Dear Northern Trust Colleague,

For over 125 years, Northern Trust has remained true to our founding principles of service, expertise, and integrity.

To fulfill our commitment to the highest standards of integrity, ethics, and honesty, the Board of Directors of Northern Trust Corporation has adopted the Northern Trust Code of Business Conduct and Ethics. It applies to all directors, officers and employees of Northern Trust Corporation and its subsidiaries at all levels throughout the world.

The Code establishes a number of basic principles to be followed in all dealings within Northern Trust, and with clients, suppliers, shareholders and regulatory agencies globally. It’s important to note that while the Code is a broad directive applying to all Northern Trust staff, it is not exhaustive. Other Northern Trust policies and procedures apply specifically to certain groups or circumstances within Northern Trust.

We expect everyone to adhere to our commitment to the highest standards of integrity, ethics, and honesty. Compliance with the Code, other Northern Trust policies and procedures (including risk management related policies and procedures), and all applicable laws and regulations is critically important.

If questions arise regarding complying with the Code or some other policy, you should consult your manager or supervisor, the Chief Compliance and Ethics Officer, the Corporate Secretary, or the General Counsel, as appropriate. If you believe that someone has violated any Northern Trust policy, law or regulatory requirement, you should report your concerns to Northern Trust as set forth in the Code or in accordance with Northern Trust’s Reporting Procedures, which are available on the Northern Trust Intranet and contain phone numbers, an email address and a secure website for reporting potential misconduct. Any report of a suspected violation is kept confidential to the extent possible. No person who, in good faith, reports any concern, complaint, or information regarding a suspected violation will be subject to retaliation. This includes discrimination in the terms and conditions of employment, or other adverse action of any kind as a result of making a report. Reporting in “good faith” means you reasonably believe that your information is as accurate and complete as possible, whether or not the reported behavior turns out to be a violation of the Code. Of course, an employee who reports his or her own misconduct will not be absolved of responsibility for his or her actions by the act of reporting.

I encourage you to review the Code and renew your commitment to the unquestioned integrity, ethics, and honesty that have been a hallmark of Northern Trust for over 125 years.

Michael G. O’Grady
Chief Executive Officer
Northern Trust Corporation

CODE OF BUSINESS CONDUCT AND ETHICS

This Code applies to all directors of Northern Trust Corporation, all directors of subsidiaries of Northern Trust Corporation and all officers and employees of Northern Trust globally. More detailed Northern Trust policies and procedures that apply to all employees or certain groups are set forth in other documents, including risk management related policies and procedures. While these other policies and procedures are not part of this Code, everyone covered by this Code is expected to conduct himself or herself consistently with this Code and all other policies that address specific legal requirements imposed by laws and regulations in countries in which Northern Trust does business and other corporate standards.

We expect everyone covered by this Code to adhere to our overriding commitment to the highest standards of integrity, ethics, and honesty. Compliance with the Code, other Northern Trust policies, procedures and standards, and the laws and regulations referred to in those documents, is a vital part of that commitment. This Code also helps us enhance our relationships with our clients, each other, and all of the people that contribute to Northern Trust’s success.

Michael G. O’Grady
Chief Executive Officer
NORTHERN TRUST CORPORATION
CODE OF BUSINESS CONDUCT AND ETHICS¹

Introduction

The Board of Directors has adopted this Code to:

• promote honest and ethical conduct, including fair dealing and the ethical handling of actual or apparent conflicts of interest;
• promote full, fair, accurate, timely and understandable public disclosure about Northern Trust;
• promote compliance with applicable laws and governmental rules, codes and regulations wherever Northern Trust does business;
• ensure the protection of our legitimate business interests; and
• deter wrongdoing.

All Northern Trust directors, officers and employees are expected to be familiar with this Code and to adhere to all of the Code’s applicable principles and procedures. More detailed policies and procedures, which are not part of this Code, also apply to some or all of Northern Trust’s directors, officers and employees. You are responsible for determining what other policies and procedures apply to you, including risk management related policies and procedures. A violation by you of the Code may subject you to disciplinary action, including dismissal and partial or full forfeiture or recoupment of any long-term incentive awards made to you.

The Code does not, and shall not be interpreted to create, any rights for any person or entity other than the Corporation. Nothing in this Code shall be construed as altering the employment relationship between the Corporation and any employee or as granting any employee employment for any specific period of time.

