THIS DOCUMENT PROVIDES DISCLOSURES REQUIRED OR RECOMMENDED BY THE FOLLOWING ACTS, RULES, REGULATIONS OR REPORTS.

- Financial Industry Regulatory Authority® (FINRA®)
  - Rule 2264 (Margin Disclosure Statement)
  - Rule 2266 (Securities Investor Protection Corporation® [SIPC®])
  - Rule 2267 (Investor Education and Protection)
  - Rule 4311 (Carrying Agreements)
  - Rule 4370 (Business Continuity Plans and Emergency Contact Information)

- Treasury Income Tax Regulations Section 1.408-2(e)(7)(iii) (Nonbank Custodian)

- Treasury Income Tax Regulations Section 35.3405-1T (Federal and State Withholding for Retirement Accounts)


- Municipal Securities Rulemaking Board (MSRB)—Rule G-15 (Electronic Confirmations)

- Regulation E of the Consumer Financial Protection Bureau (Electronic Transfers)


- Securities and Exchange Commission (SEC)
  - Rule 10b-10 (Electronic Confirmations)
  - Rule 17f-1 (Lost Securities)
  - Regulation National Market System (NMS) 607 (Customer Account Statements)

PLEASE READ THIS DOCUMENT CAREFULLY AND RETAIN IT FOR FUTURE USE. IN PARTICULAR, YOU SHOULD REVIEW CREDIT AND MARGIN DISCLOSURES.
CONTENTS

DISCLOSURE REQUIRED BY FINRA RULE 4311
Responsibilities of Your Firm ............................................................... 4
Responsibilities of Pershing ................................................................. 4
Prohibition Against Unlawful Internet Gambling ................................ 6
Important Information Regarding Money Market Mutual Funds ....... 6
Clear-Through Relationships ............................................................... 7
Complaints .......................................................................................... 7

EXCHANGE ACT OF 1934
Pershing Statement of Financial Condition ........................................ 7

FINRA RULE 2264
Credit and Margin Disclosures ............................................................. 7

EU SECURITIES FINANCING REGULATION .......................................13
SEC REGULATION NMS RULE 607
Payment for Order Flow Practices ...................................................... 13

JOINT NASD/INDUSTRY BREAKPOINT TASK FORCE
Sales Charges, Breakpoints, Fees and Revenue Sharing
Relating to Mutual Funds, Money Funds, Bank Products, Annuities and ETFs ........................................................................... 14

SPONSORSHIP FEES ................................................................................ 18
ALTERNATIVE INVESTMENT NETWORK FEES ................................ 18

TREASURY REGULATIONS .................................................................... 18
Federal and State Tax Withholding for Retirement Accounts .......... 18
MSRB RULE G-15 AND SEC RULE 10b-10
Electronic Confirmations ................................................................. 19

REGULATION E
Electronic Transfers ............................................................................ 20
SEC RULE 17F-1
Lost Securities .................................................................................... 21

FINRA RULE 4370
Pershing’s Business Continuity Plan ................................................... 21

FINRA RULE 2266
SIPC Contact Information ................................................................. 22

FINRA RULE 2267
FINRA BrokerCheck Program ........................................................... 22

MUNICIPAL SECURITIES RULEMAKING BOARD® (MSRB®)
RULE G-10 INVESTOR AND MUNICIPAL ADVISORY CLIENT
EDUCATION AND PROTECTION ........................................................22

ADDITIONAL DISCLOSURES
Credit Interest .................................................................................... 22
Important Information on Check Disbursements ......................... 22
Transactions in Listed Options ........................................................... 22
Unit Investment Trust Payments ......................................................... 23
Auction Rate Securities Payments ..................................................... 23
Float Disclosure ................................................................................. 23
Foreign Currency Transactions ........................................................ 23
Special Note for Non-U.S. Accounts .................................................. 24
DISCLOSURE REQUIRED BY FINRA RULE 4311
The firm with which you have opened your securities account (account) has retained Pershing LLC (Pershing) to provide certain recordkeeping or operational services.

These services—such as the execution and settlement of securities transactions, custody of securities and cash balances, and extension of credit on margin transactions—are provided under a written Clearing Agreement between Pershing and your firm.

As a member of FINRA, Pershing is required (under FINRA Rule 4311) to disclose to you the details of its Clearing Agreement with your firm, which are summarized below.

Responsibilities of Your Firm
Your firm has the responsibility to:

> Approve the opening of your account
> Obtain necessary documentation to help fight the funding of terrorism and money laundering activities (Note: U.S. law and international best practices require firms to obtain, verify and record information that identifies each person who opens an account. This information may be used to perform a credit check and verify your identity through internal sources or third-party vendors)
> Service and supervise your account through its own personnel in accordance with its own policies, procedures, applicable laws, regulations and rules
> Know you and your stated investment objectives
> Provide appropriate investment advice, recommendations or management services based on your investment objectives
> Determine whether particular kinds of transactions—such as margin, options and short sales—are appropriate for you
> Obtain the initial margin as required by Regulation T if a margin account is opened for you
> Accept and, in certain instances, execute securities orders
> Know the facts about any orders for the purchase or sale of securities in your account
> Comply with fair pricing and disclosure responsibilities (if your firm is a market maker in any securities or otherwise trades as principal with you)
> Correctly identify and promptly forward cash or securities intended for your account to Pershing
> Supervise the activities of any individual who services your account
> Resolve any complaints regarding the handling of your account
> Manage the ongoing relationship that it has with you

Pershing has no involvement and assumes no responsibility in all of the above matters relating to the servicing of your account.

Responsibilities of Pershing
To help the government fight the funding of terrorism and money laundering activities, financial organizations are required by Federal law to obtain, verify, and record information that identifies each individual or entity that opens an account or requests credit.
What this means for individuals: When an individual opens an account or requests credit, we will ask for their name, residence address, date of birth, tax identification number and other information that allows us to identify them. We may also ask to see a driver’s license, passport or other identifying documents.

What this means for other legal entities: When a corporation, partnership, trust or other legal entity opens an account or requests credit, we will ask for the entity’s name, physical address, tax identification number and other information that will allow us to identify the entity. If applicable, the same information will be asked for the beneficial owner(s) of the entity. We may also ask to see other identifying documents, such as certified articles of incorporation, partnership agreements or a trust instrument.

In general, Pershing is only responsible for the services within the scope of the Clearing Agreement that is provided at the request of your firm and contains specific direction regarding your account. As such, Pershing may fulfill the following responsibilities on behalf of your account:

> Create computer-based account records
> Process orders for the purchase, sale or transfer of securities (Pershing is not obligated to accept orders directly from you and will do so only in exceptional circumstances)
> Receive and deliver cash and securities
> Record such receipts and deliveries according to information provided either by your firm or directly, in writing, by you
> Hold securities and cash in custody (after they come into Pershing’s physical possession or control)
> Collect and disburse dividends, capital gains and interest
> Process reorganization and voting instructions with respect to securities held in custody
> Prepare and transmit confirmations of trades to you (or provide facilities to your firm to provide these functions), with the exception of the following transactions, which will alternatively appear on account statements:
> Systematic purchase and redemption transactions of mutual funds or unit investment trusts
> Purchase and redemption transactions of money market funds processed through Pershing’s Cash Management platform, provided that there are no purchase and redemption fees
> Dividend and other distribution reinvestment transactions of mutual funds, equities and unit investment trusts
> Dividend and other distribution reinvestment transactions of money market funds, provided that there are no reinvestment fees
> Prepare and transmit periodic account statements summarizing transactions
> Provide your firm with written reports of all transactions processed for your account to enable your firm to carry out its responsibilities under the Clearing Agreement
> Assist you and your firm with any discrepancies or errors that may occur in the processing of transactions
If your firm opens a margin account for you, Pershing may:

> Loan you money for the purpose of purchasing or holding securities (subject to the terms of Pershing’s written Margin Agreement, margin policies and applicable margin regulations)

> Calculate the amount of maintenance margin required and advise you of those requirements (usually through your firm)

> Calculate any interest charged on your debit balance

In connection with all of the functions that Pershing performs, Pershing maintains the books and records required by law and business practice. The Clearing Agreement does not encompass transactions in commodities futures contracts or investments other than marketable securities, which Pershing normally processes on recognized exchanges and over-the-counter (OTC) markets. In furnishing Pershing’s services under the Clearing Agreement, Pershing may use and rely upon the services of clearing agencies, automatic data processing vendors, proxy processing vendors, transfer agents, securities pricing services and other similar organizations.

This document addresses the basic allocation of functions regarding the handling of your account. It is not meant as a definitive enumeration of every possible circumstance, but only as a general disclosure.

