

BNY Mellon Large Cap Securities Fund, Inc.

Prospectus | May 1, 2025

Ticker Symbol: DREVX

As with all mutual funds, the Securities and Exchange Commission has not approved or disapproved these securities or passed upon the adequacy of this prospectus. Any representation to the contrary is a criminal offense.

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For More Information

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Fund Summary

Investment Objective

The fund seeks long-term capital growth consistent with the preservation of capital. Current income is a secondary investment objective.

Fees and Expenses

This table describes the fees and expenses that you may pay if you buy, hold and sell shares of the fund. **You may pay other fees, such as brokerage commissions and other fees to financial intermediaries, which are not reflected in the table and examples below.**

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)	
Management fees	.65
Other expenses	.04
Total annual fund operating expenses	.69

Example

The Example is intended to help you compare the cost of investing in the fund with the cost of investing in other mutual funds. The Example assumes that you invest \$10,000 in the fund for the time periods indicated and then hold or redeem all of your shares at the end of those periods. The Example also assumes that your investment has a 5% return each year and that the fund's operating expenses remain the same. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

1 Year	3 Years	5 Years	10 Years
\$70	\$221	\$384	\$859

Portfolio Turnover

The fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover may indicate higher transaction costs and may result in higher taxes when fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the Example, affect the fund's performance. During the most recent fiscal year, the fund's portfolio turnover rate was 27.75% of the average value of its portfolio.

Principal Investment Strategy

To pursue its goals, the fund normally invests at least 80% of its net assets, plus any borrowings for investment purposes, in equity securities of large capitalization companies. The fund considers large capitalization companies to be those companies with market capitalizations, at the time of purchase, that are within the range of market capitalizations of companies included in the S&P 500® Index, the fund's benchmark.

In choosing stocks, the fund's sub-adviser, Newton Investment Management North America, LLC, uses fundamental analysis to create a broadly diversified portfolio comprised of growth stocks, value stocks and stocks that exhibit characteristics of both investment styles. The sub-adviser attempts to measure a security's intrinsic value by analyzing "real" data (company financials, economic outlook, etc.) and other factors (management, industry conditions, competition, etc.) and selects stocks for the fund based on value, growth and financial profile.

The fund typically sells a security when the sub-adviser believes that there has been a negative change in the fundamental factors surrounding the company, the company has become fully valued, the company has lost favor in the current market or economic environment, or a more attractive opportunity has been identified.

Principal Risks

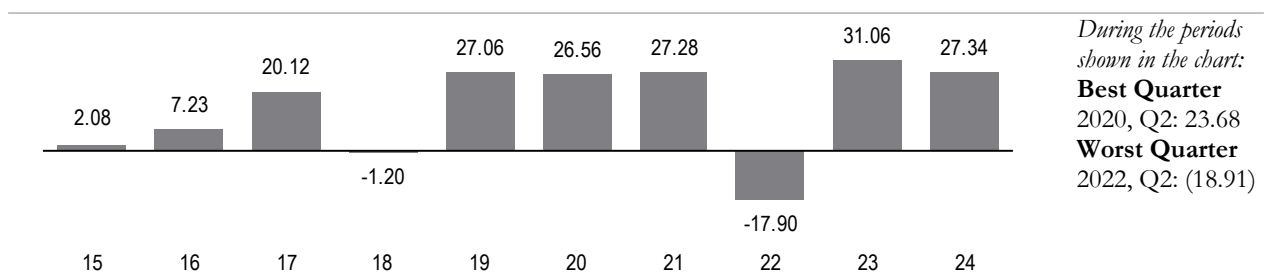
An investment in the fund is not a bank deposit. It is not insured or guaranteed by the Federal Deposit Insurance Corporation (FDIC) or any other government agency. It is not a complete investment program. The fund's share price fluctuates, sometimes dramatically, which means you could lose money.

- *Risks of stock investing:* Stocks generally fluctuate more in value than bonds and may decline significantly over short time periods. There is the chance that stock prices overall will decline because stock markets tend to move in cycles, with periods of rising prices and falling prices. The market value of a stock may decline due to general market conditions or because of factors that affect the particular company or the company's industry.
- *Growth and value stock risk:* By investing in a mix of growth and value companies, the fund assumes the risks of both. Investors often expect growth companies to increase their earnings at a certain rate. If these expectations are not met, investors can punish the stocks inordinately, even if earnings do increase. Value stocks involve the risk that they may never reach their expected full market value, either because the market fails to recognize the stock's intrinsic worth or the expected value was misgauged.
- *Large-cap stock risk:* The fund invests in large capitalization stocks and may underperform funds that invest primarily in the stocks of lower quality, smaller capitalization companies during periods when the stocks of such companies are in favor.
- *Market risk:* The value of the securities in which the fund invests may be affected by political, regulatory, economic and social developments, and developments that impact specific economic sectors, industries or segments of the market. In addition, turbulence in financial markets and reduced liquidity in equity, credit and/or fixed-income markets may negatively affect many issuers, which could adversely affect the fund. Global economies and financial markets are becoming increasingly interconnected, and conditions and events in one country, region or financial market may adversely impact issuers in a different country, region or financial market. These risks may be magnified if certain events or developments adversely interrupt the global supply chain; in these and other circumstances, such risks might affect companies world-wide.
- *Management risk:* The investment process used by the fund's sub-adviser could fail to achieve the fund's investment goals and cause your fund investment to lose value.

Performance

The following bar chart and table provide some indication of the risks of investing in the fund. The bar chart shows changes in the performance of the fund's shares from year to year. The table compares the average annual total returns of the fund's shares to those of the S&P 500® Index, a broad measure of market performance. The fund's past performance (before and after taxes) is not necessarily an indication of how the fund will perform in the future. More recent performance information may be available at www.bny.com/investments.

Year-by-Year Total Returns as of 12/31 each year (%)



After-tax returns are calculated using the historical highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown, and the after-tax returns shown are not relevant to investors who hold their shares through U.S. tax-deferred arrangements such as 401(k) plans or individual retirement accounts.

