

STARWOOD REAL ESTATE INCOME TRUST, INC.
SUPPLEMENT NO. 5 DATED JULY 17, 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 transaction price for each class of our common stock as of August 3, 2026;
- to disclose the calculation of our June 30, 2026 NAV per share for each class of our common stock;
- to provide an update on our share repurchase requests;
- to provide an update on the status of our current public offering (the “Offering”); and
- to disclose an update regarding changes to our management.

August 3, 2026 Transaction Price

The transaction price for each share class of our common stock for subscriptions accepted as of August 3, 2026 (and repurchases as of July 31, 2026) is as follows:

	Transaction Price (per share)	
Class S	\$	19.69
Class T	\$	19.70
Class D	\$	19.27
Class I	\$	19.52

The August 3, 2026 transaction price for each of our share classes is equal to such class’s NAV per share as of June 30, 2026. A detailed presentation of the NAV per share is set forth below. The purchase price of our common stock for each share class equals the transaction price of such class, plus applicable upfront selling commissions and dealer manager fees.

June 30, 2026 NAV Per Share

NAV per share is calculated in accordance with the valuation guidelines that have been approved by our board of directors. Our NAV per share, which is updated as of the last calendar day of each month, is posted on our website at www.starwoodNAV.reit. Please refer to “Net Asset Value Calculation and Valuation Guidelines” in the Prospectus for information on how our NAV is determined. The Advisor is ultimately responsible for determining our NAV. We have included a breakdown of the components of total NAV and NAV per share as of June 30, 2026 along with the immediately preceding month.

Our total NAV presented in the following tables includes the NAV of our Class S, Class T, Class D, and Class I common shares, as well as partnership interests of the Operating Partnership held by parties other than the Company. The following table provides a breakdown of the major components of our NAV as of June 30, 2026 (\$ and shares/units in thousands):

Components of NAV	June 30, 2026
Investments in real estate	\$ 20,957,700
Investment in real estate debt	951,601
Cash and cash equivalents	207,304
Restricted cash	241,030
Other assets	130,507
Debt obligations	(11,778,485)
Secured financings on investments in real estate debt	(572,391)
Subscriptions received in advance	—
Other liabilities	(2,015,292)
Performance participation accrual	—
Management fee payable	(6,688)
Accrued stockholder servicing fees ⁽¹⁾	(2,537)
Non-controlling interests in consolidated entities	(124,769)
Net asset value	\$ 7,987,980
Number of outstanding shares/units	408,025

⁽¹⁾ Stockholder servicing fees only apply to Class S, Class T and Class D shares. For purposes of NAV we recognize the stockholder servicing fee as a reduction of NAV on a monthly basis. Under accounting principles generally accepted in the United States of America (“GAAP”), we accrue the full cost of the stockholder servicing fee as an offering cost at the time we sell Class S, Class T and Class D shares. As of June 30, 2026, we have accrued under GAAP \$207.8 million of stockholder servicing fees payable to the Dealer Manager related to the Class S, Class T and Class D shares sold.

The following table provides a breakdown of our total NAV and NAV per share, by share class, as of June 30, 2026 (\$ and shares/units in thousands, except per share/unit data):

NAV Per Share	Class S Shares	Class T Shares	Class D Shares	Class I Shares	Third-party Operating Partnership Units ⁽¹⁾	Total
Net asset value	\$ 3,401,132	\$ 88,645	\$ 469,184	\$ 3,638,898	\$ 390,121	\$ 7,987,980
Number of outstanding shares/units	172,729	4,500	24,345	186,461	19,990	408,025
NAV Per Share/Unit as of June 30, 2026	\$ 19.69	\$ 19.70	\$ 19.27	\$ 19.52	\$ 19.52	

⁽¹⁾ Includes the Operating Partnership units held by the Special Limited Partner and other third parties.

Set forth below are the weighted averages of the key assumptions in the discounted cash flow methodology used in the June 30, 2026 valuations, based on property types. Once we own more than one single-family, one self-storage and one extended stay investment, we will include the key assumptions for the property types.

Property Type	Discount Rate	Exit Capitalization Rate
Multifamily	6.9%	5.5%
Industrial	7.4%	5.8%
Office	8.0%	6.7%
Other	8.3%	6.7%

For quarter-end months, these assumptions are determined by the independent valuation advisor or third party appraisers, as applicable, per the terms of our valuation guidelines. The Advisor reviews the assumptions from each of the appraisals. A change in these assumptions would impact the calculation of the value of our property investments. For example, assuming all other factors remain unchanged, the changes listed below would result in the following effects on our investment values:

Input	Hypothetical Change	Multifamily Investment Values	Industrial Investment Values	Office Investment Values	Other Investment Values
Discount Rate	0.25% decrease	+1.9%	+1.9%	+1.9%	+1.9%
(weighted average)	0.25% increase	(1.9)%	(1.9)%	(1.9)%	(1.8)%
Exit Capitalization Rate	0.25% decrease	+2.9%	+2.8%	+2.5%	+2.3%
(weighted average)	0.25% increase	(2.7)%	(2.6)%	(2.3)%	(2.1)%

The following table provides a breakdown of the major components of our NAV as of May 31, 2026 (\$ and shares/units in thousands):

Components of NAV	May 31, 2026
Investments in real estate	\$ 20,966,286
Investment in real estate debt	990,752
Cash and cash equivalents	183,551
Restricted cash	233,382
Other assets	157,221
Debt obligations	(11,796,022)
Secured financings on investments in real estate debt	(594,451)
Subscriptions received in advance	—
Other liabilities	(2,019,687)
Performance participation accrual	—
Management fee payable	(6,687)
Accrued stockholder servicing fees ⁽¹⁾	(2,630)
Non-controlling interests in consolidated entities	(125,594)
Net asset value	\$ 7,986,121
Number of outstanding shares/units	407,385

