

2020 ANNUAL REPORT

VORNADO
REALTY TRUST



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VORNADO COMPANY PROFILE

Vornado Realty Trust is a fully-integrated real estate operating company.

Our business is 87% New York-centric and 83% office-centric. We own all or portions of:

- 20.6 million square feet of Manhattan office space in 33 properties;
- 2.7 million square feet of Manhattan street retail space in 65 properties;
- The 1,700 room Hotel Pennsylvania on Seventh Avenue at 33rd Street in the heart of **THE PENN DISTRICT**

THE PENN DISTRICT is our premier interconnected campus-like development currently consisting of 9 million square feet in a dozen buildings and land sites surrounding New York's Pennsylvania Station, the busiest transportation hub in North America;

- 1,989 residential units in ten Manhattan properties;
- A 32.4% interest in Alexander's, Inc. (NYSE:ALX) which owns seven properties in the greater New York metropolitan area, including 731 Lexington Avenue, the 1.1 million square foot Bloomberg L.P. headquarters building;
- Signage throughout **THE PENN DISTRICT** and Times Square;
- BMS, our wholly owned subsidiary, which provides cleaning and security services for our buildings and third parties, currently employing 1,997 associates;
- The 3.7 million square foot MART in Chicago;
- A 70% controlling interest in 555 California Street, a three-building office complex in San Francisco's financial district aggregating 1.8 million square feet;
- A 25% interest in Vornado Capital Partners, our real estate fund. We are the general partner and investment manager of the fund. The fund is in wind down; and
- 220 Central Park South, our 950-foot super-tall luxury residential condominium tower containing 400,000 salable square feet, which is 91% sold.

Vornado's common shares are listed on the New York Stock Exchange and are traded under the symbol: VNO.

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FINANCIAL HIGHLIGHTS

As Reported	Year Ended December 31,	
	2020	2019
Revenues	\$ 1,527,951,000	\$ 1,924,700,000
Net (loss)/income	\$ (348,744,000)	\$ 3,097,806,000
Net (loss)/income per share—basic	\$ (1.83)	\$ 16.23
Net (loss)/income per share—diluted	\$ (1.83)	\$ 16.21
Total assets	\$ 16,221,822,000	\$ 18,287,013,000
Total equity	\$ 6,948,155,000	\$ 7,310,978,000
Net operating income	\$ 972,579,000	\$ 1,259,777,000
Funds from operations	\$ 750,522,000	\$ 1,003,398,000
Funds from operations per share	\$ 3.93	\$ 5.25
% (decrease)/increase in funds from operations per share	(25.1%)	37.4%

As Adjusted	Year Ended December 31,	
	2020	2019
Revenues	\$ 1,518,705,000	\$ 1,909,378,000
Net (loss)/income	\$ (6,907,000)	\$ 176,716,000
Net (loss)/income per share—basic	\$ (0.04)	\$ 0.92
Net (loss) income per share—diluted	\$ (0.04)	\$ 0.92
Total assets	\$ 18,438,432,000	\$ 19,203,348,000
Net operating income	\$ 989,555,000	\$ 1,259,400,000
Funds from operations	\$ 483,044,000	\$ 666,207,000
Funds from operations per share	\$ 2.53	\$ 3.49
% (decrease) in funds from operations per share	(27.5%)	(6.4%)

These financial highlights and the letter to shareholders present certain non-GAAP measures, including revenues, net (loss) income, total assets, Net Operating Income ("NOI") and Funds from Operations, all as adjusted, as well as Funds from Operations and NOI. We have provided reconciliations of these non-GAAP measures to the applicable GAAP measures in the appendix section of this letter to shareholders and in the Company's Annual Report on Form 10-K under "Item 7 Management's Discussion and Analysis of Financial Condition and Results of Operations," which accompanies this letter or can be viewed at www.vno.com.

To Our Shareholders

This may be a new year but, at this writing, 2021 still feels a lot like 2020... the COVID pandemic remains a significant health risk; normal life continues to be disrupted; gatherings and travel are still restricted; and office building occupancy remains low.

We grieve for the 555,000 lives lost and are in awe of the healthcare providers.

COVID has had a negative effect on our 2020 numbers.

Net (Loss)/Income attributable to common shares for the year ended December 31, 2020 was (\$348.7) million, (\$1.83) per diluted share, compared to \$3,097.8 million, \$16.21 per diluted share, for the previous year. This decrease is primarily attributable to the non-recurring gain on the Retail Joint Venture transaction in 2019. See page 8.

Funds from Operations, as Adjusted (an apples-to-apples comparison of our continuing business, eliminating certain one-timers) for the year ended December 31, 2020 was \$483.0 million, \$2.53 per diluted share, compared to \$666.2 million, \$3.49 per diluted share, for the previous year, a decrease of \$0.96 per share. This decrease is detailed on page 5.

Funds from Operations, as Reported (apples-to-oranges including one-timers) for the year ended December 31, 2020 was \$750.5 million, \$3.93 per diluted share, compared to \$1,003.4 million, \$5.25 per diluted share, for the previous year. See page 5 for a reconciliation of Funds from Operations, as Reported, to Funds from Operations, as Adjusted.

Here are our financial results (presented in Net Operating Income format) by business unit:

(\$ IN MILLIONS)	Net Operating Income				
	2020		% of 2020	2020	2019
	Same Store % (Decrease)/ Increase				
New York:					
Office ⁽¹⁾	(5.5 %)	69.8 %	672.5	717.7	719.9
Retail ⁽¹⁾	(32.6 %)	15.3 %	147.3	244.2	260.4
Retail Joint Venture ⁽¹⁾	N/A	N/A	—	35.8	116.2
Residential	(11.6 %)	2.1 %	20.7	23.4	23.5
Alexander's	(19.0 %)	3.7 %	35.9	44.3	45.1
Hotel Pennsylvania	N/A	(4.4 %)	(42.5)	7.4	11.9
Total New York	(12.7 %)	86.5 %	833.9	1,072.8	1,177.0
theMART	(32.5 %)	7.2 %	69.2	102.1	90.9
555 California Street	0.6 %	6.3 %	60.3	59.7	54.7
		100.0 %	963.4	1,234.6	1,322.6
Other (see below for details)			9.2	25.2	60.0
Total Net Operating Income			972.6	1,259.8	1,382.6

Other Net Operating Income is comprised of:

(\$ IN MILLIONS)	2020	2019	2018
Pennsylvania REIT	—	9.8	20.0
666 Fifth Avenue Office Condominium	—	—	12.1
Urban Edge Properties	—	4.9	11.8
Other	9.2	10.5	16.1
Total	9.2	25.2	60.0

This letter and Annual Report contain 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. The Company's future results, financial condition and business may differ materially from those expressed in these forward-looking statements. These forward-looking statements are subject to numerous assumptions, risks and uncertainties. Currently, one of the most significant factors is the ongoing adverse effect of the COVID-19 pandemic on our business, financial condition, results of operations, cash flows, operating performance and the effect it has 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 depend on future developments, including the duration of the pandemic, which are highly uncertain at this time but that 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, 2020, a copy of which accompanies this letter or can be viewed at www.vno.com.

¹ On April 18, 2019 we completed the transfer of a 45.4% common equity interest in Vornado's portfolio of flagship high street retail assets on Upper Fifth Avenue and Times Square to a group of institutional investors ("Retail Joint Venture"). For comparability, the historical financial results of the portion of the Retail Joint Venture assets that were transferred have been removed from the Office and Retail lines and reflected on the Retail Joint Venture line for all periods presented.

The following chart reconciles Funds from Operations, as Reported, to Funds from Operations, as Adjusted:

(\$ IN MILLIONS, EXCEPT PER SHARE)	2020	2019
Funds from Operations, as Reported	750.5	1,003.4
Less adjustments for certain items that impact FFO:		
After-tax gain on sale of 220 Central Park South units	332.1	502.6
Lease Liability extinguishment gain and non-cash impairment loss and related write-off on 608 Fifth Avenue	70.3	(77.1)
Severance accrual related to Hotel Pennsylvania closing	(6.1)	--
Transaction related costs	(7.1)	(4.6)
Credit losses on loans receivable	(13.4)	--
Severance and other reduction in force-related expenses	(23.4)	--
Prepayment penalty on redemption of \$400 million 5% senior unsecured notes	--	(22.5)
Real Estate Fund ⁽²⁾	(63.1) ⁽²⁾	(48.8)
Other, primarily noncontrolling interests' share of above adjustments	(21.8)	(12.4)
Total adjustments	267.5	337.2
Funds from Operations, as Adjusted	483.0	666.2
Funds from Operations, as Adjusted per share	2.53	3.49

Funds from Operations, as Adjusted decreased by \$183.2 million in 2020 to \$2.53 per share from \$3.49 per share, a decrease of \$0.96 per share. Here is the detail:

(\$ IN MILLIONS, EXCEPT PER SHARE)	Increase/(Decrease)	
	Amount	Per Share
Variable Business (Hotel Penn 40.3, Tradeshows 18.7, Signage 11.7, BMS 7.5 and Garages 4.6)	(82.8)	(0.43)
Tenant Related (including straight line write-offs of 48.4 and bad debt write-offs of 27.8)	(88.2)	(0.46)
Interest expense	36.2	0.19
Interest income	(16.6)	(0.09)
Asset sales	(31.8)	(0.17)
General and Administrative expenses	11.0	0.06
THE PENN DISTRICT out of service	(23.0)	(0.12)
Other	12.0	0.06
Decrease in FFO, as Adjusted	(183.2)	(0.96)

With reference to the table above, the financial impact of COVID on our business falls into three buckets:

- The decline of \$82.8 million in our variable businesses whose performance varies with activity;
- Bad debt write-offs of \$27.8 million; and
- Write-off of straight-line rent receivable of \$48.4 million from converting weak tenants to cash basis accounting.

Since the write-off of straight-line rent receivables is non-cash, the cash portion of the above is \$110.6 million.

In recognition of all this and to protect our balance sheet, at our July board meeting, we reduced our **dividend** by an annual rate of \$106 million.⁽³⁾

² Our \$800 million Real Estate Fund was formed in 2010. Over the life of the Fund, all invested capital has been returned and the Fund has earned 5.8%, 1.2x. We account for the Fund on a fair value, mark-to-market basis and, as such, the Fund's performance has caused volatility in our numbers. The Fund is in final stages of wind-down; it still retains several assets (a hotel and a few retail assets). The Fund's 2020 number shown in the table above represents the final non-cash markdowns to zero of the remaining assets. This should be the end of it.

³ A word about our dividend policy... Our Company, in accordance with IRS REIT rules, pays out by dividend all of its taxable earnings. Our intention is to have a smooth and predictable dividend that increases with our growth. We believe the dividend is sort of sacred, but not more sacred than our balance sheet, our financial strength, and our liquidity. While we certainly have the wherewithal to overpay the dividend, our management and Board believe that, in this crisis period, our dividend should mirror our taxable earnings. Accordingly, in July 2020, the Board concluded to right-size the dividend to 53 cents per quarter.

Over the last ten years, our taxable income aggregated \$5.1 billion, our regular dividends were \$4.4 billion and we paid special dividends of \$600 million. In addition, we distributed, as dividends, shares of Urban Edge Properties and JBG SMITH in tax-free spin-offs, valued at \$2.4 billion and \$3.6 billion, respectively.

Report Card

Since I have run Vornado from 1980, total shareholder returns have been 13% per annum, but subpar lately. Dividends have represented 3.6 percentage points of Vornado's annual return.

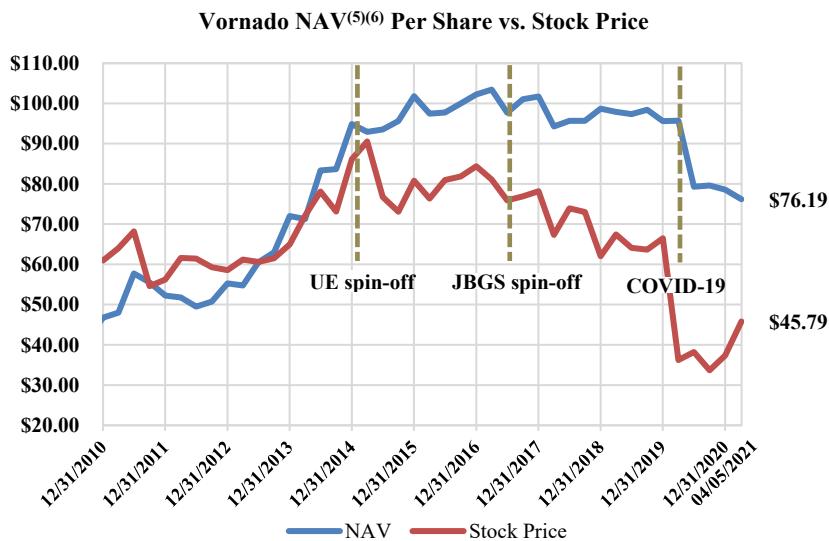
Here is a table that shows Vornado's total return to shareholders compared to our New York-centric peers and two REIT indices for various periods ending December 31, 2020:

	Vornado	NY REIT Peers ⁽⁴⁾	Office REIT Index	MSCI Index
One-year	(40.5%)	(29.2%)	(18.4%)	(7.6%)
Three-year	(43.7%)	(34.6%)	(8.4%)	11.0%
Five-year	(42.3%)	(35.8%)	9.2%	26.7%
Ten-year	(9.6%)	--	64.8%	122.0%
Fifteen-year	11.4%	--	83.4%	157.3%
Twenty-year	228.5%	--	242.6%	506.7%

The table above is skewed negatively by the effect of COVID on 2020 numbers. You may be interested in the table below which shows the same statistics, 2019 version, pre-COVID.

	Vornado	NY REIT Peers ⁽⁴⁾	Office REIT Index	MSCI Index
One-year	12.0%	15.1%	31.4%	25.8%
Three-year	(11.9%)	(8.8%)	18.3%	26.2%
Five-year	(9.2%)	(11.1%)	34.2%	40.5%
Ten-year	82.2%	--	139.2%	208.7%
Fifteen-year	109.9%	--	154.4%	212.2%
Twenty-year	569.9%	--	468.9%	732.4%

Our stock price for the last six years has been disappointing and, in my mind, chronically disconnected from the value of our assets. The graph below demonstrates that case. Over the last ten years, our NAV⁽⁵⁾ (a surrogate for private market values) has compounded at 4.9%, but our stock price has compounded at a negative 2.8%. In my letter to shareholders three years ago, I made the point that public shareholders price CBD office buildings at a significant discount to private value. That pricing mismatch has been chronic and continues. It is difficult to guesstimate our NAV post-COVID but I suggest that, even in these volatile times, our NAV is still significantly higher than our stock price. Something is obviously wrong.



⁴ Comprised of New York City-centric peers: SL Green, Empire State Realty Trust and Paramount Group.

⁵ Per Green Street Advisors.

⁶ NAV has been reduced by \$10 for the Urban Edge spin-off and \$23 for the JBG SMITH spin-off.

Ten-Year Earnings Record

As is our custom, we present the table below that traces our ten-year record, both in absolute dollars and per share amounts:

(\$ AND SHARES IN MILLIONS, EXCEPT PER SHARE DATA)	NOI ⁽⁷⁾		FFO, As Adjusted			Shares Outstanding
	Amount	% Change	Amount	% Change	Per Share	
2020	989.6	(17.4%)	483.0	(27.5%)	2.53	203.8
2019	1,198.3	(0.6%)	666.2	(6.6%)	3.49	203.1
2018	1,205.5	(0.6%)	713.5	0.1%	3.73	202.3
2017	1,212.7	3.5%	712.9	4.7%	3.73	201.6
2016	1,171.5	2.1%	681.0	4.7%	3.58	200.5
2015	1,147.9	8.7%	650.3	21.5%	3.43	199.9
2014	1,056.5	5.4%	535.1	8.0%	2.84	198.5
2013	1,002.0	12.8%	495.6	29.5%	2.64	197.8
2012	888.3	0.7%	382.8	2.9%	2.05	197.3
2011	882.3	2.6%	371.9	6.0%	1.94	196.5

As shown on the following page, in the last ten years we have been a net seller to the tune of \$12.7 billion, notably including \$2.7 billion in the Retail Joint Venture transaction and \$9.7 billion of tax-free spin-offs. This activity has enriched shareholders but has punished our earnings. The table below compares our published FFO per share period-by-period to what our FFO per share would have been had we not sold or spun assets:

	FFO, As Adjusted		
	As Published	Pro Forma To Include Sold Properties	
2020	2.53	5.14	
2019	3.49	6.79	
2018	3.73	6.92	
2017	3.73	6.86	
2016	3.58	6.50	

⁷ All years include only the properties owned at the end of 2020.

Acquisitions/Dispositions

Here is a ten-year schedule of acquisitions and dispositions.⁽⁸⁾

(\$ IN MILLIONS)	Number of Transactions	Net Acquisitions/ (Dispositions)	Acquisitions	Dispositions	Gain
2020	3	3.7	3.7	--	--
2019	7	(2,818.6)	67.1	2,885.7	1,384.1
2018	9	336.0	573.5	237.5	170.4
2017	9	(5,901.9)	145.7	6,047.6	5.1
2016	11	(875.1)	147.4	1,022.5	664.4
2015	25	(3,717.1)	955.8	4,672.9	316.7
2014	17	(412.3)	648.1	1,060.4	523.4
2013	26	(616.5)	813.3	1,429.8	434.1
2012	33	142.9	1,365.2	1,222.3	454.0
2011	19	1,109.9	1,499.1	389.2	137.8
	159	(12,749.0)	6,218.9	18,967.9	4,090.0

Over the ten-year period, our dispositions totaled \$19.0 billion and we were a net seller of \$12.7 billion.

2019 includes \$2.665 billion for the Retail Joint Venture (resulting in a gain of \$1.205 billion⁽⁹⁾) and \$100 million for 330 Madison Avenue, both sold at a 4.5% cap rate, as well as 3040 M Street and 86th and Madison Avenue. 2017 includes \$5.997 billion for the JBG SMITH spin-off and 2015 includes \$3.700 billion for the Urban Edge Properties spin-off. No gain was recognized on the spin-offs.

The action here takes place on the 45th floor where our acquisitions/dispositions team resides. Thanks to Michael Franco and to SVPs Cliff Brosler, Adam Green, Michael Schnitt, Jared Toothman and to VPs Brian Cantrell, Brian Feldman, Tatiana Melamed.

⁸ Excludes marketable securities.

⁹ The gain reported in our published financial statements was \$2.571 billion, the difference being the gain recognized on the step up in basis to fair value of the retained portion of the assets.

Lease...Lease...Lease

The mission of our business is to create value for shareholders by growing our asset base through the addition of carefully selected properties and by adding value through intensive and efficient management. Our operating platform is where the rubber meets the road. In our business, leasing is the main event. In New York, theMART and 555 California Street, we leased 3.2 million square feet in 2020.

As is our practice, we present below leasing and occupancy statistics for our businesses.

(SQUARE FEET IN THOUSANDS)	New York	theMART	555 California St.
	Street Office	Retail	
2020			
Square feet leased	2,231	238	379
Initial Rent	89.33	136.29	49.74
GAAP Mark-to-Market	11.0%	1.3%	1.5%
Cash Mark-to-Market	4.6%	(5.9%)	(1.9%)
Number of transactions	54	35	52
2019			
Square feet leased	987	238	286
Initial Rent	82.17	175.35	49.43
GAAP Mark-to-Market	5.5%	12.9%	10.7%
Cash Mark-to-Market	4.6%	9.8%	4.6%
Number of transactions	102	39	62
Occupancy rate:			
2020	93.4%	78.8%	89.5%
2019	96.9%	94.5%	94.6%
2018	97.2%	97.3%	94.7%
2017	97.1%	96.9%	98.6%
2016	96.3%	97.1%	98.9%
2015	96.3%	96.2%	98.6%
2014	96.9%	96.5%	94.7%
2013	96.6%	97.4%	96.4%
2012	95.8%	96.8%	95.2%
2011	96.2%	95.6%	90.3%

Notwithstanding the headwinds of the pandemic, 2020 was a year of significant leasing accomplishments.

- In August, at the very height of the health crisis, we completed the largest lease of the year, 730,000 square feet with Facebook at our Farley development.⁽¹¹⁾ Our dealmakers here were Glen with Josh Glick and Eddie Riguardi;
- We also completed the second largest lease of the year, with NYU Langone for 633,000 square feet at One Park Avenue;
- Importantly, we attracted Apple for 337,000 square feet at PENN 11; and
- We also did the largest deal of the year in San Francisco, the renewal of Bank of America for 247,000 square feet at 555 California Street. Our dealmakers here were Glen with Paul Heinen.

The west side of New York has become tech-central. Facebook, Apple, Google and Amazon are located in our buildings (2.5 million square feet). Facebook, Apple, Google, Amazon, and Disney are located in other buildings in the neighborhood (all told, over 13 million square feet). Tenants are speaking...the west side is the place to be.

Thanks to our leasing captains: Glen Weiss and Haim Chera. Also thanks to the New York leasing machine: Ed Hogan, Josh Glick, Jared Solomon, Jared Silverman, Edward Riguardi, Ryan Levy, Jason Morrison, Anthony Cugini, and to Paul Heinen who runs leasing at theMART and 555 California Street. Our thanks to our in-house attorneys, Pam Caruso, Elana Butler and Sara O'Toole, supported by Randall Greenman, who completed hundreds of leases and almost a thousand documents in total this year.

¹⁰ 2020 initial rent and GAAP and cash mark-to-markets exclude a 247,000 square feet lease, as the starting rent for this space will be determined in 2024 based on fair market value.

¹¹ From my remarks in our second quarter conference call: "This important commitment by Facebook answered the questions 'will even a great company such as Facebook commit in the middle of a global pandemic crisis?' 'will they commit to physical space in light of work-from-home?' 'will they continue to expand in New York?' We now know the answer is YES. This commitment is a dramatic statement from one of the most important global tech companies that, even in the midst of a pandemic, commerce must continue. This deal reinforces New York City as a great and unique place to do business with a large and highly educated workforce. New York continues to be the place to be."

From Governor Andrew Cuomo's August 3, 2020 press release: "Vornado's and Facebook's investment in New York and commitment to further putting down roots here – even in the midst of a global pandemic – is a signal to the world that our brightest days are still ahead and we are open for business. This public-private partnership fortifies New York as an international center of innovation."

Capital Markets

At year-end, we had \$3.9 billion of immediate liquidity consisting of \$1.7 billion of cash and restricted cash and \$2.2 billion available on our \$2.75 billion revolving credit facilities. Today, we have the same \$3.9 billion of immediate liquidity. We also have \$7.9 billion of unencumbered assets.

Since January 1, 2020, we have executed eight capital markets transactions totaling \$2.2 billion. Our capital markets team had another strong year. Thank you to EVP Mark Hudspeth, SVP Jan LaChapelle and VP Tatiana Melamed.

In February, we increased our unsecured term loan balance to \$800 million (from \$750 million) by exercising an accordion feature. Pursuant to an existing swap agreement, \$750 million of the loan bears interest at a fixed rate of 3.87% through October 2023, and the balance of \$50 million floats at a current rate of 1.11% (LIBOR plus 1.00%). The entire \$800 million will float thereafter for the duration of the loan through February 2024.

In August, we amended the \$700 million mortgage loan on 770 Broadway, a 1.2 million square foot Manhattan office building, to extend the term one year through March 2022.

In September, Alexander's, Inc., in which we have a 32.4% ownership interest, amended and extended the \$350 million mortgage loan on the retail condominium of 731 Lexington Avenue. Under the terms of the amendment, Alexander's paid down the loan by \$50 million to \$300 million, extended the maturity date to August 2025 and guaranteed the interest payments and certain leasing costs. The principal of the loan is non-recourse to Alexander's. The interest-only loan bears a current rate of 1.50% (LIBOR plus 1.40%), which has been swapped to a fixed rate of 1.72%.

In October, we completed a \$500 million refinancing of PENN 11, a 1.2 million square foot Manhattan office building. The interest-only loan bears a current rate of 2.85% (LIBOR plus 2.75%) and matures in October 2025, as fully extended. The loan replaces the previous \$450 million loan that bore interest at a fixed rate of 3.95% and was scheduled to mature in December 2020.

In October, Alexander's, Inc. completed a \$94 million financing of The Alexander, a 312-unit residential building that is part of Alexander's residential and retail complex located in Rego Park, Queens, New York. The interest-only loan bears a fixed rate of 2.63% and matures in November 2027.

In November, we unencumbered our land under a portion of the Borgata Hotel and Casino complex by repaying the \$52.5 million mortgage loan. The 10-year fixed-rate amortizing loan bore interest at 5.14% and was scheduled to mature in February 2021.

In November, we sold 12 million 5.25% Series N cumulative redeemable preferred shares at a price of \$25.00 per share, pursuant to an effective registration statement. We received aggregate net proceeds of \$291 million, after underwriters' discount and issuance costs.

In February 2021, a joint venture in which we have a 55% interest completed a \$525 million refinancing of One Park Avenue, a 943,000 square foot Manhattan office building. The interest-only loan bears a current rate of 1.21% (LIBOR plus 1.107%) and matures in March 2026, as fully extended. The loan replaces the previous \$300 million loan that bore interest at LIBOR plus 1.75% and was scheduled to mature in March 2021. Our share of the net proceeds was approximately \$105 million.

In March 2021, we completed a \$350 million refinancing of 909 Third Avenue, a 1.4 million square foot Manhattan office building.⁽¹²⁾ The interest-only loan bears a fixed rate of 3.23% and matures in April 2031. The loan replaces the previous \$350 million loan that bore interest at a fixed rate of 3.91% and was scheduled to mature in May 2021.

In process are refinancings of 555 California Street's existing \$534 million loan and theMART's existing \$675 million loan. On deck are 1290 Avenue of the Americas and 770 Broadway which have existing loans of \$950 million and \$700 million, respectively.

¹² Loan proceeds here are about \$400 per square foot for the office portion, excluding the 497,000 square foot post office space (where the lease expires in 2038, as extended).

Below is the right-hand side of our balance sheet at December 31, 2020 and 2019.

(\$ IN MILLIONS)	2020	2019
Secured debt	5,608	5,670
Unsecured debt	1,825	1,775
Share of non-consolidated debt	2,873	2,803
Noncontrolling interests' share of consolidated debt	(483)	(483)
Total debt	9,823	9,765
Cash and restricted cash	(1,835)	(1,347)
Projected cash proceeds from 220 Central Park South in excess of debt	(275)	(1,200)
Net debt	7,713	7,218
 EBITDA as adjusted	 879	 1,144
 Net debt/EBITDA as adjusted	 8.8x	 6.3x

The decline in our credit statistics is largely the result of COVID-related reductions in our income of \$265 million.⁽¹³⁾ This resulted in a downgrade by S&P to BBB-.⁽¹⁴⁾ We will earn our rating back and then some as our income reverts and improves as our variable businesses recover and our **PENN DISTRICT** projects come online.

Fixed-rate debt accounted for 53% of debt with a weighted average interest rate of 3.7% and a weighted average term of 3.1 years; floating-rate debt accounted for 47% of debt with a weighted average interest rate of 1.8% and a weighted average term of 3.4 years.⁽¹⁵⁾

81% of our debt is recourse solely to individual assets. The fair value of the assets pledged is \$14.1 billion, resulting in a loan-to-value of 56.6%. We have approximately \$7.9 billion of unencumbered assets.

Vornado remains committed to maintaining our investment grade rating.

¹³ Please see page 34 for detail.

¹⁴ Moody's and Fitch have us on negative watch. All of our New York peers and most of the CBD office REITs are in the same boat.

¹⁵ I have maintained over the years a contrarian view that fixed-rate debt may be more risky than floating-rate debt, which has the added benefit of being freely prepayable. We have more floating-rate debt than most, which is intentional.

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THE **PENN** DISTRICT

A VORNADO CAMPUS

"In every great global city, the most valuable real estate stands atop the major transportation hub."

- JLL Research, 4/23/19

Once redeveloped, Vornado's PENN DISTRICT holdings will join the list.

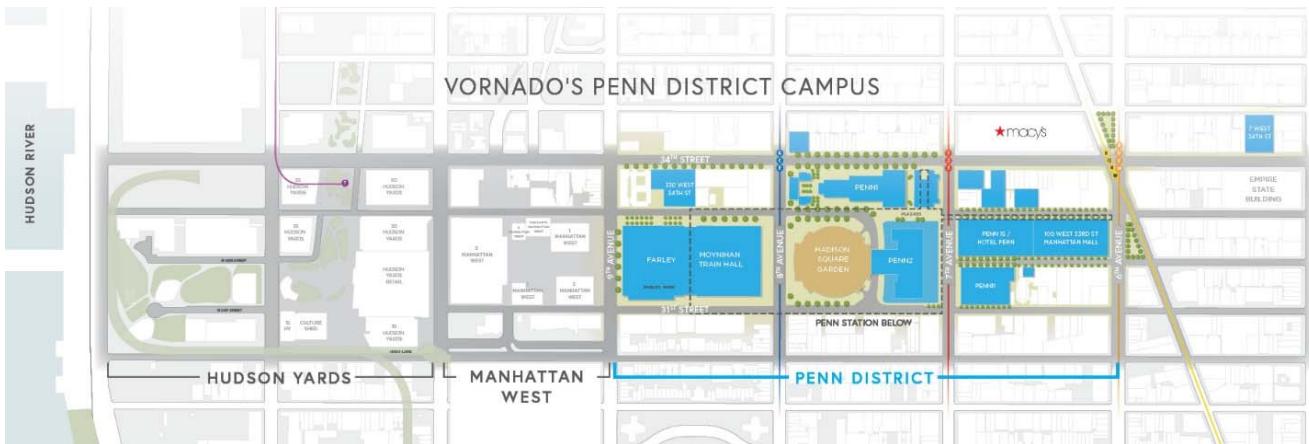


Artist Rendering of PENN 2 and PENN 1

THE PENN DISTRICT

A VORNADO CAMPUS

We are the largest owner in THE PENN DISTRICT with over 9 million square feet. THE PENN DISTRICT's time has come, the district being validated by the neighboring Hudson Yards and Manhattan West. Our assets sit literally on top of Penn Station, the region's major transportation hub, adjacent to Macy's and Madison Square Garden. Day and night, THE PENN DISTRICT is teeming with activity. Here's where we stand:



THE PENN DISTRICT is different from our other office assets...it is a large multi-building complex, it is long-term and it is development focused (*development* and *long-term* are two of the dirtiest words in REITland). THE PENN DISTRICT is our moonshot, the highest growth opportunity in our portfolio.

We intend to **separate THE PENN DISTRICT through a tracking stock**. It seems to me appropriate that we give investors the ability to choose between the higher growth but longer-term PENN DISTRICT or our other Class A, traditional core assets, or both.

Our development plans for Farley, PENN 1 and PENN 2 were outlined in my letter to shareholders last year. Images, budgets, returns and delivery dates are on our website. Each of these three large, exciting projects is now under construction and when completed will constitute the debut of our vision for THE PENN DISTRICT.

In THE PENN DISTRICT, we are creating a campus, a city within a city, which will become the very beating heart of the **NEW** New York. Over time, we hope to grow our interconnected campus by as much as 10 million square feet of new-builds. And over time, our PENN DISTRICT campus will almost certainly command premium pricing.

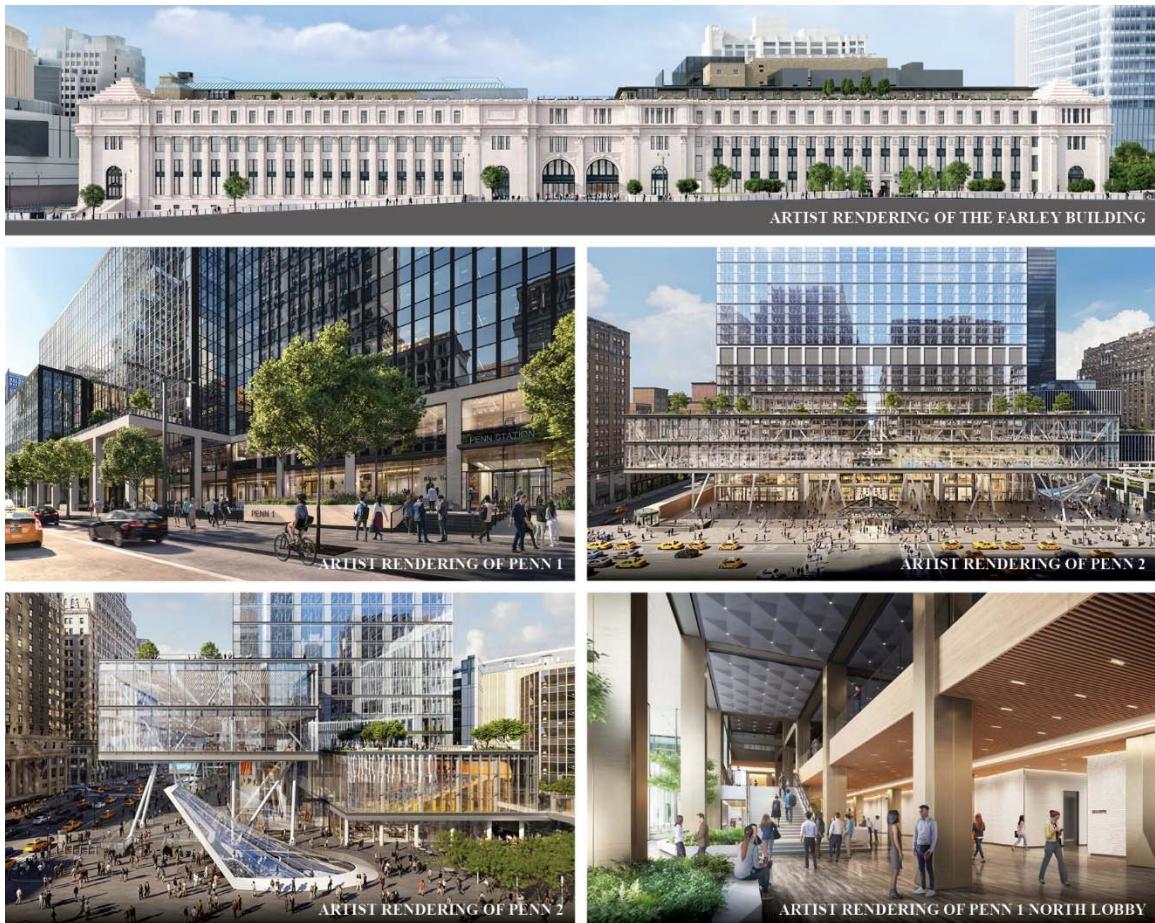
We have begun with 5 million square feet in three existing buildings – Farley, PENN 1 and PENN 2 – all interconnected either above or below ground. Here we are investing \$2.4 billion⁽¹⁶⁾ to create a unique environment for work, to bring to 22nd century standards, and to totally transform. In the middle of everything are PENN 1 and PENN 2, where we are creating a two-building, 4.4 million square foot campus directly on top of Penn Station. It will include a three-block plaza along 7th Avenue covered by a giant new bustle across the entire 430-foot frontage of PENN 2. This bustle will extend out 70 feet from the face of the building and will be 45 feet above the street. It will be striking, extraordinary and unique, creating a huge covered plaza in front of our PENN 2 and the main entrance to Penn Station. At PENN 2, we will also be removing the skin of the entire building and replacing it with a new, exciting, 22nd century curtainwall featuring floor-to-ceiling windows, see page 21. This architecture (designed by Dan Shannon, MdeAS Architects) will bring the neighborhood into the modern age. The bustle and penthouse conversion will create 140,000 square feet of valuable new, high ceiled, best-in-class creative space. Images of these designs are posted on our website at www.vno.com.

Essential to our strategy here is interconnectivity and scale which will allow us to provide our tenants with an unparalleled amenity package,⁽¹⁷⁾ even a giant leap forward from what we created at theMART a few years ago. But, there's more – the scale of this campus will allow us to provide our tenants with flexibility for their growth and expansion. A 300,000 square foot tenant in a 500,000 square foot building is boxed in. But we could almost certainly provide this same 300,000 square foot tenant in this 4.4 million square foot campus multiple expansion availabilities and unrivaled flexibility. So, scale really matters.

Sitting here today, we are more confident than ever in our design and programming of the 4.4 million square foot campus at the combined PENN 1 and PENN 2. With unique and outstanding architectural design and amenities, sitting on top of New York's main transportation hub, with Apple and Facebook anchor tenancies in other of our adjacent buildings, and with the Governor's plan for significant additional investment in the Penn Station area, we couldn't be more excited.

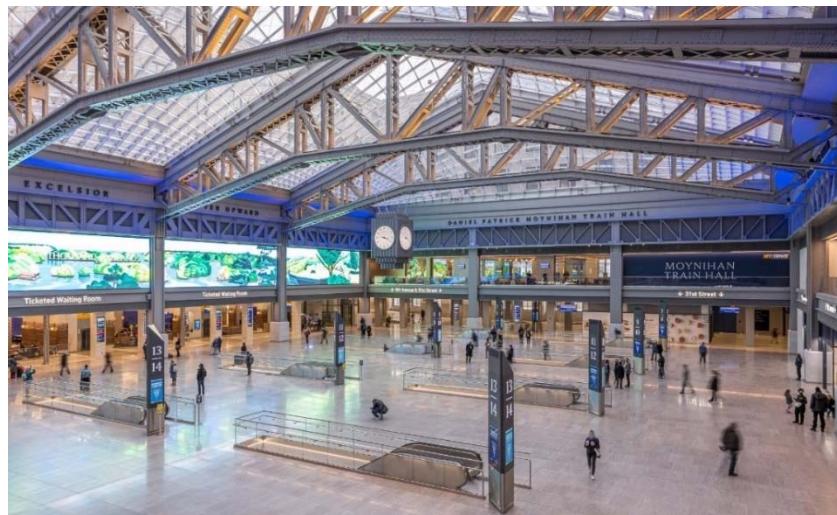
¹⁶ \$1.1 billion spent to date, with \$1.3 billion left to go. Rate of spend will be about \$700 million in 2021, \$300 million in 2022, and \$300 million in 2023.

¹⁷ Our 4.4 million square foot PENN 1 and PENN 2 campus is programmed to have over 200,000 square feet of amenity space, about 5%. Think about this – 5% of even a large million square footer would be only a noncompetitive 50,000 square foot amenity package, so scale really matters.



THE **PENN DISTRICT** is taking shape as a series of building blocks one on top of the other on top of the other. We take note of the following important accomplishments:

- It has long been a goal of government to improve the capacity and user experience of Penn Station.⁽¹⁸⁾ It has long been a precept of urban planning that density belongs at transit hubs. Recognizing these two important objectives which complement each other, Empire State Development Corporation is working to establish a General Project Plan (“GPP”), the purpose of which is to revitalize the area around Penn Station, provide significant public realm and subway improvements, and generate funds from new density to help overhaul and expand the station itself. The GPP process was announced in February by the Governor in a press release that can be accessed [here](#).
- In December 2020, the grand new Moynihan Train Hall⁽¹⁹⁾ opened to the public to rave reviews, further cementing PENN as the transportation center of New York and our **PENN DISTRICT** as the bullseye. Vornado was honored to be a major principal in the Moynihan public/private partnership.



- In August 2020, in the height of the pandemic, we completed our lease with Facebook for all 730,000 square feet of the office portion at Farley. This lease was the largest lease in New York last year. The first phase of Facebook’s space was delivered in January and the remainder will be delivered later this year. This space will house 3,000 Facebook employees.



¹⁸ In normal, non-COVID times, Penn Station struggles mightily to handle three times the traffic it was originally designed for.

¹⁹ A little explanation of terminology and geography may help. The historic Farley Post Office is the entire building; the Moynihan Train Hall sits in the eastern half of the Post Office Building; our Farley is the western half of the Post Office Building where Facebook and our retail are.

- The new Long Island Railroad 33rd Street entrance, situated between PENN 1 and PENN 2, also opened in December. Its futuristic design is unique, exciting and that is intentional.



- In December, we finalized our agreement with the MTA to redevelop the Long Island Railroad concourse. The retail stores on the north side of the concourse are ours and sit in our PENN 1 footprint. This project will double the width of the concourse, relieve overcrowding, raise the ceiling to a grand 18 feet and create a vastly improved concourse for the hundreds of thousands of commuters who use it each day. Construction is now underway, and our retail has been taken out of service. As part of the deal here, we will gain long-term control of an additional 22,000 square feet of retail on the south side, so we will now have all the retail along both sides of the heavily trafficked Long Island Railroad concourse. And we have all the retail in the adjacent Moynihan Train Hall and Farley. Taken together, this concentration of transit-oriented retail is a very significant asset. In normal times Penn Station is teeming with traffic and our retail does really well here.



We have owned Hotel Penn, PENN 1 and PENN 2 for 22/23 years. Since everything about these buildings is about to change, this seems a perfect time to review the financial performance we have enjoyed so far from these buildings over our ownership period.

(\$ IN MILLIONS)	PENN 1	PENN 2	HOTEL PENN
Initial Acquisition ⁽²⁰⁾	450	218	152
Cash NOI	1,539	873	458
Capex	459	204	130
IRR, Unlevered ⁽²⁰⁾	13.5 %	12.5 %	13.2 %

In 1997, when we acquired the Mendik portfolio which marked our entry into New York real estate, our first move was to go after the **Hotel Pennsylvania** which we bought in three separate transactions over three years. The hotel business is competitive and cyclical which made the hotel in some years a large profit producer and in others not so much. But to us, the hotel was always a taxpayer, carrying a great development site. The hotel math has deteriorated significantly over the last five years, a victim of oversupply, relentlessly rising costs and taxes and an aging physical plant. In April 2020, in response to the pandemic shutdown, we announced a temporary closing of the hotel and booked one-time losses of \$42 million.

Today, I announce that we will **permanently close and raze the hotel to create the premier development site in town**. The process from today to the fully demolished and ready-to-go site will take less than two years. We are working with Foster + Partners to design a unique building, the 22nd century workplace of the future. Initial designs for this building, now addressed PENN 15, can be seen at our website www.vno.com.

This decision was inevitable... the Pennsylvania may have been a *grande dame* in its time, but it is decades past its glory and sell-by date.⁽²¹⁾

We have history here – a megadeal that went away. In 2007, we shook hands and drew docs for a deal to build the world headquarters of Merrill Lynch on the Hotel Penn site. The papers were done, César Pelli designed a towering HQ building and we had a ULURP approval (now expired) for this 2.8 million square foot financial services headquarters building. This deal was swept away by the Great Recession.

²⁰ Current value of these buildings is multiples of our initial acquisition cost, which is baked into the IRR.

²¹ We will retain PEnnsylvania 6-5000 (famously performed by Glenn Miller), the oldest continuously in-service telephone number in New York.

PENN 2 is a unique asset. It has a 60,000 square foot footprint, it sits on a 120,000 square foot two-block wide site, it is directly on top of Penn Station. The site could support a building three times larger and so, a few years ago, we considered an audacious plan... to raze PENN 2, a building worth well more than a billion dollars, to bring back a much larger five, six or seven million square foot building, utilizing trapped air rights that we own with Madison Square Garden. This scheme was too large, even for us, and would have taken the better part of seven years, so it was a no-go.⁽²²⁾ Recognizing the scale of our site and that we sit directly on top of the station, we have also considered other schemes. Nonetheless, we are now **fully committed and full speed ahead** with our bustle transformation plan for PENN 2... and it's a beauty. Steel and curtainwall are on order, sidewalk sheds are up, and we're off to the races.

To showcase our vision for the District, we have just opened our new **PENN DISTRICT** Experience Center (a fancy word for sales center) located on the 7th floor at PENN 1, appropriately in the heart of the action. This marketing center (12,000 square feet of showroom, conference, meeting, models, and video walls and 14,000 square feet of gardens and terraces overlooking the entire district) is the best I've ever seen. It really tells our story and brings our plans to life, and even more, it's a proper environment for dealmaking. It will be the venue for our leasing and development teams to present and showcase our projects to the brokerage community and prospective tenants. Early feedback from brokers and tenants has been fantastic. When gatherings are again permitted, we look forward to hosting all of you. In the meantime, please visit our website for the latest images of our plans for THE **PENN DISTRICT**. Creating this sales center was a labor of love around here. Everything had to be perfect. Thanks to Barry Langer, Glen Weiss, Lisa Vogel and their teams. Architecture and design was by Brad Zizmor of A+I.



²² While we are reminiscing, all this is Penn Station 2.0. Back ten years ago was Penn Station 1.0 where we, Related and Madison Square Garden pursued another bold plan, to relocate MSG to the western half of the Farley Post Office. The three private sector partners committed in writing and the ball was in the public sector's court. After years of trying, we pulled the plug as it became clear that this dream wasn't going to happen. Looking back, everyone, the press, the civics, elected officials all had remorse over this unique, missed opportunity.

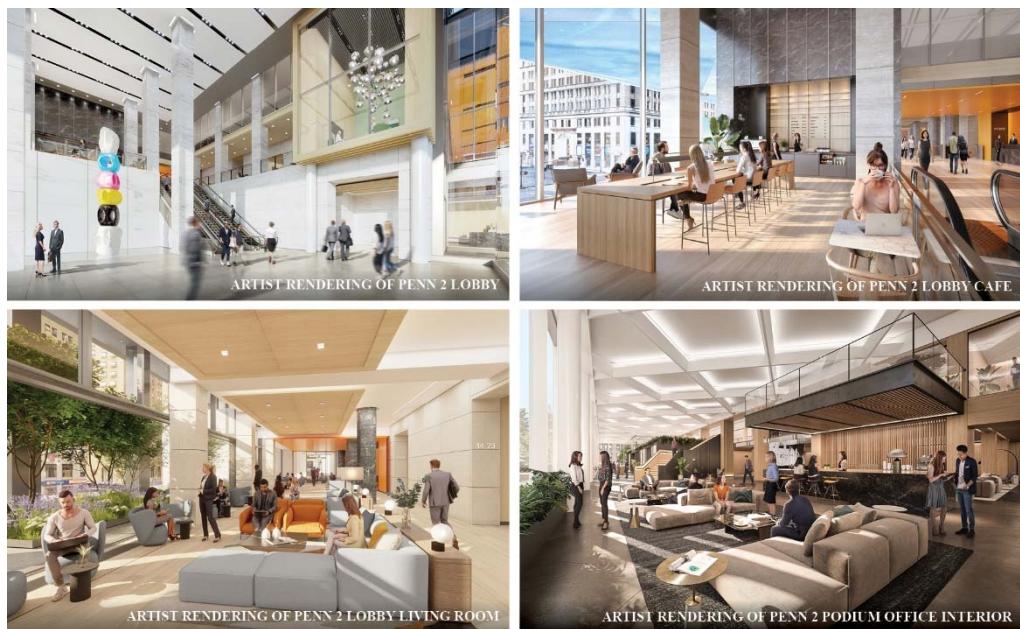
In our business, the deals are the drama... buying, selling, leasing. But in the end, we are a customer-centric business... in a manner of speaking, we are in the hospitality business. I reprint here two important paragraphs from last year's letter.

Talent is our New Client We are in a service business. We put our best foot forward when we take a page out of the hospitality industry. Our tenants appreciate and deserve to be treated like guests. Coffee and welcoming greetings go a long way. In keeping with that spirit, our **PENN DISTRICT** marketing campaign features the slogan, "Talent is our New Client," the point being that everything we do, in every phase of our business, must be geared to pleasing, even delighting, our clients, defined as the talented employees of our tenants. After all, we recognize that real estate is a recruiting tool for our tenants.

Further, we are pushing the envelope of design. There is a place for Park Avenue-style financial services buildings and a place for West Side creative-type buildings. In THE **PENN DISTRICT**, we are creating a 22nd century work environment featuring lobbies with areas to sit, congregate, surf or just hang and chill, a warm palette, welcome libraries, conference centers, gyms, an auditorium, food service, outdoor space and gardens and more. In a word, we will create a hospitality-rich communal workplace for our **PENN DISTRICT** tenants. The images below are a tiny sampling – additional images are posted at www.vno.com.

At Vornado, we have made great progress using technology to enhance our tenants' experience and make their lives more efficient. Our small dedicated staff of technologists is continuously working to improve our customers' experience. For further information, please see www.vno.com/technology-innovation.

Our **PENN DISTRICT** development team is led by Barry Langer with David Bellman, Judy Kessler, Sandy Reis, Brian Thompson, and Alan Reagan.



Disclaimer: There can be no assurance that these projects will be completed, completed on schedule or within budget. There can be no assurance that the Company will be successful in leasing the properties on the expected schedule or at the budgeted rental rates.



ARTIST RENDERING OF PENN 2

Retail

The retail industry is going through a vicious period of challenging, disruptive, secular change. Nonetheless, we are making deals – Fendi, Berluti, Sephora, Whole Foods...

Individually, and collectively, we own great assets... a portfolio of 65 properties, 2.7 million square feet of flagship street retail concentrated on the best high streets – Fifth Avenue, Times Square, THE PENN DISTRICT, Madison Avenue, and SoHo. Please see www.vno.com for portfolio details and images. Here is the math for our retail business:

(\$ IN MILLIONS, EXCEPT PROPERTIES)	Number of Properties	NOI	
		GAAP Basis	Cash Basis
2022 guesstimated		160.0	
2021 guesstimated		135.0	
2020	65	147.3	158.7
2019	64	273.2	267.7
2018	65	353.4	324.2
2017	65	359.9	324.3
2016	64	363.7	292.0
2015	60	341.7	259.2

Here is a reconciliation of retail cash basis NOI from 2018 (the top-tick year for the retail segment) to our guesstimated 2021 number. We also include a guesstimate of what 2022 cash NOI might be.

(\$ IN MILLIONS)	2018 to 2022 Bridge	
	(At Share)	
2018 Cash NOI	324.2	
Retail Joint Venture transaction	(82.8)	
Sold properties	(18.9)	
THE PENN DISTRICT out of service	(23.0)	
	199.5	
Tenant issues:		
Manhattan Mall: JCPenney	(19.5)	
1540 Broadway: Forever 21	(10.6)	
478-486 Broadway: Topshop	(8.1)	
Other, net (Zara, John Varvatos, Berluti, Planet Hollywood, Gucci, Forever 21, Elie Tahari, Necessary Clothing)	(26.3)	
2021 Cash NOI, guesstimated	135.0	
Rent steps	5.3	
Signed leases	8.8	
Farley/other leasing, net	10.9	
2022 Cash NOI, guesstimated	160.0	

Here are our 2020 results by submarket:

(\$ IN MILLIONS, EXCEPT %)	NOI			
	GAAP Basis		Cash Basis	
	Amount	%	Amount	%
Fifth Avenue	74.5	50.6	64.7	40.8
Times Square	25.2	17.1	25.7	16.2
THE PENN DISTRICT	9.9	6.7	26.7	16.8
Madison Avenue	(1.4)	(1.0)	5.2	3.3
SoHo	13.6	9.2	10.4	6.6
Other	25.5	17.4	26.0	16.3
Total	147.3	100.0	158.7	100.0

In 2020, in conjunction with the JV's appraisals, we wrote down our investment in the Retail Joint Venture by \$409 million to \$2.8 billion; there may be more to come. In accordance with our annual asset review, we impaired other retail assets by \$236 million.

The \$1.828 billion preferred that we hold on five of the seven Retail Joint Venture assets which was originally sized at 50% of value is now at, say, 61% of value per appraisal. As a reminder, this preferred is cumulative, non-call, the senior "liability" position on those five assets, bears a coupon of 4.25% until 2024 when it rises to 4.75% for the next five years and is formulaic thereafter. We still get questions regarding the terms of the Retail Joint Venture deal. Please see www.vno.com for a description of that deal from my 2018 letter to shareholders.

220 Central Park South

To use the analogy of a parent celebrating a child's growth and development (pun), 220 Central Park South has completed its development phase and is entering adulthood; about a third of the apartments are now occupied by delighted resident-owners enjoying the restaurant, amenities and the environment we have created.

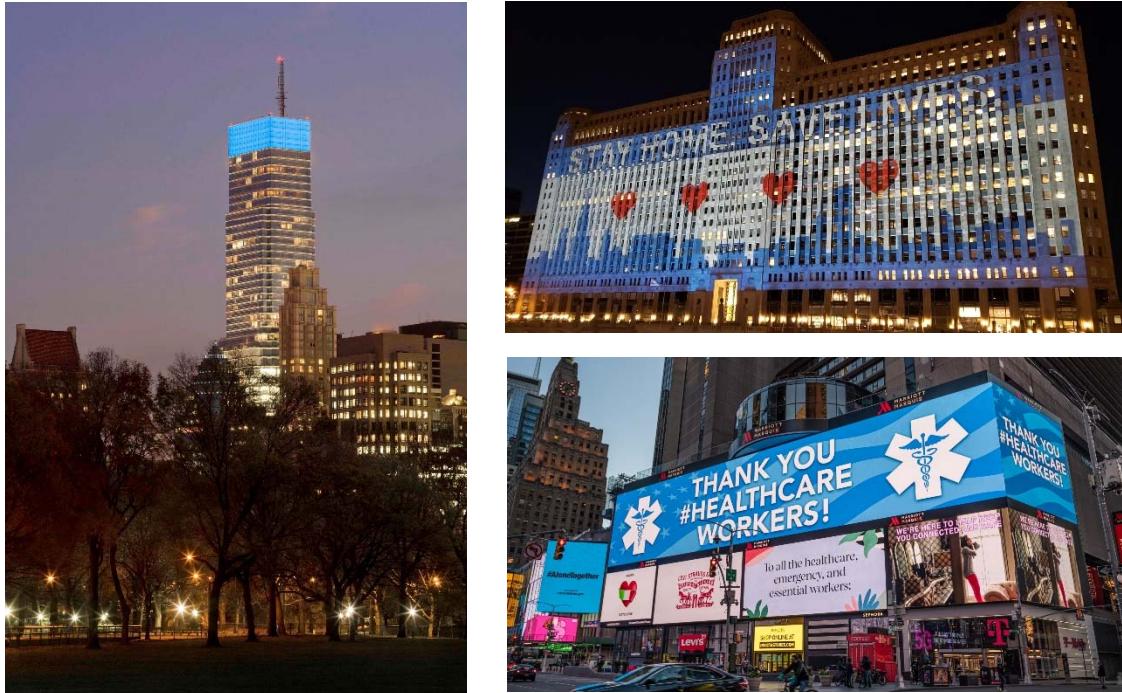
Sales to date have totaled \$2.869 billion. We are 91% sold with, I guesstimate, \$250-\$300 million still to come from future sales.

In 2020, 220 Central Park South accounted for all ten of the top ten (by sales price) condo sales in New York and 16 of the top 20. That's never been done before and likely will never be done again.

Considering our great success, proven abilities and unique franchise in this space, I now take a page out of my friend Michael Bilerman's playbook. Let's take an instant poll – should we take on another similar condo project?

Kudos to our development team led by Barry Langer with Eli Zamek, Mel Blum, supported by Alejandro Knopoff, Andrew Hunt, and Sedge Hahm. Sales were all Deborah Kern.





Public service messaging during the pandemic at our flagship assets, clockwise from left: 731 Lexington Avenue, the home of Bloomberg's World Headquarters in New York City; theMART, the world's largest commercial building and design center located in Chicago; and 1535 Broadway in Times Square, one of the largest LED screens in the world, in New York City.

G&A

As 2020 came to a close, we executed a G&A reduction program designed to save \$35 million annually.⁽²³⁾ Compensation represents 80% of our G&A expense and, accordingly, we targeted \$30 million of the reduction from compensation, including a Reduction In Force.

\$10 million of the reduction in compensation came from me as well as David Greenbaum and Joe Macnow, both of whom are retiring. It was appropriate that we eliminate the redundancies and overlapping skillsets in our senior team. David, Joe and I agreed it was time. David and Joe may be irreplaceable but, be assured, their successors – Michael, Glen, Barry, Tom and Matt – are very talented, seasoned, proven and up to the task.

The program involved a one-time expense for severance, etc., of \$23 million. We undertook this program partially as a COVID-induced belt tightening and, even more, as simply good business practice.

Our team captains in this unpleasant activity were Michael Franco and Joe Macnow... and all of our senior department heads chipped in. Kudos to them for an extremely professional and efficient process that was well-explained to staff. This was something that had to be done and our hardworking staff accepted that. The 70 people who left us were treated generously and with compassion.

A comparison of our G&A levels to our peers is complicated. The numbers and classifications are all over the place. But here's a summary, as best as we can make it: Giving account, pro forma, for the \$35 million reduction, our G&A would be 5.55% as measured against revenue and 62 basis points as measured against enterprise value. These metrics are in the ballpark of our peer group.

²³ Technically, \$28.6 million will reduce “general and administrative” expense on our income statement, \$3.2 million will reduce “operating” expense on our income statement and the final \$3.2 million will reduce capitalized expenses.