Average Annual Total Returns (as of 12/31/24)

	1 Year	5 Years	10 Years
Fund returns before taxes	27.34%	17.16%	13.80%
Fund returns after taxes on distributions	24.82%	15.17%	11.69%
Fund returns after taxes on distributions and sale of fund shares	17.95%	13.47%	10.76%
S&P 500® Index reflects no deductions for fees, expenses or taxes	25.02%	14.52%	13.10%

Portfolio Management

The fund's investment adviser is BNY Mellon Investment Adviser, Inc. (BNYIA). BNYIA has engaged its affiliate, Newton Investment Management North America, LLC (NIMNA), to serve as the fund's sub-adviser.

Karen Behr and Julianne McHugh are the fund's primary portfolio managers jointly and primarily responsible for managing the fund's portfolio, positions they have held since September 2021. Ms. Behr is a portfolio manager at NIMNA. Ms. McHugh is Head of Sustainable Equities and a senior portfolio manager at NIMNA.

Purchase and Sale of Fund Shares

In general, the fund's minimum initial investment is \$2,500 and the minimum subsequent investment is \$100. You may sell (redeem) your shares on any business day by calling 1-800-373-9387 (inside the U.S. only) or by visiting www.bny.com/investments. If you invested in the fund through a third party, such as a bank, broker-dealer or financial adviser, or through a Retirement Plan (as defined below), you may mail your request to sell shares to BNY Institutional Services, P.O. Box 534442, Pittsburgh, Pennsylvania 15253-4442. If you invested directly through the fund, you may mail your request to sell shares to BNY Shareholder Services, P.O. Box 534434, Pittsburgh, Pennsylvania 15253-4434. If you are an Institutional Direct accountholder, please contact your BNY relationship manager for instructions. Retirement Plans include qualified or non-qualified employee benefit plans, such as 401(k), 403(b)(7), Keogh, pension, profit-sharing and other deferred compensation plans, whether established by corporations, partnerships, sole proprietorships, non-profit entities, trade or labor unions, or state and local governments, but do not include IRAs (including, without limitation, traditional IRAs, Roth IRAs, Coverdell Education Savings Accounts, IRA "Rollover Accounts" or IRAs set up under Simplified Employee Pension Plans (SEP-IRAs), Salary Reduction Simplified Employee Pension Plans (SARSEPs) or Savings Incentive Match Plans for Employees (SIMPLE IRAs)).

Tax Information

The fund's distributions are taxable as ordinary income or capital gains, except when your investment is through an IRA, Retirement Plan or other U.S. tax-advantaged investment plan (in which case you may be taxed upon withdrawal of your investment from such account).

Payments to Broker-Dealers and Other Financial Intermediaries

If you purchase shares through a broker-dealer or other financial intermediary (such as a bank), the fund's distributor and its related companies may pay the intermediary for the sale of fund shares and related services. To the extent that the intermediary may receive lesser or no payments in connection with the sale of other investments, the payments from the fund's distributor and its related companies may create a potential conflict of interest by influencing the broker-dealer or other intermediary and your financial representative to recommend the fund over the other investments. This potential conflict of interest may be addressed by policies, procedures or practices adopted by the financial intermediary. As there may be many different policies, procedures or practices adopted by different intermediaries to address the manner in which compensation is earned through the sale of investments or the provision of related services, the compensation rates and other payment arrangements that may apply to a financial intermediary and its representatives may vary by intermediary. Ask your financial representative or visit your financial intermediary's website for more information.

Fund Details

Goal and Approach

The fund seeks long-term capital growth consistent with the preservation of capital. Current income is a secondary investment objective. To pursue its goals, the fund normally invests at least 80% of its net assets, plus any borrowings for investment purposes, in equity securities of large capitalization ("large-cap") companies. The fund considers large-cap companies to be those companies with market capitalizations, at the time of purchase, that are within the range of market capitalizations of companies included in the S&P 500® Index. The fund's policy with respect to the investment of at least 80% of its net assets may be changed by the fund's board upon 60 days' prior notice to shareholders.

The fund's sub-adviser, Newton Investment Management North America, LLC, focuses on large-cap companies with strong positions in their industries and a catalyst that can trigger a price increase (such as a corporate restructuring or change in management). The sub-adviser uses fundamental analysis to create a broadly diversified portfolio comprised of growth stocks, value stocks and stocks that exhibit characteristics of both investment styles. The sub-adviser attempts to measure a security's intrinsic value by analyzing "real" data (company financials, economic outlook, etc.) and other factors (management, industry conditions, competition, etc.) and selects stocks for the fund based on:

- **value**, or how a stock is priced relative to its perceived intrinsic worth
- **growth**, in this case the sustainability or growth of earnings or cash flow
- **financial profile**, which measures the financial health of the company

The fund typically sells a security when the sub-adviser believes that there has been a negative change in the fundamental factors surrounding the company, the company has become fully valued, the company has lost favor in the current market or economic environment, or a more attractive opportunity has been identified.

The S&P 500® Index is an unmanaged index of 500 common stocks chosen to reflect the industries of the U.S. economy and is often considered a proxy for the stock market in general. Companies included in the S&P 500® Index generally must have market capitalizations in excess of \$20.5 billion, to the extent consistent with market conditions. As of March 31, 2025, the total market capitalizations of the largest and smallest companies in the S&P 500® Index were approximately \$3.3 trillion and \$5.3 billion, respectively, and the weighted average and median market capitalizations of the Index were approximately \$99.1 billion and \$35.6 billion, respectively. These capitalization measures vary with market changes and periodic reconstitutions of the S&P 500® Index.

The fund may invest up to 20% of its net assets in foreign securities (i.e., securities issued by companies organized under the laws of countries other than the U.S.).

More information about the fund's portfolio securities and investment techniques, and associated risks, is provided in the fund's Statement of Additional Information.

Investment Risks

An investment in the fund is not a bank deposit. It is not insured or guaranteed by the FDIC or any other government agency. It is not a complete investment program. The value of your investment in the fund will fluctuate, sometimes dramatically, which means you could lose money.

