UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 10-Q

(Mark one)

☑ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended: **September 30, 2022**

Or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from: ____________ **to** ____________

Commission File Number: **001-11954 (Vornado Realty Trust)**
Commission File Number: **001-34482 (Vornado Realty L.P.)**

Vornado Realty Trust
Vornado Realty L.P.

(Exact name of registrants as specified in its charter)

Vornado Realty Trust	**Maryland**	**22-1657560**
	(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
Vornado Realty L.P.	**Delaware**	**13-3925979**
	(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

888 Seventh Avenue, New York, New York 10019
(Address of principal executive offices) (Zip Code)

(212) 894-7000
(Registrants' telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Registrant	Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Vornado Realty Trust	Common Shares of beneficial interest, $.04 par value per share	VNO	New York Stock Exchange
	Cumulative Redeemable Preferred Shares of beneficial interest, liquidation preference $25.00 per share:		
Vornado Realty Trust	5.40% Series L	VNO/PL	New York Stock Exchange
Vornado Realty Trust	5.25% Series M	VNO/PM	New York Stock Exchange
Vornado Realty Trust	5.25% Series N	VNO/PN	New York Stock Exchange
Vornado Realty Trust	4.45% Series O	VNO/PO	New York Stock Exchange

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
Vornado Realty Trust: Yes ☑ No ☐ Vornado Realty L.P.: Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).
Vornado Realty Trust: Yes ☑ No ☐ Vornado Realty L.P.: Yes ☑ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” "non-accelerated filer," “smaller reporting company,” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Vornado Realty Trust:

☑ Large Accelerated Filer	☐ Accelerated Filer
☐ Non-Accelerated Filer	☐ Smaller Reporting Company
	☐ Emerging Growth Company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Vornado Realty L.P.:

☐ Large Accelerated Filer	☐ Accelerated Filer
☑ Non-Accelerated Filer	☐ Smaller Reporting Company
	☐ Emerging Growth Company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).
Vornado Realty Trust: Yes ☐ No ☑ Vornado Realty L.P.: Yes ☐ No ☑

As of September 30, 2022, 191,816,684 of Vornado Realty Trust’s common shares of beneficial interest are outstanding.

EXPLANATORY NOTE

This report combines the quarterly reports on Form 10-Q for the period ended September 30, 2022 of Vornado Realty Trust and Vornado Realty L.P. Unless stated otherwise or the context otherwise requires, references to “Vornado” refer to Vornado Realty Trust, a Maryland real estate investment trust (“REIT”), and references to the “Operating Partnership” refer to Vornado Realty L.P., a Delaware limited partnership. References to the “Company,” “we,” “us” and “our” mean collectively Vornado, the Operating Partnership and those subsidiaries consolidated by Vornado.

The Operating Partnership is the entity through which we conduct substantially all of our business and own, either directly or through subsidiaries, substantially all of our assets. Vornado is the sole general partner and also a 92.1% limited partner of the Operating Partnership. As the sole general partner of the Operating Partnership, Vornado has exclusive control of the Operating Partnership’s day-to-day management.

Under the limited partnership agreement of the Operating Partnership, unitholders may present their Class A units for redemption at any time (subject to restrictions agreed upon at the time of issuance of the units that may restrict such right for a period of time). Class A units may be tendered for redemption to the Operating Partnership for cash; Vornado, at its option, may assume that obligation and pay the holder either cash or Vornado common shares on a one-for-one basis. Because the number of Vornado common shares outstanding at all times equals the number of Class A units owned by Vornado, the redemption value of each Class A unit is equivalent to the market value of one Vornado common share, and the quarterly distribution to a Class A unitholder is equal to the quarterly dividend paid to a Vornado common shareholder. This one-for-one exchange ratio is subject to specified adjustments to prevent dilution. Vornado generally expects that it will elect to issue its common shares in connection with each such presentation for redemption rather than having the Operating Partnership pay cash. With each such exchange or redemption, Vornado’s percentage ownership in the Operating Partnership will increase. In addition, whenever Vornado issues common shares other than to acquire Class A units of the Operating Partnership, Vornado must contribute any net proceeds it receives to the Operating Partnership and the Operating Partnership must issue to Vornado an equivalent number of Class A units of the Operating Partnership. This structure is commonly referred to as an umbrella partnership REIT, or UPREIT.

The Company believes that combining the quarterly reports on Form 10-Q of Vornado and the Operating Partnership into this single report provides the following benefits:

- enhances investors’ understanding of Vornado and the Operating Partnership by enabling investors to view the business as a whole in the same manner as management views and operates the business;
- eliminates duplicative disclosure and provides a more streamlined and readable presentation because a substantial portion of the disclosure applies to both Vornado and the Operating Partnership; and
- creates time and cost efficiencies in the preparation of one combined report instead of two separate reports.

The Company believes it is important to understand the few differences between Vornado and the Operating Partnership in the context of how Vornado and the Operating Partnership operate as a consolidated company. The financial results of the Operating Partnership are consolidated into the financial statements of Vornado. Vornado does not have any significant assets, liabilities or operations, other than its investment in the Operating Partnership. The Operating Partnership, not Vornado, generally executes all significant business relationships other than transactions involving the securities of Vornado. The Operating Partnership holds substantially all of the assets of Vornado. The Operating Partnership conducts the operations of the business and is structured as a partnership with no publicly traded equity. Except for the net proceeds from equity offerings by Vornado, which are contributed to the capital of the Operating Partnership in exchange for Class A units of partnership in the Operating Partnership, and the net proceeds of debt offerings by Vornado, which are contributed to the Operating Partnership in exchange for debt securities of the Operating Partnership, as applicable, the Operating Partnership generates all remaining capital required by the Company’s business. These sources may include working capital, net cash provided by operating activities, borrowings under the revolving credit facilities, the issuance of secured and unsecured debt and equity securities and proceeds received from the disposition of certain properties.

To help investors better understand the key differences between Vornado and the Operating Partnership, certain information for Vornado and the Operating Partnership in this report has been separated, as set forth below:

- Item 1. Financial Statements (unaudited), which includes the following specific disclosures for Vornado Realty Trust and Vornado Realty L.P.:
    - Note 11. Redeemable Noncontrolling Interests
    - Note 12. Shareholders' Equity/Partners' Capital
    - Note 18. Income Per Share/Income Per Class A Unit
- Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations includes information specific to each entity, where applicable.

This report also includes separate Part I, Item 4. Controls and Procedures and Part II, Item 2. Unregistered Sales of Equity Securities and Use of Proceeds sections and separate Exhibits 31 and 32 certifications for each of Vornado and the Operating Partnership in order to establish that the requisite certifications have been made and that Vornado and the Operating Partnership are compliant with Rule 13a-15 or Rule 15d-15 of the Securities Exchange Act of 1934 and 18 U.S.C. §1350.

PART I. FINANCIAL INFORMATION
Item 1. Financial Statements

VORNADO REALTY TRUST
CONSOLIDATED BALANCE SHEETS
(UNAUDITED)

(Amounts in thousands, except unit, share, and per share amounts)	As of	
	September 30, 2022	December 31, 2021
ASSETS		
Real estate, at cost:		
Land	$ 2,477,956	$ 2,540,193
Buildings and improvements	10,015,452	9,839,166
Development costs and construction in progress	802,272	718,694
Leasehold improvements and equipment	122,948	119,792
Total	13,418,628	13,217,845
Less accumulated depreciation and amortization	(3,606,986)	(3,376,347)
Real estate, net	9,811,642	9,841,498
Right-of-use assets	685,298	337,197
Cash and cash equivalents	845,423	1,760,225
Restricted cash	131,625	170,126
Investments in U.S. Treasury bills	445,165	—
Tenant and other receivables	81,004	79,661
Investments in partially owned entities	3,250,197	3,297,389
Real estate fund investments	930	7,730
220 Central Park South condominium units ready for sale	78,590	57,142
Receivable arising from the straight-lining of rents	692,733	656,318
Deferred leasing costs, net of accumulated amortization of $233,001 and $211,775	380,221	391,693
Identified intangible assets, net of accumulated amortization of $95,661 and $97,186	142,116	154,895
Other assets	630,730	512,714
	$ 17,175,674	$ 17,266,588
LIABILITIES, REDEEMABLE NONCONTROLLING INTERESTS AND EQUITY		
Mortgages payable, net	$ 5,831,769	$ 6,053,343
Senior unsecured notes, net	1,191,322	1,189,792
Unsecured term loan, net	792,847	797,812
Unsecured revolving credit facilities	575,000	575,000
Lease liabilities	731,674	370,206
Accounts payable and accrued expenses	475,151	613,497
Deferred revenue	41,879	48,118
Deferred compensation plan	95,681	110,174
Other liabilities	265,775	304,725
Total liabilities	10,001,098	10,062,667
Commitments and contingencies		
Redeemable noncontrolling interests:		
Class A units - 14,253,759 and 14,033,438 units outstanding	390,539	587,440
Series D cumulative redeemable preferred units - 141,400 units outstanding	3,535	3,535
Total redeemable noncontrolling partnership units	394,074	590,975
Redeemable noncontrolling interest in a consolidated subsidiary	89,228	97,708
Total redeemable noncontrolling interests	483,302	688,683
Shareholders' equity:		
Preferred shares of beneficial interest: no par value per share; authorized 110,000,000 shares; issued and outstanding 48,792,902 shares	1,182,459	1,182,459
Common shares of beneficial interest: $0.04 par value per share; authorized 250,000,000 shares; issued and outstanding 191,816,684 and 191,723,608 shares	7,652	7,648
Additional capital	8,362,387	8,143,093
Earnings less than distributions	(3,299,630)	(3,079,320)
Accumulated other comprehensive income (loss)	185,178	(17,534)
Total shareholders' equity	6,438,046	6,236,346
Noncontrolling interests in consolidated subsidiaries	253,228	278,892
Total equity	6,691,274	6,515,238
	$ 17,175,674	$ 17,266,588

See notes to consolidated financial statements (unaudited).

VORNADO REALTY TRUST
CONSOLIDATED STATEMENTS OF INCOME
(UNAUDITED)

(Amounts in thousands, except per share amounts)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2022	2021	2022	2021
REVENUES:				
Rental revenues	$ 409,144	$ 369,203	$ 1,211,621	$ 1,048,116
Fee and other income	48,287	40,009	141,434	120,014
Total revenues	457,431	409,212	1,353,055	1,168,130
EXPENSES:				
Operating	(221,596)	(212,699)	(660,434)	(594,598)
Depreciation and amortization	(134,526)	(100,867)	(370,631)	(285,998)
General and administrative	(29,174)	(25,553)	(102,292)	(100,341)
Benefit (expense) from deferred compensation plan liability	600	(799)	10,138	(7,422)
Transaction related costs and other	(996)	(9,681)	(4,961)	(10,630)
Total expenses	(385,692)	(349,599)	(1,128,180)	(998,989)
Income from partially owned entities	24,341	26,269	83,775	86,768
(Loss) income from real estate fund investments	(111)	(66)	5,421	5,107
Interest and other investment income, net	5,228	633	9,282	3,694
(Loss) income from deferred compensation plan assets	(600)	799	(10,138)	7,422
Interest and debt expense	(76,774)	(50,946)	(191,523)	(152,904)
Net gains on disposition of wholly owned and partially owned assets	—	10,087	35,384	35,811
Income before income taxes	23,823	46,389	157,076	155,039
Income tax (expense) benefit	(3,711)	25,376	(14,686)	20,551
Net income	20,112	71,765	142,390	175,590
Less net loss (income) attributable to noncontrolling interests in:				
Consolidated subsidiaries	3,792	(5,425)	(4,756)	(20,323)
Operating Partnership	(606)	(2,818)	(6,382)	(6,683)
Net income attributable to Vornado	23,298	63,522	131,252	148,584
Preferred share dividends	(15,529)	(16,800)	(46,587)	(49,734)
Series K preferred share issuance costs	—	(9,033)	—	(9,033)
NET INCOME attributable to common shareholders	$ 7,769	$ 37,689	$ 84,665	$ 89,817
INCOME PER COMMON SHARE - BASIC:				
Net income per common share	$ 0.04	$ 0.20	$ 0.44	$ 0.47
Weighted average shares outstanding	191,793	191,577	191,756	191,508
INCOME PER COMMON SHARE - DILUTED:				
Net income per common share	$ 0.04	$ 0.20	$ 0.44	$ 0.47
Weighted average shares outstanding	192,018	192,041	192,042	192,151

See notes to consolidated financial statements (unaudited).

VORNADO REALTY TRUST
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(UNAUDITED)

(Amounts in thousands)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2022	**2021**	**2022**	**2021**
Net income	$ 20,112	$ 71,765	$ 142,390	$ 175,590
Other comprehensive income:				
Change in fair value of interest rate swaps and other	117,219	5,362	200,838	25,555
Other comprehensive income of nonconsolidated subsidiaries	5,124	1,322	19,084	6,381
Comprehensive income	142,455	78,449	362,312	207,526
Less comprehensive income attributable to noncontrolling interests	(7,279)	(8,669)	(28,348)	(29,022)
Comprehensive income attributable to Vornado	$ 135,176	$ 69,780	$ 333,964	$ 178,504

See notes to consolidated financial statements (unaudited).

VORNADO REALTY TRUST
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(UNAUDITED)

(Amounts in thousands, except per share amounts)

	Preferred Shares		Common Shares		Additional Capital	Earnings Less Than Distributions	Accumulated Other Comprehensive Income	Non-controlling Interests in Consolidated Subsidiaries	Total Equity
	Shares	Amount	Shares	Amount					
For the Three Months Ended September 30, 2022:									
Balance as of June 30, 2022	48,793	$ 1,182,459	191,775	$ 7,650	$ 8,339,161	$ (3,205,751)	$ 73,300	$ 253,994	$ 6,650,813
Net income attributable to Vornado	—	—	—	—	—	23,298	—	—	23,298
Net income attributable to nonredeemable noncontrolling interests in consolidated subsidiaries	—	—	—	—	—	—	—	967	967
Dividends on common shares ($0.53 per share)	—	—	—	—	—	(101,656)	—	—	(101,656)
Dividends on preferred shares (see Note 12 for dividends per share amounts)	—	—	—	—	—	(15,529)	—	—	(15,529)
Common shares issued:									
Upon redemption of Class A units, at redemption value	—	—	34	1	991	—	—	—	992
Under dividend reinvestment plan	—	—	7	—	221	—	—	—	221
Contributions	—	—	—	—	—	—	—	650	650
Distributions	—	—	—	—	—	—	—	(4,548)	(4,548)
Deferred compensation shares and options	—	—	—	—	155	—	—	—	155
Other comprehensive income of nonconsolidated subsidiaries	—	—	—	—	—	—	5,124	—	5,124
Change in fair value of interest rate swaps and other	—	—	—	—	—	—	117,219	—	117,219
Redeemable Class A unit measurement adjustment	—	—	—	—	21,857	—	—	—	21,857
Noncontrolling interests' share of above adjustments	—	—	—	—	—	—	(10,465)	2,166	(8,299)
Other	—	—	1	1	2	8	—	(1)	10
Balance as of September 30, 2022	48,793	$ 1,182,459	191,817	$ 7,652	$ 8,362,387	$ (3,299,630)	$ 185,178	$ 253,228	$ 6,691,274

See notes to consolidated financial statements (unaudited).

VORNADO REALTY TRUST
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY - CONTINUED
(UNAUDITED)

(Amounts in thousands, except per share amounts)

	Preferred Shares		Common Shares		Additional Capital	Earnings Less Than Distributions	Accumulated Other Comprehensive Loss	Non-controlling Interests in Consolidated Subsidiaries	Total Equity
	Shares	Amount	Shares	Amount					
For the Three Months Ended September 30, 2021:									
Balance as of June 30, 2021	48,793	$ 1,182,291	191,561	$ 7,641	$ 8,069,033	$ (2,925,161)	$ (51,437)	$ 285,950	$ 6,568,317
Net income attributable to Vornado	—	—	—	—	—	63,522	—	—	63,522
Net income attributable to nonredeemable noncontrolling interests in consolidated subsidiaries	—	—	—	—	—	—	—	4,299	4,299
Dividends on common shares ($0.53 per share)	—	—	—	—	—	(101,527)	—	—	(101,527)
Dividends on preferred shares (see Note 12 for dividends per share amounts)	—	—	—	—	—	(16,800)	—	—	(16,800)
Series O cumulative redeemable preferred shares issuance	12,000	291,195	—	—	—	—	—	—	291,195
Common shares issued:									
Upon redemption of Class A units, at redemption value	—	—	114	5	4,744	—	—	—	4,749
Under dividend reinvestment plan	—	—	6	1	223	—	—	—	224
Contributions	—	—	—	—	—	—	—	1,110	1,110
Distributions	—	—	—	—	—	—	—	(5,877)	(5,877)
Conversion of Series A preferred shares to common shares	—	(13)	1	—	13	—	—	—	—
Deferred compensation shares and options	—	—	(1)	—	226	—	—	—	226
Other comprehensive income of nonconsolidated subsidiaries	—	—	—	—	—	—	1,322	—	1,322
Change in fair value of interest rate swaps	—	—	—	—	—	—	5,360	—	5,360
Redeemable Class A unit measurement adjustment	—	—	—	—	64,100	—	—	—	64,100
Series K cumulative redeemable preferred shares called for redemption	(12,000)	(290,967)	—	—	—	(9,033)	—	—	(300,000)
Redeemable noncontrolling interests' share of above adjustments	—	—	—	—	—	—	(426)	—	(426)
Other	—	(7)	—	(1)	(2)	—	2	39	31
Balance as of September 30, 2021	48,793	$ 1,182,499	191,681	$ 7,646	$ 8,138,337	$ (2,988,999)	$ (45,179)	$ 285,521	$ 6,579,825

See notes to consolidated financial statements (unaudited).

(Amounts in thousands, except per share amounts)

	Preferred Shares		Common Shares		Additional Capital	Earnings Less Than Distributions	Accumulated Other Comprehensive (Loss) Income	Non-controlling Interests in Consolidated Subsidiaries	Total Equity
	Shares	Amount	Shares	Amount					
For the Nine Months Ended September 30, 2022:									
Balance as of December 31, 2021	48,793	$ 1,182,459	191,724	$ 7,648	$ 8,143,093	$ (3,079,320)	$ (17,534)	$ 278,892	$ 6,515,238
Net income attributable to Vornado	—	—	—	—	—	131,252	—	—	131,252
Net income attributable to nonredeemable noncontrolling interests in consolidated subsidiaries	—	—	—	—	—	—	—	13,236	13,236
Dividends on common shares ($1.59 per share)	—	—	—	—	—	(304,896)	—	—	(304,896)
Dividends on preferred shares (see Note 12 for dividends per share amounts)	—	—	—	—	—	(46,587)	—	—	(46,587)
Common shares issued:									
Upon redemption of Class A units, at redemption value	—	—	76	3	2,566	—	—	—	2,569
Under employees' share option plan	—	—	—	—	7	—	—	—	7
Under dividend reinvestment plan	—	—	19	—	655	—	—	—	655
Contributions	—	—	—	—	—	—	—	4,903	4,903
Distributions	—	—	—	—	—	—	—	(45,976)	(45,976)
Deferred compensation shares and options	—	—	(2)	—	447	(85)	—	—	362
Other comprehensive income of nonconsolidated subsidiaries	—	—	—	—	—	—	19,084	—	19,084
Change in fair value of interest rate swaps and other	—	—	—	—	—	—	200,838	—	200,838
Redeemable Class A unit measurement adjustment	—	—	—	—	215,619	—	—	—	215,619
Noncontrolling interests' share of above adjustments	—	—	—	—	—	—	(17,210)	2,166	(15,044)
Other	—	—	—	1	—	6	—	7	14
Balance as of September 30, 2022	48,793	$ 1,182,459	191,817	$ 7,652	$ 8,362,387	$ (3,299,630)	$ 185,178	$ 253,228	$ 6,691,274

See notes to consolidated financial statements (unaudited).

VORNADO REALTY TRUST
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY - CONTINUED
(UNAUDITED)

(Amounts in thousands, except per share amounts)

	Preferred Shares		Common Shares		Additional Capital	Earnings Less Than Distributions	Accumulated Other Comprehensive Loss	Non-controlling Interests in Consolidated Subsidiaries	Total Equity
	Shares	Amount	Shares	Amount					
For the Nine Months Ended September 30, 2021:									
Balance as of December 31, 2020	48,793	$ 1,182,339	191,355	$ 7,633	$ 8,192,507	$ (2,774,182)	$ (75,099)	$ 414,957	$ 6,948,155
Net income attributable to Vornado	—	—	—	—	—	148,584	—	—	148,584
Net income attributable to nonredeemable noncontrolling interests in consolidated subsidiaries	—	—	—	—	—	—	—	18,804	18,804
Dividends on common shares ($1.59 per share)	—	—	—	—	—	(304,516)	—	—	(304,516)
Dividends on preferred shares (see Note 12 for dividends per share amounts)	—	—	—	—	—	(49,734)	—	—	(49,734)
Series O cumulative redeemable preferred shares issuance	12,000	291,195	—	—	—	—	—	—	291,195
Common shares issued:									
Upon redemption of Class A units, at redemption value	—	—	313	13	13,045	—	—	—	13,058
Under employees' share option plan	—	—	—	—	10	—	—	—	10
Under dividend reinvestment plan	—	—	16	1	653	—	—	—	654
Contributions	—	—	—	—	—	—	—	2,657	2,657
Distributions	—	—	—	—	—	—	—	(150,934)	(150,934)
Conversion of Series A preferred shares to common shares	—	(13)	1	—	13	—	—	—	—
Deferred compensation shares and options	—	—	(4)	—	675	(114)	—	—	561
Other comprehensive income of nonconsolidated subsidiaries	—	—	—	—	—	—	6,381	—	6,381
Change in fair value of interest rate swaps	—	—	—	—	—	—	25,553	—	25,553
Unearned 2018 Out-Performance Plan awards acceleration	—	—	—	—	10,283	—	—	—	10,283
Redeemable Class A unit measurement adjustment	—	—	—	—	(78,848)	—	—	—	(78,848)
Series K cumulative redeemable preferred shares called for redemption	(12,000)	(290,967)	—	—	—	(9,033)	—	—	(300,000)
Redeemable noncontrolling interests' share of above adjustments	—	—	—	—	—	—	(2,016)	—	(2,016)
Other	—	(55)	—	(1)	(1)	(4)	2	37	(22)
Balance as of September 30, 2021	48,793	$ 1,182,499	191,681	$ 7,646	$ 8,138,337	$ (2,988,999)	$ (45,179)	$ 285,521	$ 6,579,825

See notes to consolidated financial statements (unaudited).

VORNADO REALTY TRUST
CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)

(Amounts in thousands)	For the Nine Months Ended September 30,	
	2022	**2021**
Cash Flows from Operating Activities:		
Net income	$ 142,390	$ 175,590
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization (including amortization of deferred financing costs)	386,697	299,749
Distributions of income from partially owned entities	137,758	171,367
Equity in net income of partially owned entities	(83,775)	(86,768)
Straight-lining of rents	(45,835)	11,651
Net gains on disposition of wholly owned and partially owned assets	(35,384)	(35,811)
Stock-based compensation expense	22,887	32,889
Change in deferred tax liability	9,992	2,497
Amortization of below-market leases, net	(3,788)	(7,939)
Net realized and unrealized loss on real estate fund investments	1,128	789
Write-off of lease receivables deemed uncollectible	782	7,219
Real estate impairment losses	—	7,880
Other non-cash adjustments	2,560	(5,046)
Changes in operating assets and liabilities:		
Real estate fund investments	—	(789)
Tenant and other receivables	(2,128)	(12,092)
Prepaid assets	33,995	(44,731)
Other assets	(22,706)	(77,508)
Accounts payable and accrued expenses	6,649	43,067
Other liabilities	8,605	(3,911)
Net cash provided by operating activities	559,827	478,103
Cash Flows from Investing Activities:		
Purchase of U.S. Treasury bills	(794,793)	—
Development costs and construction in progress	(557,884)	(444,645)
Proceeds from maturities of U.S. Treasury bills	349,461	—
Proceeds from sales of real estate	253,958	100,024
Additions to real estate	(120,124)	(113,374)
Distributions of capital from partially owned entities	20,566	106,005
Proceeds from sale of condominium units and ancillary amenities at 220 Central Park South	16,124	97,683
Investments in partially owned entities	(15,046)	(12,366)
Acquisitions of real estate and other	(2,000)	(3,000)
Acquisition of additional 45.0% ownership interest in One Park Avenue (inclusive of $5,806 of prorations and net working capital and net of $39,370 of cash and restricted cash balances consolidated upon acquisition)	—	(123,936)
Proceeds from repayments of loan receivables	—	975
Net cash used in investing activities	(849,738)	(392,634)

See notes to consolidated financial statements (unaudited).

