

STARWOOD REAL ESTATE INCOME TRUST, INC.
SUPPLEMENT NO. 1 DATED FEBRUARY 12, 2026
TO THE PROSPECTUS DATED FEBRUARY 4, 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 February 4, 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 March 2, 2026;
- to disclose the calculation of our January 31, 2026 NAV per share for each class of our common stock;
- to provide an update on our share repurchase requests; and
- to provide an update on the status of our current public offering (the “Offering”).

March 2, 2026 Transaction Price

The transaction price for each share class of our common stock for subscriptions accepted as of March 2, 2026 (and repurchases as of February 28, 2026) is as follows:

| | Transaction Price | |
|---------|--------------------------|-------|
| | (per share) | |
| Class S | \$ | 20.02 |
| Class T | \$ | 20.03 |
| Class D | \$ | 19.61 |
| Class I | \$ | 19.85 |

The March 2, 2026 transaction price for each of our share classes is equal to such class’s NAV per share as of January 31, 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.

January 31, 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 January 31, 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 January 31, 2026 (\$ and shares/units in thousands):

| Components of NAV | January 31, 2026 | |
|---|------------------|--------------|
| Investments in real estate | \$ | 20,972,422 |
| Investment in real estate debt | | 964,657 |
| Cash and cash equivalents | | 176,830 |
| Restricted cash | | 219,402 |
| Other assets | | 171,309 |
| Debt obligations | | (11,765,402) |
| Secured financings on investments in real estate debt | | (578,794) |
| Subscriptions received in advance | | (20) |
| Other liabilities | | (1,851,305) |
| Performance participation accrual | | — |
| Management fee payable | | (6,861) |
| Accrued stockholder servicing fees ⁽¹⁾ | | (2,714) |
| Non-controlling interests in consolidated entities | | (118,339) |
| Net asset value | \$ | 8,181,185 |
| Number of outstanding shares/units | | 410,909 |

⁽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 January 31, 2026, we have accrued under GAAP \$221.3 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 January 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 | \$ 3,502,930 | \$ 94,817 | \$ 484,227 | \$ 3,702,440 | \$ 396,771 | \$ 8,181,185 |
| Number of outstanding shares/units | 174,950 | 4,733 | 24,698 | 186,538 | 19,990 | 410,909 |
| NAV Per Share/Unit as of January 31, 2026 | \$ 20.02 | \$ 20.03 | \$ 19.61 | \$ 19.85 | \$ 19.85 | |

⁽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 January 31, 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 | 7.3% | 5.8% |
| Office | 8.0% | 6.8% |
| Other | 8.4% | 6.9% |

These assumptions are determined by the Advisor 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:

| 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 | +3.0% | +2.8% | +2.4% | +2.2% |
| (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 December 31, 2025 (\$ and shares/units in thousands):

| Components of NAV | December 31, 2025 | |
|---|-------------------|--------------|
| Investments in real estate | \$ | 20,953,304 |
| Investment in real estate debt | | 918,252 |
| Cash and cash equivalents | | 197,960 |
| Restricted cash | | 225,737 |
| Other assets | | 154,668 |
| Debt obligations | | (11,753,302) |
| Secured financings on investments in real estate debt | | (550,951) |
| Subscriptions received in advance | | (145) |
| Other liabilities | | (1,767,593) |
| Performance participation accrual | | — |
| Management fee payable | | (6,918) |
| Accrued stockholder servicing fees ⁽¹⁾ | | (2,753) |
| Non-controlling interests in consolidated entities | | (116,989) |
| Net asset value | \$ | 8,251,270 |
| Number of outstanding shares/units | | 412,009 |

⁽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 December 31, 2025, we have accrued under GAAP \$224.3 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 December 31, 2025 (\$ 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 | \$ 3,536,625 | \$ 96,417 | \$ 488,020 | \$ 3,731,107 | \$ 399,101 | \$ 8,251,270 |
| Number of outstanding shares/units | 175,606 | 4,785 | 24,744 | 186,884 | 19,990 | 412,009 |
| NAV Per Share/Unit as of December 31, 2025 | \$ 20.14 | \$ 20.15 | \$ 19.72 | \$ 19.96 | \$ 19.97 | |

⁽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.

In January 2026, we received repurchase requests in excess of the 0.5% monthly limit. As per the terms of our share repurchase plan, we honored all repurchase requests for January 2026 on a pro rata basis up to the 0.5% monthly limitation. As such, approximately 3.5% of each stockholder's January repurchase request was satisfied, and we repurchased approximately 1.9 million shares of common stock representing a total of approximately \$38.7 million.

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 have not sold any shares in this Offering. As of January 31, 2026, our aggregate NAV was approximately \$8.2 billion. We intend to continue selling shares in the Offering on a monthly basis.