

STARWOOD REAL ESTATE INCOME TRUST, INC.
SUPPLEMENT NO. 17 DATED JANUARY 19, 2021
TO THE PROSPECTUS DATED APRIL 15, 2020

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 15, 2020 (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 the tax characterization of our 2020 distributions;
- to provide an update on our December 2020 rent collections;
- to disclose the transaction price for each class of our common stock as of February 1, 2021;
- to disclose the calculation of our December 31, 2020 NAV per share for each class of our common stock;
- to provide an update on the status of our current public offering (the “Offering”);
- to disclose the appointment of Sean Harris as our President;
- to disclose the election of Peggy Lamb and Austin Nowlin as new directors of our company; and
- to provide an update to the Prospectus.

Tax Characterization of 2020 Distributions

100% of our distributions for the year ended December 31, 2020 will be characterized as return of capital for federal income tax purposes.

December 2020 Rent Collections Update

Rent collections remain strong, which has enabled us to provide investors with consistent, stable distributions. We have collected 96% of December rents, which continues to demonstrate the strength of our real estate portfolio.

SREIT-SUP17-0121

February 1, 2021 Transaction Price

The transaction price for each share class of our common stock for subscriptions accepted as of February 1, 2021 (and repurchases as of January 31, 2021) is as follows:

	Transaction Price (per share)	
Class S	\$	21.71
Class T	\$	21.57
Class D	\$	21.61
Class I	\$	21.66

The February 1, 2021 transaction price for each of our share classes is equal to such class's NAV per share as of December 31, 2020. A detailed presentation of the NAV per share is set forth below. No transactions or events have occurred since December 31, 2020 that would have a material impact on our NAV per share. 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.

December 31, 2020 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 for December 31, 2020 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 stockholders, 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 December 31, 2020 (\$ and shares/units in thousands):

Components of NAV	December 31, 2020	
Investments in real properties	\$	5,056,335
Investments in real estate-related securities		218,225
Cash and cash equivalents		128,650
Restricted cash		164,761
Other assets		21,749
Debt obligations		(3,379,633)
Subscriptions received in advance		(113,532)
Other liabilities		(77,479)
Performance participation accrual		(15,061)
Management fee payable		(2,103)
Accrued stockholder servicing fees ⁽¹⁾		(778)
Minority interest		(19,817)
Net asset value	\$	1,981,317
Number of outstanding shares/units		91,375

- (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 as such fee is paid. 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, 2020, we have accrued under GAAP \$73.2 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, 2020 (\$ 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	\$ 1,008,165	\$ 53,141	\$ 61,513	\$ 848,089	\$ 10,409	\$ 1,981,317
Number of outstanding shares/units	46,432	2,463	2,847	39,153	481	91,375
NAV Per Share/Unit as of December 31, 2020	\$ 21.71	\$ 21.57	\$ 21.61	\$ 21.66	\$ 21.66	

(1) Includes the partnership interests of the Operating Partnership held by the Special Limited Partner.

Set forth below are the weighted averages of the key assumptions in the discounted cash flow methodology used in the December 31, 2020 valuations, based on property types.

Property Type	Discount Rate	Exit Capitalization Rate
Multifamily	6.4%	5.2%
Hotel	9.4%	8.1%
Office	7.3%	6.0%
Industrial	6.7%	6.1%
Medical office	6.6%	5.7%

For quarter-end months, these assumptions are determined by the independent valuation advisor and third party appraisers. In addition, the independent valuation advisor reviews these assumptions from the third-party appraisals. The Advisor reviews the assumptions from each of the appraisals regardless of who performs the work. 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	Hotel Investment Values	Office Investment Values	Industrial Investment Values	Medical office Investment Values
Discount Rate	0.25% decrease	+1.9%	+1.8%	+2.0%	+1.9%	+2.0%
(weighted average)	0.25% increase	(1.9)%	(1.8)%	(1.9)%	(1.9)%	(2.0)%
Exit Capitalization Rate	0.25% decrease	+3.1%	+1.7%	+2.9%	+2.7%	+3.2%
(weighted average)	0.25% increase	(2.8)%	(1.6)%	(2.7)%	(2.5)%	(2.9)%

The following table provides a breakdown of the major components of our NAV as of November 30, 2020 (\$ and shares/units in thousands):