VORNADO REALTY TRUST
CONSOLIDATED STATEMENTS OF CASH FLOWS - CONTINUED
(UNAUDITED)

(Amounts in thousands)	For the Nine Months Ended September 30, 2022	2021
Cash Flows from Financing Activities:		
Repayments of borrowings	$ (1,245,973)	$ (1,578,843)
Proceeds from borrowings	1,029,773	2,298,007
Dividends paid on common shares	(304,896)	(304,516)
Distributions to noncontrolling interests	(68,716)	(173,356)
Dividends paid on preferred shares	(46,587)	(49,400)
Debt issuance costs	(32,473)	(33,935)
Contributions from noncontrolling interests	4,903	2,657
Proceeds received from exercise of employee share options and other	662	664
Repurchase of shares related to stock compensation agreements and related tax withholdings and other	(85)	(114)
Proceeds from the issuance of preferred shares	—	291,195
Net cash (used in) provided by financing activities	(663,392)	452,359
Net (decrease) increase in cash and cash equivalents and restricted cash	(953,303)	537,828
Cash and cash equivalents and restricted cash at beginning of period	1,930,351	1,730,369
Cash and cash equivalents and restricted cash at end of period	$ 977,048	$ 2,268,197
Reconciliation of Cash and Cash Equivalents and Restricted Cash:		
Cash and cash equivalents at beginning of period	$ 1,760,225	$ 1,624,482
Restricted cash at beginning of period	170,126	105,887
Cash and cash equivalents and restricted cash at beginning of period	$ 1,930,351	$ 1,730,369
Cash and cash equivalents at end of period	$ 845,423	$ 2,128,964
Restricted cash at end of period	131,625	139,233
Cash and cash equivalents and restricted cash at end of period	$ 977,048	$ 2,268,197
Supplemental Disclosure of Cash Flow Information:		
Cash payments for interest, excluding capitalized interest of $12,095 and $31,785	$ 170,839	$ 137,937
Cash payments for income taxes	$ 6,919	$ 8,426
Non-Cash Investing and Financing Activities:		
Additional estimated lease liability arising from the recognition of right-of-use asset	$ 350,000	$ —
Redeemable Class A unit measurement adjustment	215,619	(78,848)
Increase in accumulated other comprehensive income due to change in fair value of consolidated interest rate swaps and other	200,838	25,555
Accrued capital expenditures included in accounts payable and accrued expenses	86,844	120,635
Reclassification of assets held for sale (included in "other assets")	64,177	79,421
Write-off of fully depreciated assets	(52,475)	(78,353)
Reclassification of condominium units from "development costs and construction in progress" to "220 Central Park South condominium units ready for sale"	30,542	11,767
Increase in assets and liabilities resulting from the consolidation of One Park Avenue:		
Real estate	—	566,013
Identified intangible assets	—	139,545
Mortgages payable	—	525,000
Deferred revenue	—	18,884
Reclassification of Series K cumulative redeemable preferred shares to liabilities upon call for redemption	—	300,000

See notes to consolidated financial statements (unaudited).

VORNADO REALTY L.P.
CONSOLIDATED BALANCE SHEETS
(UNAUDITED)

(Amounts in thousands, except unit amounts)	As of	
	September 30, 2022	December 31, 2021
ASSETS		
Real estate, at cost:		
Land	$ 2,477,956	$ 2,540,193
Buildings and improvements	10,015,452	9,839,166
Development costs and construction in progress	802,272	718,694
Leasehold improvements and equipment	122,948	119,792
Total	13,418,628	13,217,845
Less accumulated depreciation and amortization	(3,606,986)	(3,376,347)
Real estate, net	9,811,642	9,841,498
Right-of-use assets	685,298	337,197
Cash and cash equivalents	845,423	1,760,225
Restricted cash	131,625	170,126
Investments in U.S. Treasury bills	445,165	—
Tenant and other receivables	81,004	79,661
Investments in partially owned entities	3,250,197	3,297,389
Real estate fund investments	930	7,730
220 Central Park South condominium units ready for sale	78,590	57,142
Receivable arising from the straight-lining of rents	692,733	656,318
Deferred leasing costs, net of accumulated amortization of $233,001 and $211,775	380,221	391,693
Identified intangible assets, net of accumulated amortization of $95,661 and $97,186	142,116	154,895
Other assets	630,730	512,714
	$ 17,175,674	$ 17,266,588
LIABILITIES, REDEEMABLE NONCONTROLLING INTERESTS AND EQUITY		
Mortgages payable, net	$ 5,831,769	$ 6,053,343
Senior unsecured notes, net	1,191,322	1,189,792
Unsecured term loan, net	792,847	797,812
Unsecured revolving credit facilities	575,000	575,000
Lease liabilities	731,674	370,206
Accounts payable and accrued expenses	475,151	613,497
Deferred revenue	41,879	48,118
Deferred compensation plan	95,681	110,174
Other liabilities	265,775	304,725
Total liabilities	10,001,098	10,062,667
Commitments and contingencies		
Redeemable noncontrolling interests:		
Class A units - 14,253,759 and 14,033,438 units outstanding	390,539	587,440
Series D cumulative redeemable preferred units - 141,400 units outstanding	3,535	3,535
Total redeemable noncontrolling partnership units	394,074	590,975
Redeemable noncontrolling interest in a consolidated subsidiary	89,228	97,708
Total redeemable noncontrolling interests	483,302	688,683
Partners' equity:		
Partners' capital	9,552,498	9,333,200
Earnings less than distributions	(3,299,630)	(3,079,320)
Accumulated other comprehensive income (loss)	185,178	(17,534)
Total partners' equity	6,438,046	6,236,346
Noncontrolling interests in consolidated subsidiaries	253,228	278,892
Total equity	6,691,274	6,515,238
	$ 17,175,674	$ 17,266,588

See notes to consolidated financial statements (unaudited).

VORNADO REALTY L.P.
CONSOLIDATED STATEMENTS OF INCOME
(UNAUDITED)

(Amounts in thousands, except per unit amounts)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2022	2021	2022	2021
REVENUES:				
Rental revenues	$ 409,144	$ 369,203	$ 1,211,621	$ 1,048,116
Fee and other income	48,287	40,009	141,434	120,014
Total revenues	457,431	409,212	1,353,055	1,168,130
EXPENSES:				
Operating	(221,596)	(212,699)	(660,434)	(594,598)
Depreciation and amortization	(134,526)	(100,867)	(370,631)	(285,998)
General and administrative	(29,174)	(25,553)	(102,292)	(100,341)
Benefit (expense) from deferred compensation plan liability	600	(799)	10,138	(7,422)
Transaction related costs and other	(996)	(9,681)	(4,961)	(10,630)
Total expenses	(385,692)	(349,599)	(1,128,180)	(998,989)
Income from partially owned entities	24,341	26,269	83,775	86,768
(Loss) income from real estate fund investments	(111)	(66)	5,421	5,107
Interest and other investment income, net	5,228	633	9,282	3,694
(Loss) income from deferred compensation plan assets	(600)	799	(10,138)	7,422
Interest and debt expense	(76,774)	(50,946)	(191,523)	(152,904)
Net gains on disposition of wholly owned and partially owned assets	—	10,087	35,384	35,811
Income before income taxes	23,823	46,389	157,076	155,039
Income tax (expense) benefit	(3,711)	25,376	(14,686)	20,551
Net income	20,112	71,765	142,390	175,590
Less net loss (income) attributable to noncontrolling interests in consolidated subsidiaries	3,792	(5,425)	(4,756)	(20,323)
Net income attributable to Vornado Realty L.P.	23,904	66,340	137,634	155,267
Preferred unit distributions	(15,558)	(16,842)	(46,673)	(49,858)
Series K preferred unit issuance costs	—	(9,033)	—	(9,033)
NET INCOME attributable to Class A unitholders	$ 8,346	$ 40,465	$ 90,961	$ 96,376
INCOME PER CLASS A UNIT - BASIC:				
Net income per Class A unit	$ 0.04	$ 0.19	$ 0.43	$ 0.46
Weighted average units outstanding	205,410	204,864	205,271	204,663
INCOME PER CLASS A UNIT - DILUTED:				
Net income per Class A unit	$ 0.04	$ 0.19	$ 0.43	$ 0.46
Weighted average units outstanding	205,912	205,703	205,924	205,616

See notes to consolidated financial statements (unaudited).

VORNADO REALTY L.P.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(UNAUDITED)

(Amounts in thousands)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2022	**2021**	**2022**	**2021**
Net income	$ 20,112	$ 71,765	$ 142,390	$ 175,590
Other comprehensive income:				
Change in fair value of interest rate swaps and other	117,219	5,362	200,838	25,555
Other comprehensive income of nonconsolidated subsidiaries	5,124	1,322	19,084	6,381
Comprehensive income	142,455	78,449	362,312	207,526
Less comprehensive loss (income) attributable to noncontrolling interests in consolidated subsidiaries	1,626	(5,425)	(6,922)	(20,323)
Comprehensive income attributable to Vornado Realty L.P.	$ 144,081	$ 73,024	$ 355,390	$ 187,203

See notes to consolidated financial statements (unaudited).

VORNADO REALTY L.P.
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(UNAUDITED)

(Amounts in thousands, except per unit amounts)

	Preferred Units		Class A Units Owned by Vornado		Earnings Less Than Distributions	Accumulated Other Comprehensive Income	Non-controlling Interests in Consolidated Subsidiaries	Total Equity
	Units	Amount	Units	Amount				
For the Three Months Ended September 30, 2022:								
Balance as of June 30, 2022	48,793	$ 1,182,459	191,775	$ 8,346,811	$ (3,205,751)	$ 73,300	$ 253,994	$ 6,650,813
Net income attributable to Vornado Realty L.P.	—	—	—	—	23,904	—	—	23,904
Net income attributable to redeemable partnership units	—	—	—	—	(606)	—	—	(606)
Net income attributable to nonredeemable noncontrolling interests in consolidated subsidiaries	—	—	—	—	—	—	967	967
Distributions to Vornado ($0.53 per unit)	—	—	—	—	(101,656)	—	—	(101,656)
Distributions to preferred unitholders (see Note 12 for distributions per unit amounts)	—	—	—	—	(15,529)	—	—	(15,529)
Class A units issued to Vornado:								
Upon redemption of redeemable Class A units, at redemption value	—	—	34	992	—	—	—	992
Under Vornado's dividend reinvestment plan	—	—	7	221	—	—	—	221
Contributions	—	—	—	—	—	—	650	650
Distributions	—	—	—	—	—	—	(4,548)	(4,548)
Deferred compensation units and options	—	—	—	155	—	—	—	155
Other comprehensive income of nonconsolidated subsidiaries	—	—	—	—	—	5,124	—	5,124
Change in fair value of interest rate swaps and other	—	—	—	—	—	117,219	—	117,219
Redeemable Class A unit measurement adjustment	—	—	—	21,857	—	—	—	21,857
Noncontrolling interests' share of above adjustments	—	—	—	—	—	(10,465)	2,166	(8,299)
Other	—	—	1	3	8	—	(1)	10
Balance as of September 30, 2022	48,793	$ 1,182,459	191,817	$ 8,370,039	$ (3,299,630)	$ 185,178	$ 253,228	$ 6,691,274

See notes to consolidated financial statements (unaudited).

VORNADO REALTY L.P.
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY - CONTINUED
(UNAUDITED)

(Amounts in thousands, except per unit amounts)

	Preferred Units		Class A Units Owned by Vornado		Earnings Less Than Distributions	Accumulated Other Comprehensive Loss	Non-controlling Interests in Consolidated Subsidiaries	Total Equity
	Units	Amount	Units	Amount				
For the Three Months Ended September 30, 2021:								
Balance as of June 30, 2021	48,793	$ 1,182,291	191,561	$ 8,076,674	$ (2,925,161)	$ (51,437)	$ 285,950	$ 6,568,317
Net income attributable to Vornado Realty L.P.	—	—	—	—	66,340	—	—	66,340
Net income attributable to redeemable partnership units	—	—	—	—	(2,818)	—	—	(2,818)
Net income attributable to nonredeemable noncontrolling interests in consolidated subsidiaries	—	—	—	—	—	—	4,299	4,299
Distributions to Vornado ($0.53 per unit)	—	—	—	—	(101,527)	—	—	(101,527)
Distributions to preferred unitholders (see Note 12 for distributions per unit amounts)	—	—	—	—	(16,800)	—	—	(16,800)
Series O cumulative redeemable preferred units issuance	12,000	291,195	—	—	—	—	—	291,195
Class A units issued to Vornado:								
Upon redemption of redeemable Class A units, at redemption value	—	—	114	4,749	—	—	—	4,749
Under Vornado's dividend reinvestment plan	—	—	6	224	—	—	—	224
Contributions	—	—	—	—	—	—	1,110	1,110
Distributions	—	—	—	—	—	—	(5,877)	(5,877)
Conversion of Series A preferred units to Class A units	—	(13)	1	13	—	—	—	—
Deferred compensation units and options	—	—	(1)	226	—	—	—	226
Other comprehensive income of nonconsolidated subsidiaries	—	—	—	—	—	1,322	—	1,322
Change in fair value of interest rate swaps	—	—	—	—	—	5,360	—	5,360
Redeemable Class A unit measurement adjustment	—	—	—	64,100	—	—	—	64,100
Series K cumulative redeemable preferred units called for redemption	(12,000)	(290,967)	—	—	(9,033)	—	—	(300,000)
Redeemable partnership units' share of above adjustments	—	—	—	—	—	(426)	—	(426)
Other	—	(7)	—	(3)	—	2	39	31
Balance as of September 30, 2021	48,793	$ 1,182,499	191,681	$ 8,145,983	$ (2,988,999)	$ (45,179)	$ 285,521	$ 6,579,825

See notes to consolidated financial statements (unaudited).

VORNADO REALTY L.P.
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY - CONTINUED
(UNAUDITED)

(Amounts in thousands, except per unit amounts)

	Preferred Units		Class A Units Owned by Vornado		Earnings Less Than Distributions	Accumulated Other Comprehensive (Loss) Income	Non-controlling Interests in Consolidated Subsidiaries	Total Equity
	Units	Amount	Units	Amount				
For the Nine Months Ended September 30, 2022:								
Balance as of December 31, 2021	48,793	$ 1,182,459	191,724	$ 8,150,741	$ (3,079,320)	$ (17,534)	$ 278,892	$ 6,515,238
Net income attributable to Vornado Realty L.P.	—	—	—	—	137,634	—	—	137,634
Net income attributable to redeemable partnership units	—	—	—	—	(6,382)	—	—	(6,382)
Net income attributable to nonredeemable noncontrolling interests in consolidated subsidiaries	—	—	—	—	—	—	13,236	13,236
Distributions to Vornado ($1.59 per unit)	—	—	—	—	(304,896)	—	—	(304,896)
Distributions to preferred unitholders (see Note 12 for distributions per unit amounts)	—	—	—	—	(46,587)	—	—	(46,587)
Class A units issued to Vornado:								
Upon redemption of redeemable Class A units, at redemption value	—	—	76	2,569	—	—	—	2,569
Under Vornado's employees' share option plan	—	—	—	7	—	—	—	7
Under Vornado's dividend reinvestment plan	—	—	19	655	—	—	—	655
Contributions	—	—	—	—	—	—	4,903	4,903
Distributions	—	—	—	—	—	—	(45,976)	(45,976)
Deferred compensation units and options	—	—	(2)	447	(85)	—	—	362
Other comprehensive income of nonconsolidated subsidiaries	—	—	—	—	—	19,084	—	19,084
Change in fair value of interest rate swaps and other	—	—	—	—	—	200,838	—	200,838
Redeemable Class A unit measurement adjustment	—	—	—	215,619	—	—	—	215,619
Noncontrolling interests' share of above adjustments	—	—	—	—	—	(17,210)	2,166	(15,044)
Other	—	—	—	1	6	—	7	14
Balance as of September 30, 2022	48,793	$ 1,182,459	191,817	$ 8,370,039	$ (3,299,630)	$ 185,178	$ 253,228	$ 6,691,274

See notes to consolidated financial statements (unaudited).

VORNADO REALTY L.P.
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY - CONTINUED
(UNAUDITED)

(Amounts in thousands, except per unit amounts)

	Preferred Units		Class A Units Owned by Vornado		Earnings Less Than Distributions	Accumulated Other Comprehensive Loss	Non-controlling Interests in Consolidated Subsidiaries	Total Equity
	Units	Amount	Units	Amount				
For the Nine Months Ended September 30, 2021:								
Balance as of December 31, 2020	48,793	$ 1,182,339	191,355	$ 8,200,140	$ (2,774,182)	$ (75,099)	$ 414,957	$ 6,948,155
Net income attributable to Vornado Realty L.P.	—	—	—	—	155,267	—	—	155,267
Net income attributable to redeemable partnership units	—	—	—	—	(6,683)	—	—	(6,683)
Net income attributable to nonredeemable noncontrolling interests in consolidated subsidiaries	—	—	—	—	—	—	18,804	18,804
Distributions to Vornado ($1.59 per unit)	—	—	—	—	(304,516)	—	—	(304,516)
Distributions to preferred unitholders (see Note 12 for distributions per unit amounts)	—	—	—	—	(49,734)	—	—	(49,734)
Series O cumulative redeemable preferred units issuance	12,000	291,195	—	—	—	—	—	291,195
Class A Units issued to Vornado:								
Upon redemption of redeemable Class A units, at redemption value	—	—	313	13,058	—	—	—	13,058
Under Vornado's employees' share option plan	—	—	—	10	—	—	—	10
Under Vornado's dividend reinvestment plan	—	—	16	654	—	—	—	654
Contributions	—	—	—	—	—	—	2,657	2,657
Distributions	—	—	—	—	—	—	(150,934)	(150,934)
Conversion of Series A preferred units to Class A units	—	(13)	1	13	—	—	—	—
Deferred compensation units and options	—	—	(4)	675	(114)	—	—	561
Other comprehensive income of nonconsolidated subsidiaries	—	—	—	—	—	6,381	—	6,381
Change in fair value of interest rate swaps	—	—	—	—	—	25,553	—	25,553
Unearned 2018 Out-Performance Plan awards acceleration	—	—	—	10,283	—	—	—	10,283
Redeemable Class A unit measurement adjustment	—	—	—	(78,848)	—	—	—	(78,848)
Series K cumulative redeemable preferred units called for redemption	(12,000)	(290,967)	—	—	(9,033)	—	—	(300,000)
Redeemable partnership units' share of above adjustments	—	—	—	—	—	(2,016)	—	(2,016)
Other	—	(55)	—	(2)	(4)	2	37	(22)
Balance as of September 30, 2021	48,793	$ 1,182,499	191,681	$ 8,145,983	$ (2,988,999)	$ (45,179)	$ 285,521	$ 6,579,825

See notes to consolidated financial statements (unaudited).

VORNADO REALTY L.P.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)

(Amounts in thousands)	For the Nine Months Ended September 30,	
	2022	2021
Cash Flows from Operating Activities:		
Net income	$ 142,390	$ 175,590
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization (including amortization of deferred financing costs)	386,697	299,749
Distributions of income from partially owned entities	137,758	171,367
Equity in net income of partially owned entities	(83,775)	(86,768)
Straight-lining of rents	(45,835)	11,651
Net gains on disposition of wholly owned and partially owned assets	(35,384)	(35,811)
Stock-based compensation expense	22,887	32,889
Change in deferred tax liability	9,992	2,497
Amortization of below-market leases, net	(3,788)	(7,939)
Net realized and unrealized loss on real estate fund investments	1,128	789
Write-off of lease receivables deemed uncollectible	782	7,219
Real estate impairment losses	—	7,880
Other non-cash adjustments	2,560	(5,046)
Changes in operating assets and liabilities:		
Real estate fund investments	—	(789)
Tenant and other receivables	(2,128)	(12,092)
Prepaid assets	33,995	(44,731)
Other assets	(22,706)	(77,508)
Accounts payable and accrued expenses	6,649	43,067
Other liabilities	8,605	(3,911)
Net cash provided by operating activities	559,827	478,103
Cash Flows from Investing Activities:		
Purchase of U.S. Treasury bills	(794,793)	—
Development costs and construction in progress	(557,884)	(444,645)
Proceeds from maturities of U.S. Treasury bills	349,461	—
Proceeds from sales of real estate	253,958	100,024
Additions to real estate	(120,124)	(113,374)
Distributions of capital from partially owned entities	20,566	106,005
Proceeds from sale of condominium units and ancillary amenities at 220 Central Park South	16,124	97,683
Investments in partially owned entities	(15,046)	(12,366)
Acquisitions of real estate and other	(2,000)	(3,000)
Acquisition of additional 45.0% ownership interest in One Park Avenue (inclusive of $5,806 of prorations and net working capital and net of $39,370 of cash and restricted cash balances consolidated upon acquisition)	—	(123,936)
Proceeds from repayments of loan receivables	—	975
Net cash used in investing activities	(849,738)	(392,634)

See notes to consolidated financial statements (unaudited).

VORNADO REALTY L.P.
CONSOLIDATED STATEMENTS OF CASH FLOWS - CONTINUED
(UNAUDITED)

(Amounts in thousands)	For the Nine Months Ended September 30, 2022	2021
Cash Flows from Financing Activities:		
Repayments of borrowings	$ (1,245,973)	$ (1,578,843)
Proceeds from borrowings	1,029,773	2,298,007
Distributions to Vornado	(304,896)	(304,516)
Distributions to redeemable security holders and noncontrolling interests in consolidated subsidiaries	(68,716)	(173,356)
Distributions to preferred unitholders	(46,587)	(49,400)
Debt issuance costs	(32,473)	(33,935)
Contributions from noncontrolling interests in consolidated subsidiaries	4,903	2,657
Proceeds received from exercise of Vornado stock options and other	662	664
Repurchase of Class A units related to stock compensation agreements and related tax withholdings and other	(85)	(114)
Proceeds from the issuance of preferred units	—	291,195
Net cash (used in) provided by financing activities	(663,392)	452,359
Net (decrease) increase in cash and cash equivalents and restricted cash	(953,303)	537,828
Cash and cash equivalents and restricted cash at beginning of period	1,930,351	1,730,369
Cash and cash equivalents and restricted cash at end of period	$ 977,048	$ 2,268,197
Reconciliation of Cash and Cash Equivalents and Restricted Cash:		
Cash and cash equivalents at beginning of period	$ 1,760,225	$ 1,624,482
Restricted cash at beginning of period	170,126	105,887
Cash and cash equivalents and restricted cash at beginning of period	$ 1,930,351	$ 1,730,369
Cash and cash equivalents at end of period	$ 845,423	$ 2,128,964
Restricted cash at end of period	131,625	139,233
Cash and cash equivalents and restricted cash at end of period	$ 977,048	$ 2,268,197
Supplemental Disclosure of Cash Flow Information:		
Cash payments for interest, excluding capitalized interest of $12,095 and $31,785	$ 170,839	$ 137,937
Cash payments for income taxes	$ 6,919	$ 8,426
Non-Cash Investing and Financing Activities:		
Additional estimated lease liability arising from the recognition of right-of-use asset	$ 350,000	$ —
Redeemable Class A unit measurement adjustment	215,619	(78,848)
Increase in accumulated other comprehensive income due to change in fair value of consolidated interest rate swaps and other	200,838	25,555
Accrued capital expenditures included in accounts payable and accrued expenses	86,844	120,635
Reclassification of assets held for sale (included in "other assets")	64,177	79,421
Write-off of fully depreciated assets	(52,475)	(78,353)
Reclassification of condominium units from "development costs and construction in progress" to "220 Central Park South condominium units ready for sale"	30,542	11,767
Increase in assets and liabilities resulting from the consolidation of One Park Avenue:		
Real estate	—	566,013
Identified intangible assets	—	139,545
Mortgages payable	—	525,000
Deferred revenue	—	18,884
Reclassification of Series K cumulative redeemable preferred units to liabilities upon call for redemption	—	300,000

See notes to consolidated financial statements (unaudited)

1. Organization

Vornado Realty Trust ("Vornado") is a fully-integrated real estate investment trust ("REIT") and conducts its business through, and substantially all of its interests in properties are held by, Vornado Realty L.P. (the "Operating Partnership"), a Delaware limited partnership. Vornado is the sole general partner of and owned approximately 92.1% of the common limited partnership interest in the Operating Partnership as of September 30, 2022. All references to the "Company," "we," "us" and "our" mean, collectively, Vornado, the Operating Partnership and those subsidiaries consolidated by Vornado.

2. Basis of Presentation

The accompanying consolidated financial statements are unaudited and include the accounts of Vornado and the Operating Partnership and their consolidated subsidiaries. All adjustments (which include only normal recurring adjustments) necessary to present fairly the financial position, results of operations and changes in cash flows have been made. Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") have been condensed or omitted. These condensed consolidated financial statements have been prepared in accordance with the instructions to Form 10-Q of the Securities and Exchange Commission ("SEC") and should be read in conjunction with the consolidated financial statements and notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2021, as filed with the SEC.

