

Teachers Advisors, LLC

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This Brochure provides information about the qualifications and business practices of Teachers Advisors, LLC (“TAL”). If you have any questions about the contents of this Brochure, please contact us at (212) 490-9000. The information in this Brochure has not been approved or verified by the United States Securities and Exchange Commission or by any state securities authority.

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

TAL is a registered investment adviser. Registration of an investment adviser does not imply any certain level of skill or training.

Item 2 Material Changes

This Brochure dated April 23, 2020, contains updates from the previous annual update of this Brochure dated March 30, 2020 with respect to certain strategy names, but not material changes..

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Item 4 Advisory Business

Teachers Advisors, LLC (“TAL”) offers or provides its services to a wide range of client types including : (i) registered investment companies, including open-end and closed-end funds and other pooled investment vehicles (collectively, “Funds”), (ii) institutional asset management businesses including unregistered investment funds, separately managed accounts, insurance company separate accounts, insurance company general accounts, and pension plans, (iii) special purpose entities organized to issue collateralized debt obligations and collateralized loan obligations (collectively, “CDOs”), (iv) banking institutions, (v) Undertaking for Collective Investment in Transferable Securities (“UCITS”), (vi) individual and institutional separately managed account clients primarily through investment advisory programs including dual contract arrangements (“Retail SMA Accounts”), and (vii) Exchange Traded Funds (“ETFs”). Additionally, TAL provides investment allocation advice, portfolio analysis or strategy diligence services for affiliated and unaffiliated clients. From time to time, TAL provides portfolio recommendations to sponsors of unit investment trusts (“UITs”), which are sold by the sponsor through broker-dealers and other firms.

TAL is a subsidiary of Nuveen Finance, LLC, which is an indirect subsidiary of Nuveen, LLC (“Nuveen”). Nuveen is a subsidiary, and represents the Asset Management division, of Teachers Insurance and Annuity Association of America (“TIAA”), a leading financial services provider. TIAA constitutes the ultimate principal owner of TAL. TAL was incorporated on October 19, 1993 and registered with the SEC as an investment adviser on July 21, 1994. For additional information on the ownership structure, please see Form ADV Part 1, Schedules A and B, and Item 10.

TAL primarily provides its services on a discretionary basis but may also provide services on a non-discretionary and model portfolio basis.

TAL’s discretionary authority over an account is generally subject to directions, guidelines and limitations imposed by the client and, in the case of a Retail SMA Account, the program sponsor. TAL will endeavor to follow reasonable directions, investment guidelines and limitations. TAL reserves the right to decline to manage an account with investment restrictions that are unduly burdensome or materially incompatible with TAL’s investment approach.

As of December 31, 2019, TAL managed \$393,682,132,853 in discretionary assets under management and \$950,897,150 in non-discretionary assets under management.

Investment Advisory Services for Registered Investment Companies

Subject to the supervision of each client’s Board of Trustees, TAL provides management and certain administrative services necessary for the operation of its registered investment company clients, including open-end funds, closed-end funds and ETFs. TAL’s

responsibilities include, without limitation, investment advisory services, research services, recommending and placing of orders for the purchase and sale of securities for its registered investment company clients' portfolios (based on the investment objectives and needs of each client), supervising relationships with custodians, administrators, transfer and pricing agents, accountants, auditors, underwriters and other persons interacting with the clients, developing management and shareholder services, and furnishing reports, evaluations and analysis on a variety of subjects.

Investment Advisory Services for Institutional Asset Management

TAL provides asset management and related services to the institutional market. TAL manages unregistered investment funds, non-U.S. funds including UCITS, institutional separately managed accounts, insurance company separate accounts, insurance company general accounts, UITs and pension accounts utilizing equity, fixed-income, and other strategies. Additionally, TAL provides investment allocation advice, portfolio analysis or strategy diligence services to affiliated and unaffiliated clients. The research and investment staff responsible for the equity and fixed-income asset classes and strategies, as well as policies and procedures governing these investments and the unregistered products, are similar to that of TAL's registered investment company clients. TAL may outsource some of these services to unaffiliated third parties for a negotiated fee. TAL may, under certain circumstances, tailor advisory services to the needs of individual clients. Clients serviced by TAL may also impose restrictions on investing in certain securities or types of securities.

TAL provides investment management services for proprietary assets owned by TIAA under an investment management agreement with TIAA, which services include investment selection (subject to and in accordance with investment guidelines provided by TIAA), portfolio monitoring, trading and other investment-related services. The advice and services that TAL provides to TIAA cover a broad variety of publicly traded investments and derivatives activity, including cross-currency, interest rate and other derivatives activity.

TAL provides investment management services for proprietary assets owned by TIAA-CREF Life Insurance Company ("TC Life") under an investment management agreement with TIAA (appointing TAL as a sub-adviser with respect to the management of such TC Life assets), which services include investment selection (subject to and in accordance with investment guidelines provided by TIAA), portfolio monitoring, trading and other investment-related services. The advice and services that TAL provides to TIAA on behalf of the TC Life assets cover a broad variety of publicly traded investments.

CDO and CLO Advisory Services

TAL provides investment advisory, sub-advisory and supervisory services pursuant to management agreements to a number of special purpose entities organized to issue collateralized debt obligations and collateralized loan obligations (collectively, "CLOs"). CLOs

typically issue securities collateralized by a portfolio of securities, loans and/or other assets. As a provider of advisory services, TAL performs a number of functions including advising the CLOs on the acquisition and disposition of collateral, subject to the investment criteria and trading restrictions applicable to the CLO, and monitoring the performance of the CLO's portfolio. The scope of these advisory functions is delineated in each CLO's advisory agreement. The investors in CLOs are typically institutional investors such as insurance companies, pension funds and commercial banks with whom TAL or its affiliates may have other business relations. For example, TIAA, the parent of TAL may have co-invested monies with these investors and/or these investors may have invested monies as seed capital in Funds for which TAL acts as investment adviser. These investors, as a result, may be deemed to have a controlling interest in the applicable CLOs or Funds while such co-investment and/or seed capital is invested. CLO clients may impose restrictions on investing in certain types of securities, subject to limitations and conditions prescribed by the applicable indenture.

Banking Advisory Services

TAL provides limited investment advice as well as portfolio monitoring, trading and other investment-related services for proprietary assets owned by the TIAA, FSB (the "Bank") under an investment services agreement with the Bank. The advice and services that TAL provides to the Bank covers certain types of broadly syndicated commercial and industrial bank loans.

Separately Managed Account Program Clients ("Retail SMA Accounts")

TAL provides investment advisory services to separately managed account clients ("Retail SMA Accounts") primarily through investment advisory programs including dual contract arrangements. In a dual contract program, TAL provides its advisory services pursuant to an advisory agreement directly with the client. A client may separately arrange with one or more third parties for custody, financial advisory and certain trading services to be provided on a partially-bundled or unbundled basis. In a partially-bundled program, certain of such services (typically custody, financial advisory, and certain trading) are provided for a bundled fee arrangement. In an unbundled arrangement, such services are contracted, provided and paid for separately.

For Retail SMA Accounts, TAL is appointed to act as an investment adviser through a process generally administered or assisted by the program sponsor. Clients participating in a program, generally with assistance from the sponsor, may select TAL to provide investment advisory services for their account (or a portion thereof) for a particular strategy. TAL provides investment advisory services based upon the particular needs of the program client as reflected in information provided to TAL by the sponsor, and will generally make its representatives available for communication as reasonably requested by clients and/or sponsors. For certain Retail SMA Accounts, administrative support is provided by Nuveen Services, LLC, a division of Nuveen Investments Holdings, Inc., a TAL affiliate. See Item 10.

Clients are encouraged to consult their own financial advisors and legal and tax professionals on an initial and continuous basis in connection with selecting and engaging the services of an investment manager for a particular strategy and participating in a managed account program. In the course of providing services to Retail SMA Accounts who have financial advisors, TAL generally relies on information or directions communicated by the financial advisor acting with apparent authority on behalf of its client.

TAL has a process for executing specific transactions in a client's account for tax reasons. Under this process, TAL will generally follow the directions of a client or its financial advisor regarding harvesting tax losses or gains, subject to certain scope, amount and timing limitations. Generally, the directions entail a repurchase of the sold security after the "wash sale" (thirty (30) day period (e.g., in the case of equities)), or a purchase of another appropriate security (e.g., in the case of municipal bonds). TAL generally relies in good faith on directions communicated by a financial advisor acting with apparent authority on behalf of its client.

In providing such directions, the client and its financial advisor are responsible for understanding the merits and consequences of their directions in light of the client's particular tax situation. Daily market fluctuations may affect the dollar amount of gain or loss with respect to certain investment decisions. The monetary benefit derived from tax loss selling, for example, may not exceed the risk of not being fully invested during that time. Executing tax sales (and repurchases) may adversely affect performance. TAL is not a tax advisor, and therefore clients should consult with their tax specialist to review their particular tax situation.

TAL may invest in exchange traded funds or other pooled vehicles, including during the wash sale period. Exchange traded funds and other funds have certain imbedded costs, including management fees, of which the client account will bear a proportionate share while it is invested in the exchange traded fund or other fund.

TAL may provide or make available at no charge various reports or materials to certain managed account program sponsors and other financial intermediaries who typically use TAL services and products. These reports may analyze a prospective client's current holdings or show the effect of performance of a TAL composite over a particular time period in a manner directed by the sponsor or intermediary. Such reports are not intended to constitute investment advice, research or recommendations.

For certain strategies, TAL provides certain non-discretionary investment services to clients who may include banks, broker-dealers and other financial services firms (including UIT sponsors), and other investors. Such services may include asset allocation advice, equity and fixed income research and model portfolio recommendations for a variety of investment styles. Model portfolios may relate to the same or different strategies that are also offered or utilized through discretionary accounts.

The recommendations implicit in the model portfolios provided to a program sponsor or overlay manager may reflect recommendations being made by TAL contemporaneously to, or investment advisory decisions made contemporaneously for, similarly situated discretionary clients of TAL. As a result, TAL may have already commenced trading for its discretionary client accounts before the sponsor or overlay manager has received or had the opportunity to evaluate or act on TAL's recommendations. In this circumstance, trades ultimately placed by the sponsor or overlay manager for its clients may be subject to price movements, particularly with large orders or where the securities are thinly traded, that may result in model-based program clients receiving prices that are less favorable than the prices obtained by TAL for its discretionary client accounts. On the other hand, the sponsor or overlay manager may initiate trading based on TAL's recommendations before or at the same time TAL is also trading for its discretionary client accounts. Particularly with large orders or where the securities are thinly traded, this could result in TAL's discretionary clients receiving prices that are less favorable than prices that might otherwise have been obtained absent the sponsor or overlay manager's trading activity. Because TAL does not control the sponsor or overlay manager's execution of transactions for the sponsor or overlay manager's client accounts, TAL cannot control the market impact of such transactions to the same extent that it would for its discretionary client accounts.

Where TAL participates in model-based managed accounts programs, the model-based program sponsor or overlay manager is generally responsible for investment decisions and performing many other services and functions typically handled by TAL in a traditional discretionary managed account program. Depending on the particular facts and circumstances, TAL may or may not have an advisory relationship with model-based program clients. To the extent that this Form ADV Part 2A is delivered to program clients with whom TAL has no advisory relationship or under circumstances where it is not legally required to be delivered, it is provided for informational purposes only. Furthermore, because a model-based program sponsor or overlay manager generally exercises investment discretion and, in many cases, brokerage discretion, performance and other information relating to TAL's services for which it exercises investment and/or brokerage discretion is generally provided for informational purposes only, and may not be representative of model-based program client results or experience. TAL is not responsible for overseeing the provision of services by a model-based program sponsor and cannot assure the quality of its services.

Multi-Asset Class Investments

TAL provides investment services and strategies to Funds, defined benefit pension plans, foundations and endowments, insurance company separate accounts and general accounts, and other institutional investors or financial intermediaries, primarily in the areas of multi-asset class solutions, structured portfolio solutions including volatility management and option overlay. Depending on the mandate, services may include discretionary or non-discretionary portfolio management services; model portfolio creation and management; allocation services; analysis; research; modeling and scenario analysis; assisting in the

development of or making recommendations regarding investment objectives, strategies, or metrics; and/or coordination among underlying investment strategies. These services are generally developed in close consultation with a client and/or its advisers, and, depending on the mandate, are provided on a discretionary, non-discretionary or consulting basis.

Conflicts of interest may arise given the multiple potential services that TAL may provide. See Item 8 and 10.

TAL generally provides advisory services to account strategies that contemplate, with respect to all or a material portion of an account, an allocation to affiliated Funds, affiliated products and/or affiliated advisers, including TAL. This structure results in more aggregate revenue to TAL and its affiliates than would result from an allocation to unaffiliated Funds, products and/or advisers.

TAL offers a broad range of strategic and tactical allocation and related investment management and administrative services, which can vary widely depending on the particular arrangement. TAL will propose, select and/or invest in or through other Funds and/or subadvisers, on a discretionary, non-discretionary and/or model portfolio basis. Allocations are generally to Funds, including Funds advised by advisers under common control with TAL (i.e., affiliated Funds), and/or through separate accounts advised by subadvisers, including subadvisers under common control with TAL (i.e., affiliated subadvisers). TAL also may use unaffiliated strategies, including both Funds and separate accounts and/or subadvisers and other securities and investments, depending on the arrangement. TAL generally provides advisory services to multi-asset class account strategies that contemplate, with respect to all or a material portion of an account, an allocation to affiliated Funds, affiliated products and/or affiliated advisers, including TAL. This structure results in more aggregate revenue to TAL and its affiliates than would result from an allocation to unaffiliated Funds, products and/or advisers. Certain allocation strategies also include the use of derivatives. Some allocation strategies are diversified across numerous asset classes whereas others are concentrated in particular asset classes or market segments. In certain designated strategies, TAL may consider the impact of taxation and seek to create tax efficiencies. Allocation services can reflect a wide range of approaches, including, without limitation: an active (or tactical) approach with changes to allocations and portfolio composition in response to the views of TAL and factors such as changing market and economic conditions and sentiments; a less active (or strategic) approach with rebalancing to a fixed target allocation on a periodic basis or within bands of tolerance; or more limited services that may or may not include subsequent portfolio changes or rebalancing. Some services are more administrative in nature, and do not reflect the exercise of investment discretion.

Item 5 Fees and Compensation

The specific manner in which fees are charged by TAL is established in a client's written agreement with TAL. In general, fees paid to TAL for its services are also described below.

Registered Investment Companies (excluding ETFs and Closed-end Funds)

TAL asset management fees for its registered investment company clients are as follows:

- for international Funds between 4 and 84 basis points
- for fixed-income Funds between 7 and 40 basis points
- for U.S. equity Funds between 4 and 45 basis points
- for real estate Funds approximately 48 basis points
- for funds of funds between 0 and 50 basis points
(excludes fees and expenses of underlying fund investments)
- for money market Funds approximately 10 basis points
- for life Funds between 6 and 50 basis points

Some of these fees include expenses for services other than management of the Funds.

Other fees such as 12b-1 fees are normally paid by the registered investment companies. Service fees for the Funds are paid to the Funds' distributor, Nuveen Securities, LLC, by TAL.

The Investment Management Agreement between TAL and its registered investment company clients is subject to approval by the Board of Trustees of each investment company. TAL's fees under such Investment Management Agreements are set forth in the registration statement and other documents of such investment companies on file with the SEC.

Additionally, the Investment Management Agreements between TAL and its registered investment company clients may be terminated at any time as to any fund or to all Funds, without the payment of any penalty, by the Board of Trustees of the investment company, or by a vote of a majority of the outstanding votes attributable to the shares of the applicable fund, or by TAL, on 60 days' written notice to the other party. The Agreements automatically terminate in the event of their assignment. In the event of termination of the Agreements, all compensation due will be calculated on a pro-rated basis through the date of termination and

paid within fifteen business days of the date of termination.

In general, TAL's fees for its registered investment companies are exclusive of transaction costs, such as brokerage commissions related to buying and selling securities. Clients may incur other charges imposed by custodians, brokers, distributors and other third parties such as deferred sales charges, odd-lot differentials, transfer taxes, wire transfer and electronic fund fees, and other fees and taxes on securities transactions. Those charges, fees and commissions are in addition to TAL's fee and TAL shall not receive any portion of the commissions, fees and costs (other than in situations where TAL invests clients assets in a fund for which it serves as investment adviser).

Regarding investments in investment companies, when a Fund invests in other investment companies such as mutual funds and exchange traded funds, the Fund bears a proportionate share of expenses charged by the investment company in which it invests.

The internal management fees are disclosed in a Fund's prospectus and Item 12 further describes the factors that TAL considers in selecting or recommending broker-dealers for client transactions and determining the reasonableness of their compensation (e.g., commissions).

Advisory Fees for Certain Funds

Fees for advisory services provided to certain Funds (e.g., ETFs, UCITS, Closed-End, UITs, etc.) are separately negotiated between TAL and the third-party or affiliated investment adviser. Fees are generally based on a percentage of assets under management. These fees are disclosed in the relevant prospectus or offering documents.

Institutional Asset Management Fees

TAL acts as an investment adviser to its institutional business advisory clients unregistered investment funds and separately managed accounts (collectively, "Institutional Clients") and receives fees for such services at a negotiated rate based on each investment vehicle's particular investments and circumstances. Fees for such services are set forth in the Confidential Private Placement Memorandum, prospectus or other relevant offering document or applicable governing, operating or investment management agreement. Institutional Clients each have their own investment parameters as described in their offering materials and will typically have minimum investment levels and may offer breakpoints on fees for larger investments. In addition, Institutional Clients incur other charges imposed by custodians, administrators, brokers, distributors and other third parties. These charges, fees and commissions are in addition to TAL's management fee.