The fund is subject to the following principal risks:

- *Risks of stock investing:* Stocks generally fluctuate more in value than bonds and may decline significantly over short time periods. There is the chance that stock prices overall will decline because stock markets tend to move in cycles, with periods of rising prices and falling prices. The market value of a stock may decline due to general market conditions that are not related to the particular company, such as real or perceived adverse economic conditions, changes in the general outlook for corporate earnings, changes in interest or currency rates or adverse investor sentiment generally. A security's market value also may decline because of factors that affect the particular company, such as management performance, financial leverage and reduced demand for the company's products or services, or factors that affect the company's industry, such as labor shortages or increased production costs and competitive conditions within an industry.
- *Growth and value stock risk:* By investing in a mix of growth and value companies, the fund assumes the risks of both. Investors often expect growth companies to increase their earnings at a certain rate. If these expectations are not met,

investors can punish the stocks inordinately, even if earnings do increase. In addition, growth stocks may lack the dividend yield that may cushion stock prices in market downturns. Value stocks involve the risk that they may never reach their expected full market value, either because the market fails to recognize the stock's intrinsic worth or the expected value was misgauged. They also may decline in price even though in theory they are already undervalued.

- *Large-cap stock risk:* The fund invests in large capitalization stocks and may underperform funds that invest primarily in the stocks of lower quality, smaller capitalization companies during periods when the stocks of such companies are in favor. Compared to small- and mid-cap companies, large-cap companies may be less responsive to changes and opportunities affecting their business. In addition, larger companies may not be able to attain the high growth rates of successful smaller companies and may be less capable of responding quickly to competitive challenges and industry changes.
- *Market risk:* The value of the securities in which the fund invests may be affected by political, regulatory, economic and social developments, and developments that impact specific economic sectors, industries or segments of the market. In addition, turbulence in financial markets and reduced liquidity in equity, credit and/or fixed-income markets may negatively affect many issuers, which could adversely affect the fund. Global economies and financial markets are becoming increasingly interconnected, and conditions and events in one country, region or financial market may adversely impact issuers in a different country, region or financial market. These risks may be magnified if certain events or developments adversely interrupt the global supply chain; in these and other circumstances, such risks might affect companies world-wide. A widespread outbreak of an infectious disease, such as COVID-19, and efforts to contain its spread, may result in market volatility, inflation, reduced liquidity or disruption in the trading of certain financial instruments, and systemic economic weakness. To the extent the fund may overweight its investments in certain countries, companies, industries or market sectors, such positions will increase the fund's exposure to risk of loss from adverse developments affecting those countries, companies, industries or sectors.
- *Management risk:* The investment process and techniques used by the fund's sub-adviser could fail to achieve the fund's investment goals, may cause your fund investment to lose value or may cause the fund to underperform other funds with similar investment goals.

In addition to the principal risks described above, the fund is subject to the following additional risks that are not anticipated to be principal risks of investing in the fund:

- *Foreign investment risk:* To the extent the fund invests in foreign securities, the fund's performance will be influenced by political, social and economic factors affecting investments in foreign issuers. Special risks associated with investments in foreign issuers include exposure to currency fluctuations, less liquidity, less developed or less efficient trading markets, lack of comprehensive company information, political and economic instability and differing auditing and legal standards. Investments denominated in foreign currencies are subject to the risk that such currencies will decline in value relative to the U.S. dollar and affect the value of these investments held by the fund.
- *Temporary investment risk:* Under adverse market conditions, the fund could invest some or all of its assets in U.S. Treasury securities and money market securities or hold cash. Although the fund would do this for temporary defensive purposes, it could reduce the benefit from any upswing in the market. During such periods, the fund's investments may not be consistent with its principal investment strategy, and the fund may not achieve its investment objectives.

Management

Investment Adviser

The investment adviser for the fund is BNY Mellon Investment Adviser, Inc., 240 Greenwich Street, New York, New York 10286. BNYIA manages approximately \$350 billion in 90 mutual fund portfolios. The fund has agreed to pay BNYIA a management fee at the annual rate of .65% of the value of the fund's average daily net assets up to \$1.5 billion, .625% of the next \$500 million of such assets, .60% of the next \$500 million of such assets and .55% of the value of the fund's average daily net assets in excess of \$2.5 billion. For the past fiscal year, the fund paid BNYIA a management fee at the annual rate of .64% of the value of the fund's average daily net assets. A discussion regarding the basis for the board's approving the fund's management agreement with BNYIA is available in the fund's Form N-CSR for the fiscal year ended December 31, 2024. BNYIA is the primary mutual fund business of The Bank of New York Mellon Corporation (BNY), a global investments company dedicated to helping its clients manage and service their financial assets throughout the investment lifecycle. Whether providing financial services for institutions, corporations or individual investors, BNY delivers informed investment management and investment services in 35 countries. BNY is a leading investment management and investment services company, uniquely focused to help clients manage and move their financial assets in the rapidly changing global marketplace. BNY has \$52 trillion in assets under custody and administration and \$2 trillion in assets under management. BNY is the corporate brand of The Bank of New York

Mellon Corporation and may be used to reference the corporation as a whole and/or its various subsidiaries generally. BNY Investments is one of the world's leading investment management organizations, and one of the top U.S. wealth managers, encompassing BNY's affiliated investment management firms, wealth management services and global distribution companies. Additional information is available at www.bny.com/investments.

The asset management philosophy of BNYIA is based on the belief that discipline and consistency are important to investment success. For each fund, BNYIA seeks to establish clear guidelines for portfolio management and to be systematic in making decisions. This approach is designed to provide each fund with a distinct, stable identity.

Sub-Adviser

BNYIA has engaged its affiliate, Newton Investment Management North America, LLC, to serve as the fund's sub-adviser. NIMNA, subject to BNYIA's supervision and approval, provides day-to-day management of the fund's assets. NIMNA is an indirect wholly-owned subsidiary of BNY registered in the United States with the Securities and Exchange Commission as an investment adviser. NIMNA's principal office is located at BNY Center, 201 Washington Street, Boston, Massachusetts 02108. As of March 31, 2025, NIMNA had approximately \$58.7 billion in assets under management. A discussion regarding the basis for the board's approving the sub-investment advisory agreement between BNYIA and NIMNA is available in the fund's Form N-CSR for the fiscal year ended December 31, 2024. NIMNA has entered into a sub-sub-investment advisory agreement with its affiliate, Newton Investment Management Limited (NIM), to enable NIM to provide certain advisory services to NIMNA for the benefit of the fund, including, but not limited to, portfolio management services. NIM is subject to the supervision of NIMNA and BNYIA. NIM is also an affiliate of BNYIA. NIM, located at 160 Queen Victoria Street, London, EC4V, 4LA, England, was formed in 1978 and, as of March 31, 2025, had approximately \$40.1 billion in assets under management. NIM is an indirect subsidiary of BNY and is regulated by the Financial Conduct Authority in the United Kingdom and registered in the United States with the Securities and Exchange Commission as an investment adviser. A discussion regarding the basis for the board's approving the sub-sub-investment advisory agreement between NIMNA and NIM is available in the fund's Form N-CSR for the fiscal year ended December 31, 2024.