We have made estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates. The results of operations for the three and nine months ended September 30, 2022 are not necessarily indicative of the operating results for the full year. In addition, certain prior year balances have been reclassified in order to conform to the current period presentation.

Our investments in U.S. Treasury bills are accounted for as available-for-sale debt investments and are recorded at fair value in "investments in U.S. Treasury bills" on our consolidated balance sheets. See Note 14 - *Fair Value Measurements* for information on our investments in U.S. Treasury bills.

3. Recently Issued Accounting Literature

In March 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2020-04 establishing Accounting Standards Codification ("ASC") Topic 848, *Reference Rate Reform*, and in January 2021, the FASB issued ASU 2021-01, *Reference Rate Reform (Topic 848): Scope* (collectively, "ASC 848"). ASC 848 contains practical expedients for reference rate reform related activities that impact debt, leases, derivatives and other contracts. The guidance in ASC 848 is optional and may be elected over time as reference rate reform activities occur. We have elected to apply the hedge accounting expedients related to probability and the assessments of effectiveness for future LIBOR-indexed cash flows to assume that the index upon which future hedged transactions will be based matches the index on the corresponding derivatives. Application of these expedients preserves the presentation of derivatives consistent with past presentation. We continue to evaluate the impact of the guidance and may apply other elections as applicable as additional changes in the market occur.

In August 2020, the FASB issued an update ("ASU 2020-06") *Debt - Debt with Conversion and Other Options (ASC Subtopic 470-20) and Derivatives and Hedging - Contracts in Entity's Own Equity (ASC Subtopic 815-40)*. ASU 2020-06 simplifies the accounting for convertible instruments by reducing the number of accounting models for convertible debt instruments and convertible preferred stock, removes certain settlement conditions that are required for equity contracts to qualify for the derivative scope exception and also simplifies the diluted earnings per share calculation in certain areas. ASU 2020-06 is effective for reporting periods beginning after December 15, 2021, with early adoption permitted. We adopted this update effective January 1, 2022 using the modified retrospective approach which did not have a material impact on our consolidated financial statements and disclosures.

In July 2021, the FASB issued an update ("ASU 2021-05") *Lessors - Certain Leases with Variable Lease Payments* to ASC Topic 842, *Leases* ("ASC 842"). ASU 2021-05 provides additional ASC 842 classification guidance as it relates to a lessor's accounting for certain leases with variable lease payments. ASU 2021-05 requires a lessor to classify a lease with variable payments that do not depend on an index or rate as an operating lease if either a sales-type lease or direct financing lease classification would trigger a day-one loss. ASU 2021-05 is effective for reporting periods beginning after December 15, 2021, with early adoption permitted. We adopted this update effective January 1, 2022 which did not have an impact our consolidated financial statements and disclosures.

4. Revenue Recognition

Below is a summary of our revenues by segment. Additional financial information related to these reportable segments for the three and nine months ended September 30, 2022 and 2021 is set forth in Note 20 - *Segment Information.*

(Amounts in thousands)	For the Three Months Ended September 30, 2022			For the Three Months Ended September 30, 2021		
	Total	New York	Other	Total	New York	Other
Property rentals	$ 371,754	$ 303,574	$ 68,180	$ 345,235	$ 273,197	$ 72,038
Trade shows[(1)]	18,654	—	18,654	12,605	—	12,605
Lease revenues[(2)]	390,408	303,574	86,834	357,840	273,197	84,643
Tenant services	14,134	9,937	4,197	11,363	7,565	3,798
Parking revenues	4,602	3,820	782	—	—	—
Rental revenues	409,144	317,331	91,813	369,203	280,762	88,441
BMS cleaning fees	35,062	37,371	(2,309) [(3)]	30,827	32,630	(1,803) [(3)]
Management and leasing fees	2,532	2,595	(63)	2,509	2,680	(171)
Other income	10,693	2,736	7,957	6,673	571	6,102
Fee and other income	48,287	42,702	5,585	40,009	35,881	4,128
Total revenues	$ 457,431	$ 360,033	$ 97,398	$ 409,212	$ 316,643	$ 92,569

See notes below.

(Amounts in thousands)	For the Nine Months Ended September 30, 2022			For the Nine Months Ended September 30, 2021		
	Total	New York	Other	Total	New York	Other
Property rentals	$ 1,132,690	$ 921,179	$ 211,511	$ 1,008,237	$ 795,841	$ 212,396
Trade shows[(1)]	29,640	—	29,640	12,605	—	12,605
Lease revenues[(2)]	1,162,330	921,179	241,151	1,020,842	795,841	225,001
Tenant services	35,484	25,481	10,003	27,274	18,502	8,772
Parking revenues	13,807	11,556	2,251	—	—	—
Rental revenues	1,211,621	958,216	253,405	1,048,116	814,343	233,773
BMS cleaning fees	101,752	108,288	(6,536) [(3)]	87,387	92,178	(4,791) [(3)]
Management and leasing fees	8,167	8,573	(406)	10,951	11,290	(339)
Other income	31,515	7,666	23,849	21,676	3,947	17,729
Fee and other income	141,434	124,527	16,907	120,014	107,415	12,599
Total revenues	$ 1,353,055	$ 1,082,743	$ 270,312	$ 1,168,130	$ 921,758	$ 246,372

(1) We cancelled trade shows at theMART beginning late March of 2020 due to the COVID-19 pandemic and resumed in the third quarter of 2021.
(2) The components of lease revenues were as follows:

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2022	2021	2022	2021
Fixed billings	$ 353,040	$ 329,499	$ 1,025,182	$ 945,322
Variable billings	28,919	29,008	93,118	90,780
Total contractual operating lease billings	381,959	358,507	1,118,300	1,036,102
Adjustment for straight-line rents and amortization of acquired below-market leases and other, net	8,730	1,313	44,812	(8,041)
Less: write-off of straight-line rent and tenant receivables deemed uncollectible	(281)	(1,980)	(782)	(7,219)
Lease revenues	$ 390,408	$ 357,840	$ 1,162,330	$ 1,020,842

(3) Represents the elimination of Building Maintenance Services LLC ("BMS") cleaning fees related to theMART and 555 California Street which are included as income in the New York segment.

5. Real Estate Fund Investments

We are the general partner and investment manager of Vornado Capital Partners Real Estate Fund (the "Fund") and own a 25.0% interest in the Fund, which had an initial eight-year term ending February 2019. On January 29, 2018, the Fund's term was extended to February 2023, by which time the Fund intends to dispose of its remaining investments and wind down its business, subject to potential additional extensions. The Fund's three-year investment period ended in July 2013. The Fund is accounted for under ASC Topic 946, *Financial Services – Investment Companies* ("ASC 946") and its investments are reported on its balance sheet at fair value, with changes in value each period recognized in earnings. We consolidate the accounts of the Fund into our consolidated financial statements, retaining the fair value basis of accounting.

We are the general partner and investment manager of the Crowne Plaza Times Square Hotel Joint Venture (the "Crowne Plaza Joint Venture") and own a 57.1% interest in the joint venture which owns the 24.3% interest in the Crowne Plaza Times Square Hotel not owned by the Fund. The Crowne Plaza Joint Venture is also accounted for under ASC 946 and we consolidate the accounts of the joint venture into our consolidated financial statements, retaining the fair value basis of accounting. On June 9, 2020, the joint venture between the Fund and the Crowne Plaza Joint Venture defaulted on the $274,355,000 non-recourse loan on the Crowne Plaza Times Square Hotel. The interest-only loan, which bears interest at a floating rate of LIBOR plus 3.69% (6.82% as of September 30, 2022) and provides for additional default interest of 3.00%, was scheduled to mature on July 9, 2020.

On May 20, 2022, 1100 Lincoln Road was conveyed to the lender pursuant to a deed-in-lieu of foreclosure agreement in exchange for a $5,672,000 payment to the Fund. From the inception of this investment through its disposition, the Fund realized a $53,724,000 net loss.

As of September 30, 2022, we had two real estate fund investments through the Fund and the Crowne Plaza Joint Venture with an aggregate fair value of $930,000, $275,459,000 below cost, and had remaining unfunded commitments of $28,465,000, of which our share was $8,849,000. As of December 31, 2021, we had three real estate fund investments with an aggregate fair value of $7,730,000.

Below is a summary of (loss) income from the Fund and the Crowne Plaza Joint Venture.

(Amounts in thousands)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2022	2021	2022	2021
Net investment (loss) income	$ (111)	$ (66)	$ 6,549	$ 5,896
Previously recorded unrealized loss on exited investments	—	—	59,396	—
Realized loss on exited investments	—	—	(53,724)	—
Net unrealized loss on held investments	—	—	(6,800)	(789)
(Loss) income from real estate fund investments	(111)	(66)	5,421	5,107
Less loss (income) attributable to noncontrolling interests in consolidated subsidiaries	312	360	(3,287)	(2,914)
Income from real estate fund investments, net of noncontrolling interests in consolidated subsidiaries	$ 201	$ 294	$ 2,134	$ 2,193

6. Investments in Partially Owned Entities

Fifth Avenue and Times Square JV

As of September 30, 2022, we own a 51.5% common interest in a joint venture ("Fifth Avenue and Times Square JV") which owns interests in properties located at 640 Fifth Avenue, 655 Fifth Avenue, 666 Fifth Avenue, 689 Fifth Avenue, 697-703 Fifth Avenue, 1535 Broadway and 1540 Broadway (collectively, the "Properties"). The remaining 48.5% common interest in the joint venture is owned by a group of institutional investors (the "Investors"). Our 51.5% common interest in the joint venture represents an effective 51.0% interest in the Properties. The 48.5% common interest in the joint venture owned by the Investors represents an effective 47.2% interest in the Properties. We provide various services to Fifth Avenue and Times Square JV in accordance with management, development, leasing and other agreements.

We also own $1.828 billion of preferred equity security interests in certain of the properties. The preferred equity has an annual coupon of 4.25% through April 2024, increasing to 4.75% for the subsequent five years and thereafter at a formulaic rate. It can be redeemed under certain conditions on a tax deferred basis.

As of September 30, 2022, the carrying amount of our investment in the joint venture was less than our share of the equity in the net assets of the joint venture by approximately $378,876,000, the basis difference primarily resulting from non-cash impairment losses recognized during 2020. Substantially all of this basis difference was allocated, based on our estimates of the fair values of Fifth Avenue and Times Square JV's assets and liabilities, to real estate (land and buildings). We are amortizing the basis difference related to the buildings into earnings as a reduction to depreciation expense over their estimated useful lives.

6. Investments in Partially Owned Entities - continued

Fifth Avenue and Times Square JV - continued

On April 18, 2022, we received a $13,613,000 refund of New York City real property transfer tax that we previously paid in connection with the transfer of the Properties to Fifth Avenue and Times Square JV in April 2019. The receipt of the refund was recognized in "net gains on disposition of wholly owned and partially owned assets" on our consolidated statements of income for the nine months ended September 30, 2022.

330 West 34th Street land owner joint venture

On August 18, 2022, the joint venture that owns the fee interest in the 330 West 34th Street land, in which we have a 34.8% interest, completed a $100,000,000 refinancing. The interest-only loan bears interest at a fixed rate of 4.55% and matures in September 2032. In connection with the refinancing, we realized net proceeds of $10,500,000. The loan replaces the previous $50,150,000 loan that bore interest at a fixed rate of 5.71%.

Alexander's, Inc. ("Alexander's") (NYSE: ALX)

As of September 30, 2022, we own 1,654,068 Alexander's common shares, or approximately 32.4% of Alexander's common equity. We manage, develop and lease Alexander's properties pursuant to agreements which expire in March of each year and are automatically renewable.

As of September 30, 2022, the market value ("fair value" pursuant to ASC Topic 820, *Fair Value Measurements* ("ASC 820")) of our investment in Alexander's, based on Alexander's September 30, 2022 closing share price of $208.96, was $345,634,000, or $254,356,000 in excess of the carrying amount on our consolidated balance sheets. As of September 30, 2022, the carrying amount of our investment in Alexander's, excluding amounts owed to us, exceeded our share of the equity in the net assets of Alexander's by approximately $29,828,000. The majority of this basis difference resulted from the excess of our purchase price for the Alexander's common stock acquired over the book value of Alexander's net assets. Substantially all of this basis difference was allocated, based on our estimates of the fair values of Alexander's assets and liabilities, to real estate (land and buildings). We are amortizing the basis difference related to the buildings into earnings as additional depreciation expense over their estimated useful lives. This depreciation is not material to our share of equity in Alexander's net income.

Below is a schedule summarizing our investments in partially owned entities.

(Amounts in thousands)	Percentage Ownership at September 30, 2022	Balance as of September 30, 2022	Balance as of December 31, 2021
Investments:			
Fifth Avenue and Times Square JV (see page 26 for details):	51.5%	$ 2,765,475	$ 2,770,633
Partially owned office buildings/land[(1)]	Various	271,634	298,415
Alexander's	32.4%	91,278	91,405
Other investments[(2)]	Various	121,810	136,936
		$ 3,250,197	$ 3,297,389
Investments in partially owned entities included in other liabilities[(3)]:			
7 West 34th Street	53.0%	$ (63,124)	$ (60,918)
85 Tenth Avenue	49.9%	(16,884)	(18,067)
		$ (80,008)	$ (78,985)

(1) Includes interests in 280 Park Avenue, 650 Madison Avenue, 512 West 22nd Street, 61 Ninth Avenue and others.
(2) Includes interests in Independence Plaza, Rosslyn Plaza and others.
(3) Our negative basis results from distributions in excess of our investment.

6. Investments in Partially Owned Entities - continued

Below is a schedule of income from partially owned entities.

(Amounts in thousands)

	Percentage Ownership at September 30, 2022	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
		2022	2021	2022	2021
Our share of net income (loss):					
Fifth Avenue and Times Square JV (see page 26 for details):					
Equity in net income	51.5%	$ 11,941	$ 12,671	$ 41,915	$ 32,314
Return on preferred equity, net of our share of the expense		9,430	9,430	27,985	27,985
		21,371	22,101	69,900	60,299
Alexander's (see page 27 for details):					
Equity in net income[(1)]	32.4%	4,740	3,710	14,235	17,764
Management, leasing and development fees		1,170	1,085	3,352	3,622
		5,910	4,795	17,587	21,386
Partially owned office buildings[(2)]	Various	(4,732)	418	(8,080)	8,395
Other investments[(3)]	Various	1,792	(1,045)	4,368	(3,312)
		$ 24,341	$ 26,269	$ 83,775	$ 86,768

(1) On June 4, 2021, Alexander's completed the sale of a parcel of land in the Bronx, New York for $10,000. As a result of the sale, we recognized our $2,956 share of the net gain and also received a $300 sales commission from Alexander's.

(2) Includes interests in 280 Park Avenue, 650 Madison Avenue, One Park Avenue (consolidated from August 5, 2021), 7 West 34th Street, 512 West 22nd Street, 61 Ninth Avenue, 85 Tenth Avenue and others.

(3) Includes interests in Independence Plaza, Rosslyn Plaza and others.

7. 220 Central Park South ("220 CPS")

During the nine months ended September 30, 2022, we closed on the sale of one condominium unit and ancillary amenities at 220 CPS for net proceeds of $16,124,000 resulting in a financial statement net gain of $7,030,000 which is included in "net gains on disposition of wholly owned and partially owned assets" on our consolidated statements of income. In connection with these sales, $945,000 of income tax expense was recognized on our consolidated statements of income. From inception to September 30, 2022, we have closed on the sale of 107 units and ancillary amenities for net proceeds of $3,023,020,000 resulting in financial statement net gains of $1,124,285,000.

8. Dispositions

SoHo Properties

On January 13, 2022, we sold two Manhattan retail properties located at 478-482 Broadway and 155 Spring Street for $84,500,000 and realized net proceeds of $81,399,000. In connection with the sale, we recognized a net gain of $551,000 which is included in "net gains on disposition of wholly owned and partially owned assets" on our consolidated statements of income.

Center Building (33-00 Northern Boulevard)

On June 17, 2022, we sold the Center Building, an eight-story 498,000 square foot office building located at 33-00 Northern Boulevard in Long Island City, New York, for $172,750,000. We realized net proceeds of $58,946,000 after repayment of the existing $100,000,000 mortgage loan and closing costs. In connection with the sale, we recognized a net gain of $15,213,000 which is included in "net gains on disposition of wholly owned and partially owned assets" on our consolidated statements of income.

40 Fulton Street

On August 17, 2022, we entered into an agreement to sell 40 Fulton Street, a 251,000 square foot Manhattan office and retail building, for $102,000,000. We expect to close the sale in the fourth quarter of 2022 and recognize a net gain of approximately $33,000,000 after closing costs. The sale is subject to customary closing conditions. As of September 30, 2022, the $64,177,000 carrying value of the property was classified as held-for-sale and is included in "other assets" on our consolidated balance sheets.

9. Identified Intangible Assets and Liabilities

The following summarizes our identified intangible assets (primarily above-market leases) and liabilities (primarily below-market leases).

(Amounts in thousands)	Balance as of	
	September 30, 2022	December 31, 2021
Identified intangible assets:		
Gross amount	$ 237,777	$ 252,081
Accumulated amortization	(95,661)	(97,186)
Total, net	$ 142,116	$ 154,895
Identified intangible liabilities (included in deferred revenue):		
Gross amount	$ 244,396	$ 256,065
Accumulated amortization	(206,711)	(212,245)
Total, net	$ 37,685	$ 43,820

Amortization of acquired below-market leases, net of acquired above-market leases, resulted in an increase to rental revenues of $1,384,000 and $2,222,000 for the three months ended September 30, 2022 and 2021, respectively, and $3,788,000 and $7,939,000 for the nine months ended September 30, 2022 and 2021, respectively. Estimated annual amortization for each of the five succeeding years commencing January 1, 2023 is below:

(Amounts in thousands)	Acquired below (above) market leases, net
2023	$ 5,471
2024	2,352
2025	941
2026	299
2027	(148)

Amortization of all other identified intangible assets (a component of depreciation and amortization expense) was $1,987,000 and $2,066,000 for the three months ended September 30, 2022 and 2021, respectively, and $8,529,000 and $4,377,000 for the nine months ended September 30, 2022 and 2021, respectively. Estimated annual amortization for each of the five succeeding years commencing January 1, 2023 is below:

(Amounts in thousands)	Other identified intangible assets
2023	$ 7,948
2024	7,128
2025	6,077
2026	5,884
2027	5,449

10. Debt

Secured Debt

On June 15, 2022, we completed a $480,000,000 refinancing of 100 West 33rd Street, a 1.1 million square foot building comprised of 859,000 square feet of office space and 255,000 square feet of retail space. The interest-only loan bears a rate of SOFR plus 1.65% (4.64% as of September 30, 2022) through March 2024, increasing to SOFR plus 1.85% thereafter. The interest rate on the loan was swapped to a fixed rate of 5.06% through March 2024, and 5.26% through June 2027. The loan matures in June 2027, with two one-year extension options subject to debt service coverage ratio and loan-to-value tests. The loan replaces the previous $580,000,000 loan that bore interest at LIBOR plus 1.55% and was scheduled to mature in April 2024.

On June 28, 2022, we completed a $700,000,000 refinancing of 770 Broadway, a 1.2 million square foot Class A Manhattan office building. The interest-only loan bears a rate of SOFR plus 2.25% (4.93% as of September 30, 2022) and matures in July 2024 with three one-year extension options (July 2027 as fully extended). The interest rate on the loan was swapped to a fixed rate of 4.98% through July 2027. The loan replaces the previous $700,000,000 loan that bore interest at SOFR plus 1.86% and was scheduled to mature in July 2022.

10. Debt - continued

Unsecured Revolving Credit Facility

On June 30, 2022, we amended and extended one of our two revolving credit facilities. The $1.25 billion amended facility bears interest at a rate of SOFR plus 1.15% (4.18% as of September 30, 2022). The term of the facility was extended from March 2024 to December 2027, as fully extended. The facility fee is 25 basis points. On August 16, 2022, the interest rate on the $575,000,000 drawn on the facility was swapped to a fixed interest rate of 3.88% through August 2027. Our other $1.25 billion revolving credit facility matures in April 2026, as fully extended, and bears a rate of SOFR plus 1.19% with a facility fee of 25 basis points.

Unsecured Term Loan

On June 30, 2022, we extended our $800,000,000 unsecured term loan from February 2024 to December 2027. The extended loan bears interest at a rate of SOFR plus 1.30% (4.33% as of September 30, 2022) and is currently swapped to a fixed rate of 4.05%.

Interest Rate Hedging Activities

We entered into the following interest rate swap arrangements during the nine months ended September 30, 2022. See Note 14 - *Fair Value Measurements* for further information on our consolidated hedging instruments.

(Amounts in thousands)		Notional Amount	All-In Swapped Rate	Swap Expiration Date	Variable Rate Spread
770 Broadway mortgage loan	$	700,000	4.98%	07/27	S+225
Unsecured revolving credit facility		575,000	3.88%	08/27	S+115
Unsecured term loan[(1)]		50,000	4.04%	08/27	S+130
Unsecured term loan (effective 10/23)		500,000	4.39%	10/26	S+130
100 West 33rd Street mortgage loan		480,000	5.06%	06/27	S+165
888 Seventh Avenue mortgage loan[(2)]		200,000	4.66%	09/27	L+170

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(1) Together with the existing $750,000 interest rate swap arrangement expiring October 2023, the $800,000 unsecured term loan balance currently bears interest at a fixed rate of 4.05%.
(2) The remaining $83,200 amortizing mortgage loan balance bears interest at a floating rate of LIBOR plus 1.70%.

Debt Summary

Below is a summary of our consolidated debt balances as of September 30, 2022 and December 31, 2021.

(Amounts in thousands)	Weighted Average Interest Rate at September 30, 2022[(1)]	Balance as of			
		September 30, 2022		December 31, 2021	
Mortgages Payable:					
Fixed rate	3.62%	$	3,570,000	$	2,190,000
Variable rate	4.35%		2,313,015		3,909,215
Total	3.91%		5,883,015		6,099,215
Deferred financing costs, net and other			(51,246)		(45,872)
Total, net		$	5,831,769	$	6,053,343
Unsecured Debt:					
Senior unsecured notes	3.02%	$	1,200,000	$	1,200,000
Deferred financing costs, net and other			(8,678)		(10,208)
Senior unsecured notes, net			1,191,322		1,189,792
Unsecured term loan	4.05%		800,000		800,000
Deferred financing costs, net and other			(7,153)		(2,188)
Unsecured term loan, net			792,847		797,812
Unsecured revolving credit facilities	3.88%		575,000		575,000
Total, net		$	2,559,169	$	2,562,604

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(1) Represents the interest rate in effect as of September 30, 2022 based on the appropriate reference rate as of the contractual reset date plus contractual spread, adjusted for hedging instruments, as applicable.

11. Redeemable Noncontrolling Interests

Redeemable Noncontrolling Partnership Units

Redeemable noncontrolling partnership units are primarily comprised of Class A Operating Partnership units held by third parties and are recorded at the greater of their carrying amount or redemption value at the end of each reporting period. Changes in the value from period to period are charged to “additional capital” in Vornado’s consolidated statements of changes in equity and to “partners’ capital” on the consolidated balance sheets of the Operating Partnership.

Below is a table summarizing the activity of redeemable noncontrolling partnership units.

(Amounts in thousands)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2022	2021	2022	2021
Beginning balance	$ 412,022	$ 654,771	$ 590,975	$ 511,747
Net income	606	2,818	6,382	6,683
Other comprehensive income	8,299	426	15,044	2,016
Distributions	(7,579)	(7,553)	(22,740)	(22,422)
Redemption of Class A units for Vornado common shares, at redemption value	(992)	(4,749)	(2,569)	(13,058)
Redeemable Class A unit measurement adjustment	(21,857)	(64,100)	(215,619)	78,848
Other, net	3,575	13,036	22,601	30,835
Ending balance	$ 394,074	$ 594,649	$ 394,074	$ 594,649

As of September 30, 2022 and December 31, 2021, the aggregate redemption value of redeemable Class A units of the Operating Partnership, which are those units held by third parties, was $390,539,000 and $587,440,000, respectively.

Redeemable noncontrolling partnership units exclude our Series G-1 through G-4 convertible preferred units and Series D-13 cumulative redeemable preferred units, as they are accounted for as liabilities in accordance with ASC Topic 480, *Distinguishing Liabilities and Equity*. Accordingly, the fair value of these units is included as a component of “other liabilities” on our consolidated balance sheets and aggregated $49,383,000 and $49,659,000 as of September 30, 2022 and December 31, 2021, respectively. Changes in the value from period to period, if any, are charged to “interest and debt expense” on our consolidated statements of income.