¹ Following are definitions of some of the terms used in the Northern Trust Corporation Code of Business Conduct and Ethics:

“Board of Directors” means the Board of Directors of Northern Trust Corporation; “Chief Compliance and Ethics Officer” means the Corporation’s Chief Compliance and Ethics Officer; “Code” means this Northern Trust Corporation Code of Business Conduct and Ethics; “Corporation” means Northern Trust Corporation; “Executive Officer” means an “officer” as that term is defined in Rule 16a-1(f) under the Securities Exchange Act of 1934, as amended; “Northern Trust,” “we” or “our” refers to the Corporation and its direct and indirect subsidiaries; and “you” means each person covered by this Code.
I. Honest and Ethical Conduct

Each of our directors, officers and employees owes a duty to Northern Trust to act with integrity and to treat colleagues, clients, suppliers and other third parties with dignity and respect. Integrity requires, among other things, being honest, ethical and candid.

Each Northern Trust director, officer and employee must:

- Adhere to Northern Trust’s overriding commitment to the highest standards of integrity, ethics and honesty.
- Cooperate with appropriate inquiries (i) from outside accountants, (ii) pursuant to an internal audit or investigation, or (iii) pursuant to any official investigation, examination or inquiry by a regulatory or law enforcement agency.
- Observe all applicable laws and governmental rules, codes and regulations.
- Treat all persons without bias, discrimination or harassment. Northern Trust believes that everyone within and outside of Northern Trust should be treated with respect and fairness, regardless of that person’s age, color, race, religion, gender, creed, national origin, physical or mental disability, sexual orientation, gender identity, or other legally protected status as required by applicable law. Northern Trust is committed to understanding, valuing and promoting diversity and to maintaining a culture of inclusion.
- Foster maintenance of a workplace that is safe and healthy for ourselves and our clients, and a workplace that is free of violence and of any substance that is illegal or unsafe. Any threatening or suspicious behavior should be reported immediately to Global Physical Security Services or Security Liaison/Building Security as applicable and appropriate.
- Strive to protect the environment, with the goal to minimize any negative impacts our work may have on the environment, such as by limiting energy usage.

II. Dealing with Difficult Ethical Questions

This Code presents a number of obligations and prohibitions. In fulfilling your daily responsibilities to Northern Trust you may confront ethical questions from time to time. We expect our directors, officers and employees to be able to resolve many questions themselves. It will sometimes be necessary, however, to contact the Corporate Secretary or some other person in authority to resolve a question. When faced with a difficult ethical question, you should:

- Gather all the available information necessary to address the issue.
- Check the Code and any other applicable Northern Trust policy statement.
- If the decision of what action to take, or not to take, is not readily apparent, ask yourself:
  → How might my decision impact others, within and outside Northern Trust?
  → How might my action affect the reputation of Northern Trust?
→ How might my action appear if it were described in the news media?

→ Would my proposed course of action or failure to act have the appearance of being improper, even if not directly contrary to this Code or some other Northern Trust policy?

• Seek guidance from others as appropriate, always keeping in mind the confidentiality obligations discussed in Section VIII of this Code. You should consider consulting your manager or supervisor or those persons referred to in Section VI of this Code.

• Supervisors and managers are expected to oversee the conduct of each person under their supervision, and to reinforce conduct that complies with this Code.

III. Conflicts of Interest

A “conflict of interest” occurs when an individual’s real or apparent private interest interferes or appears to interfere with the interests of Northern Trust. A conflict of interest can arise when you take action or have an interest that may make it difficult to perform your Northern Trust work objectively and effectively. For example, a conflict of interest would arise if you or a member of your family received an improper personal benefit as a result of your position with Northern Trust. For these purposes, a family member includes the person’s spouse, domestic partner, counterpart in a civil union, parents, stepparents, grandparents, children, grandchildren, stepchildren, brothers, sisters, mother- and father-in-law, sons- and daughters-in-law, and brothers- and sisters-in-law, as well as other persons living in the person’s home (other than a tenant who is not otherwise included in the preceding list).

Any transaction or relationship that could reasonably be expected to give rise to a conflict of interest should be discussed in advance with the Corporate Secretary. A conflict of interest may arise inadvertently or first be recognized after it occurs. In that case you should promptly bring it to the attention of the Corporate Secretary.

Personal gain or advantage should never be allowed to interfere with, or be given a higher priority than, service to Northern Trust. Accordingly, conflicts of interest should be avoided whenever possible. All business decisions regarding Northern Trust must be based solely on what is in the best interest of Northern Trust, without regard to any conflicting interest you may have.

