

PROSPECTUS SUPPLEMENT
(To Prospectus supplement dated May 15, 2019
and accompanying prospectus
dated May 15, 2019)



\$500,000,000

Extra Space Storage Inc.

Common Stock

This prospectus supplement is being filed to update, amend and supplement certain information in the prospectus supplement, dated May 15, 2019, filed with the Securities and Exchange Commission (the “SEC”) on May 16, 2019 (the “Original Prospectus Supplement”), and the accompanying prospectus dated May 15, 2019 (the “Prospectus”) related to the offer and sale of up to an aggregate of \$500,000,000 of shares of our common stock, par value \$0.01 per share, from time to time through the Sales Agents (as defined below), pursuant to separate equity distribution agreements, dated May 15, 2019 (each, an “Equity Distribution Agreement”), between us and each of J.P. Morgan Securities LLC, BB&T Capital Markets, a division of BB&T Securities, LLC, BMO Capital Markets Corp., BNP Paribas Securities Corp., BofA Securities, Inc., Jefferies LLC, Regions Securities LLC, TD Securities (USA) LLC and Wells Fargo Securities, LLC, each as sales agents and/or principals (collectively, the “Sales Agents”). This prospectus supplement is only intended to update, amend and supplement certain information in the Original Prospectus Supplement to the extent set forth in the following paragraph. You should read this prospectus supplement together with the Original Prospectus Supplement and Prospectus.

On November 6, 2020, we entered into the Consent to Assignment and Amendment (the “Amendment”), pursuant to which Truist Securities, Inc. succeeded to and assumed all the rights and obligations of BB&T Capital Markets, a division of BB&T Securities, LLC (“BB&T”) under the applicable Equity Distribution Agreement and replaced BB&T as Sales Agent thereunder. Accordingly, all references to “BB&T Capital Markets, a division of BB&T Securities, LLC” and “BB&T Capital Markets” in the Original Prospectus Supplement shall hereafter be deemed to be deleted and replaced with references to “Truist Securities, Inc.” and “Truist Securities”, respectively. In addition, J.P. Morgan Securities LLC has elected to terminate its role as Sales Agent under its Equity Distribution Agreement, and, accordingly, all references to “J.P. Morgan Securities LLC” and “J.P. Morgan” in the Original Prospectus Supplement shall hereafter be deemed to be deleted. As a result of the events described above, all references in the Original Prospectus Supplement to a “sales agent” or “sales agents” shall hereafter be deemed to exclude BB&T and J.P. Morgan Securities LLC but to include Truist Securities, Inc. and all references in the Original Prospectus Supplement to an “equity distribution agreement” or “equity distribution agreements” shall be deemed to exclude the Equity Distribution Agreement between us and J.P. Morgan Securities LLC and shall be deemed to include the Equity Distribution Agreement with BB&T, as amended by the Amendment.

Investing in our common stock involves a high degree of risk. Before buying any of these shares you should carefully read the discussion of material risks of investing in our common stock in “Risk Factors” beginning on page S-3 of the Original Prospectus Supplement and page 2 of the Prospectus, as well as those described in our most recent Annual Report on Form 10-K and other periodic reports filed with the Securities and Exchange Commission and incorporated herein by reference.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the Prospectus. Any representation to the contrary is a criminal offense.

BMO Capital Markets

BNP Paribas

BofA Merrill Lynch

Jefferies

Regions Securities LLC

TD Securities

Truist Securities

Wells Fargo Securities

The date of this prospectus supplement is November 6, 2020.