Karen Behr and Julianne McHugh are the fund's primary portfolio managers and are jointly and primarily responsible for managing the fund's portfolio. Ms. Behr is a portfolio manager at NIMNA and has been a portfolio manager of the fund since September 2021. She has been employed by NIMNA or a predecessor company of NIMNA since 2007. Ms. McHugh is Head of Sustainable Equities and a senior portfolio manager at NIMNA and has been a portfolio manager of the fund since September 2021. She has been employed by NIMNA or a predecessor company of NIMNA since 2004.

The fund's Statement of Additional Information (SAI) provides additional portfolio manager information, including compensation, other accounts managed and ownership of fund shares.

Distributor

BNY Mellon Securities Corporation (BNYSC), a wholly-owned subsidiary of BNYIA, serves as distributor of the fund and of the other funds in the BNY Mellon Family of Funds. Any Rule 12b-1 fees and shareholder services fees, as applicable, are paid to BNYSC for financing the sale and distribution of fund shares and for providing shareholder account service and maintenance, respectively. BNYIA or BNYSC may provide cash payments out of its own resources to financial intermediaries that sell shares of funds in the BNY Mellon Family of Funds or provide other services. Such payments are separate from any sales charges, 12b-1 fees and/or shareholder services fees or other expenses that may be paid by a fund to those financial intermediaries. Because those payments are not made by fund shareholders or the fund, the fund's total expense ratio will not be affected by any such payments. These payments may be made to financial intermediaries, including affiliates, that provide shareholder servicing, sub-administration, recordkeeping and/or sub-transfer agency services, marketing support and/or access to sales meetings, sales representatives and management representatives of the financial intermediary. Cash compensation also may be paid from BNYIA's or BNYSC's own resources to financial intermediaries for inclusion of a fund on a sales list, including a preferred or select sales list or in other sales programs. These payments sometimes are referred to as "revenue sharing." From time to time, BNYIA or BNYSC also may provide cash or non-cash compensation to financial intermediaries or their representatives in the form of occasional gifts; occasional meals, tickets or other entertainment; support for due diligence trips; educational conference sponsorships; support for recognition programs; technology or infrastructure support; and other forms of cash or non-cash compensation permissible under broker-dealer regulations. In some cases, these payments or compensation may create an incentive for a financial intermediary or its employees to recommend or sell shares of the fund to you. This potential conflict of interest may be addressed by policies, procedures or practices that are adopted by the financial intermediary. As there may be many different policies, procedures or practices adopted by different intermediaries to address the manner in which compensation is earned through the sale of investments or the provision of related services, the compensation rates and other payment arrangements that may apply to a financial intermediary and its representatives may vary by intermediary. Please contact your financial representative for details about any

payments they or their firm may receive in connection with the sale of fund shares or the provision of services to the fund.

The fund, BNYIA, NIMNA, NIM and BNYSC have each adopted a code of ethics that permits its personnel, subject to such code, to invest in securities, including securities that may be purchased or held by the fund. Each code of ethics restricts the personal securities transactions of employees, and requires portfolio managers and other investment personnel to comply with the code's preclearance and disclosure procedures. The primary purpose of the respective codes is to ensure that personal trading by employees is done in a manner that does not disadvantage the fund or other client accounts.

Shareholder Guide

Buying and Selling Shares

You pay no sales charges to invest in shares of the fund. Your price for shares is the net asset value (NAV) per share, which is calculated as of the scheduled close of trading on the New York Stock Exchange (NYSE) (usually 4:00 p.m. Eastern time) on days the NYSE is scheduled to be open for regular business.

The NYSE is closed on certain holidays listed in "Determination of NAV" in the SAI. You may buy, exchange or redeem shares at their NAV next calculated after your order is received in proper form by the fund's transfer agent or other authorized entity. "Proper form" refers to completion of an account application (if applicable), satisfaction of requirements in this section (subject to "Shareholder Guide—General Policies") and any applicable conditions in "Additional Information About How to Redeem Shares" in the SAI. Authorized entities other than the fund's transfer agent may apply different conditions for the satisfaction of "proper form" requirements. For more information, consult a representative of your financial intermediary. When calculating NAVs, BNYIA values equity investments on the basis of market quotations or official closing prices. BNYIA generally values fixed-income investments based on values supplied by an independent pricing service approved by the fund's board. The pricing service's procedures are reviewed under the general supervision of the board. If market quotations or official closing prices or valuations from a pricing service are not readily available, or are determined not to reflect accurately fair value, the fund may value those investments at fair value as determined in accordance with procedures approved by the fund's board. Fair value of investments may be determined by BNYIA, as the fund's Valuation Designee, using such information as it deems appropriate under the circumstances. Under certain circumstances, the fair value of foreign equity securities will be provided by an independent pricing service. Using fair value to price investments may result in a value that is different from a security's most recent closing price and from the prices used by other mutual funds to calculate their NAVs. Foreign securities held by the fund may trade on days when the fund does not calculate its NAV and thus may affect the fund's NAV on days when investors will not be able to purchase or sell (redeem) fund shares.

Investments in certain types of thinly traded securities may provide short-term traders arbitrage opportunities with respect to the fund's shares. For example, arbitrage opportunities may exist when trading in a portfolio security or securities is halted and does not resume, or the market on which such securities are traded closes before the fund calculates its NAV. If short-term investors in the fund were able to take advantage of these arbitrage opportunities, they could dilute the NAV of fund shares held by long-term investors. Portfolio valuation policies can serve to reduce arbitrage opportunities available to short-term traders, but there is no assurance that such valuation policies will prevent dilution of the fund's NAV by short-term traders. While the fund has a policy regarding frequent trading, it too may not be completely effective to prevent short-term NAV arbitrage trading, particularly in regard to omnibus accounts. Please see "Shareholder Guide — General Policies" for further information about the fund's frequent trading policy.

Orders to buy and sell shares received by an authorized entity (such as a bank, broker-dealer or financial adviser, or Retirement Plan that has entered into an agreement with the fund's distributor) by the time as of which the fund calculates its NAV (usually 4:00 p.m. Eastern time) will be based on the NAV determined that day.