Clear conflict of interest situations involving Northern Trust directors, officers and employees who occupy supervisory positions or who have discretionary authority in dealing with any third party specified below may include:

• any significant ownership or other economic interest in any of our suppliers or clients;

• any duties, responsibilities or obligations to third parties that are inconsistent with the person’s duties to Northern Trust;

• any outside activity that interferes with the person’s ability to devote appropriate time and attention to his or her responsibilities with Northern Trust;
• the receipt of a larger than nominal gift or of excessive entertainment from any person or entity with which Northern Trust has current or prospective business dealings, regardless of any local custom or practice in this respect;

• being in the position of supervising, reviewing or having any influence on the job evaluation, pay or benefit of any immediate family member; and

• selling anything to Northern Trust or buying anything from Northern Trust, except on the same terms and conditions as are available to any other Northern Trust director, officer or employee.

Potential conflicts of interest should always be discussed with the Corporate Secretary. Some of the issues that present potential conflicts, such as the receipt or making of gifts, are dealt with in separate policies, not part of this Code, that are applicable to particular parts of the Northern Trust organization. Northern Trust directors, officers and employees must adhere to any applicable separate policies dealing with conflicts of interest in specific operations of Northern Trust or in specific places where Northern Trust does business.

You should recognize that some situations that would present a conflict for you may also present a conflict if a family member were in the same situation.

IV. Public Disclosure

Each of our directors, officers or employees involved in Northern Trust’s public disclosure process, including the Chief Executive Officer, the Chief Financial Officer and the Controller of the Corporation (the “Senior Financial Officers”), is required to be familiar with and comply with the Corporation’s disclosure controls and procedures and internal control over financial reporting. As a publicly held corporation, the Corporation files reports with the Securities and Exchange Commission (“SEC”) that must comply in all material respects with the applicable U.S. securities laws and SEC rules. In addition, any person having direct or supervisory authority regarding these SEC filings or our other public communications concerning Northern Trust’s general business, results, financial condition and prospects should, to the extent appropriate within his or her area of responsibility, consult with other Northern Trust officers and employees and take other appropriate steps regarding these disclosures with the goal of making full, fair, accurate, timely and understandable disclosure.

Each of our directors, officers and employees who is involved in Northern Trust’s public disclosure process, including the Senior Financial Officers, must:

• Be familiar with the disclosure requirements applicable to Northern Trust as well as the business and financial operations of Northern Trust.

• Not knowingly misrepresent, or cause or permit others to misrepresent, facts about Northern Trust to others, whether within or outside Northern Trust, including to our independent auditors, governmental regulators and self-regulatory organizations, nor exercise or seek to exercise improper influence over any such person.

• Record all business transactions accurately and in accordance with Corporation policy and legal and accounting requirements.
• Properly review and critically analyze proposed public disclosure for accuracy and completeness (or, where appropriate, delegate this task to others).

Unless expressly authorized to speak for Northern Trust, no director, officer, or employee shall provide information regarding, or comment on matters pertaining to, Northern Trust in any media, including Internet chatrooms, networking sites, bulletin boards or blogs.

Generally your participation in external social media sites should take place on your personal time, except to the extent that your responsibilities for Northern Trust include interaction with social media. Any reference to your work at Northern Trust should be limited to factual information about your position, without any reference to your Northern Trust contact information (telephone, e-mail address, etc.).

V. Legal Compliance

Northern Trust is committed to complying with all applicable laws, rules, codes and regulations wherever Northern Trust does business. These include applicable anti-money laundering and anti-terrorist finance (collectively “AML”) laws and regulations of the jurisdictions in which Northern Trust does business around the globe. They also include anti-bribery, fair dealing, economic sanction, anti-trust, anti-boycott, securities, banking, privacy, and civil rights laws, and laws regulating political contributions and lobbying. It is the personal responsibility of each of you to adhere to the standards and restrictions imposed by applicable laws, rules and regulations. The following subsections address several types of legal prohibitions.

A. The Prohibition on the Misuse of Material, Nonpublic Information

As a general rule, persons who possess material, nonpublic information about an issuer of securities — whether it is the Corporation itself or another public company, such as a Northern Trust client — are prohibited by the securities laws from purchasing or selling the securities of the company about which they have material, nonpublic information, or of options on those securities, and from passing such information on to others (“tipping”). Impermissible tipping includes advising another person or entity to trade in a security when you are prohibited from trading yourself. The prohibitions noted in this paragraph remain in effect until the information has been disclosed to the public or is no longer material.

Prohibitions and restrictions on securities transactions are set forth in more detail in the Corporation’s Securities Transactions Policy and Procedures. Anyone who is uncertain about whether he or she is precluded by the Code from the purchase or sale of Northern Trust securities or the securities of any company with which he or she is familiar by virtue of that person’s relationship with Northern Trust should consult with the Corporation’s General Counsel or Corporate Secretary before making any such purchase or sale.