Pershing does not control, audit or otherwise supervise the activities of your firm or its employees.

Pershing does not verify information provided by your firm regarding your account or transactions processed for your account.

Pershing does not undertake responsibility for reviewing the appropriateness of transactions entered by your firm on your behalf.

Prohibition Against Unlawful Internet Gambling
In accordance with the Unlawful Internet Gambling Enforcement Act, transactions associated with unlawful Internet gambling are prohibited. Specifically, the Act “prohibits any person engaged in the business of betting or wagering from knowingly accepting payments in connection with the participation of another person in unlawful Internet gambling.” Accordingly, you must not initiate or receive wire transfers, checks, drafts or other debit/credit transactions that are restricted by the Act. For more information, please refer to https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20081112a1.pdf

Important Information Regarding Money Market Mutual Funds
Effective October 14, 2016, the SEC requires all non-government money market mutual funds that operate at a net asset value (NAV) of $1.00 per share to adopt a “liquidity fees and redemption gates” regime. The regulation permits the board of directors of these non-government money market mutual funds to implement fees or gates if they determine it is in the best interest of shareholders to do so with the intent of protecting shareholders’ value in the fund in the event of heavy redemption activity during periods of market stress.

A liquidity fee is a fee (up to a maximum of 2%) on redemptions and a gate is a restriction on any redemption from a fund (up to a maximum of 10 business days). In the event a fee or gate is implemented by a fund’s board, Pershing will be required to take steps to implement protocols to comply.

If a fee was implemented pursuant to the regulation, it would result in a fee being charged for any redemption processed from that money
market mutual fund. If a gate was implemented, it would mean the balance held in that fund would not be available to redeem until the expiration of the redemption gate period. It is important to note that both fees and gates may apply to money market funds available as a part of the sweep program during periods of market stress. In addition, while the regulation does not mandate these requirements for government funds, government funds may voluntarily impose fees and gates in times of stress, if permissible under the fund’s prospectus and if determined by the board to be in the best interest of shareholders. Some issuers have elected to restrict the use of liquidity fees and redemption gates in their government funds and have updated fund prospectuses accordingly. Carefully review the prospectus of a specific money market mutual fund prior to any purchase for additional information.

Clear-Through Relationships
In certain circumstances, your account may be introduced to Pershing through an intermediary other than the firm with which you opened your account. This intermediary is commonly called a “clear-through broker,” with the agreement between the clear-through broker and your firm called a “clear-through relationship.”

In this situation, the clear-through broker is the agent of the firm with which you opened your account, and will be identified on your confirmations and statements in the upper left-hand corner. This disclosure statement should be read to encompass the fact that the two financial intermediaries exist. Therefore, where the context requires, “financial organization” and firm should be read to cover both the clear-through broker and the firm with which you opened your account. If you have any questions about this, you should contact the firm with which you opened your account.

Complaints
Complaints concerning services provided by Pershing may be directed to:

Complaints
Pershing LLC
Legal Department
One Pershing Plaza, Tenth Floor
Jersey City, NJ 07399
(201) 413-3330

EXCHANGE ACT OF 1934
The Exchange Act of 1934 requires that Pershing annually disclose a statement of financial condition.

Pershing Statement of Financial Condition
On December 31, 2018, Pershing’s regulatory net capital of $2.83 billion was 16.5% of aggregate debit items and $2.49 billion in excess of the minimum requirement. A complete copy of the December 31, 2018, Statement of Financial Condition is available at: www.pershing.com/statement-of-financial-condition. You may request a free printed copy by calling (888) 860-8510.

FINRA RULE 2264
FINRA Rule 2264 requires certain credit and margin disclosures.

Credit and Margin Disclosures
Cash Accounts. At Pershing’s discretion, cash accounts may be subject to interest on any debit balances (in any currency) resulting from:

> Securities purchased and not paid for by the settlement date
> Untimely delivery of securities sold
> Proceeds of sales paid prior to the settlement date
> Other charges that may be made to the account

Margin Accounts. Purchases of securities on credit, commonly known as “margin purchases,” enable you to increase the buying power of your equity and thus increase the potential for profit or loss.

A portion of the purchase price is deposited when buying securities on margin, and Pershing extends credit for the remainder. This loan will appear as a debit balance on your monthly account statement.

Pershing will charge interest on the debit balance and requires you to maintain securities or cash to repay the loan and its interest.

Interest will be charged in the underlying currency for any credit extended to you, which may include:

> Buying, trading or carrying securities
> Cash withdrawals made against the collateral of securities
> Payment made in advance of settlement on the sale of securities (from date of payment until settlement date)

If any other charge is made to your account for any reason, interest may be charged on the resulting debit balances. Interest you pay on the loan may be shared between your firm and Pershing.

If you have a margin account, pursuant to the margin agreement with Pershing, securities not fully paid for may be used by Pershing or loaned out to others and, as permitted by law, certain securities in your account may be used for, among other things, settling short sales and the lending of securities. As a result, your firm and Pershing may receive compensation in connection therewith. Further, fully paid for securities held in a cash account (unless otherwise agreed to in a separate written agreement) and fully paid for securities held in a margin account in which there is no debit balance are not loaned.

In locating “hard to borrow” securities to support your short sales, you may be charged a fee. The rate may also include a charge above the fee Pershing assesses. This additional fee represents work done by your firm on your behalf in connection with these transactions.

**Interest Rates.** Interest charged on any debit balance in cash accounts or credit extended in margin accounts may be up to 3% above the Pershing Base Lending Rate for that currency.

The Pershing Base Lending Rate for each currency will be set with reference to commercially recognized interest rates, industry conditions relating to the extension of credit and general credit market conditions.

For a loan in a currency other than U.S. dollars, the Pershing Base Lending Rate will be set based on the above referenced criteria in the country whose currency is the basis of the loan and can change without prior notice.

When the Pershing Base Lending Rate for a particular currency changes during an interest period, interest will be calculated according to the number of days each rate is in effect during that period.

If the rate of interest charged to you is changed for any reason other than stated above, you will be notified at least 30 days in advance.

In compliance with the rules governing the protection of client funds, Pershing earns money by investing your cash awaiting reinvestment or
by lending it to other clients. In some cases, a portion of the interest earned on money credit balances held by Pershing may be shared with your firm. Additionally, a portion of the interest paid to Pershing (for example, cash due interest) may be shared with your firm.

**Interest Period.** The interest period begins on the 20th day of each month and ends on the 19th of the following month. Accordingly, interest charges for the period as shown on your monthly statement are based only on the daily net debit and credit balances for the interest period.

**Method of Interest Computation.** At the close of each interest period during which credit was extended to you, an interest charge will be computed (in each applicable currency) as per the following formula:

\[
\text{Average Daily Debit Balance} \times \text{Applicable Schedule Rate} \times \frac{\text{Days of Outstanding Debit Balance}}{360}
\]

If there has been a change in the Pershing Base Lending Rate, separate calculations will be made computing the number of days within the interest period at each rate.

If credit extended to your account is not paid, the interest charge at the close of the period is added to the opening debit balance for that currency in the next period.

With the exception of credit balances in your short account, all other credit and debit balances in the same currency will be combined daily. Interest will be charged on the resulting average daily net debit balances for that currency for the period.

Credit balances in one currency will not be combined or netted with debit balances in a different currency. If there is a debit in your cash account and you hold a margin account, interest will be calculated on the combined debit balance for that currency and charged to the margin account.

Any credit balance in your short account is disregarded, because such credit collateralizes the stock borrowed for delivery against the short sale. Such credit is disregarded even if you should be long in the same position in your margin account (for instance, short sale against the box).

If the security that you sold short (or sold short against the box) appreciates in market price over the selling price, interest will be charged (in the appropriate currency) on the appreciation in value. Conversely, if the security that you sold short depreciates in market price, the interest charged will be reduced since your average debit balance will decline. This practice is known as “marking to market.” Each week, a closing price is used to determine any appreciation or depreciation of the security sold short. If your account is short shares of stock on the record date of a dividend or other distribution (however such short position occurs), your account will be charged the amount of the dividend or other distribution on the following business day.

**Margin Disclosures.** These disclosures are intended to provide some basic facts about purchasing securities on margin and to alert you to the risks involved with trading securities in a margin account. Before trading securities in a margin-eligible account, it is important to carefully review the written Margin Agreement provided by your firm or its clearing firm (Pershing), and to consult with your advisor with any questions or concerns you may have regarding margin accounts.
When you purchase securities, you can pay for them in full or borrow part of the purchase price from Pershing. If you choose to borrow funds from Pershing, you will need to open a margin account with Pershing through your firm.