Redeemable Noncontrolling Interest in a Consolidated Subsidiary

A consolidated joint venture in which we own a 95% interest is developing Farley Office and Retail (the "Project"). During 2020, a historic tax credit investor (the "Tax Credit Investor") funded $92,400,000 of capital contributions and is expected to make additional capital contributions in future periods.

The arrangement includes a put option whereby the joint venture may be obligated to purchase the Tax Credit Investor’s ownership interest in the Project at a future date. The put price is calculated based on a pre-determined formula. As exercise of the put option is outside of the joint venture’s control, the Tax Credit Investor’s interest, together with the put option, have been recorded to “redeemable noncontrolling interest in a consolidated subsidiary” on our consolidated balance sheets. The redeemable noncontrolling interest is recorded at the greater of the carrying amount or redemption value at the end of each reporting period. Changes in the value from period to period are charged to “additional capital” in Vornado’s consolidated statements of changes in equity and to “partners’ capital” on the consolidated balance sheets of the Operating Partnership. There was no adjustment required for the three and nine months ended September 30, 2022 and 2021.

Below is a table summarizing the activity of the redeemable noncontrolling interest in a consolidated subsidiary.

(Amounts in thousands)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2022	2021	2022	2021
Beginning balance	$ 93,987	$ 94,913	$ 97,708	$ 94,520
Net (loss) income	(4,759)	1,126	(8,480)	1,519
Ending balance	$ 89,228	$ 96,039	$ 89,228	$ 96,039

12. Shareholders' Equity/Partners' Capital

The following table sets forth the details of our dividends/distributions per common share/Class A unit and dividends/distributions per share/unit for each class of preferred shares/units of beneficial interest.

(Per share/unit)	For the Three Months Ended September 30, 2022	For the Three Months Ended September 30, 2021	For the Nine Months Ended September 30, 2022	For the Nine Months Ended September 30, 2021
Shares/Units:				
Common shares/Class A units held by Vornado: authorized 250,000,000 shares/units	$ 0.53	$ 0.53	$ 1.59	$ 1.59
Convertible Preferred[(1)]:				
6.5% Series A: authorized 12,902 shares/units[(2)]	0.8125	0.8125	2.4375	2.4375
Cumulative Redeemable Preferred[(1)(3)]:				
5.70% Series K: authorized 12,000,000 shares/units	N/A	0.3563	N/A	1.0689
5.40% Series L: authorized 13,800,000 shares/units	0.3375	0.3375	1.0125	1.0125
5.25% Series M: authorized 13,800,000 shares/units	0.3281	0.3281	0.9843	0.9843
5.25% Series N: authorized 12,000,000 shares/units	0.3281	0.3281	0.9843	0.9843
4.45% Series O: authorized 12,000,000 shares/units	0.2781	0.0278	0.8343	0.0278

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(1) Dividends on preferred shares and distributions on preferred units are cumulative and are payable quarterly in arrears.

(2) Redeemable at the option of Vornado under certain circumstances, at a redemption price of 1.9531 common shares/Class A units per Series A Preferred Share/Unit plus accrued and unpaid dividends/distributions through the date of redemption, or convertible at any time at the option of the holder for 1.9531 common shares/Class A units per Series A Preferred Share/Unit.

(3) Series L preferred shares/units are redeemable at Vornado's option at a redemption price of $25.00 per share/unit, plus accrued and unpaid dividends/distributions through the date of redemption. Series M preferred shares/units are redeemable commencing December 2022, Series N preferred shares/units are redeemable commencing November 2025 and Series O preferred shares/units, are redeemable commencing September 2026. Series K preferred shares/units were redeemed on October 13, 2021.

Accumulated Other Comprehensive Income (Loss)

The following table sets forth the changes in accumulated other comprehensive income (loss) by component.

(Amounts in thousands)	Total	Accumulated other comprehensive income (loss) of nonconsolidated subsidiaries	Change in fair value of interest rate swaps and other	Other
For the three months ended September 30, 2022:				
Balance as of June 30, 2022	$ 73,300	$ 9,897	$ 68,858	$ (5,455)
Other comprehensive income (loss)	111,878	5,124	117,219	(10,465)
Balance as of September 30, 2022	$ 185,178	$ 15,021	$ 186,077	$ (15,920)
For the three months ended September 30, 2021:				
Balance as of June 30, 2021	$ (51,437)	$ (9,279)	$ (45,905)	$ 3,747
Other comprehensive income (loss)	6,258	1,322	5,360	(424)
Balance as of September 30, 2021	$ (45,179)	$ (7,957)	$ (40,545)	$ 3,323
For the nine months ended September 30, 2022:				
Balance as of December 31, 2021	$ (17,534)	$ (4,063)	$ (14,761)	$ 1,290
Other comprehensive income (loss)	202,712	19,084	200,838	(17,210)
Balance as of September 30, 2022	$ 185,178	$ 15,021	$ 186,077	$ (15,920)
For the nine months ended September 30, 2021:				
Balance as of December 31, 2020	$ (75,099)	$ (14,338)	$ (66,098)	$ 5,337
Other comprehensive income (loss)	29,920	6,381	25,553	(2,014)
Balance as of September 30, 2021	$ (45,179)	$ (7,957)	$ (40,545)	$ 3,323

13. Variable Interest Entities ("VIEs")

Unconsolidated VIEs

As of September 30, 2022 and December 31, 2021, we had several unconsolidated VIEs. We do not consolidate these entities because we are not the primary beneficiary and the nature of our involvement in the activities of these entities does not give us power over decisions that significantly affect these entities' economic performance. We account for our investment in these entities under the equity method (see Note 6 – *Investments in Partially Owned Entities*). As of September 30, 2022 and December 31, 2021, the net carrying amount of our investments in these entities was $64,963,000 and $69,435,000, respectively, and our maximum exposure to loss in these entities is limited to the carrying amount of our investments.

Consolidated VIEs

Our most significant consolidated VIEs are the Operating Partnership (for Vornado), the Farley joint venture and certain properties that have noncontrolling interests. These entities are VIEs because the noncontrolling interests do not have substantive kick-out or participating rights. We consolidate these entities because we control all significant business activities.

As of September 30, 2022, the total assets and liabilities of our consolidated VIEs, excluding the Operating Partnership, were $4,569,514,000 and $2,378,725,000, respectively. As of December 31, 2021, the total assets and liabilities of our consolidated VIEs, excluding the Operating Partnership, were $4,564,621,000 and $2,517,652,000, respectively.

14. Fair Value Measurements

ASC 820 defines fair value and establishes a framework for measuring fair value. The objective of fair value is to determine the price that would be received upon the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (the exit price). ASC 820 establishes a fair value hierarchy that prioritizes observable and unobservable inputs used to measure fair value into three levels: Level 1 – quoted prices (unadjusted) in active markets that are accessible at the measurement date for assets or liabilities as well as certain U.S. Treasury securities that are highly liquid and are actively traded in secondary markets; Level 2 – observable prices that are based on inputs not quoted in active markets, but corroborated by market data; and Level 3 – unobservable inputs that are used when little or no market data is available. The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs. In determining fair value, we utilize valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible, as well as consider counterparty credit risk in our assessment of fair value. Considerable judgment is necessary to interpret Level 2 and 3 inputs in determining the fair value of our financial and non-financial assets and liabilities. Accordingly, our fair value estimates, which are made at the end of each reporting period, may be different than the amounts that may ultimately be realized upon sale or disposition of these assets.

Financial Assets and Liabilities Measured at Fair Value on a Recurring Basis

Financial assets and liabilities that are measured at fair value on our consolidated balance sheets consist of (i) investments in U.S. Treasury bills (classified as available-for-sale), (ii) real estate fund investments, (iii) the assets in our deferred compensation plan (for which there is a corresponding liability on our consolidated balance sheets), (iv) loans receivable (for which we have elected the fair value option under ASC Subtopic 825-10, *Financial Instruments* ("ASC 825-10")), (v) interest rate swaps and caps and (vi) mandatorily redeemable instruments (Series G-1 through G-4 convertible preferred units and Series D-13 cumulative redeemable preferred units). The tables on the following page, aggregate the fair values of these financial assets and liabilities by their levels in the fair value hierarchy.

14. Fair Value Measurements - continued

Financial Assets and Liabilities Measured at Fair Value on a Recurring Basis - continued

(Amounts in thousands)	As of September 30, 2022			
	Total	Level 1	Level 2	Level 3
Investments in U.S. Treasury bills [1]	$ 445,165	$ 445,165	$ —	$ —
Real estate fund investments	930	—	—	930
Deferred compensation plan assets ($6,434 included in restricted cash and $89,247 in other assets)	95,681	50,770	—	44,911
Loans receivable ($49,227 included in investments in partially owned entities and $4,024 in other assets)	53,251	—	—	53,251
Interest rate swaps and caps (included in other assets)	189,891	—	189,891	—
Total assets	$ 784,918	$ 495,935	$ 189,891	$ 99,092
Mandatorily redeemable instruments (included in other liabilities)	$ 49,383	$ 49,383	$ —	$ —
Total liabilities	$ 49,383	$ 49,383	$ —	$ —

(Amounts in thousands)	As of December 31, 2021			
	Total	Level 1	Level 2	Level 3
Real estate fund investments	$ 7,730	$ —	$ —	$ 7,730
Deferred compensation plan assets ($9,104 included in restricted cash and $101,070 in other assets)	110,174	65,158	—	45,016
Loans receivable ($46,444 included in investments in partially owned entities and $3,738 in other assets)	50,182	—	—	50,182
Interest rate swaps and caps (included in other assets)	18,929	—	18,929	—
Total assets	$ 187,015	$ 65,158	$ 18,929	$ 102,928
Mandatorily redeemable instruments (included in other liabilities)	$ 49,659	$ 49,659	$ —	$ —
Interest rate swaps (included in other liabilities)	32,837	—	32,837	—
Total liabilities	$ 82,496	$ 49,659	$ 32,837	$ —

(1) During the nine months ended September 30, 2022, we purchased $794,793 in U.S. Treasury bills with an aggregate par value of $800,000 and realized proceeds of $350,000 from maturing U.S. Treasury bills. As of September 30, 2022, our investments in U.S. Treasury bills have an aggregate amortized cost of $448,196 and have remaining maturities of less than one year.

Real Estate Fund Investments

As of September 30, 2022, we had two real estate fund investments with an aggregate fair value of $930,000, $275,459,000 below cost. These investments are classified as Level 3.

Significant unobservable quantitative inputs used in determining the fair value of each investment include capitalization rates and discount rates. These rates are based on the location, type and nature of each property, current and anticipated market conditions, industry publications and from the experience of our Acquisitions and Capital Markets departments. Significant unobservable quantitative inputs in the table below were utilized in determining the fair value of these real estate fund investments.

	Range		Weighted Average (based on fair value of assets)	
Unobservable Quantitative Input	**September 30, 2022**	**December 31, 2021**	**September 30, 2022**	**December 31, 2021**
Discount rates	12.0% to 13.0%	12.0% to 15.0%	12.6%	13.2%
Terminal capitalization rates	5.5% to 9.5%	5.5% to 8.8%	7.7%	7.4%

The inputs above are subject to change based on changes in economic and market conditions and/or changes in use or timing of exit. Changes in discount rates and terminal capitalization rates result in increases or decreases in the fair values of these investments. The discount rates encompass, among other things, uncertainties in the valuation models with respect to terminal capitalization rates and the amount and timing of cash flows. Therefore, a change in the fair value of these investments resulting from a change in the terminal capitalization rate may be partially offset by a change in the discount rate. It is not possible for us to predict the effect of future economic or market conditions on our estimated fair values.

14. Fair Value Measurements - continued

Financial Assets and Liabilities Measured at Fair Value on a Recurring Basis - continued

Real Estate Fund Investments - continued

The table below summarizes the changes in the fair value of real estate fund investments that are classified as Level 3.

(Amounts in thousands)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2022	2021	2022	2021
Beginning balance	$ 930	$ 3,739	$ 7,730	$ 3,739
Previously recorded unrealized loss on exited investments	—	—	59,396	—
Realized loss on exited investments	—	—	(53,724)	—
Net unrealized loss on held investments	—	—	(6,800)	(789)
Dispositions	—	—	(5,672)	—
Purchases/additional fundings	—	—	—	789
Ending balance	$ 930	$ 3,739	$ 930	$ 3,739

Deferred Compensation Plan Assets

Deferred compensation plan assets that are classified as Level 3 consist of investments in limited partnerships and investment funds, which are managed by third parties. We receive quarterly financial reports that provide net asset values on a fair value basis from a third-party administrator, which are compiled from the quarterly reports provided to them from each limited partnership and investment fund. The period of time over which these underlying assets are expected to be liquidated is unknown. The third-party administrator does not adjust these values in determining our share of the net assets and we do not adjust these values when reported in our consolidated financial statements.

The table below summarizes the changes in the fair value of deferred compensation plan assets that are classified as Level 3.

(Amounts in thousands)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2022	2021	2022	2021
Beginning balance	$ 44,155	$ 44,855	$ 45,016	$ 39,928
Purchases	522	2,154	3,469	5,167
Sales	(504)	(1,547)	(3,291)	(2,236)
Realized and unrealized gains (losses)	574	(69)	(1,524)	2,193
Other, net	164	1,176	1,241	1,517
Ending balance	$ 44,911	$ 46,569	$ 44,911	$ 46,569

Loans Receivable

Loans receivable consist of loan investments in real estate related assets for which we have elected the fair value option under ASC 825-10. These investments are classified as Level 3.

Significant unobservable quantitative inputs used in determining the fair value of each investment include capitalization rates and discount rates. These rates are based on the location, type and nature of each property, current and anticipated market conditions, industry publications and from the experience of our Acquisitions and Capital Markets departments. Significant unobservable quantitative inputs in the table below were utilized in determining the fair value of these loans receivable.

	Range		Weighted Average (based on fair value of investments)	
Unobservable Quantitative Input	September 30, 2022	December 31, 2021	September 30, 2022	December 31, 2021
Discount rates	6.5%	6.5%	6.5%	6.5%
Terminal capitalization rates	5.0%	5.0%	5.0%	5.0%

The table below summarizes the changes in fair value of loans receivable that are classified as Level 3.

(Amounts in thousands)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2022	2021	2022	2021
Beginning balance	$ 52,046	$ 48,776	$ 50,182	$ 47,743
Interest accrual	1,205	894	3,602	2,602
Paydowns	—	(300)	(533)	(975)
Ending balance	$ 53,251	$ 49,370	$ 53,251	$ 49,370

14. Fair Value Measurements - continued

Financial Assets and Liabilities Measured at Fair Value on a Recurring Basis - continued

Derivatives and Hedging

We utilize various financial instruments to mitigate the impact of interest rate fluctuations on our cash flows and earnings, including hedging strategies, depending on our analysis of the interest rate environment and the costs and risks of such strategies. We recognize the fair values of all derivatives in "other assets" or "other liabilities" on our consolidated balance sheets. Derivatives that are not hedges are adjusted to fair value through earnings. If a derivative is a hedge, depending on the nature of the hedge, changes in the fair value of the derivative will either be offset against the change in fair value of the hedged asset, liability, or firm commitment through earnings, or recognized in other comprehensive income until the hedged item is recognized in earnings. Reported net income and equity may increase or decrease prospectively, depending on future levels of interest rates and other variables affecting the fair values of hedging instruments and hedged items, but will have no effect on cash flows.

The following table summarizes our consolidated hedging instruments, all of which hedge variable rate debt, as of September 30, 2022 and December 31, 2021.

(Amounts in thousands)	Fair Value Asset (Liability) as of		As of September 30, 2022		
	September 30, 2022	December 31, 2021	Notional Amount	All-In Swapped Rate	Swap Expiration Date
Interest rate swaps:					
555 California Street mortgage loan	$ 53,160	$ 11,814	$ 840,000 (1)	2.26%	05/24
770 Broadway mortgage loan	32,010	—	700,000	4.98%	07/27
PENN 11 mortgage loan	28,555	6,565	500,000	2.23%	03/24
Unsecured revolving credit facility	26,759	—	575,000	3.88%	08/27
Unsecured term loan	13,706	(28,976)	800,000	4.05%	**(2)**
Unsecured term loan (effective October 2023)	8,864	—	500,000	4.39%	10/26
100 West 33rd Street mortgage loan	8,053	—	480,000	5.06%	06/27
888 Seventh Avenue mortgage loan	7,231	—	200,000 (3)	4.66%	09/27
4 Union Square South mortgage loan	3,960	(3,861)	100,000 (4)	3.74%	01/25
Interest rate caps:					
1290 Avenue of the Americas mortgage loan	6,304	411	950,000	**(5)**	11/23
Various mortgage loans	1,289	139			
Included in other assets	$ 189,891	$ 18,929			
Included in other liabilities	$ —	$ 32,837			

(1) Represents our 70.0% share of the $1.2 billion mortgage loan.

(2) Comprised of a $750,000 interest rate swap arrangement expiring October 2023 and a $50,000 interest rate swap arrangement expiring August 2027. In September 2022, we entered into a forward swap (presented above) for $500,000 of the $800,000 unsecured term loan through October 2026, effective upon the October 2023 expiration of the $750,000 swap arrangement. Together with the existing $50,000 swap arrangement, commencing October 2023, $550,000 of the loan will bear interest at a blended fixed rate of 4.36%. The unswapped balance of the loan will bear interest at a floating rate of SOFR plus 1.30%.

(3) The remaining $83,200 amortizing mortgage loan balance bears interest at a floating rate of LIBOR plus 1.70%.

(4) Upon the sale of 33-00 Northern Boulevard in June 2022, the $100,000 corporate-level interest rate swap was reallocated and now hedges the interest rate on $100,000 of the 4 Union Square South mortgage loan through January 2025. The remaining $20,000 mortgage loan balance bears interest at a floating rate of SOFR plus 1.50%. The entire $120,000 will float thereafter for the duration of the loan.

(5) LIBOR cap strike rate of 4.00%.

14. Fair Value Measurements - continued

Fair Value Measurements on a Nonrecurring Basis

There were no assets measured at fair value on a nonrecurring basis on our consolidated balance sheets as of September 30, 2022 and December 31, 2021.

Financial Assets and Liabilities not Measured at Fair Value

Financial assets and liabilities that are not measured at fair value on our consolidated balance sheets include cash equivalents (primarily money market funds, which invest in obligations of the United States government) and our secured and unsecured debt. Estimates of the fair value of these instruments are determined by the standard practice of modeling the contractual cash flows required under the instrument and discounting them back to their present value at the appropriate current risk adjusted interest rate, which is provided by a third-party specialist. For floating rate debt, we use forward rates derived from observable market yield curves to project the expected cash flows we would be required to make under the instrument. The fair value of cash equivalents and borrowings under our unsecured revolving credit facilities and unsecured term loan are classified as Level 1. The fair value of our secured debt and unsecured debt are classified as Level 2. The table below summarizes the carrying amounts and fair value of these financial instruments.

(Amounts in thousands)	As of September 30, 2022		As of December 31, 2021	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Cash equivalents	$ 440,151	$ 440,000	$ 1,346,684	$ 1,347,000
Debt:				
Mortgages payable	$ 5,883,015	$ 5,697,000	$ 6,099,215	$ 6,052,000
Senior unsecured notes	1,200,000	1,024,000	1,200,000	1,230,000
Unsecured term loan	800,000	800,000	800,000	800,000
Unsecured revolving credit facilities	575,000	575,000	575,000	575,000
Total	$ 8,458,015 (1)	$ 8,096,000	$ 8,674,215 (1)	$ 8,657,000

(1) Excludes $67,077 and $58,268 of deferred financing costs, net and other as of September 30, 2022 and December 31, 2021, respectively.

15. Stock-based Compensation

We account for all equity-based compensation in accordance with ASC Topic 718, *Compensation - Stock Compensation*. Stock-based compensation expense, a component of "general and administrative" expense on our consolidated statements of income, was $3,886,000 and $5,510,000 for the three months ended September 30, 2022 and 2021, respectively, and $22,887,000 and $32,889,000 for the nine months ended September 30, 2022 and 2021, respectively.

16. Interest and Other Investment Income, Net

The following table sets forth the details of interest and other investment income, net:

(Amounts in thousands)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2022	2021	2022	2021
Interest on cash and cash equivalents and restricted cash	$ 2,286	$ 67	$ 2,660	$ 207
Amortization of discount on investments in U.S. Treasury bills	1,546	—	3,403	—
Interest on loans receivable	1,396	561	3,215	1,679
Other, net	—	5	4	1,808
	$ 5,228	$ 633	$ 9,282	$ 3,694

17. Interest and Debt Expense

The following table sets forth the details of interest and debt expense:

(Amounts in thousands)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2022	2021	2022	2021
Interest expense	$ 76,009	$ 57,028	$ 187,552	$ 170,938
Capitalized interest and debt expense	(4,874)	(10,739)	(12,095)	(31,785)
Amortization of deferred financing costs	5,639	4,657	16,066	13,751
	$ 76,774	$ 50,946	$ 191,523	$ 152,904

18. Income Per Share/Income Per Class A Unit

Vornado Realty Trust

The following table presents the calculations of (i) basic income per common share which includes the weighted average number of common shares outstanding without regard to dilutive potential common shares and (ii) diluted income per common share which includes weighted average common shares outstanding and dilutive share equivalents. Unvested share-based payment awards that contain nonforfeitable rights to dividends, whether paid or unpaid, are accounted for as participating securities. Earnings are allocated to participating securities, which include restricted stock awards, based on the two-class method. Our share-based payment awards, including employee stock options, restricted Operating Partnership units ("OP Units"), out-performance plan awards ("OPPs"), appreciation-only long term incentive plan units ("AO LTIP Units"), Performance Conditioned AO LTIP Units and Long-Term Performance Plan units ("LTPP Units"), are included in the calculation of diluted income per share using the treasury stock method if dilutive. Our convertible securities, including our Series A convertible preferred shares, Series G-1 through G-4 convertible preferred units and Series D-13 redeemable preferred units, are reflected in diluted income per share by application of the if-converted method if dilutive.

(Amounts in thousands, except per share amounts)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2022	2021	2022	2021
Numerator:				
Net income attributable to Vornado	$ 23,298	$ 63,522	$ 131,252	$ 148,584
Preferred share dividends	(15,529)	(16,800)	(46,587)	(49,734)
Series K preferred share issuance costs	—	(9,033)	—	(9,033)
Net income attributable to common shareholders	7,769	37,689	84,665	89,817
Earnings allocated to unvested participating securities	(4)	(8)	(14)	(26)
Numerator for basic income per share	7,765	37,681	84,651	89,791
Impact of assumed conversion of dilutive convertible securities	—	—	(243)	—
Numerator for diluted income per share	$ 7,765	$ 37,681	$ 84,408	$ 89,791
Denominator:				
Denominator for basic income per share – weighted average shares	191,793	191,577	191,756	191,508
Effect of dilutive securities[1]:				
Share-based payment awards	225	464	266	643
Convertible securities	—	—	20	—
Denominator for diluted income per share – weighted average shares and assumed conversions	192,018	192,041	192,042	192,151
INCOME PER COMMON SHARE - BASIC:				
Net income per common share	$ 0.04	$ 0.20	$ 0.44	$ 0.47
INCOME PER COMMON SHARE - DILUTED:				
Net income per common share	$ 0.04	$ 0.20	$ 0.44	$ 0.47

(1) The effect of dilutive securities excluded an aggregate of 15,983 and 13,876 weighted average common share equivalents for the three months ended September 30, 2022 and 2021, respectively, and 15,836 and 13,815 weighted average common share equivalents for the nine months ended September 30, 2022 and 2021, respectively, as their effect was anti-dilutive.

18. Income Per Share/Income Per Class A Unit - continued

Vornado Realty L.P.

The following table presents the calculations of (i) basic income per Class A unit which includes the weighted average number of Class A units outstanding without regard to dilutive potential Class A units and (ii) diluted income per Class A unit which includes the weighted average Class A units outstanding and dilutive Class A unit equivalents. Unvested share-based payment awards that contain non-forfeitable rights to dividends, whether paid or unpaid, are accounted for as participating securities. Earnings are allocated to participating securities, which include Vornado restricted stock awards and our OP Units, based on the two-class method. Our other share-based payment awards, including Vornado stock options, OPPs, AO LTIP Units, Performance Conditioned AO LTIP Units and LTPP Units, are included in the calculation of diluted income per Class A unit using the treasury stock method if dilutive. Our convertible securities, including our Series A convertible preferred units, Series G-1 through G-4 convertible preferred units and Series D-13 redeemable preferred units, are reflected in diluted income per Class A unit by application of the if-converted method if dilutive.