Some Thoughts, 2020 Version

- I begin with a shoutout and a **thank you to our amazing and talented Vornado people** in New York, Paramus, Chicago and San Francisco. To our leasing teams who did the Facebook and NYU deals, and more; to our development teams responsible for 220 CPS, Farley, PENN 1, PENN 2 and more; to our Paramus team who collect the rents, pay the bills, prepare our financial statements, and are masters of control, control, control; and to our operations teams who keep the trains running on time, follow all protocols and have our buildings sanitized and ready to welcome our tenants home... you are all A+, at the head of the class, and we say thank you. And a double thank you this year since most of your work was done from home without skipping a beat (enabled by Robert Entin and his IT team).
- If there is a lesson from this horrible COVID year, it is that we must always **be prepared** for the out-of-the-blue, unexpected black swan event...and we were and we are.
- Our portfolio is populated with the **highest quality assets** in all of REITland: 555 California Street; theMART; our Fifth Avenue and Times Square retail assets; 1290 Avenue of the Americas; 770 Broadway, etc., etc. to name a few; AND, the most exciting development opportunity in all of REITland, THE **PENN DISTRICT**; AND the two best development sites in town, 350 Park Avenue and the Hotel Pennsylvania.
- The pandemic has forced everyone out of the office, out of their normal workplace to shelter in-place, i.e. into isolation in their homes. Technology (Zoom) allowed companies to carry on as best as they could with a remote workforce. Work-from-home or **work-from-anywhere** sounds to me a lot like the age-old freelancing, i.e. working alone. Will work-from-home disrupt the office and the structure of work, much like Amazon disrupted retail? I think not. Remember after the tragedy of 9/11, companies fled New York, split into multiple locations and shunned view space at the top of tall buildings. This all reversed quickly. In the early stages of the pandemic, many of our corporate leaders were quick to pronounce that their workforces could work from anywhere forever, or something like that. And almost to a one, those dictums have now been reversed. Time will tell, but I have to assume work-from-home in some hybrid form, in some modest percentage of the office population is here to stay. But the success of our businesses will continue to depend upon talented workers gathering together. I guess the kitchen table has a place for some but I continue to believe the urban office is the future of work.
- The competition between high-tax, densely populated urban centers and smaller, low-tax/no-tax cities is the topic du jour. We continue to believe that New York, our hometown, will be a big winner. **New York wins in infrastructure**. It is the economic and cultural capital of the United States (there is a reason the Statue of Liberty is in New York Harbor), it is the finance center of the world, it attracts the best and the brightest and has a large and growing highly educated and diverse workforce, eight professional sports teams, Lincoln Center and Carnegie Hall, Broadway, great museums, great restaurants and nightlife, the best hospitals and universities, and, of course, the largest concentration of Fortune 500 headquarters and is now a large and growing tech center... you get the message. And think about this, just the space that tech companies have recently leased in New York or currently have under construction will require 20,000 new talented employees. There is maybe only one other city in the country with the scale to satisfy that requirement.
- **We listen to our tenants** and, so, I am convinced that the way they want to work is rapidly changing from the rigid, closed office door Uptown model to the less formal, creative West Side model. Of New York's 400 million square feet, I'm guessing only about half of that space really qualifies for the workplace of the future.
- I agree with the conventional wisdom that the COVID lockdown will shortly turn into a **BOOM**. The stock market says so, the tsunami of trillions of stimulus will make it so, so too will pent-up consumer demand. New York will be a primary beneficiary of the stimulus and of the boom.
- **Gaming** is now all around us. There are as many as 30 gaming venues within an easy drive of Manhattan. Internet gaming is the next big thing, predicted to have a much larger audience than even brick-and-mortar casinos (I understand one can even bet on the coin toss or each down or each free throw). New York State has authorized seven casino licenses, four of which have already been issued Upstate (I understand they are not doing well) with a seven-year head start on three Downstate licenses. The enabling legislation has a prohibition against gaming in Manhattan. There is a rising level of chatter (to use a term out of the government's intelligence guidebook) that the issuance of the Downstate licenses will be accelerated and that Manhattan will be in play. There are two Downstate racetrack licenses (slot machines only) at Yonkers Raceway and Aqueduct Raceway that are performing well. My guess is that these two will win two of the three full Downstate casino licenses and then where will the third go? To my mind, it makes little sense for the third license to go to another venue in either Long Island or Westchester which would split revenue with the existing Yonkers or Aqueduct. It makes perfect sense for the third and final license to go to Manhattan. Being the center of everything, Manhattan will generate by far the highest revenue for our education system; after all, aren't we in it to maximize the tax revenue? And Manhattan has, by far, the largest number of hotel rooms, restaurants, museums, tourist attractions, and the region's transportation network was designed with Manhattan as its hub. We have heard the chatter and have been approached.
- Our property business produces a stream of income which comes from almost a hundred buildings and 1,200 tenants with generally longish-term leases and high credit profiles. Our income taken as a whole is very stable. At our current stock price, our 2019 income is at an 8.2% cap rate, our COVID-depressed 2020 income is at a 6.7% cap rate. Think about this: the senior third of our income stream is rock-solid and would undoubtedly be rated AAA or even AAAA and might be valued at, say, a 2.5% cap rate. This pushes the junior two-thirds into double digits, and that sounds crazy to me. We are studying how to isolate that senior third of super highly rated income either through credit instruments or a **fee/ground lease split**. With our large existing portfolio, we could create quite a new business here.

- **Homelessness** is a nationwide tragedy growing to epic proportions. Something must be done to help the victims and, at the same time, make our streets livable. Isn't this what government is supposed to do?
- During the COVID lockdown, I must say the best investment I ever made is my Netflix subscription. I now understand why the **soundstage** business is booming. While we certainly aren't going Hollywood, we have been approached and are intrigued.
- In June, we announced that we were going to market to explore alternatives for two large, highest-quality assets, **555 California Street**, which has to be a top 5 in the nation trophy, and **1290 Avenue of the Americas**, one of the premier buildings on Manhattan's Corporate Row. We understood that this was a contrarian move in the face of the pandemic, but we felt that the world was awash with liquidity and there were no great assets then in the marketplace. We found investors to be uncertain, distracted, and handicapped by inability to travel. We were unable to achieve our price objective and we withdrew. We are now in the process of refinancing 555 California Street. As markets improve, we may well revisit other alternatives for these two buildings.
- In investing, buy-low sell-high is the golden rule. **Our stock is once again stupid cheap**, although the first small leg off the bottom may be behind us. My friend Steve Sakwa, the highly regarded REIT analyst, recently published a report that our current stock price values our office buildings in the \$500s per square foot. With replacement cost in the \$1,200-\$1,400 per square foot range, that discount is a bell ringer. There's more, COVID-inspired work-from-anywhere has driven apartment occupancies down to the 70%'s and apartment rents down by 25%... that's never happened before... another bell ringer. So, Manhattan is now on sale and that's a buy signal and one of the reasons I believe New York will grow from strength to strength.
- I will resist questioning the wisdom of raising taxes in the face of a New York economy that is in the early innings of reopening and recovering, especially when Washington has balanced the city and state budgets. But I will, for the third year in a row, question the wisdom of the New York State **estate tax**. I repeat here what I have said before:

There is one vulnerability I would like to point out. In New York State, the top 2% pay a full 50% of personal income taxes so it is critical that they remain tax-paying residents. The vulnerability comes with the 1%-ers, who are at the end of their careers. Most of the folks I know are willing to pay higher income taxes for the privilege of living in New York, but hate the prospect of a 16% toll for the privilege of dying in New York. New York State's estate tax brings in only about 1/150th of the state's annual budget. The estate tax should be repealed. Keeping our highest taxpayers through the end of their lives is both good economic policy and good politics. By the way, high-tax California has no estate tax, New Jersey repealed its estate tax last year.

- **The Principles by Which We Run Our Business** are reprinted as Appendix A.

Environmental, Social and Governance (“ESG”)

Dan Egan is our industry acclaimed Senior Vice President, Sustainability. What follows is Dan’s summary of 2020 accomplishments and goals. Thank you, Dan.

The various crises we endured in 2020 – economic, public health, social justice, and climate, to name a few – underscore the importance and urgency of ESG. ESG remains a priority for all of us at Vornado and is further supported with oversight from our Board.

Climate change risks are imminent, as climate-driven events wreak havoc across the globe, damaging infrastructure and adversely impacting vulnerable communities. As corporate citizens, we must do our part to reduce our impact on the environment and manage the associated risks. Last year, we published our commitment to making our buildings carbon neutral by the year 2030. Our six-point plan, known as Vision 2030, is discussed fully in our ESG Report, found at www.vno.com. We have committed to aligning this plan with the Science-Based Target Initiative.

We have been focused on energy efficiency for over ten years. In fact, we reduced our energy consumption 24% between 2009 and 2019. We prioritize energy efficiency as the primary means to reduce our carbon emissions; we can and should do more, with less. To that end, below is an inventory of carbon emissions from our buildings in 2020, according to the Financial Control Method⁽²⁴⁾, measured in metric tons:

	Total MTCO2e	Scope ⁽²⁴⁾		
		1	2	3
New York	163,424	23,559	105,456	34,409
theMART	20,996	4,367	16,612	17
555 California Street	8,405	37	8,368	—
Other	13,359	1,227	3,561	8,571
Total	206,184	29,190	133,997	42,997

We realized a 20% reduction in our emissions from 2019 to 2020, mostly due to COVID-related dormancy in our office and retail spaces. We expect emissions to increase from these values, at least partially, with the return of our tenants in 2021.

Carbon emissions have a complex relationship with real estate. As property owners, we can control the emissions generated by our energy consumption, but we also must be aware of the resources expended to generate this energy. A “green” electrical grid is fully supported by renewable energy and other zero-carbon resources, like hydropower and nuclear. If the grid is green, a building whose sole energy source is electricity could become carbon neutral. Both New York State and California have mandates to achieve green grids (New York by 2040; California by 2045). Such regulation compels us to consider electrifying our buildings as a plausible path to carbon neutrality. We are actively doing so in THE PENN DISTRICT and elsewhere. We have a seat at the table with climate policymakers at City, State, and Federal levels to advise not only on what role buildings must play in climate change mitigation, but also how it can be done.

We responded to COVID with determination to ensure that our tenants, employees, and visitors remain healthy and safe. We fortified our buildings with protections that include thermal scanning, social distancing and PPE requirements, HVAC and Indoor Air Quality, and more recently, onsite COVID testing locations. This infrastructure is further reinforced with our green cleaning program and our best-in-class operations team.

We have also provided our employees with the resources, support, and flexibility needed through the pandemic. We enhance our human capital by sponsoring continuing education and career development. We have actively engaged with our workforce and solicit their feedback through our divisional leaders and employee surveys.

Our Board, and particularly our Corporate Governance and Nominating Committee, is assigned with oversight of ESG, which includes climate change risk. A discussion on our corporate governance is included in our proxy statement, which can be viewed at www.vno.com/proxy and the governance section of our website at www.vno.com/governance.

We proudly celebrate our continued achievements and recognition as a leader in ESG. In 2020, we were recognized by NAREIT as a Leader in the Light (11 years running), we achieved ENERGY STAR Partner of the Year with Sustained Excellence (6th time with this distinction) and we earned accolades from the Global Real Estate Sustainability Benchmark (8th year with “Green Star” Ranking, top quintile of performers, and an “A” grade for our public disclosure). We own and operate more than 27 million square feet of LEED certified buildings, representing 95% of our office portfolio, with over 23 million square feet at LEED Gold or better.

Our ESG narrative is told with transparency and supported by data. We have expanded our climate scenario analysis as recommended by the Taskforce on Climate-related Financial Disclosures and have updated our disclosures according to the Sustainability Accounting Standards Board and the Global Reporting Initiative. All can be found at www.vno.com.

²⁴ We have chosen to report our emissions according to the Financial Control Method, as discussed in the World Resource Institute’s Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard: Revised Edition. Our Scope 1 emissions include onsite combustion from oil and natural gas; Scope 2 emissions include our district steam consumption and electricity consumption, including electricity consumed by our submetered tenants; Scope 3 emissions include other utility consumption within the direct control of our tenants.



Cover of 2020 ESG Report which can be found on our website at www.vno.com.

David and Joe

David Greenbaum and Joe Macnow stepped back at year end from day-to-day roles and became senior advisors. Vornado is indebted to them and thanks them for their immense contributions. These two are giants and deserve much credit for building the great company that Vornado has become.

Joe started with me at the very beginning, 40 years ago. David joined 24 years ago when we acquired the Mendik Company (which, by the way, was Mike Fascitelli's first deal with us). David was with the Mendik Company for 15 years prior, so, rounding you might say that David is also a member of the 40-year club. I note (with tongue in cheek) that it will take five of our really talented leaders to replace these two giants – Glen Weiss and Barry Langer in the case of David, and Michael Franco, Tom Sanelli and Matt Iocco in the case of Joe. So be it. But, believe me the “new” five are up to the task.

David Moves to Arizona...Glen Weiss and Barry Langer Step Up

David Greenbaum and I first met when Vornado acquired the Mendik Company in 1997. For the last 24 years, he has been my partner and the leader of our New York business. A lot has happened since then and he has had a hand in every day and every deal. David is the consummate real estate professional...at the head of the class. What's more, David is the smartest, most competent and most upstanding man I know. David has chosen to kick himself upstairs, continuing his leadership as Vice Chairman, working from both New York and Arizona.

Joe Retires as CFO... Michael Franco Steps Up

Joe Macnow is the dean of REIT CFOs. He and I have worked together for 40 years. You all know him. He's as smart as they come. He has participated in all of the good stuff we have done over the years. He is, of course, an accounting wiz, an A player in management and pretty darn good at strategy, if a little stubborn.

A little history here. When Mike Fascitelli stepped down in 2013, I brought Joe into New York to work even more closely with me and we recruited Steve Theriot from Deloitte, our auditor, to be Vornado's CFO. Fast forward to 2017, when we spin-merged our Washington business into JBG SMITH (our shareholders had 73% of NewCo, so I look at it as OurCo), we contributed 12 million square feet of buildings, multiple land sites, including the Crystal City land that is now Amazon HQ2 (Matt Kelly and his JBGS team did a great job... but I can't resist taking a little credit) and we transferred Steve Theriot, who had intimate knowledge of our assets, to JBG SMITH as their CFO. At that point, we did an external search for a successor Vornado CFO. After a thorough search headed by a first-rank search firm, we concluded that Joe, even a little long in tooth, was by far the best around and he resumed the Vornado CFO job. Fast forward again to a few months ago when, in connection with our G&A review, we mutually decided, it was time. We threw most of Joe's compensation into the G&A savings pool and he remains an involved senior advisor.

Now, we focused on multiple internal candidates to be Joe's successor as Vornado's CFO. Me, our Board, our senior leadership team and that same first-rank search firm went back to work. But I changed the ground rules. Vornado's CFO has traditionally been sort of a Chief Accounting Officer. In Joe's case, his talent allowed him to be that plus a jack-of-all-trades but I really wanted something more and different. It's a little known fact that only 36% of Fortune 500 CFOs come out of accounting. The modern CFO runs the accounting and control department, usually through a deputy, but also runs the balance sheet, financings and, frequently, strategy...and dealmaking, too. He is often the CEO's right hand and, many times, a CEO in waiting. With these criteria, Michael Franco emerged as the clear winner. He is doing the finance, strategy, dealmaking and right-hand man functions now. This was an easy choice and I am delighted that Michael has agreed to add the CFO title to his President title.

In connection with all of this, Tom Sanelli has stepped up. Tom is special, and in our group of math experts, he may be the best of the lot. Tom has been promoted to Executive Vice President - Finance & Chief Administrative Officer. He has been with Vornado since 2003. Tom trained as an accountant but received his PhD working for David on all manner of deals, analytics, and management. He has been our go-to guy and, for years, has worked hand-in-hand with Michael, Glen, and Barry. Among other functions, Tom will be Michael's deputy overseeing Paramus. Most of you know Tom, he has been participating in investor meetings for years. And he will be our lead Investor Relations executive succeeding Cathy Creswell, who is retiring.

We continually broaden our leadership team through promotions from within our Company. Please join me in congratulating this year's class; they deserve it.

Dana Fulton was promoted to Senior Vice President, Financial Planning and Analysis
Jonathan Sherick was promoted to Senior Vice President, New York Controller
Gene Nicotra was promoted to Senior Vice President, Hotel Pennsylvania
Tatiana Melamed was promoted to Vice President, Acquisitions & Capital Markets
Edward Riguardi was promoted to Vice President, Leasing
Bridget Cunningham was promoted to Vice President, Operations, Senior Property Manager
Anthony Moschitta was promoted to Vice President, New York Property Accounting
Hernando Risueno was promoted to Vice President, New York Property Accounting

Welcome Steven Borenstein, Senior Vice President and Corporation Counsel.

Our operating platform heads are the best in the business. I pay my respects to my partners, Michael Franco, Glen Weiss, Barry Langer, Haim Chera and Tom Sanelli. Our exceptional Division Executive Vice Presidents deserve special recognition and our thanks: Michael Doherty – BMS; Robert Entin, Chief Information Officer; Ed Hogan, Leasing – New York Retail; Mark Hudspeth, Capital Markets; Matthew Iocco, Chief Accounting Officer; Myron Maurer, Chief Operating Officer – theMART; Gaston Silva, Chief Operating Officer – New York; and Lisa Vogel, Marketing. Thank you as well to our very talented and hardworking 29 Senior Vice Presidents and 58 Vice Presidents who make the trains run on time, every day.

Thank you and congratulations to Steve Santora (37 years of service) and to Cathy Creswell (18 years of service), who are retiring. We will all miss them and wish them well.

Our Vornado Family has grown with 3 marriages and 13 births this year, 9 girls and 4 boys.

On behalf of Vornado's Board, senior management and 2,899 associates, we thank our shareholders, analysts and other stakeholders for their continued support.

Steven Roth
Chairman and CEO

April 5, 2021

Broadway theatres hopefully will reopen in the fall. My wife is producing the first off-Broadway show to open post-COVID, *Blindness*, a thrilling socially distanced theatrical experience with immersive sound and light design, playing at the Daryl Roth Theatre in Union Square. Please call if I can help with tickets to *Blindness* or to any of my wife's or son's shows when Broadway reopens.

I salute my future: Rebecca - Yale '22, Abigail - Dartmouth '24, Emily - Horace Mann '23, and Levi will begin kindergarten.

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Appendix A - Here Are The Principles By Which We Run Our Business:

We are a fully-integrated real estate operating company. We have the best leasing, operating and development teams in the business. We are laser focused.

We invest in the best buildings in the best locations.

We seek to acquire value-add assets where our unique skills will create shareholder value. We believe vacancy at the right price is an opportunity and that buildings, even in rundown condition (that we can reimagine) in great locations are also an opportunity.

We invest in our buildings to maintain, modernize and transform. The front of the house and the back of the house of our assets are as good as new (and are in locations where new could not be created). Our transformations have increased rents over \$20 per square foot, yielding attractive double-digit returns. We also measure our success here by the quality of tenants we have been able to attract. We have transformed almost all of our fleet; THE PENN DISTRICT is on deck.

We are disciplined and patient and prepared to let flat 4% cap rate deals pass by, while we wait for the fat pitch.

While we have many million plus square foot buildings, we shy away from 500,000 square foot tenants who seem to always get the better of the deal, in strong markets or in weak. Our sweet spot is the 50,000 to 200,000 square foot tenant.

A few years ago, I coined the phrase, “The island of Manhattan is tilting to the West and to the South.” Today, the hottest submarkets in town run from Hudson Yards to THE PENN DISTRICT and extend South through Chelsea and Meatpacking. Anticipating these trends, we have structured our office portfolio so that half of our square footage is in this district.

We have a hospitality approach, treating our tenants as the valued customers that they are. This attitude begins at the leasing table (although that process can at times be contentious), through tenant fit up, to greeting at the front door. We believe this approach yields the highest renewal rate in the business; renewing tenants enhances our bottom line.

We treat the real estate brokerage community as if they are our customers, because they are. Brokers prefer dealing with us, we know what it takes to make a deal, we treat their clients well and we deliver every time.

We are in the amenity business. Our amenity poster child is the giant MART in Chicago, where we have dominant, state of the art, dining, workout, socializing and meeting spaces, etc.

Tenant mix is really important; companies and their employees care who they co-tenant with. The design and location of each of our buildings has a target market in mind. For example our new-builds in Chelsea are targeting the creative class and boutique financials (an interesting combination).

We maintain a fortress balance sheet with industry-leading liquidity.

All of this in the relentless pursuit of shareholder value.

Below is a reconciliation of Net (Loss) Income to NOI, As Adjusted (properties owned at the end of 2020):

(\$ IN MILLIONS)	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Net (Loss) Income	(461.8)	3,334.3	422.6	264.1	982.0	859.4	1,009.0	564.7	694.5	740.0
Our share of loss (income) from partially owned entities	329.1	(78.9)	(9.1)	(15.2)	(168.9)	9.9	58.5	336.3	(428.9)	(125.5)
Our share of loss (income) from real estate fund	226.3	104.1	89.2	(3.2)	23.6	(74.1)	(163.0)	(102.9)	(63.9)	(22.9)
Interest and other investment loss (income), net	5.5	(21.8)	(17.1)	(37.8)	(29.6)	(27.2)	(38.6)	20.8	252.7	(156.6)
Net gains on disposition of assets	(381.3)	(845.5)	(246.0)	(0.5)	(160.4)	(149.4)	(13.6)	(2.0)	(4.9)	(10.9)
Net gain on transfer to Fifth Ave. and Times Square JV	--	(2,571.1)	--	--	--	--	--	--	--	--
Purchase price fair value adjustment	--	--	(44.1)	--	--	--	--	--	--	--
(Income) loss from discontinued operations	--	--	(0.6)	13.2	(404.9)	(223.5)	(686.9)	(666.8)	(378.1)	(394.4)
NOI attributable to noncontrolling interests	(72.8)	(69.3)	(71.2)	(65.3)	(66.2)	(64.9)	(55.0)	(58.6)	(45.3)	(47.9)
Depreciation, amortization expense and income taxes	436.3	522.6	484.2	470.4	428.2	294.8	360.7	342.5	304.5	309.2
General and administrative expense	181.5	169.9	141.9	159.0	149.6	149.3	141.9	150.3	140.5	137.5
Acquisition and transaction related costs	174.0	106.5	31.3	1.8	9.4	12.5	18.4	24.9	17.4	34.9
Our share of NOI from partially owned entities	306.5	322.4	253.6	269.2	271.1	245.8	207.7	175.1	152.1	132.2
Interest and debt expense	229.3	286.6	347.9	345.6	330.2	309.3	337.4	323.5	315.7	338.0
NOI	972.6	1,259.8	1,382.6	1,401.3	1,364.1	1,341.9	1,176.5	1,107.8	956.3	933.6
Certain items that impact NOI	17.0	(61.5)	(177.1)	(188.6)	(192.6)	(194.0)	(120.0)	(105.8)	(68.0)	(51.3)
NOI, As Adjusted (properties owned at the end of 2020)	989.6	1,198.3	1,205.5	1,212.7	1,171.5	1,147.9	1,056.5	1,002.0	888.3	882.3

Below is a reconciliation of Net (Loss) Income to FFO and FFO, As Adjusted:

(\$ IN MILLIONS, EXCEPT SHARE AMOUNTS)	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Net (Loss) Income attributable to Vornado	(297.0)	3,147.9	449.9	227.4	906.9	760.4	864.9	476.0	617.3	662.3
Preferred share dividends and issuance costs	(51.7)	(50.1)	(65.1)	(65.4)	(83.3)	(80.6)	(81.5)	(84.0)	(67.9)	(60.5)
Net (Loss) Income applicable to common shares	(348.7)	3,097.8	384.8	162.0	823.6	679.8	783.4	392.0	549.4	601.8
Depreciation and amortization of real property	368.6	389.0	413.1	468.0	531.6	514.1	517.5	501.8	504.4	530.1
Net gains on sale of real estate	--	(178.7)	(158.1)	(3.5)	(177.0)	(289.1)	(507.2)	(411.6)	(245.8)	(51.6)
Real estate impairment losses	236.3	32.0	12.0	--	160.7	0.3	26.5	37.1	130.0	28.8
Decrease in fair value of marketable securities	4.9	5.5	26.5	--	--	--	--	--	--	--
Net gain on transfer to Fifth Ave. and Times Square JV, net	--	(2,559.1)	--	--	--	--	--	--	--	--
Net gain from sale of Urban Edge shares	--	(62.4)	--	--	--	--	--	--	--	--
After tax purchase price fair value adjustment	--	--	(27.3)	--	--	--	--	--	--	--
Partially-owned entities adjustments:										
Depreciation of real property	156.6	134.7	101.6	137.0	154.8	144.0	117.8	157.3	154.7	170.9
Net gains on sale of real estate	--	--	(4.0)	(17.8)	(2.9)	(4.5)	(11.6)	(0.5)	(241.6)	(9.8)
Income tax effect of adjustments	--	--	--	--	--	--	(7.3)	(26.7)	(27.5)	(24.6)
Real estate impairment losses	409.1	--	--	7.7	6.3	16.8	--	6.6	11.6	--
Decrease in fair value of marketable securities	2.8	2.9	3.9	--	--	--	--	--	--	--
Noncontrolling interests' share adjustments	(79.1)	141.7	(22.8)	(36.7)	(41.1)	(22.4)	(8.0)	(15.1)	(16.6)	(41.0)
Interest on exchangeable senior debentures	--	--	--	--	--	--	--	--	--	26.1
Preferred share dividends	--	--	--	1.1	1.6	--	--	0.1	--	0.3
Funds From Operations	750.5	1,003.4	729.7	717.8	1,457.6	1,039.0	911.1	641.0	818.6	1,231.0
Certain items that impact FFO	(267.5)	(337.2)	(16.2)	(4.9)	(776.6)	(388.7)	(376.0)	(145.4)	(435.8)	(859.1)
Funds From Operations, As Adjusted	483.0	666.2	713.5	712.9	681.0	650.3	535.1	495.6	382.8	371.9

Below is a reconciliation of Net (Loss) Income to Net (Loss) Income, as Adjusted:

(\$ IN MILLIONS)	2020	2019
Net (Loss) Income applicable to common shares	(348.7)	3,097.8
Net gain on transfer to Fifth Ave. and Times Square JV, net	--	(2,559.1)
Severance	29.4	--
Real Estate Fund	63.1	48.8
220 Central Park South gains	(332.1)	(502.6)
Non-cash impairment losses	575.1	109.2
Certain other items that impact net income	6.3	(17.4)
Net (Loss) Income, as Adjusted	(6.9)	176.7

Below is a reconciliation of Net (Loss) Income to EBITDA, as Adjusted

(\$ IN MILLIONS)	2020	2019
Net (Loss) Income (before noncontrolling interests)	(461.8)	3,334.3
Less: net loss attributable to noncontrolling interests in consolidated subsidiaries	139.9	24.5
Net (Loss) Income attributable to the Operating Partnership	(321.9)	3,358.8
Interest and debt expense	309.0	390.1
Depreciation and amortization	532.3	530.6
Impairment losses (net gains) on real estate	645.3	(2,705.9)
Income tax expense	36.2	103.9
EBITDA	1,200.9	1,677.5
Gain on sale of 220 Central Park South units	(381.3)	(604.4)
Severance and other reduction in force expenses	23.4	--
608 Fifth Avenue lease liability (gain) loss	(70.3)	77.2
Credit losses on loans receivable	13.4	--
Real Estate Fund	63.1	48.8
Other	29.9	(55.2)
EBITDA, as adjusted (2020 decrease - 265)	879.1	1,143.9

Below is a reconciliation of Total Assets to Total Assets, as Adjusted:

(\$ IN MILLIONS)	2020	2019
Total Assets	16,221.8	18,287.0
Adjustments:		
Assets related to sold properties	(6.7)	(7.4)
Moynihan Trail Hall development	--	(914.9)
Right of use assets	(367.4)	(379.5)
Real Estate Fund	(3.7)	(222.7)
Cash available to repay revolving credit facilities	(575.0)	(575.0)
Accumulated depreciation	3,169.4	3,015.9
Total Assets, as Adjusted	18,438.4	19,203.4

Below is a reconciliation of Revenues to Revenues, as Adjusted:

(\$ IN MILLIONS)	2020	2019
Revenues	1,527.9	1,924.7
Revenues related to sold properties	(2.3)	(15.4)
Other	(6.9)	
Revenues, as Adjusted	1,518.7	1,909.3

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D. C. 20549**

FORM 10-K

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

For the Fiscal Year Ended: December 31, 2020

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)		
N/A		
(Former name, former address and former fiscal year, if changed since last report)		

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

Registrant	Title of Each Class	Trading Symbol(s)	Name of 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	5.70% Series K	VNO/PK	New York Stock Exchange
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

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

Registrant	Title of Each Class
Vornado Realty Trust	Series A Convertible Preferred Shares of beneficial interest, liquidation preference \$50.00 per share
Vornado Realty L.P.	Class A Units of Limited Partnership Interest

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Vornado Realty Trust: Yes No Vornado Realty L.P.: Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Vornado Realty Trust: Yes No Vornado Realty L.P.: Yes No

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 and post 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:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Large Accelerated Filer | <input type="checkbox"/> Accelerated Filer |
| <input type="checkbox"/> Non-Accelerated Filer | <input type="checkbox"/> Smaller Reporting Company |
| | <input type="checkbox"/> Emerging Growth Company |

Vornado Realty L.P.:

- | | |
|---|--|
| <input type="checkbox"/> Large Accelerated Filer | <input type="checkbox"/> Accelerated Filer |
| <input checked="" type="checkbox"/> Non-Accelerated Filer | <input type="checkbox"/> Smaller Reporting Company |
| | <input type="checkbox"/> 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 has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Vornado Realty Trust: Yes No Vornado Realty L.P.: Yes No

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

The aggregate market value of the voting and non-voting common shares held by non-affiliates of Vornado Realty Trust, i.e. by persons other than officers and trustees of Vornado Realty Trust, was \$6,727,146,000 at June 30, 2020.

As of December 31, 2020, there were 191,354,679 common shares of beneficial interest outstanding of Vornado Realty Trust.

There is no public market for the Class A units of limited partnership interest of Vornado Realty L.P. Based on the June 30, 2020 closing share price of Vornado Realty Trust's common shares, which are issuable upon redemption of the Class A units, the aggregate market value of the Class A units held by non-affiliates of Vornado Realty L.P., i.e. by persons other than Vornado Realty Trust and its officers and trustees, was \$396,866,000 at June 30, 2020.

Documents Incorporated by Reference

Part III: Portions of Proxy Statement for Annual Meeting of Vornado Realty Trust's Shareholders to be held on May 20, 2021.

EXPLANATORY NOTE

This report combines the Annual Reports on Form 10-K for the fiscal year ended December 31, 2020 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 92.8% 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 Annual Reports on Form 10-K 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 facility, 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 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities;
- Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations includes information specific to each entity, where applicable; and
- Item 8. Financial Statements and Supplementary Data 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 15. Stock-based Compensation
 - Note 19. (Loss) Income Per Share/(Loss) Income Per Class A Unit

This report also includes separate Part II, Item 9A. Controls and Procedures 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.

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⁽¹⁾ These items are omitted in whole or in part because Vornado, the Operating Partnership's sole general partner, will file a definitive Proxy Statement pursuant to Regulation 14A under the Securities Exchange Act of 1934 with the Securities and Exchange Commission no later than 120 days after December 31, 2020, portions of which are incorporated by reference herein.

FORWARD-LOOKING STATEMENTS

Certain statements contained herein 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 Annual Report on Form 10-K. 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. For further discussion of factors that could materially affect the outcome of our forward-looking statements, see “Item 1A. Risk Factors” in this Annual Report on Form 10-K.

Currently, one of the most significant factors is the ongoing adverse effect of the COVID-19 pandemic on our business, financial condition, results of operations, cash flows, operating performance and the effect it has 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 depend on future developments, including the duration of the pandemic, which are highly uncertain at this time but that 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 this Annual Report on Form 10-K.

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 Annual Report on Form 10-K 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 Annual Report on Form 10-K.

PART I

ITEM 1. BUSINESS

Vornado is a fully-integrated REIT and conducts its business through, and substantially all of its interests in properties are held by, the Operating Partnership, a Delaware limited partnership. Accordingly, Vornado's cash flow and ability to pay dividends to its shareholders are dependent upon the cash flow of the Operating Partnership and the ability of its direct and indirect subsidiaries to first satisfy their obligations to creditors. Vornado is the sole general partner of, and owned approximately 92.8% of the common limited partnership interest in the Operating Partnership as of December 31, 2020.

We currently own all or portions of:

New York:

- 20.6 million square feet of Manhattan office space in 33 properties;
- 2.7 million square feet of Manhattan street retail space in 65 properties;
- 1,989 units in 10 Manhattan residential properties;
- The 1,700 room Hotel Pennsylvania located on Seventh Avenue at 33rd Street in the heart of the Penn District (closed since April 1, 2020 as a result of the COVID-19 pandemic);
- A 32.4% interest in Alexander's, Inc. ("Alexander's") (NYSE: ALX), which owns seven properties in the greater New York metropolitan area, including 731 Lexington Avenue, the 1.3 million square foot Bloomberg, L.P. headquarters building;
- Signage throughout the Penn District and Times Square; and
- Building Maintenance Services LLC ("BMS"), a wholly owned subsidiary, which provides cleaning and security services for our buildings and third parties.

Other Real Estate and Investments:

- The 3.7 million square foot theMART in Chicago;
- A 70% controlling interest in 555 California Street, a three-building office complex in San Francisco's financial district aggregating 1.8 million square feet;
- A 25.0% interest in Vornado Capital Partners, our real estate fund. We are the general partner and investment manager of the fund. The fund is in wind-down; and
- Other real estate and investments.

OBJECTIVES AND STRATEGY

Our business objective is to maximize Vornado shareholder value. We intend to achieve this objective by continuing to pursue our investment philosophy and to execute our operating strategies through:

- maintaining a superior team of operating and investment professionals and an entrepreneurial spirit;
- investing in properties in select markets, such as New York City, where we believe there is a high likelihood of capital appreciation;
- acquiring quality properties at a discount to replacement cost and where there is a significant potential for higher rents;
- developing and redeveloping properties to increase returns and maximize value; and
- investing in operating companies that have a significant real estate component.

We expect to finance our growth, acquisitions and investments using internally generated funds and proceeds from asset sales and by accessing the public and private capital markets. We may also offer Vornado common or preferred shares or Operating Partnership units in exchange for property and may repurchase or otherwise reacquire these securities in the future.

DISPOSITIONS

We completed the following sale transactions during 2020:

- \$1.05 billion net proceeds from the sale of 35 condominium units at 220 Central Park South ("220 CPS"); and
- \$28 million net proceeds from the sale of all of our 6,250,000 common shares of Pennsylvania Real Estate Investment Trust.

FINANCINGS

We completed the following financing transactions during 2020:

- \$800 million unsecured term loan balance increased from \$750 million;
- \$700 million mortgage loan on 770 Broadway extended to March 2022;
- \$500 million refinancing of PENN11;
- \$350 million mortgage loan paid down by \$50 million and extended to August 2025 on the retail condominium of 731 Lexington Avenue (32.4% interest);
- \$300 million issuance of 5.25% Series N cumulative redeemable preferred shares;
- \$94 million financing of The Alexander, a 312-unit residential building (32.4% interest); and
- \$52.5 million mortgage loan repayment on our land under a portion of the Borgata Hotel and Casino complex.

DEVELOPMENT AND REDEVELOPMENT EXPENDITURES

220 Central Park South

We are completing construction of a residential condominium tower containing 397,000 salable square feet at 220 CPS. The development cost of this project (exclusive of land cost) is estimated to be approximately \$1.480 billion, of which \$1.455 billion has been expended as of December 31, 2020.

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 844,000 rentable square feet of commercial space, comprised of approximately 730,000 square feet of office space and approximately 114,000 square feet of restaurant and retail space. The total development cost of this project is estimated to be approximately \$1,120,000,000, an increase of \$90,000,000, which is primarily due to higher projected tenant improvement allowances for the office, restaurant and retail space. As of December 31, 2020, \$791,994,000 has been expended, which has been reduced by \$88,000,000 of historic tax credit investor contributions (at our share).

The joint venture entered into a development agreement with Empire State Development ("ESD"), an entity of New York State, to build the adjacent Moynihan Train Hall, with Vornado and Related each guaranteeing the joint venture's obligations. The joint venture entered into a design-build contract with Skanska Moynihan Train Hall Builders ("Skanska") pursuant to which they built the Moynihan Train Hall on the joint venture's behalf. Skanska substantially completed construction as of December 31, 2020, thereby fulfilling this obligation to ESD. The joint venture, which we consolidate on our consolidated balance sheets, leased the entire property during the construction period and pursuant to ASC 842-40-55, was required to recognize all development expenditures for Moynihan Train Hall. Accordingly, the development expenditures funded by governmental agencies were presented as "Moynihan Train Hall development expenditures" with a corresponding obligation recorded to "Moynihan Train Hall Obligation" on our consolidated balance sheets. On December 31, 2020, upon substantial completion of Moynihan Train Hall, the portions of the property not pertaining to the joint venture's commercial space were severed from its lease with ESD and we removed the "Moynihan Train Hall development expenditures" and the offsetting "Moynihan Train Hall obligation" from our consolidated balance sheets.

PENN1

We are redeveloping PENN1, a 2,545,000 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 PENN1. Skanska USA Civil Northeast, Inc. will perform the redevelopment under a fixed price contract for \$396,000,000 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. The total development cost of our PENN1 project is estimated to be \$450,000,000, an increase of \$125,000,000, which is primarily due to the addition of the Concourse retail redevelopment project and sustainability initiatives, including the installation of triple pane high energy performance windows and the implementation of an electrification program to allow PENN1 to access more clean renewable electricity. As of December 31, 2020, \$167,894,000 has been expended.

PENN2

We are redeveloping PENN2, 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 \$91,219,000 has been expended as of December 31, 2020.

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 \$19,618,000 has been expended as of December 31, 2020.

Other

We are redeveloping a 78,000 square foot Class A office building at 345 Montgomery Street, a part of our 555 California Street complex in San Francisco (70.0% interest) located at the corner of California and Pine Street. The development cost of this project is estimated to be approximately \$66,000,000, of which our share is \$46,000,000. As of December 31, 2020, \$55,261,000 has been expended, of which our share is \$38,683,000.

We are redeveloping a 165,000 square foot office building at 825 Seventh Avenue, located at the corner of 53rd Street and Seventh Avenue (50.0% interest). The redevelopment cost of this project is estimated to be approximately \$30,000,000, of which our share is \$15,000,000. As of December 31, 2020, \$26,508,000 has been expended, of which our share is \$13,254,000.

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.

COMPETITION

We compete with a large number of real estate investors, property owners and developers, some of which 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 Item 1A for additional information regarding these factors.

SEGMENT DATA

We operate in the following reportable segments: New York and Other. Financial information related to these reportable segments for the years ended December 31, 2020, 2019 and 2018 is set forth in Note 24 – *Segment Information* to our consolidated financial statements in this Annual Report on Form 10-K.

SEASONALITY

Our revenues and expenses are subject to seasonality during the year which impacts quarterly net earnings, cash flows and funds from operations, and therefore impacts comparisons of the current quarter to the previous quarter. The New York segment has historically experienced higher utility costs in the first and third quarters of the year.

TENANTS ACCOUNTING FOR OVER 10% OF REVENUES

None of our tenants accounted for more than 10% of total revenues in any of the years ended December 31, 2020, 2019 and 2018.

CERTAIN ACTIVITIES

We do not base our acquisitions and investments on specific allocations by type of property. We have historically held our properties for long-term investment; however, it is possible that properties in our portfolio may be sold or otherwise disposed of when circumstances warrant. Further, we have not adopted a policy that limits the amount or percentage of assets which could be invested in a specific property or property type. Generally our activities are reviewed and may be modified from time to time by Vornado's Board of Trustees without the vote of our shareholders or Operating Partnership unitholders.

HUMAN CAPITAL RESOURCES

As of December 31, 2020, we have approximately 2,899 employees, consisting of (i) 246 corporate staff; (ii) 2,568 employees of the New York segment comprised of 1,997 employees of Building Maintenance Services LLC, a wholly owned subsidiary, which provides cleaning, security and engineering services primarily to our New York properties, 422 employees at the Hotel Pennsylvania and 149 employees in leasing and property management; and (iii) 85 employees of theMART. The foregoing does not include employees of partially owned entities.

We continue to pursue our investment philosophy and to execute our operating strategies through maintaining a superior team of operating and investment professionals and an entrepreneurial spirit. We value our employees as our greatest asset, and to foster their talent and growth, we provide training and education, promote career and personal development, and encourage innovation and engagement.

PRINCIPAL EXECUTIVE OFFICES

Our principal executive offices are located at 888 Seventh Avenue, New York, New York 10019; telephone (212) 894-7000.

MATERIALS AVAILABLE ON OUR WEBSITE

Copies of our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports, as well as Reports on Forms 3, 4 and 5 regarding officers, trustees or 10% beneficial owners, filed or furnished pursuant to Section 13(a), 15(d) or 16(a) of the Securities Exchange Act of 1934 are available free of charge through our website (www.vno.com) as soon as reasonably practicable after they are electronically filed with, or furnished to, the Securities and Exchange Commission. Also available on our website are copies of our Audit Committee Charter, Compensation Committee Charter, Corporate Governance and Nominating Committee Charter, Code of Business Conduct and Ethics, and Corporate Governance Guidelines. In the event of any changes to these charters or the code or guidelines, changed copies will also be made available on our website. Copies of these documents are also available directly from us free of charge. Our website also includes other financial and non-financial information, including certain non-GAAP financial measures, none of which is a part of this Annual Report on Form 10-K. Copies of our filings under the Securities Exchange Act of 1934 are also available free of charge from us, upon request.

ITEM 1A. RISK FACTORS

Material factors that may adversely affect our business, operations and financial condition are summarized below. We refer to the equity and debt securities of both Vornado and the Operating Partnership as our “securities” and the investors who own shares of Vornado or units of the Operating Partnership, or both, as our “equity holders.” The risks and uncertainties described herein may not be the only ones we face. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial may also adversely affect our business, operations and financial condition. See “Forward-Looking Statements” contained herein on page 6.

RISKS RELATED TO OUR PROPERTIES AND INDUSTRY

Our business, financial condition, results of operations and cash flows have been and are expected to continue to be adversely affected by the recent COVID-19 pandemic and the impact could be material to us.

Our business has been and is expected to continue to be adversely affected as a result of the COVID-19 pandemic and the preventive measures taken to curb the spread of the virus. In March 2020, our “non-essential” retail tenants were ordered to temporarily close and although substantially all re-opened in the latter part of June 2020, there continue to be limitations on occupancy and other restrictions that affect their ability to resume full operations and impact their financial health. Our office buildings remain open and many of our office tenants are working remotely. Trade shows at theMART were cancelled beginning March 2020 and are expected to resume in 2021. In April 2020, we closed the Hotel Pennsylvania. While we believe our tenants are required to pay rent under their leases and we have commenced legal proceedings against certain tenants that have failed to pay rent under their leases, in limited circumstances, we have agreed to and may continue to agree to rent deferrals and abatements for certain of our tenants.

Federal, state and local regulations may also affect our ability to collect rent or enforce remedies for the failure to pay rent. Certain of our tenants have incurred and may continue to incur significant costs or losses as a result of the COVID-19 pandemic and/or incur other liabilities related to shelter-in-place orders, quarantines, infection or other related factors that may adversely impact their ability to pay us timely or at all. Tenants that experience deteriorating financial conditions may be unwilling or unable to pay rent on a timely basis, or at all. Tenants may also reassess their long-term physical space needs as a result of potential trends arising out of the COVID-19 pandemic, including increasing numbers of employees working from home, increased shopping through e-commerce, technological innovations and new norms regarding physical space needs.

The COVID-19 pandemic has also caused, and is likely to continue to cause, severe economic, market or other disruptions worldwide. Conditions in the bank lending, capital and other financial markets may deteriorate as a result of the pandemic, our access to capital and other sources of funding may become constrained and the ratios of our debt to asset values may deteriorate, which could adversely affect the availability and terms of future borrowings, renewals or refinancings. In addition, the deterioration of global, national, regional and local economic conditions as a result of the pandemic may ultimately decrease occupancy levels and/or rent levels across our portfolio as tenants reduce or defer their spending, which may result in less cash flow available for operating costs, to pay our indebtedness and for distribution to our shareholders and the impact could be material. In addition, the value of our real estate assets may decline, which may result in non-cash impairment charges in future periods and the impact could be material.

The extent of the COVID-19 pandemic's effect on our operational and financial performance will depend on future developments, including the duration, spread and intensity of the outbreak (and any other strains of the coronavirus) and governmental responses thereto, including the efficacy (including duration) and distribution of vaccines, all of which are uncertain and difficult to predict. Due to the speed with which the situation is developing, we are not able at this time to estimate the ultimate effect of these factors on our business but the adverse impact on our business, results of operations, financial condition and cash flows could be material.

A significant portion of our properties is located in the New York City Metropolitan area and is affected by the economic cycles and risks inherent to this area.

In 2020, approximately 87% of our net operating income ("NOI", a non-GAAP measure) came from properties located in the New York City metropolitan area. We may continue to concentrate a significant portion of our future acquisitions, development and redevelopment in this area. Real estate markets are subject to economic downturns and we cannot predict how economic conditions will impact this market in either the short or long term. Declines in the economy or declines in real estate markets in the New York City metropolitan area, including the effects of the COVID-19 pandemic, have hurt and could continue to hurt our financial performance and the value of our properties. In addition to the factors affecting the national economic condition generally, the factors affecting economic conditions in this region include:

- financial performance and productivity of the media, advertising, professional services, financial, technology, retail, insurance and real estate industries;
- business layoffs or downsizing;
- any oversupply of, or reduced demand for, real estate;
- industry slowdowns;
- relocations of businesses;
- changing demographics;
- increased work from home and use of alternative work places;

- changes in the number of domestic and international tourists to our markets (including as a result of changes in the relative strengths of world currencies and as a result of the COVID-19 pandemic);
- the fiscal health of New York State and New York City governments and local transit authorities, particularly as a result of the COVID-19 pandemic;
- infrastructure quality; and
- changes in rates or the treatment of the deductibility of state and local taxes.

It is impossible for us to ensure the accuracy of predictions of the future or the effect of trends in the economic and investment climates of the geographic areas in which we concentrate, and more generally of the United States, or the real estate markets in these areas. Local, national or global economic downturns could negatively affect the value of our properties, our businesses and profitability.

We are subject to risks that affect the general and New York City retail environments.

Certain of our properties are Manhattan retail properties. In 2020, approximately 15% of our NOI is from Manhattan retail properties. As such, these properties are affected by the general and New York City retail environments, including office and residential occupancy rates, the level of consumer spending and consumer confidence, Manhattan tourism, the threat of terrorism, increasing competition from on-line retailers, other retailers, and outlet malls, and the impact of technological change upon the retail environment generally. These factors could adversely affect the financial condition of our retail tenants, or result in the bankruptcy of such tenants, and the willingness of retailers to lease space in our retail locations, which could have an adverse effect on the value of our properties, our business and profitability.

Our performance and the value of an investment in us are subject to risks associated with our real estate assets and with the real estate industry.

The value of our real estate and the value of an investment in us fluctuates depending on conditions in the general economy and the real estate business. These conditions may also adversely impact our revenues and cash flows.

The factors that affect the value of our real estate investments include, among other things:

- global, national, regional and local economic conditions;
- competition from other available space, including co-working space and sub-leases;
- local conditions such as an oversupply of space or a reduction in demand for real estate in the area;
- how well we manage our properties;
- the development and/or redevelopment of our properties;
- changes in market rental rates;
- the impact on our retail tenants and demand for retail space at our properties due to increased competition from online shopping;
- the timing and costs associated with property improvements and rentals;
- whether we are able to pass all or portions of any increases in operating costs through to tenants;
- changes in real estate taxes and other expenses;
- the ability of state and local governments to operate within their budgets;
- whether tenants and users such as customers and shoppers consider a property attractive;
- changes in consumer preferences adversely affecting retailers and retail store values;
- changes in space utilization by our tenants due to technology, economic conditions and business environment;
- the financial condition of our tenants, including the extent of tenant bankruptcies or defaults;
- consequences of any armed conflict involving, or terrorist attacks against, the United States or individual acts of violence in public spaces;
- trends in office real estate;
- availability of financing on acceptable terms or at all;
- inflation or deflation;
- fluctuations in interest rates;
- our ability to obtain adequate insurance;
- changes in zoning laws and taxation;
- government regulation;
- potential liability under environmental or other laws or regulations;
- natural disasters;
- general competitive factors;
- climate changes; and
- pandemics.

The rents or sales proceeds we receive and the occupancy levels at our properties may decline as a result of adverse changes in any of these factors. If rental revenues, sales proceeds and/or occupancy levels decline, we generally would expect to have less cash

available for operating costs, to pay indebtedness and for distribution to equity holders. In addition, some of our major expenses, including mortgage payments, real estate taxes and maintenance costs generally do not decline when the related rents decline.

Terrorist attacks may adversely affect the value of our properties and our ability to generate cash flow.

We have significant investments in the New York City, Chicago and San Francisco metropolitan areas. In response to a terrorist attack or the perceived threat of terrorism, tenants in these areas may choose to relocate their businesses to less populated, lower-profile areas of the United States that may be perceived to be less likely targets of future terrorist activity and fewer customers may choose to patronize businesses in these areas. This, in turn, would trigger a decrease in the demand for space in these areas, which could increase vacancies in our properties and force us to lease space on less favorable terms. Furthermore, we may experience increased costs in security, equipment and personnel. As a result, the value of our properties and the level of our revenues and cash flows could decline materially.

Natural disasters and the effects of climate change could have a concentrated impact on the areas where we operate and could adversely impact our results.

Our investments are concentrated in the New York, Chicago and San Francisco metropolitan areas. Natural disasters, including earthquakes, storms, tornados, floods and hurricanes, could cause significant damage to our properties and the surrounding environment or area. Potentially adverse consequences of “global warming,” including rising sea levels, could similarly have an impact on our properties and the economies of the metropolitan areas in which we operate. Government efforts to combat climate change may impact the cost of operating our properties. Over time, these conditions could result in declining demand for office space in our buildings or the inability of us to operate the buildings at all. Climate change may also have indirect effects on our business by increasing the cost of (or making unavailable) property insurance on terms we find acceptable, increasing the cost of energy at our properties and requiring us to expend funds as we seek to repair and protect our properties against such risks. The incurrence of these losses, costs or business interruptions may adversely affect our operating and financial results.

U.S. federal tax reform legislation now and in the future could affect REITs generally, the geographic markets in which we operate, the trading of our shares and our results of operations, both positively and negatively, in ways that are difficult to anticipate.

The Tax Cuts and Jobs Act of 2017 (the “2017 Act”) represented sweeping tax reform legislation that made significant changes to corporate and individual tax rates and the calculation of taxes, as well as international tax rules. As a REIT, we are generally not required to pay federal taxes otherwise applicable to regular corporations if we comply with the various tax regulations governing REITs. Shareholders, however, are generally required to pay taxes on REIT dividends. The 2017 Act and future tax reform legislation could impact our share price or how shareholders and potential investors view an investment in REITs. For example, the decrease in corporate tax rates in the 2017 Act could decrease the attractiveness of the REIT structure relative to companies that are not organized as REITs. In addition, while certain elements of the 2017 Act do not impact us directly as a REIT, they could impact the geographic markets in which we operate as well as our tenants in ways, both positive and negative, that are difficult to anticipate. For example, the limitation in the 2017 Act on the deductibility of certain state and local taxes may make operating in jurisdictions that impose such taxes at higher rates less desirable than operating in jurisdictions imposing such taxes at lower rates. The overall impact of the 2017 Act and other legislation also depends on the future interpretations and regulations that may be issued by U.S. tax authorities, which may be affected by changes in governmental administrations, and it is possible that future guidance could adversely impact us.

Real estate is a competitive business and that competition may adversely impact us.

We compete with a large number of real estate investors, property owners and developers, some of which 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. Substantially all of our properties face competition from similar properties in the same market, which may adversely impact the rents we can charge at those properties and our results of operations.

We depend on leasing space to tenants on economically favorable terms and collecting rent from tenants who may not be able to pay.

Our financial results depend significantly on leasing space in our properties to tenants on economically favorable terms. In addition, because a majority of our income comes from renting of real property, our income, funds available to pay indebtedness and funds available for distribution to equity holders will decrease if a significant number of our tenants cannot pay their rent or if we are not able to maintain occupancy levels on favorable terms. If a tenant does not pay its rent, we may not be able to enforce our rights as landlord without delays and may incur substantial legal and other costs. As a result of the COVID-19 pandemic, Federal, state and local regulations have affected our ability to collect rent or enforce remedies for the failure to pay rent. Even if we are able to enforce our rights, a tenant may not have recoverable assets. Additionally, in limited circumstances, we have agreed and may continue to agree to rent deferrals and abatements for certain of our tenants.

We may be adversely affected by trends in office real estate.

In 2020, approximately 83% of our NOI is from our office properties. Work from home, flexible work schedules, open workplaces, videoconferencing, and teleconferencing are becoming more common, particularly as a result of the COVID-19

pandemic. These practices may enable businesses to reduce their office space requirements. There is also an increasing trend among some businesses to utilize shared office spaces and co-working spaces. A continuation of the movement towards these practices could, over time, erode the overall demand for office space and, in turn, place downward pressure on occupancy, rental rates and property valuations.

We may be unable to renew leases or relet space as leases expire.

When our tenants decide not to renew their leases upon their expiration, we may not be able to relet the space. Even if tenants do renew or we can relet the space, the terms of renewal or reletting, considering among other things, rent and other concessions, the cost of improvements to the property and leasing commissions, may be less favorable than the terms in the expired leases. In addition, changes in space utilization by our tenants may impact our ability to renew or relet space without the need to incur substantial costs in renovating or redesigning the internal configuration of the relevant property. If we are unable to promptly renew the leases or relet the space at similar rates or if we incur substantial costs in renewing or reletting the space, our cash flow and ability to service debt obligations and pay dividends and distributions to equity holders could be adversely affected.

Bankruptcy or insolvency of tenants may decrease our revenue, net income and available cash.

From time to time, some of our tenants have declared bankruptcy, and other tenants may declare bankruptcy or become insolvent in the future. The bankruptcy or insolvency of a major tenant could cause us to suffer lower revenues and operational difficulties, including leasing the remainder of the property. As a result, the bankruptcy or insolvency of a major tenant could result in decreased net income and funds available to pay our indebtedness or make distributions to equity holders.

RISKS RELATED TO OUR OPERATIONS AND STRATEGIES

We face risks associated with property acquisitions.

We have acquired in the past and intend to continue to pursue the acquisition of properties and portfolios of properties, including, but not limited to, large portfolios that could increase our size and result in alterations to our capital structure. Our acquisition activities and their success are subject to the following risks:

- even if we enter into an acquisition agreement for a property, we may be unable to complete that acquisition after making a non-refundable deposit and incurring certain other acquisition-related costs;
- we may be unable to obtain or assume financing for acquisitions on favorable terms or at all;
- acquired properties may fail to perform as expected;
- the actual costs of repositioning, redeveloping or maintaining acquired properties may be greater than our estimates and may require significantly greater time and attention of management than anticipated;
- the acquisition agreement will likely contain conditions to closing, including completion of due diligence investigations to our satisfaction or other conditions that are not within our control, which may not be satisfied;
- acquired properties may be located in new markets where we may face risks associated with a lack of market knowledge or understanding of the local economy, lack of business relationships in the area, costs associated with opening a new regional office and unfamiliarity with local governmental and permitting procedures;
- we may acquire real estate through the acquisition of the ownership entity subjecting us to the risks of that entity and we may be exposed to the liabilities of properties or companies acquired, some of which we may not be aware of at the time of acquisition; and
- we may be unable to quickly and efficiently integrate new acquisitions, particularly acquisitions of portfolios of properties, into our existing operations, and this could have an adverse effect on our results of operations and financial condition.

Any delay or failure on our part to identify, negotiate, finance and consummate such acquisitions in a timely manner and on favorable terms, or operate acquired properties to meet our financial expectations, could impede our growth and have an adverse effect on us, including our financial condition, results of operations, cash flow and the market value of our securities.

We are exposed to risks associated with property redevelopment and repositioning that could adversely affect us, including our financial condition and results of operations.

We continue to engage in redevelopment and repositioning activities with respect to our properties, and, accordingly, we are subject to certain risks, which could adversely affect us, including our financial condition and results of operations. These risks include, without limitation, (i) the availability and pricing of financing on favorable terms or at all; (ii) the availability and timely receipt of zoning and other regulatory approvals; (iii) the potential for the fluctuation of occupancy rates and rents at redeveloped properties, which may result in our investment not being profitable; (iv) start up, repositioning and redevelopment costs may be higher than anticipated; (v) cost overruns and untimely completion of construction (including risks beyond our control, such as weather or labor conditions, or material shortages); (vi) the potential that we may fail to recover expenses already incurred if we abandon development or redevelopment opportunities after we begin to explore them; (vii) the potential that we may expend funds on and devote management time to projects which we do not complete; (viii) the inability to complete leasing of a property on schedule or at all, resulting in an increase in carrying or redevelopment costs; and (ix) the possibility that properties will be leased at below expected rental rates. These risks could result in substantial unanticipated delays or expenses and could prevent the initiation or the completion

of redevelopment activities or the ultimate rents achieved on new developments, any of which could have an adverse effect on our financial condition, results of operations, cash flow, the market value of our common shares and ability to satisfy our principal and interest obligations and to make distributions to our shareholders.

From time to time we have made, and in the future we may seek to make one or more material acquisitions. The announcement of such a material acquisition may result in a rapid and significant decline in the price of our securities.

From time to time we have made, and in the future we may seek to make one or more material acquisitions that we believe will maximize shareholder value. However, an announcement by us of one or more significant acquisitions could result in a quick and significant decline in the price of our securities.

It may be difficult to sell real estate timely, which may limit our flexibility.