TIAA-CREF Real Property Fund LP

60 basis points of average NAV

The management fee is payable quarterly in arrears. The Fund shall also reimburse TAL for certain administrative expenses associated with operation of the Fund up to a cap of 0.10% of the average NAV of the Fund. The Fund is currently expected to be made available solely to registered management investment companies or series thereof that are advised by TAL. The Fund has entered into a sub-advisory agreement with Nuveen Alternatives Advisors, LLC (NAA). TAL will pay the sub-advisory fee to NAA based on the agreement.

Separately Managed Accounts and Fees

TAL charges its clients management fees for all separately managed accounts. Most separate accounts use fee schedules which include breakpoints based on assets under management within the account and include annual minimum fees; withdrawals or market movement may adversely affect the effective fee rate. Other fee and breakpoint structures may be used from time to time. The custodian for each account will deduct the fees that are due to TAL on a quarterly basis (or more frequently, as determined by the investment management agreement) and are calculated as a percentage of average daily net assets.

The base schedules charged by TAL are listed below:

Institutional Separately Managed Account Fees

TAL bills its clients for the management fees for all existing institutional separately managed accounts. The basic fee schedules charged by TAL for institutional separately managed accounts are as follows (based on a percentage of the average daily net assets of each account):

EQUITY SEPARATE ACCOUNT MANDATES	
Emerging Markets Equity	
Minimum account size	\$50 million
Minimum annual fee	\$420,000
<u>Breakpoint Schedule</u>	
First \$50 million	84 basis points
Next \$50 million	82 basis points
Over \$100 million	80 basis points
Global Equity Income	
Minimum account size	\$50 million
Minimum annual fee	\$370,000

<u>Breakpoint Schedule</u>	
First \$50 million	74 basis points
Next \$50 million	72 basis points
Over \$100 million	70 basis points
Growth and Income	
Minimum account size	\$50 million
Minimum annual fee	\$220,000
<u>Breakpoint Schedule</u>	
First \$50 million	44 basis points
Next \$50 million	42 basis points
Over \$100 million	40 basis points
International Equity	
Minimum account size	\$50 million
Minimum annual fee	\$245,000
<u>Breakpoint Schedule</u>	
First \$50 million	49 basis points
Next \$50 million	47 basis points
Over \$100 million	45 basis points
Quant International Equity	
Minimum account size	\$50 million
Minimum annual fee	\$195,000
<u>Breakpoint Schedule</u>	
First \$50 million	39 basis points
Next \$50 million	37 basis points
Over \$100million	35 basis points
International Opportunities	
Minimum account size	\$50 million
Minimum annual fee	\$295,000
<u>Breakpoint Schedule</u>	
First \$50 million	59 basis points

Next \$50 million	57 basis points
Over \$100 million	55 basis points
Quant International Small-Cap Equity	
Minimum account size	\$50 million
Minimum annual fee	\$320,000
<u>Breakpoint Schedule</u>	
First \$50 million	64 basis points
Next \$50 million	62 basis points
Over \$100 million	60 basis points
Large-Cap Core Equity	
Minimum account size	\$50 million
Minimum annual fee	\$220,000

<u>Breakpoint Schedule</u>	
First \$50 million	44 basis points
Next \$50 million	42 basis points
Over \$100 million	40 basis points
Quant Large-Cap Growth	
Minimum account size	\$50 million
Minimum annual fee	\$170,000
<u>Breakpoint Schedule</u>	
First \$50 million	34 basis points
Next \$50 million	32 basis points
Over \$100 million	30 basis points
Quant Large-Cap Value	
Minimum account size	\$50 million
Minimum annual fee	\$170,000
<u>Breakpoint Schedule</u>	
First \$50 million	34 basis points
Next \$50 million	32 basis points
Over \$100 million	30 basis points
Large-Cap Growth	
Minimum account size	\$50 million
Minimum annual fee	\$220,000
<u>Breakpoint Schedule</u>	
First \$50 million	44 basis points
Next \$50 million	42 basis points
Over \$100 million	40 basis points
Large-Cap Value	
Minimum account size	\$50 million
Minimum annual fee	\$220,000
<u>Breakpoint Schedule</u>	

First \$50 million	44 basis points
Next \$50 million	42 basis points
Over \$100 million	40 basis points
Mid-Cap Growth	
Minimum account size	\$50 million
Minimum annual fee	\$235,000
<u>Breakpoint Schedule</u>	
First \$50 million	47 basis points
Next \$50 million	45 basis points
Over \$100 million	43 basis points
Mid-Cap Value	
Minimum account size	\$50 million
Minimum annual fee	\$235,000
<u>Breakpoint Schedule</u>	
First \$50 million	47 basis points
Next \$50 million	45 basis points
Over \$100 million	43 basis points
Real Estate Securities	
Minimum account size	\$50 million
Minimum annual fee	\$245,000
<u>Breakpoint Schedule</u>	
First \$50 million	49 basis points
Next \$50 million	47 basis points
Over \$100 million	45 basis points
Quant Small-Cap Equity	
Minimum account size	\$50 million
Minimum annual fee	\$225,000
<u>Breakpoint Schedule</u>	
First \$50 million	45 basis points

Next \$50 million	43 basis points
Over \$100 million	41 basis points
Quant Small/Mid-Cap Equity	
Minimum account size	\$50 million
Minimum annual fee	\$225,000
<u>Breakpoint Schedule</u>	
First \$50 million	45 basis points
Next \$50 million	43 basis points
Over \$100 million	41 basis points
Social Choice International Equity	
Minimum account size	\$50 million
Minimum annual fee	\$145,000
<u>Breakpoint Schedule</u>	
First \$50 million	29 basis points
Next \$50 million	27 basis points
Over \$100 million	25 basis points
Social Choice Low Carbon Equity	
Minimum account size	\$50 million
Minimum annual fee	\$120,000
<u>Breakpoint Schedule</u>	
First \$50 million	24 basis points
Next \$50 million	22 basis points
Over \$100 million	20 basis points
Socially Responsible Equity	
Minimum account size	\$100 million
Minimum annual fee	\$150,000
<u>Breakpoint Schedule</u>	
First \$100 million	15 basis points
Next \$150 million	14 basis points

Over \$250 million	13 basis points
FIXED INCOME SEPARATE ACCOUNT MANDATES	
CAT Bond	
Minimum account size	\$100 million
Minimum annual fee	\$1,000,000
<u>Breakpoint Schedule</u>	
First \$100 million	100 basis points
Next \$50 million	95 basis points
Over \$150 million	90 basis points
Core Fixed Income	
Minimum account size	\$50 million
Minimum annual fee	\$145,000
<u>Breakpoint Schedule</u>	
First \$50 million	29 basis points
Next \$50 million	27 basis points
Over \$100 million	25 basis points
Core Plus Fixed Income	
Minimum account size	\$50 million
Minimum annual fee	\$145,000
<u>Breakpoint Schedule</u>	
First \$50 million	29 basis points
Next \$50 million	27 basis points
Over \$100 million	25 basis points
Emerging Markets Debt	
Minimum account size	\$50 million
Minimum annual fee	\$270,000
<u>Breakpoint Schedule</u>	
First \$50 million	54 basis points
Next \$50 million	52 basis points

Over \$100 million	50 basis points
Emerging Markets Debt Local Currency	
Minimum account size	\$100 million
Minimum annual fee	\$650,000
<u>Breakpoint schedule</u>	
First \$100 million	65 basis points
Next \$50 million	60 basis points
Over \$150 million	55 basis points
Green Bond	
Minimum account size	\$50 million
Minimum annual fee	\$195,000
<u>Breakpoint Schedule</u>	
First \$50 million	39 basis points
Next \$50 million	37 basis points
Over \$100 million	35 basis points
High Yield BB-B Constrained	
Minimum account size	\$50 million
Minimum annual fee	\$170,000
<u>Breakpoint Schedule</u>	
First \$50 million	34 basis points
Next \$50 million	32 basis points
Over \$100 million	30 basis points
Inflation-Linked Bond	
Minimum account size	\$50 million
Minimum annual fee	\$120,000
<u>Breakpoint Schedule</u>	
First \$50 million	24 basis points
Next \$50 million	22 basis points
Over \$100 million	20 basis points

International Bond	
Minimum account size	\$50 million
Minimum annual fee	\$245,000
<u>Breakpoint Schedule</u>	
First \$50 million	49 basis points
Next \$50 million	47 basis points
Over \$100 million	45 basis points
Leveraged Loans	
Minimum account size	\$100 million
Minimum annual fee	\$500,000
<u>Breakpoint Schedule</u>	
First \$100 million	50 basis points
Next \$50 million	48 basis points
Over \$150 million	46 basis points
Non-Agency Mortgaged Back Securities	
Minimum account size	\$100 million
Minimum annual fee	\$300,000
<u>Breakpoint Schedule</u>	
First \$100 million	30 basis points
Next \$50 million	28 basis points
Over \$150 million	26 basis points
Short-Duration Impact Bond	
Minimum account size	\$50 million
Minimum annual fee	\$145,000
<u>Breakpoint Schedule</u>	
First \$50 million	29 basis points
Next \$50 million	27 basis points
Over \$100 million	25 basis points

Short-Term Bond	
Minimum account size	\$50 million
Minimum annual fee	\$120,000
<u>Breakpoint Schedule</u>	
First \$50 million	24 basis points
Next \$50 million	22 basis points
Over \$100 million	20 basis points
Core Impact Bond	
Minimum account size	\$50 million
Minimum annual fee	\$170,000
<u>Breakpoint Schedule</u>	
First \$50 million	34 basis points
Next \$50 million	32 basis points
Over \$100 million	30 basis points
5-15 Year Laddered Tax-Exempt Bond	
Minimum account size	\$50 million
Minimum annual fee	\$120,000
<u>Breakpoint Schedule</u>	
First \$50 million	24 basis points
Next \$50 million	22 basis points
Over \$100 million	20 basis points

CLO Fees

TAL's fees in connection with CLO investment advisory services are generally based on the principal amount of the collateral securities and other assets under management and are separately negotiated in each transaction. Consequently, fees in such transactions will vary. Such fees are generally not directly charged to investors but are payable from cash flow derived from the CLO's assets during the applicable period. Such fees are payable in accordance with the "Priority of Payments" for each CLO, which establishes the priority with which cash flow generated by the CLO's portfolio is applied to payments to CLO investors and service providers to the CLO.

The fee structure for CLOs frequently consists of a base management fee that is payable prior to any payments to CLO investors, and a management fee that is subordinate to payments to CLO senior note holders. An additional management fee may be negotiated that is payable once the subordinated and/or equity investors have received a specified internal rate of return.

The fee structure for CLO collateral management fees typically consists of: (i) a base management fee of up to 30 basis points of the principal balance of the CLO portfolio; and (ii) a subordinated management fee of up to 40 basis points of the principal balance of the CLO's portfolio. There may be a 20% incentive fee which becomes payable to TAL if the IRR (internal rate of return) of the applicable CLO is 12% or higher; and only on the portion above 12%. TAL charges a fee of up to 20 basis points for monitoring services on a limited basis to specific clients.

Retail SMA Accounts

For Retail SMA Accounts offered through dual contract programs, TAL and sponsors each charge their fees separately. Fees charged to dual contract accounts are individually contracted between TAL and the client.

For Retail SMA Accounts, TAL's fees are generally payable quarterly or at such other times as agreed upon by the parties involved based upon the market value of assets in the account on the date of valuation. Payment arrangements, including the timing (in advance or in arrears) and billing procedures (which may include sending an invoice and/or deduction of fees), will be agreed upon by TAL and the client.

Certain dual contract program sponsors collect and remit TAL's fee to TAL separately.

Generally, if an account is opened or closed during a billing period, the advisory fees are prorated for that portion of the billing period during which the account was open.

See also Item 15.

Advisory Fees for Non-Discretionary Accounts and Model Portfolio Advice

These services are furnished for a negotiated fee paid by the purchaser.

Advisory Fees for Multi-Asset Class Services

Fees for Multi-Asset Class Services are negotiated.

Additional Fee Disclosure

Regarding TAL's fees in general, from time to time, TAL may enter into negotiated fee

arrangements that, in light of a particular investor's special circumstances, may result in fee schedules that differ from the usual basic fee schedules. Such circumstances may include, without limitation, the type of relationship such client has with TAL; the complexity and extent of services provided; whether a new account is expected to grow rapidly; the number of different accounts and total assets under management or custody for that client (and its affiliates); the investment product mix selected by the client, and other circumstances or factors that TAL deems relevant. Fees paid by certain clients who are qualified purchasers, including affiliates of TAL, are negotiable.

From time to time, a client may instruct TAL to suspend investment management services for their accounts for a period of time. Such accounts will generally be unmanaged during such time. TAL generally charges standard fees for all or a portion of such time to reflect the administrative costs associated with implementing such instructions. Termination provisions vary by contract. Typically, a client or TAL generally may terminate its agreement at any time by providing thirty (30) days written notice. To the extent a client's investment management agreement for a dual contract Retail SMA Account provides that TAL's fees are to be paid in advance, the unearned portion of such fees will be refunded to the client upon termination of the service.

TAL supervised persons and related sales personnel typically market TAL's investment capabilities to various prospects and intermediaries. TAL's investment capabilities are available directly through provision of investment advisory services (through institutional separately managed accounts and Retail SMA Accounts), or indirectly by investment in TIAA-CREF Funds advised or sub-advised by TAL. TAL supervised persons and related sales personnel may be internally compensated for successful marketing or selling activities with respect to TAL's investment advisory services.

Investors in TIAA-CREF Funds advised or sub-advised by TAL will not be advisory clients of TAL, and TAL will not provide investment advice or recommendations with respect to the merits and suitability of the particular investment and investment decision for the particular investor. Investors in TIAA-CREF Funds are encouraged to consult their own financial, tax and legal advisors regarding such decisions. TIAA-CREF Fund shares are available through many unaffiliated broker-dealers and other financial services firms.

Item 6 Performance-Based Fees and Side-By-Side Management

TAL may charge a 20% incentive fee which becomes payable if the IRR (internal rate of return) of the applicable CLO is 12% or higher, and only on the portion above 12%. TAL does not engage in side-by-side management.

Item 7 Types of Clients

TAL offers or provides its services to a wide range of client types including: (i) registered investment companies, (ii) institutional asset management businesses including unregistered investment funds, investment advisers, insurance company separate accounts, insurance company general accounts, trust accounts and pension plans, (iii) special purpose entities organized to issue collateralized debt obligations and collateralized loan obligations (collectively, “CDOs”), (iv) banking institutions, (v) Undertaking for Collective Investment in Transferable Securities (“UCITS”), (vi) individual and institutional separately managed account clients primarily through investment advisory programs including dual contract arrangements (“Retail SMA Accounts”), and (vii) Exchange Traded Funds (“ETFs”). Additionally, from time to time, TAL provides investment allocation advice, portfolio analysis or strategy diligence services for affiliated and unaffiliated clients. From time to time, TAL provides portfolio recommendations to sponsors of unit investment trusts (“UITs”), which are sold by the sponsor through broker-dealers and other firms.

Please refer to Item 5 for the minimum account sizes of TAL’s institutional separately managed accounts. The minimum account size for its registered investment companies, unregistered investment funds, insurance company separate accounts and CDOs clients are as follows:

TIAA-CREF Funds (Institutional, Advisor, Premier, Retirement, Retail Share Classes and Class W)

- Minimum initial investment starts at \$2 million and the minimum subsequent investment is \$1000 for Institutional Class shares, unless an investor purchases shares by or through financial intermediaries that have entered into an appropriate agreement with a Fund or its affiliates
- No minimum initial or subsequent investment for Advisor Class shares. Advisor Class shares are primarily offered through certain financial intermediaries and employer-sponsored employee benefit plan
- No minimum initial or subsequent investment requirement for Premier Class shares. Premier Class shares are offered through certain financial intermediaries and employer-sponsored employee benefit plans
- No minimum initial or subsequent investment requirement for Retirement Class shares. Retirement Class shares are offered through employer-sponsored employee benefit plans
- Minimum initial investment for Retail Class shares is \$2000 for Traditional IRA, Roth

IRA and Coverdell accounts and \$2500 for all other account types. Subsequent investments for all account types must be at least \$100. Retail Class shares are available for purchase through certain financial intermediaries or by contacting the Funds directly

- No minimum initial or subsequent investment requirement for Class W shares. Class W shares are available for purchase directly from the Funds advised by TAL or its affiliates or other advisory clients or accounts of TAL or its affiliate that have entered into an arrangement with TAL to share expenses allocable to Class W

TIAA-CREF Life Funds

- Requirements for the purchase and sale of these underlying Funds for variable insurance products are provided by the insurance companies issuing the product

Closed-end Fund

- Minimum investment requirement is 100 common shares (\$1,000)

ETFs

- There are no minimum requirements for this client

UCITS

- Minimum initial investment for A and C share class is \$5,000. Class A Shares are generally offered to retail investors; Class C Shares may be offered for distribution through certain dealers at the discretion of the distributor
- Minimum initial investment for I share class is \$1,000,000. Class I Shares are only offered to institutional investors in certain limited circumstances at the discretion of the distributor
- Minimum initial investment for P share class is \$5,000,000. Class P Shares are offered for distribution in certain countries and/or through certain dealers at the discretion of the distributor
- Minimum subsequent investment for all share classes is \$5,000
- Minimum and subsequent investment may be waived or reduced at the discretion of the UCITS's directors

UITs

- Minimum investment for brokerage accounts is \$1000 (100 units)
- Minimum investment for IRA accounts is \$250 (25 units)
- Distributors may at their discretion accept subscriptions for lesser amounts

CLOs

- In general, investors must be Qualified Purchasers, as such term is defined in the Investment Company Act of 1940, as amended (the “Investment Company Act”)

TIAA Separate Account VA-1

- This product is not currently accepting new investors.

