Supplement dated May 31, 2019 To Prospectus Supplement dated June 29, 2018 (To Prospectus dated June 28, 2018)



25,000,000 Shares Dynex Capital, Inc.

Common stock

This supplement (this "Supplement") supplements the prospectus supplement, dated June 29, 2018 (the "Prospectus Supplement"), relating to the offer and sale of shares of common stock, par value \$0.01 per share, of Dynex Capital, Inc. (the "Company") from time to time through the sales agents named therein or directly to the sales agents, acting as principals. Sales of our common stock, if any, pursuant to this Supplement and the Prospectus Supplement will be made in sales deemed to be "at the market offerings" as defined in Rule 415(a)(4) under the Securities Act of 1933, as amended, by means of ordinary brokers' transactions on the New York Stock Exchange or otherwise at market prices prevailing at the time of sale, at prices related to prevailing market prices or at negotiated prices. This Supplement should be read in conjunction with the Prospectus Supplement. 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 the amendment of the distribution agreement (the "Distribution Agreement") by and among the Company, J.P. Morgan Securities LLC and JMP Securities LLC to include JonesTrading Institutional Services LLC as an additional sales agent. Accordingly, each reference to the term "Sales Agent" or "Sales Agents" in the Prospectus Supplement is hereby amended to include JonesTrading Institutional Services LLC.

This Supplement also reflects the amendment of the Distribution Agreement to increase the offer and sale of shares of the Company's common stock by 15,000,000. Accordingly, each reference to "10,000,000 shares" in the Prospectus Supplement is hereby amended to be "25,000,000 shares". As of the date of this Supplement, we have issued 8,703,857 shares of common stock through the Distribution Agreement.

The validity of the securities offered pursuant to this Supplement will be passed upon for us by Mayer Brown LLP, New York, New York. The Sales Agents are being represented in this offering by Cooley LLP, New York, New York.

J.P. Morgan

JMP Securities

JonesTrading