Real estate investments are relatively illiquid. Consequently, we may have limited ability to dispose of assets in our portfolio promptly in response to changes in economic or other conditions which could have an adverse effect on our sources of working capital and our ability to satisfy our debt obligations.

We may not be permitted to dispose of certain properties or pay down the debt associated with those properties when we might otherwise desire to do so without incurring additional costs. In addition, when we dispose of or sell assets, we may not be able to reinvest the sales proceeds and earn similar returns.

As part of an acquisition of a property, or a portfolio of properties, we may agree, and in the past have agreed, not to dispose of the acquired properties or reduce the mortgage indebtedness for a long-term period, unless we pay certain of the resulting tax costs of the seller. These agreements could result in us holding on to properties that we would otherwise sell and not pay down or refinance. In addition, when we dispose of or sell assets, we may not be able to reinvest the sales proceeds and earn returns similar to those generated by the assets that were sold.

From time to time we have made, and in the future we may seek to make investments in companies over which we do not have sole control. Some of these companies operate in industries with different risks than investing and operating real estate.

From time to time we have made, and in the future we may seek to make, investments in companies that we may not control, including, but not limited to, Alexander's, our Fifth Avenue and Times Square JV, and other equity and loan investments. Although these businesses generally have a significant real estate component, some of them operate in businesses that are different from investing and operating real estate. Consequently, we are subject to operating and financial risks of those industries and to the risks associated with lack of control, such as having differing objectives than our partners or the entities in which we invest, or becoming involved in disputes, or competing directly or indirectly with these partners or entities. In addition, we rely on the internal controls and financial reporting controls of these entities and their failure to maintain effectiveness or comply with applicable standards may adversely affect us.

We are subject to risks involved in real estate activity through joint ventures and private equity real estate funds.

We currently own properties through joint ventures and private equity real estate funds with other persons and entities and may in the future acquire or own properties through joint ventures and funds when we believe circumstances warrant the use of such structures. Joint venture and fund investments involve risk, including: the possibility that our partners might refuse to make capital contributions when due and therefore we may be forced to make contributions to maintain the value of the property; that we may be responsible to our partners for indemnifiable losses; that our partners might at any time have business or economic goals that are inconsistent with ours; that third parties may be hesitant or refuse to transact with the joint venture or fund due to the identity of our partners; and that our partners may be in a position to take action or withhold consent contrary to our recommendations, instructions or requests. We and our respective joint venture partners may each have the right to trigger a buy-sell, put right or forced sale arrangement, which could cause us to sell our interest, or acquire our partner's interest, or to sell the underlying asset, at a time when we otherwise would not have initiated such a transaction, without our consent or on unfavorable terms. In some instances, joint venture and fund partners may have competing interests in our markets that could create conflicts of interest. These conflicts may include compliance with the REIT requirements, and our REIT status could be jeopardized if any of our joint ventures or funds do not operate in compliance with REIT requirements. To the extent our partners do not meet their obligations to us or our joint ventures or funds, or they take action inconsistent with the interests of the joint venture or fund, we may be adversely affected.

RISKS RELATED TO OUR INDEBTEDNESS AND ACCESS TO CAPITAL

Capital markets and economic conditions can materially affect our liquidity, financial condition and results of operations as well as the value of an investment in our debt and equity securities.

There are many factors that can affect the value of our debt and equity securities, including the state of the capital markets and the economy. Demand for office and retail space typically declines nationwide due to an economic downturn, bankruptcies, downsizing, layoffs and cost cutting. Government action or inaction may adversely affect the state of the capital markets. The cost and availability of credit may be adversely affected by illiquid credit markets and wider credit spreads, which may adversely affect our liquidity and financial condition, including our results of operations, and the liquidity and financial condition of our tenants. Our inability or the inability of our tenants to timely refinance maturing liabilities and access the capital markets to meet liquidity needs may materially affect our financial condition and results of operations and the value of our securities.

We may not be able to obtain capital to make investments.

We depend primarily on external financing to fund the growth of our business. This is because one of the requirements of the Internal Revenue Code of 1986, as amended, for a REIT is that it distributes 90% of its taxable income, excluding net capital gains, to its shareholders. This, in turn, requires the Operating Partnership to make distributions to its unitholders. There is a separate requirement to distribute net capital gains or pay a corporate level tax in lieu thereof. Our access to debt or equity financing depends on the willingness of third parties to lend or make equity investments and on conditions in the capital markets generally. Although we believe that we will be able to finance any investments we may wish to make in the foreseeable future, there can be no assurance that new financing will be available or available on acceptable terms. For information about our available sources of funds, see “*Management’s Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources*” and the notes to the consolidated financial statements in this Annual Report on Form 10-K.

We depend on dividends and distributions from our direct and indirect subsidiaries. The creditors and preferred equity holders of these subsidiaries are entitled to amounts payable to them by the subsidiaries before the subsidiaries may pay any dividends or distributions to us.

Substantially all of Vornado’s assets are held through its Operating Partnership that holds substantially all of its properties and assets through subsidiaries. The Operating Partnership’s cash flow is dependent on cash distributions to it by its subsidiaries, and in turn, substantially all of Vornado’s cash flow is dependent on cash distributions to it by the Operating Partnership. The creditors of each of Vornado’s direct and indirect subsidiaries are entitled to payment of that subsidiary’s obligations to them, when due and payable, before distributions may be made by that subsidiary to its equity holders. Thus, the Operating Partnership’s ability to make distributions to its equity holders depends on its subsidiaries’ ability first to satisfy their obligations to their creditors and then to make distributions to the Operating Partnership. Likewise, Vornado’s ability to pay dividends to its holders of common and preferred shares depends on the Operating Partnership’s ability first to satisfy its obligations to its creditors and make distributions to holders of its preferred units and then to make distributions to Vornado.

Furthermore, the holders of preferred units of the Operating Partnership are entitled to receive preferred distributions before payment of distributions to the Operating Partnership’s equity holders, including Vornado. Thus, Vornado’s ability to pay cash dividends to its equity holders and satisfy its debt obligations depends on the Operating Partnership’s ability first to satisfy its obligations to its creditors and make distributions to holders of its preferred units and then to its equity holders, including Vornado. As of December 31, 2020, there were four series of preferred units of the Operating Partnership not held by Vornado with a total liquidation value of \$54,571,000.

In addition, Vornado’s participation in any distribution of the assets of any of its direct or indirect subsidiaries upon the liquidation, reorganization or insolvency is only after the claims of the creditors, including trade creditors and preferred equity holders, are satisfied.

We have a substantial amount of indebtedness that could affect our future operations.

As of December 31, 2020, our consolidated mortgages and unsecured indebtedness, excluding related premium, discount and deferred financing costs, net, totaled \$7.4 billion. We are subject to the risks normally associated with debt financing, including the risk that our cash flow from operations will be insufficient to meet our required debt service. Our debt service costs generally will not be reduced if developments in the market or at our properties, such as the entry of new competitors or the loss of major tenants, cause a reduction in the income from our properties. Should such events occur, our operations may be adversely affected. If a property is mortgaged to secure payment of indebtedness and income from such property is insufficient to pay that indebtedness, the property could be foreclosed upon by the mortgagee resulting in a loss of income and a decline in our total asset value.

We have outstanding debt, and the amount of debt and its cost may increase and refinancing may not be available on acceptable terms.

We rely on both secured and unsecured, variable rate and non-variable rate debt to finance acquisitions and development activities and for working capital. If we are unable to obtain debt financing or refinance existing indebtedness upon maturity, our financial condition and results of operations would likely be adversely affected. In addition, the cost of our existing debt may increase, especially in the case of a rising interest rate environment, and we may not be able to refinance our existing debt in sufficient amounts or on acceptable terms. If the cost or amount of our indebtedness increases or we cannot refinance our debt in sufficient amounts or on acceptable terms, we are at risk of credit ratings downgrades and default on our obligations that could adversely affect our financial condition and results of operations.

Failure to hedge effectively against interest rate changes may adversely affect results of operations.

The interest rate hedge instruments we use to manage some of our exposure to interest rate volatility involve risk and counterparties may fail to perform under these arrangements. In addition, these arrangements may not be effective in reducing our exposure to interest rate changes and when existing interest rate hedges terminate, we may incur increased costs in putting in place further interest rate hedges. Failure to hedge effectively against interest rate changes may adversely affect our results of operations.

Covenants in our debt instruments could adversely affect our financial condition and our acquisitions and development activities.

The mortgages on our properties contain customary covenants such as those that limit our ability, without the prior consent of the applicable lender, to further mortgage the applicable property or to discontinue insurance coverage. Our unsecured indebtedness and debt that we may obtain in the future may contain customary restrictions, requirements and other limitations on our ability to incur indebtedness, including covenants that limit our ability to incur debt based upon the level of our ratio of total debt to total assets, our ratio of secured debt to total assets, our ratio of EBITDA to interest expense, and fixed charges, and that require us to maintain a certain ratio of unencumbered assets to unsecured debt. Our ability to borrow is subject to compliance with these and other covenants. In addition, failure to comply with our covenants could cause a default under the applicable debt instrument, and we may then be required to repay such debt with capital from such other sources or give possession of a secured property to the lender. Under those circumstances, other sources of capital may not be available to us or may be available only on unattractive terms.

A downgrade in our credit ratings could materially and adversely affect our business and financial condition.

Our credit rating and the credit ratings assigned to our debt securities and our preferred shares could change based upon, among other things, our results of operations and financial condition. These ratings are subject to ongoing evaluation by credit rating agencies, and any rating could be changed or withdrawn by a rating agency in the future if, in its judgment, circumstances warrant such action. Moreover, these credit ratings are not recommendations to buy, sell or hold our common shares or any other securities. If any of the credit rating agencies that have rated our securities downgrades or lowers its credit rating, or if any credit rating agency indicates that it has placed any such rating on a "watch list" for a possible downgrading or lowering, or otherwise indicates that its outlook for that rating is negative, such action could have a material adverse effect on our costs and availability of funding, which could in turn have a material adverse effect on our financial condition, results of operations, cash flows, the trading/redemption price of our securities, and our ability to satisfy our debt service obligations and to pay dividends and distributions to our equity holders.

RISK RELATED TO OUR ORGANIZATION AND STRUCTURE

Vornado's Amended and Restated Declaration of Trust (the "declaration of trust") sets limits on the ownership of its shares.

Generally, for Vornado to maintain its qualification as a REIT under the Internal Revenue Code, not more than 50% in value of the outstanding shares of beneficial interest of Vornado may be owned, directly or indirectly, by five or fewer individuals at any time during the last half of Vornado's taxable year. The Internal Revenue Code defines "individuals" for purposes of the requirement described in the preceding sentence to include some types of entities. Under Vornado's declaration of trust, as amended, no person may own more than 6.7% of the outstanding common shares of any class, or 9.9% of the outstanding preferred shares of any class, with some exceptions for persons who held common shares in excess of the 6.7% limit before Vornado adopted the limit and other persons approved by Vornado's Board of Trustees. In addition, our declaration of trust includes restrictions on ownership of our common shares and preferred shares to preserve our status as a "domestically controlled qualified investment entity" within the meaning of Section 897 (h)(4)(B) of the Internal Revenue Code of 1986, as amended. These restrictions on transferability and ownership may delay, deter or prevent a change in control of Vornado or other transaction that might involve a premium price or otherwise be in the best interest of equity holders.

The Maryland General Corporation Law (the "MGCL") contains provisions that may reduce the likelihood of certain takeover transactions.

The MGCL imposes conditions and restrictions on certain "business combinations" (including, among other transactions, a merger, consolidation, share exchange, or, in certain circumstances, an asset transfer or issuance of equity securities) between a Maryland REIT and certain persons who beneficially own at least 10% of the corporation's stock (an "interested shareholder"). Unless approved in advance by the board of trustees of the trust, or otherwise exempted by the statute, such a business combination is prohibited for a period of five years after the most recent date on which the interested shareholder became an interested shareholder. After such five-year period, a business combination with an interested shareholder must be: (a) recommended by the board of trustees of the trust, and (b) approved by the affirmative vote of at least (i) 80% of the trust's outstanding shares entitled to vote and (ii) two-thirds of the trust's outstanding shares entitled to vote which are not held by the interested shareholder with whom the business combination is to be effected, unless, among other things, the trust's common shareholders receive a "fair price" (as defined by the statute) for their shares and the consideration is received in cash or in the same form as previously paid by the interested shareholder for his or her shares.

In approving a transaction, Vornado's Board of Trustees may provide that its approval is subject to compliance, at or after the time of approval, with any terms and conditions determined by the Board of Trustees. Vornado's Board of Trustees has adopted a resolution exempting any business combination between Vornado and any trustee or officer of Vornado or its affiliates. As a result, any trustee or officer of Vornado or its affiliates may be able to enter into business combinations with Vornado that may not be in the best interest of our equity holders. With respect to business combinations with other persons, the business combination provisions of the MGCL may have the effect of delaying, deferring or preventing a change in control of Vornado or other transaction that might involve a premium price or otherwise be in the best interest of our equity holders. The business combination statute may discourage others from trying to acquire control of Vornado and increase the difficulty of consummating any offer.

Title 3, Subtitle 8 of the MGCL permits our Board of Trustees, without shareholder approval and regardless of what is currently provided in our declaration of trust or bylaws, to implement certain takeover defenses, including adopting a classified board or increasing the vote required to remove a trustee. Such takeover defenses may have the effect of inhibiting a third party from making an acquisition proposal for us or of delaying, deferring or preventing a change in control of us under the circumstances that otherwise could provide our common shareholders with the opportunity to realize a premium over the then current market price.

Vornado may issue additional shares in a manner that could adversely affect the likelihood of certain takeover transactions.

Vornado's declaration of trust authorizes the Board of Trustees to:

- cause Vornado to issue additional authorized but unissued common shares or preferred shares;
- classify or reclassify, in one or more series, any unissued preferred shares;
- set the preferences, rights and other terms of any classified or reclassified shares that Vornado issues; and
- increase, without shareholder approval, the number of shares of beneficial interest that Vornado may issue.

Vornado's Board of Trustees could establish a series of preferred shares whose terms could delay, deter or prevent a change in control of Vornado, and therefore of the Operating Partnership, or other transaction that might involve a premium price or otherwise be in the best interest of our equity holders, although Vornado's Board of Trustees does not now intend to establish a series of preferred shares of this kind. Vornado's declaration of trust and bylaws contain other provisions that may delay, deter or prevent a change in control of Vornado or other transaction that might involve a premium price or otherwise be in the best interest of our equity holders.

We may change our policies without obtaining the approval of our equity holders.

Our operating and financial policies, including our policies with respect to acquisitions of real estate or other companies, growth, operations, indebtedness, capitalization, dividends and distributions, are exclusively determined by Vornado's Board of Trustees. Accordingly, our equity holders do not control these policies.

Steven Roth and Interstate Properties may exercise substantial influence over us. They and some of Vornado's other trustees and officers have interests or positions in other entities that may compete with us.

As of December 31, 2020, Interstate Properties, a New Jersey general partnership, and its partners beneficially owned an aggregate of approximately 7.0% of the common shares of beneficial interest of Vornado and 26.1% of the common stock of Alexander's, which is described below. Steven Roth, David Mandelbaum and Russell B. Wight, Jr. are the three partners of Interstate Properties. Mr. Roth is the Chairman of the Board of Trustees and Chief Executive Officer of Vornado, the managing general partner of Interstate Properties, and the Chairman of the Board of Directors and Chief Executive Officer of Alexander's. Messrs. Wight and Mandelbaum are Trustees of Vornado and Directors of Alexander's.

Because of these overlapping interests, Mr. Roth and Interstate Properties and its partners may have substantial influence over Vornado, and therefore over the Operating Partnership. In addition, certain decisions concerning our operations or financial structure may present conflicts of interest among Messrs. Roth, Mandelbaum and Wight and Interstate Properties and our other equity holders. In addition, Mr. Roth, Interstate Properties and its partners, and Alexander's currently and may in the future engage in a wide variety of activities in the real estate business which may result in conflicts of interest with respect to matters affecting us, such as which of these entities or persons, if any, may take advantage of potential business opportunities, the business focus of these entities, the types of properties and geographic locations in which these entities make investments, potential competition between business activities conducted, or sought to be conducted, competition for properties and tenants, possible corporate transactions such as acquisitions and other strategic decisions affecting the future of these entities.

We manage and lease the real estate assets of Interstate Properties under a management agreement for which we receive an annual fee equal to 4% of annual base rent and percentage rent. See Note 23 – *Related Party Transactions* to our consolidated financial statements in this Annual Report on Form 10-K for additional information.

There may be conflicts of interest between Alexander's and us.

As of December 31, 2020, we owned 32.4% of the outstanding common stock of Alexander's. Alexander's is a REIT that has seven properties, which are located in the greater New York metropolitan area. In addition to the 2.3% that they indirectly own through Vornado, Interstate Properties, which is described above, and its partners owned 26.1% of the outstanding common stock of Alexander's as of December 31, 2020. Mr. Roth is the Chairman of the Board of Trustees and Chief Executive Officer of Vornado, the managing general partner of Interstate Properties, and the Chairman of the Board of Directors and Chief Executive Officer of Alexander's. Messrs. Wight and Mandelbaum are Trustees of Vornado and Directors of Alexander's and general partners of Interstate Properties. Ms. Mandakini Puri and Dr. Richard West are Trustees of Vornado and Directors of Alexander's. In addition, Matthew Iocco, our Executive Vice President – Chief Accounting Officer, is the Chief Financial Officer of Alexander's.

We manage, develop and lease Alexander's properties under management, development and leasing agreements under which we receive annual fees from Alexander's. These agreements are described in Note 7 - *Investments in Partially Owned Entities* to our consolidated financial statements in this Annual Report on Form 10-K.

RISKS RELATED TO OUR COMMON SHARES AND OPERATING PARTNERSHIP CLASS A UNITS

The trading price of Vornado's common shares has been volatile and may continue to fluctuate.

The trading price of Vornado's common shares has been volatile and may continue to fluctuate widely as a result of several factors, many of which are outside our control. In addition, the stock market is subject to fluctuations in the share prices and trading volumes that affect the market prices of the shares of many companies. These broad market fluctuations have in the past and may in the future adversely affect the market price of Vornado's common shares and the redemption price of the Operating Partnership's Class A units. In particular, the market price of our common shares has been further adversely impacted since March 2020 due to the COVID-19 pandemic. These factors include:

- our financial condition and performance;
- the financial condition of our tenants, including the extent of tenant bankruptcies or defaults;
- actual or anticipated quarterly fluctuations in our operating results and financial condition;
- our dividend policy;
- the reputation of REITs and real estate investments generally and the attractiveness of REIT equity securities in comparison to other equity securities, including securities issued by other real estate companies, and fixed income securities;
- uncertainty and volatility in the equity and credit markets;
- fluctuations in interest rates;
- changes in revenue or earnings estimates or publication of research reports and recommendations by financial analysts or actions taken by rating agencies with respect to our securities or those of other REITs;
- failure to meet analysts' revenue or earnings estimates;
- speculation in the press or investment community;
- strategic actions by us or our competitors, such as acquisitions or restructurings;
- the extent of institutional investor interest in us;
- the extent of short-selling of Vornado common shares and the shares of our competitors;
- fluctuations in the stock price and operating results of our competitors;
- general financial and economic market conditions and, in particular, developments related to market conditions for REITs and other real estate related companies;
- domestic and international economic factors unrelated to our performance;
- changes in tax laws and rules; and
- all other risk factors addressed elsewhere in this Annual Report on Form 10-K.

A significant decline in Vornado's stock price could result in substantial losses for our equity holders.

Vornado has many shares available for future sale, which could hurt the market price of its shares and the redemption price of the Operating Partnership's units.

The interests of equity holders could be diluted if we issue additional equity securities. As of December 31, 2020, Vornado had authorized but unissued 58,645,321 common shares of beneficial interest, \$.04 par value, and 58,386,598 preferred shares of beneficial interest, no par value; of which 21,582,407 common shares are reserved for issuance upon redemption of Class A Operating Partnership units, convertible securities and employee stock options and 11,200,000 preferred shares are reserved for issuance upon redemption of preferred Operating Partnership units. Any shares not reserved may be issued from time to time in public or private offerings or in connection with acquisitions. In addition, common and preferred shares reserved may be sold upon issuance in the public market after registration under the Securities Act or under Rule 144 under the Securities Act or other available exemptions from registration. We cannot predict the effect that future sales of Vornado's common and preferred shares or Operating Partnership Class A and preferred units will have on the market prices of our securities.

In addition, under Maryland law, Vornado's Board of Trustees has the authority to increase the number of authorized shares without shareholder approval.

Loss of our key personnel could harm our operations and adversely affect the value of our common shares and Operating Partnership Class A units.

We are dependent on the efforts of Steven Roth, the Chairman of the Board of Trustees and Chief Executive Officer of Vornado. While we believe that we could find a replacement for him and other key personnel, the loss of their services could harm our operations and adversely affect the value of our securities.

RISKS RELATED TO REGULATORY COMPLIANCE

Vornado may fail to qualify or remain qualified as a REIT and may be required to pay federal income taxes at corporate rates.

Although we believe that Vornado will remain organized and will continue to operate so as to qualify as a REIT for federal income tax purposes, Vornado may fail to remain so qualified. Qualifications are governed by highly technical and complex provisions of the Internal Revenue Code for which there are only limited judicial or administrative interpretations and depend on various facts and circumstances that are not entirely within our control. In addition, legislation, new regulations, administrative

interpretations or court decisions may significantly change the relevant tax laws and/or the federal income tax consequences of qualifying as a REIT. If, with respect to any taxable year, Vornado fails to maintain its qualification as a REIT and does not qualify under statutory relief provisions, Vornado could not deduct distributions to shareholders in computing our taxable income and would have to pay federal income tax on its taxable income at regular corporate rates. The federal income tax payable would include any applicable alternative minimum tax. If Vornado had to pay federal income tax, the amount of money available to distribute to equity holders and pay its indebtedness would be reduced for the year or years involved, and Vornado would not be required to make distributions to shareholders in that taxable year and in future years until it was able to qualify as a REIT and did so. In addition, Vornado would also be disqualified from treatment as a REIT for the four taxable years following the year during which qualification was lost, unless Vornado were entitled to relief under the relevant statutory provisions.

We may face possible adverse federal tax audits and changes in federal tax laws, which may result in an increase in our tax liability.

In the normal course of business, certain entities through which we own real estate either have undergone or may undergo tax audits. Although we believe that we have substantial arguments in favor of our positions, in some instances there is no controlling precedent or interpretive guidance. There can be no assurance that audits will not occur with increased frequency or that the ultimate result of such audits will not have a material adverse effect on our results of operations.

At any time, the U.S. federal income tax laws governing REITs or the administrative interpretations of those laws may be amended, including with respect to our hotel ownership structure. We cannot predict if or when any new U.S. federal income tax law, regulation, or administrative interpretation, or any amendment to any existing U.S. federal income tax law, Treasury regulation or administrative interpretation, will be adopted, promulgated or become effective and any such law, regulation, or interpretation may take effect retroactively. Vornado, its taxable REIT subsidiaries, and our securityholders could be adversely affected by any such change in, or any new, U.S. federal income tax law, Treasury regulation or administrative interpretation.

We may face possible adverse state and local tax audits and changes in state and local tax law.

Because Vornado is organized and qualifies as a REIT, it is generally not subject to federal income taxes, but we are subject to certain state and local taxes. In the normal course of business, certain entities through which we own real estate either have undergone, or are currently undergoing, tax audits. Although we believe that we have substantial arguments in favor of our positions in the ongoing audits, in some instances there is no controlling precedent or interpretive guidance on the specific point at issue. There can be no assurance that audits will not occur with increased frequency or that the ultimate result of such audits will not have a material adverse effect on our results of operations.

From time to time changes in state and local tax laws or regulations are enacted, which may result in an increase in our tax liability. A shortfall in tax revenues for states and municipalities in which we operate may lead to an increase in the frequency and size of such changes including changes in laws, regulations and administration of property and transfer taxes. If such changes occur, we may be required to pay additional taxes on our assets or income. These increased tax costs could adversely affect our financial condition and results of operations and the amount of cash available for the payment of dividends and distributions to our security holders.

Compliance or failure to comply with the Americans with Disabilities Act ("ADA") or other safety regulations and requirements could result in substantial costs.

ADA generally requires that public buildings, including our properties, meet certain Federal requirements related to access and use by disabled persons. Noncompliance could result in the imposition of fines by the Federal government or the award of damages to private litigants and/or legal fees to their counsel. From time to time persons have asserted claims against us with respect to some of our properties under the ADA, but to date such claims have not resulted in any material expense or liability. If, under the ADA, we are required to make substantial alterations and capital expenditures in one or more of our properties, including the removal of access barriers, it could adversely affect our financial condition and results of operations, as well as the amount of cash available for distribution to equity holders.

Our properties are subject to various federal, state and local regulatory requirements, such as state and local fire and life safety requirements. If we fail to comply with these requirements, we could incur fines or private damage awards. We do not know whether existing requirements will change or whether compliance with future requirements will require significant unanticipated expenditures that will affect our cash flow and results of operations.

We may incur significant costs to comply with environmental laws and environmental contamination may impair our ability to lease and/or sell real estate.

Our operations and properties are subject to various federal, state and local laws and regulations concerning the protection of the environment, including air and water quality, hazardous or toxic substances and health and safety. Under some environmental laws, a current or previous owner or operator of real estate may be required to investigate and clean up hazardous or toxic substances released at a property. The owner or operator may also be held liable to a governmental entity or to third parties for property damage or personal injuries and for investigation and clean-up costs incurred by those parties because of the contamination. These laws often impose liability without regard to whether the owner or operator knew of the release of the substances or caused the release. The

presence of contamination or the failure to remediate contamination may also impair our ability to sell or lease real estate or to borrow using the real estate as collateral. Other laws and regulations govern indoor and outdoor air quality including those that can require the abatement or removal of asbestos-containing materials in the event of damage, demolition, renovation or remodeling and govern emissions of and exposure to asbestos fibers in the air. The maintenance and removal of lead paint and certain electrical equipment containing polychlorinated biphenyls (PCBs) are also regulated by federal and state laws. We are also subject to risks associated with human exposure to chemical or biological contaminants such as molds, pollens, viruses and bacteria which, above certain levels, can be alleged to be connected to allergic or other health effects and symptoms in susceptible individuals. Our predecessor companies may be subject to similar liabilities for activities of those companies in the past. We could incur fines for environmental compliance and be held liable for the costs of remedial action with respect to the foregoing regulated substances or related claims arising out of environmental contamination or human exposure to contamination at or from our properties.

Each of our properties has been subject to varying degrees of environmental assessment. To date, these environmental assessments have not revealed any environmental condition material to our business. However, identification of new compliance concerns or undiscovered areas of contamination, changes in the extent or known scope of contamination, human exposure to contamination or changes in clean-up or compliance requirements could result in significant costs to us.

In addition, we may become subject to costs or taxes, or increases therein, associated with natural resource or energy usage (such as a “carbon tax”). These costs or taxes could increase our operating costs and decrease the cash available to pay our obligations or distribute to equity holders.

GENERAL RISKS

The occurrence of cyber incidents, or a deficiency in our cyber security, as well as other disruptions of our IT networks and related systems, could negatively impact our business by causing a disruption to our operations, a compromise or corruption of our confidential information, and/or damage to our business relationships or reputation, all of which could negatively impact our financial results.

We face risks associated with security breaches, whether through cyber attacks or cyber intrusions over the Internet, malware, computer viruses, attachments to e-mails, persons who access our systems from inside or outside our organization, and other significant disruptions of our IT networks and related systems. The risk of a security breach or disruption, particularly through cyber attack or cyber intrusion, including by computer hackers, foreign governments and cyber terrorists, has generally increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased. Although we have not experienced cyber incidents that are individually, or in the aggregate, material, we have experienced cyber attacks in the past, which have thus far been mitigated by preventative, detective, and responsive measures that we have put in place. Our IT networks and related systems are essential to the operation of our business and our ability to perform day-to-day operations (including managing our building systems) and, in some cases, may be critical to the operations of certain of our tenants. Although we make efforts to maintain the security and integrity of these types of IT networks and related systems, and we have implemented various measures to manage the risk of a security breach or disruption, there can be no assurance that our security efforts and measures will be effective or that attempted security breaches or disruptions would not be successful or damaging. Unauthorized parties, whether within or outside our company, may disrupt or gain access to our systems, or those of third parties with whom we do business, through human error, misfeasance, fraud, trickery, or other forms of deceit, including break-ins, use of stolen credentials, social engineering, phishing, computer viruses or other malicious codes, and similar means of unauthorized and destructive tampering. Even the most well protected information, networks, systems and facilities remain potentially vulnerable because the techniques used in such attempted security breaches evolve and generally are not recognized until launched against a target, and in some cases are designed to not be detected and, in fact, may not be detected. Accordingly, we may be unable to anticipate these techniques or to implement adequate security barriers or other preventative measures, and thus it is impossible for us to entirely mitigate this risk.

A security breach or other significant disruption involving our IT networks and related systems could disrupt the proper functioning of our networks and systems and therefore our operations and/or those of certain of our tenants; result in the unauthorized access to, and destruction, loss, theft, misappropriation or release of, proprietary, confidential, sensitive or otherwise valuable information of ours or others, which others could use to compete against us or which could expose us to damage claims by third-parties for disruptive, destructive or otherwise harmful purposes and outcomes; result in our inability to maintain the building systems relied upon by our tenants for the efficient use of their leased space; require significant management attention and resources to remedy any damages that result; subject us to litigation claims for breach of contract, damages, credits, fines, penalties, governmental investigations and enforcement actions or termination of leases or other agreements; or damage our reputation among our tenants and investors generally. Any or all of the foregoing could have a material adverse effect on our results of operations, financial condition and cash flows.

A cyber attack or systems failure could interfere with our ability to comply with financial reporting requirements, which could adversely affect us. A cyber attack could also compromise the confidential information of our employees, tenants, customers and vendors. A successful attack could disrupt and materially affect our business operations, including damaging relationships with tenants, customers and vendors. Any compromise of our information security systems could also result in a violation of applicable privacy and other laws, significant legal and financial exposure, damage to our reputation, loss or misuse of the information (which

may be confidential, proprietary and/or commercially sensitive in nature) and a loss of confidence in our security measures, which could harm our business.

Competition for acquisitions may reduce the number of acquisition opportunities available to us and increase the costs of those acquisitions.

We may acquire properties when we are presented with attractive opportunities. We may face competition for acquisition opportunities from other well-capitalized investors, including publicly traded and privately held REITs, private real estate funds, domestic and foreign financial institutions, life insurance companies, sovereign wealth funds, pension trusts, partnerships and individual investors, which may adversely affect us because that competition may cause an increase in the purchase price for a desired acquisition property or result in a competitor acquiring the desired property instead of us.

If we are unable to successfully acquire additional properties, our ability to grow our business could be adversely affected. In addition, increases in the cost of acquisition opportunities could adversely affect our results of operations.

Changes in the method pursuant to which the LIBOR rates are determined and phasing out of LIBOR after 2021 may affect our financial results.

The chief executive of the United Kingdom Financial Conduct Authority ("FCA"), which regulates the London Interbank Offered Rate ("LIBOR"), previously announced that the FCA intends to stop compelling banks to submit rates for the calculation of LIBOR after 2021. In response, the Federal Reserve Board and the Federal Reserve Bank of New York organized the Alternative Reference Rates Committee which identified the Secured Overnight Financing Rate ("SOFR") as its preferred alternative to USD-LIBOR in derivatives and other financial contracts. In November 2020, the ICE Benchmark Administration Limited, the benchmark administrator for USD LIBOR rates, proposed extending the publication of certain commonly-used USD LIBOR settings until June 30, 2023 and the FCA issued a statement supporting such proposal. In connection with this proposal, certain U.S. banking regulators issued guidance strongly encouraging banks to generally cease entering into new contracts referencing USD LIBOR as soon as practicable and in any event by December 31, 2021. It is not possible to predict the effect of these changes, including when LIBOR will cease to be available or when there will be sufficient liquidity in the SOFR markets.

We have outstanding debt and derivatives with variable rates that are indexed to LIBOR. In the transition from the use of LIBOR to SOFR or other alternatives, the level of interest payments we incur may change. In addition, although certain of our LIBOR based obligations provide for alternative methods of calculating the interest rate payable on certain of our obligations (including transition to an alternative benchmark rate) if LIBOR is not reported and we have been entering into amendments to certain of our financing agreements to provide for alternative benchmark rates if LIBOR is discontinued, uncertainty as to the extent and manner of future changes may result in interest rates and/or payments that are higher than or lower than or that do not otherwise correlate over time with the interest rates and/or payments that would have been made on our obligations if LIBOR was available in its current form. Use of alternative interest rates or other LIBOR reforms could result in increased volatility or a tightening of credit markets which could adversely affect our ability to obtain cost-effective financing. In addition, the transition of our existing LIBOR financing agreements to alternative benchmarks may result in unanticipated changes to the overall interest rate paid on our liabilities.

Some of our potential losses may not be covered by insurance.

For our properties (except Farley), we maintain general liability insurance with limits of \$300,000,000 per occurrence and per property, of which \$235,000,000 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 and effective February 15, 2021, 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 \$1,759,257 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.

For Farley, we maintain general liability insurance with limits of \$100,000,000 per occurrence, and builder's risk insurance including coverage for existing property and development activities of \$2.8 billion per occurrence and in the aggregate. We maintain coverage for certified and non-certified terrorism acts with limits of \$1.85 billion and \$1.17 billion per occurrence, respectively, and in the aggregate.

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.

ITEM 1B. UNRESOLVED STAFF COMMENTS

There are no unresolved comments from the staff of the Securities and Exchange Commission as of the date of this Annual Report on Form 10-K.

ITEM 2. PROPERTIES

We operate in two reportable segments: New York and Other. The following pages provide details of our real estate properties as of December 31, 2020.

Property	% Ownership	Type	% Occupancy	Square Feet		
				In Service	Under Development or Not Available for Lease	Total Property
NEW YORK SEGMENT						
PENN1 (ground leased through 2098) ⁽¹⁾	100.0 %	Office / Retail	85.4%	2,202,000	343,000	2,545,000
1290 Avenue of the Americas	70.0 %	Office / Retail	98.7%	2,118,000	—	2,118,000
PENN2	100.0 %	Office / Retail	100.0%	433,000	1,187,000	1,620,000
909 Third Avenue (ground leased through 2063) ⁽¹⁾	100.0 %	Office	98.6%	1,350,000	—	1,350,000
280 Park Avenue ⁽²⁾	50.0 %	Office / Retail	97.3%	1,262,000	—	1,262,000
Independence Plaza, Tribeca (1,327 units) ⁽²⁾	50.1 %	Retail / Residential	100.0% ⁽³⁾	1,245,000	13,000	1,258,000
770 Broadway	100.0 %	Office / Retail	99.3%	1,182,000	—	1,182,000
PENN11	100.0 %	Office / Retail	99.4%	1,153,000	—	1,153,000
90 Park Avenue	100.0 %	Office / Retail	98.8%	956,000	—	956,000
One Park Avenue ⁽²⁾	55.0 %	Office / Retail	99.2%	943,000	—	943,000
888 Seventh Avenue (ground leased through 2067) ⁽¹⁾	100.0 %	Office / Retail	90.6%	885,000	—	885,000
100 West 33rd Street	100.0 %	Office	100.0%	859,000	—	859,000
Farley Office and Retail (ground and building leased through 2116) ⁽¹⁾	95.0 %	Office / Retail	(4)	—	844,000	844,000
330 West 34th Street (65.2% ground leased through 2149) ⁽¹⁾	100.0 %	Office / Retail	73.0%	724,000	—	724,000
85 Tenth Avenue ⁽²⁾	49.9 %	Office / Retail	71.4%	627,000	—	627,000
650 Madison Avenue ⁽²⁾	20.1 %	Office / Retail	96.7%	601,000	—	601,000
350 Park Avenue	100.0 %	Office / Retail	97.9%	574,000	—	574,000
150 East 58th Street ⁽⁵⁾	100.0 %	Office / Retail	89.4%	544,000	—	544,000
7 West 34th Street ⁽²⁾	53.0 %	Office / Retail	99.6%	477,000	—	477,000
33-00 Northern Boulevard (Center Building)	100.0 %	Office	99.6%	471,000	—	471,000
595 Madison Avenue	100.0 %	Office / Retail	77.7%	333,000	—	333,000
640 Fifth Avenue ⁽²⁾	52.0 %	Office / Retail	95.7%	315,000	—	315,000
50-70 W 93rd Street (325 units) ⁽²⁾	49.9 %	Residential	84.6%	283,000	—	283,000
Manhattan Mall	100.0 %	Retail	13.4%	256,000	—	256,000
40 Fulton Street	100.0 %	Office / Retail	75.7%	251,000	—	251,000
4 Union Square South	100.0 %	Retail	94.5%	204,000	—	204,000
61 Ninth Avenue (2 buildings) (ground leased through 2115) ⁽¹⁾⁽²⁾	45.1 %	Office / Retail	94.5%	192,000	—	192,000
260 Eleventh Avenue (ground leased through 2114) ⁽¹⁾	100.0 %	Office	100.0%	184,000	—	184,000
512 W 22nd Street ⁽²⁾	55.0 %	Office / Retail	42.0%	173,000	—	173,000
825 Seventh Avenue	51.2 %	Office ⁽²⁾ / Retail	(4)	—	169,000	169,000
1540 Broadway ⁽²⁾	52.0 %	Retail	100.0%	161,000	—	161,000
Paramus	100.0 %	Office	85.2%	129,000	—	129,000
666 Fifth Avenue ⁽²⁾⁽⁶⁾	52.0 %	Retail	100.0%	114,000	—	114,000
1535 Broadway ⁽²⁾	52.0 %	Retail / Theatre	98.2%	107,000	—	107,000
57th Street (2 buildings) ⁽²⁾	50.0 %	Office / Retail	87.8%	103,000	—	103,000
689 Fifth Avenue ⁽²⁾	52.0 %	Office / Retail	85.3%	98,000	—	98,000
478-486 Broadway (2 buildings) (10 units)	100.0 %	Retail / Residential	100.0% ⁽³⁾	35,000	53,000	88,000
150 West 34th Street	100.0 %	Retail	100.0%	78,000	—	78,000
510 Fifth Avenue	100.0 %	Retail	51.5%	66,000	—	66,000
655 Fifth Avenue ⁽²⁾	50.0 %	Retail	100.0%	57,000	—	57,000
155 Spring Street	100.0 %	Retail	97.3%	50,000	—	50,000
435 Seventh Avenue	100.0 %	Retail	100.0%	43,000	—	43,000

See notes on page 25.

ITEM 2. PROPERTIES – CONTINUED

NEW YORK SEGMENT – CONTINUED	Property	% Ownership	Type	% Occupancy	Square Feet		
					In Service	Under Development or Not Available for Lease	Total Property
692 Broadway		100.0 %	Retail	100.0%	36,000	—	36,000
606 Broadway		50.0 %	Office / Retail	100.0%	36,000	—	36,000
697-703 Fifth Avenue ⁽²⁾		44.8 %	Retail	100.0%	26,000	—	26,000
759-771 Madison Avenue (40 East 66th Street (5 units))		100.0 %	Retail / Residential	76.1% ⁽³⁾	26,000	—	26,000
1131 Third Avenue		100.0 %	Retail	100.0%	23,000	—	23,000
131-135 West 33rd Street		100.0 %	Retail	100.0%	23,000	—	23,000
715 Lexington Avenue		100.0 %	Retail	100.0%	10,000	12,000	22,000
828-850 Madison Avenue		100.0 %	Retail	100.0%	13,000	5,000	18,000
443 Broadway		100.0 %	Retail	100.0%	16,000	—	16,000
334 Canal Street (4 units)		100.0 %	Retail / Residential	100.0% ⁽³⁾	15,000	—	15,000
537 West 26th Street		100.0 %	Event space	—%	—	14,000	14,000
304 Canal Street (4 units)		100.0 %	Retail / Residential	100.0% ⁽³⁾	13,000	—	13,000
677-679 Madison Avenue (8 units)		100.0 %	Retail / Residential	100.0% ⁽³⁾	13,000	—	13,000
431 Seventh Avenue		100.0 %	Retail	100.0%	10,000	—	10,000
138-142 West 32nd Street		100.0 %	Retail	100.0%	8,000	—	8,000
148 Spring Street		100.0 %	Retail	72.7%	8,000	—	8,000
339 Greenwich Street		100.0 %	Retail	100.0%	8,000	—	8,000
150 Spring Street (1 unit)		100.0 %	Retail / Residential	100.0% ⁽³⁾	7,000	—	7,000
966 Third Avenue		100.0 %	Retail	100.0%	7,000	—	7,000
968 Third Avenue ⁽²⁾		50.0 %	Retail	100.0%	7,000	—	7,000
137 West 33rd Street		100.0 %	Retail	100.0%	3,000	—	3,000
57th Street ⁽²⁾		50.0 %	Land	(4)	—	—	—
Eighth Avenue and 34th Street		100.0 %	Land	(4)	—	—	—
Other (3 buildings)		100.0 %	Retail	84.8%	16,000	—	16,000
Hotel Pennsylvania⁽⁷⁾		100.0 %	Hotel	n/a	—	1,400,000	1,400,000
Alexander's, Inc.:							
731 Lexington Avenue ⁽²⁾		32.4 %	Office / Retail	99.0%	1,075,000	—	1,075,000
Rego Park II, Queens (6.6 acres) ⁽²⁾		32.4 %	Retail	96.3%	609,000	—	609,000
Rego Park I, Queens (4.8 acres) ⁽²⁾		32.4 %	Retail	100.0%	260,000	78,000	338,000
The Alexander Apartment Tower, Queens (312 units) ⁽²⁾		32.4 %	Residential	82.4%	255,000	—	255,000
Flushing, Queens (1.0 acre ground leased through 2037) ⁽¹⁾⁽²⁾		32.4 %	Retail	100.0%	167,000	—	167,000
Paramus, New Jersey (30.3 acres ground leased to IKEA through 2041) ⁽¹⁾⁽²⁾		32.4 %	Land	100.0%	—	—	—
Rego Park III, Queens (3.4 acres) ⁽²⁾		32.4 %	Land	(4)	—	—	—
Total New York Segment				92.7%	24,528,000	4,118,000	28,646,000
Our Ownership Interest				92.1%	18,777,000	3,935,000	22,712,000

See notes on page 25.

ITEM 2. PROPERTIES – CONTINUED

OTHER SEGMENT Property	% Ownership	Type	% Occupancy	Square Feet		
				In Service	Under Development or Not Available for Lease	Total Property
theMART:						
theMART, Chicago	100.0 %	Office / Retail / Trade show / Showroom	89.5%	3,673,000	—	3,673,000
Piers 92 and 94 (New York) (ground and building leased through 2110) ⁽¹⁾	100.0 %	Trade show / Other	—%	—	208,000	208,000
Other (2 properties) ⁽²⁾	50.0 %	Retail	100.0%	19,000	—	19,000
Total theMART			89.5%	3,692,000	208,000	3,900,000
Our Ownership Interest			89.5%	3,683,000	208,000	3,891,000
555 California Street:						
555 California Street	70.0 %	Office / Retail	98.1%	1,506,000	—	1,506,000
315 Montgomery Street	70.0 %	Office / Retail	100.0%	235,000	—	235,000
345 Montgomery Street	70.0 %	Office / Retail	(4)	—	78,000	78,000
Total 555 California Street			98.4%	1,741,000	78,000	1,819,000
Our Ownership Interest			98.4%	1,218,000	55,000	1,273,000
Vornado Capital Partners Real Estate Fund ("Fund")⁽⁸⁾ :						
Crowne Plaza Times Square, NY (0.64 acres owned in fee; 0.18 acres ground leased through 2187 and 0.05 acres ground leased through 2035) ⁽¹⁾⁽⁹⁾	75.3 %	Office / Retail / Hotel	86.7%	246,000	—	246,000
Lucida, 86th Street and Lexington Avenue, NY (ground leased through 2082) ⁽¹⁾ (39 units)	100.0 %	Retail / Residential	100.0% ⁽³⁾	157,000	—	157,000
1100 Lincoln Road, Miami, FL	100.0 %	Retail / Theatre	85.0%	130,000	—	130,000
501 Broadway, NY	100.0 %	Retail	100.0%	9,000	—	9,000
Total Real Estate Fund			88.9%	542,000	—	542,000
Our Ownership Interest			88.0%	155,000	—	155,000
Other:						
Rosslyn Plaza, VA (197 units) ⁽²⁾	46.2 %	Office / Residential	68.1% ⁽³⁾	685,000	304,000	989,000
Fashion Centre Mall, VA ⁽²⁾	7.5 %	Retail	87.4%	868,000	—	868,000
Washington Tower, VA ⁽²⁾	7.5 %	Office	75.0%	170,000	—	170,000
Wayne Towne Center, Wayne, NJ (ground leased through 2064) ⁽¹⁾	100.0 %	Retail	100.0%	638,000	48,000	686,000
Annapolis, MD (ground leased through 2042) ⁽¹⁾	100.0 %	Retail	100.0%	128,000	—	128,000
Atlantic City, NJ (11.3 acres ground leased through 2070 to MGM Growth Properties for a portion of the Borgata Hotel and Casino complex)	100.0 %	Land	100.0%	—	—	—
Total Other			87.0%	2,489,000	352,000	2,841,000
Our Ownership Interest			92.8%	1,154,000	188,000	1,342,000

(1) Term assumes all renewal options exercised, if applicable.

(2) Denotes property not consolidated in the accompanying consolidated financial statements and related financial data included in the Annual Report on Form 10-K.

(3) Excludes residential occupancy statistics.

(4) Properties under development or to be developed.

(5) Includes 962 Third Avenue (the Annex building to 150 East 58th Street) 50.0% ground leased through 2118⁽¹⁾.

(6) 75,000 square feet is leased from 666 Fifth Avenue Office Condominium.

(7) Closed beginning April 1, 2020 and therefore square footage was taken out of service.

(8) We own a 25% interest in the Fund. The ownership percentage in this section represents the Fund's ownership in the underlying assets.

(9) We own a 32.9% economic interest through the Fund and the Crowne Plaza Joint Venture.

NEW YORK

As of December 31, 2020, our New York segment consisted of 28.6 million square feet in 79 properties. The 28.6 million square feet is comprised of 20.6 million square feet of Manhattan office in 33 properties, 2.7 million square feet of Manhattan street retail in 65 properties, 1,989 units in 10 residential properties, the 1.4 million square foot Hotel Pennsylvania, and our 32.4% interest in Alexander's, which owns seven properties in the greater New York metropolitan area. The New York segment also includes 10 garages totaling 1.7 million square feet (4,875 spaces).

New York lease terms generally range from five to seven years for smaller tenants to as long as 20 years for major tenants, and may provide for extension options at market rates. Leases typically provide for periodic step-ups in rent over the term of the lease and pass through to tenants their share of increases in real estate taxes and operating expenses over a base year. Electricity is provided to tenants on a sub-metered basis or included in rent based on surveys and adjusted for subsequent utility rate increases. Leases also typically provide for free rent and tenant improvement allowances for all or a portion of the tenant's initial construction costs of its premises.

As of December 31, 2020, the occupancy rate for our New York segment was 92.1%.

Occupancy and weighted average annual rent per square foot (in service):

Office:

Vornado's Ownership Interest					
As of December 31,	Total Property Square Feet	Square Feet	Occupancy Rate	Weighted Average Annual Escalated Rent Per Square Foot	
2020 ⁽¹⁾	18,361,000	15,413,000	93.4%	\$	79.05
2019 ⁽²⁾⁽³⁾	19,070,000	16,195,000	96.9%		76.26
2018	19,858,000	16,632,000	97.2%		74.04
2017	20,256,000	16,982,000	97.1%		71.09
2016	20,227,000	16,962,000	96.3%		68.90

Retail:

Vornado's Ownership Interest					
As of December 31,	Total Property Square Feet	Square Feet	Occupancy Rate	Weighted Average Annual Escalated Rent Per Square Foot	
2020	2,275,000	1,805,000	78.8%	\$	226.38
2019 ⁽²⁾	2,300,000	1,842,000	94.5%		209.86
2018	2,648,000	2,419,000	97.3%		228.43
2017	2,720,000	2,471,000	96.9%		217.17
2016	2,672,000	2,464,000	97.1%		213.85

Occupancy and average monthly rent per unit (in service):

Residential:

Vornado's Ownership Interest				
As of December 31,	Number of Units	Number of Units	Occupancy Rate	Average Monthly Rent Per Unit
2020	1,989	954	83.9%	\$ 3,719
2019	1,991	955	97.0%	3,889
2018	1,999	963	96.6%	3,803
2017	2,009	981	96.7%	3,722
2016	2,004	977	95.7%	3,576

(1) 782,000 square feet at PENN2 was placed under redevelopment during 2020.

(2) Reflects the transfer of 45.4% of common equity in the properties contributed to the Fifth Avenue and Times Square JV on April 18, 2019.

(3) 149,000 square feet at PENN2 was placed under redevelopment during 2019.

NEW YORK – CONTINUED

Tenants accounting for 2% or more of revenues:

Tenant	Square Feet Leased	2020 Revenues	Percentage of New York Total Revenues	Percentage of Total Revenues
IPG & affiliates	968,000	\$ 61,517,000	5.0%	4.0%
Facebook ⁽¹⁾	757,000	57,390,000	4.7%	3.8%
Equitable Financial Life Insurance Company	505,000	42,926,000	3.5%	2.8%
Neuberger Berman Group LLC	412,000	34,704,000	2.8%	2.3%
Macy's	367,000	42,618,000	3.5%	2.8%
Ziff Brothers Investments, Inc.	219,000	32,885,000	2.7%	2.2%
Verizon Media Group	327,000	30,038,000	2.5%	2.0%

(1) Excludes lease at Farley Office for 730,000 square feet (694,000 at our share) not yet commenced.

2020 rental revenue by tenants' industry:

Industry	Percentage
Office:	
Financial Services	18%
Communications	9%
Technology	9%
Advertising/Marketing	7%
Legal Services	5%
Insurance	5%
Real Estate	4%
Family Apparel	4%
Government	3%
Engineering, Architect, & Surveying	3%
Banking	3%
Entertainment and Electronics	2%
Publishing	2%
Health Services	1%
Pharmaceutical	1%
Other	9%
	85%
Retail:	
Family Apparel	5%
Women's Apparel	2%
Restaurants	2%
Banking	2%
Department Stores	1%
Luxury Retail	1%
Other	2%
	15%
Total	100%

NEW YORK – CONTINUED

Lease expirations as of December 31, 2020, assuming none of the tenants exercise renewal options:

Year	Number of Expiring Leases	Square Feet of Expiring Leases ⁽¹⁾	Percentage of New York Square Feet	Weighted Average Annual Rent of Expiring Leases	
				Total	Per Square Foot
Office:					
Month to month	10	32,000	0.2%	\$ 2,407,000	\$ 75.22
2021	95	742,000	5.1%	60,263,000	81.22 ⁽²⁾
2022	82	726,000	5.0%	49,817,000	68.62
2023 ⁽³⁾	85	1,847,000	12.8%	164,053,000	88.82
2024	103	1,430,000	9.9%	118,402,000	82.80
2025	66	813,000	5.6%	65,293,000	80.31
2026	86	1,425,000	9.9%	106,625,000	74.82
2027	78	1,165,000	8.1%	85,100,000	73.05
2028	47	907,000	6.3%	63,221,000	69.70
2029	36	648,000	4.5%	54,375,000	83.91
2030	36	594,000	4.1%	45,412,000	76.45
Retail:					
Month to month	14	30,000	2.7%	\$ 4,405,000	\$ 146.83
2021	16	70,000	6.2%	13,551,000	193.59 ⁽⁴⁾
2022	14	116,000	10.3%	8,524,000	73.48
2023	13	36,000	3.2%	25,137,000	698.25
2024	18	202,000	18.0%	45,730,000	226.39
2025	10	33,000	2.9%	12,448,000	377.21
2026	12	70,000	6.2%	25,350,000	362.14
2027	12	30,000	2.7%	22,381,000	746.03
2028	11	23,000	2.0%	12,835,000	558.04
2029	12	46,000	4.1%	20,285,000	440.98
2030	20	159,000	14.1%	20,262,000	127.43

(1) Excludes storage, vacancy and other.

(2) Based on current market conditions, we expect to re-lease this space at rents between \$75 to \$85 per square foot.

(3) Excludes the expiration of 492,000 square feet at 909 Third Avenue for U.S. Post Office as we assume the exercise of all renewal options through 2038 given the below-market rent on their options.

(4) Based on current market conditions, we expect to re-lease this space at rents between \$150 to \$175 per square foot.

Alexander's

As of December 31, 2020, we own 32.4% of the outstanding common stock of Alexander's, which owns seven properties in the greater New York metropolitan area aggregating 2.4 million square feet, including 731 Lexington Avenue, the 1.3 million square foot Bloomberg L.P. headquarters building. Alexander's had \$1,164,544,000 of outstanding debt as of December 31, 2020, of which our pro rata share was \$377,312,000, none of which is recourse to us.

Hotel Pennsylvania

We own the Hotel Pennsylvania which is located in New York City on Seventh Avenue at 33rd Street in the heart of the Penn District and consists of a hotel portion containing 1,000,000 square feet of hotel space with 1,700 rooms and a commercial portion containing 400,000 square feet of retail and office space. The Hotel Pennsylvania has been closed since April 1, 2020 as a result of the COVID-19 pandemic.

	For the Year Ended December 31,				
	2020	2019	2018	2017	2016
Hotel Pennsylvania:					
Average occupancy rate	N/M	82.1%	86.4%	87.3%	84.7%
Average daily rate	N/M	\$ 137.67	\$ 138.35	\$ 139.09	\$ 134.38
Revenue per available room	N/M	113.08	119.47	121.46	113.84

OTHER REAL ESTATE AND INVESTMENTS

theMART

As of December 31, 2020, we own the 3.7 million square foot theMART in Chicago, whose largest tenant is Motorola Mobility at 609,000 square feet, the lease of which is guaranteed by Google. theMART is encumbered by a \$675,000,000 mortgage loan that bears interest at a fixed rate of 2.70% and matures in September 2021. As of December 31, 2020, theMART had an occupancy rate of 89.5% and a weighted average annual rent per square foot of \$48.87.

555 California Street

As of December 31, 2020, we own a 70% controlling interest in a three-building office complex containing 1.8 million square feet, located at California and Montgomery Streets in San Francisco's financial district ("555 California Street"). 555 California Street is encumbered by a \$537,643,000 mortgage loan that bears interest at a fixed rate of 5.10% and matures in September 2021. As of December 31, 2020, 555 California Street had an occupancy rate of 98.4% and a weighted average annual rent per square foot of \$83.83.

Vornado Capital Partners Real Estate Fund (the "Fund") and Crowne Plaza Times Square Hotel Joint Venture (the "Crowne Plaza Joint Venture")

As of December 31, 2020, we own a 25.0% interest in the Fund, which is in wind-down, and currently has four investments, one of which is the Crowne Plaza Times Square Hotel in which we also own an additional interest through the Crowne Plaza Joint Venture. We are the general partner and investment manager of the Fund. As of December 31, 2020, these four investments including the Crowne Plaza Joint Venture's share of the Crowne Plaza Times Square Hotel are carried on our consolidated balance sheet at an aggregate fair value of \$3,739,000.

ITEM 3. 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 expected to have a material adverse effect on our financial position, results of operations or cash flows.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Vornado Realty Trust

Vornado's common shares are traded on the New York Stock Exchange under the symbol "VNO."

As of February 1, 2021, there were 858 holders of record of Vornado common shares.

Vornado Realty L.P.

There is no established trading market for the Operating Partnership's Class A units. Class A units that are not held by Vornado 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 unit holder is equal to the quarterly dividend paid to a Vornado common shareholder.

As of February 1, 2021, there were 912 Class A unitholders of record.

Recent Sales of Unregistered Securities

During 2020, the Operating Partnership issued 662,398 Class A units in connection with the exercise of awards pursuant to Vornado's omnibus share plan, including with respect to 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, and consideration received included \$5,897,859 in cash proceeds. Such units were issued in reliance on an exemption from registration under Section 4(2) of the Securities Act of 1933, as amended.

From time to time, in connection with equity awards granted under our Omnibus Share Plan, we may withhold common shares for tax purposes or acquire common shares as part of the payment of the exercise price. Although we treat these as repurchases for certain financial statement purposes, these withheld or acquired shares are not considered by us as repurchases for this purpose.

Information relating to compensation plans under which Vornado's equity securities are authorized for issuance is set forth under Part III, Item 12 of this Annual Report on Form 10-K and such information is incorporated by reference herein.