The securities purchased are used as collateral for the loan that was made to you or any other indebtedness arising after the initial transaction. If the securities in your brokerage account decline in value, so does the value of the collateral supporting your loan. As a result, your firm or Pershing can take action.

For instance, your firm or Pershing may issue a margin call and/or sell securities or liquidate other assets in any of your brokerage accounts held with your firm or Pershing to maintain the required equity in the margin account.

It is important that you fully understand the risks involved in trading securities on margin. These risks include the following:

> You may lose more funds or securities than you deposited in your margin account. A decline in the value of securities that are purchased on margin may require you to provide additional funds to Pershing to avoid the forced sale of those securities or other securities or assets in your account(s).

> Your firm or Pershing may force the sale of securities or other assets in your account(s). If the equity in your account falls below Pershing’s maintenance margin requirements or your firm's higher “house” requirements, your firm or Pershing may sell the securities or other assets in any of your accounts to cover the margin deficiency. You also will be responsible for any shortfall in the account after such a sale.

> Your firm or Pershing can sell your securities or other assets without contacting you. Some investors mistakenly believe that a firm must contact them for a margin call to be valid, and that the firm cannot liquidate securities or other assets in their account(s) to meet the call unless the firm has contacted them first. This is not the case. Most firms will attempt to notify their clients of margin calls, but they are not required to do so. However, even if a firm has contacted a client and provided a specific date by which the client can meet a margin call, a firm may still take necessary steps to protect its financial interests, including immediately selling the securities without notice to the client.

> Your firm or Pershing may change margin requirements or margin call time periods without notice to you. With regard to house, maintenance and other margin calls, in lieu of immediate liquidations, Pershing, through your firm, may permit you a period of time to satisfy a call. This time period shall not in any way waive or diminish Pershing’s right in its sole discretion to shorten the time period in which you may satisfy a call, including one already outstanding, or to demand that a call be satisfied immediately. Nor does such practice waive or diminish the right of Pershing or your firm to sell out positions to satisfy the call, which may be as high as the full indebtedness owed by you. Margin requirements may be established and changed by Pershing or your firm in its sole discretion and judgment.

> You are not entitled to choose which securities or other assets in your brokerage account(s) are liquidated or sold to meet a margin call. Because the securities are collateral for the margin loan, your firm or Pershing has the right to decide which securities to sell to protect its interests.
Your firm or Pershing may increase its “house” maintenance margin requirements at any time and is not required to provide you with advance written notice. These changes in firm policy often take effect immediately and may result in the issuance of a maintenance margin call. Your failure to satisfy the call may cause your firm or Pershing to liquidate or sell securities in your brokerage account(s).

> You are not entitled to an extension of time on a margin call. Although an extension of time to meet margin requirements may be available to investors under certain conditions, an investor does not have a right to the extension.

Your written Margin Agreement with Pershing or your firm provides for certain important obligations by you. The Margin Agreement is a legally binding agreement, cannot be modified by conduct, and no failure on the part of Pershing or your firm at any time to enforce its rights under the Margin Agreement to the greatest extent permitted shall in any way be deemed to waive, modify or relax any of the rights granted Pershing or your firm, including those rights vested in Pershing or your firm to deal with the collateral on all loans advanced to you. Also, the Margin Agreement constitutes the full and entire understanding between the parties with respect to the provision of the Margin Agreement, and there are no oral or other agreements in conflict with the Margin Agreement unless you have advised Pershing or your firm in writing of such conflict. Any future modification, amendment or supplement to the Margin Agreement or any individual provision of the Margin Agreement can only be done in writing and signed by a representative of Pershing. You should carefully review your Margin Agreement for the rights and limitations governing your margin account relationship.

General Margin Policies. The amount of credit that Pershing may extend and terms of such extension are governed by the rules of the Federal Reserve Board and FINRA.

Within the guidelines of those rules—and subject to adjustments required by changes in those rules and Pershing’s business judgment—Pershing’s margin account policies are summarized below:

> Pershing may require the deposit of additional acceptable collateral at any time

> Margin account equity is the current market value of securities and cash, less the amount owed Pershing for credit extended at its discretion

> It is Pershing’s general policy to require margin account holders to maintain a certain level of equity in their accounts regarding common stock: 30% of the current market value or $3 per share, whichever is greater

> Any security valued at less than $5 per share may not be purchased in a margin account

> From time to time, Pershing may deem certain securities ineligible for margin credit

For information with respect to general margin maintenance policy for municipal bonds, corporate bonds, U.S. Treasury notes and bonds and other securities—as well as information about the eligibility of particular securities for margin credit—please contact your firm.

Notwithstanding the above general policies, Pershing reserves the right, at its discretion, to require the deposit of additional collateral and to set
required margin at a higher or lower amount with respect to particular accounts or classes of accounts as it deems necessary.

In making this determination, Pershing may take into account various factors including but not limited to:

> Issues as to your securities, such as, among others, the liquidity of a position and concentrations of securities in an account
> Considerations as to your status, including but not limited to a decline in creditworthiness
> The size of the account
> The general condition of the market
> Considerations as to the ability of Pershing to obtain financing
> Regulatory interpretations and guidelines

If you fail to meet a margin call in a timely manner, some or all of your positions may be liquidated.

**Deposits of Collateral, Lien on Accounts and Liquidation.** In the event that additional collateral is requested, you may deposit funds or acceptable securities into your margin account.

If satisfactory collateral is not promptly deposited after a request is made, Pershing or your firm may liquidate securities held in any of your accounts. Pursuant to Pershing's Margin Agreement, Pershing may retain any asset held in your accounts, including securities held for safekeeping, for as long as any extended credit remains outstanding.

**Callable Securities.** Securities held for your account in “street name,” or by a securities depository, are commingled with the same securities held for Pershing’s own clients and clients of other firms.

Your ownership of these securities is reflected in Pershing’s records. You have the right at any time to require delivery of any securities that are fully paid for or are in excess of margin requirements.

The terms of many bonds allow the issuer to partially redeem or “call” the issue prior to the maturity date. Certain preferred stocks are also subject to being called by the issuer. Whenever any security being held by Pershing is partially “called,” Pershing determines the ownership of the securities to be submitted for redemption through a random selection procedure—as prescribed by FINRA rules—without regard to unsettled sales. In the event that such securities owned by you are selected and redeemed, your account will be credited with the proceeds.

If you do not wish to be the subject of this random selection process, you may instruct your firm to have Pershing deliver your securities to the transfer agent directly via the Direct Registration System (DRS) or request a physical certificate issued in your name and mailed to you. There will be fees associated with the issuance of certificates or DRS positions, and not all issuers still offer certificates.

To move a security, it must not have been called by the delivery date. When moving a security off the Pershing platform, it will no longer reflect on your brokerage statement. Also, the probability of a security being called is the same whether it is held by Pershing or you.

**Miscellaneous Credits.** Pershing credits account funds that belong to you—such as dividends, interest, redemptions and proceeds of corporate reorganizations—on the day such funds are received by Pershing.

These funds come to Pershing from issuers and various intermediaries in which Pershing is a participant (such as the Depository Trust
Company). Periodically, an intermediary will pass to Pershing some or all of the interest earned on funds while in its possession. To the extent Pershing receives such payments, Pershing retains them.

Your firm is responsible for providing you information regarding when Pershing credits your account with funds due to you, when those funds are available to you and/or when you begin earning interest on those funds.

**Substitute Payments.** As permitted under your Margin Agreement, Pershing may lend shares in your account when your account has a debit balance. Payments that you receive with respect to loaned securities will be reclassified as "substitute" payments.

The tax consequences of substitute payments may differ from payments made directly from the security's issuer, such as a qualified dividend. For instance, a qualified dividend received by an individual may be taxed at a preferential rate. If a substitute payment is received instead, the preferential rate will not apply.

Individuals may also be affected if certain payments (such as exempt interest dividends, capital gain distributions, return of capital and foreign tax credit dividends) are reclassified as substitute payments. Corporate taxpayers may also be affected because the dividends-received deduction is not available with respect to substitute payments.

**Substitute Payment Reimbursement.** As permitted under your Margin Agreement, Pershing may lend shares in your account when your account has a debit balance. In the instance in which your securities are on loan over an ex-dividend date, Pershing may issue a substitute payment to your account in lieu of the dividend and, subsequently, a reimbursement to compensate you for the tax differential.

A substitute payment received in lieu of a qualified dividend may be eligible for a reimbursement to the lender's account only if the account is open on the reimbursement date. Please note that these reimbursements are (1) credited at Pershing's discretion, (2) subject to change and (3) may be eliminated without advanced notification.