TC Life Stable Value Separate Account

- Minimum funding for this separate account is based upon the insurance company issuing the Stable Value Account product negotiations with its Stable Value Account client

Retail SMA Accounts

- For Retail SMA Accounts, TAL typically requires a minimum account of \$100,000 for equity and asset allocation strategies and \$250,000 for fixed income strategies, although the specific minimum account size varies by program. TAL may waive these minimums based on client type, asset class, pre-existing relationship with client and other factors. For certain accounts, a negotiated minimum annual fee applies.

Item 8 Methods of Analysis, Investment Strategies and Risk of Loss

TAL may use a variety of different analytic methods and investment strategies, depending on the nature of the Fund or account it is managing. This section first describes the analytical methods TAL uses and, then separately, the investment strategies (which may refer to analytic methods) and their associated risks.

Methods of Analysis

Active Management

For the equity portfolios, TAL invests in securities it believes have the potential for capital appreciation, growth, and appear undervalued by the market based on evaluation of their potential worth. TAL generally looks for companies that it believes are leaders in their respective industries, with sustainable competitive advantages. TAL also looks for companies that it believes have management teams that are dedicated to creating shareholder value. For the fixed income portfolios, TAL conducts its own credit analysis, paying particular attention to economic trends and other market events to construct a portfolio of securities that is diversified, as applicable, by industry, maturity, duration, credit quality and country.

Quant Indexing

TAL actively uses quantitative analysis to attempt to enhance a Fund's performance relative to an index, while retaining a similar risk profile, instead of passively holding a representative basket of securities designed to match the index. TAL uses proprietary quantitative models, or models utilizing econometric and mathematical techniques, based on financial and investment theories to evaluate and score a broad universe of stocks in which a Fund invests. These models typically weigh many different variables, including the valuation of the individual stocks versus the market or its peers, future earnings and sustainable growth prospects, and the price and volume trends of the stock. The score is used to form the portfolio, and the following additional inputs may also be considered: weightings of the stock and its corresponding sector in the benchmark, correlation of the stocks in the universe and trading costs. The overall goal is to build a portfolio of stocks that generate favorable long-term total return, while also managing the relative risk of a Fund versus its benchmark index.

Pure Indexing

TAL may use investment techniques designed to track various segments of the component indices of a Fund's benchmark index. Funds using this technique may not invest in all securities in the indices comprising the Funds' composite benchmark, but rather may use a sampling approach to create a portfolio that closely matches the overall characteristics of the relevant

segments of the underlying indices.

ESG Criteria

Nuveen, the asset management division of TIAA, has adopted certain principles on responsible investing at the enterprise level. NAM generally endeavors to consider environmental, social and governance (ESG) factors as part of investment research and portfolio construction. TAL does not undertake to apply specific requirements in this regard, and the degree to which ESG factors are integrated largely depends on the particular portfolio management team, strategy and account-level guidelines and requirements, and may vary materially. Unless a strategy expressly undertakes to employ ESG, green, or other responsible investing factors, TAL will not necessarily include in or exclude from portfolios certain securities, industries or sectors based solely on such criteria.

The ESG criteria are generally implemented based on data provided by independent research vendor(s). In those limited cases where independent ESG criteria are not available for certain types of securities or for certain issuers, these securities may nonetheless be eligible should they meet certain internal ESG criteria.

With respect to equity or fixed-income investments, the corporate evaluation process favors companies with leadership in ESG performance relative to their peers. Typically, environmental assessment categories include climate change, natural resource use, waste management and environmental opportunities. Social evaluation categories include human capital, product safety and social opportunities. Governance assessment categories include corporate governance, business ethics and government & public policy. How well companies adhere to international norms and principles and involvement in major ESG controversies (examples of which may relate to the environment, customers, human rights & community, labor rights & supply chain, and governance) are other considerations. The ESG evaluation process with respect to corporate issuers is conducted on an industry-specific basis and involves the identification of key performance indicators, which are given more or less relative weight compared to the broader range of potential assessment categories. When ESG concerns exist, the evaluation process gives careful consideration to how companies address the risks and opportunities they face in the context of their sector or industry and relative to their peers. ESG criteria will generally preclude investment in companies significantly involved in certain business activities including, but not limited to, the production of alcohol, tobacco, military weapons, firearms, nuclear power, thermal coal, and gambling products and services.

The ESG evaluation process with respect to government issuers of fixed-income investments favors issuers with leadership in ESG performance relative to all peers. Typically, environmental assessment categories include the issuer's ability to protect, harness, and supplement its natural resources, and to manage environmental vulnerabilities and externalities. Social assessment categories include the issuer's ability to develop a healthy,

productive, and stable workforce and knowledge capital, and to create a supportive economic environment. Governance assessment categories include the issuer's institutional capacity to support long-term stability and well-functioning financial, judicial, and political systems, and capacity to address environmental and social risks. The government ESG evaluation process is conducted on a global basis and reflects how an issuer's exposure to and management of ESG risk factors may affect the long-term sustainability of its economy.

Impact Framework

TAL has developed a proprietary Impact framework which seeks to identify investments that provide direct exposure to issuers and/or individual projects with social or environmental benefits. Impact investments generally consist of publicly traded fixed-income securities that finance initiatives in areas including affordable housing, community and economic development, renewable energy and climate change, and natural resources. These investments will be selected based on the same financial criteria used by TAL in selecting the fund or account's other fixed-income investments. The portion of the fund or account invested in accordance with TAL's proprietary Impact framework is not additionally subject to ESG criteria provided by a third party.

Investment Strategies

Asset Allocation

- **Managed Allocation** – Seeks favorable returns that reflect the broad investment performance of the financial markets through capital appreciation and investment income. The Fund will pursue this goal through a “fund of funds” approach, whereby the Fund will make investments primarily in other mutual funds.

U.S. Equity

- **Equity Index** – Seeks a favorable long-term total return, mainly through capital appreciation, by investing primarily in a portfolio of equity securities selected to track the overall U.S. equity markets based on a market index.
- **Growth and Income** – Seeks a favorable long-term total return, through both capital appreciation and investment income, primarily from income-producing equity securities.
- **Large-Cap Growth** – Seeks a favorable long-term return, mainly through capital appreciation, primarily from equity securities.
- **Large-Cap Growth Index** – Seeks a favorable long-term total return, mainly through capital appreciation, by investing primarily in a portfolio of equity securities of large

domestic growth companies based on a market index.

- **Large-Cap Value** – Seeks a favorable long-term total return, mainly through capital appreciation, primarily from equity securities of large domestic companies.
- **Large-Cap Value Index** – a favorable long-term total return, mainly through capital appreciation, by investing primarily in a portfolio of equity securities of large domestic value companies based on a market index.
- **Mid-Cap Growth** – Seeks a favorable long-term total return, mainly through capital appreciation, primarily from equity securities of medium-sized domestic companies.
- **Mid-Cap Value** – Seeks a favorable long-term total return, mainly through capital appreciation, primarily from equity securities of medium-sized domestic companies.
- **Quant Large-Cap Growth** – Seeks a favorable long-term total return, mainly through capital appreciation, primarily from equity securities of large domestic companies.
- **Quant Large-Cap Value** – Seeks a favorable long-term total return, mainly through capital appreciation, primarily from equity securities of large domestic companies.
- **Quant Small-Cap Equity** – Seeks a favorable long-term total return, mainly through capital appreciation, primarily from equity securities of smaller domestic companies.
- **Quant Small/Mid-Cap Equity** – Seeks a favorable long-term total return, mainly through capital appreciation.
- **S&P 500 Index** – Seeks a favorable long-term total return, mainly through capital appreciation, by investing primarily in a portfolio of equity securities of large domestic companies selected to track U.S. equity markets based on a market index.
- **Small-Cap Blend Index** – Seeks a favorable long-term total return, mainly through capital appreciation, by investing primarily in a portfolio of equity securities in smaller domestic companies based on a market index.
- **Social Choice Equity** – Seeks a favorable long-term total return that reflects the investment performance of the overall U.S. stock market while giving special consideration to certain environmental, social and governance (“ESG”) criteria.
- **Social Choice Low Carbon Equity** – Seeks a favorable long-term total return that reflects the investment performance of the overall U.S. stock market while giving special consideration to certain environmental, social, and governance criteria (“ESG”), which include additional criteria relating to carbon emissions and fossil fuel reserves.

Fixed Income

- **5-15 Year Laddered Tax-Exempt Bond** – Seeks current income that is exempt from regular federal income tax.
- **Core Bond** – Seeks total return, primarily through current income.
- **Bond Index** – Seeks total return that corresponds with the total return of the U.S. investment-grade bond market as represented by a broad bond index.
- **Core Plus Bond** – Seeks total return, primarily through current income.
- **Green Bond** – Seeks total return while giving special consideration to certain environmental criteria.
- **High Yield** – Seeks total return primarily through high current income and, when consistent with its primary objective, capital appreciation.
- **Inflation-Linked Bond** – Seeks a rate of return that outpaces inflation.
- **Short-Duration Impact** – Seeks current income while giving special consideration to certain environmental, social and governance (“ESG”) criteria.
- **Short-Term Bond** – Seeks current income.
- **Short-Term Bond Index** – Seeks total return that corresponds with the total return of the short-term U.S. investment-grade bond market as represented by a short-term bond index.
- **Core Impact Bond** – Seeks total return while giving special consideration to certain environmental, social and governance (“ESG”) criteria.

International

- **Emerging Markets Debt** – Seeks a total return.
- **Emerging Markets Equity** – Seeks a favorable long-term total return, mainly through capital appreciation, by investing primarily in a portfolio of emerging markets equity investments.
- **Emerging Markets Equity Index** – Seeks a favorable long-term total return, mainly through capital appreciation, by investing primarily in a portfolio of emerging market

equity investments based on a market index.

- **International Bond** – Seeks total return.
- **International Equity** – Seeks a favorable long-term total return, mainly through capital appreciation, primarily from equity securities of foreign issuers.
- **International Equity Index** – Seeks a favorable long-term total return, mainly through capital appreciation, by investing primarily in a portfolio of foreign equity investments based on a market index.
- **International Opportunities** – Seeks a favorable long-term total return, mainly through capital appreciation, primarily from equity securities of foreign issuers.
- **Quant International Equity** – Seeks a favorable long-term total return, mainly through capital appreciation, primarily from equity securities of foreign issuers.
- **Quant International Small-Cap Equity** – Seeks a favorable long-term total return, mainly through capital appreciation.
- **Social Choice International Equity** – Seeks a favorable long-term total return that reflects the investment performance of the overall foreign equity markets while giving special consideration to certain environmental, social and governance (“ESG”) criteria.

Lifecycle

- **Lifecycle Retirement Income** – A fund-of-funds that seeks high total return over time primarily through income, with a secondary emphasis on capital appreciation, and invests in Class W shares of other TIAA-CREF Funds and in other investment pools or investment products according to a relatively stable asset allocation strategy that will not gradually adjust over time and is designed for investors who are already in or entering retirement and invests in several underlying equity, fixed income and direct real estate Funds. The Lifecycle Retirement Income Fund seeks high total return over time primarily through income, with a secondary emphasis on capital appreciation.
- **Lifecycle Index Retirement Income** – A fund-of-funds that seeks high total return over time primarily through income, with a secondary emphasis on capital appreciation, and invests in Class W shares of several underlying equity and fixed-income Funds offered by TIAA-CREF Funds and potentially other investment pools or investment products and expects to allocate approximately 40% of assets to equity underlying Funds and 60% of assets to fixed-income underlying Funds. The Lifecycle Index Retirement Income Fund seeks high total return over time primarily through income, with a secondary emphasis on

capital appreciation.

Life Funds

- **Growth & Income** – Seeks a favorable long-term total return, through both capital appreciation and investment income, primarily from income-producing equity securities.
- **Growth Equity** – Seeks a favorable long-term return, mainly through capital appreciation, primarily from equity securities.
- **International Equity** – Seeks a favorable long-term total return, mainly through capital appreciation, primarily from equity securities of foreign issuers.
- **Large-Cap Value** – Seeks a favorable long-term total return, mainly through capital appreciation, primarily from equity securities of large domestic companies.
- **Real Estate Securities** – Seeks to obtain a favorable long-term total return through both capital appreciation and current income, by investing primarily in equity securities of companies principally engaged in or related to the real estate industry.
- **Small-Cap Equity** – Seeks a favorable long-term total return, mainly through capital appreciation, primarily from equity securities of smaller domestic companies.
- **Social Choice Equity** – Seeks a favorable long-term total return that reflects the investment performance of the overall U.S. stock market while giving special consideration to certain environmental, social and governance (“ESG”) criteria.
- **Stock Index** – Seeks a favorable long-term total return, mainly through capital appreciation, by investing primarily in a portfolio of equity securities selected to track the overall U.S. equity markets.
- **Core Bond** – Seeks total return, primarily through current income.
- **Balanced** – Seeks long-term total return, consisting of capital appreciation and current income.
- **Money Market** – Seeks current income consistent with maintaining liquidity and preserving capital.

Lifestyle

- **Lifestyle Aggressive Growth** – A fund-of-funds that seeks long-term growth of capital.

- **Lifestyle Conservative** – A fund-of-funds that seeks long-term total return, consisting of current income and capital appreciation.
- **Lifestyle Growth** – A fund-of-funds that seeks long-term growth of capital with some current income.
- **Lifestyle Income** – A fund-of-funds that seeks current income with some capital appreciation.
- **Lifestyle Moderate** – A fund-of-funds that seeks long-term total return, consisting of capital appreciation and current income.

Money Market

- **Money Market** – Seeks current income consistent with maintaining liquidity and preserving capital.

Real Estate

- **Real Estate Securities** – Seeks to obtain a favorable long-term total return through both capital appreciation and current income, by investing primarily in equity securities of companies principally engaged in or related to the real estate industry.

TIAA Separate Account VA-1

- Seeks favorable long-term return from a diversified portfolio selected to track the overall market for common stocks publicly traded in the United States, as represented by a broad stock market index.

Stable Value Separate Account

- Seeks preservation of capital and to maximize realized yield relative to the duration target range by investing in high quality short/intermediate fixed income investments with a focus on high quality spread sectors emphasizing safety through diversification

Closed-end Fund

- **Emerging Markets Debt 2022 Target Term Fund** – Seeks to provide a high level of current income and to return \$9.85 per share (the original net asset value per common share

before deducting costs of \$0.02 per share) to holders of common shares on or about December 01, 2022 and will invest in emerging markets debt securities including a broad range of sovereign, quasi-sovereign and corporate debt securities

UCITS

- **Emerging Markets Debt** – Seeks a favorable long-term total return, through income and capital appreciation and invests primarily in a portfolio of emerging markets fixed-income securities including a broad range of corporate, sovereign and quasi-sovereign fixed-income securities, including loan participations and Sukuks, with ratings of B- or better, but may also invest in fixed-income securities having a lower credit rating
- **Global Equity ESG** – Seeks a favorable long-term return that reflects the investment performance of the overall global equity markets while giving special consideration to certain environmental, social and governance (ESG) criteria by investing in the equity securities of companies whose activities are consistent with the Fund’s ESG criteria and is managed utilizing a quantitative investment process and will not have any particular sector or capitalization focus
- **U.S. Bond ESG** – Seeks a favorable long-term total return through income and capital appreciation while giving special consideration to certain environmental, social and governance (ESG) criteria by investing in a broad range of Investment Grade bonds and fixed-income securities including, but not limited to, U.S. Government Securities, corporate bonds, taxable U.S. municipal securities, loan participations and mortgage-backed or other asset-backed securities, provided that the underlying investment of such mortgage backed or other asset-backed securities meet the ESG criteria

Retail SMAs

- **All-Cap Growth ESG** – Seeks to outperform the broad benchmark over a full market cycle, while generating comparable total return characteristics relative to the Russell 3000 Growth Index while adhering to comprehensive ESG guidelines by investing in U.S. and non-U.S. equity securities with a market capitalization generally above \$1 billion at time of purchase
- **Global Dividend Equity ESG** – Seeks to outperform the broad benchmark over a full market cycle, while generating comparable total return characteristics relative to the MSCI World Index while adhering to comprehensive ESG guideline by investing in U.S. and non-U.S. equities that pay a dividend
- **Low Carbon Value Equity ESG** – Seeks to outperform the broad benchmark over a full market cycle, while generating comparable total return characteristics relative to the

Russell 1000 Value Index while adhering to comprehensive ESG and additional Low Carbon guidelines by investing in U.S. and non-U.S. securities with a market capitalization generally above \$3 billion at time of purchase

ETFs

- **Enhanced Yield 1-5 Year U.S. Aggregate Bond** – Seeks to track the investment results, before fees and expenses, of the ICE BofA ML Enhanced Yield 1-5 Year US Broad Bond Index and is designed to broadly capture the 1-5 year U.S. investment grade fixed income market
- **Enhanced Yield U.S. Aggregate Bond** – Seeks to track the investment results, before fees and expenses, of the ICE BofA ML Enhanced Yield US Broad Bond Index and generally invests in a sample of the securities in the its Index whose risk, return and other characteristics resemble the risk, return and other characteristics of its Enhanced Index as a whole
- **ESG Emerging Markets Equity** – Seeks to track the investment results, before fees and expenses, of the TIAA ESG Emerging Markets Equity Index which is comprised of listed equity securities issued by companies (and depositary receipts representing such securities) located in countries with emerging markets that meet certain environment, social and governance (ESG) criteria and selects from securities of large- and mid-capitalization companies located in one of the following 24 emerging markets countries: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey and the United Arab Emirates.
- **ESG International Developed Markets Equity** – Seeks to track the investment results, before fees and expenses, of the TIAA ESG International Developed Markets Equity Index which is comprised solely of equity securities issued by companies (and depositary receipts representing such securities) located in countries with developed markets, excluding the United States and Canada, that meet certain environmental, social, and governance (ESG) criteria and selects from large- and mid-capitalization companies located in the following 21 developed market countries: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland and the United Kingdom.
- **ESG Large-Cap Growth** – Seeks to track the investment results, before fees and expenses, of the TIAA ESG USA Large-Cap Growth Index which is comprised of equity securities issued by large capitalization companies listed on U.S. exchanges that meet certain environmental, social and governance (ESG) criteria and select from securities that exhibit overall growth style characteristics based on five variable: long-term forward

earnings per share (EPS) growth rate, short-term EPS growth rate, current internal growth rate, long-term historical EPS growth trend and long-term historical sales per share growth trend

