



Exhibit A

TIAA Brokerage 408(b)(2) Disclosure Document Brokerage and Advisory Services

This document describes information about fees and other compensation TIAA-CREF Individual & Institutional Services, LLC, through its TIAA Brokerage and Advice and Planning Services divisions (“TIAA”) reasonably expects to receive in connection with services provided to your ERISA-covered retirement plan (“Plan”) and is intended to comply with the DOL regulation on reasonable contracts or arrangements under ERISA Section 408(b)(2).

I. SERVICES AND STATUS

TIAA Brokerage – See the [TIAA Brokerage Account Customer Agreement](#) (“Account Agreement”) for a description of the brokerage services to be provided to the Plan.

Investment Advisory Services – TIAA provides investment advisory services to the Plan only if the Plan participates in the TIAA Advice and Planning Services Portfolio Advisor Program (“Program”) and has entered into an advisory agreement with TIAA Advice and Planning Services for such advisory services. See the TIAA Advice and Planning Services Portfolio Advisor Advisory Agreement (“Program Agreement”) and the TIAA Advice and Planning Services Portfolio Advisor Disclosure Brochure (“Disclosure Brochure”) for a description of the investment advisory services provided to a Plan participating in the Program. TIAA does not provide its services to the Plan in its capacity as an investment adviser registered under the Investment Advisers Act of 1940 (“Advisers Act”) or as an ERISA fiduciary except to the extent it provides investment advisory services under the Program.

II. DIRECT COMPENSATION

For its brokerage services described above and in the Account Agreement, TIAA receives compensation directly from the Plan’s Account in the form of commissions and service-specific fees that may vary depending upon the particular investment or service. See Section III of the Account Agreement for the Commission and Fee Schedule.

For its advisory services under the Program, TIAA receives an asset-based fee according to the annual schedules listed in the Program Agreement and Disclosure Brochure. The advisory fee is paid from the Plan Account as described in those documents.



III. INDIRECT COMPENSATION, PAYMENTS BETWEEN AFFILIATES, AND PAYMENTS TO SUBCONTRACTORS

Indirect Compensation

With respect to its brokerage services described above:

Mutual Fund Revenue: TIAA may receive 12b-1 fees from mutual funds whose shares it purchases on behalf of clients. These fees are for distribution and/or shareholder services that TIAA provides to these funds. The amount of these fees, if applicable, may vary among mutual fund groups and may vary depending on the class of fund shares held by the Plan and the particular services for which the 12b-1 fees are paid. If a mutual fund pays a 12b-1 fee to TIAA, the annual rate of such fee is anticipated to range between 0 to 40 basis points of the value of the Plan's fund shares.

For transaction fee funds, while TIAA receives 12b-1 fees associated with the funds, Pershing LLC receives any transaction fees associated with the transactions. Refer to the Commission and Fee Schedule in the Account Agreement for more information related to transaction fees. More detailed information concerning the above described mutual fund revenue also may be provided in the relevant mutual fund's prospectus, statement of additional information, and annual report.

With respect to its investment advisory services described above:

Mutual Fund Revenue: To the extent that TIAA receives Mutual Fund Revenue (described above), with respect to a Plan account for which it provides advisory services, TIAA will reduce the Program fee by a fee credit for Program assets invested in TIAA affiliated mutual funds that will offset any mutual fund management fee TIAA affiliates receive from the TIAA-CREF and Nuveen affiliated mutual funds. This fee credit will be calculated as set forth below:

- **Fee Credit Prior to December 15, 2014:** For the period prior to December 15, 2014, the fee credit will offset the investment portion of the proprietary fund expenses ("fund management fees") that TIAA affiliates receive in connection with the proprietary funds held in the Plan account.
- **Fee Credit On and After December 15, 2014:** On and after December 15, 2014, the fee credit will offset not only the fund management fees in connection with the proprietary funds held in the Plan account, but also the administrative and other fees that TIAA-CREF affiliates receive from such proprietary funds that are included in fund expenses.