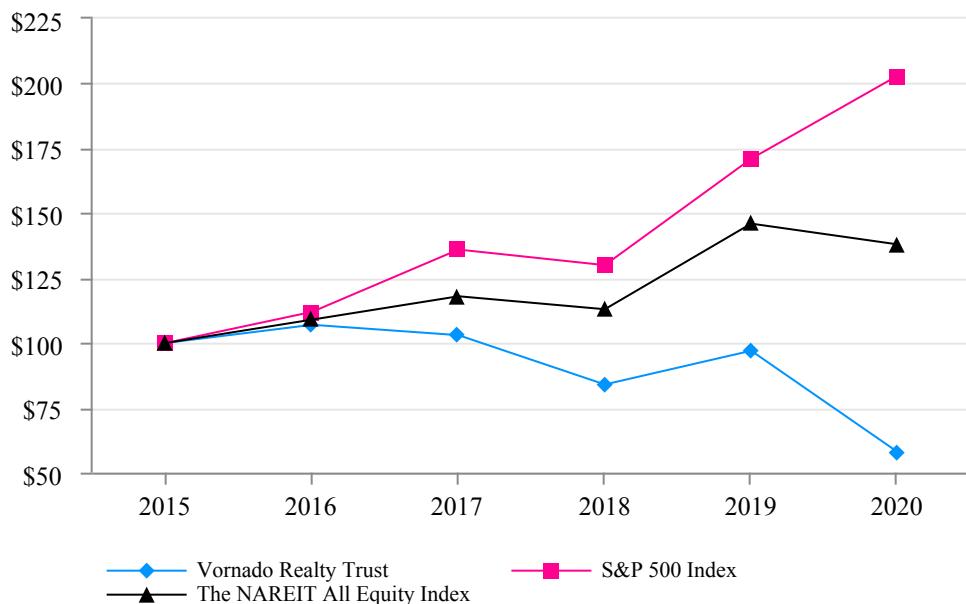
Recent Purchases of Equity Securities

None.

Performance Graph

The following graph is a comparison of the five-year cumulative return of Vornado's common shares, the Standard & Poor's 500 Index (the "S&P 500 Index") and the National Association of Real Estate Investment Trusts' ("NAREIT") All Equity Index, a peer group index. The graph assumes that \$100 was invested on December 31, 2015 in our common shares, the S&P 500 Index and the NAREIT All Equity Index and that all dividends were reinvested without the payment of any commissions. There can be no assurance that the performance of our shares will continue in line with the same or similar trends depicted in the graph below.

Comparison of Five-Year Cumulative Return



	2015	2016	2017	2018	2019	2020
Vornado Realty Trust	\$ 100	\$ 107	\$ 103	\$ 84	\$ 97	\$ 58
S&P 500 Index	100	112	136	130	171	203
The NAREIT All Equity Index	100	109	118	113	146	138

ITEM 6. SELECTED FINANCIAL DATA

Not applicable.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

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Introduction

The following discussion should be read in conjunction with the financial statements and related notes included under Part II, Item 8 of this Annual Report on Form 10-K.

Our Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") within this section is focused on the years ended December 31, 2020 and 2019, including year-to-year comparisons between these years. Our MD&A for the year ended December 31, 2018, including year-to-year comparisons between 2019 and 2018, can be found in Part II, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations in the Company's Annual Report on Form 10-K for the year ended December 31, 2019.

In May 2020, the SEC issued Final Rule Release No. 33-10786, which amends the financial statement requirements for acquisitions and dispositions of businesses, including real estate operations, and related pro forma financial information required under SEC Regulation S-X, Rule 3-05, 3-14 and 11-01. The final rule changed the income and investment tests within SEC Regulation S-X, Rule 1-02(w) used to calculate significance and also raises the significance threshold for reporting acquisitions and dispositions of real estate operations, and dispositions of a business from 10% to 20%. The revised income test will also apply to the evaluation of equity method investments for significance in accordance with SEC Regulation S-X, Rules 3-09, 4-08(g) and 10-01(b)(1). The final rule is applicable for fiscal years beginning after December 31, 2020, however early adoption is permitted. The Company adopted the provisions of the final rule in the fourth quarter of 2020.

In November 2020, the SEC issued Final Rule Release No. 33-10890, Management's Discussion and Analysis, Selected Financial Data, and Supplementary Financial Information. This rule, which became effective on February 10, 2021, amended certain SEC disclosure requirements in order to modernize, simplify and enhance certain financial disclosure requirements in Regulation S-K. Specifically, the amendments eliminate the requirement for Selected Financial Data, streamline the requirement to disclose Supplementary Financial Information, and amend Management's Discussion and Analysis "MD&A". The final rule is applicable for fiscal years beginning after December 31, 2020, however, early adoption on an Item-by-Item basis is permitted after February 10, 2021. We early adopted the amendments to two items resulting in the elimination of Item 301, *Selected Financial Data*, and the omission of Regulation S-K Item 302(a), *Supplementary Financial Information*. The amendments to Item 303 *MD&A*, will be adopted in our Form 10-K for the year ended December 31, 2021.

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., a Delaware limited partnership (the "Operating Partnership"). Accordingly, Vornado's cash flow and ability to pay dividends to its shareholders are dependent upon the cash flow of the Operating Partnership and the ability of its direct and indirect subsidiaries to first satisfy their obligations to creditors. Vornado is the sole general partner of, and owned approximately 92.8% of the common limited partnership interest in the Operating Partnership as of December 31, 2020. All references to the "Company," "we," "us" and "our" mean collectively Vornado, the Operating Partnership and those subsidiaries consolidated by Vornado.

We own and operate office and retail properties with a concentration in the New York City metropolitan area. In addition, we have a 32.4% interest in Alexander's, Inc. ("Alexander's") (NYSE: ALX), which owns seven properties in the greater New York metropolitan area, as well as interests in other real estate and investments.

Our business objective is to maximize Vornado shareholder value, which we measure by the total return provided to our shareholders. Below is a table comparing Vornado's performance to the FTSE NAREIT Office Index ("Office REIT") and the MSCI US REIT Index ("MSCI") for the following periods ended December 31, 2020:

	Total Return ⁽¹⁾		
	Vornado	Office REIT	MSCI
Three-month	12.7%	16.9%	11.5%
One-year	(40.5%)	(18.4%)	(7.6%)
Three-year	(43.7%)	(8.4%)	11.0%
Five-year	(42.3%)	9.2%	26.7%
Ten-year	(9.6%)	64.8%	122.0%

⁽¹⁾ Past performance is not necessarily indicative of future performance.

We intend to achieve this objective by continuing to pursue our investment philosophy and to execute our operating strategies through:

- maintaining a superior team of operating and investment professionals and an entrepreneurial spirit;
- investing in properties in select markets, such as New York City, where we believe there is a high likelihood of capital appreciation;
- acquiring quality properties at a discount to replacement cost and where there is a significant potential for higher rents;
- developing and redeveloping properties to increase returns and maximize value; and
- investing in operating companies that have a significant real estate component.

Overview - continued

We expect to finance our growth, acquisitions and investments using internally generated funds and proceeds from asset sales and by accessing the public and private capital markets. We may also offer Vornado common or preferred shares or Operating Partnership units in exchange for property and may repurchase or otherwise reacquire these securities in the future.

We compete with a large number of real estate investors, property owners and developers, some of which 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 Item 1A for additional information regarding these factors.

Our business has been adversely affected as a result of the COVID-19 pandemic and the preventive measures taken to curb the spread of the virus. Some of the effects on us include the following:

- With the exception of grocery stores and other "essential" businesses, many of our retail tenants closed their stores in March 2020 and began reopening when New York City entered phase two of its reopening plan on June 22, 2020, however, there continue to be limitations on occupancy and other restrictions that affect their ability to resume full operations.
- While our buildings remain open, many of our office tenants are working remotely.
- We have closed the Hotel Pennsylvania. In connection with the closure, we accrued \$9,246,000 of severance for furloughed Hotel Pennsylvania union employees and recognized a corresponding \$3,145,000 income tax benefit for the year ended December 31, 2020.
- We cancelled trade shows at theMART from late March through the remainder of 2020 and expect to resume in 2021.
- Because certain of our development projects were deemed "non-essential," they were temporarily paused in March 2020 due to New York State executive orders and resumed once New York City entered phase one of its state mandated reopening plan on June 8, 2020.
- As of April 30, 2020, we placed 1,803 employees on furlough, which included 1,293 employees of Building Maintenance Services LLC ("BMS"), 414 employees at the Hotel Pennsylvania and 96 corporate staff employees. As of February 10, 2021, 50% of furloughed employees have returned to work. The remaining employees still on furlough are from BMS and the Hotel Pennsylvania.
- Effective April 1, 2020, our executive officers waived portions of their annual base salary for the remainder of 2020.
- Effective April 1, 2020, each non-management member of our Board of Trustees agreed to forgo their \$75,000 annual cash retainer for the remainder of 2020.

While we believe our tenants are required to pay rent under their leases and we have commenced legal proceedings against certain tenants that have failed to pay rent under their leases, in limited circumstances, we have agreed to and may continue to agree to rent deferrals and rent abatements for certain of our tenants. We have made a policy election in accordance with the Financial Accounting Standards Board ("FASB") Staff Q&A which provides relief in accounting for leases during the COVID-19 pandemic, allowing us to continue recognizing rental revenue on a straight-line basis for rent deferrals, with no impact to revenue recognition, and to recognize rent abatements as a reduction to rental revenue in the period granted.

For the quarter ended December 31, 2020, we collected 95% (97% including rent deferrals) of rent due from our tenants, comprised of 97% (99% including rent deferrals) from our office tenants and 88% (89% including rent deferrals) from our retail tenants. Rent deferrals generally require repayment in monthly installments over a period not to exceed twelve months.

Based on our assessment of the probability of rent collection of our lease receivables, we have written off \$51,571,000 of receivables arising from the straight-lining of rents for the year ended December 31, 2020, including the JCPenney retail lease at Manhattan Mall and the New York & Company, Inc. office lease at 330 West 34th Street. Both tenants have filed for Chapter 11 bankruptcy and rejected their leases during 2020. In addition, we have written off \$22,546,000 of tenant receivables deemed uncollectible for the year ended December 31, 2020. These write-offs resulted in a reduction of lease revenues and our share of income from partially owned entities. Prospectively, revenue recognition for lease receivables deemed uncollectible will be based on actual amounts received.

In light of the evolving health, social, economic, and business environment, governmental regulation or mandates, and business disruptions that have occurred and may continue to occur, the impact of the COVID-19 pandemic on our financial condition and operating results remains highly uncertain but has been and may continue to be material. The impact on us includes lower rental income and potentially lower occupancy levels at our properties which will result in less cash flow available for operating costs, to pay our indebtedness and for distribution to our shareholders. During 2020, we experienced a decrease in cash flow from operations due to the COVID-19 pandemic, including reduced collections of rents billed to certain of our tenants, the closure of Hotel Pennsylvania, the cancellation of trade shows at theMART, and lower revenues from BMS and signage. In addition, we recognized \$409,060,000 of non-cash impairment losses, net of noncontrolling interests, related to our investment in Fifth Avenue and Times Square JV which are included in "(loss) income from partially owned entities" and \$236,286,000 of non-cash impairment losses primarily on wholly owned retail assets which are included in "impairment losses and transaction related costs, net" on our consolidated statements of income for the year ended December 31, 2020. The value of our real estate assets may continue to decline, which may result in additional non-cash impairment charges in future periods and that impact could be material.

Overview - continued

Year Ended December 31, 2020 Financial Results Summary

Net loss attributable to common shareholders for the year ended December 31, 2020 was \$348,744,000, or \$1.83 per diluted share, compared to net income attributable to common shareholders of \$3,097,806,000, or \$16.21 per diluted share, for the year ended December 31, 2019. The years ended December 31, 2020 and 2019 include certain items that impact net (loss) income attributable to common shareholders, which are listed in the table below. The aggregate of these items, net of amounts attributable to noncontrolling interests, increased net loss attributable to common shareholders by \$341,837,000, or \$1.79 per diluted share, for the year ended December 31, 2020 and increased net income attributable to common shareholders by \$2,921,090,000, or \$15.29 per diluted share, for the year ended December 31, 2019.

Funds from operations ("FFO") attributable to common shareholders plus assumed conversions for the year ended December 31, 2020 was \$750,522,000, or \$3.93 per diluted share, compared to \$1,003,398,000, or \$5.25 per diluted share, for the year ended December 31, 2019. The years ended December 31, 2020 and 2019 include certain items that impact FFO, which are listed in the table on the following page. The aggregate of these items, net of amounts attributable to noncontrolling interests, increased FFO by \$267,478,000, or \$1.40 per diluted share, for the year ended December 31, 2020 and \$337,191,000, or \$1.76 per diluted share, for the year ended December 31, 2019.

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

(Amounts in thousands)	For the Year Ended December 31,	
	2020	2019
Certain expense (income) items that impact net (loss) income attributable to common shareholders:		
Non-cash impairment loss on our investment in Fifth Avenue and Times Square JV, net of \$4,289 attributable to noncontrolling interests	\$ 409,060	—
After-tax net gain on sale of 220 Central Park South ("220 CPS") condominium units	(332,099)	(502,565)
Real estate impairment losses (primarily wholly owned retail assets in 2020)	236,286	8,065
608 Fifth Avenue lease liability extinguishment gain in 2020 and impairment loss and related write-offs in 2019	(70,260)	101,092
Our share of loss from real estate fund investments	63,114	48,808
Severance and other reduction-in-force related expenses	23,368	—
Credit losses on loans receivable resulting from a new GAAP accounting standard effective January 1, 2020	13,369	—
Transaction related costs	7,150	4,613
Severance accrual related to Hotel Pennsylvania closure, net of \$3,145 of income tax benefit	6,101	—
Mark-to-market decrease in Pennsylvania Real Estate Investment Trust ("PREIT") common shares (accounted for as a marketable security from March 12, 2019 and sold on January 23, 2020)	4,938	21,649
Net gain on transfer to Fifth Avenue and Times Square retail JV, net of \$11,945 attributable to noncontrolling interests	—	(2,559,154)
Net gains on sale of real estate (primarily our 25% interest in 330 Madison Avenue in 2019)	—	(178,769)
Net gain from sale of Urban Edge Properties ("UE") common shares (sold on March 4, 2019)	—	(62,395)
Prepayment penalty in connection with redemption of \$400 million 5.00% senior unsecured notes due January 2022	—	22,540
Mark-to-market increase in Lexington Realty Trust ("Lexington") common shares (sold on March 1, 2019)	—	(16,068)
Other	5,436	(7,505)
	366,463	(3,119,689)
Noncontrolling interests' share of above adjustments	(24,626)	198,599
Total of certain expense (income) items that impact net (loss) income attributable to common shareholders	<u>\$ 341,837</u>	<u>\$ (2,921,090)</u>

Overview - continued

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)	<u>For the Year Ended December 31,</u>	
	<u>2020</u>	<u>2019</u>
Certain (income) expense items that impact FFO attributable to common shareholders plus assumed conversions:		
After-tax net gain on sale of 220 CPS condominium units	\$ (332,099)	\$ (502,565)
608 Fifth Avenue lease liability extinguishment gain in 2020 and impairment loss and related write-offs in 2019	(70,260)	77,156
Our share of loss from real estate fund investments	63,114	48,808
Severance and other reduction-in-force related expenses	23,368	—
Credit losses on loans receivable resulting from a new GAAP accounting standard effective January 1, 2020	13,369	—
Transaction related costs	7,150	4,613
Severance accrual related to Hotel Pennsylvania closure, net of \$3,145 of income tax benefit	6,101	—
Prepayment penalty in connection with redemption of \$400 million 5.00% senior unsecured notes due January 2022	—	22,540
Other	2,510	(10,732)
	<u>(286,747)</u>	<u>(360,180)</u>
Noncontrolling interests' share of above adjustments	19,269	22,989
Total of certain (income) expense items that impact FFO attributable to common shareholders plus assumed conversions, net	<u>\$ (267,478)</u>	<u>\$ (337,191)</u>

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

The percentage (decrease) increase 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 summarized below.

<u>Year Ended December 31, 2020 compared to December 31, 2019:</u>	<u>Total</u>	<u>New York</u>	<u>theMART</u>	<u>555 California Street</u>
Same store NOI at share % (decrease) increase	(13.8)%	(12.7)%	(32.5)%	0.6%
Same store NOI at share - cash basis % (decrease) increase	(8.3)%	(6.3)%	(29.5)%	0.9%

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.

220 CPS

During the year ended December 31, 2020, we closed on the sale of 35 condominium units at 220 CPS for net proceeds of \$1,049,360,000 resulting in a financial statement net gain of \$381,320,000 which is included in "net gains on disposition of wholly owned and partially owned assets" on our consolidated statements of income in Part II, Item 8 of this Annual Report on Form 10-K. In connection with these sales, \$49,221,000 of income tax expense was recognized on our consolidated statements of income in Part II, Item 8 of this Annual Report on Form 10-K. From inception to December 31, 2020, we have closed on the sale of 100 units for net proceeds of \$2,869,492,000 resulting in financial statement net gains of \$1,066,937,000.

Dispositions

On January 23, 2020, we sold all of our 6,250,000 common shares of PREIT, realizing net proceeds of \$28,375,000. We recorded a \$4,938,000 loss (mark-to-market decrease) for the year ended December 31, 2020.

Financings

Unsecured Term Loan

On February 28, 2020, we increased our unsecured term loan balance to \$800,000,000 (from \$750,000,000) by exercising an accordion feature. Pursuant to an existing swap agreement, \$750,000,000 of the loan bears interest at a fixed rate of 3.87% through October 2023, and the balance of \$50,000,000 floats at a rate of LIBOR plus 1.00% (1.15% as of December 31, 2020). The entire \$800,000,000 will float thereafter for the duration of the loan through February 2024.

Other Financings

On August 12, 2020, we amended the \$700,000,000 mortgage loan on 770 Broadway, a 1.2 million square foot Manhattan office building, to extend the term one year through March 2022.

Overview - continued

Financings - continued

Other Financings - continued

On September 14, 2020, Alexander's, Inc. (NYSE: ALX) ("Alexander's"), in which we have a 32.4% ownership interest, amended and extended the \$350,000,000 mortgage loan on the retail condominium of 731 Lexington Avenue. Under the terms of the amendment, Alexander's paid down the loan by \$50,000,000 to \$300,000,000, extended the maturity date to August 2025 and guaranteed the interest payments and certain leasing costs. The principal of the loan is non-recourse to Alexander's. The interest-only loan is at LIBOR plus 1.40% (1.55% as of December 31, 2020) which has been swapped to a fixed rate of 1.72%.

On October 15, 2020, we completed a \$500,000,000 refinancing of PENN11, a 1.2 million square foot Manhattan office building. The interest-only loan carries a rate of LIBOR plus 2.75% (2.90% as of December 31, 2020) and matures in October 2023, with two one-year extension options. The loan replaces the previous \$450,000,000 loan that bore interest at a fixed rate of 3.95% and was scheduled to mature in December 2020.

On October 23, 2020, Alexander's completed a \$94,000,000 financing of The Alexander, a 312-unit residential building that is part of Alexander's residential and retail complex located in Rego Park, Queens, New York. The interest-only loan has a fixed rate of 2.63% and matures in November 2027.

On November 2, 2020, we repaid the \$52,476,000 mortgage loan on our land under a portion of the Borgata Hotel and Casino complex. The 10-year fixed rate amortizing loan bore interest at 5.14% and was scheduled to mature in February 2021.

Preferred Securities

On November 24, 2020, Vornado sold 12,000,000 5.25% Series N cumulative redeemable preferred shares at a price of \$25.00 per share, pursuant to an effective registration statement. Vornado received aggregate net proceeds of \$291,182,000, after underwriters' discount and issuance costs and contributed the net proceeds to the Operating Partnership in exchange for 12,000,000 5.25% Series N preferred units (with economic terms that mirror those of the Series N preferred shares). Dividends on the Series N preferred shares/units are cumulative and payable quarterly in arrears. The Series N preferred shares/units are not convertible into, or exchangeable for, any of our properties or securities. On or after five years from the date of issuance (or sooner under limited circumstances), Vornado may redeem the Series N preferred shares/units at a redemption price of \$25.00 per share, plus accrued and unpaid dividends through the date of redemption. The Series N preferred shares/units have no maturity date and will remain outstanding indefinitely unless redeemed by Vornado.

Leasing Activity For The Year Ended December 31, 2020

The leasing activity and related statistics in the tables 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.

- 2,231,000 square feet of New York Office space (1,853,000 square feet at share) at an initial rent of \$89.33 per square foot and a weighted average lease term of 14.4 years. Includes 730,000 square feet (694,000 at our share) for the new Facebook lease at Farley Office and 633,000 square feet (348,000 at our share) for the New York University long-term renewal at One Park Avenue. The initial rent of \$89.33 excludes the rent on 174,000 square feet (all at share) as the starting rent for this space will be determined later in 2021 based on fair market value. The changes in the GAAP and cash mark-to-market rent on the 899,000 square feet of second generation space were positive 11.0% and 4.6%, respectively. Tenant improvements and leasing commissions were \$8.75 per square foot per annum, or 9.8% of initial rent.
- 238,000 square feet of New York Retail space (184,000 square feet at share) at an initial rent of \$136.29 per square foot and a weighted average lease term of 4.0 years. The changes in the GAAP and cash mark-to-market rent on the 159,000 square feet of second generation space were positive 1.3% and negative 5.9%, respectively. Tenant improvements and leasing commissions were \$16.80 per square foot per annum, or 12.3% of initial rent.
- 379,000 square feet at theMART (all at share) at an initial rent of \$49.74 per square foot and a weighted average lease term of 8.5 years. The changes in the GAAP and cash mark-to-market rent on the 374,000 square feet of second generation space were positive 1.5% and negative 1.9%, respectively. Tenant improvements and leasing commissions were \$3.89 per square foot per annum, or 7.8% of initial rent.
- 371,000 square feet at 555 California Street (260,000 square feet at share) at an initial rent of \$108.92 per square foot and a weighted average lease term of 8.0 years. The initial rent of \$108.92 excludes the rent on a ten-year renewal option for 247,000 square feet (173,000 square feet at share) as the starting rent for this space will be determined in 2024 based on fair market value. The changes in the GAAP and cash mark-to-market rent on the 87,000 square feet of second generation space were positive 54.7% and 39.7%, respectively. Tenant improvements and leasing commissions were \$6.94 per square foot per annum, or 6.4% of initial rent, excluding the ten-year renewal option for 247,000 square feet (173,000 square feet at share).

Overview - continued

Square footage (in service) and Occupancy as of December 31, 2020:

(Square feet in thousands)		Square Feet (in service)		
	Number of properties	Total Portfolio	Our Share	Occupancy %
New York:				
Office	33	18,361	15,413	93.4%
Retail (includes retail properties that are in the base of our office properties)	65	2,275	1,805	78.8%
Residential - 1,677 units	9	1,526	793	83.9%
Alexander's, including 312 residential units	7	2,366	766	96.7%
Hotel Pennsylvania (closed since April 1, 2020)	1	—	—	
		<u>24,528</u>	<u>18,777</u>	92.1%
Other:				
theMART	4	3,692	3,683	89.5%
555 California Street	3	1,741	1,218	98.4%
Other	11	2,489	1,154	92.8%
		<u>7,922</u>	<u>6,055</u>	
Total square feet at December 31, 2020		<u>32,450</u>	<u>24,832</u>	

Square footage (in service) and Occupancy as of December 31, 2019:

(Square feet in thousands)		Square Feet (in service)		
	Number of properties	Total Portfolio	Our Share	Occupancy %
New York:				
Office	35	19,070	16,195	96.9%
Retail (includes retail properties that are in the base of our office properties)	70	2,300	1,842	94.5%
Residential - 1,679 units	9	1,526	793	97.0%
Alexander's, including 312 residential units	7	2,230	723	96.5%
Hotel Pennsylvania	1	1,400	1,400	
		<u>26,526</u>	<u>20,953</u>	96.7%
Other:				
theMART	4	3,826	3,817	94.6%
555 California Street	3	1,741	1,218	99.8%
Other	11	2,533	1,198	92.7%
		<u>8,100</u>	<u>6,233</u>	
Total square feet at December 31, 2019		<u>34,626</u>	<u>27,186</u>	

Critical Accounting Policies

In preparing the consolidated financial statements we have made estimates and assumptions that affect the reported amounts of 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. We consider an accounting estimate to be critical if changes in the estimate could have a material impact on our consolidated results of operations or financial condition.

Set forth below is a summary of the accounting policies that we believe are critical to the preparation of our consolidated financial statements. The summary should be read in conjunction with the more complete discussion of our accounting policies included in Note 3 - *Basis of Presentation and Significant Accounting Policies* to our consolidated financial statements in this Annual Report on Form 10-K.

Real Estate

Upon the acquisition of real estate, we assess the fair value of acquired assets (including land, buildings and improvements, identified intangibles, such as acquired above and below-market leases, acquired in-place leases and tenant relationships) and acquired liabilities and we allocate the purchase price based on these assessments which are on a relative fair value basis. We assess fair value based on estimated cash flow projections that utilize appropriate discount and capitalization rates and available market information. Estimates of future cash flows are based on a number of factors including historical operating results, known trends, and market/economic conditions, and could differ materially from actual results.

Our properties, including any related right-of-use assets and intangible assets, are individually reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment exists when the carrying amount of an asset exceeds the aggregate projected future cash flows over the anticipated holding period on an undiscounted basis. An impairment loss is measured based on the excess of the property's carrying amount over its estimated fair value. Impairment analyses are based on our current plans, intended holding periods and available market information at the time the analyses are prepared. If our estimates of the future cash flows, anticipated holding periods, or market conditions change, our evaluation of impairment losses may be different and such differences could be material to our consolidated financial statements. Estimates of future cash flows are subjective and are based, in part, on assumptions regarding future occupancy, rental rates, capital requirements, capitalization rates and discount rates that could differ materially from actual results.

Partially Owned Entities

We consolidate entities in which we have a controlling financial interest. In determining whether we have a controlling financial interest in a partially owned entity and the requirement to consolidate the accounts of that entity, we consider (i) whether the entity is a variable interest entity ("VIE") in which we are the primary beneficiary or (ii) whether the entity is a voting interest entity in which we have a majority of the voting interests of the entity. We are deemed to be the primary beneficiary of a VIE when we have (i) the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and (ii) the obligation to absorb losses or receive benefits that could potentially be significant to the VIE. Management uses its judgement when determining if we are the primary beneficiary of a VIE. We generally do not control a partially owned entity if the approval of all of the partners/members is contractually required with respect to decisions that most significantly impact the performance of the partially owned entity. This includes decisions regarding operating/capital budgets, and the placement of new or additional financing secured by the assets of the venture, among others. We account for investments under the equity method when the requirements for consolidation are not met, and we have significant influence over the operations of the investee.

Investments in unconsolidated partially owned entities are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recorded when there is a decline in the fair value below the carrying value and we conclude such decline is other-than-temporary. An impairment loss is measured based on the excess of the carrying amount of an investment over its estimated fair value. Impairment analyses are based on current plans, intended holding periods, ability to hold, and available information at the time the analyses are prepared. The ultimate realization of our investments in partially owned entities is dependent on a number of factors, including the performance of each investment and market conditions. If our estimates of the projected future cash flows, the nature of development activities for properties for which such activities are planned and the estimated fair value of the investment change based on market conditions or otherwise, our evaluation of impairment losses may be different and such differences could be material to our consolidated financial statements. Estimates of future cash flows is subjective and is based, in part, on assumptions regarding future occupancy, rental rates, capital requirements, capitalization rates and discount rates that could differ materially from actual results.

Critical Accounting Policies - continued

Revenue Recognition

We have the following revenue sources and revenue recognition policies:

- Rental revenues include revenues from the leasing of space at our properties to tenants, lease termination income, revenues from the Hotel Pennsylvania, trade shows and tenant services.
 - Revenues from the leasing of space at our properties to tenants includes (i) lease components, including fixed and variable lease payments, and nonlease components which include reimbursement of common area maintenance expenses, and (ii) reimbursement of real estate taxes and insurance expenses. As lessor, we have elected to combine the lease and nonlease components of our operating lease agreements and account for the components as a single lease component.
 - Revenues derived from fixed lease payments are recognized on a straight-line basis over the non-cancelable period of the lease, together with renewal options that are reasonably certain of being exercised. We commence rental revenue recognition when the underlying asset is available for use by the lessee.
 - Revenue derived from the reimbursement of real estate taxes, insurance expenses and common area maintenance expenses are generally recognized in the same period as the related expenses are incurred.
 - We have made a policy election in accordance with the FASB Staff Q&A allowing us to not account for COVID-19 related lease concessions as lease modifications. Accordingly, rent abatements are recognized as reductions to "rental revenues" during the period in which they were granted. Rent deferrals result in an increase to "tenant and other receivables" during the deferral period with no impact on revenue recognition. For any concessions that do not meet the guidance contained in the Q&A, the modification guidance in accordance with Accounting Standards Codification Topic 842, *Leases* will be applied. See Note 3 - *Basis of Presentation and Significant Accounting Policies* to the consolidated financial statements in Part II, Item 8 of this Annual Report on Form 10-K for additional information.
 - Lease termination income is recognized immediately if a tenant vacates or is recognized on a straight-line basis over the shortened remaining lease term.
 - Hotel revenue arising from the operation of Hotel Pennsylvania consists of room revenue, food and beverage revenue, and banquet revenue. Room revenue is recognized when the rooms are made available for the guest.
 - Trade shows revenue arising from the operation of trade shows is primarily booth rentals. This revenue is recognized upon the occurrence of the trade shows when the trade show booths are made available for use by the exhibitors.
 - Tenant services revenue arises from sub-metered electric, elevator, trash removal and other services provided to tenants at their request. This revenue is recognized as the services are transferred.
- Fee and other income includes management, leasing and other revenue arising from contractual agreements with third parties or with partially owned entities and includes BMS cleaning, engineering and security services. This revenue is recognized as the services are transferred.

We evaluate on an individual lease basis whether it is probable that we will collect substantially all amounts due from our tenants. We recognize changes in the collectability assessment of our operating leases as adjustments to rental revenue. Management exercises judgment in assessing collectability and considers payment history, current credit status and publicly available information about the financial condition of the tenant, including the impact of COVID-19 on tenants' businesses, among other factors. Tenant receivables, including receivables arising from the straight-lining of rents, are written off when management deems that the collectability of substantially all future lease payments from a specific lease is not probable of collection, at which point, the Company will limit future rental revenues to cash received.

Income Taxes

Vornado operates in a manner intended to enable it to continue to qualify as a REIT under Sections 856-860 of the Internal Revenue Code of 1986, as amended. Under those sections, a REIT which distributes at least 90% of its REIT taxable income as a dividend to its shareholders each year and which meets certain other conditions will not be taxed on that portion of its taxable income which is distributed to its shareholders. Vornado distributes to its shareholders 100% of its REIT taxable income and therefore, no provision for Federal income taxes is required. If Vornado fails to distribute the required amount of income to its shareholders, or fails to meet other REIT requirements, it may fail to qualify as a REIT which may result in substantial adverse tax consequences.

Recent Accounting Pronouncements

See Note 3 – *Basis of Presentation and Significant Accounting Policies* to our consolidated financial statements in this Annual Report on Form 10-K for a discussion concerning recent accounting pronouncements.

NOI At Share by Segment for the Years Ended December 31, 2020 and 2019

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. NOI at share - cash basis includes rent that has been deferred as a result of the COVID-19 pandemic. Rent deferrals generally require repayment in monthly installments over a period of time not to exceed twelve months.

Below is a summary of NOI at share and NOI at share - cash basis by segment for the years ended December 31, 2020 and 2019.

(Amounts in thousands)

	For the Year Ended December 31, 2020		
	Total	New York	Other
Total revenues	\$ 1,527,951	\$ 1,221,748	\$ 306,203
Operating expenses	(789,066)	(640,531)	(148,535)
NOI - consolidated	738,885	581,217	157,668
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(72,801)	(43,773)	(29,028)
Add: NOI from partially owned entities	306,495	296,447	10,048
NOI at share	972,579	833,891	138,688
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	46,246	36,715	9,531
NOI at share - cash basis	<u>\$ 1,018,825</u>	<u>\$ 870,606</u>	<u>\$ 148,219</u>

(Amounts in thousands)

	For the Year Ended December 31, 2019		
	Total	New York ⁽¹⁾	Other
Total revenues	\$ 1,924,700	\$ 1,577,860	\$ 346,840
Operating expenses	(917,981)	(758,304)	(159,677)
NOI - consolidated	1,006,719	819,556	187,163
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(69,332)	(40,896)	(28,436)
Add: NOI from partially owned entities	322,390	294,168	28,222
NOI at share	1,259,777	1,072,828	186,949
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(6,060)	(12,318)	6,258
NOI at share - cash basis	<u>\$ 1,253,717</u>	<u>\$ 1,060,510</u>	<u>\$ 193,207</u>

(1) Reflects the transfer of 45.4% of common equity in the properties contributed to the Fifth Avenue and Times Square JV on April 18, 2019.

NOI At Share by Segment for the Years Ended December 31, 2020 and 2019 - continued

The elements of our New York and Other NOI at share for the years ended December 31, 2020 and 2019 are summarized below.

(Amounts in thousands)

	For the Year Ended December 31,	
	2020	2019
New York:		
Office ⁽¹⁾⁽²⁾	\$ 672,495	\$ 724,526
Retail ⁽¹⁾⁽³⁾	147,299	273,217
Residential	20,687	23,363
Alexander's ⁽⁴⁾	35,912	44,325
Hotel Pennsylvania ⁽⁵⁾	(42,502)	7,397
Total New York	<u>833,891</u>	<u>1,072,828</u>
Other:		
theMART ⁽⁶⁾	69,178	102,071
555 California Street	60,324	59,657
Other investments ⁽⁷⁾	9,186	25,221
Total Other	<u>138,688</u>	<u>186,949</u>
NOI at share	<u><u>\$ 972,579</u></u>	<u><u>\$ 1,259,777</u></u>

(1) Reflects the transfer of 45.4% of common equity in the properties contributed to the Fifth Avenue and Times Square JV on April 18, 2019.

(2) 2020 includes \$18,173 of non-cash write-offs of receivables arising from the straight-lining of rents, including the New York & Company, Inc. lease at 330 West 34th Street, and \$6,702 of write-offs of tenant receivables deemed uncollectible.

(3) 2020 includes \$25,876 of non-cash write-offs of receivables arising from the straight-lining of rents, including the JCPenney lease at Manhattan Mall, and \$12,017 of write-offs of tenant receivables deemed uncollectible. 2019 includes \$14,010 of non-cash write-offs of receivables arising from the straight-lining of rents.

(4) 2020 includes \$3,511 of non-cash write-offs of receivables arising from the straight-lining of rents and \$1,335 of write-offs of tenant receivables deemed uncollectible.

(5) The decrease in NOI at share is primarily due to the effects of the COVID-19 pandemic. The Hotel Pennsylvania has been closed since April 1, 2020 as a result of the pandemic. 2020 includes a \$9,246 severance accrual for furloughed union employees.

(6) The decrease in NOI at share is primarily due to the effects of the COVID-19 pandemic, causing trade shows to be cancelled from late March 2020 through the remainder of the year. Additionally, 2020 includes \$2,722 of non-cash write-offs of receivables arising from the straight-lining of rents and \$1,742 of write-offs of tenant receivables deemed uncollectible.

(7) 2019 includes our share of PREIT (accounted for as a marketable security from March 12, 2019 and sold on January 23, 2020) and UE (sold on March 4, 2019).

NOI At Share by Segment for the Years Ended December 31, 2020 and 2019 - continued

The elements of our New York and Other NOI at share - cash basis for the years ended December 31, 2020 and 2019 are summarized below.

(Amounts in thousands)

	For the Year Ended December 31,	
	2020	2019
New York:		
Office ⁽¹⁾⁽²⁾	\$ 691,755	\$ 718,734
Retail ⁽¹⁾⁽³⁾	158,686	267,655
Residential	19,369	21,894
Alexander's ⁽⁴⁾	42,737	45,093
Hotel Pennsylvania ⁽⁵⁾	(41,941)	7,134
Total New York	<u>870,606</u>	<u>1,060,510</u>
Other:		
theMART ⁽⁶⁾	76,251	108,130
555 California Street	60,917	60,156
Other investments ⁽⁷⁾	11,051	24,921
Total Other	<u>148,219</u>	<u>193,207</u>
NOI at share - cash basis	<u><u>\$ 1,018,825</u></u>	<u><u>\$ 1,253,717</u></u>

(1) Reflects the transfer of 45.4% of common equity in the properties contributed to the Fifth Avenue and Times Square JV on April 18, 2019.

(2) 2020 includes \$6,702 of write-offs of tenant receivables deemed uncollectible.

(3) 2020 includes \$12,017 of write-offs of tenant receivables deemed uncollectible.

(4) 2020 includes \$1,335 of write-offs of tenant receivables deemed uncollectible.

(5) The decrease in NOI at share - cash basis is primarily due to the effects of the COVID-19 pandemic. The Hotel Pennsylvania has been closed since April 1, 2020 as a result of the pandemic. 2020 includes a \$9,246 severance accrual for furloughed union employees.

(6) The decrease in NOI at share - cash basis is primarily due to the effects of the COVID-19 pandemic, causing trade shows to be cancelled from late March 2020 through the remainder of the year. Additionally, 2020 includes \$1,742 of write-offs of tenant receivables deemed uncollectible.

(7) 2019 includes our share of PREIT (accounted for as a marketable security from March 12, 2019 and sold on January 23, 2020) and UE (sold on March 4, 2019).

Reconciliation of Net (Loss) Income to NOI At Share and NOI At Share - Cash Basis for the Years Ended December 31, 2020 and 2019

Below is a reconciliation of net (loss) income to NOI at share and NOI at share - cash basis for the years ended December 31, 2020 and 2019.

(Amounts in thousands)

	For the Year Ended December 31,	
	2020	2019
Net (loss) income	\$ (461,845)	\$ 3,334,262
Depreciation and amortization expense	399,695	419,107
General and administrative expense	181,509	169,920
Impairment losses and transaction related costs, net	174,027	106,538
Loss (income) from partially owned entities	329,112	(78,865)
Loss from real estate fund investments	226,327	104,082
Interest and other investment loss (income), net	5,499	(21,819)
Interest and debt expense	229,251	286,623
Net gain on transfer to Fifth Avenue and Times Square JV	—	(2,571,099)
Net gains on disposition of wholly owned and partially owned assets	(381,320)	(845,499)
Income tax expense	36,630	103,439
Loss from discontinued operations	—	30
NOI from partially owned entities	306,495	322,390
NOI attributable to noncontrolling interests in consolidated subsidiaries	(72,801)	(69,332)
NOI at share	972,579	1,259,777
Non cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	46,246	(6,060)
NOI at share - cash basis	<u>\$ 1,018,825</u>	<u>\$ 1,253,717</u>

NOI At Share by Region

	For the Year Ended December 31,	
	2020	2019
Region:		
New York City metropolitan area	87%	87%
Chicago, IL	7%	8%
San Francisco, CA	6%	5%
	<u>100%</u>	<u>100%</u>

Results of Operations – Year Ended December 31, 2020 Compared to December 31, 2019

Revenues

Our revenues were \$1,527,951,000 for the year ended December 31, 2020 compared to \$1,924,700,000 in the prior year, a decrease of \$396,749,000. Below are the details of the decrease by segment:

(Amounts in thousands)

(Decrease) increase due to:	Total	New York	Other
Rental revenues:			
Acquisitions, dispositions and other	\$ (5,085)	\$ (3,505)	\$ (1,580)
Development and redevelopment	(73,297)	(73,299)	2
Hotel Pennsylvania ⁽¹⁾	(84,287)	(84,287)	—
Trade shows ⁽²⁾	(27,925)	—	(27,925)
Properties transferred to Fifth Avenue and Times Square JV	(100,554)	(100,554)	—
Same store operations	(98,439) ⁽³⁾	(79,845)	(18,594)
	<u>(389,587)</u>	<u>(341,490)</u>	<u>(48,097)</u>
Fee and other income:			
BMS cleaning fees	(19,138)	(21,246) ⁽⁴⁾	2,108
Management and leasing fees	5,874	5,814	60
Properties transferred to Fifth Avenue and Times Square JV	(388)	(388)	—
Other income	6,490	1,198	5,292
	<u>(7,162)</u>	<u>(14,622)</u>	<u>7,460</u>
Total decrease in revenues	\$ (396,749)	\$ (356,112)	\$ (40,637)

See notes on the following page.

Results of Operations – Year Ended December 31, 2020 Compared to December 31, 2019 - continued

Expenses

Our expenses were \$1,550,740,000 for the year ended December 31, 2020 compared to \$1,625,155,000 in the prior year, a decrease of \$74,415,000. Below are the details of the decrease by segment:

(Amounts in thousands)

(Decrease) increase due to:	Total	New York	Other
Operating:			
Acquisitions, dispositions and other	\$ (10,055)	\$ (8,786)	\$ (1,269)
Development and redevelopment	(35,478)	(35,478)	—
Non-reimbursable expenses	1,327	1,408	(81)
Hotel Pennsylvania ⁽¹⁾	(34,399)	(34,399)	—
Trade shows ⁽²⁾	(9,613)	—	(9,613)
BMS expenses	(12,016)	(14,124) ⁽⁴⁾	2,108
Properties transferred to Fifth Avenue and Times Square JV	(21,615)	(21,615)	—
Same store operations	(7,066)	(4,779)	(2,287)
	<u>(128,915)</u>	<u>(117,773)</u>	<u>(11,142)</u>
Depreciation and amortization:			
Acquisitions, dispositions and other	(3,735)	(3,744)	9
Development and redevelopment	(214)	(214)	—
Properties transferred to Fifth Avenue and Times Square JV	(25,119)	(25,119)	—
Same store operations	9,656	8,599	1,057
	<u>(19,412)</u>	<u>(20,478)</u>	<u>1,066</u>
General and administrative	<u>11,589</u> ⁽⁵⁾	<u>4,231</u>	<u>7,358</u>
Benefit from deferred compensation plan liability	<u>(5,166)</u>	<u>—</u>	<u>(5,166)</u>
Impairment Losses and transaction related costs, net	<u>67,489</u> ⁽⁶⁾	<u>65,077</u>	<u>2,412</u>
Total decrease in expenses	\$ (74,415)	\$ (68,943)	\$ (5,472)

- (1) Closed since April 1, 2020 as a result of the COVID-19 pandemic. Operating expense for 2020 includes a \$9,246 severance accrual for furloughed union employees.
- (2) Cancelled trade shows at theMART from late March 2020 through the remainder of the year as a result of the pandemic.
- (3) 2020 includes \$46,463 for the non-cash write-off of receivables arising from the straight-lining of rent, including the JCPenney retail lease at Manhattan Mall and the New York & Company, Inc. office lease at 330 West 34th Street, and \$16,741 for the write-off of tenant receivables deemed uncollectible.
- (4) Primarily due to a decrease in third party cleaning services provided to retail and office tenants as a result of the pandemic.
- (5) Primarily due to \$22,132 severance and other reduction-in-force related expenses in 2020, partially offset by (i) \$8,444 non-cash stock-based compensation expense for the accelerated vesting of previously issued Operating Partnership units and Vornado restricted stock in 2019 due to the removal of the time-based vesting requirements for participants who have reached 65 years of age and (ii) \$844 of lower non-cash stock-based compensation expense in 2020 for the time-based compensation granted in connection with the new leadership group announced in April 2019.
- (6) Primarily due to \$236,286 of non-cash impairment losses primarily related to wholly owned street retail assets in 2020, partially offset by (i) \$101,360 of non-cash impairment losses, substantially 608 Fifth Avenue, recognized in the second quarter of 2019 and (ii) \$70,260 of lease liability extinguishment gain related to 608 Fifth Avenue recognized in the second quarter of 2020.

Results of Operations – Year Ended December 31, 2020 Compared to December 31, 2019 - continued

(Loss) Income from Partially Owned Entities

Below are the components of (loss) income from partially owned entities for the years ended December 31, 2020 and 2019.

(Amounts in thousands)	Percentage Ownership at December 31, 2020	<u>For the Year Ended December 31,</u>	
		<u>2020</u>	<u>2019</u>
Our share of net (loss) income:			
Fifth Avenue and Times Square JV ⁽¹⁾ :			
Non-cash impairment loss ⁽²⁾		\$ (413,349)	\$ —
Return on preferred equity, net of our share of the expense		37,357	27,586
Equity in net income ⁽³⁾	51.5%	21,063	31,130
		<u>(354,929)</u>	58,716
Alexander's ⁽⁴⁾	32.4%	18,635	23,779
Partially owned office buildings ⁽⁵⁾	Various	12,742	(3,443)
Other investments ⁽⁶⁾	Various	(5,560)	(187)
		<u>\$ (329,112)</u>	<u>\$ 78,865</u>

(1) Entered into on April 18, 2019.

(2) See Note 7 - *Investments in Partially Owned Entities* to the consolidated financial statements in Part II, Item 8 of this Annual Report on Form 10-K for additional information.

(3) 2020 includes a \$13,971 reduction in income related to a Forever 21 lease modification at 1540 Broadway and \$3,125 of write-offs of lease receivables deemed uncollectible during 2020.

(4) 2020 includes our \$4,846 share of write-offs of lease receivables deemed uncollectible.

(5) Includes interests in 280 Park Avenue, 650 Madison Avenue, One Park Avenue, 7 West 34th Street, 330 Madison Avenue (sold on July 11, 2019), 512 West 22nd Street, 61 Ninth Avenue, 85 Tenth Avenue and others.

(6) Includes interests in Independence Plaza, Rosslyn Plaza, UE (sold on March 4, 2019), PREIT (accounted for as a marketable security from March 12, 2019 and sold on January 23, 2020) and others.

Loss from Real Estate Fund Investments

Below are the components of the loss from our real estate fund investments for the years ended December 31, 2020 and 2019.

(Amounts in thousands)	<u>For the Year Ended December 31,</u>	
	<u>2020</u>	<u>2019</u>
Net unrealized loss on held investments	\$ (226,107)	\$ (106,109)
Net investment (loss) income	(220)	2,027
Loss from real estate fund investments	<u>(226,327)</u>	<u>(104,082)</u>
Less loss attributable to noncontrolling interests in consolidated subsidiaries	163,213	55,274
Loss from real estate fund investments net of noncontrolling interests in consolidated subsidiaries	<u>\$ (63,114)</u>	<u>\$ (48,808)</u>

Interest and Other Investment (Loss) Income, net

Below are the components of interest and other investment (loss) income, net for the years ended December 31, 2020 and 2019.

(Amounts in thousands)	<u>For the Year Ended December 31,</u>	
	<u>2020</u>	<u>2019</u>
Credit losses on loans receivable ⁽¹⁾	\$ (13,369)	\$ —
Interest on cash and cash equivalents and restricted cash	5,793	13,380
Decrease in fair value of marketable securities ⁽²⁾	(4,938)	(5,533)
Interest on loans receivable	3,384	6,326
Dividends on marketable securities	—	3,938
Other, net	3,631	3,708
	<u>\$ (5,499)</u>	<u>\$ 21,819</u>

(1) See Note 3 - *Basis of Presentation and Significant Accounting Policies* and Note 14 - *Fair Value Measurements* to our consolidated financial statements in Part II, Item 8 of this Annual Report on Form 10-K for additional information.

(2) 2020 includes a \$4,938 mark-to-market decrease in the fair value of our PREIT common shares (sold on January 23, 2020). 2019 includes (i) a \$21,649 decrease in the fair value of our investment in PREIT, partially offset by (ii) a \$16,068 mark-to market increase in the fair value of our Lexington common shares (sold on March 1, 2019).

Results of Operations – Year Ended December 31, 2020 Compared to December 31, 2019 - continued

Interest and Debt Expense

Interest and debt expense was \$229,251,000 for the year ended December 31, 2020, compared to \$286,623,000 in the prior year, a decrease of \$57,372,000. This decrease was primarily due to (i) \$24,458,000 of lower interest expense resulting from lower average interest rates on our variable rate loans, (ii) \$22,540,000 of expense in 2019 from debt prepayment costs relating to redemption of our \$400,000,000 5.00% senior unsecured notes, (iii) \$17,459,000 of lower interest expense resulting from the repayment of the mortgage payable of PENN2, (iv) \$12,530,000 of lower interest expense resulting from the deconsolidation of mortgages payable of the properties contributed to Fifth Avenue and Times Square JV in April 2019, (v) \$7,680,000 of lower interest expense resulting from the payoff of the 220 CPS loan, and (vi) \$5,045,000 of lower interest expense from the redemption of the \$400,000,000 5.00% senior unsecured notes in 2019, partially offset by \$31,144,000 of lower capitalized interest and debt expense.

Net Gain on Transfer to Fifth Avenue and Times Square JV

During 2019, we recognized a \$2,571,099,000 net gain from the transfer of common equity in the properties contributed to Fifth Avenue and Times Square JV, including the related step-up in our basis of the retained portion of the assets to fair value.

Net Gains on Disposition of Wholly Owned and Partially Owned Assets

Net gains on disposition of wholly owned and partially owned assets of \$381,320,000 for the year ended December 31, 2020 consists of net gains on sale of 220 CPS condominium units. Net gains of \$845,499,000 for the year ended December 31, 2019 primarily consist of (i) \$604,393,000 of net gains on sale of 220 CPS condominium units, (ii) \$159,292,000 net gain on sale of our 25% interest in 330 Madison Avenue, (iii) \$62,395,000 net gain from the sale of all of our UE partnership units, and (iv) \$19,477,000 net gain on sale of 3040 M Street.

Income Tax Expense

For the year ended December 31, 2020, we had income tax expense of \$36,630,000, compared to \$103,439,000 in the prior year, a decrease of \$66,809,000. This decrease was primarily due to lower income tax expense from the sale of 220 CPS condominium units.

Net Loss Attributable to Noncontrolling Interests in Consolidated Subsidiaries

Net loss attributable to noncontrolling interests in consolidated subsidiaries was \$139,894,000 for the year ended December 31, 2020, compared to \$24,547,000 in the prior year, an increase of \$115,347,000. This increase resulted primarily from the higher allocation of net loss to the noncontrolling interests in our real estate fund investments and \$4,289,000 allocated to noncontrolling interests for the non-cash impairment loss recognized on our investment in Fifth Avenue and Times Square JV in 2020.

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

Net loss attributable to noncontrolling interests in the Operating Partnership was \$24,946,000 for the year ended December 31, 2020, compared to net income of \$210,872,000 in the prior year, a decrease in income of \$235,818,000. This decrease resulted primarily from lower net income subject to allocation to Class A unitholders.

Preferred Share Dividends of Vornado Realty Trust

Preferred share dividends were \$51,739,000 for the year ended December 31, 2020, compared to \$50,131,000 in the prior year, an increase of \$1,608,000.

Preferred Unit Distributions of Vornado Realty L.P.

Preferred unit distributions were \$51,904,000 for the year ended December 31, 2020, compared to \$50,296,000 in the prior year, an increase of \$1,608,000.

Results of Operations – Year Ended December 31, 2020 Compared to December 31, 2019 - continued

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 year ended December 31, 2020 compared to December 31, 2019.

(Amounts in thousands)

	Total	New York	theMART	555 California Street	Other
NOI at share for the year ended December 31, 2020	\$ 972,579	\$ 833,891	\$ 69,178	\$ 60,324	\$ 9,186
Less NOI at share from:					
Development properties	(30,946)	(30,946)	—	—	—
Hotel Pennsylvania (closed beginning April 1, 2020)	33,146	33,146	—	—	—
Other non-same store (income) expense, net	(27,898)	(18,361)	(524)	173	(9,186)
Same store NOI at share for the year ended December 31, 2020	<u>\$ 946,881</u>	<u>\$ 817,730</u>	<u>\$ 68,654</u>	<u>\$ 60,497</u>	<u>\$ —</u>
NOI at share for the year ended December 31, 2019	\$ 1,259,777	\$ 1,072,828	\$ 102,071	\$ 59,657	\$ 25,221
Less NOI at share from:					
Change in ownership interests in properties contributed to Fifth Avenue and Times Square JV	(35,770)	(35,770)	—	—	—
Dispositions	(7,420)	(7,420)	—	—	—
Development properties	(68,063)	(68,063)	—	—	—
Hotel Pennsylvania (closed beginning April 1, 2020)	(13,212)	(13,212)	—	—	—
Other non-same store (income) expense, net	(36,827)	(11,722)	(354)	470	(25,221)
Same store NOI at share for the year ended December 31, 2019	<u>\$ 1,098,485</u>	<u>\$ 936,641</u>	<u>\$ 101,717</u>	<u>\$ 60,127</u>	<u>\$ —</u>
(Decrease) increase in same store NOI at share for the year ended December 31, 2020 compared to December 31, 2019	<u>\$ (151,604)</u>	<u>\$ (118,911)</u>	<u>\$ (33,063)</u>	<u>\$ 370</u>	<u>\$ —</u>
% (decrease) increase in same store NOI at share	<u>(13.8)%</u>	<u>(12.7)%</u>	<u>(32.5)%</u>	<u>0.6 %</u>	<u>— %</u>

Results of Operations – Year Ended December 31, 2020 Compared to December 31, 2019 - continued

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 year ended December 31, 2020 compared to December 31, 2019.

(Amounts in thousands)

	Total	New York	theMART	555 California Street	Other
NOI at share - cash basis for the year ended December 31, 2020	\$ 1,018,825	\$ 870,606	\$ 76,251	\$ 60,917	\$ 11,051
Less NOI at share - cash basis from:					
Development properties	(42,531)	(42,531)	—	—	—
Hotel Pennsylvania (closed beginning April 1, 2020)	32,576	32,576	—	—	—
Other non-same store (income) expense, net	(39,271)	(27,672)	(553)	5	(11,051)
Same store NOI at share - cash basis for the year ended December 31, 2020	<u>\$ 969,599</u>	<u>\$ 832,979</u>	<u>\$ 75,698</u>	<u>\$ 60,922</u>	<u>\$ —</u>
NOI at share - cash basis for the year ended December 31, 2019	\$ 1,253,717	\$ 1,060,510	\$ 108,130	\$ 60,156	\$ 24,921
Less NOI at share - cash basis from:					
Change in ownership interests in properties contributed to Fifth Avenue and Times Square JV	(32,905)	(32,905)	—	—	—
Dispositions	(8,219)	(8,219)	—	—	—
Development properties	(87,856)	(87,856)	—	—	—
Hotel Pennsylvania (closed beginning April 1, 2020)	(12,997)	(12,997)	—	—	—
Other non-same store (income) expense, net	(54,571)	(29,207)	(692)	249	(24,921)
Same store NOI at share - cash basis for the year ended December 31, 2019	<u>\$ 1,057,169</u>	<u>\$ 889,326</u>	<u>\$ 107,438</u>	<u>\$ 60,405</u>	<u>\$ —</u>
(Decrease) increase in same store NOI at share - cash basis for the year ended December 31, 2020 compared to December 31, 2019	<u>\$ (87,570)</u>	<u>\$ (56,347)</u>	<u>\$ (31,740)</u>	<u>\$ 517</u>	<u>\$ —</u>
% (decrease) increase in same store NOI at share - cash basis	<u>(8.3)%</u>	<u>(6.3)%</u>	<u>(29.5)%</u>	<u>0.9 %</u>	<u>— %</u>

Related Party Transactions

See Note 23 - *Related Party Transactions* to our consolidated financial statements in this Annual Report on Form 10-K for a discussion concerning related party transactions.

Liquidity and Capital Resources

Rental revenue is our primary source of cash flow and is dependent upon the occupancy and rental rates of our properties. Our cash requirements include property operating expenses, capital improvements, tenant improvements, debt service, leasing commissions, dividends to shareholders and distributions to unitholders of the Operating Partnership, as well as acquisition and development costs. During 2020, we have experienced a decrease in cash flow from operations due to the COVID-19 pandemic, including reduced collections of rents billed to certain of our tenants, the closure of Hotel Pennsylvania, the cancellation of trade shows at theMART through 2020, and lower revenues from BMS and signage. For the quarter ended December 31, 2020, we collected 95% (97% including rent deferrals) of rent due from our tenants, comprised of 97% (99% including rent deferrals) from our office tenants and 88% (89% including rent deferrals) from our retail tenants. Rent deferrals generally require repayment in monthly installments over a period not to exceed twelve months. While we believe that our tenants are required to pay rent under their leases, we have implemented and will continue to consider rent deferrals on a case-by-case basis. Other sources of liquidity to fund cash requirements include 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 December 31, 2020, we have \$3.9 billion of liquidity comprised of \$1.7 billion of cash and cash equivalents and restricted cash and \$2.2 billion available on our \$2.75 billion revolving credit facilities. The challenges posed by COVID-19 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 shareholders, debt amortization and recurring capital expenditures. Capital requirements for development expenditures and acquisitions may require funding from borrowings, equity offerings and/or asset sales. Consequently, the Company will continue to evaluate its liquidity and financial position on an ongoing basis.

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.

Dividends

On January 20, 2021, Vornado declared a quarterly common dividend of \$0.53 per share (an indicated annual rate of \$2.12 per common share). This dividend, if declared by the Board of Trustees for all of 2021, would require Vornado to pay out approximately \$406,000,000 of cash for common share dividends. In addition, during 2021, Vornado expects to pay approximately \$66,000,000 of cash dividends on outstanding preferred shares and approximately \$29,000,000 of cash distributions to unitholders of the Operating Partnership.

Financing Activities and Contractual Obligations

We have an effective shelf registration for the offering of our equity and debt securities that is not limited in amount due to our status as a “well-known seasoned issuer.” We have issued senior unsecured notes from a shelf registration statement that contain financial covenants that restrict our ability to incur debt, and that require us to maintain a level of unencumbered assets based on the level of our secured debt. 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 unsecured revolving credit facilities also contain customary conditions precedent to borrowing, including representations and warranties, and contain customary events of default that could give rise to accelerated repayment, including such items as failure to pay interest or principal. As of December 31, 2020, we are in compliance with all of the financial covenants required by our senior unsecured notes and our unsecured revolving credit facilities.

Liquidity and Capital Resources - continued

Financing Activities and Contractual Obligations - continued

As of December 31, 2020, we had \$1,624,482,000 of cash and cash equivalents and \$2,161,451,000 of borrowing capacity under our unsecured revolving credit facilities, net of letters of credit of \$13,549,000. A summary of our consolidated debt as of December 31, 2020 and 2019 is presented below.

