT FD I	8.00
International Equities - Developed	Markets TRTIX - ROWE T F	RICE INTL FDS INC-INTL GWT INC I	1.50
■ International Equities - Developed	Markets JVLIX - JOHN HAI	NCOCK FDS III-DSPLN VAL FD I	0.75
Cash	Cash		1.75
			100.00
		Legend	
U.S. Fixed Income	U.S. Equities	International Equities	
■ International Fixed Income	Other Assets	■ Managed Futures	
Cash			

Prepared for: ORAL, KAYLE October 18, 2022

Each investment listed goes through a rigorous due diligence process as individual investments, but we also look at how each of the investments works together within the portfolio as a whole.

The recommendations in this proposal could vary at any time in the future depending on a variety of circumstances.

Consider the investment objectives, risks, fees and expenses carefully before investing. Please contact your Individual Advisory Services advisor for a current prospectus that contains this and other information. Please read the prospectus carefully before investing.

Program Fees and Expenses

The Estimated Program Fee is a composite determined by the fees applicable to each investment strategy and the amount invested in each strategy. Your actual Program Fee will be higher or lower than the Estimated Program Fee and will likely vary over time because the amount allocated to each investment strategy will change for reasons such as market value fluctuations. In addition, if you have multiple accounts in this Program that together qualify for fee breakpoints; your aggregate fees for all such accounts will be lower than if each account was considered separately.

The Program Fee covers the cost associated with managing the account, developing the Program's advice, the custody of Program assets, trade execution, client reporting and other administrative expenses. The Program Fee does not vary depending upon whether you choose investment advice developed from TIAA investment professionals or by third-party advisors.

Estimated Annual Program Fee: 1.13 %

Account		Value
Y2D_A0		\$500,000.00
	Total Investment	\$500,000.00

This estimate is based on the investment account assumed in this Proposal. Actual Program Fees will be calculated on the amount invested in the Program, and will be deducted from the account(s) in four quarterly installments.

The Program Fee does not include any fees, costs and expenses inherent in underlying mutual funds or ETFs, including investment advisory, administrative, distribution, transfer agent, custodial, legal, audit, contingent deferred sales charges or redemption fees and other customer fees and expenses related to investments in these products which are described in the relevant prospectus or similar disclosure documents. Please review the Portfolio Advisor Advisory Agreement and Disclosure Brochure for a complete description of how fees are calculated and services included within the fee.

The following is the fee schedule that will be assigned to your portfolio. Future changes you make to your preferences may cause changes to the assigned fee schedule.

Schedule	Fee
First \$250,000	1.15%
Next \$250,001 - \$500,000	1.10%
Next \$500,001 - \$750,000	1.05%
Next \$750,001 - \$1,000,000	1.00%
Next \$1,000,001 - \$1,500,000	0.90%
Next \$1,500,001 - \$2,000,000	0.85%
Next \$2,000,001 - \$3,000,000	0.80%
Next \$3,000,001 - \$4,000,000	0.75%
Next \$4,000,001 - \$5,000,000	0.70%
Next \$5,000,001 - \$10,000,000	0.65%
Over \$10,000,000	0.65%

Prepared for: ORAL, KAYLE October 18, 2022

Notes and Disclosures

Notes

Source

Brinson, Hood and Beebower, *Financial Analysts Journal*, vol. 42, no. 4, (July/August 1986); Sharpe, *Financial Analysts Journal*, vol. 47, no. 1 (January/February 1991); Brinson, Singer and Beebower, *Financial Analysts Journal*, vol. 47, no. 3 (May/June 1991); Hensel, Ezra and Ilkiw, *Financial Analysts Journal*, vol. 47, no. 4 (July/August 1991); Jahnke, *Journal of Financial Planning*, vol. 10, no. 1 (February 1997); Lucas, *Pension Investment Handbook* (1998); Stevens, Surz and Wimer, *Journal of Investing*, vol. 8, no. 4 (Winter 1999); Ibbotson and Kaplan, *Financial Analysts Journal*, vol. 56, no. 1 (January/February 2000).

Disclosures

Mutual funds that invest in small-cap companies are subject to heightened risk and are more volatile than funds that invest in larger, more established companies. High-Yield bond funds that invest in non-investment-grade securities are subject to various risks, including fluctuations in property values, higher expenses or lower income than expected and potential environmental problems and liability. Funds that invest in foreign securities are subject to special risks including currency fluctuations and political and economic instability.

You should consider the risks, fees and expenses carefully before investing. Please call your advisor for this and other information or to request a prospectus. Please read the prospectus carefully before investing.

Mutual funds and exchange-traded funds (ETF's) incur additional, embedded expenses (known as their "expense ratio"), internal trading costs, other fees and taxes that reduce their market value.

All managed accounts are subject to market risk. Consult with your Advisor to ensure that you are comfortable with the level of risk in your portfolio, and advise them of any changes in your financial situation.

Portfolio Advisor is a fee-based investment advisory managed account service offered through Advice and Planning Services, a division of TIAA-CREF Individual & Institutional Services, LLC, a Securities and Exchange Commission registered investment adviser. Brokerage Services are provided by TIAA Brokerage Services, a division of TIAA-CREF Individual & Institutional Services, LLC, Member FINRA and SIPC.

©2021 Teachers Insurance and Annuity Association of America-College Retirement Equities Fund (TIAA), 730 Third Avenue, New York, NY 10017

1178842

Prepared for: ORAL, KAYLE October 18, 2022

Appendix



INVESTMENT PROFILE

QUESTIONNAIRE

Page 1 of 5

This questionnaire will identify an asset allocation mix that will help you work towards attaining your financial goals. By analyzing your investment objectives risk tolerance and time horizon, we can determine a proposed asset

First Name		Middle Initial
KAYLE		C
Last Name		
ORAL		
PIN		
7136576		
SECONDARY C	LIENT INFORMATION N/A	
	LIENT INFORMATION N/A have all of the requested information below:	
Please be sure we h		Middle Initial
Please be sure we h		Middle Initial
Please be sure we h		Middle Initial
Please be sure we h		Middle Initial
Please be sure we he first Name Last Name		Middle Initial
Please be sure we he first Name Last Name		Middle Initial
		Middle Initial
Please be sure we h First Name Last Name		Middle Initial
Please be sure we he first Name Last Name PIN	have all of the requested information below:	
Please be sure we he first Name Last Name PIN		



INVESTMENT PROFILE

QUESTIONNAIRE

Page 2 of

	0. 0
SECTION 1 — INVESTMENT OBJECTIVES	
 What is your savings objective? Are you saving for: Please select one of the following. 	
• A. College	
B. Home Purchase	
C. Retirement	
O D. Other	
2. Which of the following best describes your investment objective? Are you seeking: Please select one of the following.	
A. Income and Capital Preservation	
B. Growth and Income	
C. Long-Term Growth	
O D. Aggressive Growth and Speculative Investments	
3. Which best describes your investment experience? Do you consider yourself: Please select one of the following.	
A. A beginner or novice with little or no investment experience	
B. Moderately experienced and comfortable with IRAs, mutual funds, and bank CDs	
• C. A knowledgeable investor who has bought or sold shares of individual stocks or bonds	
O D. A sophisticated investor who has traded stock options, exercised stock rights and warrants	



INVESTMENT PROFILE QUESTIONNAIRE

Page 3 of 5

S	ECTIO	ON 2 — CLIENT PREFERENCE QUESTIONS
1.	Sour	ces of Investment Advice:
	(A.	I prefer that a variety of sources, both internal and external to TIAA, be used to determine asset allocation and investment selection decisions for my portfolio.
	O ^{B.}	I prefer portfolio construction decisions to be sourced exclusively through third parties not affiliated with TIAA. Selecting this option will direct the Program to rely exclusively upon unaffiliated parties for asset allocation and investment selection decisions. I understand that my portfolio will be constructed entirely using unaffiliated actively managed mutual funds, with no exchange traded funds or mutual funds managed by TIAA and any of its affiliates (referred to as "Affiliated Funds").
	O c.	I do not have a preference on this matter. I understand that selecting this option will direct the Program to use a variety of sources, both internal and external to TIAA, for asset allocation and investment selection decisions for my portfolio.
2.	Incon	ne Approach
	O ^{A.}	I prefer a strategy that is designed primarily to support income distribution by seeking diversified sources of yield. I also prefer a strategy that attempts to reduce (but not eliminate) volatility associated with interest rate and inflation risk, while seeking to generate total returns. I acknowledge this strategy may not generate sufficient income to support all income distribution needs and that total returns may be less than a portfolio that is not designed for income distribution. I understand that the income generated from this strategy can be taken in periodic distributions. I understand that by selecting this preference, not all other preferences will be available to me.
	O B.	I prefer a strategy that is not focused on attempting to support income distribution but one that instead focuses on the total return of my portfolio. I understand that the Program will create a strategy focused on the total return of my portfolio, while taking into consideration additional preference options.
3.	Down	side Risk:
	○ A.	I prefer a strategy designed to help reduce, but not eliminate, my portfolio's exposure to major downward market movements, even if it means not fully participating in upward market movements, or "bull," markets. I understand that the Program will attempt to reduce my portfolio's exposure to downward movements in equity markets through the selection of investments and asset classes. I also understand that the Program may use mutual funds and ETFs that invest in nontraditional investment strategies, known as alternative investments, that are intended to help mitigate overall portfolio volatility. I also understand that selecting this preference will result in the selection of a recommended portfolio designed to potentially reduce (but not eliminate) downside risk, relative to a portfolio that would be recommended where the Downside Risk preference is not indicated.
	O B.	I prefer a strategy that attempts to more fully participate in market returns over the full market cycle. I understand that the Program's investment selection will focus upon managers that attempt to match (passive or indexed managers) or beat (active managers) the benchmark to which their performance is compared. I also understand that this approach is designed to outperform the downside mitigation risk strategy in "bull" markets, and underperform the downside risk mitigation strategy in downward trending or "bear" markets.



INVESTMENT PROFILE QUESTIONNAIRE

Page 4 of 5

SECTION 2 — CLIENT PREFERENCE QUESTIONS (CONTINUED)			
4. Socially Aware Investing:			
A. I prefer that the managers in my portfolio be restricted to investing in socially responsible companies (i.e. those that seek to promote broader economic development, positive and social outcomes and a healthier environment). I understand that the Program will use investment managers who restrict their investment selection to companies that meet socially responsible screens when they are available and compatible with my other preferences. Socially responsible managers may not be available for all asset classes in my portfolio. I also understand that managers who use socially responsible criteria invest in a more limited set of companies than other managers, which may have a positive or negative impact on their relative performance. Additionally, by selecting this option I understand that mutual funds managed by TIAA and any of its affiliates (referred to as "Affiliated Funds") with socially responsible investment mandates may be selected for my portfolio.			
B. I prefer that the investment managers in my portfolio have no socially responsible investment constraints. I understand that the Program will not consider socially responsible investment criteria in selecting managers for use in my portfolio.			
C. I do not have a preference on this matter. I understand that the Program will not consider socially responsible investment criteria in selecting managers for use in my portfolio.			
5. Portfolio Management Approach:			
A. I prefer to use managers who actively manage the portfolio in an attempt to deliver better (either in terms of higher returns and/or reduced risk) performance than the market in general. I understand that the Program will use predominantly (or exclusively) active managers to construct my portfolio. Active managers typically research individual securities and use that research to construct portfolios that attempt to beat the performance of the manager's stated market benchmark. I understand that active managers take risks that are different than those of the market in their attempt to deliver improved returns and that there is no guarantee that they will be able to deliver returns that are better than those of the market even if they have done so in the past.			
B. I prefer to use passive managers who attempt to match the performance and risk of the market to an index while focusing on keeping expenses low. I understand that the Program will use predominantly (or exclusively) passive managers that employ index strategies, to construct my portfolio. I also understand that passive managers may not be available for all asset classes in my portfolio.			
C. I have no preference in this matter (I prefer a blend of managers). I understand that the Program will use a combination of both active and passive managers to construct my portfolio based on the Program's manager selection process. Active managers typically research individual securities to construct portfolios that attempt to beat the performance of the manager's stated market benchmark, while passive managers seek to replicate market returns and risk of an index.			



INVESTMENT PROFILE

QUESTIONNAIRE

Page 5 of 5

SECTION 2 — CLIENT PREFERENCE QUESTIONS (CONTINUED)

6. Investment Selection:

A. I prefer that my portfolio be constructed with mutual funds managed by TIAA and any of its affiliates (referred to as "Affiliated Funds") over other funds when available. I understand that while all funds in my portfolio are selected based on the quantitative and qualitative investment selection and evaluation criteria described in the Program's disclosure brochure, this preference will result in my portfolio consisting wholly or predominantly of Affiliated Funds, even when unaffiliated Funds with superior performance and/or other investment metrics, that also meet the Program's selection criteria, are available.

B. I prefer that my portfolio be constructed with mutual funds from a wide range of investment managers, without favoring mutual funds managed by TIAA and any of its affiliates (referred to as "Affiliated Funds"). I understand that Affiliated Funds will nevertheless be included in my portfolio if the Affiliated Fund is determined to be a suitable and appropriate investment option based on the quantitative and qualitative investment selection and evaluation criteria described in the Program's disclosure brochure.

7. Tax Management for Taxable Accounts:

A. This is a taxable account, in which I prefer a strategy that attempts to defer or minimize taxes, realizing this may impact investment decisions in my portfolio. I understand that, to the extent possible, municipal securities investments will be used within fixed income allocations to construct my portfolio. This may include tax sensitive investments from active managers or passive managers depending on my other preferences. I also understand that several of these strategies may have lower pre-tax returns than similar products, but are designed with the goal of providing higher after-tax returns. Additionally, when selecting this preference, I understand that the Program will also incorporate a Tax Loss Harvesting strategy, which will attempt to harvest unrealized losses in my portfolio. Ask your advisor or see the Program's brochure for important information about Tax Loss Harvesting.

I understand that if I elected to have municipal funds from a single state used in my portfolio, and such funds are available, they will be included in this proposal. I understand that selecting state specific funds could reduce my state income taxes for the portion of my portfolio income generated by the funds, but will expose me to a higher level of risk by reducing the geographic and economic diversification opportunities to those in my state of residency (instead of nationally available opportunities). I must notify my Advisor if my state of residency changes.

B. This is a tax-deferred account (e.g., IRA); or a taxable account, but I prefer to focus on my pre-tax performance without consideration for tax issues. I understand that investment strategies that focus on pre-tax returns - as opposed to minimizing taxes - will generally be used in the construction of my portfolio.

Advisory services are provided by Advice and Planning Services, a division of TIAA CREF Individual & Institutional Services, LLC, a registered investment advisor. TIAA-CREF Individual & Institutional Services, LLC, Member FINRA, distributes securities products.

Investment, insurance and annuity products are not FDIC insured, are not bank guaranteed, are not deposits, are not insured by any federal government agency, are not a condition to any banking service or activity, and may lose value.

©2021 Teachers Insurance and Annuity Association of America-College Retirement Equities Fund (TIAA-CREF), 730 Third Avenue, New York, NY 10017



Advice & Planning Services

Portfolio Advisor Wrap Fee Program

Disclosure Brochure

Form ADV Part 2A

730 Third Avenue New York, NY 10017 212-490-9000 www.tiaa.org

March 31, 2022

This wrap fee program disclosure brochure ("**Disclosure Brochure**") provides information about the qualifications and business practices of Advice & Planning Services, a division of TIAA-CREF Individual & Institutional Services, LLC relating to the Portfolio Advisor Wrap Fee Program (the "**Program**"). If you have any questions about the contents of this Disclosure Brochure, please contact us at 212-490-9000. The information in this Disclosure Brochure has not been approved or verified by the United States Securities and Exchange Commission (the "**SEC**") or by any state securities authority. Registration with the SEC as an investment adviser does not imply a certain level of skill or training.

Additional information about Advice & Planning Services is also available on the SEC's website at www.adviserinfo.sec.gov.

Item 2 – Material Changes

A summary of the material changes made to the Portfolio Advisor Wrap Fee Program Disclosure Brochure will be published in a separate document that will be distributed to clients who received the previous version of the Disclosure Brochure.

Item 3 - Table of Contents

Item 2 – Material Changes	2
Item 4 – Services, Fees and Compensation	4
The Portfolio Advisor Program	5
Scope of Services and Applicable Standards.	5
Program Investment Management Services	9
Program Costs	14
Additional Information About the Program	17
Item 5 – Account Requirements and Types of Clients	29
Deposits and Withdrawals	29
Termination	30
Types of Clients	31
Item 6 - Portfolio Manager Selection and Evaluation	31
Client Preferences	31
Review of Third-Party Service Providers and Sources of Investment Advice	36
Methods of Analysis, Investment Strategies and Risk of Loss	37
Performance-based Fees and Side by Side Management	46
Voting Client Securities	46
Other Advisory Services	47
Item 7 – Client Information Provided to Portfolio Managers	48
Item 8 – Client Contact with Portfolio Managers	48
Item 9 – Additional Information	48
Disciplinary Information and Information about Other Financial Industry Activities and Affiliations .	48
Code of Ethics	50
Review of Accounts	50
Client Referrals and Other Compensation	52
Financial Information	52
Item 10 —Requirements for State Registered Advisers	52
Riographies of TIAA FSR Investment Management Personnel	53

Item 4 – Services, Fees and Compensation

The Portfolio Advisor Wrap Fee Program or "**Program**" is an investment advisory service provided through Advice and Planning Services ("**APS**"), a division of TIAA-CREF Individual & Institutional Services, LLC ("**TC Services**", "**we**" or "**our**"). APS sponsors, administers and manages the Program.

Teachers Insurance and Annuity Association of America ("TIAA"), an insurance company, is the direct parent of TC Services (and its APS division). TC Services is registered with the SEC as both an investment adviser and broker-dealer, and is also a member of the Financial Industry Regulatory Authority ("FINRA"). As a broker-dealer, TC Services is involved in the sale of securities, including but not limited to variable annuities, mutual funds and individual equity and fixed income securities. TC Services provides retail brokerage services under the name "TIAA Brokerage Services." As noted above, TC Services provides investment advisory services as a registered investment adviser to individuals under the name Advice & Planning Services.

TIAA provides a variety of services that are material to TC Services' investment advisory activities, including administrative, legal and marketing support. All TC Services personnel are employees of, or contracted through, TIAA. Certain officers and directors of TC Services also serve in similar capacities with other affiliates. TC Services has also entered into an arrangement with TIAA, Federal Savings Bank ("TIAA, FSB"), an affiliated bank wholly owned by TIAA, whereby TIAA, FSB employees formulate the investment advice for the Program (acting under the bank's trust powers). These relationships result in conflicts of interest described throughout this Disclosure Brochure and are mitigated through such disclosures.

This Disclosure Brochure describes the Program, its services and the fees you pay when you enroll in the Program. It also describes the compensation APS and its affiliates receive in connection with the services provided through the Program. You should carefully consider the information set forth in this Disclosure Brochure in your evaluation of, and continued enrollment in, the Program.

The primary points of contact for Program clients are APS's investment adviser representatives available in person or by phone, referred to as Wealth Management Advisers ("WMAs"), and investment adviser representatives available by phone, referred to as Advisory Consultants (WMAs and Advisory Consultants are collectively referred to as "Advisors"). Advisors can recommend that you open, contribute, and/or consolidate (through a rollover or transfer) assets in Program accounts, help you enroll in the Program, and help fulfill client service requests for your Program account. These functions are referred to in this brochure as "Sales, Enrollment and Servicing" activities. Advisors also may help fulfill client service requests regarding the Program, but those requests may also be fulfilled by our TC Services broker-dealer registered representatives ("Brokerage Services Representatives"). Brokerage Services Representatives are acting in a limited capacity, as described in Item 4 under "Sales, Enrollment, and Servicing and the Role of Advisors."

In addition to the Program, APS also provides other managed account and investment advisory services as described in Item 6 under "Other Advisory Services." TIAA and TC Services maintain a website, available at https://www.tiaa.org/relationshipdisclosures, which contains this Disclosure Brochure, the TC Services APS Form ADV Part 2A disclosure brochure, and other important disclosures related to TC Services' products and services.

The Portfolio Advisor Program

The Program is a fee-based discretionary investment program that currently manages customized model portfolios of diversified investments in mutual funds and exchange traded funds ("ETFs") (mutual funds and ETFs are collectively referred to as "Funds"). Funds that are sponsored, managed, advised, distributed, and/or manufactured by TIAA affiliates ("Affiliated Funds") are included in substantially all of the Program's model portfolios. See "Use of Affiliated Funds and Two Levels of Fees" in this Item 4.

The Program offers:

- A carefully constructed portfolio formulated by TIAA, FSB, a bank affiliate of TC Services, and third party advisers, as described in this Item 4 under "Engagement of Service Providers to Formulate Advice." The Program provides clients with the option of selecting from investment preferences such as tax minimization, income, socially responsible investing, among other preferences. The flexibility and choices help to generate more than 1,000 model portfolios, over 14 preference options and 7 levels of risk tolerance.
- A rigorous and purposeful investment process for asset allocation, including automated rebalancing, ongoing management and oversight, as well as detailed tracking and reporting for your Program account.
- An Advisor who is available to help you determine whether the Program is appropriate for you based
 upon your investment need and preferences by making recommendations to open, contribute to, or
 consolidate assets in a Program account, provide assistance regarding your enrollment in the Program,
 and address client servicing requests while enrolled in the Program.
 - Your Advisor is backed by a team of investment professionals. See "Sales, Enrollment, and Servicing and the Role of Advisors" in this Item 4.

The Program may also in the future expand the types of securities included in client portfolios beyond Funds. See "Other Investments" in this Item 4.

Scope of Services and Applicable Standards.

This section describes the scope of the registered investment adviser ("RIA") services provided by APS, the separate broker-dealer services provided by TC Services' broker-dealer division, and the standards of care that apply to each. Under the standards applicable to each, we are required to act in your best interest and not put our interests ahead of yours. There are also important differences in the standards and the way we make money for our services, as described here.

Standard of Care for the Program, Investment Management Services and the Sales, Enrollment and Servicing Activities. TC Services provides the Program, its investment management services and the "Sales, Enrollment and Servicing" activities performed by Advisors for the Program as a registered investment adviser through its APS division, and is subject to a fiduciary duty under the Investment Advisers Act of 1940. This means that APS and its Advisors are required to act in your best interest pursuant to duties of loyalty and care. These duties require us to either avoid or mitigate material conflicts of interest with clients, and to provide Program clients with disclosure of such conflicts of interest. The duties also require us to provide ongoing monitoring of our recommendations to open, contribute or consolidate assets in a Program account as defined in our disclosures and/or agreements for the advisory services. See "Review of Accounts" under Item 9 for information on the review of recommendations.

Additionally, there are two circumstances under which we are subject to a fiduciary duty under the Internal Revenue Code ("IRC"), the Employee Retirement Securities Act of 1974 ("ERISA") and our internal policies in connection with the Program. They are as follows:

- Program Investment Management Services. The investment management services APS provides to Program accounts that are individual retirement accounts ("IRAs") or employer sponsored retirement plans subject to ERISA are subject to an additional fiduciary obligation under the IRC and ERISA, respectively, that require us to avoid certain conflicts of interest and which we do through compliance with applicable Department of Labor Advisory Opinions and Prohibited Transaction Exemptions. We collectively refer to this duty as a "Plan Advice Fiduciary Duty." Generally, a Plan Advice Fiduciary Duty requires us to avoid conflicts of interest. Specifically, we provide an affiliated Fund fee credit to employer sponsored retirement plans and IRAs enrolled in the Program as described in this Item 4 under "Affiliated Fund Fee Credit for IRAs and Accounts Subject to ERISA."
- Retirement Plan Enrollment and Rollover Transfer Recommendations. Recommendations by an Advisor to enroll in the Program through an IRA or employer retirement plan subject to ERISA and/or rollover or transfer assets into or from an IRA or employer retirement plan subject to ERISA are also subject to a fiduciary duty under the IRC and ERISA, respectively. When we provide these recommendations to you, the way we make money creates certain conflicts with your interests. Therefore, we must operate under an impartial conduct standard and internal policies and procedures that require us to act in your best interest and not put our interests ahead of yours. When we provide investment advice to you regarding your plan(s), we are fiduciaries within the meaning of the IRC and ERISA, as applicable. Certain employer retirement plans (like governmental plans) are not covered by ERISA and its impartial conduct standards. However, our internal policies and procedures require us to adhere to the same fiduciary standard and requirements when we provide you with these types of recommendation.

Broker-Dealer Services Provided Outside of the Program. TC Services also provides broker-dealer services through its Advisors and Brokerage Services Representatives. Any securities transactions recommended outside of the Program and its Sales, Enrollment and Servicing are provided to you by TC Services, through its representatives acting in their capacity as registered broker-dealer representatives -- for example, any specific investment recommendations provided for your employer-sponsored plan record kept at TIAA ("Employer Plan(s) at TIAA"). These broker-dealer recommendations and any subsequent implementation are separate and distinct from our registered investment advisory services.

When acting in a broker-dealer capacity, the recommendations provided are subject to a best interest standard under Regulation Best Interest of the Securities Exchange Act of 1934 ("Reg BI"). Reg BI requires us to act in your best interest at the time we make the recommendations without placing our interests ahead of yours. When acting in a broker-dealer capacity, we must also observe high standards of commercial honor and just and equitable principles of trade under FINRA rules. Under a applicable broker-dealer best interest standard, however, TC Services does not assume or agree to any ongoing duties with respect to these recommendations. We do not charge for our recommendations we provide as a broker dealer, although you will bear the underlying costs of the associated investments if you implement the recommendations.

Our Advisors and Brokerage Services Representatives who recommend insurance products, such as annuities and life insurance, also are licensed insurance agents and are subject to standards of care under applicable state laws.

We do not have an investment advisory relationship with you when acting as a broker-dealer or insurance agent. Additionally, we do not have a fiduciary obligation to you when acting as a broker-dealer or insurance agent, except for when we provide certain types of recommendations to you with respect to your retirement plan or IRA at TIAA (specifically, recommendations to enroll in an IRA, IRA and retirement plan rollover

and transfer recommendations and recommendations to annuitize annuity holdings in a retirement plan or IRA at TIAA). We have a fiduciary obligation for these recommendations under other federal laws and our internal policies as set forth in additional disclosures you will receive at the time we provide such recommendations. Separately, a few states impose a fiduciary standard of conduct more broadly on the various types of investment recommendations we make as a broker-dealer to their residents under their respective laws. Additionally, some but not all of our representatives hold the Certified Financial Planner ("CFP") designation and are bound by the CFP Board of Standards Code of Conduct which requires they meet a fiduciary standard when making investment recommendations.

While both the fiduciary duty standard under the Investment Advisers Act of 1940 and the broker-dealer best interest standard under the Reg BI require us to act in your best interest and not put our interests ahead of yours, a fiduciary duty under the Investment Advisers Act is a broader duty, which includes in the case of the Program, among other things, the duty to provide ongoing advice as defined by the scope of the advisory relationship, and as set forth in our disclosures. The scope of our investment advisory services differs depending on the advisory service we provide. Accordingly, the fiduciary duty that extends to our registered investment advisory services is specific to each service and lasts for the duration of the service. Specifically:

- For the Program, the fiduciary duty extends to our recommendation of the account and the portfolio management of your enrolled assets and lasts for as long as you are enrolled in the Program.
- For our financial planning services, the fiduciary duty extends only to the provision of the financial plan or recommendation and ends after an Advisor delivers the report generated in connection with the financial planning service or makes the recommendation. See the TC Services APS disclosure brochure at https://www.tiaa.org/public/pdf/tc adv program.pdf.
- For Broker-Dealer services which include recommendations, the best interest standard applies only at the time of the recommendation.

Representatives Acting in Different Capacities with Same Client. As an example of how our Advisors may act in different capacities, during your interaction with an Advisor you may receive:

- A financial plan in which your Advisor acts as an investment adviser representative;
- A broker-dealer recommendation in which your Advisor acts as a broker-dealer representative (and insurance agent for annuity transactions), such as recommendations on how to allocate assets within your Employer Plan(s) at TIAA; and/or
- A recommendation to enroll in, contribute to or consolidate assets into a Program account, assistance with enrolling in the Program and/or ongoing servicing of your Program account, such as the periodic outreach described below, where your Advisor acts as an investment adviser representative.

This chart below summarizes the types of investment advisory and broker-dealer services we provide:

a fiduciary duty when . . .

We provide investment advisory services under We provide recommendations to you as a brokerdealer service under a best interest standard* when . . .

- We provide you with the *financial planning* services described in a separate disclosure document that you receive with that service.
- You enroll in the *TIAA Portfolio Advisor* or TIAA Personal Portfolio (closed to new investors) wrap fee managed account services and we manage your account on an ongoing basis.
- We recommend that you open, contribute to, or consolidate assets into our TIAA Portfolio Advisor and TIAA Personal Portfolio (closed to new investors) wrap fee programs or the TIAA, FSB's Private Asset Management ("PAM") managed account service.

Note: our affiliated bank, TIAA, FSB, provides investment management services for PAM as a fiduciary under its trust powers (and not as a registered investment adviser) when you enroll in PAM.

- We provide you with an Investment Plan report or otherwise recommend you purchase or sell specific investments within your employer plans record kept by TIAA ("TIAA Plan"), the TIAA IRAs or certain TIAA-CREF Life Insurance Company ("TIAA Life") annuities;
- We recommend you open, contribute or enroll in a brokerage account, self-directed IRA or variable annuity, including consolidating assets via an IRA or plan rollover or transfer;
- We recommend you create a lifetime income stream by annuitizing affiliated variable annuity holdings at TIAA; or
- We recommend you purchase third-party variable universal life insurance policies.

* As described above, our Broker-dealer services involving the recommendations described above for your retirement plan and IRA assets at TIAA also are subject to a fiduciary standard of conduct under other federal laws or our internal policies. Separately, a few states impose a fiduciary standard of conduct more broadly on the investment recommendations described above that we make as a broker-dealer to their residents under their respective laws. Additionally, some but not all of our representatives hold the CFP designation and are bound by the CFP Board of Standards Code of Conduct which requires they meet a fiduciary standard when making investment recommendations.

We also offer broker-dealer educational services through TIAA client facing representatives that do not involve a recommendation and thus are not subject to Regulation Best Interest or a separate fiduciary standard, including:

- Information about investing;
- Information about accounts/products available at TIAA;
- Education and enrollment services, including help with contributions, servicing and distribution needs for your TIAA Plans and other TIAA accounts; and various educational online tools and calculators available through TIAA.org.

For more information on these services see our Form CRS and Reg BI disclosures which can be found at https://www.tiaa.org/relationshipdisclosures.

Program Investment Management Services

This section describes the investment management services provided with a Program account.

Model-Based Portfolios. A variety of model portfolios are used to manage Program accounts. The model portfolios are designed to address a wide range of investor needs, from very aggressive to very conservative risk tolerance levels. Based on a review of your risk tolerance, investment time horizon, preferences for certain investment strategies, investment options that are available through the Program (referred to as "Client Preferences"), and other information that you provide via a Program questionnaire, you will receive an investment strategy proposal ("Program Proposal") containing asset allocation and portfolio investments from a series of model portfolios created for the Program. Your assets will thereafter be managed in accordance with the appropriate agreed upon model portfolio. Adjustments will be made to the model portfolios from time to time, in consideration of changes in market conditions, client needs, and other factors such periodic asset allocation changes-- and in a manner that is consistent with the long-term orientation of the Program as described in Item 6 under "Methods of Analysis, Investment Strategies and Risk of Loss."

Portfolio Investments. The Program currently uses a variety of Funds to build a portfolio of diversified holdings appropriate for clients enrolled in the Program. The Program, at APS' discretion, will use all or a subset of these Funds to construct the model portfolios.

APS selects investments from the universe of Funds (including affiliated Funds) that are available through the fund platform sponsored by the Program's qualified custodian, Pershing, LLC ("Pershing" and the "Pershing Platform"), and that do not include a surcharge on purchases and sales of the Fund or a Fund's share class (the "Universe"). APS may from time to time utilizes Funds or Fund share classes that may become subject to the surcharge (and in those instances APS will, under its current policy, bear the cost). APS has a conflict of interest in deciding to exclude Funds or Fund share classes that would result in additional trading expenses, such as surcharges, because doing so allows APS to minimize its own costs. By imposing this limitation, the Program excludes Funds or Funds' share classes that do in some cases have superior performance, lower expense ratios, and/or other potentially more favorable investment metrics, and would otherwise be selected for use in the Program by TIAA, FSB or the third party adviser if not for this limitation imposed by APS. The Program seeks to mitigate this conflict by disclosing it to you. TIAA, FSB's managed account service, PAM, is not subject to these limitations and may invest in these surcharged Funds.

Share Class Selection. Mutual funds generally offer several share classes to investors. Each share class invests in the same portfolio of underlying securities and has the same investment objectives or policies. However, their fees, expenses, and initial investment minimums differ. When constructing model portfolios, the Program generally uses share classes of mutual funds that are in the Universe and designed for institutional use. Other share classes will be used in the event that: (i) share classes designed for institutional use are not offered by the mutual fund complex, (ii) the Program is ineligible for share classes designed for institutional use based on criteria set forth in the mutual fund's prospectus, or (iii) the Program is not granted a waiver to use share classes designed for institutional use by the mutual fund complex.

Share classes designed for institutional use typically do not charge Rule 12b-1 fees, but may charge other fund fees for distribution, administrative, sub-transfer agency, or shareholder services (referred to as "Other Fund Fees"), as disclosed in each mutual fund's prospectus. In those cases in which the Program invests in share classes that charge Rule 12b-1 fees or Other Fund Fees, APS's policy is to credit any portion of that

fee received by TC Services from the Fund to your Program account as described in this Item 4 under "Rule 12b-1 and Other Fund Fees." Other Program service providers, such as Pershing, receive Rule 12b-1 fees and Other Fund Fees in connection with Funds held in Program accounts independent from TC Services. TC Services does not reimburse these fees that are paid to and retained by Pershing.

The Program will periodically monitor your investments for eligibility to use share classes designed for institutional use within the Universe and convert your shares when operationally feasible at the Program's discretion. The Program does not guarantee that you will always be invested in the most favorable share class offered by a mutual fund complex or that more favorable share classes will be made available in the Program.

Program accounts in employer sponsored retirement plans are subject to ERISA and may be eligible for share classes with lower expenses than share classes designed for institutional use, such as, for example, retirement share classes. TC Services will not utilize share classes that are only available to a select number of accounts in the Program. Accordingly, accounts subject to ERISA may be able to qualify for lower cost share classes outside of this Program.

When you transfer Fund shares into your Program account for any reason, TC Services does not convert or exchange your holdings in these Funds to a more favorable share class except for: (i) specific circumstances related to "Legacy Assets," (as defined and described in this Item 4 under "Securities Transferred into the Program Account for Retention,") and (ii) shares transferred into the Program for sale that would otherwise be selected by the Program at its discretion, for use in your model portfolio, (as described in this Item 4 under "Funding").

Other Investments. APS believes that Funds are appropriate investment vehicles for the Program for reasons of diversification and expense. APS may in the future expand the types of securities included in the Program beyond Funds. APS will provide you with 30 days' advance written notice of any such expansion to the Program.

Additionally, APS may remove current or incorporate new portfolio strategies. APS reserves the right to charge fees for such strategies that differ from the Program Fees described in this Item 4. APS will not remove current or incorporate new strategies into your Program account without your prior agreement.

From time to time, certain strategies may not be available to all clients within the Program. For example, for pilot purposes, some strategies may be made available to employees or a subset of employees of TIAA who are enrolled in the Program. Such employees' Program accounts will otherwise be subject to the same terms and conditions as all clients enrolled in the Program, but based on any promotions or discounts described in this Item 4 under "*Program Fees*."

Use of Affiliated Funds and Two Levels of Fees. Affiliated Funds, such as the TIAA family of mutual funds and the various registered funds of Nuveen Investments, Inc. are included in substantially all of the Program's model portfolios (and the Program accounts of clients following each model), subject to the quantitative and qualitative investment selection and evaluation criteria described in Item 6 under "Methods of Analysis, Investment Strategies and Risk of Loss." As a result of the qualitative component, Affiliated Funds can be selected for inclusion in a model portfolio even if they rank quantitatively lower in terms of performance and/or other investment metrics than unaffiliated Funds. You could own Funds that rank quantitatively higher in terms of performance and/or other investment metrics outside of the Program.

The amount of Affiliated Funds included in your Program account will vary depending on the model portfolio you assign based on your risk tolerance and time horizon, as well as your Client Preferences. If you select a

Client Preference for Affiliated Funds, a significant portion of your Program account will be allocated to Affiliated Funds and could even be comprised solely of Affiliated Funds and cash. Even if you do not select a Client Preference for Affiliated Funds, your selection of certain Client Preferences will still result in a significant allocation to Affiliated Funds, and will, in some instances, result in allocations to Affiliated Funds that are comparable to those in model portfolios in which clients have selected a Client Preference for Affiliated Funds. Clients who prefer not to invest in Affiliated Funds have the option to select the Client Preference for portfolio construction decisions to be sourced exclusively through parties external to TIAA, resulting in a portfolio consisting only of actively managed unaffiliated mutual funds (but not ETFs). For information regarding the target amounts of Affiliated Funds included in the various model portfolios, and a discussion of the use of Affiliated Funds in connection with specific Client Preferences, see "Client Preferences and Affiliated Funds" in Item 6.

The Program Proposal you receive at the time of your enrollment sets forth the initial anticipated asset allocation and lists the corresponding specific investments, including Affiliated Funds, to be used in the management of your Program account. Please note that both the allocation and the specific investments used for your Program account are subject to change. You should refer to your quarterly performance reports (which can be requested from your Advisor) and online account information, which show the current composition of your Program account holdings and specific percentage allocation to each investment in your Program account, including Affiliated Funds.

TIAA and its affiliates have a conflict of interest in selecting Affiliated Funds for Program accounts because TIAA affiliates earn compensation for advisory, distribution and administrative services provided to the Affiliated Funds. This compensation is in addition to the Program Fee, resulting in the receipt of two levels of fees by TIAA and its affiliates. We seek to address the conflict associated with investing Program accounts in Affiliated Funds in multiple ways, including disclosing the conflict of interest in this Disclosure Brochure and providing you with detailed information about your Program account's allocation to individual positions. We also allow you to select a Client Preference for your advice to be sourced from an independent third party and those portfolios will not be populated with any Affiliated Funds. We also seek to mitigate this conflict for IRAs and Program accounts subject to the IRC and ERISA (but not taxable accounts) by providing fee credits to offset the underlying fund affiliated management fees and to all Program accounts by providing reimbursements of Rule 12b-1 fees and Other Fund Fees as described in this Item 4 under "Program Fees." These additional fees may be significant, both in absolute dollar amounts and relative to TIAA's net income, and the receipt and retention by TIAA and its affiliates of these fees creates an incentive for TIAA to cause the Program to select and continue to retain Affiliated Funds over unaffiliated Funds. A more detailed discussion of the additional fees that TIAA and its affiliates receive from the use of Affiliated Funds in the Program and the ways we address this conflict of interest appear throughout this Item 4 and in Item 6 of this Disclosure Brochure. You should consider this additional Fund-related compensation when evaluating the amount and appropriateness of the fees we earn in connection with your Program account and the Program overall.

Rebalancing. The model portfolio used in connection with your Program account will be monitored daily for drift versus target asset allocations and portfolio weightings When market conditions or deposits to and withdrawals from your Program account cause your assets to deviate over time from the model portfolio used to manage your Program account, and such deviations become materially significant (as determined by the Program's parameters), then your Program account will be rebalanced to align it more closely with the model portfolio, provided your Program account meets the minimum balance requirements as described in this Item 4 under "Funding."

The Program's current approach to rebalancing employs an asymmetric rebalancing strategy, *i.e.*, applying a percentage threshold for overweight assets, and a dollar threshold for underweight assets. Rebalancing occurs when assets are deemed materially overweight or underweight (taking into account Fund allocation parameters and the Program account size), and when sufficient cash has been accumulated. The intent of this process is to: participate in the potential momentum for appreciation (avoiding purchases of declining assets); control trading costs; and, provide for efficient and timely rebalancing activity. The Program parameters and methodology for rebalancing are determined by, and may be changed by APS (and TIAA, FSB) at its discretion, and without notice to you.

Investment Restrictions. You may impose reasonable restrictions upon the management of your Program account by requesting, either orally or in writing, that the Program refrain from investing in certain securities or that the Program provide an alternative security in place of a security initially purchased and held within your Program account. For example, you may make a request for the Program to refrain from investing in a particular Fund or to replace a particular Fund held in your Program account. The Program will not accept any restrictions that are inconsistent with the Program's stated investment strategy, guidelines, or philosophy or that are inconsistent with the nature or operation of the Program. Requests for restrictions on the underlying securities held in the Funds will not be considered reasonable and will not be accepted. Any restrictions requested by you are subject to acceptance by APS at its discretion and may cause the performance of your Program account to differ from that of the recommended model portfolio, possibly producing lower overall investment returns. In addition, a restriction will result in a strategy that differs from the Program's model portfolio and may not meet all your Client Preferences, which are described in detail in Item 6. Reasonable restrictions accepted by the Program will be reflected in your Program Proposal (if accepted upon enrollment in the Program) and in all quarterly performance reports (which can be requested from your Advisor) following the acceptance. You may request that existing restrictions be modified or removed by contacting your Advisor.

Securities Transferred into Program Account for Retention. You can transfer into your Program account certain holdings that you already own and wish to retain ("Legacy Assets"). The Program will seek to incorporate Legacy Assets into your Program account but will not always be able to do so. The Program will accept your request to retain these holdings if they: (1) are identified by you upon enrollment within the Program questionnaire or anytime you make a request in writing prior to depositing securities within an existing Program account, (2) meet the Program's investment criteria, and (3) are on the Program's hold eligible list. Legacy Assets may be subject to various position, sector, industry or asset class concentration limits. You should discuss the eligibility of any assets you intend to transfer into a Program account with your Advisor. Legacy Assets will be included when calculating the Program Fee in the manner described in this Item 4 under "Program Fees."

The inclusion of Legacy Assets may cause the performance of your Program account to differ materially from that of the recommended model portfolio, possibly producing lower overall results, and also may impact the Program's ability to rebalance your Program account to align with the recommended model portfolio.

Legacy Assets will be reviewed periodically to ensure that they continue to meet the Program's investment criteria and are on the Program's hold eligible list. Legacy Assets that at any time fail to either meet the Program's investment criteria or are no longer on the Program's hold eligible list will be sold from your Program account or returned to you without notice, without regard to the tax consequences to you or the quality of the asset. Market factors and the nature of the Legacy Assets may impact the timing of the sale of the assets.

You understand and agree that if your Legacy Assets are sold, you may incur taxes or contingent deferred sales charges. You should consult with your tax advisor in this regard, as APS and its Advisors do not provide tax or legal advice. With respect to certain types of securities, factors such as limited liquidity and limited pricing transparency and quotations may impact the price obtained when the Legacy Assets are sold or may potentially delay the sale.

Sweep Vehicle. Cash balances held in your Program account are invested in a sweep vehicle option offered by TIAA Brokerage Services' sweep program and as provided in the Program's Account Application (the "Application"). Currently, the sweep vehicle offered is the TIAA Bank Brokerage Sweep product ("Affiliate Bank Sweep"). TIAA Brokerage Services may change the terms and conditions of the sweep program it makes available to brokerage accounts and therefore to Program accounts, including adding, changing or removing available sweep vehicle options. Your Advisor provides information, but not advice, when educating you on any sweep vehicle options.

When utilizing the Affiliate Bank Sweep, cash balances in your Program account, up to a maximum deposit amount (currently \$248,500) are swept into TIAA, FSB deposit accounts. TIAA, FSB is a federal savings bank and an affiliate of TC Services. See the Affiliate Bank Sweep terms and conditions for more information available at https://www.tiaa.org/public/pdf/Bank_Sweep_TC.pdf. In the event a Program account using the Affiliate Bank Sweep holds a cash balance in excess of the maximum deposit amount, a separate overflow bank sweep product sponsored by Pershing and Reich & Tang Deposit Solutions, LLC – the Liquid Insured Deposits product ("LIDs") – will be used for such excess amounts. Through LIDs, a variety of participating banks unaffiliated with TIAA receive deposits. See the LIDs terms and conditions for more information available at https://www.tiaa.org/public/pdf/pershing_fi_termsconditions.pdf. TIAA, FSB pays TC Services a flat fee for each Program account invested in the Affiliate Bank Sweep.

TIAA, FSB, as well as other banks that receive deposits through the bank sweep vehicles, earn net income from the difference between the amounts that the bank pays to clients and the income the bank earns on loans, investments and other assets.

Use of the Affiliate Bank Sweep presents a conflict of interest for APS because TC Services earns compensation (a per account fee) for each account that uses the Affiliated Bank Sweep and because TIAA, FSB earns compensation on deposits it accepts through the Affiliate Bank Sweep. The use of the Affiliate Bank Sweep for the Program also presents a conflict of interest for APS because we have an incentive to use this product in the Program even when other options could generate a higher yield for you. Additionally, TIAA, FSB sets the interest rates for deposits through the Affiliate Bank Sweep and interest rates paid on deposits in the Affiliate Bank Sweep will vary from, and may be lower than, interest earned on other sweep vehicles offered outside the Program. Further, TIAA, FSB is not obligated to pay Program clients the same rate as paid to its other customers and the interest rate paid to Program clients may be lower than that paid to other bank customers based on the terms of service being offered. The interests of TIAA, FSB with respect to the setting of this rate are different from yours – the higher the deposit amount and the lower the interest rate paid, the more TIAA, FSB earns.

APS seeks to address the conflicts of interest associated with the use of Affiliate Bank Sweep in the Program by excluding cash balances held in your Program account when calculating the Program Fee, by providing disclosure of these conflicts in this Disclosure Brochure, and by targeting your portfolio's allocation to cash at 1%. (Note, however, the amount of cash held in your Program account can exceed or drop below the 1% target cash allocation based on market fluctuations, when funds you have deposited into your Program account are awaiting investment, and/or in instances where you direct us to liquidate securities in your

Program account. Program accounts will be rebalanced to achieve a 1% target cash allocation once certain parameters are reached, as described in this Item 4 under "Rebalancing".)

Current rates for the Affiliate Bank Sweep can be accessed at https://www.tiaa.org/public/invest/financial-products/brokerage-accounts/interest-rate-disclosure or by calling (800) 927-3059. Sweep vehicles available outside of the Program can pay higher rates.