B. The Prohibition on Bribery and Kickbacks

Many jurisdictions have anti-bribery corruption laws under which it is unlawful for any Northern Trust director, officer or employee directly or indirectly (including through a conduit) to solicit, demand or accept any gifts or other items of value (including meals and entertainment) intended to influence or reward that person in connection with any aspect of Northern Trust business.

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Similarly, under the laws of numerous jurisdictions where Northern Trust does business, including the United States, no Northern Trust director, officer or employee may directly or indirectly (including through a conduit) give a bribe, kickback or other payment, consideration or benefit to government officials or candidates for government office (including meals and entertainment) in order to obtain business for Northern Trust or secure an improper advantage. For example, under the U.S. Foreign Corrupt Practices Act ("FCPA"), it is a crime for a Northern Trust director, officer or employee or any agent, representative, or business partner of, or consultant for, Northern Trust — wherever that person is located — to give or offer to give money or anything of value (including political contributions) with the intent to influence improperly the business decisions of officials or employees of a foreign government or its entities who have discretionary authority, including officials of public international organizations. Providing gifts, travel, entertainment or other items of value (for example, favorable loan terms or debt forgiveness), or directing business directly or indirectly to particular vendors (for example, when specifically directed to do so by a foreign government) may constitute FCPA violations.

Many jurisdictions in addition to the U.S. government impose prohibitions on behavior similar to or broader than those in the FCPA. For example, in contrast with the FCPA, which applies to bribery outside the United States where at least one party has a role in the public sector, the U.K. Bribery Act covers bribery in any part of the world in both the public and the private sectors, and extends criminal liability to the recipient of the bribe. In addition, many state and local governments in the United States have expansive definitions of what constitutes an improper benefit or gift under their conflict of interest laws.

All of our directors, officers and employees are expected to adhere to local law and the Northern Trust Global Anti-Bribery and Corruption Policy, always conforming to the most stringent requirement where multiple laws may apply.

C. Money Laundering and Other Financial Crimes

AML laws and regulations are intended to safeguard the global financial system and the financial institutions that make up that system from the abuses of financial crime, including money laundering, terrorist financing, and other illicit financial transactions. Northern Trust is committed to complying with applicable AML laws and regulations of all countries in which it does business, as well as applicable U.S. government sanctions laws, including orders and regulations issued by the U.S. Treasury’s Office of Foreign Assets Control, and all other applicable government sanctions laws and regulations of the jurisdictions in which Northern Trust does business. In order to maintain a strong global AML compliance program, the Corporation has adopted the Global Anti-Money Laundering and Economic Sanctions Compliance Program.

VI. Reporting and Accountability

The Corporate Governance Committee of the Board of Directors is responsible for applying this Code to specific situations in which questions are presented to it and for evaluating whether there is any need for revisions to this Code.
Any Northern Trust director, officer or employee who becomes aware of any suspected past, ongoing, or potential violation of law, rules or regulations is required to notify the Corporate Secretary promptly. Alternatively, reports may be made using Northern Trust’s Reporting Procedures, which are posted on the Northern Trust Intranet. Failure to report is itself a violation of this Code.

Any questions relating to how this Code should be interpreted or applied, including questions about the legality of any proposed or actual conduct in any jurisdiction, should be addressed to the General Counsel, the Corporate Secretary or the Chief Compliance and Ethics Officer. A Northern Trust director, officer or employee who is unsure whether proposed conduct by that person or any other person violates this Code should discuss the situation with the Corporate Secretary.

The General Counsel provides interpretations of this Code, which are subject to the final authority of the Corporate Governance Committee. Questions about the interpretation of other Northern Trust policies may be directed as provided in the Reporting Procedures, which are posted on the Northern Trust Intranet. The Reporting Procedures address how anonymous reports of violations of Northern Trust policies may be made to NAVEX Global, an independent third-party that Northern Trust has engaged to administer its confidential reporting hotlines.

You must:

- Notify the General Counsel or the Corporate Secretary promptly of any suspected past, ongoing, or potential violation of this Code.

- If you suspect there has been criminal conduct or you are contacted by law enforcement or other government officials regarding suspected criminal conduct, promptly notify the General Counsel or the Corporate Secretary. If you suspect that there has been a regulatory violation, promptly notify the General Counsel, the Corporate Secretary or the Chief Compliance and Ethics Officer. All efforts must be made to stop any continuing criminal conduct immediately and to take appropriate action to avoid any further regulatory violation.