(Amounts in thousands, except per unit amounts)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2022	2021	2022	2021
Numerator:				
Net income attributable to Vornado Realty L.P.	$ 23,904	$ 66,340	$ 137,634	$ 155,267
Preferred unit distributions	(15,558)	(16,842)	(46,673)	(49,858)
Series K preferred unit issuance costs	—	(9,033)	—	(9,033)
Net income attributable to Class A unitholders	8,346	40,465	90,961	96,376
Earnings allocated to unvested participating securities	(498)	(649)	(1,719)	(2,034)
Numerator for basic income per Class A unit	7,848	39,816	89,242	94,342
Impact of assumed conversion of dilutive convertible securities	—	—	(243)	—
Numerator for diluted income per Class A unit	$ 7,848	$ 39,816	$ 88,999	$ 94,342
Denominator:				
Denominator for basic income per Class A unit – weighted average units	205,410	204,864	205,271	204,663
Effect of dilutive securities[1]:				
Share-based payment awards	502	839	633	953
Convertible securities	—	—	20	—
Denominator for diluted income per Class A unit – weighted average units and assumed conversions	205,912	205,703	205,924	205,616
INCOME PER CLASS A UNIT - BASIC:				
Net income per Class A unit	$ 0.04	$ 0.19	$ 0.43	$ 0.46
INCOME PER CLASS A UNIT - DILUTED:				
Net income per Class A unit	$ 0.04	$ 0.19	$ 0.43	$ 0.46

(1) The effect of dilutive securities excluded an aggregate of 2,089 and 214 weighted average Class A unit equivalents for the three months ended September 30, 2022 and 2021, respectively, and 1,954 and 350 weighted average Class A unit equivalents for the nine months ended September 30, 2022 and 2021, respectively, as their effect was anti-dilutive.

19. Commitments and Contingencies

Insurance

For our properties, we maintain general liability insurance with limits of $300,000,000 per occurrence and per property, of which $250,000,000 includes communicable disease coverage, and we maintain all risk property and rental value insurance with limits of $2.0 billion per occurrence, with sub-limits for certain perils such as flood and earthquake, excluding communicable disease coverage. Our California properties have earthquake insurance with coverage of $350,000,000 per occurrence and in the aggregate, subject to a deductible in the amount of 5% of the value of the affected property. We maintain coverage for certified terrorism acts with limits of $6.0 billion per occurrence and in the aggregate (as listed below), $1.2 billion for non-certified acts of terrorism, and $5.0 billion per occurrence and in the aggregate for terrorism involving nuclear, biological, chemical and radiological ("NBCR") terrorism events, as defined by the Terrorism Risk Insurance Act of 2002, as amended to date and which has been extended through December 2027.

Penn Plaza Insurance Company, LLC ("PPIC"), our wholly owned consolidated subsidiary, acts as a re-insurer with respect to a portion of all risk property and rental value insurance and a portion of our earthquake insurance coverage, and as a direct insurer for coverage for acts of terrorism including NBCR acts. Coverage for acts of terrorism (excluding NBCR acts) is fully reinsured by third-party insurance companies and the Federal government with no exposure to PPIC. For NBCR acts, PPIC is responsible for a deductible of $1,799,727 and 20% of the balance of a covered loss and the Federal government is responsible for the remaining portion of a covered loss. We are ultimately responsible for any loss incurred by PPIC.

Certain condominiums in which we own an interest (including the Farley Condominiums) maintain insurance policies with different per occurrence and aggregate limits than our policies described above.

We continue to monitor the state of the insurance market and the scope and costs of coverage for acts of terrorism and other events. However, we cannot anticipate what coverage will be available on commercially reasonable terms in the future. We are responsible for uninsured losses and for deductibles and losses in excess of our insurance coverage, which could be material.

Our debt instruments, consisting of mortgage loans secured by our properties, senior unsecured notes and revolving credit agreements contain customary covenants requiring us to maintain insurance. Although we believe that we have adequate insurance coverage for purposes of these agreements, we may not be able to obtain an equivalent amount of coverage at reasonable costs in the future. Further, if lenders insist on greater coverage than we are able to obtain it could adversely affect our ability to finance or refinance our properties and expand our portfolio.

Other Commitments and Contingencies

We are from time to time involved in legal actions arising in the ordinary course of business. In our opinion, after consultation with legal counsel, the outcome of such matters is not currently expected to have a material adverse effect on our financial position, results of operations or cash flows.

Each of our properties has been subjected to varying degrees of environmental assessment at various times. The environmental assessments did not reveal any material environmental contamination. However, there can be no assurance that the identification of new areas of contamination, changes in the extent or known scope of contamination, the discovery of additional sites, or changes in cleanup requirements would not result in significant costs to us.

In January 2022, we exercised a 25-year renewal option on our PENN 1 ground lease extending the term through June 2073. As a result of the exercise, we remeasured the related ground lease liability to include the 25-year extension option and recorded an estimated incremental right-of-use asset and lease liability of approximately $350,000,000 which is included in "right-of-use assets" and "lease liabilities", respectively, on our consolidated balance sheets.

In July 2018, we leased 78,000 square feet at 345 Montgomery Street in San Francisco, CA, to a subsidiary of Regus PLC, for an initial term of 15 years. The obligations under the lease were guaranteed by Regus PLC in an amount of up to $90,000,000. The tenant purported to terminate the lease prior to space delivery. We commenced a suit on October 23, 2019 seeking to enforce the lease and the guaranty. On May 11, 2021, the court issued a final statement of decision in our favor and on July 7, 2021, the Regus subsidiary appealed the decision. On October 9, 2020, the successor to Regus PLC filed for bankruptcy in Luxembourg. We are actively pursuing claims relating to the guaranty against the successor to Regus PLC and its parent, in Luxembourg and other jurisdictions.

Our mortgage loans are non-recourse to us, except for the mortgage loans secured by 640 Fifth Avenue, 7 West 34th Street and 435 Seventh Avenue, which we guaranteed and therefore are part of our tax basis. In certain cases, we have provided guarantees or master leased tenant space. These guarantees and master leases terminate either upon the satisfaction of specified circumstances or repayment of the underlying loans. In addition, we have guaranteed the rent and payments in lieu of real estate taxes due to Empire State Development, an entity of New York State, for Farley Office and Retail. As of September 30, 2022, the aggregate dollar amount of these guarantees and master leases is approximately $1,593,000,000.

19. Commitments and Contingencies - continued

Other Commitments and Contingencies - continued

As of September 30, 2022, $15,273,000 of letters of credit were outstanding under one of our unsecured revolving credit facilities. Our unsecured revolving credit facilities contain financial covenants that require us to maintain minimum interest coverage and maximum debt to market capitalization ratios, and provide for higher interest rates in the event of a decline in our ratings below Baa3/BBB- (our current ratings). Our unsecured revolving credit facilities also contain customary conditions precedent to borrowing, including representations and warranties, and also contain customary events of default that could give rise to accelerated repayment, including such items as failure to pay interest or principal.

Our 95% consolidated joint venture (5% is owned by Related Companies ("Related")) is developing Farley Office and Retail. In connection with the development of the property, the joint venture admitted a historic tax credit investor partner. Under the terms of the historic tax credit arrangement, the joint venture is required to comply with various laws, regulations, and contractual provisions. Non-compliance with applicable requirements could result in projected tax benefits not being realized and, therefore, may require a refund or reduction of the Tax Credit Investor’s capital contributions. As of September 30, 2022, the Tax Credit Investor has made $92,400,000 in capital contributions. Vornado and Related have guaranteed certain of the joint venture’s obligations to the Tax Credit Investor.

As investment manager of the Fund we are entitled to an incentive allocation after the limited partners have received a preferred return on their invested capital. The incentive allocation is subject to catch-up and clawback provisions. Accordingly, based on the September 30, 2022 fair value of the Fund assets, at liquidation we would be required to make a $24,990,000 payment to the limited partners, net of amounts owed to us, representing a clawback of previously paid incentive allocations, which would have no income statement impact as it was previously accrued.

As of September 30, 2022, we expect to fund additional capital to certain of our partially owned entities aggregating approximately $10,300,000.

As of September 30, 2022, we have construction commitments aggregating approximately $492,000,000.

20. Segment Information

We operate in two reportable segments, New York and Other, which is based on how we manage our business.

Net operating income ("NOI") at share represents total revenues less operating expenses including our share of partially owned entities. NOI at share - cash basis represents NOI at share adjusted to exclude straight-line rental income and expense, amortization of acquired below and above market leases, net and other non-cash adjustments. We consider NOI at share - cash basis to be the primary non-GAAP financial measure for making decisions and assessing the unlevered performance of our segments as it relates to the total return on assets as opposed to the levered return on equity. As properties are bought and sold based on NOI at share - cash basis, we utilize this measure to make investment decisions as well as to compare the performance of our assets to that of our peers. NOI at share and NOI at share - cash basis should not be considered alternatives to net income or cash flow from operations and may not be comparable to similarly titled measures employed by other companies.

20. Segment Information - continued

Below is a summary of NOI at share and NOI at share - cash basis by segment for the three and nine months ended September 30, 2022 and 2021.

(Amounts in thousands)	For the Three Months Ended September 30, 2022		
	Total	New York	Other
Total revenues	$ 457,431	$ 360,033	$ 97,398
Operating expenses	(221,596)	(182,131)	(39,465)
NOI - consolidated	235,835	177,902	57,933
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(14,766)	(8,691)	(6,075)
Add: NOI from partially owned entities	76,020	71,943	4,077
NOI at share	297,089	241,154	55,935
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net, and other	(1,419)	(3,462)	2,043
NOI at share - cash basis	$ 295,670	$ 237,692	$ 57,978

(Amounts in thousands)	For the Three Months Ended September 30, 2021		
	Total	New York	Other
Total revenues	$ 409,212	$ 316,643	$ 92,569
Operating expenses	(212,699)	(151,276)	(61,423)
NOI - consolidated	196,513	165,367	31,146
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(16,886)	(9,747)	(7,139)
Add: NOI from partially owned entities	75,644	73,219	2,425
NOI at share	255,271	228,839	26,432
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net, and other	1,922	783	1,139
NOI at share - cash basis	$ 257,193	$ 229,622	$ 27,571

(Amounts in thousands)	For the Nine Months Ended September 30, 2022		
	Total	New York	Other
Total revenues	$ 1,353,055	$ 1,082,743	$ 270,312
Operating expenses	(660,434)	(536,238)	(124,196)
NOI - consolidated	692,621	546,505	146,116
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(51,100)	(32,708)	(18,392)
Add: NOI from partially owned entities	228,772	219,116	9,656
NOI at share	870,293	732,913	137,380
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(8,824)	(13,626)	4,802
NOI at share - cash basis	$ 861,469	$ 719,287	$ 142,182

(Amounts in thousands)	For the Nine Months Ended September 30, 2021		
	Total	New York	Other
Total revenues	$ 1,168,130	$ 921,758	$ 246,372
Operating expenses	(594,598)	(468,294)	(126,304)
NOI - consolidated	573,532	453,464	120,068
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(50,221)	(26,841)	(23,380)
Add: NOI from partially owned entities	231,635	224,392	7,243
NOI at share	754,946	651,015	103,931
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	1,570	351	1,219
NOI at share - cash basis	$ 756,516	$ 651,366	$ 105,150

20. Segment Information - continued

Below is a reconciliation of net income to NOI at share and NOI at share - cash basis for the three and nine months ended September 30, 2022 and 2021.

(Amounts in thousands)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2022	2021	2022	2021
Net income	$ 20,112	$ 71,765	$ 142,390	$ 175,590
Depreciation and amortization expense	134,526	100,867	370,631	285,998
General and administrative expense	29,174	25,553	102,292	100,341
Transaction related costs and other	996	9,681	4,961	10,630
Income from partially owned entities	(24,341)	(26,269)	(83,775)	(86,768)
Loss (income) from real estate fund investments	111	66	(5,421)	(5,107)
Interest and other investment income, net	(5,228)	(633)	(9,282)	(3,694)
Interest and debt expense	76,774	50,946	191,523	152,904
Net gains on disposition of wholly owned and partially owned assets	—	(10,087)	(35,384)	(35,811)
Income tax expense (benefit)	3,711	(25,376)	14,686	(20,551)
NOI from partially owned entities	76,020	75,644	228,772	231,635
NOI attributable to noncontrolling interests in consolidated subsidiaries	(14,766)	(16,886)	(51,100)	(50,221)
NOI at share	297,089	255,271	870,293	754,946
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(1,419)	1,922	(8,824)	1,570
NOI at share - cash basis	$ 295,670	$ 257,193	$ 861,469	$ 756,516

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Trustees of Vornado Realty Trust

Results of Review of Interim Financial Information

We have reviewed the accompanying consolidated balance sheet of Vornado Realty Trust and subsidiaries (the "Company") as of September 30, 2022, the related consolidated statements of income, comprehensive income, changes in equity for the three-month and nine-month periods ended September 30, 2022 and 2021, and of cash flows for the nine-month periods ended September 30, 2022 and 2021, and the related notes (collectively referred to as the "interim financial information"). Based on our reviews, we are not aware of any material modifications that should be made to the accompanying interim financial information for it to be in conformity with accounting principles generally accepted in the United States of America.

We have previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheet of the Company as of December 31, 2021, and the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for the year then ended (not presented herein); and in our report dated February 14, 2022, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying consolidated balance sheet as of December 31, 2021, is fairly stated, in all material respects, in relation to the consolidated balance sheet from which it has been derived.

Basis for Review Results

This interim financial information is the responsibility of the Company's management. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our reviews in accordance with standards of the PCAOB. A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with the standards of the PCAOB, the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

/s/ DELOITTE & TOUCHE LLP

New York, New York
October 31, 2022

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Partners of Vornado Realty L.P.

Results of Review of Interim Financial Information

We have reviewed the accompanying consolidated balance sheet of Vornado Realty L.P. and subsidiaries (the "Partnership") as of September 30, 2022, the related consolidated statements of income, comprehensive income, changes in equity for the three-month and nine-month periods ended September 30, 2022 and 2021, and of cash flows for the nine-month periods ended September 30, 2022 and 2021, and the related notes (collectively referred to as the "interim financial information"). Based on our reviews, we are not aware of any material modifications that should be made to the accompanying interim financial information for it to be in conformity with accounting principles generally accepted in the United States of America.

We have previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheet of the Partnership as of December 31, 2021, and the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for the year then ended (not presented herein); and in our report dated February 14, 2022, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying consolidated balance sheet as of December 31, 2021, is fairly stated, in all material respects, in relation to the consolidated balance sheet from which it has been derived.

Basis for Review Results

This interim financial information is the responsibility of the Partnership's management. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Partnership in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our reviews in accordance with standards of the PCAOB. A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with the standards of the PCAOB, the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

/s/ DELOITTE & TOUCHE LLP

New York, New York
October 31, 2022

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Certain statements contained in this Quarterly Report constitute forward-looking statements as such term is defined in Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements are not guarantees of performance. They represent our intentions, plans, expectations and beliefs and are subject to numerous assumptions, risks and uncertainties. Our future results, financial condition and business may differ materially from those expressed in these forward-looking statements. You can find many of these statements by looking for words such as "approximates," "believes," "expects," "anticipates," "estimates," "intends," "plans," "would," "may" or other similar expressions in this Quarterly Report on Form 10-Q. We also note the following forward-looking statements: in the case of our development and redevelopment projects, the estimated completion date, estimated project cost and cost to complete; and estimates of future capital expenditures, dividends to common and preferred shareholders and operating partnership distributions. Many of the factors that will determine the outcome of these and our other forward-looking statements are beyond our ability to control or predict.

Currently, some of the factors are the ongoing adverse effect of the COVID-19 pandemic, the increase in interest rates and inflation on our business, financial condition, results of operations, cash flows, operating performance and the effect that these factors have had and may continue to have on our tenants, the global, national, regional and local economies and financial markets and the real estate market in general. The extent of the impact of the COVID-19 pandemic will continue to depend on future developments, including vaccination rates among the population, the efficacy and durability of vaccines against emerging variants, and governmental and tenant responses thereto, which continue to be uncertain but the impact could be material. Moreover, you are cautioned that the COVID-19 pandemic will heighten many of the risks identified in "Item 1A. Risk Factors" in Part I of our Annual Report on Form 10-K for the year ended December 31, 2021.

For further discussion of factors that could materially affect the outcome of our forward-looking statements, see "Item 1A. Risk Factors" in Part I of our Annual Report on Form 10-K for the year ended December 31, 2021. For these statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. You are cautioned not to place undue reliance on our forward-looking statements, which speak only as of the date of this Quarterly Report on Form 10-Q or the date of any document incorporated by reference. All subsequent written and oral forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. We do not undertake any obligation to release publicly any revisions to our forward-looking statements to reflect events or circumstances occurring after the date of this Quarterly Report on Form 10-Q.

Management's Discussion and Analysis of Financial Condition and Results of Operations includes a discussion of our consolidated financial statements for the three and nine months ended September 30, 2022. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates. The results of operations for the three and nine months ended September 30, 2022 are not necessarily indicative of the operating results for the full year. Certain prior year balances have been reclassified in order to conform to the current year presentation.

Overview

Vornado Realty Trust ("Vornado") is a fully-integrated real estate investment trust ("REIT") and conducts its business through, and substantially all of its interests in properties are held by, Vornado Realty L.P. (the "Operating Partnership"), a Delaware limited partnership. Vornado is the sole general partner of and owned approximately 92.1% of the common limited partnership interest in the Operating Partnership as of September 30, 2022. All references to the "Company," "we," "us" and "our" mean, collectively, Vornado, the Operating Partnership and those subsidiaries consolidated by Vornado.

We compete with a large number of real estate investors, property owners and developers, some of whom may be willing to accept lower returns on their investments. Principal factors of competition are rents charged, sales prices, attractiveness of location, the quality of the property and the breadth and the quality of services provided. Our success depends upon, among other factors, trends of the global, national, regional and local economies, the financial condition and operating results of current and prospective tenants and customers, availability and cost of capital, construction and renovation costs, taxes, governmental regulations, legislation, population and employment trends. See "Risk Factors" in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2021 for additional information regarding these factors.

Our business has been adversely affected by the ongoing COVID-19 pandemic and the preventive measures taken to curb the spread of the virus. The pandemic has resulted in governments and other authorities implementing numerous measures to try to contain the virus, such as travel bans and restrictions, quarantines, shelter in place orders, and business closures. Some of the effects on us include the following:

- While substantially all of the limitations and restrictions imposed on our retail tenants during the onset of the pandemic have been lifted, economic conditions and other factors, including a decline in Manhattan tourism since the onset of the virus, continue to adversely affect the financial health of our retail tenants.
- Many of our office tenants' employees continue to work remotely or under a hybrid schedule.
- We permanently closed the Hotel Pennsylvania on April 5, 2021 and plan to develop an office tower on the site.
- Trade shows at theMART were cancelled beginning March of 2020 and resumed in the third quarter of 2021 with generally lower attendance than pre-pandemic levels.

The extent of the COVID-19 pandemic's effect on our operational and financial performance will continue to depend on future developments, including vaccination rates among the population, the efficacy and durability of vaccines against emerging variants and governmental and tenant responses thereto, which continue to be uncertain. Given the dynamic nature of the circumstances, it is difficult to predict the long-term impact of the ongoing COVID-19 pandemic on our business, financial condition, results of operations and cash flows but the impact could be material.

Vornado Realty Trust

Quarter Ended September 30, 2022 Financial Results Summary

Net income attributable to common shareholders for the quarter ended September 30, 2022 was $7,769,000, or $0.04 per diluted share, compared to $37,689,000, or $0.20 per diluted share, for the prior year's quarter. The quarters ended September 30, 2022 and 2021 include certain items that impact the comparability of period-to-period net income attributable to common shareholders, which are listed in the table on the following page. The aggregate of these items, net of amounts attributable to noncontrolling interests, decreased net income attributable to common shareholders for the quarter ended September 30, 2022 by $29,660,000, or $0.15 per diluted share, and increased net income attributable to common shareholders by $11,763,000, or $0.06 per diluted share, for the quarter ended September 30, 2021.

Funds from operations ("FFO") attributable to common shareholders plus assumed conversions for the quarter ended September 30, 2022 was $152,461,000, or $0.79 per diluted share, compared to $158,286,000, or $0.82 per diluted share, for the prior year's quarter. FFO attributable to common shareholders plus assumed conversions for the quarters ended September 30, 2022 and 2021 include certain items that impact the comparability of period-to-period FFO, which are listed in the table on the following page. The aggregate of these items, net of amounts attributable to noncontrolling interests, decreased FFO attributable to common shareholders plus assumed conversions for the quarter ended September 30, 2022 by $4,889,000, or $0.02 per diluted share, and increased FFO attributable to common shareholders plus assumed conversions by $22,073,000, or $0.11 per diluted share, for the quarter ended September 30, 2021.

Overview - continued

Nine Months Ended September 30, 2022 Financial Results Summary

Net income attributable to common shareholders for the nine months ended September 30, 2022 was $84,665,000, or $0.44 per diluted share, compared to $89,817,000, or $0.47 per diluted share, for the nine months ended September 30, 2021. The nine months ended September 30, 2022 and 2021 include certain items that impact the comparability of period-to-period net income attributable to common shareholders, which are listed in the table below. The aggregate of these items, net of amounts attributable to noncontrolling interests, decreased net income attributable to common shareholders for the nine months ended September 30, 2022 by $21,987,000, or $0.12 per diluted share, and increased net income attributable to common shareholders by $24,641,000, or $0.13 per diluted share, for the nine months ended September 30, 2021.

FFO attributable to common shareholders plus assumed conversions for the nine months ended September 30, 2022 was $462,463,000, or $2.39 per diluted share, compared to $430,057,000, or $2.24 per diluted share, for the nine months ended September 30, 2021. FFO attributable to common shareholders plus assumed conversions for the nine months ended September 30, 2022 and 2021 include certain items that impact the comparability of period-to-period FFO, which are listed in the table below. The aggregate of these items, net of amounts attributable to noncontrolling interests, decreased FFO attributable to common shareholders plus assumed conversions for the nine months ended September 30, 2022 by $7,388,000, or $0.04 per diluted share, and increased FFO attributable to common shareholders by $36,324,000, or $0.19 per diluted share for the nine months ended September 30, 2021.

The following table reconciles the difference between our net income attributable to common shareholders and our net income attributable to common shareholders, as adjusted:

(Amounts in thousands)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2022	2021	2022	2021
Certain expense (income) items that impact net income attributable to common shareholders:				
Hotel Pennsylvania loss	$ 26,613	$ 6,492	$ 44,473	$ 20,474
Deferred tax liability on our investment in Farley Office and Retail (held through a taxable REIT subsidiary)	3,776	1,688	10,183	1,688
Tax benefit recognized by our taxable REIT subsidiaries	—	(27,910)	—	(27,910)
After-tax net gain on sale of 220 Central Park South ("220 CPS") condominium unit(s) and ancillary amenities	—	(8,815)	(6,085)	(31,023)
Net gain on sale of the Center Building (33-00 Northern Boulevard, Long Island City, NY)	—	—	(15,213)	—
Refund of New York City transfer taxes related to the April 2019 transfer to Fifth Avenue and Times Square JV	—	—	(13,613)	—
Other	1,477	15,664	4,137	10,090
	31,866	(12,881)	23,882	(26,681)
Noncontrolling interests' share of above adjustments	(2,206)	1,118	(1,895)	2,040
Total of certain expense (income) items that impact net income attributable to common shareholders	$ 29,660	$ (11,763)	$ 21,987	$ (24,641)

The following table reconciles the difference between our FFO attributable to common shareholders plus assumed conversions and our FFO attributable to common shareholders plus assumed conversions, as adjusted:

(Amounts in thousands)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2022	2021	2022	2021
Certain expense (income) items that impact FFO attributable to common shareholders plus assumed conversions:				
Deferred tax liability on our investment in Farley Office and Retail (held through a taxable REIT subsidiary)	$ 3,776	$ 1,688	$ 10,183	$ 1,688
Tax benefit recognized by our taxable REIT subsidiaries	—	(27,910)	—	(27,910)
After-tax net gain on sale of 220 CPS condominium unit(s) and ancillary amenities	—	(8,815)	(6,085)	(31,023)
Other	1,477	11,394	3,840	18,698
	5,253	(23,643)	7,938	(38,547)
Noncontrolling interests' share of above adjustments	(364)	1,570	(550)	2,223
Total of certain expense (income) items that impact FFO attributable to common shareholders plus assumed conversions, net	$ 4,889	$ (22,073)	$ 7,388	$ (36,324)

Same Store Net Operating Income ("NOI") At Share

The percentage increase (decrease) in same store NOI at share and same store NOI at share - cash basis of our New York segment, theMART and 555 California Street are below.