Program Costs

Program Fees. You will be charged an asset-based "**Program Fee**" for participation in the Program according to a fee schedule that varies depending on when the Program account is opened. The Program Fee may change upon 30 days' written notice to you and you will be deemed to have consented if you remain enrolled in the Program subsequent to the notice period.

Fee Schedules: This Disclosure Brochure describes only the fee schedule applicable to new Program accounts that meet all of the following conditions: (i) were opened on or after July 3, 2017, and (ii) were not held directly by a pre-existing Program account holder or for the benefit of a spouse, parent, child or anyone else residing at the same address as a pre-existing Program account holder, subject to the notice requirement and other householding rules described here.

Portfolio Advisor Blended Fee Schedule	
Value Bracket	Annual Fee as %
First \$150,000	1.15%
Next \$150,001 - \$300,000	1.00%
Next \$300,001 - \$750,000	0.85%
Next \$750,001 - \$1,000,000	0.75%
Next \$1,000,001 - \$1,500,000	0.70%
Next \$1,500,001 - \$3,000,000	0.65%
Next \$3,000,001 - \$4,000,000	0.60%
Next \$4,000,001 - \$5,000,000	0.50%
Over \$5,000,000	0.40%

This blended fee schedule is used to calculate your Program Fee by weighting your aggregate Program account value in accordance with the value brackets and weights shown. As the market value of a Program account reaches a higher breakpoint, the assets within that higher breakpoint category are charged a lower rate. This results in a blended fee rate that will be charged to the client's Program account.

If your Program account does not meet the foregoing conditions, please speak with your Advisor or consult your Advisory Agreement for the fee schedule applicable to your account.

Cash Balances: Irrespective of the applicable fee schedule, the Program includes cash balances when calculating the aggregate value of your Program account for purposes of meeting fee breakpoints, but excludes cash balances held in your Program account when calculating the Program Fee.

Householding Rules: You should notify your Advisor if you wish to apply "householding" rules to your accounts for fee reduction purposes. Householding is an aggregation process that can help lower your

Program Fee rate by adding together the amounts in your household members' Program accounts to achieve higher account values (and thus more favorable breakpoints) than available to an individual Program account. Program accounts held directly by you, or for the benefit of a spouse, parent, child or anyone else residing at the same address as you, qualify for householding. The Program Fee breakpoints are set forth in the fee schedules above based on the Program account value. Householding of related Program accounts will result in the receipt of a single combined quarterly performance report per household. By householding related Program accounts, you authorize APS to share your Program account performance information with other members of your household. Householding of related Program accounts does not authorize others in your household to conduct transactions in your Program account. In the event you would like to discontinue your participation in householding, please notify your Advisor.

Other Fees and Expenses. Your Program account will be subject to the following additional fees and expenses, when applicable.

Two Levels of Fees and Expenses - Costs and Expenses of Underlying Funds: The Program Fee does not include any fees, costs and expenses inherent in the underlying Funds, including investment advisory, administrative, distribution, transfer agent, custodial, legal, audit, contingent deferred sales charges or redemption fees and other customer fees and expenses related to investments in these products which are described in the relevant prospectus or similar disclosure documents. Consequently, this means that, as a participant in the Program, you will bear two levels of fees and expenses. You will bear directly the Program Fee and also bear indirectly the Fund fees and expenses as a Fund shareholder, except where expressly qualified in connection with IRAs and accounts subject to ERISA that are enrolled in the Program. See "Affiliated Fund Fee Credit – for IRAs and Accounts Subject to ERISA" in this Item 4. The fees and expenses of the Program, along with the fees and expenses that will be borne by each Program client as an investor in the underlying Funds, may be lower or higher than those imposed by other investment programs offered by TIAA affiliates.

As described in this Item 4 under "Use of Affiliated Funds and Two Levels of Fees," TC Services and certain other TIAA affiliates receive compensation for services they provide to Affiliated Funds, including but not limited to advisory, distribution and administrative services. Such Fund-related compensation will be in addition to the Program Fee and is a conflict of interest. You should consider this additional Fund related compensation when evaluating the amount and appropriateness of the fees we earn in connection with your Program account and the Program.

Rule 12b-1 and Other Fund Fees: Among the fees you bear indirectly as a Fund shareholder are Rule 12b-1 fees and Other Fund Fees that are paid by certain share classes of mutual funds and by ETFs held in Program accounts. The Program's policy is to credit any portion of these fees received by TC Services from the Fund to your Program account. Other service providers, such as Pershing, receive Rule 12b-1 fees and Other Fund Fees in connection with Funds held in Program accounts independently from APS and APS does not reimburse these fees to Program clients. Please consult the prospectus and statement of additional information of a particular Fund for more information concerning these fees. See "Share Class Selection" in this Item 4 for more information on the share classes used in the Program.

Other Costs: The Program Fee is a "wrap fee" that covers the fees and costs associated with providing you with an Advisor, managing your Program account, developing the Program's advice, custody of Program assets, trade execution through TIAA Brokerage Services, client reporting, and redemption fees resulting from mutual fund trades.

The Program Fee does not include costs associated with additional services requested by you or other brokerage account transactional fees, which are provided or performed by TC Services' clearing broker and the Program's qualified custodian, Pershing. They include, but are not limited to - wire or electronic fund transfer fees, overnight delivery fees, duplicate statement fees, account transfer fees, reorganization fees, administrative fees, agent servicing fees, direct registration fees, dividend reinvestment fees, extension fees, foreign dividend/custody/settlement fees, returned check fees, share class exchange fees, special product fees, stop payment fees, termination fees, section 31 fees, voluntary reorganization fees, or any contingent deferred sales charges that may be incurred upon the sale of a security transferred into the Program account at your request. A schedule of these fees is available in your current Brokerage Agreement (as defined and Agreements"), described in Item under "Program which can find https://www.tiaa.org/public/pdf/BrokerageAccountCustomerAgreement.pdf. For certain administrative and transactional account fees that are charged by Pershing, TIAA Brokerage Services will apply an incremental mark-up. TIAA Brokerage Services may change the fee schedule in the Brokerage Agreement, subject to applicable notification requirements.

Payment, Waivers and Credits. In certain circumstances, and at our discretion, we may reduce or offset your Program Fee, or rebate other fees and expenses that you pay in addition to the Program Fee.

Payment of the Program Fee: The Program Fee is payable quarterly in arrears. It is calculated by multiplying the daily trade date market value of the Program account by the pro-rata daily Program Fee (the "daily fee calculation") and summing the value of the daily fee calculations during the preceding quarter. The Program determines market value in reliance upon published net asset values and prices reported on national exchanges. Should neither be available for a particular security, the Program will price the relevant security based upon fair valuation principles that estimate what the security would bring upon sale. The Program Fee will be deducted from the Program account on a quarterly basis, generally within thirty business days after each quarter's end, by charging cash balances or redeeming Fund shares within the Program account. The redemption of Fund shares is a taxable event for non-tax advantaged accounts of Program clients. The Program Fee for partial quarters (i.e., upon the inception or termination of a Program account) will be prorated.

Waivers and Discounts: The Program reserves the right to reduce or discount the Program Fee at its discretion or to offer other promotions, including for promotional events that may result in complimentary or reduced advisory fees for new clients, to current clients for referrals, for clients making deposits above a certain size, for TIAA employees, and/or for family members of TIAA employees. These promotions may include additional Program account services, products, bonus payments and other forms of incentive. These promotions may create a conflict of interest in requiring you to maintain certain levels of assets managed through the Program in order to become eligible to receive an incentive, bonus or additional compensation. We address these conflicts by disclosing the terms and conditions of any such promotions to you. Other than as noted, the Program Fee is not negotiable.

Affiliated Fund Fee Credit – for IRAs and Accounts Subject to ERISA: For IRAs and accounts subject to ERISA that are enrolled in the Program, the Program Fee will be reduced by a fee credit for revenue that TIAA affiliates receive and retain as a result of assets invested in Affiliated Funds. The fee credit will equal the sum of (i) the investment management portion (including advisory and sub-advisory fees) of the Affiliated Fund's expenses that TIAA affiliates retain in connection with the Affiliated Funds held in the Program account, and (ii) the administrative and other fees that TIAA affiliates retain from such Affiliated Funds that are included in the Affiliated Fund's expenses. The fee credit amount will generally exclude any reimbursable expenses paid by the Affiliated Funds to TIAA affiliates which are reasonable direct expenses of the TIAA affiliates. This includes expenses such as salaries of affiliated personnel attributable to work

performed for the Affiliated Funds held in the Program account and third party custodial fees and transfer agent fees associated with the Affiliated Funds held in the Program account. The fee credit amount will vary depending upon the particular Affiliated Fund employed as the amount of fees subject to the fee credit differ from Affiliated Fund to Affiliated Fund. While the fee credit reduces the Program Fee paid by you resulting in lower investing costs (than if you were to bear those costs in addition to the Program Fee) and a corresponding increased share of any investment returns, a reduced Program Fee does not assure portfolio gains as portfolio performance ultimately is dependent on the performance of the combination of Funds selected for investment as well as the performance of the underlying investments within each Fund.

Investing Directly in Program Securities: In most cases, you are able to invest directly in the Funds purchased within the Program, without enrolling in the Program and incurring the Program Fee, but in that event, you would not receive the advice available to Program clients and may not be eligible to purchase or retain the same share classes in which the Program invests. The Program may cost you more or less than purchasing the services provided under the Program separately depending in part upon the size of your Program account, subsequent deposits and withdrawals, the frequency of your transactions and the cost and availability of similar advice available outside of the Program. The Program does not include advice on assets held outside of the Program, nor does it monitor assets you hold outside of the Program.

Additional Information About the Program

Engagement of Service Providers to Formulate Advice. APS engages a TIAA affiliated entity, TIAA, FSB, as well as third party advisers to formulate advice for the Program, which APS oversees as described in Item 6 under "Review of Third Party Service Providers and Sources of Investment Advice." TIAA, FSB also handles the purchase and sale of securities for Program accounts. APS has entered into an agreement with TIAA, FSB, for these services, and APS pays TIAA, FSB an annualized rate of 6.25 basis points based upon the amount of Program assets advised by TIAA, FSB. Additionally, APS engages a third party adviser, for a flat annual fee of \$60,000 to determine the mutual fund selections in your Program account, should you select a Client Preference for advice sourced from a third party, as described in Item 6 under "Description of Client Preferences – Sources of Investment Advice" ("External Adviser"). An unaffiliated third party provider is also engaged and compensated by TIAA, on behalf of APS and other affiliates, to provide asset allocations for use throughout the TIAA organization ("Allocation Provider"). If you select a Client Preference for advice sourced from a third party, your allocations will be developed by the Allocation Provider and your funds will be selected by the External Adviser.

After payment of these fees and other Program expenses, APS receives the remainder of the Program revenue. As described in this Item 4 under "Sweep Vehicle," TIAA, FSB will also receive compensation as part of the Affiliate Bank Sweep. Other TIAA affiliates serve as the investment advisors to the Affiliated Funds and receive fees from each such Fund for their investment management services, as described in this Item 4 under "About TIAA."

Engagement of Operational Vendor. The Program relies on a financial digital solutions vendor for certain operational and trading functions. TIAA has an ownership interest in this vendor, which creates a conflict of interest, because TC Services has an incentive to select this vendor and has an incentive to continue using this vendor for the Program. TC Services addresses this conflict by disclosing it to clients and by subjecting the vendor to due diligence. Additionally, clients are not directly responsible for payments to this vendor.

Sales, Enrollment and Servicing and the Role of Advisors. Sales, Enrollment and Servicing for the Program includes recommendations by Advisors to open, contribute to or consolidate assets (through a rollover or transfer) into a Program account, as well as enrollment assistance and fulfillment of client administrative service requests for the Program account. Recommendations to open, contribute to or consolidate assets (through a rollover or transfer) into Program accounts typically occur alongside or following the delivery of our financial planning services, which are described in a separate disclosure brochure that is delivered to you at or before the time of such services, and are made for clients with sufficient assets where enrollment in the Program can help meet the client's general investing and financial planning goals and is in the client's best interest.

An Advisor will meet with you to assess whether the Program is in your best interest, based on your investment needs and preferences, objectives and financial circumstances. Typically, the Advisor will consider the following objectives and circumstances: product minimums (whether you can meet the minimum investment requirement), fees and expenses (the advisory fee and underlying expenses for the Program account), tax implications (potential tax consequences related to the Program account), level of service needed (your desire to control your accounts or forego discretion), appropriate strategy (the type of strategy you would receive in the Program account based on your age, net worth, needs and preferences), other alternatives (other account types that may be appropriate for you) and, in the case of a rollover from an employer sponsored plan any lost benefits in moving assets to the Program account. Based upon the information provided, and where appropriate, Advisors can recommend that you open, contribute assets to or consolidate assets in a Program account.

Advisors perform Sales, Enrollment and Servicing for the Program based on your expressed investing needs and financial planning goals. This occurs upon the initial recommendation and enrollment in the Program or at a point in the future when you review your Program account with your Advisor. Advisors are providing this service on behalf of TC Services as a registered investment adviser. While Advisors are able to assess your goals and make a recommendation to enroll and remain in the Program, as well as assist you with enrollment and servicing, Advisors do not provide advice on how to invest assets within the Program nor manage the assets enrolled in the Program. The Program's advice is generated for APS by TIAA, FSB, which provides investment, management and portfolio monitoring services for the Program account pursuant to your risk tolerance, time horizon and Client Preferences (as described in Item 6).

Advisors also perform general support services such as transmitting documents including account opening, closing and disclosure documents, obtaining customer signatures, and other administrative and support services as part of the Sales, Enrollment and Servicing for the Program.

TC Services has a conflict of interest when providing Sales, Enrollment and Servicing for the Program because the greater the market value of assets in your Program account, the more TC Services will receive in fees. Additionally, WMAs receive compensation for recommending the Program and therefore have an incentive to encourage you to open and increase assets in a Program account. Advisory Consultants can receive compensation for gathering and retaining assets in Program accounts. See "Compensation of WMAs, Advisory Consultants and other TC Services' Representatives" in Item 4 for more information on Advisors' compensation. These conflicts of interest create an incentive for TC Services and Advisors to recommend that you open, contribute to or consolidate assets in Program accounts. We mitigate these conflicts by disclosing them to you and by requiring that all recommendations to open, contribute or consolidate assets into a Program account be reviewed in accordance with applicable regulatory standards, to determine whether they are appropriate for the client's financial needs.

We have an incentive to, and typically do, recommend that clients invest in a Program account over a brokerage account sponsored by TC Services when the client is eligible for both. More revenue is generated for TIAA overall, and for TC Services in particular, when clients accept our recommendation to invest in a Program account, rather than a brokerage account, because the asset-based advisory fee you pay on a Program account likely is greater than the total commissions, fees, charges and other income that TC Services and other TIAA entities can earn when you invest via a brokerage account.

TC Services could also recommend, and clients may be eligible to participate in, the other advisory services. See "Other Advisory Services" under Item 6 for a description of these services and the conflicts of interest associated with recommending one service over another.

To enroll in the Program, an Advisor will meet with you in person or by phone to discuss your needs and collect and assess pertinent information. As part of the enrollment, you must complete a Program questionnaire that identifies your risk tolerance level, time horizon and other information about your investment needs. The information that you provide in the Program questionnaire is relied upon in selecting the appropriate model portfolio for your Program account and will continue to be relied upon in the ongoing management of your Program account. You are responsible for the accuracy of all information provided to the Advisor in connection with the Program.

The Program questionnaire also allows you to specify preferences among different investment strategies and options, which are described in Item 6 under "Client Preferences."

An Advisor will serve as your primary point of contact with respect to your participation in the Program as noted above. You should inform your Advisor of any changes to the information you provided in the Program questionnaire or your circumstances that could impact the management of your Program account, such as a change in risk tolerance, time horizon, investment objective or any Client Preference. APS will inquire with you annually to determine whether your investment objectives, risk tolerance and Client Preferences have changed relative to your overall financial needs identified through the financial planning services and, if they have, can work with you and APS to change the portfolio in which you are invested or, where appropriate, terminate your enrollment in the Program.

APS has hired TIAA, FSB as sub-advisor for the Program and oversees and monitors its performance. Advisors do not, however, monitor your individual account performance as part of the Sales, Enrollment and Servicing for the Program. APS will generate quarterly performance reports (which can be requested from your Advisor) for your Program account.

Brokerage Services Representatives may also fulfill service requests for your account. Brokerage Services Representatives are limited to taking your direction for certain actions related to your account, including, but not limited to, deposits and withdrawals, changes in beneficiaries and address changes. Brokerage Services Representatives are not Advisors (*i.e.*, they are not acting in an advisory capacity) and therefore cannot advise you on your account or on the impact of any actions you direct for your Program account. Brokerage Services Representatives do not promptly share information regarding any such actions with your Advisor. If you have a change in circumstances that is prompting you to take action on your Program account please contact an Advisor.

Compensation of WMAs, Advisory Consultants and other TC Services' Representatives.

WMAs, Advisory Consultants and other TIAA representatives will receive compensation as a result of assisting you. Their compensation is comprised of a salary and annual variable bonus (collectively, "Compensation"). The amount of the annual variable bonus is calculated differently for WMAs, Advisory Consultants and other TIAA representatives, and is described in detail below.

Compensation of WMAs. TIAA's compensation philosophy aims to reward WMAs with appropriate compensation for sales of products and services available through TIAA, the maintenance of client relationships and associated retention of assets in products and services at TIAA. WMAs are paid the same under the annual variable bonus for gathering and retaining assets in retirement products and services available through TIAA (specifically, Plans and the TIAA IRA and IS IRA) as they are for gathering and retaining assets in TIAA Managed Accounts. Bonus compensation differs for other products, including life insurance, long-term care insurance, self-directed taxable brokerage accounts and after-tax annuities.

The way the bonus is calculated and the differences in compensation among products and services are described below. The annual variable bonus for WMAs is determined based on Growth and Retention Metrics as well as Behavior-Based Measures. The compensation paid under the Growth and Retention Metrics accounts for sixty percent (60%) of the annual bonus on average. It measures and awards *net flows of client assets* into TIAA products and services and *retention of client assets* in TIAA products and services as described below.

Net Flows of Client Assets into TIAA Products and Services: The Annual Growth Metric measures and awards the amount of external asset inflows to TIAA products and services by clients serviced by the WMA as reduced by the amount of asset outflows by such clients.

- Inflows of assets is measured as the dollar amount of external assets consolidated in Plans, the TIAA IRA, IS IRA, TIAA Managed Accounts, self-directed taxable brokerage accounts and after-tax annuities. Inflows of assets into life insurance products and long-term care products are measured differently. For permanent and term life insurance, inflows are calculated as a percentage of the death benefit under the policy purchased. More credit is given to sales of permanent life insurance than to sales of term life insurance due to the fact that term life insurance does not have a cash value and is issued for a set period of time. For long-term care insurance, inflows are calculated as a multiple of premiums paid.
- Outflows of assets are measured by the dollar amount of assets flowing out of TIAA from Plans, the TIAA IRA, IS IRA and TIAA Managed Accounts. The outflows measure does not include outflows from self-directed taxable brokerage accounts, after-tax annuities, life insurance and long-term care insurance.
- Inflows and outflows resulting from client referrals to TIAA Bank for deposit and lending products and referrals to state tuition savings plans administered by TIAA-CREF Tuition Financing, Inc. are not counted for purposes of the net flows.

Retention of Client Assets: The Annual Retention Metric measures and awards the amount of client assets serviced by the WMA that are retained in Plans, the TIAA/IS IRA, TIAA Managed Accounts, after-tax annuities, life insurance and long-term care insurance in premium paying phase. Assets retained in self-directed taxable brokerage accounts, bank accounts at TIAA Bank and college savings accounts administered through TIAA-CREF Tuition Financing, Inc. are excluded from the calculation.

The Growth and Retention Metrics create conflicts of interest as a result of the incentives they create for WMAs. The net flows metrics give WMAs an incentive to recommend that clients transfer external assets into products, services and accounts at TIAA. The retention metrics give WMAs an incentive to recommend

that clients continue to maintain assets in Plans at TIAA, the TIAA IRA, IS IRA and TIAA Managed Accounts. WMAs also have an incentive to recommend that clients continue to maintain assets in taxable Managed Accounts over self-directed taxable brokerage accounts. Additionally, the retention metrics give WMAs an incentive to continue to maintain assets in after-tax annuities, life insurance products and long-term care products. WMAs receive more credit for permanent life insurance sales than term life insurance. While both permanent and term life insurance provide for a death benefit, they are structured differently with permanent life insurance lasting for your lifetime and term life insurance lasting for a set period of time. We place greater emphasis on permanent life insurance, which has higher fees and expenses than term life insurance due to the fact that term life insurance does not have a cash value and is issued for a set period of time. This presents a conflict of interest because recommending permanent life insurance results in higher compensation to the WMA and higher costs to you. We address these conflicts by disclosing them to you and requiring that recommendations to purchase TIAA products, services and accounts be reviewed by supervisory personnel, in accordance with the applicable regulatory standards, to determine whether they are appropriate for clients' financial needs.

Behavior-Based Measures account for forty percent (40%) of the annual variable bonus on average and assess how effectively the WMA has performed in his or her role. Seventy percent (70%) of the measures are subjective assessments that take into consideration customer satisfaction based on client survey results and adherence with TIAA values. Financial results include an assessment of the number of times the WMA's client base has taken any of the following actions: (1) the transfer of assets from one type of account at TIAA to another (for example, rollovers from a Plan to an IRA), (2) implementation of the recommendations made in retirement advice sessions for Plans or TIAA/IS IRA through a service provided to the client at no additional charge, or (3) annuitization of holdings within a Plan or a TIAA/IS IRA. Referrals to TIAA affiliates for non-advisory services account for ten percent (10%) of the Behavior-Based Measures and assess the number of times, based on referrals by the WMA, the WMA's client base enrolled in deposit accounts or used trust and endowment services offered through TIAA, FSB or enrolled in state education savings plans administered by TIAA-CREF Tuition Financing, Inc. The referrals measure also assesses the number of times the WMA refers clients to a TC Services financial consultant, Advisory Consultant or Wealth Planning Specialist and/or the number of times an existing WMA client refers new clients who do not participate in Plans at TIAA to the WMA. The client Solutions Activities and Referrals assessments are made by comparing the WMA's efforts to the efforts of other WMAs.

The Client Solutions Activities and Referrals measures create a conflict because WMAs have an incentive to: (1) recommend that their clients retain assets at TIAA, transfer or rollover assets from one account at TIAA to another, implement retirement advice, and/or annuitize holdings within a Plan or TIAA IRA; and (2) use banking deposit accounts, trust and endowment services and educational savings and charitable giving accounts from TIAA affiliates. It also incents WMAs to do so more often than the WMA's peers as the WMA's efforts are compared against other WMAs' efforts. The measures also create a conflict because TIAA and its affiliates benefit through receipt of additional compensation when clients take action to retain and consolidate assets at TIAA or use products available through TIAA and its affiliates as a result of the WMA's recommendations and referrals. We address these conflicts by disclosing them to you and requiring that recommendations to purchase TIAA products, services and accounts be reviewed by supervisory personnel, in accordance with the applicable regulatory standards, to determine whether they are appropriate for clients' financial needs. Additionally, the recommendations delivered in retirement advice sessions concerning the investments in Plans and mutual funds and annuities from TIAA affiliates available through the TIAA/IS IRA are made by an independent third party.

The amount of the annual variable bonus relative to salary. While salaries are set according to schedules, the size of a WMA's annual variable bonus is not limited, and the percentage of compensation represented by the annual variable bonus can be significantly higher than the salary portion of compensation.

The size of the annual variable bonus, relative to the salary paid to WMAs, depends on how successful the WMA is in gathering and retaining client assets in products and services at TIAA. The percentage of compensation represented by the annual variable bonus typically increases with the seniority of the WMA with the most successful WMAs advancing to more senior roles. The portion of the annual variable bonus attributed to the WMAs compensation typically differs in magnitude as follows.

- WMAs with the title of "Senior Wealth Management Advisor" typically earn a larger percentage of their compensation through the annual variable bonus than through their salary. On average, Senior Wealth Management Advisors are estimated to earn approximately three-quarters of their compensation through the annual variable bonus but there is no cap.
- WMAs who work on their own, without leading a team of WMAs, typically earn slightly less than half of their Compensation through the annual variable bonus.

If you are not sure of your WMA's title or role, please contact your WMA for more information.

Compensation of Advisory Consultants. In assessing individual and team performance for purposes of the annual variable bonus, TIAA primarily considers quantitative metrics related to financial results such as gathering, and retaining client assets across various TIAA Solutions. Other factors such as use of a range of investment tools with clients, client survey results, service quality, leadership, teamwork and adherence to company policy and regulatory standards are also considered in assessing individual and team performance.

The financial results measures include credit for gathering client assets in appropriate TIAA Solutions and rewards Advisory Consultants for successful enrollments or sales equally regardless of the type of TIAA Solution, with the exception of insurance products. Advisory Consultants are also rewarded for educating clients about different types of accounts at TIAA, contribution increases, and asset consolidation options.

Financial results also include an assessment of the number of times the Advisory Consultant's client base has taken any of the following actions: (1) the transfer of external assets to TIAA and the transfer of assets from one type of account at TIAA to another (for example, rollovers from a Plan to an IRA), (2) implementation of the recommendations made in retirement advice sessions for Plans or TIAA and IS IRA through a service provided to the client at no additional charge or, if the client chooses, a quarterly rebalancing service offered for a fee; and (3) annuitization of holdings within a Plan or a TIAA IRA and IS IRA; and utilization of the income simulation feature of certain TIAA annuities, also known as the income test drive. It also includes a separate assessment of the number of times the Advisory Consultant delivers reports to clients relating to retirement income. The financial results assessments are made by comparing the Advisory Consultant's efforts to the efforts of other Advisory Consultants.

Financial results also measure and award the Advisory Consultant for assets that are retained at TIAA. Advisory Consultants are also compensated for successful client referrals by the Advisory Consultant to other groups at TIAA for other products and services.

These metrics create conflicts of interest as a result of the incentives they create for Advisory Consultants. They give Advisory Consultants an incentive to recommend that clients transfer or rollover external assets into products, services and accounts at TIAA. The retention metric gives Advisory Consultants an incentive to recommend that clients continue to maintain assets at TIAA, and they may recommend you do so.

These metrics also create a conflict of interest relating to recommendations of insurance products. Where an Advisory Consultant solicits the purchase of a life insurance product, the Advisory Consultant receives more credit for permanent life insurance sales than for term life insurance sales and therefore, has an incentive to recommend permanent life insurance sales over term life insurance. While both permanent and term life

insurance provide for a death benefit, they are structured differently with permanent life insurance lasting for your lifetime and term life insurance lasting for a set period of time. We place greater emphasis on permanent life insurance, which has higher fees and expenses than term life insurance due to the fact that term life insurance does not have a cash value and is issued for a set period of time. The greater weighting for permanent life insurance with higher fees and expenses than term life insurance presents a conflict of interest because recommending permanent life insurance results in more credit, and thus more compensation, for the Advisory Consultant and higher costs to you. We address the conflicts created by the Advisory Consultants' compensation arrangements by disclosing them to you and by requiring that recommendations to purchase TIAA products and services by Advisory Consultants be reviewed, in accordance with the applicable regulatory standard, to determine whether they are appropriate for a client's financial needs. Additionally, recommendations delivered in retirement advice sessions concerning the investments in Plans and mutual funds and annuities from TIAA affiliates available through the TIAA IRA and IS IRA are made by an independent third party.

Consultants. Where appropriate, other client facing representatives associated with TC Services, including field consultants, national contact center financial consultants, and individual financial consultants (collectively, "Representatives"), acting in their capacity as broker-dealer representatives, refer clients with more complex investment needs to WMAs. Representatives also refer clients to the Advisory Consultants. Whether a referral results in clients enrolling in other products and services offered through TIAA is one factor among several other qualitative and quantitative factors that TIAA will consider in determining the referring employee's annual variable bonus. These compensation arrangements create a conflict of interest by incentivizing these individuals to refer you to WMAs and Advisory Consultants. We address this conflict by disclosing it to you and requiring that transactions recommended to purchase our products and services by WMAs and Advisory Consultants be reviewed by supervisory personnel, in accordance with the applicable regulatory standards, to determine whether they are appropriate for the client's financial needs.

Representatives may also refer you to a licensed life insurance specialist. These specialists perform various functions, including assisting clients with life insurance needs, such as term life, whole life, universal and variable universal life products and fixed and certain variable annuities. The annual discretionary bonus for these life insurance specialists is assessed using a scorecard that measures qualitative and quantitative performance criteria, including client service excellence, product proficiency, and financial results. Financial results include sales, recurring premiums, and life insurance contracts issued.

Managers of TC Services' Financial Professionals. Managers of WMAs, Advisory Consultants and other TIAA representatives described above are compensated based on qualitative metrics, such as their leadership abilities (which include training, monitoring, and oversight), as well as quantitative metrics, such as the performance (financial or otherwise) and productivity of the financial professionals they supervise. This compensation arrangement creates a conflict of interest by incentivizing managers to encourage those they manage to gather, retain and consolidate client assets in products and services at TIAA. We address this conflict by disclosing it to you and by supervising the managers.

Compensation of TIAA, *FSB Personnel*. Additionally, if you enroll in PAM, the Portfolio Managers and Trust Administrators that will assist you are compensated by TIAA, FSB in accordance with TIAA, FSB's compensation plan. Portfolio Managers and Trust Administrators do not make referrals to TC Services.

Other Payments. In certain instances, Funds (through their investment managers or other affiliated companies) will sponsor educational events and pay expenses of Advisors attending those events. TIAA policies require that the training or educational portion of these events comprise substantially all of the event.

TIAA Personnel. TIAA and its affiliates have intercompany arrangements whereby one or more affiliates share personnel for one or more purposes. Any such shared personnel are subject to the policies and procedures of the applicable affiliate when acting on its affiliate's behalf. Any such shared personnel will have potentially conflicting interests when playing these various roles. For example, such personnel will not necessarily be devoted exclusively, or even predominately, to TC Services.

Financial Planning Services and Asset Allocation Considerations. Prior to enrolling in the Program clients typically receive point-in-time non-discretionary financial planning services, which are registered investment adviser services described in the TC Services Advice and Planning Services Disclosure Brochure. As a complement to the financial planning services, clients also receive an Investment Plan with specific investment recommendations sourced from a third party for your Employer Plans held at TIAA and/or the TIAA/IS IRA if you hold one (collectively, your "Retirement Plan Account(s)"). This advice is only available for your Employer Plans at TIAA where the plan sponsor has authorized TIAA to provide this advice to you. TC Services acts as a broker-dealer when providing the recommendations to you (as described in Item 4 under "Scope of Services and Applicable Standards"). These services are offered separately and are not part of the Program services, but may help inform your overall financial planning strategy, including investing needs and risk capacity.

If you seek to balance your risk exposure among your various accounts by assigning more aggressive risk tolerance levels to certain accounts and more conservative risk tolerance levels to other accounts in furtherance of an overall asset allocation informed by your overall risk tolerance, you are solely responsible for monitoring and adjusting any such risk balancing strategy and the associated asset allocation.

Optional Completion Portfolio Service

Enrollment in the Completion Portfolio Service was no longer available for Program accounts as of May 14, 2021. Program accounts that had enrolled in the Completion Portfolio Service prior to that date are handled as outlined in this Disclosure Brochure and in accordance with the Completion Portfolio Terms and Conditions.

The Completion Portfolio Service was designed to help you balance your overall risk exposure by allowing you to establish a risk tolerance level for your Program account that takes into consideration, at the time you enroll in the Completion Portfolio Service, your overall expressed risk capacity as well as the risk level of your Retirement Plan Account(s). To remain balanced while enrolled in the Completion Portfolio Service, you must contact your Advisor to request an adjustment to the risk level associated with your Program account upon any material changes to the composition or value of the Retirement Account(s). See the Completion Portfolio Terms and Conditions for more information. Because the asset allocations in your Retirement Plan Account(s) are used to determine the risk tolerance level for your Program account, and TIAA has no authority or responsibility for managing or rebalancing assets in your Retirement Plan Account(s) (nor any other accounts you hold outside of your Program account), you are responsible for maintaining those asset allocations or instructing your Advisor to adjust the risk level of the Program account.

Enrollment in the Completion Portfolio Service requires that you rebalance the assets in your Retirement Plan Account(s) when necessary to ensure the risk exposure of your Plan Account(s) continues to align with your risk balancing approach, and that you monitor and adjust your risk balancing approach as needed. For your convenience, APS provides information in your quarterly performance reports (which can be requested from your Advisor) for your Program account showing, as of the date indicated, the estimated risk exposure of your Retirement Plan Account(s). This information is a supplement to, but not a replacement for, the information that is separately available to you through TIAA.org and other reports that are provided outside

of the Program. Neither APS nor its Advisors undertakes or assumes responsibility for monitoring or adjusting your risk balancing approach and is not authorized to do so. The Program is only responsible for your Program account. You are responsible for contacting your Advisor whenever any changes occur in your Retirement Plan Account(s), and an Advisor will help you evaluate whether there is a need to modify the risk tolerance level and/or the investment allocation of your Program account.

Your risk level is an important component of investing and helps inform not only the opportunity for investment gain, but also the risk of loss. If the asset allocation within your Retirement Plan Accounts(s) or Program account is not aligned with your risk balancing strategy, it can either create more volatility and risk of loss within your portfolio or conversely lower long-term results, depending on the circumstances. A more aggressive risk target may help increase long-term investment returns, but it also can create more volatility (i.e., the risk of greater and sometimes dramatic fluctuations and declines in portfolio value). Conversely, a more conservative risk target may help minimize the risk of substantial short-term declines in portfolio value, but may result in lower long-term returns. In addition, your ability to reach and maintain an asset allocation across your accounts that is consistent with your overall risk tolerance level and combined risk target could be impacted by changes in your Retirement Plan Account(s) and/or Program account values, or allocations, changes in the risk exposure or composition of assets held in your Retirement Plan Account(s) or Program account or as a result of market fluctuations.

The following types of Employer Plans at TIAA are not eligible for the CP Service: Health Savings Accounts, Retiree Medical Savings Accounts and Voluntary Employee Beneficiary Association Plans.

Funding. You may fund your Program account using cash or securities. Generally, if you do not fund the account with assets that meet the Program's minimum required amount of \$50,000 (or \$25,000 for TIAA employees), APS will, at its discretion, and within a reasonable timeframe (e.g., 30 days), terminate the Program account, as described in Item 5 under "Termination." Underfunded Program accounts will not be managed until they are funded to meet the Program's minimum required amount.

Securities Transferred into Program Account for Funding: You can fund your Program account with securities that you already own, provided the securities are liquid and able to be sold by us. Securities that you transfer into your Program account will be sold or returned to you as soon as practicable, with the exception of Legacy Assets described in this Item 4 under "Securities Transferred into Program Account for Retention" and mutual funds that are already used in Program models, as described below. The Program reserves the right to require you to wait a specific period of time before depositing any securities into your Program account for funding purposes. APS does not charge the Program Fee on these securities. TC Services treats any Rule 12b-1 and Other Fund Fees associated with these securities in the manner described in Item 4 under "Program Fees."

If a security deposited to your Program account is a mutual fund already used in Program models, the Program will not sell it, but rather retain your shares and convert them to the share class used by the Program if it is different from the share class you own. The Program will complete any such exchanges as soon as they become operationally feasible at APS' discretion. In all other cases, APS will retain your existing share classes rather than converting them to a more favorable share class. If the Funds being held pay Rule 12b-1 fees or Other Fund Fees, APS will treat these fees in the manner described in this Item 4 under "Program Fees."

You understand and agree that if you initially fund your Program account in whole or in part through the transfer of securities, or make any subsequent deposit of securities into your Program account, you may incur taxes or contingent deferred sales charges when such assets are sold. You should consult with your tax

advisor in this regard. Neither APS nor its Advisors provide tax or legal advice. Factors such as limited liquidity and limited pricing transparency and quotations may impact the price obtained when the assets are sold or delay the sale. Moreover, any securities that cannot be sold may be returned to you at any time.

Additionally, if you fund your Program account with fixed income securities, these assets will be liquidated. By opening a Program account you consent to the sale of these fixed income assets.

Special Considerations Regarding Individual Retirement Accounts. Recommendations by Advisors can include recommendations on how to fund a Program account – for example, through an asset transfer or rollover from another account (such as an employer sponsored retirement plan account or existing IRA) into an IRA managed by the Program. Prior to rolling over or transferring assets into an IRA to be managed by the Program, you should consider the features, costs and surrender charges associated with consolidating the assets in one place. For instance, IRA rollovers and transfers may be subject to differences in features, costs and surrender charges. You should consider all of the options prior to rolling over assets description of considerations into detailed these may be http://www.tiaa.org/public/pdf/Know Your Options from TIAA.pdf.

You may be able to leave money in your current plans, withdraw cash subject to potential penalties or rollover the assets into a new employer's plan if one is available and rollovers are permitted. You should review your options and consult an Advisor for more information. However, please note that neither APS nor its Advisors provide tax advice. APS benefits when you move funds from your employer sponsored retirement plan to a Program account because of the Program Fee, which would not be charged if your assets remain in an employer sponsored retirement plan. This creates a conflict of interest. We seek to mitigate this conflict by disclosing it to you and by requiring Advisors to discuss your options and potential loss of benefits when making a rollover recommendation. We also require that rollover transactions recommended by Advisors be reviewed as required by applicable regulatory standards to determine whether they are appropriate to meet clients' financial needs.

Discretionary Authority. When opening a Program account, you will enter into an advisory agreement with APS (the "Advisory Agreement"), which grants APS discretionary investment authority to manage your Program account. Your grant of discretionary authority means that APS will have full discretion to make and implement investment decisions for your Program account. APS will not provide prior notice to or seek your approval when determining the asset allocation for your Program account or when selecting securities to buy, sell or hold or when selecting the broker-dealers to execute securities transactions for your Program account.

Your grant of discretionary authority does not authorize APS to withdraw or transfer funds, except as necessary to settle purchase and sale transactions and to deduct the Program's advisory fee from your Program account. You are prohibited from placing or directing trades in your Program account when enrolled in the Program. Advisors and other TC Services' representatives do not individually have discretionary authority over your assets.

Your grant of discretionary investment authority is durable and will continue despite your subsequent disability, incapacity, incompetence, or death. In the event of your death, disability, incapacity, or incompetence, the services under the Program will continue and the Program Fee will be charged, as described in this Item 4 under "Program Fee," until APS receives written notice from a person with established authority over the Program account assets to terminate the account. Unclaimed balances will escheat to your state of residency per state guidelines.

Your grant of discretionary authority also extends to the selection of a tax lot relief method (also called a cost accounting method) for your Program account in calculating the gain or loss on the sale of a security in your Program account. A tax lot relief method is a way of computing the realized gain or loss for an asset sold in a taxable transaction. It determines the lot of a security that is sold, as well as its associated cost basis, and the holding period used in computing the gain or loss on that sale. Although the default tax lot relief method, as specified in the Brokerage Account Customer Agreement ("Brokerage Agreement"), is first in, first out ("FIFO"), under this Program, APS will, in its sole discretion, select the cost basis accounting method that it deems appropriate to use with respect to any transaction in your Program account. By enrolling in the Program, you are granting APS the authority to use any such method, in its discretion, or any such method it implements by default, for any transaction in your Program account. TC Services and its affiliates shall have no liability for any damages you may incur as a result of (i) TC Services or its affiliates providing the required 1099-B Annual Information Report to the IRS, (ii) TC Services or its affiliates selection of, or change in, the method it uses to calculate your cost basis, or (iii) any differences in the cost basis reported by TC Services or its affiliates to the IRS and your actual adjusted cost basis in the relevant security in your Program account.

Program Agreements. In addition to the Advisory Agreement that you enter into with APS, the Program also requires that you open a brokerage account with TIAA Brokerage Services by completing the Application and entering into a Brokerage Agreement with TIAA Brokerage Services. Pershing, a subsidiary of The Bank of New York Mellon N.A. that is unaffiliated with APS, acts as TIAA Brokerage Services' clearing firm and holds your Program account assets in its custody in fully disclosed brokerage accounts. With respect to IRA assets ("IRA Assets"), other than SIMPLE IRA assets, TIAA, FSB acts as directed trustee for the IRA Assets and has legal custody of IRA Assets through this role. TIAA, FSB is compensated for this role. Pershing currently acts as service agent for the IRA Assets, performing certain administrative, record-keeping, and reporting duties and responsibilities of TIAA, FSB, including but not limited to maintaining physical custody of IRA Assets and sending of brokerage account communications to you, such as periodic account statements. You should compare the account statements received from Pershing with any quarterly reports you receive from the Program. APS currently uses TIAA Brokerage Services and Pershing to execute securities transactions in the Program because any transaction fees incurred through other brokerdealers would be in addition to, and not included within, the Program Fee. APS has an incentive to maintain Pershing as clearing broker because Pershing provides TC Services with certain economic benefits by allowing APS to use TIAA Brokerage Services as the broker-dealer for its advisory program accounts, rather than an unaffiliated broker-dealer. This presents a conflict of interest for APS because a greater portion of your fee remains within TC Services than if APS used a third party to provide these services. We mitigate this conflict by disclosing it to you and by reviewing TIAA Brokerage Services' and Pershing's execution quality on a quarterly basis.

In addition to terms and conditions of the Advisory Agreement and the Brokerage Agreement, you will be subject to the terms and conditions of each respective Funds' prospectus or similar disclosure documents, including any underlying fees and expense ratios described therein. Additionally, as discussed in this Item 4 under "Bank Sweep," you will be agreeing to the terms and conditions for that bank product, which differs from the terms and conditions of your Brokerage Agreement and Advisory Agreement. For a description of the conflict of interest arising from the investment of Program accounts in Affiliated Funds, and from the receipt by TC Services' affiliates of additional compensation for providing advisory, distribution and administrative services to those Affiliate Funds, see "Use of Affiliated Funds and Two Levels of Fees" in this Item 4.

Execution Practices. When selecting broker-dealers for the execution of client transactions, APS and the Program have a duty to seek best execution and must periodically and systematically evaluate the execution services it receives for its clients to ensure continued best execution. In seeking best execution, a registered

investment adviser must execute securities transactions for clients in such a manner that the client's total costs or proceeds in each transaction are the most favorable under the circumstances. TIAA Brokerage Services, which executes trades on behalf of the Program and Program accounts directs all trade orders through its clearing broker, Pershing, for execution. TC Services performs ongoing reviews of Pershing's execution quality for both Program and non-Program account trades utilizing analytics from a third party provider and addresses exception items with Pershing as needed.

Trade Order Aggregation and Randomization. APS seeks to aggregate Program client purchase and sale orders in the same securities and allocate trades in a manner designed to achieve fair and equitable treatment of its Program clients. APS determines the timing and allocation of trades for portfolios both constructed by an External Adviser and by TIAA, FSB, before providing the trades to TIAA Brokerage Services for execution.

Where consistent with APS's duty to seek best execution, client orders will be aggregated for trading with orders of other managed account programs offered by APS (which are described in Item 6 under "Other Advisory Services"). Where the Program opts to aggregate orders, such orders will be allocated on a prorata, average price basis. Orders may be aggregated to facilitate seeking best execution, to negotiate more favorable commission rates, or to allocate equitably among TC Services clients the effects of any market fluctuations that might have otherwise occurred had these orders been placed independently.

Larger trades may need to be executed over multiple days or different times in the same trading day for multiple client accounts within the Program or across multiple managed account programs offered by TC Services and its affiliates (which are described in Item 6 under "Other Advisory Services"). Trades done on the same day or over multiple days are not guaranteed to receive the same execution price.

The Program, at its discretion, employs a randomized trading process when executing large share trade orders that can occur when there are large daily flows into or out of the Program, when rebalancing Program accounts, or when replacing a Fund with another Fund across applicable Program accounts. This randomized trading process seeks to prevent one client or group of clients or strategies from being unfairly or systematically favored over another.

Trade Errors. APS and TC Services maintain policies and procedures that address the identification and correction of trade errors. In cases in which a trade error does occur, the Program will use reasonable efforts to identify and resolve errors as promptly as possible. The Program will address and resolve errors on a case-by-case basis, in its discretion, based on the facts and circumstances. The Program is not obligated to follow any single method of resolving errors but will seek to treat all clients fairly in the resolution of trade errors.

About TIAA. TIAA is the marketing name under which Teachers Insurance and Annuity Association of America and its subsidiaries provide products and services. Any profits earned by TIAA subsidiaries, including TC Services, may be paid in the form of dividends directly or indirectly to TIAA. Such dividend amounts, if any, become part of the general account for TIAA, which is used to back the annuity and other insurance products it issues and would inure to the benefit of the holders of such annuity and other insurance products. These annuity and other insurance products are not currently available for investment through the Program.

TIAA and TC Services have entered into a service arrangement whereby TIAA, directly or through its subsidiaries, provides a variety of services that are material to APS' investment advisory activities, including administrative, legal and marketing services. All Advisors are employees of TIAA and are deemed supervised persons of TC Services. Certain officers and directors of TC Services also serve in similar

capacities with other affiliated entities. TIAA, FSB, which formulates advice for the Program, is an indirectly, wholly owned subsidiary of TIAA.

TC Services and its affiliates provide services to, and receive compensation from, the Affiliated Funds. This includes:

The TIAA-CREF Family of Funds: Teachers Advisors, LLC is the advisor to the TIAA-CREF family of Funds and an indirectly, wholly owned subsidiary of TIAA, and receives compensation for its investment management services from the TIAA-CREF family of Funds. Additionally, other TIAA affiliates provide services to certain series of the TIAA-CREF family of Funds: TIAA provides administrative services, Nuveen Securities, LLC is the principal underwriter, and TC Services provides distribution services. These entities receive compensation for their services from the TIAA-CREF family of Funds. See the Funds' prospectuses for a description of the compensation. Always consult the Fund prospectus for the most current information.

The Nuveen Funds: Nuveen Fund Advisors, LLC, is the investment adviser to the Nuveen Funds and a subsidiary of Nuveen Investments, Inc. Various subsidiaries of Nuveen Investments, Inc. serve as sub-advisors to the Nuveen Funds. Nuveen Securities, LLC, also a subsidiary of Nuveen Investments, Inc., serves as the principal underwriter for the Nuveen Funds. Nuveen Investments, Inc. and its subsidiaries are indirectly, wholly owned subsidiaries of TIAA. TC Services provides distribution services to the Nuveen Funds in connection with Program accounts. Each of the above affiliates receives compensation from the Nuveen Funds in connection with the services it provides. See the Funds' prospectuses for a description of the compensation. Always consult the Fund prospectus for the most current information.