- **ESG Large-Cap Value** – Seeks to track the investment results, before fees and expenses, of the TIAA ESG USA Large-Cap Value Index which is comprised of equity securities issued by large capitalization companies listed on U.S. exchanges that meet certain ESG criteria and selects from securities that generally consist of large- and mid-capitalization U.S. equity securities that exhibit overall style characteristics based on three variable: book value to price, 12-month forward earnings to prices and dividend yield
- **ESG Mid-Cap Growth** – seeks to track the investment results, before fees and expenses, of the TIAA ESG USA Mid-Cap Growth Index which is comprised of equity securities issued by mid-capitalization companies listed on U.S. exchanges that meet certain environmental, social, and governance (ESG) criteria and selects from the securities which generally consists of mid-capitalization U.S. equity securities that exhibit overall growth style characteristics based on five variables: long-term forward earnings per share (EPS) growth rate, short-term forward EPS growth rate, current internal growth rate, long-term historical EPS growth trend, and long-term historical sales per share growth trend.
- **ESG Mid-Cap Value** – seeks to track the investment results, before fees and expenses, of the TIAA ESG USA Mid-Cap Value Index which is comprised of equity securities issued by mid-capitalization companies listed on U.S. exchanges that meet certain environmental, social, and governance (ESG) criteria and selects from the securities which generally consists of mid-capitalization U.S. equity securities that exhibit overall value style characteristics based on three variables: book value to price, 12-month forward earnings to price, and dividend yield.
- **ESG U.S. Aggregate Bond** – Seeks to track the investment results, before fees and expenses, of the Bloomberg Barclays MSCI US Aggregate ESG Select Index and is designed to broadly capture the U.S. investment grade, taxable fixed income market and utilizes certain environmental, social and governance criteria to select from the securities included in the Bloomberg Barclays US Aggregate Bond Index
- **ESG Small-Cap** – seeks to track the investment results, before fees and expenses, of the TIAA ESG USA Small-Cap Index which is comprised of equity securities issued by small-capitalization companies listed on U.S. exchanges that meet certain environmental, social, and governance (ESG) criteria and selects from the securities which generally consists of equity securities that comprise the small-cap segment of the U.S. market.
- **Short-Term REIT** – Seeks to track the investment results, before fees and expenses, of the Dow Jones U.S. Select Short-Term REIT Index which is comprised of real estate investment trusts and generally invests in equity REITS traded on a national securities

exchange in the United States that derive at least 75% of their total revenue from the ownership and operation of real estate assets and that have a minimum total market capitalization of \$200 million at the time of inclusion

TIAA-CREF Real Property Fund LP

- Seeks a favorable long-term total return by primarily investing in a diversified portfolio of U.S. commercial core real estate assets well located in select targeted cities. Currently expected to be made available solely to registered management investment companies or series that are advised by TAL

Multi-Asset Class Investments

- Allocation portfolios invest primarily in other Funds that pursue certain strategies by investing in certain types of securities or investments, including with respect to all or a material portion of an account, and affiliated Funds. The particular Fund utilized will depend on the particular strategy or product.

Additional Information about Allocation Portfolios

Allocation portfolios may pursue other strategies or invest in other instruments described in this Brochure, including ETNs. A portfolio may utilize the following derivatives: options; futures contracts; options on futures contracts, including futures on equity and commodities indices; interest rate and currency futures; interest rate caps, collars, and floors; non-U.S. currency contracts; options on non-U.S. currencies; interest rate, total return, currency and credit default swaps, and options on the foregoing types of swap agreements. A portfolio may use these derivatives in an attempt to manage market risk, currency risk, credit risk and yield curve risk; to manage the effective maturity or duration of securities in the portfolio; or for speculative purposes in an effort to increase yield or to enhance returns.

Index portfolios generally invest a substantial amount of their assets in common stocks included in a particular broad-based securities index, such as a large cap, mid cap or small cap index. A portfolio generally does not hold all of the stocks included in a particular index, or hold them in the same weighting as the index.

Enhanced Equity Index/Large Cap Core Quantitative portfolios follow an actively managed strategy that uses a proprietary quantitative process to invest in common stocks.

Description of Material Risks Associated with Investment Strategies

- **Active Management Risk** – The risk that the strategy, investment selection or trade execution may cause a Fund to underperform relative to its benchmark index or mutual funds with similar investment objectives.

- **Asset Allocation Risk** – The risk that a Fund may not achieve its target allocations. In addition, there is the risk that the asset allocations may not achieve the desired risk-return characteristic or that the selection of underlying Funds and the allocations among them will result in a Fund underperforming other similar Funds or cause an investor to lose money.
- **Benchmark Risk** – The risk that a Fund’s performance may not correspond to its benchmark index for any period of time and may underperform such index or the overall financial market. Additionally, to the extent that a Fund’s investments vary from the composition of its benchmark index, a Fund’s performance could potentially vary from the index’s performance to a greater extent than if a Fund merely attempted to replicate the index.
- **Bond Market Liquidity Risk** – Dealer inventories of bonds, which provide an indication of the ability of financial intermediaries to “make markets” in those bonds, are at or near historic lows in relation to market size. This reduction in market making capacity has the potential to decrease liquidity and increase price volatility in the fixed income markets in which a Fund invests, particularly during periods of economic or market stress. Decreased liquidity may also lead to higher volatility in the market price of a Fund’s shares and wider bid-ask spreads. Although an exchange-traded fund intends to redeem its shares primarily in-kind, if an exchange-traded fund is forced to sell underlying investments at reduced prices or under unfavorable conditions to meet redemption requests or for other cash needs, a Fund may suffer a loss.
- **Call Risk** – The risk that, during periods of falling interest rates, an issuer may call (or repay) a fixed-income security prior to maturity, resulting in a decline in a Fund’s income.
- **Cash Redemption Risk** – A Fund’s investment strategy may require it to effect redemptions, in whole or in part, in cash. In order to obtain the cash needed for a redemption, a Fund may be required to sell portfolio securities, which may cause a Fund to recognize capital gains that it might not have recognized if it had satisfied the redemption in-kind. Therefore, to the extent a Fund effects redemptions in cash, it may pay out higher annual capital gain distributions than if it satisfied redemptions entirely in-kind.
- **Concentration Risk** – To the extent that a fund’s Fund’s portfolio is concentrated in the securities of issuers in a particular market, industry, group of industries, sector or asset class, a fund Fund may be adversely affected by the performance of those securities, may be subject to increased price volatility and may be more susceptible to adverse economic, market, political or regulatory occurrences affecting that market, industry, group of industries, sector or asset class. The financial sector can be significantly affected by changes in, among other things, interest rates, government regulation, the rate of defaults on corporate, consumer and government debt, and the availability and cost of capital.

- **Counterparty and Third Party Risk** – Transactions involving a counterparty to a derivative or other instrument, or a third party responsible for servicing the instrument, are subject to the credit risk of the counterparty or third party, and to the counterparty's or third party's ability to perform in accordance with the terms of the transaction. If a counterparty defaults, a Fund may have contractual remedies but the Fund may be unable to enforce them due to the application of bankruptcy, insolvency and other laws affecting the rights of creditors. Counterparty risk is still present even if a counterparty's obligations are secured by collateral because, for example, a Fund's interest in collateral may not be perfected or additional collateral may not be promptly posted as required. A Fund is also subject to counterparty risk to the extent it executes a significant portion of its securities or derivatives transactions through a single broker, dealer, or futures commission merchant.
- **Credit Risk** (a type of **Issuer Risk**) – The risk that the issuer of fixed-income investments may not be able or willing to meet interest or principal payments when the payments become due.
- **Credit Spread Risk** – The risk that credit spreads (i.e., the difference in yield between securities that is due to differences in each security's respective credit quality) may increase when market participants believe that bonds generally have a greater risk of default, which could result in a decline in the market values of a Fund's debt securities.
- **Currency Risk** – The risk that foreign (non-U.S.) currencies may decline in value relative to the U.S. dollar and adversely affect the value of a Fund's investments in foreign currencies, securities denominated in foreign currencies or derivative instruments that provide exposure to foreign currencies.
- **Currency Management Strategies Risk** – Currency management strategies, including the use of forward currency contracts and other derivatives, may substantially change a Fund's exposure to currencies and currency exchange rates and could result in losses to a Fund if currencies do not perform as TAL anticipates. A Fund's ability to use derivative instruments to manage currency exposure may also be altered or constrained by pending SEC regulations, if such regulations are adopted as proposed.
- **Current Income Risks** – The risk that the income a Fund receives may fall as a result of a decline in interest rates. In a low or negative interest rate environment, a Fund may not be able to achieve a positive or zero yield or maintain a stable net asset value ("NAV") of \$1.00 per share.
- **Cybersecurity Risk** – Cybersecurity breaches may allow an unauthorized party to gain access to Fund assets, customer data, or proprietary information, or cause a Fund and/or its service providers to suffer data corruption or lose operational functionality.

- **Derivatives Risk** – The risks associated with investing in derivatives may be different and greater than the risks associated with directly investing in the underlying securities and other instruments. A Fund may use futures and options, single name or index credit default swaps, or forwards, and a Fund may also use more complex derivatives such as swaps that might present liquidity, credit and counterparty risk. When investing in derivatives, a Fund may lose more than the principal amount invested.
- **Downgrade Risk** – The risk that securities are subsequently downgraded should the TAL and/or rating agencies believe the issuer’s business outlook or creditworthiness has deteriorated.
- **Emerging Markets Risk** – The risk of foreign investment often increases in countries with emerging markets. For example, these countries may have more unstable governments than developed countries, and their economies may be based on only a few industries. Because their financial markets may be very small, share prices of financial instruments in emerging market countries may be volatile and difficult to determine. Financial instruments of issuers in these countries may have lower overall liquidity than those of issuers in more developed countries. In addition, foreign investors such as the Fund are subject to a variety of special restrictions in many emerging market countries.
- **Enhanced Index Risk** – The risk that a Fund may underperform its benchmark index due to differences between the investments made by a Fund and its benchmark index.
- **Equity Security Risk** – The risk that equity securities may decline significantly in price over short or extended periods of time. Such declines may occur because of declines in the equity market as a whole, or because of declines specific to a particular company, country, region, industry or sector.
- **ESG Criteria Risk** – The risk that because the Fund’s ESG criteria and/or proprietary and Impact framework exclude securities of certain issuers for nonfinancial reasons, the Fund may forgo some market opportunities available to funds that do not use these criteria.
- **Extension Risk** – The risk that, during periods of rising interest rates, borrowers may pay off their mortgage loans later than expected, preventing a Fund from reinvesting principal proceeds at higher interest rates and resulting in less income than potentially available.

Fixed-Income Foreign Investment Risk – in fixed-income securities or financial instruments of foreign issuers involves increased risks due to adverse issuer, political, regulatory, currency, market or economic developments. These developments may impact the ability of a foreign debt issuer to make timely and ultimate payments on its debt obligations to the Fund or impair the Fund’s ability to enforce its rights against the foreign debt issuer. These risks are heightened in emerging or developing markets. Foreign investments may also have lower overall liquidity and be more difficult to value than

investments in U.S. issuers.

- **Floating and Variable Rate Securities Risk** – Floating and variable rate securities provide for a periodic adjustment of the interest rate paid on the securities. The rate adjustment intervals may be regular and range from daily up to annually, or may be based on an event, such as a change in the prime rate. Floating and variable rate securities may be subject to greater liquidity risk than other debt securities, meaning that there may be limitations on a Fund’s ability to sell the securities at any given time. Such securities also may lose value.
- **Foreign Investment Risk** – Foreign investments, which may include securities of foreign issuers, securities or contracts traded or acquired in non-U.S. markets or on non-U.S. exchanges, or securities or contracts payable or denominated in non-U.S. currencies, can involve special risks that arise from one or more of the following events or circumstances: (1) changes in currency exchange rates; (2) possible imposition of market controls or currency exchange controls; (3) possible imposition of withholding taxes on dividends and interest; (4) possible seizure, expropriation or nationalization of assets; (5) more limited financial information or difficulties interpreting it because of foreign regulations and accounting standards; (6) lower liquidity and higher volatility in some foreign markets; (7) the impact of political, social or diplomatic events; (8) economic sanctions or other measures by the United States or other governments; (9) the difficulty of evaluating some foreign economic trends; and (10) the possibility that a foreign government could restrict an issuer from paying principal and interest to investors outside the country. Brokerage commissions and custodial and transaction costs are often higher for foreign investments, and it may be difficult to use foreign laws and courts to enforce financial or legal obligations.

The risks described above often increase in countries with emerging markets. For example, these countries may have more unstable governments than developed countries, and their economies may be based on only a few industries. Because their financial markets may be very small, prices of issuers in emerging market countries may be volatile and difficult to determine. In addition, foreign investors such as a Fund are subject to a variety of special restrictions in many such countries.

- **Fund of Funds Risk** – The ability of a Fund to achieve its investment objective will depend in part upon the ability of the underlying Funds to achieve their investment objectives. There can be no guarantee that any underlying Fund will achieve its investment objective.
- **Geographic Concentration Risk** – To the extent a Fund invests a significant portion of its assets in the securities of companies in a single country or region, it is more likely to be impacted by events or conditions affecting that country or region.

- **Green Investment Risk** – The risk that because a Fund’s green investment criteria and/or proprietary impact framework may exclude securities of certain issuers for nonfinancial reasons, the Fund may forgo some market opportunities available to Funds that do not use these criteria. In addition, because a Fund seeks to invest primarily in green investments, the value of a Fund may be affected by events that adversely affect such investments, such as a decrease in governmental or other support for environmental initiatives, and may fluctuate more than that of a Fund that does not invest primarily in green investments.

- **Illiquid Investments Risk** – The risk that illiquid investments may be difficult to sell for the value at which they are carried, if at all, or at any price within the desired time frame. Illiquid investments are those that are not reasonably expected to be sold or disposed of in current market conditions in seven calendar days or less without the sale or disposition significantly changing the market value of the investment. Pursuant to applicable SEC regulations, a Fund may not invest more than 15% of its net assets in illiquid investments that are assets. The Funds have implemented a liquidity risk management program and related procedures to identify illiquid investments pursuant to this regulation. A Fund may be limited in its ability to invest in illiquid and “less liquid” investments, which may adversely affect a Fund’s performance and ability to achieve its investment objective. A Fund’s investments in illiquid investments may reduce the returns of the Fund because it may be unable to sell the illiquid investment at an advantageous time or price, which could prevent the Fund from taking advantage of other investment opportunities. There is also a risk that unusually high redemption requests, including redemption requests from certain large shareholders (such as institutional investors) or asset allocation changes, may make it difficult for a Fund to sell investments in sufficient time to allow it to meet redemptions or require a Fund to sell illiquid investments at reduced prices or under unfavorable conditions. Illiquid investments may trade less frequently, in lower quantities and/or at a discount as compared to more liquid investments, which may cause a Fund to receive distressed prices and incur higher transaction costs when selling such investments. Securities that are liquid at the time of purchase may subsequently become illiquid due to events such as adverse developments for an issuer, industry-specific developments, market events, rising interest rates, changing economic conditions or investor perceptions and geopolitical risk.

- **Income Risk** – A Fund’s income could decline during periods of falling interest rates or when a Fund experiences defaults on debt securities it holds.

- **Income Volatility Risk** – Income volatility refers to the degree and speed with which changes in prevailing market interest rates diminish the level of current income from a portfolio of fixed-income securities. The risk of income volatility is that the level of current income from a portfolio of fixed-income securities may decline in certain interest rate environments.

- **Index Risk** – The risk that a Fund’s performance may not correspond to its benchmark

index for any period of time and may underperform such index or the overall financial market. Additionally, to the extent that a Fund's investments vary from the composition of its benchmark index, a Fund's performance could potentially vary from the index's performance to a greater extent than if a Fund merely attempted to replicate the index

- **Industry/Sector Concentration Risk** – The risk that focusing on investment in specific industries or sectors makes a Fund more vulnerable to developments particularly affecting those industries or sectors than a more broadly diversified Fund would be.
- **Interest Rate Risk (a type of Market Risk)** – risk that the value or yield of fixed-income investments may decline if interest rates change. In general, when prevailing interest rates decline, the market values of outstanding fixed-income investments (particularly those paying a fixed rate of interest) tend to increase while yields on similar newly issued fixed-income investments tend to decrease, which could adversely affect a Fund's income. Conversely, when prevailing interest rates increase, the market values of outstanding fixed-income investments (particularly those paying a fixed rate of interest) tend to decline while yields on similar newly issued fixed-income investments tend to increase. If a fixed-income investment pays a floating or variable rate of interest, changes in prevailing interest rates may increase or decrease the investment's yield. Fixed-income investments with longer durations tend to be more sensitive to interest rate changes than shorter-duration investments. Interest rate risk is generally heightened during periods when prevailing interest rates are low or negative. During periods of very low or negative interest rates, a Fund may not be able to maintain positive returns. As of the date of this Prospectus, interest rates in the United States and in certain foreign markets are at low levels, which may increase a Fund's exposure to risks associated with rising interest rates. In general, changing interest rates could have unpredictable effects on the markets and may expose fixed-income and related markets to heightened volatility. A wide variety of factors can cause interest rates to rise (e.g., central bank monetary policies, inflation rates, general economic conditions, etc.).
- **Investment Style Risk** – A Fund invests in the securities included in, or representative of, an index regardless of their investment merit. A Fund does not attempt to outperform an index or take defensive positions in declining markets. As a result, a Fund's performance may be adversely affected by a general decline in the market segments relating to an index.
- **Issuer Risk (often called Financial Risk)** – The risk that an issuer's earnings prospects and overall financial position will deteriorate, causing a decline in the value of the issuer's financial instruments over short or extended periods of time. In times of market turmoil, perceptions of an issuer's credit risk can quickly change and even large, well-established issuers may deteriorate rapidly with little or no warning.

