STARWOOD REAL ESTATE INCOME TRUST, INC. SUPPLEMENT NO. 6 DATED JULY 17, 2025 TO THE PROSPECTUS DATED APRIL 9, 2025

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 9, 2025 (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 1, 2025;
- to disclose the calculation of our June 30, 2025 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 certain updates to our Prospectus.

August 1, 2025 Transaction Price

The transaction price for each share class of our common stock for subscriptions accepted as of August 1, 2025 (and repurchases as of July 31, 2025) is as follows:

	Transact	ion Price
	(per s	share)
Class S	\$	21.10
Class T	\$	21.12
Class D	\$	20.67
Class I	\$	20.92

The August 1, 2025 transaction price for each of our share classes is equal to such class's NAV per share as of June 30, 2025. 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, 2025 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, 2025 along with the immediately preceding month.

SREIT-SUP6-0725

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, 2025 (\$ and shares/units in thousands):

Components of NAV	June 30, 2025
Investments in real estate	\$ 20,952,758
Investment in real estate debt	902,308
Cash and cash equivalents	240,173
Restricted cash	225,264
Other assets	266,815
Debt obligations	(11,662,879)
Secured financings on investments in real estate debt	(541,450)
Subscriptions received in advance	(1,251)
Other liabilities	(1,464,944)
Performance participation accrual	
Management fee payable	(7,375)
Accrued stockholder servicing fees ⁽¹⁾	(2,828)
Non-controlling interests in consolidated entities	(112,384)
Net asset value	\$ 8,794,207
Number of outstanding shares/units	419,138

⁽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, 2025, we have accrued under GAAP \$243.9 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, 2025 (\$ and shares/units in thousands, except per share/unit data):

	Class S Class T				Class D	Class I	Third-party Operating Partnership					
NAV Per Share	Shares		Shares		Shares		Shares		Units (1)		Total	
Net asset value	\$ 3,788,421	\$	105,432	\$	521,867	\$	3,959,556	\$	418,931	\$	8,794,207	
Number of outstanding shares/units	179,584		4,992		25,246		189,289		20,027		419,138	
NAV Per Share/Unit as of June 30, 2025	\$ 21.10	\$	21.12	\$	20.67	\$	20.92	\$	20.92			

⁽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, 2025 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.

		Exit
	Discount	Capitalization
Property Type	Rate	Rate
Multifamily	6.9%	5.5%
Industrial	7.2%	5.7%
Office	8.0%	6.7%
Other	8.5%	7.1%

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:

		Multifamily	Industrial	Office	Other
	Hypothetical	Investment	Investment	Investment	Investment
Input	Change	Values	Values	Values	Values
Discount Rate	0.25% decrease	+1.9%	+1.9%	+1.9%	+1.9%
(weighted average)	0.25% increase	(1.9)%	(1.9)%	(1.8)%	(1.9)%
Exit Capitalization Rate	0.25% decrease	+3.0%	+2.9%	+2.4%	+2.2%
(weighted average)	0.25% increase	(2.7)%	(2.6)%	(2.2)%	(2.0)%

The following table provides a breakdown of the major components of our NAV as of May 31, 2025 (\$ and shares/units in thousands):

Components of NAV	 May 31, 2025
Investments in real estate	\$ 20,854,499
Investment in real estate debt	886,059
Cash and cash equivalents	219,391
Restricted cash	224,359
Other assets	308,528
Debt obligations	(11,635,314)
Secured financings on investments in real estate debt	(487,393)
Subscriptions received in advance	(805)
Other liabilities	(1,437,757)
Performance participation accrual	
Management fee payable	(7,389)
Accrued stockholder servicing fees ⁽¹⁾	(2,934)
Non-controlling interests in consolidated entities	(106,746)
Net asset value	\$ 8,814,498
Number of outstanding shares/units	419,991

(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, 2025, we have accrued under GAAP \$246.8 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 May 31, 2025 (\$ and shares/units in thousands, except per share/unit data):

	Third-party Operating Class S Class T Class D Class I Partnership										
NAV Per Share	Shares		Shares Sha		Shares	Shares		Units (1)		Total	
Net asset value	\$ 3,795,354	\$	105,822	\$	523,370	\$	3,970,897	\$	419,055	\$ 8,814,498	
Number of outstanding shares/units	 179,869		5,012		25,309		189,774		20,027	419,991	
NAV Per Share/Unit as of May 31, 2025	\$ 21.10	\$	21.11	\$	20.68	\$	20.92	\$	20.92		