Item 5 – Account Requirements and Types of Clients

As noted in Item 4 under "Program Agreements," the Program requires you to open a brokerage account with TIAA Brokerage Services. You must fund the account with a minimum of \$50,000 (or \$25,000 for TIAA employees) in cash or eligible securities and grant APS investment discretion over your Program account. The Program may lower this Program account minimum at its discretion, in whole or in part, in connection with promotional campaigns or for any other reason. Additionally, TIAA Brokerage Services may offer pricing discounts, bonus payments or other account-related benefits and incentives to clients opening brokerage accounts to be enrolled in the Program (or for funding existing brokerage accounts enrolled in the Program) in connection with promotional campaigns or other reasons.

Deposits and Withdrawals

As described in Item 4 under "Funding" and under "Securities transferred into the Program Account for Retention," should you transfer securities into your Program account, the Program will either sell the securities upon receipt and use the proceeds to fund your Program account or sell them at a later time if they no longer meet the Program's investment criteria and are not on the Program's hold eligible list. Securities transferred into your Program account will also potentially be sold upon receipt unless you obtain prior written agreement from APS to retain the assets in your Program account, as described in Item 4 under "Securities Transferred into the Program Account for Retention." Any sale could cause a taxable event to you or trigger contingent deferred sales charges.

Additionally, for certain types of securities (such as securities that are not publicly traded, trade over the counter, are not traded on an exchange, are no longer quoted, or are not fully transferred), factors such as limited liquidity and limited pricing transparency and quotations may impact the price obtained when the

assets are sold. APS may, however, at its discretion alter the order of how subsequent deposits are invested when required for purposes of meeting fund minimum investment requirements, tax optimization needs or other purposes consistent with the model portfolio. You may establish automatic monthly or quarterly withdrawals. In such cases, securities held in your Program account will be sold as needed to fund the withdrawals, which may be a taxable event for clients not investing through an IRA or retirement account.

Upon receipt of a deposit or withdrawal request in good order, you will receive, with regards to mutual funds, the net asset values or price next available pursuant to the respective mutual funds' prospectus. With regards to ETFs, the Program will generally trade these shares once a day and you will receive the price available in the marketplace at that time. A request is considered in good order when TC Services possesses all information necessary to process the transaction. Such information includes the amount of the withdrawal, the distribution method requested and any form required to facilitate the distribution. This may result in a delay in the placement of certain trades and settlement of such trades depending upon the availability of your funds and accompanying information. The Program may withhold from any withdrawal an amount equal to any tax required by law.

The Program will hold proceeds from dividends and interest payments in cash and will rebalance material excess cash into positions that are under-weighted in the model portfolio. The Program will also generally direct mutual fund capital gains distributions to cash and will rebalance material excess cash into positions that are under-weighted in the model portfolio.

Termination

You may terminate your participation in the Program at any time upon notice to APS through your Advisor or team of Advisors. APS may terminate your enrollment in the Program at any time effective upon written notice to you. APS specifically reserves the right to immediately terminate your participation in the Program (i) should your balance fall below the Program's minimum balance of \$50,000 (or \$25,000 for TIAA employees) due to your initiated withdrawals; (ii) should APS determine that the Program is no longer appropriate for you, or (iii) if you fail to update Program required documentation. APS will also immediately terminate your participation in the Program should you change residency to a non-US address, or to certain US territories.

Upon termination from the Program, APS will cease managing your Program account and collect any fees due for investment management services provided through the date of termination. You thereafter must direct the Program to transfer assets out of your Program account within 30 days by providing such instructions to APS or through your Advisor. Once your directions to transfer assets are received, the transfer may take 30 days or more to occur. Should you fail to direct such transfer APS will, at its discretion, and within a reasonable timeframe, either transfer the assets to a separate, self-directed TIAA Brokerage Services brokerage account registered identically to the Program account, containing the same securities as the Program account and subject to the standard brokerage account transaction fee schedule, or in the alternative, redeem the assets and mail a check for the proceeds to you. Such redemptions may result in a taxable event to you. APS' decision to transfer your assets into a separate, self-directed TIAA Brokerage Services account instead of redeeming them and mailing a check to you creates a conflict of interest because it allows APS to keep the funds within TIAA products and investments, including Affiliated Funds and the Affiliate Bank Sweep, for which it earns compensation and within other third party investments for which TC Services may earn compensation. APS seeks to mitigate this conflict through disclosure, and by providing you with notification and the option to direct a transfer or liquidation of your assets.

Any liquidations resulting from your instruction to terminate and liquidate your Program account may not occur on the same day the instruction is received. Extreme market volatility and in process trades could impact this timing. The Program may invest in certain mutual fund share classes or other securities that cannot be held outside of the Program and these would need to be exchanged or sold upon termination from the Program, which may be a taxable event if you are not investing through an IRA or other tax-advantaged account.

Types of Clients

The Program's clients primarily consist of individuals who have a pre-existing relationship with TIAA, often through their participation within a TIAA-administered, employer-sponsored retirement plan, such as a 403(b) plan. However, the Program's clients also include family or friends of existing clients who have a pre-existing relationship with TIAA, as well as individuals without a pre-existing relationship and also to organizations like trusts, estates, partnerships, corporate entities, and small employer sponsored retirement plan accounts not administered by TIAA.

Item 6 - Portfolio Manager Selection and Evaluation

The specific asset allocations and Funds selected for your Program account are based on your responses to a Program questionnaire, including a series of Client Preferences from which you can select, as defined here. The Funds anticipated to be used to construct your Program account will be set forth in the Program Proposal that you receive at the time of Program enrollment, but are subject to change. Such changes are reflected in the periodic statements that you receive in connection with your Program account. You may also view your holdings online. You may impose reasonable restrictions on the use of specific Funds in your Program account as described in Item 4 under "Investment Restrictions."

Client Preferences

The Program is designed to allow you to express a number of preferences for certain investment strategies and options, which are referred to as "Client Preferences" throughout this Disclosure Brochure and described here. The Program offers these options to accommodate the varying investing interests and preferences of APS's clients and does not recommend one Client Preference over another. When providing the Sales, Enrollment and Servicing for the Program, APS has an incentive to encourage you to pick Client Preferences that result in a larger allocation to Affiliated Funds than other Client Preferences. This presents a conflict of interest that we mitigate, in part, limiting Advisors to educate clients about particular Client Preferences. Your Advisor provides information, but not advice when educating you on the different Client Preferences. We also mitigate this conflict by structuring our Advisors' compensation arrangements so as not to differentiate based on the Client Preferences selected for Program accounts (i.e., Advisor compensation does not vary based on a Program client's Client Preference selection(s)). See "Compensation of WMAs, Advisory Consultants and other TC Services' Representatives" in Item 4.

Most clients investing in the Program do, initially or periodically, receive separate point-in-time non-discretionary financial planning services from APS at no additional charge. If these services inform your long-term asset allocation and other Client Preferences, please carefully review the disclosures accompanying the service. As noted in Item 4 under "Holistic Asset Allocation Considerations," such financial planning services are offered separately from the Program and are subject to different terms and limitations set forth in the APS' disclosure brochure.

The combination of Client Preferences you select informs the model portfolio strategy (including the underlying Funds) used for your Program account. While all of your Client Preferences are considered

equally when structuring model portfolios, not all Client Preferences can be accommodated simultaneously; as a result, the funds and ETFs selected for your model portfolio will not necessarily align with each Client Preference you have selected. We have an incentive to accommodate certain Client Preferences, such as a Client Preference for Affiliated Funds, passive managers and socially responsible investing, over other Client Preferences that typically result in a smaller allocation to Affiliated Funds in your portfolio. For a description of the conflict of interest arising from use of Affiliated Funds in Program accounts, see "Use of Affiliated Funds and Two Levels of Fees" in Item 4 and "Client Preferences and Affiliated Funds" in this Item 6.

Selection of certain Client Preferences by you in the Program questionnaire may reduce the number of other preferences available for your selection. You may change your Client Preferences at any time by contacting your Advisor and completing a new Program questionnaire, but you should consider the possibility that certain changes would trigger the sale of assets that would cause a taxable event to you.

You should consult with a tax advisor. Neither APS nor any of its Advisors provide tax advice. The current Client Preferences available through the Program, and additional information about the impact of these Client Preferences on the allocation to Affiliated Funds, are set forth here. APS will apply your Client Preferences in constructing your Program account to the extent such investments corresponding investment vehicles are available and approved for use in the Program.

The Program reserves the right to modify or eliminate any of the Client Preferences from time to time with notice to you of any material modifications.

Description of Client Preferences.

- Sources of Investment Advice: You may specify a Client Preference for portfolio construction and Fund selection decisions to be sourced exclusively through advisers external to TIAA. If you select this Client Preference, the Program will rely exclusively on unaffiliated parties for asset allocation and investment selection decisions and your Program account will be constructed entirely using unaffiliated actively managed mutual funds, with no ETFs or Affiliated Funds. If you select a Client Preference for portfolio construction decisions to be sourced exclusively through advisers external to TIAA the asset allocation for the Program's model portfolios will be developed by the Allocation Provider and your Funds (which populate the model portfolios and determine the investment makeup of your Program account) will be selected by the External Adviser. Where the Client Preference is not selected, the Program will rely on a variety of sources, both internal and external to TIAA, to determine asset allocation and investment selection and you will have increased customization options through use of the additional Client Preferences available to you (as described here). Regardless of the Client Preference chosen, the Program engages TIAA, FSB to implement the transactions and executes the transactions through TIAA Brokerage Services and Pershing as described in Item 4 under "Program Agreements."
- Investment Selection Client Preference for Affiliated Funds: You may specify a Client Preference for a model portfolio constructed with Affiliated Funds, in which case, the Program will select Affiliated Funds over other Funds where Affiliated Funds are available for asset classes within your model portfolio and where the Affiliated Funds meet the Program's Fund quantitative and qualitative selection criteria summarized in Item 6 under "Methods of Analysis, Investment Strategies and Risk of Loss." This Client Preference will likely result in your Program account wholly or predominantly consisting of Affiliated Funds, even when an unaffiliated Fund may be available with superior performance and/or other investment metrics. Where you do not select a Client Preference for Affiliated Funds, the Program will not favor Affiliated Funds in the

construction of the model portfolio for your Program account. However, Affiliated Funds will nevertheless be included in your Program account if the Affiliated Fund is determined to be a suitable and appropriate investment option and meets the Program's qualitative and quantitative selection standards. For a description of the conflict of interest arising from use of Affiliated Funds in Program accounts, see "Use of Affiliated Funds and Two Levels of Fees" in Item 4 and "Client Preferences and Affiliated Funds" in this Item 6.

- *Income Approach:* You may specify a Client Preference for a strategy that is designed primarily to help support income distribution by seeking diversified sources of yield and that also attempts to reduce (but not eliminate) associated interest rate and inflation risk, while seeking to generate total returns. The increased focus on income generation may have an impact on the relative performance of your Program account and result in total returns that are less than a model portfolio that is not designed for income distribution. Additionally, the strategy does not guarantee income and your income needs may be more than the income generated from the strategy. Where you select a Client Preference for income, further customization through use of other Client Preferences will be restricted. Where a Client Preference for income is not selected, the Program will use a strategy focused on the total return of your Program account, while considering the other Client Preferences.
- Downside Risk: You may specify a Client Preference for a strategy that is designed to help reduce, but not eliminate, your exposure to major downward market movements. Where this Client Preference is selected, it typically will result in a model portfolio that by design does not fully participate in upward market movements, thereby reducing your relative returns in "bull" markets. The Program attempts to achieve downside risk mitigation through the asset allocation models and resulting types of investment managers associated with the asset classes used. Downside risk mitigated strategies may include allocations to Funds investing in non-traditional asset classes that are intended to help mitigate overall portfolio volatility. Alternatively, you can select a Client Preference for a strategy that attempts to more fully participate in market returns over the full market cycle. In this case, the Program will use asset allocations without alternative investment strategies, which will typically result in larger traditional equity allocations and potentially higher portfolio volatility. Dependent upon other Client Preferences, the Program may also manage your risk by selecting investments that focus on managers who attempt to match or beat the benchmark to which their performance is compared. There is no guarantee that a manager will be able to achieve performance results that match or exceed the returns of the relevant benchmark.
- Socially Responsible Investing: You may specify a Client Preference for active managers that are restricted to investing in socially responsible companies (i.e., those that seek to promote broader economic development, positive and social outcomes and a healthier environment). Managers that consider social factors may not be available for all asset classes in your model portfolio and typically invest in a more limited set of companies than other managers, which may have a positive or negative impact on their relative performance. To the extent that socially responsible investment mandates apply, Affiliated Funds may be selected for your portfolio when you select a preference for socially responsible investing. For a description of the conflict of interest arising from use of Affiliated Funds in Program accounts, see "Use of Affiliated Funds and Two Levels of Fees" in Item 4 and "Client Preferences and Affiliated Funds" in this Item 6. Alternatively, you may prefer that managers have no social constraints. You may also have no preference in this matter, in which case you will receive a model portfolio with no social constraints.
- Portfolio Management Approach (Active and/or Passive): You may specify a Client Preference for either managers that actively manage a Fund's portfolio in an attempt to deliver better (either in

terms of higher returns and/or reduced risk) performance than the market in general and/or managers that attempt to match the performance and risk of the market while focusing on minimizing investment expenses. Active managers typically research individual securities to construct portfolios that attempt to beat the performance of the manager's stated market benchmark, while passive managers seek to replicate market returns and risk of an index. There is no guarantee that active managers will be able to deliver returns that are higher than those of the market, even if they have done so in the past. A Client Preference for active managers generally will result in a model portfolio consisting of predominantly (or exclusively) active managers and a Client Preference for passive managers generally will result in a model portfolio consisting of predominantly (or exclusively) passive managers. If you select the "no preference" option, the Program will use its discretion to apply a combination of active and passive managers to your Program account. Because the Program considers the fee credit applied to IRAs and accounts subject to ERISA in selecting passive managers, as described in Item 4 under "Affiliated Fund Fee Credit - For IRAs and Accounts Subject to ERISA," a Client Preference for passive managers will result in a higher allocation to Affiliated Funds in these types of accounts. For a description of the conflict of interest arising from use of Affiliated Funds in Program accounts, see "Use of Affiliated Funds and Two Levels of Fees" in Item 4 and "Client Preferences and Affiliated Funds" in this Item 6. Also, because actively managed funds are not selected for the Program based on the Fund's expense ratio (as noted in this Item 6 under "Portfolio Construction by TIAA, FSB") and typically have higher expense ratios than passive funds, a Client Preference for active managers will result in your portfolio consisting of Funds with higher expense ratios than a Client Preference for passive managers. Regardless of whether you have selected an active or passive preference, APS, at its sole discretion, may use a combination of select active or passive fund investments, based on market conditions and other factors that could impact the performance of the applicable model portfolios.

Tax Management for Taxable Accounts: For taxable accounts, you may prefer a model portfolio that attempts to defer or minimize taxes. If you select this Client Preference, the Program will, to the extent possible, construct your Program account with tax sensitive municipal securities investments and allow you to indicate whether you prefer that those municipal securities be state specific funds. State specific funds are only available in certain states and if your state of residency changes at a later date, the Program will invest your Program account in a national municipal bond fund in place of a previously selected single state municipal bond. If you would like to be invested in a state specific municipal bond at that later date, you must contact your Advisor. While several of these strategies may have lower pre-tax returns than similar products, they are designed to provide higher after-tax returns. This Client Preference is based on individual circumstances and may not be appropriate for you. In addition, the Program has a Tax Loss Harvesting strategy, which is incorporated within the Tax Management preference and applied to Program accounts that have selected the Tax Management preference. This strategy will attempt to harvest unrealized losses in your Program account. See "Tax Loss Harvesting" in this Item 6 for more information about this offering and the limitations of its features. Alternatively, you may prefer to focus on maximizing your pretax performance without consideration of tax issues. If you select this Client Preference the tax minimization strategies will not be applied to your Program account. APS, based on its investment discretion, may switch Funds in any model based on market conditions and other factors, and regardless of tax consequences for Program accounts.

Client Preferences and Affiliated Funds. As described in Item 4, the Client Preferences you select will also affect the amount of your Program account that is invested in Affiliated Funds, with certain Client Preferences having a more significant impact than others.

On or about the date of this Disclosure Brochure, Affiliated Funds represented approximately 49% of the assets under management in Program accounts. Across the models available in the Program: (i) the minimum target allocation to Affiliated Funds is 0%, (ii) the maximum target allocation to Affiliated Funds models with a Client Preference for Affiliated Funds is 89%, and (iii) the maximum target allocation to Affiliated Funds for models without a Client Preference for Affiliated Funds is 74%.

The selection of certain Client Preferences has a greater impact on the target allocation to Affiliated Funds than other Client Preferences. Those are the Client Preferences for: (i) Affiliated Funds, (ii) passive managers, (iii) a combination of passive and active managers, and (iv) tax minimization using state specific Funds when available. The remaining Client Preferences do not result in more than a 1% target allocation to Affiliated Funds.

The table below shows the following information for each of the Client Preferences listed above, taken in isolation (*i.e.*, without considering the impact of any other Client Preference selections):

Range of Target Allocations to Affiliated Funds in Program Models: This column shows, across all the models available for selection in the Program, the minimum and maximum target allocation to Affiliated Funds.

<u>Weighted Average Allocation to Affiliated Funds in Client Accounts:</u> This column shows, across the models selected by clients in the Program, the weighted average target allocation to Affiliated Funds, based on the total number of client accounts.

How to understand this Table: As an example, if you chose the Client Preference for Passive Managers, the resulting target allocation to Affiliated Funds in the model used for your portfolio will be between 0% and 74%. In addition, all clients who chose the Client Preference for Passive Managers had an average target allocation to Affiliated Funds of 43%. Where your model falls depends on your risk tolerance, investment time horizon, and the combination of your selected Client Preferences.

Client Preference	Range of Target Allocations to Affiliated Funds by Client Preference in Program Models	Weighted Average Allocation to Affiliated Funds by Client Preference in Client Accounts	
Investment Selection			
Client Preference for Affiliated Funds	34 – 89%	68%	
Portfolio Management Approach			
Client Preference for Passive Managers	0 – 74%	43%	
No Client Preference on Portfolio Management Approach	0 – 45%	22%	
Tax Management			

-*- Demonstration Powered by OpenText Exstream 10/18/2022, Version 16.3.0 64-bit -*-

Client Preference for Tax	0 – 50%	43%
Minimization Using State Specific Funds When Available		

Important information regarding the foregoing table: The information in the table is provided on or about the date of this Disclosure Brochure for informational purposes only. It does not restrict in any way the amount of assets invested in Affiliated Funds by a given model or by Program accounts using that model. The actual amount invested in Affiliated Funds by models constructed for Program clients will vary, possibly materially, from that shown in the table without notice to you at APS' discretion. The actual amount of your Program account assets invested in Affiliated Funds will be higher or lower than that of your model for reasons including, without limitation, client-directed activity (such as deposits, withdrawals or Legacy Assets), market action and operational considerations. Your target allocation to Affiliated Funds, resulting from a combination of Client Preferences, cannot be determined from the table (e.g., by averaging or summing the percentage indicated for all of your selected Client Preferences). Please see your initial Program Proposal, most recent quarterly performance report (which can be requested from your Advisor), online account information, or contact your Advisor for the composition of your account holdings and your specific allocation to Affiliated Funds.

Review of Third-Party Service Providers and Sources of Investment Advice

As described in Item 4 under "Engagement of Service Providers to Formulate Advice," APS has engaged other entities, such as TIAA, FSB and the External Adviser and Allocation Provider, to help formulate the advice provided through the Program.

On a quarterly basis, APS reviews the list of Funds selected by TIAA, FSB and the External Adviser. APS also reviews the share class selections made by TIAA, FSB (which selects share classes and executes trades for models for the External Advisor as well as itself), as needed. APS engages TIAA, FSB to review annually the methodology, business changes, strategy changes and personnel changes of the External Adviser and reports its findings to APS. APS also engages TIAA, FSB to review the calculations and capital market assumptions underlying the asset allocations provided by the Allocation Provider each year. APS uses TIAA, FSB's findings to conduct an annual review and validation of the investment advice capabilities of the External Adviser and participates in a validation process with other senior management and investment personnel across TIAA to evaluate the Allocation Provider's services.

APS will replace TIAA, FSB, the External Adviser and/or the Allocation Provider should a determination be made that any or all is no longer performing satisfactorily. APS will base any decision to retain or replace TIAA, FSB or the External Adviser on the quality and continued value of their services.

Although judged on similar criteria, TIAA, FSB and the External Adviser and Allocation Provider are each evaluated differently for a number of reasons, including differences in the services performed. APS engages TIAA, FSB to create many more model portfolios, with many more available Client Preferences, than the models that APS receives from the External Adviser and Allocation Provider. The evaluation process also differs because APS has more, and continuous, information regarding TIAA, FSB's investment processes as well as its personnel and risk and compliance procedures (certain TIAA, FSB investment personnel also act on behalf of APS).

APS's use of an affiliated entity, TIAA, FSB, presents a conflict of interest for APS because a greater portion of your fee remains within the TIAA family of companies than if APS used a third party to provide these services. APS addresses this conflict of interest through disclosure of the conflict in this Disclosure Brochure, and through reviews of TIAA, FSB's services. APS's use of TIAA, FSB also could present a conflict of interest as TIAA, FSB could use its discretion to invest your assets in Affiliated Funds that would provide TIAA with greater aggregate revenue than through the use of unaffiliated Funds. To address this possible conflict, APS compensates TIAA, FSB and the External Adviser without regard to the affiliation of the Funds selected. Moreover, APS imposes no limitations or minimum purchase requirements upon TIAA, FSB concerning the use of Affiliated Funds and does not permit the use of Affiliated Funds in the Program accounts of clients that elect to have the External Adviser make all asset allocation and investment selection decisions.

Methods of Analysis, Investment Strategies and Risk of Loss

In providing Sales, Enrollment and Servicing for the Program, an Advisor will meet with you to assess whether the Program is in your best interest using the criteria described in Item 4 under "Sales, Enrollment, and Servicing and the Role of Advisors." Advisors do not provide advice on how to invest assets within Program accounts or manage the assets enrolled in Program accounts. Advisors also do not monitor your individual account performance as part of the Sales, Enrollment and Servicing for the Program. APS will make available to you quarterly performance reports (which can be requested from your Advisor) for your Program account.

The Program adheres to long term investing principles to build a Program account consisting of diversified holdings for you. As described in Item 4 under "Model Based Portfolios," the Program offers a number of model portfolios to meet a wide range of investor needs. APS has engaged TIAA, FSB and the External Adviser to formulate the model portfolios for the Program subject to APS's oversight described in this Item 6 under "Review of Third-Party Service Providers and Sources of Investment Advice."

Set forth here is a general description of the primary methods of analysis that the External Adviser and TIAA, FSB utilize when formulating advice for the Program, including designing model portfolios. Also set forth here is a description of TIAA, FSB's primary methods of analysis in light of the conflicts of interest pertaining to the selection and retention of Affiliated Funds in Program accounts.

Portfolio Construction by the External Adviser. The External Adviser only provides advice for use in the Program by clients who select a Client Preference for models and investment selection decisions sourced exclusively through parties unaffiliated with TIAA. The External Adviser applies its own methodologies, based upon generally accepted quantitative investment principles, subject to any Program limitations, to construct, monitor and update its advice. The External Adviser selects from the Universe defined in Item 4 under "Portfolio Investments" unaffiliated actively managed mutual funds that satisfy criteria established from time to time by the External Adviser. The External Adviser's methodologies also consider information provided by you in your Program questionnaire, including goals, risk tolerance, investment constraints and investment time horizon. Based upon the information you provide in your Program questionnaire and subsequently to your Advisor, the External Adviser selects funds for your model portfolio composed of a target asset allocations provided by the Allocation Provider, and APS thereafter manages your assets on a discretionary basis in line with your investment objectives, market conditions and reasonable restrictions. The External Adviser selects only unaffiliated Funds for use in these portfolios.

Portfolio Construction by TIAA, FSB. The Program's advice that is generated by TIAA, FSB is based upon a long-term investment philosophy analyzed through a combination of quantitative and qualitative

investment methodologies. The advice is generated in three stages: (i) the creation of strategic asset allocations, (ii) the selection of Funds eligible for use in the Program's models ("Reference List Investments"), and (iii) the inclusion of Reference List Investments in the Program's model portfolios.

Creation of Strategic Asset Allocation: TIAA, FSB establishes and updates strategic asset allocations for the Program following a similar process that TIAA, FSB uses for other affiliates and its own managed account clients. The process starts with capital market assumptions and corresponding asset allocations received from the Allocation Provider. These assumptions and allocations are then quantitatively and qualitatively analyzed to determine the set of allocations that TIAA, FSB believes best align to the available risk levels, time horizons and Client Preferences in the Program. TIAA, FSB generally uses the asset classes assigned by the Allocation Provider, but can choose to include or exclude certain asset classes at its discretion, and has an incentive to select the asset class categories represented by its Affiliated Funds. For a description of the conflict of interest arising from use of Affiliated Funds in Program accounts, see "Use of Affiliated Funds and Two Levels of Fees" in Item 4. Senior investment professionals from TIAA, FSB are responsible for approving the asset allocations for use in the Program. While APS does not independently approve these asset allocations, it meets periodically with a designee of TIAA, FSB to review them. APS also reviews the asset allocation models for consistency with TIAA, FSB's policies and procedures.

Selection of Reference List Investments: TIAA, FSB chooses the Reference List Investments from the Universe defined in Item 4 under "Portfolio Investments" that can be used for each asset class targeted for a strategic asset allocation. Only Funds that represent each of those asset classes are eligible for evaluation. While TIAA, FSB generally accepts the asset class categories designated by the Allocation Provider, it can adjust the categorization from time to time to exclude a Fund from or include a Fund in the asset class, at its discretion. This could potentially result in an Affiliated Fund comparing more (or less) favorably to the other Funds being considered as Reference List Investments for that asset class. For a description of the conflict of interest arising from use of Affiliated Funds in Program accounts, see "Use of Affiliated Funds and Two Levels of Fees" in Item 4.

The selection methodology used to determine whether a Fund becomes a Reference List Investment differs based on whether the Fund is actively managed or managed using passive investment strategies (*i.e.*, index funds) ("passively managed").

Actively Managed Funds: When initiating a search for an actively managed Fund to obtain exposure to a particular asset class, TIAA, FSB applies a proprietary quantitative approach to identify a manageable number of Funds for further evaluation, and then applies qualitative criteria to select amongst the narrowed list of Funds. The proprietary quantitative scoring system analyzes a variety of factors to identify Funds that have historically performed well versus their peers in falling markets, rising markets or both for the asset class. Past performance does not guarantee future results. Actively managed Funds that have at least a 36-month manager tenure and rank within the top two quintiles are eligible for further evaluation on the basis of various qualitative factors. The qualitative factors include, but are not limited to, organizational stability, the quality of investment personnel, investment and risk management processes, capacity, regulatory compliance profile and other analytical criteria. The Fund's expense ratio does not influence the selection of actively managed Funds for use as Reference List Investments.

When an actively managed Fund becomes a Reference List Investment, TIAA, FSB monitors it in accordance with its long-term investment philosophy. Actively managed Reference List Investments are periodically reviewed for use based on the Funds' ongoing performance and the continued support of qualitative factors. These Funds will be removed if they fail to perform against the benchmark over an extended period of time and/or fail to be supportable by qualitative factors. Funds slated for removal from the Reference List

Investments will be removed from model portfolios when operationally feasible as determined by TIAA, FSB (and APS) (as further described in this Item 6 under "Inclusion of Reference List Investments in the Model Portfolios").

Whenever a Reference List Investment requires replacement on and after November 6, 2020, a search will be initiated for a new Fund in the asset class using a different quantitative approach than described above. Actively managed Funds that have at least a 36-month manager tenure and a significance level of the Fund's excess return greater than 60% when the quantitative approach is applied are eligible for further evaluation on the basis of the qualitative factors described above ("Statistical Quantitative Screen"). In addition, approximately every four years from a Fund's selection as a Reference List Investment, it is evaluated for continued use against other actively managed Funds in the same asset class using the Statistical Quantitative Screen. The Statistical Quantitative Screen will be applied until all of the Funds included as Reference List Investments have been replaced or retained using it.

Passively Managed Funds: When initiating a search for a passively managed Fund to gain exposure to an asset class, TIAA, FSB conducts a quantitative assessment of the accuracy with which the Fund replicates the performance of the benchmark index assigned to the asset class over the most recent 2-year period. While TIAA, FSB generally accepts the benchmark index of that Fund, as determined by Allocation Provider or the Fund prospectus, it can adjust the assigned benchmark index from time to time, at its discretion, and has an incentive to select as the benchmark the index tracked by its Affiliated Funds. For a description of the conflict of interest arising from use of Affiliated Funds in Program accounts, see "Use of Affiliated Funds and Two Levels of Fees" in item 4.

Among the passively managed Funds that meet the minimum quantitative replication criteria and liquidity thresholds (as determined by TIAA, FSB at its discretion), TIAA, FSB selects the Fund with the lowest expense ratio, unless such Fund is disqualified on the basis of qualitative factors, in which case the Fund with the next lowest expense ratio will be selected. Those qualitative factors include, but are not limited to, consideration of the Fund's tax efficiency, securities lending practices, business and regulatory concerns associated with the Fund provider, fair value pricing for mutual funds, and historic premium or discount to net asset value for ETFs. For IRAs and accounts subject to ERISA, the determination of "lowest expense ratio" will take into consideration the Affiliated Fund fee credit described in Item 4 under "Affiliated Fund Fee Credit—for IRAs and Accounts Subject to ERISA." This means that it will be more likely that a passively managed Affiliated Fund will be used in IRAs and accounts subject to ERISA than a passively managed unaffiliated fund. This increased likelihood for the use of Affiliated Funds resulting from consideration of the Affiliated Fund fee credit does not apply to taxable accounts. For a description of the conflict of interest arising from use of Affiliated Funds in Program accounts, see "Use of Affiliated Funds and Two Levels of Fees" in Item 4 and in "Client Preferences and Affiliated Funds" in this Item 6.

When a passively managed Fund becomes a Reference List Investment, TIAA, FSB periodically reviews it to reconfirm that it meets the minimum quantitative replication criteria and liquidity thresholds, and is still the lowest cost passively managed Fund that is not disqualified on the basis of qualitative factors. Should a Fund fall below the minimum quantitative replication criteria and liquidity thresholds or no longer be the lowest cost in its asset class, it will be removed as a Reference List Investment and replaced, as needed, through a search initiated for the asset class in the same manner as described here. Funds slated for removal from the Reference List Investments will be removed from model Portfolios when operationally feasible at the discretion of APS and TIAA, FSB (as further described in this Item 6 under "Inclusion of Reference List Investments in the Model Portfolios").

Oversight of Reference List Investments: Additions to and removals from the Reference List Investments are reviewed and approved by senior investment professionals from TIAA, FSB. The quantitative and qualitative criteria for adding and removing Funds from Reference List Investments and any required exceptions to the process outlined here, are also approved by senior investment professionals from TIAA, FSB, annually and upon material changes. APS also reviews updates to the Reference List Investments. APS conducts a review of the Funds recommended by TIAA, FSB quarterly. There are other funds and strategies approved by the senior investment professionals from TIAA, FSB for use by affiliates and their clients that are not included as Reference List Investments to the Program.

Inclusion of Reference List Investments in the Model Portfolios: A team of portfolio managers at TIAA, FSB (the "portfolio construction team") selects the combination of Reference List Investments that, in its view, balances the risk tolerance, time horizon and Client Preference selections for each model portfolio available in the Program. Clients with an identical combination of Client Preferences, risk tolerance and time horizon and the same account type will (generally?) receive the same combination of Reference List Investments (unless a client decides to request reasonable restrictions or other modifications to the management of their Program account, as described in Item 4 under "Investment Restrictions" and "Securities Transferred into the Program Account for Retention").

The initial selection of Reference List Investments used to construct the model portfolios is based on a twostep process. First, the portfolio construction team reviews the strategic asset allocation associated with the Client Preferences for Income Approach, Downside Risk and Tax Management and selects Reference List Investments based on the team's judgment of how different combinations of investments can achieve exposure to each asset class targeted for a strategic asset allocation, while also limiting the correlation among the investments. Second, the portfolio construction team seeks to satisfy the Client Preference combinations equally for Affiliated Funds, Socially Responsible Investing and Portfolio Management

Approach. Reference List Investments may not be available that satisfy all of these Client Preferences simultaneously, resulting in the portfolio construction team applying its discretion to create a combination of Funds that align with your Client Preferences. Additionally, TIAA, FSB may determine that certain Reference List Investments intended to satisfy Client Preferences are no longer advisable for certain model portfolios based on market conditions and/or other factors, in which case the portfolio construction team will select other funds in view of the investment strategy of the affected the model portfolios. Because TIAA affiliates manufacture, advise and distribute Affiliated Funds, TIAA has an interest in the Program recommending a higher investment allocation to Affiliated Funds by accommodating certain of your Client Preferences instead of others when all cannot be accommodated simultaneously. For a description of the conflicts of interest arising from the investment of Program accounts in Affiliated Funds and the additional fees TIAA and its affiliates receive from the use of Affiliated Funds in the Program, see "Use of Affiliated Funds and Two Levels of Fees" in Item 4. An assessment is made periodically to determine whether the Reference List Investments in the model portfolios should continue to be used or replaced by other Reference List Investments.

Program Limitations: Typically, a single Reference List Investment cannot be used to make up more than 60% of any model portfolio.

Retention Funds: Once the portfolio construction team determines that a Reference List Investment Fund should be removed from the Reference List Investments and replaced in the model portfolio(s), the portfolio construction team will also determine whether that Fund should be maintained in certain existing taxable Program accounts in order to mitigate the tax consequences that would be realized by a sale of the Fund (referred to as a "Retention Fund"). Retention Funds are only held in existing taxable Program accounts and not retirement accounts or IRAs.

The nature of the ongoing monitoring and reviews of Retention Funds will depend on whether the Fund is actively managed or passively managed. TIAA, FSB monitors Retention Funds that are actively managed in accordance with its long-term investment philosophy and based on the same criteria applied to the Reference List Investments. For Retention Funds that are passively managed, TIAA, FSB periodically reviews the Fund to reconfirm that it meets certain quantitative replication criteria and any applicable thresholds, also considering costs and other qualitative factors.

TIAA, FSB will consider material investment related factors to determine whether a Retention Fund should be removed from the affected model portfolios notwithstanding any potential tax consequences to affected taxable Program accounts. Removal of a Retention Fund in taxable Program accounts may occur immediately or over time, for a particular Program account or a group of Program accounts.

Model Portfolio Construction: Program accounts with an identical combination of Client Preferences, risk tolerance, and time horizon are invested in the same model portfolio investments, except for when: a client holds Legacy Assets (as defined and described in this Item 4 under "Securities Transferred into the Program Account for Retention") in a Program account; a Retention Fund is maintained in a taxable Program account; or, a Reference List Investment Fund that has been replaced with a new Reference List Investment Fund for a particular model portfolio is maintained in a taxable Program account ("Replaced Reference List Fund"). Replaced Reference List Funds are only held in existing taxable Program accounts and not retirement accounts or IRAs.

New deposits (other than Legacy Assets) will be invested in the current Reference List Investment Fund for a model portfolio. Retention Funds and Replaced Reference List Investment Funds may be maintained in a taxable Program account, or migrate to the new Reference List Investment Fund for the model portfolio over time in order to help mitigate the tax consequences associated with selling or redeeming a Fund in a Program account. The sale or redemption of Retention Funds or Replaced Reference List Investment Funds may result in a taxable event, including taxable gains.

There is no guarantee that the retention or migration of Retention Funds or Replaced Reference List Funds will mitigate tax consequences in a Program account. This strategy does not take into account client assets held outside a Program account. Fund differences between Program accounts in the same model portfolio will result in performance dispersion between Program accounts in the same model portfolio. APS has a conflict of interest in cases where a Retention Fund or a Replaced Reference List Fund, maintained or invested in a Program account, is an Affiliated Fund. We seek to address the conflict associated with investing Program accounts in Affiliated Funds in multiple ways, including disclosing the conflict of interest in this Disclosure Brochure and providing you with detailed information about your Program account's allocation to individual positions (e.g., account statements and reports). See "Use of Affiliated Funds and Two Level of Fees" in Item 4 for additional information on conflicts of interest related to the use of Affiliated Funds in the Program.

The Program selects the same Reference List Investment for its IRAs and accounts subject to ERISA as for its taxable accounts, except when selecting passively managed Reference List Investments for IRAs and accounts subject to ERISA. In those cases, the portfolio construction team considers the Affiliated Fund fee credit applied to IRAs and accounts subject to ERISA when choosing the lowest cost passively managed fund for the model. This means that it will be more likely that a passively managed Affiliated Fund will be used in IRAs and accounts subject to ERISA than a passively managed unaffiliated fund. For a description of the conflict of interest arising from use of Affiliated Funds in Program accounts, see "Use of Affiliated Funds and Two Levels of Fees" in Item 4 and "Client Preferences and Affiliated Funds" in this Item 6.

Once a Reference List Investment is designated for inflows or outflows, the decision can be implemented immediately or over an extended period of time at the discretion of TIAA, FSB. Considerations include, without limitation, operational considerations, legal considerations, client directed activity, tax implications, and input from the Funds marked for asset flows. Based on these considerations, implementation of Reference List Investment inflows and outflows for different Program models or groups of Program accounts may occur over differing periods of time. For example, recommended fund inflows and outflows will generally occur immediately for IRA Program accounts, whereas for taxable accounts they may occur over time to mitigate the tax impact. Please see "Trade Randomization and Aggregation" in Item 4 for additional information on the implementation of trades and "Discretionary Authority" in Item 4 for a description of the other discretionary authority granted to the Program and delegated to TIAA, FSB, subject to APS oversight.

The Program's model portfolios contain a combination of Funds that represent, depending on the Fund, indirect investments in equity, fixed income, and to a lesser extent, derivative investments, alternative investment strategies and non-traditional asset classes. For all Funds, the return and principal value will fluctuate with changes in market conditions. In addition, shares when sold may be worth more or less than their original cost. Note that the Program does not offer a margin trading strategy.

Tax Loss Harvesting. For taxable accounts that select the Client Preference for Tax Management, the Program will seek to harvest the tax losses in your Program account to the extent consistent with the Program's investment strategy.

Tax loss harvesting occurs when the Program strategically sells a security in your Program account with unrealized losses. When the Program sells this security, it may enable you to offset taxes on both capital gains and a limited amount of ordinary income. The Program is designed to select "similar" (but not "substantially identical") investments to replace the strategically sold existing investments ("replacement security") based on historical returns, correlations and portfolio construction methodology, but not necessarily based on your Client Preference. The Program harvests tax losses with respect to securities it has recommended and not necessarily based on positions in your Program account. For example, the Program will not take into consideration any Legacy Assets held in your Program account when determining whether to sell securities. It will review the positions in your Program account for tax losses daily. The Program may change this frequency from time to time without notice to you. The Program's goal is not to maximize overall losses either in your Program account or across all of your accounts (at TIAA or elsewhere), as the Program will not necessarily sell all securities with unrealized losses in a particular Program account, and will also not necessarily sell securities with the greatest aggregate losses in a particular Program account. The Program will only sell those securities with unrealized losses that it determines are appropriate to be sold at the time, taking into consideration such factors as the availability of a replacement security. The Program makes no warranty or guarantee that these similar investments will perform similarly to the replaced investments, nor does it make any warranty or guarantee that the sale of the existing investment and the purchase of a replacement investment will be effective in reducing your tax obligations in the present or in the future. You are required to notify APS, in writing, if you are prohibited from investing in any individual investments. Such prohibitions may alter the "similar" investments selected as part of the Program, and may alter the effectiveness of the Tax Loss Harvesting strategy.

If you and/or your spouse have other taxable or non-taxable accounts, and you hold in those accounts any of the securities held in your Program account, you should not buy any security sold at a loss for a period of at least 30 days before or after the Program sells those same securities as part of the Tax Loss Harvesting strategy to avoid the possible application of the "wash sale" rules. You are responsible for monitoring your (and your spouse's) accounts both inside and outside of the Program to ensure that transactions in the same security or a substantially similar security as one traded from your Program account do not create a wash

sale. Your Program account information can be accessed online or by making a request to your Advisor. A wash sale is the sale at a loss and purchase of the same security or substantially similar security within 30 days of each other. If a wash sale transaction occurs, the IRS may disallow or defer the claimed loss for tax reporting purposes. More specifically, the wash sale period for any sale at a loss consists of 61 calendar days: the day of the sale, the 30 days before the sale, and the 30 days after the sale. The wash sale rule has the effect of disallowing or postponing losses on a sale, if a replacement security is bought within these time periods. If you have multiple accounts in the Program under one Household, the Program will not monitor your Household's accounts, nor will it monitor any accounts for members of your Household maintained outside the Program, to ensure that transactions in the same security or a substantially similar security do not create a wash sale. For more information on the wash sale rule, please read IRS Publication 550.

Whether the Program, including tax management and tax loss harvesting, is effective in reducing your overall tax liability will depend on your entire tax and investment profile, including purchases and dispositions in your (or your spouse's) accounts outside of the Program, the nature of your investments (e.g., taxable or nontaxable) and their respective holding period (e.g., short-term or long-term). The Program will monitor only your Program account to determine if there are unrealized losses for purposes of determining whether to harvest losses. Transactions in any account other than your Program account (such as your spouse's accounts held at TC Services), any accounts outside of TIAA, or even additional Program accounts may affect whether a loss is successfully harvested. Moreover, in determining whether and how to harvest tax losses, the Program will rely on various assumptions about the tax posture of a typical investor, which assumptions may or may not correspond with an individual investor's actual circumstances.

Client Directed Tax Management: In addition to the Client Preference for Tax Management, for taxable accounts the Program will also accept your instructions to harvest a specific amount of tax losses or gains, subject to such limitations and procedures as the Program may establish from time to time. Instructions to harvest tax losses must be provided in writing in the manner prescribed by the Program. The Program will only sell up to ten percent of your Program account in an effort to harvest taxes at your request. The Program will reasonably attempt to fulfill your instructions, but may determine that a request is not feasible for a variety of reasons, including but not limited to, the size of the request. TIAA, FSB will follow its internal procedures to determine which securities to sell in harvesting losses or gains. Unlike the Client Preference for Tax Management in which substituted securities are used, any proceeds from tax loss sales made at your direction will be held in cash and will not be reinvested in substitute securities, which may reduce the performance of your Program account. Please contact your Advisor for more information about the limitations and procedures that apply.

APS does not employ tax professionals and has not and will not provide tax advice to you. No employee or agent of TIAA is qualified or permitted to provide tax advice. You should consult a tax professional for specific tax advice and specifically regarding the tax consequences of investing with the Program and engaging in the Tax Loss Harvesting strategy based on your particular circumstances. No feature of, interaction with, description of, or action taken in accordance with the Program, including the Client Preference for Tax Management, represents a tax strategy in the context of your individual tax situation and should not replace or supplement the advice of your personal tax advisor. APS is not responsible for ensuring that you accurately report the trading activity in your Program account to the IRS or any other relevant taxing authority. APS is not responsible to you for the tax consequences of any transaction in a Program account, makes no warranties or guarantees that the tax consequences described herein or in the materials provided to you by the Program in respect of your Program account will be achieved by the Program, and makes no warranty or guarantee that the IRS or other relevant taxing authorities will not challenge the tax consequences of its trades, nor that any such challenge will not be successful. If the IRS is successful in its claim that one or more transactions executed pursuant to the Program were wash sale transactions, any loss recognized on

such transactions may be deferred or disallowed, and you may be subject to the imposition of interest and penalties on such transactions.

Risks of Investing in the Program. The following is a general description of risks associated with investing in the Program. The following list describes risks at the overall portfolio level for your Program account and does not purport to be an exhaustive list of all risk factors associated with the Program. The following list also does not describe the principal risks of the underlying funds and ETFs selected for your portfolio, which are described in each fund's and ETF's current prospectus.

Investment Risks:

- Market Risk. The price of any security or the value of an entire asset class can decline for a variety of reasons outside of the Program's control, including, but not limited to, changes in the macroeconomic environment, unpredictable market sentiment, forecasted or unforeseen economic developments, interest rates, regulatory changes, and domestic or foreign political, demographic, epidemic, pandemic, or social events. For example, if a client has a high allocation to a particular asset class, and that asset class underperforms relatives to the overall market, their Program account may be negatively impacted. Additionally, a low allocation to a particular asset class that outperforms other asset classes will cause the Program account to underperform relative to the overall market.
- Global Economic Risk. National and regional economies and financial markets are becoming increasingly interconnected, which increases the possibilities that conditions in one country, region or market might adversely impact issuers in a different country, region or market. Changes in legal, political, regulatory, tax and economic conditions may cause fluctuations in markets and securities prices around the world, which could negatively impact the value of an account's investments. Major economic or political disruptions, particularly in large economies, may have global negative economic and market repercussions. Additionally, events such as war, terrorism, natural and environmental disasters and the spread of infectious illnesses or other public health emergencies may adversely affect the global economy and the markets and issuers in which an account invests. These events could reduce consumer demand or economic output, result in market closure, travel restrictions or quarantines, and generally have a significant impact on the economy. Such events could materially increase risks, including market and liquidity risk, and significantly reduce account values. These events could also impair the information technology and other operational systems upon which service providers, including APS, rely, and could otherwise disrupt the ability of employees of service providers to perform essential tasks on behalf of an account. There is no assurance that governmental and quasi-governmental authorities and regulators will provide constructive and effective intervention when facing a major economic, political or social disruption, disaster or other public emergency.
- Mutual Funds and ETFs (Funds) Risks. Investing in shares of a Fund involves risk of loss that Program clients should be prepared to bear. For mutual funds and ETFs in particular, this includes the risk that the general level of underlying security prices may decline, thereby adversely affecting the value of the Fund. Moreover, a Fund may not fully replicate the performance of its benchmark index. Funds are not guaranteed or insured by the FDIC or any other government agency. Funds have their own fees, investments and risks. For the specific information associated with any Fund used by the Program for your account, please consult the Fund's prospectus and statement of additional information, which you should read carefully.

