

BNY Mellon New Jersey Municipal Bond Fund, Inc.

ANNUAL
SHAREHOLDER
REPORT
DECEMBER 31, 2024

Class I – DN MIX

This annual shareholder report contains important information about BNY Mellon New Jersey Municipal Bond Fund, Inc. (the “Fund”) for the period of January 1, 2024 to December 31, 2024. You can find additional information about the Fund at bny.com/investments/literaturecenter. You can also request this information by calling 1-800-373-9387 (inside the U.S. only) or by sending an e-mail request to info@bny.com.

What were the Fund’s costs for the last year?

(based on a hypothetical \$10,000 investment)

Share Class	Costs of a \$10,000 investment	Costs paid as a percentage of a \$10,000 investment
Class I	\$60	0.59%

How did the Fund perform last year?

- For the 12-month period ended December 31, 2024, the Fund’s Class I shares returned 1.88%.
- In comparison, the Bloomberg U.S. Municipal Bond Index (the “Index”) returned 1.05% for the same period.

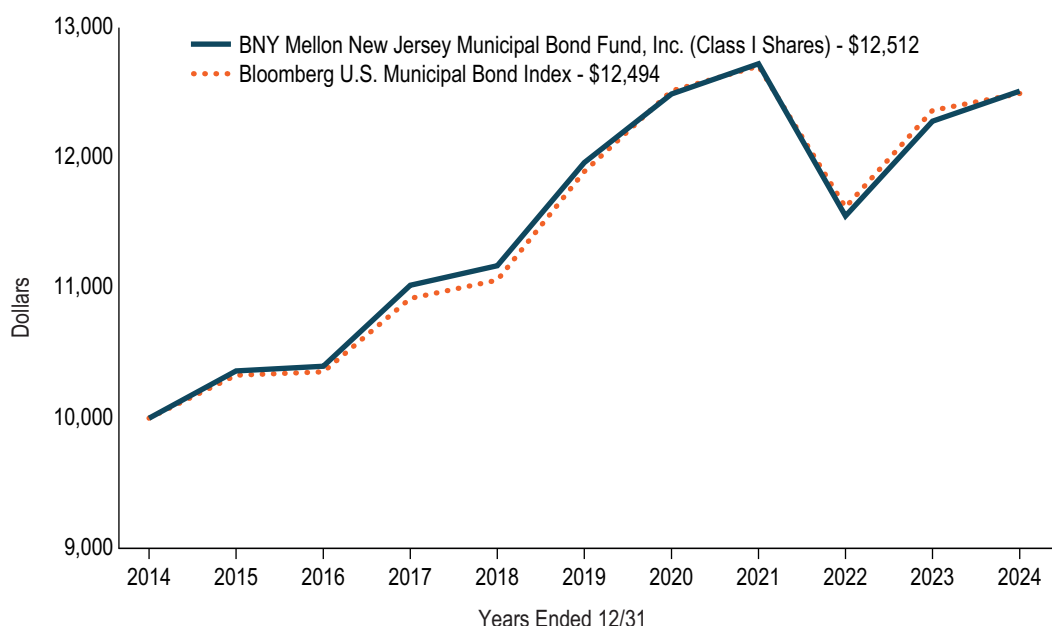
What affected the Fund’s performance?

- Municipal bonds produced solid returns, buoyed primarily by a summer rally in anticipation of Federal Reserve interest rate cuts. Strong inflows to mutual funds and robust credit conditions also provided support.
- Except for 7-10 year maturities, municipal yields declined, following U.S. Treasury yields. Longer-maturities performed best.
- An overweight to revenue bonds contributed positively. Top revenue sectors included hospitals, transportation and housing. The Fund also benefited from the outperformance of New Jersey issuers vs the national benchmark.
- Fund performance was negatively impacted by an overweight to the education sector and to appropriation-backed bonds.

How did the Fund perform over the past 10 years?

The Fund's past performance is not a good predictor of the Fund's future performance. The graph and table do not reflect the deduction of taxes that a shareholder would pay on fund distributions or redemption of fund shares.

Cumulative Performance from January 1, 2014 through December 31, 2024 Initial Investment of \$10,000



The above graph compares a hypothetical \$10,000 investment in the Fund's Class I shares to a hypothetical investment of \$10,000 made in the Bloomberg U.S. Municipal Bond Index on 12/31/2014. The performance shown takes into account applicable fees and expenses of the Fund, including management fees and other expenses. The Fund's performance also assumes the reinvestment of dividends and capital gains. Unlike the Fund, the Index is not subject to charges, fees and other expenses. Investors cannot invest directly in any index.