(Amounts in thousands)	As of December 31, 2020		As of December 31, 2019	
	Balance	Weighted Average Interest Rate	Balance	Weighted Average Interest Rate
Consolidated debt:				
Variable rate	\$ 3,220,815	1.83%	\$ 1,643,500	3.09%
Fixed rate	<u>4,212,643</u>	3.70%	<u>5,801,516</u>	3.57%
Total	<u>7,433,458</u>	2.89%	<u>7,445,016</u>	3.46%
Deferred financing costs, net and other	<u>(34,462)</u>		<u>(38,407)</u>	
Total, net	<u><u>\$ 7,398,996</u></u>		<u><u>\$ 7,406,609</u></u>	

Our consolidated outstanding debt, net of deferred financing costs and other, was \$7,398,996,000 at December 31, 2020, a \$7,613,000 decrease from the balance at December 31, 2019. During 2021 and 2022, \$1,562,643,000 and \$1,650,000,000, respectively, of our outstanding debt matures; we may refinance this maturing debt as it comes due or choose to repay it using cash and cash equivalents or our unsecured revolving credit facilities. We may also refinance or prepay other outstanding debt depending 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.

Below is a schedule of our contractual obligations at December 31, 2020.

(Amounts in thousands)	Total	Less than 1 Year	1 – 3 Years	3 – 5 Years	Thereafter
Contractual cash obligations ⁽¹⁾ (principal and interest ⁽²⁾):					
Notes and mortgages payable	\$ 5,940,860	\$ 2,737,058	\$ 1,627,598	\$ 1,160,108	\$ 416,096
Operating leases	1,044,896	22,010	47,671	49,076	926,139
Purchase obligations, primarily construction commitments	609,600	609,600	—	—	—
Senior unsecured notes due 2025	513,656	15,750	31,500	466,406	—
Unsecured term loan	886,965	29,603	56,210	801,152	—
Revolving credit facilities	588,179	5,923	582,256	—	—
Other obligations ⁽³⁾	549,861	7,230	15,252	18,396	508,983
Total contractual cash obligations	<u>\$ 10,134,017</u>	<u>\$ 3,427,174</u>	<u>\$ 2,360,487</u>	<u>\$ 2,495,138</u>	<u>\$ 1,851,218</u>

(1) Excludes committed tenant-related obligations as timing and amounts of payments are uncertain and may only be due upon satisfactory performance of certain conditions.

(2) Interest on variable rate debt is computed using rates in effect at December 31, 2020.

(3) Represents rent and fixed payments in lieu of real estate taxes due to Empire State Development ("ESD"), an entity of New York State, for Farley Office and Retail.

Details of 2020 financing activities are provided in the "Overview" of Management's Discussion and Analysis of Financial Condition and Results of Operations.

Certain Future Cash Requirements

Capital Expenditures

The following table summarizes anticipated 2021 capital expenditures.

(Amounts in millions, except per square foot data)	Total	New York	theMART	555 California Street
Expenditures to maintain assets	\$ 100.0	\$ 84.0	\$ 6.0	\$ 10.0
Tenant improvements	82.0	65.0	12.0	5.0
Leasing commissions	<u>30.5</u>	<u>25.0</u>	<u>3.0</u>	<u>2.5</u>
Total recurring tenant improvements, leasing commissions and other capital expenditures	<u><u>\$ 212.5</u></u>	<u><u>\$ 174.0</u></u>	<u><u>\$ 21.0</u></u>	<u><u>\$ 17.5</u></u>
Square feet budgeted to be leased (in thousands)		1,000	250	150
Weighted average lease term (years)		10.0	7.5	5.0
Tenant improvements and leasing commissions:				
Per square foot	\$ 90.00	\$ 60.00	\$ 50.00	
Per square foot per annum	9.00	8.00	10.00	

The table above excludes anticipated capital expenditures of each of our partially owned non-consolidated subsidiaries, as these entities fund their capital expenditures without additional equity contributions from us.

Liquidity and Capital Resources - continued

Development and Redevelopment Expenditures

220 CPS

We are completing construction of a residential condominium tower containing 397,000 salable square feet at 220 CPS. The development cost of this project (exclusive of land cost) is estimated to be approximately \$1.480 billion, of which \$1.455 billion has been expended as of December 31, 2020.

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 844,000 rentable square feet of commercial space, comprised of approximately 730,000 square feet of office space and approximately 114,000 square feet of restaurant and retail space. The total development cost of this project is estimated to be approximately \$1,120,000,000, an increase of \$90,000,000, which is primarily due to higher projected tenant improvement allowances for the office, restaurant and retail space. As of December 31, 2020, \$791,994,000 has been expended, which has been reduced by \$88,000,000 of historic tax credit investor contributions (at our share).

The joint venture entered into a development agreement with ESD, an entity of New York State, to build the adjacent Moynihan Train Hall, with Vornado and Related each guaranteeing the joint venture's obligations. The joint venture entered into a design-build contract with Skanska Moynihan Train Hall Builders ("Skanska") pursuant to which they built the Moynihan Train Hall on the joint venture's behalf. Skanska substantially completed construction as of December 31, 2020, thereby fulfilling this obligation to ESD. The joint venture, which we consolidate on our consolidated balance sheets, leased the entire property during the construction period and pursuant to ASC 842-40-55, was required to recognize all development expenditures for Moynihan Train Hall. Accordingly, the development expenditures funded by governmental agencies were presented as "Moynihan Train Hall development expenditures" with a corresponding obligation recorded to "Moynihan Train Hall Obligation" on our consolidated balance sheets. On December 31, 2020, upon substantial completion of Moynihan Train Hall, the portions of the property not pertaining to the joint venture's commercial space were severed from its lease with ESD and we removed the "Moynihan Train Hall development expenditures" and the offsetting "Moynihan Train Hall obligation" from our consolidated balance sheets.

PENN1

We are redeveloping PENN1, a 2,545,000 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 PENN1. Skanska USA Civil Northeast, Inc. will perform the redevelopment under a fixed price contract for \$396,000,000 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. The total development cost of our PENN1 project is estimated to be \$450,000,000, an increase of \$125,000,000, which is primarily due to the addition of the Concourse retail redevelopment project and sustainability initiatives, including the installation of triple pane high energy performance windows and the implementation of an electrification program to allow PENN1 to access more clean renewable electricity. As of December 31, 2020, \$167,894,000 has been expended.

PENN2

We are redeveloping PENN2, 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 \$91,219,000 has been expended as of December 31, 2020.

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 \$19,618,000 has been expended as of December 31, 2020.

Other

We are redeveloping a 78,000 square foot Class A office building at 345 Montgomery Street, a part of our 555 California Street complex in San Francisco (70.0% interest) located at the corner of California and Pine Street. The development cost of this project is estimated to be approximately \$66,000,000, of which our share is \$46,000,000. As of December 31, 2020, \$55,261,000 has been expended, of which our share is \$38,683,000.

We are redeveloping a 165,000 square foot office building at 825 Seventh Avenue, located at the corner of 53rd Street and Seventh Avenue (50.0% interest). The redevelopment cost of this project is estimated to be approximately \$30,000,000, of which our share is \$15,000,000. As of December 31, 2020, \$26,508,000 has been expended, of which our share is \$13,254,000.

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.

Liquidity and Capital Resources - continued

Insurance

For our properties (except Farley), we maintain general liability insurance with limits of \$300,000,000 per occurrence and per property, of which \$235,000,000 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 and effective February 15, 2021, excluding communicable disease coverage. For the period February 15, 2020 through February 14, 2021, we and the insurance carriers for our all risk property policy have disagreements as to the applicability of a \$2,300,000 sub-limit for communicable disease coverage across our properties. 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 \$1,759,257 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.

For Farley, we maintain general liability insurance with limits of \$100,000,000 per occurrence, and builder's risk insurance including coverage for existing property and development activities of \$2.8 billion per occurrence and in the aggregate. We maintain coverage for certified and non-certified terrorism acts with limits of \$1.85 billion and \$1.17 billion per occurrence, respectively, and in the aggregate.

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.

Liquidity and Capital Resources - continued

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 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. In December 2020, following a trial, the court issued a tentative ruling in our favor. A final hearing was held on February 1, 2021 and we are awaiting a definitive ruling. 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.

In November 2011, we entered into an agreement with the New York City Economic Development Corporation ("EDC") to lease Piers 92 and 94 (the "Piers") for a 49-year term with five 10-year renewal options. The non-recourse lease with a single-purpose entity calls for current annual rent payments of \$2,000,000 with fixed rent steps through the initial term. We operate trade shows and special events at the Piers (and sublease to others for the same uses). In February 2019, an inspection revealed that the piles supporting Pier 92 were structurally unsound (an obligation of EDC to maintain) and we were issued an order by EDC to vacate the property. We continued to make the required lease payments through February 2020, with no abatement provided by EDC for the loss of our right to use Pier 92 or reimbursement for lost revenues. Beginning March 2020, as no resolution had been reached with EDC, we have not paid the monthly rents due under the non-recourse lease. As of December 31, 2020, we have a \$47,473,000 lease liability and a \$34,482,000 right-of-use asset recorded for this lease.

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 ESD, an entity of New York State, for Farley Office and Retail. As of December 31, 2020, the aggregate dollar amount of these guarantees and master leases is approximately \$1,769,000,000.

As of December 31, 2020, \$13,549,000 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 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 took in 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 December 31, 2020, 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 December 31, 2020 fair value of the Fund assets, at liquidation we would be required to make a \$29,800,000 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 December 31, 2020, we expect to fund additional capital to certain of our partially owned entities aggregating approximately \$10,700,000.

As of December 31, 2020, we have construction commitments aggregating approximately \$451,000,000.

Liquidity and Capital Resources - continued

Cash Flows for the Year Ended December 31, 2020 Compared to December 31, 2019

Our cash flow activities for the years ended December 31, 2020 and 2019 are summarized as follows:

(Amounts in thousands)

	For the Year Ended December 31,		(Decrease) Increase in Cash Flow
	2020	2019	
Net cash provided by operating activities	\$ 424,240	\$ 662,539	\$ (238,299)
Net cash (used in) provided by investing activities	(87,800)	2,463,276	(2,551,076)
Net cash used in financing activities	(213,202)	(2,235,589)	2,022,387

Cash and cash equivalents and restricted cash was \$1,730,369,000 at December 31, 2020, a \$123,238,000 increase from the balance at December 31, 2019.

Net cash provided by operating activities of \$424,240,000 for the year ended December 31, 2020 was comprised of \$615,721,000 of cash from operations, including distributions of income from partially owned entities of \$175,246,000, and a net decrease of \$191,481,000 in cash due to the timing of cash receipts and payments related to changes in operating assets and liabilities.

The following table details the net cash (used in) provided by investing activities for the years ended December 31, 2020 and 2019:

(Amounts in thousands)

	For the Year Ended December 31,		(Decrease) Increase in Cash Flow
	2020	2019	
Proceeds from sale of condominium units at 220 Central Park South	\$ 1,044,260	\$ 1,605,356	\$ (561,096)
Development costs and construction in progress	(601,920)	(649,056)	47,136
Moynihan Train Hall expenditures	(395,051)	(438,935)	43,884
Additions to real estate	(155,738)	(233,666)	77,928
Proceeds from sales of marketable securities	28,375	168,314	(139,939)
Investments in partially owned entities	(8,959)	(18,257)	9,298
Distributions of capital from partially owned entities	2,389	24,880	(22,491)
Acquisitions of real estate and other	(1,156)	(69,699)	68,543
Proceeds from transfer of interest in Fifth Avenue and Times Square JV (net of \$35,562 of transaction costs and \$10,899 of deconsolidated cash and restricted cash)	—	1,248,743	(1,248,743)
Proceeds from redemption of 640 Fifth Avenue preferred equity	—	500,000	(500,000)
Proceeds from sale of real estate and related investments	—	324,201	(324,201)
Proceeds from repayments of loans receivable	—	1,395	(1,395)
Net cash (used in) provided by investing activities	<u>\$ (87,800)</u>	<u>\$ 2,463,276</u>	<u>\$ (2,551,076)</u>

The following table details the net cash used in financing activities for the years ended December 31, 2020 and 2019:

(Amounts in thousands)

	For the Year Ended December 31,		Increase (Decrease) in Cash Flow
	2020	2019	
Rewards of borrowings	\$ (1,067,564)	\$ (2,718,987)	\$ 1,651,423
Proceeds from borrowings	1,056,315	1,108,156	(51,841)
Dividends paid on common shares/Distributions to Vornado	(827,319)	(503,785)	(323,534)
Moynihan Train Hall reimbursement from Empire State Development	395,051	438,935	(43,884)
Proceeds from issuance of preferred shares/units	291,182	—	291,182
Contributions from noncontrolling interests in consolidated subsidiaries	100,094	17,871	82,223
Distributions to redeemable security holders and noncontrolling interests in consolidated subsidiaries	(91,514)	(80,194)	(11,320)
Dividends paid on preferred shares/Distributions to preferred unitholders	(64,271)	(50,131)	(14,140)
Debt issuance costs	(10,901)	(15,588)	4,687
Proceeds received from exercise of Vornado stock options and other	5,862	6,903	(1,041)
Repurchase of shares/Class A units related to stock compensation agreements and related tax withholdings and other	(137)	(8,692)	8,555
Purchase of marketable securities in connection with defeasance of mortgage payable	—	(407,126)	407,126
Prepayment penalty on redemption of senior unsecured notes due 2022	—	(22,058)	22,058
Redemption of preferred shares/units	—	(893)	893
Net cash used in financing activities	<u>\$ (213,202)</u>	<u>\$ (2,235,589)</u>	<u>\$ 2,022,387</u>

Liquidity and Capital Resources - continued

Capital Expenditures for the Year Ended December 31, 2020

Capital expenditures consist of expenditures to maintain assets, tenant improvement allowances and leasing commissions. Recurring capital expenditures include expenditures to maintain a property's competitive position within the market and tenant improvements and leasing commissions necessary to re-lease expiring leases or renew or extend existing leases. Non-recurring capital improvements include expenditures to lease space that has been vacant for more than nine months and expenditures completed in the year of acquisition and the following two years that were planned at the time of acquisition, as well as tenant improvements and leasing commissions for space that was vacant at the time of acquisition of a property.

Below is a summary of amounts paid for capital expenditures and leasing commissions for the year ended December 31, 2020.

(Amounts in thousands)	Total	New York	theMART	555 California Street
Expenditures to maintain assets	\$ 65,173	\$ 53,543	\$ 7,627	\$ 4,003
Tenant improvements	65,313	52,763	5,859	6,691
Leasing commissions	18,626	14,612	3,173	841
Recurring tenant improvements, leasing commissions and other capital expenditures	149,112	120,918	16,659	11,535
Non-recurring capital expenditures	64,624	64,414	210	—
Total capital expenditures and leasing commissions	<u>\$ 213,736</u>	<u>\$ 185,332</u>	<u>\$ 16,869</u>	<u>\$ 11,535</u>

Development and Redevelopment Expenditures for the Year Ended December 31, 2020

Development and redevelopment expenditures consist of all hard and soft costs associated with the development or redevelopment of a property, including capitalized interest, debt and operating costs until the property is substantially completed and ready for its intended use. Our development project estimates below include initial leasing costs, which are reflected as non-recurring capital expenditures in the table above.

Below is a summary of amounts paid for development and redevelopment expenditures in the year ended December 31, 2020. These expenditures include interest and debt expense of \$41,056,000, payroll of \$17,654,000, and other soft costs (primarily architectural and engineering fees, permits, real estate taxes and professional fees) aggregating \$129,097,000, which were capitalized in connection with the development and redevelopment of these projects.

(Amounts in thousands)	Total	New York	theMART	555 California Street	Other
Farley Office and Retail	\$ 239,427	\$ 239,427	\$ —	\$ —	\$ —
220 CPS	119,763	—	—	—	119,763
PENN1	105,392	105,392	—	—	—
PENN2	76,883	76,883	—	—	—
345 Montgomery Street	16,661	—	—	16,661	—
Other	43,794	39,746	4,011	—	37
	<u>601,920</u>	<u>461,448</u>	<u>4,011</u>	<u>16,661</u>	<u>119,800</u>

Capital Expenditures for the Year Ended December 31, 2019

Below is a summary of amounts paid for capital expenditures and leasing commissions for the year ended December 31, 2019.

(Amounts in thousands)	Total	New York	theMART	555 California Street
Expenditures to maintain assets	\$ 93,226	\$ 80,416	\$ 9,566	\$ 3,244
Tenant improvements	98,261	84,870	9,244	4,147
Leasing commissions	18,229	16,316	827	1,086
Recurring tenant improvements, leasing commissions and other capital expenditures	209,716	181,602	19,637	8,477
Non-recurring capital expenditures	30,374	28,269	332	1,773
Total capital expenditures and leasing commissions	<u>\$ 240,090</u>	<u>\$ 209,871</u>	<u>\$ 19,969</u>	<u>\$ 10,250</u>

Liquidity and Capital Resources - continued

Development and Redevelopment Expenditures for the Year Ended December 31, 2019

Below is a summary of amounts paid for development and redevelopment expenditures in the year ended December 31, 2019. These expenditures include interest and debt expense of \$72,200,000, payroll of \$16,014,000, and other soft costs (primarily architectural and engineering fees, permits, real estate taxes and professional fees) aggregating \$83,463,000, which were capitalized in connection with the development and redevelopment of these projects.

(Amounts in thousands)	Total	New York	theMART	555 California Street	Other
Farley Office and Retail	\$ 265,455	\$ 265,455	\$ —	\$ —	\$ —
220 CPS	181,177	—	—	—	181,177
PENN1	51,168	51,168	—	—	—
345 Montgomery Street	29,441	—	—	29,441	—
PENN2	28,719	28,719	—	—	—
606 Broadway	7,434	7,434	—	—	—
1535 Broadway	1,031	1,031	—	—	—
Other	84,631	78,128	2,322	3,896	285
	\$ 649,056	\$ 431,935	\$ 2,322	\$ 33,337	\$ 181,462

Funds From Operations

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 depreciable 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 it excludes 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. 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 19 – *(Loss) Income Per Share/(Loss) Income Per Class A Unit*, in our consolidated financial statements in Part II, Item 8 of this Annual Report on Form 10-K.

FFO - continued

Vornado Realty Trust - continued

FFO attributable to common shareholders plus assumed conversions was \$750,522,000, or \$3.93 per diluted share, for the year ended December 31, 2020, compared to \$1,003,398,000, or \$5.25 per diluted share, for the prior year. Details of certain items that impact FFO are discussed in the financial results summary of our "Overview."

(Amounts in thousands, except per share amounts)

	For the Year Ended December 31,	
	2020	2019
Reconciliation of our net (loss) income attributable to common shareholders to FFO attributable to common shareholders plus assumed conversions:		
Net (loss) income attributable to common shareholders	\$ (348,744)	\$ 3,097,806
Per diluted share	\$ (1.83)	\$ 16.21
FFO adjustments:		
Depreciation and amortization of real property	\$ 368,556	\$ 389,024
Real estate impairment losses	236,286	32,001
Net gain on transfer to Fifth Avenue and Times Square JV on April 18, 2019, net of \$11,945 attributable to noncontrolling interests	—	(2,559,154)
Net gains on sale of real estate	—	(178,711)
Net gain from sale of UE common shares (sold on March 4, 2019)	—	(62,395)
Decrease (increase) in fair value of marketable securities:		
PREIT (accounted for as a marketable security from March 12, 2019 and sold on January 23, 2020)	4,938	21,649
Lexington (sold on March 1, 2019)	—	(16,068)
Other	—	(48)
Proportionate share of adjustments to equity in net income of partially owned entities to arrive at FFO:		
Non-cash impairment loss on our investment in Fifth Avenue and Times Square JV, net of \$4,289 of noncontrolling interests	409,060	—
Depreciation and amortization of real property	156,646	134,706
Decrease in fair value of marketable securities	2,801	2,852
	1,178,287	(2,236,144)
Noncontrolling interests' share of above adjustments	(79,068)	141,679
FFO adjustments, net	\$ 1,099,219	\$ (2,094,465)
FFO attributable to common shareholders		
Convertible preferred share dividends	\$ 750,475	\$ 1,003,341
FFO attributable to common shareholders plus assumed conversions	\$ 750,522	\$ 1,003,398
Per diluted share	\$ 3.93	\$ 5.25
Reconciliation of weighted average shares outstanding:		
Weighted average common shares outstanding	191,146	190,801
Effect of dilutive securities:		
Convertible preferred shares	28	34
Employee stock options and restricted share awards	19	216
Denominator for FFO per diluted share	191,193	191,051

ITEM 7A. 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 unit amounts)

	2020			2019		
	December 31, Balance	Weighted Average Interest Rate	Effect of 1% Change In Base Rates	December 31, Balance	Weighted Average Interest Rate	
Consolidated debt:						
Variable rate	\$ 3,220,815	1.83%	\$ 32,208	\$ 1,643,500	3.09%	
Fixed rate	4,212,643	3.70%	—	5,801,516	3.57%	
	<u><u>\$ 7,433,458</u></u>	<u><u>2.89%</u></u>	<u><u>32,208</u></u>	<u><u>\$ 7,445,016</u></u>	<u><u>3.46%</u></u>	
Pro rata share of debt of non-consolidated entities⁽¹⁾:						
Variable rate	\$ 1,384,710	1.80%	13,847	\$ 1,441,690	3.34%	
Fixed rate	1,488,464	3.76%	—	1,361,169	3.93%	
	<u><u>\$ 2,873,174</u></u>	<u><u>2.81%</u></u>	<u><u>13,847</u></u>	<u><u>\$ 2,802,859</u></u>	<u><u>3.62%</u></u>	
Noncontrolling interests' share of consolidated subsidiaries			(371)			
Total change in annual net income attributable to the Operating Partnership			45,684			
Noncontrolling interests' share of the Operating Partnership			(3,070)			
Total change in annual net income attributable to Vornado			<u><u>\$ 42,614</u></u>			
Total change in annual net income attributable to the Operating Partnership per diluted Class A unit			<u><u>\$ 0.22</u></u>			
Total change in annual net income attributable to Vornado per diluted share			<u><u>\$ 0.22</u></u>			

(1) Our pro rata share of debt of non-consolidated entities as of December 31, 2020 and 2019 is net of \$16,200 and \$63,409, respectively, of our share of Alexander's participation in its Rego Park II shopping center mortgage loan which is considered partially extinguished as the participation interest is a reacquisition of debt.

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 derivative instruments, all of which hedge variable rate debt, as of December 31, 2020.

(Amounts in thousands)

Hedged Item	As of December 31, 2020					
	Variable Rate					
	Fair Value	Notional Amount	Spread over LIBOR	Interest Rate	Swapped Rate	Expiration Date
Interest rate caps (included in other assets):						
Various	<u><u>\$ 17</u></u>	<u><u>\$ 175,000</u></u>				
Interest rate swaps (included in other liabilities):						
Unsecured term loan	\$ 57,723	\$ 750,000	L+100	1.15%	3.87%	10/23
33-00 Northern Boulevard mortgage loan	8,310	100,000	L+180	1.95%	4.14%	1/25
	<u><u>\$ 66,033</u></u>	<u><u>\$ 850,000</u></u>				

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 December 31, 2020, the estimated fair value of our consolidated debt was \$7,463,000,000.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**INDEX TO FINANCIAL STATEMENTS**

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Vornado Realty Trust and subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for each of the three years in the period ended December 31, 2020, and the related notes and the schedule listed in the Index at Item 15 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with the accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 16, 2021, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. 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 US federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Impairment Losses — Refer to Notes 3, 7, 14, and 16 to the financial statements

Critical Audit Matter Description

The Company's wholly owned properties are individually reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is measured based on the excess of the property's carrying amount over its fair value. Fair value is determined based on estimated cash flow projections that utilize discount and capitalization rates and available market information. The Company's discounted cash flows requires management to make significant estimates and assumptions related to future market rental rates, capitalization rates, and discount rates. The Company recognized impairment losses on its wholly owned properties of \$236,286,000 for the year ended December 31, 2020 which are included in "Impairment losses and transaction related costs, net" within the consolidated statements of income.

The Company also reviews its investments in partially owned entities for impairment when indications of potential impairment exists. An impairment loss for investments in partially owned entities is recorded when there is a decline in the fair value below the carrying value that is other than temporary. Fair value is determined based on discounted cash flows which requires management to make significant estimates and assumptions related to future market rental rates, capitalization rates, and discount rates. The Company performed an impairment analysis on its investment in Fifth Avenue and Times Square JV and determined the decline in value is other than temporary and therefore recognized impairment losses on its investment in Fifth Avenue and Times Square JV of \$413,349,000 for the year ended December 31, 2020 which are included in "(Loss) income from partially owned entities" within the consolidated statements of income.

We identified the impairment of wholly owned properties and the investment in Fifth Avenue and Times Square JV as a critical audit matter because of the significant estimates and assumptions management makes to determine the fair value of wholly owned properties and investments in partially owned entities, specifically the estimates of market rental rates, capitalization rates, and discount rates used in the discounted cash flows. Performing audit procedures to evaluate the reasonableness of these estimates and assumptions required a high degree of auditor judgment and an increased extent of effort, including the need to involve our fair value specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the discounted cash flow analyses included, among other things, the following:

- We tested the effectiveness of controls over management's evaluation of impairment of its wholly owned assets and investments in partially owned entities and measurement of that impairment based on discounted cash flows, including those over the market rental rates, capitalization rates, and discount rates used in the assessment.
- With the assistance of our fair value specialists, we evaluated the reasonableness of significant assumptions in the discounted cash flows analyses, including identifying independent estimates of market rental rates, capitalization rates, and discount rates, focusing on geographical location and property. In addition, we tested the mathematical accuracy of the discounted cash flows analyses.
- We evaluated the reasonableness of management's discounted cash flows analyses by comparing management's projections to the Company's historical results and external market sources.
- We evaluated whether the assumptions were consistent with evidence obtained in other areas of the audit.

/s/ DELOITTE & TOUCHE LLP

New York, New York
February 16, 2021

We have served as the Company's auditor since 1976.

VORNADO REALTY TRUST
CONSOLIDATED BALANCE SHEETS

(Amounts in thousands, except unit, share and per share amounts)

	As of December 31,	
	2020	2019
ASSETS		
Real estate, at cost:		
Land	\$ 2,420,054	\$ 2,591,261
Buildings and improvements	7,933,030	7,953,163
Development costs and construction in progress	1,604,637	1,490,614
Moynihan Train Hall development expenditures	—	914,960
Leasehold improvements and equipment	130,222	124,014
Total	12,087,943	13,074,012
Less accumulated depreciation and amortization	(3,169,446)	(3,015,958)
Real estate, net	8,918,497	10,058,054
Right-of-use assets	367,365	379,546
Cash and cash equivalents	1,624,482	1,515,012
Restricted cash	105,887	92,119
Marketable securities	—	33,313
Tenant and other receivables	77,658	95,733
Investments in partially owned entities	3,491,107	3,999,165
Real estate fund investments	3,739	222,649
220 Central Park South condominium units ready for sale	128,215	408,918
Receivable arising from the straight-lining of rents	674,075	742,206
Deferred leasing costs, net of accumulated amortization of \$196,972 and \$196,229	372,919	353,986
Identified intangible assets, net of accumulated amortization of \$93,113 and \$98,587	23,856	30,965
Other assets	434,022	355,347
	<u>\$ 16,221,822</u>	<u>\$ 18,287,013</u>
LIABILITIES, REDEEMABLE NONCONTROLLING INTERESTS AND EQUITY		
Mortgages payable, net	\$ 5,580,549	\$ 5,639,897
Senior unsecured notes, net	446,685	445,872
Unsecured term loan, net	796,762	745,840
Unsecured revolving credit facilities	575,000	575,000
Lease liabilities	401,008	498,254
Moynihan Train Hall obligation	—	914,960
Special dividend/distribution payable	—	398,292
Accounts payable and accrued expenses	427,202	440,049
Deferred revenue	40,110	59,429
Deferred compensation plan	105,564	103,773
Other liabilities	294,520	265,754
Total liabilities	<u>8,667,400</u>	<u>10,087,120</u>
Commitments and contingencies		
Redeemable noncontrolling interests:		
Class A units - 13,583,607 and 13,298,956 units outstanding	507,212	884,380
Series D cumulative redeemable preferred units - 141,401 units outstanding	4,535	4,535
Total redeemable noncontrolling partnership units	<u>511,747</u>	<u>888,915</u>
Redeemable noncontrolling interest in a consolidated subsidiary	94,520	—
Total redeemable noncontrolling interests	<u>606,267</u>	<u>888,915</u>
Shareholders' equity:		
Preferred shares of beneficial interest: no par value per share; authorized 110,000,000 shares; issued and outstanding 48,793,402 and 36,795,640 shares	1,182,339	891,214
Common shares of beneficial interest: \$0.04 par value per share; authorized 250,000,000 shares; issued and outstanding 191,354,679 and 190,985,677 shares	7,633	7,618
Additional capital	8,192,507	7,827,697
Earnings less than distributions	(2,774,182)	(1,954,266)
Accumulated other comprehensive loss	(75,099)	(40,233)
Total shareholders' equity	6,533,198	6,732,030
Noncontrolling interests in consolidated subsidiaries	414,957	578,948
Total equity	<u>6,948,155</u>	<u>7,310,978</u>
	<u><u>\$ 16,221,822</u></u>	<u><u>\$ 18,287,013</u></u>

See notes to the consolidated financial statements.

VORNADO REALTY TRUST
CONSOLIDATED STATEMENTS OF INCOME

(Amounts in thousands, except per share amounts)

	For the Year Ended December 31,		
	2020	2019	2018
REVENUES:			
Rental revenues	\$ 1,377,635	\$ 1,767,222	\$ 2,007,333
Fee and other income	150,316	157,478	156,387
Total revenues	<u>1,527,951</u>	<u>1,924,700</u>	<u>2,163,720</u>
EXPENSES:			
Operating	(789,066)	(917,981)	(963,478)
Depreciation and amortization	(399,695)	(419,107)	(446,570)
General and administrative	(181,509)	(169,920)	(141,871)
(Expense) benefit from deferred compensation plan liability	(6,443)	(11,609)	2,480
Impairment losses and transaction related costs, net	(174,027)	(106,538)	(31,320)
Total expenses	<u>(1,550,740)</u>	<u>(1,625,155)</u>	<u>(1,580,759)</u>
(Loss) income from partially owned entities	(329,112)	78,865	9,149
Loss from real estate fund investments	(226,327)	(104,082)	(89,231)
Interest and other investment (loss) income, net	(5,499)	21,819	17,057
Income (loss) from deferred compensation plan assets	6,443	11,609	(2,480)
Interest and debt expense	(229,251)	(286,623)	(347,949)
Net gain on transfer to Fifth Avenue and Times Square JV	—	2,571,099	—
Purchase price fair value adjustment	—	—	44,060
Net gains on disposition of wholly owned and partially owned assets	381,320	845,499	246,031
(Loss) income before income taxes	(425,215)	3,437,731	459,598
Income tax expense	(36,630)	(103,439)	(37,633)
(Loss) income from continuing operations	(461,845)	3,334,292	421,965
(Loss) income from discontinued operations	—	(30)	638
Net (loss) income	<u>(461,845)</u>	<u>3,334,262</u>	<u>422,603</u>
Less net loss (income) attributable to noncontrolling interests in:			
Consolidated subsidiaries	139,894	24,547	53,023
Operating Partnership	24,946	(210,872)	(25,672)
Net (loss) income attributable to Vornado	(297,005)	3,147,937	449,954
Preferred share dividends	(51,739)	(50,131)	(50,636)
Preferred share issuance costs	—	—	(14,486)
NET (LOSS) INCOME attributable to common shareholders	<u>\$ (348,744)</u>	<u>\$ 3,097,806</u>	<u>\$ 384,832</u>
(LOSS) INCOME PER COMMON SHARE - BASIC:			
Net (loss) income per common share	\$ (1.83)	\$ 16.23	\$ 2.02
Weighted average shares outstanding	<u>191,146</u>	<u>190,801</u>	<u>190,219</u>
(LOSS) INCOME PER COMMON SHARE - DILUTED:			
Net (loss) income per common share	\$ (1.83)	\$ 16.21	\$ 2.01
Weighted average shares outstanding	<u>191,146</u>	<u>191,053</u>	<u>191,290</u>

See notes to consolidated financial statements.

VORNADO REALTY TRUST
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(Amounts in thousands)

	For the Year Ended December 31,		
	2020	2019	2018
Net (loss) income	\$ (461,845)	\$ 3,334,262	\$ 422,603
Other comprehensive (loss) income:			
Reduction in value of interest rate swaps and other	(29,971)	(47,883)	(14,635)
Other comprehensive (loss) income of nonconsolidated subsidiaries	(14,342)	(938)	1,155
Amounts reclassified from accumulated other comprehensive loss relating to nonconsolidated subsidiary	—	(2,311)	—
Comprehensive (loss) income	(506,158)	3,283,130	409,123
Less comprehensive loss (income) attributable to noncontrolling interests	174,287	(183,090)	28,187
Comprehensive (loss) income attributable to Vornado	<u><u>\$ (331,871)</u></u>	<u><u>\$ 3,100,040</u></u>	<u><u>\$ 437,310</u></u>

See notes to consolidated financial statements.

VORNADO REALTY TRUST
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(Amounts in thousands, except per share amount)

	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					
Balance as of December 31, 2019	36,796	\$ 891,214	190,986	\$ 7,618	\$ 7,827,697	\$ (1,954,266)	\$ (40,233)	\$ 578,948	\$ 7,310,978
Cumulative effect of accounting change (see Note 3)	—	—	—	—	—	(16,064)	—	—	(16,064)
Net loss attributable to Vornado	—	—	—	—	—	(297,005)	—	—	(297,005)
Net loss attributable to nonredeemable noncontrolling interests in consolidated subsidiaries	—	—	—	—	—	—	—	(140,438)	(140,438)
Dividends on common shares (\$2.38 per share)	—	—	—	—	—	(454,939)	—	—	(454,939)
Dividends on preferred shares (see Note 12 for dividends per share amounts)	—	—	—	—	—	(51,739)	—	—	(51,739)
Series N cumulative redeemable preferred shares issuance	12,000	291,182	—	—	—	—	—	—	291,182
Common shares issued:									
Upon redemption of Class A units, at redemption value	—	—	236	9	9,257	—	—	—	9,266
Under employees' share option plan	—	—	69	3	3,514	—	—	—	3,517
Under dividend reinvestment plan	—	—	47	2	2,343	—	—	—	2,345
Contributions:									
Real estate fund investments	—	—	—	—	—	—	—	3,389	3,389
Other	—	—	—	—	—	—	—	4,305	4,305
Distributions	—	—	—	—	—	—	—	(33,007)	(33,007)
Conversion of Series A preferred shares to common shares	(3)	(57)	4	—	57	—	—	—	—
Deferred compensation shares and options	—	—	13	1	1,305	(137)	—	—	1,169
Other comprehensive loss of nonconsolidated subsidiaries	—	—	—	—	—	—	(14,342)	—	(14,342)
Reduction in value of interest rate swaps	—	—	—	—	—	—	(29,972)	—	(29,972)
Unearned 2017 Out-Performance Plan awards acceleration	—	—	—	—	10,824	—	—	—	10,824
Redeemable Class A unit measurement adjustment	—	—	—	—	344,043	—	—	—	344,043
Redeemable noncontrolling interests' share of above adjustments	—	—	—	—	—	—	2,914	—	2,914
Other	—	—	—	—	(6,533)	(32)	6,534	1,760	1,729
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

See notes to consolidated financial statements.

VORNADO REALTY TRUST
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY - CONTINUED

(Amounts in thousands, except per share amounts)

	Preferred Shares		Common Shares		Additional Capital	Earnings Less Than Distributions	Accumulated Other Comprehensive Income (Loss)	Non-controlling Interests in Consolidated Subsidiaries	Total Equity
	Shares	Amount	Shares	Amount					
Balance as of December 31, 2018	36,800	\$ 891,294	190,535	\$ 7,600	\$ 7,725,857	\$ (4,167,184)	\$ 7,664	\$ 642,652	\$ 5,107,883
Net income attributable to Vornado	—	—	—	—	—	3,147,937	—	—	3,147,937
Net loss attributable to noncontrolling interests in consolidated subsidiaries	—	—	—	—	—	—	—	(24,547)	(24,547)
Dividends on common shares:									
Special dividend (\$1.95 per share)	—	—	—	—	—	(372,380)	—	—	(372,380)
Aggregate quarterly dividends (\$2.64 per common share)	—	—	—	—	—	(503,785)	—	—	(503,785)
Dividends on preferred shares	—	—	—	—	—	(50,131)	—	—	(50,131)
Common shares issued:									
Upon redemption of Class A units, at redemption value	—	—	171	7	11,243	—	—	—	11,250
Under employees' share option plan	—	—	245	10	5,479	(8,587)	—	—	(3,098)
Under dividend reinvestment plan	—	—	22	1	1,413	—	—	—	1,414
Contributions:									
Real estate fund investments	—	—	—	—	—	—	—	9,023	9,023
Other	—	—	—	—	—	—	—	8,848	8,848
Distributions	—	—	—	—	—	—	—	(45,587)	(45,587)
Conversion of Series A preferred shares to common shares	(2)	(80)	6	—	80	—	—	—	—
Deferred compensation shares and options	—	—	7	—	1,095	(105)	—	—	990
Amounts reclassified related to a nonconsolidated subsidiary	—	—	—	—	—	—	(2,311)	—	(2,311)
Other comprehensive loss of nonconsolidated subsidiaries	—	—	—	—	—	—	(938)	—	(938)
Reduction in value of interest rate swaps	—	—	—	—	—	—	(47,885)	—	(47,885)
Unearned 2016 Out-Performance Plan awards acceleration	—	—	—	—	11,720	—	—	—	11,720
Redeemable Class A unit measurement adjustment	—	—	—	—	70,810	—	—	—	70,810
Redeemable noncontrolling interests' share of above adjustments	—	—	—	—	—	—	3,235	—	3,235
Deconsolidation of partially owned entity	—	—	—	—	—	—	—	(11,441)	(11,441)
Other	(2)	—	—	—	—	(31)	2	—	(29)
Balance as of December 31, 2019	36,796	\$ 891,214	190,986	\$ 7,618	\$ 7,827,697	\$ (1,954,266)	\$ (40,233)	\$ 578,948	\$ 7,310,978

See notes to consolidated financial statements.

VORNADO REALTY TRUST
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY - CONTINUED

(Amounts in thousands, except per share amount)

	Preferred Shares Shares	Preferred Shares Amount	Common Shares Shares	Common Shares Amount	Additional Capital	Earnings Less Than Distributions	Accumulated Other Comprehensive Income	Non-controlling Interests in Consolidated Subsidiaries	Total Equity
Balance as of December 31, 2017	36,800	\$ 891,988	189,984	\$ 7,577	\$ 7,492,658	\$ (4,183,253)	\$ 128,682	\$ 670,049	\$ 5,007,701
Cumulative effect of accounting change	—	—	—	—	—	122,893	(108,374)	—	14,519
Net income attributable to Vornado	—	—	—	—	—	449,954	—	—	449,954
Net loss attributable to noncontrolling interests in consolidated subsidiaries	—	—	—	—	—	—	—	(53,023)	(53,023)
Dividends on common shares (\$2.52 per share)	—	—	—	—	—	(479,348)	—	—	(479,348)
Dividends on preferred shares	—	—	—	—	—	(50,636)	—	—	(50,636)
Series G and Series I cumulative redeemable preferred shares issuance costs	—	(663)	—	—	—	(14,486)	—	—	(15,149)
Common shares issued:									
Upon redemption of Class A units, at redemption value	—	—	244	10	17,058	—	—	—	17,068
Under employees' share option plan	—	—	279	12	5,907	(12,185)	—	—	(6,266)
Under dividend reinvestment plan	—	—	20	1	1,389	—	—	—	1,390
Contributions:									
Real estate fund investments	—	—	—	—	—	—	—	46,942	46,942
Other	—	—	—	—	—	—	—	15,715	15,715
Distributions:									
Real estate fund investments	—	—	—	—	—	—	—	(12,665)	(12,665)
Other	—	—	—	—	—	—	—	(33,250)	(33,250)
Conversion of Series A preferred shares to common shares	—	(31)	2	—	30	—	—	—	(1)
Deferred compensation shares and options	—	—	6	—	1,157	(121)	—	—	1,036
Unearned 2015 Out-Performance Plan awards acceleration	—	—	—	—	9,046	—	—	—	9,046
Other comprehensive income of nonconsolidated subsidiaries	—	—	—	—	—	—	1,155	—	1,155
Reduction in value of interest rate swaps	—	—	—	—	—	—	(14,634)	—	(14,634)
Redeemable Class A unit measurement adjustment	—	—	—	—	198,064	—	—	—	198,064
Redeemable noncontrolling interests' share of above adjustments	—	—	—	—	—	—	836	—	836
Consolidation of the Farley joint venture	—	—	—	—	—	—	—	8,720	8,720
Other	—	—	—	—	548	(2)	(1)	164	709
Balance as of December 31, 2018	36,800	\$ 891,294	190,535	\$ 7,600	\$ 7,725,857	\$ (4,167,184)	\$ 7,664	\$ 642,652	\$ 5,107,883

See notes to consolidated financial statements.

VORNADO REALTY TRUST
CONSOLIDATED STATEMENTS OF CASH FLOWS

(Amounts in thousands)

	For the Year Ended December 31,		
	2020	2019	2018
Cash Flows from Operating Activities:			
Net (loss) income	\$ (461,845)	\$ 3,334,262	\$ 422,603
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Depreciation and amortization (including amortization of deferred financing costs)	417,942	438,933	472,785
Net gains on disposition of wholly owned and partially owned assets	(381,320)	(845,499)	(246,031)
Equity in net loss (income) of partially owned entities	329,112	(78,865)	(9,149)
Real estate impairment losses and related write-offs	236,286	26,705	12,000
Net unrealized loss on real estate fund investments	226,107	106,109	84,706
Distributions of income from partially owned entities	175,246	116,826	78,831
Non-cash (gain on extinguishment of 608 Fifth Avenue lease liability) impairment loss on 608 Fifth Avenue right-of-use asset	(70,260)	75,220	—
Write-off of lease receivables deemed uncollectible	63,204	17,237	—
Stock-based compensation expense	48,677	53,908	31,722
Straight-lining of rents	24,404	9,679	(7,605)
Amortization of below-market leases, net	(16,878)	(19,830)	(38,573)
Credit losses on loans receivable	13,369	—	—
Decrease in fair value of marketable securities	4,938	5,533	26,453
Net gain on transfer to Fifth Avenue and Times Square JV	—	(2,571,099)	—
Prepayment penalty on redemption of senior unsecured notes due 2022	—	22,058	—
Purchase price fair value adjustment	—	—	(44,060)
Return of capital from real estate fund investments	—	—	20,290
Change in valuation of deferred tax assets and liabilities	—	—	12,835
Other non-cash adjustments	6,739	(3,472)	7,499
Changes in operating assets and liabilities:			
Real estate fund investments	(7,197)	(10,000)	(68,950)
Tenant and other receivables, net	(5,330)	(25,988)	(14,532)
Prepaid assets	(137,452)	7,558	151,533
Other assets	(52,832)	(4,302)	(84,222)
Accounts payable and accrued expenses	14,868	5,940	5,869
Other liabilities	(3,538)	1,626	(11,363)
Net cash provided by operating activities	424,240	662,539	802,641
Cash Flows from Investing Activities:			
Proceeds from sale of condominium units at 220 Central Park South	1,044,260	1,605,356	214,776
Development costs and construction in progress	(601,920)	(649,056)	(418,186)
Moynihan Train Hall expenditures	(395,051)	(438,935)	(74,609)
Additions to real estate	(155,738)	(233,666)	(234,602)
Proceeds from sales of marketable securities	28,375	168,314	4,101
Investments in partially owned entities	(8,959)	(18,257)	(37,131)
Distributions of capital from partially owned entities	2,389	24,880	100,178
Acquisitions of real estate and other	(1,156)	(69,699)	(574,812)
Proceeds from transfer of interest in Fifth Avenue and Times Square JV (net of \$35,562 of transaction costs and \$10,899 of deconsolidated cash and restricted cash)	—	1,248,743	—
Proceeds from redemption of 640 Fifth Avenue preferred equity	—	500,000	—
Proceeds from sale of real estate and related investments	—	324,201	219,731
Proceeds from repayments of loans receivable	—	1,395	25,757
Investments in loans receivable	—	—	(105,000)
Net consolidation of Farley Office and Retail Building	—	—	2,075
Net cash (used in) provided by investing activities	(87,800)	2,463,276	(877,722)

See notes to consolidated financial statements.

VORNADO REALTY TRUST
CONSOLIDATED STATEMENTS OF CASH FLOWS – CONTINUED

(Amounts in thousands)

	For the Year Ended December 31,		
	2020	2019	2018
Cash Flows from Financing Activities:			
Repayments of borrowings	\$ (1,067,564)	\$ (2,718,987)	\$ (685,265)
Proceeds from borrowings	1,056,315	1,108,156	526,766
Dividends paid on common shares	(827,319)	(503,785)	(479,348)
Moynihan Train Hall reimbursement from Empire State Development	395,051	438,935	74,609
Proceeds from issuance of preferred shares	291,182	—	—
Contributions from noncontrolling interests	100,094	17,871	61,062
Distributions to noncontrolling interests	(91,514)	(80,194)	(76,149)
Dividends paid on preferred shares	(64,271)	(50,131)	(55,115)
Debt issuance costs	(10,901)	(15,588)	(12,908)
Proceeds received from exercise of employee share options and other	5,862	6,903	7,309
Repurchase of shares related to stock compensation agreements and related tax withholdings and other	(137)	(8,692)	(12,969)
Purchase of marketable securities in connection with defeasance of mortgage payable	—	(407,126)	—
Prepayment penalty on redemption of senior unsecured notes due 2022	—	(22,058)	—
Redemption of preferred shares	—	(893)	(470,000)
Debt prepayment and extinguishment costs	—	—	(818)
Net cash used in financing activities	<u>(213,202)</u>	<u>(2,235,589)</u>	<u>(1,122,826)</u>
Net increase (decrease) in cash and cash equivalents and restricted cash	123,238	890,226	(1,197,907)
Cash and cash equivalents and restricted cash at beginning of period	1,607,131	716,905	1,914,812
Cash and cash equivalents and restricted cash at end of period	<u>\$ 1,730,369</u>	<u>\$ 1,607,131</u>	<u>\$ 716,905</u>
Reconciliation of Cash and Cash Equivalents and Restricted Cash:			
Cash and cash equivalents at beginning of period	\$ 1,515,012	\$ 570,916	\$ 1,817,655
Restricted cash at beginning of period	92,119	145,989	97,157
Cash and cash equivalents and restricted cash at beginning of period	<u>\$ 1,607,131</u>	<u>\$ 716,905</u>	<u>\$ 1,914,812</u>
Cash and cash equivalents at end of period	\$ 1,624,482	\$ 1,515,012	\$ 570,916
Restricted cash at end of period	105,887	92,119	145,989
Cash and cash equivalents and restricted cash at end of period	<u>\$ 1,730,369</u>	<u>\$ 1,607,131</u>	<u>\$ 716,905</u>

See notes to consolidated financial statements.

VORNADO REALTY TRUST
CONSOLIDATED STATEMENTS OF CASH FLOWS – CONTINUED

(Amounts in thousands)

	For the Year Ended December 31,		
	2020	2019	2018
Supplemental Disclosure of Cash Flow Information:			
Cash payments for interest, excluding capitalized interest of \$40,855, \$67,980 and \$67,402	\$ 210,052	\$ 283,613	\$ 311,835
Cash payments for income taxes	<u>\$ 15,105</u>	<u>\$ 59,834</u>	<u>\$ 62,225</u>
Non-Cash Investing and Financing Activities:			
Decrease in assets and liabilities resulting from the deconsolidation of Moynihan Train Hall:			
Real estate, net	\$ (1,291,804)	\$ —	\$ —
Moynihan Train Hall obligation	(1,291,804)	—	—
Reclassification of condominium units from "development costs and construction in progress" to "220 Central Park South condominium units ready for sale"	388,280	1,311,468	233,179
Redeemable Class A unit measurement adjustment	344,043	70,810	198,064
Write-off of fully depreciated assets	(189,250)	(122,813)	(86,064)
Accrued capital expenditures included in accounts payable and accrued expenses	117,641	109,975	88,115
Investments received in exchange for transfer to Fifth Avenue and Times Square JV:			
Preferred equity	—	2,327,750	—
Common equity	—	1,449,495	—
Lease liabilities arising from the recognition of right-of-use assets	—	526,866	—
Marketable securities transferred in connection with the defeasance of mortgage payable	—	(407,126)	—
Special dividend/distribution declared and payable on January 15, 2020	—	398,292	—
Defeasance of mortgage payable	—	390,000	—
Recognition of negative basis related to the sale of our investment in 330 Madison Avenue	—	60,052	—
Amounts related to our investment in Pennsylvania Real Estate Investment Trust reclassified from "investments in partially owned entities" and "accumulated other comprehensive loss" to "marketable securities" upon conversion of operating partnership units to common shares	—	54,962	—
Increase in assets and liabilities resulting from the consolidation of Farley Office and Retail Building:			
Real estate, net	—	—	401,708
Mortgage payable, net	—	—	249,459
Increase in assets and liabilities resulting from the consolidation of Moynihan Train Hall:			
Real estate, net	—	—	346,926
Moynihan Train Hall obligation	—	—	346,926

See notes to consolidated financial statements.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Vornado Realty L.P. and subsidiaries (the "Partnership") as of December 31, 2020 and 2019, the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for each of the three years in the period ended December 31, 2020, and the related notes and the schedule listed in the Index at Item 15 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Partnership as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with the accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Partnership's internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 16, 2021, expressed an unqualified opinion on the Partnership's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Partnership's management. Our responsibility is to express an opinion on the Partnership's financial statements based on our audits. 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 US federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Impairment Losses — Refer to Notes 3, 7, 14, and 16 to the financial statements

Critical Audit Matter Description

The Partnership's wholly owned properties are individually reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is measured based on the excess of the property's carrying amount over its fair value. Fair value is determined based on estimated cash flow projections that utilize discount and capitalization rates and available market information. The Partnership's discounted cash flows requires management to make significant estimates and assumptions related to future market rental rates, capitalization rates, and discount rates. The Partnership recognized impairment losses on its wholly owned properties of \$236,286,000 for the year ended December 31, 2020 which are included in "Impairment losses and transaction related costs, net" within the consolidated statements of income.

The Partnership also reviews its investments in partially owned entities for impairment when indications of potential impairment exists. An impairment loss for investments in partially owned entities is recorded when there is a decline in the fair value below the carrying value that is other than temporary. Fair value is determined based on discounted cash flows which requires management to make significant estimates and assumptions related to future market rental rates, capitalization rates, and discount rates. The Partnership performed an impairment analysis on its investment in Fifth Avenue and Times Square JV and determined the decline in value is other than temporary and therefore recognized impairment losses on its investment in Fifth Avenue and Times Square JV of \$413,349,000 for the year ended December 31, 2020 which are included in "(Loss) income from partially owned entities" within the consolidated statements of income.

We identified the impairment of wholly owned properties and the investment in Fifth Avenue and Times Square JV as a critical audit matter because of the significant estimates and assumptions management makes to determine the fair value of wholly owned properties and investments in partially owned entities, specifically the estimates of market rental rates, capitalization rates, and discount rates used in the discounted cash flows. Performing audit procedures to evaluate the reasonableness of these estimates and assumptions required a high degree of auditor judgment and an increased extent of effort, including the need to involve our fair value specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the discounted cash flow analyses included, among other things, the following:

- We tested the effectiveness of controls over management's evaluation of impairment of its wholly owned assets and investments in partially owned entities and measurement of that impairment based on discounted cash flows, including those over the market rental rates, capitalization rates, and discount rates used in the assessment.
- With the assistance of our fair value specialists, we evaluated the reasonableness of significant assumptions in the discounted cash flows analyses, including identifying independent estimates of market rental rates, capitalization rates, and discount rates, focusing on geographical location and property. In addition, we tested the mathematical accuracy of the discounted cash flows analyses.
- We evaluated the reasonableness of management's discounted cash flows analyses by comparing management's projections to the Partnership's historical results and external market sources.
- We evaluated whether the assumptions were consistent with evidence obtained in other areas of the audit.

/s/ DELOITTE & TOUCHE LLP

New York, New York
February 16, 2021

We have served as the Partnership's auditor since 1997.

VORNADO REALTY L.P.
CONSOLIDATED BALANCE SHEETS

(Amounts in thousands, except unit amounts)

	As of December 31,	
	2020	2019
ASSETS		
Real estate, at cost:		
Land	\$ 2,420,054	\$ 2,591,261
Buildings and improvements	7,933,030	7,953,163
Development costs and construction in progress	1,604,637	1,490,614
Moynihan Train Hall development expenditures	—	914,960
Leasehold improvements and equipment	130,222	124,014
Total	12,087,943	13,074,012
Less accumulated depreciation and amortization	(3,169,446)	(3,015,958)
Real estate, net	8,918,497	10,058,054
Right-of-use assets	367,365	379,546
Cash and cash equivalents	1,624,482	1,515,012
Restricted cash	105,887	92,119
Marketable securities	—	33,313
Tenant and other receivables	77,658	95,733
Investments in partially owned entities	3,491,107	3,999,165
Real estate fund investments	3,739	222,649
220 Central Park South condominium units ready for sale	128,215	408,918
Receivable arising from the straight-lining of rents	674,075	742,206
Deferred leasing costs, net of accumulated amortization of \$196,972 and \$196,229	372,919	353,986
Identified intangible assets, net of accumulated amortization of \$93,113 and \$98,587	23,856	30,965
Other assets	434,022	355,347
	<u>\$ 16,221,822</u>	<u>\$ 18,287,013</u>
LIABILITIES, REDEEMABLE NONCONTROLLING INTERESTS AND EQUITY		
Mortgages payable, net	\$ 5,580,549	\$ 5,639,897
Senior unsecured notes, net	446,685	445,872
Unsecured term loan, net	796,762	745,840
Unsecured revolving credit facilities	575,000	575,000
Lease liabilities	401,008	498,254
Moynihan Train Hall obligation	—	914,960
Special distribution payable	—	398,292
Accounts payable and accrued expenses	427,202	440,049
Deferred revenue	40,110	59,429
Deferred compensation plan	105,564	103,773
Other liabilities	294,520	265,754
Total liabilities	<u>8,667,400</u>	<u>10,087,120</u>
Commitments and contingencies		
Redeemable noncontrolling interests:		
Class A units - 13,583,607 and 13,298,956 units outstanding	507,212	884,380
Series D cumulative redeemable preferred units - 141,401 units outstanding	4,535	4,535
Total redeemable noncontrolling partnership units	<u>511,747</u>	<u>888,915</u>
Redeemable noncontrolling interest in a consolidated subsidiary	94,520	—
Total redeemable noncontrolling interests	<u>606,267</u>	<u>888,915</u>
Partners' equity:		
Partners' capital	9,382,479	8,726,529
Earnings less than distributions	(2,774,182)	(1,954,266)
Accumulated other comprehensive loss	(75,099)	(40,233)
Total partners' equity	<u>6,533,198</u>	<u>6,732,030</u>
Noncontrolling interests in consolidated subsidiaries	414,957	578,948
Total equity	<u>6,948,155</u>	<u>7,310,978</u>
	<u>\$ 16,221,822</u>	<u>\$ 18,287,013</u>

See notes to the consolidated financial statements.

VORNADO REALTY L.P.
CONSOLIDATED STATEMENTS OF INCOME

(Amounts in thousands, except per unit amounts)

	For the Year Ended December 31,		
	2020	2019	2018
REVENUES:			
Rental revenues	\$ 1,377,635	\$ 1,767,222	\$ 2,007,333
Fee and other income	150,316	157,478	156,387
Total revenues	<u>1,527,951</u>	<u>1,924,700</u>	<u>2,163,720</u>
EXPENSES:			
Operating	(789,066)	(917,981)	(963,478)
Depreciation and amortization	(399,695)	(419,107)	(446,570)
General and administrative	(181,509)	(169,920)	(141,871)
(Expense) benefit from deferred compensation plan liability	(6,443)	(11,609)	2,480
Impairment losses and transaction related costs, net	(174,027)	(106,538)	(31,320)
Total expenses	<u>(1,550,740)</u>	<u>(1,625,155)</u>	<u>(1,580,759)</u>
(Loss) income from partially owned entities	(329,112)	78,865	9,149
Loss from real estate fund investments	(226,327)	(104,082)	(89,231)
Interest and other investment (loss) income, net	(5,499)	21,819	17,057
Income (loss) from deferred compensation plan assets	6,443	11,609	(2,480)
Interest and debt expense	(229,251)	(286,623)	(347,949)
Net gain on transfer to Fifth Avenue and Times Square JV	—	2,571,099	—
Purchase price fair value adjustment	—	—	44,060
Net gains on disposition of wholly owned and partially owned assets	<u>381,320</u>	<u>845,499</u>	<u>246,031</u>
(Loss) income before income taxes	<u>(425,215)</u>	<u>3,437,731</u>	<u>459,598</u>
Income tax expense	(36,630)	(103,439)	(37,633)
(Loss) income from continuing operations	<u>(461,845)</u>	<u>3,334,292</u>	<u>421,965</u>
(Loss) income from discontinued operations	—	(30)	638
Net (loss) income	<u>(461,845)</u>	<u>3,334,262</u>	<u>422,603</u>
Less net loss attributable to noncontrolling interests in consolidated subsidiaries	139,894	24,547	53,023
Net (loss) income attributable to Vornado Realty L.P.	<u>(321,951)</u>	<u>3,358,809</u>	<u>475,626</u>
Preferred unit distributions	(51,904)	(50,296)	(50,830)
Preferred unit issuance costs	—	—	(14,486)
NET (LOSS) INCOME attributable to Class A unitholders	<u>\$ (373,855)</u>	<u>\$ 3,308,513</u>	<u>\$ 410,310</u>
(LOSS) INCOME PER CLASS A UNIT - BASIC:			
(Loss) income from continuing operations, net	\$ (1.86)	\$ 16.22	\$ 2.01
Income from discontinued operations, net	—	—	0.01
Net (loss) income per Class A unit	<u>\$ (1.86)</u>	<u>\$ 16.22</u>	<u>\$ 2.02</u>
Weighted average units outstanding	<u>203,503</u>	<u>202,947</u>	<u>202,068</u>
(LOSS) INCOME PER CLASS A UNIT - DILUTED:			
Net (loss) income per Class A unit	\$ (1.86)	\$ 16.19	\$ 2.00
Weighted average units outstanding	<u>203,503</u>	<u>203,248</u>	<u>203,412</u>

See notes to consolidated financial statements.