- Fixed Income Risk. Your Program account may hold significant positions in mutual funds and ETFs that invest exclusively or primarily in debt securities such as corporate and foreign bonds. Debt securities are subject to credit risk, which is the risk that the issuer of the security will not be able to make principal and interest payments when due. This will significantly impair the value of the security. Even if a debt issuer continues to make principal and interest payments, the market value of a debt security can decline because of concerns about the issuer's ability to make such payments in the future. Debt securities are also subject to interest rate risk because their value will rise and fall with changes in interest rates. When interest rates rise, the market prices of already issued debt securities usually declines and when interest rates fall, the market value of the debt instrument will rise. Interest rate risk tends to be greater for debt securities with longer maturities or duration.
- *Model Risks:* The assumptions made in the construction of the models may limit their effectiveness. For example, use of historical market data may not predict future events. Additionally, inaccuracies or limitations in the quantitative analysis or models used by the Program may interfere with the implementation of model portfolio strategy.
- Asset Allocation and Investment Strategy Risks: The asset classes used within the various model portfolios offered through the Program can perform differently over time and potentially underperform the Program's expectations. More aggressive strategies used within the model portfolios generally contain larger weightings of riskier asset classes such as equities.
- Liquidity Risks. Program clients collectively account for a significant portion of certain ETFs and mutual funds (in some cases, in excess of 50%). As a result, when the Program generates a full or partial liquidation of larger size, mutual fund managers are generally permitted under the terms of the fund's prospectus to satisfy the redemption "in kind" (i.e., the Program would receive a distribution of securities, rather than cash, which it would need to liquidate directly). A redemption received in kind may require the use of a transition manager, which may be difficult to source and costly. In order to avoid a redemption in kind, the Program may liquidate such positions over a more extended period of time, which introduces pricing risk. Further, mutual funds may "gate" during times of market stress or otherwise allocate liquidity among investors seeking to redeem, which can further delay the Program's ability to reduce or redeem out of such positions. Additionally, when the Program aims to liquidate large positions in an ETF that has less liquid underlying investments it can create pricing gaps, which the Program may mitigate by buying and selling the ETF over an extended period of time. While the Program may be able to execute large ETF sales with a market maker, a market maker generally assesses a markdown for a large, at risk trade. These scenarios create a risk that the mutual fund or ETF is not sold in a timely manner at the desired price.
- Concentration Risk. Program clients collectively account for a significant portion of certain ETF and mutual fund assets (in some cases, in excess of 50%) and a decision by the Program to sell the shares of the ETF or mutual fund may negatively impact the value of the ETF or mutual fund. In addition, managed account programs operated by TIAA Affiliates (including TIAA, FSB) often own material positions in these same ETF and mutual funds, which increases the collective ownership by TIAA and heightens this risk.

Cybersecurity Risks: With the increased use of technologies such as the Internet to conduct business, client portfolios are susceptible to operational, information security and related risks. In general, cyber incidents can result from deliberate attacks or unintentional events that include, but are not limited to, gaining unauthorized access to digital systems, misappropriating assets or sensitive information, corrupting data, or causing operational disruption, including the denial-of-service attacks on websites. Cyber security failures

or breaches by a third party service provider and the issuers of securities in which the portfolio invests, have the ability to cause disruptions and impact business operations, potentially resulting in financial losses, the inability to transact business, violations of applicable privacy and other laws, regulatory fines, penalties, reputational damage, reimbursement or other compensation costs, and/or additional compliance costs, including the cost to prevent cyber incidents.

Reliance on Technology: The offerings within the Program are dependent upon various computer and telecommunication technologies, many of which are provided by or are dependent on third parties. The successful operation of the Program could be severely compromised by system or component failure, telecommunication failure, power loss, a software-related system crash, unauthorized system access or use (such as "hacking"), computer viruses and similar programs, fire or water damage, human errors in using or accessing relevant systems, or various other events or circumstances. It is not possible to provide comprehensive and foolproof protection against all such events, and no assurance can be given about the ability of applicable third parties to continue providing their services. Any event that interrupts such computer and/or telecommunication systems or operations could have a material adverse effect on the Program. Such a material adverse effect may have a heightened impact on the Program given the automated nature of the services provided.

Limitations of Risk Disclosures: As the strategies develop and change over time, clients may be subject to additional and different risk factors, therefore the above list of risks is not a complete enumeration or explanation of the risks involved in investment in Program. No assurance can be made that profits will be achieved or that substantial losses will not be incurred.

Performance-based Fees and Side by Side Management

APS does not charge performance-based fees, which are fees based on a share of a Program account's capital gains or appreciation, to its Program clients or any other clients.

Voting Client Securities

Rule 206(4)-6 under the Advisers Act requires that investment advisers exercising voting authority on behalf of their advisory clients must adopt and implement written policies and procedures reasonably designed to ensure that proxies are voted in a manner that reflects the best interests of clients. Program account proxies are voted by TIAA's Responsible Investing team, unless you request otherwise, in which case the proxy materials will be sent directly to you. In voting your proxies, TIAA's Responsible Investing team follows the guidelines set forth in the TIAA Policy Statement on Corporate Responsible Investing. Conflicts of interest identified are resolved through guidelines set forth in TIAA's Responsible Investing team's procedures. This includes the use of an independent third party proxy advisory firm (currently, Institutional Shareholder Services) to vote proxies for Program holdings in Affiliated Funds, The TIAA Responsible Investing team works with a proxy execution firm to effectuate the voting of your proxies. The Program reviews the proxy voting practices of TIAA's Responsible Investing team periodically to ensure that they are acting in clients' best interests. TC Services intends to vote proxies in accordance with its clients' best interests, and aims to use proxy voting as a tool to promote positive returns for long-term shareholders. TC Services may not vote proxies if it determines that the benefit of voting individual proxies is small relative to the undue burden of voting those proxies, or where the client's account does not have an economic interest in the outcome of the proxy.

You cannot direct the Program on how to vote on a particular proxy; you must either delegate all proxy voting to the Program on your behalf or wholly retain voting privileges. You may obtain information about how TIAA's Responsible Investing team voted with respect to any security by calling your Advisor. You may

also obtain a copy of the applicable proxy voting policies and procedures, and the TIAA Policy Statement on Corporate Responsible Investing, by calling your Advisor.

Class Actions. The Program will not and does not undertake to act on your behalf with regards to class action claims or notices and instead will forward any such claims or notices directly to you for handling. The Program will pass through for you to vote directly any voluntary corporate action notices.

Other Advisory Services

APS and TIAA, FSB offer other managed account programs, such as the TIAA Personal Portfolio program offered through APS and the PAM service offered through TIAA, FSB (together with the Program, the "TIAA Managed Accounts"). Different managed account programs have different fee structures and offerings of services than the Program and have access to different Funds, asset classes and/or share classes of Funds than those available through the Program. These differences are based on the level and type of services offered by each program, the service providers and platforms used in each program and the amount of a client's assets under management, among other factors. You should consult your Advisor for more information about the other managed account programs when considering whether the Program is right for you.

Advisors can recommend that you open, contribute or consolidate assets (through a rollover or transfer) into any of the TIAA Managed Accounts (except TIAA Personal Portfolio, which is closed to new investors). In certain cases a client may be eligible to invest in more than one TIAA Managed Account recommended by TC Services.

- TC Services has an incentive to recommend the Program over other TIAA Managed Accounts when the client is eligible for both. The revenue that TC Services retains from the Program Fee is greater than the advisory fee you would pay on a TIAA Personal Portfolio account and greater than the referral fee TC Services earns on a PAM account.
- Based on a comparison of investment management fees and without regard to the cost of the additional services provided in PAM, including a dedicated Portfolio Manager, TIAA typically has an incentive for TC Services to recommend a PAM account over a Program account when the client is eligible for both. This is because the blended fee rate that you pay on a PAM account can be greater than the rate you would pay on a Program account (depending on account size and mix of asset classes). However, our incentive to recommend the PAM account (over a Program account) depends on the total revenue and costs to all TIAA entities from a particular account, which varies based on additional factors such as the level of service required by a client and cost of transactions. All else being equal, the Program account generally is more expensive for you, and more profitable for TIAA overall, than the PAM account when trading activity in your Program account is low because TIAA bears transaction costs for assets invested in the Program, but not in the PAM account.

Making a recommendation that generates more revenue, or decreases the costs, to TC Services and/or TIAA as a whole presents a conflict of interest. Please see the TC Services APS disclosure brochure at https://www.tiaa.org/public/pdf/tc_adv_program.pdf for more detail on the revenue that TC Services and/or TIAA receives from each TIAA Managed Account program. We address the conflicts of interest by disclosing our incentives to you and by requiring that all TC Services' recommendations be reviewed in accordance with applicable regulatory standards, to determine whether they are appropriate for client's financial needs.

Positions taken by APS or TIAA, FSB on behalf of some managed account clients may be the same as, or different from, or made contemporaneously or at different times than, positions taken for other clients. TIAA, FSB's investment decisions for the Program are based on research or other information that is also used to support its investment recommendations for other clients, and it may be perceived as a conflict of interest when advice differs for their accounts that use strategies similar to those used by Program accounts, especially if the investment decision results in TIAA retaining more of the Program Fee as described in Item 4 under "Model-Based Portfolios and Portfolio Investments." APS seeks to identify and mitigate or disclose actual and perceived conflicts of interest with clients and to resolve such conflicts appropriately if they do occur.

APS also offers, separately from the Program non-discretionary financial planning services with an emphasis on retirement planning needs. Retirement planning helps clients invest for retirement and address income needs. Retirement planning is generally limited to providing advice across fixed annuities, variable annuities, mutual funds and ETFs. These services are described in greater detail in the Advice & Planning Services' Disclosure Brochure.

Item 7 – Client Information Provided to Portfolio Managers

As described in Item 4 under "Engagement of Service Providers to Formulate Advice," APS has engaged TIAA, FSB to provide portfolio management services. To facilitate this, APS provides your risk tolerance level (ranging from very conservative to very aggressive), time horizon and Client Preferences to TIAA, FSB in connection with your Program account. APS will pass through to TIAA, FSB any updates to this information as received by you. APS does not provide your personal data to the Allocation Provider or the External Adviser.

Item 8 – Client Contact with Portfolio Managers

The Program does not generally contemplate that you will speak directly with either the TIAA investment professionals or the External Adviser responsible for the formulation of Program advice; however, they may be made available upon specific request. Rather, Advisors knowledgeable about the Program and its advice are available during normal business hours to discuss any aspect of the Program with you.

Item 9 – Additional Information

Disciplinary Information and Information about Other Financial Industry Activities and Affiliations

1. On July 13, 2021, TC Services entered into settlements with the SEC and the New York Attorney General ("NYAG"), without admitting or denying the findings. The settlements state that during the period January 1, 2012 to March 30, 2018, TC Services made false, inaccurate or misleading statements in the marketing of Portfolio Advisor managed accounts, and (1) failed to correctly or adequately disclose to clients the financial incentives and conflicts of interest for wealth management advisors ("WMAs") to recommend rollovers from an employer-sponsored retirement plan ("Plan") record-kept by TIAA to the Portfolio Advisor program, over other investment options that would earn less compensation for the WMA and less revenue for TC Services; (2) provided clients with incomplete and misleading information about their investment options, including the existence of other investment options with lower costs and/or better net-of-fees modeled returns, particularly the option of retaining assets in employer-sponsored plans; and (3) provided training that confused WMAs, who made inaccurate and confusing statements concerning the legal standard under which

WMAs were acting when making investment recommendations, with WMAs believing and stating that they were acting as fiduciaries.

In the settlements, TC Services was found to have violated, and was ordered to cease and desist from committing or causing further violations of: (1) Sections 206(2), 206(4) and 206(4)(7) of the Investment Advisers Act of 1940; (2) Sections 17(a)(2) and 17(a)(3) of the Securities Act of 1933; and (3) the Martin Act, New York Executive Law section 63(12) and New York common law. TC Services also was ordered to provide client restitution in the amount of \$97 million, which included a \$9,000,000 SEC penalty, return of a portion of fees in the amount of \$73,985,572 and prejudgment interest of \$14,014,428, to approximately 20,000 former or current clients who opened a Portfolio Advisor account using assets from a TIAA-administered retirement plan between January 1, 2012 and March 30, 2018.

In resolving the matter, the NYAG and SEC acknowledged certain measures taken by TC Services prior to and during the investigations, including: (1) changes to WMA compensation to remove differential compensation between managed accounts and other retirement plan options; (2) the decision to hold all WMAs to a fiduciary standard when recommending the Portfolio Advisor program; and (3) enhancements to training, disclosures, supervision, and policies and procedures to improve its practices regarding the issues in the settlement. Pursuant to the settlements' terms, TC Services has undertaken to notify affected clients of the terms of the settlements, to continue to hold all WMAs to a fiduciary standard when recommending the Portfolio Advisor program, to review and improve as necessary the training programs and disclosures, and to report to the SEC and NYAG regarding compliance with the undertakings and relief provisions.

For a copy of the SEC order, see https://www.sec.gov/litigation/admin/2021/33-10954.pdf

- 2. On March 11, 2019, the SEC issued an order regarding conduct TC Services had self-reported to the SEC in connection with the Share Class Selection Disclosure Initiative (the "Initiative"). Without admitting or denying the findings, TC Services consented to the entry of an order (the "Settlement Order") finding that it violated Sections 206(2) and 207 of the Advisers Act by not adequately disclosing to clients enrolled in the Portfolio Advisor and Portfolio Manager programs certain conflicts of interest related to the receipt of Rule 12b-1 fees and selection of mutual fund share classes that pay such fees. Pursuant to the Settlement Order, TC Services consented to a censure and was ordered to cease and desist from committing or causing further violations of Sections 206(2) and 207 of the Advisers Act. TC Services also was ordered to disgorge a total of \$2,102,280.21 in Rule 12b-1 fees received, plus \$293,342.08 in prejudgment interest, to affected investors and to notify affected investors of the Settlement Order's terms, including the following undertakings: (1) review and correct as necessary all relevant disclosure documents concerning mutual fund share class selection and Rule 12b-1 fees; (2) evaluate whether existing clients should be moved to a lowercost share class and to move clients as necessary; and (3) evaluate, update and review for the effectiveness of their implementation, TC Services policies and procedures to assure that they are reasonably designed to prevent violations of the Advisers Act in connection with disclosures regarding mutual fund share class selection. The SEC did not impose a civil penalty on TC Services based on TC Services self-reporting through the Initiative.
- 3. On November 22, 2016, TC Services entered into a settlement, known as a letter of acceptance, waiver and consent ("AWC") with FINRA, a self-regulatory organization for broker-dealers. The settlement related to how it confirmed transactions it effected between 2004 and 2015 for employer retirement plans record-kept by TIAA. TC Services accepted and consented to the entry of findings (without admitting or denying the findings) that it failed to deliver confirmations for certain

transactions and delayed delivery of confirmations due to technological issues and ambiguities in a vendor contract, and did not denote the firm's capacity as agent on certain confirmations, resulting in violations of Securities Exchange Act Rule 10b-10, NASD Rule 2230 and FINRA Rule 2232 related to customer confirmations, and NASD Rule 2110 and FINRA Rule 2010 related to standards of commercial honor and principles of trade. TC Services further consented to a censure and fine of \$275,000. The activity subject to the settlement was not related to APS' investment advisory programs. In resolving the matter, FINRA recognized that TC Services: (1) timely self-reported the foregoing confirmation issues to FINRA; (2) prior to detection or intervention by a regulator, engaged outside counsel and an independent consultant to conduct an internal forensic investigation of the relevant issues; (3) promptly took corrective action and revised its policies and procedures regarding confirmation production and delivery; (4) hired additional staff dedicated to ensuring proper confirmation production and delivery; and (5) provided substantial assistance to FINRA by sharing the results of its internal investigation and voluntarily and promptly providing updates regarding additional confirmation delivery issues discovered during its internal investigation.

Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

APS has a Code of Ethics and Personal Trading Policy that regulates the personal securities trading activities of investment personnel and other persons with access to confidential trading information (collectively "access persons") and requires them to address conflicts of interest, appropriately, e.g., when investing in or making additional contributions to investments that are branded, sponsored, advised or sub-advised by TIAA or its affiliates. It ultimately seeks to ensure that access persons place the interests of clients of TC Services ahead of their own interests with respect to their personal securities trading activities. All access persons and members of their households must report their personal holdings and transactions in covered securities. Certain access persons are subject to certain restrictions and prohibitions in trading for their own accounts, and are subject to pre-clearance of certain securities transactions by a compliance unit. The Code of Ethics Policy also prohibits the misuse of material nonpublic information and confidential information. APS prohibits or limits the purchase of securities in initial public offerings and private placements. Advisors may purchase or sell for their personal account securities recommended to you subject to the limitations of the aforementioned Code of Ethics Policy. TIAA, FSB, which trades securities for the Program, has a similar policy. You may request a copy of APS' Code of Ethics Policy by calling your Advisor.

SEC rules require broker-dealers to maintain a minimum amount of working capital. TC Services may invest this working capital in money market mutual funds, mortgage backed securities, investment grade corporate bonds or U.S. Treasury Securities. Except for securities invested for this limited purpose, TC Services does not generally buy or sell its own securities that it may recommend to you.

Review of Accounts

Upon initial enrollment, an APS supervisor will review your participation in the Program to verify it is in your best interest based on your investing needs, objectives and circumstances and by analyzing certain considerations, as described in Item 4 under "Sales, Enrollment, and Servicing and the Role of Advisors."

APS has an ongoing obligation as a fiduciary to consider whether prior recommendations to open, contribute to or consolidate assets (through a rollover or transfer) into a Program account and continued enrollment in a Program account remain appropriate for its clients. APS and Advisors fulfill this obligation by offering to meet with Program clients at least annually and including notices in various Program communications requesting that Program clients contact their Advisor if their investment objectives or financial circumstances have changed. When meeting with Program clients, Advisors focus on whether the client's financial

circumstances or their individual preferences for advisory services have changed materially in a way that might suggest that the Program account is no longer appropriate, or whether changes to the management of your Program account should be made. Advisors will also inquire as to whether a client wants to impose or modify any reasonable restrictions on the account, as described in Item 4 under "Investment Restrictions." Advisors do not have a role individually in determining whether TIAA, FSB continues to perform adequately as investment manager, as that review is conducted by APS periodically and serves as the basis for making these account type recommendations to its clients as described in Item 4 under "Sales, Enrollment, and Servicing and the Role of Advisors."

In between these inquiries, as noted above clients are advised to contact an Advisor whenever a material change occurs in their financial situation or investment objective, as either may affect the continued appropriateness of the Program account. A review of the continued appropriateness of the Program account will be conducted, as needed, whenever this information is brought to TC Services' attention. TC Services will have no liability for your failure to provide it with accurate or complete information or to inform APS promptly of any changes in the information you previously provided. When received, APS will evaluate whether any changes should be made to the management of your Program account based on this information. Any changes to your model portfolio may not occur the same day following receipt of the instruction. Extreme market volatility and in process trades could impact this timing. Examples of material changes include, but are not limited to changes in net worth, employment status, marital status, family size, occupation, residence, health or income level, investment objective or risk tolerance (for example, changes based on market events). As described in Item 4 under "Sales, Enrollment, and Servicing and the Role of Advisors," service requests fulfilled by Brokerage Services Representatives are not promptly shared with Advisors. For any changes to your financial circumstances, you should contact your Advisor.

Any recommendations regarding the Program account that occur when Advisors meet with Program clients are subject to the fiduciary duty described in Item 4 under "Standards of Care." As part of the investment management service for your Program account, and as described in Item 4 under "Rebalancing", the model portfolio used in connection with your Program account will be monitored daily for drift. Market conditions and other factors will likely cause your Program account to deviate over time from the model portfolio. When such deviations become materially significant (as determined by the Program's parameters), then your Program account will be rebalanced to align it more closely with the model portfolio provided your Program account meets the minimum balance requirements as described in Item 4 under "Funding."

Quarterly performance reports (which can be requested from your Advisor) will be available to you beginning after the completion of your first full enrollment quarter detailing the progress of your Program account. You will also receive separate brokerage confirmation statements reflecting individual transactions made in your Program account unless you elect to suppress these statements with a quarterly confirmation report summarizing all information that would otherwise be contained on the separate brokerage confirmation statements. You are able to change your election at any time. You will also receive monthly or quarterly brokerage account statements depending upon Program account activity. You are responsible for reviewing each report and statement in a timely manner and alerting an Advisor to any discrepancy. The Program will compile quarterly performance information for your Program account based upon uniform criteria consistent with generally accepted industry standards. You will receive mutual fund prospectuses for each new mutual fund purchased for your Program account and are responsible for reviewing the terms and conditions contained therein. For important information about each Fund, including investment objectives, risks, charges, and expenses, you can read each Fund's prospectus carefully and consider all the information in it before investing.

All written information, including, but not limited to your reports, statements and confirmations may be delivered to you in electronic format if you consent to such delivery at the time of enrollment or anytime thereafter. You may opt out of electronic delivery at any time.

Client Referrals and Other Compensation

In connection with other services provided to you outside of the Program, Advisors may recommend you invest in affiliated products and non-advisory services offered by or through TIAA such as variable annuities, mutual funds, life insurance, and deposit and lending products. TC Services and its affiliates receive compensation for services they provide to these affiliated products, including but not limited to advisory, distribution and administrative services. Refer to the prospectuses, statements of additional information, or other disclosures for the applicable affiliated product for a complete description of such fees and payments. Also, recommending affiliated products creates a conflict of interest because the TIAA family of companies receives more revenue when recommending affiliated products than when recommending unaffiliated products. Please refer to "Use of Affiliated Funds and Two Levels of Fees" and "About TIAA" in Item 4 for additional information about these conflicts of interest and how they are addressed.

TC Services compensates field consultants, national contact center financial consultants, and individual financial consultants, who act as broker-dealer representatives for client referrals to TC Services' advisory division. For information about how these financial professionals are compensated for these referrals, see "Compensation of WMAs, Advisory Consultants and other TC Services' Representatives" in Item 4. In addition, "Share Class Selection" and "Program Fees – Other Fees and Expenses" in Item 4 describe the payments that TC Services and its clearing firm, Pershing, receive from certain Affiliated Funds and unaffiliated mutual funds as compensation for distribution, shareholder and administrative services.

TC Services does not compensate, and has no referral arrangements with, any third-parties for referrals they make to APS.

Financial Information

TC Services does not require or solicit prepayment of more than \$1,200 in fees per client six months or more in advance and, thus, has not included a balance sheet of its most recent fiscal year. TC Services is not aware of any financial condition that is reasonably likely to impair its ability to meet its contractual commitments to clients, nor has TC Services been the subject of a bankruptcy petition at any time during the past ten years.

Item 10 —Requirements for State Registered Advisers

TC Services is a federally registered investment adviser.

Biographies of TIAA, FSB Investment Management Personnel

The Brochure Supplements (each, a "Brochure Supplement") that appear on the following pages contain the biographies of those affiliated investment personnel who manage assets invested in the Portfolio Advisor Wrap Fee Program ("Program") on behalf of Advice and Planning Services ("APS"), the division of TIAA-CREF Individual & Institutional Services, LLC ("TC Services") that sponsors, administers and manages the Program. These investment personnel support the Program as part of an investment team at APS' affiliated federal savings bank, TIAA, FSB (the "TIAA, FSB Investment Team") that APS engages to formulate advice for the Program, subject to its oversight.

Brochure Supplement Eric T. Jones March 31, 2022

This Brochure Supplement provides information about Eric T. Jones, an individual who is on the TIAA, FSB Investment Team that has investment discretionary authority over assets enrolled in the Program, subject to APS' oversight. It supplements the attached Disclosure Brochure for the Program. You should have received a copy of that Disclosure Brochure. Please call 866.220.6583 if you did not receive a copy of the Program's Disclosure Brochure or if you have any questions about the contents of this Brochure Supplement.

<u>Background</u>. Eric is 60 years old as of the date of this Brochure Supplement. His work address is 8500 Andrew Carnegie Boulevard, Charlotte, NC, 28262. His phone number is 704.988.1000. Eric is interim Chief Investment Officer for TIAA, FSB. He is also Senior Managing Director, Advisory Solutions and Product Development for TIAA Individual Advisory Services and a registered representative of TC Services in support of this role. He also sits as Chair on the Board of Directors of TC Services and TIAA-CREF Life Insurance Company. TIAA, FSB's corporate headquarters are located at 501 Riverside Avenue, Jacksonville, FL 32202, phone 904.281.6000.

Educational Background and Business Experience. Eric joined TIAA, FSB in September 2018 in his current role as interim Chief Investment Officer. At TIAA, he is also Senior Managing Director, Advisory Solutions and Product Development and was previously Senior Managing Director, head of Individual Products. Eric has been at TIAA for 14 years. Prior to TIAA, Eric held a variety of senior roles at UBS Financial Services for over 13 years, including Director of Product Development and Investment Manager Research, Director of Wealth Management Services, and head of product management and development for UBS' managed account and fee-based products. Prior to that, Eric was a product manager at Kemper Securities for four years. Eric graduated with a BS in Finance from Penn State University.

<u>Disciplinary Information</u>. Eric has no history of disciplinary events.

Other Business Activities. Eric has no other business activities. His full-time occupation is with his roles at TIAA as Interim Chief Investment Officer for TIAA, FSB, Senior Managing Director, Advisory Solutions and Product Development for TIAA Individual Advisory Services (and registered representative of TC Services in support of this role) and member of the Board for TC Services and TIAA-CREF Life Insurance Company.

<u>Additional Compensation</u>. Eric is paid a base salary and bonus. Bonus compensation takes into account a number of factors based on Eric's roles with TIAA, FSB and TIAA Individual Advisory Services, including the overall economic performance of TIAA, the risk adjusted performance of the portfolio strategies, achieving operational and risk standards, delivering ongoing advisory program and process enhancements

demonstrated through customer engagement, and the growth of total assets generated by the advisory sales force. Eric does not receive compensation for providing advisory services from anyone other than his employer.

<u>Supervision</u>. The investment discretion exercised by the TIAA, FSB Investment Team is principally monitored by APS' affiliated federal savings bank, TIAA, FSB, which APS engages to formulate advice for the Program. Senior investment professionals from TIAA, FSB typically meet monthly to review investment-related decisions, policies and procedures and annually to review the investment strategy work of the TIAA, FSB Investment Team. APS exercises oversight as described in the Program's Disclosure Brochure. Eric's supervisor is Rashmi Badwe, Head of Wealth Solutions & investments at TIAA at 704.988.1000. General inquiries regarding accounts, balances, distributions, or any other account administrative features should be directed to your Advisor.

Brochure Supplement Richard Robinson March 31, 2022

This Brochure Supplement provides information about Richard Robinson, an individual who is on the TIAA, FSB Investment Team that has investment discretionary authority over assets enrolled in the Program, subject to APS' oversight. It supplements the attached Disclosure Brochure for the Program. You should have received a copy of that Disclosure Brochure. Please call 866.220.6583 if you did not receive a copy of the Program's Disclosure Brochure or if you have any questions about the contents of this Brochure Supplement.

<u>Background</u>. Richard is 51 years old as of the date of this Brochure Supplement. His work address is 8500 Andrew Carnegie Boulevard, Charlotte, NC, 28262. His phone number is 704.988.1000. Richard is Senior Vice President and Chief Fiduciary Officer for TIAA, FSB. He is also Chair of the Investment Committee at TIAA, FSB. TIAA, FSB's corporate headquarters are located at 501 Riverside Avenue, Jacksonville, FL 32202, phone 904.281.6000.

Educational Background and Business Experience. Richard joined TIAA, FSB in March 2014. At TIAA, he has also held the role of Director of Business Supervision and Controls and became Managing Director in this role in 2018. Richard has over 20 years of supervision and oversight experience. Prior to TIAA, Richard was a Senior Compliance Manager with Bank of America and a Compliance and Oversight Manager with General Electric Asset Management. Richard graduated with a B.A. in General Studies from the University of Connecticut and a J.D. from Quinnipiac University.

<u>Disciplinary Information</u>. Richard has no history of disciplinary events.

Other Business Activities. Richard has no other business activities. His full-time occupation is as a Senior Vice President and Chief Fiduciary Officer for TIAA, FSB.

Additional Compensation. Richard is paid a base salary and bonus. Bonus compensation takes into account a number of factors, including the overall economic performance of TIAA and Richard's individual performance in achieving the goals established for his role at TIAA, FSB. Richard does not receive compensation for providing advisory services from anyone other than his employer.

<u>Supervision</u>. The investment discretion exercised by the TIAA, FSB Investment Team is principally monitored by APS' affiliated federal savings bank, TIAA, FSB, which APS engages to formulate advice for the Program. Senior investment professionals from TIAA, FSB typically meet monthly to review investment-related decisions, policies and procedures and annually to review the investment strategy work of the TIAA, FSB Investment Team. APS exercises oversight as described in the Program's Disclosure Brochure. Richard's supervisor is Rashmi Badwe, Head of Wealth Solutions & investments at TIAA at 704.988.1000.

General inquiries regarding accounts, balances, distributions, or any other account administrative features should be directed to your Advisor.

Brochure Supplement T. Todd Starcher March 31, 2022

This Brochure Supplement provides information about T. Todd Starcher, an individual who is on the TIAA, FSB Investment Team that has investment discretionary authority over assets enrolled in the Program, subject to APS' oversight. It supplements the attached Disclosure Brochure for the Program. You should have received a copy of that Disclosure Brochure. Please call 866.220.6583 if you did not receive a copy of the Program's Disclosure Brochure or if you have any questions about the contents of this Brochure Supplement.

<u>Background</u>. Todd is 47 years old as of the date of this Brochure Supplement. His work address is 8500 Andrew Carnegie Boulevard, Charlotte, NC, 28262. His phone number is 704.988.1000. Todd is a Senior Director, Portfolio Construction & Advisory Platform for TIAA, FSB. TIAA, FSB's corporate headquarters are located at 501 Riverside Avenue, Jacksonville, FL 32202, phone 904.281.6000.

Educational Background and Business Experience. Todd joined TIAA, FSB in August 2009. At TIAA, he has also held the roles of Senior Portfolio Strategist in addition to his current role of Senior Director, Portfolio Construction & Advisory Platform. Prior to TIAA, Todd worked as Vice President and Alternative Investment Product Manager for Evergreen Investments for 1 year. Prior to that, Todd worked as Vice President and Asset Allocation Strategist for Evergreen Investments for 5 years. Todd graduated with a Bachelor of Science from Palm Beach Atlantic University in 1997. Todd attained the Chartered Financial Analyst, or CFA designation, in 2003; this designation requires completion of a three stage self-study curriculum and achieving a passing score on three progressive exams. It prepares the holder to analyze securities and recommend portfolios.

<u>Disciplinary Information</u>. Todd has no history of disciplinary events.

Other Business Activities. Todd has no other business activities. His full-time occupation is as a Senior Director, Portfolio Construction & Advisory Platform for TIAA, FSB.

Additional Compensation. Todd is paid a base salary and bonus. Bonus compensation takes into account a number of factors, including the overall economic performance of TIAA, the performance of the portfolio strategies, achieving operational and risk standards, and delivering ongoing advisory program and process enhancements demonstrated through customer engagement. Todd does not receive compensation for providing advisory services from anyone other than his employer.

<u>Supervision</u>. The investment discretion exercised by the TIAA, FSB Investment Team is principally monitored by APS' affiliated federal savings bank, TIAA, FSB, which APS engages to formulate advice for the Program. Senior investment professionals from TIAA, FSB typically meets monthly to review investment-related decisions, policies and procedures and annually to review the investment strategy work of the TIAA, FSB Investment Team. APS exercises oversight as described in the Program's Disclosure Brochure. Todd's supervisor is Eric T. Jones, interim Chief Investment Officer for TIAA, FSB at 704.988.1000. General inquiries regarding accounts, balances, distributions, or any other account administrative features should be directed to your Advisor.

Brochure Supplement Walter Joyce March 31, 2022

This Brochure Supplement provides information about Walter Joyce, an individual who is on the TIAA, FSB Investment Team that has investment discretionary authority over assets enrolled in the Program, subject to APS' oversight. It supplements the attached Disclosure Brochure for the Program. You should have received a copy of that Disclosure Brochure. Please call 866.220.6583 if you did not receive a copy of the Program's Disclosure Brochure or if you have any questions about the contents of this Brochure Supplement.

<u>Background</u>. Walter is 49 years old as of the date of this Brochure Supplement. His work address is 8500 Andrew Carnegie Boulevard, Charlotte, NC, 28262. His phone number is 704.988.1000. Walter is Managing Director of Investment Services for TIAA, FSB. TIAA, FSB's corporate headquarters are located at 501 Riverside Avenue, Jacksonville, FL 32202, phone 904.281.6000.

Educational Background and Business Experience. Walter has more than 17 years of financial services experience and has held several senior leadership positions, including six years as the COO of an institutional brokerage and asset management firm in New York and four years heading up Equity Capital Markets in charge of Research and Equities trading. Additionally, he spent four years both as an investment manager and consultant to various wealth managers. Walter holds a B.S. in Management from the University of Alabama and an M.B.A. in Finance from Thunderbird Graduate School of International Management.

<u>Disciplinary Information</u>. Walter has no history of disciplinary events.

<u>Other Business Activities</u>. Walter has no other business activities. His full-time occupation is as Managing Director of Investment Services for TIAA, FSB.

Additional Compensation. Walter is paid a base salary and bonus. Bonus compensation takes into account a number of factors, including the overall economic performance of TIAA, the performance of the portfolio strategies, achieving operational and risk standards, and delivering ongoing advisory program and process enhancements demonstrated through customer engagement. Walter does not receive compensation for providing advisory services from anyone other than his employer.

<u>Supervision</u>. The investment discretion exercised by the TIAA, FSB Investment Team is principally monitored by APS' affiliated federal savings bank, TIAA, FSB, which APS engages to formulate advice for the Program. Senior investment professionals from TIAA, FSB typically meet monthly to review investment-related decisions, policies and procedures and annually to review the investment strategy work of the TIAA, FSB Investment Team. APS exercises oversight as described in the Program's Disclosure Brochure. Walter's supervisor is Eric T. Jones, interim Chief Investment Officer for TIAA, FSB at 704.988.1000. General inquiries regarding accounts, balances, distributions, or any other account administrative features should be directed to your Advisor.

Brochure Supplement Michael Sowa March 31, 2022 This Brochure Supplement provides information about Michael Sowa, an individual who is on the TIAA, FSB Investment Team that has investment discretionary authority over assets enrolled in the Program, subject to APS' oversight. It supplements the attached Disclosure Brochure for the Program. You should have received a copy of that Disclosure Brochure. Please call 866.220.6583 if you did not receive a copy of the Program's Disclosure Brochure or if you have any questions about the contents of this Brochure Supplement.

<u>Background</u>. Michael is 45 years old as of the date of this Brochure Supplement. His work address is 8500 Andrew Carnegie Boulevard, Charlotte, NC, 28262. His phone number is 704.988.1000. Michael is a Senior Director and Deputy Chief Investment Officer for TIAA, FSB. TIAA, FSB's corporate headquarters are located at 501 Riverside Avenue, Jacksonville, FL 32202, phone 904.281.6000.

Educational Background and Business Experience. Michael joined TIAA, FSB in August 2011. At TIAA, he has also held the role of Senior Associate in addition to his current role of Senior Director of Manager Research. Prior to TIAA, Michael worked as Vice President, Senior Investment Analyst for Envestnet Asset Management for four years. Prior to that, Michael worked as Senior Analyst for National Planning Holdings for 2 years, as well as a Research Analyst for Lipper for three years. Michael graduated with Bachelor of Science from American International College in 1999 and an MSc in Finance & Investments from the University of Edinburgh, Scotland in 2005. Michael attained the Chartered Alternative Investment Analyst, or CAIA designation, in 2007; this designation requires completion of a two stage self-study curriculum and achieving a passing score on two progressive exams.

Disciplinary Information. Michael has no history of disciplinary events.

<u>Other Business Activities</u>. Michael has no other business activities. His full-time occupation is as a Senior Director of Manager Research for TIAA, FSB.

<u>Additional Compensation</u>. Michael is paid a base salary and bonus. Bonus compensation takes into account a number of factors, including the overall economic performance of TIAA, the performance of the portfolio strategies, achieving operational and risk standards, and delivering ongoing advisory program and process enhancements demonstrated through customer engagement. Michael does not receive compensation for providing advisory services from anyone other than his employer.

<u>Supervision</u>. The investment discretion exercised by the TIAA, FSB Investment Team is principally monitored by APS' affiliated federal savings bank, TIAA, FSB, which APS engages to formulate advice for the Program. Senior investment professionals from TIAA, FSB typically meet monthly to review investment-related decisions, policies and procedures and annually to review the investment strategy work of the TIAA, FSB Investment Team. APS exercises oversight as described in the Program's Disclosure Brochure. Michael's supervisor is Eric T. Jones, interim Chief Investment Officer for TIAA, FSB at 704.988.1000. General inquiries regarding accounts, balances, distributions, or any other account administrative features should be directed to your Advisor.

Brochure Supplement Weiyi Ning March 31, 2022

This Brochure Supplement provides information about Weiyi Ning, an individual who is on the TIAA, FSB Investment Team that has investment discretionary authority over assets enrolled in the Program, subject to APS' oversight. It supplements the attached Disclosure Brochure for the Program. You should have received a copy of that Disclosure Brochure. Please call 866.220.6583 if you did not receive a copy of the Program's Disclosure Brochure or if you have any questions about the contents of this Brochure Supplement.

<u>Background</u>. Weiyi is 40 years old as of the date of this Brochure Supplement. Her work address is 8500 Andrew Carnegie Boulevard, Charlotte, NC, 28262. Her phone number is 704.988.1000. Weiyi is a Director, Senior Portfolio Analyst for TIAA, FSB. TIAA, FSB's corporate headquarters are located at 501 Riverside Avenue, Jacksonville, FL 32202, phone 904.281.6000.

Educational Background and Business Experience. Weiyi has over 15 years of investment experience. Prior to joining TIAA, Trust in 2018, she was an Investment Director at South Carolina Retirement System Investment Commission, responsible for manager due diligence and portfolio construction for the Agency's \$3bn hedge fund allocation. She was also a voting member of the Internal Investment Committee, responsible for total plan allocation, risk management, and approval of investment decisions in all asset classes. Previous roles include portfolio risk manager at Stark Investments, and quantitative analyst at State Street Global Advisors, focused on equity and derivatives selection and risk management. Weiyi received a M.S. in Quantitative Finance from University of Wisconsin-Madison, an M.S. in High Performance Computation from National University of Singapore, and a B.S. in Automatic Control from Beihang University in China. She also holds the Chartered Financial Analyst (CFA), Chartered Alternative Investment Analyst (CAIA) and Financial Risk Manager (FRM) designations.

Disciplinary Information. Weiyi has no history of disciplinary events.

Other Business Activities. Weiyi has no other business activities. Her full-time occupation is as a Portfolio Analyst for TIAA, FSB.

<u>Additional Compensation</u>. Weiyi is paid a base salary and bonus. Bonus compensation takes into account a number of factors, including the overall economic performance of TIAA, the performance of the portfolio strategies, achieving operational and risk standards, and delivering ongoing advisory program and process enhancements demonstrated through customer engagement. Weiyi does not receive compensation for providing advisory services from anyone other than her employer.

<u>Supervision</u>. The investment discretion exercised by the TIAA, FSB Investment Team is principally monitored by APS' affiliated federal savings bank, TIAA, FSB, which APS engages to formulate advice for the Program. Senior investment professionals from TIAA, FSB typically meet monthly to review investment-related decisions, policies and procedures and annually to review the investment strategy work of the TIAA, FSB Investment Team. APS exercises oversight as described in the Program's Disclosure Brochure. Weiyi's supervisor is Michael Sowa, Senior Director and Deputy Chief Investment Officer for TIAA, FSB at 704.988.1000. General inquiries regarding accounts, balances, distributions, or any other account administrative features should be directed to your Advisor.

Attachment A March 2019

ADVICE AND PLANNING SERVICES PORTFOLIO ADVISOR ADVISORY AGREEMENT

This Agreement sets forth the terms and conditions governing participation in the TIAA Portfolio Advisor program (the "Program"). Advice and Planning Services serves as the sponsor, manager and administrator of the Program and is a division of TIAA-CREF Individual & Institutional Services LLC, ("Services LLC") an investment adviser registered with the Securities and Exchange Commission. You ("Client") should read the Program Disclosure Brochure prior to signing the applicable TIAA Portfolio Advisor Application. Client understands and agrees to the following:

- A. Portfolio Advisor is a discretionary advisory program. The Program manages a portfolio for Client that may include both mutual funds and exchange traded funds ("ETFs") in exchange for an asset-based fee. Advice and Planning Services may subsequently expand the type of securities it evaluates and manages for Program portfolios beyond mutual funds and ETFs. Advice and Planning Services will provide Client with 30 days written notice prior to adding additional securities types and allow Client within this timeframe to request that the additional types of securities not be considered or included within Client's Program portfolio. Where Client does not respond to this written notice, Advice and Planning Services will include the new security type within Client's Program portfolio where appropriate.
- B. Advice and Planning Services manages a number of model portfolios ranging from conservative to aggressive in nature. Client's responses to investor questionnaires shall serve as the basis by which the Program will manage Client's portfolio in line with an appropriate model portfolio.
- C. Client may request Advice and Planning Services to incorporate certain of Client's pre-existing holdings ("legacy assets") into the Program's portfolio. Eligible legacy assets consist of certificates of deposit as well as select individual equities, mutual funds and ETFs rated the equivalent of a 'hold' or better by Advice and Planning Services or an independent research organization selected by Advice and Planning Services. Legacy assets are also subject to various position, sector or industry concentration limits. The inclusion of legacy assets may cause the performance of client's Portfolio Advisor portfolio to differ from that of the recommended model portfolio. Client understands and agrees that eligible legacy assets will only be retained if client makes such request in writing prior to enrolling in a new account or prior to depositing securities within an existing account within the Program and obtains Advice and Planning Services' agreement. Notwithstanding the quality of any legacy asset, Advice and Planning Services reserves the right to sell legacy assets at any time in its sole discretion without notice and without regard to tax consequences. Client acknowledges that such sales may cause a taxable event and understands it is Client's responsibility to consult with Client's tax advisor regarding potential tax consequences when deciding whether to include legacy assets. Advice and Planning Services does not provide tax advice.

- D. Client authorizes Advice and Planning Services to manage Client's Program assets on a discretionary basis in accordance with Client responses to the investment questionnaires, market conditions and any reasonable restrictions that Client may impose on the management of Client's assets that are accepted by Advice and Planning Services.
- E. Advice and Planning Services will review Client's portfolio on a periodic basis and make adjustments where appropriate. Market conditions may cause Client assets to deviate over time from the model portfolio used to manage Client's account. When Advice and Planning Services determines the deviation becomes materially significant, Advice and Planning Services may rebalance Client assets in line with the model portfolio.
- F. Client may impose reasonable restrictions upon the management of the Portfolio Advisor portfolio by requesting Advice and Planning Services refrain from investing in certain securities or request an alternative security in place of a security initially purchased and held within the portfolio. Any restrictions are subject to acceptance by Advice and Planning Services at its discretion and may cause the performance of client's portfolio to differ from that of the recommended model portfolio.
- G. Advice and Planning Services will inquire annually whether there have been any changes in Client's financial situation or investment objective, or whether Client wishes to impose or modify any reasonable restriction on the management of the account. In the interim, Client is responsible for contacting Advice and Planning Services whenever a material change occurs in Client's financial situation or investment objective, as either may affect the continued appropriateness of Client's current model portfolio.
- H. Client will receive prospectuses or similar disclosure documents for securities purchased within the portfolio. Client is responsible for reviewing these materials and will be subject to all of the terms and conditions stated therein.
- I. Client must open a brokerage account with Services LLC through its retail brokerage business TIAA Brokerage Services ("TBS") and fund the account with a minimum of \$50,000 (for employees of TIAA, the minimum is \$25,000), unless approved for a lesser amount. Services LLC holds client assets in custody with Pershing LLC, its clearing firm. Pershing LLC is a subsidiary of BNY Mellon and is located at One Pershing Plaza, Jersey City, NJ 07399. The Program uses Services LLC to effect all transactions. Client should compare the account statements received from Pershing LLC with the quarterly reports received from Advice and Planning Services.
- J. Should Client fund the account by a transfer of securities, Client directs Advice and Planning Services to sell those holdings as soon as practicable upon their receipt in the account in good order unless the client has requested in advance in writing that eligible legacy assets be retained and Advice and Planning Services has agreed to retain such assets as set forth in paragraph C, above; provided, however, that Client understands and acknowledges that market factors and the nature of the securities funding the account, including but not limited to liquidity considerations, may delay or otherwise impact the timing of the sale of the securities. Program management of the account will not begin until such securities (excluding any eligible legacy assets to be retained) have been sold. The sale of transferred securities may cause a taxable event. Client understands it is Client's responsibility to consult with Client's tax advisor regarding potential tax consequences. Advice and Planning Services does not provide tax advice.

- K. Subsequent deposits into an account must be at least \$1000 and will generally be invested into any asset classes or securities underweighted in comparison to Client's model portfolio. Advice and Planning Services may at its discretion alter the order of how subsequent deposits are invested when required for purposes of meeting fund minimum investment requirements, tax optimization needs or other purposes consistent with client's model portfolio. Client may establish automatic monthly or quarterly withdrawals subject to a minimum of \$500. All dividends, capital gains distributions and cash balances will be reinvested.
- L. Advice and Planning Services charges an asset-based fee for participation in the Program ("Program Fee") according to the fee schedules listed below.

Schedule A – Grandfathered Fixed Income Schedule (for Existing Clients):

This fee schedule applies to Program accounts that meet all of the following conditions: (i) were opened prior to July 3, 2017, (ii) are managed under a model portfolio that includes 80% or more of fixed income and strategically allocated cash securities prior to July 3, 2017, and (iii) are subject to Schedule A on July 2, 2017.

This fee schedule also applies to Program accounts opened following an Investment Strategy Proposal that is generated prior to July 3, 2017, which shows this Schedule A as the proposed fee schedule.

Schedule A – Grandfathered Fixed Income Schedule		
Aggregate Account Value	<u>%</u>	
\$50,000 - \$150,000	0.90%	
\$150,001 - \$300,000	0.75%	
\$300,001 - \$750,000	0.60%	
Over \$750,001	0.55%	

Note: This tiered fee schedule is used to calculate your fee based on the aggregate value of your account.

Schedule B – Grandfathered Equity Tiered Schedule (for Existing Clients):

This fee schedule applies to Program accounts that meet all of the following conditions: (i) were opened prior to July 3, 2017, (ii) are managed under a model portfolio consisting of less than 80% fixed income and strategically allocated cash securities prior to July 3, 2017, and (iii) are subject to this Schedule B on July 2, 2017.

This fee schedule also applies to Program accounts opened following an Investment Strategy Proposal that is generated prior to July 3, 2017, which shows this Schedule B as the proposed fee schedule.