- Promptly report to the email address Personal_Conduct_Report@ntrs.com if you have:
  - Been charged with or convicted of any criminal offense or misconduct. Minor traffic offenses do not need to be reported; however, offenses involving driving under the influence of alcohol or drugs are not considered to be minor traffic offenses.
  - Been sanctioned by or received notice of any action against you by any regulatory agency, self-regulatory organization, licensing authority, organization that issues professional certifications or designations, or law enforcement authority.
  - Been subjected to any legal claims against you involving allegations of fraud, whether or not relating to your actions at Northern Trust.

No person who, in good faith, reports any concern, complaint, or information of suspected violations will be subject to retaliation. This includes discrimination in the terms and conditions
of employment, or other adverse action of any kind solely as a result of making a report. Reporting in “good faith” means you reasonably believe that your information is as accurate and complete as possible, whether or not the reported behavior turns out to be a violation of the Code. An employee who reports his or her own misconduct, however, will not be absolved of responsibility for his or her actions by the act of reporting.

Any waiver of a provision of this Code for directors or Executive Officers of the Corporation may be made only by the Board of Directors. A waiver and the reasons for granting such a waiver must be promptly disclosed in the manner required by the rules of the SEC and/or The Nasdaq Stock Market LLC or any other securities exchanges on which the Corporation’s securities may be listed. Any waiver for directors of subsidiaries of the Corporation, or for Northern Trust officers or employees other than Executive Officers of the Corporation, may be made only by the General Counsel or the Corporate Secretary.

VII. Corporate Opportunities and Use of Corporate Property

Each of our directors, officers and employees owes a duty to Northern Trust to advance our business interests when the opportunity to do so arises. Our directors, officers and employees are prohibited from taking (or directing to a third party) a business opportunity that is discovered through the use of corporate property, information or position, unless Northern Trust has already been offered the opportunity and declined it.

More generally, directors, officers and employees are prohibited from using corporate property, corporate information or their position at Northern Trust for personal gain and from competing with Northern Trust. For these purposes Northern Trust corporate property includes any asset owned by, leased by or licensed to Northern Trust, including tangible and intangible property, business plans, information assets (including hard copy and electronic data) and proprietary rights (including trademarks). This includes the “Northern Trust” name, which may not be used without authorization.

Northern Trust has proprietary rights in all property created or developed for Northern Trust resulting from any work performed by an employee for Northern Trust or that is created with Northern Trust resources. Sometimes the line between personal and Northern Trust benefits is difficult to draw, and sometimes there are both personal and Northern Trust benefits in the same activity. Any Northern Trust director, officer or employee who intends to make use of Northern Trust property or services in a manner not solely for the benefit of Northern Trust should consult beforehand with the Corporate Secretary.

VIII. Confidentiality

It is a violation of this Code to disclose or communicate confidential or proprietary information about Northern Trust or its clients, client prospects, vendors, directors, officers, or employees to anyone who is not authorized or legally mandated to receive such information. This obligation extends to communications made by directors, officers, and employees via social media (i.e., Facebook®, LinkedIn®, Twitter®, YouTube®, Instagram®, SnapChat®, Pinterest®, etc.) on their own time or via their personal communications systems. Also, this obligation continues after the director, officer or employee in possession of the confidential or proprietary information
is no longer affiliated with Northern Trust. If you have any questions about whether information
is confidential or proprietary, please contact the Corporation’s Chief Compliance and Ethics
Officer, General Counsel, or Corporate Secretary.

You must protect all client and employee personal information by following applicable privacy
and data protection laws wherever we do business. Everyone is expected to ensure the privacy of
personal information.

IX. Fair Dealing

We have a history of succeeding through honest business competition. Northern Trust does not
seek competitive advantage through illegal or unethical business practices. Each of our directors,
officers and employees should endeavor to deal fairly with Northern Trust’s clients, service
providers, suppliers, competitors and employees. No Northern Trust director, officer or
employee should take unfair advantage of anyone through manipulation, concealment, abuse of
privileged information, misrepresentation of material facts, forced labor, or any other unfair
dealing practice. No Northern Trust director, officer or employee should seek to manipulate or
otherwise tamper with any market, including the market for any financial instrument such as
securities, commodities or loans.

X. Protection and Proper Use of Northern Trust Assets

All of our directors, officers and employees should protect Northern Trust’s property (as
specified in Section VII) and ensure its efficient use. All Northern Trust property should be used
only for legitimate business purposes. Theft of corporate assets is prohibited and carelessness
and waste should be avoided.

XI. Disclosure of this Code

This Code shall be posted on the Corporation’s website. The fact that this Code is posted on the
website shall be disclosed in the Corporation’s Form 10-K each year. Northern Trust shall make
such other disclosure of this Code as is required by law.

Adopted by the Board of Directors, effective January 1, 2018, and re-affirmed on November 13,
2018.