⁽¹⁾ Stockholder servicing fees only apply to Class S, Class T and Class D shares. For purposes of NAV we recognize the stockholder servicing fee as a reduction of NAV on a monthly basis. Under accounting principles generally accepted in the United States of America (“GAAP”), we accrue the full cost of the stockholder servicing fee as an offering cost at the time we sell Class S, Class T and Class D shares. As of May 31, 2026, we have accrued under GAAP \$210.1 million of stockholder servicing fees payable to the Dealer Manager related to the Class S, Class T and Class D shares sold.

The following table provides a breakdown of our total NAV and NAV per share, by share class, as of May 31, 2026 (\$ and shares/units in thousands, except per share/unit data):

NAV Per Share	Class S Shares	Class T Shares	Class D Shares	Class I Shares	Third-party Operating Partnership Units ⁽¹⁾	Total
Net asset value	\$ 3,407,206	\$ 90,199	\$ 469,591	\$ 3,628,482	\$ 390,643	\$ 7,986,121
Number of outstanding shares/units	172,811	4,573	24,332	185,679	19,990	407,385
NAV Per Share/Unit as of May 31, 2026	\$ 19.72	\$ 19.72	\$ 19.30	\$ 19.54	\$ 19.54	

⁽¹⁾ Includes the Operating Partnership units held by the Special Limited Partner and other third parties.

Share Repurchase Request Update

Effective April 29, 2026, our board of directors amended our share repurchase plan, beginning with repurchases submitted during the month of April 2026 such that (i) repurchase requests made upon the death or qualifying disability of a stockholder who is a natural person will be repurchased in full to the extent there are available funds up to a limit of \$5 million per month; and (ii) repurchase requests for accounts having a balance below \$5,000 will be repurchased in full to the extent there are available funds up to a limit of \$5 million per month.

In April 2026, we accepted approximately \$4.8 million of common stock under our share repurchase plan, which represented all repurchase requests for such period made upon the death or qualifying disability of a stockholder and for accounts having a balance below \$5,000.

In May 2026, we accepted approximately \$2.3 million of common stock under our share repurchase plan, which represented all repurchase requests for such period made upon the death or qualifying disability of a stockholder and for accounts having a balance below \$5,000.

In June 2026, we accepted approximately \$2.5 million of common stock under our share repurchase plan, which represented all repurchase requests for such period made upon the death or qualifying disability of a stockholder and for accounts having a balance below \$5,000.

Status of our Current Public Offering

This Offering was declared effective by the SEC on February 4, 2026 and we are currently offering on a continuous basis up to \$10.0 billion in shares of common stock, consisting of up to \$9.5 billion in shares in our primary offering and up to \$0.5 billion in shares pursuant to our distribution reinvestment plan. As of the date hereof, we had issued and sold (i) 230,595 shares of our common stock (consisting of 28,388 Class S shares and 202,207 Class I shares) in the primary offering for total proceeds of approximately \$4.5 million and (ii) 2,203,294 shares of our common stock (consisting of 1,037,398 Class S shares, 44,367 Class T shares, 85,591 Class D shares and 1,035,938 Class I shares) pursuant to our distribution reinvestment plan for a total value of approximately \$43.6 million. As of June 30, 2026, our aggregate NAV was approximately \$8.0 billion. We intend to continue selling shares in the Offering on a monthly basis.

Management Update

On July 17, 2026, the Advisor appointed Qahir Madhany as a member of the Advisor’s Investment Committee and Ethan Bing resigned from his position as a member of the Advisor’s Investment Committee.

The following disclosure supplements the disclosure in the section of the Prospectus titled “Management—The Advisor and Starwood Capital.”

Qahir Madhany is a Managing Director and the Head of Acquisitions, Americas at Starwood Capital. Prior to joining Starwood Capital, Mr. Madhany was a Managing Director in the Real Estate Group at Blackstone and played a leadership role in over \$60 billion of Blackstone’s investments across all asset classes in the United States and Canada. Prior to joining Blackstone, Mr. Madhany spent over seven years at Westbrook Partners focused on real estate transactions across the United States. Mr. Madhany serves as a board member for the Corporation for Supportive Housing and The Bruce Museum. Mr. Madhany received a B.S.E. in Biomedical Engineering and a B.S. in Economics from Duke University.

The following disclosure supersedes and replaces the seventh paragraph and table of the section of the Prospectus titled “Management—The Advisor and Starwood Capital.”

The Advisor’s Investment Committee process emphasizes a consensus-based approach to decision making among the members. The members of the Advisor’s Investment Committee, along with their respective positions at Starwood Capital, are as follows:

Name	Position at Starwood Capital
Barry Sternlicht	Chief Executive Officer and Chairman of Starwood Capital
Jeffrey Dishner	Vice Chairman
Jonathan Pollack	President
Laura Mestel Rubin	Senior Managing Director and Head of Portfolio and Risk Management
Austin Nowlin	Senior Managing Director and Global Head of Capital Markets
Duncan MacPherson	Senior Managing Director and Head of Debt for Europe*
Qahir Madhany	Managing Director and the Head of Acquisitions, Americas
Nora Creedon	Managing Director
Joseph Nieto	Managing Director
John Gonnella	Senior Managing Director and Head of Asset Management

* For European Deals Only