▶BNY | INVESTMENTS

BNY Mellon Midcap Index Fund, Inc.

Summary Prospectus | February 28, 2025

Class Ticker
Investor PESPX
I DMIDX

Before you invest, you may want to review the fund's prospectus, which contains more information about the fund and its risks. You can find the fund's prospectus and other information about the fund, including the statement of additional information and most recent reports to shareholders, online at www.bny.com/investments/literaturecenter. You can also get this information at no cost by calling 1-800-373-9387 (inside the U.S. only) or by sending an e-mail request to info@bny.com. The fund's prospectus and statement of additional information, dated February 28, 2025 (each as revised or supplemented), are incorporated by reference into this summary prospectus.

Investment Objective

The fund seeks to match the performance of the S&P MidCap 400® Index.

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)				
	Investor Shares	Class I Shares		
Management fees	.25	.25		
Other expenses:				
Shareholder services fees	.25	none		
Miscellaneous other expenses	.01	.01		
Total other expenses	<u>.26</u>	<u>.01</u>		
Total annual fund operating expenses	.51	.26		
Fee waiver*	(.00)	(.00.)		
Total annual fund operating expenses (after fee waiver)	.51	.26		

^{*} The fund's investment adviser, BNY Mellon Investment Adviser, Inc., has agreed in its management agreement with the fund to: (1) pay all of the fund's direct expenses, except management fees, shareholder services plan fees and certain other expenses, including the fees and expenses of the non-interested board members and the fees and expenses of counsel to the fund and to the non-interested board members, and (2) reduce its fees pursuant to the management agreement in an amount equal to the fund's allocable portion of the fees and expenses of the non-interested board members and the fees and expenses of counsel to the fund and to the non-interested board members (in the amount of less than .01% for the past fiscal year). These provisions in the management agreement may not be amended without the approval of the fund's shareholders.

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. The examples are based on net operating expenses, which reflect the contractual undertaking by BNY Mellon Investment Adviser, Inc. 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
Investor Shares	\$52	\$164	\$285	\$640
Class I Shares	\$27	\$84	\$146	\$331

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 17.87% of the average value of its portfolio.

Principal Investment Strategy

To pursue its goal, the fund generally is fully invested in stocks included in the S&P MidCap 400[®] Index and in futures whose performance is tied to the index. The fund generally invests in all of the stocks in the S&P MidCap 400[®] Index in proportion to their weighting in the index.

Because the fund has expenses, performance will tend to be slightly lower than that of the S&P MidCap 400[®] Index. The fund attempts to have a correlation between its performance and that of the S&P MidCap 400[®] Index of at least .95, before fees and expenses. A correlation of 1.00 would mean that the fund and the index were perfectly correlated.

The S&P MidCap 400[®] Index is an unmanaged index of the common stocks of 400 mid-sized companies. S&P weights each company's stock in the index by its market capitalization (i.e., the share price times the number of shares outstanding), adjusted by the number of available float shares (i.e., those shares available to public investors). Companies included in the S&P MidCap 400[®] Index generally have market capitalizations ranging between approximately \$7.4 billion and \$20.5 billion, to the extent consistent with market conditions.

"Standard & Poor's®," "S&P®" and "S&P MidCap 400® Index" are trademarks of Standard & Poor's Financial Services LLC and have been licensed for use by the fund. The fund is not sponsored, endorsed, sold or promoted by Standard & Poor's and Standard & Poor's makes no representation regarding the advisability of investing in the fund.

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.

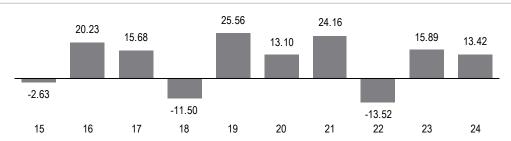
- Market risk: The value of the securities in which the fund invests may be affected by political, regulatory, economic and social developments, and developments that impact specific economic sectors, industries or segments of the market. In addition, turbulence in financial markets and reduced liquidity 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.
- 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.
- Indexing strategy risk: The fund uses an indexing strategy. It does not attempt to manage market volatility, use defensive strategies or reduce the effects of any long-term periods of poor index performance. The correlation between fund and index performance may be affected by the fund's expenses, changes in securities markets, changes in the composition of the index and the timing of purchases and redemptions of fund shares.
- Small and midsize company risk: Small and midsize companies carry additional risks because the operating histories of these companies tend to be more limited, their earnings and revenues less predictable (and some companies may be experiencing significant losses), and their share prices more volatile than those of larger, more established companies. The shares of smaller companies tend to trade less frequently than those of larger, more established companies, which can adversely affect the pricing of these securities and the fund's ability to sell these securities.

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 Investor shares from year to year. The table compares the average annual total returns of the fund's shares to those of the S&P 1500[®] Index, a broad measure of market performance, and the S&P MidCap 400[®] Index. The fund's past performance (before and after taxes) is not necessarily an indication of how the fund will perform in the future. Performance for each share class will vary due to differences in expenses. More recent performance information may be available at www.bny.com/investments. Prior to August 31, 2016, the fund's Investor shares were undesignated.

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

Investor Shares



During the periods shown in the chart:

Best Quarter 2020, Q4: 24.26 Worst Quarter 2020, Q1: (29.84)

After-tax performance is shown only for Investor shares. After-tax performance of the fund's other share class will vary. 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. Returns after taxes on distributions and sale of fund shares may be higher than returns before taxes or returns after taxes on distributions due to an assumed tax benefit from losses on a sale of the fund's shares at the end of the period.

For the fund's Class I shares, periods prior to the inception date reflect the performance of the fund's Investor shares. Such performance figures have not been adjusted to reflect applicable class fees and expenses of Class I shares. Each share class is invested in the same portfolio of securities, and the annual returns would have differed only to the extent that the classes have different expenses.

Average Annual Total Returns (as of 12/31/24)			
Class (Inception Date)	1 Year	5 Years	10 Years
Investor Shares returns before taxes	13.42%	9.80%	9.16%
Investor Shares returns after taxes on distributions	10.12%	6.71%	6.25%
Investor Shares returns after taxes on distributions and sale of fund shares	10.02%	7.30%	6.73%
Class I Shares (8/31/16) returns before taxes	13.72%	10.08%	9.38%
S&P 1500® Index* reflects no deductions for fess, expenses or taxes	23.95%	14.13%	12.79%
S&P MidCap 400® Index reflects no deductions for fees, expenses or taxes	13.93%	10.34%	9.68%

^{*} In accordance with regulatory changes requiring the fund to compare its performance with a broad-based securities market index that represents the overall applicable market, the fund added the indicated benchmark effective October 31, 2024.

Portfolio Management

The fund's investment adviser is BNY Mellon Investment Adviser, Inc. (BNYM Investment Adviser).

David France, CFA, Todd Frysinger, CFA, Vlasta Sheremeta, CFA, Michael Stoll, and Marlene Walker Smith are the fund's primary portfolio managers, positions they have held since October 2020. Messrs. France, Frysinger and Stoll and Ms. Sheremeta are each a senior vice president and senior portfolio manager at Mellon Investments Corporation (Mellon), an affiliate of BNYM Investment Adviser. Ms. Walker Smith is a senior director and head of equity index portfolio management at Mellon. Messrs. France, Frysinger and Stoll and Mses. Sheremeta and Walker Smith also are employees of BNYM Investment Adviser.

Purchase and Sale of Fund Shares

In general, for Investor shares and Class I shares, the fund's minimum initial investment is \$2,500 and \$1,000, respectively, 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.

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.