

STARWOOD REAL ESTATE INCOME TRUST, INC.
SUPPLEMENT NO. 6 DATED AUGUST 4, 2026
TO THE PROSPECTUS DATED APRIL 7, 2026

This prospectus supplement (“Supplement”) is part of and should be read in conjunction with the prospectus of Starwood Real Estate Income Trust, Inc., dated April 7, 2026 (as supplemented to date, the “Prospectus”). Unless otherwise defined herein, capitalized terms used in this Supplement shall have the same meanings as in the Prospectus. References herein to the “Company,” “we,” “us,” or “our” refer to Starwood Real Estate Income Trust, Inc. and its subsidiaries unless the context specifically requires otherwise.

The purposes of this Supplement are as follows:

- to disclose the formation of a new joint venture; and
- to disclose certain updates to our Prospectus.

Formation of Joint Venture with Apollo Global Management

On August 3, 2026 (the “Closing Date”), we, through one or more subsidiaries, consummated a transaction with funds managed by and affiliates of Apollo Global Management (“Apollo”) to form a joint venture structured as a Delaware limited liability company that will own, operate and manage a portfolio consisting of approximately 120 of our affordable housing properties located in the United States. Apollo made a \$1.02 billion high-grade investment in the joint venture in exchange for Class B Common Units representing 41.5% of the equity interests in the joint venture. We hold Class A Common Units representing 58.5% of the equity interests in the joint venture and retain full asset management responsibility and operational control of the portfolio. We will consolidate the Joint Venture and will classify Apollo’s interest as a redeemable noncontrolling interest, with no gain or loss recognized on formation.

Proceeds from the transaction will be used to repay a significant portion of our credit facility, immediately reducing interest expense and improving operating cash flow. The transaction is a critical step in our broader plan to improve liquidity, enhance stockholder returns and position us for long-term performance.

Under the terms of the joint venture agreement, we will make distributions of a portion of available cash generated by the portfolio to Apollo. We will guarantee Apollo receives distributions that would result in an annual minimum yield on Apollo’s investment in the Joint Venture, which is investment-grade rated. The annual minimum yield increases over time, and we are responsible for the payment of such yield.

We have a call option to redeem Apollo’s interest in the Joint Venture, exercisable at certain times. If exercised between the fifth and 10th anniversary of the Closing Date, the call price will be calculated to ensure a capped internal rate of return of 7% to Apollo. The longer Apollo remains in the Joint Venture, additional financial obligations will be imposed on us.

Prospectus Updates

The following risk factor is added to the section of the Prospectus “Risk Factors—General Risks Related to Investments in Real Estate.”

Failure to exercise the Apollo buyout option may increase our payment obligations and limit our operating flexibility.

Between the fifth and 12th anniversary of the closing of our joint venture with Apollo, and at certain intervals thereafter, we have the right, in our discretion, to exercise a call option to redeem Apollo’s interest in the joint venture at a price designed to provide Apollo with its target return, after taking into account prior distributions. If we do not exercise that right at or shortly after the fifth anniversary, we will be subject to increased payment obligations and economic constraints, including minimum yield payments, make-whole contributions and other contingent payment obligations, which increase each year Apollo remains an investor in the joint venture. These obligations could require us to make cash payments even if the underlying assets do not generate sufficient distributable cash flow, which could reduce cash available for other corporate purposes, investments, stockholder redemptions or distributions to our stockholders. Delaying or declining to exercise the buyout option will make a future redemption of Apollo’s interests more expensive. Additionally, if we cannot satisfy the payment obligations, Apollo may be entitled to governing rights with respect to the joint venture’s portfolio. These rights and obligations may limit our ability to manage, refinance, sell or otherwise monetize the underlying assets on the timing or terms we would otherwise prefer. If the joint venture underperforms, these consequences could have a material adverse effect on our liquidity, financial condition, results of operations and ability to make distributions to our stockholders.

SREIT-SUP6-0826