Components of NAV	November 30, 2020
Investments in real properties	\$ 4,735,598
Investments in real estate-related securities	218,754
Cash and cash equivalents	91,360
Restricted cash	172,206
Other assets	32,979
Debt obligations	(3,188,364)
Subscriptions received in advance	(124,583)
Other liabilities	(83,694)
Performance participation accrual	(4,289)
Management fee payable	(1,927)
Accrued stockholder servicing fees ⁽¹⁾	(709)
Minority interest	(15,121)
Net asset value	\$ 1,832,210
Number of outstanding shares/units	85,735

- (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 as such fee is paid. Under 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 November 30, 2020, we have accrued under GAAP \$69.2 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 November 30, 2020 (\$ 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	\$ 940,824	\$ 50,771	\$ 55,824	\$ 774,533	\$ 10,258	\$ 1,832,210
Number of outstanding shares/units	43,963	2,388	2,621	36,282	481	85,735
NAV Per Share/Unit as of November 30, 2020	\$ 21.40	\$ 21.26	\$ 21.30	\$ 21.35	\$ 21.35	

(1) Includes the partnership interests of the Operating Partnership held by the Special Limited Partner.

Status of our Current Public Offering

We are currently offering on a continuous basis up to \$5.0 billion in shares of common stock, consisting of up to \$4.0 billion in shares in our primary offering and up to \$1.0 billion in shares pursuant to our distribution reinvestment plan. As of the date hereof, we had issued and sold (i) 94,737,117 shares of our common stock (consisting of 48,365,344 Class S shares, 2,561,551 Class T shares, 2,957,386 Class D shares and 40,852,836 Class I shares) in the primary offering for total proceeds of \$2.0 billion and (ii) 2,690,617 shares of our common stock (consisting of 1,692,830 Class S Shares, 72,873 Class T Shares, 119,366 Class D Shares and 805,548 Class I Shares) pursuant to our distribution reinvestment plan for a total value of \$57.2 million. We intend to continue selling shares in the offering on a monthly basis.

Appointment of President

The disclosure appearing under the heading “Management—Directors and Executive Officers” beginning on page 137 of our Prospectus is supplemented with the following:

On January 15, 2021, our board of directors appointed Sean Harris as our President, effectively immediately. Previously, Mr. Harris served as our Senior Vice President of Acquisitions from October 2017 to January 2021. John P. McCarthy Jr., who previously served as both our Chief Executive Officer and President, will continue to serve as our Chief Executive Officer. Mr. McCarthy will also continue to serve as one of our directors. The appointment of Mr. Harris was not made pursuant to any arrangement or understanding between him and any other person.

Mr. Harris’s biographical information below replaces his biography in the “Management” section of the Prospectus:

Sean Harris has served as our President since January 2021. Previously, Mr. Harris served as our Senior Vice President of Acquisitions from October 2017 to January 2021. Mr. Harris served as an Acquisitions Associate and Assistant to Mr. Sternlicht, the Chairman and CEO of Starwood Capital, from August 2016 to September 2017. Prior to joining Starwood Capital in 2016, Mr. Harris served as a Director of Acquisitions and Investment Management at Monday Properties, LLC since December 2012, where he co-lead acquisitions, investment management, and capital markets. Before joining Monday Properties, LLC as an Associate in July 2010, Mr. Harris was employed by Ernst & Young LLC in the Transaction Real Estate group. Mr. Harris received B.S. degrees in finance and accounting from East Carolina University and a MAcc from the Max M. Fisher College of Business at The Ohio State University.

Mr. McCarthy’s biographical information below replaces his biography in the “Management” section of the Prospectus:

John P. McCarthy, Jr. has served as our Chief Executive Officer since our formation in June 2017 and as a member of our board of directors and the Advisor’s Investment Committee since November 2017. Mr. McCarthy also served as our President since our formation in June 2017 until January 2021. Mr. McCarthy has also served as Managing Director of Starwood Capital since July 2015, where he was responsible for managing and expanding relationships with Starwood Capital’s investors around the world. Mr. McCarthy previously served as Global Head of Asset Management for Starwood Capital from March 2009 to May 2012, during which