Large-Cap Risk – The risk that large-capitalization companies are more mature and may grow more slowly than the economy as a whole and tend to go in and out of favor based on market and economic conditions.

- **Low Carbon Risk** – The risk that because a Fund’s investment will have special emphasis on companies with low current carbon emissions and limited exposure to fossil fuel reserves, a Fund’s portfolio might exclude certain issuers for nonfinancial reasons and a Fund may forgo some market opportunities that otherwise would be available.
- **Market Risk** – The risk that market prices of portfolio investments held by a Fund may fall rapidly or unpredictably due to a variety of factors, including changing economic, political or market conditions. Market risk may affect a single issuer, industry or sector of the economy, or it may affect the market as a whole. From time to time, the Fund may invest a significant portion of its assets in companies in one or more related sectors or industries, which would make the Fund more vulnerable to adverse developments affecting such sectors or industries.
- **Market Trading Risks** – ETF shares may be bought and sold in the secondary market at market prices. Although it is expected that the market price of an ETF share typically will approximate its net asset value (“NAV”), there may be times when the market price and the NAV diverge more significantly, particularly in times of market volatility or steep market declines. Thus, you may pay more or less than NAV when you buy ETF shares on the secondary market, and you may receive more or less than NAV when you sell those shares. Although an ETF’s shares are listed for trading on a national securities exchange, it is possible that an active trading market may not develop or be maintained; in which case transactions may occur at wider bid/ask spreads. Trading of an ETFs shares may be halted by the activation of individual or market-wide trading halts (which halt trading for a specific period of time when the price of a particular security or overall market prices decline by a specified percentage).
- **Market Volatility, Liquidity and Valuation Risk (types of Market Risk)** – The risk that volatile or dramatic reductions in trading activity make it difficult for a Fund to properly value its investments and that a Fund may not be able to purchase or sell an investment at an attractive price, if at all.
- **Mid-Cap Risk** – The risk that the stocks of mid-capitalization companies often experience greater price volatility, lower trading volume and lower overall liquidity than the stocks of larger, more established companies.
- **Mortgage- and Asset-Backed Securities Risk** – Mortgage- and asset-backed securities generally can be prepaid at any time, and prepayments that occur either more quickly or more slowly than expected can adversely impact the value of such securities. They are also subject to extension risk, which is the risk that rising interest rates could cause mortgages or other obligations underlying the securities to be prepaid more slowly than expected, thereby lengthening the duration of such securities, increasing their sensitivity to interest rate changes and causing their prices to decline. A mortgage-backed security may be negatively affected by the quality of the mortgages underlying such security, the

credit quality of its issuer or guarantor, and the nature and structure of its credit support.

- **Mortgage Roll Risk** – The risk that TAL will not correctly predict mortgage prepayments and interest rates, which will diminish the investment performance of a Fund compared with what such performance would have been without the use of the strategy.
- **Non-Diversification Risks** – While the Fund is considered to be a diversified investment company under the 1940 Act, the Fund may become nondiversified under the 1940 Act without Fund shareholder approval when necessary to continue to track its benchmark index. Non-diversified status means that the Fund can invest a greater percentage of its assets in the securities of a single issuer than a diversified fund. Investing in a nondiversified fund involves greater risk than investing in a diversified fund because a loss in value of one or more particular securities may have a greater effect on the fund's return since they may represent a larger portion of the fund's total portfolio assets.
- **Non-Investment-Grade Securities Risk** – Issuers of non-investment-grade securities, which are usually called “high-yield” or “junk bonds”, are typically in weaker financial health and such securities can be harder to value and sell and their prices can be more volatile than more highly rated securities. While these securities generally have higher rates of interest, they also involve greater risk of default than do securities of a higher-quality rating.
- **Non-U.S./Emerging Markets Risk** – Non-U.S. issuers or U.S. issuers with significant non-U.S. operations may be subject to risks in addition to those of issuers located in or that principally operate in the United States as a result of, among other things, political, social and economic developments abroad and different legal, regulatory and tax environments.
- **Non-U.S. Investment Risk** – Non-U.S. companies may be subject to risks in addition to those of companies located in the U.S. as a result of, among other things, political, social and economic developments abroad and different legal, regulatory and tax environments.
- **Other Investment Companies Risk** – When a Fund invests in other investment companies, including ETFs, shareholders bear both their proportionate share of Fund expenses and, indirectly, the expenses of the other investment companies. Furthermore, a Fund is exposed to the risks to which the other investment companies may be subject.
- **Portfolio Construction Risk** – The risk that an adviser may be influenced by potential conflicts of interest in its construction and management of a Fund's portfolio since a Fund's performance may affect an affiliated insurance company's exposure under its variable annuity contracts.
- **Portfolio Turnover Risk** – In pursuing its investment objectives, a Fund may engage in trading that results in a high portfolio turnover rate, which may vary greatly from year to

year, as well as within a given year. A higher portfolio turnover rate may result in correspondingly greater transactional expenses that are borne by a Fund. Such expenses may include bid-ask spreads, dealer mark-ups, and other transactional costs on the sale of securities and reinvestment in other securities, and may result in the realization of taxable capital gains (including short-term gains, which are generally taxed to shareholders as ordinary income). These costs, which are not reflected in annual fund operating expenses or in the example thereunder, may affect a Fund's performance.)

- **Prepayment Risk** – The risk that, during periods of falling interest rates, borrowers may pay off their mortgage loans sooner than expected, forcing a Fund to reinvest the unanticipated proceeds at lower interest rates, resulting in a decline in income. These risks are normally present in mortgage-backed securities and other asset-backed securities. For example, homeowners have the option to prepay their mortgages. Therefore, the duration of a security backed by home mortgages can shorten depending on homeowner prepayment activity. A rise in the repayment rate and the resulting decline in duration of fixed-income securities held by a Fund can result in losses to investors in the Fund.
- **Quantitative Analysis Risk** – The risk that stocks selected using quantitative modeling and analysis could perform differently from the market as a whole and the risk that such quantitative analysis and modeling may not adequately take into account certain factors, may contain design flaws or inaccurate assumptions and may rely on inaccurate data inputs, which may result in losses to the Fund.
- **Real Estate Investing Risk** – The risks associated with the ownership of real estate include, among others, declines in the value of real estate, negative changes in the climate for real estate, risks related to general and local economic conditions, decreases in property revenues, increases in prevailing interest rates, property taxes and operating expenses, changes in zoning laws and costs resulting from the cleanup of environmental problems.
- **Regulation S Securities Risk** – The risk that Regulation S securities may be less liquid than publicly traded securities. Regulation S securities may not be subject to the disclosure and other investor protection requirements that would be applicable to publicly traded securities. As a result, Regulation S securities may involve a high degree of business and financial risk and may result in losses.
- **REITs Risk** – In addition to the risks associated with investing in securities of real estate companies and real estate related companies, REITs are subject to certain additional risks. Equity REITs may be affected by changes in real estate values, rents, property taxes and interest rates. Further, REITs are dependent upon specialized management skills and cash flows, and may have their investments in relatively few properties, or in a small geographic area or a single property type. Failure of a company to qualify as a REIT under federal tax law, or changes to federal tax law or regulations governing REITs, may have adverse consequences to an account. In addition, REITs have their own expenses, and the

Fund will bear a proportionate share of those expenses. Many REITs utilize leverage (and some may be highly leveraged), which increases investment risk and could potentially magnify an account's losses.

- **Risk of Investment in a Fund's Wholly Owned Subsidiary** – A subsidiary is not registered under the Investment Company Act and is not subject to its investor protections (except as otherwise noted in a prospectus). As an investor in a subsidiary, a Fund does not have all of the protections offered to investors by the Investment Company Act. However, a subsidiary is wholly owned and controlled by a Fund and managed by an adviser. Therefore, a Fund's ownership and control of the subsidiary make it unlikely that the subsidiary would take actions contrary to the interests of a Fund or its shareholders.
- **Senior Loan Risk** – Many senior loans are rated lower than investment grade, or considered to be of comparable credit risk, so they present credit risk comparable to high-yield securities. While backed by collateral, the value of the collateral may not equal a Fund's investment and may be hard to sell, so the liquidation of the collateral may not satisfy the borrower's obligation to the Fund in the event of non-payment of scheduled interest or principal. Senior loans also expose a Fund to call risk and illiquid investments risk. There is no organized exchange or board of trade on which loans are traded; rather, they trade in an unregulated inter-dealer or inter-bank resale market, so the secondary market for senior loans can be limited. Trades can be infrequent and the values for senior loans may experience volatility. In some cases, negotiations for the sale or settlement of senior loans may require weeks to complete, which may impair a Fund's ability to raise cash to satisfy redemptions, pay dividends, pay expenses or take advantage of other investment opportunities in a timely manner. If an issuer of a senior loan prepays or redeems the loan prior to maturity, a Fund will have to reinvest the proceeds in other senior loans or instruments that may pay lower interest rates.
- **Service Provider Operational Risk** – A Fund's service providers, such as the administrator, custodian or transfer agent, may experience disruptions or operating errors that could negatively impact a Fund. Although service providers are required to have appropriate operational risk management policies and procedures, and to take appropriate precautions to avoid and mitigate risks that could lead to disruptions and operating errors, it may not be possible to identify all of the operational risks that may affect a Fund or to develop processes and controls to completely eliminate or mitigate their occurrence or effects.
- **Small-Cap Risk** – Securities of small-sized companies may experience greater fluctuations in price than the securities of larger companies. The securities of small-sized companies often have lower overall liquidity than those of larger, more established companies. The number of small-sized companies whose securities are listed on securities exchanges has been declining while investor demand for the securities of such issuers has been increasing, in each case relative to historical trends, which may increase a Fund's exposure to illiquid investments risk. As a result, a Fund's investments in the securities of

small-sized companies may be difficult to purchase or sell at an advantageous time or price, which could prevent the Fund from taking advantage of investment opportunities. From time to time, small-sized company securities may have to be sold at a discount from their current market prices or in small lots over an extended period, since they may be harder to sell than larger-cap securities. In addition, it may be difficult to find buyers for securities of small-sized companies that a Fund wishes to sell when the company is not perceived favorably in the marketplace or during periods of poor economic or market conditions. Such companies may be subject to certain business risks due to their smaller size, limited markets and financial resources, narrow product lines and frequent lack of depth of management. The costs of purchasing and selling securities of small-sized companies may be greater than those of more widely traded securities.

- **Sovereign Debt Risk** – The risk that the issuer of non-U.S. sovereign debt or the governmental authorities that control the repayment of such debt may be unable or unwilling to repay principal or interest when due. This may result from political or social factors, the general economic environment of a country, levels of foreign debt or foreign currency exchange rates, among other possible reasons. To the extent the issuer or controlling governmental authority is unable or unwilling to repay principal or interest when due, a Fund may have limited recourse to compel payment in the event of default.
- **Special Risks for Inflation-Indexed Bonds** – The risk that market values of inflation-indexed investments held by the Inflation-Linked Bond Fund may be adversely affected by a number of factors, including changes in the market’s inflation expectations, changes in real rates of interest or declines in inflation (or deflation). There is a risk that interest payments in inflation-indexed investments may fall because of a decline in inflation (or deflation). In addition, the Consumer Price Index for All Urban Consumers (“CPI-U”) may not accurately reflect the true rate of inflation. If the market perceives that any of these events have occurred, then the market value of those investments could be adversely affected.
- **Special Situation Risk** – Stocks of companies involved in acquisitions, consolidations, tender offers or exchanges, takeovers, reorganizations, mergers and other special situations can involve the risk that such situations may not materialize or may develop in unexpected ways. Consequently, those stocks can involve more risk than ordinary securities.
- **State and Municipal Investment Risk** – Events affecting states and municipalities may adversely affect the Fund’s investments and its performance. These events may include severe financial difficulties and continued budget deficits, economic or political policy changes, tax base erosion, state constitutional limits on tax increases, and changes in the credit ratings assigned to state and municipal issuers of debt instruments. Since 2008, many states and municipalities have experienced—and continue to experience—severe financial difficulties. As a result, the economies and fiscal condition of these states and municipalities have deteriorated significantly as a result of a number of economic and other factors,

including continued state and local housing crises, high unemployment levels, a drop in tax revenue and the larger national economic slowdown. The continued deterioration of state and municipal economies has resulted in large state and municipal budget deficits and it is unclear at this time when and how states and municipalities will close their budget gaps or how those solutions might affect state or municipal governments. A negative change in any one of these or other areas could affect the ability of state or municipal issuers to meet their debt obligations and result in losses to the Fund.

- **Style Risk** – The risk that use of a particular investing style (such as growth or value investing) may fall out of favor in the marketplace for various periods of time and result in underperformance relative to the broader market sector or significant declines in the value of a Fund’s portfolio investments
 - Risks of Growth Investing – Due to their relatively high valuations, growth stocks are typically more volatile than value stocks. For example, the price of a growth stock may experience a larger decline on a forecast of lower earnings, or a negative event or market development, than would a value stock. Because the value of growth companies is often a function of their expected earnings growth, there is a risk that such earnings growth may not occur or cannot be sustained.
 - Risks of Value Investing – Securities believed to be undervalued are subject to the risks that: (1) the issuer’s potential business prospects are not realized; (2) their potential values are never recognized by the market; and (3) due to unanticipated or unforeseen problems associated with the issuer or industry, they were appropriately priced when acquired and therefore do not perform as anticipated.
- **Tax Risk** – Income from tax-exempt municipal obligations could be declared taxable because of unfavorable changes in tax laws, adverse interpretations of the Internal Revenue Service or the non-compliant conduct of a bond issuer.
- **Underlying Funds Risks** – A Fund is exposed to the risks of the underlying Funds in which it invests in direct proportion to the amount of assets the Fund allocates to each underlying Fund.
 - **Equity Underlying Funds Risks** – The risks of investing in equity underlying Funds include risks specific to their investment strategies, as well as risks related to the equity markets in general, such as:
 - market risk – The risk that the price of equity investments may decline in response to general market and economic conditions or events, including conditions and developments outside of the financial markets;
 - issuer risk – The risk that an issuer’s earnings prospects and overall financial position will deteriorate, causing a decline in the value of the issuer’s financial instruments over short or extended periods of time; and
 - foreign investment risk – The risks of investing in underlying Funds

with foreign investments include increased risks of adverse issuer, political, regulatory, currency, market or economic developments than investments in U.S. issuers, which can result in greater market and price volatility. These risks may be heightened in emerging or developing markets. Foreign investments may also be less liquid and more difficult to value than investments in U.S. issuers.

- **Fixed-Income Underlying Funds Risks** – The risks of investing in fixed-income underlying Funds include risks specific to their investment strategies, as well as risks related to the fixed-income markets in general, such as:
 - credit risk – The risk that a decline in an issuer’s financial position may prevent it from making principal and interest payments on fixed-income investments held by a Fund when due;
 - interest rate risk – The risk that the value or yield of fixed-income investments may decline if interest rates change, which could adversely affect a Fund’s income or the value of its holdings;
 - income volatility risk – The risk that the level of current income from a Fund’s portfolio of fixed-income securities may decline due to rapid and unpredictable changes in prevailing market interest rates;
 - call risk – The risk that, during periods of falling interest rates, an issuer may call (or repay) a fixed-income security prior to maturity, resulting in a decline in a Fund’s income;
 - extension risk—The risk that during periods of rising interest rates, borrowers may pay off their mortgage loans later than expected, preventing a Fund from reinvesting principal proceeds at higher interest rates and resulting in less income than potentially available;
 - issuer risk—The risk that an issuer’s earnings prospects and overall financial position will deteriorate, causing a decline in the value of the issuer’s financial instruments over short or extended periods of time; and
 - credit spread risk—The risk that credit spreads (i.e., the difference in yield investments between securities that is due to differences in each security’s respective credit quality) may increase when market participants believe that bonds generally have a greater risk of default, which could result in a decline in the market values of a Fund’s debt securities;
- **Direct Real Estate Underlying Funds Risks** – The risks of investing in direct real estate underlying Funds include risks specific to their investment strategies, as well as risks related to investing in real estate in general, such as:
 - real estate-related investment risk – The risks associated with exposure to direct real estate through investing in investment vehicles managed by TAL that will primarily invest directly in real estate, which can include declines in real estate values or revenues, uninsured

losses at properties, the absence of regulatory oversight of and a secondary market for interests in direct real estate underlying Funds, a scarcity of interests issued by direct real estate Underlying Funds, making it difficult for the Fund to achieve its target allocation, and illiquidity of interests in direct real estate Underlying Funds.

- **U.S. Government Securities Risk** – Securities issued by the U.S. Government or one of its agencies or instrumentalities may receive varying levels of support from the U.S. Government, which could affect a Fund’s ability to recover should they default. To the extent a Fund invests significantly in securities issued or guaranteed by the U.S. Government or its agencies or instrumentalities, any market movements, regulatory changes or changes in political or economic conditions that affect the securities of the U.S. Government or its agencies or instrumentalities in which a Fund invests may have a significant impact on a Fund’s performance.
- **Valuation Risk** – The debt securities in which a Fund invests typically are valued by a pricing service utilizing a range of market-based inputs and assumptions, including readily available market quotations obtained from broker-dealers making markets in such instruments, cash flows and transactions for comparable instruments. Pricing services generally price debt securities assuming orderly transactions of an institutional “round lot” size, but some trades may occur in smaller, “odd lot” sizes, often at lower prices than institutional round lot trades.

