

Supplement No. 2, dated August 11, 2026 to
Prospectus Supplement, dated March 4, 2025
(to Prospectus dated February 28, 2025)



**Up to 20,000,000 Shares
Common Stock**

This supplement (this “Supplement”) is being filed to update, amend and supplement certain information in the prospectus of Main Street Capital Corporation (the “Company”) dated February 28, 2025 (the “Prospectus”), as supplemented by that prospectus supplement dated March 4, 2025 (as supplemented to date, the “Prospectus Supplement”) and from time to time including hereby, relating to the offer and sale of up to 20,000,000 shares of the Company’s common stock, par value \$0.01 per share, from time to time (i) through the Sales Agents in negotiated transactions or transactions that are deemed to be “at the market,” as defined in Rule 415 under the Securities Act of 1933, as amended, including sales made directly on the New York Stock Exchange or similar securities exchange or sales made to or through a market maker other than on an exchange, at market prices prevailing at the time of sale, at prices related to the prevailing market prices or at other negotiated prices or (ii) directly to one or more of the Sales Agents, as principal for its own respective account, at a price agreed upon at the time of sale (the “ATM Program”). This Supplement should be read in conjunction with the Prospectus Supplement and the Prospectus. This Supplement is only intended to update, amend and supplement certain information in the Prospectus Supplement to the extent set forth in the following four paragraphs. Capitalized terms used and not defined herein shall have the meanings ascribed to such terms in the Prospectus Supplement.

This Supplement is being filed to reflect that the Company has entered into equity distribution agreements, dated August 11, 2026, with each of Academy Securities, Inc. (“Academy”) and SMBC Nikko Securities America, Inc. (“SMBC Nikko”) to add Academy and SMBC Nikko as additional Sales Agents under the ATM Program on substantially the same terms as the Company’s equity distribution agreements, dated March 4, 2025 or November 12, 2025, as applicable, and as amended from time to time, with each of Truist Securities, Inc., RBC Capital Markets, LLC, Raymond James & Associates, Inc. and Huntington Securities, Inc. Additionally, effective August 11, 2026, the Company and B. Riley Securities, Inc. (“B. Riley”) agreed to terminate the equity distribution agreement, dated March 4, 2025, between the Company and B. Riley.

Accordingly, each reference to the term “Sales Agent” or “Sales Agents” in the Prospectus Supplement is hereby amended to include Academy and SMBC Nikko and to exclude B. Riley.

Affiliates of RBC Capital Markets, LLC, Truist Securities, Inc., Raymond James & Associates, Inc., Huntington Securities, Inc., Academy and SMBC Nikko act as lenders and/or agents under our multi-year revolving credit facility (the “Corporate Facility”) and/or our special purpose vehicle revolving credit facility (the “SPV Facility”). Certain of the net proceeds from the sale of our common stock in the ATM Program, not including selling compensation, may be paid to RBC Capital Markets, LLC, Truist Securities, Inc., Raymond James & Associates, Inc., Huntington Securities, Inc., Academy and SMBC Nikko and/or their affiliates in connection with the repayment of debt owed under the Corporate Facility and/or the SPV Facility. As a result, RBC Capital Markets, LLC, Truist Securities, Inc., Raymond James & Associates, Inc., Huntington Securities, Inc., Academy and SMBC Nikko and/or their affiliates may receive more than 5% of the net proceeds of this offering, not including selling compensation.

The address of Academy is Academy Securities, Inc., 622 Third Avenue, 12th Floor New York, NY 10017. The address of SMBC Nikko is SMBC Nikko Securities America, Inc., 277 Park Avenue, New York, NY 10172.

Investing in our common stock involves a high degree of risk and should be considered highly speculative. See “Risk Factors” beginning on page S-8 of the Prospectus Supplement and page 12 of the accompanying Prospectus, in our most recently filed Annual Report on Form 10-K and subsequent filings with the Securities and Exchange Commission (the “SEC”), and under similar headings in the other documents that we file with the SEC on or after the date hereof and that are incorporated by reference into the Prospectus Supplement and the accompanying Prospectus, as further supplemented from time to time, before investing in our common stock.