Pershing suggests that you contact your tax advisor to discuss the tax treatment of substitute payments.

**EU SECURITIES FINANCING REGULATION**
If Article 15 of the EU Securities Financing Transactions Regulation is applicable to you, please refer to www.pershing.com/disclosures for access to an information statement disclosing the risks and consequences of delivering non-cash collateral under a relevant collateral arrangement with Pershing LLC (including a margin account). This statement does not amend or supersede the express terms of any transaction or collateral arrangement, or otherwise affect your or our liabilities or obligations.

Please contact your advisor if you have any questions.

**SEC REGULATION NMS RULE 607**
SEC Regulation NMS Rule 607 requires Pershing to disclose its payment for order flow practices.

**Payment for Order Flow Practices**
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 Mellon Capital 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 option 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, please refer to www.orderroutingdisclosure.com.

**Best Execution.** Notwithstanding the previous paragraph regarding payment for order flow, Pershing selects certain market centers for routing non-directed orders that offer the opportunity for the following:

> Provide automated execution of substantially all electronically transmitted orders in over-the-counter (OTC) and exchange-listed securities

The designated market centers to which orders are routed are selected based on the following:

> The consistent high quality of their executions in one or more market segments

> Their ability to provide opportunities for executions at prices superior to the national best bid of offer (NBBO)

> Service, accessibility speed of execution

> Cost and counterparty credit worthiness

Pershing regularly reviews reports for quality of execution.

**Stop Order Election/Trigger.** Equity odd-lot sales count toward consolidated and participant exchange volumes, but do not update the last-sale, open, close, high or low price. Since odd-lot executions are not last-sale eligible, they will not trigger nondirected stop, stop-limit or trailing-stop orders routed to Pershing for execution.

**JOINT NASD/INDUSTRY BREAKPOINT TASK FORCE**

A July 2003 report based on the findings of this task force recommends written disclosure regarding mutual fund breakpoints.

**Sales Charges, Breakpoints, Fees and Revenue Sharing Relating to Mutual Funds, Money Funds, Bank Deposit Programs, Annuities and Exchange-Traded Funds (ETFs).** Before investing in mutual funds, it is important that you understand the sales charges, expenses and management fees that you will be charged, as well as the breakpoint discounts to which you may be entitled. Understanding these charges and breakpoint discounts will assist you in identifying the best investment for your particular needs and may help you to reduce the cost of your investment.

This section will give you general background information about these charges and discounts; however, sales charges, expenses, management fees and breakpoint discounts vary from mutual fund to mutual fund.

Therefore, you should discuss these matters with your advisor and review each mutual fund’s prospectus and statement of additional information (which are available from your advisor) to obtain the specific information regarding the charges and breakpoint discounts associated with a particular mutual fund.
Mutual Fund Sales Charges. Investors who purchase mutual funds must make certain choices, including which funds to purchase and which share class is the most advantageous in light of their specific investing needs. Each mutual fund has a specified investment strategy. You should consider whether the mutual fund’s investment strategy is compatible with your investment objectives. Additionally, many mutual funds offer different share classes. Although each share class represents a similar interest in the mutual fund’s portfolio, the mutual fund will charge you different fees and expenses depending upon your choice of share class.

As a general rule, Class A shares carry a “front-end” sales charge or “load” that is deducted from your investment at the time you buy the fund shares. This sales charge is a percentage of your total purchase.

As explained below, many mutual funds offer volume discounts to the front-end sales charge assessed on Class A shares at certain predetermined levels of investment, which are called “breakpoint discounts.” In contrast, Class B and C shares usually do not carry any front-end sales charges. Instead, investors who purchase Class B or C shares pay asset-based sales charges, which may be higher or lower than the charges associated with Class A shares. Investors who purchase Class B or C shares may also be required to pay a sales charge known as a contingent deferred sales charge when they sell their shares, depending upon the rules of the particular mutual fund. This is known as a “back-end” sales charge or “load.”

Mutual Fund Breakpoint Discounts. Many mutual funds offer investors a variety of ways to qualify for breakpoint discounts on the sales charge associated with the purchase of Class A shares. In general, most mutual funds provide breakpoint discounts to investors who make large purchases at one time. The extent of the discount depends upon the size of the purchase.

Generally, as the amount of the purchase increases, the percentage used to determine the sales load decreases. The entire sales charge may be waived for investors who make very large purchases of Class A shares.

Mutual fund prospectuses contain tables that illustrate the available breakpoint discounts and the investment levels at which breakpoint discounts apply. Additionally, many mutual funds allow investors to qualify for breakpoint discounts based upon current holdings from prior purchases through Rights of Accumulation (ROA) and from future purchases based upon Letters of Intent (LOI). Mutual funds have different rules regarding the availability of ROAs and LOIs. Therefore, you should discuss these matters with your advisor and review the mutual fund’s prospectus and statement of additional information to determine the specific terms upon which a mutual fund offers ROAs or LOIs.

Rights of Accumulation—Many mutual funds allow investors to include the value of previous purchases of the same fund, or another fund within the same fund family, with the value of the current purchase to qualify for breakpoint discounts. Moreover, mutual funds may allow investors to include existing holdings in multiple accounts, such as individual retirement accounts (IRAs) or accounts at other firms, to qualify for breakpoint discounts. Therefore, if you have accounts at other firms and wish to take advantage of the balances in these accounts to qualify for a breakpoint discount, you must advise your advisor about those balances. You may need to provide documentation if you wish to rely upon balances in accounts at another firm.

In addition, many mutual funds allow investors to include the value of holdings in accounts of certain related parties, such as spouses or
children, to qualify for breakpoint discounts. Each mutual fund has different rules that govern when relatives may rely upon each other’s holdings to qualify for breakpoint discounts. You should consult your advisor and review the mutual fund’s prospectus and statement of additional information to determine what these rules are for the fund family in which you are investing. If you wish to rely upon the holdings of related parties to qualify for a breakpoint discount, you should advise your advisor about these accounts. You may need to provide documentation to your advisor if you wish to rely upon balances in accounts at another firm. Mutual funds also follow different rules to determine the value of existing holdings. Some funds use the current NAV of existing investments to determine whether an investor qualifies for a breakpoint discount. However, a small number of funds use the historical cost, which is the cost of the initial purchase, to determine eligibility for breakpoint discounts. If the mutual fund uses historical costs, you may need to provide account records, such as confirmation statements or monthly statements, to qualify for a breakpoint discount based upon previous purchases. You should consult with your advisor or firm and review the mutual fund’s prospectus and statement of additional information to determine whether the mutual fund uses NAV or historical costs to determine breakpoint eligibility.

**Letters of Intent (LOI)—**Many mutual funds allow investors to qualify for breakpoint discounts by signing an LOI, which commits the investor to purchasing a specified amount of Class A shares within a defined period of time, usually 13 months. For instance, if an investor plans to purchase $50,000 worth of Class A shares over a period of 13 months, but each individual purchase would not qualify for a breakpoint discount, the investor could sign an LOI at the time of the first purchase and receive the breakpoint discount associated with a $50,000 investment on the first and all subsequent purchases. Additionally, some funds offer retroactive LOIs that allow investors to rely upon purchases in the recent past to qualify for a breakpoint discount. However, if an investor fails to invest the amount required by the LOI, the fund is entitled to retroactively deduct the correct sales charges based upon the amount that the investor actually invested.

If you intend to make several purchases within a 13-month period, you should consult your advisor and the mutual fund prospectus to determine if it would be beneficial for you to sign an LOI. As you can see, understanding the availability of breakpoint discounts is important because it may allow you to purchase Class A shares at a lower price. The availability of breakpoint discounts may save you money and may also affect your decision regarding the appropriate share class in which to invest. Therefore, you should discuss the availability of breakpoint discounts with your advisor and carefully review the mutual fund prospectus and its statement of additional information when choosing among the share classes offered by a mutual fund. If you wish to learn more about mutual fund share classes or mutual fund breakpoints, you can also review the investor alerts via the FINRA website: finra.org/Investors/ProtectYourself/InvestorAlerts/MutualFunds/index.htm.

**Mutual Fund Fees and Revenue Sharing.** Pershing may receive servicing fees from mutual funds that participate in Pershing’s mutual fund no-transaction-fee program (FundVest®) in lieu of clearance charges to your firm. Participation by your firm in this program is optional and your firm may share with Pershing in such fees. These fees may be considered revenue sharing and are a significant source of revenue for Pershing and may be a significant source of revenue for your firm. These fees are typically paid in accordance with an asset-based formula.
Pershing also receives operational reimbursements from mutual funds in the form of networking or omnibus processing fees. These reimbursements are based either on a flat fee per holding or a percentage of assets and are remitted to Pershing for its work on behalf of the funds. This work may include, but is not limited to, subaccounting services, dividend calculations and posting, accounting, reconciliation, client confirmation and statement preparation and mailing, and tax statement preparation and mailing. These fees are a significant source of revenue for Pershing. For additional details regarding Pershing’s mutual fund no-transaction-fee program or a listing of funds that pay Pershing networking or omnibus fees, refer to www.pershing.com/disclosures.