This fee schedule will also apply to Program accounts that meet all of the following conditions: (i) are opened on or after July 3, 2017, and (ii) are held directly by a pre-existing Program account holder or for the benefit of a spouse, parent, child or anyone else residing at the same address as a pre-existing Program account holder, subject to the householding rules described below.

Schedule B – Grandfathered Equity Tiered Schedule		
Aggregate Account Value	<u>%</u>	
\$50,000 - \$150,000	1.15%	
\$150,001 - \$300,000	1.00%	
\$300,001 - \$750,000	0.85%	
Over \$750,001	0.75%	

Note: This tiered fee schedule is used to calculate your fee based on the aggregate value of your account.

<u>Schedule C – Portfolio Advisor Blended Fee Schedule (for New Clients)</u>:

This fee schedule will apply to new Program accounts that meet all of the following conditions: (i) are opened on or after July 3, 2017, and (ii) are not held directly by a pre-existing Program account holder or for the benefit of a spouse, parent, child or anyone else residing at the same address as a pre-existing Program account holder, subject to the householding rules described below.

Schedule C – Portfolio Advisor Blended Fee Schedule		
<u>Value Bracket</u>	<u>%</u>	
First \$150,000	1.15%	
Next \$150,001 - \$300,000	1.00%	
Next \$300,001 - \$750,000	0.85%	
Next \$750,001 - \$1,000,000	0.75%	
Next \$1,000,001 - \$1,500,000	0.70%	
Next \$1,500,001 - \$3,000,000	0.65%	
Next \$3,000,001 - \$4,000,000	0.60%	
Next \$4,000,001 - \$5,000,000	0.50%	
Over \$5,000,000	0.40%	

Note: This blended fee schedule is used to calculate your fee by weighting your aggregate account value in accordance with the value brackets and weights shown.

Householding: Client may notify an Advisor if Client wishes to opt to aggregate the amounts in the Program accounts held directly by Client or for the benefit of a spouse, parent, child or anyone else residing at the same address as you for fee calculation purposes. These accounts are deemed to be in the same "Household" and the aggregation process if referred to as "householding" related Program accounts. Householding related Program accounts may collectively qualify the Program accounts for a different Program Fee breakpoint. The Program Fee breakpoints are set forth in the fee schedules above based on the account value. Householding related Program accounts will result in the receipt of a single combined quarterly performance report per household. By householding related Program accounts, Client authorizes Advice and Planning Services to share Client's Program account performance information with other members of Client's household while reducing paper mailings. Householding related Program accounts does not authorize others in Client's household to conduct transactions in Client's Program account.

What the Program Fee Covers: The Program Fee covers the fees and costs associated with managing the Program account, developing the Program's advice, custody of Program assets, trade execution, client reporting and other administrative expenses. The Program Fee does not vary depending upon whether Client chooses investment advice developed from TIAA investment professionals or by third party advisers.

The Program Fee does not include costs associated with additional services requested by Client, including wire or electronic fund transfer fees, overnight delivery fees, duplicate statement fees, account transfer fees, and reorganization fees.

Cash Balances: The Program excludes cash balances held in Client's Program account when calculating the Program Fee. The Program Fee does not include any fees, costs and expenses inherent in the underlying securities, including investment advisory, administrative, distribution, transfer agent, custodial, legal, audit, contingent deferred sales charges or redemption fees and other customer fees and expenses related to investments in these products which are described in the relevant prospectus or similar disclosure documents. Consequently, this means Clients will pay the fund fees and expenses as a fund shareholder, except where expressly qualified below in connection with an individual retirement account ("IRA") enrolled in the Program.

Payment of the Program Fee: The Program Fee is payable quarterly in arrears. It is calculated by multiplying the daily market value of the Program account by the pro-rata daily Program Fee (the "daily fee calculation") and summing the value of the daily fee calculations during the preceding quarter. The Program determines market value in reliance upon published net asset values and prices reported on national exchanges. Should neither not be available for a particular security, the Program will price the relevant security based upon fair valuation principles that estimate what the security would bring upon sale. Advice and Planning Services will deduct the Program Fee from the Program account on a quarterly basis, generally within thirty business days after each quarter's end by charging cash balances or redeeming fund shares within the Program account. For the initial enrollment quarter, Program Fees will be deducted as described above for the remainder of that quarter.

Waivers and Discount: Advice and Planning Services may agree to waive or discount the Program Fee in connection with promotional campaigns, for clients making large deposits for TIAA employees. Advice and Planning Services may change the fee schedule upon 30 days written notice to Client and Client will be deemed to have consented if client remains enrolled in the Program subsequent to the notice period.

IRA account Fee Credits and Reimbursements – Affiliated Fund Fee Credits: For IRAs enrolled in the Program, Advice and Planning Services will reduce the Program Fee by a fee credit for IRA assets invested in investment products manufactured by TIAA affiliates, such as the TIAA family of mutual funds and the various registered funds of Nuveen Investments, Inc., including the Nuveen Funds ("Affiliated Funds"). The fee credit will be calculated by offsetting both (i) the investment management portion of the Affiliated Fund's expenses ("Affiliated Fund management fees") that TIAA affiliates receive in connection with the Affiliated Funds held in the IRA, and (ii) the administrative and other fees that TIAA affiliates receive from such Affiliated Funds included in the Affiliated Fund expenses. Advice and Planning Services may exclude from the fee credit amount any reimbursable expenses paid by the Affiliated Funds to TIAA affiliates which are reasonable direct expenses of the TIAA affiliates. This includes expenses such as salaries of affiliate personnel attributable to work performed for the Affiliated Funds held in Client's IRA and third party custodial fees and transfer agent fees associated with the Affiliated Funds held in Client's IRA.

Advice and Planning Services also may reduce the fee credit amount to reflect fee waivers and reimbursements granted by TIAA affiliates to the Affiliated Funds as disclosed in the applicable fund prospectus. The fee credit may vary depending upon the particular Affiliated Fund employed, as fees differ from fund to fund.

Rule 12b-1 Fee and Other Fund Fee Reimbursements: With regard to any Funds held in Client's Program account which levy a Rule 12b-1 fee or other fund fees for distribution, administrative, sub-transfer agency, or shareholder service (referred to as "Other Fund Fees"), Advice and Planning Services will deposit directly into Client's Program account whatever portion of the Rule 12b-1 fee and Other Fund Fees it receives. Other service providers, such as Pershing LLC, receive Rule 12b-1 fees and Other Fund Fees in connection with the Funds held in Client's Program account and Advice and Planning Services will not reimburse these fees that are retained by Pershing LLC.

- M. Advice and Planning Services will vote proxies for the mutual funds, ETFs and other securities held in Client's Program account unless Client directs otherwise, in which event proxies will be forwarded directly to Client for Client to vote. Advice and Planning Services will pass through for Client to vote directly any voluntary corporate action notices.
- N. Client's grant of discretionary authority to Advice and Planning Services also extends to the selection of a tax lot relief method (also called a cost accounting method) for Client's Program account in calculating the gain or loss on the sale of a security in Client's Program account. A tax lot relief method is a way of computing the realized gain or loss for an asset sold in a taxable transaction. It determines the lot of a security that is sold, as well as its associated cost basis, and the holding period used in computing the gain or loss on that sale. Although TIAA's default tax lot relief method, as specified in the Brokerage Account Customer Agreement ("Brokerage Agreement"), is First In, First Out ("FIFO"), under this Program, Advice and Planning Services will select the cost basis accounting method which it deems appropriate to use in its sole discretion with respect to any transaction in Client's Program account. By enrolling in the Program, Client is granting Advice and Planning Services the authority to use any such method as it may select in its discretion, or any such method it may implement by default, for any transaction in Client's Program account. TIAA and its affiliates shall have no liability for any damages Client may incur as a result of (i) TIAA providing the required 1099-B Annual Information Report to the IRS, (ii) TIAA's selection of, or change in, the method it uses to calculate Client's cost basis, or (iii) any differences in the cost basis reported by TIAA to the IRS and Client's actual adjusted cost basis in the relevant security in Client's Program account.
- O. Except as may be permitted by law, both Client and Advice and Planning Services shall treat all information regarding the account and the Program as confidential.
- P. Client acknowledges it is solely responsible for the accuracy of any information Client provides in connection with the Program. Client is also responsible for reviewing each account statement in a timely manner and contacting Advice and Planning Services to discuss any concerns or discrepancies identified therein.
- Q. Any failure by Advice and Planning Services to insist upon strict compliance with any term or condition of this Agreement at any time shall not constitute an ongoing waiver

- of the enforceability of such term or condition or any other term or condition. A waiver of a term or condition can only be made in a writing signed by Advice and Planning Services.
- R. Client acknowledges that Advice and Planning Services or an affiliate is required by law to obtain certain information to verify the identity of Client, and that Advice and Planning Services or an affiliate cannot open the account if Client does not provide sufficient identifying information. Advice and Planning Services shall not be liable for any loss or damage Client may incur as a result of Client's failure to provide information sufficient to establish such account.
- S. To the extent permitted by law, Advice and Planning Services' liability for the services provided in connection with the Program shall not exceed the fees paid by Client hereunder. Federal and state securities laws may nonetheless impose liability on persons who act in good faith and nothing in this Agreement shall serve to waive or limit any rights Client may have under those laws.
- T. Advice and Planning Services may amend this Agreement upon 30 days written notice to Client and Client will be deemed to have consented to any such amendment if still enrolled in the Program subsequent to the notice period. Any written communications contemplated by this Agreement shall be deemed duly given when sent to Client at the address provided or when received by Advice and Planning Services.
- U. Advice and Planning Services may not assign this Agreement within the meaning of the Investment Advisers Act of 1940, as amended, without Client consent.
- V. Client's delegation of discretionary authority contained herein is durable and shall not be affected by Client's subsequent disability, incapacity or incompetence. It shall continue in effect after a Client's death until Advice and Planning Services receives written notice from an executor or other Client representative terminating the authority.
- W. Either party may terminate Client's participation in the Program at any time upon notice to the other. Advice and Planning Services specifically reserves the right to terminate Client's participation in the Program should Client's balance fall below the Program's minimum balance of \$50,000 due to client initiated withdrawals or should Advice and Planning Services determine the Program is no longer appropriate for Client. Upon termination, Advice and Planning Services will cease managing account assets and debit from the account any fee incurred to date. Client agrees upon termination to transfer all assets from the Program account within 30 days, and should Client fail to do so, directs Advice and Planning Services to at its discretion either transfer Client assets to a separate TBS brokerage account registered identically as the account and subject to the TBS standard transaction fee schedule, or redeem the account holdings and mail the proceeds to Client. Client acknowledges that redemption may result in a taxable event.
- X. This Agreement shall be governed by the laws of the State of New York without giving effect to conflict of law principles, to the extent not inconsistent with federal law.
- Y. The TBS Customer Agreement contains a Predispute Arbitration Provision on Page 2, Paragraph 13, requiring that any controversy arising between Client and Services LLC be submitted to arbitration before the Financial Industry Regulatory Authority ("FINRA"). Client acknowledges reviewing and agreeing to this arbitration provision. Should FINRA decline jurisdiction, the dispute shall be submitted to the American

Arbitration Association in accordance with that entity's commercial dispute resolution procedures. Venue shall be within the Client's State of residence, or any other venue mutually agreed upon. Arbitration must be commenced by service upon the other party of a written demand for arbitration or a written notice of intention to arbitrate.

- Z. This Agreement constitutes an amendment and supplement to the TBS Customer Agreement (the "Brokerage Agreement"), as it may previously have been amended or supplemented, which Client acknowledges having received, read, and understood. Client acknowledges that the account will be governed by the terms and conditions of the Brokerage Agreement (including the arbitration provisions contained therein), and this Agreement, which together represent the entire agreement between the parties with respect to the services described herein and therein and supersede all previous agreements and understandings between the parties with respect to the Program. Termination of this Agreement will not result in termination of the Brokerage Agreement, the terms and conditions of which will continue to remain in full force and effect. If any provision of this Agreement shall be held or made invalid by a court decision, statute, rule, or otherwise, the remainder of this Agreement shall not be affected thereby.
- AA. Client acknowledges having received and read the TIAA-CREF Advice and Planning Services Portfolio Advisor Program disclosure brochure and the TIAA Privacy Policy. Client also acknowledges having received and reviewed for accuracy a copy of Client's responses to the Program's risk tolerance and preference questionnaire. In connection with IRA Accounts, Client acknowledges and agrees that the Program may invest Client's IRA Account in proprietary TIAA-CREF investment products ("TIAA-CREF Funds"), subject to the fee credit offset described in Paragraph L where Client indicates a preference for TIAA-CREF Funds or Advice and Planning Services otherwise believes them appropriate given Client's investment objectives. Each TIAA-CREF Fund prospectus describes the investment characteristics, the schedule of fees paid to TIAA affiliates by the TIAA- CREF Fund, and the schedule of fees paid to TIAA affiliates for any additional services provided by them to the TIAA-CREF Fund.

Client represents that he or she has authority to enter into this Agreement, acknowledges receipt of a copy of this Agreement and agrees to its terms and conditions. Client further acknowledges that the sale of legacy assets from the Account and/or the sale of transferred assets to fund the Account may cause a taxable event and it is his or her responsibility to consult with his or her tax advisor regarding potential tax consequences when deciding whether to include legacy assets and/or fund the Account with transferred assets. Advice and Planning Services does not provide tax advice.

This Agreement and all of its terms and conditions are hereby incorporated and made part of the Application. By signing the Application, you are agreeing to all of the terms and conditions of this Agreement.



ACCOUNT APPLICATION

Page 1 of 10

IMPORTANT INFORMATION ABOUT PROCEDURES FOR OPENING A	NEW ACCOUNT 92607		
To help the government fight the funding of terrorism and money lau TIAA, to obtain, verify and record information that identifies each per open an account, we will ask for your name, residence address, home information that will allow us to identify you. We may also ask to see the information we need, we may not be able to open an account of Questions? Please call 866-842-3519, weekdays, 8 a.m 7 p.m.	rson who opens an account. What this ne telephone number, date of birth, So e your driver's license or other identifying r effect any transactions for you.	s means for you: Whe	en you er and other
STEP 1: BROKERAGE ACCOUNT REGISTRATION (RE	QUIRED)		
Individual ✓ Joint Tenants With Rights of Survivorship	Joint Tenants in Common	Custodial (UGMA/UTI	MA)
Other		1	
STEP 2: PRIMARY ACCOUNT OWNER/MINOR (REQ	UIRED)		
Title First Name M R K A Y L E			M. I.
Last Name ORAL		Suf	fix
Social Security Number Date of Birth (mmddyyyy)		mail Address	
0 0 1 1 5 7 0 6 4 0 9 2 2 1 9 6	6 Male Female	jal.gurjar@in.tiaa.org	
Marital Status Citizenship (If not U.S.)			
Married Other United States			
U.S. Residential Street Address (No P.O. Boxes)	City	State Zip	Code
2060 Vultee St	Allentown	P A 18	31034745
Mailing Address (If different from your residential address)	City	State Zip	Code
2060 Vultee St	Allentown	P A 18	31034745
Phone Number Type			
7329023008	siness		





ACCOUNT APPLICATION

Page 2 of 10

STEP 2: PRIMARY ACCOUNT OWNER/MINOR (REQU	JIRED) (CONTINUED)		
EMPLOYMENT INFORMATION FOR PRIMARY ACCOUNT OWNER	R/MINOR (REQUIRED)		
If Unemployed or Retired			
If Employed, Self-Employed or Consultant, complete the following	ng:		
Employer's Name	Your Occupation/Title		
Orbis International	Artist		
Business Street Address	City	State	Zip Code
Complete if applicable			
I am, or an immediate family member is, a director, a 10% share	eholder, or a policymaking executive of	a publicly tra	aded company.
Name of Person	Company Name/Symbol		
I am, or an immediate family member is, affiliated with or working as an affiliated person will have any financial interest in or discring Relationship to Person Name of Person I am, or a person with interest in this account is, (i) a senior mile associated with or an immediate family member of such an office	etionary authority over this account. Name of F itary, governmental or political official i	Firm	-
STEP 3: SECONDARY ACCOUNT OWNER/CUSTODIA	N (IF APPLICABLE)		
First Name	M.I. Last Name		
Jeffrey	Robinson		
Social Security Number Date of Birth (mmddyyyy)	Gender Em	ail Address	
0 0 2 0 9 5 4 4 7 0 8 0 6 1 9 9	7 Male Female cha	aithanya.aduru@	liaa.org
Marital Status Citizenship (If not U.S.) ✓ Married Other United States			
U.S. Residential Street Address (No P.O. boxes)	City	State	Zip Code
2398 E Camelback Rd	Phoenix	AZ	850169001
Mailing Address (If different from your residential address)	City	State	Zip Code
2398 E Camelback Rd	Phoenix	A Z	850169001
Phone Number Phone Number Type 9809990901 ✓ Mobile Home Bus	iness		





ACCOUNT APPLICATION

Page 3 of 10

$\textbf{STEP 3: SECONDARY ACCOUNT OWNER/CUSTODIAN} \ (\mathsf{IF} \ \mathsf{APPLICABLE}) \ (\mathsf{CONTINUED})$

EMPLOYMENT INFORMATION FOR SECONDARY ACCOUNT OW	NER/CUSTODIAN		
If Unemployed or Retired			
✓ If Employed, Self-Employed or Consultant, complete the following	ng:		
Employer's Name	Your Occupation/Title		
Silver Stag	Civil Servant		
Business Street Address	City	State	Zip Code
1410 Clarkview Rd	Baltimore	M D	21209
Complete if applicable			
I am, or an immediate family member is, a director, a 10% share	eholder, or a policymaking executive of	a publicly tra	ded company.
	· · · · · · · · · · · · · · · · · · ·	<i>x</i> pao	aca company.
Name of Person	Company Name/Symbol		
I am, or an immediate family member is, affiliated with or working		inge, or FINR	A, including TIAA, or
as an affiliated person will have any financial interest in or discr	etionary authority over this account.		
Relationship to Person Name of Person	Name of Fi	rm	
I am, or a person with interest in this account is, (i) a senior mili associated with or an immediate family member of such an office		a non-U.S. o	country, or (ii) closely
STEP 4: ADDITIONAL ACCOUNT OWNER (IF APPLICA	ABLE)		
First Name	M.I. Last Name		
Donald	Anderson		
Social Security Number Date of Birth (mmddyyyy)	Gender Ema	nil Address	
0 0 5 0 9 5 4 4 7 0 8 1 9 1 9 8		t@tiaa.org	
Marital Status Citizenship (If not U.S.)	7 Maio Tomaio Unio	i@iiaa.org	
Married Other United States			
	0.4	04-4-	7 0. 1.
U.S. Residential Street Address (No P.O. boxes)	City	State	Zip Code
2398 E Camelback Rd	Phoenix	AZ	850169001
Mailing Address (If different from your residential address)	City	State	Zip Code
2398 E Camelback Rd	Phoenix	A Z	850169001
Phone Number			
7042443061	siness		

associated with or an immediate family member of such an official.



TIAA PORTFOLIO ADVISOR

ACCOUNT APPLICATION

Page 4 of 10

STEP 4: ADDITIONAL ACCOUNT OWNER (IF APPLICABLE) (CONTINUED) EMPLOYMENT INFORMATION FOR ADDITIONAL ACCOUNT OWNER If Unemployed or Retired If Employed, Self-Employed or Consultant, complete the following: Employer's Name Your Occupation/Title Nippon Foundation Accountant **Business Street Address** City Zip Code State 1410 Clarkview Rd **Baltimore** M D 21209 Complete if applicable I am, or an immediate family member is, a director, a 10% shareholder, or a policymaking executive of a publicly traded company. Name of Person Company Name/Symbol I am, or an immediate family member is, affiliated with or working for another member firm, stock exchange, or FINRA, including TIAA, or as an affiliated person will have any financial interest in or discretionary authority over this account. Name of Person Relationship to Person Name of Firm I am, or a person with interest in this account is, (i) a senior military, governmental or political official in a non-U.S. country, or (ii) closely



ACCOUNT APPLICATION

Page 5 of 10

STEP 5: ADDITIONAL ACCOUNT OWNER (IF APPLIC	ABLE)	
First Name	M.I. Last Name	
Mace	S Windu	
Social Security Number Date of Birth (mmddyyyy)	Gender Ema	ail Address
0 0 0 0 0 8 6 8 5 1 2 3 1 1 9 6	8	aithanya.aduru@tiaa.org
Marital Status Citizenship (If not U.S.)		
✓ Married Other United States		
U.S. Residential Street Address (No P.O. boxes)	City	State Zip Code
41 University Dr	Newtown	P A 189401873
Mailing Address (If different from your residential address)	City	State Zip Code
41 University Dr	Newtown	P A 189401873
Phone Number Phone Number Type		
0000007050	siness	
If Employed, Self-Employed or Consultant, complete the following Employer's Name	Your Occupation/Title Law Enforcement	
Morningside Heights		
Business Street Address	City	State Zip Code
Complete if applicable		
I am, or an immediate family member is, a director, a 10% sha	reholder, or a policymaking executive of	a publicly traded company.
Name of Person	Company Name/Symbol	
I am, or an immediate family member is, affiliated with or work as an affiliated person will have any financial interest in or disc	_	ange, or FINRA, including TIAA, or
Relationship to Person Name of Person	Name of Fi	rm
, , , , , , , , , , , , , , , , , , , ,		
I am, or a person with interest in this account is, (i) a senior mi associated with or an immediate family member of such an off		a non-U.S. country, or (ii) closely





ACCOUNT APPLICATION

Page 6 of 10

irst Name	M.I. Last Name		
Tony	Mccann		
ocial Security Number Date of Birth (mmddyyyy)	Gender	Email Address	
0 0 0 0 6 6 6 6 6 0 3 2 8 1 9	9 5 Male Female chaithanya.aduru@tiaa		
Marital Status Citizenship (If not U.S.)			
Married ✓ Other United States			
I.S. Residential Street Address (No P.O. boxes)	City	State Zip Code	
6802 Paragon Pl	Richmond	V A 2323016	644
Mailing Address (If different from your residential address)	City	State Zip Code	
6802 Paragon Pl	Richmond	V A 2323016	644
Phone Number Phone Number Type			
0000000004	Business		
If Employed, Self-Employed or Consultant, complete the followed	wing:		
imployer's Name	Your Occupation/Title		
imployer's Name Cacheme	Your Occupation/Title Accountant		
imployer's Name	Your Occupation/Title	State Zip Code	
Imployer's Name Cacheme Business Street Address	Your Occupation/Title Accountant	State Zip Code	
imployer's Name Cacheme	Your Occupation/Title Accountant City		ıny.
Employer's Name Cacheme Susiness Street Address Complete if applicable	Your Occupation/Title Accountant City		iny.
Cacheme Susiness Street Address Complete if applicable I am, or an immediate family member is, a director, a 10% sh	Your Occupation/Title Accountant City nareholder, or a policymaking executive		ıny.
Cacheme Susiness Street Address Complete if applicable I am, or an immediate family member is, a director, a 10% sh	Your Occupation/Title Accountant City nareholder, or a policymaking executive Company Name/Symbol rking for another member firm, stock ex	of a publicly traded compa	
Cacheme Business Street Address Complete if applicable I am, or an immediate family member is, a director, a 10% sh Name of Person I am, or an immediate family member is, affiliated with or work	Your Occupation/Title Accountant City nareholder, or a policymaking executive Company Name/Symbol rking for another member firm, stock executionary authority over this account.	of a publicly traded compa	





ACCOUNT APPLICATION

Page 7 of 10

Social Security Number Date of Birth (mmddyyyy) Date of Dat	Male Female ity Niagara Falls ity Niagara Falls	Email Address chaithanya.aduru@tiaa.org State Zip Code N Y 143041521 State Zip Code N Y 143041521
Social Security Number Date of Birth (mmddyyyy) Date of Date	Gender E Male Female ity Niagara Falls ity Niagara Falls ER	chaithanya.aduru@tiaa.org State Zip Code N Y 143041521 State Zip Code
Marital Status Citizenship (If not U.S.) ✓ Married Other United States U.S. Residential Street Address (No P.O. boxes) 5555 Porter Rd Mailing Address (If different from your residential address) 5555 Porter Rd Phone Number Phone Number	ity Niagara Falls ity Niagara Falls ity Niagara Falls care	chaithanya.aduru@tiaa.org State Zip Code N Y 143041521 State Zip Code
Marital Status ✓ Married Other United States U.S. Residential Street Address (No P.O. boxes) 5555 Porter Rd Mailing Address (If different from your residential address) 5555 Porter Rd Phone Number Phone Number Type 9809990901 ✓ Mobile Home Busine EMPLOYMENT INFORMATION FOR ADDITIONAL ACCOUNT OWNI If Unemployed or Retired ✓ If Employed, Self-Employed or Consultant, complete the following: Employer's Name Yes To Youth Business Street Address	ity Niagara Falls ity Niagara Falls SS ER	State Zip Code N Y 143041521 State Zip Code
U.S. Residential Street Address (No P.O. boxes) 5555 Porter Rd Mailing Address (If different from your residential address) 5555 Porter Rd Phone Number Phone Number Type 9809990901 Phone Number Home Busine EMPLOYMENT INFORMATION FOR ADDITIONAL ACCOUNT OWNI If Unemployed or Retired If Employed, Self-Employed or Consultant, complete the following: Employer's Name Yes To Youth Business Street Address	Niagara Falls ity Niagara Falls ss ER	N Y 143041521 State Zip Code
U.S. Residential Street Address (No P.O. boxes) 5555 Porter Rd Mailing Address (If different from your residential address) 5555 Porter Rd Phone Number Phone Number Type 9809990901 Phone Number Type 9809990901 For Additional Account Owni If Unemployed or Retired If Employed, Self-Employed or Consultant, complete the following: Employer's Name Yes To Youth Business Street Address	Niagara Falls ity Niagara Falls ss ER	N Y 143041521 State Zip Code
S555 Porter Rd Mailing Address (If different from your residential address) S5555 Porter Rd Phone Number Phone Number Type 9809990901 Phone Number Type Mobile Home Busine EMPLOYMENT INFORMATION FOR ADDITIONAL ACCOUNT OWNI If Unemployed or Retired ✓ If Employed, Self-Employed or Consultant, complete the following: Employer's Name Yes To Youth Business Street Address	Niagara Falls ity Niagara Falls ss ER	N Y 143041521 State Zip Code
Mailing Address (If different from your residential address) 5555 Porter Rd Phone Number	nity Niagara Falls SS ER Dur Occupation/Title	State Zip Code
Phone Number Phone Number Type 9809990901 Phone Number Type Mobile Home Busine EMPLOYMENT INFORMATION FOR ADDITIONAL ACCOUNT OWNI If Unemployed or Retired If Employed, Self-Employed or Consultant, complete the following: Employer's Name Yes To Youth Business Street Address	Niagara Falls SS ER Dur Occupation/Title	
Phone Number Phone Number Type 9809990901 Phone Number Type Mobile Home Busine EMPLOYMENT INFORMATION FOR ADDITIONAL ACCOUNT OWNI If Unemployed or Retired If Employed, Self-Employed or Consultant, complete the following: Employer's Name Yes To Youth Business Street Address	Niagara Falls SS ER Dur Occupation/Title	N Y 143041521
Busines EMPLOYMENT INFORMATION FOR ADDITIONAL ACCOUNT OWNI If Unemployed or Retired ✓ If Employed, Self-Employed or Consultant, complete the following: Employer's Name Yes To Youth Business Street Address	ER our Occupation/Title	
Busines EMPLOYMENT INFORMATION FOR ADDITIONAL ACCOUNT OWNI If Unemployed or Retired ✓ If Employed, Self-Employed or Consultant, complete the following: Employer's Name Yes To Youth Business Street Address	ER our Occupation/Title	
EMPLOYMENT INFORMATION FOR ADDITIONAL ACCOUNT OWNI If Unemployed or Retired If Employed, Self-Employed or Consultant, complete the following: Employer's Name Yes To Youth Business Street Address	ER our Occupation/Title	
Business Street Address (Consulting	
Complete if applicable	ity	State Zip Code
Complete if applicable		
I am, or an immediate family member is, a director, a 10% shareho	lder, or a policymaking executive	of a publicly traded company.
Name of Person	Company Name/Symbol	
I am, or an immediate family member is, affiliated with or working as an affiliated person will have any financial interest in or discretic		change, or FINRA, including TIAA, or
Relationship to Person Name of Person	Name of	of Firm
I am, or a person with interest in this account is, (i) a senior militar		





ACCOUNT APPLICATION

Page 8 of 10

STEP 8: YOUR INVESTMENT I	PROFILE (REQUIRED)			
Annual income (from all sources):	Up to \$24,999	\$25,000 to \$49,999	\$50,000 to \$74,999	
	\$75,000 to \$99,999	\$100,000 to \$149,999	\$150,000 to \$199,999	
	\$200,000 to \$249,999	\$250,000 or greater		
Approximate net worth	Up to \$49,999	\$50,000 to \$99,999	\$100,000 to \$199,999	
(excluding residence):	\$200,000 to \$499,999	✓ \$500,000 to \$999,999	\$1,000,000 to \$2,499,999	
	\$2,500,000 or greater			
Source of Funds:				
Income from Earnings	Investment Proceeds	Gift	✓ Sale of Business	
Legal Settlement	Pension/IRA/Retirement Savings	Spouse/Parent	Inheritance	
Insurance Proceeds	Other			
STEP 9: ACCOUNT OPTIONS (REQUIRED)			
VOTING PROXIES				
Unless otherwise instructed by the Clie		visor Investment Manager to vote	proxies on behalf of the Client. If	
you would like to vote your own proxies, please indicate here. By checking this box, I am instructing TIAA Brokerage to send all proxy voting material to my mailing address.				
By checking this box, I am instruct	ing IIAA Brokerage to send all proxy	voting material to my mailing ad-	dress.	
CONFIRMATION SUPPRESSION				
You can opt to receive separate trade of	·	aced in your account. Or, instead	of separate confirmations, we can	
provide trade information in a quarterly Would you like to receive separate trade	•	od in your account?		
	·	•		
No, I do not wish to receive separate trade confirmations for each trade. I prefer to receive a quarterly confirmation report instead.				
Yes, I would like to receive separat	e confirmations for each trade.			

Confirmation Suppression Terms and Conditions

By checking "No," you direct TIAA Individual & Institutional Services ("TC Services") and Pershing to discontinue providing separate trade confirmations for your TIAA Portfolio Advisor discretionary managed account. You understand that in lieu of separate trade confirmations, information from the confirmation will be reported at least quarterly via a quarterly confirmation report. You further understand that you may obtain, upon request and at no additional charge, information regarding any trade confirmation for your account, and an electronic copy of any trade confirmation. TC Services will also receive a confirmation of each trade.

You understand and acknowledge that:

- You will <u>not</u> pay a different fee based on your decision to suppress separate trade confirmations.
- Your decision to suppress trade confirmations is <u>not</u> a condition to your initiating or continuing participation with this account.
- You can rescind this instruction at any time.





ACCOUNT APPLICATION

Page 9 of 10

STEP 9: ACCOUNT OPTIONS (REQUIRED) (CONTINUED)

SWEEP OPTION

Your account includes a Sweep Program feature which automatically invests available uninvested cash in your account at the end of each Business Day. Two separate bank sweeps will be used: (1) the TIAA Bank Sweep Account, to be used as the primary bank sweep for uninvested cash balances in your Account up to a maximum amount set by TIAA, FSB (not to exceed the current per individual depositor FDIC insurance limits); and (2) the Liquid Insured Deposits, to be used for uninvested cash balances in your Account in excess of the maximum amount accepted by TIAA, FSB. Interest rates may change at any time. Current rates, Agreements and Disclosures for each can be accessed at TIAA.org/public/invest/financial-products/brokerage-accounts/interest-rate-disclosure or by calling 800-927-3059.

Bank Deposit Sweep Option:



TIAA Bank Sweep Account

STEP 10: AGREEMENT AND SIGNATURE(S) (REQUIRED)

By signing this TIAA Portfolio Advisor Account Application ("Application"), I acknowledge that I am: (1) opening a brokerage account ("Account") with TIAA Brokerage; and (2) enrolling in the Portfolio Advisor program ("Program"), a discretionary fee based advisory program offered by TIAA Advice & Planning Services ("Advice & Planning Services"). TIAA Brokerage and Advice & Planning Services are divisions of TIAA-CREF Individual & Institutional Services, LLC ("TC Services"). Brokerage accounts and related brokerage services are provided by TIAA Brokerage as a registered broker/dealer. The Program is provided by Advice & Planning Services as a registered investment adviser.

I acknowledge that the Application is not for a foreign financial institution or a private banking account.

I certify that the information I have provided in this Application is true and correct, and that I am of legal age and have the legal capacity to open this Account with TIAA Brokerage and enroll in the Program provided by Advice & Planning Services. I acknowledge that I have been furnished with a copy of the TIAA Brokerage Account Customer Agreement ("Brokerage Agreement"), and the TIAA Advice & Planning Services Portfolio Advisor Advisory Agreement ("Advisory Agreement") (see Attachment A), and that I have read, understood, and agree to be bound by their terms and conditions as they are currently in effect and as they may be amended in the future. I hereby acknowledge that this Application is governed by a predispute arbitration clause, which appears on Pages 2 and 3, Paragraph 13 of the Brokerage Agreement.

I understand that the Account includes a sweep feature which automatically transfers uninvested cash balances in the Account at the end of each business day to the bank sweep deposit account (a "Sweep Option" and, together, the "Sweep Program") and facilitates the transfer of uninvested cash balances to cover purchases of securities and other debits in the Account. A disclosure document for the Sweep can be accessed at TIAA.org/public/invest/financial-products/brokerage-accounts/interest-rate-disclosure or by calling 800-927-3059. I agree to review this disclosure document prior to opening the Account. TC Services may change the terms and conditions of the Sweep Program and the Sweep Options available for the Account, in its sole discretion. I understand that TC Services will provide me with written notice in advance of adding, changing or deleting Sweep Options for the Account or making other changes to the Sweep Program to the extent required by applicable law.

Should I choose to fund my account by a transfer of securities, I direct Advice & Planning Services and its designees to sell those holdings as soon as practicable upon their receipt in the Account in good order, unless the Client has requested in advance in writing that eligible legacy assets be retained and Advice & Planning Services has agreed to retain such assets. In addition, I understand and acknowledge that market factors and the nature of the securities funding the Account, including but not limited to liquidity considerations, may delay or otherwise impact the timing of the sale of the securities. Program management of the Account will not begin until such securities (excluding any eligible legacy assets to be retained) have been sold. I acknowledge that the sale of transferred securities may cause a taxable event. I understand that it is my responsibility to consult with my tax advisor regarding potential tax consequences. Advice & Planning Services does not provide tax advice.





ACCOUNT APPLICATION

Page 10 of 10

STEP 10: AGREEMENT AND SIGNATURE(S) (REQUIRED) (CONTINUED)

I further understand that by signing below, I am giving Advice & Planning Services and its designees under the Program the right to trade for my Account during the period that the Account is enrolled in the Program.

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.

Certification instructions. You must cross out item 2 above 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.

ur Signature(Primary Account Owner/Custodian) Print Name	e and Title (If applicable)	Today's Date (mm/c	dd/yyyy)
MR KAYL	E C ORAL		1 2 0
our Signature(Secondary Account Owner/Custodian) Print Nam	e and Title (If applicable)	Today's Date (mm/c	dd/yyyy)
Jeffrey R	obinson		/ 2 0
our Signature(Additional Account Owner) Print Nam	e and Title (If applicable)	Today's Date (mm/c	dd/yyyy)
Donald A	nderson	/	1 2 0
our Signature(Additional Account Owner) Print Nam	e and Title (If applicable)	Today's Date (mm/c	dd/yyyy)
Mr Mace	S Windu		/ 2 0
our Signature(Additional Account Owner) Print Nam	e and Title (If applicable)	Today's Date (mm/c	dd/yyyy)
Tony Mcc	cann		/ 2 0
our Signature(Additional Account Owner) Print Nam	e and Title (If applicable)	Today's Date (mm/g	dd/yyyy)
Dr Leone	I K Girdletree		/ 2 0

Investment products are provided by TIAA-CREF Individual & Institutional Services, LLC. Member FINRA and SIPC.

Certain securities and other investment, insurance and annuity products are not FDIC insured, are not bank guaranteed, are not deposits, are not insured by any federal government agency, are not a condition to any banking service or activity, and may lose value. Securities are subject to investment risk, including possible loss of the principal amount invested.

Brokerage accounts are carried by Pershing, LLC, a subsidiary of BNY Mellon. Member FINRA, NYSE, SIPC.





TIAA PORTFOLIO ADVISOR ACCOUNT APPLICATION

RETURN COMPLETED FORM(S)

Upload your documents easily from your mobile device or computer.

Use the TIAA mobile app to quickly upload your completed documents. It's as simple as taking a picture:

- Tap the Message Center icon in the upper-right corner of your main screen.
- Select the Files header and tap Upload. That's it!

Haven't downloaded the TIAA mobile app? Get it today in the App Store or Google Play.

Don't have a smartphone? It's still easy. From your personal computer, here's what you'll need to do:

- Log in to your **TIAA.org** account and select the **Actions** tab.
- Choose Upload documents from the options presented.
- Select **Upload Files** and follow the step-by-step instructions.

To avoid the possibility that your postal mail will not be received by us in a timely manner, please submit service and transaction requests to us through our website at TIAA.org or Mobile App. If you prefer to fax or mail this form, use the information provided below to complete the process.

FAX: STANDARD MAIL: OVERNIGHT: 800-914-8922 (within U.S.) TIAA TIAA

P.O. Box 1280 8500 Andrew Carnegie Blvd. Charlotte, NC 28201-1280 Charlotte, NC 28262



-*-*- Demonstration Page - Powered	by OpenText Exstream, Version	16.3.0 64-bit -*-*-

-*- Demonstration Powered by OpenText Exstream 10/18/2022, Version 16.3.0 64-bit -*-



TIAA Brokerage Customer Account Agreement (Retail)

Brokerage accounts are provided by TIAA Brokerage, a division of TIAA-CREF Individual & Institutional Services, LLC, Member FINRA and SIPC, and are carried by Pershing LLC ("Pershing"), Member FINRA, NYSE, SIPC, a subsidiary of The Bank of New York Mellon Corporation.

I. General terms and conditions

By signing the TIAA Brokerage Services Account Application ("Account Application"), you agree to be bound by the following terms and conditions, as well as the terms and conditions set forth in Sections II to VII of this Agreement (collectively, with the Account Application, this "Agreement" or "agreement").

If you are signing this Agreement in connection with a managed account advisory program with Advice & Planning Services, LLC ("APS"), a division of TIAA-CREF Individual & Institutional Services, LLC, you will not be bound by certain sections and provisions of this agreement while enrolled in the program, including Margin Agreements, Options Contracts and Commission and Transaction Fees (related to trading directed by APS). For certain services that you request in connection with your managed account, you will be charged the applicable account maintenance fee in accordance with the Commission and Fee Schedule at the end of this Agreement. See your managed account advisory program's disclosure brochure and advisory agreement for more information about your managed account and the associated fees. If your management is terminated in accordance with your managed account advisory program's advisory agreement, and your assets are transferred to a brokerage account with TIAA Brokerage Services (TBS), you will be bound by all the terms and conditions of this Agreement.

- 1. "You," "your" or "Account holder" refers to all of the individual(s) who sign the Account Application for individual and joint Accounts and refers to the corporation, limited liability company, partnership, trust or other legal entity for corporate, limited liability company, partnership, trust or other legal entity Accounts.
- 2. "TIAA" refers to TIAA Brokerage, a division of TIAA-CREF Individual & Institutional Services, LLC. "Custodian" refers to the Custodian or trustee, as applicable, of your Account. "Account" or "Accounts" refers to the cash or margin account opened in your name with custody at Pershing.
- 3. If there is more than one Account holder, each joint Account holder's obligations under this Agreement shall be joint and several (i.e., are the responsibility of each Account owner, both individually and jointly). Each joint Account holder has authority, acting individually and without notice to any other Account holder, to deal with TIAA as fully and completely as if the joint Account holder is the sole Account holder.
- 4. TIAA is authorized, but not obligated, to follow the instructions of any joint Account holder and to deliver funds, securities or other assets to any joint Account holder. TIAA is not responsible for determining the purpose or propriety of any instruction received from a joint Account holder or for the disposition of payments or deliveries among joint Account holders.
- **5.** Any notice TIAA sends to one joint Account holder will be deemed notice to all joint Account holders. Any debts of a joint Account may be offset against any Accounts held individually by a joint Account holder.
- 6. You represent that the information you have provided on your Account Application is accurate. You will notify TIAA of any change to the information provided on your Account Application within 30 days of such change.

- 7. You will promptly notify TIAA within 10 days if you become a director, 10% beneficial shareholder or an affiliate of a publicly traded company, or if you become a member firm or an employee of any securities exchange, or a self-regulatory organization or a corporation of which security exchange owns a majority of the capital stock.
- 8. You are responsible for determining the suitability of your Account transactions in light of your stated investment objectives and financial situation. TIAA has no responsibility for any such determination unless TIAA has otherwise specifically agreed in writing in connection with an advisory program or a TIAA representative has given advice directly to you that is clearly identified as a TIAA recommendation for you to buy, sell or hold a particular security or securities, or use a particular investment strategy, for your Account.
- 9. If TIAA makes such a recommendation, TIAA believes it is suitable for you at the time of the recommendation. TIAA has no ongoing duty to ensure the recommendation continues to be suitable for you. You have an affirmative duty to monitor for profits and losses in your Account and to modify your trading decisions accordingly. Furthermore, unless TIAA has otherwise specifically agreed in writing in connection with an advisory program, you acknowledge that: (a) TIAA does not have discretionary authority over your Account or an obligation to review or make recommendations for the investment of securities or cash in your Account; (b) you will rely on multiple sources of information in making investment decisions for your Account; (c) any information TIAA may provide will not serve as the primary basis for any investment decision you make or made on your behalf; and (d) TIAA does not provide investment advice or otherwise act as a "fiduciary" as that term is defined in the Employee Retirement Income Security Act of 1974, as amended, or Section 4975 of the Internal Revenue Code.
- **10.** You acknowledge that TIAA offers many different Account types and you are responsible for selecting the type most appropriate for your needs. TIAA provides no subaccounting recordkeeping services or similar support for Accounts beneficially held by more than one owner.
- 11. TIAA may provide you with market data or research relating to securities and securities markets but does not guarantee the accuracy, completeness or timeliness of such information. Such market data or research is not personalized or in any way tailored to your personal financial circumstances or investment objectives, unless TIAA has otherwise specifically agreed in writing in connection with an advisory program. Other than in limited circumstances, TIAA limits the research available regarding mutual funds to certain mutual funds and shares classes of mutual funds that provide TIAA with a minimum level of compensation. You may be able to obtain research on such other mutual funds through other providers.
- 12. You understand that none of TIAA, Pershing and Custodian provide legal, tax or accounting advice and none of their employees are authorized to give any legal, tax or accounting advice, and you will not solicit or rely upon any such advice from TIAA, Pershing or the Custodian or their employees, whether in connection with transactions in or for your Account or otherwise.
- **13.** You acknowledge this Agreement contains a pre-dispute arbitration clause. By signing an arbitration agreement, the parties agree as follows:
 - **a.** All parties to this Agreement are giving up the right to sue each other in court, including the right to a trial by jury, except as provided by the rules of the arbitration forum in which a claim is filed.
 - **b.** Arbitration awards are generally final and binding; a party's ability to have a court reverse or modify an arbitration award is very limited.
 - **c.** The ability of the parties to obtain documents, witness statements and other discovery is generally more limited in arbitration than in court proceedings.
 - **d.** The arbitrators do not have to explain the reason(s) for their award unless, in an eligible case, a joint request for an explained decision has been submitted by all parties to the panel at least 20 days prior to the first scheduled hearing date.

-*- Demonstration Powered by OpenText Exstream 10/18/2022, Version 16.3.0 64-bit -*-

TIAA Brokerage Customer Account Agreement (Retail)

- **e.** The panel of arbitrators may include a minority of arbitrators who were or are affiliated with the securities industry.
- f. The rules of some arbitration forums may impose time limits for bringing a claim in arbitration. In some cases, a claim that is ineligible for arbitration may be brought in court.
- g. The rules of the arbitration forum in which the claim is filed, and any amendments thereto, shall be incorporated into this Agreement.

ANY CONTROVERSY THAT SHALL ARISE BETWEEN THE ACCOUNT HOLDER AND TIAA, TIAA'S AFFILIATES, PERSHING AND/OR THE CUSTODIAN (INCLUDING, BUT NOT LIMITED TO, CONTROVERSIES CONCERNING ANY ACCOUNT, ORDER OR TRANSACTION, OR THE CONTINUATION, PERFORMANCE OR BREACH OF THIS OR ANY OTHER AGREEMENT BETWEEN THE ACCOUNT HOLDER AND TIAA, TIAA'S AFFILIATES, PERSHING AND/OR THE CUSTODIAN, WHETHER ENTERED INTO OR ARISING BEFORE, ON OR AFTER THIS ACCOUNT IS OPENED) SHALL BE SUBMITTED TO ARBITRATION BEFORE AND ONLY BEFORE THE FINANCIAL INDUSTRY REGULATORY AUTHORITY. ARBITRATION MUST BE COMMENCED BY SERVICE UPON THE OTHER PARTY OF A WRITTEN DEMAND FOR ARBITRATION OR A WRITTEN NOTICE OF INTENTION TO ARBITRATE, THEREIN INDICATING THE ARBITRATION TRIBUNAL. NO PERSON SHALL BRING PUTATIVE OR CERTIFIED CLASS ACTION TO ARBITRATION, NOR SEEK TO ENFORCE ANY PREDISPUTE ARBITRATION AGREEMENT AGAINST ANY PERSON WHO HAS INITIATED IN COURT A PUTATIVE CLASS ACTION; OR WHO IS A MEMBER OF A PUTATIVE CLASS WHO HAS NOT OPTED OUT OF THE CLASS WITH RESPECT TO ANY CLAIMS ENCOMPASSED BY THE PUTATIVE CLASS ACTION UNTIL: (i) THE CLASS CERTIFICATION IS DENIED; (ii) THE CLASS IS DECERTIFIED; OR (iii) THE CUSTOMER IS EXCLUDED FROM THE CLASS BY THE COURT. SUCH FORBEARANCE TO ENFORCE AN AGREEMENT TO ARBITRATE SHALL NOT CONSTITUTE A WAIVER OF ANY RIGHTS UNDER THIS AGREEMENT EXCEPT TO THE EXTENT STATED HEREIN. ANY ARBITRATION AWARD SHALL BE FINAL AND BINDING, AND ANY COURT HAVING JURISDICTION MAY ENTER JUDGMENT THEREON.