AVERAGE ANNUAL TOTAL RETURNS (AS OF 12/31/24)

Share Class	1YR	5YR	10YR
Class I	1.88%	0.90%	2.27%
Bloomberg U.S. Municipal Bond Index	1.05%	0.99%	2.25%

The performance data quoted represent past performance, which is no guarantee of future results. For more current information visit bny.com/investments/literaturecenter.

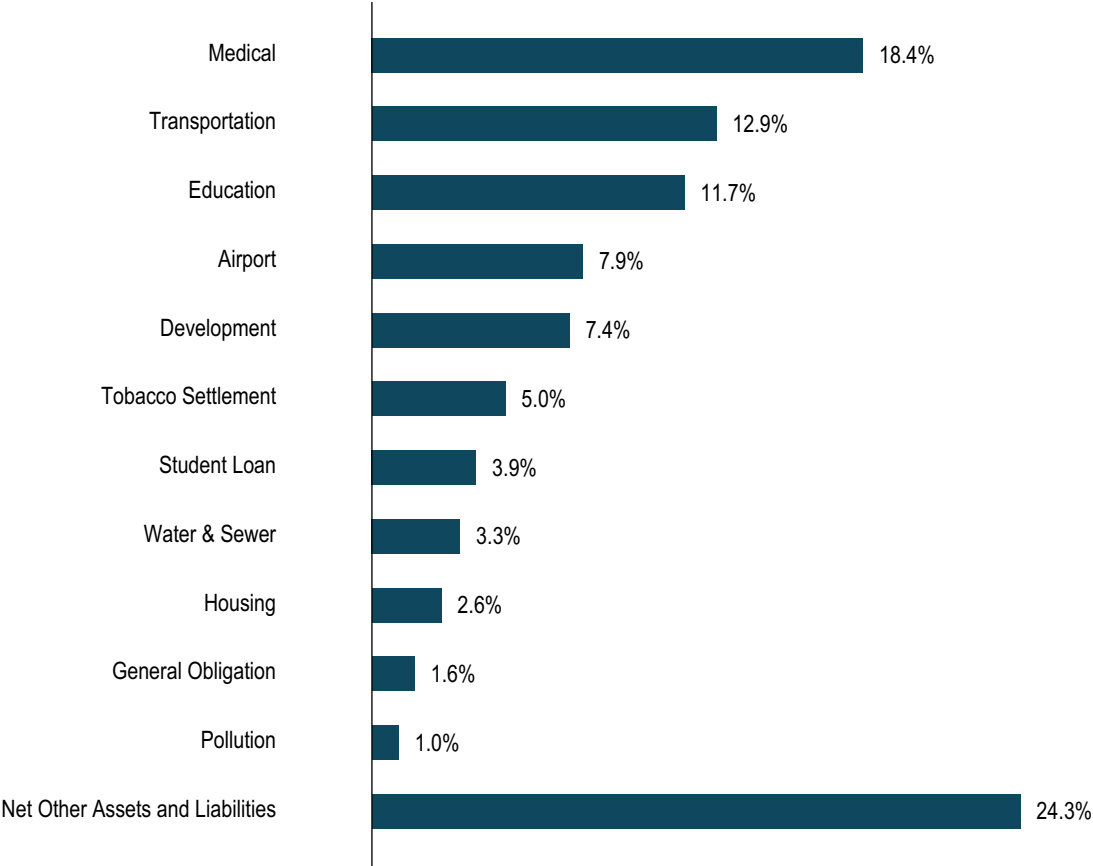
KEY FUND STATISTICS (AS OF 12/31/24)

Fund Size (Millions)	Number of Holdings	Total Advisory Fee Paid During Period	Annual Portfolio Turnover
\$315	116	\$1,437,369	20.81%

Not FDIC Insured. Not Bank-Guaranteed. May Lose Value

PORTFOLIO HOLDINGS (AS OF 12/31/24)

Sector Allocation (Based on Net Assets)



For additional information about the Fund, including its prospectus, financial information, portfolio holdings and proxy voting information, please visit bny.com/investments/literaturecenter.