Multi-Asset Class Investment Risks

For Multi-Asset Class Investments strategies, the following risks are in addition to those described above, as applicable.

- **Call Option Risk** – The value of call options that an account sells (writes) will fluctuate. The account may not participate in any appreciation of its equity portfolio as fully as it would if the account did not sell call options. In addition, the account will continue to bear the risk of declines in the value of its equity securities.
- **ETF Risk** – An ETF is subject to the risks of the underlying securities that it holds. In addition, as noted above, for index-based ETFs, the performance of an ETF may diverge from the performance of the index (tracking error). ETFs pay fees and expenses (like management fees and operating expenses) that do not apply to an index, and the portfolio will indirectly bear its proportionate share of the ETF’s fees and expenses. Moreover, ETF shares may trade at a premium or discount to their net asset value. As ETFs trade on an exchange, they are subject to the risks of any exchange-traded instrument, including: (i) an active trading market for its shares may not develop or be maintained, (ii) market makers or authorized participants may decide to reduce their role or step away from these activities in times of market stress, (iii) the exchange may halt trading of its shares, and (iv) its shares may be delisted from the exchange.

- **ETN Risk** – Like other index-tracking instruments, ETNs are subject to the risk that the value of the index may decline, at times sharply and unpredictably. In addition, ETNs, which are debt instruments, are subject to risk of default by the issuer.
- **Fund Risk** – Investing in Funds, particularly in an asset allocation portfolio, causes a portfolio to indirectly bear its proportionate share of the Fund’s fees and expenses, in addition to portfolio expenses. Investing in Funds also subjects a portfolio to the same risks associated with directly investing in securities held by the Fund. Additionally, for index-based Funds (including ETFs), the performance of the Fund may diverge from the performance of the index (commonly known as tracking error).
- **Futures and Swaps Risk** – The use of futures contracts and swaps to manage the portfolio’s volatility may expose the portfolio to losses (some of which may be sudden) to which it would not otherwise have been exposed if the portfolio held only direct investments in equity securities. For example, if the portfolio holds long positions in futures contracts or total return swaps and there is a decline in the value of the underlying equity index, the value of the futures contract or total return swaps will decline at the same time as the portfolio’s direct investments in equity securities, leaving the portfolio in a worse position than if it had held only direct investments in equity securities. Conversely, if the portfolio holds short positions in futures contracts or total return swaps and there is an increase in the value of the underlying equity index, the value of the portfolio’s positions will decline and offset any appreciation of the portfolio’s direct investments in equity securities. Losses on short positions are theoretically unlimited since there is no limit as to how high the underlying equity index can appreciate in value. In addition, investments in futures contracts and swaps may entail investment exposures that are greater than their cost would suggest. As a result, a small investment in futures contracts or swaps could have a large impact on performance. While the futures contracts utilized by the portfolio are standardized and traded on an exchange, total return swap agreements are privately negotiated and entered into in the over-the-counter market with a single counterparty. When the portfolio enters into such swap agreements it bears the risk that its counterparty will default on its obligations.
- **Index Call Option Risk** – Because index options are settled in cash, sellers of index call options cannot provide in advance for its potential settlement obligations by acquiring and holding the underlying securities.
- **Index Methodology Risk** – There can be no assurance that the U.S. or any foreign inflation index will accurately measure the real rate of inflation in the prices of goods and services.
- **Managed Volatility Strategy Risk** – There can be no assurance that the quantitative models used to manage the portfolio’s volatility will accurately forecast realized volatility levels or enable the portfolio to maintain its targeted volatility range; the actual volatility that the portfolio experiences may be significantly higher than its target. In

addition, during periods of strong positive equity market performance, the volatility management strategy can be expected to limit the portfolio's gains when compared to similar strategies that do not attempt to manage volatility.

- **Multi-Manager Risk** – When allocating assets to underlying managers, the interplay of the various strategies employed by the underlying managers may result in an account holding a significant amount of certain types of securities. This may be beneficial or detrimental to an account's performance depending upon the performance of those securities and the overall economic environment. The managers may make investment decisions that conflict with each other; for example, at any particular time, one manager may be purchasing shares of an issuer whose shares are being sold by another manager. Consequently, the account could indirectly incur transaction costs without accomplishing any net investment result. In addition, the multi-manager approach could increase an account's turnover rate, which may result in higher transaction costs and higher taxes.
- **Statistical Method Risk** – Certain allocation strategies attempt to keep their volatility within a specified range using a proprietary statistical method. There can be no assurance that this method will perform as anticipated or enable a strategy to achieve its objective.

Also consider the following additional risks:

- **Additional Regulatory Risk** – If financial markets become unstable, as happened in 2008-2009, federal, state, and other governments, their regulatory agencies, or self-regulatory organizations could take actions that affect the regulation of the instruments in which an account invests, or the issuers of such instruments, in ways that are unforeseeable. Volatile financial markets can expose accounts to greater market and liquidity risk and potential difficulty in valuing portfolio instruments held by accounts. The value of an account's holdings is also generally subject to the risk of future local, national, or global economic disturbances based on unknown weaknesses in the markets in which an account invests. In the event of such a disturbance, issuers of securities held by a portfolio may experience significant declines in the value of their assets and even cease operations, or may receive government assistance accompanied by increased restrictions on their business operations or other government intervention. In addition, it is not certain that the U.S. government will intervene in response to a future market disturbance and the effect of any such future intervention cannot be predicted. It is difficult for issuers to prepare for the impact of future financial downturns, although companies can seek to identify and manage future uncertainties through risk management programs.
- **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 TAL, 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.

Please note that investing in securities involves a risk of loss that clients should be prepared to bear. Also, some of the strategies may involve frequent trading which may increase the brokerage and other transaction costs and taxes associated with such a strategy. These increased costs and taxes may negatively affect the performance associated with such strategies.

Item 9 Disciplinary Information

Federal regulations require TAL to disclose all material facts regarding any legal or disciplinary events that would be material to the evaluation of TAL or the integrity of TAL's management. To that end, TAL has no events to report.

Item 10 Other Financial Industry Activities and Affiliations

TAL has arrangements that are material to its advisory business or its clients with related persons. Also, certain supervised persons of TAL are registered representatives of one or more affiliated broker/dealers.

As discussed above, TAL is a subsidiary of Nuveen Finance, LLC, which is an indirect subsidiary of Nuveen. Nuveen is a subsidiary, and represents the Asset Management division, of TIAA, a leading financial services provider. TIAA constitutes the ultimate principal owner of TAL. For additional information on the ownership structure, please see Form ADV Part 1, Schedules A and B.

TIAA's subsidiaries include various financial industry entities, including broker-dealers, other investment advisers, commodity pool operators and/or commodity trading advisors, banking or thrift institutions, insurance companies or agencies, pension consultants, sponsors or syndicators of limited partnerships, and sponsors, general partners, or managing members of pooled investment vehicles, among other entities. For further information on these subsidiaries, please see Exhibit A.

TIAA is considered a control person of TAL and TIAA's other financial industry entities may be considered affiliates of TAL under various other regulatory regimes, including as applicable the Investment Advisers Act of 1940, as amended (the "Advisers Act"), the Investment Company Act and the Employee Retirement Income Security Act of 1974 ("ERISA").

TAL is committed to putting the interests of its clients first and seeks to act in a manner consistent with its fiduciary and contractual obligations to its clients and applicable law. At times, TAL may determine, in an exercise of its discretion, to limit or refrain from entering into certain transactions, for some or all clients, in order to seek to avoid a potential conflict of interest, or where the legal, regulatory, administrative or other costs associated with entering into the transaction are deemed by TAL to outweigh the expected benefits. Further, certain regulatory and legal restrictions or limitations and internal policies (including those relating to the aggregation of different account holdings by TAL and its affiliates) may restrict certain investment or voting activities of TAL on behalf of its clients. For example, TAL's investment and proxy voting activities with respect to certain securities, issuers, regulated industries and non-U.S. markets may be restricted where applicable laws or regulations impose limits or burdens with respect to exceeding certain investment thresholds when aggregated with its affiliates.

From a business perspective within Nuveen, TAL's business is part of a functional group (known internally as Nuveen Equities & Fixed Income), which seeks to provide alignment and collaboration among certain Nuveen affiliates managing public equity and fixed income

asset classes. These affiliates include TAL, TIAA-CREF Investment Management, LLC (“TCIM”), Nuveen Asset Management, LLC (“NAM”), NWQ Investment Management Company, LLC, Santa Barbara Asset Management, LLC, Winslow Capital Management, LLC, and others.

From an investment perspective within Nuveen, TAL’s municipal fixed income, taxable fixed income, and equities investment services are part of a broader Nuveen organizational framework that seeks to promote greater collaboration among and provide leadership to the respective investment teams. TAL’s municipal bond and taxable fixed income investment teams comprise investment and trading personnel who perform functions across TAL, TCIM and NAM (“Multi-hatted Personnel”). These teams coordinate and share investment and certain trading processes with respect to client accounts in municipal bond and taxable fixed income strategies. These integrated municipal bond and taxable fixed teams are sometimes referred to in the marketplace as Nuveen Municipal Fixed Income and Nuveen Global Fixed Income, respectively. Further integration and use of Multi-hatted Personnel within the Nuveen equities teams is expected.

Multi-hatted Personnel face conflicts in providing services for various clients of multiple affiliates, such as in the areas of trade sequencing and allocating opportunities. These conflicts are similar to the conflicts they face in providing services to various clients (including affiliated and proprietary accounts) of a single investment adviser. Through its policies, procedures and practices, TAL seeks to provide for the fair and equitable treatment of its clients. See Item 12.

TIAA affiliates market, distribute, make referrals of, use and/or recommend investment products and services (including Funds and investment advisory services) of other affiliates (including TAL), and such affiliates may pay and receive fees and compensation in connection thereto. As a result of the potential additional economic benefit to TAL and/or its affiliates resulting from such activities, there is a potential conflict of interest for TAL, which TAL seeks to mitigate in a variety of ways, depending on the nature of the conflict, such as through oversight of these activities and/or by disclosure in this Brochure. Affiliated broker-dealers and their personnel act as distributors with respect to and/or promote and provide marketing support to affiliated funds and broker-dealer personnel are internally compensated for those activities. Such distribution activities are subject to the broker-dealer’s own procedures.

TAL serves as sub-adviser to several affiliated products including UCITS, Retail SMAs, ETFs and Closed-end Funds. Nuveen Fund Advisors, LLC is the adviser for the UCITS, ETF and Closed-end Fund platforms. NAM acts as the adviser for the Retail SMAs.

For certain strategies, it is expected that, with respect to all or a material portion of an account, TAL will allocate to or recommend itself, affiliated Funds, affiliated products and/or affiliated advisers, and as a result in such case, TAL and its affiliates will retain more fees than if TAL had allocated to or recommended an unaffiliated fund, product or adviser. Clients should be

aware of this potential conflict when engaging TAL for multiple services, and should consult their own independent professional advisor(s) to determine whether the arrangement is appropriate and in their continuing best interests.

TAL also provides services from time to time to various accounts affiliated with TIAA including TIAA annuity accounts and TIAA general accounts See Item 11 and 12.

As described herein, TAL provides services to multiple proprietary or affiliated Funds or accounts of various sizes and strategies. It is the general policy of TAL that proprietary or affiliated Funds or accounts should receive neither special advantages nor disadvantages. TAL addresses the conflict associated with providing services to both affiliated and unaffiliated Funds/accounts by seeking to act in a manner consistent with its policies and procedures and its fiduciary duty to all clients.

TAL's affiliates or shared services units provide it with supplemental account administration, trading, operations, client service, sales and marketing, product development and management, risk management, information technology, legal and compliance, human resources, and other corporate, finance or administrative services. TAL may likewise provide services for its affiliates. Multi-hatted Personnel may perform services for both TAL and one or more TAL affiliates. The scope of certain such services and arrangements varies depending on the particular strategy, distribution channel, program, and client size and type.

Item 11 Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

TAL is subject to Nuveen's Code of Ethics and TAL's Code of Ethics Supplement (collectively, the "Code") under Rule 204A-1 of the Investment Advisers Act and Rule 17j-1 of the Investment Company Act. The Code governs, among other things, the personal trading activities of certain employees ("Access Persons") and members of their households. Access Persons must at all times place the interests of TIAA and its affiliates and clients above their own. In addition, Access Persons:

- May not attempt to profit personally from their knowledge of recent or contemplated transactions in clients' accounts including any mutual funds affiliated with TAL.
- Must act in a manner consistent with that of a fiduciary with respect to client accounts.
- Must conduct personal securities transactions consistent with the Code and in such a manner as to avoid any actual or potential conflict of interest or any abuse of a position of trust and responsibility.
- May not purchase or sell a security when they have actual knowledge that a mutual fund or other client account will be trading in that security (or a related security).

Access Persons are required to maintain their brokerage accounts at a limited number of brokerage firms approved by Compliance. While Access Persons and their household members may invest in securities that may also be purchased or held by client accounts, they must pre-clear and report all covered securities transactions as required by the Code. In addition, Access Persons must disclose personal security transactions and holdings information. The Code is designed to ensure that the personal securities transactions, activities and interests of the Access Persons will not interfere with making decisions that are in the best interest of advisory clients. The Code therefore restricts trading in close proximity to client trading activity and restricts personal trading for securities for which the firm is in possession of Material Nonpublic Information. Under the Code, certain classes of securities have been designated as exempt transactions in conjunction with associated rules. Access Persons' trading is continually monitored under the Code to reasonably detect and prevent conflicts of interest between TAL and its clients. All Access Persons must annually acknowledge their understanding of the terms of the Code. TAL will provide a summary copy of the Code to any client or prospective client upon request.

TAL and its affiliates must also adhere to the restrictions contained in the TIAA Code of Business Conduct, which articulates general standards of ethical conduct for employees, the Teachers Advisors, LLC and TIAA-CREF Investment Management, LLC Material Nonpublic Information Policy, and the Nuveen Global Business Gift, Meal and Entertainment Policy.

Transactions Among Clients

TAL may periodically recommend securities to clients that are also recommended by one or more of its affiliated persons to their clients. TAL has policies and procedures such as the fair allocation policies described in Item 12 to address any conflicts that may arise from such transactions.

TAL may purchase or sell securities for the accounts of its clients in which TAL or a related person may have a position of financial or other interests and may buy or sell for itself securities that it also recommends to its clients (“Principal Transactions”). Principal Transaction strategies are used primarily to rebalance the various CLO portfolios advised by TAL, in connection with the liquidation of the assets of a CLO transaction, to contribute assets to a CLO from time to time (including as may be structured for purposes of applicable risk retention rules or similar requirements) or to take advantage of other opportunities.

TAL has established a variety of restrictions, procedures and disclosures designed to address any potential conflicts of interest that may arise as a result of these arrangements. Pursuant to these policies, any principal or cross transaction must be fair and equitable, and executed in accordance with the requirements of Section 206(3) under the Advisers Act. In addition, the sale price and purchase price in Principal Transactions and cross transactions will be the market value of the securities.

TAL may execute transactions between its registered investment companies and other client accounts it manages, as well as certain other clients managed by its affiliates (including the CREF accounts managed by TIAA-CREF Investment Management, LLC). Any such transactions will be executed in accordance with Rule 17a-7 under the Investment Company Act and procedures adopted by the TAL’s Boards of Trustees (as applicable). The procedures provide among other things that (1) the transaction was a purchase or sale, for no consideration other than cash payment against prompt delivery of the security for which market quotations were readily available, (2) the transaction was effected at the independent current market price of the security determined as specified in the procedures, (3) the transaction is consistent with the policy of each Fund participating in the transaction, as recited in its registration statement, and (4) no brokerage commission, fee (except for customary transfer fees) or other remuneration was paid in connection with the transaction.

TAL’s investment decisions are limited by the investment criteria established for each client and TAL’s own internal guidelines. In making any investment decision concerning the amount of securities to buy or sell, TAL will consider many factors, including but not limited to, the client’s policies and restrictions, investment objectives, issuer, industry and sector concentration, tax implications and the size of the investment in relation to the account.

In its role as investment adviser to CLOs, TAL may have discretionary authority to buy and

sell securities for the CLOs. TAL and/or affiliates may, under certain circumstances, purchase or sell securities to or from its CLO clients. TAL may also, under certain circumstances, purchase or sell securities for a CLO client account to or from another CLO client account (“Cross Transactions”). TAL has adopted a policy on all Principal Transactions and Cross Transactions with respect to its CLO business, which is summarized below.

Under the policy, the sale price in all Principal Transactions and in all Cross Transactions will be the fair market value of the securities purchased or sold. TAL may not directly or indirectly earn any compensation other than its usual advisory fee for effecting a Cross Transaction between its CLOs clients without the explicit authorization of appropriate management committees or other oversight functions. If such compensation is earned, the Cross Transaction must comply with the notice and consent requirements of Section 206(3) of the Advisers Act. Furthermore, all Cross Transactions between a client and an investment company client of TAL must comply with TAL’s Rule 17a-7 procedures.

TAL, when appropriate, may advise its clients to invest in securities that are being purchased by its parent, TIAA. TAL has an established trade allocation policy to seek to ensure that the purchased securities are allocated fairly.

Cross Trades

For certain client accounts, in accordance with applicable law, TAL effects cross trades between the accounts of clients advised by it or its affiliates in appropriate circumstances. TAL believes that cross trades have the potential to provide benefits to both the buying and the selling account, including eliminating or reducing transaction costs. Further, cross trades can provide a potentially attractive alternative to selling or buying a small-lot size of a desirable security in the open market, especially when the small-lot is part of a larger block position held by other TAL clients. Prior to each cross trade transaction, TAL will determine that the transaction is in the best interests of both clients concerned based on the investment objectives and portfolio characteristics of each client account. Neither TAL nor any broker-dealer affiliated with TAL receives any commission, transaction fees or other transactional compensation in connection with effecting cross trades.