14. Unless otherwise specified in writing in connection with an advisory program, you acknowledge that you will be charged a commission on applicable transactions and other account-related fees including, but not limited to, service fees and Cash Solutions Account fees in accordance with the standard TIAA Commission and Fee Schedule, as in effect from time to time. TIAA receives remuneration in connection with the mutual funds that you invest in, including, but not limited to, money market funds and exchange traded funds, including 12b-1 fees and other compensation from Pershing, or a mutual fund's distributor, transfer agent or investment adviser for marketing, shareholder services and/or distribution services. Additionally, Teachers Advisors, Inc., the investment adviser to TIAA-CREF Funds, and the advisory entities of TIAA's wholly owned subsidiary, Nuveen Fund Advisors, LLC, the investment adviser to the Nuveen Funds, receive fees from the mutual funds for investment advisory and/ or fund administration services. See the respective mutual funds' prospectus or statement of additional information for mutual fund payment information. With certain exceptions, TIAA limits the mutual funds available for purchase through your account to mutual funds, or share classes of a mutual fund, that include a minimum level of compensation to TIAA. In some cases, TIAA makes available for purchase multiple share classes of mutual funds, including multiple share classes of the Nuveen Funds and TIAA-CREF Funds. However, not all share classes of all mutual funds may be available for purchase, including in some cases, the lowest cost share classes of mutual funds. Mutual fund purchases are subject to the initial and subsequent minimum investment amounts as set forth in the mutual funds' prospectuses. You may also be able to purchase other share classes of the mutual funds from the mutual funds directly or through other providers. The mutual funds available through the Platform, including available share classes of particular mutual funds, may change over time at TIAA's discretion. The fees charged with respect to any mutual fund classes that are now or in the future are made available through the Platform may also change over time at TIAA's discretion or by the mutual fund itself. For more information on how TIAA gets paid for its products and services, please refer to our "Regulation Best Interest-Form CRS" located at the bottom of the home page of our website at https://www.tiaa.org/public/pdf/support/regbi/TIAA_FormCRS.pdf.

- 15. TIAA may suspend or terminate your Account at any time, for any reason and without prior notice to you. If you do not fund your Account within 30 days of Account opening or your account remains unfunded and inactive (no statement is generated) during any three-month consecutive period, TIAA reserves the right to close your Account without prior notice to you. Once your account is closed, for any reason, TIAA Brokerage reserves the right to reject any new account application submitted by you or on your behalf. In addition, if you maintain a small balance in your Account (for example, \$100 or less), during any three-month consecutive period, TIAA reserves the right to close your Account without prior notice to you. A check will be mailed to you after your account is closed. You shall have 30 days from receiving notice of termination of your Account to transfer all holdings from within your Account to another broker/ dealer of your choosing. Should you fail to complete this transfer within 30 days, TIAA may liquidate all holdings within your Account and mail you a check for any proceeds. This may result in a taxable event. In the event your Account is liquidated, you agree to be liable for any resulting losses and costs incurred by TIAA. You may close your Account at any time by giving TIAA notice.
- **16.** You acknowledge that, at the time you place a trade, you are solely responsible for ensuring that you have sufficient funds in your Account to cover your purchase. You also acknowledge that TIAA may review, reject, cancel or modify any securities transactions that you have entered at any time, for any reason and without prior notice to you.
- **17.** You acknowledge that you will pay in full for securities you purchase by the settlement date. For transactions not paid for by the settlement date, TIAA shall have the right, without notice to you, to sell the securities purchased.
- **18.** You authorize TIAA to accept your oral or electronic instructions for the purchase and sale of securities. You acknowledge that such instructions must be placed through designated TIAA channels. TIAA will not accept orders or instructions sent via electronic or postal mail (including, but not limited to, U.S. mail or overnight delivery).
- 19. When you change any instruction on a limit order, you are responsible for any open order, and any actions by you that modify or impact an open order. If you fail to do so, you understand that you will be responsible for any loss, including applicable commission charges. You are responsible for knowing the status of your pending orders, and any duplication by you of a pending order will be considered authorized by you. You understand and acknowledge that all Good Till Canceled (GTC) orders entered will expire in 90 days.
- 20. You acknowledge that to deter frequent trading within mutual funds, a short-term redemption fee may be assessed against any transaction that results in mutual fund shares being held for less than six months. This fee is in addition to any short-term redemption fee or restriction the underlying mutual fund may independently assess against the same transaction. Each of TIAA, Pershing and/or Custodian reserves the right to restrict access to the purchase of mutual fund shares within any account deemed at their sole discretion to engage in excessive or abusive short-term trading patterns. Additionally, in the event Pershing or Custodian, as the case may be, is instructed by the issuer of a mutual fund to restrict your access to such mutual fund's shares, such a restriction may remain in place until Pershing or Custodian receives notice from the issuer to remove the restriction.
- 21. You agree that TIAA, Pershing and or Custodian may place trading, disbursement or other full or partial restrictions on your account as deemed necessary, including but not limited to, the following circumstances: pursuant to a court order, tax levy, or garnishment; at the request of a government agency or law enforcement authority; in the event that your account is restricted (including, but not limited to, trading or trade-related violations, or termination of custodianship at the age of termination); in the event that a deposit has not yet settled; or in the event of a dispute between joint tenants. You agree to abide by any such restriction and not to initiate trades or transactions which would violate the restriction. You agree to allow us to liquidate securities in your account to satisfy any court order, garnishment, tax levy, or other legal obligation imposed by a court or government agency. You agree not to hold TIAA, Pershing or Custodian liable for any trading losses, lost profits, tax obligation, or other damages resulting from liquidations or trading or disbursement restrictions imposed on your account in connection with a court order, tax levy, garnishment or other legal proceeding.
- 22. You understand that "penny stocks" (generally defined as any equity security priced below \$5 a share) are generally considered high-risk investments and should be purchased purely for speculation. You acknowledge that any order you place for penny stocks was not solicited by TIAA and was solely your decision.

-*- Demonstration Powered by OpenText Exstream 10/18/2022, Version 16.3.0 64-bit -*-

- 23. If at any time you shall enter into any transaction for the purchase or resale of an option contract, you hereby agree to abide by the rules of any national securities association, registered securities exchange or clearing organization applicable to the trading of option contracts and, acting alone or in concert, will not violate the position or exercise limitation rules of any such association or exchange or of the Options Clearing Corporation or other clearing organization.
- 24. Exercise assignment notices for options contracts are allocated among short positions pursuant to a procedure that randomly selects from all short options positions, including positions established on the day of the assignment, those contracts that are subject to exercise. A more detailed description of this random allocation procedure is available on request. All short options positions are liable for assignment at any time.
- 25. Some account types may permit trading in a limited range of securities (e.g., mutual funds) and you acknowledge that you must follow TIAA procedures to obtain expanded trading privileges for such accounts. TIAA, Pershing and/or Custodian, in their sole discretion, may eliminate or restrict your ability to purchase particular securities, investments or other property due to volatility or other factors.
- **26.** You acknowledge that TIAA will send all communications to you at the mailing address you provided on your Account Application, or at such other address, as you may subsequently provide to TIAA in writing, and that all communications so sent in writing shall be deemed delivered, whether actually received or not.
- 27. You acknowledge that federal law requires that TIAA verify your identity by obtaining, among other information, your name, date of birth, address and government-issued identification number before opening your Account. This information is necessary to help the government fight the funding of terrorism and money laundering activities. TIAA may gather and verify this information with respect to any other person authorized to effect transactions in your Account. For certain entities, such as trusts, estates, corporations, partnerships or other organizations, TIAA may require additional identifying documentation. TIAA may restrict and/or close your Account if TIAA cannot verify this information. TIAA will not be responsible for any loss, costs and/or expenses resulting from your failure to provide this information, or from any related restriction or closing of your Account.
- 28. You authorize us to exchange credit information about you and your Account with others. As required by law, you are notified that any negative credit report reflecting on your credit record may be submitted to a credit reporting agency if you fail to fulfill the terms of your credit obligations. We may request a credit report on you, and upon request, we will state the name and address of the consumer reporting agency that furnished it. If we extend, update, review or renew your credit, we may request a new credit report without notifying you.
- 29. You acknowledge that any person acting as a trustee, Custodian or fiduciary for your Account is liable for all activity within the Account. TIAA will not review any action or inaction taken by a trustee, Custodian or fiduciary with respect to your Account. You agree to indemnify and hold harmless TIAA, its directors, employees, agents, affiliates and assigns from and against any and all losses, claims or financial obligations (including reasonable attorney's fees) that may arise from any act or omission it may suffer from the activity of any trustee, Custodian or fiduciary you appoint with respect to your Account.
- 30. You acknowledge that where you provide TIAA with written notice that an unaffiliated third-party advisor has discretionary authority over your Account, TIAA and its affiliates bear no liability or responsibility for any action taken by the third-party advisor. TIAA may rely and act upon any direction given by the third-party advisor, unless and until TIAA receives written notice from you revoking the third-party advisor's discretionary authority. You are responsible for confirming that such written revocation has been received and processed. You agree to indemnify and hold harmless TIAA, its directors, employees, agents, affiliates and assigns from and against any and all losses, claims or financial obligations (including reasonable attorney's fees) it may suffer from the activity of any unaffiliated third-party advisor you appoint with respect to your Account.

- **31.** You understand that the Internal Revenue Service ("IRS") generally requires TIAA to report annually, on Form 1099-B (the "1099-B Annual Information Report"), any gross proceeds you receive from the sale of securities, your "cost basis" for securities sold, whether any gain or loss on a security is long term or short term, and whether any reported loss is disallowed due to the application of wash sale rules.
- 32. In order to calculate the gain or loss on the sale of a covered security, a tax lot relief method (also called a cost accounting method) must be selected. A tax lot relief method is a way of computing the realized gain or loss for an asset sold in a taxable transaction. It determines which lot of a security, as well as its associated cost basis and the holding period, is used in computing the gain or loss. TIAA's default tax lot relief method is First In, First Out ("FIFO"). You should consult with your personal tax advisor or financial planner to determine your specific reporting requirements and which tax lot relief method makes sense for you. To make a change to TIAA's default method, you must select a different method by submitting your request in writing to TIAA. All cost basis identification methods, including specific lot selection, must be made prior to the settlement date of your transaction. TIAA and its affiliates shall have no liability for any damages you may incur as a result of (i) TIAA providing the required 1099-B Annual Information Report to the IRS, or (ii) any differences in the cost basis reported by TIAA to the IRS and your actual adjusted cost basis.
- 33. TIAA, Pershing and/or Custodian may charge certain fees, including an annual fee, to your Account for the financial services provided to you under this Agreement. Your Account may also incur service charges based upon Account activity, items returned unpaid, stop-payment orders, garnishments, levies, copies or images of cancelled checks or for other Account services related to your Account. The fees and charges are set forth in the Commission and Fee Schedule at the end of this Agreement, and they are subject to change with notice or advance notice provided to you only if required by applicable law.
 - You agree to repay TIAA, Pershing and/or Custodian all of their respective expenses, including attorneys' fees and legal expenses, to collect money you owe to Pershing, Custodian, Administrator, Bank, Check Free and/or TIAA because of your Account or for any dispute relating to your Account.
- 34. All of your securities and other property in any Account (margin or cash) in which you have an interest or which at any time are in your possession or under your control other than retirement Accounts, such as IRAs, shall be subject to a lien for the discharge of any and all indebtedness or any other obligations you may have to TIAA. Securities and other property held in retirement accounts, such as IRAs, are not subject to this lien, and are not used as security for the payment of your obligations or indebtedness for other Accounts (cash or margin) that you maintain with TIAA. In enforcing the lien, TIAA may, at its sole discretion, determine which securities and other property held in your Account are to be sold or which contracts are to be closed, except where prohibited by law.
- 35. TIAA may also transfer securities or other property from any of your Accounts, whether individual or joint, to any of your other Accounts in order to satisfy deficiencies in any of your Accounts, except where prohibited by law. You grant TIAA the right of set-off in satisfaction of any debt in your Account, except where prohibited by law. You agree to pay any costs or expenses incurred by TIAA, including reasonable attorney's fees, that result from your failure to properly settle any securities transactions or pay any debt, or otherwise satisfy your obligations under this Agreement. You acknowledge that your Account may be subject to interest on any debit balances resulting from your failure to make payment in full for securities purchased from proceeds of sales paid prior to settlement date, or for other charges that may be made to the Accounts.
- **36.** You acknowledge that TIAA may, at its discretion, allow certain holdings and/or positions not held in custody by Pershing to be reflected on your Account brokerage statement. Where TIAA permits this, TIAA reports these held-away holdings and/or positions based solely upon information provided by a third party. TIAA is not responsible for the accuracy of any information regarding held-away holdings and/or positions, and does not verify or use a third party to verify the accuracy of such holdings and/or positions. In connection with annuities

-*- Demonstration Powered by OpenText Exstream 10/18/2022, Version 16.3.0 64-bit -*-

- sold to you through TIAA or TIAA Insurance Agency that are reflected on your Account brokerage statement but not held in custody by Pershing, TIAA and TIAA Insurance Agency receive remuneration from issuers of the annuities, including commissions.
- 37. Your Account includes a Sweep Program feature which automatically transfers available uninvested cash balances in your Account at the end of each Business Day to a money market fund or bank sweep deposit account (each a "Sweep Vehicle" and together the "Sweep Program") and facilitates the redemption of available shares of any such money market funds or the transfer of available cash balances from any such bank sweep deposit accounts to your Account to cover purchases of securities and other debits in your Account. Available Sweep Vehicles vary based on account type. You direct us to use the Sweep Vehicle indicated on your Account Application as the Sweep Vehicle for your Account and, if you fail to indicate a Sweep Vehicle, you direct us to use the default Sweep Vehicle indicated therein. If your account type includes only one Sweep Vehicle, you acknowledge that the Sweep Vehicle set forth in the Account Application will serve as the sweep option in which all available uninvested cash balances in your Account will be allocated at the end of each Business Day. Different Sweep Vehicles may have different rates of return and different terms and conditions, including, but not limited to, requiring minimum cash balances in your Account before such balances may be swept to a Sweep Vehicle. Money market mutual funds are securities that are registered with the U.S. Securities and Exchange Commission ("SEC") under the Investment Company Act of 1940 and the Securities Act of 1933. Although money market funds attempt to maintain a stable net asset value of \$1 per share, there is no guarantee that the fund will in fact maintain a \$1 per share stable net asset value. Money market funds are not insured by the Federal Deposit Insurance Corporation ("FDIC"). Money market funds are, however, securities subject to protection by the Securities Investor Protection Corporation ("SIPC") in the event of insolvency of Pershing, LLC as the brokerage firm holding your Account and cash or securities owed to you. SIPC is a non-profit member corporation funded primarily by member securities brokerage firms registered with the SEC, which protects customers up to certain limits in the event of the failure of a brokerage firm where cash and securities are owed to customers. See the TIAA Brokerage Services SIPC Asset Protection Guide for more information. SIPC does not protect against loss due to market fluctuation or failure of the issuer of a money market fund. More specific information about a particular money market mutual fund, including applicable fund restrictions, fees and expenses and other important information, can be found in the fund's prospectus. Bank sweep options are deposit accounts held at one or more banks. Deposit accounts pay interest on deposits pursuant to the terms and conditions in the disclosure document for the applicable bank sweep option. Interest rates may fluctuate and may vary among banks. Deposit accounts are not subject to SIPC protection. They are subject to FDIC insurance up to applicable limits. FDIC insurance protects against loss of deposit amounts in the event the bank holding the deposits fails. More specific information about particular bank sweep options, including applicable FDIC insurance limits, interest amounts and other important information can be found in the applicable bank sweep disclosure document. Prospectuses or similar disclosure documents for the Sweep Vehicle option(s) available for your Account are available by calling 800-842-2252. You agree to review these disclosure documents prior to opening your Account. TIAA may change the terms and conditions of the Sweep Program and the Sweep Vehicle options available for your Account, at its sole discretion. TIAA will provide you with written notice in advance of adding, changing or deleting Sweep Vehicle options for your Account or making other changes to the Sweep Program to the extent required by applicable law. TIAA may receive 12b-1 and similar service fee payments from Sweep Vehicles. Please consult the prospectus or similar disclosure document for each Sweep Vehicle for more information concerning such fees. TIAA, FSB, a TIAA affiliate, holds deposits in connection with the TIAA Bank Brokerage Sweep Vehicle bank sweep option described in Paragraph 38 below and in connection therewith earns net income from the difference TIAA, FSB pays on the deposit accounts and the income it earns on loans, investments and other assets.
- **38.** As set forth in Paragraph 37 above, Sweep Vehicle options vary by account type. The following paragraph applies to account types with a bank deposit option.

-*- Demonstration Powered by OpenText Exstream 10/18/2022, Version 16.3.0 64-bit -*-

TIAA Brokerage Customer Account Agreement (Retail)

The TIAA Bank Brokerage Sweep Account. The following describes your bank sweep option if your Account Application indicates that the Sweep Vehicle for your Account is the TIAA Bank Brokerage Sweep Account; if you have selected the TIAA Bank Brokerage Sweep Account as your Sweep Vehicle; if you have failed to select a Sweep Vehicle on your Account Application and the TIAA Bank Brokerage Sweep Account is the default sweep vehicle for the account; or if TIAA has notified you that TIAA is replacing the existing bank Sweep Vehicle for your Account with the TIAA Bank Brokerage Sweep. The TIAA Bank Brokerage Sweep comprises two separate Sweep Vehicles used in combination: (1) the TIAA Bank Brokerage Sweep Vehicle which automatically sweeps eligible cash balances in an Account up to the Maximum Deposit Amount (defined below) into interest-bearing deposit accounts at TIAA, FSB (a TIAA affiliate); and (2) the Liquid Insured Deposits ("LIDs") Sweep Vehicle which is used as an overflow Sweep Vehicle to automatically sweep eligible cash balances in excess of the Maximum Deposit Amount into interest-bearing deposit accounts with participating banks unaffiliated with TIAA ("LIDs banks"). The TIAA Bank Brokerage Sweep Vehicle will serve as the primary bank Sweep Vehicle for eligible cash balances in an Account up to a maximum deposit amount set by TIAA, FSB. The Maximum Deposit Amount for an Account is currently \$248,500 and is subject to change by TIAA, FSB with notice to you. Interest that accumulates in your account may cause your balance to exceed the Maximum Deposit Amount; however, in no event will the balance exceed the then-current FDIC insurance limits for deposit amounts held at a bank in the same right and capacity. The LIDs Sweep Vehicle will be used as an overflow sweep for eligible cash deposits in an Account which exceeds the Maximum Deposit Amount ("Excess Balances") plus any interest accrued. Only Excess Balances in an Account are eligible to use the LIDs Sweep Vehicle. By way of example, if an Account holds \$300,000 in eligible cash balances, the first \$248,500 will be automatically swept into interest-bearing deposit accounts with TIAA, FSB through the TIAA Bank Brokerage Sweep. The remaining \$51,500 in eligible cash balances will be automatically swept into interest-bearing accounts with participating banks unaffiliated with TIAA through the LIDs Sweep Vehicle. By way of further example, if the Account instead holds \$248,500 or less in eligible cash balances, such eligible cash balances will be automatically swept into interestbearing deposit accounts with TIAA, FSB through the TIAA Bank Brokerage Sweep. Please review the separate disclosure documents for the TIAA Bank Brokerage Sweep Vehicle and the LIDs Sweep Vehicle carefully.

Other Bank Sweep Options. For some Accounts, TIAA may make the Liquid Insured Deposits Sweep Vehicle on its own (i.e., not in combination with the TIAA Bank Brokerage Sweep Vehicle described above). TIAA may change this option by replacing it with the TIAA Bank Brokerage Account Sweep Vehicle described above or otherwise adding or deleting bank sweep options. TIAA will provide prior written notice to such Account holders as set forth in Paragraph 37 above prior to making any such changes.

It is your sole responsibility to monitor the total balances you have across your accounts with TIAA, FSB and/or the LIDs banks to ensure that your deposit amounts held at any bank in the same right and capacity, directly or indirectly (with the bank or through your account), do not exceed \$250,000, which currently is the maximum amount eligible for FDIC insurance coverage for a single bank. Amounts you hold at any bank, including TIAA, FSB or a LIDs bank, in excess of \$250,000 will not receive FDIC insurance coverage. For example, if you have a deposit account and a certificate of deposit ("CD") with the same bank, the aggregate dollar amount of the deposit account and the CD including accrued interest in excess of \$250,000 will not be FDIC-insured. A list of participating LIDs banks can be viewed online by going to https://www.pershing.com/_global-assets/pdf/liquid-insured-bank-list.pdf or by contacting TIAA for a written copy. Once you have investment within the LIDS sweep, you may opt out of having funds swept to a participating LIDs bank by contacting us at 800-842-2252 weekdays, 8 a.m. to 7 p.m. (ET); a representative can take such instructions over the phone.

39. You acknowledge TIAA is obligated by federal securities laws to provide your name, address and holdings information to issuers of those securities upon request, unless you instruct TIAA in writing not to do so.

- **40.** For the parties' mutual protection, you understand, agree and expressly consent to our electronic recordation of any of your telephone conversations with us and to our monitoring of your electronic communications with us, including, but not limited to, email and facsimile transmission.
- 41. You acknowledge receipt of the TIAA Privacy Notices.
- 42. Securities which are held for your Account and which are in "street name," or are being held by a securities depository, are commingled with the same securities being held for other customers of TIAA and for Pershing's own customers. Your ownership of these securities is reflected in Pershing's records. You have the right at any time to require delivery to you of any such securities that are fully paid for or are in excess of margin requirements. The terms of many bonds allow the issuer to partially redeem or "call" the issue prior to maturity date. Certain preferred stocks are also subject to being called by the issuer. Whenever any such security being held by Pershing is partially "called," Pershing will determine through a random selection procedure as prescribed by the New York Stock Exchange rules, the ownership of the securities to be submitted for redemption. In the event that such securities owned by you are selected and redeemed, your Account will be credited with the proceeds. Should you not wish to be subject to this random selection process, you must instruct TIAA to have Pershing deliver your securities to you. Delivery will be effected provided, of course, that your position is unencumbered or had not already been called by the issuer as described, prior to receipt by Pershing of your instructions. The probability of one of your securities being called is the same whether they are held by you or by Pershing for you.
- 43. You acknowledge that various federal and state laws or regulations may be applicable to transactions in your Account regarding restricted securities, as defined by applicable securities laws and regulations. It is your responsibility to notify TIAA if your Account contains restricted securities and to ensure that any transaction you effect will comply with all applicable laws and regulations. You understand that transactions in restricted securities may take longer to process than transactions involving unrestricted securities. Notwithstanding the foregoing, TIAA may, at its sole discretion, refuse to permit restricted securities within your Account.
- **44.** You acknowledge your responsibility to review your brokerage Account statements for accuracy and to notify TIAA, Pershing and/or Custodian within 30 days of receipt of any error or omission. If you fail to notify TIAA, Pershing and/or Custodian of any error or omission within this time frame, your brokerage Account statement shall be presumed accurate. You acknowledge your responsibility to review all confirmation statements for accuracy and notify TIAA, Pershing and Custodian immediately of any error or omission.
 - If your periodic customer statement indicates that securities were forwarded to you and you have not received them, you should notify TIAA or Pershing immediately. If notification is received within 120 days after the mailing date, as reflected on your periodic statement, replacement will be made free of charge. Thereafter, a fee for replacement may apply.
- **45.** You acknowledge that if any provision or condition of this Agreement is held invalid or unenforceable for any reason by any court, or regulatory or self-regulatory agency or body, such provision or condition shall be fully severable, and this Agreement shall be enforced and construed as if such provision or condition had never comprised a part of this Agreement.
- **46.** You acknowledge that this Agreement cannot be modified by conduct and/or the failure of TIAA, Pershing and/or Custodian at any time to enforce its rights hereunder to the greatest extent permitted by law, and shall not be deemed to waive, modify or relax any of the rights granted to TIAA, Pershing and/or Custodian herein, including any right to deal with collateral on all loans advanced to you.
- 47. You acknowledge that this Agreement constitutes the full and entire understanding between the parties with respect to the provisions herein, and that there are no oral or other agreements in conflict herewith. You acknowledge that each of TIAA, Pershing and/or Custodian reserves the right to amend this Agreement, by modifying or rescinding any of its existing provisions or by adding any new provision at any time upon written

-*- Demonstration Powered by OpenText Exstream 10/18/2022, Version 16.3.0 64-bit -*-

TIAA Brokerage Customer Account Agreement (Retail)

notice to you on your brokerage Account statement(s), trade confirmation(s), or such other written or electronic notification, including, but not limited to, posting notice of such amendment(s) and/or the amended Agreement on the TIAA Brokerage website. The amended Agreement will be effective as of the date established by TIAA, Pershing and/or Custodian (the "Effective Date"). You agree that any future amendments made to the Agreement shall apply to your Account and to any subsequent Accounts you ask TIAA to establish for you in the future. The use of your Account after the Effective Date of the amendment(s) shall constitute your acknowledgment and agreement to be bound thereby. You are responsible for regularly checking for updates. You understand additional restrictions may apply to the brokerage services provided hereunder and additional documentation may be required by applicable law or TIAA, Pershing and/or Custodian's policies and procedures. You agree to comply with any such restrictions and promptly provide any documents or information requested.

- 48. This Agreement or any subsequently modified agreement shall cover all aspects of the Account(s) you may open or reopen with Pershing through TIAA, including, but not limited to, Account(s) with brokerage, Check-writing privileges, Card services and associated ACH Transactions and BillSuite Services, and shall inure to the benefit of each of our successors whether by merger, consolidation or otherwise, and assigns, and each of us may transfer your Account to our respective successors and assigns, and this Agreement shall be binding upon your heirs, executors, administrators, successors and assigns.
- **49.** TIAA Brokerage and Pershing, in their capacity as clearing firm, may make the Account communications available in an electronic form instead of mailing them in paper form; according terms and conditions will be stated within the Electronic Delivery Terms and Conditions.
- 50. You acknowledge that telephone, Internet or any other electronic system, and software provided for use in accessing your Account information, is used at your sole risk and that neither TIAA, its vendors providing data, information or other services, including, but not limited to, any exchange (collectively, "service providers"), warrant that the service will be uninterrupted or error-free and that neither TIAA nor any such service providers will make any warranty as to the results that may be obtained from any of these systems. You further acknowledge that telephone, Internet and other electronic systems are provided on an as-is and as-available basis, without warranties of any kind, either expressed or implied, including, without limitation, those of merchantability and fitness for a particular purpose, other than those warranties which are implied by and incapable of exclusion, restriction or modification under applicable laws and regulations. None of TIAA, any service provider, Pershing or Custodian will be liable in any way to you or any other person for any inaccuracy, error or delay in, or omission of, any data, information or message, or the transmission or delivery of any data, information or message, or any loss or damages arising from or occasioned by: any inaccuracy, error, delay or omission, nonperformance, interruption in data due to neglect or omission by any service provider, any "force majeure" (i.e., loss caused directly or indirectly by flood, fire, war, terrorism, civil unrest, strikes, natural disaster, extraordinary weather conditions, earthquake or other acts of God, government restrictions or actions, interruptions of communications, exchanges or market rulings, suspension of trading or other conditions beyond TIAA's control, failure, or equipment or software malfunction) or any other cause beyond the reasonable control of any service provider.
- **51.** You acknowledge that complaints regarding your Account are to be mailed to TIAA Brokerage, P.O. Box 1280, Charlotte, North Carolina 28201, or you may call **800-842-2252**.

TIAA Brokerage Customer Account Agreement (Retail)

- 52. The Agreement, all transactions made in your Account and all matters arising in connection with the Agreement will be governed by, and construed and enforced in accordance with, the laws of the State of New York (regardless of the choice of law rules thereof), provided, however, that the Banking Services Agreement and the BillSuite™ Agreement set forth in Part IV will be governed by the laws of such state(s) as indicated in Part IV.
- 53. You agree that TIAA may assign this Agreement (in part or in full, and including assigning the role of clearing broker and custodian for the Account) to any third party or any subsidiary, affiliate or successor of TIAA. You hereby delegate and grant to TIAA the power and authority to make these changes on your behalf. TIAA will provide you with at least 30 days prior written notice of such assignment and you will be deemed to have consented to the assignment if you conduct any transactions in your Account or keep your Account open subsequent to receiving such a notice.

II. Trusted Contacts

TIAA is committed to helping you protect your account(s) and information. One way to protect your interests is to appoint a Trusted Contact. A Trusted Contact is someone over the age of 18 whom you know and trust. This person will serve as a point of contact should we have questions concerning your overall well-being, whereabouts, or if we suspect you may be the victim of fraud or exploitation. The individual(s) you select may not take any action on your account and will not replace or affect existing powers of attorney. You should notify those you appoint as Trusted Contacts.

To appoint your Trusted Contact(s), log into your account at **TIAA.org**, click *Profile* at the top of the page. Within *More profile options*, click *Trusted Contacts* and complete the required Trusted Contact information, or contact us at **800-842-2252** to request a form to name a Trusted Contact.

Please note that TIAA, and its affiliates and representatives are authorized to contact the Trusted Contact(s) and disclose information about your account(s) to address possible financial exploitation, to confirm the specifics of your current contact information, health status, or the identity of any legal guardian, executor, trustee, or holder of a power of attorney, or as otherwise permitted under FINRA Rule 2165. Except as is required by FINRA Rule 2165, TIAA is under no obligation to interact with Trusted Contact(s).

III. Role of Pershing

TIAA retained Pershing to act as a clearing broker for TIAA and provide certain recordkeeping and operational services, which may include execution and settlement of securities transactions, custody of securities and cash balances, and extension of credit on margin transactions. These services are provided under a written Clearing Agreement between Pershing and TIAA. The respective roles of Pershing and TIAA, as defined within the Clearing Agreement, are outlined below.

- 1. In general, Pershing is only responsible for those services provided at the request or direction of TIAA as contemplated by the Clearing Agreement.
- 2. Pershing will create computer-based account records on the Account holder's behalf in such name(s) and with such address(es) as TIAA directs.
- Pershing will process orders for the purchase, sale or transfer of securities for the Account as TIAA directs. Pershing
 is not obligated to accept orders for securities transactions directly from the Account holder and will do so only in
 exceptional circumstances.

- **4.** Pershing will receive and deliver cash and securities for the Account and will record such receipts and deliveries according to information provided either by TIAA or directly, in writing, by the Account holder.
- 5. Pershing will hold in custody securities and cash received for the Account, and will collect and disburse dividends and interest and process reorganization and voting instructions with respect to securities held in custody. Pershing is responsible for the custody of cash and securities only after it comes into Pershing's physical possession or control.
- 6. Pershing will prepare and transmit to the Account holder or provide facilities to TIAA for the preparation and transmission of confirmations of trades. Pershing will prepare and transmit to the Account holder periodic Account statements summarizing the transaction history.
- 7. If TIAA opens a Margin Account for an Account holder, Pershing will loan the Account holder money for the purpose of purchasing or holding securities subject to the terms of Pershing's written Margin Agreement as set forth in Section III below or in a separate document and Pershing margin policies and applicable margin regulations. TIAA is responsible for obtaining the initial margin as required by Regulation T. Thereafter, Pershing will calculate the amount of maintenance margin required. Pershing will advise the Account holder of those requirements, usually through TIAA. Pershing will also calculate the interest charged on the debit balance, if any.
- 8. In connection with all of the functions that Pershing performs, Pershing maintains the books and records required by law and by business practice. Pershing will provide TIAA with written reports of all transactions processed for the Account to enable it to carry out its responsibilities under the Clearing Agreement. Pershing will assist the Account holder and TIAA with any discrepancies or errors that may occur in the processing of transactions for the Account.
- PERSHING DOES NOT CONTROL, AUDIT OR OTHERWISE SUPERVISE THE ACTIVITIES OF TIAA OR ITS EMPLOYEES. PERSHING DOES NOT VERIFY INFORMATION PROVIDED BY TIAA REGARDING THE ACCOUNT OR TRANSACTIONS PROCESSED FOR THE ACCOUNT NOR UNDERTAKE RESPONSIBILITY FOR REVIEWING THE APPROPRIATENESS OF TRANSACTIONS ENTERED BY TIAA ON THE ACCOUNT HOLDER'S BEHALF. PERSHING MAY ACCEPT FROM TIAA, WITHOUT INQUIRY OR INVESTIGATION, (I) ORDERS FOR THE PURCHASE OR SALE OF SECURITIES AND OTHER PROPERTY ON MARGIN OR OTHERWISE, AND (II) OTHER INSTRUCTIONS CONCERNING YOUR ACCOUNTS. NOTICES TO YOU CONCERNING MARGIN REQUIREMENTS OR OTHER MATTERS RELATED TO YOU WILL GO THROUGH TIAA: HOWEVER, DIRECT CONTACT BY PERSHING MAY OCCUR IF MARKET CONDITIONS, TIME CONSTRAINTS OR OTHER CIRCUMSTANCES REQUIRE IT. PERSHING SHALL NOT BE RESPONSIBLE OR LIABLE FOR ANY ACTS OR OMISSIONS BY TIAA OR ITS EMPLOYEES. YOU UNDERSTAND THAT PERSHING PROVIDES NO INVESTMENT ADVICE NOR DOES PERSHING GIVE ADVICE OR OFFER ANY OPINION WITH RESPECT TO THE SUITABILITY OF ANY TRANSACTION OR ORDER. YOU UNDERSTAND THAT TIAA IS NOT ACTING AS THE AGENT OF PERSHING AND YOU AGREE THAT YOU WILL IN NO WAY HOLD PERSHING, ITS OTHER DIVISIONS, AND ITS OFFICERS, DIRECTORS AND AGENTS LIABLE FOR ANY TRADING LOSSES INCURRED BY YOU. YOU AUTHORIZE PERSHING TO ACT AS YOUR AGENT TO PURCHASE AND REDEEM FOR YOUR ACCOUNT SHARES OF THE FUNDS, AS PREVIOUSLY DEFINED, AND YOU AGREE THAT YOU SHALL NOT HOLD PERSHING, ITS OTHER DIVISIONS, AFFILIATES, OFFICERS, DIRECTORS OR AGENTS LIABLE FOR ANY TRADING LOSSES INCURRED.
- **10.** The Clearing Agreement does not encompass transactions in commodities futures contracts or investments other than marketable securities, which Pershing normally processes on recognized exchanges and over-the-counter markets.
- **11.** In furnishing its services under the Clearing Agreement, Pershing may use and rely upon the services of clearing agencies, automatic data processing vendors, proxy processing, transfer agents, securities pricing services and other similar organizations.
- **12.** This statement addresses the basic allocation of functions regarding the handling of the Account. It is not meant as a definitive enumeration of every possible circumstance, but only as a general disclosure.

IV. Margin Agreement

General margin policies

The amount of credit that may be extended by Pershing and the terms of such extension are governed by rules of the Federal Reserve Board and the Financial Industry Regulatory Authority. Within the guidelines of these rules and subject to adjustment required by changes in such rules and Pershing's business judgment, Pershing establishes certain policies with respect to Margin Accounts. If the market value of securities in a Margin Account declines, Pershing may require the deposit of additional collateral. Margin Account equity is the current market value of securities and cash deposited as security less the amount owed to Pershing for credit extended at its discretion. It is Pershing's general policy to require Margin Account holders to maintain equity in their Margin Accounts of the greater of 30% of the current market value or \$3.00 per share for common stock purchased on margin. Pershing applies other standards for other types of securities. For example, securities may be ineligible for margin credit from time to time. For information with respect to general margin maintenance policy as to municipal bonds, corporate bonds, listed United States Treasury notes and bonds, mutual funds and other securities, as well as information about the eligibility of particular securities for margin credit, please contact TIAA. Notwithstanding the above general policies, Pershing reserves the right, at its discretion, to require the deposit of additional collateral and to set required margin at a higher or lower amount with respect to particular accounts or classes of accounts as it deems necessary. In making this determination, Pershing may take into account various factors including, but not limited to, (i) issues as to your securities such as, among others, the liquidity of a position and concentrations of securities in an Account, (ii) considerations as to your status, including, but not limited to, a decline in creditworthiness, (iii) the size of the Account, (iv) the general condition of the market, (v) considerations as to the ability of Pershing to obtain financing, and (vi) regulatory interpretations or guidance. If the Account holder fails to meet a margin call in a timely manner, some or all of the Account holder's positions may be liquidated.

Please note that approval of margin privileges is subject to review by TIAA. To apply for margin privileges, please contact a TIAA Brokerage representative. The following terms and conditions shall govern all Margin Accounts:

- 1. You acknowledge that Margin Accounts, which allow the purchase of securities on credit, enable you to increase the buying power of your equity and thus increase the potential for profit or loss. A portion of the purchase price is deposited when buying securities on margin and Pershing extends credit for the remainder. You understand this loan appears as a debit balance on your monthly account statement. Pershing charges interest on the debit balance and requires you to maintain securities, cash or other property to secure repayment of funds advanced and interest due. You understand that interest will be charged for any credit extended to you for the purpose of buying, trading or carrying any securities, for any cash withdrawals made against the collateral of securities, or for any other extension of credit. When funds are paid in advance of settlement on the sale of securities, interest will be charged on such amount from date of payment until settlement date. In the event that any other charge is made to the Account for any reason, interest may be charged on the resulting debit balances. You authorize TIAA to transfer securities held in your cash Account to your Margin Account. Any assets in your Account that are eligible as margin will be transferred to your Margin Account upon the opening of your Margin Account. This transfer will only happen upon the opening of your Margin Account and that any further transfers will require you to communicate with TIAA to effect them.
- 2. All margin transactions shall be subject to the constitution, rules, regulations, customs and usages of the exchange or market and its clearing house, if any, where executed by Pershing or its agents, including its subsidiaries and affiliates.
- 3. For purposes of this Agreement, "securities and other property," as used herein, shall include, but not be limited to, money and securities of every kind and nature and all contracts and options relating thereto, whether for present or future delivery.

- 4. All securities and other property which Pershing may at any time be carrying for you, or which may at any time be in Pershing's possession or under Pershing's control, shall be subject to a general lien and security interest in Pershing's favor for the discharge of all your indebtedness and other obligations to Pershing, without regard to Pershing having made any advances in connection with such securities and other property and without regard to the number of Accounts you may have with Pershing. In enforcing its lien, Pershing shall have the discretion to determine which securities and property are to be sold and which contracts are to be closed. Securities and other property held in your retirement Account(s) maintained by Pershing, which may include IRAs or qualified plans, are not subject to this general lien and such securities or other property may only be used to satisfy the undersigned's indebtedness or other obligations to TIAA and/or Pershing related to your retirement Account(s).
- 5. If, at Pershing's discretion, Pershing considers it necessary for Pershing's protection to require additional collateral or in the event that a petition in bankruptcy or for appointment of a receiver is filed by or against you, or an attachment is levied against your accounts, or in the event of your death, Pershing shall have the right to sell any or all securities, commodities and other property in the Accounts Pershing has established for you, whether carried individually or jointly with others, to buy any or all securities, commodities and other property which may be short in such Accounts, to cancel any open orders, and to close any or all outstanding contracts, all without demand for margin or additional margin, notice of sale or purchase or other notice or advertisement. Any such sales or purchases may be made at Pershing's discretion on any exchange or other market where such business is usually transacted, or at a public auction or private sale and Pershing may be the purchaser for its own Account. It is understood that a prior demand, or call, or prior notice of the time and place of such sale or purchase shall not be considered a waiver of Pershing's right to sell or buy without demand or notice.
- 6. You shall at all times be liable for the payment upon demand of any debit balance or other obligations owing in any of your Accounts, and shall be liable to Pershing for any deficiency remaining in any such Accounts in the event of the liquidation thereof, in whole or in part, by either Pershing or you; and you shall make payments of such obligations and indebtedness upon demand. The reasonable cost and expense of collection of the debit balance, recovery of securities and any unpaid deficiency in your Accounts with Pershing, including, but not limited to, attorney's fees incurred and payable or paid by Pershing shall be payable to Pershing by you.
- 7. All securities and other property now or hereafter held, carried or maintained by Pershing in its possession in any of your Accounts may be pledged, repledged, hypothecated or rehypothecated by Pershing from time to time, without notice to you, either separately or in common with other such securities and other property for any amount due in the Accounts, or for any greater amount, and Pershing may do so without retaining into its possession or control for delivery a like amount of similar securities or other property.
- 8. You will at all times maintain such securities and other property in the Accounts for margin purposes as Pershing shall require from time to time via a margin call or other request, and the monthly debit balances or adjusted balances in the Accounts with Pershing shall be charged, in accordance with Pershing practice, with interest at a rate permitted by laws of the State of New York. The interest charge made to the Account at the close of a charge period will be added to the opening balance for the next charge period unless paid.
- 9. You acknowledge receipt of the Disclosure Statement that explains the conditions under which interest can be charged to the Account, the annual rate of interest, how debit balances are determined and the methods of computing interest.
- 10. In regard to margin calls, whether for maintenance or any other margin call, in lieu of immediate liquidations, Pershing, through TIAA, may permit you a period of time to satisfy a call. This time period shall not in any way waive or diminish Pershing's right, in its sole discretion, to shorten the time period in which you must satisfy the call, including one already outstanding, or to demand that a call be satisfied immediately. Nor does such practice waive or diminish the right of Pershing and/or TIAA to sell out positions to satisfy the call, which can be as high as

- the full indebtedness owed. Margin requirements may be established and changed by Pershing, at its sole discretion and judgment, without notice to you. You should contact TIAA for the latest information on margin requirements.
- 11. Pershing and/or TIAA may exchange credit information about you with others. Pershing and/or TIAA may request a credit report, and upon request, Pershing and/or TIAA will state the name and address of the consumer reporting agency that furnished it. If Pershing and/or TIAA extends, updates or renews your credit, Pershing and/or TIAA may request a new credit report without notice to you.
- **12.** If this is a Margin Agreement for a trust or other similar fiduciary account, you certify that the use of a Margin Account and the borrowing and lending of securities is authorized by the trust instrument and/or applicable law.
- 13. You agree that TIAA is a third-party beneficiary under the terms and conditions of the Margin Agreement and that any rights that Pershing has under this Margin Agreement, including, but not limited to, the right to collect any debit balance or other obligations owing in any of the Accounts, may be assigned to TIAA so that TIAA may collect from the Account holder independently or jointly with Pershing or enforce any other rights granted to Pershing under this Agreement.
- 14. This Agreement cannot be modified by conduct and no failure on the part of Pershing at any time to enforce its rights hereunder to the greatest extent permitted shall in any way be deemed to waive, modify or relax all of the rights granted to Pershing herein, including those rights vested in Pershing to deal with collateral on all loans advanced to the Account holder.
- 15. By signing the Account Application, you acknowledge that securities not fully paid for by you may be loaned to Pershing or loaned out to others, and as permitted by law, certain securities in your Account may be used for, among other things, settling short sales and lending the securities for short sales, and as a result Pershing and TIAA may receive compensation in connection therewith. Pershing and TIAA do not lend fully paid-for securities without your written permission. Fully paid-for securities held in a cash Account (unless otherwise agreed in a separate written agreement) and fully paid-for securities held in a Margin Account in which there is no debit balance are not loaned. Account owner(s) should contact TIAA with any questions.
- **16.** In the event your securities have been loaned by Pershing on the record date of a shareholder vote involving those securities, you agree that your vote may be reduced to reflect the total amount of your securities loaned by Pershing.

V. Interest Rate Disclosure Pursuant to Section 10b-16 of the Securities and Exchange Act of 1934

The following information applies to charges in connection with any credit that we may extend to you.

For Margin Accounts, interest will be charged on any credit extended to you for the purpose of purchasing, carrying or trading in securities. The annualized rate of interest will be based on the amount of the debit balance during the interest calculation period. The rates are subject to revision without notice, in accordance with any changes in the Pershing Base Lending Rate. Interest rates charged on any debit balances in cash Accounts or credit extended in Margin Accounts may be up to 3.00 percentage points above the Pershing Base Lending Rate. The Pershing Base Lending Rate will be set with reference to commercially recognized interest rates, industry conditions relating to the extension of credit and general credit market conditions. The Pershing Base Lending Rate will change without prior notice. When the Pershing Base Lending Rate changes during an interest period, interest will be calculated according to the number of days each rate is in effect during that period. If the rate of interest charged to you is changed for any

TIAA Brokerage Customer Account Agreement (Retail)

other reason, you will be notified at least 30 days in advance. Interest period begins on the 20th of each month and ends on the 19th of the following month. Accordingly, the interest charges for the period as shown on your monthly statement are based only on the daily net debit and credit balances for the interest period.

The method of interest computation is as follows. At the close of each interest period during which credit was extended to you, an interest charge is computed by multiplying the average daily debit balance by the applicable schedule rate and by the number of days during which a debit balance was outstanding, and then dividing by 360. If there has been a change in the Pershing Base Lending Rate, separate computations will be made with respect to each rate of charge for the appropriate number of days at each rate during the interest period. The interest charge for credit made to your Account at the close of the interest period is added to the opening debit balance for the next interest period, unless paid.

With the exception of credit balances in your short Account, all other credit and debit balances in all of your Accounts will be combined daily and interest will be charged on the resulting average daily net debit balances for the interest period. If there is a debit in the cash Account (type 1) and there is a Margin Account (type 2), interest will be calculated on the combined debit balance and charged to the Margin Account. Any credit balance in the short Account is disregarded because such credit collateralizes the stock borrowed for delivery against the short sale.

Such credit is disregarded even if you should be long in the same position in your Margin Account (i.e., short against the box). If the security that you sold short (or sold short against the box) appreciates in market price over the selling price, interest will be charged on the appreciation in value. Correspondingly, if the security that you sold short depreciates in market price, the interest charged will be reduced since your average debit balance will decline. This practice is known as "marking-to-market." The daily closing price is used to determine any appreciation or depreciation of the security sold short.

If your Account is short shares of stock on the record date of a dividend or other distribution, however such short position occurs, your Account will be charged the amount of dividend or other distribution on the following Business Day.

Interest rate table		
Average Debit Balance	Interest Rate Above Pershing Base Lending Rate	
\$0 - \$ 9,999	1.25%	
\$10,000 - \$29,999	0.75%	
\$30,000 - \$49,999	0.50%	
\$50,000 +	0.25%	

VI. Cash Solutions Account

An Account with Cash Solutions features consists of three parts: (a) a conventional brokerage Account which is either a cash or Margin Account, or both; (b) access to funds in the Account via Cards, Checks and ACH Transactions; and (c) a choice of Funds. Enrollment in the Cash Solutions feature is through an additional and separate application. Full terms, conditions and fee schedule can be reviewed within the Cash Solutions Account Terms and Conditions.