Money Fund and Bank Deposit Program Fees and Revenue Sharing. Money fund and bank deposit program processing fees and revenue sharing arrangements are significant sources of revenue for Pershing and may also be significant sources of revenue for your firm. Pershing may also receive distribution fees in the form of 12(b)-1 fees, which may also be shared with your firm. Pershing receives fees from providers for making available money market funds and bank deposit programs you have selected through your firm, some of which may be associated with your firm. These fees are typically paid according to an asset-based formula. Your firm may share in these fees. A portion of Pershing’s fees is applied against costs associated with providing services on behalf of the 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. For a listing of money funds and bank deposit programs that pay Pershing revenue-sharing and processing fees, please refer to www.pershing.com/disclosures.

Fees Received by Affiliates. Pershing makes available a variety of money market mutual funds on its platform under the names of “Dreyfus,” “Pershing,” “General” and “BNY Mellon,” for which The Dreyfus Corporation (Dreyfus Corp.) serves as investment advisor and MBSC Securities Corporation (MBSC) serves as the distributor. Both the Dreyfus Corp. and MBSC are affiliates of Pershing and receive compensation for delivering their respective services to the money market mutual funds.

Annuity Fees and Revenue Sharing. Pershing may receive servicing fees from certain insurance companies that participate in Pershing’s annuity program. These fees may be considered revenue sharing and are a source of revenue for Pershing.

Pershing also receives operational reimbursement fees from certain insurance companies. A flat fee per holding is paid to Pershing for the services it provides, which may include, but is not limited to, posting, accounting, reconciliation, and client statement preparation and mailing. These fees are a source of revenue for Pershing. For additional details regarding processing annuities and a listing of annuities that pay Pershing revenue sharing and processing fees, please refer to www.pershing.com/disclosures.

ETFs. Pershing may receive compensation from third parties or their affiliates for marketing, educational training programs, back office accounting, the development and maintenance of technology platforms and reporting systems, and certain other services (“Services”) related to its securities trading platform (the “Platform”). Pershing is entitled to receive payments in connection with such Services. The payment for such Services may create incentives for Pershing to encourage customers
to transact through the Platform and as a result Pershing may make decisions about which investment options it makes available or the level of Services it provides to its customers based on the payments or other financial incentives it is eligible to receive.

SPONSORSHIP FEES

Third-party product and service providers (e.g., mutual fund companies, annuity companies, ETF providers, money market fund companies, money managers, technology and business solution providers) offer marketing support in the form of sponsorship fee payments to Pershing (or third parties at Pershing's direction) in connection with educational conferences, events, seminars and workshops for broker-dealers or advisors. These payments may be for the expenses of educational materials or other conference-related expenses. For a listing of companies that pay sponsorship fees to Pershing for events, please refer to www.pershing.com/disclosures.

ALTERNATIVE INVESTMENT NETWORK FEES

Pershing may receive servicing fees from managed futures funds, non-traded real estate investment trusts (REITs), private equity, private debt, business development companies, managed futures funds, hedge funds and fund of funds (collectively, “alternative investments”) that participate in Pershing’s Alternative Investment Network no-fee program in lieu of transaction fees and special product fee charges to your firm. These fees are calculated in accordance with an asset-based formula. Pershing also receives setup fees from alternative investment providers or broker-dealers in the form of a one-time fee to add an alternative investment to the platform. The fee is a flat fee per CUSIP® and is remitted to Pershing for its work to set up the alternative investment. For additional details regarding Pershing's Alternative Investment Network no-fee program or a listing of entities that pay fees to Pershing, please refer to www.pershing.com/disclosures.

TREASURY REGULATION SECTION 1.408-2(E)(7)(III)

Pershing will make available a copy of the Internal Revenue Service (IRS) approval letters authorizing it to act as a nonbank custodian for your retirement accounts.

If you are interested in obtaining a copy of the IRS approval letters, please visit www.pershing.com/disclosures.

If you are unable to retrieve the documents online, you may call Pershing’s Service Hotline at (888) 860-8510 and select option 3, where you will be prompted to either say or enter your account number. The document will then be mailed to the address of record for your account.

TREASURY REGULATION SECTION 35.3405-1T

Treasury Regulation Section 35.3405-1T requires disclosures regarding periodic (or streams of) payments.

Federal and State Tax Withholding for Retirement Accounts: Subject to changes in prevailing rules—or changes in your circumstances—you may, at any time, designate or change the federal and state income tax withholding election for distributions from your individual retirement arrangement, 403(b)(7) custodial account or qualified retirement plan. Simply notify your advisor or firm.

If you do not have enough federal or state income tax withheld, you may be responsible for payment of estimated taxes. Penalties and interest may also apply.
Both the MSRB and SEC require disclosures regarding electronic confirmations.

Electronic Confirmations
Certain clients receive electronic confirmations through Depository Trust Company (DTC) or other delivery systems in lieu of hard copy confirms. You should be aware that any terms, conditions and disclosures set forth on hard copy confirmations will continue to apply to each confirm processed electronically, including the following:

- Securities purchased on a cash or margin basis are, or may be, hypothecated and, under such circumstances, commingled with securities carried for other clients. Such securities will be withdrawn from hypothecation after receipt of payment.

- If sufficient funds are not already in your cash account to cover a purchase transaction, it is agreed that you will (1) make full payment for the securities described on the confirmation no later than the stated settlement date, and (2) not sell such securities prior to making payment.

- If Pershing does not receive full payment for securities purchased by you, Pershing may, at its option, cancel the transaction without notice to you.

- If sold securities are not already held in your account with Pershing, it will act upon your representation that you or your principal own such securities. It is agreed that you will deposit the securities with Pershing no later than the transaction settlement date.

- If securities sold by you are not delivered to Pershing in proper form on or after the first trading day after settlement date, Pershing may, at its option, cancel or otherwise liquidate the transaction without notice to you.

- You will be liable to Pershing for any loss without limitation, including all expenses, attorney's fees, and other costs incurred by Pershing, and interest thereon, as a result of a cancelled or liquidated transaction.

- Call features may exist for securities. Call features for fixed income securities may affect yield. Complete information will be provided on request.

- The ratings that appear in the description of some fixed income securities have been obtained from rating services that Pershing believes to be reliable. However, Pershing cannot guarantee their accuracy. Securities for which ratings are not available are marked “UNRATED.”

- With transactions involving a security that (1) has an interest in or is secured by a pool of receivables, or (2) is subject to continuous prepayment, such as asset-backed or collateralized mortgage obligations (CMOs), the actual yield of such security may vary according to the rate at which the underlying asset is prepaid. Information concerning the factors that affect yield (including estimated yield, weighted average life and the prepayment assumptions of underlying yield) will be furnished upon your written request.

- It is understood and agreed that all transactions are subject to the rules and customs of the exchange or market (and its clearing house, if any) where they are executed. The name of the broker or party and the time of execution will be furnished upon request.
Commission rates are subject to negotiation. Any commission charged to you may be more or less than commissions charged to or by others in similar transactions. The source and amount of other commissions charged by Pershing in connection with the transaction will be furnished upon request.

Provisions of agreements and contracts shall inure to any successor of your firm or Pershing. Agreements and contracts are governed by the laws of the state of New York.

REGULATION E

Regulation E of the Consumer Financial Protection Bureau establishes disclosures regarding electronic transfers. In addition to the disclosures in this section, you should review the account terms and conditions and other disclosures regarding electronic transfers that are provided to you by your firm. Please note that this disclosure section is not applicable to international remittance transfers. Contact your firm in the event that you have any questions regarding international remittance transfers you have requested.

Electronic Transfers

Electronic transfers include:

> **Direct Deposits**—You provide your checking account information to a company (such as employer, Social Security Administration) and the company electronically sends deposits to your checking account, which credits the brokerage account.

> **Authorized Debits**—You provide your checking account information to a company (such as mortgage, utility) and the company electronically sends debits to your checking account, which debits the brokerage account.

> **Debit Card Transactions**—Any merchant purchase, automatic teller machine (ATM) withdrawal or cash advance done with the debit card issued from the account.

> **Electronic Check Conversion**—You authorize a merchant or other payee to make a one-time electronic payment from your checking account using information from your check to pay for purchases or to pay bills.