How to Buy Shares

By Mail.

Regular Accounts. To open a regular account, complete an application and mail it, together with a check payable to The BNY Mellon Family of Funds, to the appropriate address below. To purchase additional shares in a regular account, mail a check payable to The BNY Mellon Family of Funds (with your account number on your check), together with an investment slip, to the appropriate address below.

IRA Accounts. To open an IRA account or make additional investments in an IRA account, be sure to specify the fund name and the year for which the contribution is being made. When opening a new account include a completed IRA application applicable to the type of IRA for which the investment is made, and when making additional investments include an investment slip. Make checks payable to The BNY Mellon Family of Funds, and mail to the appropriate address below.

Mailing Address. If you are investing directly through the fund, mail to:

BNY Shareholder Services
P.O. Box 534434
Pittsburgh, Pennsylvania 15253-4434

If you are investing through a third party, such as a bank, broker-dealer or financial adviser, or in a Retirement Plan, mail to:

BNY Institutional Services
P.O. Box 534442
Pittsburgh, Pennsylvania 15253-4442

If you are applying for an Institutional Direct account, please contact your BNY relationship manager for mailing instructions.

Electronic Check or Wire. To purchase shares by wire or electronic check, please call 1-800-373-9387 (inside the U.S. only) for more information.

Telephone or Online. To purchase additional shares by telephone or online, you can call 1-800-373-9387 (inside the U.S. only) or visit www.bny.com/investments to request your transaction. In order to do so, you must have elected the TeleTransfer Privilege on your account application or a Shareholder Services Form. See "Services for Fund Investors — Wire Redemption and TeleTransfer Privileges" for more information. Institutional Direct accounts are not eligible for online services.

Automatically. You may purchase additional shares by selecting one of the automatic investment services made available to the fund on your account application or service application. See "Services for Fund Investors – Automatic Services."

The minimum initial and subsequent investment (except as set forth below) is \$2,500 and \$100, respectively. The minimum initial investment for Retirement Plans or IRAs (other than Coverdell Education Savings Accounts) sponsored by BNYIA or its affiliates is \$750, with no minimum subsequent investment. The minimum initial investment for Coverdell Education Savings Accounts sponsored by BNYIA or its affiliates is \$500, with no minimum subsequent investment. Subsequent investments made through TeleTransfer are subject to a \$100 minimum and a \$150,000 maximum. All investments must be in U.S. dollars. Third-party checks, cash, travelers' checks or money orders will not be accepted. You may be charged a fee for any check that does not clear.

How to Sell Shares

You may sell (redeem) shares at any time. Your shares will be sold at the next NAV calculated after your order is received in proper form by the fund's transfer agent or other authorized entity. Any certificates representing fund shares being sold must be returned with your redemption request. Your order will be processed promptly.

If you request the fund to transmit your redemption proceeds to you by check, the fund expects that your redemption proceeds normally will be sent within two business days after your request is received in proper form. If you request the fund to transmit your redemption proceeds to you by wire via the Wire Redemption Privilege (\$1,000 minimum) or electronic check via the TeleTransfer Privilege (\$500 minimum), and the fund has your bank account information on file, the fund expects that your redemption proceeds normally will be wired within one business day or sent by electronic check within two business days, as applicable, to your bank account after your request is received in proper form. See "Services for Fund Investors — Wire Redemption and TeleTransfer Privileges" for more information. Payment of redemption proceeds may take longer than the number of days the fund typically expects and may take up to seven days after your order is received in proper form by the fund's transfer agent or other authorized entity, particularly during periods of stressed market conditions or very large redemptions or excessive trading.

The processing of redemptions may be suspended, and the delivery of redemption proceeds may be delayed beyond seven days, depending on the circumstances, for any period: (i) during which the NYSE is closed (other than on holidays or weekends), or during which trading on the NYSE is restricted; (ii) when an emergency exists that makes the disposal of securities owned by the fund or the determination of the fair value of the fund's net assets not reasonably practicable; or (iii) as permitted by order of the Securities and Exchange Commission for the protection of fund shareholders. For these purposes, the Securities and Exchange Commission determines the conditions under which trading shall be deemed to be restricted and an emergency shall be deemed to exist.

Before selling shares recently purchased by check, TeleTransfer or Automatic Asset Builder, please note that:

- if you send a written request to sell such shares, the fund may delay sending the proceeds for up to eight business days following the purchase of those shares or until the fund receives verification of clearance of the funds used to purchase such shares, whichever is earlier

- the fund will not process wire, telephone, online or TeleTransfer redemption requests for up to eight business days following the purchase of those shares or until the fund receives verification of clearance of the funds used to purchase such shares, whichever is earlier

Under normal circumstances, the fund expects to meet redemption requests by using cash it holds in its portfolio or selling portfolio securities to generate cash. In addition, the fund, and certain other funds in the BNY Mellon Family of Funds, may draw upon an unsecured credit facility for temporary or emergency purposes to meet redemption requests. The fund also reserves the right to pay redemption proceeds in securities rather than cash (i.e., "redeem in-kind"), to the extent the composition of the fund's investment portfolio enables it to do so. Generally, a redemption in-kind may be made under the following circumstances: (1) BNYIA determines that a redemption in-kind (i) is more advantageous to the fund (e.g., due to advantageous tax consequences or lower transaction costs) than selling/purchasing portfolio securities, (ii) will not favor the redeeming shareholder to the detriment of any other shareholder or the fund and (iii) is in the best interests of the fund; (2) to manage liquidity risk (i.e., the risk that the fund could not meet redemption requests without significant dilution of remaining investors' interests in the fund); (3) in stressed market conditions; or (4) subject to the approval of the fund's board in other circumstances identified by BNYIA. Securities distributed in connection with any such redemption in-kind are expected to generally represent your pro rata portion of assets held by the fund immediately prior to the redemption, with adjustments as may be necessary in connection with, for example, certain derivatives, restricted securities, odd lots or fractional shares. Any securities distributed in-kind will remain exposed to market risk until sold, and you may incur transaction costs and taxable gain when selling the securities.

By Mail.

Regular Accounts. To redeem shares in a regular account by mail, send a letter of instruction that includes your name, your account number, the name of the fund, the dollar amount to be redeemed and how and where to send the proceeds. Mail your request to the appropriate address below.