VORNADO REALTY L.P.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(Amounts in thousands)

	For the Year Ended December 31,		
	2020	2019	2018
Net (loss) income	\$ (461,845)	\$ 3,334,262	\$ 422,603
Other comprehensive (loss) income:			
Reduction in value of interest rate swaps and other	(29,971)	(47,883)	(14,635)
Other comprehensive (loss) income of nonconsolidated subsidiaries	(14,342)	(938)	1,155
Amounts reclassified from accumulated other comprehensive loss relating to nonconsolidated subsidiary	—	(2,311)	—
Comprehensive (loss) income	(506,158)	3,283,130	409,123
Less comprehensive loss attributable to noncontrolling interests in consolidated subsidiaries	139,894	24,547	53,023
Comprehensive (loss) income attributable to Vornado Realty L.P.	<u>\$ (366,264)</u>	<u>\$ 3,307,677</u>	<u>\$ 462,146</u>

See notes to consolidated financial statements.

VORNADO REALTY L.P.
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(Amounts in thousands, except per unit amount)

	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				
Balance as of December 31, 2019	36,796	\$ 891,214	190,986	\$ 7,835,315	\$ (1,954,266)	\$ (40,233)	\$ 578,948	\$ 7,310,978
Cumulative effect of accounting change (see Note 3)	—	—	—	—	(16,064)	—	—	(16,064)
Net loss attributable to Vornado Realty L.P.	—	—	—	—	(321,951)	—	—	(321,951)
Net loss attributable to redeemable partnership units	—	—	—	—	24,946	—	—	24,946
Net loss attributable to nonredeemable noncontrolling interests in consolidated subsidiaries	—	—	—	—	—	—	(140,438)	(140,438)
Distributions to Vornado (\$2.38 per unit)	—	—	—	—	(454,939)	—	—	(454,939)
Distributions to preferred unitholders (see Note 12 for distributions per unit amounts)	—	—	—	—	(51,739)	—	—	(51,739)
Series N cumulative redeemable preferred units issuance	12,000	291,182	—	—	—	—	—	291,182
Class A Units issued to Vornado:								
Upon redemption of redeemable Class A units, at redemption value	—	—	236	9,266	—	—	—	9,266
Under Vornado's employees' share option plan	—	—	69	3,517	—	—	—	3,517
Under Vornado's dividend reinvestment plan	—	—	47	2,345	—	—	—	2,345
Contributions:								
Real estate fund investments	—	—	—	—	—	—	3,389	3,389
Other	—	—	—	—	—	—	4,305	4,305
Distributions	—	—	—	—	—	—	(33,007)	(33,007)
Conversion of Series A preferred units to Class A units	(3)	(57)	4	57	—	—	—	—
Deferred compensation units and options	—	—	13	1,306	(137)	—	—	1,169
Other comprehensive loss of nonconsolidated subsidiaries	—	—	—	—	—	(14,342)	—	(14,342)
Reduction in value of interest rate swaps	—	—	—	—	—	(29,972)	—	(29,972)
Unearned 2017 Out-Performance Plan awards acceleration	—	—	—	10,824	—	—	—	10,824
Redeemable Class A unit measurement adjustment	—	—	—	344,043	—	—	—	344,043
Redeemable partnership units' share of above adjustments	—	—	—	—	—	2,914	—	2,914
Other	—	—	—	(6,533)	(32)	6,534	1,760	1,729
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

See notes to consolidated financial statements.

VORNADO REALTY L.P.
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY – CONTINUED

(Amounts in thousands, except per unit amounts)

	Preferred Units		Class A Units Owned by Vornado		Earnings Less Than Distributions	Accumulated Other Comprehensive Income (Loss)	Non- controlling Interests in Consolidated Subsidiaries	Total Equity
	Units	Amount	Units	Amount				
Balance as of December 31, 2018	36,800	\$ 891,294	190,535	\$ 7,733,457	\$ (4,167,184)	\$ 7,664	\$ 642,652	\$ 5,107,883
Net income attributable to Vornado Realty L.P.	—	—	—	—	3,358,809	—	—	3,358,809
Net income attributable to redeemable partnership units	—	—	—	—	(210,872)	—	—	(210,872)
Net loss attributable to noncontrolling interests in consolidated subsidiaries	—	—	—	—	—	—	(24,547)	(24,547)
Distributions to Vornado:								
Special distribution (\$1.95 per Class A unit)	—	—	—	—	(372,380)	—	—	(372,380)
Aggregate quarterly distributions to Vornado (\$2.64 per Class A unit)	—	—	—	—	(503,785)	—	—	(503,785)
Distributions to preferred unitholders	—	—	—	—	(50,131)	—	—	(50,131)
Class A Units issued to Vornado:								
Upon redemption of redeemable Class A units, at redemption value	—	—	171	11,250	—	—	—	11,250
Under Vornado's employees' share option plan	—	—	245	5,489	(8,587)	—	—	(3,098)
Under Vornado's dividend reinvestment plan	—	—	22	1,414	—	—	—	1,414
Contributions:								
Real estate fund investments	—	—	—	—	—	—	9,023	9,023
Other	—	—	—	—	—	—	8,848	8,848
Distributions	—	—	—	—	—	—	(45,587)	(45,587)
Conversion of Series A preferred units to Class A units	(2)	(80)	6	80	—	—	—	—
Deferred compensation units and options	—	—	7	1,095	(105)	—	—	990
Amounts reclassified related to a nonconsolidated subsidiary	—	—	—	—	—	(2,311)	—	(2,311)
Other comprehensive loss of nonconsolidated subsidiaries	—	—	—	—	—	(938)	—	(938)
Reduction in value of interest rate swaps	—	—	—	—	—	(47,885)	—	(47,885)
Unearned 2016 Out-Performance Plan awards acceleration	—	—	—	11,720	—	—	—	11,720
Redeemable Class A unit measurement adjustment	—	—	—	70,810	—	—	—	70,810
Redeemable partnership units' share of above adjustments	—	—	—	—	—	3,235	—	3,235
Deconsolidation of partially owned entity	—	—	—	—	—	—	(11,441)	(11,441)
Other	(2)	—	—	—	(31)	2	—	(29)
Balance as of December 31, 2019	36,796	\$ 891,214	190,986	\$ 7,835,315	\$ (1,954,266)	\$ (40,233)	\$ 578,948	\$ 7,310,978

See notes to consolidated financial statements.

VORNADO REALTY L.P.
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY – CONTINUED

(Amounts in thousands, except per unit amount)

	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				
Balance as of December 31, 2017	36,800	\$ 891,988	189,984	\$ 7,500,235	\$ (4,183,253)	\$ 128,682	\$ 670,049	\$ 5,007,701
Cumulative effect of accounting change	—	—	—	—	122,893	(108,374)	—	14,519
Net income attributable to Vornado Realty L.P.	—	—	—	—	475,626	—	—	475,626
Net income attributable to redeemable partnership units	—	—	—	—	(25,672)	—	—	(25,672)
Net loss attributable to noncontrolling interests in consolidated subsidiaries	—	—	—	—	—	—	(53,023)	(53,023)
Distributions to Vornado (\$2.52 per Class A unit)	—	—	—	—	(479,348)	—	—	(479,348)
Distributions to preferred unitholders	—	—	—	—	(50,636)	—	—	(50,636)
Series G and Series I cumulative redeemable preferred units issuance costs	—	(663)	—	—	(14,486)	—	—	(15,149)
Class A Units issued to Vornado:								
Upon redemption of redeemable Class A units, at redemption value	—	—	244	17,068	—	—	—	17,068
Under Vornado's employees' share option plan	—	—	279	5,919	(12,185)	—	—	(6,266)
Under Vornado's dividend reinvestment plan	—	—	20	1,390	—	—	—	1,390
Contributions:								
Real estate fund investments	—	—	—	—	—	—	46,942	46,942
Other	—	—	—	—	—	—	15,715	15,715
Distributions:								
Real estate fund investments	—	—	—	—	—	—	(12,665)	(12,665)
Other	—	—	—	—	—	—	(33,250)	(33,250)
Conversion of Series A preferred units to Class A units	—	(31)	2	30	—	—	—	(1)
Deferred compensation units and options	—	—	6	1,157	(121)	—	—	1,036
Other comprehensive income of nonconsolidated subsidiaries	—	—	—	—	—	1,155	—	1,155
Reduction in value of interest rate swaps	—	—	—	—	—	(14,634)	—	(14,634)
Unearned 2015 Out-Performance Plan awards acceleration	—	—	—	9,046	—	—	—	9,046
Redeemable Class A unit measurement adjustment	—	—	—	198,064	—	—	—	198,064
Redeemable partnership units' share of above adjustments	—	—	—	—	—	836	—	836
Consolidation of the Farley joint venture	—	—	—	—	—	—	8,720	8,720
Other	—	—	—	548	(2)	(1)	164	709
Balance as of December 31, 2018	36,800	\$ 891,294	190,535	\$ 7,733,457	\$ (4,167,184)	\$ 7,664	\$ 642,652	\$ 5,107,883

See notes to consolidated financial statements.

VORNADO REALTY L.P.
CONSOLIDATED STATEMENTS OF CASH FLOWS

(Amounts in thousands)

	For the Year Ended December 31,		
	2020	2019	2018
Cash Flows from Operating Activities:			
Net (loss) income	\$ (461,845)	\$ 3,334,262	\$ 422,603
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Depreciation and amortization (including amortization of deferred financing costs)	417,942	438,933	472,785
Net gains on disposition of wholly owned and partially owned assets	(381,320)	(845,499)	(246,031)
Equity in net loss (income) of partially owned entities	329,112	(78,865)	(9,149)
Real estate impairment losses and related write-offs	236,286	26,705	12,000
Net unrealized loss on real estate fund investments	226,107	106,109	84,706
Distributions of income from partially owned entities	175,246	116,826	78,831
Non-cash (gain on extinguishment of 608 Fifth Avenue lease liability) impairment loss on 608 Fifth Avenue right-of-use asset	(70,260)	75,220	—
Write-off of lease receivables deemed uncollectible	63,204	17,237	—
Stock-based compensation expense	48,677	53,908	31,722
Straight-lining of rents	24,404	9,679	(7,605)
Amortization of below-market leases, net	(16,878)	(19,830)	(38,573)
Credit losses on loans receivable	13,369	—	—
Decrease in fair value of marketable securities	4,938	5,533	26,453
Net gain on transfer to Fifth Avenue and Times Square JV	—	(2,571,099)	—
Prepayment penalty on redemption of senior unsecured notes due 2022	—	22,058	—
Purchase price fair value adjustment	—	—	(44,060)
Return of capital from real estate fund investments	—	—	20,290
Change in valuation of deferred tax assets and liabilities	—	—	12,835
Other non-cash adjustments	6,739	(3,472)	7,499
Changes in operating assets and liabilities:			
Real estate fund investments	(7,197)	(10,000)	(68,950)
Tenant and other receivables, net	(5,330)	(25,988)	(14,532)
Prepaid assets	(137,452)	7,558	151,533
Other assets	(52,832)	(4,302)	(84,222)
Accounts payable and accrued expenses	14,868	5,940	5,869
Other liabilities	(3,538)	1,626	(11,363)
Net cash provided by operating activities	424,240	662,539	802,641
Cash Flows from Investing Activities:			
Proceeds from sale of condominium units at 220 Central Park South	1,044,260	1,605,356	214,776
Development costs and construction in progress	(601,920)	(649,056)	(418,186)
Moynihan Train Hall expenditures	(395,051)	(438,935)	(74,609)
Additions to real estate	(155,738)	(233,666)	(234,602)
Proceeds from sales of marketable securities	28,375	168,314	4,101
Investments in partially owned entities	(8,959)	(18,257)	(37,131)
Distributions of capital from partially owned entities	2,389	24,880	100,178
Acquisitions of real estate and other	(1,156)	(69,699)	(574,812)
Proceeds from transfer of interest in Fifth Avenue and Times Square JV (net of \$35,562 of transaction costs and \$10,899 of deconsolidated cash and restricted cash)	—	1,248,743	—
Proceeds from redemption of 640 Fifth Avenue preferred equity	—	500,000	—
Proceeds from sale of real estate and related investments	—	324,201	219,731
Proceeds from repayments of loans receivable	—	1,395	25,757
Investments in loans receivable	—	—	(105,000)
Net consolidation of Farley Office and Retail Building	—	—	2,075
Net cash (used in) provided by investing activities	(87,800)	2,463,276	(877,722)

See notes to consolidated financial statements.

VORNADO REALTY L.P.
CONSOLIDATED STATEMENTS OF CASH FLOWS – CONTINUED

(Amounts in thousands)

	For the Year Ended December 31,		
	2020	2019	2018
Cash Flows from Financing Activities:			
Repayments of borrowings	\$ (1,067,564)	\$ (2,718,987)	\$ (685,265)
Proceeds from borrowings	1,056,315	1,108,156	526,766
Distributions to Vornado	(827,319)	(503,785)	(479,348)
Moynihan Train Hall reimbursement from Empire State Development	395,051	438,935	74,609
Proceeds from issuance of preferred units	291,182	—	—
Contributions from noncontrolling interests in consolidated subsidiaries	100,094	17,871	61,062
Distributions to redeemable security holders and noncontrolling interests in consolidated subsidiaries	(91,514)	(80,194)	(76,149)
Distributions to preferred unitholders	(64,271)	(50,131)	(55,115)
Debt issuance costs	(10,901)	(15,588)	(12,908)
Proceeds received from exercise of Vornado stock options and other	5,862	6,903	7,309
Repurchase of Class A units related to stock compensation agreements and related tax withholdings and other	(137)	(8,692)	(12,969)
Purchase of marketable securities in connection with defeasance of mortgage payable	—	(407,126)	—
Prepayment penalty on redemption of senior unsecured notes due 2022	—	(22,058)	—
Redemption of preferred units	—	(893)	(470,000)
Debt prepayment and extinguishment costs	—	—	(818)
Net cash used in financing activities	<u>(213,202)</u>	<u>(2,235,589)</u>	<u>(1,122,826)</u>
Net increase (decrease) in cash and cash equivalents and restricted cash	123,238	890,226	(1,197,907)
Cash and cash equivalents and restricted cash at beginning of period	1,607,131	716,905	1,914,812
Cash and cash equivalents and restricted cash at end of period	<u>\$ 1,730,369</u>	<u>\$ 1,607,131</u>	<u>\$ 716,905</u>
Reconciliation of Cash and Cash Equivalents and Restricted Cash:			
Cash and cash equivalents at beginning of period	\$ 1,515,012	\$ 570,916	\$ 1,817,655
Restricted cash at beginning of period	92,119	145,989	97,157
Cash and cash equivalents and restricted cash at beginning of period	<u>\$ 1,607,131</u>	<u>\$ 716,905</u>	<u>\$ 1,914,812</u>
Cash and cash equivalents at end of period	\$ 1,624,482	\$ 1,515,012	\$ 570,916
Restricted cash at end of period	105,887	92,119	145,989
Cash and cash equivalents and restricted cash at end of period	<u>\$ 1,730,369</u>	<u>\$ 1,607,131</u>	<u>\$ 716,905</u>

See notes to consolidated financial statements.

VORNADO REALTY L.P.
CONSOLIDATED STATEMENTS OF CASH FLOWS – CONTINUED

(Amounts in thousands)

	For the Year Ended December 31,		
	2020	2019	2018
Supplemental Disclosure of Cash Flow Information:			
Cash payments for interest, excluding capitalized interest of \$40,855, \$67,980 and \$67,402	\$ 210,052	\$ 283,613	\$ 311,835
Cash payments for income taxes	<u>\$ 15,105</u>	<u>\$ 59,834</u>	<u>\$ 62,225</u>
Non-Cash Investing and Financing Activities:			
Decrease in assets and liabilities resulting from the deconsolidation of Moynihan Train Hall:			
Real estate, net	\$ (1,291,804)	\$ —	\$ —
Moynihan Train Hall obligation	<u>(1,291,804)</u>	<u>—</u>	<u>—</u>
Reclassification of condominium units from "development costs and construction in progress" to "220 Central Park South condominium units ready for sale"	388,280	1,311,468	233,179
Redeemable Class A unit measurement adjustment	344,043	70,810	198,064
Write-off of fully depreciated assets	(189,250)	(122,813)	(86,064)
Accrued capital expenditures included in accounts payable and accrued expenses	117,641	109,975	88,115
Investments received in exchange for transfer to Fifth Avenue and Times Square JV:			
Preferred equity	—	2,327,750	—
Common equity	—	1,449,495	—
Lease liabilities arising from the recognition of right-of-use assets	—	526,866	—
Marketable securities transferred in connection with the defeasance of mortgage payable	—	(407,126)	—
Special dividend/distribution declared and payable on January 15, 2020	—	398,292	—
Defeasance of mortgage payable	—	390,000	—
Recognition of negative basis related to the sale of our investment in 330 Madison Avenue	—	60,052	—
Amounts related to our investment in Pennsylvania Real Estate Investment Trust reclassified from "investments in partially owned entities" and "accumulated other comprehensive loss" to "marketable securities" upon conversion of operating partnership units to common shares	—	54,962	—
Increase in assets and liabilities resulting from the consolidation of Farley Office and Retail Building:			
Real estate, net	—	—	401,708
Mortgage payable, net	—	—	249,459
Increase in assets and liabilities resulting from the consolidation of Moynihan Train Hall:			
Real estate, net	—	—	346,926
Moynihan Train Hall obligation	—	—	346,926

See notes to consolidated financial statements.

**VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

1. Organization and Business

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., a Delaware limited partnership (the “Operating Partnership”). Accordingly, Vornado’s cash flow and ability to pay dividends to its shareholders are dependent upon the cash flow of the Operating Partnership and the ability of its direct and indirect subsidiaries to first satisfy their obligations to creditors. Vornado is the sole general partner of, and owned approximately 92.8% of the common limited partnership interest in the Operating Partnership as of December 31, 2020. All references to the “Company,” “we,” “us” and “our” mean, collectively, Vornado, the Operating Partnership and those subsidiaries consolidated by Vornado.

We currently own all or portions of:

New York:

- 20.6 million square feet of Manhattan office space in 33 properties;
- 2.7 million square feet of Manhattan street retail space in 65 properties;
- 1,989 units in 10 Manhattan residential properties;
- The 1,700 room Hotel Pennsylvania located on Seventh Avenue at 33rd Street in the heart of the Penn District (closed since April 1, 2020 as a result of the COVID-19 pandemic);
- A 32.4% interest in Alexander’s, Inc. (“Alexander’s”) (NYSE: ALX), which owns seven properties in the greater New York metropolitan area, including 731 Lexington Avenue, the 1.3 million square foot Bloomberg, L.P. headquarters building;
- Signage throughout the Penn District and Times Square; and
- Building Maintenance Services LLC ("BMS"), a wholly owned subsidiary, which provides cleaning and security services for our buildings and third parties.

Other Real Estate and Investments:

- The 3.7 million square foot theMART in Chicago;
- A 70% controlling interest in 555 California Street, a three-building office complex in San Francisco’s financial district aggregating 1.8 million square feet;
- A 25.0% interest in Vornado Capital Partners, our real estate fund. We are the general partner and investment manager of the fund. The fund is in wind-down; and
- Other real estate and investments.

2. COVID-19 Pandemic

Our business has been adversely affected as a result of the COVID-19 pandemic and the preventive measures taken to curb the spread of the virus. Some of the effects on us include the following:

- With the exception of grocery stores and other "essential" businesses, many of our retail tenants closed their stores in March 2020 and began reopening when New York City entered phase two of its reopening plan on June 22, 2020, however, there continue to be limitations on occupancy and other restrictions that affect their ability to resume full operations.
- While our buildings remain open, many of our office tenants are working remotely.
- We have closed the Hotel Pennsylvania. In connection with the closure, we accrued \$9,246,000 of severance for furloughed Hotel Pennsylvania union employees and recognized a corresponding \$3,145,000 income tax benefit for the year ended December 31, 2020.
- We cancelled trade shows at theMART from late March through the remainder of 2020 and expect to resume in 2021.
- Because certain of our development projects were deemed "non-essential," they were temporarily paused in March 2020 due to New York State executive orders and resumed once New York City entered phase one of its state mandated reopening plan on June 8, 2020.
- As of April 30, 2020, we placed 1,803 employees on furlough, which included 1,293 employees of BMS, 414 employees at the Hotel Pennsylvania and 96 corporate staff employees. As of February 10, 2021, 50% of furloughed employees have returned to work. The remaining employees still on furlough are from BMS and the Hotel Pennsylvania.
- Effective April 1, 2020, our executive officers waived portions of their annual base salary for the remainder of 2020.
- Effective April 1, 2020, each non-management member of our Board of Trustees agreed to forgo their \$75,000 annual cash retainer for the remainder of 2020.

While we believe our tenants are required to pay rent under their leases and we have commenced legal proceedings against certain tenants that have failed to pay rent under their leases, in limited circumstances, we have agreed to and may continue to agree to rent deferrals and rent abatements for certain of our tenants. We have made a policy election in accordance with the Financial Accounting Standards Board (“FASB”) Staff Q&A which provides relief in accounting for leases during the COVID-19 pandemic, allowing us to continue recognizing rental revenue on a straight-line basis for rent deferrals, with no impact to revenue recognition, and to recognize rent abatements as a reduction to rental revenue in the period granted. See Note 3 - *Basis of Presentation and Significant Accounting Policies* for additional information.

**VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

2. COVID-19 Pandemic - continued

Based on our assessment of the probability of rent collection of our lease receivables, we have written off \$51,571,000 of receivables arising from the straight-lining of rents for the year ended December 31, 2020, including the JCPenney retail lease at Manhattan Mall and the New York & Company, Inc. office lease at 330 West 34th Street. Both tenants have filed for Chapter 11 bankruptcy and rejected their leases during 2020. In addition, we have written off \$22,546,000 of tenant receivables deemed uncollectible for the year ended December 31, 2020. These write-offs resulted in a reduction of lease revenues and our share of income from partially owned entities. Prospectively, revenue recognition for lease receivables deemed uncollectible will be based on actual amounts received. See Note 4 - *Revenue Recognition* and Note 7 - *Investments in Partially Owned Entities* for additional information.

3. Basis of Presentation and Significant Accounting Policies

Basis of Presentation

The accompanying consolidated financial statements include the accounts of Vornado and the Operating Partnership and their consolidated subsidiaries. All inter-company amounts have been eliminated. Our consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"), which require us to make estimates and assumptions that affect the reported amounts of assets and liabilities, 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. In addition, certain prior year balances have been reclassified in order to conform to the current period presentation.

Recently Issued Accounting Literature

In June 2016, the FASB issued an update ("ASU 2016-13") *Measurement of Credit Losses on Financial Instruments* establishing Accounting Standards Codification ("ASC") Topic 326, *Financial Instruments - Credit Losses* ("ASC 326"), as amended by subsequent ASUs on the topic. ASU 2016-13 changes how entities account for credit losses for most financial assets and certain other instruments that are not measured at fair value through net income. The guidance replaces the current "incurred loss" model with an "expected loss" model that requires consideration of a broader range of information to estimate expected credit losses over the lifetime of the financial asset. ASU 2016-13 is effective for interim and annual reporting periods in fiscal years beginning after December 15, 2019. In May 2019, the FASB issued ASU 2019-05 *Financial Instruments - Credit Losses (Topic 326): Targeted Transition Relief* to allow companies to irrevocably elect, upon adoption of ASU 2016-13, the fair value option for financial instruments that were previously recorded at amortized cost and are within the scope of ASC Subtopic 326-20 if the instruments are eligible for the fair value option under ASC Subtopic 825-10, *Financial Instruments* ("ASC 825-10"). We elected to apply the fair value option on an instrument-by-instrument basis to our loans receivable. We adopted this standard effective January 1, 2020 and recorded a \$16,064,000 cumulative-effect adjustment to beginning accumulated deficit to recognize credit losses on loans receivable recorded on our consolidated balance sheets. For the year ended December 31, 2020, we recorded \$13,369,000 of credit losses on our loans receivable which are included in "interest and other investment (loss) income, net" on our consolidated statements of income.

In March 2020, the FASB issued an update ("ASU 2020-04") establishing ASC Topic 848, *Reference Rate Reform*. ASU 2020-04 contains practical expedients for reference rate reform related activities that impact debt, leases, derivatives and other contracts. The guidance in ASU 2020-04 is optional and may be elected over time as reference rate reform activities occur. During the year ended December 31, 2020, we 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 April 2020, the FASB issued a Staff Q&A on accounting for leases during the COVID-19 pandemic, focused on the application of lease guidance in ASC Topic 842, *Leases* ("ASC 842"). The Staff Q&A states that it would be acceptable to make a policy election regarding rent concessions resulting from COVID-19, which would not require entities to account for these rent concessions as lease modifications when total cash flows resulting from the modified contract are "substantially the same or less" than the cash flows in the original contract. During the year ended December 31, 2020, in limited circumstances, we granted rent deferrals and rent abatements for certain of our tenants. We have made a policy election in accordance with the Staff Q&A for our portfolio allowing us to not account for the concessions as lease modifications. Accordingly, rent abatements are recognized as reductions to "rental revenues" during the period in which they were granted. Rent deferrals result in an increase to "tenant and other receivables" during the deferral period with no impact on rental revenue recognition. For any concessions that do not meet the guidance contained in the Q&A, the modification guidance in accordance with ASC 842 will be applied. See Note 2 - *COVID-19 Pandemic* for further details.

**VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

3. Basis of Presentation and Significant Accounting Policies - continued

Recently Issued Accounting Literature - continued

In August 2020, the FASB issued an update ("ASU 2020-06") *Debt - Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging - Contracts in Entity's Own Equity (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 are currently evaluating the impact of the adoption of ASU 2020-06 on our consolidated financial statements, but do not believe the adoption of this standard will have a material impact on our consolidated financial statements.

Significant Accounting Policies

Real Estate: Real estate is carried at cost, net of accumulated depreciation and amortization. Betterments, major renewals and certain costs directly related to the improvement and leasing of real estate are capitalized. Maintenance and repairs are expensed as incurred. For redevelopment of existing operating properties, the net book value of the existing property under redevelopment plus the cost for the construction and improvements incurred in connection with the redevelopment, including interest and debt expense, are capitalized to the extent the capitalized costs of the property do not exceed the estimated fair value of the redeveloped property when complete. If the cost of the redeveloped property, including the net book value of the existing property, exceeds the estimated fair value of the redeveloped property, the excess is charged to expense. Depreciation is recognized on a straight-line basis over the estimated useful lives which range from 7 to 40 years. Tenant allowances are amortized on a straight-line basis over the lives of the related leases, which approximate the useful lives of the assets.

Upon the acquisition of real estate, we assess the fair value of acquired assets (including land, buildings and improvements, identified intangibles, such as acquired above and below-market leases, acquired in-place leases and tenant relationships) and acquired liabilities and we allocate the purchase price based on these assessments which are on a relative fair value basis. We assess fair value based on estimated cash flow projections that utilize appropriate discount and capitalization rates and available market information. Estimates of future cash flows are based on a number of factors including historical operating results, known trends, and market/economic conditions. We amortize identified intangibles that have finite lives over the period they are expected to contribute directly or indirectly to the future cash flows of the property or business acquired.

Our properties, including any related right-of-use ("ROU") assets and intangible assets, are individually reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment exists when the carrying amount of an asset exceeds the aggregate projected future cash flows over the anticipated holding period on an undiscounted basis. An impairment loss is measured based on the excess of the property's carrying amount over its estimated fair value. Impairment analyses are based on our current plans, intended holding periods and available market information at the time the analyses are prepared. If our estimates of the future cash flows, anticipated holding periods, or market conditions change, our evaluation of impairment losses may be different and such differences could be material to our consolidated financial statements. Estimates of future cash flows are subjective and are based, in part, on assumptions regarding future occupancy, rental rates, capital requirements, capitalization rates and discount rates that could differ materially from actual results.

**VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

3. Basis of Presentation and Significant Accounting Policies - continued

Significant Accounting Policies - continued

Partially Owned Entities: We consolidate entities in which we have a controlling financial interest. In determining whether we have a controlling financial interest in a partially owned entity and the requirement to consolidate the accounts of that entity, we consider (i) whether the entity is a variable interest entity ("VIE") in which we are the primary beneficiary or (ii) whether the entity is a voting interest entity in which we have a majority of the voting interests of the entity. We are deemed to be the primary beneficiary of a VIE when we have (i) the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and (ii) the obligation to absorb losses or receive benefits that could potentially be significant to the VIE. We generally do not control a partially owned entity if the approval of all of the partners/members is contractually required with respect to decisions that most significantly impact the performance of the partially owned entity. This includes decisions regarding operating/capital budgets, and the placement of new or additional financing secured by the assets of the venture, among others. We account for investments under the equity method when the requirements for consolidation are not met, and we have significant influence over the operations of the investee. Equity method investments are initially recorded at cost and subsequently adjusted for our share of net income or loss and cash contributions and distributions each period. Investments that do not qualify for consolidation or equity method accounting are accounted for under the cost method.

Investments in unconsolidated partially owned entities are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recorded when there is a decline in the fair value below the carrying value and we conclude such decline is other-than-temporary. An impairment loss is measured based on the excess of the carrying amount of an investment over its estimated fair value. Impairment analyses are based on current plans, intended holding periods, ability to hold, and available information at the time the analyses are prepared.

220 Central Park South Condominium Units Ready For Sale: We are completing construction of a residential condominium tower at 220 Central Park South ("220 CPS"). Condominium units are reclassified from "development costs and construction in progress" to "220 Central Park South condominium units ready for sale" upon receipt of the unit's temporary certificate of occupancy. These units are substantially complete and ready for sale. Each unit is carried at the lower of its carrying amount or fair value less costs to sell. We have used the relative sales value method to allocate costs to individual condominium units. GAAP income is recognized when legal title transfers upon closing of the condominium unit sales and is included in "net gains on disposition of wholly owned and partially owned assets" on our consolidated statements of income. As of December 31, 2020 and 2019, none of the 220 CPS condominium units ready for sale had a carrying value that exceeded fair value.

Cash and Cash Equivalents: Cash and cash equivalents consist of highly liquid investments with original maturities of three months or less and are carried at cost, which approximates fair value due to their short-term maturities. The majority of our cash and cash equivalents consists of (i) deposits at major commercial banks, which may at times exceed the Federal Deposit Insurance Corporation limit, (ii) United States Treasury Bills, and (iii) Certificate of Deposits placed through an Account Registry Service.

Restricted Cash: Restricted cash consists of security deposits, cash restricted for the purposes of facilitating a Section 1031 Like-Kind exchange, cash restricted in connection with our deferred compensation plan and cash escrowed under loan agreements, including for debt service, real estate taxes, property insurance and capital improvements.

Deferred Charges: Direct financing costs are deferred and amortized over the terms of the related agreements as a component of interest expense. Direct and incremental costs related to successful leasing activities are capitalized and amortized on a straight-line basis over the lives of the related leases. All other deferred charges are amortized on a straight-line basis, which approximates the effective interest rate method, in accordance with the terms of the agreements to which they relate.

**VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

3. Basis of Presentation and Significant Accounting Policies - continued

Significant Accounting Policies - continued

Revenue Recognition:

- Rental revenues include revenues from the leasing of space at our properties to tenants, lease termination income, revenues from the Hotel Pennsylvania, trade shows and tenant services.
 - Revenues from the leasing of space at our properties to tenants includes (i) lease components, including fixed and variable lease payments, and nonlease components which include reimbursement of common area maintenance expenses, and (ii) reimbursement of real estate taxes and insurance expenses. As lessor, we have elected to combine the lease and nonlease components of our operating lease agreements and account for the components as a single lease component in accordance with ASC 842.
 - Revenues derived from fixed lease payments are recognized on a straight-line basis over the non-cancelable period of the lease, together with renewal options that are reasonably certain of being exercised. We commence rental revenue recognition when the underlying asset is available for use by the lessee.
 - Revenue derived from the reimbursement of real estate taxes, insurance expenses and common area maintenance expenses are generally recognized in the same period as the related expenses are incurred.
 - As discussed on page 84, in 2020, we have made a policy election in accordance with the Staff Q&A for our portfolio allowing us to not account for the concessions as lease modifications. Accordingly, rent abatements are recognized as reductions to "rental revenues" during the period in which they were granted. Rent deferrals result in an increase to "tenant and other receivables" during the deferral period with no impact on rental revenue recognition. For any concessions that do not meet the guidance contained in the Q&A, the modification guidance in accordance with ASC 842 will be applied.
 - Lease termination income is recognized immediately if a tenant vacates or is recognized on a straight-line basis over the shortened remaining lease term in accordance with ASC 842.
 - Hotel revenue arising from the operation of Hotel Pennsylvania consists of room revenue, food and beverage revenue, and banquet revenue. Room revenue is recognized when the rooms are made available for the guest, in accordance with ASC 842.
 - Trade shows revenue arising from the operation of trade shows is primarily booth rentals. This revenue is recognized upon the occurrence of the trade shows when the trade show booths are made available for use by the exhibitors, in accordance with ASC 842.
 - Tenant services revenue arises from sub-metered electric, elevator, trash removal and other services provided to tenants at their request. This revenue is recognized as the services are transferred in accordance with ASC Topic 606, *Revenue from Contracts with Customers* ("ASC 606").
- Fee and other income includes management, leasing and other revenue arising from contractual agreements with third parties or with partially owned entities and includes BMS cleaning, engineering and security services. This revenue is recognized as the services are transferred in accordance with ASC 606.

We evaluate on an individual lease basis whether it is probable that we will collect substantially all amounts due from our tenants. We recognize changes in the collectability assessment of our operating leases as adjustments to rental revenue. Management exercises judgment in assessing collectability and considers payment history, current credit status and publicly available information about the financial condition of the tenant, including the impact of COVID-19 on tenants' businesses, among other factors. Tenant receivables, including receivables arising from the straight-lining of rents, are written off when management deems that the collectability of substantially all future lease payments from a specific lease is not probable of collection, at which point, the Company will limit future rental revenues to cash received.

Prior to the adoption of ASC 842, we maintained an allowance for doubtful accounts for estimated losses on receivables under our lease agreements, including receivables arising from the straight-lining of rent. During the year ended December 31, 2018, we had \$1,910,000 of additions charged against operations and \$2,592,000 of uncollectible accounts written-off, with an ending allowance for doubtful accounts balance of \$5,798,000 as of December 31, 2018.

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

3. Basis of Presentation and Significant Accounting Policies - continued

Significant Accounting Policies - continued

Income Taxes: Vornado operates in a manner intended to enable it to continue to qualify as a REIT under Sections 856-860 of the Internal Revenue Code of 1986, as amended. Under those sections, a REIT which distributes at least 90% of its REIT taxable income as a dividend to its shareholders each year and which meets certain other conditions will not be taxed on that portion of its taxable income which is distributed to its shareholders. Vornado distributes to its shareholders 100% of its REIT taxable income and therefore, no provision for Federal income taxes is required. Dividends distributed for the year ended December 31, 2020, were characterized, for federal income tax purposes, as ordinary income. Dividends distributed for the year ended December 31, 2019, were characterized, for federal income tax purposes, as 62.1% ordinary income and 37.9% long-term capital gain. Dividends distributed for the year ended December 31, 2018, were characterized, for federal income tax purposes, as 91.7% ordinary income and 8.3% long-term capital gain.

We have elected to treat certain consolidated subsidiaries, and may in the future elect to treat newly formed subsidiaries, as taxable REIT subsidiaries pursuant to an amendment to the Internal Revenue Code that became effective January 1, 2001. Taxable REIT subsidiaries may participate in non-real estate related activities and/or perform non-customary services for tenants and are subject to Federal and State income tax at regular corporate tax rates. Our 220 CPS condominium project and the operations of Hotel Pennsylvania are held through a taxable REIT subsidiary.

At December 31, 2020 and 2019, our taxable REIT subsidiaries had deferred tax assets, net of valuation allowances, of \$15,017,000 and \$57,226,000, respectively, and are included in "other assets" on our consolidated balance sheets. At December 31, 2020 and 2019, our taxable REIT subsidiaries had deferred tax liabilities of \$29,348,000 and \$29,444,000, respectively, which are included in "other liabilities" on our consolidated balance sheets. The deferred tax assets and liabilities relate to net operating loss carry forwards and temporary differences between the book and tax basis of asset and liabilities.

For the years ended December 31, 2020, 2019 and 2018, we recognized \$36,630,000, \$103,439,000 and \$37,633,000 of income tax expense, respectively, based on effective tax rates of approximately (8.6)%, 3.0% and 8.2%, respectively. Income tax expense recorded in each of the years primarily relates to our consolidated taxable REIT subsidiaries, and certain state, local, and franchise taxes. The years ended December 31, 2020 and 2019, included \$49,221,000 and \$101,828,000, respectively, of income tax expense recognized on the sale of 220 CPS condominium units. The Company has no uncertain tax positions recognized as of December 31, 2020 and 2019.

The Operating Partnership's partners are required to report their respective share of taxable income on their individual tax returns.

The following table reconciles net (loss) income attributable to Vornado common shareholders to estimated taxable income for the years ended December 31, 2020, 2019 and 2018.

(Amounts in thousands)	For the Year Ended December 31,		
	2020	2019	2018
Net (loss) income attributable to Vornado common shareholders	\$ (348,744)	\$ 3,097,806	\$ 384,832
Book to tax differences (unaudited):			
Impairment losses	602,430	95,371	11,260
Depreciation and amortization	228,520	200,913	234,325
Sale of real estate and other capital transactions	(151,960)	(2,575,435)	31,527
Straight-line rent adjustments	70,923	9,057	(7,133)
Earnings of partially owned entities	11,074	150,550	15,711
Vornado stock options	(381)	(16,597)	(22,992)
Tangible property regulations	—	(57,078)	(86,040)
Other, net	7,950	12,575	18,956
Estimated taxable income (unaudited)	<u>\$ 419,812</u>	<u>\$ 917,162</u>	<u>\$ 580,446</u>

The net basis of Vornado's assets and liabilities for tax reporting purposes is approximately \$3.1 billion lower than the amounts reported in Vornado's consolidated balance sheet at December 31, 2020.

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

4. Revenue Recognition

Below is a summary of our revenues by segment. Additional financial information related to these reportable segments for the years ended December 31, 2020, 2019 and 2018 is set forth in Note 24 - *Segment Information*.

(Amounts in thousands)

	For the Year Ended December 31, 2020		
	Total	New York	Other
Property rentals ⁽¹⁾	\$ 1,323,347	\$ 1,051,009	\$ 272,338
Hotel Pennsylvania ⁽²⁾	8,741	8,741	—
Trade shows ⁽³⁾	11,303	—	11,303
Lease revenues ⁽⁴⁾	1,343,391	1,059,750	283,641
Tenant services	34,244	23,750	10,494
Rental revenues	1,377,635	1,083,500	294,135
BMS cleaning fees	105,536	112,112	(6,576) ⁽⁵⁾
Management and leasing fees	19,416	19,508	(92)
Other income	25,364	6,628	18,736
Fee and other income	150,316	138,248	12,068
Total revenues	<u>\$ 1,527,951</u>	<u>\$ 1,221,748</u>	<u>\$ 306,203</u>

See notes below.

(Amounts in thousands)

	For the Year Ended December 31, 2019		
	Total	New York	Other
Property rentals ⁽¹⁾	\$ 1,589,539	\$ 1,300,385	\$ 289,154
Hotel Pennsylvania	89,594	89,594	—
Trade shows	40,577	—	40,577
Lease revenues ⁽⁴⁾	1,719,710	1,389,979	329,731
Tenant services	47,512	35,011	12,501
Rental revenues	1,767,222	1,424,990	342,232
BMS cleaning fees	124,674	133,358	(8,684) ⁽⁵⁾
Management and leasing fees	13,542	13,694	(152)
Other income	19,262	5,818	13,444
Fee and other income	157,478	152,870	4,608
Total revenues	<u>\$ 1,924,700</u>	<u>\$ 1,577,860</u>	<u>\$ 346,840</u>

(1) Reduced by \$63,204 and \$17,237 for the years ended December 31, 2020 and 2019, respectively, for the write-off of lease receivables deemed uncollectible (primarily write-offs of receivables arising from the straight-lining of rents).

(2) Closed since April 1, 2020 as a result of the pandemic.

(3) Cancelled trade shows at theMART from late March 2020 through the remainder of the year as a result of the pandemic.

(4) The components of lease revenues were as follows:

(Amounts in thousands)

	For the Year Ended December 31,	
	2020	2019
Fixed billings	\$ 1,292,174	\$ 1,531,917
Variable billings	126,907	199,291
Total contractual operating lease billings	1,419,081	1,731,208
Adjustment for straight-line rents and amortization of acquired below-market leases, net	(12,486)	5,739
Less: write-off of straight-line rent and tenant receivables deemed uncollectible	(63,204)	(17,237)
Lease revenues	<u>\$ 1,343,391</u>	<u>\$ 1,719,710</u>

(5) Represents the elimination of theMART and 555 California Street BMS cleanings fees which are included as income in the New York segment.

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

4. Revenue Recognition - continued

(Amounts in thousands)

	For the Year Ended December 31, 2018		
	Total	New York	Other
Property rentals	\$ 1,816,329	\$ 1,548,226	\$ 268,103
Hotel Pennsylvania	94,399	94,399	—
Trade shows	42,684	—	42,684
Lease revenues	1,953,412	1,642,625	310,787
Tenant services	53,921	41,351	12,570
Rental revenues	2,007,333	1,683,976	323,357
BMS cleaning fees	120,357	129,088	(8,731) ⁽¹⁾
Management and leasing fees	13,324	12,203	1,121
Other income	22,706	10,769	11,937
Fee and other income	156,387	152,060	4,327
Total revenues	\$ 2,163,720	\$ 1,836,036	\$ 327,684

⁽¹⁾ Represents the elimination of theMART and 555 California Street BMS cleanings fees 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. The Fund's three-year investment period ended in July 2013. The Fund is accounted for under ASC 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 24.7% 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% (3.85% as of December 31, 2020) and provides for additional default interest of 3.00%, was scheduled to mature on July 9, 2020.

As of December 31, 2020, we had four real estate fund investments through the Fund and the Crowne Plaza Joint Venture with an aggregate fair value of \$3,739,000, \$339,022,000 below cost, and had remaining unfunded commitments of \$29,194,000, of which our share was \$9,266,000. As of December 31, 2019, those four real estate fund investments had an aggregate fair value of \$222,649,000.

Below is a summary of loss from the Fund and the Crowne Plaza Joint Venture for the years ended December 31, 2020, 2019 and 2018.

(Amounts in thousands)

	For the Year Ended December 31,		
	2020	2019	2018
Net unrealized loss on held investments	\$ (226,107)	\$ (106,109)	\$ (83,794)
Net investment (loss) income	(220)	2,027	6,105
Net realized loss on exited investments	—	—	(912)
New York City real property transfer tax (the "Transfer Tax") ⁽¹⁾	—	—	(10,630)
Loss from real estate fund investments	(226,327)	(104,082)	(89,231)
Less loss attributable to noncontrolling interests in consolidated subsidiaries	163,213	55,274	61,230
Loss from real estate fund investments net of noncontrolling interests in consolidated subsidiaries	\$ (63,114)	\$ (48,808)	\$ (28,001)

⁽¹⁾ Due to the additional Transfer Tax related to the March 2011 acquisition of One Park Avenue which was recognized as a result of the New York City Tax Appeals Tribunal (the "Tax Tribunal") decision in 2018. We appealed the Tax Tribunal's decision to the New York State Supreme Court, Appellate Division, First Department ("Appellate Division"). The Appellate Division entered a unanimous decision and order that confirmed the decision of the Tax Tribunal and dismissed our appeal. We filed a motion to reargue the Appellate Division's decision or for leave to appeal to the New York State Court of Appeals. That motion was denied in December 2019 and can no longer be appealed.

**VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

6. Marketable Securities

Marketable securities are presented on our consolidated balance sheets at fair value and are accounted for in accordance with ASC Topic 321 - *Investments in Equity Securities*, which requires changes in the fair value of our marketable securities to be recorded in current period earnings. Changes in the fair value are recorded to "interest and other investment (loss) income, net" on our consolidated statements of income (see Note 17 - *Interest and Other Investment (Loss) Income, Net*).

Pennsylvania Real Estate Investment Trust ("PREIT") (NYSE: PEI)

On January 23, 2020, we sold all of our 6,250,000 common shares of PREIT, realizing net proceeds of \$28,375,000. We recorded a \$4,938,000 loss (mark-to-market decrease) for the year ended December 31, 2020.

The table below summarizes the changes of our marketable securities portfolio for the years ended December 31, 2020 and 2019.

(Amounts in thousands)	Total
Balance as of December 31, 2018	\$ 152,198
Sale of marketable securities (primarily Lexington Realty Trust)	(168,314)
Transfer of PREIT investment balance ⁽¹⁾	54,962
Decrease in fair value of marketable securities	(5,533)
Balance as of December 31, 2019	33,313
Sale of marketable securities on January 23, 2020	(28,375)
Decrease in fair value of marketable securities	(4,938)
Balance as of December 31, 2020	\$ —

(1) In March 2019, we converted all of our 6,250,000 PREIT operating partnership units into common shares and began accounting for our investment as a marketable security. Prior to conversion, we accounted for our investment under the equity method.

7. Investments in Partially Owned Entities

Fifth Avenue and Times Square JV

As of December 31, 2020, 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 also own \$1.828 billion of preferred equity interests in certain of the properties. All of the preferred equity has an annual coupon of 4.25% for the first five years, increasing to 4.75% for the next five years and thereafter at a formulaic rate. It can be redeemed under certain conditions on a tax deferred basis.

Fifth Avenue and Times Square JV was formed in April 2019, when we contributed our interests in the Properties to the joint venture and transferred a 48.5% common interest in the joint venture to the Investors (the "Transaction"). The Transaction valued the Properties at \$5.556 billion, resulting in a \$2.571 billion net gain, before noncontrolling interests of \$11,945,000, including a gain related to the step up in our basis of the retained portion of the assets to fair value. Subsequent to the Transaction, Manhattan street retail suffered negative market conditions and was further stressed by the COVID-19 pandemic. This has resulted in a decrease in cash flows and a decline in the value of our investment which we determined was "other-than-temporary." Accordingly, we recognized impairment losses of \$413,349,000, before noncontrolling interests of \$4,289,000, for the year ended December 31, 2020 which are included in "(loss) income from partially owned entities" on our consolidated statements of income. Our conclusions were based on, among other factors, the significant challenges facing the retail sector and our inability to forecast a recovery over our anticipated holding period. In determining the fair value of our investment, we considered, among other inputs, a discounted cash flow analysis based upon market conditions and expectations of growth.

As of December 31, 2020, 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 \$403,029,000, the basis difference primarily resulting from the non-cash impairment losses discussed above. 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.

**VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

7. Investments in Partially Owned Entities - continued

Fifth Avenue and Times Square JV - continued

Management, Development, Leasing and Other Agreements

We provide various services to Fifth Avenue and Times Square JV in accordance with management, development, leasing and other agreements, as described below.

We receive an annual fee for managing the Properties equal to 2% of the gross revenues from the Properties. In addition, we are entitled to a development fee of 5% of development costs, plus reimbursement of certain costs, for development projects performed by us. We are entitled to 1.5% of development costs, plus reimbursement of certain costs, as a supervisory fee for development projects not performed by us. We provide leasing services for fees calculated based on a percentage of rents, less any commissions paid to third-party real estate brokers, if applicable. We jointly provide leasing services for the retail space with Crown Acquisitions Inc. ("Crown"), and exclusively provide leasing services for the office space. We recognized property management fee income, included in "fee and other income" on our consolidated statements of income, of \$3,982,000 and \$3,085,000 for the years ended December 31, 2020 and 2019, respectively.

BMS, our wholly-owned subsidiary, supervises cleaning, security and engineering services at certain of the Properties. We recognized income for these services, included in "fee and other income" on our consolidated statements of income, of \$3,595,000 and \$3,087,000 for the years ended December 31, 2020 and 2019, respectively.

We believe, based on comparable fees charged by other real estate companies, that the fees described above are at fair market value.

Alexander's, Inc

As of December 31, 2020, 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 December 31, 2020 and 2019, Alexander's owed us an aggregate of \$1,516,000 and \$1,426,000, respectively, pursuant to such agreements.

As of December 31, 2020, 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 December 31, 2020 closing share price of \$277.35, was \$458,756,000, or \$375,854,000 in excess of the carrying amount on our consolidated balance sheet. As of December 31, 2020, the carrying amount of our investment in Alexander's, excluding amounts owed to us, exceeds our share of the equity in the net assets of Alexander's by approximately \$38,470,000. 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.

On September 14, 2020, Alexander's amended and extended the \$350,000,000 mortgage loan on the retail condominium of 731 Lexington Avenue. Under the terms of the amendment, Alexander's paid down the loan by \$50,000,000 to \$300,000,000, extended the maturity date to August 2025 and guaranteed the interest payments and certain leasing costs. The principal of the loan is non-recourse to Alexander's. The interest-only loan is at LIBOR plus 1.40% (1.55% as of December 31, 2020) which has been swapped to a fixed rate of 1.72%.

On October 23, 2020, Alexander's completed a \$94,000,000 financing of The Alexander, a 312-unit residential building that is part of Alexander's residential and retail complex located in Rego Park, Queens, New York. The interest-only loan has a fixed rate of 2.63% and matures in November 2027.

Management, Development, Leasing and Other Agreements

We receive an annual fee for managing Alexander's and all of its properties equal to the sum of (i) \$2,800,000, (ii) 2% of the gross revenue from the Rego Park II Shopping Center, (iii) \$0.50 per square foot of the tenant-occupied office and retail space at 731 Lexington Avenue, and (iv) \$334,000, escalating at 3% per annum, for managing the common area of 731 Lexington Avenue. In addition, we are entitled to a development fee of 6% of development costs, as defined.

We provide Alexander's with leasing services for a fee of 3% of rent for the first ten years of a lease term, 2% of rent for the eleventh through twentieth year of a lease term and 1% of rent for the twenty-first through thirtieth year of a lease term, subject to the payment of rents by Alexander's tenants. In the event third-party real estate brokers are used, our fee increases by 1% and we are responsible for the fees to the third-parties. We are also entitled to a commission upon the sale of any of Alexander's assets equal to 3% of gross proceeds, as defined, for asset sales less than \$50,000,000, and 1% of gross proceeds, as defined, for asset sales of \$50,000,000 or more.

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

7. Investments in Partially Owned Entities - continued

Alexander's, Inc - continued

Management, Development, Leasing and Other Agreements - continued

BMS, our wholly-owned subsidiary, supervises (i) cleaning, engineering and security services at Alexander's 731 Lexington Avenue property and (ii) security services at Alexander's Rego Park I, Rego Park II properties and The Alexander apartment tower. During the years ended December 31, 2020, 2019 and 2018, we recognized \$3,613,000, \$3,613,000 and \$2,705,000 of income, respectively, for these services.

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

(Amounts in thousands)

	Percentage Ownership at December 31, 2020	Balance as of December 31,	
		2020	2019
Investments:			
Fifth Avenue and Times Square JV (see page 91 for details)	51.5%	\$ 2,798,413	\$ 3,291,231
Partially owned office buildings/land ⁽¹⁾	Various	473,285	464,109
Alexander's (see page 92 for details)	32.4%	82,902	98,543
Other investments ⁽²⁾	Various	136,507	145,282
		<u>\$ 3,491,107</u>	<u>\$ 3,999,165</u>
Investments in partially owned entities included in other liabilities⁽³⁾:			
7 West 34th Street	53.0%	\$ (55,340)	\$ (54,004)
85 Tenth Avenue	49.9%	(13,080)	(6,186)
		<u>\$ (68,420)</u>	<u>\$ (60,190)</u>

(1) Includes interests in 280 Park Avenue, 650 Madison Avenue, One Park 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.

Below is a schedule of (loss) income from partially owned entities.

(Amounts in thousands)

	Percentage Ownership at December 31, 2020	For the Year Ended December 31,		
		2020	2019	2018
Our share of net (loss) income:				
Fifth Avenue and Times Square JV (see page 91 for details) ⁽¹⁾ :				
Non-cash impairment loss		\$ (413,349)	\$ —	\$ —
Return on preferred equity, net of our share of the expense		37,357	27,586	—
Equity in net income	51.5%	<u>21,063</u> ⁽²⁾	<u>31,130</u>	—
		<u>(354,929)</u>	<u>58,716</u>	—
Alexander's (see page 92 for details):				
Equity in net income	32.4%	13,326 ⁽³⁾	19,204	10,485 ⁽⁴⁾
Management, leasing and development fees		<u>5,309</u>	<u>4,575</u>	<u>4,560</u>
		<u>18,635</u>	<u>23,779</u>	<u>15,045</u>
Partially owned office buildings ⁽⁵⁾	Various	12,742	(3,443)	(3,085)
Other investments ⁽⁶⁾	Various	(5,560)	(187)	(2,811)
		<u>\$ (329,112)</u>	<u>\$ 78,865</u>	<u>\$ 9,149</u>

(1) Entered into on April 18, 2019.

(2) Includes a \$13,971 reduction in income related to a Forever 21 lease modification at 1540 Broadway and \$3,125 of write-offs of lease receivables deemed uncollectible during 2020.

(3) Includes our \$4,846 share of write-offs of lease receivables deemed uncollectible.

(4) Includes our \$7,708 share of Alexander's additional Transfer Tax related to the November 2012 sale of Kings Plaza Regional Shopping Center. Alexander's recorded this expense based on the precedent established by the Tax Tribunal's decision regarding One Park Avenue in 2018 (see Note 5 - *Real Estate Fund Investments*). On January 12, 2021, Alexander's decided not to further contest the additional Transfer Tax paid in connection with the sale of Kings Plaza.

(5) Includes interests in 280 Park Avenue, 650 Madison Avenue, One Park Avenue, 7 West 34th Street, 330 Madison Avenue (sold on July 11, 2019), 512 West 22nd Street, 61 Ninth Avenue, 85 Tenth Avenue and others. 2018 includes our \$4,978 share of additional Transfer Tax related to the March 2011 acquisition of One Park Avenue (see Note 5 - *Real Estate Fund Investments*).

(6) Includes interests in Independence Plaza, Rosslyn Plaza, Urban Edge Properties (sold on March 4, 2019), PREIT (accounted for as a marketable security from March 12, 2019 and sold on January 23, 2020), 666 Fifth Avenue Office Condominium (sold on August 3, 2018) and others. 2018 includes a net loss of \$4,873 from our 666 Fifth Avenue Office Condominium joint venture as a result of our share of depreciation expense.

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

7. Investments in Partially Owned Entities – continued

Below is a summary of the debt of our partially owned entities as of December 31, 2020 and 2019.

(Amounts in thousands)	Percentage Ownership at December 31, 2020	Maturity	Interest Rate at December 31, 2020	100% Partially Owned Entities' Debt at December 31, ⁽¹⁾	
				2020	2019
Mortgages Payable:					
Partially owned office buildings ⁽²⁾	Various	2021-2029	2.89%	\$ 3,622,572	\$ 3,604,104
Alexander's	32.4%	2021-2027	1.65%	1,164,544	974,836
Fifth Avenue and Times Square JV	51.5%	2022-2024	2.63%	950,000	950,000
Other ⁽³⁾	Various	2021-2025	4.32%	1,288,265	1,290,227

- (1) All amounts are non-recourse to us except (i) the \$500,000 mortgage loan on 640 Fifth Avenue, included in the Fifth Avenue and Times Square JV, and (ii) the \$300,000 mortgage loan on 7 West 34th Street.
- (2) Includes interests in 280 Park Avenue, 650 Madison Avenue, One Park Avenue, 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.

Based on our ownership interest in the partially owned entities above, our pro rata share of the debt of these partially owned entities was \$2,873,174,000 and \$2,802,859,000 as of December 31, 2020 and 2019, respectively.

Summary of Condensed Combined Financial Information

The following is a summary of condensed combined financial information for all of our partially owned entities as of December 31, 2020 and 2019 and for the years ended December 31, 2020, 2019 and 2018.