If you have any questions regarding electronic transfers, call Pershing’s Asset Management Account Department at (800) 547-7008 or at (201) 413-4624. You may also write to Pershing at:

Pershing LLC Asset Management Account Department One Pershing Plaza, Fifth Floor, Jersey City, NJ 07399

Contact Pershing immediately if you think your statement or transfer receipt is incorrect, or if you need more information about a particular transfer. Pershing must hear from you within 60 days of the date of the first statement on which the transfer in question appeared. When contacting Pershing, please provide:

> Your name
> Account number
> Dollar amount of the transfer
> Description of the transfer
> Explanation indicating why you believe there is an error or why you need more information

If you notify Pershing verbally, it may request that you submit your inquiry in writing. If not received within 10 business days of Pershing’s request, Pershing may not credit your account.
Pershing will inform you of the results of Pershing’s investigation within 10 business days after it receives your inquiry and it will promptly correct any error.

If Pershing needs more time to investigate your inquiry, Pershing will credit your account in the amount of the transfer in question so that you have use of the funds during Pershing’s investigation, which may take up to 45 days to complete.

Pershing will inform you of the results within three business days after completing its investigation. If Pershing decides that there was no error, it will send you a written explanation. You may request copies of the documents that Pershing uses in its investigation.

If you have any questions, contact your advisor or firm. You may also contact Pershing’s Asset Management Account Department at (800) 547-7008 or (201) 413-4624, or by fax at (201) 413-5304.

SEC RULE 17F-1
SEC Rule 17f-1 requires that all lost or stolen securities be reported.

Lost Securities
If your periodic client statement indicates that securities were forwarded to you and you have not received them, you should immediately notify your firm or Pershing. If notification is received within 120 days after the mailing date, as reflected on your periodic statement, replacement will be made free of charge. Thereafter, a fee for replacement may apply.

FINRA RULE 4370
FINRA Rule 4370 requires the disclosure of Pershing’s business continuity plan in the event an interruption occurs to Pershing’s normal course of business.

Pershing’s Business Continuity Plan
To address interruptions to Pershing's normal course of business, Pershing maintains a business continuity plan, which includes geographically dispersed data centers and processing facilities. The plan is annually reviewed and updated as necessary.

The plan outlines the actions Pershing will take in the event of a building, city or regional incident, including:

- Continuous processing support by personnel located in unaffected facilities
- Relocating technology or operational personnel to alternate regional facilities
- Switching technology data processing to an alternate regional data center

All Pershing operational facilities are equipped for resumption of business and are tested. Regarding all circumstances within Pershing’s control, Pershing’s recovery time objective for business resumption is four hours or less, depending upon the availability of external resources.

If your firm experiences a significant business interruption, you may contact Pershing directly to process limited trade-related transactions, cash disbursements and security transfers. Instructions to Pershing must be in writing and transmitted via facsimile to (201) 413-5368 or by postal service as follows:

Pershing LLC
P.O. Box 2065
Jersey City, NJ 07303-2065
For additional information about how to request funds and securities when your firm cannot be contacted due to a significant business interruption, please select the Business Continuity and Other Disclosures link at www.pershing.com/disclosures. You may also call (201) 413-3635 for recorded instructions.

If you cannot access the instructions from the above website or telephone number, you may call (213) 624-6100, extension 500, an alternate Pershing number for recorded instructions.

FINRA RULE 2266
FINRA Rule 2266 requires Pershing to disclose SIPC contact information.

SIPC CONTACT INFORMATION
Information regarding SIPC, including a SIPC brochure, may be obtained by contacting SIPC via its website at sipc.org or by telephone at (202) 371-8300.

FINRA RULE 2267
FINRA Rule 2267 requires Pershing to provide information about FINRA’s BrokerCheck program.

FINRA BrokerCheck Program
An investor brochure that includes information describing FINRA BrokerCheck may be obtained from FINRA. The FINRA BrokerCheck Hotline Number is (800) 289-9999. The FINRA website address is www.finra.org.

MUNICIPAL SECURITIES RULEMAKING BOARD® (MSRB®)
RULE G-10 INVESTOR AND MUNICIPAL ADVISORY CLIENT EDUCATION AND PROTECTION
An investor brochure that describes the protections available under MSRB rules and instructions on how to file a complaint with an appropriate regulatory authority can be found on the MSRB website, www.msrb.org.

Pershing LLC is registered with the Securities and Exchange Commission (SEC) and MSRB, and a member of FINRA and the NYSE.

ADDITIONAL DISCLOSURES
Credit Interest
You may receive interest on positive account balances, referred to as “free credit balances,” provided that the funds are awaiting reinvestment and are subject to certain minimum balances and time requirements. Pershing and your firm may receive compensation based on the amount of free credit balances in client accounts. If you maintain free credit balances in your account solely for the purpose of receiving credit interest, and have no intention of investing the funds in the future, contact your advisor or firm to discuss your investment options.

Important Information on Check Disbursements
In situations where you request a check disbursement from your account, Pershing will receive and retain any interest or earnings generated on the amount of the check from the date that it is disbursed until its final settlement and payment.

Transactions in Listed Options
If you purchase or sell options listed on the U.S. national options exchanges, you must review the Characteristics and Risks of Standardized Options disclosure published by The Options Clearing Corporation (OCC). You may obtain a copy of the options disclosure document from your advisor or by visiting the OCC website at www.theocc.com/about/publications/character-risks.jsp.
Unit Investment Trust Payments
When Pershing acts upon the instruction of your firm to execute the purchase of a unit investment trust, Pershing may receive a payment based on the volume of sales processed by Pershing. Your firm may receive a monetary concession for the sale of the unit investment trust to you. Such payments are disclosed in the applicable unit investment trust prospectus. Additional information regarding such payment is available at www.pershing.com/disclosures.

Auction Rate Securities Payments
Pershing may receive payments from the distribution agent for trades in municipal auction rate securities and closed-end fund/preferred auction rate securities executed by Pershing upon your firm's instruction. These payments are not charged to or paid by you. Additional information regarding such payments is available at www.pershing.com/disclosures.

Float Disclosure
Pershing may obtain a financial benefit attributable to the cash balances in any account (including Employee Retirement Income Security Act [ERISA] accounts) that are held by Pershing in accounts that it has with major money center banks (the names of which will be provided upon request). These cash balances result from (1) cash awaiting investment or (2) cash pending distribution. Pershing's financial benefit may be in the form of interest earned on such balances and/or reductions in interest expenses that Pershing would otherwise pay to such money center banks. To the extent that the financial benefit is in the form of interest paid to Pershing, it is often paid at the federal funds rate.

With respect to cash awaiting investment (e.g., new contributions), Pershing obtains such financial benefit until the funds are invested in a money market fund or are used to purchase securities. If an account agreement provides for the automatic investment into a money market fund, such investment will take place on the day after the receipt of cash (and the financial benefit will be one day), unless instructions are received to manually purchase money fund shares on the same day that cash is received. Such instructions must be received before the cutoff time established by each money market fund available to the account. If the account agreement does not provide for automatic investment into a money market fund, such investment will take place on the day after the receipt of appropriate instructions.

When Pershing receives a request for a distribution by check, the account is charged (debited) on the date the check is written. Cash is transferred to a Pershing disbursement account maintained with a major money center bank on the day the check is presented for payment. Pershing mails disbursement checks on the same day that they are written. Pershing may obtain the financial benefit described above from the date the check is written until the date the check is presented for payment, the timing of which is beyond the control of Pershing. When a distribution is requested using an Automated Clearing House (ACH) instruction, Pershing receives a one-day financial benefit in connection with the distribution. If the distribution is made using the Federal Reserve wire system, Pershing receives no financial benefit in connection with the distribution.

Foreign Currency Transactions
Pershing will execute foreign currency transactions as principal for your account. Pershing's currency conversion rate will not exceed the highest interbank conversion rate identified from customary banking sources on the conversion date or prior business day, increased by up to 1%, unless a particular rate is required by applicable law.
Your firm may also increase the currency conversion rate. Conversion rates may differ from rates in effect on the date a dividend, interest payment or corporate action is credited or declared.

Unless you instruct your firm otherwise, Pershing may automatically convert foreign currency to or from U.S. dollars for dividends, interest and corporate actions.

Special Note for Non-U.S. Accounts
With respect to assets custodied by Pershing on your behalf, income and capital gains or distributions to you from your account may be taxable in your home jurisdiction and/or country of tax residence. Please consult your tax advisor for the appropriate tax treatment of your transactions.