VII. Commission and fee schedule

	Online/Mobile TIAA.org/brokerage	Automated Telephone System (ATS) 800-842-2252	Client Service Assistance 800-842-2252	
Equity and Transaction-Fee ETFs	No charge	\$35	\$55	
No-Transaction-Fee (NTF) ETFs	■ NTF-eligible ETFs will have a \$0.00	commission, regardless of order size	or holding period.	
	Any ETF shares purchased prior to January 26, 2018, and now identified as an NTF ETF will still be characteristic commission when the shares are sold, when placing the trade through the ATS or Client Service Assist			
	 A commission will be charged for I 	NTF ETFs sold prior to settlement.		
	NTF-eligible ETFs should not be purchased on margin. If purchased on margin, the ETF is no longer NTF eligible.			
	NTF-eligible ETFs can be moved to margin after 30 days.			
Equity notes	 Fees shown reflect stock prices greater than \$1 per share. Orders to buy shares priced under \$1, restricted shares, non-permitted Cannabis Related Business (CRB) securities, foreign securities, privately held securities, shares without a market price or both a bid/ask will not be accepted. 			
	 Orders to sell shares priced under rate, given above, based on eligibi 	\$1 are handled via Client Service Assi lity.	stance at the online commission	
Financial Transaction Tax (FTT) Ordinary and ADR	All opening transactions in FTT-eligible companies from the following countries will be subject to the FTT tax rate:			
	■ French FTT at a rate of 0.30% of the	ne total transaction cost.		
	Italian FTT at a rate between 0.10°	% and 0.20 $%$ of the total transaction c	ost.	
	Spanish FTT at a rate of 0.20% of	the total transaction cost.		
ADR agent servicing fee	■ Fee will generally range from \$0.01 to \$0.03 per share. Amounts will differ by ADR. Please refer to the ADR prospectus for specific fee and other information.			
Securities and Exchange Commission (SEC) section 31 transaction fee	 Varies per transaction. Visit SEC.g 	ov for the current rate.		

Fixed income (Bonds and CDs are available for purchase online. For assistance, call 800-842-2252.)		
U.S. Treasury Securities		
New issues (primary, at auction)	\$50 per transaction	
Existing issues (secondary, already trading)	\$1 per \$1,000 face amount (\$50 minimum)	
Other Fixed Income		
Municipal Bonds, Government Agency Bonds, Unlisted (Over-the-counter, or OTC) Corporate Bonds, and Mortgage-backed Securities ¹	\$50 + \$2 per bond	
Certificates of Deposit—New Issues	Purchase minimums of \$5,000, no commission (interest rate reflects issuing bank's fee)	

^{1.} TIAA may execute certain fixed-income transactions for your Account on either an agency or principal basis. If we execute on an agency basis, the commissions listed above will apply. If we execute on a principal basis, we will sell a fixed-income product to you (or buy it from you), which we contemporaneously purchase from (or sell to) a dealer. If so, the net compensation earned by TIAA will include a mark-up. If we sell a fixed-income product to you, the mark-up is the difference between the sales price to you and the price we pay to purchase the product from a dealer. If we buy a fixed-income product from you, the mark-up is the difference between the sales price to the dealer and the price we pay to purchase the security from you.

VII. Commission and Fee Schedule (continued)

Options (All commissions and fees are per transaction, unless otherwise indicated.)				
	Online/Mobile TIAA.org/brokerage	Automated Telephone System (ATS) 800-842-2252	Client Service Assistance 800-842-2252	
Commissions and fees	No charge	\$35 + \$2.00 per contract	\$55 + \$2.50 per contract	
Options exercise/assignment	\$25	\$25	\$25	
Options regulatory fee	Varies by contract. Visit http	Varies by contract. Visit https://www.theocc.com for the current fee schedule.		

No-Transaction-Fee (NTF) Funds	• Minimum initial investment for NTF mutual funds: The greater of either the listed amount in the fund's prospectus or \$500. Purchases below the stated minimum will be charged the appropriate transaction fee.
	 Additional investments of NTF funds: The greater of either the listed amount in the fund's prospectus or \$100. Transactions of NTF funds for amounts less than \$500 will be subject to the appropriate transaction fee. Systematic (automatic recurring or dollar cost averaging) orders are excluded. Different minimums may apply for managed accounts.
	 Systematic (automatic recurring or dollar cost averaging) orders, no fee; minimum transaction of \$100. Short-term redemption fee: \$50 minimum for shares held less than six months (waived for shares transferred from another brokerage firm or financial institution). Additional redemption fees may apply as set forth in each fund's prospectus.
Transaction-Fee (TF) Funds	■ Transaction fee, regardless of order size: — \$50 per trade
	- \$35 per trade for customers that receive a financial planning solution from their Wealth Management Adviso
	• Minimum initial investment for mutual funds: The greater of either the listed amount in the fund's prospectus or \$500.
	 Additional investments: The greater of either the listed amount in the fund's prospectus or \$100. Different minimums apply for managed accounts.
	 Systematic (automatic recurring or dollar cost averaging) orders, no fee; minimum transaction of \$100.

Account maintenance fees (All fees are per transaction, unless otherwise indicated.)	
Account research	\$20 per hour
ACH return fee	\$25
Alternate investment transaction/processing fee	\$50
Certificate cancellation fee for certificates deposited outside of the transfer agent	\$3+ (pass-through fee, varies by transfer agent)
Custody/safekeeping fee for physical securities (Excludes ADRs held with domestic custodian bank)	\$10 per account, per position, per month
Direct registration system (DRS) incoming transfer fee—shares sent directly from some transfer agents	\$15 – \$20 (pass-through fee, varies by transfer agent)
Direct registration system (DRS) outgoing transfer fee—shares sent directly back to the transfer agent*	\$30 per security, per account

VII. Commission and fee schedule (continued)

Foreign account fee (Non-US address)	\$50 per year for each account that maintained a balance, position or had a form 1042-S reportable transaction
Foreign acquirities	Up to \$125 for each order (not applicable to American Depositary Receipts) +
Foreign securities	transaction fees and commission
Foreign security receive and deliver fee	\$75
Incoming account transfer/IRA termination/account closure fee	Varies by sender (pass-through fee)
International overnight check delivery fee	\$28
IRA termination fee**	\$130
Margin extensions	\$15
NSF/return check deposit fee	\$25
Outgoing wired funds fee	\$25 (waived for account in an advisory program)
Overnight check delivery fee	\$12
Post-effective reorganizations—Voluntary	\$75
Reorganizations—Voluntary	\$25
Saturday delivery—overnight check delivery fee	\$18
Special product fee—Registered REITs	\$35 per position, charged at transfer and then annually
Special product fee—Unregistered REITs	\$125 per position, charged at transfer and then annually
Stop-payment order fee	\$15
Transfers of gifted securities or checks mailed regular delivery*	No charge
Transfers—Accommodation*	\$80 per transfer
Transfers—Automated Clearing House (ACH)	No charge
Transfers—GNMA, Restricted, Legal*	\$140 per transfer
Transfers—Outgoing full account*	\$50 per transfer, no charge for partial transfers
Transfers—Register, transfer and ship*	\$80 per transfer, plus any third-party charges, including a DTCC charge of \$500
Unrelated Business Taxable Income (UBTI) Tax Return (IRS Form 990-T) Processing	\$200 per tax return filed

^{*} Checks in the amount of \$250,000 or more for transfers or payments will be sent via overnight delivery and a delivery fee of \$12 will be charged to the account.

Foreign currency deposit fee "Free credit balance interest charge"

(Monthly rate subject to change. Call TIAA Brokerage for current rates.)

Currency	Rate for balance below daily exception balance	Daily exception balance	Rate for balance above daily exception
Swiss Franc (CHF)	2.00%	\$100,000	4.25%
Danish Krone (DKK)	1.30%	\$1,000,000	1.80%
Swedish Krona (SEK)	.85%	\$2,000,000	1.25%
Euro (EUR)	.80%	\$86,000	1.05%
Japanese Yen (JPY)	.40%	\$100,000,000	.65%

^{**} Termination fee does not apply to the TIAA IRA or Investment Solutions IRA self-directed brokerage account, or if the assets from a TIAA IRA account are transferred to a new or existing TIAA IRA account.

TIAA Brokerage Customer Account Agreement (Retail)

VII. Commission and Fee Schedule (continued)

Retail Brokerage IRA Resource Checking (All fees are per transaction, unless otherwise indicated.)	
Copy of cancelled check	\$3.75 per copy
NSF/return check fee	\$25
Stop payment fee	\$25

Cash Solutions Account (CSA) (All fees are per account and per transaction, unless otherwise indicated.) **Silver Tier Gold Tier Platinum Tier** \$95 Annual fee \$25 \$145 ATM withdrawal fee Visa® or Plus® N/A None None (PNC Bank or Allpoint® Network) ATM out-of-network fee N/A None None (ATM not on PNC Bank or Allpoint® Network) ATM out-of-network surcharge fee* N/A **Various** Various (charged by ATM owner not on PNC Bank or Allpoint® Network) Bill payment through BillSuite Free Free Free Business style check reorder \$50 \$50 \$50 Business style checks-initial order, includes binder \$60 \$60 \$60 Business style checks-replacement binder N/A N/A \$20 .25% of transaction .25% of transaction Cash advance fee (non-ATM) N/A (\$2.50 minimum) (\$2.50 minimum) Check reorder \$15 \$10 Free Copy of paid check online None None None Copy of paid checks or Visa® draft \$3.75 per copy \$3.75 per copy \$3.75 per copy CSA checks and debit card-overnight delivery \$40 \$40 \$40 Foreign transaction fee N/A 1% of transaction 1% of transaction (Visa® fee for transactions performed outside the U.S.) Initial check order (includes checkbook cover, Free Free Free check register, deposit tickets and 40 checks) Letter with checking account information None None None \$25 \$25 Lost or stolen checkbook replacement \$25 MobileWallet vendor additional transaction charges N/A None None Returned check or automated clearing house (ACH) \$25 \$25 \$25 Transaction (for any reason) RewardSuite™ N/A None None \$25 Stop payments (on checks) \$25 Free

Note: Silver Tier annual fee is waived for accounts that have \$25,000 or more in average month-end closing cash sweep balances.

^{*}Surcharge may be imposed for ATM usage including transactions and balance inquiries.

Demonstration	Powered by OpenText Exstream 10/18/2022, Version 16.3.0 64-bit -*-
7	'I A A
	IAA
	division of TIAA-CREF Individual & Institutional Services, LLC, reserves the right to change this fee and commission schedule at to notification in accordance with applicable laws and regulations.
TIAA-CREF Individua Individual & Institut	al & Institutional Services, LLC, Member FINRA and SIPC, distributes securities products. TIAA Brokerage, a division of TIAA-C tional Services, LLC, Member FINRA and SIPC, distributes securities. Brokerage accounts are carried by Pershing, LLC, a subservive Mellon Corporation, Member FINRA, NYSE, SIPC.
	nsurance and Annuity Association of America-College Retirement Equities Fund, 730 Third Avenue, New York, NY 10017

-*-*- Demonstration Page - Powered by OpenText Exstream, Version 16.3.0 64-bit -*-*-			



TIAA privacy notice

Please read this notice carefully. It applies to you as a current or former customer of our products and services, or as a consumer interested in our products and services. We at TIAA are committed to protecting your privacy in accordance with the Fair Credit Reporting Act (FCRA), as amended by the Fair and Accurate Credit Transactions Act of 2003 (FACT Act), the Gramm-Leach-Bliley Financial Services Modernization Act (GLB), applicable state laws and this privacy notice. This privacy notice should not be construed as establishing a contractual relationship.

Information we may collect

The nonpublic personal information we collect may include, but is not limited to, your name, address, telephone number, email address, Social Security number, date of birth, and your transaction and experience history with TIAA Companies. We may use this information in connection with certain aspects of our business. For example, we may use this information to complete your requested transaction, to improve your online experience with us, or to otherwise manage your relationship with the TIAA Companies.

We may obtain this information i) directly from you (e.g., application or other form you have completed, from information you have chosen to disclose in our website, **TIAA.org**, or from information you have given a TIAA Company in a consultation), ii) from your employer with respect to your employer-sponsored plan, or iii) from third parties. In addition, we may also collect information about your creditworthiness from consumer reporting agencies, and may include your marital status, employment history, income, assets, credit score, credit history, open lines of credit and about your household.

If you own a life insurance policy, we may have collected your health information. We will not disclose your health information to any other company, including TIAA Companies or other persons unless authorized by you, or required or permitted by law or regulation.

How your information is used

We use your personal information primarily to provide you with the products and services you request or your employer has directed us to deliver on your behalf, and we share and use your personal information relating to transactions, balances, payment history and similar experiences among the TIAA Companies to conduct their business. If you are a participant in an employer-sponsored retirement or savings plan investing in a TIAA or third-party annuity contract, or a TIAA or third-party mutual fund, we may share the information we collect with your employer and its agents, if any, for plan administration purposes. Additionally, unless instructed otherwise by a plan sponsor of your current or former retirement plan, we may also use your personal information to market or determine your possible interest in products and services that the other TIAA Companies offer.

TIAA privacy notice

Disclosure of your information

We share your personal information with other TIAA Companies as permitted by law. We will not disclose your personal information to anyone outside of the TIAA Companies unless: 1) we have received proper consent from you; 2) we are legally permitted to do so; or 3) we reasonably believe, in good faith, that we are legally required to do so. For example, we may provide the information to assist us with various aspects of conducting our business, to comply with laws or industry regulations, and/or to effectuate any action that you have requested, including the following:

- Unaffiliated service providers (e.g., fulfillment companies and securities clearinghouses, data processing services, printers and mailing facilities) engaged by us
- Unaffiliated fund and/or insurance companies and their agents whose investment options are made available to you
 through your employer-sponsored retirement or savings plan, provided monies are allocated to them on your behalf
- Government agencies, other regulatory bodies and law enforcement officials (e.g., for tax purposes or for reporting suspicious transactions)
- Other organizations, with your consent or as directed by you (e.g., if you use TIAA as a financial reference in applying for credit with another institution)
- Other organizations, as permitted or required by law (e.g., for fraud prevention)

Security of your information

TIAA protects the personal information you provide against unauthorized access, disclosure, alteration, destruction, loss or misuse. Your personal information is protected by physical, electronic and procedural safeguards in accordance with federal and state standards. These safeguards include appropriate procedures for access and use of electronic data, provisions for the secure transmission of sensitive personal information on our website and telephone system authentication procedures. Additionally, we limit access to your personal information to those TIAA employees and agents who need access in order to offer and provide products or services to you. We also require our service providers to protect your personal information by utilizing the privacy and security safeguards required by law.

Your right to opt-out

Providing us with access to your information permits us to offer you distinct advantages and better service. It enables us to provide you with more comprehensive financial guidance. Sharing and using your information helps us tailor product offerings to you, and eliminate those that may not interest you. This helps us keep expenses low.

Federal law gives you the right to limit some but not all sharing of your personal information. You may not limit sharing of information of your transactions and experiences with TIAA Companies, but you may limit sharing of information about your creditworthiness.

Unless you tell us otherwise and opt-out, (i) the TIAA Company(ies) with which you have a business relationship may share information about your creditworthiness with other TIAA Companies or (ii) other TIAA Companies may use your personal information for marketing purposes. If you are a Vermont resident, state law gives you an additional right: We will not share information about your creditworthiness with other TIAA Companies except with your consent.

If you opt-out, the TIAA Company(ies) with which you have a business relationship will still notify you of their new products or services. Please note that we cannot withdraw any previous disclosures made with your authorization.

To opt-out of either information sharing or marketing or both, please call the National Contact Center weekdays, 8 a.m. to 10 p.m. (ET) at 877-518-9161. You may receive more than one privacy notice from the TIAA Companies depending on the products you own.

TIAA privacy notice

If you own a life insurance contract, brokerage account or a TIAA-CREF Funds account with a co-owner, you and the co-owner may:

- Opt-out separately, or
- Either of you may opt-out for both of you

If you opt-out separately, we will limit disclosure of information only for the owner who has opted-out. If you indicate that you are opting-out for the co-owner as well, we will limit disclosure for both of you.

Your opt-out becomes effective as soon as practicable. It remains in effect until you revoke it in writing. Even if you have opted-out, you will receive our privacy notice as required by law.

TIAA Online Privacy Notice

Please also see the TIAA Online Privacy Notice at TIAA.org for additional information regarding our online privacy practices.

Changes in our privacy notice

TIAA periodically reviews its privacy notice and reserves the right to amend it. If amended, TIAA will continue its commitment to maintaining the security and privacy of your personal information. We will notify you of material changes prior to when they take effect through a banner notice in our website, **TIAA.org**.

How to change or correct your personal information

To change or correct information such as your name, address, retirement start date, telephone number, email address or other personal information, please log in to your TIAA account page at **TIAA.org** and submit your changes. Your revised information will be effective immediately. If you want to change your address on fewer than all contracts, you will need to select "click here" located under the email section of the page.

You may also change your personal information by calling our National Contact Center at **800-842-2776** weekdays, 8 a.m. to 10 p.m. (ET). Note that certain changes cannot be processed over the phone. You may send letters to:

TIAA, P.O. Box 1259, Charlotte, NC 28201

For Nevada residents, state law requires that we provide you notice that you have the option to be placed on our Internal Do Not Call list. If you would rather not receive marketing calls from us, please call us at the telephone number provided above.

Former customers

If your customer relationship with TIAA ends, we will not destroy your personal information unless required or permitted by law. We will continue to treat your personal information in accordance with this privacy notice and applicable laws.

Internet tracking disclosure

We do not have the protocol that offers you the choice to opt-out of Internet tracking. You may reset your web browser to enable do not track signals if your web browser supports such functionality.

TIAA privacy notice

The TIAA Companies

As described in this notice, "TIAA", the "TIAA Companies" or "we" are financial companies using the TIAA and/or Nuveen brands that share a common corporate identity. TIAA Companies include but are not limited to the following:

- Teachers Insurance and Annuity Association of America and TIAA-CREF Life Insurance Company (TIAA Life) are insurance companies. They provide products such as life insurance and annuities.
- College Retirement Equities Fund (CREF) is an investment company that is the companion organization to TIAA. CREF provides retirement annuities.
- TIAA-CREF Funds is an investment company.
- TIAA-CREF Life Funds is an investment company.
- Teachers Advisors, LLC, is an investment advisor. It provides services for our mutual funds and personal annuities.
- TIAA-CREF Investment Management, LLC, is the investment advisor to CREF.
- TIAA-CREF Individual & Institutional Services, LLC, is the principal underwriter for CREF and the TIAA Real Estate Account, and is authorized by agreement to sell and service TIAA-CREF Funds, TIAA-CREF Life Funds and interests in tuition savings products. It also provides brokerage accounts through TIAA-CREF Brokerage Services.
- TIAA, FSB, is a federally chartered savings bank. It provides asset management and fiduciary services for individuals and institutions, and acts as custodian and trustee for individual retirement accounts, retail bank products such as checking and savings accounts, and certificates of deposit. TIAA, FSB clients are subject to a separate privacy notice and procedures.



©2022 Teachers Insurance and Annuity Association of America-College Retirement Equities Fund, 730 Third Avenue, New York, NY 10017

P0120985 (01/22)

TIAA, FSB



Bank Sweep Product Terms and Conditions

The following Terms and Conditions govern your participation in the TIAA, FSB Bank Sweep Product (the "Bank Sweep Product") offered to eligible brokerage accounts (each a "Brokerage Account") provided by the TIAA Brokerage division of TIAA-CREF Individual & Institutional Services, LLC ("TIAA Brokerage") and carried by its unaffiliated clearing broker, Pershing LLC ("Pershing"). The Bank Sweep Product is designed to sweep Eligible Cash Balances (as defined below) in your Brokerage Account into bank deposit accounts at TIAA, FSB (the "Bank"). Currently, cash balances held in a Brokerage Account up to \$248,500 are Eligible Cash Balances. The Bank may change this amount from time to time, as described more fully below.

This document provides you with important information about how the Bank Sweep Product works. These terms and conditions supplement the terms and conditions contained in the account agreements and related documents which govern your Brokerage Account.

YOU UNDERSTAND THAT BY PROVIDING YOUR AUTHORIZATION TO USE THE BANK SWEEP PRODUCT, YOU HAVE INSTRUCTED PERSHING TO DIRECT YOUR FREE CREDIT BALANCES TO THIS SWEEP PRODUCT.

YOU ACKNOWLEDGE THAT YOU HAVE RECEIVED AND CAREFULLY READ THESE TERMS AND CONDITIONS IN CONNECTION WITH ENROLLING IN THE BANK SWEEP PRODUCT. IF YOU HAVE ANY QUESTIONS ABOUT ANY OF THE PROVISIONS OF THESE TERMS AND CONDITIONS, PLEASE CALL TIAA BROKERAGE OR YOUR INVESTMENT PROFESSIONAL.

A. The Bank Sweep Product

1. Operation of the Bank Sweep Product. TIAA Brokerage. The Bank Sweep Product is operated by TIAA Brokerage through Pershing. Under the Bank Sweep Product, eligible cash balances in your Brokerage Account are automatically swept into interest bearing deposit accounts at the Bank. These interest bearing deposit accounts are an omnibus interest bearing Demand Deposit Account ("Omnibus DDA"), an omnibus Money Market Demand Account ("Omnibus MMDA"), and/or, for qualifying Brokerage Accounts, an omnibus Negotiable Order of Withdrawal Account ("Omnibus NOW") and are held in each case in the name of "Pershing LLC as agent for the exclusive benefit of customers, each customer acting for themselves and others" or a similar designation (together, the "Omnibus Accounts").

You maintain a beneficial account interest in the Omnibus Accounts equal to the aggregate amount of your free credit balances that remain in your Brokerage Account after purchase transactions and other charges in your Brokerage Account (such as checks, ACH payments, debit cards and ATM withdrawals), plus the interest that accrues on the amounts transferred into each Omnibus Account (the "Subaccount"). The Subaccount will be evidenced by an entry on records maintained by Pershing and not directly on the records of the Bank.

2. Account Eligibility. The following account types are eligible to use the Bank Sweep Product: individual, joint, IRA and certain organizational accounts, such as corporate accounts and certain fiduciary and trust accounts. TIAA Brokerage reserves the right, in its sole discretion, to amend the types of brokerage accounts that are eligible to participate in the Bank Sweep Product, as well as modify the eligibility requirements for the Bank Sweep Product. Brokerage accounts that are brokerage windows to an employer-sponsored retirement plan provided through TIAA are not currently eligible for participation in the Bank Sweep Product.

- -*- Demonstration Powered by OpenText Exstream 10/18/2022, Version 16.3.0 64-bit -*-
 - 3. Eligible Cash Balances. The free credit balances that remain in your Brokerage Account after purchase transactions and other charges in your Brokerage Account (such as checks, ACH payments, debit cards and ATM withdrawals) are eligible to be deposited into the Bank Sweep Product ("Eligible Cash Balances"). The Bank imposes a maximum amount of Eligible Cash Balances it will receive ("Maximum Eligible Cash Balance Amount")—currently, the amount is \$248,500 per Brokerage Account. The Bank may change the Maximum Eligible Cash Balance Amount from time to time with prior notice to you. Interest that accumulates in your account may cause your balance to exceed the Maximum Deposit Amount; however, in no event will the balance exceed the applicable FDIC insurance limit in effect at the time of the change (currently, \$250,000 per legal category of ownership as described more fully below). In addition, if the Bank is no longer accepting deposits. the Bank may change the Maximum Eligible Cash Balance Amount to zero. Eligible Cash Balances in your Brokerage Account which exceed the Maximum Eligible Cash Balance Amount will be deposited into bank deposit accounts with one or more other banks through a separate bank sweep vehicle ("Overflow Bank Sweep Product"). For example, if the Eligible Cash Balance in your Brokerage Account is \$275,000, the first \$248,500 will be deposited under the Bank Sweep Product and the remaining \$26,500 will be deposited into bank deposit accounts with one or more other banks through the Overflow Bank Sweep Product. Currently, the Liquid Insured Deposits bank sweep vehicle ("LIDS") operated by Pershing is the Overflow Bank Sweep Product. LIDS is a separate sweep vehicle subject to separate terms and conditions. See the Liquid Insured Deposits Terms and Conditions for important information about this vehicle and its applicable FDIC insurance limits. The LIDS bank sweep vehicle comprises a number of participating banks; however, the Bank is not one of the participating banks for purposes of the Overflow Bank Sweep Product.
 - **4. Minimum Balance Requirements.** There is no minimum Eligible Cash Balance required to either participate in the Bank Sweep Product or continue to participate in the Bank Sweep Product. There is also no minimum period that your funds invested in the Bank Sweep Product (the "Funds") must remain on deposit with the Bank and no limitation on the number or amount of withdrawals that Pershing may affect under the Bank Sweep Product.
 - 5. FDIC-insured Accounts. The Bank Sweep Product seeks to provide you with the security of FDIC insurance for your Funds. FDIC insurance provides protection against the loss of your Funds on deposit with the Bank under the Bank Sweep Product, up to allowable limits, in the event the Bank fails. FDIC deposit insurance is backed by the full faith and credit of the United States. Specifically, FDIC deposit insurance coverage is available for your Funds up to the FDIC standard maximum deposit insurance amount ("SMDIA"), which is currently \$250,000 per legal category of account ownership at the Bank, when aggregated with all other deposits held by you at the Bank and in the same legal category of account ownership. Please see Appendix A for examples regarding how FDIC coverage works. Eligible Cash Balances in your Brokerage Account up to the Maximum Eligible Cash Balance Amount then in effect may be deposited under the Bank Sweep Product with the Bank even if the aggregate amount of your Funds on deposit with the Bank through the Bank Sweep Product together with any other funds that you maintain in the same legal category of ownership with the Bank exceeds the SMDIA. You are solely responsible for monitoring the aggregate amount that you have on deposit with the Bank and any other bank participating in the Overflow Sweep Program in connection with FDIC insurance limits. Pershing, TIAA Brokerage and your investment professional do not monitor or take any responsibility for money you may have at the Bank outside the Program or money you have at any bank participating in the Overflow Sweep Program. Money you hold on deposit with the Bank that is separate from your Funds on deposit with the Bank through the Bank Sweep Product will not be taken into account in determining whether to sweep your Eligible Cash Balances to the Bank through the Bank Sweep Product. In addition, if you have more than one Brokerage Account with the same legal category of account ownership, the funds in all Brokerage Accounts that participate in the Bank Sweep Product will be aggregated in order to determine the amount covered by FDIC insurance. For example, if the SMDIA is \$250,000 and you have \$30,000 in Eligible Cash Balances in one Brokerage Account, \$30,000 in Eligible Cash Balances in another Brokerage Account and \$200,000 on deposit with the Bank outside of your Brokerage Account, only \$250,000 of your \$260,000 is insured by the FDIC. Depending on the individual facts and the ownership rights and capacities in which your Brokerage Accounts and deposits with the Bank are held, additional amounts may be covered by FDIC insurance.
 - 6. Securities Investor Protection Corporation ("SIPC"). SIPC is a nonprofit member corporation funded primarily by member securities brokerage firms registered with the Securities and Exchange Commission, such as TIAA Brokerage and Pershing. SIPC covers against custodial loss (but not investment loss such as a decrease in value of an investment) in the event of a brokerage firm insolvency. TIAA Brokerage (a registered broker/dealer) and Pershing, which holds your Brokerage Account assets (also a registered broker/dealer), are members of SIPC.
 - 7. Your Funds are not covered by SIPC. Your Responsibility to Monitor Your Eligible Cash Investment Options. None of TIAA Brokerage, Pershing or the Bank have any obligation to monitor your Eligible Cash Balance investment

options, including the Bank Sweep Product and the Overflow Bank Sweep Product for your Brokerage Account, or to make recommendations about or changes to the Bank Sweep Product, including monitoring your FDIC insurance limits. As your personal financial circumstances and other factors change, it may be in your interest to change your Eligible Cash Balance investment options or to invest cash from your Brokerage Account in other investment vehicles. You can review your investment options and other investments, as well as the current rates and returns of each by calling TIAA Brokerage at **800-842-2252** or by visiting TIAA.org.

- 8. Deposits with the Bank. When you enroll in the Bank Sweep Product, you consent to have Eligible Cash Balances in your Brokerage Account at TIAA Brokerage automatically deposited through the Bank Sweep Product to the Bank up to the Maximum Eligible Cash Balance Amount then in effect. Each business day (as defined herein), Pershing will sweep the Eligible Cash Balances in your Brokerage Account to the Bank. Only Eligible Cash Balances swept by Pershing to the Bank will be eligible for inclusion in the Bank Sweep Product. For purposes of these Terms and Conditions, a business day is any day when both the New York Stock Exchange and the New York Branch of the Federal Reserve Bank are open for business (a "Business Day").
- 9. Withdrawals and Access to Funds. When you enroll in the Bank Sweep Product, you consent to have your Funds on deposit at the Bank automatically withdrawn in the event of a debit in your Brokerage Account or on the settlement date to reconcile purchase transactions and other charges posted to your Brokerage Account (such as checks, ACH payments, debit cards and ATM withdrawals). Each Business Day, as needed, Pershing will withdraw your Funds on deposit with the Bank.

You cannot withdraw your Funds from the Bank directly. Checks, ACH payments, debit cards, ATM withdrawals, direct deposits, credits and other transactions and items for your Brokerage Account are processed through your Brokerage Account rather than directly with the Bank under the Bank Sweep Product. In the event of the failure of Pershing, you may seek to access your Funds by contacting TIAA Brokerage at 800-842-2252. In the event of the failure of TIAA Brokerage, you may seek to access your funds by contacting Pershing at 201-413-3333. TIAA Brokerage and/or the Bank reserves the right to require you to present any information, identification, certification or any other documentation reasonably deemed necessary by the Bank to establish your entitlement to funds prior to disbursing any funds to you, if circumstances require such action.

In the event of a failure of the Bank, there may be a time period during which you may not be able to access your Funds in the Omnibus MMDA or Omnibus NOW.

10. Brokerage Account Statements. Your periodic Brokerage Account statement from Pershing will summarize account activity with respect to your participation in the Bank Sweep Product, including your opening and closing balances, deposits, withdrawals, and interest earned on your Funds for the period covered. You will not receive a separate statement from the Bank. Please retain your Brokerage Account statements for your records.

B. About the Bank

1. Affiliation and Information. TIAA Brokerage and the Bank are separate but affiliated companies and wholly owned subsidiaries of Teachers Insurance and Annuity Association of America ("TIAA"). The Bank is a federal savings bank and an FDIC-insured depository institution. You can obtain publicly available financial information about the Bank at the FDIC's website at fdic.gov, or by contacting the FDIC's Division of Information and Research by writing to Federal Deposit Insurance Corporation, Division of Information and Research, 550 17th Street, NW, Washington, DC 20429-9990; or by calling the FDIC's Division of Information and Research at 877-275-3342. Neither Pershing nor TIAA Brokerage guarantees the financial condition of the Bank, or the accuracy of any publicly available information concerning the Bank.

Your Funds are a direct obligation of the Bank and are not, either directly or indirectly, guaranteed by TIAA Brokerage or Pershing, or any of their subsidiaries, affiliates or parent companies.

2. Your Relationship with the Bank. Although your Funds are a direct obligation of the Bank, you will receive no separate evidence of ownership from the Bank. Instead, the Subaccount will be evidenced by an entry on records maintained by Pershing, as the custodian of your Brokerage Account assets.

C. Interest Rates on Your Deposits

1. Interest and Fees. Your Funds will earn interest and such interest will be accrued daily on the balance of your Funds with the Bank. The interest will be credited and paid by the Bank at the end of each month, on the date your account closes or when you withdraw all of your Funds. Interest will begin to accrue on the day your Funds are credited to the Bank and will accrue up to, but not including, the day on which your Funds are withdrawn

from the Bank. The amount of paid interest and the annual percentage yield earned on your Funds will be stated on your Brokerage Account statement.

- 2. Determination of Interest Rates. Interest rates paid on your Funds will fluctuate and are subject to change at any time. To find out the Bank's current interest rates, you may contact TIAA Brokerage by calling 800-842-2252 or by visiting TIAA.org.
- 3. Risks. You may receive a lower rate of return on your Funds deposited under the Bank Sweep Product than on other sweep options such as money market mutual funds. The Bank is permitted to impose a seven (7) day delay on any withdrawal request from funds held in any money market deposit account or negotiable order of withdrawal account, including the Omnibus MMDA or Omnibus NOW. In addition, in the event of a failure of the Bank, there may be a time period during which you may not be able to access your Funds. If the total amount of deposits that you hold at the Bank in the same legal category of account ownership (including deposits made through the Bank Sweep Product, deposits you hold outside of the Bank Sweep Product and other Brokerage Accounts that participate in the Bank Sweep Product) exceeds applicable FDIC insurance limits, you will be exposed to the credit risk of the Bank with respect to the amount of the excess.

D. Conflicts of Interest

1. Conflicts of Interest. TIAA Brokerage and Pershing may earn fees based on the amount of funds on deposit with the Bank through the Bank Sweep Product or the number of Brokerage Accounts that participate in the Bank Sweep Product. TIAA Brokerage may earn a higher fee if you participate in the Bank Sweep Product than if you invest in other sweep options such as money market mutual funds. In addition, the Bank will use the deposits in the Omnibus Accounts to support its investment lending and other activities. The profitability of the Bank is determined in part by the difference between the interest it pays on the Omnibus Accounts (and other costs incurred), and the interest or other income it earns on loans, investments and other assets. The Bank will receive substantial deposits from the Bank Sweep Product at a price that may be less than alternative funding sources. Funds in the Omnibus Accounts held at the Bank provide a stable source of funds for the Bank.

E. Other Provisions

- 1. Brokerage Account Agreement. You understand and agree that your Brokerage Account Agreement with TIAA Brokerage continues to govern your Brokerage Account and shall also govern your participation in the Bank Sweep Product. If any provision of the Brokerage Account Agreement conflicts with provisions of these Terms and Conditions, the provisions of the Brokerage Account Agreement shall govern, with the exception of the Sections herein on Governing Law and Disputes. You understand that by continuing to maintain your Brokerage Account without objecting to the use of the Bank Sweep Product, you accept and are legally bound by the provisions of these Terms and Conditions.
- 2. Right of Set-Off. Under the terms of your Brokerage Account Agreement, Pershing may charge or setoff any of the assets in your Brokerage Account, including the Funds, against indebtedness or obligations you may have to Pershing. For further information on the rights of Pershing regarding such indebtedness or obligations, you should review your Brokerage Account Agreement. This provision does not apply where otherwise prohibited by law.
- 3. Termination; Closing of Account. Pershing may, at its sole discretion and without any prior notice, suspend or terminate your participation in the Bank Sweep Product. If you or Pershing close your Brokerage Account for any reason, your participation in the Bank Sweep Product will also be terminated and Pershing will withdraw your Funds on deposit with the Bank.
- **4. Inactive Accounts.** Pershing and the Bank may be required by law to turn over (escheat) any portion or all of your Funds on deposit with the Bank to a state, typically your state of residence, based on account inactivity for a certain time period established by applicable state law. If any of your Funds are remitted to the state, you may file a claim with the state to recover such funds.
- 5. Joint Account Owners. If your Brokerage Account is a joint or other multi-party account, any one of the account owners may take any action with respect to your Brokerage Account that will affect deposits to or withdrawals from the Bank through the Bank Sweep Product. You hereby authorize Pershing to act on the verbal, written or electronic instructions of any of the account owners or authorized signers, and Pershing will so honor the instructions of any such account owner.

- -*- Demonstration Powered by OpenText Exstream 10/18/2022, Version 16.3.0 64-bit -*-
 - **6. Advance Notice.** As required by federal law, the Bank reserves the right to require seven (7) days advance written notice of an intended transfer or withdrawal of funds from any money market demand account or negotiable order of withdrawal account. The Bank has not exercised this right in the past.
 - 7. Tax Reporting. The interest that you earn on the daily balance of your Funds with the Bank is generally fully subject to federal, state and, where applicable, local tax. An IRS Form 1099 will be sent to you by Pershing each year, showing the amount of interest income you have earned on your Funds. Pershing may be required to withhold U.S. federal income tax at the prevailing rate on all taxable distributions payable to certain participants in the Bank Sweep Product who fail to provide their correct taxpayer identification number or make required certifications or who have been notified by the Internal Revenue Service that they are subject to backup withholding.
 - 8. Notices and Information. Any notice required to be provided pursuant to these Terms and Conditions may be provided by the Bank, TIAA Brokerage and Pershing via letter, email or other electronic means, by entry on your Brokerage Account statement or by other reasonable means. The current interest rate and other information about the Bank Sweep Product are available by contacting TIAA Brokerage by calling 800-842-2252 or by visiting TIAA.org.
 - 9. Notice of Unauthorized Activity. Please refer to the Regulation E (Electronic transfer) section of the Disclosure Statement delivered to you by Pershing upon opening of your Brokerage Account, which can also be found by selecting Business Continuity and Other Disclosures on pershing.com.
 - **10.** Business Continuity. If you are unable to contact TIAA Brokerage due to a business interruption event, such as a natural disaster, you may contact Pershing.
 - 11. Assignment by Customer. Neither these Terms and Conditions nor your participation in the Bank Sweep Product may be assigned or transferred by you to any other person or entity, except for (i) a transfer by a change in ownership of a linked Brokerage Account or (ii) a transfer that occurs due to death, incompetence, marriage, divorce, attachment or otherwise by operation of law, in which case, such transfer shall not be binding on Pershing, TIAA Brokerage or the Bank unless and until sufficient, acceptable documentation has been received by such entities.
 - **12. Assignment by Pershing.** Pershing may assign and transfer its respective rights and obligations under the Bank Sweep Product, including, without limitation, pursuant to these Terms and Conditions, to (i) one or more of its affiliates or subsidiaries, (ii) to any person that acquires all or substantially all of the assets of Pershing or (iii) any other clearing broker used by TIAA Brokerage without prior notice to you and without obtaining your consent.
 - 13. Personal Information. You agree that Pershing, TIAA Brokerage the Bank and their respective service providers may share information concerning you and your accounts in connection with your participation in the Bank Sweep Product and these Terms and Conditions to any affiliate of such entity or otherwise in accordance with applicable laws and regulations and Pershing's and TIAA Brokerage respective privacy policies. You agree that Pershing, TIAA Brokerage the Bank and their respective service providers may obtain such information as may be necessary for legitimate business needs in connection with the operation of the Bank Sweep Product or with respect to your Funds. For information regarding the collection, processing and use of your personal information and your rights to limit the use and disclosure of such information, you should refer to TIAA Brokerage and Pershing's privacy policies provided to you at the time you opened your Brokerage Account.
 - **14. Complaints.** Any complaints regarding the Bank Sweep Product should be addressed in writing to TIAA Brokerage.
 - 15. Legal Process. Pershing and the Bank may comply with any writ of attachment, execution, garnishment, tax levy, restraining order, subpoena, warrant or other legal process, which such party reasonably and in good faith believes to be valid. Pershing may notify you of such process by telephone, electronically or in writing. If Pershing is not fully reimbursed for its record research, photocopying and handling costs by the party that served the process, Pershing may charge such costs to your Brokerage Account in addition to its minimum legal process fee. You agree to indemnify, defend and hold the Bank, TIAA Brokerage and Pershing harmless from all actions, claims, liabilities, losses, costs, attorney's fees and damages associated with their compliance with any process that such party believes reasonably and in good faith to be valid. You further agree that the Bank, TIAA Brokerage and Pershing may honor legal process that is served personally, by mail or by facsimile transmission at any of their respective offices (including locations other than where the funds, records or property sought is

held), even if the law requires personal delivery at the office where your records with respect to the Bank Sweep Product are maintained.

- **16.** Power and Authority. You represent and warrant that you have full power and authority to participate in the Bank Sweep Product and you agree to these Terms and Conditions. In addition, if you are not an individual, you represent and warrant that (1) you are duly organized, validly existing and in good standing under the laws of its state or jurisdiction of organization, (2) you possess all requisite authority, power, licenses, permits, registrations and franchises and have made all governmental filings to conduct business wherever it conducts business and to execute, deliver and comply with your obligations hereunder, and (3) your agreement to these Terms and Conditions and performance hereunder shall not conflict with or violate your governing documents or any law, regulation, decree, demand, order or any other contract or agreement to which it is subject.
- **17. Amendment.** Pershing, TIAA Brokerage or the Bank may modify these Terms and Conditions at any time by giving such notice as may be required by applicable law.
- **18. Waiver.** Any provision of these Terms and Conditions may be waived if, but only if, such waiver is in writing and is signed by the party against whom the waiver is to be effective. No failure or delay by any party in exercising any right, power or privilege hereunder shall operate as a waiver thereof nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or privilege.
- **19. Severability.** If any term, provision, covenant or restriction in these Terms and Conditions is held by a court of competent jurisdiction or other authority to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions of these Terms and Conditions shall remain in full force and effect and shall in no way be affected, impaired or invalidated.
- 20. Entire Agreement. These Terms and Conditions constitute the entire agreement with you regarding the Bank Sweep Product, and supersedes all prior and contemporaneous agreements and understandings, both oral and written, with respect to the subject matter hereof. In the event of any inconsistency between a provision of these Terms and Conditions and a provision of any such other document provided to you in connection with the Bank Sweep Product (other than your Brokerage Account Agreement), the provision of these Terms and Conditions shall prevail.
- 21. Governing Law. These Terms and Conditions are to be construed in accordance with and governed by the internal laws of the State of Florida and the United States of America without giving effect to any choice of law rule that would cause the application of the laws of any other jurisdiction to the rights and duties of the parties. Unless otherwise provided herein, the Bank, TIAA Brokerage and Pershing may comply with applicable clearinghouse, Federal Reserve and correspondent bank rules in processing transactions relating to your Funds. You agree that none of the Bank, TIAA Brokerage or Pershing are required to notify you of a change in those rules, except to the extent required by law.
- 22. Disputes. Except to the extent otherwise provided by applicable law, any action at law or in equity arising out of or relating to these Terms and Conditions shall be filed only in the courts of the State of New York, or in one of the United States District Courts for New York, and you hereby consent and submit to the personal jurisdiction of such courts for the purposes of litigating any such action. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATED TO THESE TERMS AND CONDITIONS.

Appendix A: Examples of FDIC Insurance Protection

The summary of FDIC deposit insurance laws and regulations contained herein is not intended to be a full restatement of applicable laws and FDIC regulations and interpretations. In addition, the applicable laws and FDIC regulations and interpretations may change from time to time and, in certain instances, additional terms and conditions may apply which are not described in herein. Accordingly, the discussion herein is qualified in its entirety by applicable laws and the FDIC regulations and interpretations. You are urged to discuss with your attorney, the insurance coverage afforded to your Funds, including your Funds deposited under the Bank Sweep Product. You may also write to the following address: FDIC Office of Consumer Affairs, 550 17th Street, N.W., Washington, D.C. 20429.

What is the FDIC?

The FDIC—short for the Federal Deposit Insurance Corporation—is an independent agency of the United States government. The FDIC protects depositors of insured banks located in the United States against the loss of their deposits if an insured bank fails. Any person or entity can have FDIC insurance coverage in an insured bank. A person does not have to be a U.S. citizen or resident to have his or her deposits insured by the FDIC. FDIC insurance is backed by the full faith and credit of the United States government. Since the FDIC began operations in 1934, no depositor has ever lost a penny of FDIC-insured deposits.

FDIC Coverage Basics

FDIC insurance covers depositors' accounts at each insured bank, dollar-for-dollar, including principal and any accrued interest through the date of the insured bank's closing, up to the insurance limit. FDIC insurance covers all types of deposits received at an insured bank but does not cover investments, even if they were purchased at an insured bank.

What the FDIC Covers

- Checking accounts (DDA)
- Negotiable Order of Withdrawal (NOW) accounts
- Savings accounts
- Money market deposit accounts (MMDA)
- Time deposits such as certificates of deposit (CDs)
- Cashier's checks, money orders and other official items issued by a bank

What the FDIC Does Not Cover

- Stock investments
- Bond investments
- Mutual funds
- Life insurance policies
- Annuities
- Municipal securities
- Safe deposit boxes or their contents
- U.S. Treasury bills, bonds or notes*

The standard deposit insurance amount is \$250,000 per depositor, per insured bank, for each account ownership category.

The FDIC insures deposits that a person holds in one insured bank separately from any deposits that the person owns in another separately chartered insured bank. For example, if a person has a certificate of deposit at Bank A and has a certificate of deposit at Bank B, the amounts would each be insured separately up to \$250,000. Funds deposited in separate branches of the same insured bank are not separately insured. The FDIC provides separate insurance coverage for funds depositors may have in different categories of legal ownership. The FDIC refers to these different categories as "ownership categories." This means that a bank customer who has multiple accounts may qualify for more than \$250,000 in insurance coverage if the customer's funds are deposited in different ownership categories and the requirements for each ownership category are met.

Ownership Categories

This section describes the following FDIC ownership categories and the requirements a depositor must meet to qualify for insurance coverage above \$250,000 at one insured bank.

- Single Accounts
- Certain Retirement Accounts
- Joint Accounts
- Revocable Trust Accounts
- Irrevocable Trust Accounts
- Employee Benefit Plan Accounts
- Corporation/Partnership/Unincorporated
- Association Accounts
- Government Accounts

^{*} These investments are backed by the full faith and credit of the U.S. government.

Single Accounts

A single account is a deposit owned by one person. This ownership category includes:

- An account held in one person's name only, provided the owner has not designated any beneficiary(ies) who are entitled to receive the funds when the account owner dies
- An account established for one person by an agent, nominee, guardian, custodian or conservator, including Uniform Transfers to Minors Act accounts, escrow accounts and brokered deposit accounts
- An account held in the name of a business that is a sole proprietorship (for example, a "Doing Business As" or DBA
 account)
- An account established for or representing a deceased person's funds—commonly known as a decedent's estate account
- An account that fails to qualify for separate coverage under another ownership category
- If an account title identifies only one owner, but another person has the right to withdraw funds from the account (e.g., as Power of Attorney or custodian), the FDIC will insure the account as a single ownership account.

The FDIC adds together all single accounts owned by the same person at the same bank and insures the total up to \$250,000.

Note on Beneficiaries: If the owner of a single account has designated one or more beneficiaries who will receive the deposit when the account owner dies, the account would be insured as a revocable trust account.