	Total	New York	theMART[(1)]	555 California Street
Same store NOI at share % increase (decrease)				
Three months ended September 30, 2022 compared to September 30, 2021	11.7 %	(0.8)%	456.2 %	1.3 %
Nine months ended September 30, 2022 compared to September 30, 2021	7.4 %	3.0 %	76.1 %	3.5 %
Same store NOI at share - cash basis % increase				
Three months ended September 30, 2022 compared to September 30, 2021	13.8 %	1.1 %	325.8 %	16.7 %
Nine months ended September 30, 2022 compared to September 30, 2021	9.4 %	4.6 %	71.3 %	12.2 %

(1) Primarily due to (i) prior period accrual adjustments recorded in the third quarter of each year related to changes in the tax-assessed value of theMART and (ii) an increase in tradeshow activity in the third quarter of 2022.

Calculations of same store NOI at share, reconciliations of our net income to NOI at share, NOI at share - cash basis and FFO and the reasons we consider these non-GAAP financial measures useful are provided in the following pages of Management's Discussion and Analysis of Financial Condition and Results of Operations.

Dispositions

220 CPS

During the nine months ended September 30, 2022, we closed on the sale of one condominium unit and ancillary amenities at 220 CPS for net proceeds of $16,124,000 resulting in a financial statement net gain of $7,030,000 which is included in "net gains on disposition of wholly owned and partially owned assets" on our consolidated statements of income. In connection with these sales, $945,000 of income tax expense was recognized on our consolidated statements of income. From inception to September 30, 2022, we have closed on the sale of 107 units and ancillary amenities for net proceeds of $3,023,020,000 resulting in financial statement net gains of $1,124,285,000.

SoHo Properties

On January 13, 2022, we sold two Manhattan retail properties located at 478-482 Broadway and 155 Spring Street for $84,500,000 and realized net proceeds of $81,399,000. In connection with the sale, we recognized a net gain of $551,000 which is included in "net gains on disposition of wholly owned and partially owned assets" on our consolidated statements of income.

Center Building (33-00 Northern Boulevard)

On June 17, 2022, we sold the Center Building, an eight-story 498,000 square foot office building located at 33-00 Northern Boulevard in Long Island City, New York, for $172,750,000. We realized net proceeds of $58,946,000 after repayment of the existing $100,000,000 mortgage loan and closing costs. In connection with the sale, we recognized a net gain of $15,213,000 which is included in "net gains on disposition of wholly owned and partially owned assets" on our consolidated statements of income.

40 Fulton Street

On August 17, 2022, we entered into an agreement to sell 40 Fulton Street, a 251,000 square foot Manhattan office and retail building, for $102,000,000. We expect to close the sale in the fourth quarter of 2022 and recognize a net gain of approximately $33,000,000 after closing costs. The sale is subject to customary closing conditions. As of September 30, 2022, the $64,177,000 carrying value of the property was classified as held-for-sale and is included in "other assets" on our consolidated balance sheets.

Financings

100 West 33rd Street

On June 15, 2022, we completed a $480,000,000 refinancing of 100 West 33rd Street, a 1.1 million square foot building comprised of 859,000 square feet of office space and 255,000 square feet of retail space. The interest-only loan bears a rate of SOFR plus 1.65% (4.64% as of September 30, 2022) through March 2024, increasing to SOFR plus 1.85% thereafter. The interest rate on the loan was swapped to a fixed rate of 5.06% through March 2024, and 5.26% through June 2027. The loan matures in June 2027, with two one-year extension options subject to debt service coverage ratio and loan-to-value tests. The loan replaces the previous $580,000,000 loan that bore interest at LIBOR plus 1.55% and was scheduled to mature in April 2024.

Financings - continued

770 Broadway

On June 28, 2022, we completed a $700,000,000 refinancing of 770 Broadway, a 1.2 million square foot Class A Manhattan office building. The interest-only loan bears a rate of SOFR plus 2.25% (4.93% as of September 30, 2022) and matures in July 2024 with three one-year extension options (July 2027 as fully extended). The interest rate on the loan was swapped to a fixed rate of 4.98% through July 2027. The loan replaces the previous $700,000,000 loan that bore interest at SOFR plus 1.86% and was scheduled to mature in July 2022.

Unsecured Revolving Credit Facility

On June 30, 2022, we amended and extended one of our two revolving credit facilities. The $1.25 billion amended facility bears interest at a rate of SOFR plus 1.15% (4.18% as of September 30, 2022). The term of the facility was extended from March 2024 to December 2027, as fully extended. The facility fee is 25 basis points. On August 16, 2022, the interest rate on the $575,000,000 drawn on the facility was swapped to a fixed interest rate of 3.88% through August 2027. Our other $1.25 billion revolving credit facility matures in April 2026, as fully extended, and bears a rate of SOFR plus 1.19% with a facility fee of 25 basis points.

Unsecured Term Loan

On June 30, 2022, we extended our $800,000,000 unsecured term loan from February 2024 to December 2027. The extended loan bears interest at a rate of SOFR plus 1.30% (4.33% as of September 30, 2022) and is currently swapped to a fixed rate of 4.05%.

330 West 34th Street land owner joint venture

On August 18, 2022, the joint venture that owns the fee interest in the 330 West 34th Street land, in which we have a 34.8% interest, completed a $100,000,000 refinancing. The interest-only loan bears interest at a fixed rate of 4.55% and matures in September 2032. In connection with the refinancing, we realized net proceeds of $10,500,000. The loan replaces the previous $50,150,000 loan that bore interest at a fixed rate of 5.71%.

Interest Rate Hedging Activities

We entered into the following interest rate swap arrangements during the nine months ended September 30, 2022. See Note 14 - *Fair Value Measurements* in Part I, Item I of this Quarterly Report on Form 10-Q for further information on our consolidated hedging instruments.

(Amounts in thousands)		Notional Amount	All-In Swapped Rate	Swap Expiration Date	Variable Rate Spread
770 Broadway mortgage loan	$	700,000	4.98%	07/27	S+225
Unsecured revolving credit facility		575,000	3.88%	08/27	S+115
Unsecured term loan(1)		50,000	4.04%	08/27	S+130
Unsecured term loan (effective 10/23)		500,000	4.39%	10/26	S+130
100 West 33rd Street mortgage loan		480,000	5.06%	06/27	S+165
888 Seventh Avenue mortgage loan(2)		200,000	4.66%	09/27	L+170

(1) Together with the existing $750,000 interest rate swap arrangement expiring October 2023, the $800,000 unsecured term loan balance currently bears interest at a fixed rate of 4.05%.
(2) The remaining $83,200 amortizing mortgage loan balance bears interest at a floating rate of LIBOR plus 1.70%.

Leasing Activity

The leasing activity and related statistics below are based on leases signed during the period and are not intended to coincide with the commencement of rental revenue in accordance with accounting principles generally accepted in the United States of America ("GAAP"). Second generation relet space represents square footage that has not been vacant for more than nine months and tenant improvements and leasing commissions are based on our share of square feet leased during the period.

For the Three Months Ended September 30, 2022

- 167,000 square feet of New York Office space (140,000 square feet at share) at an initial rent of $88.99 per square foot and a weighted average lease term of 5.8 years. The changes in the GAAP and cash mark-to-market rent on the 101,000 square feet of second generation space were positive 7.2% and positive 1.8%, respectively. Tenant improvements and leasing commissions were $16.21 per square foot per annum, or 18.2% of initial rent.
- 62,000 square feet of New York Retail space (57,000 square feet at share) at an initial rent of $242.89 per square foot and a weighted average lease term of 10.5 years. The changes in the GAAP and cash mark-to-market rent on the 36,000 square feet of second generation space were negative 55.8% and negative 49.3%, respectively. Tenant improvements and leasing commissions were $17.96 per square foot per annum, or 7.4% of initial rent.
- 67,000 square feet at theMART (all at share) at an initial rent of $52.20 per square foot and a weighted average lease term of 7.3 years. The changes in the GAAP and cash mark-to-market rent on the 38,000 square feet of second generation space were negative 3.1% and negative 7.4%, respectively. Tenant improvements and leasing commissions were $11.64 per square foot per annum, or 22.3% of initial rent.
- 154,000 square feet at 555 California (108,000 square feet at share) at an initial rent of $98.20 per square foot and a weighted average lease term of 5.6 years. The changes in the GAAP and cash mark-to-market rent on the 101,000 square feet of second generation space were positive 16.0% and positive 11.9%, respectively. Tenant improvements and leasing commissions were $4.73 per square foot per annum, or 4.8% of initial rent.

For the Nine Months Ended September 30, 2022

- 740,000 square feet of New York Office space (607,000 square feet at share) at an initial rent of $84.49 per square foot and a weighted average lease term of 9.2 years. The changes in the GAAP and cash mark-to-market rent on the 362,000 square feet of second generation space were positive 6.2% and positive 3.9%, respectively. Tenant improvements and leasing commissions were $12.09 per square foot per annum, or 14.3% of initial rent.
- 90,000 square feet of New York Retail space (85,000 square feet at share) at an initial rent of $262.88 per square foot and a weighted average lease term of 11.6 years. The changes in the GAAP and cash mark-to-market rent on the 42,000 square feet of second generation space were negative 38.3% and negative 34.2%, respectively. Tenant improvements and leasing commissions were $21.82 per square foot per annum, or 8.3% of initial rent.
- 275,000 square feet at theMART (all at share) at an initial rent of $51.78 per square foot and a weighted average lease term of 7.2 years. The changes in the GAAP and cash mark-to-market rent on the 221,000 square feet of second generation space were negative 4.5% and negative 4.6%, respectively. Tenant improvements and leasing commissions were $10.88 per square foot per annum, or 21.0% of initial rent.
- 210,000 square feet at 555 California (147,000 square feet at share) at an initial rent of $96.40 per square foot and a weighted average lease term of 5.9 years. The changes in the GAAP and cash mark-to-market rent on the 135,000 square feet of second generation space were positive 24.3% and positive 13.6%, respectively. Tenant improvements and leasing commissions were $7.15 per square foot per annum, or 7.4% of initial rent.

Square Footage (in service) and Occupancy as of September 30, 2022

(Square feet in thousands)	Number of Properties		Square Feet (in service) Total Portfolio	Square Feet (in service) Our Share	Occupancy %
New York:					
Office	31	(1)	18,970	16,275	91.8 %
Retail (includes retail properties that are in the base of our office properties)	58	(1)	2,307	1,867	74.4 %
Residential - 1,983 units[2]	7	(1)	1,511	778	96.8 % (2)
Alexander's	6		2,241	726	96.3 % (2)
			25,029	19,646	90.3 %
Other:					
theMART	4		3,637	3,628	87.3 %
555 California Street	3		1,819	1,273	94.7 %
Other	11		2,532	1,197	92.7 %
			7,988	6,098	
Total square feet as of September 30, 2022			33,017	25,744	

See notes below.

Square Footage (in service) and Occupancy as of December 31, 2021

(Square feet in thousands)	Number of properties		Square Feet (in service) Total Portfolio	Square Feet (in service) Our Share	Occupancy %
New York:					
Office	32	(1)	19,442	16,757	92.2 %
Retail (includes retail properties that are in the base of our office properties)	60	(1)	2,267	1,825	80.7 %
Residential - 1,986 units[2]	8	(1)	1,518	785	97.0 % (2)
Alexander's	6		2,218	719	95.6 % (2)
			25,445	20,086	91.3 %
Other:					
theMART	4		3,692	3,683	88.9 %
555 California Street	3		1,818	1,273	93.8 %
Other	11		2,489	1,154	92.8 %
			7,999	6,110	
Total square feet as of December 31, 2021			33,444	26,196	

(1) Reflects the Office, Retail and Residential space within our 73 and 76 total New York properties as of September 30, 2022 and December 31, 2021, respectively.
(2) The Alexander Apartment Tower (312 units) is reflected in Residential unit count and occupancy.

Critical Accounting Estimates

A summary of our critical accounting policies and estimates used in the preparation of our consolidated financial statements is included in Part II, Item 7 - *Management's Discussion and Analysis of Financial Condition and Results of Operations* in our Annual Report on Form 10-K for the year ended December 31, 2021. For the nine months ended September 30, 2022, there were no material changes to these policies.

Recently Issued Accounting Literature

Refer to Note 3 - *Recently Issued Accounting Literature* to the unaudited consolidated financial statements in Part I, Item I of this Quarterly Report on Form 10-Q for information regarding recent accounting pronouncements that may affect us.

NOI At Share by Segment for the Three Months Ended September 30, 2022 and 2021

NOI at share represents total revenues less operating expenses including our share of partially owned entities. NOI at share - cash basis represents NOI at share adjusted to exclude straight-line rental income and expense, amortization of acquired below and above market leases, net and other non-cash adjustments. We consider NOI at share - cash basis to be the primary non-GAAP financial measure for making decisions and assessing the unlevered performance of our segments as it relates to the total return on assets as opposed to the levered return on equity. As properties are bought and sold based on NOI at share - cash basis, we utilize this measure to make investment decisions as well as to compare the performance of our assets to that of our peers. NOI at share and NOI at share - cash basis should not be considered alternatives to net income or cash flow from operations and may not be comparable to similarly titled measures employed by other companies.

Below is a summary of NOI at share and NOI at share - cash basis by segment for the three months ended September 30, 2022 and 2021.

(Amounts in thousands)	For the Three Months Ended September 30, 2022		
	Total	New York	Other
Total revenues	$ 457,431	$ 360,033	$ 97,398
Operating expenses	(221,596)	(182,131)	(39,465)
NOI - consolidated	235,835	177,902	57,933
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(14,766)	(8,691)	(6,075)
Add: NOI from partially owned entities	76,020	71,943	4,077
NOI at share	297,089	241,154	55,935
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net, and other	(1,419)	(3,462)	2,043
NOI at share - cash basis	$ 295,670	$ 237,692	$ 57,978

(Amounts in thousands)	For the Three Months Ended September 30, 2021		
	Total	New York	Other
Total revenues	$ 409,212	$ 316,643	$ 92,569
Operating expenses	(212,699)	(151,276)	(61,423)
NOI - consolidated	196,513	165,367	31,146
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(16,886)	(9,747)	(7,139)
Add: NOI from partially owned entities	75,644	73,219	2,425
NOI at share	255,271	228,839	26,432
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net, and other	1,922	783	1,139
NOI at share - cash basis	$ 257,193	$ 229,622	$ 27,571

NOI At Share by Segment for the Three Months Ended September 30, 2022 and 2021 - continued

The elements of our New York and Other NOI at share for the three months ended September 30, 2022 and 2021 are summarized below.

(Amounts in thousands)	For the Three Months Ended September 30,	
	2022	2021
New York:		
Office	$ 174,790	$ 166,553
Retail	52,127	49,083
Residential	4,598	4,194
Alexander's	9,639	9,009
Total New York	241,154	228,839
Other:		
theMART[(1)]	35,769	6,431
555 California Street	16,092	16,128
Other investments	4,074	3,873
Total Other	55,935	26,432
NOI at share	$ 297,089	$ 255,271

See note below.

The elements of our New York and Other NOI at share - cash basis for the three months ended September 30, 2022 and 2021 are summarized below.

(Amounts in thousands)	For the Three Months Ended September 30,	
	2022	2021
New York:		
Office	$ 174,606	$ 170,521
Retail	48,096	45,175
Residential	4,556	4,136
Alexander's	10,434	9,790
Total New York	237,692	229,622
Other:		
theMART[(1)]	36,772	8,635
555 California Street	16,926	14,745
Other investments	4,280	4,191
Total Other	57,978	27,571
NOI at share - cash basis	$ 295,670	$ 257,193

(1) Increase primarily due to (i) prior period accrual adjustments recorded in the third quarter of each year related to changes in the tax-assessed value of theMART and (ii) an increase in tradeshow activity in the third quarter of 2022.

Reconciliation of Net Income to NOI At Share and NOI At Share - Cash Basis for the Three Months Ended September 30, 2022 and 2021

Below is a reconciliation of net income to NOI at share and NOI at share - cash basis for the three months ended September 30, 2022 and 2021.

(Amounts in thousands)	For the Three Months Ended September 30,	
	2022	2021
Net income	$ 20,112	$ 71,765
Depreciation and amortization expense	134,526	100,867
General and administrative expense	29,174	25,553
Transaction related costs and other	996	9,681
Income from partially owned entities	(24,341)	(26,269)
Loss from real estate fund investments	111	66
Interest and other investment income, net	(5,228)	(633)
Interest and debt expense	76,774	50,946
Net gains on disposition of wholly owned and partially owned assets	—	(10,087)
Income tax expense (benefit)	3,711	(25,376)
NOI from partially owned entities	76,020	75,644
NOI attributable to noncontrolling interests in consolidated subsidiaries	(14,766)	(16,886)
NOI at share	297,089	255,271
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(1,419)	1,922
NOI at share - cash basis	$ 295,670	$ 257,193

NOI At Share by Region

	For the Three Months Ended September 30,	
	2022	2021
Region:		
New York City metropolitan area	82 %	91 %
Chicago, IL	13 %	3 %
San Francisco, CA	5 %	6 %
	100 %	100 %

Results of Operations – Three Months Ended September 30, 2022 Compared to September 30, 2021

Revenues

Our revenues were $457,431,000 for the three months ended September 30, 2022 compared to $409,212,000 for the prior year's quarter, an increase of $48,219,000. Below are the details of the increase by segment:

(Amounts in thousands)	Total	New York	Other
(Decrease) increase due to:			
Rental revenues:			
Acquisitions, dispositions and other	$ (2,539)	$ (2,539)	$ —
Development and redevelopment	23,192	23,192	—
Trade shows	6,049	—	6,049
Same store operations	13,239	15,916	(2,677)
	39,941	36,569	3,372
Fee and other income:			
BMS cleaning fees	4,235	4,741	(506)
Management and leasing fees	23	(85)	108
Other income	4,020	2,165	1,855
	8,278	6,821	1,457
Total increase in revenues	$ 48,219	$ 43,390	$ 4,829

Expenses

Our expenses were $385,692,000 for the three months ended September 30, 2022, compared to $349,599,000 for the prior year's quarter, an increase of $36,093,000. Below are the details of the increase (decrease) by segment:

(Amounts in thousands)	Total	New York	Other
(Decrease) increase due to:			
Operating:			
Acquisitions, dispositions and other	$ (618)	$ (618)	$ —
Development and redevelopment	9,735	9,488	247
Non-reimbursable expenses	7,560	7,794	(234)
Trade shows	(291)	—	(291)
BMS expenses	3,739	4,246	(507)
Same store operations	(11,228)	9,945	(21,173)
	8,897	30,855	(21,958)
Depreciation and amortization:			
Acquisitions, dispositions and other	20,868	20,868	—
Development and redevelopment	13,654	13,654	—
Same store operations	(863)	(1,061)	198
	33,659	33,461	198
General and administrative	3,621	463	3,158
Benefit from deferred compensation plan liability	(1,399)	—	(1,399)
Transaction related costs and other	(8,685)	(7,769) (1)	(916)
Total increase (decrease) in expenses	$ 36,093	$ 57,010	$ (20,917)

(1) Primarily non-cash impairment losses for the three Manhattan retail properties located at 677-679, 759-771 and 828-850 Madison Avenue, New York sold in the third quarter of 2021.

Income from Partially Owned Entities

Below are the components of income from partially owned entities.

(Amounts in thousands)	Percentage Ownership at September 30, 2022	For the Three Months Ended September 30, 2022	2021
Our share of net income (loss):			
Fifth Avenue and Times Square JV:			
Equity in net income	51.5%	$ 11,941	$ 12,671
Return on preferred equity, net of our share of the expense		9,430	9,430
		21,371	22,101
Alexander's	32.4%	5,910	4,795
Partially owned office buildings[1]	Various	(4,732)	418
Other investments[2]	Various	1,792	(1,045)
		$ 24,341	$ 26,269

(1) Includes interests in 280 Park Avenue, 650 Madison Avenue, One Park Avenue (consolidated from August 5, 2021), 7 West 34th Street, 512 West 22nd Street, 61 Ninth Avenue, 85 Tenth Avenue and others.
(2) Includes interests in Independence Plaza, Rosslyn Plaza and others.

Loss from Real Estate Fund Investments

Below is a summary of loss from the Fund and the Crowne Plaza joint venture.

(Amounts in thousands)	For the Three Months Ended September 30, 2022	2021
Net investment loss	$ (111)	$ (66)
Loss from real estate fund investments	(111)	(66)
Less loss attributable to noncontrolling interests in consolidated subsidiaries	312	360
Income from real estate fund investments, net of noncontrolling interests in consolidated subsidiaries	$ 201	$ 294

Interest and Other Investment Income, Net

The following table sets forth the details of interest and other investment income, net.

(Amounts in thousands)	For the Three Months Ended September 30, 2022	2021
Interest on cash and cash equivalents and restricted cash	$ 2,286	$ 67
Amortization of discount on investments in U.S. Treasury bills	1,546	—
Interest on loans receivable	1,396	561
Other, net	—	5
	$ 5,228	$ 633

Interest and Debt Expense

Interest and debt expense for the three months ended September 30, 2022 was $76,774,000 compared to $50,946,000 for the prior year's quarter, an increase of $25,828,000. This was primarily due to (i) $19,913,000 of higher interest expense resulting from higher average interest rates on our variable rate loans and (ii) $5,865,000 of lower capitalized interest and debt expense.

Net Gains on Disposition of Wholly Owned and Partially Owned Assets

Net gains on disposition of wholly owned and partially owned assets for the three months ended September 30, 2021 of $10,087,000 consists of a net gain from the sale of a condominium unit at 220 CPS.

Income Tax (Expense) Benefit

Income tax expense for the three months ended September 30, 2022 was $3,711,000 compared to a benefit of $25,376,000 for the prior year's quarter, an increase in expense of $29,087,000. This was primarily due to a $27,910,000 tax benefit recognized by our taxable REIT subsidiaries in 2021.

Net Loss (Income) Attributable to Noncontrolling Interests in Consolidated Subsidiaries

Net loss attributable to noncontrolling interests in consolidated subsidiaries was $3,792,000 for the three months ended September 30, 2022, compared to net income of $5,425,000 for the prior year's quarter, a decrease in income of $9,217,000. This resulted primarily from a decrease in net income subject to allocation to the noncontrolling interests of our non-wholly owned consolidated subsidiaries.

Net Income Attributable to Noncontrolling Interests in the Operating Partnership (Vornado Realty Trust)

Net income attributable to noncontrolling interests in the Operating Partnership was $606,000 for the three months ended September 30, 2022, compared to $2,818,000 for the prior year's quarter, a decrease of $2,212,000. This resulted primarily from lower net income subject to allocation to unitholders.

Preferred Share Dividends of Vornado Realty Trust

Preferred share dividends were $15,529,000 for the three months ended September 30, 2022, compared to $16,800,000 for the prior year's quarter, a decrease of $1,271,000.

Preferred Unit Distributions of Vornado Realty L.P.

Preferred unit distributions were $15,558,000 for the three months ended September 30, 2022, compared to $16,842,000 for the prior year's quarter, a decrease of $1,284,000.

Preferred Share/Unit Issuance Costs

Preferred share/unit issuance costs for the three months ended September 30, 2021 were $9,033,000 representing the previously capitalized issuance costs which were expensed upon calling for redemption of all the outstanding Series K cumulative redeemable preferred shares/units in September 2021.

Same Store Net Operating Income At Share

Same store NOI at share represents NOI at share from operations which are in service in both the current and prior year reporting periods. Same store NOI at share - cash basis is same store NOI at share adjusted to exclude straight-line rental income and expense, amortization of acquired below and above market leases, net and other non-cash adjustments. We present these non-GAAP measures to (i) facilitate meaningful comparisons of the operational performance of our properties and segments, (ii) make decisions on whether to buy, sell or refinance properties, and (iii) compare the performance of our properties and segments to those of our peers. Same store NOI at share and same store NOI at share - cash basis should not be considered alternatives to net income or cash flow from operations and may not be comparable to similarly titled measures employed by other companies.

Below are reconciliations of NOI at share to same store NOI at share for our New York segment, theMART, 555 California Street and other investments for the three months ended September 30, 2022 compared to September 30, 2021.

(Amounts in thousands)	Total	New York	theMART	555 California Street	Other
NOI at share for the three months ended September 30, 2022	$ 297,089	$ 241,154	$ 35,769	$ 16,092	$ 4,074
Less NOI at share from:					
Change in ownership interest in One Park Avenue	(2,106)	(2,106)	—	—	—
Dispositions	(88)	(88)	—	—	—
Development properties	(22,914)	(22,914)	—	—	—
Other non-same store income, net	(6,149)	(2,075)	—	—	(4,074)
Same store NOI at share for the three months ended September 30, 2022	$ 265,832	$ 213,971	$ 35,769	$ 16,092	$ —
NOI at share for the three months ended September 30, 2021	$ 255,271	$ 228,839	$ 6,431	$ 16,128	$ 3,873
Less NOI at share from:					
Dispositions	(2,754)	(2,754)	—	—	—
Development properties	(6,302)	(6,055)	—	(247)	—
Other non-same store income, net	(8,198)	(4,325)	—	—	(3,873)
Same store NOI at share for the three months ended September 30, 2021	$ 238,017	$ 215,705	$ 6,431	$ 15,881	$ —
Increase (decrease) in same store NOI at share	$ 27,815	$ (1,734)	$ 29,338	$ 211	$ —
% increase (decrease) in same store NOI at share	11.7 %	(0.8)%	456.2 %	1.3 %	0.0 %

Same Store Net Operating Income At Share - continued

Below are reconciliations of NOI at share - cash basis to same store NOI at share - cash basis for our New York segment, theMART, 555 California Street and other investments for the three months ended September 30, 2022 compared to September 30, 2021.