The fee credit may vary depending upon the particular TIAA-CREF mutual fund employed as the TIAA-CREF mutual funds' management fees may differ from fund to fund. Advice and Planning Services may also exclude from the fee credit amount any reimbursable expenses paid by the proprietary funds to TIAA affiliates which are reasonable direct expenses of the TIAA affiliates, including salaries of affiliated personnel attributable to work performed for the proprietary funds held in client's portfolio, and third party custodial fees and transfer agent fees associated with the proprietary funds held in client's portfolio. Advice and Planning Services may further reduce the fee credit amount to reflect fee waivers and reimbursements granted by TIAA affiliates to the proprietary funds as disclosed in the applicable fund prospectus. Such fee waivers have the effect of reducing the amount of fund management fees, administration fees and expense reimbursements actually paid by the proprietary funds to TIAA affiliates.



With regard to any mutual funds held in a Plan's Account which levy a 12b-1 fee, TIAA will deposit directly into the Plan's Account whatever portion of the 12b-1 fee it receives. Any remaining portion of the 12b-1 fee is retained by TIAA's clearing firm, Pershing, LLC, without benefit to TIAA.

Additional details on fees received by TIAA under the Program are described in the Program Agreement and Program Disclosure Document.

Interest on Free Credit Balances: Interest on free credit balances are received by Pershing, LLC at the rates set out in the TIAA Brokerage Account Customer Agreement. TIAA may receive compensation from Pershing based on the amount of free credit balances in Plan Accounts (between 0 and 35 basis points).

Payments Between Affiliates

Proprietary Mutual Funds. Teachers Advisers, Inc. is a corporate affiliate of TIAA, which acts as the registered investment advisor to the TIAA-CREF family of mutual funds. Nuveen Fund Advisers, LLC is a corporate affiliate of TIAA that acts as the registered investment advisor to the Nuveen family of funds, with various affiliates of TC Services serving as sub-advisors. Both Teachers Advisers, Inc. and Nuveen Fund Advisers, LLC, respectively, receive fees from each such fund for investment advisory services. In addition, TIAA-CREF Individual & Institutional Services, LLC and another affiliated broker-dealer serve as distributors of the TIAA-CREF funds. Nuveen Securities, LLC serves as the distributor of the Nuveen funds. As distributors of the respective funds, these affiliated entities receive fees for distribution activities, shareholder servicing and other administrative tasks. These fees are described in the applicable TIAA-CREF or Nuveen mutual fund prospectus and Statement of Additional Information.

With respect to the investment advisory services described above, TIAA provides a reduction in the Program fee and applies to fee credit to Plan accounts enrolled in the Program, as described above.

Payments to Subcontractors

The Account Agreement describes the role of Pershing, LLC as subcontractor to TIAA. TIAA has retained Pershing, LLC to act as its clearing firm and to provide certain custody and clearance services to TIAA for its clients. Under this arrangement, Pershing charges TIAA certain fees on a transactional basis for select services provided to your Plan brokerage account which include the following commission and fee schedule:

Commission and Fee Schedule

Not all fees apply or are pertinent to all employer-sponsored plans. See individual plan for investment option details.

Online [TIAA.org/brokerage](https://www.tiaa.org/brokerage)

Automated Telephone System
(ATS) 800-842-2252

Client Service Assistance
800-927-3059

Equities and Exchange Traded Funds

Commissions and Fees	Equity and ETF Trades—No Charge	\$35	\$55
Equity and Transaction-Fee ETFs notes	<ul style="list-style-type: none"> Fees shown reflect stock prices greater than \$1 per share. Orders to buy shares priced under \$1, restricted shares, foreign securities, privately held securities, shares without a market price or no bid/ask will not be accepted. Orders to sell shares priced under \$1 are handled via Client Service Assistance at the online commission rate above, based on eligibility. 		
No-Transaction Fee (NTF) ETFs	<ul style="list-style-type: none"> NTF eligible ETFs will have a \$0.00 commission, regardless of order size or holding period Any ETF shares purchased prior to January 26, 2018, and are now identified as a No Transaction Fee ETF, will still be charged a commission when the shares are sold. 		
Financial Transaction Tax (FTT) Ordinary and ADR	<ul style="list-style-type: none"> All opening transactions in FTT-eligible French companies will be subject to the French FTT at a rate of 0.30% of the total transaction cost All opening transactions in FTT-eligible Italian companies will be subject to the Italian FTT at a rate between 0.10% - 0.20% of the total transaction cost 		
ADR Agent Servicing Fee	<ul style="list-style-type: none"> Fee will generally range from \$0.01 - \$0.03 per share. Amounts will differ by ADR. Please refer to the ADR prospectus for specific fee and other information. 		

Fixed Income

Bonds and CDs are available for purchase online, or for assistance call 800-927-3059.