Example 1: Single Account

Account Title	Deposit Type	Account Balance
Marci Jones	MMDA	\$15,000
Marci Jones	Savings	\$20,000
Marci Jones	CD	\$200,000
Marci's Memories (a Sole Proprietorship)	Checking	\$25,000
Total		\$260,000
Amount Insured		\$250,000
Amount Uninsured		\$10,000

Explanation

Marci Jones has four single accounts at the same insured bank, including one account in the name of her business, which is a sole proprietorship. The FDIC insures deposits owned by a sole proprietorship as the single account of the business owner. The FDIC combines the four accounts, which equal \$260,000, and insures the total balance up to \$250,000, leaving \$10,000 uninsured. For additional examples of FDIC insurance coverage, please see https://www.fdic.gov/deposit/deposits/brochures/your-insured-deposits-english.pdf.

-*- Demonstration Powered by OpenText Exstream 10/18/2022, Version 16.3.0 64-bit -*- Liquid Insured Deposits Terms and Conditions

I. Introduction

The Liquid Insured DepositsSM Program (the "Program") is offered to you by your investment professional or financial organization ("Investment Professional") at the broker dealer that introduced your account ("IBD") to Pershing LLC ("Pershing"), which acts as custodian of the assets in your account, as a sweep option and is intended for the investment of available cash balances into bank deposit accounts. By selecting the Program as your automatic cash investment option, you agree to these Terms and Conditions and to appoint Pershing as your authorized agent to establish and maintain bank deposit accounts at various depository institutions that participate in the Program, which may include The Bank of New York Mellon ("BNYM") and BNY Mellon, National Association ("BNY Mellon, N.A.") (collectively, "Program Banks"), and to effect deposits to and withdrawals from such Program Banks pursuant to these Terms and Conditions. Pershing has appointed Reich & Tang Deposit Solutions, LLC ("R&T") to provide certain services with respect to the operation of the Program. There is no minimum amount required as an initial deposit or for subsequent deposits. Subject to certain exceptions, the maximum amount of Federal Deposit Insurance Corporation ("FDIC") deposit insurance coverage available under the Program for your bank deposits currently is \$2.5 million for each category of legal ownership as more fully explained below.

These Terms and Conditions for the Program are supplemental to those contained in your existing account agreements you executed to open and maintain with Pershing through your Investment Professional.

YOU UNDERSTAND THAT TO ENROLL IN THE PROGRAM, YOU HAVE EITHER (1) RECENTLY INSTRUCTED YOUR INVESTMENT PROFESSIONAL TO DIRECT YOUR CASH PENDING INVESTMENT TO THIS INSURED BANK DEPOSIT SWEEP OPTION, OR (2) GIVEN YOUR REGISTERED INVESTMENT ADVISOR OR INVESTMENT PROFESSIONAL DISCRETION TO MAKE INVESTMENT DECISIONS FOR YOUR ACCOUNT.

YOU ACKNOWLEDGE THAT YOU HAVE RECEIVED AND CAREFULLY READ THESE TERMS AND CONDITIONS AS WELL AS THE DISCLOSURES WITH RESPECT TO INTEREST RATES IN CONNECTION WITH CHOOSING TO ENROLL IN THE PROGRAM. IF YOU HAVE ANY QUESTIONS ABOUT ANY OF THE PROVISIONS OF THESE TERMS AND CONDITIONS, PLEASE CALL YOUR INVESTMENT PROFESSIONAL.

II. Summary of Terms and Conditions

This Section II of the Terms and Conditions is a summary of certain features of the Program. It is prepared for your convenience, and must be read in conjunction with the more detailed disclosure below.

A Summary of the Program: Pershing operates the Program which, if you choose to participate, automatically purchases, or sweeps, your excess cash balances in your brokerage account in custody at Pershing ("Account") to demand deposit accounts ("DDAs") and/or money market deposit accounts ("MMDAs"; together with DDAs, "Deposit Accounts") at Program Banks in accordance with the allocation methodology described in Section III. J, Allocations to Program Banks, and sweeps your cash from those various Program Bank accounts to cover purchases of securities and other debits in your Account. You receive interest on your balances held on deposit at the various Program Banks.

FDIC Insurance: Your funds are routed through an intermediary bank and deposited into interest-bearing FDIC-insured omnibus Deposit Accounts at the Program Banks which hold your and other customers' funds, and in which you will hold a beneficial interest. Your deposits, plus interest earned thereon, ("Liquid Insured Deposits"), are held in those Program Bank account(s) in a manner designed to currently provide your Liquid Insured Deposits balance with up to a maximum level of \$2.5 million of FDIC insurance coverage under the Program. Pershing, as your agent, allocates your Liquid Insured Deposits among a number of Program Bank accounts up to the total balance allowable under the Program, currently \$2,490,000 (the "Program Deposit Limit"), to seek to maximize the FDIC deposit insurance coverage available under the Program, which protects your deposits in the event of a bank failure. FDIC deposit insurance coverage is normally available for your Liquid Insured Deposits up to the FDIC standard maximum deposit insurance amount ("SMDIA"), which is currently \$250,000 per legal category of account ownership at each participating Program Bank when aggregated with all other deposits held by you in the same Program Bank and in the same legal category of account ownership. While the target FDIC insurance coverage on Program Banks when aggregated with all other deposits balance, the amount of FDIC insurance coverage available to you is subject to availability of Program Banks. In any event, the maximum amount of FDIC insurance available cannot exceed the SMDIA per legal category of account ownership multiplied by the number of participating Program Banks that you have not excluded from receiving your deposits through the Program, less any funds you may hold in a Program Bank outside of the Program in the same legal category of account ownership. For example, based on the SMDIA of \$250,000 per legal category of account ownership per Program Bank and an assumption that there are eleven or more Program Banks eligible to recei

Pershing has established standing instructions with each Program Bank to help ensure that Pershing maintains control over your funds at each Program Bank at all times. Pershing uses the services of R&T to perform allocations among the Program Banks in accordance with the allocation methodology described in Section III. J, Allocations to Program Banks, to seek to maximize FDIC insurance coverage on your balance in the Program. However, any money that you hold at a Program Bank outside the Program may impact the insurance coverage available, as neither Pershing, your Investment Professional, your IBD nor R&T monitors or takes any responsibility for money you may have at a Program Bank outside the Program. You are solely responsible for monitoring this. As such, you should regularly review the then current list of Program Banks carefully. A current list is attached, and the Program Banks holding your money upon each interest reinvestment will also be listed on your Account statements. You have the right to instruct that your Liquid Insured Deposits not be allocated to a particular Program Bank. See Sections G, FDIC Deposit Insurance: Operations and Limitations, and H., Ability to Exclude Program Banks.

Securities Investor Protection Corporation ("SIPC"): SIPC insures certain customer assets held at broker-dealers, such as Pershing, in the event of the failure of the broker-dealer. Although SIPC covers securities in client brokerage accounts up to \$500,000 (including a maximum of \$250,000 for uninvested cash held in the brokerage account), the deposits made through the Program are not insured by SIPC. Note that SIPC does not insure against the loss of value of any investment or product. See Section B, Differences Between Liquid Insured Deposits and Money Market Funds. For more information about SIPC coverage see www.sipc.org.

Access to Funds: You will access your funds in the Program only through your Account, by contacting your Investment Professional or IBD. In the event of the failure of your Investment Professional or IBD, you may seek to access your funds by contacting Pershing at 1-201-413-3333. In the event of the failure of Pershing, you may seek to access your funds by contacting R&T at 1-800-433-1918 or the designated trustee or receiver of Pershing. As explained in Section III. L., Account Statements, your Account statements will list the names of the Program Banks holding your money and the balance at each upon each interest reinvestment. See Section III. F., Withdrawals.

<u>Determination of Interest Rates:</u> Interest rates fluctuate and are based on the prevailing interest rates paid by the Program Banks. Program interest rates are available from your Investment Professional. See Section III. K., Interest, Negative Interest Rates and Compensation to Pershing and R&T.

Conflicts of Interest: Pershing and R&T earn fees on the balances in the Program, including your money. Your Investment Professional and IBD may earn fees based on the amount of money in the Program, including your money. Your Investment Professional and IBD may earn a higher fee if you participate in the Program than if you invest in other cash sweep products, such as money market mutual funds. Your Investment Professional, IBD and Pershing may be affiliated with one or more Program Banks If a portion of your Program balances is allocated to BNYM and BNY Mellon, N.A., they will realize an economic benefit from them. The Program Banks, including BNYM and BNY Mellon, N.A. do not have a duty to offer the highest rates available or rates that are comparable to money market mutual funds or those offered by other depository institutions. See Section III. K., Interest, Negative Interest Rates and Compensation to Pershing and R&T.

Risks of the Program: You may receive a lower rate of return on money deposited through the Program than on other types of money market investments, such as money market mutual funds. Program Banks are permitted to impose a seven-day delay on any withdrawal request for amounts placed in MMDAs. In the event of a failure of a Program Bank, there may be a time period during which you may not be able to access your money. If you have money at a Program Bank outside the Program, this will negatively impact the availability of FDIC insurance coverage on the total amount of your funds held within and outside the Program. If you have on deposit through the Program, funds in an amount of money that exceeds the number of Program Banks that you have not excluded multiplied by the SMDIA, the balance in excess of that amount will not be insured by the FDIC. If you exclude one or more Program Banks, the amount of FDIC insurance coverage available on your balance in the Program may decrease. In the event there is insufficient availability of Program Banks to fully allocate your balances, there is a potential that your Program balance may not be fully insured up to \$2,500,000. In the event the Program cannot accept any additional deposits, the sweep feature on your Account may be updated to prevent any further sweep deposits into the Program from your Account. If this occurs, an available cash balance in your Account would no longer be automatically invested into the Program and would remain a free credit balance in your Account. If you have concerns about the risks of this program, contact your IBD or Investment Professional about alternatives available to you.

III. Detailed Terms and Conditions

A. Account Eligibility

This Program is available to the following types of accounts: individual, joint, IRAs, certain business entities including corporations, and certain fiduciary and trust accounts provided the beneficiaries are individuals or otherwise eligible to maintain a bank deposit. In order to obtain FDIC insurance in the Program, you must provide proper and correct tax identification information to Pershing.

B. Differences between Liquid Insured Deposits Program and Money Market Mutual Funds

The money market mutual funds made available through your Investment Professional or IBD are registered with the U.S. Securities and Exchange Commission ("SEC") under both the Investment Company Act of 1940 and the Securities Act of 1933. The Liquid Insured Deposits Program made available through Pershing is not a registered fund, but is a program under which the uninvested cash in your Account is swept to, and held in, Deposit Accounts at Program Banks that are regulated by bank regulatory agencies under various federal and/or state banking laws and regulations.

Liquid Insured Deposits are obligations of the Program Banks in which the deposits are held and qualify for FDIC insurance protection per depositor in each recognized legal category of account ownership in accordance with the rules of the FDIC. An investment in a money market mutual fund is not insured or guaranteed by the FDIC.

A Program Bank account under the Program is not covered by the SIPC. SIPC is a non-profit member corporation funded primarily by member securities brokerage firms registered with the SEC. SIPC provides protection against risks to clients of member brokerage firms, like Pershing and your IBD, in the event of the failure of that member firm. SIPC covers securities in client brokerage accounts up to \$500,000 (including a maximum of \$250,000 for uninvested cash held in the brokerage account). However, SIPC does not insure against the failure of the issuer of securities and does not guarantee bank deposits. For more information about SIPC coverage see www.sipc.org.

Your Liquid Insured Deposits balance earns interest at the Program Banks in which your deposits are held, and a money market mutual fund investment earns dividends on fund shares held in your Account. The interest earned on your Liquid Insured Deposits balance may fluctuate and may be greater or less than the then current yield on a money market mutual fund investment. Please see Section K, Interest and Compensation to Pershing and R&T.

While a registered investment company, such as a money market mutual fund, is bound by fiduciary obligations to its shareholders to seek the highest rates prudently available (less fees and expenses), Pershing, R&T, and the Program Banks are under no such obligation.

Of course, you may also be able to choose, as an automatic cash investment option, other sweep alternatives. Please call your Investment Professional or IBD for additional information,

C. Relationship with Pershing

Pershing is acting as your agent in establishing and maintaining Program Bank accounts, including depositing your money to and withdrawing your money from the Program Bank accounts. Having instructed your Investment Professional or IBD to enroll you in the Program, your first bank deposit will constitute your appointment of Pershing as your agent to establish and maintain Program Bank accounts and to effect deposits to and withdrawals from such Program Bank accounts in connection with the Program. Pershing has reviewed, and entered into agreements with, the Program Banks which maintain the account(s) used for the deposit or withdrawal of your money. Pershing retains R&T to operate the allocation algorithm described in Section III. J, Allocations to Program Banks that determines into which Program Bank(s) your money will be deposited to maximize the amount of FDIC insurance available to you under the Program up to the Program limit. While the allocation algorithm determines allocation among Program Banks, R&T does not select the Program Banks that are included in the Program.

D. Information about Pershing and R&T

Pershing, a wholly owned indirect subsidiary of The Bank of New York Mellon Corporation, is a registered broker-dealer in securities and is a member organization of the New York Stock Exchange (NYSE), the Financial Industry Regulatory Authority ("FINRA") and SIPC. BNYM is a NY state-chartered bank and BNY Mellon, N.A. is a national banking association. Both BNYM and BNY Mellon, N.A. may participate in the Program by holding your funds in Deposit Accounts and both are affiliates of Pershing. Pershing, BNYM and BNY Mellon, N.A. are BNY Mellon companies. BNY Mellon is the corporate brand for The Bank of New York Mellon Corporation.

R&T assists Pershing in the allocation of your funds among Program Banks and may also maintain certain records on behalf of Pershing. It is not, itself, a bank, broker-dealer, or investment adviser and does not hold any of your Liquid Insured Deposits, nor does it maintain discretion to select Program Banks for participation in the Program.

Program Banks may be affiliated with Pershing, your Investment Professional or your IBD from time to time. Program Banks that are affiliated with Pershing, your Investment Professional or your IBD may be given sequence priority to receive deposits or may operate under terms that are not available to unaffiliated Program Banks. For a list of affiliated Program Banks and other related disclosures please contact your Investment Professional. R&T is not affiliated with any of the Program Banks.

E. Deposits

By enrolling in the Program, you consent to have excess cash balances pending investment in your Account automatically deposited into accounts at Program Banks. Once enrolled in the Program, each business day, Pershing or its agent bank, based on the results of the of the allocation algorithm of R&T, will deposit the excess cash balance in your Account to one or more omnibus Deposit Accounts maintained at the Program Banks entitled "Pershing LLC as Agent for the Exclusive Benefit of its Customers, Acting For Themselves and For Others" or substantially similar. Your Liquid Insured Deposits ownership will be evidenced by an entry on records maintained by Pershing and R&T, as Pershing's agent and record keeper, for each of the Program Banks at which your funds are on deposit. You will not be issued any evidence of ownership of a Program Bank account, such as a passbook or certificate. However, your Account statement will reflect all deposits, withdrawals, Program Bank deposit balance(s) and the applicable interest rate.

Funds intended for deposit into the Program must be placed through your Account and cannot be placed directly by you with any of the Program Banks. Only balances transferred by Pershing will be eligible for inclusion in a Program Bank account. Excess cash balances in your Account on each business day will be transferred to Program Bank accounts no later than the next business day.

Unless your IBD has instructed Pershing otherwise, once your Program balance reaches the current Program Deposit Limit of \$2,490,000, Pershing, as your agent, will automatically sweep any Excess Balance in your Account into the secondary sweep option in your Account as described in more detail below.

F. Withdrawals

By enrolling in the Program, you consent to have your money on deposit at the Program Bank(s) automatically withdrawn from the Program Bank accounts in the event of a debit in your Account or, on settlement date, to pay for securities purchased for or sold in your Account. Each business day as needed, Pershing or its agent bank, based on the results of the allocation algorithm of R&T, will withdraw your cash from the omnibus Deposit Accounts maintained at the Program Banks.

You may make withdrawals from the Program, in any amount, not to exceed your total account balance in the Program, through your Account. Withdrawals from the Program cannot be made directly by you through any of the Program Banks. Checks, ACH payments, debit cards, ATM withdrawals, direct deposits, credits and other transactions occurring in your Account are processed through that account rather than through the Program accounts.

If your Program balance exceeds the Program Deposit Limit and the Excess Balance from your Account is swept into a secondary sweep option, the balance in that secondary sweep option will be used first to satisfy debits in your Account before withdrawals are made from your Program balance.

G. FDIC Deposit Insurance: Operation and Limitations

Your balance in the Liquid Insured Deposits is deposited into omnibus Deposit Accounts at the Program Banks in a manner currently designed to provide up to a minimum target level of \$2.5 million of FDIC insurance coverage on your Program balance, subject to certain exceptions described herein. The FDIC insurance coverage on your Program balance will be limited to the extent that you hold deposits directly, or through others, in the same recognized legal category of ownership at the same Program Banks as you hold deposits through the Program. The FDIC protects you against the loss of your insured Liquid Insured Deposits balance in the event a Program Bank fails. FDIC deposit insurance is backed by the full faith and credit of the United States. Specifically, FDIC deposit insurance coverage shall be available for your balance in the Liquid Insured Deposits up to the SMDIA, which is currently \$250,000 per legal category of account ownership at each participating Program Bank, but will be aggregated with all other deposits held by you in the same Program Bank both within and outside the Program and in the same legal category of account ownership.

During the business day when your funds are transferred and being deposited into the Program, your funds will be held for a limited amount of time intraday at an intermediary bank prior to being allocated and distributed among the Program Banks. Once transferred from the intermediary bank to the Program Banks, the funds will be insured. The Program has been designed to facilitate the movement of funds in a timely manner each day. Pershing expects that your funds will be sent by the intermediary bank to the Program Banks by the close of business each day. However, in the event of a failure of wire transfer systems or communications facilities or other causes beyond Pershing's control, resulting in your funds not being sent to the Program Banks in a timely manner and remain held at the intermediary bank or any Program Bank, your funds could, to the extent they exceed the current SMDIA, be uninsured until the next business day.

Your Program Funds are allocated among a number of Program Banks to seek to maximize the potential FDIC deposit insurance coverage up to the total balance allowable under the Program, currently \$2,490,000 ("Program Deposit Limit"). Pershing, in its sole discretion, may change the Program Deposit Limit. The total deposit for you at any Program Bank is set at a level below \$250,000 (i.e., below the SMDIA) to ensure that the sum of the principal and accrued interest at a Program Bank does not exceed \$250,000. For this same reason, the Program Deposit Limit is set at \$2,490,000. The maximum deposit at each Program Bank is currently set at \$245,000 and the Program Deposit Limit is \$2,490,000. Based on the level of interest rates and other factors, Pershing may change these amounts in the future. In the aggregate, the maximum amount of Liquid Insured Deposits eligible for FDIC deposit insurance coverage shall not exceed the SMDIA per legal category of account ownership *multiplied* by the number of participating Program Banks in the Program Banks outside of the Program in the same legal category of account ownership, but not in excess of the Program Deposit Limit. The number of participating Program banks will vary.

If you have any money on deposit in a Program Bank outside of the Program, that money will not be taken into account in determining whether to allocate your money in the Program to a particular Program Bank.

For example, if the SMDIA is \$250,000 and you have a non-Program deposit account at Program Bank "A" of \$200,000 and you also have \$60,000 in Liquid Insured Deposits at Program Bank A in the same legal category of ownership as your separate deposit, only \$250,000 of your \$260,000 balance held at Program Bank A would be insured by the FDIC.

A number of factors can affect your insurance coverage, including bank mergers. Because neither Pershing nor R&T would be aware of deposits made by you outside of this Program, you are solely responsible for monitoring the total amount of all deposits you have at each Program Bank for purposes of calculating your FDIC coverage. In addition, if for any reason the amount deposited in the Program in your Accounts exceeds the number of Program Banks available to you multiplied by the SMDIA, the excess funds would not be insured by the FDIC. None of Pershing, R&T, your Investment Professional or your IBD is responsible for any insured or uninsured portion of your deposits in any of the Program Banks.

In the event that FDIC deposit insurance payments become necessary, payments of principal plus unpaid and accrued interest up to the SMDIA per legal category of account ownership multiplied by the number of Program Banks shall be made to you. However, there is no specific time period during which the FDIC must make insurance payments available. Furthermore, you may be required to provide certain documentation to the FDIC before insurance payments are made.

Unless your IBD has instructed Pershing otherwise, once funds equal to the Program Deposit Limit have been deposited for you through the Program into the Program Banks, any additional funds will be automatically invested into a secondary sweep option, as described in more detail below.

H. Ability to Exclude Program Banks

You may exclude any Program Bank from holding your Liquid Insured Deposits by notifying your Investment Professional or IBD. There will be a delay between the time you make your request and the time that such Program Bank is excluded. If you exclude one or more Program Banks, the maximum level of FDIC insurance available under the Program may be reduced. Contact your Investment Professional or your IBD at the time you exclude the Program Bank to confirm the new maximum amount of Federal deposit insurance available to you under the Program.

I. Your Responsibility to Monitor Your Automatic Cash Investment Options

Neither Pershing nor R&T has any obligation to monitor this automatic cash sweep option for your Account or to make recommendations about, or changes to, the Program that might be beneficial to you. As returns on the Liquid Insured Deposits, your personal financial circumstances and other factors change, it may be in your financial interest to change your automatic cash sweep investment option or invest cash in your Account in other investment vehicles. You can determine what automatic cash investment options and other investments are available and the current rates and returns thereon at any time by calling you Investment Professional or IBD.

J. Allocations to Program Banks

You may obtain a current list of Program Banks at any time by calling your Investment Professional or IBD or visiting www.Pershing.com/rates.html. Your Account statements also list the Program Banks that hold your Liquid Insured Deposits and the amount in each of those Program Banks upon interest reinvestment date. The Program Banks that hold your Liquid Insured Deposits may change at any time during a statement period. Accordingly, if you want to know the Program Bank at which your Liquid Insured Deposits are located at any particular time, contact your Investment Professional or IBD. Pershing may add and remove Program Banks from the Program without prior notice to you.

Pershing enters into participation agreements with multiple Program Banks to accept funds from the Program. Each Program Bank will establish, and from time to time reestablish, the level of deposits that it is willing to accept (the "target level"), and the amount of interest and fees that it is willing to pay under the Program.

R&T's allocation algorithm is a non-discretionary allocation methodology performed at the open of each business day that ranks the Program Banks according to the following objective process:

- Each Program Bank is initially priority ranked according to the amount of the balance required to reach its target level by accepting Program deposits that day. Under this ranking process, the Program Bank with the greatest amount required to reach its target level is ranked first, the Program Bank with the second greatest amount required to reach its target level is ranked second, and so on and
- The initial priority ranking shall be adjusted, as needed, to take into account Program Bank specific conditions that may, pursuant to the terms of its participation agreement and certain regulatory requirements, restrict its ability to receive individual client deposits under the Program below certain minimum dollar amounts (e.g., only deposits of \$100,000 or more per individual depositor may be accepted) or from only certain types of accounts (e.g., based on legal category of account ownership, whether held by a U.S. or non-U.S. person).

With respect to the above adjustment, Program Banks that require specific types of deposits or deposit minimums per individual depositor will be moved to the top of the priority ranking, based first on the dollar amount of any individual depositor minimum, and then based on the target level, each by descending amounts. In addition, Program Banks that are affiliated with Pershing, your Investment Professional or your IBD, at their instruction, may be given sequence priority to receive deposits.

The initial ranking as so adjusted for each business day is referred to as that business day's "Deposit Allocation Ranking".

Once the Deposit Allocation Ranking is established, all customer funds participating in the Program are allocated (and re-allocated), each business day, to the Program Banks according to the current Deposit Allocation Ranking, subject to (i) the individual customer opt-out rights as to any Program Bank(s), (ii) the Program Bank's individual depositor minimum, where applicable; (iii) the Program Bank's individual depositor minimum, where applicable; (iii) the Program Bank's individual depositor minimum, where applicable; (iii) the Program Bank's account type restrictions; (iv) the Program Bank's stated capacity; and (v) the Program Deposit Limit. Customer funds are allocated to the Program Banks individually, based on deposit size, in descending order. Accordingly, customers with larger deposits will be processed and allocated before customers with smaller balances.

With respect to the allocation of your Program balance, the first Program Bank in the Deposit Allocation Ranking for any business day will receive your funds first until such Program Bank holds an amount of your funds not to exceed \$250,000. To the extent that you have allocable funds in excess of the maximum limit per bank set by Pershing (currently \$245,000), your funds are then allocated to the second Program Bank in the Deposit Allocation Ranking, and this process is continued until all of your funds are allocated or the Program Deposit Limit is reached. To the extent that a Program Bank has already received deposits up to such Program Bank's target level, or to the extent the level of your deposits is insufficient to satisfy a Program Bank's per individual depositor minimum deposit minimum requirements, or your deposits do not satisfy the Program Bank's account type requirements, such Program Bank will be skipped when allocating your funds, and your funds will be allocated to the next Program Bank in the Deposit Allocation Ranking. Any Program Bank on which you have exercised your opt-out right will also be skipped.

Unless your IBD has instructed Pershing otherwise, once your Program balance reaches the current Program Deposit Limit of \$2,490,000, Pershing, as your agent, will automatically sweep any Excess Balance in your Account into the secondary sweep option in your Account.

Each Program Bank is a separate FDIC-insured depository institution. You can obtain publicly available financial information for all Program Banks at the FDIC's website at www.fdic.gov; or by contacting the FDIC's Division of Information and Research by writing to Federal Deposit Insurance Corporation, Division of Information and Research, 550 17th Street, N.W., Washington, D.C. 20429-9990; or by calling the FDIC's Division of Information and Research at 877-275-3342. Neither Pershing nor R&T guarantees the financial condition of any Program Bank, or the accuracy of any publicly available information concerning a Program Bank. Pershing and R&T are not responsible for any insured or uninsured portion of any deposits at a Program Bank. Push give your consent to Pershing, R&T and their service providers to provide your customer account information to Program Banks and the FDIC, if necessary, for purposes of your involvement in the Program.

The Program Bank accounts established by Pershing on behalf of its customers, as customers' agent, constitute a direct obligation of the Program Bank(s) and are not directly or indirectly an obligation of R&T, Pershing, your IBD or your Investment Professional.

Where your funds are held in MMDAs, the return of your funds may be delayed. Program Banks are permitted to, but rarely do, impose a delay of up to seven days on any withdrawal request from an MMDA.

Secondary Sweep Option

Unless your IBD has instructed Pershing otherwise, once your Program balance reaches the current Program Deposit Limit of \$2,490,000, Pershing, as your agent, will automatically sweep any additional free credit balance over that amount ("Excess Balance") from your Account into the secondary sweep option selected by your IBD or your Investment Professional. If your IBD or Investment Professional has not selected a secondary sweep option on your account, any Excess Balance will be swept into a default money market mutual fund ("Money Fund"). The default Money Fund used as the secondary sweep option for the Program is currently the Dreyfus Government Cash Management Service Shares (Ticker symbol DGUXX). Please see the section of this Disclosure Statement titled "Money Fund Features" for additional information on the default secondary sweep option.

Money Fund Features

Any balance in excess of the current Program Deposit Limit of \$2,490,000 will be automatically swept into the secondary sweep option in your Account that was selected by your IBD or your Investment Professional. If your IBD or Investment Professional has not selected a secondary sweep option in your Account, Pershing, as your agent, will automatically sweep any Excess Balance into the Dreyfus Government Cash Management Service Shares Money Fund (Ticker symbol DGUXX). If the Excess Balance in your Account is swept into the default Money Fund, a prospectus will automatically be mailed to you. Balances in a Money Fund are not FDIC-insured, but is eligible for Securities Investor Protection Corporation ("SIPC") coverage up to applicable limits. You could lose money by investing in a Money Fund. Although a Money Fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in a Money Fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The sponsor of a Money Fund has no legal obligation to provide financial support to the Money Fund, and you should not expect that the sponsor will provide financial support to the Money Fund at any time. Although the board of the default Money Fund has no current intention to impose a fee upon the sale of shares or temporarily suspend redemptions if the liquidity of the Money Fund falls below certain levels, the board reserves the ability to do so after providing at least 60 days prior written notice to shareholders. Please see the "SIPC Coverage" section of this Disclosure Statement for more information on SIPC coverage.

K. Interest and Compensation to Pershing and R&T

Interest

The amount of paid interest and the annual percentage yield earned ("APYE") applicable to your Liquid Insured Deposits will be stated on your Account statement. Contact your Investment Professional or IBD to obtain the current interest rate and APY being paid on your Liquid Insured Deposits, the names of the Program Banks, your account balances at each of the Program Banks as of the most recent business day, and other account information.

The interest rate paid by each Program Bank is paid pursuant to an agreement with each Program Bank and is subject to change at any time. The interest rate on the Deposit Accounts is determined by Pershing based on the amount that Banks are willing to pay on the Deposit Accounts less the fees paid to Pershing and R&T as set forth below under "Compensation to Pershing and R&T". The interest rate may fluctuate daily.

Interest will be compounded daily and posted monthly to the Program Bank account. Interest will accrue on deposits from the day they are received in investible form by the Program Bank through the day preceding the date of withdrawal from the Program Bank. The "daily balance method" is used to calculate interest. This method applies a daily periodic interest rate to the principal in the account for the period. The daily rate is 1/365 (or 1/366 in a leap year) of the applicable annual rate. The interest rate you earn on your Liquid Insured Deposits may be higher or lower than the rates available to depositors making non-Program deposits with Program Banks directly, through other types of accounts at Pershing, or with other depository institutions in comparable accounts. Any fees imposed under the Program reduce earnings on your Liquid Insured Deposits. You should compare the terms, rates of return, required minimum amounts, charges and other features of a Liquid Insured Deposit with other accounts and investment alternatives.

Negative Interest Rates

In response to certain extraordinary economic conditions, some foreign countries have implemented a negative interest rate policy to stabilize their economies. Under such a policy, a central bank charges banks a fee to hold reserves, and, as a result, the banks then charge depositors a fee to maintain their deposits. Historically, the U.S. has not adopted policies resulting in negative interest rates, and there is no indication that the Federal Reserve Board plans to adopt such a policy in the future. If, however, such a policy is adopted in the U.S., Program Banks may begin to charge fees to maintain deposits held through bank deposit sweep products, such as the Program. In such an event, a fee would be charged for maintaining your deposits at Program Banks through the Program. This fee would be in addition to fees received from Program Banks for their participation in the Program. Any fees related to negative interest rates would be applied to your Program balance on a monthly basis for the duration of the negative interest rate period. If applicable, this fee will appear on your periodic Account statement.

Compensation to Pershing and R&

Each Program Bank pays Pershing and R&T fees for services related to your Liquid Insured Deposits equal to a percentage of the average daily deposit balance in the Deposit Accounts at the Program Bank. For certain accounts, such fees may be determined on a "per account" basis. The fee may vary from bank to bank. The amount of the fee paid to R&T and Pershing will affect the interest rate paid on the Program balance in your Account. In its sole discretion, Pershing may adjust its fee and may vary the amount of fees between clients. Pershing may earn a higher fee if you participate in the Program than if you used another cash sweep investment (e.g., shares in a money market mutual fund). If an Excess Balance is swept into a Money Fund, including the default Money Fund, the Dreyfus Government Cash Management Service Shares Money Fund (Ticker symbol DGUXX), Pershing will earn fees on that balance. Your IBD or Investment Professional will receive a portion of the fee paid to Pershing by the Program Banks and Money Fund Provider.

There is no minimum deposit amount to participate in the Program and no minimum balance to maintain your participation in the Program. There also is no minimum period that your money must remain on deposit in the Program and no limitations on the number or dollar amount of withdrawals from, or deposits to, the Program accounts. There is no penalty or fees for withdrawal of your entire balance, or any part thereof, at any time.

L. Account Statements

You will receive a periodic Account statement from Pershing. All activity with respect to your Liquid Insured Deposits, including interest earned during the period covered, will appear on your periodic Account statement, including the total of your opening and closing balance in the Liquid Insured Deposits. You will not receive a separate statement from the Program Banks. You should retain all Account statements. Within 30 days you must notify your Investment Professional or IBD of any discrepancies you note on your Account statement. See Section P below.

M. Tax Reporting

The discussion contained in this document as to U.S. Federal tax considerations is not intended or written to be used, and cannot be used, for the purpose of avoiding penalties. Such discussion is written to support the promotion or marketing of the transactions or matters addressed herein. Each taxpayer should seek U.S. Federal tax advice based on the taxpayer's particular circumstances from an independent tax advisor.

The interest that you receive from your Liquid Insured Deposits is generally fully subject to federal, state and, where applicable, local income tax. An I.R.S. Form 1099 will be sent to you by Pershing for each year, showing the amount of interest income you have earned from your Liquid Insured Deposits. You will not receive a Form 1099 if you are not a citizen or resident of the United States or Canada.

N. FDIC Deposit Insurance for FDIC-Recognized Categories of Account Ownership; Multi-Tiered Fiduciary Relationships

To ensure that your Program Deposits are protected by FDIC insurance to the fullest extent possible under the Program, you should understand how FDIC insurance applies to each FDIC-recognized category of account ownership

In general, the FDIC-recognized categories of account ownership include single ownership accounts; accounts held by an agent, escrow agent, nominee, guardian, custodian, or conservator; annuity contract accounts; certain joint ownership accounts; certain revocable trust accounts; accounts of a corporation, partnership, or unincorporated association; accounts held by a depository institution as the trustee of an irrevocable trust; certain irrevocable trust accounts; certain retirement and other employee benefit plan accounts; and certain accounts held by government depositors.

The rules that govern these categories of account ownership are very detailed and very complex, and there are many nuances and exceptions. Complete information can be found at the FDIC's regulations set forth at 12 C.F.R. Part 330.

The FDIC's regulations impose special requirements for obtaining pass-through FDIC insurance coverage, up to the SMDIA (currently \$250,000 for each FDIC-recognized category of account ownership), for multiple levels of fiduciary relationships. In these situations, in order for FDIC insurance coverage to pass through to the true beneficial owners of the funds, it is necessary (i) to expressly indicate, on the records of the insured depository institution that there are multiple levels of fiduciary relationships, (ii) to disclose the existence of additional levels of fiduciary relationships in records, maintained in good faith and in the regular course of business, by parties at subsequent levels, and (iii) to disclose, at each of the level(s), the name(s) and the interest(s) of the person(s) on whose behalf the party at the level is acting. No person or entity in the chain of parties will be permitted to claim that they are acting in a fiduciary capacity for others unless the possible existence of such a relationship is revealed at some previous level in the chain. If your Liquid Insured Deposits are beneficially owned through multiple levels of fiduciary relationship, you must take steps to comply with these special requirements.

Due to operational complexities, Program balances held in Accounts with trust registrations are allocated at the Account level and not at the beneficiary level; therefore FDIC insurance coverage on Program balances held in trust accounts is not available at the beneficiary level. The Program does not provide FDIC coverage at the beneficiary level. Program balances held in Accounts with joint registrations are assumed to be held by two individuals and allocated to Program Banks accordingly.

For questions about FDIC insurance coverage, you may call the FDIC at 877-275-3342 or visit the FDIC's web site at www.fdic.gov.

You also may wish to utilize "EDIE The Estimator," the FDIC's electronic insurance calculation program, which is found at https://www.fdic.gov/edie/index.html. Other information regarding FDIC insurance coverage may be found at the "Deposit Insurance" section of the "Quick Links for Consumers & Communities" on the FDIC's web site at http://www.fdic.gov/quicklinks/consumers.html.

O. Business Continuity

In the event you are unable to contact your Investment Professional or IBD due to a business interruption event, such as a natural disaster, you may contact Pershing. In the event you cannot contact Pershing, you may call R&T at 1-800-433-1918 for account information.

P. Notice of Unauthorized Activity

Please refer to the Regulation E/ Electronic Funds Transfer section of the Disclosure Statement delivered to you by Pershing upon opening of your Account or found by selecting Business Continuity and Other Disclosures on www.pershing.com.

Q. Other Terms

Limits on Certain Deposit Accounts: Federal banking regulations limit the transfers from an MMDA to a total of six (6) during a monthly statement cycle, and certain aggregation rules may apply to transfers from such accounts at the Program Banks. These limits on transfers will not limit the number of withdrawals you can make from your Program balance, the interest rate you earn or the amount of FDIC insurance coverage for which you are eligible. The Program seeks to rely on certain exemptions and interpretive relief granted by the Federal Reserve Board in connection with these limitations.

Inactive Accounts: Pershing and the Program Banks may be required by law to turn over (escheat) any portion of your Liquid Insured Deposits to a state, typically your state of residence, based on account inactivity for a certain time period established by applicable state law. If funds are remitted to the state, you may file a claim with the state to recover the funds.

Assignment by Customer: Neither these Terms and Conditions nor your participation in the Program may be assigned or transferred by you to any other person or entity, except for (i) a transfer by a change in ownership of the Account in which the Program balance is held or (ii) a transfer that occurs due to death, incompetence, marriage, divorce, attachment or otherwise by operation of law, in which case, such transfer shall not be binding on Pershing, R&T, or the Program Banks unless and until sufficient, acceptable documentation has been received by such entities.

Assignment by Pershing and R&T: Pershing and R&T may assign and transfer their respective rights and obligations under the Program, including, without limitation, pursuant to these Terms and Conditions, to one or more of its affiliates or subsidiaries or to any person that acquires all or substantially all of the assets of Pershing or R&T, without prior notice to you and without obtaining your consent.

Termination: Closing of Account: Pershing may, at its sole discretion and without any prior notice, suspend or terminate your participation in the Program. If you or Pershing, for any reason, close your Account, your participation in the Program also will be terminated and your funds will be distributed out through the Account according to the terms and conditions of your Account agreement.

Ordinary Care: Any failure by Pershing, R&T, or any Program Bank to act or any delay by such party beyond time limits prescribed by law or permitted by these Terms and Conditions is excused if caused by your negligence, interruption of communication facilities, suspension of payments by another financial institution, war, act of terrorism, emergency conditions or other circumstances beyond the control of such party. You agree that any act or omission made by Pershing, R&T, or any Program Bank in reliance upon or in accordance with any provision of the Uniform Commercial Code as adopted in New York, or any rule or regulation of the State of New York, the New York Stock Exchange, Inc., Financial Industry Regulatory Authority, or a federal agency having jurisdiction over such party shall constitute ordinary care.

Personal Information: You agree that Pershing, the Program Banks and their respective service providers may share information concerning you and your accounts in connection with your participation in the Program and these Terms and Conditions to any affiliate of such entity or otherwise in accordance with applicable laws and regulations, Pershing's Privacy Policy and/or customary brokerage and banking practices. You agree that Pershing, the Program Banks and their respective service providers may obtain such information as may be necessary for legitimate business needs in connection with the operation of the Program. For information regarding the collection, processing and use of your personal information and your rights to limit the use and disclosure of such information, you should refer to the Pershing's Privacy Policy provided to you at the time you opened your Account.

Alternatives to the Program: By your enrollment in the Program, you agree to the terms provided herein. You understand that, at any time, you may withdraw your consent to participate in the Program. If you withdraw your consent, and you do not designate a replacement automatic cash investment option for your Account, the uninvested cash held through the Program will be credited to your Account.

Days of Operation: The Program will operate on all days when both the NYSE and the Federal Reserve Bank of New York are open for business.

Tax Withholding: Pershing may be required to withhold U.S. federal income tax at the prevailing rate on all taxable distributions payable to certain depositors who fail to provide their correct taxpayer identification number or to make required certifications or who have been notified by the Internal Revenue Service that they are subject to backup withholding. Interest earned on accounts held by entities (individuals or corporations) that are neither citizens nor residents of the United States, except for Canadian residents, is not subject to withholding tax. Consult your tax advisor.

Joint Account Owners. If your Account is a joint or other multi-party account, any one of the account owners may deposit or withdraw funds from the Account. You hereby authorize Pershing, your Investment Professional or your IBD to act on the verbal, written or electronic instructions of any of the account owners or authorized signers, and such entity will so honor the instructions of any such account owner.

Limitation of Liability. TO THE MAXIMUM EXTENT PERMITTED BY LAW, IN NO EVENT SHALL R&T OR ITS AFFILIATES BE LIABLE FOR ANY INDIRECT, CONSEQUENTIAL, EXEMPLARY, SPECIAL, INCIDENTAL OR PUNITIVE DAMAGES OF ANY NATURE, WHETHER SUCH LIABILITY IS ASSERTED ON THE BASIS OF CONTRACT, TORT (INCLUDING NEGLIGENCE OR STRICT LIABILITY) OR OTHERWISE, INCLUDING WITHOUT LIMITATION, LOSS OF PROFITS, GOODWILL OR BUSINESS INTERRUPTION.

Tax or Other Unique Identification Information. You acknowledge that the Program uses a unique identifier for you (e.g., tax identification number, other unique number) in order to allocate your Liquid Insured Deposits across Program Banks under the Program. If you do not provide, or if you do not have, a tax identification number, your funds may not be allocated across Program Banks to provide you with expanded FDIC insurance under the provisions of these Terms and Conditions.

Aggregation of Funds in Multiple Accounts. If you have selected the Program in one or more Accounts with the same unique identifier, your Program balances in all such Accounts are aggregated for the purpose of allocating your Program balances and calculating the FDIC insurance coverage available under the Program. Depending on the individual facts and the ownership rights and capacities in which funds are held, additional FDIC insurance may be available. Refer to Section N above for further information about FDIC insurance.

Complaints: Any complaints regarding the Program should be addressed in writing to Pershing

Legal Process: Pershing, R&T, and the Program Banks may comply with any writ of attachment, execution, garnishment, tax levy, restraining order, subpoena, warrant or other legal process, which such party reasonably and in good faith believes to be valid. Pershing may notify you of such process by telephone, electronically or in writing. If Pershing is not fully reimbursed for its record research, photocopying and handling costs by the party that served the process, Pershing may charge such costs to your Account or assess by increasing fees on the Liquid Insured Deposits, in addition to its minimum legal process fee. You agree to indemnify, defend and hold Pershing, R&T, and the Program Banks harmless from all actions, claims, liabilities, losses, costs, attorney's fees, and damages associated with their compliance with any process that such party believes reasonably and in good faith to be valid. You further agree that Pershing, R&T, and the Program Banks may honor legal process that is served personally, by mail, or by facsimile transmission at any of their respective offices (including locations other than where the funds, records or property sought is held), even if the law requires personal delivery at the office where your Liquid Insured Deposits records are maintained.

Power & Authority: You represent and warrant that you have full power and authority to participate in the Program and to agree to and to perform these Terms and Conditions. In addition, if you are not an individual, you represent and warrant that (1) you are duly organized, validly existing and in good standing under the laws of its state or jurisdiction of organization, (2) you possess all requisite authority, power, licenses, permits, registrations and franchises and have made all governmental filings to conduct business wherever it conducts business and to execute, deliver and comply with you obligations hereunder and (3) your agreement to these Terms and Conditions and performance hereunder shall not conflict with or violate your governing documents or any law, regulation, decree, demand, order or any other contract or agreement to which it is subject.

R. General

Amendment: Pershing may modify these Terms and Conditions at any time by giving such notice as required by applicable law.

Waiver: Any provision of these Terms and Conditions may be waived if, but only if, such waiver is in writing and is signed by the party against whom the waiver is to be effective. No failure or delay by any party in exercising any right, power or privilege hereunder shall operate as a waiver thereof nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or privilege.

Severability: If any term, provision, covenant or restriction of these Terms and Conditions is held by a court of competent jurisdiction or other authority to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions of these Terms and Conditions shall remain in full force and effect and shall in no way be affected, impaired or invalidated

Entire Agreement: These Terms and Conditions and any other documents provided to you by Pershing or R&T in connection with the Program constitute the entire agreement with you regarding the Program, and supersedes all prior and contemporaneous agreements and understandings, both oral and written, with respect to the subject matter hereof. EXCEPT AS EXPRESSLY SET FORTH IN THESE TERMS AND CONDITIONS, NO REPRESENTATIONS OR WARRANTIES (ORAL OR WRITTEN, STATUTORY, EXPRESS, IMPLIED OR OTHERWISE) ARE MADE TO YOU REGARDING THE PROGRAM, INCLUDING, WITHOUT LIMITATION, AS TO MERCHANTABILITY, FITNESS FOR PURPOSE, CONFORMITY TO ANY DESCRIPTION OR REPRESENTATION, NON-INTERFERENCE OR NON-INFRINGEMENT. In the event of any inconsistency between a provision of these Terms and Conditions and a provision of any such other document provided to you in connection with the Program, the provision of these Terms and Conditions shall prevail.

Binding Effect: These Terms and Conditions shall inure to the benefit of and be binding upon the parties hereto and their respective permitted heirs, successors, legal representatives and assigns. Nothing in these Terms and Conditions, expressed or implied, is intended to confer on any person other than the parties hereto and R&T, and their respective permitted heirs, successors, legal representatives and assigns, any rights, remedies, obligations or liabilities under or by reason of these Terms and Conditions.

Governing Law: These Terms and Conditions are to be construed in accordance with and governed by the internal laws of the State of New York and the United States of America without giving effect to any choice of law rule that would cause the application of the laws of any other jurisdiction to the rights and duties of the parties. Unless otherwise provided herein, Pershing may comply with applicable clearinghouse, Federal Reserve and correspondent bank rules in processing transactions relating to your Liquid Insured Deposits. You agree that Pershing is not required to notify you of a change in those rules, except to the extent required by law.

Disputes: Except to the extent otherwise provided by applicable law, any action at law or in equity arising out of or relating to these Terms and Conditions shall be filed only in the courts of the State of New York in the City of New York, or in the United States District Court for the Southern District of New York, and you hereby consent and submit to the personal jurisdiction of such courts for the purposes of litigating any such action. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATED TO THESE TERMS AND CONDITIONS.

Interpretative Provisions: The headings herein are included for convenience of reference only and shall be ignored in the construction or interpretation hereof. Any singular term in these Terms and Conditions shall be deemed to include the plural, and any plural term the singular. Whenever the words "include", "includes" or "including" are used in these Terms and Conditions, they shall be deemed to be followed by the words "without limitation", whether or not they are in fact followed by those words or words of like import. References to any document provided to you or to any agreement or contract are to that document, agreement or contract as amended, modified or supplemented from time to time in accordance with the terms hereof or thereof. In any construction of the terms of these Terms and Conditions, the same shall not be construed against a party on the basis of that party being the drafter of such terms.

Version: May 2021

-*-*- Demonstration Page - Powered by OpenText Exstream, Version 16.3.0 64-bit -*-*-		