(Amounts in thousands)	Total	New York	theMART	555 California Street	Other
NOI at share - cash basis for the three months ended September 30, 2022	$ 295,670	$ 237,692	$ 36,772	$ 16,926	$ 4,280
Less NOI at share - cash basis from:					
Change in ownership interest in One Park Avenue	(1,502)	(1,502)	—	—	—
Dispositions	(88)	(88)	—	—	—
Development properties	(15,796)	(15,796)	—	—	—
Other non-same store income, net	(6,573)	(2,293)	—	—	(4,280)
Same store NOI at share - cash basis for the three months ended September 30, 2022	$ 271,711	$ 218,013	$ 36,772	$ 16,926	$ —
NOI at share - cash basis for the three months ended September 30, 2021	$ 257,193	$ 229,622	$ 8,635	$ 14,745	$ 4,191
Less NOI at share - cash basis from:					
Dispositions	(3,436)	(3,436)	—	—	—
Development properties	(6,852)	(6,605)	—	(247)	—
Other non-same store income, net	(8,064)	(3,873)	—	—	(4,191)
Same store NOI at share - cash basis for the three months ended September 30, 2021	$ 238,841	$ 215,708	$ 8,635	$ 14,498	$ —
Increase in same store NOI at share - cash basis	$ 32,870	$ 2,305	$ 28,137	$ 2,428	$ —
% increase in same store NOI at share - cash basis	13.8 %	1.1 %	325.8 %	16.7 %	0.0 %

NOI At Share by Segment for the Nine Months Ended September 30, 2022 and 2021

Below is a summary of NOI at share and NOI at share - cash basis by segment for the nine months ended September 30, 2022 and 2021.

(Amounts in thousands)	For the Nine Months Ended September 30, 2022		
	Total	New York	Other
Total revenues	$ 1,353,055	$ 1,082,743	$ 270,312
Operating expenses	(660,434)	(536,238)	(124,196)
NOI - consolidated	692,621	546,505	146,116
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(51,100)	(32,708)	(18,392)
Add: NOI from partially owned entities	228,772	219,116	9,656
NOI at share	870,293	732,913	137,380
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(8,824)	(13,626)	4,802
NOI at share - cash basis	$ 861,469	$ 719,287	$ 142,182

(Amounts in thousands)	For the Nine Months Ended September 30, 2021		
	Total	New York	Other
Total revenues	$ 1,168,130	$ 921,758	$ 246,372
Operating expenses	(594,598)	(468,294)	(126,304)
NOI - consolidated	573,532	453,464	120,068
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(50,221)	(26,841)	(23,380)
Add: NOI from partially owned entities	231,635	224,392	7,243
NOI at share	754,946	651,015	103,931
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	1,570	351	1,219
NOI at share - cash basis	$ 756,516	$ 651,366	$ 105,150

NOI At Share by Segment for the Nine Months Ended September 30, 2022 and 2021 - continued

The elements of our New York and Other NOI at share for the nine months ended September 30, 2022 and 2021 are summarized below.

(Amounts in thousands)	For the Nine Months Ended September 30,	
	2022	2021
New York:		
Office	$ 534,641	$ 497,238
Retail	155,670	124,998
Residential	14,622	12,889
Alexander's	27,980	28,567
Hotel Pennsylvania(1)	—	(12,677)
Total New York	732,913	651,015
Other:		
theMART(2)	75,630	42,950
555 California Street	49,051	48,230
Other investments	12,699	12,751
Total Other	137,380	103,931
NOI at share	$ 870,293	$ 754,946

See notes below.

The elements of our New York and Other NOI at share - cash basis for the nine months ended September 30, 2022 and 2021 are summarized below.

(Amounts in thousands)	For the Nine Months Ended September 30,	
	2022	2021
New York:		
Office	$ 532,759	$ 504,939
Retail	142,678	116,265
Residential	13,554	11,898
Alexander's	30,296	30,987
Hotel Pennsylvania(1)	—	(12,723)
Total New York	719,287	651,366
Other:		
theMART(2)	78,749	45,976
555 California Street	50,141	45,552
Other investments	13,292	13,622
Total Other	142,182	105,150
NOI at share - cash basis	$ 861,469	$ 756,516

(1) On April 5, 2021, we permanently closed the Hotel Pennsylvania. Beginning in the third quarter of 2021, we commenced capitalization of carrying costs in connection with our development of the future PENN 15 (formerly Hotel Pennsylvania) site.

(2) Increase primarily due to (i) prior period accrual adjustments recorded in the third quarter of each year related to changes in the tax-assessed value of theMART and (ii) an increase in tradeshow activity in the third quarter of 2022.

Reconciliation of Net Income to NOI At Share and NOI at share - cash basis for the Nine Months Ended September 30, 2022 and 2021

Below is a reconciliation of net income to NOI at share and NOI at share - cash basis for the nine months ended September 30, 2022 and 2021.

(Amounts in thousands)	For the Nine Months Ended September 30,	
	2022	2021
Net income	$ 142,390	$ 175,590
Depreciation and amortization expense	370,631	285,998
General and administrative expense	102,292	100,341
Transaction related costs and other	4,961	10,630
Income from partially owned entities	(83,775)	(86,768)
Income from real estate fund investments	(5,421)	(5,107)
Interest and other investment income, net	(9,282)	(3,694)
Interest and debt expense	191,523	152,904
Net gains on disposition of wholly owned and partially owned assets	(35,384)	(35,811)
Income tax expense (benefit)	14,686	(20,551)
NOI from partially owned entities	228,772	231,635
NOI attributable to noncontrolling interests in consolidated subsidiaries	(51,100)	(50,221)
NOI at share	870,293	754,946
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(8,824)	1,570
NOI at share - cash basis	$ 861,469	$ 756,516

NOI At Share by Region

	For the Nine Months Ended September 30,	
	2022	2021
Region:		
New York City metropolitan area	85 %	88 %
Chicago, IL	9 %	6 %
San Francisco, CA	6 %	6 %
	100 %	100 %

Results of Operations – Nine Months Ended September 30, 2022 Compared to September 30, 2021

Revenues

Our revenues were $1,353,055,000 for the nine months ended September 30, 2022, compared to $1,168,130,000 for the prior year's nine months, an increase of $184,925,000. Below are the details of the increase by segment:

(Amounts in thousands)	Total	New York	Other
Increase (decrease) due to:			
Rental revenues:			
Acquisitions, dispositions and other	$ 12,286	$ 12,286	$ —
Development and redevelopment	68,281	68,281	—
Trade shows[(1)]	17,035	—	17,035
Same store operations	65,903	63,306	2,597
	163,505	143,873	19,632
Fee and other income:			
BMS cleaning fees	14,365	16,110	(1,745)
Management and leasing fees	(2,784)	(2,717)	(67)
Other income	9,839	3,719	6,120
	21,420	17,112	4,308
Total increase in revenues	$ 184,925	$ 160,985	$ 23,940

See notes below.

Expenses

Our expenses were $1,128,180,000 for the nine months ended September 30, 2022, compared to $998,989,000 for the prior year's nine months, an increase of $129,191,000. Below are the details of the increase (decrease) by segment:

(Amounts in thousands)	Total	New York	Other
Increase (decrease) due to:			
Operating:			
Acquisitions, dispositions and other	$ 3,495	$ 3,495	$ —
Development and redevelopment	24,046	23,198	848
Non-reimbursable expenses	21,254	23,140	(1,886)
Trade shows[(1)]	5,359	—	5,359
Hotel Pennsylvania[(2)]	(13,702)	(13,702)	—
BMS expenses	14,085	15,830	(1,745)
Same store operations	11,299	15,983	(4,684)
	65,836	67,944	(2,108)
Depreciation and amortization:			
Acquisitions, dispositions and other	45,159	45,159	—
Development and redevelopment	38,622	38,622	—
Same store operations	852	(1,052)	1,904
	84,633	82,729	1,904
General and administrative	1,951	(1,337)	3,288
Benefit from deferred compensation plan liability	(17,560)	—	(17,560)
Transaction related costs and other	(5,669)	(6,390) [(3)]	721
Total increase (decrease) in expenses	$ 129,191	$ 142,946	$ (13,755)

(1) We cancelled trade shows at theMART beginning late March of 2020 due to the COVID-19 pandemic and resumed in the third quarter of 2021.

(2) On April 5, 2021, we permanently closed the Hotel Pennsylvania. Beginning in the third quarter of 2021, we commenced capitalization of carrying costs in connection with our development of the future PENN 15 (formerly Hotel Pennsylvania) site.

(3) Primarily non-cash impairment losses for the three Manhattan retail properties located at 677-679, 759-771 and 828-850 Madison Avenue, New York sold in the third quarter of 2021.

Results of Operations – Nine Months Ended September 30, 2022 Compared to September 30, 2021 - continued

Income from Partially Owned Entities

Below are the components of income from partially owned entities.

(Amounts in thousands)	Percentage Ownership at September 30, 2022	For the Nine Months Ended September 30, 2022	2021
Our share of net income (loss):			
Fifth Avenue and Times Square JV:			
Equity in net income	51.5%	$ 41,915	$ 32,314
Return on preferred equity, net of our share of the expense		27,985	27,985
		69,900	60,299
Alexander's[(1)]	32.4%	17,587	21,386
Partially owned office buildings[(2)]	Various	(8,080)	8,395
Other investments[(3)]	Various	4,368	(3,312)
		$ 83,775	$ 86,768

(1) 2021 includes our $2,956 share of the net gain on the sale of a land parcel in the Bronx, New York.

(2) Includes interests in 280 Park Avenue, 650 Madison Avenue, One Park Avenue (consolidated from August 5, 2021), 7 West 34th Street, 512 West 22nd Street, 61 Ninth Avenue, 85 Tenth Avenue and others.

(3) Includes interests in Independence Plaza, Rosslyn Plaza and others.

Income from Real Estate Fund Investments

Below is a summary of income from the Fund and the Crowne Plaza joint venture.

(Amounts in thousands)	For the Nine Months Ended September 30, 2022	2021
Previously recorded unrealized loss on exited investments	$ 59,396	$ —
Realized loss on exited investments	(53,724)	—
Net unrealized loss on held investments	(6,800)	(789)
Net investment income	6,549	5,896
Income from real estate fund investments	5,421	5,107
Less income attributable to noncontrolling interests in consolidated subsidiaries	(3,287)	(2,914)
Income from real estate fund investments, net of noncontrolling interests in consolidated subsidiaries	$ 2,134	$ 2,193

Interest and Other Investment Income, Net

The following table sets forth the details of interest and other investment income, net.

(Amounts in thousands)	For the Nine Months Ended September 30, 2022	2021
Amortization of discount on investments in U.S. Treasury bills	$ 3,403	$ —
Interest on loans receivable	3,215	1,679
Interest on cash and cash equivalents and restricted cash	2,660	207
Other, net	4	1,808
	$ 9,282	$ 3,694

Interest and Debt Expense

Interest and debt expense was $191,523,000 for the nine months ended September 30, 2022, compared to $152,904,000 for the prior year's nine months, an increase of $38,619,000. This was primarily due to (i) $25,692,000 of higher interest expense resulting from higher average interest rates on our variable rate loans, and (ii) $19,690,000 of lower capitalized interest and debt expense, partially offset by (iii) $5,700,000 of lower interest expense in connection with the refinancing of 1290 Avenue of the Americas.

Net Gains on Disposition of Wholly Owned and Partially Owned Assets

Net gains on disposition of wholly owned and partially owned assets of $35,384,000 for the nine months ended September 30, 2022, primarily consists of (i) $15,213,000 from the sale of the Center Building located at 33-00 Northern Boulevard in Long Island City, New York, (ii) $13,613,000 from the refund of New York City real property transfer tax paid in connection with the April 2019 Fifth Avenue and Times Square JV transaction and (iii) $7,030,000 from the sale of one condominium unit and ancillary amenities at 220 CPS. Net gains on disposition of wholly owned and partially owned assets of $35,811,000 for the nine months ended September 30, 2021, primarily consists of net gains from the sale of condominium units and ancillary amenities at 220 CPS.

Income Tax (Expense) Benefit

Income tax expense for the nine months ended September 30, 2022 was $14,686,000 compared to a benefit of $20,551,000 for the prior year's nine months, an increase in expense of $35,237,000. This was primarily due to (i) an increase in the deferred tax liability on our investment in Farley Office and Retail in 2022 and (ii) higher tax benefit recognized by our taxable REIT subsidiaries in 2021, partially offset by (iii) lower income tax expense from the sale of 220 CPS condominium units in 2022.

Net Income Attributable to Noncontrolling Interests in Consolidated Subsidiaries

Net income attributable to noncontrolling interests in consolidated subsidiaries was $4,756,000 for the nine months ended September 30, 2022, compared to $20,323,000 for the prior year's nine months, a decrease of $15,567,000. This resulted primarily from a decrease in net income subject to allocation to the noncontrolling interests of our non-wholly owned consolidated subsidiaries.

Net Income Attributable to Noncontrolling Interests in the Operating Partnership (Vornado Realty Trust)

Net income attributable to noncontrolling interests in the Operating Partnership was $6,382,000 for the nine months ended September 30, 2022, compared to $6,683,000 for the prior year's nine months, a decrease of $301,000. This resulted primarily from lower net income subject to allocation to Class A unitholders.

Preferred Share Dividends of Vornado Realty Trust

Preferred share dividends were $46,587,000 for the nine months ended September 30, 2022, compared to $49,734,000 for the prior year's nine months, a decrease of $3,147,000.

Preferred Unit Distributions of Vornado Realty L.P.

Preferred unit distributions were $46,673,000 for the nine months ended September 30, 2022, compared to $49,858,000 for the prior year's nine months, a decrease of $3,185,000.

Preferred Share/Unit Issuance Costs

Preferred share/unit issuance costs for the nine months ended September 30, 2021 were $9,033,000 representing the previously capitalized issuance costs which were expensed upon calling for redemption of all the outstanding Series K cumulative redeemable preferred shares/units in September 2021.

Results of Operations – Nine Months Ended September 30, 2022 Compared to September 30, 2021 - continued

Same Store Net Operating Income At Share

Below are reconciliations of NOI at share to same store NOI at share for our New York segment, theMART, 555 California Street and other investments for the nine months ended September 30, 2022 compared to September 30, 2021.

(Amounts in thousands)	Total	New York	theMART	555 California Street	Other
NOI at share for the nine months ended September 30, 2022	$ 870,293	$ 732,913	$ 75,630	$ 49,051	$ 12,699
Less NOI at share from:					
Change in ownership interest in One Park Avenue	(13,370)	(13,370)	—	—	—
Dispositions	(3,523)	(3,523)	—	—	—
Development properties	(65,440)	(65,440)	—	—	—
Other non-same store income, net	(17,910)	(5,211)	—	—	(12,699)
Same store NOI at share for the nine months ended September 30, 2022	$ 770,050	$ 645,369	$ 75,630	$ 49,051	$ —
NOI at share for the nine months ended September 30, 2021	$ 754,946	$ 651,015	$ 42,950	$ 48,230	$ 12,751
Less NOI at share from:					
Dispositions	(6,667)	(6,667)	—	—	—
Development properties	(23,207)	(22,359)	—	(848)	—
Hotel Pennsylvania (permanently closed on April 5, 2021)	12,677	12,677	—	—	—
Other non-same store income, net	(20,991)	(8,240)	—	—	(12,751)
Same store NOI at share for the nine months ended September 30, 2021	$ 716,758	$ 626,426	$ 42,950	$ 47,382	$ —
Increase in same store NOI at share	$ 53,292	$ 18,943	$ 32,680	$ 1,669	$ —
% increase in same store NOI at share	7.4 %	3.0 %	76.1 %	3.5 %	0.0 %

Below are reconciliations of NOI at share - cash basis to same store NOI at share - cash basis for our New York segment, theMART, 555 California Street and other investments for the nine months ended September 30, 2022 compared to September 30, 2021.

(Amounts in thousands)	Total	New York	theMART	555 California Street	Other
NOI at share - cash basis for the nine months ended September 30, 2022	$ 861,469	$ 719,287	$ 78,749	$ 50,141	$ 13,292
Less NOI at share - cash basis from:					
Change in ownership interest in One Park Avenue	(10,111)	(10,111)	—	—	—
Dispositions	(3,732)	(3,732)	—	—	—
Development properties	(44,381)	(44,381)	—	—	—
Other non-same store income, net	(19,478)	(6,186)	—	—	(13,292)
Same store NOI at share - cash basis for the nine months ended September 30, 2022	$ 783,767	$ 654,877	$ 78,749	$ 50,141	$ —
NOI at share - cash basis for the nine months ended September 30, 2021	$ 756,516	$ 651,366	$ 45,976	$ 45,552	$ 13,622
Less NOI at share - cash basis from:					
Dispositions	(6,796)	(6,796)	—	—	—
Development properties	(24,430)	(23,582)	—	(848)	—
Hotel Pennsylvania (permanently closed on April 5, 2021)	12,723	12,723	—	—	—
Other non-same store income, net	(21,310)	(7,688)	—	—	(13,622)
Same store NOI at share - cash basis for the nine months ended September 30, 2021	$ 716,703	$ 626,023	$ 45,976	$ 44,704	$ —
Increase in same store NOI at share - cash basis	$ 67,064	$ 28,854	$ 32,773	$ 5,437	$ —
% increase in same store NOI at share - cash basis	9.4 %	4.6 %	71.3 %	12.2 %	0.0 %

Liquidity and Capital Resources

Our cash requirements include property operating expenses, capital improvements, tenant improvements, debt service, leasing commissions, dividends to our shareholders, distributions to unitholders of the Operating Partnership, as well as acquisition and development and redevelopment costs. The sources of liquidity to fund these cash requirements include rental revenue, which is our primary source of cash flow and is dependent upon the occupancy and rental rates of our properties, proceeds from debt financings, including mortgage loans, senior unsecured borrowings, unsecured term loans and unsecured revolving credit facilities; proceeds from the issuance of common and preferred equity; and asset sales.

As of September 30, 2022, we have $3.3 billion of liquidity comprised of $977 million of cash and cash equivalents and restricted cash, $445 million of investments in U.S. Treasury bills and $1.9 billion available on our $2.5 billion revolving credit facilities. The ongoing challenges posed by the COVID-19 pandemic could adversely impact our cash flow from continuing operations but we anticipate that cash flow from continuing operations over the next twelve months together with cash balances on hand will be adequate to fund our business operations, cash distributions to unitholders of the Operating Partnership, cash dividends to our shareholders, debt amortization and recurring capital expenditures. Capital requirements for development and redevelopment expenditures and acquisitions may require funding from borrowings, equity offerings and/or asset sales.

We may from time to time purchase or retire outstanding debt securities or redeem our equity securities. Such purchases, if any, will depend on prevailing market conditions, liquidity requirements and other factors. The amounts involved in connection with these transactions could be material to our consolidated financial statements.

Summary Cash Flows for the Nine Months Ended September 30, 2022 and 2021

Cash and cash equivalents and restricted cash was $977,048,000 as of September 30, 2022, a $953,303,000 decrease from the balance as of December 31, 2021.

Our cash flow activities are summarized as follows:

(Amounts in thousands)	For the Nine Months Ended September 30,		Increase (Decrease) in Cash Flow
	2022	2021	
Net cash provided by operating activities	$ 559,827	$ 478,103	$ 81,724
Net cash used in investing activities	(849,738)	(392,634)	(457,104)
Net cash (used in) provided by financing activities	(663,392)	452,359	(1,115,751)

Operating Activities

Net cash provided by operating activities primarily consists of cash inflows from rental revenues and operating distributions from our non-consolidated partially owned entities less cash outflows for property expenses, general and administrative expenses and interest expense. For the nine months ended September 30, 2022, net cash provided by operating activities of $559,827,000 was comprised of $535,412,000 of cash from operations, including distributions of income from partially owned entities of $137,758,000, and a net increase of $24,415,000 in cash due to the timing of cash receipts and payments related to changes in operating assets and liabilities.

Investing Activities

Net cash flow used in investing activities is impacted by the timing and extent of our development, capital improvement, acquisition and disposition activities during the year.

The following table details the net cash used in investing activities:

(Amounts in thousands)	For the Nine Months Ended September 30,		(Decrease) Increase in Cash Flow
	2022	2021	
Purchase of U.S. Treasury bills	$ (794,793)	$ —	$ (794,793)
Development costs and construction in progress	(557,884)	(444,645)	(113,239)
Proceeds from maturities of U.S. Treasury bills	349,461	—	349,461
Proceeds from sales of real estate	253,958	100,024	153,934
Additions to real estate	(120,124)	(113,374)	(6,750)
Distributions of capital from partially owned entities	20,566	106,005	(85,439)
Proceeds from sale of condominium units and ancillary amenities at 220 Central Park South	16,124	97,683	(81,559)
Investments in partially owned entities	(15,046)	(12,366)	(2,680)
Acquisitions of real estate and other	(2,000)	(3,000)	1,000
Acquisition of additional 45.0% ownership interest in One Park Avenue (inclusive of $5,806 of prorations and net working capital and net of $39,370 of cash and restricted cash balances consolidated upon acquisition)	—	(123,936)	123,936
Proceeds from repayments of loan receivables	—	975	(975)
Net cash used in investing activities	$ (849,738)	$ (392,634)	$ (457,104)

Financing Activities

Net cash flow (used in) provided by financing activities is impacted by the timing and extent of issuances of debt and equity securities, distributions paid to common shareholders and unitholders of the Operating Partnership as well as principal and other repayments associated with our outstanding debt.

The following table details the net cash (used in) provided by financing activities:

(Amounts in thousands)	For the Nine Months Ended September 30, 2022	2021	Increase (Decrease) in Cash Flow
Repayments of borrowings	$ (1,245,973)	$ (1,578,843)	$ 332,870
Proceeds from borrowings	1,029,773	2,298,007	(1,268,234)
Dividends paid on common shares/Distributions to Vornado	(304,896)	(304,516)	(380)
Distributions to redeemable security holders and noncontrolling interests in consolidated subsidiaries	(68,716)	(173,356)	104,640
Dividends paid on preferred shares/Distributions to preferred unitholders	(46,587)	(49,400)	2,813
Debt issuance costs	(32,473)	(33,935)	1,462
Contributions from noncontrolling interests in consolidated subsidiaries	4,903	2,657	2,246
Proceeds received from exercise of Vornado stock options and other	662	664	(2)
Repurchase of shares/Class A units related to stock compensation agreements and related tax withholdings and other	(85)	(114)	29
Proceeds from the issuance of preferred shares/units	—	291,195	(291,195)
Net cash (used in) provided by financing activities	$ (663,392)	$ 452,359	$ (1,115,751)

Development and Redevelopment Expenditures for the Nine Months Ended September 30, 2022

Development and redevelopment expenditures consist of all hard and soft costs associated with the development and redevelopment of a property. We plan to fund these development and redevelopment expenditures from operating cash flow, existing liquidity, and/or borrowings. See the detailed discussion below for our current development and redevelopment projects.

PENN District

Farley

Our 95% joint venture (5% is owned by the Related Companies ("Related")) is developing Farley Office and Retail, which will include approximately 846,000 rentable square feet of commercial space, comprised of approximately 730,000 square feet of office space and approximately 116,000 square feet of restaurant and retail space. The total development cost of this project is estimated to be approximately $1,120,000,000 at our 95% share, of which $1,069,131,000 of cash has been expended as of September 30, 2022.

PENN 1

We are redeveloping PENN 1, a 2,546,000 square foot office building located on 34th Street between Seventh and Eighth Avenue. In December 2020, we entered into an agreement with the Metropolitan Transportation Authority (the "MTA") to oversee the redevelopment of the Long Island Rail Road Concourse at Penn Station (the "Concourse"), within the footprint of PENN 1. Skanska USA Civil Northeast, Inc. is performing the redevelopment under a fixed price contract for $380,000,000 which is being funded by the MTA. In connection with the redevelopment, we entered into an agreement with the MTA which will result in the widening of the Concourse to relieve overcrowding and our trading of 15,000 square feet of back of house space for 22,000 square feet of retail frontage space. Vornado's total development cost of our PENN 1 project is estimated to be $450,000,000, of which $354,828,000 of cash has been expended as of September 30, 2022.

PENN 2

We are redeveloping PENN 2, a 1,795,000 square foot (as expanded) office building located on the west side of Seventh Avenue between 31st and 33rd Street. The development cost of this project is estimated to be $750,000,000, of which $330,303,000 of cash has been expended as of September 30, 2022.