(Amounts in thousands)	As of December 31,	
	2020	2019
Balance Sheet:		
Assets	\$ 13,344,000	\$ 13,384,000
Liabilities	7,747,000	7,548,000
Noncontrolling interests	2,075,000	2,054,000
Equity	3,522,000	3,782,000

(Amounts in thousands)	For the Year Ended December 31,		
	2020	2019	2018
Income Statement:			
Total revenue	\$ 1,163,000	\$ 1,504,000	\$ 1,798,000
Net income	45,000	39,000	52,000
Net (loss) income attributable to the entity	(33,000)	(32,000)	21,000

8. 220 Central Park South

We are completing construction of a residential condominium tower containing 397,000 salable square feet at 220 CPS. The development cost of this project (exclusive of land cost) is estimated to be approximately \$1.480 billion, of which \$1.455 billion has been expended as of December 31, 2020.

During the year ended December 31, 2020, we closed on the sale of 35 condominium units at 220 CPS for net proceeds of \$1,049,360,000 resulting in a financial statement net gain of \$381,320,000 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, \$49,221,000 of income tax expense was recognized on our consolidated statements of income. From inception to December 31, 2020, we have closed on the sale of 100 units for net proceeds of \$2,869,492,000 resulting in financial statement net gains of \$1,066,937,000.

As of December 31, 2020, 91% of the condominium units have been sold and closed.

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

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 December 31,	
	2020	2019
Identified intangible assets:		
Gross amount	\$ 116,969	\$ 129,552
Accumulated amortization	(93,113)	(98,587)
Total, net	<u><u>\$ 23,856</u></u>	<u><u>\$ 30,965</u></u>
Identified intangible liabilities (included in deferred revenue):		
Gross amount	\$ 273,902	\$ 316,119
Accumulated amortization	(238,541)	(262,580)
Total, net	<u><u>\$ 35,361</u></u>	<u><u>\$ 53,539</u></u>

Amortization of acquired below-market leases, net of acquired above-market leases, resulted in an increase to rental revenues of \$16,878,000, \$19,830,000 and \$38,573,000 for the years ended December 31, 2020, 2019 and 2018, respectively. Estimated annual amortization of acquired below-market leases, net of acquired above-market leases, for each of the five succeeding years commencing January 1, 2021 is as follows:

(Amounts in thousands)

2021	\$ 10,697
2022	9,169
2023	6,631
2024	2,883
2025	1,453

Amortization of all other identified intangible assets (a component of depreciation and amortization expense) was \$6,507,000, \$8,666,000 and \$18,018,000 for the years ended December 31, 2020, 2019 and 2018, respectively. Estimated annual amortization of all other identified intangible assets including acquired in-place leases for each of the five succeeding years commencing January 1, 2021 is as follows:

(Amounts in thousands)

2021	\$ 4,334
2022	3,734
2023	3,648
2024	3,034
2025	2,150

10. Debt

On February 28, 2020, we increased our unsecured term loan balance to \$800,000,000 (from \$750,000,000) by exercising an accordion feature. Pursuant to an existing swap agreement, \$750,000,000 of the loan bears interest at a fixed rate of 3.87% through October 2023, and the balance of \$50,000,000 floats at a rate of LIBOR plus 1.00% (1.15% as of December 31, 2020). The entire \$800,000,000 will float thereafter for the duration of the loan through February 2024.

On August 12, 2020, we amended the \$700,000,000 mortgage loan on 770 Broadway, a 1.2 million square foot Manhattan office building, to extend the term one year through March 2022.

On October 15, 2020, we completed a \$500,000,000 refinancing of PENN11, a 1.2 million square foot Manhattan office building. The interest-only loan carries a rate of LIBOR plus 2.75% (2.90% as of December 31, 2020) and matures in October 2023, with two one-year extension options. The loan replaces the previous \$450,000,000 loan that bore interest at a fixed rate of 3.95% and was scheduled to mature in December 2020.

On November 2, 2020, we repaid the \$52,476,000 mortgage loan on our land under a portion of the Borgata Hotel and Casino complex. The 10-year fixed rate amortizing loan bore interest at 5.14% and was scheduled to mature in February 2021.

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

10. Debt - continued

The following is a summary of our debt:

(Amounts in thousands)	Weighted Average Interest Rate at December 31, 2020	Balance as of December 31,	
		2020	2019
Mortgages Payable:			
Fixed rate	3.68%	\$ 3,012,643	\$ 4,601,516
Variable rate	2.02%	2,595,815	1,068,500
Total	2.91%	5,608,458	5,670,016
Deferred financing costs, net and other		(27,909)	(30,119)
Total, net		<u>\$ 5,580,549</u>	<u>\$ 5,639,897</u>
Unsecured Debt:			
Senior unsecured notes	3.50%	\$ 450,000	\$ 450,000
Deferred financing costs, net and other		(3,315)	(4,128)
Senior unsecured notes, net		<u>446,685</u>	<u>445,872</u>
Unsecured term loan	3.70%	800,000	750,000
Deferred financing costs, net and other		(3,238)	(4,160)
Unsecured term loan, net		<u>796,762</u>	<u>745,840</u>
Unsecured revolving credit facilities	1.05%	575,000	575,000
Total, net		<u><u>\$ 1,818,447</u></u>	<u><u>\$ 1,766,712</u></u>

The net carrying amount of properties collateralizing the above indebtedness amounted to \$5.5 billion as of December 31, 2020.

As of December 31, 2020, the principal repayments required for the next five years and thereafter are as follows:

(Amounts in thousands)	Mortgages Payable	Senior Unsecured Notes, Unsecured Term Loan and Unsecured Revolving Credit Facilities
Year Ended December 31,		
2021	\$ 2,609,243	—
2022	971,600	—
2023	523,400	575,000
2024	773,215	800,000
2025	331,000	450,000
Thereafter	400,000	—

11. Redeemable Noncontrolling Interests

Redeemable Noncontrolling Partnership Units

Redeemable noncontrolling interests on Vornado's consolidated balance sheets and redeemable partnership units on the consolidated balance sheets of the Operating Partnership 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. 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.

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

11. Redeemable Noncontrolling Interests - continued

Redeemable Noncontrolling Partnership Units - continued

Below are the details of redeemable noncontrolling partnership units as of December 31, 2020 and 2019.

(Amounts in thousands, except units and per unit amounts)

Unit Series	Balance as of December 31,		Units Outstanding as of December 31,		Per Unit Liquidation Preference	Preferred or Annual Distribution Rate
	2020	2019	2020	2019		
Common:						
Class A units held by third parties	\$ 507,212 ⁽¹⁾	\$ 884,380 ⁽¹⁾	13,583,607	13,298,956	n/a	\$ 2.38
Perpetual Preferred/Redeemable Preferred⁽²⁾:						
5.00% D-16 Cumulative Redeemable	\$ 1,000	\$ 1,000	1	1	\$ 1,000,000.00	\$ 50,000.00
3.25% D-17 Cumulative Redeemable	\$ 3,535	\$ 3,535	141,400	141,400	\$ 25.00	\$ 0.8125

(1) Aggregate redemption value was based on Vornado's quarter-end closing common share price.

(2) Holders may tender units for redemption to the Operating Partnership for cash at their stated redemption amount; Vornado, at its option, may assume that obligation and pay the holders either cash or Vornado preferred shares on a one-for-one basis. These units are redeemable at Vornado's option at any time.

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

(Amounts in thousands)

	For the Year Ended December 31,	
	2020	2019
Beginning balance	\$ 888,915	\$ 783,562
Net (loss) income	(24,946)	210,872
Other comprehensive loss	(2,914)	(3,235)
Distributions	(32,595)	(34,607)
Special distribution declared on December 18, 2019 (see Note 12 - <i>Shareholder's Equity/Partners' Capital</i>)	—	(25,912)
Redemption of Class A units for Vornado common shares, at redemption value	(9,266)	(11,250)
Redeemable Class A unit measurement adjustment	(344,043)	(70,810)
Other, net	36,596	40,295
Ending balance	\$ 511,747	\$ 888,915

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*, because of their possible settlement by issuing a variable number of Vornado common shares. Accordingly, the fair value of these units is included as a component of "other liabilities" on our consolidated balance sheets and aggregated \$50,002,000 and \$50,561,000 as of December 31, 2020 and 2019, 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

The 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 sheet as of December 31, 2020. 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 year ended December 31, 2020.

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

11. Redeemable Noncontrolling Interests - continued

Redeemable Noncontrolling Interest in a Consolidated Subsidiary - continued

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

(Amounts in thousands)	For the Year Ended December 31, 2020
Beginning balance	\$ —
Net income	544
Contributions	92,400
Other, net	1,576
Ending balance	<u>\$ 94,520</u>

12. Shareholders' Equity/Partners' Capital

Common Shares (Vornado Realty Trust)

As of December 31, 2020, there were 191,354,679 common shares outstanding. During 2020, we paid an aggregate of \$454,857,000 of quarterly common dividends comprised of common dividends of \$0.66 per share in the first and second quarter, and \$0.53 per share in the third and fourth quarter.

On December 18, 2019, Vornado's Board of Trustees declared a special dividend of \$1.95 per share, or \$372,380,000 in the aggregate, which was paid on January 15, 2020 to common shareholders of record on December 30, 2019 (the "Record Date".)

Class A Units (Vornado Realty L.P.)

As of December 31, 2020, there were 191,354,679 Class A units outstanding that were held by Vornado. These units are classified as "partners' capital" on the consolidated balance sheets of the Operating Partnership. As of December 31, 2020, there were 13,583,607 Class A units outstanding, that were held by third parties. These units are classified outside of "partners' capital" as "redeemable partnership units" on the consolidated balance sheets of the Operating Partnership (See Note 11 – *Redeemable Noncontrolling Interests*). During 2020, the Operating Partnership paid an aggregate of \$454,857,000 of quarterly distributions to Vornado comprised of common distributions of \$0.66 per unit in the first and second quarter, and \$0.53 per unit in the third and fourth quarter.

On January 15, 2020, distributions of \$1.95 per unit, or \$398,292,000 in the aggregate, were paid to Class A unitholders of the Operating Partnership as of the Record Date, of which \$372,380,000 was distributed to Vornado, in connection with the special dividend declared on December 18, 2019 by Vornado's Board of Trustees.

Preferred Shares/Units

On November 24, 2020, Vornado sold 12,000,000 5.25% Series N cumulative redeemable preferred shares at a price of \$25.00 per share, pursuant to an effective registration statement. Vornado received aggregate net proceeds of \$291,182,000, after underwriters' discount and issuance costs and contributed the net proceeds to the Operating Partnership in exchange for 12,000,000 5.25% Series N preferred units (with economic terms that mirror those of the Series N preferred shares). Dividends on the Series N preferred shares/units are cumulative and payable quarterly in arrears. The Series N preferred shares/units are not convertible into, or exchangeable for, any of our properties or securities. On or after five years from the date of issuance (or sooner under limited circumstances), Vornado may redeem the Series N preferred shares/units at a redemption price of \$25.00 per share, plus accrued and unpaid dividends through the date of redemption. The Series N preferred shares/units have no maturity date and will remain outstanding indefinitely unless redeemed by Vornado.

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

12. Shareholders' Equity/Partners' Capital - continued

Preferred Shares/Units - continued

The following table sets forth the details of our preferred shares of beneficial interest and the preferred units of the Operating Partnership as of December 31, 2020 and 2019.

(Amounts in thousands, except share/unit and per share/per unit amounts)

Preferred Shares/Units	Shares/Units Outstanding as of December 31,				Per Share/Unit		
	Balance as of December 31,		2020	2019	Liquidation Preference	Annual Dividend/Distribution ⁽¹⁾	
	2020	2019					
Convertible Preferred:							
6.5% Series A: authorized 13,402 and 15,640 shares/units ⁽²⁾	\$ 934	\$ 991	13,402	15,640	\$ 50.00	\$ 3.25	
Cumulative Redeemable Preferred:							
5.70% Series K: authorized 12,000,000 shares/units ⁽³⁾	290,971	290,971	12,000,000	12,000,000	25.00	1.425	
5.40% Series L: authorized 13,800,000 shares/units ⁽³⁾	290,306	290,306	12,000,000	12,000,000	25.00	1.35	
5.25% Series M: authorized 13,800,000 shares/units ⁽³⁾	308,946	308,946	12,780,000	12,780,000	25.00	1.3125	
5.25% Series N: authorized 12,000,000 shares/units ⁽³⁾	291,182	—	12,000,000	—	25.00	1.3125 ⁽⁴⁾	
	<u>\$ 1,182,339</u>	<u>\$ 891,214</u>	<u>48,793,402</u>	<u>36,795,640</u>			

(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) 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.

(4) Annual dividend/distribution rate commencing in November 2020.

During 2020, we paid an aggregate of \$51,739,000 of preferred dividends.

Accumulated Other Comprehensive Loss

The following table sets forth the changes in accumulated other comprehensive loss by component for the year ended December 31, 2020.

(Amounts in thousands)

	Total	Accumulated other comprehensive income (loss) of nonconsolidated subsidiaries	Interest rate swaps	Other
Balance as of December 31, 2019	\$ (40,233)	\$ 4	\$ (36,126)	\$ (4,111)
Other comprehensive (loss) income	(34,866)	(14,342)	(29,972)	9,448
Balance as of December 31, 2020	<u>\$ (75,099)</u>	<u>\$ (14,338)</u>	<u>\$ (66,098)</u>	<u>\$ 5,337</u>

13. Variable Interest Entities

Unconsolidated VIEs

As of December 31, 2020 and 2019, we have 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 7 – *Investments in Partially Owned Entities*). As of December 31, 2020 and 2019, the net carrying amount of our investments in these entities was \$224,754,000 and \$217,451,000, 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 non-controlling interests. These entities are VIEs because the non-controlling interests do not have substantive kick-out or participating rights. We consolidate these entities because we control all significant business activities.

As of December 31, 2020, the total assets and liabilities of our consolidated VIEs, excluding the Operating Partnership, were \$4,053,841,000 and \$1,722,719,000 respectively. As of December 31, 2019, the total assets and liabilities of our consolidated VIEs, excluding the Operating Partnership, were \$4,923,656,000 and \$2,646,623,000, respectively.

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

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; 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) marketable securities, (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 825-10), (v) interest rate swaps and (vi) mandatorily redeemable instruments (Series G-1 through G-4 convertible preferred units and Series D-13 cumulative redeemable preferred units). The tables below aggregate the fair values of these financial assets and liabilities by their levels in the fair value hierarchy.

(Amounts in thousands)

	As of December 31, 2020			
	Total	Level 1	Level 2	Level 3
Real estate fund investments	\$ 3,739	\$ —	\$ —	\$ 3,739
Deferred compensation plan assets (\$10,813 included in restricted cash and \$94,751 in other assets)	105,564	65,636	—	39,928
Loans receivable (\$43,008 included in investments in partially owned entities and \$4,735 in other assets)	47,743	—	—	47,743
Interest rate caps (included in other assets)	17	—	17	—
Total assets	\$ 157,063	\$ 65,636	\$ 17	\$ 91,410
Mandatorily redeemable instruments (included in other liabilities)	\$ 50,002	\$ 50,002	\$ —	\$ —
Interest rate swaps (included in other liabilities)	66,033	—	66,033	—
Total liabilities	\$ 116,035	\$ 50,002	\$ 66,033	\$ —

(Amounts in thousands)

	As of December 31, 2019			
	Total	Level 1	Level 2	Level 3
Marketable securities	\$ 33,313	\$ 33,313	\$ —	\$ —
Real estate fund investments	222,649	—	—	222,649
Deferred compensation plan assets (\$11,819 included in restricted cash and \$91,954 in other assets)	103,773	71,338	—	32,435
Interest rate swaps (included in other assets)	4,327	—	4,327	—
Total assets	\$ 364,062	\$ 104,651	\$ 4,327	\$ 255,084
Mandatorily redeemable instruments (included in other liabilities)	\$ 50,561	\$ 50,561	\$ —	\$ —
Interest rate swaps (included in other liabilities)	40,354	—	40,354	—
Total liabilities	\$ 90,915	\$ 50,561	\$ 40,354	\$ —

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

14. Fair Value Measurements - continued

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

Real Estate Fund Investments

As of December 31, 2020, we had four real estate fund investments with an aggregate fair value of \$3,739,000, or \$339,022,000 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.

Unobservable Quantitative Input	Range		Weighted Average (based on fair value of assets)	
	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019
Discount rates	7.6% to 15.0%	8.6% to 12.0%	12.7%	9.9%
Terminal capitalization rates	5.5% to 10.3%	4.9% to 8.2%	7.9%	5.9%

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.

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 Year Ended December 31,	
	2020	2019
Beginning balance	\$ 222,649	\$ 318,758
Net unrealized loss on held investments	(226,107)	(106,109)
Purchases/additional fundings	7,197	10,000
Ending balance	<u>\$ 3,739</u>	<u>\$ 222,649</u>

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 from a third-party administrator, which are compiled from the quarterly reports provided to them from each limited partnership and investment fund. The quarterly reports provide net asset values on a fair value basis which are audited by independent public accounting firms on an annual basis. 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 Year Ended December 31,	
	2020	2019
Beginning balance	\$ 32,435	\$ 37,808
Sales	(5,467)	(27,053)
Purchases	8,766	18,494
Realized and unrealized gains	808	1,947
Other, net	3,386	1,239
Ending balance	<u>\$ 39,928</u>	<u>\$ 32,435</u>

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 as of January 1, 2020. 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 on the following page were utilized in determining the fair value of these loans receivable.

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

14. Fair Value Measurements - continued

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

Loans Receivable - continued

Unobservable Quantitative Input	Range	December 31, 2020	
		Weighted Average (based on fair value of investments)	
Discount rates	6.5%		6.5 %
Terminal capitalization rates	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 Year Ended December 31, 2020
Beginning balance	\$ 59,251
Credit losses	(13,369)
Interest accrual	2,461
Paydowns	(600)
Ending balance	\$ 47,743

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 hedge 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 derivative instruments and hedged items, but will have no effect on cash flows.

The following table summarizes our consolidated derivative instruments, all of which hedge variable rate debt, as of December 31, 2020 and 2019, respectively.

(Amounts in thousands)	As of December 31, 2020					
	Variable Rate					
	Fair Value	Notional Amount	Spread over LIBOR	Interest Rate	Swapped Rate	Expiration Date
Hedged Item						
Interest rate caps (included in other assets):						
Various	\$ 17	\$ 175,000				
Interest rate swaps (included in other liabilities):						
Unsecured term loan	\$ 57,723	\$ 750,000 (1)	L+100	1.15%	3.87%	10/23
33-00 Northern Boulevard mortgage loan	8,310	100,000	L+180	1.95%	4.14%	1/25
	\$ 66,033	\$ 850,000				

(1) Remaining \$50,000 balance of our unsecured term loan bears interest at a floating rate of LIBOR plus 1.00%.

(Amounts in thousands)	As of December 31, 2019					
	Variable Rate					
	Fair Value	Notional Amount	Spread over LIBOR	Interest Rate	Swapped Rate	Expiration Date
Hedged Item						
Interest rate swaps (included in other assets):						
770 Broadway loan	\$ 4,045	\$ 700,000	L+175	3.46%	2.56%	9/20
888 Seventh Avenue mortgage loan	218	375,000	L+170	3.44%	3.25%	12/20
	\$ 4,263	1,075,000				
Interest rate caps (included in other assets):						
Various	64	175,000				
	\$ 4,327	\$ 1,250,000				
Interest rate swaps (included in other liabilities):						
Unsecured term loan	\$ 36,809	\$ 750,000	L+100	2.80%	3.87%	10/23
33-00 Northern Boulevard mortgage loan	3,545	100,000	L+180	3.52%	4.14%	1/25
	\$ 40,354	\$ 850,000				

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

14. Fair Value Measurements - continued

Fair Value Measurements on a Nonrecurring Basis

As of December 31, 2020, assets measured at fair value on a nonrecurring basis on our consolidated balance sheet consisted of real estate assets that have been written down to estimated fair value for impairment purposes. The impairment losses primarily relate to wholly owned street retail assets. There were no assets measured at fair value on a nonrecurring basis on our consolidated balance sheet as of December 31, 2019.

Our estimate of the fair value of these assets was measured using widely accepted valuation techniques including (i) discounted cash flow analyses based upon market conditions and expectations of growth and utilized unobservable quantitative inputs, including a capitalization rate of 5.0% and discount rate of 7.0%, and (ii) comparable sales activity.

(Amounts in thousands)

	As of December 31, 2020			
	Total	Level 1	Level 2	Level 3
Real estate assets	\$ 191,116	\$ —	\$ —	\$ 191,116

As of September 30, 2020, assets measured at fair value on a nonrecurring basis on our consolidated balance sheet consisted of our investment in Fifth Avenue and Times Square JV that had been written down to estimated fair value for impairment purposes.

Our estimate of the fair value of our investment in Fifth Avenue and Times Square JV was measured using a discounted cash flow analysis based upon market conditions and expectations of growth and utilized unobservable quantitative inputs, including a capitalization rate of 4.50% and discount rate of 6.25%. See Note 7 - *Investments in Partially Owned Entities* for details of non-cash impairment losses recognized on our investment in Fifth Avenue and Times Square JV during the year ended December 31, 2020.

(Amounts in thousands)

	As of September 30, 2020			
	Total	Level 1	Level 2	Level 3
Investment in Fifth Avenue and Times Square JV	\$ 2,811,374	\$ —	\$ —	\$ 2,811,374

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 December 31, 2020		As of December 31, 2019	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Cash equivalents	\$ 1,476,427	\$ 1,476,000	\$ 1,276,815	\$ 1,277,000
Debt:				
Mortgages payable	\$ 5,608,458	\$ 5,612,000	\$ 5,670,016	\$ 5,714,000
Senior unsecured notes	450,000	476,000	450,000	468,000
Unsecured term loan	800,000	800,000	750,000	750,000
Unsecured revolving credit facilities	575,000	575,000	575,000	575,000
Total	\$ 7,433,458 ⁽¹⁾	\$ 7,463,000	\$ 7,445,016 ⁽¹⁾	\$ 7,507,000

⁽¹⁾ Excludes \$34,462 and \$38,407 of deferred financing costs, net and other as of December 31, 2020 and 2019 respectively.

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

15. Stock-based Compensation

Vornado's 2019 Omnibus Share Plan (the "Plan") provides the Compensation Committee of Vornado's Board of Trustees (the "Committee") the ability to grant incentive and nonqualified Vornado stock options, restricted stock, restricted Operating Partnership units ("OP units"), out-performance plan awards ("OPPs"), appreciation-only long-term incentive plan units ("AO LTIP Units") and performance conditioned appreciation-only long-term incentive plan units ("Performance Conditioned AO LTIP Units") to certain of our employees and officers. Awards may be granted up to a maximum 5,500,000 shares, if all awards granted are Full Value awards, as defined in the Plan, and up to 11,000,000 shares, if all of the awards granted are Not Full Value Awards, as defined in the Plan. Full Value Awards are awards of securities, such as restricted shares, that, if all vesting requirements are met, do not require the payment of an exercise price or strike price to acquire the securities. Not Full Value Awards are awards of securities, such as options, that do require the payment of an exercise price or strike price. As of December 31, 2020, Vornado has approximately 4,662,000 shares available for future grants under the Plan, if all awards granted are Full Value Awards, as defined.

We account for all equity-based compensation in accordance with ASC Topic 718, *Compensation - Stock Compensation*. Below is a summary of our stock-based compensation expense, a component of "general and administrative" expense on our consolidated statements of income.

(Amounts in thousands)

	For the Year Ended December 31,		
	2020	2019	2018
OP Units	\$ 33,431	\$ 39,969	\$ 17,763
OPPs	9,579	1,944	10,689
AO LTIP Units	3,955	2,636	2,113
Vornado stock options	656	547	587
Vornado restricted stock	649	549	570
Performance Conditioned AO LTIP Units	407	8,263	—
	<u>\$ 48,677</u>	<u>\$ 53,908</u>	<u>\$ 31,722</u>

Below is a summary of unrecognized compensation expense for the year ended December 31, 2020.

(Amounts in thousands)

	As of December 31, 2020	Weighted-Average Remaining Contractual Term	
		1.6	2.1
OP Units	\$ 25,661	1.6	1.6
OPPs	3,882	2.1	2.1
AO LTIP Units	2,286	1.5	1.5
Vornado stock options	987	1.7	1.7
Vornado restricted stock	974	1.7	1.7
Performance Conditioned AO LTIP Units	313	1.3	1.3
	<u>\$ 34,103</u>	<u>1.7</u>	<u>1.7</u>

OPPs

OPPs are multi-year, performance-based equity compensation plans under which participants have the opportunity to earn a class of units ("OPP units") of the Operating Partnership if, and only if, Vornado outperforms a predetermined total shareholder return ("TSR") and/or outperforms the market with respect to a relative TSR during the three-year performance period (the "Performance Period") as described on the following page. OPP units, if earned, become convertible into Class A units of the Operating Partnership (and ultimately into Vornado common shares) following vesting.

2020 OPP

On March 30, 2020, the Committee approved the 2020 OPP, a multi-year, \$35,000,000 performance-based equity compensation plan of which \$32,930,000 was granted to senior executives. The fair value of the 2020 OPP granted was \$11,686,000, of which \$7,583,000 was immediately expensed due to the acceleration of vesting for employees who are retirement eligible (have reached age 65 or age 60 with at least 20 years of service). The remaining \$4,103,000 is being amortized into expense over a five-year period from the date of grant using a graded vesting attribution model.

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

15. Stock-based Compensation – continued

OPPs - continued

2020 OPP - continued

Awards under the 2020 OPP may potentially be earned if Vornado (i) achieves a TSR above a benchmark weighted index (the “Index”) comprised 80% of the SNL US Office REIT Index and 20% of the SNL US Retail Index over the Performance Period (the “2020 OPP Relative Component”), and/or (ii) achieves a TSR greater than 21% over the Performance Period (the “2020 OPP Absolute Component”).

The value of awards under the 2020 OPP Relative Component and 2020 OPP Absolute Component will be calculated separately and will each be subject to an aggregate \$35,000,000 maximum award cap for all participants. The two components will be added together to determine the aggregate award size, which shall also be subject to the aggregate \$35,000,000 maximum award cap for all participants. In the event awards are earned under the 2020 OPP Absolute Component, but Vornado underperforms the Index by more than 200 basis points per annum over the Performance Period (600 basis points over the three years), the amount earned under the 2020 OPP Absolute Component will be reduced based on the degree by which the Index exceeds Vornado’s TSR with the maximum payout being 50% under the 2020 OPP Absolute Component. In the event awards are earned under the 2020 OPP Relative Component, but Vornado fails to achieve a TSR of at least 2% per annum, awards earned under the 2020 OPP Relative Component will be reduced on a ratable sliding scale based on Vornado’s absolute TSR performance, with awards earned under the 2020 OPP Relative Component being reduced by a maximum of 50% in the event Vornado’s TSR during the applicable measurement period is 0% or negative. If the designated performance objectives are achieved, awards earned under the 2020 OPP will vest ratably in each of years three, four and five. In addition, all of Vornado’s Named Executive Officers (as defined in Vornado’s Proxy Statement filed on Schedule 14A with the Securities and Exchange Commission on April 3, 2020) are required to hold any earned and vested awards for one year following each such vesting date. Dividends on awards granted under the 2020 OPP accrue during the Performance Period and are paid to participants if awards are ultimately earned based on the achievement of the designated performance objectives.

2018 OPP

Awards under the 2018 OPP may be earned if Vornado (i) achieves a TSR level greater than 21% over the Performance Period (the “2018 OPP Absolute Component”) and/or (ii) achieves a TSR above a benchmark weighted index comprised of 70% of the SNL US Office REIT Index and 30% of the SNL US Retail Index over the Performance Period (the “2018 OPP Relative Component”).

The value of awards under the 2018 OPP Relative Component and 2018 OPP Absolute Component will be calculated separately and will each be subject to an aggregate \$35,000,000 maximum award cap for all participants. The two components will be added together to determine the aggregate award size, which shall also be subject to the aggregate \$35,000,000 maximum award cap for all participants. In the event awards are earned under the 2018 OPP Absolute Component, but Vornado underperforms the index by more than 200 basis points per annum over the Performance Period (600 basis points over the three years), the amount earned under the 2018 OPP Absolute Component will be reduced (and potentially fully negated) based on the degree by which the index exceeds Vornado’s TSR. In the event these awards are earned under the 2018 OPP Relative Component, but Vornado fails to achieve a TSR of at least 3% per annum, awards earned under the 2018 OPP Relative Component will be reduced on a ratable sliding scale based on Vornado’s absolute TSR performance, with awards earned under the 2018 OPP Relative Component being reduced by a maximum of 50% in the event Vornado’s TSR during the applicable measurement period is 0% or negative. If the designated performance objectives are achieved, awards under the 2018 OPP will vest ratably in each of years three, four and five. In addition, all of Vornado’s Named Executive Officers (as defined in Vornado’s Proxy Statement filed on Schedule 14A with the Securities and Exchange Commission on April 5, 2019) are required to hold any earned and vested awards for one year following each such vesting date. Dividends on awards granted under the 2018 OPP accrue during the Performance Period and are paid to participants if awards are ultimately earned based on the achievement of the designated performance objectives.

Below is the summary of the OPP units granted during the years December 31, 2020, 2018 and 2017.

Plan Year	Total Plan Notional Amount	Percentage of Notional Amount Granted	Grant Date Fair Value ⁽¹⁾	OPP Units Earned
2020	\$ 35,000,000	94.0 %	\$ 11,700,000	To be determined in 2023
2018	35,000,000	78.2 %	10,300,000	To be determined in 2021
2017	35,000,000	86.6 %	10,800,000	Not earned

⁽¹⁾ During the years ended December 31, 2020 and 2018, \$7,583,000 and \$8,040,000, respectively, was immediately expensed on the respective grant date due to acceleration of vesting for employees who are retirement eligible (have reached age 65 or age 60 with at least 20 years of service).

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

15. Stock-based Compensation – continued

Vornado Stock Options

Vornado stock options are granted at an exercise price equal to the average of the high and low market price of Vornado's common shares on the NYSE on the date of grant, generally vest over 4 years and expire 10 years from the date of grant. Compensation expense related to Vornado stock option awards is recognized on a straight-line basis over the vesting period.

Below is a summary of Vornado's stock option activity for the year ended December 31, 2020.

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding as of December 31, 2019	1,768,877	\$ 57.39		
Granted	70,581	52.35		
Exercised	(68,782)	51.12		
Forfeited	(4,474)	65.63		
Expired	<u>(1,000,565)</u>	51.77		
Outstanding as of December 31, 2020	<u>765,637</u>	<u>\$ 64.79</u>	1.92	\$ 20,794
Options exercisable as of December 31, 2020	<u>658,807</u>	<u>\$ 65.84</u>	<u>0.86</u>	<u>\$ 1,288</u>

The fair value of each option grant is estimated on the date of grant using an option-pricing model with the following weighted-average assumptions for grants in the years ended December 31, 2020, 2019 and 2018.

	As of December 31,		
	2020	2019	2018
Expected volatility	35% - 36%	35%	35%
Expected life	5.0 years	5.0 years	5.0 years
Risk free interest rate	0.57% - 1.76%	2.50%	2.25%
Expected dividend yield	3.2% - 3.4%	2.9%	2.9%

The weighted average grant date fair value per share for options granted during the years ended December 31, 2020, 2019 and 2018 was \$12.28, \$16.64 and \$18.42, respectively. Cash received from option exercises for the years ended December 31, 2020, 2019 and 2018 was \$3,516,000, \$5,495,000 and \$5,927,000, respectively. The total intrinsic value of options exercised during the years ended December 31, 2020, 2019 and 2018 was \$859,000, \$18,954,000 and \$25,820,000, respectively.

Performance Conditioned AO LTIP Units

Performance Conditioned AO LTIP Units are AO LTIP Units that require the achievement of certain performance conditions by a specified date or they are forfeited. The performance-based condition is met if Vornado common shares trade at or above 110% of the grant price per share for any 20 consecutive days on or before the fourth anniversary following the date of grant. If the performance conditions are not met, the awards are forfeited. If the performance conditions are met, once vested, the awards may be converted into Class A Operating Partnership units in the same manner as AO LTIP Units until ten years from the date of grant.

Below is a summary of Performance Conditioned AO LTIP Units activity for the year ended December 31, 2020.

	Units	Weighted-Average Grant-Date Fair Value	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding as of December 31, 2019	<u>496,762</u>	<u>\$ 62.62</u>		
Outstanding as of December 31, 2020	<u>496,762</u>	<u>\$ 62.62</u>	8.04	\$ —
Options exercisable at December 31, 2020	<u>235,089</u>	<u>\$ 62.62</u>	<u>8.04</u>	<u>\$ —</u>

Performance Conditioned AO LTIP Units granted during the year ended December 31, 2019 had a grant price of \$64.48 and fair value of \$8,983,000. The fair value of each Performance Conditioned AO LTIP Units granted is estimated on the date of grant using an option-pricing model with the following weighted average assumptions for grants in the year ended December 31, 2019.

	As of December 31, 2019	
Expected volatility		35%
Expected life		8.0 years
Risk free interest rate		2.76%
Expected dividend yield		3.1%

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

15. Stock-based Compensation - continued

AO LTIP Units

AO LTIP Units are a class of partnership interests in the Operating Partnership that are intended to qualify as “profits interests” for federal income tax purposes and generally only allow the recipient to realize value to the extent the fair market value of a Vornado common share exceeds the threshold level set at the time the AO LTIP Units are granted, subject to any vesting conditions applicable to the award. The threshold level is intended to be equal to 100% of the then fair market value of a Vornado common share on the date of grant. The value of vested AO LTIP Units is realized through conversion of the AO LTIP Units into Class A Operating Partnership units. The number of Class A Units into which vested AO LTIP Units may be converted is determined based on the quotient of (i) the excess of the conversion value on the conversion date over the threshold value designated at the time the AO LTIP Unit was granted, divided by (ii) the conversion value on the conversion date. The “conversion value” is the value of a Vornado common share on the conversion date multiplied by the Conversion Factor as defined in the Partnership Agreement, which is currently one. AO LTIP Units have a term of 10 years from the grant date. Each holder will generally receive special income allocations in respect of an AO LTIP Unit equal to 10% (or such other percentage specified in the applicable award agreement) of the income allocated in respect of a Class A Unit. Upon conversion of AO LTIP Units to Class A Units, holders will be entitled to receive in respect of each such AO LTIP Unit, on a per unit basis, a special distribution equal to 10% (or such other percentage specified in the applicable award agreement) of the distributions received by a holder of an equivalent number of Class A Units during the period from the grant date of the AO LTIP Units through the date of conversion.

Below is a summary of AO LTIP Units activity for the year ended December 31, 2020.

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding as of December 31, 2019	383,983	\$ 66.23		
Granted	342,924	52.40		
Forfeited	(7,454)	57.23		
Expired	(1,872)	67.55		
Outstanding as of December 31, 2020	<u>717,581</u>	<u>\$ 59.71</u>	<u>7.30</u>	<u>\$ 100,619</u>
Options exercisable as of December 31, 2020	<u>216,646</u>	<u>\$ 63.94</u>	<u>4.47</u>	<u>\$ 14,187</u>

AO LTIP Units granted during the years ended December 31, 2020, 2019 and 2018 had a fair value of \$4,319,000, \$3,429,000 and \$3,484,000, respectively. The fair value of each AO LTIP Units granted is estimated on the date of grant using an option-pricing model with the following weighted-average assumptions for grants in the years ended December 31, 2020, 2019 and 2018.

	As of December 31,		
	2020	2019	2018
Expected volatility	35% - 36%	35%	35%
Expected life	5.0 years	5.0 years	5.0 years
Risk free interest rate	0.57% - 1.76%	2.50%	2.25%
Expected dividend yield	3.2% - 3.4%	2.9%	2.9%

OP Units

OP Units are granted at the average of the high and low market price of Vornado’s common shares on the NYSE on the date of grant, vest ratably over four years and are subject to a taxable book-up event, as defined. Compensation expense related to OP Units is recognized ratably over the vesting period using a graded vesting attribution model. Distributions paid on unvested OP Units are charged to “net loss (income) attributable to noncontrolling interests in the Operating Partnership” on Vornado’s consolidated statements of income and to “preferred unit distributions” on the Operating Partnership’s consolidated statements of income and amounted to \$5,316,000, \$4,070,000 and \$2,559,000 in the years ended December 31, 2020, 2019 and 2018, respectively.

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

15. Stock-based Compensation - continued

OP Units - continued

Below is a summary of restricted OP unit activity for the year ended December 31, 2020.

Unvested Units	Units	Weighted-Average Grant-Date Fair Value
Unvested as of December 31, 2019	1,148,313	\$ 59.21
Granted	530,597	33.95
Vested	(516,805)	47.16
Forfeited	(9,687)	35.86
Unvested as of December 31, 2020	<u>1,152,418</u>	<u>53.17</u>

OP Units granted in 2020, 2019 and 2018 had a fair value of \$18,013,000, \$58,732,000 and \$17,463,000, respectively. The fair value of OP Units that vested during the years ended December 31, 2020, 2019 and 2018 was \$24,373,000, \$27,821,000 and \$18,037,000, respectively.

Vornado Restricted Stock

Vornado restricted stock awards are granted at the average of the high and low market price of Vornado's common shares on the NYSE on the date of grant and generally vest over four years. Compensation expense related to Vornado's restricted stock awards is recognized on a straight-line basis over the vesting period. Dividends paid on unvested Vornado restricted stock are charged directly to retained earnings and amounted to \$98,000, \$51,000 and \$44,000 for the years ended December 31, 2020, 2019 and 2018, respectively.

Below is a summary of Vornado's restricted stock activity for the year ended December 31, 2020.

Unvested Shares	Shares	Weighted-Average Grant-Date Fair Value
Unvested as of December 31, 2019	18,927	\$ 70.96
Granted	16,003	53.29
Vested	(8,526)	70.60
Forfeited	(1,089)	67.51
Unvested as of December 31, 2020	<u>25,315</u>	<u>60.06</u>

Vornado restricted stock awards granted in 2020, 2019 and 2018 had a fair value of \$853,000, \$568,000 and \$623,000, respectively. The fair value of restricted stock that vested during the years ended December 31, 2020, 2019 and 2018 was \$602,000, \$477,000 and \$492,000, respectively.

16. Impairment Losses and Transaction Related Costs, Net

The following table sets forth the details of impairment losses and transaction related costs, net:

(Amounts in thousands)

	For the Year Ended December 31,		
	2020	2019	2018
Real estate impairment losses ⁽¹⁾	\$ (236,286)	\$ (8,065)	\$ (12,000)
608 Fifth Avenue lease liability extinguishment gain in 2020 and impairment loss and related write-offs in 2019 (see following page for details)	70,260	(93,860)	—
Transaction related costs	(8,001)	(4,613)	(6,217)
Transfer Tax ⁽²⁾	—	—	(13,103)
	<u>\$ (174,027)</u>	<u>\$ (106,538)</u>	<u>\$ (31,320)</u>

(1) See Note 14 - *Fair Value Measurements* for additional information.

(2) Additional Transfer Tax recorded in the first quarter 2018 related to the acquisition of Independence Plaza. The joint venture, in which we have a 50.1% economic interest, that owns Independence Plaza recognized this expense based on the precedent established by the Tax Tribunal's decision regarding One Park Avenue (see Note 5 - *Real Estate Fund Investments*).

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

16. Impairment Losses and Transaction Related Costs, Net - continued

608 Fifth Avenue

During the second quarter of 2019, Arcadia Group US Ltd ("Arcadia Group"), the operator of Topshop, our retail tenant at 608 Fifth Avenue, filed for Chapter 15 bankruptcy protection in the United States. On June 28, 2019, Arcadia Group closed all of its stores in the United States. 608 Fifth Avenue was subject to a land and building lease which was set to expire in 2033. During the second quarter of 2019, we concluded that the carrying amount of the property was not recoverable and recognized a \$93,860,000 non-cash impairment loss on our consolidated statements of income, of which \$75,220,000 resulted from the impairment of our right-of-use asset.

On May 20, 2020, we entered into an agreement with the land and building lessor at 608 Fifth Avenue to surrender the property. Per the terms of the agreement, we were released from our obligations under the lease and assigned all of our right, title and interest in the tenant leases of 608 Fifth Avenue to the land and building lessor. In connection therewith, we removed the lease liability from our consolidated balance sheets which resulted in a \$70,260,000 gain recorded on our consolidated statements of income for the year ended December 31, 2020.

17. Interest and Other Investment (Loss) Income, Net

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

(Amounts in thousands)

	For the Year Ended December 31,		
	2020	2019	2018
(Decrease) increase in fair value of marketable securities:			
PREIT ⁽¹⁾	\$ (4,938)	\$ (21,649)	\$ —
Lexington ⁽²⁾	—	16,068	(26,596)
Other	—	48	143
	<u>(4,938)</u>	<u>(5,533)</u>	<u>(26,453)</u>
Credit losses on loans receivable ⁽³⁾	(13,369)	—	—
Interest on cash and cash equivalents and restricted cash	5,793	13,380	15,827
Interest on loans receivable	3,384	6,326	10,298 ⁽⁴⁾
Dividends on marketable securities	—	3,938	13,339
Other, net	3,631	3,708	4,046
	<u>\$ (5,499)</u>	<u>\$ 21,819</u>	<u>\$ 17,057</u>

(1) Sold on January 23, 2020 (see page 91 for details).

(2) Sold on March 1, 2019.

(3) See Note 3 - *Basis of Presentation and Significant Accounting Policies* and Note 14 - *Fair Value Measurements* for additional information.

(4) Includes \$6,707 of profit participation in connection with an investment in a mezzanine loan which was previously repaid to us.

18. Interest and Debt Expense

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

(Amounts in thousands)

	For the Year Ended December 31,		
	2020	2019	2018
Interest expense ⁽¹⁾	\$ 251,847	\$ 335,016	\$ 389,136
Capitalized interest and debt expense	(41,056)	(72,200)	(73,166)
Amortization of deferred financing costs	18,460	23,807	31,979
	<u>\$ 229,251</u>	<u>\$ 286,623</u>	<u>\$ 347,949</u>

(1) 2019 includes \$22,540 of debt prepayment costs in connection with the redemption of \$400,000 5.00% senior unsecured notes which were scheduled to mature in January 2022.

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

19. (Loss) Income Per Share/(Loss) Income Per Class A Unit

Vornado Realty Trust

The following table presents the calculations of (i) basic (loss) income per common share which includes the weighted average number of common shares outstanding without regard to dilutive potential common shares and (ii) diluted (loss) income per common share which includes the weighted average common shares 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. Other potential dilutive share equivalents such as our employee stock options, OP Units, OPPs, AO LTIP Units and Performance Conditioned AO LTIP Units are included in the computation of diluted Earnings Per Share ("EPS") using the treasury stock method, while the dilutive effect of our Series A convertible preferred shares is reflected in diluted EPS by application of the if-converted method.

(Amounts in thousands, except per share amounts)

	For the Year Ended December 31,		
	2020	2019	2018
Numerator:			
(Loss) income from continuing operations, net of loss (income) attributable to noncontrolling interests	\$ (297,005)	\$ 3,147,965	\$ 449,356
(Loss) income from discontinued operations	—	(28)	598
Net (loss) income attributable to Vornado	(297,005)	3,147,937	449,954
Preferred share dividends	(51,739)	(50,131)	(50,636)
Preferred share issuance costs	—	—	(14,486)
Net (loss) income attributable to common shareholders	(348,744)	3,097,806	384,832
Earnings allocated to unvested participating securities	(99)	(309)	(44)
Numerator for basic (loss) income per share	<u>(348,843)</u>	<u>3,097,497</u>	<u>384,788</u>
Impact of assumed conversions:			
Convertible preferred share dividends	—	57	62
Earnings allocated to Out-Performance Plan units	—	9	174
Numerator for diluted (loss) income per share	<u>\$ (348,843)</u>	<u>\$ 3,097,563</u>	<u>\$ 385,024</u>
Denominator:			
Denominator for basic (loss) income per share – weighted average shares	191,146	190,801	190,219
Effect of dilutive securities ⁽¹⁾ :			
Employee stock options and restricted stock awards	—	216	933
Convertible preferred shares	—	34	37
Out-Performance Plan units	—	2	101
Denominator for diluted (loss) income per share – weighted average shares and assumed conversions	<u>191,146</u>	<u>191,053</u>	<u>191,290</u>
(LOSS) INCOME PER COMMON SHARE - BASIC:			
Net (loss) income per common share	<u>\$ (1.83)</u>	<u>\$ 16.23</u>	<u>\$ 2.02</u>
(LOSS) INCOME PER COMMON SHARE - DILUTED:			
Net (loss) income per common share	<u>\$ (1.83)</u>	<u>\$ 16.21</u>	<u>\$ 2.01</u>

⁽¹⁾ The effect of dilutive securities excluded an aggregate of 14,007, 13,020 and 12,232 weighted average common share equivalents in the years ended December 31, 2020, 2019 and 2018, respectively, as their effect was anti-dilutive.

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

19. (Loss) Income Per Share/(Loss) Income Per Class A Unit – continued

Vornado Realty L.P.

The following table presents the calculations of (i) basic (loss) 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 (loss) income per Class A unit which includes the weighted average Class A unit 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, OP Units and OPPs, based on the two-class method. Other potential dilutive unit equivalents such as Vornado stock options, AO LTIP Units and Performance Conditioned AO LTIP Units are included in the computation of diluted income per unit ("EPU") using the treasury stock method, while the dilutive effect of our Series A convertible preferred units is reflected in diluted EPU by application of the if-converted method.

(Amounts in thousands, except per unit amounts)

	For the Year Ended December 31,		
	2020	2019	2018
Numerator:			
(Loss) income from continuing operations, net of loss attributable to noncontrolling interests in consolidated subsidiaries	\$ (321,951)	\$ 3,358,839	\$ 474,988
(Loss) income from discontinued operations	—	(30)	638
Net (loss) income attributable to Vornado Realty L.P.	(321,951)	3,358,809	475,626
Preferred unit distributions	(51,904)	(50,296)	(50,830)
Preferred unit issuance costs	—	—	(14,486)
Net (loss) income attributable to Class A unitholders	(373,855)	3,308,513	410,310
Earnings allocated to unvested participating securities	(5,417)	(17,296)	(2,973)
Numerator for basic (loss) income per Class A unit	(379,272)	3,291,217	407,337
Impact of assumed conversions:			
Convertible preferred unit distributions	—	57	62
Numerator for diluted (loss) income per Class A unit	<u>\$ (379,272)</u>	<u>\$ 3,291,274</u>	<u>\$ 407,399</u>
Denominator:			
Denominator for basic (loss) income per Class A unit – weighted average units	203,503	202,947	202,068
Effect of dilutive securities ⁽¹⁾ :			
Vornado stock options, Vornado restricted stock awards, OP Units, AO LTIP Units and OPPs	—	267	1,307
Convertible preferred units	—	34	37
Denominator for diluted (loss) income per Class A unit – weighted average units and assumed conversions	<u>203,503</u>	<u>203,248</u>	<u>203,412</u>
(LOSS) INCOME PER CLASS A UNIT - BASIC:			
(Loss) income from continuing operations, net	\$ (1.86)	\$ 16.22	\$ 2.01
Income from discontinued operations, net	—	—	0.01
Net (loss) income per Class A unit	<u>\$ (1.86)</u>	<u>\$ 16.22</u>	<u>\$ 2.02</u>
(LOSS) INCOME PER CLASS A UNIT - DILUTED:			
Net (loss) income per Class A unit	<u>\$ (1.86)</u>	<u>\$ 16.19</u>	<u>\$ 2.00</u>

(1) The effect of dilutive securities excluded an aggregate of 1,650, 825 and 110 weighted average Class A unit equivalents in the years ended December 31, 2020, 2019 and 2018 respectively, as their effect was anti-dilutive.

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

20. Leases

As lessor

We lease space to tenants under operating leases. Most of the leases provide for the payment of fixed base rent payable monthly in advance. Office building leases generally require tenants to reimburse us for operating costs and real estate taxes above their base year costs. Certain leases provide for pass-through to tenants for their share of real estate taxes, insurance and common area maintenance. Certain leases also require additional variable rent payments based on a percentage of the tenants' sales.

As of December 31, 2020, future undiscounted cash flows under non-cancelable operating leases were as follows:

(Amounts in thousands)	<u>As of December 31, 2020</u>	
For the year ended December 31,		
2021	\$	1,230,675
2022		1,227,742
2023		1,161,730
2024		995,588
2025		876,497
Thereafter		5,090,824

As lessee

We have a number of ground leases which are classified as operating leases. As of December 31, 2020, our ROU assets and lease liabilities were \$367,365,000 and \$401,008,000, respectively. As of December 31, 2019, our ROU assets and lease liabilities were \$379,546,000 and \$498,254,000, respectively.

The discount rate applied to measure each ROU asset and lease liability is based on our incremental borrowing rate ("IBR"). We consider the general economic environment and our credit rating and factor in various financing and asset specific adjustments to ensure the IBR is appropriate to the intended use of the underlying lease. Certain of our ground leases offer renewal options which we assess against relevant economic factors to determine whether we are reasonably certain of exercising or not exercising the option. Lease payments associated with renewal periods that we are reasonably certain will be exercised are included in the measurement of the lease liability and corresponding ROU asset.

Certain of our ground leases are subject to fair market rent resets based on a percentage of the appraised value of the underlying assets at specified future dates. Fair market rent resets do not give rise to remeasurement of the related ROU assets and lease liabilities. Fair market rent resets, which may be material, will be recognized in the periods in which they are incurred.

The following table sets forth information related to the measurement of our lease liabilities as of December 31, 2020 and 2019:

(Amounts in thousands)	<u>For the Year Ended December 31,</u>	
	<u>2020</u>	<u>2019</u>
Weighted average remaining lease term (in years)	44.8	40.2
Weighted average discount rate	4.91%	4.84%
Cash paid for operating leases	\$ 23,932	\$ 27,817

We recognize rent expense as a component of "operating" expenses on our consolidated statements of income. Rent expense is comprised of fixed and variable lease payments. Variable lease payments include percentage rent and rent resets based on an index or rate. The following table sets forth the details of rent expense for the years ended December 31, 2020 and 2019:

(Amounts in thousands)	<u>For the Year Ended December 31,</u>	
	<u>2020</u>	<u>2019</u>
Fixed rent expense	\$ 28,503	\$ 33,738
Variable rent expense	1,178	1,978
Rent expense	<u>\$ 29,681</u>	<u>\$ 35,716</u>

As of December 31, 2020, future lease payments under operating ground leases were as follows:

(Amounts in thousands)	<u>As of December 31, 2020</u>	
For the year ended December 31,		
2021	\$ 22,010	
2022	23,669	
2023	24,002	
2024	24,354	
2025	24,722	
Thereafter	926,139	
Total undiscounted cash flows	1,044,896	
Present value discount	(643,888)	
Lease liabilities	<u>\$ 401,008</u>	

**VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

20. Leases - continued

As lessee - continued

Farley Office and Retail

The future lease payments detailed on the previous page exclude the ground and building lease at Farley Office and Retail. Our 95% consolidated joint venture which is developing Farley Office and Retail has a 99-year triple-net lease with Empire State Development ("ESD") for 844,000 rentable square feet of commercial space, comprised of approximately 730,000 square feet of office space and approximately 114,000 square feet of restaurant and retail space. The joint venture entered into a development agreement with ESD to build the adjacent Moynihan Train Hall and entered into a design-build contract with Skanska Moynihan Train Hall Builders ("Skanska"), pursuant to which they built Moynihan Train Hall. Skanska substantially completed construction on December 31, 2020, thereby fulfilling this obligation to ESD. The joint venture leased the entire property during the construction period and pursuant to ASC 842-40-55, was required to recognize all development expenditures for Moynihan Train Hall. Accordingly, the development expenditures paid for by governmental agencies were presented as "Moynihan Train Hall development expenditures" with a corresponding obligation recorded to "Moynihan Train Hall Obligation" on our consolidated balance sheets. On December 31, 2020, upon substantial completion of Moynihan Train Hall, the portions of the property not pertaining to our commercial space were severed from the joint venture's lease with ESD and we removed the "Moynihan Train Hall development expenditures" and the offsetting "Moynihan Train Hall obligation" from our consolidated balance sheets.

Our lease of the commercial space at the property is accounted for as a "failed sale-leaseback" as a result of the lease meeting "finance lease" classification pursuant to ASC 842-40-25. The lease calls for annual rent payments of \$5,000,000 plus fixed payments in lieu of real estate taxes ("PILOT") through June 2030. Following the fixed PILOT payment period, the PILOT is calculated in a manner consistent with buildings subject to New York City real estate taxes and assessments. As of December 31, 2020, future rent and fixed PILOT payments are \$549,861,000.

21. Multiemployer Benefit Plans

Our subsidiaries make contributions to certain multiemployer defined benefit plans ("Multiemployer Pension Plans") and health plans ("Multiemployer Health Plans") for our union represented employees, pursuant to the respective collective bargaining agreements.

Multiemployer Pension Plans

Multiemployer Pension Plans differ from single-employer pension plans in that (i) contributions to multiemployer plans may be used to provide benefits to employees of other participating employers and (ii) if other participating employers fail to make their contributions, each of our participating subsidiaries may be required to bear its then pro rata share of unfunded obligations. If a participating subsidiary withdraws from a plan in which it participates, it may be subject to a withdrawal liability. As of December 31, 2020, our subsidiaries' participation in these plans was not significant to our consolidated financial statements.

In the years ended December 31, 2020, 2019 and 2018, we contributed \$7,049,000, \$10,793,000 and \$10,377,000, respectively, towards Multiemployer Pension Plans, which is included as a component of "operating" expenses on our consolidated statements of income. Our subsidiaries' contributions did not represent more than 5% of total employer contributions in any of these plans for the years ended December 31, 2020, 2019 and 2018.

Multiemployer Health Plans

Multiemployer Health Plans in which our subsidiaries participate provide health benefits to eligible active and retired employees. In the years ended December 31, 2020, 2019 and 2018, our subsidiaries contributed \$26,938,000, \$32,407,000 and \$30,354,000, respectively, towards these plans, which is included as a component of "operating" expenses on our consolidated statements of income.

**VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

22. Commitments and Contingencies

Insurance

For our properties (except Farley), we maintain general liability insurance with limits of \$300,000,000 per occurrence and per property, of which \$235,000,000 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 and effective February 15, 2021, excluding communicable disease coverage. For the period February 15, 2020 through February 14, 2021, we and the insurance carriers for our all risk property policy have disagreements as to the applicability of a \$2,300,000 sub-limit for communicable disease coverage across our properties. 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 \$1,759,257 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.

For Farley, we maintain general liability insurance with limits of \$100,000,000 per occurrence, and builder's risk insurance including coverage for existing property and development activities of \$2.8 billion per occurrence and in the aggregate. We maintain coverage for certified and non-certified terrorism acts with limits of \$1.85 billion and \$1.17 billion per occurrence, respectively, and in the aggregate.

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 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. In December 2020, following a trial, the court issued a tentative ruling in our favor. A final hearing was held on February 1, 2021 and we are awaiting a definitive ruling. 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.

**VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

22. Commitments and Contingencies – continued

Other Commitments and Contingencies - continued

In November 2011, we entered into an agreement with the New York City Economic Development Corporation ("EDC") to lease Piers 92 and 94 (the "Piers") for a 49-year term with five 10-year renewal options. The non-recourse lease with a single-purpose entity calls for current annual rent payments of \$2,000,000 with fixed rent steps through the initial term. We operate trade shows and special events at the Piers (and sublease to others for the same uses). In February 2019, an inspection revealed that the piles supporting Pier 92 were structurally unsound (an obligation of EDC to maintain) and we were issued an order by EDC to vacate the property. We continued to make the required lease payments through February 2020, with no abatement provided by EDC for the loss of our right to use Pier 92 or reimbursement for lost revenues. Beginning March 2020, as no resolution had been reached with EDC, we have not paid the monthly rents due under the non-recourse lease. As of December 31, 2020, we have a \$47,473,000 lease liability and a \$34,482,000 right-of-use asset recorded for this lease.

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 ESD, an entity of New York State, for Farley Office and Retail. As of December 31, 2020, the aggregate dollar amount of these guarantees and master leases is approximately \$1,769,000,000.

As of December 31, 2020, \$13,549,000 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 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 the Related Companies ("Related")) is developing Farley Office and Retail. In connection with the development of the property, the joint venture took in 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 December 31, 2020, 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 December 31, 2020 fair value of the Fund assets, at liquidation we would be required to make a \$29,800,000 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 December 31, 2020, we expect to fund additional capital to certain of our partially owned entities aggregating approximately \$10,700,000.

As of December 31, 2020, we have construction commitments aggregating approximately \$451,000,000.

23. Related Party Transactions

Alexander's, Inc.

We own 32.4% of Alexander's. Steven Roth, the Chairman of Vornado's Board of Trustee's and its Chief Executive Officer, is also the Chairman of the Board of Directors and Chief Executive Officer of Alexander's. We provide various services to Alexander's in accordance with management, development and leasing agreements. These agreements are described in Note 7 - *Investments in Partially Owned Entities*.

Interstate Properties ("Interstate")

Interstate is a general partnership in which Mr. Roth is the managing general partner. David Mandelbaum and Russell B. Wight, Jr., Trustees of Vornado and Directors of Alexander's, respectively, are Interstate's two other general partners. As of December 31, 2020, Interstate and its partners beneficially owned an aggregate of approximately 7.0% of the common shares of beneficial interest of Vornado and 26.1% of Alexander's common stock.

