STARWOOD REAL ESTATE INCOME TRUST, INC. SUPPLEMENT NO. 4 DATED MAY 17, 2023 TO THE PROSPECTUS DATED APRIL 7, 2023

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, 2023 (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 provide an update on our portfolio;
- to disclose the transaction price for each class of our common stock as of June 1, 2023;
- to disclose the calculation of our April 30, 2023 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 provide an update to the Prospectus.

Portfolio Highlights

Our portfolio remains well positioned across what we believe are the main drivers of performance: asset selection, market selection, debt structuring, and liquidity.

93% of our portfolio is invested in asset classes that we believe are well-positioned for today's environment. This includes 83% in rental housing and industrial, two of the best performing asset classes today. In April, our rental housing portfolio remained 95% occupied and rent growth across market rate multifamily and single-family rental remained above 5% over expiring leases. Our industrial portfolio held 98% occupancy and over the last four months, as our industrial leases have expired, rent increases have averaged 58%. Floating-rate real estate loans represent another 5% of our AUM and are currently yielding 12% due to the steep rise in benchmark rates.

75% of our portfolio is allocated to the Southeast and Southwest. Our two biggest concentrations are in Florida and Texas; nearly 30% of our portfolio is in these two states. Importantly, we have been more overweight in the Southeast, with 58% allocated to these markets, and 17% allocated to the Southwest. We also have 10% of our portfolio allocated to international markets across Europe and Australia, which provides portfolio diversification and solid underlying fundamentals.

97% of our debt is effectively fixed at approximately 3.4% and has more than five years of duration remaining. In addition, we have minimal debt maturities over the next three years with 1% maturing in 2023, 1% maturing in 2024, and 10% maturing in 2025. We believe that this will help us navigate through the current market turbulence.

Finally, we continue to maintain liquidity to navigate the current environment. As of the end of April 2023, we had access to approximately \$2.0 billion of liquidity or 15% of NAV in the form of cash, marketable securities, and lines of credit. The redemption limitations, combined with our liquidity position, enhance our ability to properly navigate through a challenging environment.

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June 1, 2023 Transaction Price

The transaction price for each share class of our common stock for subscriptions accepted as of June 1, 2023 (and repurchases as of May 31, 2023) is as follows:

	Transact	non Price
	(per s	share)
Class S	\$	25.51
Class T	\$	25.51
Class D	\$	25.07
Class I	\$	25.32

The June 1, 2023 transaction price for each of our share classes is equal to such class's NAV per share as of April 30, 2023. 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.

April 30, 2023 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. All of our property investments are appraised annually by third party appraisal firms in accordance with our valuation guidelines and such appraisals are reviewed by our independent valuation advisor. We have included a breakdown of the components of total NAV and NAV per share as of April 30, 2023 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 April 30, 2023 (\$ and shares/units in thousands):

Components of NAV	April 30, 2023
Investments in real estate	\$ 25,406,759
Investments in real estate debt	1,610,326
Cash and cash equivalents	311,749
Restricted cash	298,486
Other assets	964,304
Debt obligations	(14,216,328)
Secured financings on investments in real estate debt	(749,361)
Subscriptions received in advance	(21,608)
Other liabilities	(651,004)
Performance participation accrual	
Management fee payable	(13,448)
Accrued stockholder servicing fees (1)	(4,203)
Non-controlling interests in consolidated joint ventures	(96,176)
Net asset value	\$ 12,839,496
Number of outstanding shares/units	505,737

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 April 30, 2023, we have accrued under GAAP \$384.0 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 April 30, 2023 (\$ and shares/units in thousands, except per share/unit data):

Third-party

										on u-party Operating		
	Class	S		Class T		Class D		Class I	Pa	artnership		
NAV Per Share	Share	s	Shares		Shares		Shares		Units (1)		Total	
Net asset value	\$ 5,598	,809	\$	145,333	\$	745,533	\$:	5,840,839	\$	508,982	\$	12,839,496
Number of outstanding shares/units	219	,508		5,697		29,744		230,686		20,102		505,737
NAV Per Share/Unit as of April 30, 2023	\$ 2	5.51	\$	25.51	\$	25.07	\$	25.32	\$	25.32		

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 April 30, 2023 valuations, based on property types. Once we own more than one self-storage and one extended stay investment, we will include the key assumptions for the property types.