PENN 15 (Hotel Pennsylvania Site)

We have permanently closed the Hotel Pennsylvania and plan to develop an office tower on the site. Demolition of the existing building structure commenced in the fourth quarter of 2021.

We are also making districtwide improvements within the PENN District. The development cost of these improvements is estimated to be $100,000,000, of which $40,843,000 of cash has been expended as of September 30, 2022.

We are also evaluating other development and redevelopment opportunities at certain of our properties in Manhattan including, in particular, the PENN District.

There can be no assurance that the above projects will be completed, completed on schedule or within budget.

Insurance

For our properties, we maintain general liability insurance with limits of $300,000,000 per occurrence and per property, of which $250,000,000 includes communicable disease coverage, and we maintain all risk property and rental value insurance with limits of $2.0 billion per occurrence, with sub-limits for certain perils such as flood and earthquake, excluding communicable disease coverage. Our California properties have earthquake insurance with coverage of $350,000,000 per occurrence and in the aggregate, subject to a deductible in the amount of 5% of the value of the affected property. We maintain coverage for certified terrorism acts with limits of $6.0 billion per occurrence and in the aggregate (as listed below), $1.2 billion for non-certified acts of terrorism, and $5.0 billion per occurrence and in the aggregate for terrorism involving nuclear, biological, chemical and radiological ("NBCR") terrorism events, as defined by the Terrorism Risk Insurance Act of 2002, as amended to date and which has been extended through December 2027.

Penn Plaza Insurance Company, LLC ("PPIC"), our wholly owned consolidated subsidiary, acts as a re-insurer with respect to a portion of all risk property and rental value insurance and a portion of our earthquake insurance coverage, and as a direct insurer for coverage for acts of terrorism including NBCR acts. Coverage for acts of terrorism (excluding NBCR acts) is fully reinsured by third-party insurance companies and the Federal government with no exposure to PPIC. For NBCR acts, PPIC is responsible for a deductible of $1,799,727 and 20% of the balance of a covered loss and the Federal government is responsible for the remaining portion of a covered loss. We are ultimately responsible for any loss incurred by PPIC.

Certain condominiums in which we own an interest (including the Farley Condominiums) maintain insurance policies with different per occurrence and aggregate limits than our policies described above.

We continue to monitor the state of the insurance market and the scope and costs of coverage for acts of terrorism and other events. However, we cannot anticipate what coverage will be available on commercially reasonable terms in the future. We are responsible for uninsured losses and for deductibles and losses in excess of our insurance coverage, which could be material.

Our debt instruments, consisting of mortgage loans secured by our properties, senior unsecured notes and revolving credit agreements contain customary covenants requiring us to maintain insurance. Although we believe that we have adequate insurance coverage for purposes of these agreements, we may not be able to obtain an equivalent amount of coverage at reasonable costs in the future. Further, if lenders insist on greater coverage than we are able to obtain it could adversely affect our ability to finance or refinance our properties and expand our portfolio.

Other Commitments and Contingencies

We are from time to time involved in legal actions arising in the ordinary course of business. In our opinion, after consultation with legal counsel, the outcome of such matters is not currently expected to have a material adverse effect on our financial position, results of operations or cash flows.

Each of our properties has been subjected to varying degrees of environmental assessment at various times. The environmental assessments did not reveal any material environmental contamination. However, there can be no assurance that the identification of new areas of contamination, changes in the extent or known scope of contamination, the discovery of additional sites, or changes in cleanup requirements would not result in significant costs to us.

In January 2022, we exercised a 25-year renewal option on our PENN 1 ground lease extending the term through June 2073. As a result of the exercise, we remeasured the related ground lease liability to include the 25-year extension option and recorded an estimated incremental right-of-use asset and lease liability of approximately $350,000,000 which is included in "right-of-use assets" and "lease liabilities", respectively, on our consolidated balance sheets.

In July 2018, we leased 78,000 square feet at 345 Montgomery Street in San Francisco, CA, to a subsidiary of Regus PLC, for an initial term of 15 years. The obligations under the lease were guaranteed by Regus PLC in an amount of up to $90,000,000. The tenant purported to terminate the lease prior to space delivery. We commenced a suit on October 23, 2019 seeking to enforce the lease and the guaranty. On May 11, 2021, the court issued a final statement of decision in our favor and on July 7, 2021, the Regus subsidiary appealed the decision. On October 9, 2020, the successor to Regus PLC filed for bankruptcy in Luxembourg. We are actively pursuing claims relating to the guaranty against the successor to Regus PLC and its parent, in Luxembourg and other jurisdictions.

Our mortgage loans are non-recourse to us, except for the mortgage loans secured by 640 Fifth Avenue, 7 West 34th Street and 435 Seventh Avenue, which we guaranteed and therefore are part of our tax basis. In certain cases, we have provided guarantees or master leased tenant space. These guarantees and master leases terminate either upon the satisfaction of specified circumstances or repayment of the underlying loans. In addition, we have guaranteed the rent and payments in lieu of real estate taxes due to Empire State Development, an entity of New York State, for Farley Office and Retail. As of September 30, 2022, the aggregate dollar amount of these guarantees and master leases is approximately $1,593,000,000.

Other Commitments and Contingencies - continued

As of September 30, 2022, $15,273,000 of letters of credit were outstanding under one of our unsecured revolving credit facilities. Our unsecured revolving credit facilities contain financial covenants that require us to maintain minimum interest coverage and maximum debt to market capitalization ratios, and provide for higher interest rates in the event of a decline in our ratings below Baa3/BBB- (our current ratings). Our unsecured revolving credit facilities also contain customary conditions precedent to borrowing, including representations and warranties, and also contain customary events of default that could give rise to accelerated repayment, including such items as failure to pay interest or principal.

Our 95% consolidated joint venture (5% is owned by Related) is developing Farley Office and Retail. In connection with the development of the property, the joint venture admitted a historic tax credit investor partner. Under the terms of the historic tax credit arrangement, the joint venture is required to comply with various laws, regulations, and contractual provisions. Non-compliance with applicable requirements could result in projected tax benefits not being realized and, therefore, may require a refund or reduction of the Tax Credit Investor’s capital contributions. As of September 30, 2022, the Tax Credit Investor has made $92,400,000 in capital contributions. Vornado and Related have guaranteed certain of the joint venture’s obligations to the Tax Credit Investor.

As investment manager of the Fund we are entitled to an incentive allocation after the limited partners have received a preferred return on their invested capital. The incentive allocation is subject to catch-up and clawback provisions. Accordingly, based on the September 30, 2022 fair value of the Fund assets, at liquidation we would be required to make a $24,990,000 payment to the limited partners, net of amounts owed to us, representing a clawback of previously paid incentive allocations, which would have no income statement impact as it was previously accrued.

As of September 30, 2022, we expect to fund additional capital to certain of our partially owned entities aggregating approximately $10,300,000.

As of September 30, 2022, we have construction commitments aggregating approximately $492,000,000.

Funds From Operations ("FFO")

Vornado Realty Trust

FFO is computed in accordance with the definition adopted by the Board of Governors of the National Association of Real Estate Investment Trusts ("NAREIT"). NAREIT defines FFO as GAAP net income or loss adjusted to exclude net gains from sales of certain real estate assets, real estate impairment losses, depreciation and amortization expense from real estate assets and other specified items, including the pro rata share of such adjustments of unconsolidated subsidiaries. FFO and FFO per diluted share are non-GAAP financial measures used by management, investors and analysts to facilitate meaningful comparisons of operating performance between periods and among our peers because they exclude the effect of real estate depreciation and amortization and net gains on sales, which are based on historical costs and implicitly assume that the value of real estate diminishes predictably over time, rather than fluctuating based on existing market conditions. The Company also uses FFO attributable to common shareholders plus assumed conversions, as adjusted for certain items that impact the comparability of period-to-period FFO, as one of several criteria to determine performance-based compensation for senior management. FFO does not represent cash generated from operating activities and is not necessarily indicative of cash available to fund cash requirements and should not be considered as an alternative to net income as a performance measure or cash flow as a liquidity measure. FFO may not be comparable to similarly titled measures employed by other companies. The calculations of both the numerator and denominator used in the computation of income per share are disclosed in Note 18 – *Income Per Share/Income Per Class A Unit*, in our consolidated financial statements on page 38 of this Quarterly Report on Form 10-Q. Details of certain adjustments to FFO are discussed in the financial results summary of our "Overview".

Below is a reconciliation of net income attributable to common shareholders to FFO attributable to common shareholders plus assumed conversions for the three and nine months ended September 30, 2022 and 2021.

(Amounts in thousands, except per share amounts)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2022	2021	2022	2021
Reconciliation of net income attributable to common shareholders to FFO attributable to common shareholders plus assumed conversions:				
Net income attributable to common shareholders	$ 7,769	$ 37,689	$ 84,665	$ 89,817
Per diluted share	$ 0.04	$ 0.20	$ 0.44	$ 0.47
FFO adjustments:				
Depreciation and amortization of real property	$ 122,438	$ 86,180	$ 335,020	$ 256,295
Real estate impairment losses	—	7,880	—	7,880
Net gain on sale of real estate	—	—	(28,354)	—
Proportionate share of adjustments to equity in net income of partially owned entities to arrive at FFO:				
Depreciation and amortization of real property	32,584	35,125	98,404	104,829
Net loss (gain) on sale of real estate	6	—	(169)	(3,052)
Decrease (increase) in fair value of marketable securities	—	287	—	(1,118)
	155,028	129,472	404,901	364,834
Noncontrolling interests' share of above adjustments	(10,731)	(8,886)	(28,018)	(24,627)
FFO adjustments, net	$ 144,297	$ 120,586	$ 376,883	$ 340,207
FFO attributable to common shareholders	$ 152,066	$ 158,275	$ 461,548	$ 430,024
Impact of assumed conversion of dilutive convertible securities	395	11	915	33
FFO attributable to common shareholders plus assumed conversions	$ 152,461	$ 158,286	$ 462,463	$ 430,057
Per diluted share	$ 0.79	$ 0.82	$ 2.39	$ 2.24
Reconciliation of weighted average shares outstanding:				
Weighted average common shares outstanding	191,793	191,577	191,756	191,508
Effect of dilutive securities:				
Convertible securities	1,790 (1)	26	1,407 (1)	26
Share-based payment awards	225	464	266	643
Denominator for FFO per diluted share	193,808	192,067	193,429	192,177

(1) On January 1, 2022, we adopted Accounting Standards Update 2020-06, which requires us to include our Series D-13 cumulative redeemable preferred units and Series G-1 through G-4 convertible preferred units in our dilutive earnings per share calculations, if the effect is dilutive.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

We have exposure to fluctuations in market interest rates. Market interest rates are sensitive to many factors that are beyond our control. Our exposure to a change in interest rates on our consolidated and non-consolidated debt (all of which arises out of non-trading activity) is as follows:

(Amounts in thousands, except per share and per unit amounts)	2022			2021	
	September 30, Balance	Weighted Average Interest Rate	Effect of 1% Change in Base Rates	December 31, Balance	Weighted Average Interest Rate
Consolidated debt:					
Variable rate	$ 2,313,015	4.35%	$ 23,130	$ 4,534,215	1.59%
Fixed rate	6,145,000	3.58%	—	4,140,000	3.06%
	$ 8,458,015	3.79%	23,130	$ 8,674,215	2.29%
Pro rata share of debt of non-consolidated entities:					
Variable rate	$ 1,271,535	4.42%	12,715	$ 1,267,224	1.78%
Fixed rate	1,447,457	3.72%	—	1,432,181	3.72%
	$ 2,718,992	4.05%	12,715	$ 2,699,405	2.81%
Noncontrolling interests' share of consolidated subsidiaries			(6,821)		
Total change in annual net income attributable to the Operating Partnership			29,024		
Noncontrolling interests' share of the Operating Partnership			(2,008)		
Total change in annual net income attributable to Vornado			$ 27,016		
Total change in annual net income attributable to the Operating Partnership per Class A unit			$ 0.14		
Total change in annual net income attributable to Vornado per common share			$ 0.14		

Fair Value of Debt

The estimated fair value of our consolidated debt is calculated based on current market prices and discounted cash flows at the current rate at which similar loans would be made to borrowers with similar credit ratings for the remaining term of such debt. As of September 30, 2022, the estimated fair value of our consolidated debt was $8,096,000,000.

Item 3. Quantitative and Qualitative Disclosures About Market Risk - continued

Derivatives and Hedging

We utilize various financial instruments to mitigate the impact of interest rate fluctuations on our cash flows and earnings, including hedging strategies, depending on our analysis of the interest rate environment and the costs and risks of such strategies. The following table summarizes our consolidated hedging instruments, all of which hedge variable rate debt, as of September 30, 2022 and December 31, 2021.

(Amounts in thousands)	Fair Value Asset (Liability) as of		As of September 30, 2022		
	September 30, 2022	**December 31, 2021**	**Notional Amount**	**All-In Swapped Rate**	**Swap Expiration Date**
Interest rate swaps:					
555 California Street mortgage loan	$ 53,160	$ 11,814	$ 840,000 (1)	2.26%	05/24
770 Broadway mortgage loan	32,010	—	700,000	4.98%	07/27
PENN 11 mortgage loan	28,555	6,565	500,000	2.23%	03/24
Unsecured revolving credit facility	26,759	—	575,000	3.88%	08/27
Unsecured term loan	13,706	(28,976)	800,000	4.05%	**(2)**
Unsecured term loan (effective October 2023)	8,864	—	500,000	4.39%	10/26
100 West 33rd Street mortgage loan	8,053	—	480,000	5.06%	06/27
888 Seventh Avenue mortgage loan	7,231	—	200,000 (3)	4.66%	09/27
4 Union Square South mortgage loan	3,960	(3,861)	100,000 (4)	3.74%	01/25
Interest rate caps:					
1290 Avenue of the Americas mortgage loan	6,304	411	950,000	**(5)**	11/23
Various mortgage loans	1,289	139			
Included in other assets	$ 189,891	$ 18,929			
Included in other liabilities	$ —	$ 32,837			

(1) Represents our 70.0% share of the $1.2 billion mortgage loan.

(2) Comprised of a $750,000 interest rate swap arrangement expiring October 2023 and a $50,000 interest rate swap arrangement expiring August 2027. In September 2022, we entered into a forward swap (presented above) for $500,000 of the $800,000 unsecured term loan through October 2026, effective upon the October 2023 expiration of the $750,000 swap arrangement. Together with the existing $50,000 swap arrangement, commencing October 2023, $550,000 of the loan will bear interest at a blended fixed rate of 4.36%. The unswapped balance of the loan will bear interest at a floating rate of SOFR plus 1.30%.

(3) The remaining $83,200 amortizing mortgage loan balance bears interest at a floating rate of LIBOR plus 1.70%.

(4) Upon the sale of 33-00 Northern Boulevard in June 2022, the $100,000 corporate-level interest rate swap was reallocated and now hedges the interest rate on $100,000 of the 4 Union Square South mortgage loan through January 2025. The remaining $20,000 mortgage loan balance bears interest at a floating rate of SOFR plus 1.50%. The entire $120,000 will float thereafter for the duration of the loan.

(5) LIBOR cap strike rate of 4.00%.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures (Vornado Realty Trust)

Disclosure Controls and Procedures: Our management, with the participation of Vornado's Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended) as of the end of the period covered by this report. Based on such evaluation, Vornado's Chief Executive Officer and Chief Financial Officer have concluded that, as of September 30, 2022, such disclosure controls and procedures were effective.

Internal Control Over Financial Reporting: There have not been any changes in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934, as amended) during the fiscal quarter to which this report relates that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Evaluation of Disclosure Controls and Procedures (Vornado Realty L.P.)

Disclosure Controls and Procedures: Vornado Realty L.P.'s management, with the participation of Vornado's Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended) as of the end of the period covered by this report. Based on such evaluation, Vornado's Chief Executive Officer and Chief Financial Officer have concluded that, as of September 30, 2022, such disclosure controls and procedures were effective.

Internal Control Over Financial Reporting: There have not been any changes in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934, as amended) during the fiscal quarter to which this report relates that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

We are from time to time involved in legal actions arising in the ordinary course of business. In our opinion, after consultation with legal counsel, the outcome of such matters is not currently expected to have a material adverse effect on our financial position, results of operations or cash flows.

Item 1A. Risk Factors

There were no material changes to the Risk Factors disclosed in our Annual Report on Form 10-K for the year ended December 31, 2021.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Vornado Realty Trust

None.

Vornado Realty L.P.

During the quarter ended September 30, 2022, we issued 7,660 Class A units in connection with (i) the issuance of Vornado common shares and (ii) the exercise of awards pursuant to Vornado's omnibus share plan, including grants of restricted Vornado common shares and restricted units of the Operating Partnership and upon conversion, surrender or exchange of the Operating Partnership's units or Vornado stock options. The consideration received included $221,489 in cash proceeds. Such units were issued in reliance on an exemption from registration under Section 4(a)(2) of the Securities Act of 1933, as amended.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibits required by Item 601 of Regulation S-K are filed herewith or incorporated herein by reference and are listed in the attached Exhibit Index.

EXHIBIT INDEX

Exhibit No.		
15.1	—	Letter regarding Unaudited Interim Financial Information of Vornado Realty Trust
15.2	—	Letter regarding Unaudited Interim Financial Information of Vornado Realty L.P.
31.1	—	Rule 13a-14 (a) Certification of the Chief Executive Officer of Vornado Realty Trust
31.2	—	Rule 13a-14 (a) Certification of the Chief Financial Officer of Vornado Realty Trust
31.3	—	Rule 13a-14 (a) Certification of the Chief Executive Officer of Vornado Realty L.P.
31.4	—	Rule 13a-14 (a) Certification of the Chief Financial Officer of Vornado Realty L.P.
32.1	—	Section 1350 Certification of the Chief Executive Officer of Vornado Realty Trust
32.2	—	Section 1350 Certification of the Chief Financial Officer of Vornado Realty Trust
32.3	—	Section 1350 Certification of the Chief Executive Officer of Vornado Realty L.P.
32.4	—	Section 1350 Certification of the Chief Financial Officer of Vornado Realty L.P.
101	—	The following financial information from Vornado Realty Trust and Vornado Realty L.P. Quarterly Report on Form 10-Q for the quarter ended September 30, 2022 formatted in Inline Extensible Business Reporting Language (iXBRL) includes: (i) consolidated balance sheets, (ii) consolidated statements of income, (iii) consolidated statements of comprehensive income, (iv) consolidated statements of changes in equity, (v) consolidated statements of cash flows, and (vi) the notes to consolidated financial statements.
104	—	The cover page from the Vornado Realty Trust and Vornado Realty L.P. Quarterly Report on Form 10-Q for the quarter ended September 30, 2022, formatted as iXBRL and contained in Exhibit 101.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

VORNADO REALTY TRUST
(Registrant)

Date: October 31, 2022

By: /s/ Deirdre Maddock
Deirdre Maddock, Chief Accounting Officer
(duly authorized officer and principal accounting officer)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

VORNADO REALTY L.P.
(Registrant)

Date: October 31, 2022

By: /s/ Deirdre Maddock
Deirdre Maddock, Chief Accounting Officer of Vornado Realty Trust, sole General Partner of Vornado Realty L.P. (duly authorized officer and principal accounting officer)

EXHIBIT 15.1

October 31, 2022

The Board of Trustees and Shareholders of Vornado Realty Trust
New York, New York

We are aware that our report dated October 31, 2022, on our review of the interim financial information of Vornado Realty Trust and subsidiaries appearing in this Quarterly Report on Form 10-Q for the quarter ended September 30, 2022, is incorporated by reference in the following Registration Statements of Vornado Realty Trust:

Amendment No.1 to Registration Statement No. 333-36080 on Form S-3
Amendment No.1 to Registration Statement No. 333-50095 on Form S-3
Amendment No.1 to Registration Statement No. 333-89667 on Form S-3
Amendment No.1 to Registration Statement No. 333-102215 on Form S-3
Amendment No.1 to Registration Statement No. 333-102217 on Form S-3
Registration Statement No. 333-105838 on Form S-3
Registration Statement No. 333-107024 on Form S-3
Registration Statement No. 333-114146 on Form S-3
Registration Statement No. 333-121929 on Form S-3
Amendment No.1 to Registration Statement No. 333-120384 on Form S-3
Registration Statement No. 333-126963 on Form S-3
Registration Statement No. 333-139646 on Form S-3
Registration Statement No. 333-141162 on Form S-3
Registration Statement No. 333-150592 on Form S-3
Registration Statement No. 333-172880 on Form S-8
Registration Statement No. 333-191865 on Form S-4
Registration Statement No. 333-232056 on Form S-8
Registration Statement No. 333-258409 on Form S-3

and in the following joint registration statement of Vornado Realty Trust and Vornado Realty L. P.:

Registration Statement No. 333-254965 on Form S-3

/s/ DELOITTE & TOUCHE LLP

New York, New York

EXHIBIT 15.2

October 31, 2022

The Partners of Vornado Realty L.P.
New York, New York

We are aware that our report dated October 31, 2022, on our review of the interim financial information of Vornado Realty L.P. and subsidiaries appearing in this Quarterly Report on Form 10-Q for the quarter ended September 30, 2022, is incorporated by reference in the joint Registration Statement No. 333-254965 on Form S-3 of Vornado Realty Trust and Vornado Realty L.P.

/s/ DELOITTE & TOUCHE LLP

New York, New York

EXHIBIT 31.1

CERTIFICATION

I, Steven Roth, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Vornado Realty Trust;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure control and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

October 31, 2022

/s/ Steven Roth

Steven Roth
Chairman of the Board and Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION

I, Michael J. Franco, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Vornado Realty Trust;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure control and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

October 31, 2022

/s/ Michael J. Franco

Michael J. Franco

President and Chief Financial Officer

EXHIBIT 31.3

CERTIFICATION

I, Steven Roth, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Vornado Realty L.P.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure control and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and
5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

October 31, 2022

/s/ Steven Roth
Steven Roth
Chairman of the Board and Chief Executive Officer
of Vornado Realty Trust, sole General Partner of Vornado Realty L.P.

EXHIBIT 31.4

CERTIFICATION

I, Michael J. Franco, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Vornado Realty L.P.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure control and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

October 31, 2022

/s/ Michael J. Franco

Michael J. Franco

President and Chief Financial Officer of Vornado Realty
Trust, sole General Partner of Vornado Realty L.P.

EXHIBIT 32.1

CERTIFICATION

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(Subsection (a) and (b) of Section 1350 of Chapter 63 of Title 18 of the United States Code)

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of Section 1350 of Chapter 63 of Title 18 of the United States Code), the undersigned officer of Vornado Realty Trust (the "Company"), hereby certifies, to such officer's knowledge, that:

The Quarterly Report on Form 10-Q for the quarter ended September 30, 2022 (the "Report") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

October 31, 2022		/s/ Steven Roth
	Name:	Steven Roth
	Title:	Chairman of the Board and Chief Executive Officer

EXHIBIT 32.2

CERTIFICATION

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(Subsection (a) and (b) of Section 1350 of Chapter 63 of Title 18 of the United States Code)

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of Section 1350 of Chapter 63 of Title 18 of the United States Code), the undersigned officer of Vornado Realty Trust (the "Company"), hereby certifies, to such officer's knowledge, that:

The Quarterly Report on Form 10-Q for the quarter ended September 30, 2022 (the "Report") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

October 31, 2022		/s/ Michael J. Franco
	Name:	Michael J. Franco
	Title:	President and Chief Financial Officer

EXHIBIT 32.3

CERTIFICATION

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(Subsection (a) and (b) of Section 1350 of Chapter 63 of Title 18 of the United States Code)

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of Section 1350 of Chapter 63 of Title 18 of the United States Code), the undersigned officer of Vornado Realty L.P. (the "Company"), hereby certifies, to such officer's knowledge, that:

The Quarterly Report on Form 10-Q for the quarter ended September 30, 2022 (the "Report") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

October 31, 2022		/s/ Steven Roth
	Name:	Steven Roth
	Title:	Chairman of the Board and Chief Executive Officer of Vornado Realty Trust, sole General Partner of Vornado Realty L.P.

EXHIBIT 32.4

CERTIFICATION

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(Subsection (a) and (b) of Section 1350 of Chapter 63 of Title 18 of the United States Code)

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of Section 1350 of Chapter 63 of Title 18 of the United States Code), the undersigned officer of Vornado Realty L.P. (the "Company"), hereby certifies, to such officer's knowledge, that:

The Quarterly Report on Form 10-Q for the quarter ended September 30, 2022 (the "Report") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

October 31, 2022		/s/ Michael J. Franco
	Name:	Michael J. Franco
	Title:	President and Chief Financial Officer of Vornado Realty Trust, sole General Partner of Vornado Realty L.P.