IRA Accounts. To redeem shares in an IRA account by mail, send a letter of instruction that includes all of the same information for regular accounts and indicate whether the distribution is qualified or premature and whether the 10% TEFRA should be withheld. Mail your request to the appropriate address below.

Mailing Address. If you invested directly through the fund, mail to:

BNY Shareholder Services
P.O. Box 534434
Pittsburgh, Pennsylvania 15253-4434

If you invested through a third party, such as a bank, broker-dealer or financial adviser, or in a Retirement Plan, mail to:

BNY Institutional Services
P.O. Box 534442
Pittsburgh, Pennsylvania 15253-4442

If you are an Institutional Direct accountholder, please contact your BNY relationship manager for mailing instructions.

A medallion signature guarantee is required for some written sell orders. These include:

- amounts of \$10,000 or more on accounts whose address has been changed within the last 30 days
- requests to send the proceeds to a different payee or address
- amounts of \$100,000 or more

A medallion signature guarantee helps protect against fraud. You can obtain one from most banks or securities dealers, but not from a notary public. For joint accounts, each signature must be guaranteed. Please call to ensure that your medallion signature guarantee will be processed correctly.

Telephone or Online. To redeem shares by telephone or online, call 1-800-373-9387 (inside the U.S. only) or, for regular accounts, visit www.bny.com/investments to request your transaction. Institutional Direct accounts are not eligible for online services.

By calling 1-800-373-9387 (inside the U.S. only), you may speak to a BNY representative and request that redemption proceeds be paid by check and mailed to your address of record (maximum \$250,000 per day). For redemption requests made online through www.bny.com/investments or through the Express voice-activated account access system, there is a \$100,000 per day limit.

Automatically. You may sell shares in a regular account by completing an Automatic Withdrawal Form which you can obtain by calling 1-800-373-9387 (inside the U.S. only), visiting www.bny.com/investments or contacting your financial

representative. For instructions on how to establish automatic withdrawals to sell shares in an IRA account, please call 1-800-373-9387 (inside the U.S. only) or contact your financial representative. See "Services for Fund Investors — Automatic Services."

General Policies

The fund and the fund's transfer agent are authorized to act on telephone or online instructions from any person representing himself or herself to be you and reasonably believed by the fund or the transfer agent to be genuine. You may be responsible for any fraudulent telephone or online order as long as the fund or the fund's transfer agent (as applicable) takes reasonable measures to confirm that the instructions are genuine.

The fund reserves the right to reject any purchase or exchange request in whole or in part. All shareholder services and privileges offered to shareholders may be modified or terminated at any time, except as otherwise stated in the fund's SAI. Please see the fund's SAI for additional information on buying and selling shares, privileges and other shareholder services.

If you invest through a financial intermediary (rather than directly through the fund), the policies may be different than those described herein. For example, banks, brokers, Retirement Plans, financial advisers and financial supermarkets may charge transaction fees and may set different minimum investments or limitations on buying or selling shares. Please consult your financial representative.

The fund is designed for long-term investors. Frequent purchases, redemptions and exchanges may disrupt portfolio management strategies and harm fund performance by diluting the value of fund shares and increasing brokerage and administrative costs. As a result, BNYIA and the fund's board have adopted a policy of discouraging excessive trading, short-term market timing and other abusive trading practices (frequent trading) that could adversely affect the fund or its operations. BNYIA and the fund will not enter into arrangements with any person or group to permit frequent trading.

The fund also reserves the right to:

- refuse any purchase or exchange request, including those from any individual or group who, in BNYIA's view, is likely to engage in frequent trading
- change or discontinue fund exchanges, or temporarily suspend exchanges during unusual market conditions
- change its minimum investment amount

More than four roundtrips within a rolling 12-month period generally is considered to be frequent trading. A roundtrip consists of an investment that is substantially liquidated within 60 days. Based on the facts and circumstances of the trades, the fund may also view as frequent trading a pattern of investments that are partially liquidated within 60 days.

Transactions made through the Automatic Withdrawal Plan, Auto-Exchange Privileges, automatic investment plans (including Automatic Asset Builder), automatic non-discretionary rebalancing programs and minimum required retirement distributions generally are not considered to be frequent trading. For Retirement Plans, generally only participant-initiated exchange transactions are subject to the roundtrip limit.

BNYIA monitors selected transactions to identify frequent trading. When its surveillance systems identify multiple roundtrips, BNYIA evaluates trading activity in the account for evidence of frequent trading. BNYIA considers the investor's trading history in other accounts under common ownership or control, in other funds in the BNY Mellon Family of Funds and BNY Mellon Funds Trust and, if known, in non-affiliated mutual funds and accounts under common control. These evaluations involve judgments that are inherently subjective, and while BNYIA seeks to apply the policy and procedures uniformly, it is possible that similar transactions may be treated differently. In all instances, BNYIA seeks to make these judgments to the best of its abilities in a manner that it believes is consistent with shareholder interests. If BNYIA concludes the account is likely to engage in frequent trading, BNYIA may cancel or revoke the purchase or exchange on the following business day. BNYIA may also temporarily or permanently bar such investor's future purchases into the fund in lieu of, or in addition to, canceling or revoking the trade. At its discretion, BNYIA may apply these restrictions across all accounts under common ownership, control or perceived affiliation.

Fund shares often are held through omnibus accounts maintained by financial intermediaries, such as brokers and Retirement Plan administrators, where the holdings of multiple shareholders, such as all the clients of a particular broker, are aggregated. BNYIA's ability to monitor the trading activity of investors whose shares are held in omnibus accounts is limited. However, the agreements between the distributor and financial intermediaries include obligations to comply with the terms of this prospectus and to provide BNYIA, upon request, with information concerning the trading activity of investors whose shares are held in omnibus accounts. If BNYIA determines that any such investor has engaged in

frequent trading of fund shares, BNYIA may require the financial intermediary to restrict or prohibit future purchases or exchanges of fund shares by that investor.

Certain Retirement Plans and intermediaries that maintain omnibus accounts with the fund may have developed policies designed to control frequent trading that may differ from the fund's policy. At its sole discretion, the fund may permit such intermediaries to apply their own frequent trading policy. If you are investing in fund shares through a financial intermediary (or in the case of a Retirement Plan, your plan sponsor), please contact the financial intermediary for information on the frequent trading policies applicable to your account.