	Discount	Capitalization
Property Type	Rate	Rate
Multifamily	6.5%	5.3%
Single-Family Rental	6.5%	5.3%
Industrial	6.6%	5.4%
Office	7.6%	6.2%
Other	8.2%	6.7%

These assumptions are determined by the Advisor (except for investments valued by a third party appraisal firm), and reviewed by our independent valuation advisor. 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:

	Hypothetical	Multifamily Investment	Single-Family Rental Investment	Industrial Investment	Office Investment	Other Investment
Input	Change	Values	Values	Values	Values	Values
Discount Rate	0.25% decrease	+2.0%	+2.0%	+2.0%	+1.9%	+1.8%
(weighted average)	0.25% increase	(1.9)%	(1.9)%	(1.9)%	(1.9)%	(1.8)%
Exit Capitalization Rate	0.25% decrease	+3.1%	+3.1%	+3.2%	+2.7%	+2.3%
(weighted average)	0.25% increase	(2.9)%	(2.8)%	(2.9)%	(2.6)%	(2.1)%

The following table provides a breakdown of the major components of our NAV as of March 31, 2023 (\$ and shares/units in thousands):

Components of NAV	 March 31, 2023
Investments in real estate	\$ 25,505,001
Investments in real estate debt	1,658,769
Cash and cash equivalents	357,689
Restricted cash	279,581
Other assets	964,869
Debt obligations	(14,229,885)
Secured financings on investments in real estate debt	(752,052)
Subscriptions received in advance	(20,728)
Other liabilities	(602,838)
Performance participation accrual	<u>—</u>
Management fee payable	(13,657)
Accrued stockholder servicing fees (1)	(4,463)
Non-controlling interests in consolidated joint ventures	(97,979)
Net asset value	\$ 13,044,307
Number of outstanding shares/units	509,395

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 March 31, 2023, we have accrued under GAAP \$390.9 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 March 31, 2023 (\$ 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	(hird-party Operating artnership Units ⁽¹⁾	Total
Net asset value	\$ 5,675,192	\$ 147,032	\$ 757,514	\$ 5,951,135	\$	513,434	\$ 13,044,307
Number of outstanding shares/units	220,612	5,715	29,961	233,005		20,102	509,395
NAV Per Share/Unit as of March 31, 2023	\$ 25.72	\$ 25.73	\$ 25.28	\$ 25.54	\$	25.54	

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

Share Repurchase Request Update

Pursuant to the terms of our share repurchase plan, the total amount of aggregate share repurchases is limited to no more than 2% of our aggregate NAV per month (measured using the aggregate NAV as of the end of the immediately preceding month) and no more than 5% of our aggregate NAV per calendar quarter (measured using the aggregate NAV as of the end of the immediately preceding quarter).

In April 2023, we received repurchase requests equal to 4.2% of our aggregate monthly NAV. As per the terms of our share repurchase plan, we honored all repurchase requests for April 2023 on a pro rata basis up to the 2% monthly limitation. As such, 47.7% of each stockholder's repurchase request was satisfied in April 2023. Importantly, our structure continues to provide investors with liquidity over time, as it was designed. Investors who started redeeming in November, when redemption requests were first prorated, have received 97% of their money back in 6 months.

Status of our Current Public Offering

This Offering was declared effective by the SEC on April 7, 2023 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) 38,689,945 shares of our common stock (consisting of 14,094,560 Class S shares, 200,781 Class T shares, 2,144,975 Class D shares and 22,249,629 Class I shares) in the primary offering for total proceeds of approximately \$1.1 billion and (ii) 6,418,771 shares of our common stock (consisting of 2,906,719 Class S shares, 102,074 Class T shares, 406,710 Class D shares and 3,003,268 Class I shares) pursuant to our distribution reinvestment plan for a total value of approximately \$0.2 billion. As of April 30, 2023, our aggregate NAV was approximately \$12.8 billion. We intend to continue selling shares in the Offering on a monthly basis.

Update to Prospectus

The section of the Prospectus entitled "Prospectus Summary—Q: What is a "best efforts" offering?" is deleted and replaced in its entirety with the following:

Q: What is a "best efforts" offering?

A: This public offering of common stock is being conducted on a "best efforts" basis. A "best efforts" offering means that the Dealer Manager and the participating brokers are only required to use their best efforts to sell the shares. When shares are offered to the public on a "best efforts" basis, no underwriter, broker-dealer or other person has a firm commitment or obligation to purchase any of the shares. Therefore, we cannot guarantee that any minimum number of shares will be sold.