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

23. Related Party Transactions - continued

Interstate - continued

We manage and lease the real estate assets of Interstate pursuant to a management agreement for which we receive an annual fee equal to 4% of annual base rent and percentage rent. The management agreement has a term of one year and is automatically renewable unless terminated by either of the parties on 60 days' notice at the end of the term. We believe, based upon comparable fees charged by other real estate companies, that the management agreement terms are fair to us. We earned \$203,000, \$300,000, and \$453,000 of management fees under the agreement for the years ended December 31, 2020, 2019 and 2018, respectively.

Fifth Avenue and Times Square JV

We provide various services to Fifth Avenue and Times Square JV in accordance with management, development, leasing and other agreements. These agreements are described in Note 7 - *Investments in Partially Owned Entities*. Haim Chera, Executive Vice President - Head of Retail, has an investment in Crown, a company controlled by Mr. Chera's family. Crown has a nominal minority interest in Fifth Avenue and Times Square JV. Additionally, we have other investments with Crown.

24. 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. NOI at share - cash basis includes rent that has been deferred as a result of the COVID-19 pandemic. Rent deferrals generally require repayment in monthly installments over a period of time not to exceed twelve months.

Below is a reconciliation of net (loss) income to NOI at share and NOI at share - cash basis for the years ended December 31, 2020, 2019 and 2018.

(Amounts in thousands)

	For the Year Ended December 31,		
	2020	2019	2018
Net (loss) income	\$ (461,845)	\$ 3,334,262	\$ 422,603
Depreciation and amortization expense	399,695	419,107	446,570
General and administrative expense	181,509	169,920	141,871
Impairment losses and transaction related costs, net	174,027	106,538	31,320
Loss (income) from partially owned entities	329,112	(78,865)	(9,149)
Loss from real estate fund investments	226,327	104,082	89,231
Interest and other investment loss (income), net	5,499	(21,819)	(17,057)
Interest and debt expense	229,251	286,623	347,949
Net gain on transfer to Fifth Avenue and Times Square JV	—	(2,571,099)	—
Purchase price fair value adjustment	—	—	(44,060)
Net gains on disposition of wholly owned and partially owned assets	(381,320)	(845,499)	(246,031)
Income tax expense	36,630	103,439	37,633
Loss (income) from discontinued operations	—	30	(638)
NOI from partially owned entities	306,495	322,390	253,564
NOI attributable to noncontrolling interests in consolidated subsidiaries	(72,801)	(69,332)	(71,186)
NOI at share	972,579	1,259,777	1,382,620
Non cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	46,246	(6,060)	(44,704)
NOI at share - cash basis	<u>\$ 1,018,825</u>	<u>\$ 1,253,717</u>	<u>\$ 1,337,916</u>

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

24. Segment Information - continued

Below is a summary of NOI at share, NOI at share - cash basis and selected balance sheet data by segment for the years ended December 31, 2020, 2019 and 2018.

(Amounts in thousands)

	For the Year Ended December 31, 2020		
	Total	New York	Other
Total revenues	\$ 1,527,951	\$ 1,221,748	\$ 306,203
Operating expenses	(789,066)	(640,531)	(148,535)
NOI - consolidated	738,885	581,217	157,668
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(72,801)	(43,773)	(29,028)
Add: NOI from partially owned entities	306,495	296,447	10,048
NOI at share	972,579	833,891	138,688
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	46,246	36,715	9,531
NOI at share - cash basis	<u>\$ 1,018,825</u>	<u>\$ 870,606</u>	<u>\$ 148,219</u>

Balance Sheet Data:

Real estate, at cost	\$ 12,087,943	\$ 9,581,830	\$ 2,506,113
Investments in partially owned entities	3,491,107	3,459,142	31,965
Total assets	16,221,822	15,046,469	1,175,353

(Amounts in thousands)

	For the Year Ended December 31, 2019		
	Total	New York	Other
Total revenues	\$ 1,924,700	\$ 1,577,860	\$ 346,840
Operating expenses	(917,981)	(758,304)	(159,677)
NOI - consolidated	1,006,719	819,556	187,163
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(69,332)	(40,896)	(28,436)
Add: NOI from partially owned entities	322,390	294,168	28,222
NOI at share	1,259,777	1,072,828	186,949
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(6,060)	(12,318)	6,258
NOI at share - cash basis	<u>\$ 1,253,717</u>	<u>\$ 1,060,510</u>	<u>\$ 193,207</u>

Balance Sheet Data:

Real estate, at cost	\$ 13,074,012	\$ 10,272,458	\$ 2,801,554
Investments in partially owned entities	3,999,165	3,964,289	34,876
Total assets	18,287,013	16,429,159	1,857,854

(Amounts in thousands)

	For the Year Ended December 31, 2018		
	Total	New York	Other
Total revenues	\$ 2,163,720	\$ 1,836,036	\$ 327,684
Operating expenses	(963,478)	(806,464)	(157,014)
NOI - consolidated	1,200,242	1,029,572	170,670
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(71,186)	(48,490)	(22,696)
Add: NOI from partially owned entities	253,564	195,908	57,656
NOI at share	1,382,620	1,176,990	205,630
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(44,704)	(45,427)	723
NOI at share - cash basis	<u>\$ 1,337,916</u>	<u>\$ 1,131,563</u>	<u>\$ 206,353</u>

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. 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 Annual Report on Form 10-K. Based on such evaluation, Vornado's Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of such period, our disclosure controls and procedures are 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 fourth quarter of the fiscal year to which this report relates that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting

Management of Vornado Realty Trust, together with its consolidated subsidiaries (the "Company"), is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control over financial reporting is a process designed under the supervision of Vornado's principal executive and principal financial officers to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our financial statements for external reporting purposes in accordance with accounting principles generally accepted in the United States of America.

As of December 31, 2020, management conducted an assessment of the effectiveness of our internal control over financial reporting based on the framework established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management has determined that our internal control over financial reporting as of December 31, 2020 was effective.

Our internal control over financial reporting includes policies and procedures that pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets; provide reasonable assurances that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States, and that receipts and expenditures are being made only in accordance with authorizations of management and our trustees; and provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on our financial statements.

The effectiveness of our internal control over financial reporting as of December 31, 2020 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report appearing on the following page, which expresses an unqualified opinion on the effectiveness of our internal control over financial reporting as of December 31, 2020.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Vornado Realty Trust and subsidiaries (the “Company”) as of December 31, 2020, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2020, of the Company and our report dated February 16, 2021, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed 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. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ DELOITTE & TOUCHE LLP

New York, New York
February 16, 2021

ITEM 9A. - CONTINUED***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 Annual Report on Form 10-K. Based on such evaluation, Vornado's Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of such period, our disclosure controls and procedures are 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 fourth quarter of the fiscal year to which this report relates that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting

Management of Vornado Realty Trust, sole general partner of Vornado Realty L.P., together with Vornado Realty L.P.'s consolidated subsidiaries (the "Company"), is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control over financial reporting is a process designed under the supervision of Vornado's principal executive and principal financial officers to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our financial statements for external reporting purposes in accordance with accounting principles generally accepted in the United States of America.

As of December 31, 2020, management conducted an assessment of the effectiveness of our internal control over financial reporting based on the framework established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management has determined that our internal control over financial reporting as of December 31, 2020 was effective.

Our internal control over financial reporting includes policies and procedures that pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets; provide reasonable assurances that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States, and that receipts and expenditures are being made only in accordance with authorizations of management and Vornado's trustees; and provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on our financial statements.

The effectiveness of our internal control over financial reporting as of December 31, 2020 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report appearing on the following page, which expresses an unqualified opinion on the effectiveness of our internal control over financial reporting as of December 31, 2020.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Vornado Realty L.P. and subsidiaries (the “Partnership”) as of December 31, 2020, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Partnership maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2019, of the Partnership and our report dated February 16, 2021, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Partnership’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Partnership’s internal control over financial reporting based on our audit. 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed 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. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ DELOITTE & TOUCHE LLP

New York, New York
February 16, 2021

ITEM 9B. OTHER INFORMATION

In connection with Joseph Macnow's previously announced separation from the Company, on February 16, 2021, Mr. Macnow and the Company entered into an agreement pursuant to which Mr. Macnow provided the Company a general release from certain claims. A copy of the agreement is filed as Exhibit 10.41 hereto and incorporated herein by reference.

In addition, a copy of Mr. Macnow's previously announced consulting agreement between the Company and Mr. Macnow, effective as of January 1, 2021, and executed February 16, 2021, is filed as Exhibit 10.39 hereto and incorporated herein by reference.

PART III**ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

Information relating to trustees of Vornado, the Operating Partnership's sole general partner, including its audit committee and audit committee financial expert, will be contained in Vornado's definitive Proxy Statement involving the election of Vornado's trustees which Vornado will file with the Securities and Exchange Commission pursuant to Regulation 14A under the Securities Exchange Act of 1934 not later than 120 days after December 31, 2020, and such information is incorporated herein by reference. Also incorporated herein by reference is the information under the caption "16(a) Beneficial Ownership Reporting Compliance" of the Proxy Statement.

Executive Officers of the Registrant

The following is a list of the names, ages, principal occupations and positions with Vornado of the executive officers of Vornado and the positions held by such officers during the past five years. All executive officers of Vornado have terms of office that run until the next succeeding meeting of the Board of Trustees of Vornado following the Annual Meeting of Vornado's Shareholders unless they are removed sooner by Vornado's Board.

Name	Age	PRINCIPAL OCCUPATION, POSITION AND OFFICE (Current and during past five years with Vornado unless otherwise stated)
Steven Roth	79	Chairman of the Board; Chief Executive Officer since April 2013 and from May 1989 to May 2009; Managing General Partner of Interstate Properties, an owner of shopping centers and an investor in securities and partnerships; Chief Executive Officer of Alexander's, Inc. since March 1995, a Director since 1989, and Chairman of the Board since May 2004.
Michael J. Franco	52	President and Chief Financial Officer since December 2020; President since April 2019; Executive Vice President - Chief Investment Officer from April 2015 to April 2019; Executive Vice President - Head of Acquisitions and Capital Markets from November 2010 to April 2015.
Haim Chera	51	Executive Vice President - Head of Retail since April 2019; Principal at Crown Acquisitions from January 2000 - April 2019.
Barry S. Langer	42	Executive Vice President - Development - Co-Head of Real Estate since April 2019; Executive Vice President - Head of Development from May 2015 to April 2019.
Glen J. Weiss	51	Executive Vice President - Office Leasing - Co-Head of Real Estate since April 2019; Executive Vice President - Office Leasing from May 2013 to April 2019.

Vornado, the Operating Partnership's sole general partner, has adopted a Code of Business Conduct and Ethics that applies to, among others, the above executive officers, and its principal accounting officer, Matthew Iocco, Vornado's Executive Vice President - Chief Accounting Officer. Mr. Iocco, 50 years of age, has been the Executive Vice President - Chief Accounting Officer of Vornado since May 2015 and Chief Financial Officer of Alexander's, Inc. since April 2017. From May 2012 to May 2015, Mr. Iocco was the Senior Vice President - Chief Accounting Officer of Vornado. This Code is available on Vornado's website at www.vno.com.

ITEM 11. EXECUTIVE COMPENSATION

Information relating to Vornado's executive officer and trustee compensation will be contained in Vornado's Proxy Statement referred to above in Item 10, "Directors, Executive Officers and Corporate Governance," and such information is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information relating to security ownership of certain beneficial owners and management and related stockholder matters will be contained in Vornado's Proxy Statement referred to in Item 10, "Directors, Executive Officers and Corporate Governance," and such information is incorporated herein by reference.

Equity compensation plan information

The following table provides information as of December 31, 2020 regarding Vornado's equity compensation plans.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in the second column)
Equity compensation plans approved by security holders	5,380,924 ⁽¹⁾	\$ 64.79	4,661,915 ⁽²⁾
Equity compensation awards not approved by security holders	—	—	—
Total	<u>5,380,924</u>	<u>\$ 64.79</u>	<u>4,661,915</u>

(1) Includes shares/units of (i) 765,637 Vornado Stock Options (658,807 of which are vested and exercisable), (ii) 717,581 Appreciation-Only Long-Term Incentive Plan ("AO LTIP") units (216,646 of which are vested and exercisable), (iii) 496,762 Performance Conditioned AO LTIP units (235,089 of which are vested and exercisable), (iv) 2,196,554 restricted Operating Partnership units (1,044,136 of which are vested and exercisable) and (v) 1,204,390 unearned Out-Performance Plan ("OPP") units, which do not have an exercise price. OPP units, if earned, become convertible into Class A units of the Operating Partnership (and ultimately into Vornado common shares) following vesting.

Does not include 25,315 shares of Vornado Restricted Stock, as they have been reflected in Vornado's total shares outstanding.

(2) Based on awards being granted as "Full Value Awards," as defined. If we were to grant "Not Full Value Awards," as defined, the number of securities available for future grants would be 9,323,830.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information relating to certain relationships and related transactions, and director independence will be contained in Vornado's Proxy Statement referred to in Item 10, "Directors, Executive Officers and Corporate Governance," and such information is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Information relating to principal accounting fees and services will be contained in Vornado's Proxy Statement referred to in Item 10, "Directors, Executive Officers and Corporate Governance," under the caption "Ratification of The Appointment of Independent Accounting Firm" and such information is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as part of this report:

1. The consolidated financial statements are set forth in Item 8 of this Annual Report on Form 10-K.

The following financial statement schedules should be read in conjunction with the financial statements included in Item 8 of this Annual Report on Form 10-K.

III--Real Estate and Accumulated Depreciation as of December 31, 2020, 2019 and 2018

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on Form 10-K

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Schedules other than those listed above are omitted because they are not applicable or the information required is included in the consolidated financial statements or the notes thereto.

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
SCHEDULE III
REAL ESTATE AND ACCUMULATED DEPRECIATION
(Amounts in thousands)

COLUMN A	COLUMN B	COLUMN C		COLUMN D		COLUMN E			COLUMN F	COLUMN G	COLUMN H	COLUMN I					
						Initial cost to company											
		Encumbrances (1)	Land	Buildings and improvements	Costs capitalized subsequent to acquisition	Land	Buildings and improvements	Total (2)									
New York																	
Manhattan																	
1290 Avenue of the Americas	\$ 950,000	\$ 518,244	\$ 926,992	\$ 256,937	\$ 518,244	\$ 1,183,929	\$ 1,702,173	\$ 406,087	1963	2007	(4)						
350 Park Avenue	400,000	265,889	363,381	49,637	265,889	413,018	678,907	153,866	1960	2006	(4)						
PENN1	—	—	412,169	490,803	—	902,972	902,972	336,852	1972	1998	(4)						
100 West 33rd Street	398,402	242,776	247,970	42,188	242,776	290,158	532,934	105,705	1911	2007	(4)						
150 West 34th Street	205,000	119,657	268,509	—	119,657	268,509	388,166	37,479	1900	2015	(4)						
PENN2	575,000 (5)	53,615	164,903	182,136	52,689	347,965	400,654	132,321	1968	1997	(4)						
90 Park Avenue	—	8,000	175,890	199,918	8,000	375,808	383,808	161,439	1964	1997	(4)						
Manhattan Mall	181,598	88,595	113,473	30,283	88,595	143,756	232,351	48,996	2009	2007	(4)						
770 Broadway	700,000	52,898	95,686	186,666	52,898	282,352	335,250	112,718	1907	1998	(4)						
888 Seventh Avenue	321,000	—	117,269	161,640	—	278,909	278,909	142,057	1980	1998	(4)						
PENN11	500,000	40,333	85,259	111,535	40,333	196,794	237,127	83,611	1923	1997	(4)						
909 Third Avenue	350,000	—	120,723	122,005	—	242,728	242,728	114,831	1969	1999	(4)						
150 East 58th Street	—	39,303	80,216	54,863	39,303	135,079	174,382	68,764	1969	1998	(4)						
595 Madison Avenue	—	62,731	62,888	50,717	62,731	113,605	176,336	49,081	1968	1999	(4)						
330 West 34th Street	—	—	8,599	147,945	—	156,544	156,544	40,849	1925	1998	(4)						
828-850 Madison Avenue	—	107,937	28,261	(89,293)	35,403	11,502	46,905	—		2005	(4)						
715 Lexington Avenue	—	—	26,903	19,986	30,085	16,804	46,889	—	1923	2001	(4)						
478-486 Broadway	—	30,000	20,063	11,831	21,489	40,405	61,894	3,817	2009	2007	(4)						
4 Union Square South	120,000	24,079	55,220	9,685	24,079	64,905	88,984	24,170	1965/2004	1993	(4)						
Farley Office and Retail	—	—	476,235	565,014	—	1,041,249	1,041,249	—	1912	2018	(4)						
260 Eleventh Avenue	—	—	80,482	5,352	—	85,834	85,834	12,133	1911	2015	(4)						
510 Fifth Avenue	—	34,602	18,728	35,402	48,403	40,329	88,732	10,992		2010	(4)						
606 Broadway	74,119	45,406	8,993	51,624	45,298	60,725	106,023	2,441		2016	(4)						
40 Fulton Street	—	15,732	26,388	38,625	15,732	65,013	80,745	22,147	1987	1998	(4)						
443 Broadway	—	11,187	41,186	(36,225)	3,457	12,691	16,148	—		2013	(4)						
40 East 66th Street	—	13,616	34,635	159	13,616	34,794	48,410	13,113		2005	(4)						
155 Spring Street	—	13,700	30,544	6,769	13,700	37,313	51,013	12,456		2007	(4)						
435 Seventh Avenue	95,696	19,893	19,091	2,166	19,893	21,257	41,150	9,681	2002	1997	(4)						
692 Broadway	—	6,053	22,908	3,901	6,053	26,809	32,862	10,734		2005	(4)						
131-135 West 33rd Street	—	8,315	21,312	316	8,315	21,628	29,943	2,566		2016	(4)						

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
SCHEDULE III
REAL ESTATE AND ACCUMULATED DEPRECIATION - CONTINUED
(Amounts in thousands)

COLUMN A	COLUMN B	COLUMN C		COLUMN D	COLUMN E			COLUMN F	COLUMN G	COLUMN H	COLUMN I					
		Initial cost to company		Costs capitalized subsequent to acquisition	Gross amount at which carried at close of period			Accumulated depreciation and amortization	Date of construction (3)	Date acquired	Life on which depreciation in latest income statement is computed					
		Encumbrances (1)	Land		Land	Buildings and improvements	Total (2)									
New York - continued																
Manhattan - continued																
304 Canal Street	—	\$ 3,511	\$ 12,905	\$ (8,456)	\$ 1,771	\$ 6,189	\$ 7,960	\$ —	1910	2014	(4)					
677-679 Madison Avenue	—	13,070	9,640	585	13,070	10,225	23,295	3,691		2006	(4)					
1131 Third Avenue	—	7,844	7,844	5,708	7,844	13,552	21,396	2,696		1997	(4)					
431 Seventh Avenue	—	16,700	2,751	—	16,700	2,751	19,451	946		2007	(4)					
138-142 West 32nd Street	—	9,252	9,936	1,720	9,252	11,656	20,908	1,504	1920	2015	(4)					
334 Canal Street	—	1,693	6,507	(1,170)	752	6,278	7,030	—		2011	(4)					
966 Third Avenue	—	8,869	3,631	—	8,869	3,631	12,500	666		2013	(4)					
148 Spring Street	—	3,200	8,112	398	3,200	8,510	11,710	2,718		2008	(4)					
150 Spring Street	—	3,200	5,822	309	3,200	6,131	9,331	1,945		2008	(4)					
137 West 33rd Street	—	6,398	1,550	—	6,398	1,550	7,948	223	1932	2015	(4)					
825 Seventh Avenue	—	1,483	697	3,341	1,483	4,038	5,521	575		1997	(4)					
537 West 26th Street	—	10,370	17,632	16,730	26,631	18,101	44,732	1,319		2018	(4)					
339 Greenwich	—	2,622	12,333	(10,019)	865	4,071	4,936	—		2017	(4)					
Other (Including Signage)	—	140,477	31,892	36,832	94,788	114,413	209,201	19,942								
Total Manhattan		4,870,815	2,051,250	4,286,128	2,758,563	1,971,461	7,124,480	9,095,941	2,155,131							
Other Properties																
Hotel Pennsylvania, New York	—	29,903	121,712	134,245	29,903	255,957	285,860	142,143	1919	1997	(4)					
33-00 Northern Boulevard, Queens, New York	100,000	46,505	86,226	13,538	46,505	99,764	146,269	15,710	1915	2015	(4)					
Paramus, New Jersey	—	—	—	23,311	1,036	22,275	23,311	18,313	1967	1987	(4)					
Total Other Properties	100,000	76,408	207,938	171,094	77,444	377,996	455,440	176,166								
Total New York		4,970,815	2,127,658	4,494,066	2,929,657	2,048,905	7,502,476	9,551,381	2,331,297							

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
SCHEDULE III
REAL ESTATE AND ACCUMULATED DEPRECIATION - CONTINUED
(Amounts in thousands)

COLUMN A	COLUMN B	COLUMN C		COLUMN D			COLUMN E			COLUMN F		COLUMN G	COLUMN H	COLUMN I	
							Initial cost to company								
		Encumbrances (1)	Land	Buildings and improvements	Costs capitalized subsequent to acquisition	Land	Buildings and improvements	Total (2)	Accumulated depreciation and amortization	Date of construction (3)	Date acquired	Life on which depreciation in latest income statement is computed			
Other															
theMART															
theMART, Illinois	\$ 675,000	\$ 64,528	\$ 319,146	\$ 414,122	\$ 64,535	\$ 733,261	\$ 797,796	\$ 348,404	1930	1998	(4)				
527 West Kinzie, Illinois	—	5,166	—	132	5,166	132	5,298	—		1998	(4)				
Piers 92 and 94, New York	—	—	—	17,773	—	17,773	17,773	3,847		2008	(4)				
Total theMART	675,000	69,694	319,146	432,027	69,701	751,166	820,867	352,251							
555 California Street, California	537,643	223,446	895,379	241,667	211,459	1,149,033	1,360,492	360,277	1922-1969 -1970	2007	(4)				
220 Central Park South, New York	—	115,720	16,445	(104,428)	—	27,737	27,737	—		2005	(4)				
Borgata Land, Atlantic City, NJ	—	83,089	—	—	83,089	—	83,089	—		2010					
40 East 66th Residential, New York	—	8,454	13,321	(8,193)	5,273	8,309	13,582	2,882		2005	(4)				
677-679 Madison Avenue, New York	—	1,462	1,058	285	1,627	1,178	2,805	535		2006	(4)				
Annapolis, Maryland	—	—	9,652	—	—	9,652	9,652	4,462		2005	(4)				
Wayne Towne Center, New Jersey	—	—	26,137	56,373	—	82,510	82,510	29,431		2010	(4)				
Other	—	—	—	5,606	—	5,606	5,606	1,725			(4)				
Total Other	1,212,643	501,865	1,281,138	623,337	371,149	2,035,191	2,406,340	751,563							
Leasehold improvements equipment and other	—	—	—	130,222	—	130,222	130,222	86,586							
Total December 31, 2020	\$ 6,183,458	\$ 2,629,523	\$ 5,775,204	\$ 3,683,216	\$ 2,420,054	\$ 9,667,889	\$ 12,087,943	\$ 3,169,446							

(1) Represents contractual debt obligations.

(2) The net basis of Vornado's assets and liabilities for tax reporting purposes is approximately \$3.1 billion lower than the amounts reported for financial statement purposes.

(3) Date of original construction — many properties have had substantial renovation or additional construction — see Column D.

(4) Depreciation of the buildings and improvements are calculated over lives ranging from the life of the lease to forty years.

(5) Secured amount outstanding on revolving credit facilities.

VORNADO REALTY TRUST AND VORNADO REALTY L.P.
SCHEDULE III
REAL ESTATE AND ACCUMULATED DEPRECIATION
(Amounts in thousands)

The following is a reconciliation of real estate assets and accumulated depreciation:

	Year Ended December 31,		
	2020	2019	2018
Real Estate			
Balance at beginning of period	\$ 13,074,012	\$ 16,237,883	\$ 14,756,295
Additions during the period:			
Land	1,372	46,074	170,065
Buildings & improvements and other	1,127,593	1,391,784	1,665,684
	<u>14,202,977</u>	<u>17,675,741</u>	<u>16,592,044</u>
Less: Assets sold, written-off, reclassified to ready for sale and deconsolidated	2,115,034	4,601,729	354,161
Balance at end of period	<u><u>\$ 12,087,943</u></u>	<u><u>\$ 13,074,012</u></u>	<u><u>\$ 16,237,883</u></u>
Accumulated Depreciation			
Balance at beginning of period	\$ 3,015,958	\$ 3,180,175	\$ 2,885,283
Additions charged to operating expenses	344,301	360,194	381,500
	<u>3,360,259</u>	<u>3,540,369</u>	<u>3,266,783</u>
Less: Accumulated depreciation on assets sold, written-off and deconsolidated	190,813	524,411	86,608
Balance at end of period	<u><u>\$ 3,169,446</u></u>	<u><u>\$ 3,015,958</u></u>	<u><u>\$ 3,180,175</u></u>

(b) Exhibits:

Exhibit No.

- 2.1 — Master Transaction Agreement, dated as of October 31, 2016, by and among Vornado Realty Trust, Vornado Realty L.P., JBG Properties, Inc., JBG/Operating Partners, L.P., certain affiliates of JBG Properties Inc. and JBG/Operating Partners set forth on Schedule A thereto, JBG SMITH Properties and JBG SMITH Properties LP. Incorporated by reference to Exhibit 2.1 to Vornado Realty Trust's Annual Report on Form 10-K for the year ended December 31, 2016 (File No.001-11954), filed February 13, 2017 *
- 3.1 — Articles of Restatement of Vornado Realty Trust, as filed with the State Department of Assessments and Taxation of Maryland on July 30, 2007 - Incorporated by reference to Exhibit 3.75 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended June 30, 2007 (File No. 001-11954), filed on July 31, 2007 *
- 3.2 — Amended and Restated Bylaws of Vornado Realty Trust, as amended on July 25, 2018 - Incorporated by reference to Exhibit 3.55 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018 (File No. 001-11954), filed on July 30, 2018 *
- 3.3 — Articles of Amendment to Declaration of Trust, dated September 30, 2016 ***
- 3.4 — Articles of Amendment to Declaration of Trust, dated June 13, 2018 - Incorporated by reference to Exhibit 3.54 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018 (File No. 001-11954), filed on July 30, 2018 *
- 3.5 — Articles of Amendment to Declaration of Trust, dated August 7, 2019 - Incorporated by reference to Exhibit 3.1 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954), filed on August 8, 2019 *
- 3.6 — Articles Supplementary, 5.40% Series L Cumulative Redeemable Preferred Shares of Beneficial Interest, liquidation preference \$25.00 per share, no par value - Incorporated by reference to Exhibit 3.6 to Vornado Realty Trust's Registration Statement on Form 8-A (File No. 001-11954), filed on January 25, 2013 *
- 3.7 — Articles Supplementary Classifying Vornado Realty Trust's 5.25% Series M Cumulative Redeemable Preferred Shares of Beneficial Interest, liquidation preference \$25.00 per share, no par value - Incorporated by reference to Exhibit 3.7 to Vornado Realty Trust's Registration Statement on Form 8-A (File No. 001-11954), filed on December 13, 2017 *
- 3.8 — Articles Supplementary Classifying Vornado Realty Trust's 5.25% Series N Cumulative Redeemable Preferred Shares of Beneficial Interest, liquidation preference \$25.00 per share, no par value - Incorporated by reference to Exhibit 3.1 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954), filed on November 24, 2020 *
- 3.9 — Second Amended and Restated Agreement of Limited Partnership of Vornado Realty L.P., dated as of October 20, 1997 (the "Partnership Agreement") – Incorporated by reference to Exhibit 3.26 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended March 31, 2003 (File No. 001-11954), filed on May 8, 2003 *
- 3.10 — Amendment to the Partnership Agreement, dated as of December 16, 1997 – Incorporated by reference to Exhibit 3.27 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended March 31, 2003 (File No. 001-11954), filed on May 8, 2003 *
- 3.11 — Second Amendment to the Partnership Agreement, dated as of April 1, 1998 – Incorporated by reference to Exhibit 3.5 to Vornado Realty Trust's Registration Statement on Form S-3 (File No. 333-50095), filed on April 14, 1998 *
- 3.12 — Third Amendment to the Partnership Agreement, dated as of November 12, 1998 - Incorporated by reference to Exhibit 3.2 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954), filed on November 30, 1998 *
- 3.13 — Fourth Amendment to the Partnership Agreement, dated as of November 30, 1998 - Incorporated by reference to Exhibit 3.1 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954), filed on February 9, 1999 *
- 3.14 — Fifth Amendment to the Partnership Agreement, dated as of March 3, 1999 - Incorporated by reference to Exhibit 3.1 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954), filed on March 17, 1999 *
- 3.15 — Sixth Amendment to the Partnership Agreement, dated as of March 17, 1999 - Incorporated by reference to Exhibit 3.2 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954), filed on July 7, 1999 *
- 3.16 — Seventh Amendment to the Partnership Agreement, dated as of May 20, 1999 - Incorporated by reference to Exhibit 3.3 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954), filed on July 7, 1999 *
- 3.17 — Eighth Amendment to the Partnership Agreement, dated as of May 27, 1999 - Incorporated by reference to Exhibit 3.4 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954), filed on July 7, 1999 *
- 3.18 — Ninth Amendment to the Partnership Agreement, dated as of September 3, 1999 - Incorporated by reference to Exhibit 3.3 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954), filed on October 25, 1999 *
- 3.19 — Tenth Amendment to the Partnership Agreement, dated as of September 3, 1999 - Incorporated by reference to Exhibit 3.4 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954), filed on October 25, 1999 *
- 3.20 — Eleventh Amendment to the Partnership Agreement, dated as of November 24, 1999 - Incorporated by reference to Exhibit 3.2 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954), filed on December 23, 1999 *
- 3.21 — Twelfth Amendment to the Partnership Agreement, dated as of May 1, 2000 - Incorporated by reference to Exhibit 3.2 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954), filed on May 19, 2000 *

* Incorporated by reference

*** Filed herewith

- 3.22 — Thirteenth Amendment to the Partnership Agreement, dated as of May 25, 2000 - Incorporated by reference to Exhibit 3.2 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954), filed on June 16, 2000 *
- 3.23 — Fourteenth Amendment to the Partnership Agreement, dated as of December 8, 2000 - Incorporated by reference to Exhibit 3.2 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954), filed on December 28, 2000 *
- 3.24 — Fifteenth Amendment to the Partnership Agreement, dated as of December 15, 2000 - Incorporated by reference to Exhibit 4.35 to Vornado Realty Trust's Registration Statement on Form S-8 (File No. 333-68462), filed on August 27, 2001 *
- 3.25 — Sixteenth Amendment to the Partnership Agreement, dated as of July 25, 2001 - Incorporated by reference to Exhibit 3.3 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954), filed on October 12, 2001 *
- 3.26 — Seventeenth Amendment to the Partnership Agreement, dated as of September 21, 2001 - Incorporated by reference to Exhibit 3.4 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954), filed on October 12, 2001 *
- 3.27 — Eighteenth Amendment to the Partnership Agreement, dated as of January 1, 2002 - Incorporated by reference to Exhibit 3.1 to Vornado Realty Trust's Current Report on Form 8-K/A (File No. 001-11954), filed on March 18, 2002 *
- 3.28 — Nineteenth Amendment to the Partnership Agreement, dated as of July 1, 2002 - Incorporated by reference to Exhibit 3.47 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended June 30, 2002 (File No. 001-11954), filed on August 7, 2002 *
- 3.29 — Twentieth Amendment to the Partnership Agreement, dated April 9, 2003 - Incorporated by reference to Exhibit 3.46 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended March 31, 2003 (File No. 001-11954), filed on May 8, 2003 *
- 3.30 — Twenty-First Amendment to the Partnership Agreement, dated as of July 31, 2003 - Incorporated by reference to Exhibit 3.47 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended September 30, 2003 (File No. 001-11954), filed on November 7, 2003 *
- 3.31 — Twenty-Second Amendment to the Partnership Agreement, dated as of November 17, 2003 - Incorporated by reference to Exhibit 3.49 to Vornado Realty Trust's Annual Report on Form 10-K for the year ended December 31, 2003 (File No. 001-11954), filed on March 3, 2004 *
- 3.32 — Twenty-Third Amendment to the Partnership Agreement, dated May 27, 2004 - Incorporated by reference to Exhibit 99.2 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954), filed on June 14, 2004 *
- 3.33 — Twenty-Fourth Amendment to the Partnership Agreement, dated August 17, 2004 - Incorporated by reference to Exhibit 3.57 to Vornado Realty Trust and Vornado Realty L.P.'s Registration Statement on Form S-3 (File No. 333-122306), filed on January 26, 2005 *
- 3.34 — Twenty-Fifth Amendment to the Partnership Agreement, dated November 17, 2004 - Incorporated by reference to Exhibit 3.58 to Vornado Realty Trust and Vornado Realty L.P.'s Registration Statement on Form S-3 (File No. 333-122306), filed on January 26, 2005 *
- 3.35 — Twenty-Sixth Amendment to the Partnership Agreement, dated December 17, 2004 - Incorporated by reference to Exhibit 3.1 to Vornado Realty L.P.'s Current Report on Form 8-K (File No. 000-22685), filed on December 21, 2004 *
- 3.36 — Twenty-Seventh Amendment to the Partnership Agreement, dated December 20, 2004 - Incorporated by reference to Exhibit 3.2 to Vornado Realty L.P.'s Current Report on Form 8-K (File No. 000-22685), filed on December 21, 2004 *
- 3.37 — Twenty-Eighth Amendment to the Partnership Agreement, dated December 30, 2004 - Incorporated by reference to Exhibit 3.1 to Vornado Realty L.P.'s Current Report on Form 8-K (File No. 000-22685), filed on January 4, 2005 *
- 3.38 — Twenty-Ninth Amendment to the Partnership Agreement, dated June 17, 2005 - Incorporated by reference to Exhibit 3.1 to Vornado Realty L.P.'s Current Report on Form 8-K (File No. 000-22685), filed on June 21, 2005 *
- 3.39 — Thirtieth Amendment to the Partnership Agreement, dated August 31, 2005 - Incorporated by reference to Exhibit 3.1 to Vornado Realty L.P.'s Current Report on Form 8-K (File No. 000-22685), filed on September 1, 2005 *
- 3.40 — Thirty-First Amendment to the Partnership Agreement, dated September 9, 2005 - Incorporated by reference to Exhibit 3.1 to Vornado Realty L.P.'s Current Report on Form 8-K (File No. 000-22685), filed on September 14, 2005 *
- 3.41 — Thirty-Second Amendment and Restated Agreement of Limited Partnership, dated as of December 19, 2005 - Incorporated by reference to Exhibit 3.59 to Vornado Realty L.P.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2006 (File No. 000-22685), filed on May 8, 2006 *
- 3.42 — Thirty-Third Amendment to Second Amended and Restated Agreement of Limited Partnership, dated as of April 25, 2006 - Incorporated by reference to Exhibit 10.2 to Vornado Realty Trust's Form 8-K (File No. 001-11954), filed on May 1, 2006 *
- 3.43 — Thirty-Fourth Amendment to Second Amended and Restated Agreement of Limited Partnership, dated as of May 2, 2006 - Incorporated by reference to Exhibit 3.1 to Vornado Realty L.P.'s Current Report on Form 8-K (File No. 000-22685), filed on May 3, 2006 *
- 3.44 — Thirty-Fifth Amendment to Second Amended and Restated Agreement of Limited Partnership, dated as of August 17, 2006 - Incorporated by reference to Exhibit 3.1 to Vornado Realty L.P.'s Form 8-K (File No. 000-22685), filed on August 23, 2006 *
- 3.45 — Thirty-Sixth Amendment to Second Amended and Restated Agreement of Limited Partnership, dated as of October 2, 2006 - Incorporated by reference to Exhibit 3.1 to Vornado Realty L.P.'s Form 8-K (File No. 000-22685), filed on January 22, 2007 *
- 3.46 — Thirty-Seventh Amendment to Second Amended and Restated Agreement of Limited Partnership, dated as of June 28, 2007 - Incorporated by reference to Exhibit 3.1 to Vornado Realty L.P.'s Current Report on Form 8-K (File No. 000-22685), filed on June 27, 2007 *

*

Incorporated by reference

- 3.47 — Thirty-Eighth Amendment to Second Amended and Restated Agreement of Limited Partnership, dated as of June 28, 2007 – Incorporated by reference to Exhibit 3.2 to Vornado Realty L.P.'s Current Report on Form 8-K (File No. 000-22685), filed on June 27, 2007 *
- 3.48 — Thirty-Ninth Amendment to Second Amended and Restated Agreement of Limited Partnership, dated as of June 28, 2007 – Incorporated by reference to Exhibit 3.3 to Vornado Realty L.P.'s Current Report on Form 8-K (File No. 000-22685), filed on June 27, 2007 *
- 3.49 — Fortieth Amendment to Second Amended and Restated Agreement of Limited Partnership, dated as of June 28, 2007 – Incorporated by reference to Exhibit 3.4 to Vornado Realty L.P.'s Current Report on Form 8-K (File No. 000-22685), filed on June 27, 2007 *
- 3.50 — Forty-First Amendment to Second Amended and Restated Agreement of Limited Partnership, dated as of March 31, 2008 – Incorporated by reference to Exhibit 3.44 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended March 31, 2008 (file No. 001-11954), filed on May 6, 2008 *
- 3.51 — Forty-Second Amendment to Second Amended and Restated Agreement of Limited Partnership, dated as of December 17, 2010 – Incorporated by reference to Exhibit 99.1 to Vornado Realty L.P.'s Current Report on Form 8-K (File No 000-22685), filed on December 21, 2010 *
- 3.52 — Forty-Third Amendment to Second Amended and Restated Agreement of Limited Partnership, dated as of April 20, 2011 – Incorporated by reference to Exhibit 3.1 to Vornado Realty L.P.'s Current Report on Form 8-K (File No. 000-22685), filed on April 21, 2011 *
- 3.53 — Forty-Fourth Amendment to Second Amended and Restated Agreement of Limited Partnership of Vornado Realty L.P., dated as of March 30, 2012 - Incorporated by reference to Exhibit 99.1 to Vornado Realty L.P.'s Current Report on Form 8-K (File No. 001-34482), filed on April 5, 2012 *
- 3.54 — Forty-Fourth Amendment to Second Amended and Restated Agreement of Limited Partnership dated as of July 18, 2012 – Incorporated by reference to Exhibit 3.1 to Vornado Realty L.P.'s Current Report on Form 8-K (File No. 001-34482), filed on July 18, 2012 *
- 3.55 — Forty-Fifth Amendment to Second Amended and Restated Agreement of Limited Partnership, dated as of January 25, 2013 – Incorporated by reference to Exhibit 3.1 to Vornado Realty L.P.'s Current Report on Form 8-K (File No. 001-34482), filed on January 25, 2013 *
- 3.56 — Forty-Sixth Amendment to Second Amended and Restated Agreement of Limited Partnership of Vornado Realty L.P., dated April 1, 2015 - Incorporated by reference to Exhibit 3.1 to Vornado Realty L.P.'s Current Report on Form 8-K (File No. 001-34482), filed on April 2, 2015 *
- 3.57 ** — Forty-Seventh Amendment to Second Amended and Restated Agreement of Limited Partnership of Vornado Realty L.P., dated December 13, 2017 - Incorporated by reference to Exhibit 3.2 to Vornado Realty L.P.'s Current Report on Form 8-K (File No. 001-34482), filed on December 13, 2017 *
- 3.58 ** — Forty-Eighth Amendment to Second Amended and Restated Agreement of Limited Partnership of Vornado Realty L.P., dated as of January 12, 2018 - Incorporated by reference to Exhibit 3.53 to Vornado Realty Trust's Annual Report on 10-K for the year ended December 31, 2017 (File No. 001-11954), filed on February 12, 2018 *
- 3.59 — Forty-Ninth Amendment to Second Amended and Restated Agreement of Limited Partnership of Vornado Realty L.P., dated as of August 7, 2019 - Incorporated by reference to Exhibit 3.2 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954), filed on August 8, 2019 *
- 3.60 — Fiftieth Amendment to Second Amended and Restated Agreement of Limited Partnership of Vornado Realty L.P., dated as of November 24, 2020 - Incorporated by reference to Exhibit 3.2 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954), filed on November 24, 2020 *
- 4.1 — Indenture, dated as of November 25, 2003, between Vornado Realty L.P. and The Bank of New York, as Trustee - Incorporated by reference to Exhibit 4.10 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended March 31, 2005 (File No. 001-11954), filed on April 28, 2005 *
- 4.2 — Indenture, dated as of November 20, 2006, among Vornado Realty Trust, as Issuer, Vornado Realty L.P., as Guarantor and The Bank of New York, as Trustee – Incorporated by reference to Exhibit 4.1 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954), filed on November 27, 2006
- Certain instruments defining the rights of holders of long-term debt securities of Vornado Realty Trust and its subsidiaries are omitted pursuant to Item 601(b)(4)(iii) of Regulation S-K. Vornado Realty Trust hereby undertakes to furnish to the Securities and Exchange Commission, upon request, copies of such instruments*
- 4.3 — Description of the Vornado Realty Trust securities registered pursuant to Section 12 of the Securities Exchange Act ***
- 4.4 — Description of Class A units of Vornado Realty L.P. and certain provisions of its agreement of limited partnership ***
- 10.1 — Registration Rights Agreement between Vornado, Inc. and Steven Roth, dated December 29, 1992 - Incorporated by reference to Vornado Realty Trust's Annual Report on Form 10-K for the year ended December 31, 1992 (File No. 001-11954), filed February 16, 1993 *
- 10.2 ** — Management Agreement between Interstate Properties and Vornado, Inc. dated July 13, 1992 – Incorporated by reference to Vornado, Inc.'s Annual Report on Form 10-K for the year ended December 31, 1992 (File No. 001-11954), filed February 16, 1993 *

* Incorporated by reference

** Management contract or compensatory agreement

*** Filed herewith

10.3	**	— Employment Agreement, dated as of April 15, 1997, by and among Vornado Realty Trust, The Mendik Company, L.P. and David R. Greenbaum - Incorporated by reference to Exhibit 10.4 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954), filed on April 30, 1997	*
10.4		— Tax Reporting and Protection Agreement, dated December 31, 2001, by and among Vornado, Vornado Realty L.P., Charles E. Smith Commercial Realty L.P. and Charles E. Smith Commercial Realty L.L.C. - Incorporated by reference to Exhibit 10.3 to Vornado Realty Trust's Current Report on Form 8-K/A (File No. 1-11954), filed on March 18, 2002	*
10.5	**	— Amendment to Real Estate Retention Agreement, dated as of July 3, 2002, by and between Alexander's, Inc. and Vornado Realty L.P. - Incorporated by reference to Exhibit 10(i)(E)(3) to Alexander's Inc.'s Quarterly Report for the quarter ended June 30, 2002 (File No. 001-06064), filed on August 7, 2002	*
10.6	**	— 59th Street Real Estate Retention Agreement, dated as of July 3, 2002, by and between Vornado Realty L.P., 731 Residential LLC and 731 Commercial LLC - Incorporated by reference to Exhibit 10(i)(E)(4) to Alexander's Inc.'s Quarterly Report for the quarter ended June 30, 2002 (File No. 001-06064), filed on August 7, 2002	*
10.7		— Amended and Restated Management and Development Agreement, dated as of July 3, 2002, by and between Alexander's, Inc., the subsidiaries party thereto and Vornado Management Corp. - Incorporated by reference to Exhibit 10(i)(F)(1) to Alexander's Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2002 (File No. 001-06064), filed on August 7, 2002	*
10.8	**	— Amended and Restated Employment Agreement between Vornado Realty Trust and Joseph Macnow dated July 27, 2006 – Incorporated by reference to Exhibit 10.54 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended June 30, 2006 (File No. 001-11954), filed on August 1, 2006	*
10.9	**	— Second Amendment to Real Estate Retention Agreement, dated January 1, 2007, by and between Vornado Realty L.P. and Alexander's Inc. – Incorporated by reference to Exhibit 10.55 to Vornado Realty Trust's Annual Report on Form 10-K for the year ended December 31, 2006 (File No. 001-11954), filed on February 27, 2007	*
10.10	**	— Amendment to 59th Street Real Estate Retention Agreement, dated January 1, 2007, by and among Vornado Realty L.P., 731 Retail One LLC, 731 Restaurant LLC, 731 Office One LLC and 731 Office Two LLC. – Incorporated by reference to Exhibit 10.56 to Vornado Realty Trust's Annual Report on Form 10-K for the year ended December 31, 2006 (File No. 001-11954), filed on February 27, 2007	*
10.11	**	— Amendment to Employment Agreement between Vornado Realty Trust and Joseph Macnow, dated December 29, 2008 - Incorporated by reference to Exhibit 10.48 to Vornado Realty Trust's Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-11954) filed on February 24, 2009	*
10.12	**	— Amendment to Employment Agreement between Vornado Realty Trust and David R. Greenbaum, dated December 29, 2008 - Incorporated by reference to Exhibit 10.49 to Vornado Realty Trust's Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-11954) filed on February 24, 2009	*
10.13	**	— Amendment to Indemnification Agreement between Vornado Realty Trust and David R. Greenbaum, dated December 29, 2008 - Incorporated by reference to Exhibit 10.50 to Vornado Realty Trust's Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-11954) filed on February 24, 2009	*
10.14	**	— Vornado Realty Trust's 2010 Omnibus Share Plan - Incorporated by reference to Exhibit 10.41 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended June 30, 2010 (File No. 001-11954) filed on August 3, 2010	*
10.15	**	— Form of Vornado Realty Trust 2010 Omnibus Share Plan Incentive / Non-Qualified Stock Option Agreement - Incorporated by reference to Exhibit 99.1 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954) filed on April 5, 2012	*
10.16	**	— Form of Vornado Realty Trust 2010 Omnibus Share Plan Restricted Stock Agreement - Incorporated by reference to Exhibit 99.2 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954) filed on April 5, 2012	*
10.17	**	— Form of Vornado Realty Trust 2010 Omnibus Share Plan Restricted LTIP Unit Agreement - Incorporated by reference to Exhibit 99.3 to Vornado Realty Trust's Current Report on Form 8-K (File No. 001-11954) filed on April 5, 2012	*
10.18	**	— Form of Vornado Realty Trust 2012 Outperformance Plan Award Agreement - Incorporated by reference to Exhibit 10.45 to Vornado Realty Trust's Annual Report on Form 10-K for the year ended December 31, 2012 (File No. 001-11954) filed on February 26, 2013	*
10.19	**	— Form of Vornado Realty Trust 2013 Outperformance Plan Award Agreement - Incorporated by reference to Exhibit 10.50 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended March 31, 2013 (File No. 001-11954), filed on May 6, 2013	*
10.20	**	— Employment agreement between Vornado Realty Trust and Michael J. Franco dated January 10, 2014 - Incorporated by reference to Exhibit 10.52 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended March 31, 2014 (File No. 001-11954), filed on May 5, 2014	*
10.21	**	— Form of 2017 Amendment to Vornado Realty Trust 2015, 2016, 2017 Outperformance Plan Award Agreements - Incorporated by reference to Exhibit 10.32 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017 (File No. 001-11954), filed on July 31, 2017	*
10.22	**	— Form of Vornado Realty Trust 2010 Omnibus Share Plan AO LTIP Unit Award Agreement - Incorporated by reference to Exhibit 10.34 to Vornado Realty Trust's Annual Report on Form 10-K for the year ended December 31, 2017 (File No. 001-11954), filed on February 12, 2018	*
10.23	**	— Form of Vornado Realty Trust 2018 Outperformance Plan Award Agreement - Incorporated by reference to Exhibit 10.35 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018 (File No. 001-11954) filed on April 30, 2018	*
10.24		— Amended and Restated Term Loan Agreement dated as of October 26, 2018 among Vornado Realty L.P. as Borrower, Vornado Realty Trust as General Partner, the Banks listed on the signature pages thereof, and JP Morgan Chase Bank N.A. as Administrative Agent for the Banks - Incorporated by reference to Exhibit 10.36 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended September 30, 2018 (File No. 001-11954), filed on October 29, 2018	*

* Incorporated by reference

** Management contract or compensatory agreement

10.25	**	— Form of Performance Conditioned AO LTIP Award Agreement - Incorporated by reference to Exhibit 10.36 to Vornado Realty Trust's Annual Report on Form 10-K for the year ended December 31, 2018 (File No. 001-11954), filed on February 11, 2019	*
10.26	**	— Form of 2019 Amendment to Restricted LTIP Unit and Restricted Stock Agreements - Incorporated by reference to Exhibit 10.37 to Vornado Realty Trust's Annual Report on Form 10-K for the year ended December 31, 2018 (File No. 001-11954), filed on February 11, 2019	*
10.27	**	— Form of Vornado Realty Trust 2010 Omnibus Share Plan Restricted LTIP Unit Agreement - Incorporated by reference to Exhibit 10.38 to Vornado Realty Trust's Annual Report on Form 10-K for the year ended December 31, 2018 (File No. 001-11954), filed on February 11, 2019	*
10.28	**	— Form of Vornado Realty Trust 2010 Omnibus Share Plan Restricted Stock Agreement - Incorporated by reference to Exhibit 10.39 to Vornado Realty Trust's Annual Report on Form 10-K for the year ended December 31, 2018 (File No. 001-11954), filed on February 11, 2019	*
10.29		— Second Amended and Restated Revolving Credit Agreement dated as of March 26, 2019, among Vornado Realty L.P., as Borrower, Vornado Realty Trust as General Partner, the Banks listed on the signature pages thereof, and JPMorgan Chase Bank N.A., as Administrative Agent for the Banks - Incorporated by reference to Exhibit 10.40 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019 (File No. 001-11954), filed on April 29, 2019	*
10.30	**	— Form of Vornado Realty Trust 2019 Omnibus Share Plan - Incorporated by reference to Annex B to Vornado Realty Trust's Proxy Statement dated April 5, 2019 (File No. 001-11954), filed on April 5, 2019	*
10.31		— Transaction Agreement between Vornado Realty L.P. and Crown Jewel Partner LLC, dated April 18, 2019 - Incorporated by reference to Exhibit 10.42 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019 (File No. 001-11954), filed on July 29, 2019	*
10.32	**	— Form of Vornado Realty Trust 2019 Omnibus Share Plan Restricted Stock Agreement - Incorporated by reference to Exhibit 10.32 to Vornado Realty Trust's Quarterly Report on Form 10-K for the year ended December 31, 2019 (File No. 001-11954), filed on February 18, 2020	*
10.33	**	— Form of Vornado Realty Trust 2019 Omnibus Share Plan Restricted LTIP Unit Agreement - Incorporated by reference to Exhibit 10.33 to Vornado Realty Trust's Quarterly Report on Form 10-K for the year ended December 31, 2019 (File No. 001-11954), filed on February 18, 2020	*
10.34	**	— Form of Vornado Realty Trust 2019 Omnibus Share Plan Incentive/Non-Qualified Stock Option Agreement - Incorporated by reference to Exhibit 10.34 to Vornado Realty Trust's Quarterly Report on Form 10-K for the year ended December 31, 2019 (File No. 001-11954), filed on February 18, 2020	*
10.35	**	— Employment agreement between Vornado Realty Trust and Glen J. Weiss dated May 25, 2018 - Incorporated by reference to Exhibit 10.35 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 (File No. 001-11954), filed on May 4, 2020	*
10.36	**	— Employment agreement between Vornado Realty Trust and Haim Chera dated April 19, 2019 - Incorporated by reference to Exhibit 10.36 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 (File No. 001-11954), filed on May 4, 2020	*
10.37	**	— Form of Vornado Realty Trust 2020 Outperformance Plan Award Agreement - Incorporated by reference to Exhibit 10.37 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 (File No. 001-11954), filed on May 4, 2020	*
10.38	**	— Consulting agreement between Vornado Realty Trust and David R. Greenbaum dated February 16, 2021	***
10.39	**	— Consulting agreement between Vornado Realty Trust and Joseph Macnow dated February 16, 2021	***
10.40	**	— Agreement between Vornado Realty Trust and David R. Greenbaum dated February 16, 2021	***
10.41	**	— Agreement between Vornado Realty Trust and Joseph Macnow dated February 16, 2021	***
10.42	**	— Form of Vornado Realty Trust 2021 Outperformance Plan Award Agreement for Executives	***
10.43	**	— Form of Vornado Realty Trust 2021 Outperformance Plan Award Agreement for Non-Executives	***

* Incorporated by reference

** Management contract or compensatory agreement

*** Filed herewith

21	— Subsidiaries of Vornado Realty Trust and Vornado Realty L.P.	***
23.1	— Consent of Independent Registered Public Accounting Firm for Vornado Realty Trust	***
23.2	— Consent of Independent Registered Public Accounting Firm for 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. Annual Report on Form 10-K for the year ended December 31, 2020 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 (iv) the notes to consolidated financial statements.	***
104	— The cover page from the Vornado Realty Trust and Vornado Realty L.P. Annual Report on Form 10-K for the year ended December 31, 2020, formatted as iXBRL and contained in Exhibit 101.	***

 Filed herewith

ITEM 16. FORM 10-K SUMMARY

None.

VORNADO CORPORATE INFORMATION

TRUSTEES

STEVEN ROTH

Chairman of the Board

CANDACE K. BEINECKE, Lead Trustee

Senior Partner of Hughes Hubbard & Reed LLP

MICHAEL D. FASCITELLI

Owner of MDF Capital LLC and former President
and Chief Executive Officer of Vornado

BEATRICE HAMZA BASSEY

Group General Counsel, Chief Compliance Officer
and Corporate Secretary, Atlas Mara Ltd.

WILLIAM W. HELMAN IV

General Partner, Greylock Partners

DAVID M. MANDELBAUM

Partner, Interstate Properties

MANDAKINI PURI*

Private Equity Consultant

DANIEL R. TISCH*

Managing Member,

TowerView LLC

RICHARD R. WEST*

Dean Emeritus, Leonard N. Stern School of Business,
New York University

RUSSELL B. WIGHT, JR

Partner, Interstate Properties

*Members of the Audit Committee

DIVISION EXECUTIVE VICE PRESIDENTS

MICHAEL DOHERTY

President – BMS Division

ROBERT ENTIN

Executive Vice President

Chief Information Officer

ED HOGAN

Executive Vice President

Retail Leasing – New York Division

MARK HUDSPETH

Executive Vice President

Head of Capital Markets

CORPORATE OFFICERS

STEVEN ROTH

Chairman of the Board

Chief Executive Officer

MICHAEL J. FRANCO

President and Chief Financial Officer

GLEN J. WEISS

Executive Vice President –
Office Leasing and Co-Head of Real Estate

BARRY S. LANGER

Executive Vice President –
Development and Co-Head of Real Estate

HAIM CHERA

Executive Vice President –
Head of Retail

THOMAS SANELLI

Executive Vice President –
Finance and Chief Administrative Officer

MATTHEW IOCCO

Executive Vice President –
Chief Accounting Officer

DAVID R. GREENBAUM

Vice Chairman

JOSEPH MACNOW

Senior Advisor

MYRON MAURER

Executive Vice President

Chief Operating Officer – theMART

GASTON SILVA

Executive Vice President

Chief Operating Officer – New York Division

LISA VOGEL

Executive Vice President

Marketing

COMPANY DATA

EXECUTIVE OFFICES
888 Seventh Avenue
New York, New York 10019

INDEPENDENT REGISTERED
PUBLIC ACCOUNTING FIRM
Deloitte & Touche LLP
New York, New York

COUNSEL
Sullivan & Cromwell LLP
New York, New York

TRANSFER AGENT AND REGISTRAR
American Stock Transfer & Trust Co.
New York, New York

MANAGEMENT CERTIFICATIONS
The Company's Chief Executive Officer and Chief Financial Officer provided certifications to the Securities and Exchange Commission as required by Section 302 of the Sarbanes-Oxley Act of 2002 and these certifications are included in the Company's Annual Report on Form 10-K for the year ended December 31, 2020. In addition, as required by Section 303A.12(a) of the New York Stock Exchange (NYSE) Listed Company Manual, on May 15, 2020, the Company's Chief Executive Officer submitted to the NYSE the annual CEO certification regarding the Company's compliance with the NYSE's corporate governance listing standards.

REPORT ON FORM 10-K

Shareholders may obtain a copy of the Company's annual report on Form 10-K as filed with the Securities and Exchange Commission free of charge (except for exhibits), by writing to the Secretary, Vornado Realty Trust, 888 Seventh Avenue, New York, New York 10019; or visit the Company's website at www.vno.com and refer to the Company's SEC filings.

ANNUAL MEETING

The annual meeting of shareholders of Vornado Realty Trust, will be held virtually, via the internet, at 11:30 AM. New York City time on May 20, 2021.

To attend the virtual 2021 Annual Meeting you will need to access www.virtualshareholdermeeting.com/VNO2021 and enter the 16-digit control number found on your proxy card, voting instruction form or Notice of Internet Availability of Proxy Materials. There is no physical location for the annual meeting. We encourage you to allow ample time for online check-in, which will begin at 11:15 AM. New York City time. Additional details regarding how to participate in the Annual Meeting can be accessed at the Company's website, www.vno.com or at www.proxyvote.com.

2020 ANNUAL REPORT

VORNADO
REALTY TRUST



 This Annual Report is printed on recycled paper and is recyclable.