Liens and Levies
If, for any reason, your account is subject to a garnishment, lien or levy directed to Pershing, Pershing will abide by the directions of the federal, state or other levying authority unless Pershing receives:

> A court order staying or quashing the lien or levy
> Some other form of release from the levying authority

If Pershing receives a garnishment, lien or levy on your account, you may be assessed a reasonable processing fee.

Important Notice for California Residents
Pursuant to California state law (Part 3, Title 10, Chapter 7), Pershing, as custodian of your assets, may be required to transfer your assets to the State of California in the event that no activity occurs within the statutorily defined time period. The state law defines the time period as 24 to 30 months where there is no activity within the account, or communication between the account owner and the firm.

Extended-Hours Trading
Terms. Extended-hours trading sessions offer the ability to trade all NMS equity securities that have not been halted both before and after the regular market session (9:30 a.m. to 4 p.m. [ET]). Increased trading opportunity means increased ability to react to news and earnings reports that occur during pre-and post-market sessions.

The following sections provide important information regarding Pershing’s extended-hours trading sessions:

Session Times. Pre-Market Trading—8:00 a.m. to 9:15 a.m. each business day.

After-Market Trading—4:01 p.m. to 6:29:59 p.m. each regular business day. On business days when the regular market session is abbreviated (e.g., 1:00 p.m. closing), the extended-hours session following regular market hours will begin earlier and end earlier, typically 1:01 p.m. to 3:00 p.m.

Order Duration. Orders entered are only in force for the trading session during which they were entered. Good till canceled (GTC), good this day (GTD) and good this month (GTM) orders are not allowed.

Securities Available. NMS equity securities are eligible for trading.

NOTE: Non-NMS Quotation Service (NNQS), Pink Sheets and securities traded on foreign exchanges are not eligible for extended-hours trading.

How Pershing Executes Extended-Hours Trades. Pershing executes extended-hours trades by routing orders to a participating exchange.
The market center will automatically match client buy and sell orders, with bids and offers they are holding. In addition, markets may be linked to other exchanges or electronic trading systems to improve the opportunity for your order to be executed.

Types of Orders That Can Be Placed During Extended-Hours Trading. Only limit orders may be entered in both the pre- and post-market trading sessions. Other types of orders and order qualifiers, such as market, stop, all-or-none (AON) and fill-or-kill (FOK) are not currently available. The minimum order size is one (1) share and the maximum order size is 99,999 shares per order.

Short Sales During Extended-Hours Trading. Short sales are permitted during extended-hours trading sessions. An affirmative determination is required to verify that the security is available to borrow.

Duration of Orders Placed During Extended-Hours Trading. Orders placed during extended-hours trading sessions are only good for the session during which the order is placed. If the order is not executed during a specific extended-hours session, the order expires at the end of that session and does not roll over to the next regular hours or extended-hours session. Similarly, orders from the regular trading session do not roll over to the extended-hours session. Orders not yet executed can be canceled in the same manner as regular session orders before the close of that session.

Orders executed during an extended-hours session are considered to have been executed during that day's regular session for settlement and clearing purposes. Settlement dates for extended-hours trades follow the same rules as regular hours trading. For instance, if settlement is two business days after the day on which the transaction occurred and your pre-market order to buy is executed on Monday, the 6th day of the month, the settlement date is Wednesday, the 8th day of the month, and payment is due at that time.

Margin Requirements for Extended-Hours Trading. Margin requirements remain the same as during regular trading hours. A stock's margin eligibility during an extended-hours session is computed using the closing price of the previous regular market session.

Risks. As with any securities trading, there are risks. Additional risks associated with extended-hours trading include:

Risk of Timing of Order Entry—All orders entered and posted during extended-hours trading sessions must be limit orders. You must indicate the price at which you would like your order to be executed. By entering the price, you agree not to buy for more or sell for less than the price you entered, although your order may be executed at a better price. Your order will be executed if it matches an order from another investor or market professional to sell or purchase on the other side of the transaction. In addition, there may be orders entered ahead of your order by investors willing to buy or sell at the same price. Orders entered earlier at the same price level will have a higher priority. This means that if the market is at your requested price level, an order entered prior to your order will be executed first. This may prevent your order from being executed in whole or in part.

Risk of Execution Pricing—For extended-hours trading sessions, quotations will reflect the bid and ask currently available through the used quotation service. The quotation service may not reflect all available bids and offers posted by other participating electronic communication networks (ECNs) or exchanges, and may reflect bids and offers that may not be accessible through Pershing or respective
trading partners. This quotation montage applies for both pre- and post-market sessions.

Not all systems are linked. Therefore, you may pay more or less for your security purchases or receive more or less for your security sales through a participating ECN or exchange than you would for a similar transaction on a different ECN or exchange.

Risk of Communications Delays or Failures—Delays or failures in communications due to a high volume of orders or to other computer or system problems, including Internet disruptions, may cause delays in or prevent the execution of your order. Any communication or computer problems experienced by Pershing, its designated order manager, or participating ECN or exchange, may prevent or delay the order from being executed. Pershing reserves the right to temporarily or permanently close an extended-hours trading session without prior notification in the event of system failures or unforeseen emergencies.

Pershing will not be held liable for missed executions in the case of a system failure.

Risk of Lower Liquidity—Liquidity refers to the ability to buy and sell securities. Generally, if there are more orders available in the market, then the security is more liquid. Due to limited trading activity in the extended-hours trading sessions, the liquidity in these sessions may be significantly less than during regular market hours. Lower liquidity may prevent your order from being executed in whole or in part, or from receiving as favorable a price as you might receive during regular trading hours. In addition, lower liquidity means fewer shares of a given security are being traded, which may result in larger spreads between bid and ask prices and volatile swings in stock prices.

Risk of Trading Halts—News stories may have a significant impact on stock prices during extended-hours trading sessions. The SEC, FINRA, or a stock exchange may impose a trading halt when significant news has affected a company's stock price. Any SEC-, FINRA- or exchange-imposed trading halt will be enforced. Pending orders for a security will be held upon imposition of a trading halt for that security and reinitiated upon resumption of trading during that session.

Risk of Duplicate Orders—There is a risk of duplicate orders if you place an order for the same security in both an extended-hours session and the regular trading session, even if that order is a day order. Orders executed during regular trading hours may not be confirmed until after the post-market extended trading session has already begun. Similarly, orders executed in the pre-market session may not be confirmed until after regular trading has begun.

Risk of Partial Executions—Orders placed during extended trading hours are entered through a participating ECN or exchange, which may be linked to other ECNs or exchanges. Because you cannot add qualifiers to an order, such as AON or FOK, a round lot order may be filled in part by an odd lot or mixed lot order, leaving stock left over to buy or to sell. There is a risk that the remaining order may not be filled during the extended-hours session. An odd lot may not be represented in the displayed quote. This would occur in instances in which an order has an execution leaving an odd lot. There are no execution guarantees for an odd lot or the odd lot portion of a mixed lot portion of an order.

Risk of Lack of Calculation or Dissemination of Underlying Index Value or Intraday Indicative Value—For certain derivative securities products, an updated underlying index value or intraday indicative value may not be calculated or publicly disseminated in extended-hours trading. Since the
underlying index value and intraday indicative value are not calculated or widely disseminated during the opening and late trading sessions, an investor who is unable to calculate implied values for certain derivative securities products in those sessions may be at a disadvantage to market professionals.

Risk of Higher Volatility—Volatility refers to the changes in price that securities undergo when trading. Generally, the higher the volatility of a security, the greater its price swings. There may be greater volatility in extended-hours trading than in regular market hours. As a result, your order may only be partially executed, or not at all, or you may receive an inferior price in extended-hours trading than you would during regular market hours.

Risk of News Announcements—Normally, issuers make news announcements that may affect the price of their securities after regular market hours. Similarly, important financial information is frequently announced outside of regular market hours. In extended-hours trading, these announcements may occur during trading and, if combined with lower liquidity and higher volatility, may cause an exaggerated and unsustainable effect on the price of a security.

Risk of Wider Spreads—The spread refers to the difference in price for which you can buy and sell a security. Lower liquidity and higher volatility in extended-hours trading may result in wider than normal spreads for a particular security.

Confirmation of Executions and/or Cancellations
Confirinations of executions or cancellations may be delayed, erroneous (e.g., due to computer system issues) or cancelled/adjusted by a Market. A customer is bound by the actual order execution, if consistent with customer's order. The cancellation of an order is not guaranteed. The order will only be cancelled if the request to cancel is received by the market center to which the order was routed and matched with the order to be cancelled before it is executed. During market hours, it is rarely possible to cancel a market order or a marketable limit order, as such orders are subject to immediate execution. Client may not assume that any order has been executed or canceled until Client has received a transaction or cancellation confirmation from your introducing firm or Pershing. Even in the event such execution or cancellation is reported to Client, any reporting or posting errors, including errors in reporting or posting execution prices or cancellations, may be corrected to reflect what actually occurred in the marketplace.