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

Share Repurchase Request Update

On June 6, 2025, our board of directors amended our share repurchase plan. The amendments include, among other things, that beginning with repurchases during the month of June 2025, we limit share repurchases to 0.5% of NAV per month (measured using the aggregate NAV attributable to stockholders as of the end of the immediately preceding month), which is an increase from the prior limit of 0.33% of NAV per month. In addition, beginning July 1, 2025, the share repurchase plan has been amended such that we limit share repurchases to 1.5% of NAV per quarter (measured using the aggregate NAV attributable to stockholders as of the end of the immediately preceding quarter), an increase from the prior limit of 1.0% of NAV per quarter. As a result of these changes, the limit for the quarter ending June 30, 2025 is approximately 1.16% of the aggregate NAV (measured using the aggregate NAV attributable

to stockholders as of March 31, 2025).

In April 2025, we received repurchase requests in excess of the 0.33% monthly limit. As per the terms of our share repurchase plan, we honored all repurchase requests for April 2025 on a pro rata basis up to the 0.33% monthly limitation. As such, approximately 3% of each stockholder's April repurchase request was satisfied.

In May 2025, we received repurchase requests in excess of the 0.33% monthly limit. As per the terms of our share repurchase plan, we honored all repurchase requests for May 2025 on a pro rata basis up to the 0.33% monthly limitation. As such, approximately 3% of each stockholder's May repurchase request was satisfied.

In June 2025, we received repurchase requests in excess of the 0.5% monthly and 1.16% quarterly limits. As per the terms of our share repurchase plan, we honored in full all repurchase requests for June 2025 that were entitled to repurchase priority as set forth in our share repurchase plan. Thereafter, we honored all repurchase requests for June 2025 on a pro rata basis up to the limitations. As such, following the repurchases entitled to repurchase priority, approximately 4% of each stockholder's June repurchase request was satisfied.

In addition and in accordance with our share repurchase plan, on June 30, 2025, we repurchased all of the shares from stockholders that held less than \$500 in shares and, as such, we exceeded the limits by \$5,129, as authorized by our board of director.

Status of our Current Public Offering

This Offering was declared effective by the SEC on August 10, 2022 and we are currently offering on a continuous basis up to \$18.0 billion in shares of common stock, consisting of up to \$16.0 billion in shares in our primary offering and up to \$2.0 billion in shares pursuant to our distribution reinvestment plan. As of the date hereof, we had issued and sold (i) 50,440,886 shares of our common stock (consisting of 17,541,221 Class S shares, 259,967 Class T shares, 2,436,743 Class D shares and 30,202,955 Class I shares) in the primary offering for total proceeds of approximately \$1.3 billion and (ii) 22,584,884 shares of our common stock (consisting of 10,749,669 Class S shares, 409,744 Class T shares, 1,261,786 Class D shares and 10,163,685 Class I shares) pursuant to our distribution reinvestment plan for a total value of approximately \$0.5 billion. As of June 30, 2025, our aggregate NAV was approximately \$8.8 billion. We intend to continue selling shares in the Offering on a monthly basis.

Updates to Prospectus

The following supplements the discussion contained under the heading "Material U.S. Federal Income Tax Considerations" in the prospectus.

The One Big Beautiful Bill Act

On July 4, 2025, President Trump signed into law the legislation known as the One Big Beautiful Bill Act, or the OBBBA. The OBBBA made significant changes to the U.S. federal income tax laws in various areas. Among the notable changes, the OBBBA permanently extended certain provisions that were enacted in the Tax Cuts and Jobs Act of 2017, most of which were set to expire after December 31, 2025. Such extensions included the permanent extension of the 20% deduction for "qualified REIT dividends" for individuals and other non-corporate taxpayers as well as the permanent extension of the limitation on non-corporate taxpayers using "excess business losses" to offset other income. The OBBBA also increased the percentage limit under the REIT asset test applicable to taxable REIT subsidiaries, or TRSs, from 20% to 25% for taxable years beginning after December 31, 2025. As a result, for taxable years beginning after December 31, 2025, the aggregate value of all securities of TRSs held by a REIT may not exceed 25% of the value of its gross assets.

You are urged to consult with your tax advisors with respect to the OBBBA and its potential effect on an investment in our common stock.

Future Tax Legislation

Future changes to the tax laws are possible. There can be no assurance that future tax law changes will not increase income tax rates, impose new limitations on deductions, credits, or other tax benefits, or make other changes that may adversely affect our business, cash flows, or financial performance or the tax impact to you of an investment in our common stock.