time he also served on Starwood Capital's Investment Committee. Prior to rejoining Starwood Capital, Mr. McCarthy served as Deputy Head of Europe for the Abu Dhabi Investment Authority ("ADIA") from June 2012 to May 2015. During this time, Mr. McCarthy served on ADIA's Executive and Global Strategy committees. Prior to this, Mr. McCarthy served as Global Co-Head of Asset Management for Lehman Brothers Real Estate Private Equity from June 2005 to February 2009 and was a Partner at O'Connor Capital Partners ("O'Connor"), and the Co-Head of the Europe Business. Prior to joining O'Connor, Mr. McCarthy worked for GE Capital, where he held a variety of positions, including managing the firm's real estate investing activities across Central Europe. Mr. McCarthy has previously served on several boards throughout his career, including ERE, a Paris, France based developer of European Shopping Malls, Deutsche Annington, a listed German based residential rental platform encompassing more than 180,000 units and McCarthy & Stone, formerly the UK's largest developer of homes for seniors. Mr. McCarthy received a B.S. in Finance from the University of Connecticut, and an M.B.A. from Fordham University.

Election of New Directors

The disclosure appearing under the heading "Management—Directors and Executive Officers" beginning on page 137 of our Prospectus is supplemented with the following:

On January 15, 2021, our board of directors increased the size of our board by two and elected Peggy Lamb and Austin Nowlin as new directors. Ms. Lamb serves as an independent director. Mr. Nowlin continues to serve on the Advisor's Investment Committee. The appointment of Ms. Lamb and Mr. Nowlin was not made pursuant to any arrangement or understanding between her or him and any other person. Ms. Lamb and Mr. Nowlin are parties to indemnification agreements as described elsewhere in this Prospectus.

Ms. Lamb's biographical information is below:

Peggy Lamb has served as a member of the Board since January 2021. Since 2017, she has served as a Managing Director of Halstatt, LLC where she is responsible for the legacy investment portfolio and real estate investment activities. She is also a principal in the Halstatt Real Estate Investment Funds' upcoming Fund IV. In her role, Ms. Lamb is responsible for originating, structuring, underwriting, and closing real estate investments as well as managing an existing diverse investment portfolio across multiple asset types. From 1996 to 2004, she served as a member of the Management Group for Investment Banking at Goldman Sachs. She also served as Chief of Staff for the Financing Division. She was Chief Operating Officer of the Investment Banking Real Estate Department from 1995 to 2005, and Department Head for the Global Business Unit Managers from 1995 to 2004 and Knowledge Management Group from 2000 to 2004. Ms. Lamb retired from Goldman Sachs in 2005 but continued to consult for real estate companies, specializing in entry into the Chinese and Indian markets. Ms. Lamb received an M.B.A. from Harvard Business School and a B.S. from the University of Illinois.

Mr. Nowlin's biographical information below replaces his biography in the "Management" section of the Prospectus:

Austin Nowlin has served as a member of our board of directors since January, 2021. He serves as a member of the Advisor's Investment Committee and has served as a Managing Director and Head of Capital Markets for the Americas at Starwood Capital Group. In this role, he is responsible for all debt capital market activities for the Firm's investments in the Americas, including, the origination, structuring, and execution of asset-level and fund/corporate-level financing activity. Since joining Starwood Capital in 2011, Mr. Nowlin has completed financings across all asset and product types, including revolving credit facilities, domestic and foreign balance sheet loans, construction financing, fixed and floating rate commercial mortgage-backed securities, preferred and mezzanine financing. He is a member of the Investment Committees at Starwood Capital and Starwood Property Trust. Prior to joining Starwood Capital, Mr. Nowlin worked at Wells Fargo and its predecessor, Wachovia Securities, in leveraged finance. He began his career at Raymond James, where he focused on making equity investments in multifamily assets. Mr. Nowlin received a B.A. degree in economics from Florida State University.

Update to the Prospectus

The following risk factor is added to the section of the Prospectus entitled "Risk factors - Risks Related to This Offering and Our Organizational Structure":

We have incurred GAAP net losses attributable to stockholders and an accumulated deficit in the past and may incur GAAP net losses attributable to stockholders and continue to have an accumulated deficit in the future.

For the three months ended September 30, 2020 and the year ended December 31, 2019, we had a GAAP net loss attributable to stockholders of (\$10.3) million and (\$20.8) million, respectively, resulting in a GAAP net loss per share of common stock, basic and diluted, of (\$0.14) for the three months ended September 30, 2020 and (\$0.91) for the year ended December 31, 2019. Our accumulated

deficit and cumulative distributions as of September 30, 2020 and December 31, 2019 was (\$167.7) million and (\$46.7) million, respectively. We may incur net losses and continue to have an accumulated deficit in the future.