Money Market Mutual Fund Confirmations
Confirmations for Money Market Mutual Fund purchases processed through the sweep platform are not sent pursuant to SEA Rule 10b-10(b)(1).

Pershing’s Impartial Lottery Process
Partial Calls Information about Pershing’s impartial lottery process can be found on www.pershing.com/disclosures. You may also request a printed copy of this information by calling (888) 367-2563, option 3 then option 5.

When a security is subject to a partial redemption, pursuant to FINRA Rule 4340, Pershing must have procedures in place that are designed to treat clients fairly in accordance with an impartial lottery process.

When an issuer initiates a partial call of securities, the depository holding such securities (typically, the Depository Trust and Clearing Corporation, or DTCC) conducts an impartial, computerized lottery using an incremental random number technique to determine the
The allocation of called securities to participants for which it holds securities on deposit (including Pershing). Because DTCC’s lottery is random and impartial, participants may or may not receive an allocation of securities selected for redemption.

When Pershing is notified that it received an allocation of called securities, Pershing conducts a similar, computer-generated random lottery. The lottery determines the accounts that will be selected and the number of securities in the account that will be redeemed. Allocations are based on the number of trading units held in the account. The probability of any trading unit held by an account being selected as called in a partial call is proportional to the total number of trading units held through Pershing.

Once the lottery is complete, Pershing notifies introducing broker-dealers whose introduced accounts have received an allocation.

Securities registered in the client’s name, either in transit or held in custody, are excluded from the Pershing lottery process.

Pershing initiates the lottery process by identifying the accounts holding the called security, the total par value of the called securities held, and the trading unit of the security.

Example (unit of trade = $25,000):

<table>
<thead>
<tr>
<th>Client Account</th>
<th>Par Value</th>
<th>Number of Trading Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC-123234</td>
<td>$100,000</td>
<td>4</td>
</tr>
<tr>
<td>DEF-325465</td>
<td>$75,000</td>
<td>3</td>
</tr>
<tr>
<td>EDR-567433</td>
<td>$150,000</td>
<td>6</td>
</tr>
<tr>
<td>EGT-876574</td>
<td>$50,000</td>
<td>2</td>
</tr>
<tr>
<td>EGT-888345</td>
<td>$25,000</td>
<td>1</td>
</tr>
<tr>
<td>FRT-435234</td>
<td>$25,000</td>
<td>1</td>
</tr>
<tr>
<td>FRT-658797</td>
<td>$75,000</td>
<td>3</td>
</tr>
</tbody>
</table>

In brief, the allocation process involves the following steps:

> The number of trading units held in each account is identified.
> A sequential number is assigned to each trading unit (e.g., account EDR-567433 would be assigned six numbers).
> A random number is generated that will result in one of these trading units being the first unit in the selection process.
> Thereafter, the trading units participating in the allocation are based on an incremental random number technique until the number of trading units allocated to Pershing is exhausted.

Additional Information:

> The allocation of called securities is not made on a pro-rata basis. Therefore, it is possible that a client may receive a full or partial redemption of shares held. Conversely, it is also possible that a client may not have any securities selected for redemption at all.
> When a partial call is deemed favorable to the holders of the called security, Pershing will exclude certain accounts from the lottery. Excluded accounts will include Pershing’s proprietary and employee accounts, as well as proprietary and employee accounts of introducing broker-dealers (if Pershing carries and clears those accounts). No allocation will be made to these proprietary and employee accounts until all other client positions at Pershing in such securities have been called. When a partial call is deemed unfavorable to holders of the called security, Pershing will not exclude any accounts from the lottery.
If the partial call is made at a price above the current market price as captured in Pershing's price reporting system, Pershing will generally categorize the partial call as one that is favorable to the holders of such security. If the partial call is made at a price that is equal to or below the current market price of the security as captured in Pershing's price reporting system, Pershing will generally categorize that call as one that is unfavorable to holders of the security.

Clients have the right to withdraw uncalled, fully paid securities from Pershing at any time prior to the cutoff date and time established by the issuer, transfer agent and/or depository with respect to the partial call. Clients also have the right to withdraw excess margin securities, provided that the client account is not subject to restriction under Regulation T or that such withdrawal will not cause an under-margined condition.

**Estimated Annual Income and Estimated Yield**
The following disclosure pertains to estimated annual income (EAI) and estimated current yield (ECY) figures displayed on Pershing's brokerage account statements.

The EAI and ECY figures are estimates and for informational purposes only. These figures are not considered to be a forecast or guarantee of future results. These figures are computed using information from providers believed to be reliable; however, no assurance can be made as to the accuracy. Since interest and dividend rates are subject to change at any time, and may be affected by current and future economic, political and business conditions, they should not be relied on for making investment, trading or tax decisions. These figures assume that the position quantities, and then dividing that figure by 100. The resulting figure is reflected on the brokerage account statement in the EAI field.

The EAI for equity, mutual fund, unit investment trust and exchange-traded fund securities is computed using either a historical methodology (HM) or projected methodology (PM), depending on the information from the issuer. The PM annualizes the latest regular cash dividend. The HM accumulates the regular cash dividends over the past twelve months. If there is less than one year of dividend history, the accumulated dividends are annualized. The EAI for preferred securities is computed using the PM. The HM or PM figure, whichever is calculated, is then multiplied by the quantity of the security and the resulting figure is reflected on the brokerage account statement in the EAI field.

The following are important caveats to the HM figure and PM figure.

- The figure is denominated in the same currency as the dividend announcement.
- The figure does not contemplate special or extra dividends.
- When a security pays its first dividend with no specificity as to dividend frequency, the initial dividend will be the reported figure.
- If a security announces a stock split and does not announce a new dividend rate, the figure will be adjusted on the ex-distribution/dividend date.
- For a called security, the figure will remain unchanged until the payment date, at which point it will revert to zero.
- The figure for Canadian securities is calculated the same way as for U.S. securities.
- The figure for mutual funds only includes dividends treated as income.
The figure will be zero under the following scenarios: a security that has only paid capital gains during the preceding year; a security that has only had stock splits, stock (not cash) dividends or reverse stock splits during the preceding year; a security other than an open-end mutual fund (excluding a money market fund), ADR preferred, or exchange-traded fund which rescinds or omits a dividend payment; and a security from an issuer which is in arrears and uncertain about its ability to make a dividend payment.

The ECY figure is computed by dividing the EAI figure by the current market price of the security, which may be higher or lower than the purchase price, and then the figure is multiplied by 100. The resulting figure is reflected on the brokerage account statement in the ECY field. With specific regard to a fixed income security, the initial purchase confirmation oftentimes reflects yield to maturity, yield to call and/or yield to worst figures which are more relevant figures from the point of purchase.

**Trailing Stop Orders**

Trailing stop orders can be triggered by either a transaction or by a National Best Bid/Offer (NBBO) quotation update, and can trail by dollar value or percentage, depending on which option your financial advisor chooses on an order-by-order basis at the time the order is placed.

**Canadian Activities**

Pershing LLC operates in Canada under an International Dealer Exception through the Ontario Securities Commission.

**Elder and Vulnerable Adults**

By completing a physical or electronic contact form or providing trusted party information to your broker or advisor for electronic capture, you authorize your firm and Pershing and their affiliates to share your nonpublic personal information* held at your firm and Pershing with the named trusted contact person(s) identified as such. This authorization includes, but is not limited to, sharing or disclosing any information regarding securities, insurance, bank related, financial planning or other financial products or services offered by or through your firm and/or Pershing or any financial information you may have provided to your firm or Pershing. You understand that your firm or Pershing may contact the named trusted contact person(s) if there are questions or concerns about your whereabouts or health status (i.e., if your firm or Pershing becomes concerned that you may no longer be able to handle your financial affairs) or in the event that your firm or Pershing becomes concerned that you may be a victim of fraud or exploitation.

You should contact your firm or advisor with additional questions. You may also contact FINRA’s senior investors line at (844) 57-HELPS [(844) 574-3577], Monday-Friday, 9 a.m.-5 p.m. (ET), to get assistance or raise concerns about issues with brokerage accounts and investments.

* “Nonpublic personal information” includes, but is not limited to: financial account information and balances, information regarding the purchase of a security or insurance product, and any other personally identifiable financial information: (i) provided by you to your firm; (ii) resulting from any transaction in your account or any service performed on behalf of you by your firm; or (iii) otherwise obtained from you by your firm.