Any cross trades involving U.S. registered open-end and closed-end investment companies are carried out in accordance with Rule 17a-7 under the Investment Company Act and applicable policies and procedures.

Cross trades involving accounts subject to ERISA are not generally permitted.

Material Non-Public Information

From time to time, TAL is subject to limitations on its investment activities relating to the possession of material non-public information (“MNPI”). Under applicable law, TAL and its personnel are prohibited from improperly disclosing or using MNPI for its own benefit

or the benefit of its clients. Possession of MNPI could limit TAL's ability to transact in affected investments, which could be detrimental to client accounts. TAL may in its discretion seek to employ the use of certain approaches or procedures to seek to minimize such limitations, but there is no assurance that TAL will employ such procedures or that such procedures will be effective in alleviating the limitations associated with possessing MNPI.

Capital Structure

Conflicts will also arise in cases where different Funds or clients of TAL or affiliates of TAL invest in different parts of an issuer's capital structure, including circumstances in which one or more clients or Funds may own private securities or obligations of an issuer and other clients or Funds may own public securities of the same issuer. For example, a Fund may acquire a loan, loan participation or a loan assignment of a particular borrower in which one or more other Funds have an equity investment. In addition, different clients or Funds may invest in securities of an issuer that have different voting rights, dividend or repayment priorities or other features that may be in conflict with one another. In negotiating the terms and conditions of any such investments, or any subsequent amendments or waivers, TAL or its affiliates may find that their own interests, the interests of clients or accounts/Funds could conflict. For example, a debt holder may be better served by a liquidation of the issuer in which it may be paid in full, whereas an equity holder might prefer a reorganization that holds the potential to create value for the equity holders. Any of the foregoing conflicts of interest will be discussed and resolved on a case-by-case basis. Any such discussions will take into consideration the interests of the relevant clients and Funds, the circumstances giving rise to the conflict and applicable laws.

Item 12 Brokerage Practices

Selecting Broker-Dealers

TAL is responsible for decisions to buy and sell securities for its clients as well as for selecting brokers and, where applicable, negotiating the amount of the commission rate paid. It is the intention of TAL to place brokerage orders with the objective of obtaining the best execution. In evaluating best execution for equity transactions, TAL considers a number of factors, including, without limitation, the following: best price; the nature of the security being traded; the nature and character of the markets for the security to be purchased or sold; the likely market impact of the transaction based on the nature of the transaction; the skill of the executing broker; the liquidity being provided by the broker; the broker-dealer's settlement and clearance capability; the reputation and financial condition of the broker-dealer; the costs of processing information; the nature of price discovery in different markets; and the laws and regulations governing investment advisers. When purchasing or selling securities traded on the over-the-counter market, TAL generally will execute the transactions with a broker engaged in making a market for such securities. When TAL deems the purchase or sale of a security to be in the best interests of one or more accounts, it may, consistent with its fiduciary obligations, decide either to buy or to sell a particular security for the accounts at the same time as for other clients that it may be managing, or that may be managed by its affiliate, TCIM, another investment adviser subsidiary of TIAA. In that event, allocation of the securities purchased or sold, as well as the expenses incurred in the transaction, will be made in an equitable manner.

Transactions on equity exchanges and other agency transactions involve the payment of negotiated brokerage commissions. Such commissions vary among different brokers. Trades are regularly monitored for best execution purposes by the equity trading desk.

TAL's fixed-income traders select the broker-dealers (sell-side) with whom they do business independent of any research, strategy pieces or trade recommendations provided to TAL. The vast majority of institutional fixed-income trading is conducted over-the-counter rather than on exchanges, with set prices plus commissions. Fixed-income trading is based on the risk-taking practice of market making by sell-side firms, which attempt to capture the bid/ask spread on trades where capital is committed (principal model) or on a pre-negotiated spread concession for riskless principal trades (agency model).

The fixed-income marketplace does not use a voting system to rate broker-dealers with the intent of using those rankings to direct or allocate trades. The directive to TAL's fixed-income traders, and the conventional trading construct within the fixed-income market, is based on the practice of fiduciary efforts to achieve best execution. The research, credit opinions and relative value trade recommendations provided by TAL's sell-side counterparts are evaluated, but there is no direct linkage between that evaluation and TAL's selection of a particular broker-dealer for trade execution. When selecting a broker, the traders follow established trading protocols for data aggregation, price discovery, inventory

mining and information protection and conduct an assessment of counterparty performance. The protocol incorporates TAL's knowledge of and experience with select broker-dealers with respect to providing liquidity, namely the highest bid price or lowest offer price for a particular security.

TAL and certain affiliates utilize one or more shared centralized trading desks for trading certain fixed income strategies for Funds and Institutional Separate Accounts, depending on the specific strategy, dollar amount, operational connectivity, and other factors, and a separate shared centralized trading desk for trading equities for Retail SMA Accounts.

Every broker is reviewed by the Equity or Fixed-Income Best Execution Committee, as appropriate, which is comprised of representatives from trading, portfolio management, compliance and law. Risk management also reviews the creditworthiness of all brokers.

TAL does not use affiliated broker-dealers to execute any trades on its behalf. Also, Client referrals do not play a role in TAL's broker selection process except with respect to Retail SMA Accounts.

Prohibition on Directed Brokerage Arrangements for Registered Investment Company Clients

TAL has adopted policies and procedures relating to its registered investment company clients to prohibit directed brokerage arrangements prohibited by Rule 12b-1 (h) under the Investment Company Act. This rule prohibits investment companies from using brokerage commissions to compensate any broker-dealer for the promotion or sale of investment company shares. TAL's policies and procedures prohibit it from using select broker-dealers to execute Fund portfolio securities transactions, or directing commissions to broker-dealers in consideration of promotional or sales efforts with respect to the Funds. In addition, the Funds, the College Retirement Equities Fund, their respective investment advisers, and any principal underwriter of the Funds may not enter into any agreement (whether oral or written) or other understanding under which a Fund directs, or is expected to direct, Fund portfolio securities transactions, or any remuneration (including but not limited to any commission, mark-up, mark-down, or other fee or portion thereof received or to be received from the Fund's portfolio transactions effected through any other broker-dealer), to a broker-dealer in consideration for the promotion or sale of Fund shares. In particular, commissions may not be allocated to a broker-dealer in return for sale of the Funds, for "shelf space" for the Funds, for exposure of Funds to the broker-dealer's sales force or clients, or for any other arrangement that is designed to support or promote the broker-dealer's sales of the Funds' shares.

Transactions for Initial Purchase of Equity or Debt Instruments

Transactions involving the initial purchase of equity or debt instruments generally involve an investment banker that charges a fee to the issuer of the equity or debt securities. TAL does not directly pay a fee or negotiate the fee.

Research and Services Provided by Broker-Dealers

With respect to equity securities, TAL has adopted a policy embodying the concepts of Section 28(e) under the Securities Exchange Act of 1934, which provides a safe harbor allowing an investment adviser to cause a client to pay a higher commission to a broker that also provides research services than the commission another broker would charge (generally referred to as the use of “soft dollars”). To utilize soft dollars, the adviser must determine in good faith that the commission paid is reasonable in relation to the value of the brokerage and research services provided and that, over time, each client paying soft dollars receives some benefit from the research obtained through the use of soft dollars. An adviser may make such a determination based upon either the particular transaction involved or the overall responsibilities of the adviser with respect to the accounts over which it exercises investment discretion. Therefore, specific research may not necessarily benefit all accounts paying commissions to such broker. Research obtained through soft dollars may be developed by the broker or a third party, where the obligation to pay is between the broker and the third party. In such cases the research will be paid for through a Commission Sharing Arrangement (CSA) or similar arrangement.

Fixed-income trades on behalf of TAL’s clients in which the broker is acting as principal may not be allocated in order to generate soft dollar credits, but at times, a broker may send TAL unsolicited proprietary research that may be based in part on fixed-income trading volume directed to that broker. Similarly, trades on behalf of TAL’s clients that follow an index or quantitative strategy, or execution-only trades, may not generate soft dollars, but at times a broker may send TAL unsolicited proprietary research that is based in part on such trades.

As part of Nuveen Equities (the integrated equity investment teams of affiliates TCIM, TAL and Nuveen Asset Management, LLC (“NAM”)), CSA credits generated by TAL, TCIM and NAM are aggregated in to a single pool, and research is allocated among the respective Nuveen Equities investment teams based on factors such as asset size of the team’s equity strategy and the strategy’s geographic considerations (e.g., U.S. vs non-U.S.; developed markets vs emerging markets).

Research or services obtained for one client may be used by TAL in managing other clients and other investment company clients and advisory clients of TAL. Research or services obtained by TAL also may be used by TCIM or NAM for the benefit of their respective clients, and vice versa.

To address conflicts of interests, TAL has adopted policies and procedures for the use of soft dollars. Additionally, TAL may develop specialized policies and procedures for the use of and payment for soft dollars with respect to particular clients.

Client-Directed Brokerage Transactions

TAL does not generally recommend or request that a client direct TAL to execute transactions through a specified broker-dealer. Clients, including certain Retail SMA Accounts, may direct TAL to use a particular broker-dealer, or broker-dealers, to execute portfolio transactions for its account. Where a client directs the use of a particular broker-dealer, or broker-dealers, TAL may not be in a position where it can freely negotiate commission rates or best price, or select broker-dealers on the basis of best price and execution. Additionally, transactions for a client that directs brokerage may not be combined or “blocked” for execution purpose with orders for the same securities or other Funds or account managed by TAL. As a result, client-directed brokerage transactions may result in higher commissions or less favorable net prices than would be the case if TAL were empowered to select brokers and dealers to execute transactions for the client’s account. In the event of a sale or purchase executed for all or most of TAL’s clients, it is the policy of TAL to first execute transactions where TAL is authorized to select the broker followed by client-directed brokerage arrangements.

A client may direct TAL to direct portfolio transactions to broker-dealers that agree to pay custodial, transfer agent or other expenses which would otherwise be paid by clients of TAL or clients of TAL’s affiliates. In such circumstances, each client’s commissions are used to defray that client’s expenses only and are not used for the benefit of any other client. Broker-dealer participation in these arrangements typically also provides TAL with research and brokerage services.

Trade Error Policy

It TAL’s policy to review, report, and correct transaction-related errors that occur in connection with client public market securities transactions as soon as possible, so that clients are not disadvantaged as a result of an error. Transaction exceptions are escalated for review to the Transaction Error Review Committee, a group comprised of senior-level control partners including representatives from Law, Compliance, Risk Management, Finance and Operations. The Committee is responsible for overseeing the reimbursement of transaction errors in client accounts managed by the TAL. The Committee reviews the facts and circumstances of each error presented and has the authority to act on behalf of TAL to determine the appropriate reimbursement of client accounts. The Committee also analyzes the root cause of exceptions and evaluates the remediation of control gaps. All exceptions, reimbursements and corrective actions taken to remediate process gaps are reviewed and approved by the Committee.

For trade errors that occur in Retail SMA Accounts, TAL generally does not have the ability to control the ultimate resolution of the trade error. In these instances, the trade error and resolution thereof will be governed by the program sponsor’s policies and procedures or directions. Certain program sponsors establish trade error accounts for their programs whereby gains for certain errors in client accounts managed by TAL are offset by losses in

other client accounts managed by TAL in the same program(s) over varying time periods. This offsetting of gains with losses could result in a benefit or detriment to TAL.

Policies Regarding Aggregation and Allocation of Orders

Equity Securities Policy

TAL has adopted aggregation and allocation of orders procedures designed to treat each account fairly and equitably over time in the allocation of investment opportunities and the aggregation and allocation of trades. The procedures also impose restrictions on potentially inconsistent trading and provide guidelines for trading priority. Moreover, TAL's trading activities are subject to supervisory review and compliance monitoring to help address and mitigate conflicts of interest and ensure that accounts are being treated fairly and equitably over time. In determining whether an account's participation in an order is appropriate, TAL considers the account's investment objectives, investment restrictions, cash position, need for liquidity, sector concentration, brokerage considerations relating to the account and other criteria.

TAL may aggregate or "bunch" orders of various accounts, including registered investment companies, unregistered investment companies, TIAA, other proprietary accounts and client accounts of TAL's affiliates (e.g., CREF accounts managed by TCIM)), consistent with TAL's policy to seek best execution for its orders.

In summary, subject to best execution considerations, open orders for the same single security are generally aggregated with other orders for the same single security with the same trading priority guidelines received at the same time as well as with open or unfilled portions of earlier orders of the same single security with the same trading priority. If aggregated orders are fully executed, each participating account is allocated its share pro rata based on order size on an average execution price and trading cost basis. In the event the order is only partially filled, each participating account receives a pro-rata share of the securities purchased (or a pro-rata share of the proceeds of securities sold) based on the size of its order relative to the aggregated order.

However, basket trades are generally not aggregated with orders for the same security in other baskets or with single security orders for the same name, because they are used to pursue quantitative strategies and rely on an automated process to implement trades on an as needed basis (as indicated by the relevant index or model). Also, because of their size, execution of the basket trades occur in stages and TAL must be able to monitor characteristics (e.g., cash, region, sector, beta, neutrality) of the baskets in the aggregate in order to be able to make changes to the baskets as necessary. In certain instances (e.g., portfolio transitions), single name aggregation may occur if a trader determines that, based on basket characteristics as well as total volume to be traded and the illiquid nature of a particular security, one or more large single orders within a basket should be removed from the basket and aggregated with other orders (whether single security trades or other basket trades) to achieve best execution.

The procedures also impose restrictions on potentially inconsistent trading of single securities. For example, a portfolio manager of TAL may not sell a single security short for an account if the same portfolio manager either is long in the security or is neutral or overweight the long position against the benchmark of the account holding the securities long. Similarly, a portfolio manager may not buy a security long if the same portfolio manager has a short position in the same security. This limitation does not apply to a portfolio manager buying a security to close or reduce a short position or underweight long position against the benchmark of an account. This limitation also does not apply to securities, futures, or derivative instruments representing broad-based indices or baskets of underlying securities (e.g., certain exchange traded funds that track index of broad based securities) or trades for model-driven quantitative strategies. Basket trades do not have the same types of restrictions on potentially inconsistent trading because they are tailored to a particular index or model portfolio based on the risk profile of a particular account pursuing a particular quantitative strategy.

In addition, the procedures set forth guidelines for long and short trades. Both long and short trades are generally routed by portfolio managers to the same trading desk except with the exception of Retail SMA Accounts. Single security trades (both long and short) are time-recorded and prioritized for execution based on when they are received by the trading desk.

Exceptions to TAL's aggregation and allocation of orders procedures must be approved in accordance with the procedures.

Fixed Income Securities Policy

The mandate of the Fixed Income Trading Desk is to operate in a fiduciary capacity on behalf of all clients and to act in their best interest when trading securities. The Fixed Income Desk continually seeks to obtain the overall best trade execution given prevailing market conditions while utilizing approved broker-dealers as authorized by the Best Execution Committee.

Fixed income trades are typically executed on a net yield basis – the dealers through whom we execute client trades do not charge explicit commissions, commission equivalent (e.g., separately identifiable mark-ups and mark-downs in such transactions) or spreads. Fixed income orders entered into Bloomberg AIM, the fixed income trading system, are aggregated to assist in the best execution of trade orders. Most multiple account orders that are not completely filled after the initial trade execution are then allocated pro-rata automatically by AIM and incorporates the firm-wide de minimis and rounding requirements. The allocation for these orders are made pro-rata by account, based upon the original trade order each account's portfolio manager entered into AIM or communicated to the trading desk using pre-established AIM rules.

Non pro rata allocations for new issue municipal securities are generally based on specialty mandates that require preferable allocations of certain issues (such as state specific, high

yield, ESG or insured bonds) because of the more limited supply of investment opportunities for such mandates, rounding lot sizes, the relative availability of cash (or expected cash), and other factors.

With respect to investment and trading Multi-Hatted Personnel of TAL as well as TCIM and NAM, NAM's centralized trading desk for municipal securities new issues allocates new issues among accounts of TAL, TCIM and NAM. Such personnel face conflicts relating to providing services for various clients of multiple different affiliates, such as in the areas of trade sequencing and allocating investment opportunities. These conflicts are similar to the conflicts faced by such personnel in providing services for various clients (including affiliated and proprietary accounts) of a single investment adviser. Through its policies, procedures and practices, TAL seeks to provide for the fair and equitable treatment of such clients. See Item 10.

Post trade allocation, should a portfolio manager notify the trading desk that they wish to transfer a portion of or an entire allocation from one account to another account, a written exception request must be submitted to Global Public Markets management for review and approval. In cases where a portfolio manager opts to *withdraw* their entire allocation, either the balance will be offered to the remaining accounts on a pro-rata basis or the withdrawn balance will be sold in the secondary market, with performance attribution being assigned to the original portfolio account.

TAL's policy on the use of soft dollars prohibits generating soft dollars through fixed income transactions. Therefore, fixed income research provided by Broker-Dealers is not a criterion considered when executing trades. Fixed income research and related services are provided by our counterparts with a view that they are a cost of doing business and an important means of sustaining long-term relationships.

The Fixed Income Trading Desk does not employ the use of a voting system to rate Broker-Dealers with the intent of using those rankings to direct or allocate trades. The quality of research, credit opinions or relative value trade recommendations that are provided by our counterparts are periodically evaluated, but there is no connection between rankings and our selection of a particular Broker-Dealer for trade execution.

The Fixed Income Trading Desk does not execute trades for the Retail SMA Accounts.