To the extent the fund significantly invests in thinly traded securities, certain investors may seek to trade fund shares in an effort to benefit from their understanding of the value of these securities (referred to as price arbitrage). Any such frequent trading strategies may interfere with efficient management of the fund's portfolio to a greater degree than funds that invest in highly liquid securities, in part because the fund may have difficulty selling these portfolio securities at advantageous times or prices to satisfy large and/or frequent redemption requests. Any successful price arbitrage may also cause dilution in the value of fund shares held by other shareholders.

Although the fund's frequent trading and fair valuation policies and procedures are designed to discourage market timing and excessive trading, none of these tools alone, nor all of them together, completely eliminates the potential for frequent trading.

Small Account Policy

If your account falls below \$500, the fund may ask you to increase your balance. If it is still below \$500 after 30 days, the fund may close your account and send you the proceeds.

Escheatment

If your account is deemed "abandoned" or "unclaimed" under state law, the fund may be required to "escheat" or transfer the assets in your account to the applicable state's unclaimed property administration. The state may sell escheated shares and, if you subsequently seek to reclaim your proceeds of liquidation from the state, you may only be able to recover the amount received when the shares were sold. It is your responsibility to ensure that you maintain a correct address for your account, keep your account active by contacting the fund's transfer agent or distributor by mail or telephone or accessing your account through the fund's website at least once a year, and promptly cash all checks for dividends, capital gains and redemptions. The fund, the fund's transfer agent and BNYIA and its affiliates will not be liable to shareholders or their representatives for good faith compliance with state escheatment laws.

Distributions and Taxes

The fund earns dividends, interest and other income from its investments, and distributes this income (less expenses) to shareholders as dividends. The fund also realizes capital gains from its investments, and distributes these gains (less any losses) to shareholders as capital gain distributions. The fund normally pays dividends quarterly and capital gain distributions, if any, annually. Fund dividends and capital gain distributions will be reinvested in the fund unless you or your financial intermediary instruct the fund otherwise. There are no fees or sales charges imposed by the fund on reinvestments.

Distributions paid by the fund are subject to federal income tax, and also may be subject to state or local taxes (unless you are investing through an IRA, Retirement Plan or other U.S. tax-advantaged investment plan). For federal tax purposes, in general, certain fund distributions, including distributions of short-term capital gains, are taxable as ordinary income. Other fund distributions, including dividends from certain U.S. companies and certain foreign companies and distributions of long-term capital gains, generally are taxable as qualified dividends and capital gains, respectively.

High portfolio turnover and more volatile markets can result in significant taxable distributions to shareholders, regardless of whether their shares have increased in value. The fund's share price may, at any time, reflect undistributed capital gains or income and unrealized appreciation, which may result in future taxable distributions. For example, if the fund has unrealized capital gains, these gains could become taxable to shareholders if the fund sells some appreciated positions during the year. Such distributions can occur even in a year when the fund has a negative return. The tax status of any distribution generally is the same regardless of how long you have been in the fund and whether you reinvest your distributions or take them in cash.

If you buy shares of the fund when the fund has realized but not yet distributed income or capital gains, you will be "buying a dividend" by paying the full price for the shares and then receiving a portion back in the form of a taxable distribution.

Your sale of shares, including exchanges into other funds, may result in a capital gain or loss for tax purposes. A capital gain or loss on your investment in the fund generally is the difference between the cost of your shares and the amount you receive when you sell them.

The tax status of your distributions will be detailed in your annual tax statement from the fund. Because everyone's tax situation is unique, please consult your tax adviser before investing.

Annual year-end distribution estimates, if any, are expected to be available beginning in early October, and may be updated from time to time, at www.bny.com/investments/taxcenter or by calling 1-800-373-9387 (inside the U.S. only) or your financial representative.

Services for Fund Investors

The following services may be available to fund investors. If you purchase shares through a third party financial intermediary or in a Retirement Plan, the financial intermediary or Retirement Plan recordkeeper may impose different restrictions on these services and privileges, or may not make them available at all. Consult a representative of your financial intermediary or Retirement Plan for further information.

Automatic Services

Buying or selling shares automatically is easy with the services described below. With each service, you select a schedule and amount, subject to certain restrictions. For information, call 1-800-373-9387 (inside the U.S. only) or your financial representative.

Automatic Asset Builder permits you to purchase fund shares (minimum of \$100 and maximum of \$150,000 per transaction) at regular intervals selected by you. Fund shares are purchased by transferring funds from the bank account designated by you.

Payroll Savings Plan permits you to purchase fund shares (minimum of \$100 per transaction) automatically through a payroll deduction.

Government Direct Deposit permits you to purchase fund shares (minimum of \$100 and maximum of \$50,000 per transaction) automatically from your federal employment, Social Security or other regular federal government check.

Dividend Sweep permits you to automatically reinvest dividends and distributions from the fund in shares of the same class, or another class in which you are eligible to invest, of another fund in the BNY Mellon Family of Funds. However, if you hold fund shares through financial intermediary brokerage platforms, you may invest automatically your dividends and distributions from the fund only in shares of the same class of another fund in the BNY Mellon Family of Funds. Shares held through a Coverdell Education Savings Account sponsored by BNYIA or its affiliates are not eligible for this privilege.

Auto-Exchange Privilege permits you to exchange at regular intervals your fund shares for shares of the same class, or another class in which you are eligible to invest, of another fund in the BNY Mellon Family of Funds. However, if you hold fund shares through financial intermediary brokerage platforms, you may only exchange fund shares for shares of the same class of another fund in the BNY Mellon Family of Funds.

Automatic Withdrawal Plan permits you to make withdrawals (minimum of \$50) on a specific day each month, quarter or semi-annual or annual period, provided your account balance is at least \$5,000.

Fund Exchanges

Generally, you can exchange shares worth \$500 or more (no minimum for Retirement Plans and IRAs sponsored by BNYIA or its affiliates) into shares of the same class, or another class in which you are eligible to invest, of another fund in the BNY Mellon Family of Funds. However, if you hold fund shares through financial intermediary brokerage platforms, you may only exchange fund shares for shares of the same class of another fund in the BNY Mellon Family of Funds. You can request your exchange by calling 1-800-373-9387 (inside the U.S. only) or your financial representative. If you are an Institutional Direct account holder, please contact your BNY relationship manager for instructions. Be sure to read the current prospectus for any fund into which you are exchanging before investing. Any new account established through an exchange generally will have the same privileges as your original account (as long as they are available). There is currently no fee for exchanges, although you may be charged a sales load when exchanging into any fund that has one.