U.S. Treasury Securities

New Issues (primary at auction)	\$50 per transaction
Existing issues (secondary already trading)	\$1 per \$1,000 face amount, (\$50 minimum)

Other Fixed Income

Municipal Bonds, Government Agency Bonds, Unlisted (Over-the-counter, or OTC) Corporate Bonds, and Mortgage-backed Securities	TIAA may execute certain fixed-income transactions for your Account on either an agency or principal basis. If we execute on an agency basis, a \$50 + \$2 per bond commission will be charged. If we execute on a principal basis, we will sell a fixed-income product to you (or buy it from you), which we contemporaneously purchase (or sell) to a dealer. If so, the net compensation earned by TIAA will include a mark-up. If we sell a fixed-income product to you, the mark-up is the difference between the sales price to you and the price we pay to purchase the product from a dealer. If we buy a fixed-income product from you, the mark-up is the difference between the sales price to the dealer and the price we pay to purchase the security from you.
Certificates of Deposit - New Issues	Purchase minimums of \$5,000, no commission (interest rate reflects issuing bank's fee)

Mutual Funds

No-transaction-fee (NTF) funds	<ul style="list-style-type: none"> Minimum initial investment for mutual funds: The greater of either the listed amount in the fund's prospectus or \$500. Additional investments typically based on amount listed in the fund's prospectus, generally \$100. Purchases placed below the stated minimum amount will be charged the appropriate transaction fee. Different minimums may apply for managed accounts. Short-term redemption fee: \$50 minimum for shares held less than three months (waived for shares transferred from another brokerage firm or financial institution). Additional redemption fees may apply as set forth in each fund's prospectus. Dollar cost averaging transactions, no-fee; minimum transaction \$100.
Transaction-fee (TF) funds	<ul style="list-style-type: none"> Transaction fee, regardless of order size: \$35 per trade Minimum initial investment for mutual funds: The greater of either the listed amount in the fund's prospectus or \$500. Additional investments typically based on amount listed in the fund's prospectus, generally \$100. Purchases placed below the stated minimum amount will be charged the appropriate transaction fee. Different minimums may apply for managed accounts. Dollar cost averaging transactions, no-fee; minimum transaction \$100. Exchanges: \$8 per trade regardless of order size

TIAA Self-Directed Brokerage Account Customer Account Agreement

Commission and Fee Schedule (continued)

Options

	Online TIAA.org/brokerage	Automated Telephone System (ATS) 800-842-2252	Client Service Assistance 800-927-3059
Options			
Commissions and Fees	No charge	\$35 + \$2.00 per contract	\$55 + \$2.50 per contract
Options Exercise/Assignment	\$25	\$25	\$25

Account Maintenance Fees

Alternate Investment Transaction/Processing Fee	\$50
Direct Registration System (DRS) Outgoing Transfer Fee	\$30 per security, per account
Foreign Securities	\$75 for each order (not applicable to American Depositary Receipts) + commission
Foreign Security Receive and Deliver Fee	\$75
Post-Effective Reorganizations – Voluntary	\$75
Preferred Stock Administrative Fee	\$50
Reorganizations – Voluntary	\$25
Safekeeping Fee for Physical Securities	\$2 per account, per position, per month
Special Product Fee - Unregistered REITs	\$125 per position, charged at transfer and then annually
Special Product Fee - Registered REITs	\$35 per position, charged at transfer and then annually
Transfers – Accommodation*	\$80 per transfer
Transfers – GNMA, Restricted, Legal*	\$65 per transfer
Transfers – Outgoing Account*	\$50 per transfer
Transfers – Outgoing full account*	\$50 per transfer, no charge for partial transfers
Transfers – Register, Transfer and Ship*	\$80 per transfer, plus any third-party charges, including a DTCC charge of \$500

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





Refer to the TIAA Self-Directed Brokerage Customer Account Agreement at:

www.tiaa.org/public/pdf/forms/SDA_Customer_Account_Agreement.pdf

Compensation Paid to Pershing, LLC by Third Parties. Pershing, LLC has provided us the following additional information on compensation paid to Pershing, LLC by third parties in connection with its clearing services:

Mutual Fund Fees. Pershing, LLC has entered into agreements with certain mutual fund companies that pay Pershing, LLC for performing certain services for the mutual fund. Pursuant to these agreements, Pershing receives fees for operational services from mutual funds in the form of networking or omnibus processing fees. The reimbursements are remitted to Pershing, LLC for its work on behalf of the funds. This work may include, but is not limited to, sub-accounting services, dividend calculation and posting, accounting, reconciliation, client confirmation and statement preparation and mailing and tax statement preparation and mailing. These reimbursements are based either on (a) a flat fee ranging from \$0 to \$20 per holding or (b) a percentage of assets that can range from 0 to 15 basis points for domestic funds and 0 to 30 basis points for offshore funds. Mutual funds that are available in Pershing, LLC's FundVest no transaction fee mutual fund program may pay Pershing, LLC servicing fees in exchange for being offered in Pershing LLC's FundVest Program. These payments are based on a percentage of assets and can range from 7 to 40 basis points. For additional details about Pershing, LLC's mutual fund no-transaction-fee program, or a listing of funds that pay Pershing, LLC networking or omnibus fees, please refer to www.pershing.com/mutual_fund.htm. The mutual funds listed on this website are listed in order from highest to lowest paying mutual funds based on gross payments made to Pershing, LLC.

Money Fund. Pershing, LLC has entered into agreements with money market fund companies. Pershing, LLC receives fees from money fund companies and service providers for making available money market funds. A portion of Pershing, LLC's fees is applied against costs associated with providing services on behalf of the fund companies and service providers, which may include maintaining cash sweep systems, sub-accounting services, dividend and interest calculation and posting, accounting, reconciliation, client statement preparation and mailing, tax statement preparation and mailing, marketing and distribution related support, and other services. These fees are paid in accordance with an asset-based formula that can range from 0 to 100 basis points annually. For a listing of money funds that pay Pershing, LLC these fees, please refer to www.pershing.com/money_fund.htm.

Sponsorship Fees. Mutual fund companies, annuity companies, exchange-traded fund (ETF) providers, money market providers and other providers offering investment, business and technology products and services offer marketing support in the form of sponsorship fee payments to Pershing, LLC (or third parties at Pershing, LLC's direction) in connection with educational conferences, events, seminars, and workshops that Pershing, LLC offers to its broker-dealer or investment professional customers. These payments are made through arrangements with investment providers and may be for the expenses of educational materials or other conference-related expenses. Generally, the smallest level of sponsorship is \$5,000, and the level of sponsorship can increase depending on the opportunity. For a listing of companies that pay sponsorship fees to Pershing, LLC for events, please refer to www.pershing.com/event.

Payments for Order Flow. Pershing sends certain equity orders to exchanges or broker-dealers during normal business hours and during extended trading sessions. Some of these market centers provide payments to Pershing or charge access fees depending upon the characteristics of the order and any subsequent execution. In addition, Pershing may execute certain equity orders as principal or route orders to an affiliate, called BNY MellonCapital



Markets, LLC, which may also execute as principal while facilitating the trade as a market maker. The details of these payments and fees are available upon written request.

Pershing receives payments for directing listed options order flow to certain options exchanges through broker-dealers, which allows Pershing to access price improvement auctions on the various options exchanges.

Compensation is generally in the form of a per-option contract cash payment. This disclosure only applies to orders directed to Pershing by your firm. For a list of organizations that pay Pershing for order flow, refer to www.orderroutingdisclosure.com.

Float. Pershing, LLC may obtain a financial benefit attributable to cash balances of ERISA Plan accounts that are held by Pershing, LLC in connection with cash awaiting investment or cash pending distribution. For a more detailed description of this compensation, refer to www.pershing.com/#float_disclosure

Compensation paid to Advisory Program Managers. In connection with the advisory program described above, the agreement between TIAA-CREF Individual & Institutional Services, LLC (“Advice and Planning Services”) and the TIAA-CREF Trust Company, FSB (“TC Trust”) calls for a quarterly payment of 12.5 bps to be paid to TC Trust based upon the amount of Program assets advised by TC Trust. The agreement between Advice and Planning Services and the third party adviser calls for Advice and Planning Services to pay the third party adviser a fixed quarterly fee of \$15,000. After payment of these fees and other program expenses, Advice and Planning Services receives the remainder of the Program revenue. For more information on these relationships, please refer to the disclosure document for the advisory program.

IV. COMPENSATION FOR TERMINATION OF CONTRACT OR ARRANGEMENT

TIAA does not receive any compensation in connection with the termination of its services to your Plan