Municipal Securities

Generally, secondary market trades are not managed by a centralized trading desk. Accordingly, while individual portfolio managers may aggregate trades for multiple accounts they manage, in most cases, such trades are not aggregated with trades initiated by other portfolio managers. In circumstances where a portfolio manager has reason to believe that other accounts managed by other portfolio managers may be in the market at the same time selling the same security, a central trading desk for new issues will coordinate the selling activity by coordinating and aggregating such sell orders.

IPO Allocation Policy

TAL has adopted written procedures with respect to allocation of initial public offerings (“IPOs”). Allocations of IPOs by TAL will be made in a fair and equitable manner consistent with its fiduciary obligations. Portfolio managers wishing to participate in a particular IPO or Secondary Offering must communicate their indications to the trading desk either in writing, through a secure computer system, or by calling the trading desk. The trading desk enters the indications into an IPO database. In situations where IPO or Secondary Offering shares allocated to the firm are less than the total amount of shares TAL indicated for all portfolio managers, default allocations among portfolio managers who have indicated for the IPO or Secondary Offering will be done pro rata, based on the amount of assets of the portfolio manager manages for each portfolio participating, subject to a ceiling based on the maximum amount indicated for each portfolio to ensure that the portfolio does not receive more shares than it had indicated for.

When indications are made on behalf of certain concentrated Funds (“Specialty Funds”), TAL uses a modified allocation process to help ensure that Specialty Funds receive a fair allocation of IPO and Secondary Offerings that fall within their areas of industry concentration. For the purposes of this IPO and Secondary Offering Allocation Policy, Specialty Funds are Funds that, as a fundamental investment policy, concentrate more than 25% of total assets in equities in any one industry.

TAL has put procedures in place to handle situations where allocations are to be changed after the order is placed, provided the reason for the change is in writing and signed off by appropriate senior management of TAL.

Allocation relating to Retail SMA Accounts

TAL endeavors to treat clients fairly and equitably over time with respect to trading sequencing and allocation. Where there are constraints on the use of aggregate orders, such as in the case of Retail SMA Accounts programs, or where TAL does not handle trading, such as in the case of the delivery of model portfolios, TAL employs, where appropriate, procedures that may include (i) employing the use of one or more execution or order delivery rotations among clients; (ii) executing orders or delivering model recommendations for different clients at approximately the same time; or (iii) other methods as may be developed from time to time. While these procedures are designed to treat clients in a fair and equitable manner over time, on any given order, some accounts may trade before other accounts, and some accounts may receive more favorable pricing than other accounts for the same security.

Allocations relating to Municipal Securities

New issues of municipal securities are allocated through a municipal bond centralized trading desk pursuant to procedures that are designed to treat all accounts fairly and equitably over time. Generally, if an allotment of a new municipal issue is for less than the total bonds for which orders were placed, the total allotment received generally will be allocated pro rata based on the number of bonds requested by each account, to the extent practicable. Non pro rata allocations are generally based on specialty mandates that require preferable allocations of certain issues (such as high yield, ESG bonds) because of the more limited supply of investment opportunities for such mandates, rounding lot sizes, the relative availability of cash (or expected cash), and other factors.

Item 13 Review of Accounts

Portfolio managers or their designees review on a coordinated basis TAL's client accounts for which they are responsible. . When client accounts are reviewed, the portfolio manager considers various matters, including any changes in firm policy or the objectives and needs of the client; changes in market conditions or changes of security positions; the current structure of the portfolio; if appropriate, the tax consequences of any transactions; and the effect on the portfolio of any known additions or withdrawals from the account in the future.

The TIAA Public Investments Oversight Committee is an internal management committee established as a sub-committee of Nuveen Risk Management Committee (the "Nuveen RMC") to oversee the investment risk, and compliance risk profiles, the design and implementation of risk management and compliance frameworks, and to report up to Nuveen RMC in fulfilling its risk and compliance oversight responsibilities for TIAA Public Investments. Along with the President of TIAA Public Investments, the Committee includes representatives from Risk Management, Compliance, Valuations, Law, Product, Client Portfolio Management, Fund Administration, Operations/IT and Investment Oversight.

With respect to its registered investment company clients, TAL monitors portfolios daily as well as reports on the investment performance of the investment companies to their respective Boards of Trustees at regularly scheduled meetings. With respect to unregistered private Funds, TAL reviews transactions to ensure that the amounts committed to the market in general, and the investments selected in particular, are consistent with each client's objective, and purchases and sales in any account are not excessive in size and frequency relative to the financial resources of the client. With respect to separate accounts, TAL may undertake reviews as a result of clients' requests. Such reviews may address performance of accounts, investment objectives, securities positions and other investment opportunities.

For its CLO business, TAL considers ongoing account review and credit surveillance to be as important as the initial investment decisions and actively monitors its clients' portfolios. TAL's analysts specialize by asset class and each is responsible for ongoing monitoring and analysis of a portion of the CLO portfolios. The surveillance process includes regular reviews of underlying collateral performance. These reviews may be conducted in various formats and may utilize both internal and 3rd party models. Analysts also maintain as needed communications with rating agencies, broker-dealers and other market participants.

In general, TAL provides monthly or quarterly client reports pursuant to its investment management agreements or other types of documents governing its advisory accounts.

For Retail SMA Accounts, clients generally receive reports regarding holdings, transactions and performance from the program sponsor or financial intermediary.

Item 14 Client Referrals and Other Compensation

TAL is not currently engaged in cash solicitation arrangements with third parties under Rule 206(4)-3 of the Advisers Act in connection with its advisory business.

In appropriate instances, TAL and its related persons refer business to each other with respect to each other's products and services. Prospects and clients to whom such referrals have been made should be aware of the conflict inherent in such referral as a result of the common control of such parties. See Item 10.

The following disclosure applies with respect to Retail SMA Accounts and Funds advised by TAL or its affiliates. In the ordinary course of business, TAL or a related person provides corporate gifts, meals and entertainment such as golfing and tickets to cultural and sporting events to personnel of firms that do business with TAL or its affiliates. Such gifts, meals and entertainment provided by TAL or a related person generate a conflict of interest to the extent that they create an incentive for the recipient or beneficiary to use, recommend, offer or include products or services of TAL in a particular program, include TAL in a preferred list of advisers, or refer clients to TAL. In the ordinary course of business TAL employees also are the recipients of corporate gifts, meals and entertainment. TAL's receipt of gifts, meals and entertainment generates a conflict of interest to the extent that they create an incentive for the recipient or beneficiary to use the services of the provider (e.g., in the case of a broker-dealer, brokerage services) of the gifts, meals and entertainment. The giving and receipt of gifts and other benefits are subject to limitations under internal policies and procedures.

TAL may pay fees to consultants for their advice and services, industry information or data, or conference attendance. If a particular payment constitutes, in TAL's judgment, a client solicitation arrangement under Rule 206(4)-3 under the Advisers Act, TAL will comply with the provisions of the Rule. The payment of fees to consultants generates a conflict to the extent that such payment creates an incentive for the recipient or beneficiary to use, recommend, offer or include products or services of TAL in a particular program, include TAL in a preferred list of advisers, or refer clients to TAL.

As a company under common control with Nuveen Investments, TAL is affiliated with the Nuveen Investments Wealth Management Services group, a division of Nuveen Investments that provides free general educational services to financial intermediaries who typically offer or use products or services of TAL and/or its advisory affiliates. Nuveen Investments Wealth Management Services makes available various financial and educational tools, reports, materials and presentations on current industry topics relevant to a financial advisor. Certain financial tools and illustrations may use data provided by a financial advisor. Materials and services provided by the Nuveen Investments Wealth Management Services group are not intended to constitute financial planning, tax, legal, or investment advice and are for educational purposes only. The provision of Nuveen Investments Wealth Management

services and materials generates a conflict of interest to the extent that such provision creates an incentive for the recipient or beneficiary to use, recommend, offer or include products or services of TAL in a particular program, include TAL in a preferred list of advisers, or refer clients to TAL.

In the ordinary course of business, TAL (or an affiliate) may make payments to firms or persons that use, recommend, offer or include products or services of TAL (and its affiliates) in a particular program, include TAL (and its affiliates) in a preferred list of advisers, or refer clients to TAL (or its affiliates). The types of payments include, without limitation, conference, program or event attendance, participation or exhibition sponsorship fees; educational and training fees; license, data access, operational or administrative fees; or fees linked to program participation or specific marketing initiatives within an existing program or new program. The amounts of such payments, which are generally made on an enterprise-wide basis, can be significant for certain SMA program sponsor or financial intermediary firm recipients (e.g., up to or in excess of \$1 million annually). TAL (or an affiliate on TAL's behalf) sometimes pays travel, meal and entertainment expenses for a firm's representatives and others who visit TAL's offices or other locations (including hotels and conference centers) to learn about its products and services. The foregoing payments generate a conflict to the extent that they create an incentive for the recipient or beneficiary of the payment to use, recommend, offer or include products or services of TAL in a particular program, include TAL in a preferred list of advisers, or refer clients to TAL.

TAL also may make charitable contributions or underwrite or sponsor charitable events at the request of others. Payments described above vary significantly from firm to firm depending on the nature of TAL's and its affiliated investment advisers' separate account activities with the firm and the amount of the firm's separate account client assets under TAL's and its affiliated investment advisers' management. Such contributions generate a conflict to the extent that they create an incentive for the recipient or beneficiary of the payment to use, recommend, offer or include products or services of TAL in a particular program, include TAL in a preferred list of advisers, or refer clients to TAL. Payments are subject to TAL or a related person's internal review and approval procedures.

Retail SMA Account clients are encouraged to request and review materials from program sponsors (such as a sponsor's program brochure) describing business and financial terms and arrangements between program sponsors and investment advisers. Clients are encouraged to make relevant inquiries of their financial advisory firms and financial advisors, consultants and other intermediaries regarding the arrangements and practices described above.

Item 15 Custody

Where TAL has control of the client's selection of a custodian, TAL uses qualified third-party custodians to custody client assets. Clients should receive at least quarterly, statements from the broker dealer, bank or other qualified custodian that holds and maintains the client's investment assets. TAL urges clients to carefully review such statements and compare such official custodial records to the account statements that TAL may provide to its clients. TAL's statements may vary from custodial statements based on accounting procedures, reporting dates or valuation methodologies of certain securities. TAL's statements are not intended to be a substitute for account statements provided by a qualified custodian, and should not be used for official purposes.

In the event of an inadvertent receipt of a check or other financial instrument payable to a client, TAL reserves the right to send the check or instrument to the client or its custodian rather than back to the original sender when it believes that such procedure provides the best overall protection for the underlying assets.

For Retail SMA Accounts, individual clients who seek to direct transfers or payments from their advisory account to third parties (e.g., to pay bills or transfer funds) should directly contact and instruct the account's custodian and/or primary financial advisor. It is generally outside the scope of TAL's authority and services to process or intermediate such instructions.

Item 16 Investment Discretion

TAL is responsible for decisions to buy and sell securities for its registered investment company clients, its CDO clients, in connection with its institutional asset management business, and for Retail SMA Accounts. TAL's authority is subject to certain limits, including written information received by TAL regarding the clients' investment objectives, guidelines and reasonable restrictions as well as regulatory constraints. TAL reserves the right to decline or terminate accounts with investment restrictions that are unduly burdensome or materially incompatible with TAL's investment approach (including restrictions affecting more than a stated percentage of the account).

With respect to TAL's registered investment company clients, such investment limitations are set forth in the client's registration statement filed with the SEC. Also, TAL's authority to trade securities for its registered investment company clients may also be limited by certain federal securities and tax laws.

Most clients are required to execute an agreement or other authorization prior to TAL's assumption of discretionary authority.

See also Item 4.

Item 17 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. In its capacity as fiduciary and discretionary investment manager, TAL votes the proxies of publicly traded companies held by its mutual funds, separately managed accounts, unregistered Funds and separate account clients (including discretionary Retail SMA Accounts) in accordance with the guidelines established by the Committees on Corporate Governance and Social Responsibility (“CGSR Committees”). TAL does not generally vote securities upon the direction of its clients.

TAL has a dedicated team of professionals responsible for reviewing and voting proxies. In analyzing a proposal, in addition to exercising their professional judgment, these professionals utilize various sources of information to enhance their ability to evaluate the proposal. These sources may include research from third-party proxy advisory firms and other consultants, various corporate governance-focused organizations, related publications and our investment professionals. Based on their analysis of proposals and guided by the TIAA Policy Statement on Responsible Investing (the “Policy Statement”), these professionals then make recommendations intended solely to advance the best interests of the participants. Individuals, including portfolio managers, research analysts and/or other personnel are solely and ultimately responsible for voting proxies on portfolio securities owned or managed on behalf of clients of TAL consistent with the best interests of the client and may override recommendations at any time. Occasionally, when a proposal relates to issues not addressed in the Policy Statement, TAL may seek guidance from the CGSR Committees.

TAL believes that it has implemented policies, procedures and processes designed to prevent conflicts of interest from influencing proxy voting decisions. These include: (i) oversight by the CGSR Committees; (ii) a clear separation of proxy voting functions from external client relationship and sales functions; and (iii) the active monitoring of required annual disclosures of potential conflicts of interest by individuals who have direct roles in executing or influencing proxy voting (e.g., TAL’s proxy voting professionals, or trustees or senior executives of TAL or TAL’s affiliates) by TAL’s legal and compliance professionals.

There could be rare instances in which an individual who has a direct role in executing or influencing proxy voting (e.g. TAL’s proxy voting professionals, or a trustee or senior executive of TAL or TAL’s affiliates) is either a director or executive of a portfolio company or may have some other association with a portfolio company. In such cases, this individual is required to recuse himself or herself from all decisions related to proxy voting for that portfolio company.

A report of proxies voted for the registered investment company clients is made regularly to

their Boards or its Committee on Corporate Governance and Social Responsibility, noting any proxies that were voted in exception to the Policy Statement. Also, a record of the proxy votes cast over a twelve month period for TAL's registered investment company clients can be obtained, free of charge, at www.tiaa.org or on the SEC's website at www.sec.gov. Copies of TAL's proxy voting policy are also available to TAL's clients upon request.

Legal Proceedings

TAL is under no obligation to advise or act for clients in legal proceedings including bankruptcies and class actions involving securities purchased or held in client accounts. TAL generally notifies or transmits copies of legal materials it receives to the client, program sponsor, client custodian or other client representative.

Item 18 Financial Information

TAL does not require or solicit prepayment of investment advisory fees. TAL has no financial commitment that impairs its ability to meet contractual and fiduciary commitments to clients.

EXHIBIT A

Primary Financial Industry Subsidiaries under Nuveen, LLC, the asset management division of TIAA

Entity Name	Primary Financial Industry or Related Affiliation*
AGR Partners, LLC	Registered Investment Adviser
Churchill Asset Management LLC	Registered Investment Adviser
Greenwood Resources Capital Management LLC	Registered Investment Adviser
Gresham Investment Management LLC	Registered Investment Adviser CFTC Registered Commodity Pool Operator CFTC Registered Commodity Trading Advisor
Nuveen Asset Management, LLC	Registered Investment Adviser CFTC Registered Commodity Trading Advisor
Nuveen Fund Advisors, LLC	Registered Investment Adviser CFTC Registered Commodity Pool Operator
NWQ Investment Management Company, LLC	Registered Investment Adviser
Santa Barbara Asset Management, LLC	Registered Investment Adviser
Symphony Asset Management LLC	Registered Investment Adviser
Teachers Advisors, LLC	Registered Investment Adviser
Nuveen Alternatives Advisors, LLC	Registered Investment Adviser
Nuveen Churchill Advisors LLC	Registered Investment Adviser
TIAA-CREF Investment Management, LLC	Registered Investment Adviser
Westchester Group Investment Management, Inc.	Real Estate Broker or Dealer
Winslow Capital Management, LLC	Registered Investment Adviser
Nuveen Securities, LLC	Registered Broker Dealer
Nuveen Services, LLC	Shared services entity
Nuveen Canada Company	Canadian exempt market dealer
Nuveen Real Estate Management Limited	UK FCA registered entity
Nuveen Management AIFM Limited	UK FCA registered entity
TIAA-CREF Asset Management UK Limited	UK FCA registered entity
Nuveen Hong Kong Limited	HK SFC registered entity
Nuveen Australia Pty Ltd	Australian ASIC registered entity
Nuveen Real Estate Australia Ltd	Australian ASIC registered entity
Nuveen Japan Co. Ltd	Japan FSA registered entity
Nuveen Singapore Private Ltd	Singapore MAS registered entity
Nuveen Alternatives Europe SARL	Luxembourg CSSF registered entity
Nuveen Asset Management Europe SARL	Luxembourg CSSF registered entity

Other Primary Financial Industry Subsidiaries of TIAA

TIAA-CREF Individual & Institutional Services, LLC (aka TIAA-CREF Advice and Planning Svcs.)	Registered Investment Adviser Registered Broker Dealer
TIAA-CREF Tuition Financing, Inc.	Registered Investment Adviser Registered Municipal Advisor
TIAA Endowment and Philanthropic Services, LLC	Registered Investment Adviser
Teachers Insurance and Annuity Association of America	Insurance Company or Agency
TIAA-CREF Life Insurance Company	Insurance Company or Agency
TIAA-CREF Insurance Agency, LLC	Insurance Company or Agency
TIAA, FSB	Banking or thrift institution
TIAA Advisory, LLC	Registered Investment Adviser

*The list above refers to TIAA subsidiaries in financial industry affiliation categories referenced in Form ADV, Part 2A, Item 10.C, excluding numerous entities organized primarily to serve as sponsor, general partner, managing member (or equivalent) or syndicator of one or more pooled investment vehicles or limited partnerships (or equivalent). For a list of such entities that have material arrangements with the registrant, please see the registrant's Form ADV, Part 1, Section 7.A. of Schedule D. The list above refers to the primary financial industry affiliation category and certain TIAA

subsidiaries listed above may have additional financial industry affiliations, as further described in its respective disclosure documents (Form ADV, in the case of a registered investment adviser).