Your exchange request will be processed on the same business day it is received in proper form, provided that each fund is open at the time of the request (i.e., the request is received by the latest time each fund calculates its NAV for that business day). If the exchange is accepted at a time of day after one or both of the funds is closed (i.e., at a time after the

NAV for the fund has been calculated for that business day), the exchange will be processed on the next business day. See the SAI for more information regarding exchanges.

Wire Redemption and TeleTransfer Privileges

To redeem shares from your fund account with a phone call (for regular or IRA accounts) or online (for regular accounts only), use the Wire Redemption Privilege or the TeleTransfer Privilege. To purchase additional shares in your fund account with a phone call (for regular or IRA accounts) or online (for regular accounts only), use the TeleTransfer Privilege. You can set up the Wire Redemption Privilege and TeleTransfer Privilege on your account by providing bank account information and following the instructions on your application or, if your account has already been established, a Shareholder Services Form which you can obtain by calling 1-800-373-9387 (inside the U.S. only), visiting www.bny.com/investments or contacting your financial representative. Shares held in a Coverdell Education Savings Account may not be redeemed through the Wire Redemption or TeleTransfer Privileges. Institutional Direct accounts are not eligible for the Wire Redemption or TeleTransfer Privileges initiated online.

Account Statements

Every investor in a fund in the BNY Mellon Family of Funds automatically receives regular account statements. You will also be sent a yearly statement detailing the tax characteristics of any dividends and distributions you have received.

Express Voice-Activated Account Access System

You can check your account balances, get fund price and performance information, order documents and much more, by calling 1-800-373-9387 (inside the U.S. only) and using the Express voice-activated account access system. You may also be able to purchase fund shares and/or transfer money between your funds in the BNY Mellon Family of Funds using the Express voice-activated account access system. Certain requests require the services of a representative.

Financial Highlights

These financial highlights describe the performance of the fund's shares for the fiscal periods indicated. "Total return" shows how much your investment in the fund would have increased (or decreased) during each period, assuming you had reinvested all dividends and distributions. These financial highlights have been derived from the fund's financial statements, which have been audited by Ernst & Young LLP, an independent registered public accounting firm, whose report, along with the fund's financial statements, is included in the fund's Form N-CSR, which is available upon request.

	<i>Year Ended December 31,</i>				
	2024	2023	2022	2021	2020
Per Share Data (\$):					
Net asset value, beginning of period	16.30	13.09	16.69	14.74	12.43
Investment Operations:					
Net investment income ^a	.05	.06	.06	.06	.09
Net realized and unrealized gain (loss) on investments	4.39	3.98	(3.03)	3.79	3.15
Total from Investment Operations	4.44	4.04	(2.97)	3.85	3.24
Distributions:					
Dividends from net investment income	(.05)	(.06)	(.06)	(.05)	(.09)
Dividends from net realized gain on investments	(1.65)	(.77)	(.57)	(1.85)	(.84)
Total Distributions	(1.70)	(.83)	(.63)	(1.90)	(.93)
Net asset value, end of period	19.04	16.30	13.09	16.69	14.74
Total Return (%)	27.34	31.06	(17.90)	27.28	26.56
Ratios/Supplemental Data (%):					
Ratio of total expenses to average net assets	.69	.71	.71	.70	.71
Ratio of net expenses to average net assets	.68	.69	.71	.70	.71
Ratio of net investment income to average net assets	.24	.40	.41	.35	.67
Portfolio Turnover Rate	27.75	29.08	18.20	17.70	44.24
Net Assets, end of period (\$ x 1,000)	2,422,321	2,003,768	1,458,884	1,835,957	1,546,068

^a Based on average shares outstanding.

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For More Information

BNY Mellon Large Cap Securities Fund, Inc.

More information on this fund is available free upon request, including the following:

Annual/Semi-Annual Report and Financial Statements

The fund's annual and semi-annual reports describe the fund's performance and recent market conditions, economic trends and fund strategies that significantly affected the fund's performance during the period covered by the report. The fund's Form N-CSR contains the fund's financial statements and lists the fund's portfolio holdings. The fund's most recent annual and semi-annual reports and other information, such as the fund's financial statements, are available at www.bny.com/investments.

Statement of Additional Information (SAI)

The SAI provides more details about the fund and its policies. A current SAI is available at www.bny.com/investments and is on file with the Securities and Exchange Commission (SEC). The SAI, as amended or supplemented from time to time, is incorporated by reference (and is legally considered part of this prospectus).

Portfolio Holdings

The fund generally discloses, at www.bny.com/investments, (1) complete portfolio holdings as of each calendar quarter end with a 15-day lag and as of each month-end with a one-month lag; (2) top 10 holdings as of each month-end with a 10-day lag; and (3) from time to time, certain security-specific performance attribution data as of a month-end, with a 10-day lag. From time to time, the fund may make available certain portfolio characteristics, such as allocations, performance- and risk-related statistics, portfolio-level statistics and non-security specific attribution analyses, on request. The fund's portfolio holdings will remain on the website for a period of six months and any security-specific performance attribution data will remain on the website for varying periods up to six months, provided that portfolio holdings will remain until the fund files its Form N-PORT or Form N-CSR for the period that includes the dates of the posted holdings.

A complete description of the fund's policies and procedures with respect to the disclosure of the fund's portfolio securities is available in the fund's SAI and at www.bny.com/investments.

To Obtain Information

By telephone. Call 1-800-373-9387 (inside the U.S. only)

By mail.

The BNY Mellon Family of Funds
144 Glenn Curtiss Boulevard
Uniondale, NY 11556-0144

By E-mail. Send your request to info@bny.com

On the Internet. Certain fund documents can be viewed online or downloaded from: www.bny.com/investments

Reports and other information about the fund are available on the EDGAR Database on the SEC's website at <http://www.sec.gov>, and that copies of this information may be obtained, after paying a duplicating fee, by electronic request at the following email address: publicinfo@sec.gov.

This prospectus does not constitute an offer or solicitation in any state or jurisdiction in which, or to any person to whom, such offering or solicitation may not lawfully be made.

SEC file number: 811-00523